# OTAY CROSSINGS COMMERCE PARK

APPENDIX G

ARCHAEOLOGICAL RESOURCES EVALUATION

to the

DRAFT SUPPLEMENTAL
ENVIRONMENTAL IMPACT REPORT

EIR 93-19-006Q, TM 5405RPL[7]
SCH No. 2006041039

*Lead Agency*:

County of San Diego
Department of Planning and Land Use
5201 Ruffin Road, Suite B
San Diego, California 92123
Contact: Robert Hingtgen
(858) 694-3712

MAY 2010

# ARCHAEOLOGICAL RESOURCES EVALUATION, OTAY CROSSINGS COMMERCE PARK, OTAY MESA, SAN DIEGO COUNTY, CALIFORNIA TM 5405RPL7

**Submitted to:**

**County of San Diego**
**Department of Planning and Land Use**
**5201 Ruffin Road, Suite B**
**San Diego, California 92123-1666**
**(858) 694-2960**

**Prepared for:**

**Kearny PCCP Otay 311, LLC**
**655 West Broadway, Suite 1600**
**San Diego, California 92101**

**Prepared by:**

**Affinis**
**Shadow Valley Center**
**847 Jamacha Road**
**El Cajon, California 92019**
**(619) 441-0144**

**Mary Robbins-Wade, M.A. (R.P.A.)**
**Director of Cultural Resources**

**August 2005**
**Revised August 2006**
**Revised November 2006**
**Revised September 2007**
**Revised August 2008**
**Revised September 2009**
**Revised April 2010**

**Affinis Job No. 2232/1966**

**USGS quadrangle: Otay M esa (7.5' series)**
**Acreage: approx. 311 acres**
**Keywords: Archaeological evaluation; Otay Mesa, San Diego County; prehistoric and historic sites; sparse lithic scatters; historic debris, homestead sites; CA-SDI-8076/CA-SDI-8079, CA-SDI-8078, CA-SDI-8080, CA-SDI-8081, CA-SDI-10,299, CA-SDI-11,793, CA-SDI-11,794, CA-SDI-11,798, CA-SDI-11,799H, CA-SDI-11,800, CA-SDI-11,801, CA-SDI-11,802H, CA-SDI-12,888H, CA-SDI-15,872, CA-SDI-15,873, CA-SDI-15,875; T18S, R1W, Sections 31 and 32**

## NATIONAL ARCHAEOLOGICAL DATA BASE INFORMATION

| | |
|---|---|
| Authors: | Mary Robbins-Wade |
| Consulting firm: | Affinis, 847 Jamacha Road, El Cajon, California 92019 (619) 441-0144 |
| Report Date: | August 2005, Revised August 2006, Revised November 2006, Revised September 2007, Revised August 2008, Revised September 2009, Revised April 2010 |
| Report Title: | Archaeological Resources Evaluation, Otay Crossings Commerce Park, Otay Mesa, San Diego County, California. SPA 04-006; TM 5405RPL6 |
| Submitted to: | County of San Diego, Department of Planning and Land Use, 5201 Ruffin Road, Suite B, San Diego, California 92123-1666<br>(858) 694-2960 |
| Submitted by: | Kearny PCCP Otay 311, LLC, 655 West Broadway, Suite 1600, San Diego, California 92101 |
| Contract number: | Affinis Job No. 2232/1966 |
| USGS quadrangles: | Otay Mesa (7.5' series) |
| Acreage: | approx. 311 acres |
| Keywords: | Archaeological evaluation; Otay Mesa, San Diego County; prehistoric and historic sites; sparse lithic scatters; historic debris, homestead sites; CA-SDI-8076/CA-SDI-8079, CA-SDI-8078, CA-SDI-8080, CA-SDI-8081, CA-SDI-10,299, CA-SDI-11,793, CA-SDI-11,794, CA-SDI-11,798, CA-SDI-11,799H, CA-SDI-11,800, CA-SDI-11,801, CA-SDI-11,802H, CA-SDI-12,888H, CA-SDI-15,872, CA-SDI-15,873, CA-SDI-15,875; T18S, R1W, Sections 31 and 32 |

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## CONFIDENTIAL APPENDICES

(Bound Separately -- Not for Public Review)

## MANAGEMENT SUMMARY

The Otay Crossings Commerce Park project is a Tentative Map (TM) and preliminary Grading Plan (Tract 5405) for 311.5 acres of land in Subarea 2 of the East Otay Mesa Specific Plan (EOMSP). The future route for SR-11 traverses the site, and the future U.S. Port-of-Entry is situated on the south portion of the site. The TM will subdivide the property into 56 industrial lots and three open space lots. The project is on the eastern end of Otay Mesa, in the County of San Diego, in far southwestern San Diego County. The property is bounded on the north by an extension of Old Otay Mesa Road, on the south by an extension of Airway Road, and on the west by an extension of Alta Road. The project area is within Township 18 South, Range 1 West, Sections 31 and 32 on the USGS 7.5' Otay Mesa quadrangle.

Sixteen archaeological sites have been recorded within or adjacent to the Otay Crossings Commerce Park project area. Two of these sites are mapped adjacent to the project area but do not extend into it. Of the 14 sites that are wholly or partially within the current project area, 4 have been tested and determined not to be significant cultural resources. The remaining 10 sites within the Tentative Map area were the subject of the current evaluation project. The off-site improvement areas are addressed below, following the discussion of the project area itself.

Subsurface testing could not be undertaken at two of the sites (CA-SDI-11,799H and CA-SDI-11,801), due to the presence of nesting burrowing owls. CA-SDI-11,801 was recorded as a very small scatter of fewer than 20 pieces of marine shell. Its extremely limited research potential makes it ineligible for inclusion in the California Register of Historic Resources. Therefore, the site is not considered a significant resource, and impacts to it would not constitute significant environmental effects.

CA-SDI-11,799H is part of the 160-acre D.O. McCarthy farmstead. The site is mainly off-site to the south, but it is mapped as extending into the Tentative Map area and the proposed Airway Road right-of-way. A testing program was conducted on the property to the south of the project area, which included CA-SDI-11,799H. The site was determined to be a significant archaeological resource under CEQA and County guidelines, although the site is not significant under the County of San Diego's Resource Protection Ordinance (RPO) (Smith 2006). A data recovery excavation and monitoring program will be conducted at CA-SDI-11,799H.

CA-SDI-11,802H is the location of the Peter and Lucy Beckley homestead. A single cultural feature was encountered during testing at CA-SDI-11,802H. The site is less than significant but retains the potential for buried resources to be present. Based on this, monitoring will be conducted at this site, as addressed under Mitigation Measures.

The remaining seven sites in the Tentative Map area (CA-SDI-8078, CA-SDI-10,299, CA-SDI-11,793, CA-SDI-11,800, CA-SDI-15,872, CA-SDI-15,873, and CA-SDI-15,875) are all sparse lithic scatters that fit the lithic scatter profile of the *Management Plan for Otay Mesa Prehistoric Resources, San Diego, California* (Gallegos et al. 1998). The general lack of research potential

of these sites makes them ineligible for the California Register of Historical Resources. They are not significant resources, and impacts to these sites would not constitute significant environmental effects.

Eight archaeological sites have been recorded within areas that would be affected by off-site improvements associated with the project. Five of these sites have been tested and determined not to be significant. One site has been destroyed by construction. CA-SDI-12,888H is mapped within the right-of-way for Airway Road and may be affected by the proposed sewer improvements as well. This historic site could not be tested, due to the presence of nesting burrowing owls. In the absence of testing, the site must be treated as significant under CEQA. Based on available information, however, the site does not meet the criteria of RPO significance. A data recovery program must be undertaken at the site. A testing program was conducted at the portion of CA-SDI-8081 that is within the proposed sewer alignment. No cultural material was found within the tested area. Based on this, the site appears to be located entirely to the west of Alta Road in this area. It would not be affected by the project or by off-site improvements.

Per County requirements a grading monitoring and data recovery program to mitigate potential impacts to undiscovered buried archaeological resources on TM5405 shall be implemented to the satisfaction of the Planning Director.

# I. INTRODUCTION

## PROJECT LOCATION

The Otay Crossings Commerce Park project is located within the East Otay Mesa Specific Plan Subarea 2, in the County of San Diego, in far southwestern San Diego County (Figure 1). The project area is at the eastern end of Otay Mesa, east of State Route 905 (SR 905), and is crossed by the proposed route of SR 11. The property is bounded on the north by an extension of Old Otay Mesa Road, on the south by an extension of Airway Road, and on the west by an extension of Alta Road (Figures 2 and 3). The project area is within Township 18 South, Range 1 West, Sections 31 and 32 on the USGS 7.5' Otay Mesa quadrangle (Figure 2).

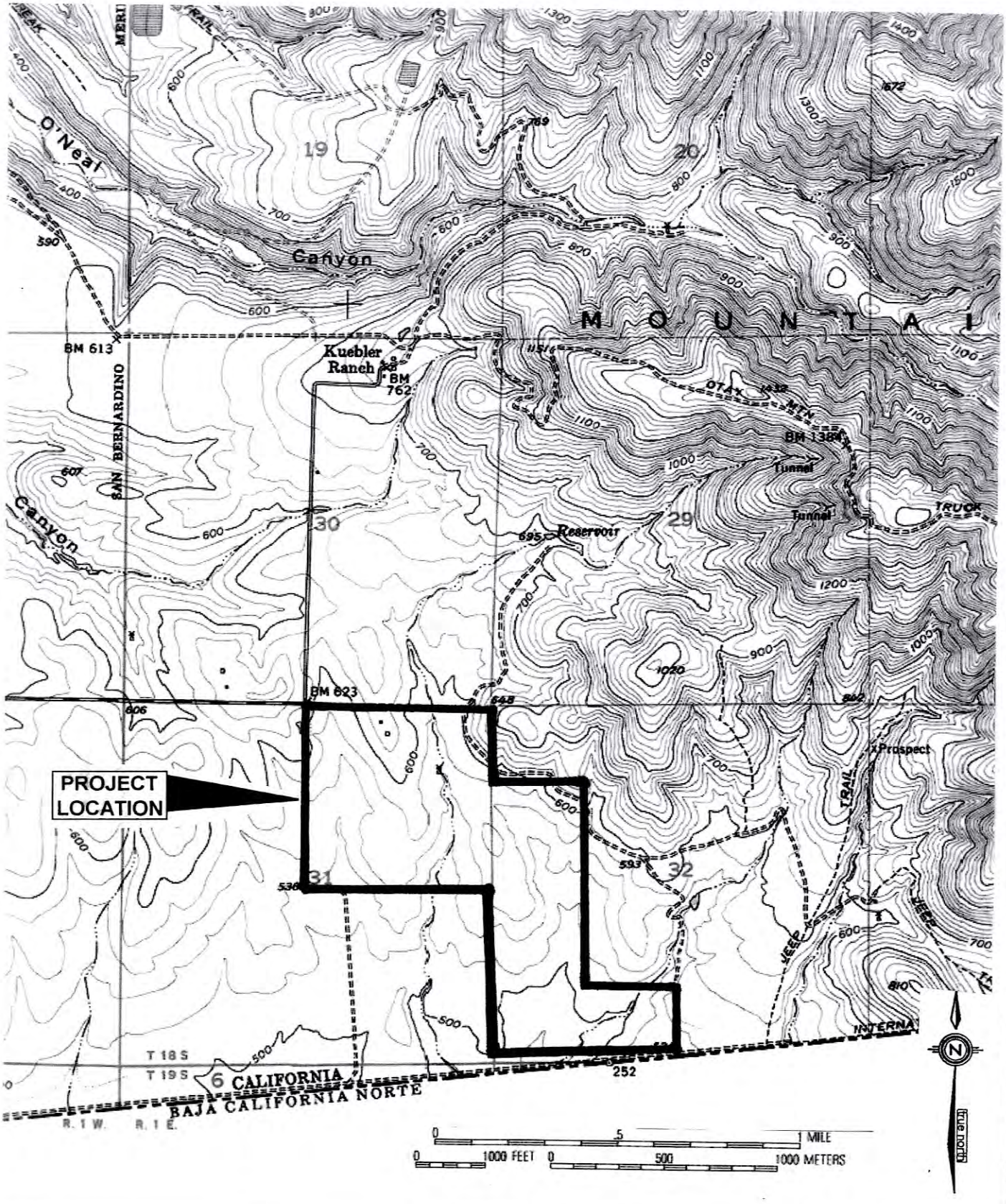
## PROJECT DESCRIPTION

The Otay Crossings Commerce Park project is a Tentative Map (TM) and Preliminary Grading Plan (Tract 5405) for 311.5 acres of land designated for Mixed Industrial, Rural Residential and State Route (i.e., SR-11) use. The future route for SR-11 traverses the site and the future (third) U.S. Port-of-Entry (POE) is situated on the south portion of the site. The TM will subdivide the property into 59 lots ranging in size from 0.9 net acres to 59.1 net acres (Figure 3). The 56 industrial lots and three open space lots will be divided and recorded in five separate units. Approximately 285.5 acres will be placed in lots, while 20.4 acres would contain on-site public streets, and half-widths up to the center lines of Otay Mesa Road, Alta Road and Airway Road immediately adjacent to the site account for 5.6 acres. The Preferred Alternative identified for the SR-11/POE program corresponds with the SR-11 and POE right-of-way locations defined in the Otay Crossings site plan. Construction timing of both projects is dependent on completion of studies and securing sufficient funding for the facilities. The project applicant is not proposing to construct the freeway or POE as part of the proposed project; on-site grading of the reserved rights-of-way is proposed, however. In addition, three open space lots with open space easements are proposed to protect sensitive biological areas and steep slope areas in the northeast corners of the site that are in the "G" Designator Area of the East Otay Mesa Specific Plan (EOMSP).

The Preliminary Grading Plan for the proposed project conforms with the Design Guidelines contained in the EOMSP and the County Grading Ordinance. The proposed project also involves an amendment to the EOMSP to modify the land use designation in the northeast corner of the site from Rural Residential to Mixed Industrial and to modify design guidelines related to surfacing and fencing of temporary use areas, including SR-11 and POE rights-of-way.

The archaeological project consisted of an archaeological evaluation to assess the significance of cultural resources that would be affected by development of the property. This included review of previous archaeological studies within and adjacent to the project area, historic archival research on the homestead sites, and subsurface testing to evaluate site significance of those sites that had not been tested in the past. Mary Robbins-Wade served as the project manager/project archaeologist. This report addresses the methods and results of the evaluation program.


| | | |
|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Regional location in San Diego County | Figure 1 |



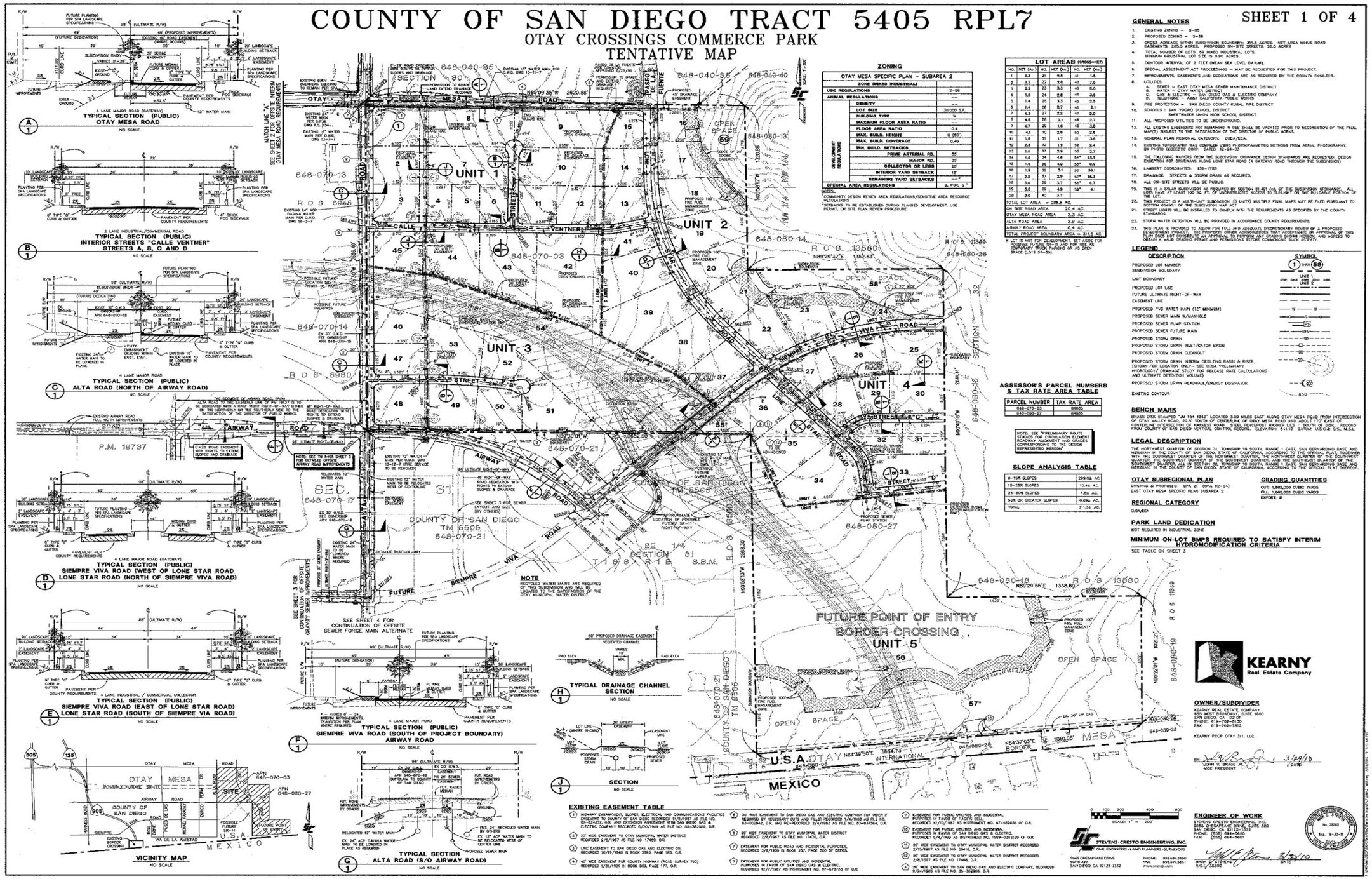

| | | |
|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Project Location on USGS 7.5'<br>Otay Mesa Quadrangle | Figure 2 |

# COUNTY OF SAN DIEGO TRACT 5405 RPL7

## OTAY CROSSINGS COMMERCE PARK

## TENTATIVE MAP

SHEET 1 OF 4




### ZONING

| OTAY MESA SPECIFIC PLAN – SUBAREA 2 | | |
|---|---|---|
| ZONE (MIXED INDUSTRIAL) | | S-88 |
| USE REGULATIONS | | --- |
| ANIMAL REGULATIONS | | --- |
| DEVELOPMENT REGULATIONS | LOT SIZE | 30,000 S.F. |
| | BUILDING TYPE | M |
| | MAXIMUM FLOOR AREA RATIO | --- |
| | FLOOR AREA RATIO | 0.6 |
| | MAX. BUILD. HEIGHT | 0 (80') |
| | MAX. BUILD. COVERAGE | 0.40 |
| | MIN. BUILD. SETBACKS | |
| | PRIME ARTERIAL RD. | 35' |
| | MAJOR RD. | 25' |
| | COLLECTOR OR LESS | 20' |
| | INTERIOR YARD SETBACK | 15' |
| | REMAINING YARD SETBACKS | --- * |
| SPECIAL AREA REGULATIONS | | B, FOR, C * |

NOTES:
COMMUNITY DESIGN REVIEW AREA REGULATIONS/SENSITIVE AREA RESOURCE REGULATIONS
*SETBACKS TO BE ESTABLISHED DURING PLANNED DEVELOPMENT, USE PERMIT, OR SITE PLAN REVIEW PROCEDURE.

### LOT AREAS (GROSS=NET)

| NO. | NET (Ac.) | NO. | NET (Ac.) | NO. | NET (Ac.) |
|---|---|---|---|---|---|
| 1 | 3.3 | 21 | 5.5 | 41 | 1.6 |
| 2 | 2.2 | 22 | 2.8 | 42 | 7.5 |
| 3 | 2.2 | 23 | 3.3 | 43 | 5.0 |
| 4 | 1.8 | 24 | 2.8 | 44 | 3.8 |
| 5 | 1.4 | 25 | 3.3 | 45 | 2.5 |
| 6 | 1.4 | 26 | 2.7 | 46 | 3.1 |
| 7 | 2.7 | 27 | 2.8 | 47 | 2.0 |
| 8 | 4.5 | 28 | 2.1 | 48 | 2.7 |
| 9 | 4.7 | 29 | 1.6 | 49 | 3.0 |
| 10 | 4.3 | 30 | 3.5 | 50 | 2.6 |
| 11 | 1.9 | 31 | 1.7 | 51 | 3.8 |
| 12 | 2.3 | 32 | 1.9 | 52 | 2.4 |
| 13 | 2.0 | 33 | 2.9 | 53 | 3.7 |
| 14 | 1.8 | 34 | 4.6 | 54* | 13.7 |
| 15 | 1.8 | 35 | 4.0 | 55* | 0.9 |
| 16 | 1.9 | 36 | 3.1 | 56 | 59.1 |
| 17 | 2.5 | 37 | 2.9 | 57* | 35.2 |
| 18 | 3.4 | 38 | 3.7 | 58* | 8.7 |
| 19 | 3.5 | 39 | 4.8 | 59* | 4.1 |
| 20 | 3.0 | 40 | 3.7 | | |

| | |
|---|---|
| TOTAL LOT AREA = | 285.5 AC. |
| ON SITE ROAD AREA | 20.4 AC. |
| OTAY MESA ROAD AREA | 2.3 AC. |
| ALTA ROAD AREA | 2.9 AC. |
| AIRWAY ROAD AREA | 0.4 AC. |
| TOTAL PROJECT BOUNDARY AREA = | 311.5 AC. |

* LOT IS NOT FOR DEVELOPMENT. SET ASIDE FOR TEMPORARY TURN-AROUND AND FOR USE AS TEMPORARY PARKING OR AS OPEN SPACE (LOTS 57-59).

### ASSESSOR'S PARCEL NUMBERS & TAX RATE AREA TABLE

| PARCEL NUMBER | TAX RATE AREA |
|---|---|
| 646-070-03 | 84035 |
| 646-080-27 | 84035 |

NOTE: SEE "PRELIMINARY ROUTE STUDIES FOR CIRCULATION ELEMENT ROADWAY ALIGNMENT AND GRADES CORRESPONDING TO THE DESIGN REPRESENTED HEREON"

### SLOPE ANALYSIS TABLE

| | |
|---|---|
| 0-15% SLOPES | 299.06 AC. |
| 15-25% SLOPES | 10.48 AC. |
| 25-50% SLOPES | 1.82 AC. |
| 50% OR GREATER SLOPES | 0.096 AC. |
| TOTAL | 311.34 AC. |

### GENERAL NOTES

1. EXISTING ZONING – S-88
2. PROPOSED ZONING – S-88
3. GROSS ACREAGE WITHIN SUBDIVISION BOUNDARY: 311.5 ACRES, NET AREA MINUS ROAD EASEMENTS: 285.5 ACRES; PROPOSED ON-SITE STREETS: 20.0 ACRES
4. TOTAL NUMBER OF LOTS: 59 MIXED INDUSTRIAL LOTS. MINIMUM INDUSTRIAL LOT SIZE IS 0.80 ACRES.
5. CONTOUR INTERVAL OF 2 FEET (MEAN SEA LEVEL DATUM).
6. SPECIAL ASSESSMENT ACT PROCEEDINGS – MAY BE REQUESTED FOR THIS PROJECT.
7. IMPROVEMENTS, EASEMENTS AND DEDICATIONS ARE AS REQUIRED BY THE COUNTY ENGINEER.
8. UTILITIES:
   A. SEWER – EAST OTAY MESA SEWER MAINTENANCE DISTRICT
   B. WATER – OTAY WATER DISTRICT
   C. GAS & ELECTRIC – SAN DIEGO GAS & ELECTRIC COMPANY
   D. TELEPHONE – AT&T CALIFORNIA PUBLIC WORKS
9. FIRE PROTECTION – SAN DIEGO COUNTY RURAL FIRE DISTRICT
10. SCHOOLS : SAN YSIDRO SCHOOL DISTRICT
    SWEETWATER UNION HIGH SCHOOL DISTRICT
11. ALL PROPOSED UTILITIES TO BE UNDERGROUND.
12. ALL EXISTING EASEMENTS NOT REMAINING IN USE SHALL BE VACATED PRIOR TO RECORDATION OF THE FINAL MAP(S) SUBJECT TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS.
13. GENERAL PLAN REGIONAL CATEGORY: CUDA/ECA.
14. EXISTING TOPOGRAPHY WAS COMPILED USING PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY, BY PHOTO GEODETIC CORP. DATED 12-24-03.
15. THE FOLLOWING WAIVERS FROM THE SUBDIVISION ORDINANCE DESIGN STANDARDS ARE REQUESTED: DESIGN EXCEPTION FOR DRIVEWAYS ALONG LONE STAR ROAD (A GATEWAY ROAD THROUGH THE SUBDIVISION)
16. LAMBERT COORDINATES: 1530-1785
17. DRAINAGE: STREETS & STORM DRAIN AS REQUIRED.
18. ALL ON-SITE STREETS WILL BE PUBLIC.
19. THIS IS A SOLAR SUBDIVISION AS REQUIRED BY SECTION 81.401 (A), OF THE SUBDIVISION ORDINANCE. ALL LOTS HAVE AT LEAST 100 SQ. FT. OF UNOBSTRUCTED ACCESS TO SUNLIGHT ON THE BUILDABLE PORTION OF THE LOT.
20. THIS PROJECT IS A MULTI-UNIT SUBDIVISION, (3 UNITS) MULTIPLE FINAL MAPS MAY BE FILED PURSUANT TO SECTION 66456.1 OF THE SUBDIVISION MAP ACT.
21. STREET LIGHTS WILL BE INSTALLED TO COMPLY WITH THE REQUIREMENTS AS SPECIFIED BY THE COUNTY STANDARDS.
22. STORM WATER DETENTION WILL BE PROVIDED IN ACCORDANCE COUNTY REQUIREMENTS.
23. THIS PLAN IS PROVIDED TO ALLOW FOR FULL AND ADEQUATE DISCRETIONARY REVIEW OF A PROPOSED DEVELOPMENT PROJECT. THE PROPERTY OWNER ACKNOWLEDGES THAT ACCEPTANCE OR APPROVAL OF THIS PLAN DOES NOT CONSTITUTE AN APPROVAL TO PERFORM ANY GRADING SHOWN HEREON, AND AGREES TO OBTAIN A VALID GRADING PERMIT AND PERMISSIONS BEFORE COMMENCING SUCH ACTIVITY.

### LEGEND

| DESCRIPTION | SYMBOL |
|---|---|
| PROPOSED LOT NUMBER | 1 THRU 59 |
| SUBDIVISION BOUNDARY | |
| UNIT BOUNDARY | UNIT 1, UNIT 2, UNIT 3 |
| PROPOSED LOT LINE | |
| FUTURE ULTIMATE RIGHT-OF-WAY | |
| EASEMENT LINE | |
| PROPOSED PVC WATER MAIN (12" MINIMUM) | W |
| PROPOSED SEWER MAIN W/MANHOLE | S |
| PROPOSED SEWER PUMP STATION | SPS |
| PROPOSED SEWER FUTURE MAIN | SFM |
| PROPOSED STORM DRAIN | SD |
| PROPOSED STORM DRAIN INLET/CATCH BASIN | |
| PROPOSED STORM DRAIN CLEANOUT | |
| PROPOSED STORM DRAIN INTERIM DESILTING BASIN & RISER, (SHOWN FOR LOCATION ONLY– SEE CEQA PRELIMINARY HYDROLOGY/DRAINAGE STUDY FOR RELEASE RATE CALCULATIONS AND ULTIMATE DETENTION VOLUME) | DB |
| PROPOSED STORM DRAIN HEADWALL/ENERGY DISSIPATOR | |
| EXISTING CONTOUR | 630 |

### BENCH MARK

BRASS DISK STAMPED "JM 104 1969" LOCATED 3.09 MILES EAST ALONG OTAY MESA ROAD FROM INTERSECTION OF OTAY VALLEY ROAD, 20.5' SOUTH OF CENTERLINE OF OTAY MESA ROAD AND 170' EAST OF CENTERLINE INTERSECTION OF HARVEST ROAD. STEEL FENCEPOST MARKER LIES 1' SOUTH OF DISC. RECORD FROM COUNTY OF SAN DIEGO VERTICAL CONTROL RECORD. ELEVATION: 541.10' DATUM: U.S.C.&G.S., M.S.L.

### LEGAL DESCRIPTION

THE NORTHWEST QUARTER OF SECTION 31, TOWNSHIP 18 SOUTH, RANGE 1 EAST, SAN BERNARDINO BASE AND MERIDIAN IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF. TOGETHER WITH THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER, THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER, THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER, AND THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER, ALL IN SECTION 32, TOWNSHIP 18 SOUTH, RANGE 1 EAST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

### OTAY SUBREGIONAL PLAN

EXISTING & PROPOSED: SPA 21 (OPA 92-04)
EAST OTAY MESA SPECIFIC PLAN SUBAREA 2

### GRADING QUANTITIES

CUT: 1,982,000 CUBIC YARDS
FILL: 1,982,000 CUBIC YARDS
EXPORT: 0

### REGIONAL CATEGORY

CUDA/ECA

### PARK LAND DEDICATION

NOT REQUIRED IN INDUSTRIAL ZONES

### MINIMUM ON-LOT BMPS REQUIRED TO SATISFY INTERIM HYDROMODIFICATION CRITERIA

SEE TABLE ON SHEET 3

### EXISTING EASEMENT TABLE

(1) HIGHWAY EMBANKMENT, SLOPES, ELECTRICAL AND COMMUNICATIONS FACILITIES EASEMENT TO COUNTY OF SAN DIEGO RECORDED 11/5/1987 AS FILE NO. 87-624377, O.R. AND EXTENSION AGREEMENT WITH SAN DIEGO GAS & ELECTRIC COMPANY RECORDED 6/30/1989 AS FILE NO. 89-382859, O.R.

(2) 20' WIDE EASEMENT TO OTAY MUNICIPAL WATER DISTRICT RECORDED 2/8/1967 AS FILE NO. 17469, O.R.

(3) LINE EASEMENT TO SAN DIEGO GAS AND ELECTRIC CO. RECORDED 10/19/1948 IN BOOK 2985, PAGE 183, O.R.

(4) 40' WIDE EASEMENT FOR COUNTY HIGHWAY (ROAD SURVEY 793) RECORDED 1/28/1928 IN BOOK 869, PAGE 177, O.R.

(5) 30' WIDE EASEMENT TO SAN DIEGO GAS AND ELECTRIC COMPANY (OR RIDER IF REQUIRED BY NECESSARY CUTS AND FILLS) RECORDED 11/4/1983 AS FILE NO. 83-502842, O.R. AND RE-RECORDED 2/4/1983 AS FILE NO. 83-037064, O.R.

(6) 20' WIDE EASEMENT TO OTAY MUNICIPAL WATER DISTRICT RECORDED 2/8/1967 AS FILE NO. 17470, O.R.

(7) EASEMENT FOR PUBLIC ROAD AND INCIDENTAL PURPOSES, RECORDED 3/8/1920 IN BOOK 257, PAGE 500 OF DEEDS.

(8) EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES IN FAVOR OF SAN DIEGO GAS & ELECTRIC RECORDED 12/7/1987 AS INSTRUMENT NO. 87-673353 OF O.R.

(9) EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES IN FAVOR OF PACIFIC BELL, RECORDED 10/10/1997 AS INSTRUMENT NO. 97-482636 OF O.R.

(10) EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES IN FAVOR OF SAN DIEGO GAS & ELECTRIC, RECORDED 5/5/1999 AS INSTRUMENT NO. 1999-0392109 OF O.R.

(11) 20' WIDE EASEMENT TO OTAY MUNICIPAL WATER DISTRICT RECORDED 2/15/1967 AS FILE NO. 20418, O.R.

(12) 20' WIDE EASEMENT TO OTAY MUNICIPAL WATER DISTRICT RECORDED 2/8/1967 AS FILE NO. 17468, O.R.

(A) 20' WIDE EASEMENT TO SAN DIEGO GAS AND ELECTRIC COMPANY, RECORDED 9/24/1985 AS FILE NO. 85-352969, O.R.


KEARNY Real Estate Company

**OWNER/SUBDIVIDER**
KEARNY REAL ESTATE COMPANY
550 WEST BROADWAY, SUITE 1600
SAN DIEGO, CA. 92101
PHONE: 619-702-8130
FAX: 619-702-7812

KEARNY POINT OTAY 361, LLC.

BY: _____ 3/29/10
VORN V. BRAGG JR. DATE
VICE PRESIDENT

**ENGINEER OF WORK**
STEVENS CRESTO ENGINEERING, INC.
8665 CHESAPEAKE DRIVE, SUITE 320
SAN DIEGO, CA 92123-1352
PHONE: (858) 614-5650
FAX: (858) 614-5651

REGISTERED PROFESSIONAL ENGINEER — No. 38509 — Exp. 9-30-11 — CIVIL — STATE OF CALIFORNIA

_____ 3/29/10
MARK D. STEVENS DATE
R.C.E. 38509

STEVENS CRESTO ENGINEERING, INC.
CIVIL ENGINEERS - LAND PLANNING - SURVEYORS
8665 CHESAPEAKE DRIVE, SUITE 320, SAN DIEGO, CA 92123-1352
PHONE: 858.614.5650 FAX: 858.614.5651 www.scengr.com

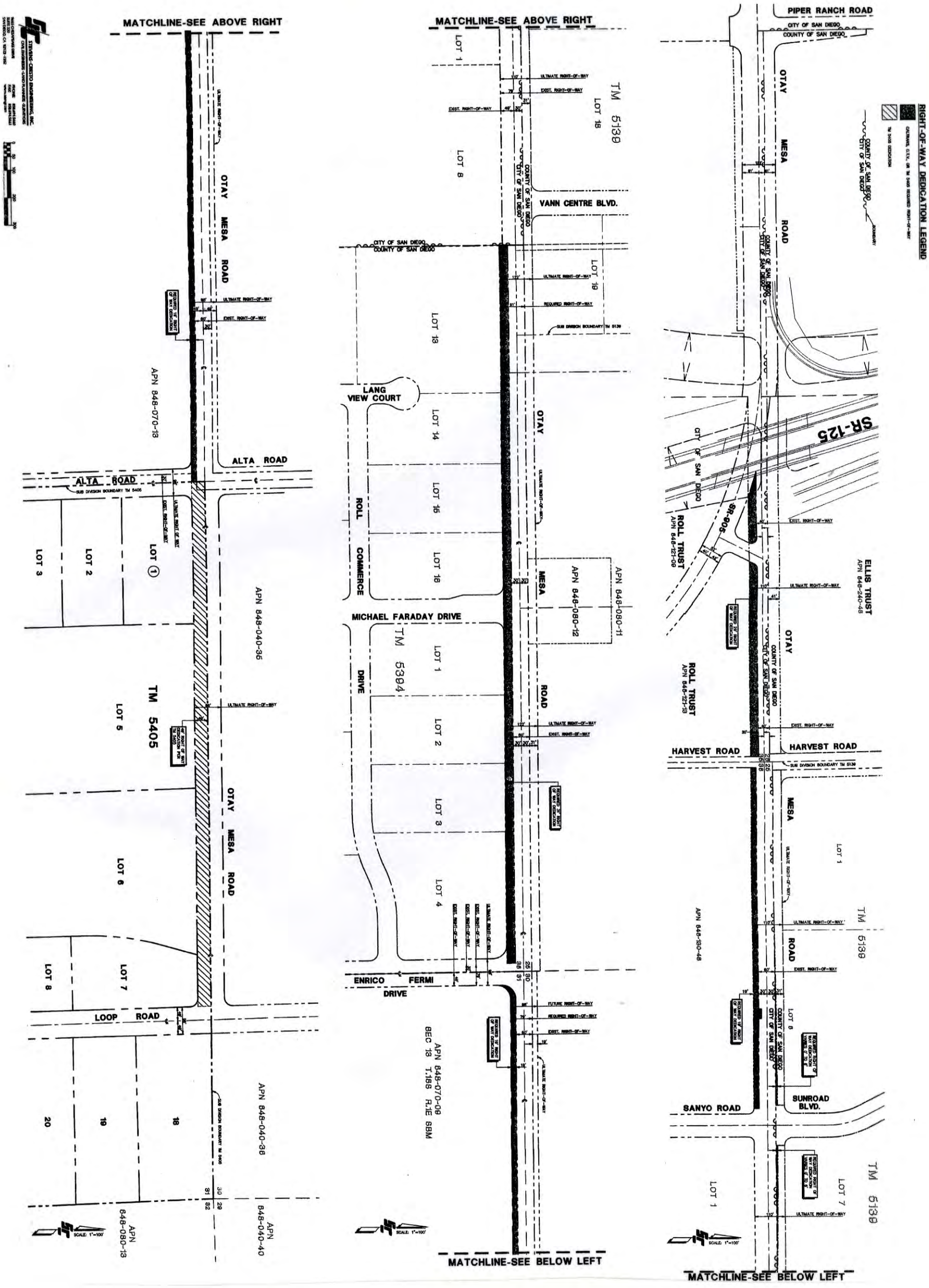

SCALE: 1" = 200'

**Affinis**
Shadow Valley Center
847 Jamacha Road
El Cajon, CA 92019

Project Plans

Figure 3

FIGURE 3 PAGE 2




RIGHT-OF-WAY DEDICATION LEGEND

CALTRANS, CITY, OR TM 5405 REQUIRED RIGHT-OF-WAY

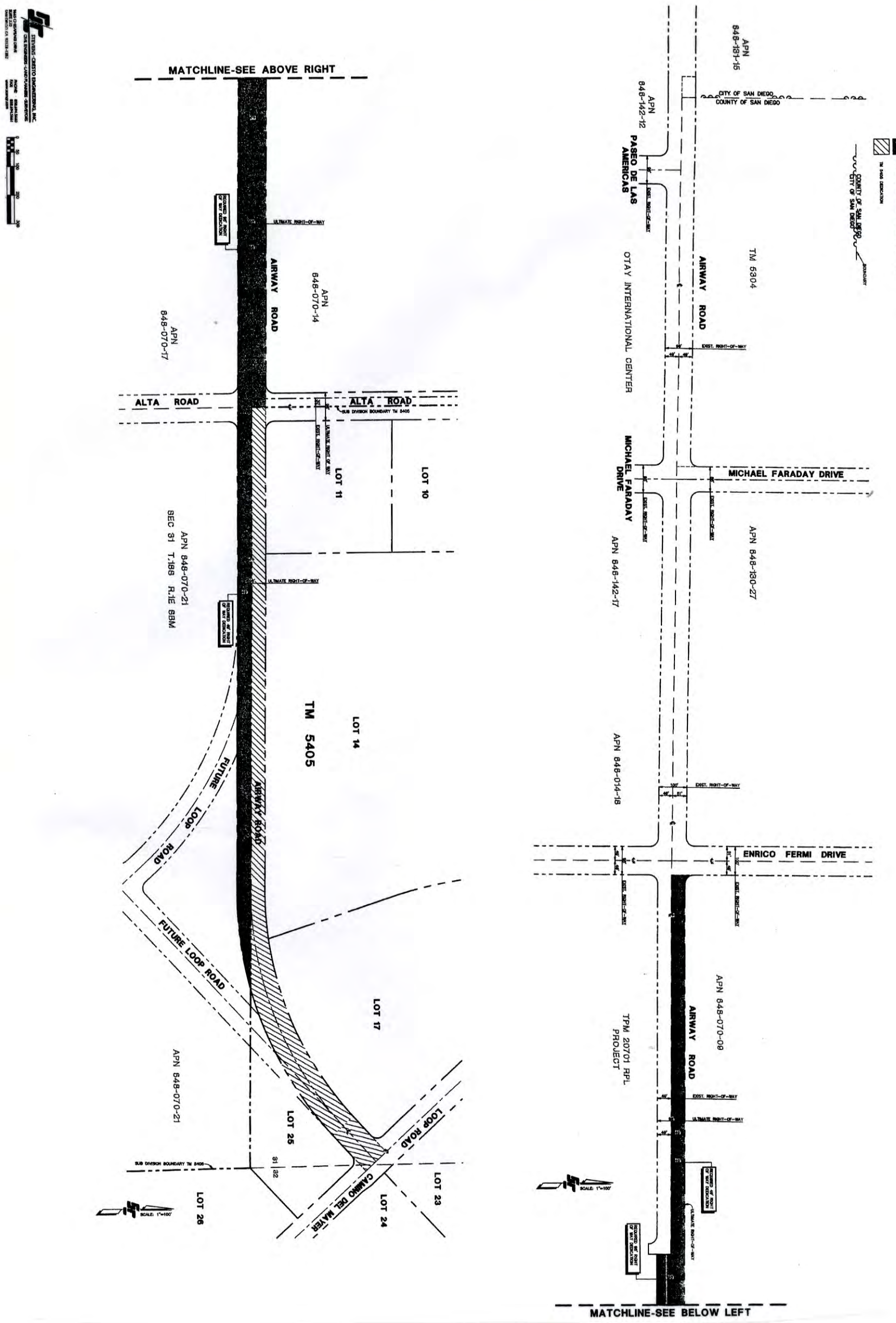
TM 5405 DEDICATION

STEVENS CRESTO ENGINEERING, INC.
CIVIL ENGINEERS · LAND PLANNERS · SURVEYORS
SAN DIEGO, CA 92123-1202

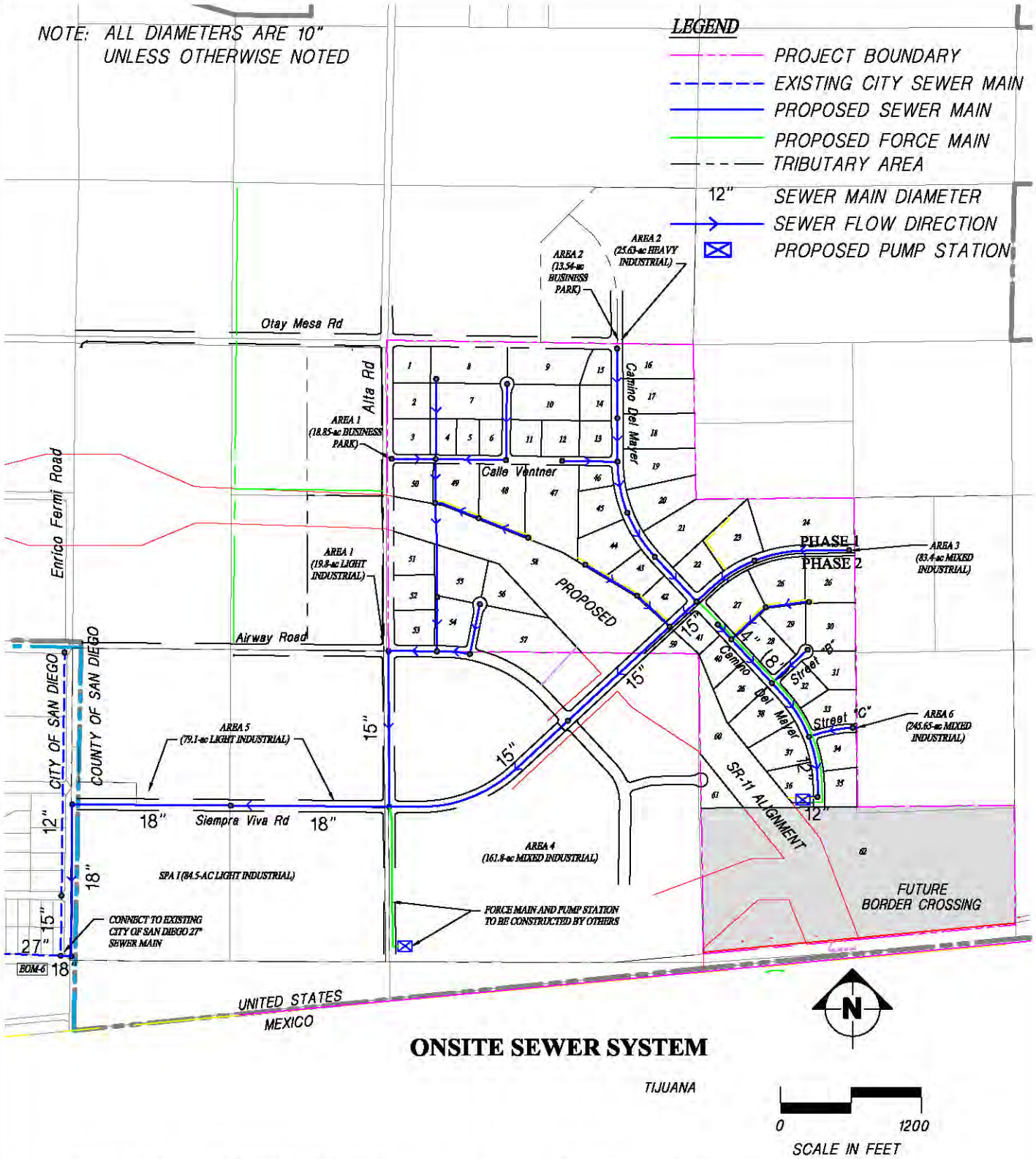
0 50 100 200 300

| | | |
|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Off-Site Improvements – Old Otay Mesa Road | Figure 4 |

FIGURE 4 PAGE 2




| | | |
|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Off-Site Improvements – Airway Road | Figure 5 |




**ONSITE SEWER SYSTEM**

H:\Waterres\047 Judd\OCCP\dwg\491115.03sewer.dwg September 11, 2007

PBS&J

*Otay Crossings Conceptual Sewer Study*
*September 2007*

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| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Off-site improvements -- sewer | Figure 6 |

## II. ENVIRONMENTAL SETTING

### PHYSICAL AND BIOLOGICAL ENVIRONMENT

Otay Mesa is located in an ideal situation for exploitation of several varied ecosystems. The current project site is about 12.5 miles (20 km) from the present day open coastline. The more sheltered San Diego Bay is about 11 miles (18 km) northwest of the project area. The Mesa is bordered on the north by the Otay River Valley, and the Tijuana River flows south of the Otay Mesa area. The Tijuana River Estuary is formed where the river flows into the ocean, southwest of Otay Mesa. The eastern end of the Mesa abuts the San Ysidro Mountains. The southernmost portion of the Mesa is south of the U.S.-Mexican International Border, but the vast majority of Otay Mesa is within the United States.

The majority of Otay Mesa consists of a series of terrace remnants (mesas) dissected by deep canyons. "The unequal altitudes of terraces of the same age [within the coastal plains] indicate uplift of the coastal area as the major cause in forming the terraces" (Bowman 1973:85). Elevation on Otay Mesa ranges from 300 ft (90 m) on the western portion of the Mesa to approximately 600 ft (183 m) at the base of the foothills.

The coastal plains physiographic province has the most equable climate in San Diego County, with temperature and precipitation varying according to elevation and distance from the coast. The mean annual temperature on the coastal plains is 61° F, and the frost-free season is 280 to 360 days (Bowman 1973:85). Annual rainfall on Otay Mesa is approximately 10 in. (25 cm) (Griner and Pryde 1976:Figure 3.3), 90 percent of which falls between November and April (Bowman 1973:85). The average July maximum daily temperature on the Mesa is between 75° F and 80° F (Griner and Pryde 1976:Figure 3.1), and the average January minimum daily temperature is between 40° F and 44° F (Griner and Pryde 1976:Figure 3.2).

Geologically, the entire project area is underlain by the Tertiary Otay Formation (Kennedy and Tan 1977). Metavolcanic material suitable for lithic tool manufacture is found in cobbles and nodules across Otay Mesa. The project area is a series of relatively gentle north-south ridges at the far eastern end of Otay Mesa. Elevation ranges from around 480 ft above mean sea level in the southeastern portion of the project to about 620 ft amsl at the northern project boundary (Figure 2). A seasonal drainage runs south through the central portion of the property. Fresh water would have been available on a seasonal basis in other nearby canyons as well (Figure 2).

Most of Otay Mesa, including the project area, currently supports non-native grasses and ruderal vegetation, in areas that were cultivated for many years. Native grasslands may have existed across much of the mesa in the past, as well as coastal sage scrub vegetation. Pockets of coastal sage scrub habitat are along the edges of the current project area. Chaparral is found on canyon slopes and in some canyon bottoms of Otay Mesa. Vernal pools, with their unique plant communities, occur on various places on Otay Mesa, including the southernmost part of the project site. These various vegetation communities would have provided a number of plant species

known to have been used by the Kumeyaay people for food, medicine, tools, shelter, ceremonial and other uses (Christenson 1990; Hedges and Beresford 1986; Luomala 1978). Many of the animal species found in these communities would have been used by native populations as well.

## CULTURAL ENVIRONMENT

Several recent summaries discuss the prehistory of San Diego County and provide a reasonable background for understanding the archaeology of the general area surrounding the project. Moratto's (1984) review of the archaeology of California contains important discussions of Southern California, including the San Diego area. Bull (1983, 1987), Carrico (1987), Gallegos (1987), and Warren (1985, 1987) provide summaries of recent work and interpretations. The following is a brief summary of the culture history of the San Diego area.

Carter (1957, 1978, 1980), Minshall (1976) and others (e.g., Childers 1974; Davis 1968, 1973) have long argued for the presence of Pleistocene humans in California, including the San Diego area. The sites identified as "early man" are all controversial. Carter and Minshall are best known for their discoveries at Texas Street and Buchanan Canyon. The material from these sites is generally considered nonartifactual, and the investigative methodology is often questioned (Moratto 1984).

The earliest accepted archaeological manifestation of Native Americans in the San Diego area is the San Dieguito complex, dating to approximately 10,000 years ago (Warren 1967). The San Dieguito complex was originally defined by Rogers (1939), and Warren published a clear synthesis of the complex in 1967. The material culture of the San Dieguito complex consists primarily of scrapers, scraper planes, choppers, large blades, and large projectile points. Rogers considered crescentic stones to be characteristic of the San Dieguito complex as well. Tools and debitage made of fine-grained green metavolcanic material, locally known as felsite, were found at many sites which Rogers identified as San Dieguito. Often these artifacts were heavily patinated. Felsite tools, especially patinated felsite, became seen as an indicator of the San Dieguito complex. Until relatively recently, many archaeologists felt that the San Dieguito culture lacked milling technology and saw this as an important difference between the San Dieguito and La Jolla complexes. Sleeping circles, trail shrines, and rock alignments have also been associated with early San Dieguito sites. The San Dieguito complex is chronologically equivalent to other Paleoindian complexes across North America, and sites are sometimes called "Paleoindian" rather than "San Dieguito". San Dieguito material underlies La Jolla complex strata at the C. W. Harris site in San Dieguito Valley (Warren, ed. 1966).

The traditional view of San Diego prehistory has the San Dieguito complex followed by the La Jolla complex at least 7,000 years ago, possibly as long as 9,000 years ago (Rogers 1966). The La Jolla complex is part of the Encinitas tradition and equates with Wallace's (1955) Millingstone Horizon. The Encinitas tradition is generally "recognized by millingstone assemblages in shell middens, often near sloughs and lagoons" (Moratto 1984:147). "Crude" cobble tools, especially choppers and scrapers, characterize the La Jolla complex (Moriarty 1966). Basin metates, manos,

discoidals, a small number of Pinto series and Elko series points, and flexed burials are also characteristic.

In the inland area of northern San Diego County (originally in the Pauma Valley), True (1958) identified the Pauma complex. Like La Jolla complex sites, Pauma sites contain milling implements, discoidals, and core scrapers, along with "San Dieguito-like flaked-stone crescents and leaf-shaped points or knives" (Moratto 1984:151). Further analysis has led True (1980) to suggest that there is a close relationship between Pauma and La Jolla, and that some Pauma complex sites show evidence of the Campbell tradition intrusion proposed by Warren (1968). It appears that the Pauma complex is the inland counterpart to the coastal La Jolla complex (Cárdenas and Van Wormer 1984; Gallegos 1987; True and Beemer 1982). The time period represented by La Jolla and Pauma sites is known as the Early Milling or Milling Archaic period.

Warren et al. (1961) proposed that the La Jolla complex developed with the arrival of a desert people on the coast who quickly adapted to their new environment. Moriarty (1966) and Kaldenberg (1976) have suggested an in situ development of the La Jolla people from the San Dieguito. Moriarty has since proposed a Pleistocene migration of an ancestral stage of the La Jolla people to the San Diego coast. He suggested this Pre-La Jolla complex is represented at Texas Street, Buchanan Canyon, and the Brown site (Moriarty 1987).

In recent years, archaeologists in the region have begun to question the traditional definition of San Dieguito people simply as makers of finely crafted felsite projectile points, domed scrapers, and discoidal cores, who lacked milling technology. The traditional defining criteria for La Jolla sites (manos, metates, "crude" cobble tools, and reliance on lagoonal resources) have also been questioned (Bull 1987; Cárdenas and Robbins-Wade 1985; Robbins-Wade 1986). There is speculation that differences between artifact assemblages of "San Dieguito" and "La Jolla" sites reflect functional differences rather than temporal or cultural variability (Bull 1987; Gallegos 1987). Gallegos (1987) has proposed that the San Dieguito, La Jolla, and Pauma complexes are manifestations of the same culture, with differing site types "explained by site location, resources exploited, influence, innovation and adaptation to a rich coastal region over a long period of time" (Gallegos 1987:30). The classic "La Jolla" assemblage is one adapted to life on the coast and appears to continue through time (Robbins-Wade 1986; Winterrowd and Cárdenas 1987). Inland sites adapted to hunting contain a different tool kit, regardless of temporal period (Cárdenas and Van Wormer 1984).

Several archaeologists in San Diego, however, do not subscribe to the Early Prehistoric/Late Prehistoric chronology (see Cook 1985; Gross and Hildebrand 1998; Gross and Robbins-Wade 1989; Shackley 1988; Warren 1998). They feel that an apparent overlap among assemblages identified as "La Jolla," "Pauma," or "San Dieguito" does not preclude the existence of an Early Milling period culture in the San Diego region, whatever name is used to identify it, separate from an earlier culture. One problem these archaeologists perceive is that many site reports in the San Diego region present conclusions based on interpretations of stratigraphic profiles from sites at which stratigraphy cannot validly be used to address chronology or changes through time.

Archaeology emphasizes stratigraphy as a tool, but many of the sites known in the San Diego region are not in depositional situations. In contexts where natural sources of sediment or anthropogenic sources of debris to bury archaeological materials are lacking, other factors must be responsible for the subsurface occurrence of cultural materials. The subsurface deposits at numerous sites are the result of such agencies as rodent burrowing and insect activity. Recent work has emphasized the importance of bioturbative factors in producing the stratigraphic profiles observed at archaeological sites (see Gross 1992). Different classes of artifacts move through the soil in different ways (Bocek 1986; Erlandson 1984; Johnson 1989), creating vertical patterning (Johnson 1989) that is not culturally relevant. Many sites which have been used to help define the culture sequence of the San Diego region are the result of just such nondepositional stratigraphy.

The Late Prehistoric period is represented by the San Luis Rey complex in northern San Diego County and the Cuyamaca complex in the southern portion of the county. The San Luis Rey complex is the archaeological manifestation of the Shoshonean predecessors of the ethnohistoric Luiseño (named for the Mission San Luis Rey). The Cuyamaca complex represents the Yuman forebears of the Kumeyaay (Diegueño, named for the San Diego Mission). Agua Hedionda is traditionally considered to be the point of separation between Luiseño and Northern Kumeyaay territories. Elements of the San Luis Rey complex include small, pressure-flaked projectile points (Cottonwood and Desert Side-notched series); milling implements, including mortars and pestles; *Olivella* shell beads; ceramic vessels; and pictographs (True et al. 1974). Of these elements, mortars and pestles, ceramics, and pictographs are not associated with earlier sites. True noted a greater number of quartz projectile points at San Luis Rey sites than at Cuyamaca complex sites, which he interpreted as a cultural preference for quartz (True 1966). He considered ceramics to be a late development among the Luiseño, probably learned from the Diegueño. The general mortuary pattern at San Luis Rey sites is ungathered cremations.

The Cuyamaca complex, reported by True (1970), is similar to the San Luis Rey complex, differing in the following points:

1. Defined cemeteries away from living areas;
2. Use of grave markers;
3. Cremations placed in urns;
4. Use of specially made mortuary offerings;
5. Cultural preference for side-notched points;
6. Substantial numbers of scrapers, scraper planes, etc., in contrast to small numbers of these implements in San Luis Rey sites;
7. Emphasis placed on use of ceramics; wide range of forms and several specialized items;
8. Steatite industry;
9. Substantially higher frequency of milling stone elements compared with San Luis Rey;
10. Clay-lined hearths (True 1970:53-54).

Both the San Luis Rey and Cuyamaca complexes were defined on the basis of village sites in the foothills and mountains. Coastal manifestations of both Luiseño and Kumeyaay differ from their inland counterparts. Fewer projectile points are found on the coast, and there tends to be a greater number of scrapers and scraper planes at coastal sites (Robbins-Wade 1986, 1988). Cobble-based tools, originally defined as "La Jolla", are characteristic of coastal sites of the Late Prehistoric period as well (Cárdenas and Robbins-Wade 1985:117; Winterrowd and Cárdenas 1987:56).

The San Diego Mission and the Presidio of San Diego were founded in 1769, bringing about profound changes in the lives of the Indians of San Diego. Ethnographic work concentrated on the mountain and desert peoples, who were able to retain some of their aboriginal culture. Coastal groups were quickly absorbed into the mission system or died of newly introduced diseases. Therefore, ethnographic accounts of the Indians of the San Diego coast are sparse.

## Cultural Environment of the Otay Mesa Area

In the past two decades, a number of cultural resource management studies have been conducted in the Otay Mesa area. These studies have identified hundreds of archaeological sites across the mesa, spanning thousands of years of occupation. Some of these sites have simply been identified and mapped, others have been subject to test excavations or extensive data recovery programs. Archaeological sites are the result of past episodes of human behavior. This behavior ranges from a single event performed by a single individual to repeated activities carried out by many individuals. Human behavior, however, does not occur in isolation. Rather, it takes place in the context of an adaptive system which is designed to promote the survival of the group. Individual sites and their functions, therefore, must also be investigated from the standpoint of the larger cultural system of which they were a part.

The majority of sites on Otay Mesa have been identified as lithic reduction sites and processing locations. These sites, with their emphasis on lithic tools, are fairly evenly spread across the mesa. Many of them are located on the edges of the canyons where lithic raw materials, in the form of blocks and cobbles, are particularly abundant. It is expected that some types of labor that require frequent tool repair and replacement (such as woodworking [Crabtree and Davis 1968]) would have taken place in areas where raw materials were abundant, and it is possible that these canyon rim locations were used because cobbles were available near a resource that required such labor. Many of the sites have good views of the canyons. It is possible that the lithic reduction and processing activities took place while the canyons were being watched for signs of movement of game.

Residential base camps have been identified on western Otay Mesa at the heads of Dennery Canyon (CA-SDI-6941 [Davis and Wade 1990; Kyle et al. 1996; Robbins-Wade et al. 1987] and CA-SDI-10,198 [Wade and Hector 1990]) and Spring Canyon (CA-SDI-10,185 [Hector 1988] and CA-SDI-11,424 [Gallegos & Associates 1998; Kyle et al. 1997]) and on the westernmost slopes of Otay Mesa (CA-SDI-11,079 [Kyle et al. 1998]). On the eastern end of Otay Mesa, a site described as a village/base camp (CA-SDI-8654) is located at the head of O'Neal Canyon (CSRI

1983; Kyle et al. 1988). Canyon head locations would have provided easy access to canyon resources such as water and game, but base camps would not be expected in the canyons themselves. Although the canyons were probably rich in resources, there is little flat land on which to locate residential bases.

Several lithic quarry sites have been identified on eastern Otay Mesa. The eastern end of the mesa abuts the San Ysidro Mountains with their Santiago Peak Volcanics bedrock, and fine-grained metavolcanic material is found in outcrops, veins, and blocks.

Temporal placement is difficult to ascertain for most sites on Otay Mesa, as lithic debris (cores and debitage) and non-diagnostic stone tools are the types of artifacts most often recovered. In addition, given that the landscape was used over long periods of time and that certain resources are redundantly positioned, we would expect to find "palimpsest accumulations that 'look' like sites in that they are aggregates of artifacts; however, such aggregates commonly lack internal structure" (Binford 1980:9).

This appears to be the case over much of Otay Mesa. The mesa was used for thousands of years, and the fact that artifacts are found in proximity to one another on the ground surface does not necessarily mean that they are related to each other.

Due to a general lack of organic material, radiocarbon dates have been obtained from very few sites across the mesa. The dates that have been obtained are generally between 7000 and 2000 years ago (Robbins-Wade 1990). Several recent archaeological studies on Otay Mesa have yielded radiocarbon dates in the range of about 3000 to 7600 years ago; radiocarbon analysis of shell samples from CA-SDI-11,079 suggest the occupation dates to 8250 to 9200 years ago (Kyle et al. 1998). Two pieces of obsidian from sites on the western portion of the mesa were traced to the Coso volcanic field and underwent hydration analysis; one yielded an Early Archaic period date and one produced a Late Prehistoric or modern date (Robbins-Wade et al. 1987). CA-SDI-11,079 also yielded three obsidian specimens that were traced to the West Sugarloaf source of the Coso fields (Kyle et al. 1998). Ceramic sherds diagnostic of the Late Prehistoric period have been found at several sites on Otay Mesa, three of which are located on canyon benches below the level of the mesa top. Diagnostic bifaces representing the San Dieguito complex, the Early Archaic period, and the Late Prehistoric period have been found on Otay Mesa. Thus, Otay Mesa appears to have been used mainly between 7000 and 2000 years ago, although use continued into the Late Prehistoric period (Kyle et al. 1998; Robbins-Wade 1990).

Much of the land in the Otay Valley and Otay Mesa area was used during the late 18th century and early 19th century for grazing cattle and sheep belonging to the Mission San Diego de Alcala. Several Spanish land grant ranchos were located in the vicinity of Otay Mesa, including Otay Rancho, Rancho Janal, and Rancho La Nacion. Settlers, primarily German immigrants, began moving to the Otay Mesa area during the 1870s and 1880s. The land was used for grazing cattle and for dry farming. Wheat, barley, and corn were successful crops grown on Otay Mesa. Peaches, apricots, grapes, potatoes, beans, and peas were also planted (Painter 1985). Residents

of Otay Mesa relied on cisterns, wells, and catch basins to provide water for both domestic and agricultural needs. Rural residents continued to rely on these sources as late as 1961 (Painter 1985).

As people began to move to the Otay Mesa area, a small community developed. The Alta School (located several miles west of the project area, within what is now Brown Field) was built to provide educational and religious services. By the turn of the century, as many as 28 families lived on the mesa, and they were actively participating in a variety of social activities (Painter 1985). Historic research has been conducted for several homesteads on Otay Mesa, including the Piper Ranch (Van Wormer 1987), the Beckley homestead (Smith 1989), and the Schott family homestead (Phillips and Van Wormer 1991).

## III. PREVIOUS RESEARCH

### MANAGEMENT PLAN FOR OTAY MESA PREHISTORIC RESOURCES

In conjunction with the archaeological program for SR 905, an archaeological resources management plan was prepared for Otay Mesa. This plan bears directly on the archaeological resources within the Otay Crossings Commerce Park project area, as the majority of these resources (the lithic scatter sites) could be treated programmatically under the Management Plan. "The Management Plan for Otay Mesa Prehistoric Resources has been completed to provide archaeologists, local and federal agencies, the general public, and other researchers a better understanding of past cultural resources work on Otay Mesa and to provide recommendations for future work" (Gallegos et al. 1998:v). The management plan indicates:

> Raw materials from both the Lindavista and the Otay formations, which provided a source of readily-available excellent surface cobble material for making stone tools, covers the mesa. Extensive research, that includes survey and testing programs, have been conducted on the sparse lithic scatters. This work has identified this resource as a surface manifestation that contains no subsurface deposition, no ecofacts, no diagnostic artifacts, and no artifact diversity. Given this, tests of this site type have repeatedly shown this resource to lack research potential, lack Native American concerns, and lack the qualities that would make it eligible for the National Register of Historic Places or the California Register of Historical Resources. Because of the agricultural activity over the past 100 years and the absence of temporal placement and an intact subsurface deposit, these sites simply represent a smear or background noise, as opposed to the significant sites which provide information to address important research questions [Gallegos et al. 1998:vi].

In summary, important research avenues can be addressed from data at significant sites on Otay Mesa; however, the vast majority of the mesa consists of a sparse lithic scatter with no cultural significance or archaeological research potential.

### TENTATIVE MAP AREA

The Otay Crossings Commerce Park project area was surveyed in its entirety as part of a larger study area, in conjunction with proposed land acquisition for a sludge processing facility, as part of the Clean Water Program for Greater San Diego (Robbins-Wade and Gross 1990). Portions of the property have been surveyed for other projects as well (Berryman 1976; Carrico 1974a; Smith and Moriarty 1985). In addition, a cultural resources survey for the proposed SR 11 and East Otay Mesa Port of Entry covered part of the current project area (Kyle and Van Wormer 2001). Because of this level of past survey coverage, the project area was not identified by County staff as one of the parcels requiring additional survey (Russell et al. 2002). Sixteen archaeological sites have been recorded within or adjacent to the subject property. These are summarized in

Table 1 and illustrated in Figure 7 (Confidential Appendix B). This section briefly describes the previous studies conducted within the project area and addresses each archaeological site individually. Site records are included in Confidential Appendix C.

## CA-SDI-8076/CA-SDI-8079

CA-SDI-8076 and CA-SDI-8079 were originally recorded as separate sites, but later testing combined the two, as no real break was seen between the two sites. Therefore, they are addressed here as a single site, a portion of which extends into the southern portion of the project area.

CA-SDI-8076 was originally recorded by Carrico (1974b) and also addressed by CSRI (1982; Clark 1981). Carrico (1974b) recorded the site as a "thin lithic scatter", measuring 30 m (100 ft) 25 m (80 ft), a total area of 750 $m^2$ (0.2 acres). Depth was undetermined, but subsurface material was considered likely. Artifacts collected during the 1974 inventory were: "one bifacial flake scraper, one flake scraper, one domed discoidal scraper, one unmodified flake scraper, two waste flakes" (Carrico 1974a). Other tools and flakes were not collected.

Carrico (1974a) recorded the site as representing the San Dieguito pattern. The site's significance was considered minor due to the scattered nature of the material and the site's location. "The location of this site upon a moderately eroded slope lessens the chance of ascertaining any clear data regarding the relative context of any recovered materials" (Carrico 1974a).

CA-SDI-8076 was noted by CSRI during the inventory for the Miguel-Tijuana transmission line. A proposed access road along the International Border would have created impacts to the site, so a testing program was conducted to assess site significance. Description and assessment of the site were included in *Cultural Resource Identification and National Register Assessment Program for the Proposed Miguel-Tijuana 230 kV International Interconnection Project. Cultural Properties Report, Volume 1* (CSRI 1982). The site dimensions were enlarged following the CSRI testing program to 320 m (1050 ft) east-west by 58 m (190 ft) north-south, covering 18,560 $m^2$ (4.6 acres) (Clark 1981). The site appeared to extend south into Mexico an unknown distance (CSRI 1982). A total of 78 surface artifacts was inventoried during the testing phase. These were: eight scrapers, three core-based tools, four cores, and 63 flakes/debitage (Clark 1981). A single 1 m by 1 m test unit was excavated at CA-SDI-8076 and continued to a depth of 80 cm. Cultural material was found to 70 cm depth, and a total of 93 items was recovered subsurface. Subsurface material included: 86 flakes/debitage, two retouched flakes, one shell fragment, three bone fragments, and one historic item (Clark 1981). The rodent bones were of recent origin (CSRI 1982:210). One microflake of obsidian was recovered in the 0-10 cm level of the excavation unit. Information as to source was not available. The metavolcanic artifacts were noted as being heavily patinated (Clark 1981).

The site was attributed to the San Dieguito II period based on degree of patination which, "coupled with the artifact types and lack of later type material, indicate an affinity with the San Dieguito

Table 1. Cultural resources within and adjacent to project area

| Site Number | Site Description | Previously Tested? | Comments |
|---|---|---|---|
| CA-SDI-8076/8079 | Lithic scatter | Yes | Originally determined significant; later testing determined site not significant (McDonald et al. 1998) |
| CA-SDI-8078 | Moderate lithic scatter with flakes, cores, and tools | No | Mainly outside the project area, to the south. Testing required for portion within project area |
| CA-SDI-8080 | Lithic scatter | Yes | Not significant (Kyle and Van Wormer 2001) |
| CA-SDI-8081 | Habitation site with flakes, cores, and tools | No | Adjacent to property, does not extend into project area (Ogden and Gallegos & Associates 1993; Robbins-Wade and Gross 1990) |
| CA-SDI-8652 | Lithic scatter | Yes | Originally determined significant; later testing determined site not significant (McDonald et al.1998) |
| CA-SDI-10,299 | Habitation site | No | Mainly outside the project area, to the north. Testing required for portion with project area. |
| CA-SDI-11,793 | Light density lithic scatter with debitage and cores | No | Testing required. |
| CA-SDI-11,794 | Light to moderate density lithic scatter with debitage and cores | Yes | Not significant (Kyle and Van Wormer 2001) |
| CA-SDI-11,799H | Historic – cistern into which lumber and other materials have been bulldozed | No | Historic background research and testing required |
| CA-SDI-11,800 | Light density lithic scatter with biface, hammerstones, cores, and debitage | No | Testing required |
| CA-SDI-11,801 | Small shell scatter | No | Testing required |
| CA-SDI-11,802H | Historic – home site marked by construction debris and household trash | No | Historic background research and testing required |
| CA-SDI-15,872 | Lithic scatter with possible cobble quarry | No | Testing required |
| CA-SDI-15,873 | Lithic scatter | No | Testing required |
| CA-SDI-15,875 | Lithic scatter | No | Testing required |

**SENSITIVE MATERIAL – IN CONFIDENTIAL APPENDIX B**

| | | |
|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Locations of cultural resources –<br>Tentative Map area | Figure 7 |

cultural period. The general lack of a San Dieguito I manifestation in the coastal area, as defined by previous investigators, suggests a San Dieguito II phase affiliation" (CSRI 1982:212).

Regarding site significance, the report states: "Although the surface integrity may be low, the extreme density and age of the materials make this site highly significant and potentially eligible for nomination to the National Register of Historic Places" (CSRI 1982:213). Although no cultural features were identified during the study, it was felt that features may be found through more extensive excavation. Due to the assessed significance of CA-SDI-8076, it was recommended that project impacts to the site be avoided by not using the proposed access road along the International Border (CSRI 1982:213). The subsequent report of the data recovery program for the Miguel-Tijuana project (CSRI 1983) did not address this site. It is assumed that the site was avoided by that project.

CA-SDI-8079 also was originally recorded by Carrico (1974b) and later tested by CSRI (1982). CA-SDI-8079 was called a "major lithic scatter site", measuring 75 m (245 ft) by 70 m (230 ft), an area of 5230 $m^2$ (1.3 acres). Depth of the deposit was undetermined. No artifacts were collected at the site during the 1974 inventory, but numerous cores, tools, and flakes were noted (Carrico 1974b). The site may have been a lithic manufacturing site or it could have been used for food processing as well (Carrico 1974a).

CA-SDI-8079 was assessed as representative of the San Dieguito period. Carrico (1974a) concluded, "The relatively undisturbed nature of this site coupled with the large quantities of artifacts which possess great antiquity, make this site a valuable scientific resource. In the total context of the project and of the surrounding area this site should be rated as a major site and as one which requires a great deal of further research and investigation" (Carrico 1974a).

CA-SDI-8079 was tested by CSRI (1982), because it would be subject to direct impacts from proposed improvements to access roads in conjunction with the Miguel-Tijuana transmission line. Site dimensions were increased to 336 m (1100 ft) east-west by 132 m (435 ft) north-south. The site was noted as continuing south into Mexico. Cultural material was recorded to a maximum depth of 60 cm (Clark 1981).

A total of 194 artifacts was inventoried on the surface of CA-SDI-8079: 2 manos, 4 hammerstones, 14 core-based scrapers, 8 core-based choppers, 1 biface, 20 retouched flakes, 109 flakes, and 19 debitage (Clark 1981). Two areas of artifact concentration were identified on the surface. Two 1 m by 1 m test units were excavated at the site: one in an area of dense surface material near the border road, and one up slope, in Concentration No. 2. A total of 97 items was recovered in the two units. Unit 1, near the road, was excavated to a depth of 50 cm, and cultural material was encountered to the 30-40 cm level. Rodent disturbance was noted to a depth of 30 cm. A total of 12 flakes was collected in Unit 1. Unit 2, located in Concentration No. 2, was excavated to a depth of 70 cm and contained cultural material to 60 cm. A total of 83 artifacts was collected in Unit 2, including flakes and debitage, 2 retouched flakes, 4 cores, and 1 side scraper (CSRI 1982:217). (Note: there is a discrepancy between the given artifact total, 97, and the total

from addition of the numbers given for the two units, 12 plus 83. The breakdown of artifact types given in the report differs slightly from that on the site record.) In addition, the site record noted that one tooth fragment from a horse was collected from the units (Clark 1981). Flecks of charcoal were noted in the 50-60 cm level of Unit 2, and possible fire-altered rocks were noted in that level (CSRI 1982:217).

Regarding chronologic placement the report noted, "Probable San Dieguito II period cultural material dominates the site, but the presence of a mano suggests that Early Milling people were also using this site area for food processing to a limited extent" (CSRI 1982:219).

CA-SDI-8079 was suggested to have been used as a processing area for various resources, including stone tool manufacture and processing of non-lithic materials. Although no cultural features or organic midden were encountered, it was suggested that hearths and "habitation features" may be identified with further investigation of the site. Although the site had been subject to disturbance in the form of plowing, burning, fences, and the border roads, it was considered that the subsurface deposits below about 8 in. (20 cm) were relatively intact. General site integrity was said to be high (CSRI 1982:218).

CA-SDI-8079 was assessed as a highly significant site, potentially eligible for nomination to the National Register. The assessment is based on the presumed dual nature of the site and the presence of subsurface cultural deposits of a presumably San Dieguito period age. "Research oriented investigation of these sites [CA-SDI-8076 and CA-SDI-8079] could be expected to yield information that would greatly contribute to the present understanding of this cultural time period in southern San Diego County. Additionally, such site depth could potentially provide data on culture history and change within the San Dieguito pattern as it is expressed in the Otay Mesa area" (CSRI 1982:220).

As was the case for CA-SDI-8076, the report of the data recovery program for the Miguel-Tijuana project (CSRI 1983) did not address this site. It is assumed that impacts to the site from that project were avoided.

During the survey for the Southeast Otay Mesa Sludge Processing Facilities, CA-SDI-8076 and CA-SDI-8079 were found to be generally as previously recorded. CA-SDI-8076 was described as a light to moderate density lithic scatter along the US-Mexican International Border. The site was found to be larger than previously mapped, although the east-west dimension was not longer than that given on the site record. The site measured approximately 245 m (800 ft) east-west by 150 m (500 ft) north-south, covering 28,865 $m^2$ (7.2 acres). Artifacts observed included cores, flakes/debitage, and possible tools. No material was collected from the site. CA-SDI-8079 was noted as a light to moderate density lithic scatter which included flaked stone tools, cores, and flakes/debitage. Three artifacts, originally thought to be isolates, were collected; all were large, patinated, fine-grained metavolcanic (felsite) flakes. No ground stone tools were noted, although two manos had been found by CSRI (1982). One of the test units excavated by CSRI (1982) was located as well (Robbins-Wade and Gross 1990).

The cultural resources technical report for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993) reiterated the testing recommendations of Robbins-Wade and Gross (1990).

CA-SDI-8076/CA-SDI-8079 was assessed in conjunction with the Immigration and Naturalization Service (INS) Area Lighting, Fencing, and Roadways project and determined not to be National Register eligible (McDonald et al. 1998).

CA-SDI-8076/CA-SDI-8079 was relocated during the survey for SR 11 (Kyle and Van Wormer 2001). Twelve artifacts (debitage, cores, and lithic tools) were identified. The report noted that the site "has been heavily disturbed by construction of the new border fence and roads used by the Border Patrol" (Kyle and Van Wormer 2001:2-6).

In summary, CA-SDI-8076/CA-SDI-8079 has been subject to a great deal of disturbance over many years. The site has been evaluated and determined not to be a significant archaeological resource (Mc Donald 1998). Based on this, the County's 2002 supplement to the East Otay Mesa Specific Plan cultural resources technical report (Russell et al. 2002) recommended no further work at the site.

**CA-SDI-8078**

This site was recorded as a moderate lithic scatter measuring 65 m (210 ft) by 28 m (90 ft), covering an area of 1820 $m^2$ (0.5 acres) (Carrico 1974a). Depth of the deposit was estimated to be less than 10 cm, "possibly up to 2-3 inches though the disturbed nature of the site makes this figure tenuous" (Carrico 1974a). Flakes, cores, and tools were noted at the site. In addition, one cortex backed chopper, one convex side scraper, one domed discoidal scraper, and one metate were collected. The site was considered to be a food preparation center (Carrico 1974a).

CA-SDI-8078 was assessed as representing primarily the San Dieguito complex with some evidence of an Inland Archaic component. The site exhibited a variety of tool types and was considered to have multiple components. Although the site had been disturbed by a roadway and cultivation, it was considered to retain some scientific research potential. As such, its significance was rated as moderate (Carrico 1974a).

During the survey for the sludge processing facilities (Robbins-Wade and Gross 1990), CA-SDI-8078 was found to be more elongated than previously mapped. The site measured approximately 215 m (700 ft) by 120 m (400 ft), 20,265 $m^2$ (5.0 acres). The long axis of the site followed the direction of plowing. A light scatter of cores and flakes/debitage was observed at the site; no artifacts were collected (Robbins-Wade and Gross 1990).

The cultural resource technical report for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993) reiterated the testing recommendations made by Robbins-Wade and Gross (1990). No evidence was found that testing had every been conducted at CA-SDI-8078. The vast

majority of the site is located south of the project area, but it extends a short distance into the Tentative Map and into the right-of-way for Airway Road.

Subsequent to the fieldwork for the current project, the portion of CA-SDI-8078 south of the Otay Crossings Commerce Park project area was tested by another contractor, as addressed below, under Off-Site Improvements: Sewer System.

**CA-SDI-8080**

Recorded as an "extensive lithic scatter", CA-SDI-8080 covered 14,850 $m^2$ (3.7 acres), measuring 165 m (540 ft) by 90 m (295 ft) (Carrico 1974b). Depth of the site was undetermined, but no depth was anticipated. Collected artifacts included one discoidal scraper, one domed discoidal scraper, one plano-convex side-scraper, one teshoa flake scraper, and one quartz hammerstone. Additionally, choppers, scrapers, cores, core fragments, and flakes were noted by not collected (Carrico 1974a).

The site was considered representative of the San Dieguito tradition. Due to the extensive size of the site, as well as the quantity and variety of material, CA-SDI-8080 was considered to be of moderate significance (Carrico 1974a).

CA-SDI-8080 could not be found during the survey for the Southeast Otay Mesa Sludge Processing Facilities (Robbins-Wade and Gross 1990). That report noted that :

> Due to continued plowing and other ground-modifying activities, the surface manifestations of previously recorded sites tended to differ slightly from the mapped locations. These changes in the surface undoubtedly account for the failure to relocate CA-SDI-8080; over fifteen years had elapsed between the time the site was originally recorded and the current inventory.

The site was found during the survey for the proposed SR 11, with approximately 50 debitage, cores, and lithic tools noted in a 50 m (165 ft) by 30 m (100 ft) area (Kyle and Van Wormer 2001). The majority of CA-SDI-8080 is located outside the current project area, but the site extends east into the project area a short distance (Figure 7). Four shovel test pits (STPs) were excavated to evaluate site significance, as part of the SR 11 study. Four pieces of debitage were recovered in STP 1, and three pieces of debitage and two fire-affected rocks were collected in STP 4. The other two STPs were devoid of cultural material. "The testing has identified CA-SDI-8080 as part of the Otay Mesa sparse lithic scatter (Gallegos et al. 1998) and, therefore, the site is recommended as not eligible for listing on the NRHP" (Kyle and Van Wormer 2001:4-1). The site also is not eligible for the California Register of Historical Resources; it is not a significant cultural resource.

Based on the evaluation by Kyle and Van Wormer (2001), the County's 2002 supplement to the East Otay Mesa Specific Plan cultural resources technical report (Russell et al. 2002) recommended no further work at the site.

**CA-SDI-8081**

CA-SDI-8081 was recorded as a moderate lithic scatter covering 5850 $m^2$ (1.4 acres). Site dimensions were given as 90 m (295 ft) by 65 m (215 ft) (Carrico 1974b), with no apparent depth (Carrico 1974a). Flakes, cores, and tools were observed on the surface. Material collected was: one cortex backed bifacial chopper, one rectangular scraper, two cores, three core fragments, and one utilized flake. The site may have been a large camp site (Carrico 1974a).

The site was considered indicative of the San Dieguito period. Regarding site significance: "The highly scattered nature of this site combined with an erosional pattern which has no doubt displaced most of the artifactual material, lessens the overall importance of this site. However, the large quantities of archaeological resources indicates that this site saw prolonged or extensive use at one time in distant past. As such this site is rated as of moderate importance" (Carrico 1974a).

During the survey for the sludge processing project, no evidence of CA-SDI-8081 was noted along the dirt extension of Alta Road that marked the project's western boundary (also the western boundary of the Otay Crossings Commerce Park project). The road has been maintained through grading, and road gravel has been used in places. "CA-SDI-8081 does not extend into the project area" (Robbins-Wade and Gross 1990:68).

The cultural resources report for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993) noted CA-SDI-8081 as a large habitation site, including debitage, hammerstones, cores, flake tools, and core tools. "The present survey redefined the site boundaries" (Ogden and Gallegos & Associates 1993:4-5). The updated site record shows the site area significantly decreased; it does not extend as far north as the Otay Crossings Commerce Park project area (Ogden and Gallegos & Associates 1993).

**CA-SDI-8652**

Recorded as a light lithic scatter located in the southeastern portion of the current project area, CA-SDI-8652 covered 34,944 $m^2$ (8.6 acres), measuring 336 m (1100 ft) by 104 m (340 ft) (Clark 1981). No subsurface cultural material was found (CSRI 1982:222). A total of 87 artifacts was encountered: 1 mano, 1 hammerstone, 8 core-based choppers, 5 scrapers, 11 cores, 60 flakes/debitage, and 1 historic artifact (Clark 1981). The site was identified as a limited activity site, probably used for resource processing (CSRI 1982:224).

Two 1 m by 1 m test units were excavated at CA-SDI-8652. The units were taken to a depth of 30 cm, and no cultural material was found below the surface. A scraper had been noted in an

erosional crevice during the inventory, but no other indication of subsurface material was found. It was suggested "that the scraper was redeposited by disturbance (erosion, etc.)" (CSRI 1982:222).

Regarding temporal/cultural affiliation, the report stated, "Lithic tool types suggest a basic San Dieguito occupation for this site, followed by a limited visit from Early Milling people" (CSRI 1982:224). The integrity of the site was considered limited, due to the extensive disturbance along the International Border. The site was not thought to be as significant as CA-SDI-8076 and CA-SDI-8079, because it lacked depth. However, "as a member of a relatively undisturbed group of San Dieguito sites, it may yield valuable information on settlement patterns and intersite relationships" (CSRI 1982:224). The site was considered to be potentially eligible for nomination to the National Register as part of an archaeological district. CA-SDI-8652 was not addressed in the report of the Miguel-Tijuana data recovery program (CSRI 1983). It is assumed that impacts to the site from that project were avoided.

During the survey of the Southeast Otay Mesa Sludge Processing Facilities, CA-SDI-8652 was found to be in basically the same location as previously mapped. The site was noted as a sparse lithic scatter at which flakes/debitage and cores were observed. Three artifacts, originally thought to be isolates, were collected: one flake/debitage, one core, and one utilized/retouched flake. The core is medium-grained metavolcanic. The other two artifacts are fine-grained metavolcanic (felsite). Although one mano had been noted by CSRI (1982), no ground stone implements were noted during the sludge processing facilities inventory (Robbins-Wade and Gross 1990).

The cultural resources technical report for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993) reiterated the recommendations for testing presented in Robbins-Wade and Gross (1990).

CA-SDI-8652 was evaluated in conjunction with the Immigration and Naturalization Service (INS) Area Lighting, Fencing, and Roadways project and was determined not to be National Register eligible (McDonald et al. 1998).

One piece of debitage was identified at the site during the survey for SR 11 (Kyle and Van Wormer 2001). The report noted, “the site location has been heavily disturbed by grading and use by the Border Patrol” (Kyle and Van Wormer 2001:2-6).

In summary, CA-SDI-8652 has been subject to a great deal of disturbance and is essentially destroyed. The site was evaluated and determined not to be a significant archaeological resource (Mc Donald et al. 1998). Based on this evaluation, the County’s 2002 supplement to the East Otay Mesa Specific Plan cultural resources technical report (Russell et al. 2002) also recommended no further work at the site.

## CA-SDI-10,299

This site was recorded by Smith (1984) as a "major site of the San Dieguito II occupation of the area". Site dimensions were given as 426 m (1395 ft) by 240 m (785 ft), and depth was unknown. The site was mapped immediately north of the Otay Crossings Commerce Park Tentative Map, possibly extending into the project area a short distance. Artifacts noted included "various types of scrapers, planes, blade fragments, a hand axe, and manos" (Smith 1984). Midden soil was also noted, and the site was considered "potentially very significant" (Smith 1984).

Although the site was thought to represent the San Dieguito culture when it was recorded in 1984, subsequent work on Otay Mesa has led Smith to suggest that CA-SDI-10,299 may actually be representative of an inland Early Milling occupation (Smith, personal communication 1990). A radiocarbon date of approximately 4500 years before present (BP) was obtained from a sample of shell from nearby site CA-SDI-10,297 (SDM-W-3507) (Smith and Moriarty 1985, cited in WESTEC 1986:5-13) which Smith considers to be contemporaneous with CA-SDI-10,299 (Smith, personal communication 1990).

During the survey for the sludge processing facilities project, a few scattered artifacts were noted on the slopes of a knoll (on which CA-SDI-11,802H is located). These were noted as “probably outliers of the site” (Robbins-Wade and Gross 1990:84).

The cultural resources technical report for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993) recommended testing at the site.

## CA-SDI-11,793

Located in the northeastern portion of the property on a relatively flat area, CA-SDI-11,793 was recorded during the survey for the sludge processing facilities. The site was described as a light density lithic scatter in plowed fields. The site measures approximately 350 m (1150 ft) by 170 m (550 ft), covering 46,730 $m^2$ (11.4 acres). Elevation ranges from 560 ft amsl along the drainage on the west to 600 ft amsl along the northern end. “Artifacts noted on the site include flakes/ debitage and cores made from fine-grained, non-porphyritic metavolcanic (felsite) and porphyritic metavolcanic material. No artifacts were collected from CA-SDI-11,793" (Robbins-Wade and Gross 1990:84).

The cultural resources technical report for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993) recommended testing at the site.

The portion of CA-SDI-11,793 located within the SR 11 study area was identified as part of the Otay Mesa lithic scatter and was not included in the Extended Phase I testing program, in compliance with the Otay Mesa Management Plan (Gallegos et al. 1998). Based on this assessment no additional work was recommended at the site (Kyle and Van Wormer 2001:4-7).

The County's 2002 supplement to the East Otay Mesa Specific Plan cultural resources technical report (Russell et al. 2002) also recommended no further work at the site. However, subsequent findings at other sites on Otay Mesa led to the requirement for testing at this site and others that had not previously been tested.

**CA-SDI-11,794**

This site, too, was originally recorded during the survey for the Southeast Otay Mesa Sludge Processing Facilities project (Robbins-Wade and Gross 1990). CA-SDI-11,794 was described as a relatively large, light to moderate density lithic scatter which encompasses two areas of concentration, identified as Loci A and B. The site is located along the top and slopes at the southern end of a low north-south ridge and extends onto the flat area at the base of the ridge, in the southeastern portion of the project area. The site covers approximately 98,215 $m^2$ (24.3 acres), measuring 410 m (1350 ft) by 305 m (1000 ft). Site elevation ranges from 152 m (500 ft) along the southern and western boundaries to 171 m (560 ft) on the crest of the ridge. "CA-SDI-11,794 encompasses the areas recorded in the field as sites Otay-2, Otay-4, Otay-14, and Otay-15, and Isolates 6, 7, 9, 10, 11, 12, 20, 21, 63, 64, and 65. Artifacts noted include flakes/debitage, cores, and unifaces, mostly made of fine-grained metavolcanic material (felsite). Artifacts which were collected as isolates include six flakes/debitage, three cores, and two unifacial tools. Of these 11 artifacts, nine were fine-grained metavolcanic and two were medium-grained metavolcanic. (Isolates 11 and 12 were not collected.)" (Robbins-Wade and Gross 1990:85).

During the sludge processing facilities survey, it was noted that along the eastern edge of the site, material was concentrated in and along the drainage. One flake was found in the sidewall of the drainage at a depth of 80 cm below the ground surface (Robbins-Wade and Gross 1990).

The cultural resource technical report for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993) reiterated the testing recommendations of Robbins-Wade and Gross (1990).

CA-SDI-11,794 was relocated during the SR 11 survey, and cultural material observed included debitage, cores, lithic tools, and a mano in a 410 m by 305 m area. Kyle and Van Wormer (2001:2-7) noted that this site "was one of the areas where sludge was spread during the survey". Three STPs were excavated, yielding only one piece of debitage in the 0-10 cm level of STP 1 and one piece of debitage in the 10-20 cm level of STP 3. Approximately 25 artifacts were noted during the survey. "Testing has identified CA-SDI-11,794 as part of the Otay Mesa sparse lithic scatter (Gallegos et al. 1998) and, therefore, the site is recommended as not eligible for listing on the NRHP" (Kyle and Van Wormer 2001:4-3). The site is also not considered eligible for the California Register of Historic Resources; it is not a significant cultural resource.

Based on the evaluation by Kyle and Van Wormer (2001) that the site is not a significant resource, the County's 2002 supplement to the East Otay Mesa Specific Plan cultural resources technical report (Russell et al. 2002) also recommended no further work at CA-SDI-11,794.

## CA-SDI-11,799H

CA-SDI-11,799H was described as a cistern into which lumber and other materials had been bulldozed. The site was recorded in conjunction with the Southeast Otay Mesa Sludge Processing Facilities survey (Robbins-Wade and Gross 1990). The cistern was in a cultivated field and was a short distance (approximately 90 m [300 ft]) east of the dirt extension of Alta Road. A bottle neck of sun-affected amethyst glass was collected at the cistern. There are enough materials associated with the site to suggest that a house or other structure was probably demolished on the site. The site is represented on the 1903 Cuyamaca quadrangle as one structure. It does not appear on any of the later topographic maps. The site is not shown on the 1879 Bureau of Land Management (BLM) map, but the "Old Road from San Diego to Lower California" is shown as running through the area at that time. CA-SDI-11,799H is located mainly to the south of the Otay Crossings Commerce Park project area, but it is mapped as extending a short distance into the Tentative Map area and the proposed Airway Road right-of-way.

## CA-SDI-11,800

Recorded during the sludge facilities study, CA-SDI-11,800 was described as a light density lithic scatter along the top and upper slopes of a low north-south ridge in the central portion of the project area. The site measured approximately 305 m (1000 ft) by 185 m (600 ft), covering 44,315 m (10.8 acres). Cultural material observed at CA-SDI-11,800 during the 1990 survey included a biface, hammerstones, cores, and flakes/debitage made from fine-grained metavolcanic material (felsite). No artifacts were collected from the site during that survey (Robbins-Wade and Gross 1990).

The cultural resources technical report for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993) reiterated the recommendations for testing made by Robbins-Wade and Gross (1990).

Due to poor ground visibility, only one piece of debitage was noted at this site during the survey for SR 11 (Kyle and Van Wormer 2001). CA-SDI-11,800 was identified as part of the Otay Mesa lithic scatter, and no testing was conducted, in compliance with the Otay Mesa Management Plan (Gallegos et al. 1998). No additional work was recommended at the site.

The County's 2002 supplement to the East Otay Mesa Specific Plan cultural resources technical report (Russell et al. 2002) also recommended no further work at the site. However, subsequent findings at other sites on Otay Mesa led to the requirement for testing at this site and others that had not previously been tested.

## CA-SDI-11,801

Also found during the sludge processing facilities survey, CA-SDI-11,801 was recorded as a very small, light scatter of marine shell at the base of the knoll on which CA-SDI-8078 is located, near

the western property boundary. The site measured approximately 4 m (13 ft) in diameter, covering just 13 $m^2$ (133 square feet). CA-SDI-11,801 consisted of around 15 small fragments of oyster (*Ostrea lurida*) and chione clam (*Chione* sp.). Minimum number of individuals represented by the shell scatter is one oyster and one chione (Robbins-Wade and Gross 1990).

### CA-SDI-11,802H

CA-SDI-11,802H is noticeable on the landscape as scattered construction debris and a stand of eucalyptus trees on a knolltop at the northwestern end of the project area (Figure 7). The site was recorded as part of the Southeast Otay Mesa Sludge Processing Facilities study (Robbins-Wade and Gross 1990). There is a flat area where a structure once stood but no concrete pad or foundation. The area shows evidence of bulldozer disturbance. Cultural material observed at the site during the 1990 survey includes construction materials and household debris. A glass marble was collected from the site.

CA-SDI-11,802H is represented on the 1943 and 1955 15' Jamul quadrangles by one building and on the 1955 7.5' Otay Mesa quadrangle by two structures. No structures appear in the area of the site on the 1903 30' Cuyamaca quadrangle. The plat maps for 1891 and 1893 show D.O. McCarthy as the land owner. The property was sold or mortgaged to the California Mortgage Loan and Trust Company in 1895, and is shown as owned by Peter A. Beckley in the circa 1912 plat book. The Beckley family is recorded in the city directories for Otay Mesa through the early years of the 20th century. In the 1900 census Peter Beckley is mentioned as a farm laborer on the farm of his father (Henry C. Beckley). He is listed as a head of household in the 1910 census. The Beckley place was described as being next to a racetrack in the town of Siempre Viva (Painter 1985:65). "It is not known at this time if CA-SDI-11,802H is the location of the Beckley farm complex" (Robbins-Wade and Gross 1990:80).

The cultural resources technical report for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993) recommended testing at the site, based on the survey report (Robbins-Wade and Gross 1990).

### CA-SDI-15,872

Located along the eastern project boundary, CA-SDI-15,872 was recorded during the survey for SR 11 (Kyle and Van Wormer 2001). The site was described as a light to moderate density lithic scatter measuring about 140 m (460 ft) by 75 m (245 ft). Artifacts noted during the survey were 4 lithic tools, 21 cores, and 8 pieces of debitage, most found in a 40 m (130 ft) by 20 m (65 ft) area on the northern edge of the site (Kyle and Van Wormer 2001:2-11). The site was identified as part of the Otay Mesa sparse lithic scatter and was not included in the testing program for SR 11, per the Otay Mesa Management Plan (Gallegos et al. 1998). No additional work was recommended for the site (Kyle and Van Wormer 2001:4-7).

The County's 2002 supplement to the East Otay Mesa Specific Plan cultural resources technical report (Russell et al. 2002) also recommended no further work at the site. However, subsequent findings at other sites on Otay Mesa led to the requirement for testing at this site and others that had not previously been tested.

### CA-SDI-15,873

CA-SDI-15,873 is located a short distance north of CA-SDI-15,872, along the eastern project boundary (Figure 7). Recorded during the survey for SR 11, the site was described as a sparse lithic scatter. "Two lithic tools and eight pieces of debitage were noted in an area approximately 80 m north/south by 25 m east/west" (Kyle and Van Wormer 2001:2-11). CA-SDI-15,873 was identified as part of the Otay Mesa sparse lithic scatter per the Management Plan (Gallegos et al. 1998) and was not included in the Extended Phase I testing program for SR 11. No additional work was recommended for the site (Kyle and Van Wormer 2001:4-7).

The County's 2002 supplement to the East Otay Mesa Specific Plan cultural resources technical report (Russell et al. 2002) also recommended no further work at the site. However, subsequent findings at other sites on Otay Mesa led to the requirement for testing at this site and others that had not previously been tested.

### CA-SDI-15,875

CA-SDI-15,875 is located in the eastern portion of the project area, northwest of CA-SDI-15,872 and CA-SDI-15,873. The site is a sparse lithic scatter, and ground visibility was excellent during the survey. "Artifacts noted in a 100 m north/south by 35 m east/west are include 2 flake tools, 2 cores, and 7 flakes of metavolcanic material" (Kyle and Van Wormer 2001:2-12). Extended Phase I testing was not conducted, as the site fit the pattern of the Otay Mesa sparse lithic scatter per the Otay Mesa Management Plan (Gallegos et al. 1998). No further work was recommended at the site.

The County's 2002 supplement to the East Otay Mesa Specific Plan cultural resources technical report (Russell et al. 2002) also recommended no further work at CA-SDI-15,875. However, subsequent findings at other sites on Otay Mesa led to the requirement for testing at this site and others that had not previously been tested.

## OFF-SITE IMPROVEMENTS: OLD OTAY MESA ROAD

As shown in Figure 4, some right-of-way dedication and other improvements may be required along Old Otay Mesa Road in conjunction with development of the Otay Crossings Commerce Park project. Two archaeological sites have been recorded along the right-of-way of Old Otay Mesa Road in this area: CA-SDI-12,337 and CA-SDI-12,872 (Figure 8; Table 2).

**SENSITIVE MATERIAL – IN CONFIDENTIAL APPENDIX B**

| | | |
|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Locations of cultural resources –<br>Off-site: Old Otay Mesa Road | Figure 8 |

Table 2. Cultural resources within off-site improvement areas

| Site Number | Site Description | Previously Tested? | Comments |
|---|---|---|---|
| Old Otay Mesa Road | | | |
| CA-SDI-12,337 | Large lithic scatter (over 700 acres) with debitage, cores, and flaked stone tools | Yes | Not significant; no further work required (Russell et al. 2002) |
| CA-SDI-12,872 | Habitation site with flakes, flaked stone tools, and some milling tools | Yes | Not significant; no further work required (Russell et al. 2002) |
| Airway Road | | | |
| CA-SDI-12,886 | Light lithic scatter of debitage and one tool | Yes | Not significant; no further work required (Russell et al. 2002) |
| CA-SDI-12,888H | Historic debris in mapped location of 19th century structure | No | Potentially significant |
| Sewer System | | | |
| CA-SDI-8078 | Moderate lithic scatter with flakes, cores, and tools | Portion within proposed sewer alignment – yes | Portion within proposed sewer alignment not significant; no further work required there (Smith 2006). |
| CA-SDI-8081 | Habitation site with flakes, cores, and tools | No | Potentially significant |
| CA-SDI-10,081 | No site record | No | Site destroyed; no further work required (Russell et al. 2002) |
| CA-SDI-11,798 | Moderate lithic scatter with flakes, cores, and tools | Yes | Not significant; no further work required there (Smith 2006). |
| CA-SDI-12,888H | see above | | |

### CA-SDI-12,337

CA-SDI-12,337 is an extremely large site (covering over 700 acres), which includes four previously recorded sites (CA-SDI-5352, CA-SDI-9974, CA-SDI-10,072, and CA-SDI-10,735). This huge lithic scatter includes debitage, cores, and flaked stone tools (Rosen 1990). Numerous testing programs have been conducted on portions of the site, and all have determined that the portions tested are not important resources (Cupples and Eidsness 1978; Kyle and Gallegos 1992a, 1992b, 1992c, 1992d, 1992e, 1992f; Kyle, et al. 1996). CA-SDI-12,337 as a whole was determined not to be a significant resource (Byrd et al. 1994; Rosen 1999). Based on this, the County's 2002 supplement to the East Otay Mesa Specific Plan cultural resources technical report (Russell et al. 2002) recommended no further work at the site.

### CA-SDI-12,872

The cultural resources technical report for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993) described this site as a large habitation site associated with CA-SDI-5352 (now part of CA-SDI-12,337). Debitage, flaked stone tools, and several milling tools were noted at the site (Ogden and Gallegos & Associates 1993). The County's 2002 supplement technical report indicated that testing had been undertaken at CA-SDI-12,872, and the site determined not significant (Russell et al. 2002).

## OFF-SITE IMPROVEMENTS: AIRWAY ROAD

Two archaeological sites have been recorded along the proposed right-of-way for improvements to Airway Road (Figure 9; Table 2). These are CA-SDI-12,886 and CA-SDI-12,888H.

### CA-SDI-12,886

CA-SDI-12,886 was described as a light lithic scatter of debitage and one tool (Ogden and Gallegos & Associates 1993). The County's 2002 supplement to the technical report indicated that this site was tested and determined not to be a significant resource. Therefore, no further work was recommended for CA-SDI-12,886 (Russell et al. 2002).

### CA-SDI-12,888H

CA-SDI-12,888H was recorded during the survey for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993). The site was noted as fragments of porcelain, aqua glass, purple glass, and white ware ceramics in the "same location as a structure that was seen in the historic map check for 1880)" (Ogden and Gallegos & Associates 1993:4-6). The site is mapped outside the Tentative Map area, within the right-of-way of the proposed Airway Road, at the southwest corner of two existing dirt roads that are the existing alignments of Alta Road and Airway Road.

**SENSITIVE MATERIAL – IN CONFIDENTIAL APPENDIX B**

| | | |
|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Locations of cultural resources –<br>Off-site: Airway Road | Figure 9 |

## OFF-SITE IMPROVEMENTS: SEWER SYSTEM

The proposed off-site sewer improvements cross the recorded locations of five sites: CA-SDI-8078, CA-SDI-8081, CA-SDI-10,081, CA-SDI-11,798, and CA-SDI-12,888H (Figure 10; Table 2).

### CA-SDI-8078

CA-SDI-8078 is described earlier in this chapter, under Tentative Map Area. The site was described as a lithic scatter. While a portion of CA-SDI-8078 is located within the Otay Crossings Commerce Park project area, the vast majority of the site is to the south. The cultural resource technical report for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993) reiterated the testing recommendations made by Robbins-Wade and Gross (1990). While the current study was in progress, a testing program was conducted by another contractor at the portion of CA-SDI-8078 to the south of the project area, including the portion crossed by the proposed sewer alignment. The site was found not to be a significant resource under the California Environmental Quality Act (CEQA); the level of work conducted there is sufficient to mitigate impacts to the site (Smith 2006).

### CA-SDI-8081

CA-SDI-8081 is described earlier in this chapter, under Tentative Map Area. The cultural resources report for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993) noted the site as a large habitation site, including debitage, hammerstones, cores, flake tools, and core tools.

### CA-SDI-10,081

No site record is available for CA-SDI-10,081, only a map location. During a 1992 survey for a proposed pipeline project, Alter et al. (1992) noted that there was no evidence of the site. "It is probable that the site was destroyed by agricultural activities and construction of industrial buildings and other improvements" (Alter et al. 1992:41). Ogden and Gallegos & Associates (1993) stated that the portion of the site east of Enrico Fermi Drive had been destroyed, but recommended testing for the area recorded west of this road. The 2002 County technical report indicated that several surveys had been unable to locate CA-SDI-10,081, which had evidently been destroyed by construction. Therefore, no further work was recommended with regard to this site (Russell et al. 2002).

**SENSITIVE MATERIAL – IN CONFIDENTIAL APPENDIX B**

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| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Locations of cultural resources –<br>Off-site: sewer | Figure 10 |

## CA-SDI-11,798

CA-SDI-11,798 was described as a very light density lithic scatter in a plowed field, covering approximately 8.8 acres (36,305 $m^2$), measuring 700 ft (215 m) in diameter. Flakes/debitage, cores, and a flaked tool were noted at CA-SDI-11,798, and testing was recommended to assess significance (Robbins-Wade and Gross 1990). The cultural resource technical report for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993) reiterated the testing recommendations made by Robbins-Wade and Gross (1990). While the current study was in progress, a testing program was conducted at CA-SDI-11,798 for an adjacent project. The site was found not to be a significant resource under the California Environmental Quality Act (CEQA); the level of work conducted there is sufficient to mitigate impacts to the site (Smith 2006).

## CA-SDI-12,888H

CA-SDI-12,888H is described earlier, under Off-Site Improvements: Airway Road. This historic period site is mapped at the southwest corner of Alta Road and Airway Road.

## IV. RESEARCH METHODS

Sixteen archaeological sites have been recorded within or adjacent to the Otay Crossings Commerce Park project area, as shown in Tables 1 and 2 and discussed under Previous Research. CA-SDI-8081 was determined not to extend into the project area (Ogden and Gallegos & Associates 1993; Robbins-Wade and Gross 1990), but it is located within off-site improvement areas, specifically a proposed sewer alignment. CA-SDI-12,888H also does not extend into the project area, although it may be present in the right-of-way for Airway Road, just west of the project site. The off-site improvement areas are addressed below, following the discussion of the project area itself.

Of the 14 sites that are wholly or partially within the current project area, 4 have been tested and determined not to be significant cultural resources: CA-SDI-8076/CA-SDI-8079 (McDonald et al. 1998), CA-SDI-8080 (Kyle and Van Wormer 2001), CA-SDI-8652 (McDonald et al. 1998), and CA-SDI-11,794 (Kyle and Van Wormer 2001). This leaves 10 sites within the Tentative Map area that have not been evaluated prior to the current study. Two of these sites (CA-SDI-11,799H and CA-SDI-11,802H) are historic archaeological resources, and one is a small shell scatter (CA-SDI-11,801).

The remaining seven sites (CA-SDI-8078, CA-SDI-10,299, CA-SDI-11,793, CA-SDI-11,800, CA-SDI-15,872, CA-SDI-15,873, and CA-SDI-15,875) all appear to fit the sparse lithic scatter pattern as identified in the *Management Plan for Otay Mesa Prehistoric Resources, San Diego, California* (Gallegos et al. 1998). Based on this, no testing was proposed for these resources initially, as they did not appear to meet the criteria for inclusion in the California Register of Historical Resources and were not, therefore, significant resources under CEQA or the County of San Diego guidelines. Indeed, several of the sites had been identified in the County's supplement to the East Otay Mesa Specific Plan cultural resources technical report (Russell et al. 2002) as requiring no further work. However, recent unexpected discoveries at other sites on Otay Mesa prompted County staff to require further examination of sites that were previously identified as sparse lithic scatters at which no testing was recommended. Based on this new information, the current evaluation program was conducted for the Otay Crossings Commerce Park project. Testing was proposed at three of the sites (CA-SDI-8078, CA-SDI-10,299, and CA-SDI-11,799H) to determine whether they actually extend into the project area, and, if so, whether the portion within the project area contains significant deposits. The remaining sites to be evaluated are within the project area in their entirety, or, in the case of CA-SDI-11,793, the majority of the site is within the project area.

### PRE-FIELD METHODS AND BIOLOGICAL CONSTRAINTS

Records searches were obtained from the South Coastal Information Center and reviewed. Previous reports addressing the project area were also obtained and reviewed; these are discussed under Previous Research. Historic maps and aerial photographs were reviewed to determine the potential for historic archaeological resources. Stephen R. Van Wormer and Susan D. Walter

conducted historic archival research to assess site significance of CA-SDI-11,802H and CA-SDI-11,799H. Their report is included as Appendix A to this report.

Due to sensitive biological resources within the project area, Affinis archaeologists and biologists from Helix Environmental Planning coordinated with staff from the US Fish and Wildlife Service and California Department of Fish and Game to conduct the field testing program without damaging sensitive biological resources. Correspondence with these resource agencies is included as Appendix B of this report. The week before field work began for the testing program, Helix biologists conducted surveys to determine whether raptors were still nesting in the eucalyptus trees at CA-SDI-11,802H (they were not) and whether burrowing owls were nesting within the project area (they were). Due to the presence of burrowing owls, field work was not conducted at CA-SDI-11,799H, CA-SDI-11,801, and CA-SDI-12,888H (this site is mapped outside the project area, but within the proposed Airway Road right-of-way). Prior to beginning field work, Director of Cultural Resources, Mary Robbins-Wade, and project co-field director, Matt Murray, visited the sites to be tested along with Helix biologist, Jasmine Watts. Ms. Watts showed Ms. Robbins-Wade and Mr. Murray the sensitive plant species that were to be avoided at CA-SDI-11,793. Together, they staked and flagged the edge of the coastal sage scrub community on the eastern portion of the site and a 50-ft buffer from the edge of this community, as well as the *Iva hayesiana* population on the western portion of the site. Individual barrel cactus were also flagged. No testing was conducted in these flagged areas.

## FIELD AND LABORATORY METHODS

Field work for the testing program was conducted July 13-22, 2005. The crew consisted of co-field director, Matt Murray; crew chief, Matt Sivba; and crew members Sarah Jenkins, Amy Jordan, Kyle Knabb, and Tamara Leviton, under the direction of Mary Robbins-Wade. (Co-field director, Andrew Giletti, began the pre-field preparations but was ill during the course of the testing field work.)

Due to extremely poor ground visibility, site boundaries were based on the boundaries recorded by previous studies, particularly Robbins-Wade and Gross (1990). Recorded site locations were plotted on the project topographic map for reference in the field. The archaeological crew walked over each site to mark any artifacts visible on the surface. All visible surface artifacts were mapped and collected, but in general, artifacts were only visible in dirt roads.

A series of shovel test pits (STPs) was excavated at each site. STPs were placed along an axis across each site, with additional STPs placed as necessary to give adequate areal coverage. The distance between STPs differed depending upon the size of the site and is discussed in more detail under the individual site descriptions in the Results section. The STPs, which measured 50 cm north-south by 30 cm east-west, were oriented to true north and were excavated in 10-cm contour levels. The STPs were excavated to a depth of no less than 30 cm. If cultural material was encountered, at least one sterile level was excavated below the cultural material. Soils were passed

through 1/8-in mesh rocker screens. Standard record forms were completed for each unit and level, recording artifact recovery, soil characteristics, and other information about the unit.

All cultural material collected during the testing program was taken to the Affinis lab, where material was washed, sorted, cataloged, and analyzed. Standard catalog forms were completed for the collection that recorded provenience, artifact type, material, and project technological attributes. The artifact catalog is included as Appendix C of this report. Data were entered into database files for manipulation, and summaries were generated. Cultural material collected during the testing program will be permanently curated at the San Diego Archaeological Center.

## OFF-SITE IMPROVEMENT AREAS

As previously addressed, off-site improvements associated with the project may be required along Old Otay Mesa Road and Airway Road, in the form of right-of-way dedication. Sewer improvements are proposed within the future alignment of Siempre Viva Road through the property to the south of the Otay Crossings Commerce Park project area, Siempre Viva Road to the west of Alta Road, and Enrico Fermi Road. The areas along Old Otay Mesa Road had all been previously surveyed and were not resurveyed for this project. The Airway Road extension to the west of Alta Road and possible sewer line alignments along Alta Road and west of Alta Road were surveyed for archaeological resources by Affinis personnel in May 2005. Parallel transects were walked, spaced 10 m apart. A 100- ft wide corridor was surveyed for sewer (50 ft on each side of the centerline) and a 60-ft wide corridor was surveyed for the Airway Road improvements.

Eight archaeological sites have been recorded within areas that would be affected by off-site improvements associated with the project. Five of these sites have been tested and determined not to be significant (CA-SDI-8078, CA-SDI-11,798, CA-SDI-12,337, CA-SDI-12,872, and CA-SDI-12,886). One site (CA-SDI-10,081) has been destroyed by construction. As previously addressed, testing could not be undertaken at the historic site, CA-SDI-12,888H, due to the presence of burrowing owls. The remaining site was tested as part of the current project.

Similar to the sites within the Tentative Map area, CA-SDI-8081 appears to fit the sparse lithic scatter pattern as identified in the *Management Plan for Otay Mesa Prehistoric Resources, San Diego, California* (Gallegos et al. 1998). As with the sites in the project area, County staff required that a testing program be conducted to assess this site. A testing program was conducted at the portion of CA-SDI-8081 that is within the proposed sewer alignment, along Alta Road and Siempre Viva Road. Field work was conducted on November 2-3, 2006 by Affinis archaeologists Andrew Giletti, Matt Sivba, and Traci Biegger, under the direction of Mary Robbins-Wade. Site boundaries were based on the boundaries recorded by previous studies. The archaeological crew walked over the portion of the site within the proposed sewer right-of-way, but no cultural material was observed during the current testing program.

A series of shovel test pits (STPs) was excavated within the proposed sewer alignment. Fifteen STPs were excavated parallel to Alta Road and five STPs were place parallel to Siempre Viva

Road. The STPs, which measured 50 cm north-south by 30 cm east-west, were oriented to true north and were excavated in 10-cm contour levels. The STPs were excavated to a depth of 30 cm. Soils were passed through 1/8-in mesh rocker screens. Standard record forms were completed for each unit and level, recording artifact recovery, soil characteristics, and other information about the unit. No cultural material was recovered in the STPs at CA-SDI-8081.

# V. RESULTS

As described under Previous Research, 16 archaeological sites have been recorded within or adjacent to the Otay Crossings Commerce Park project area. These are summarized in Table 1 and illustrated in Figure 7 (Confidential Appendix B). As addressed under Research Methods, two sites (CA-SDI-8081 and CA-SDI-12,888H) are mapped adjacent to the project area but do not extend into it, although CA-SDI-12,888H may be present in the proposed right-of-way for Airway Road, just west of the project site. Of the 14 sites that are wholly or partially within the current project area, 4 were previously tested and determined not to be significant cultural resources: CA-SDI-8076/CA-SDI-8079 (McDonald et al. 1998), CA-SDI-8080 (Kyle and Van Wormer 2001), CA-SDI-8652 (McDonald et al. 1998), and CA-SDI-11,794 (Kyle and Van Wormer 2001). The remaining 10 sites (CA-SDI-8078, CA-SDI-10,299, CA-SDI-11,793, CA-SDI-11,799H, CA-SDI-11,800, CA-SDI-11,801, CA-SDI-11,802H, CA-SDI-15,872, CA-SDI-15,873, and CA-SDI-15,875) were evaluated and are discussed in this chapter.

Eight archaeological sites have been recorded in areas that would be affected by off-site improvements associated with the project. These sites (CA-SDI-8078, CA-SDI-8081, CA-SDI-10,081, CA-SDI-11,798, CA-SDI-12,337, CA-SDI-12,872, CA-SDI-12,886, and CA-SDI-12,888H) are addressed at the end of this chapter, under Off-Site Improvement Areas.

## CA-SDI-8078

CA-SDI-8078 is located mainly off-site to the south, but the site extends a short distance into the project area (Figure 7). Ground visibility was extremely poor, except in dirt roads, of which there were several. Site dimensions were not changed from those previously recorded. The site measures approximately 215 m (700 ft) by 120 m (400 ft), 20,265 $m^2$ (5.0 acres). The long axis of the site follows the direction of plowing (Robbins-Wade and Gross 1990:81).

The testing program addressed the portion of CA-SDI-8078 within the project area. Eleven surface artifacts were found and collected at the site (Figure 11): eight flakes and three cores. Five STPs were excavated at the site, each to a depth of 30 cm. STPs 1-3 were excavated at 25 m intervals on an east-west axis along the southern project boundary. STPs 4 and 5 were on an axis 15 m north of the first line, also spaced 25 m apart and placed so as to fill in the distance between STPs 1-3 (Figures 11 and 12). A single core was found in the STPs, in the 0-10 cm level of STP 5.

As summarized in Tables 3 and 4, all of the artifacts except one are metavolcanic, most of them fine-grained metavolcanic material. One piece of debitage is quartzite.

**SENSITIVE MATERIAL – IN CONFIDENTIAL APPENDIX B**

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|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Sketch map: CA-SDI-8078 | Figure 11 |

**SENSITIVE MATERIAL – IN CONFIDENTIAL APPENDIX B**

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|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Site map: CA-SDI-8078 and CA-SDI-11,801 | Figure 12 |

Table 3. CA-SDI-8078, material types of debitage

| Material | Count | % Count | Weight (g) | % Weight |
|---|---|---|---|---|
| Med.- to coarse-grained metavolcanic | 3 | 37.5% | 358.8 | 71.6% |
| Fine-grained metavolcanic | 4 | 50.0% | 140.3 | 28.0% |
| Quartzite | 1 | 12.5% | 1.7 | 0.3% |
| Total | 8 | 100.0% | 500.8 | 100.0% |

Table 4. CA-SDI-8078, material types of cores

| Material | Count | % Count | Weight (g) | % Weight |
|---|---|---|---|---|
| Med.- to coarse-grained metavolcanic | 1 | 25.0% | 303.0 | 49.7% |
| Fine-grained metavolcanic | 3 | 75.0% | 306.6 | 50.3% |
| Total | 4 | 100.0% | 609.6 | 100.0% |

## CA-SDI-10,299

CA-SDI-10,299 is located mainly outside the project area, to the north, but the site extends a short distance (about 55 m [175 ft]) south into the historic homestead site CA-SDI-11,802H (Figure 7). Ground visibility in this area was generally excellent, due to a number of dirt roads and graded areas. Ten surface artifacts were found and collected (Figure 13): eight flakes and two retouched/utilized flakes. As summarized in Table 5, only one of the flakes is medium- to coarse-grained metavolcanic, the other items are all fine-grained metavolcanic. No other raw material types were found. Both of the retouched/ utilized artifacts are fine-grained metavolcanic. Both of these artifacts are flaked-based with unifacial retouch. Artifact #1 has retouch and use wear on two concave edges and has cortex on the dorsal surface. Artifact #8 has a single retouched/utilized edge, which is convex, and exhibits no cortex.

Table 5. CA-SDI-10,299, material types of debitage

| Material | Count | % Count | Weight (g) | % Weight |
|---|---|---|---|---|
| Med.- to coarse-grained metavolcanic | 1 | 12.5% | 52.3 | 28.4% |
| Fine-grained metavolcanic | 7 | 87.5% | 131.8 | 71.6% |
| Total | 8 | 100.0% | 184.1 | 100.0% |

Eight STPs were excavated, four of them in a line across the northen project boundary, and the other four on either side of the cleared area on the knoll top, staggered to maximize areal coverage (Figure 14). STP 2 was excavated to a depth of 40 cm; all other STPs were terminated at 30 cm. No artifacts were recovered in the STPs.

**SENSITIVE MATERIAL – IN CONFIDENTIAL APPENDIX B**

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|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Sketch map:<br>CA-SDI-10,299 and CA-SDI-11,802H | Figure 13 |

**SENSITIVE MATERIAL – IN CONFIDENTIAL APPENDIX B**

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|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Site map:<br>CA-SDI-10,299 and CA-SDI-11,802H | Figure 14 |

## CA-SDI-11,793

CA-SDI-11,793 is located in the northern portion of the project area and extends off-site to the east. It was originally described as a large, light density lithic scatter, at which flakes and debitage were noted (Robbins-Wade and Gross 1990). As addressed under Research Methods, two areas of biological sensitivity were staked and flagged during the current study, and testing was precluded in these areas (Figure 15). During a field visit in March 2005, a few surface artifacts had been noted in the coastal sage scrub area; these were not collected during the testing program, as that area was off-limits. Ground visibility over the remainder of the site was extremely poor, due to the thick growth of non-native grasses over the very wet winter. Three surface artifacts were mapped and collected: two flakes and one core (Table 6).

A series of 15 STPs was excavated across the site. The initial eight STPs were placed on an axis running the length of the site (northwest-southeast). The remaining seven STPs were staggered on either side of this axis, to provide maximum areal coverage. Cultural material (all debitage) was found in 4 of the 15 STPs, as summarized in Table 6. STP 15 was excavated to a depth of 40 cm; all other STPs were halted at 30 cm.

Table 6. CA-SDI-11,793, summary of artifact recovery

| Unit | Level | Item | Count |
|---|---|---|---|
| Surface collection | Surface | Flakes | 2 |
| Surface collection | Surface | Core | 1 |
| STP 8 | 0-10 cm | Angular debris | 1 |
| STP 9 | 0-10 cm | Angular debris | 1 |
| STP 12 | 10-20 cm | Angular debris | 1 |
| STP 15 | 20-30 cm | Flake | 1 |
| Total | | | 8 |

As summarized in Table 7, all the debitage collected at CA-SDI-11,793 was metavolcanic, about half fine-grained and half medium- to coarse-grained. A single multi-directional core was collected at the site. It is of fine-grained metavolcanic material. The previous description of the site as a light density lithic scatter was not changed by the results of the testing program.

Table 7. CA-SDI-11,793, material types of debitage

| Material | Count | % Count | Weight (g) | % Weight |
|---|---|---|---|---|
| Med.- to coarse-grained metavolcanic | 3 | 42.9% | 78.8 | 80.4% |
| Fine-grained metavolcanic | 4 | 57.1% | 19.2 | 19.6% |
| Total | 7 | 100.0% | 98.0 | 100.0% |

**SENSITIVE MATERIAL – IN CONFIDENTIAL APPENDIX B**

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|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Site map: CA-SDI-11,793 | Figure 15 |

## CA-SDI-11,799H

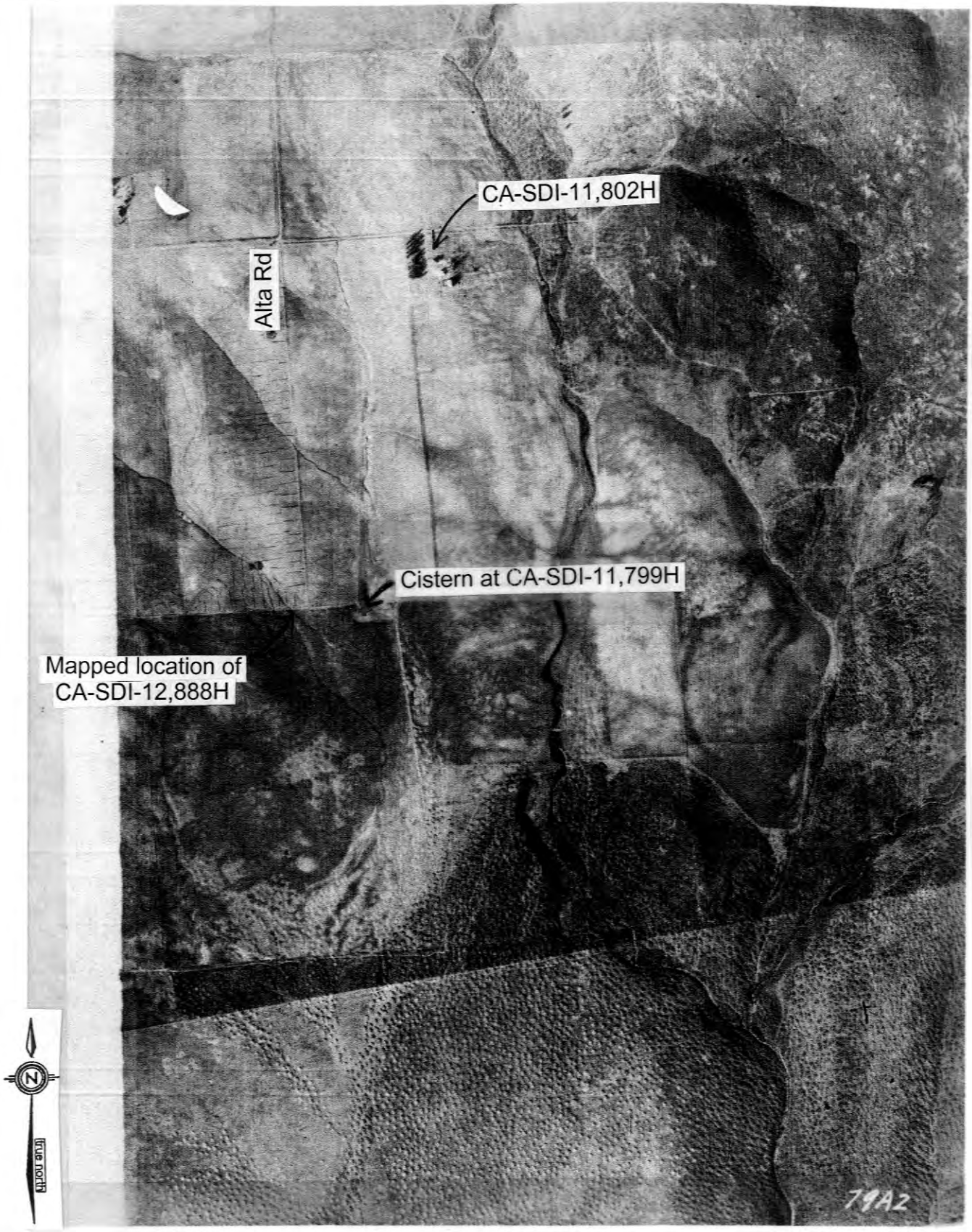
CA-SDI-11,799H was described as a cistern in a cultivated field, into which lumber and other materials had been bulldozed (Robbins-Wade and Gross 1990). A bottle neck of sun-affected amethyst glass was collected at the cistern during the 1990 survey, and there were enough materials associated with the site to suggest that a house or other structure was probably demolished on the site. Indeed, a building is shown in this location on the 1903 Cuyamaca quadrangle.

The site is part of the 160-acre D.O. McCarthy farmstead, which is discussed in detail in Appendix A to this report. McCarthy was living on Otay Mesa by 1883 and received a patent for the 160 acres in 1889. D.O. McCarthy and his son J. Harvey are best remembered for establishing a store, blacksmith shop, post office, and race track at their Otay Mesa ranch. In addition, it became the local voting precinct polling place. The blacksmith shop opened in October 1889. The Siempreviva Grocery, built and run by J. Harvey, opened the same month. The store was "well stocked with groceries that he is selling at San Diego prices." At this time Otay Mesa farmers sent a signed petition to Washington, D.C. asking for a post office to be called Siempreviva, which was established at McCarthy's place in February 1890 (see Appendix A).

By 1895 McCarthy no longer controlled the acreage, and it was owned by the California Mortgage Company. A building is shown on the property on the 1903 USGS Cuyamaca quadrangle that was surveyed in 1891 and 1901 to 1902. There are no buildings on the former McCarthy farmstead in a 1928 aerial photograph of the area (Figure 16). The family remained in San Diego, publishing a small newspaper called the *Vidette* until 1901 when they moved to Los Angeles. In 1916, at the age of 86, D.O. McCarthy returned to San Diego where he was hailed as a pioneer. He spent the time visiting the old location of his Otay Mesa ranch and reminiscing about the early days of the city of San Diego (see Appendix A).

CA-SDI-11,799H is mainly off-site to the south, but it is mapped as extending into the Tentative Map area and the proposed Airway Road right-of-way (Figure 7). During a field visit in March 2005, it was noted that the cistern has been filled since the 1990 survey; it is now discernible as a depression filled with gravel. The density of non-native grasses severely limited ground visibility except in the dirt roads.

As addressed under Research Methods, burrowing owls are currently nesting at this site, so no field work was conducted here during the current testing program. Subsequent to the field work conducted for the current project, a testing program was conducted on the property to the south, which included CA-SDI-11,799H. The site was determined to be a significant archaeological resource under CEQA and County guidelines, although the site is not significant under the County of San Diego's Resource Protection Ordinance (RPO) (Smith 2006). A data recovery excavation and monitoring program will be conducted at CA-SDI-11,799H, as addressed under Mitigation Measures.




| | | |
|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | 1928 aerial photograph | Figure 16 |

## CA-SDI-11,800

Like CA-SDI-11,793, CA-SDI-11,800 is a large, light density lithic scatter. The site is located on the top and upper slopes of a low north-south ridge in the central portion of the project area. "The site measures approximately 305 m (1000 ft) by 185 m (600 ft), covering 44,315 $m^2$ (10.8 acres). Cultural material observed at CA-SDI-11,800 included a biface, hammerstones, cores, and flakes/debitage made from fine-grained metavolcanic material (felsite)" (Robbins-Wade and Gross 1990).

Ground visibility at the site was limited to rodent mounds and a few small patches of disturbed soil, mainly due to off-road vehicle traffic associated with the US Border Patrol. Thick grass and vegetation eliminated visibility over the rest of the site. Only three surface artifacts were found: two flakes and a retouched/utilized flake.

Nineteen STPs were excavated across the site. STPs 1-9 were laid out along the long axis of the site (generally north-south). STPs 10-17 were excavated on either side of this line. Two additional STPs were placed on the top of the knoll, at the northern end of the site (Figure 17). Three pieces of angular debris were collected in STP 1 and STP 4 (Table 8). The remaining 17 STPs were sterile. All STPs were excavated to 30 cm, except STP 4, which went to 40 cm.

Table 8. CA-SDI-11,800, summary of artifact recovery

| Unit | Level | Item | Count |
|---|---|---|---|
| Surface collection | Surface | Retouched/utilized flake | 1 |
| Surface collection | Surface | Flake | 1 |
| Surface collection | Surface | Angular debris | 1 |
| STP 1 | 10-20 cm | Angular debris | 2 |
| STP 4 | 20-30 cm | Angular debris | 1 |
| Total | | | 6 |

As summarized in Table 9, all the debitage from CA-SDI-11,800 is metavolcanic, with medium- to coarse-grained metavolcanic more prevalent. The single retouched/utilized tool is flake-based, with bifacial retouch and use on two edges. This piece is also fine-grained metavolcanic.

Table 9. CA-SDI-11,800, material types of debitage

| Material | Count | % Count | Weight (g) | % Weight |
|---|---|---|---|---|
| Med.- to coarse-grained metavolcanic | 3 | 60.0% | 25.9 | 82.7% |
| Fine-grained metavolcanic | 2 | 40.0% | 5.4 | 17.3% |
| Total | 5 | 100.0% | 31.3 | 100.0% |

**SENSITIVE MATERIAL – IN CONFIDENTIAL APPENDIX B**

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|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Site map: CA-SDI-11,800 | Figure 17 |

## CA-SDI-11,801

CA-SDI-11,801 was recorded as a very small, light scatter of marine shell at the base of a knoll to the west of CA-SDI-8078, along the southern project boundary (Figures 7 and 12). The site measured only 4 m (13 ft) in diameter, and consisted of around 15 small fragments of oyster (*Ostrea lurida*) and chione clam (*Chione* sp.). During a brief field visit in March 2005, the site could not be found, due to its small size and the dense growth of non-native grasses in the area.

The site is mapped within 300 ft of a burrowing owl nest, so per the requirements of the US Fish and Wildlife Service and California Department of Fish and Game, no subsurface testing could be conducted to attempt to relocate the site. Given the small amount of shell recorded at CA-SDI-11,801 and the lack of other cultural material, the research potential of the site is quite limited. The shell may have been associated with agricultural uses (Van Wormer 2005, personal communication).

## CA-SDI-11,802H

Located on a knoll near the northern project boundary (Figures 7, 13, and 14), CA-SDI-11,802H is the site of the Peter Beckley homestead, which is addressed in detail in Appendix A to this report. During the first half of the 20th century, Peter and Lucy Beckley had a house, barn, grove of eucalyptus trees, and a small orchard here. This area had been used as a sheep camp during the late 1870s and probably through the early 1880s.

The site includes a remnant grove of eucalyptus trees, as well as some olive trees, and the knoll top has been graded. A house, barn, and possible outbuilding are shown on 1928 aerial photographs on file at the County of San Diego Cartographic Services (Figure 16). The knoll top currently appears to be used as a staging area by the US Border Patrol. The site has also been subject to impacts from illegal dumping, recreational shooting, off-road vehicle activity, and active use of the area by the Border Patrol. Due to these disturbances, surface cultural material is quite fragmentary, and any provenience is suspect. No diagnostic artifactual material was noted during the testing program.

A series of 20 backhoe trenches was excavated across CA-SDI-11,802H in an attempt to locate subsurface cultural features associated with the historic farmstead. Trenches average 10 m (33 ft) in length. Trench 11 was placed across a small, circular depression in the general area of where the farmhouse was thought to be, based on the 1928 aerial photographs. A cistern was encountered in this trench, at a depth of about 20 cm. Agnes Mc Cown, a niece of Peter Beckley, had said that a cistern had been located off the front porch of the farmhouse. The backhoe was used to remove debris and soil from the cistern and expose the feature. The cylindrical cistern measured 10 ft wide and 12 ft deep. A variety of debris was noted in the cistern fill material, including large slabs of red-painted concrete, apparently from a patio or landing. Plastic sheeting,

beer and liquor bottles, modern trash, and building material was also found in the backfill in the cistern. Historic archaeologist Stephen R. Van Wormer was present for the excavation of the cistern. He noted that all the cultural material found in the cistern is essentially modern and that collection and cataloging of such material was not warranted.

Three metal pipes, which appeared to be gas lines, were encountered in Trench 2. A single bottle was found in this trench, but its original context is unclear; it may have been in the fill burying the pipes.

## CA-SDI-15,872

CA-SDI-15,872 was recorded as a light to moderate density lithic scatter along the fence line at the eastern project boundary. Over 30 artifacts were noted during the survey (Kyle and Van Wormer 2001). Dense grass cover totally obscured the ground surface during the current study, so no surface artifacts were found. Five STPs were excavated in a north-south transect across the length of the site (Figure 18). Two artifacts were found, one is STP 1 at the south end of the site and one in STP 4 near the north end (Table 10). STP 4 was excavated to 40 cm, the other STPs were terminated at 30 cm.

Table 10. CA-SDI-15,872, summary of artifact recovery

| Unit | Level | Item | Count |
|---|---|---|---|
| STP 1 | 0-10 cm | Angular debris | 1 |
| STP 4 | 20-30 cm | Flake | 1 |
| Total | | | 2 |

## CA-SDI-15,873

This site was also along the fence line at the eastern project boundary, a just north of CA-SDI-15,872 (Figures 7 and 18). It was originally described as a sparse lithic scatter. Due to the thick grass cover, which eliminated ground visibility, no surface artifacts were observed. Four STPs were excavated, two on the west side of the fence line and two on the east side (Figure 18). All STPs were excavated to 30 cm, and no cultural material was found.

## CA-SDI-15,875

CA-SDI-15,875 was originally recorded as a sparse lithic scatter, located northwest of CA-SDI-15,872 and CA-SDI-15,873 (Figures 7 and 18). While visibility was described as excellent during the SR 11 survey, only 11 artifacts were noted at the site then (Kyle and Van Wormer 2001). No surface artifacts were found during the current study, due to the dense cover of grass and vegetation that severely limited ground visibility. Six STPs were excavated, five of them at 25 m

**SENSITIVE MATERIAL – IN CONFIDENTIAL APPENDIX B**

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|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Site map: CA-SDI-15,872,<br>CA-SDI-15,873, and CA-SDI-15,875 | Figure 18 |

intervals along the long axis of the site (northwest-southeast). A sixth STP was placed 15 m east of that line, where the original site map showed a slight bulge. A single flake was collected in the 20-30 cm level of STP 3, in the center of the site (Figure 18). That STP was excavated to a depth of 40 cm; the other STPs were terminated at 30 cm.

## OFF-SITE IMPROVEMENT AREAS

As described under Previous Research and summarized in Table 2, eight archaeological sites have been recorded within areas that would be affected by off-site improvements associated with the project. Five of these sites have been tested and determined not to be significant (the portion of CA-SDI-8078 within the property south of the current project area, CA-SDI-11,798, CA-SDI-12,337, CA-SDI-12,872, and CA-SDI-12,886). One site (CA-SDI-10,081) has been destroyed by construction. The remaining two sites, CA-SDI-8081 and CA-SDI-12,888H, are described here.

### CA-SDI-8081

CA-SDI-8081 was originally recorded as a moderate lithic scatter with no apparent depth (Carrico 1974a). Flakes, cores, and tools were observed on the surface. Carrico (1974a) "The highly scattered nature of this site combined with an erosional pattern which has no doubt displaced most of the artifactual material, lessens the overall importance of this site" (Carrico 1974a).

The cultural resources report for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993) noted CA-SDI-8081 as a large habitation site, including debitage, hammerstones, cores, flake tools, and core tools. The updated site record shows the site area significantly decreased; it does not extend as far north as the Otay Crossings Commerce Park project area (Ogden and Gallegos & Associates 1993).

During the survey of possible sewer alignments in 2005, Affinis staff noted only a few scattered artifacts (two cores and one flake) along the extension of Alta Road, south of Airway Road. No areas of concentration were noted. Testing was conducted at this site in November 2006, after the sewer alignments had been determined. Due to the large mapped area of the site and the fact that it is outside the project ownership, only the portion of the site within the proposed sewer alignment was tested. No artifacts were observed on the surface, although ground visibility was poor outside the road. A series of 20 STPs was excavated: 15 of them parallel to Alta Road and 5 parallel to Siempre Viva Road (Figures 19). No cultural material was recovered. Based on this, the site appears to be located entirely to the west of Alta Road in this area. It would not be affected by the project or by off-site improvements.

**SENSITIVE MATERIAL – IN CONFIDENTIAL APPENDIX B**

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| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Sketch map: CA-SDI-8081 | Figure 19 |

**CA-SDI-12,888H**

This site is mapped outside the Tentative Map area but within the right-of-way of Airway Road, to the west of the project area. The site may also be affected by trenching for the proposed sewer system. CA-SDI-12,888H was originally noted as fragments of porcelain, aqua glass, purple glass, and white ware ceramics in the "same location as a structure that was seen in the historic map check for 1880)" (Ogden and Gallegos & Associates 1993:4-6). No building is shown in this area on the 1903 USGS map or on the 1928 aerial photograph (Figure 16), but given the proximity of this site to CA-SDI-11,799H, it is possible that the two sites are part of the same historic archaeological resource. Both CA-SDI-11,799H and CA-SDI-12,888H are within the D.O. McCarthy property, which included not only McCarthy's home, but a grocery store, post office, blacksmith shop, and race track (see Appendix A). Due to the presence of burrowing owls nearby, no backhoe trenching was conducted at this site, but a data recovery excavation and monitoring program will be conducted, as addressed under Mitigation Measures. No cultural material was found during the current survey, but thick vegetation severely limited ground visibility in the mapped area of the site.

## VI. IMPACTS, SIGNIFICANCE, AND MANAGEMENT RECOMMENDATIONS

### SIGNIFICANCE CRITERIA

Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR Section 4852) including the following:

I. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

II. Is associated with the lives of persons important in our past;

III. 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:

IV. Has yielded or may be likely to yield information important in prehistory or history.

Significance of archaeological sites is generally based on the fourth criterion, its ability to contribute to our knowledge of prehistory. Cultural resources (historic resources and archaeological sites) that meet these significance criteria are also governed by the County of San Diego's Resource Protection Ordinance (RPO).

RPO defines a significant sites as:

Sites that provide information regarding important scientific research questions about prehistoric or historic activities that have scientific, religious, or other ethnic value of local, regional, State, or Federal importance. Such locations shall include, but not be limited to:

(1) Any prehistoric or historic district, site, interrelated collection of features or artifacts, building, structure, or object either:
   (a) Formally determined eligible or listed in the National Register of Historic Places by the keeper of the National Register; or
   (b) To which the Historic Resource ("H" Designator) Special Area Regulations have been applied; or

(2) One-of-a-kind, locally unique, or regionally unique cultural resources which contain a significant volume and range of data and materials, and

(3) Any location of past or current sacred religious or ceremonial observances which is either:

(a) Protected under Public Law 95-341, the American Indian Religious Freedom Act or Public Resources Code Section 5097.9, such as burial(s), pictographs, petroglyphs, solstice observatory sites, sacred shrines, religious ground figures or

(b) Other formally designated and recognized sites which are of ritual, ceremonial, or sacred value to any prehistoric or historic ethnic group.

## IMPACTS AND SIGNIFICANCE – TENTATIVE MAP AREA

Fourteen archaeological sites have been identified wholly or partially within the Otay Crossings Commerce Park Tentative Map project area, 12 of which would be subject to impacts from development of the project (Figure 20). Four of the sites were previously tested and determined not to be significant cultural resources: CA-SDI-8076/CA-SDI-8079 (McDonald et al. 1998), CA-SDI-8080 (Kyle and Van Wormer 2001), CA-SDI-8652 (McDonald et al. 1998), and CA-SDI-11,794 (Kyle and Van Wormer 2001). These sites do not meet the criteria for nomination to the California Register of Historical Resources. Therefore, impacts to these four sites are not significant effects under CEQA or the guidelines of the County of San Diego. Two of these sites are within open space easements under the proposed project plan.

The remaining 10 sites (CA-SDI-8078, CA-SDI-10,299, CA-SDI-11,793, CA-SDI-11,799H, CA-SDI-11,800, CA-SDI-11,801, CA-SDI-11,802H, CA-SDI-15,872, CA-SDI-15,873, and CA-SDI-15,875) are the subject of the current evaluation program. Subsurface testing could not be undertaken at two of the sites (CA-SDI-11,799H and CA-SDI-11,801), due to the presence of nesting burrowing owls. As addressed under Results, CA-SDI-11,801 was recorded as a very small scatter of fewer than 20 pieces of marine shell. Even if the site was relocated, its extremely limited research potential makes it ineligible for inclusion in the California Register of Historical Resources. Therefore, the site is not considered a significant resource, and impacts to it would not constitute significant environmental effects.

CA-SDI-11,799H is the location of the D.O. McCarthy homestead. The site is located mainly south of the project area but may extend into the Tentative Map area and the right-of-way of the proposed Airway Road. So, the project may have significant effects to this resource. A testing program conducted for the property to the south of the Otay Crossings Commerce Park determined that CA-SDI-11,799H is a significant resource under CEQA and County guidelines, but the site does not meet the criteria of RPO significance. A data recovery program must be undertaken at the site, as addressed under Mitigation Measures.

CA-SDI-11,802H is the location of the Peter and Lucy Beckley homestead. The only feature encountered during the testing program was a cistern filled with modern debris. The site is less than significant but retains the potential for buried resources to be present. At the Schott Ranch site (CA-SDI-10,668H), located north of the current project area, numerous historic features and artifactual material were found in monitoring during grading, although there was no surface evidence and trenching had been conducted, similar to that at CA-SDI-11,802H (Phillips and Van Wormer 1991). Based on this, monitoring will be conducted at this site, as addressed under Mitigation Measures.

**SENSITIVE MATERIAL – IN CONFIDENTIAL APPENDIX B**

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|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Locations of cultural resources<br>in relation to project plans | Figure 20 |

The remaining sites addressed by the testing program (CA-SDI-8078, CA-SDI-10,299, CA-SDI-11,793, CA-SDI-11,800, CA-SDI-15,872, CA-SDI-15,873, and CA-SDI-15,875) are all sparse lithic scatters that fit the lithic scatter profile of the *Management Plan for Otay Mesa Prehistoric Resources, San Diego, California* (Gallegos et al. 1998). The general lack of research potential of these sites makes them ineligible for the California Register of Historical Resources. They are not significant resources, and impacts to these sites would not constitute significant environmental effects.

## IMPACTS AND SIGNIFICANCE – OFF-SITE IMPROVEMENTS

Eight archaeological sites have been recorded in areas that may be affected by off-site improvements associated with the project. Five of these sites have been tested and determined not to be significant: two along Old Otay Mesa Road (CA-SDI-12,337 and CA-SDI-12,872), one within the Airway Road right-of-way (CA-SDI-12,886), and two within the proposed sewer alignment to the south of the project area (CA-SDI-8078 and CA-SDI-11,798).

The sewer alignment would cross CA-SDI-8081. The portion of this site within the sewer alignment was tested as part of the current study and determined not to be significant. No cultural material was found during the testing program. This lack of cultural material within the right-of-way, as well as the small amount of cultural material noted during the survey for off-site improvements (three artifacts) suggests that the site is highly disturbed. Therefore, the project will have no significant impacts on this site.

CA-SDI-12,888H is mapped within the right-of-way for Airway Road and may be affected by the proposed sewer improvements as well. As previously addressed, this historic site could not be tested, due to the presence of nesting burrowing owls. In the absence of testing, the site must be treated as significant under CEQA. Based on available information, however, the site does not meet the criteria of RPO significance. A data recovery program must be undertaken at the site, as described below.

## MITIGATION MEASURES

As previously discussed, testing could not be undertaken at two historic sites: CA-SDI-11,799H and CA-SDI-12,888H. CA-SDI-11,799H is located mainly to the south of the project area but may extend into the Tentative Map area. The portion of CA-SDI-11,799H south of the Otay Crossings Commerce park project area was tested and determined to be significant under CEQA and County guidelines. The site is not RPO significant, however (Smith 2006). CA-SDI-12,888H is mapped within the right-of-way for the extension of Airway Road. In the absence of testing, this site must be considered significant under CEQA, although available information indicates that it is not RPO significant. Therefore, a data recovery program shall be conducted at CA-SDI-11,799H and CA-SDI-12,888H in order to mitigate potentially significant impacts. The data recovery program will be guided by the research design included as Appendix D to this report.

As previously addressed, there is a potential for subsurface cultural features at the historic homestead sites: CA-SDI-11,799H, CA-SDI-11,802H, and CA-SDI-12,888H. Based on this potential, a monitoring program is recommended for these sites. In addition, County staff noted the requirement for monitoring of grading over the entire project site.

The conditions listed below will be placed on the project.

**Preliminary Conditions**

***Data Recovery & Curation***

Prior to Approval of any Grading Permits or Improvement Plans, or prior to the Recordation of the Final Map, whichever comes first, the applicant shall:

- Implement, to the satisfaction of the Director of Planning and Land Use, the research design detailed in Appendix D of this report. The implementation of the research design constitutes mitigation for the proposed destruction of archaeological/historic sites CA-SDI-11,799H and CA-SDI-12,888H. The research design shall include, but is not limited to the following performance standards:

    - The presence of a Native American monitor shall be required for the duration of the excavation portion of the data recovery program.
    - Phase I data recovery shall include mechanical trenching of CA-SDI-11,799H and CA-SDI-12,888H to identify cultural features such as privy pits, root cellars, building foundations, and trash deposits. All trench sidewalls shall be examined, as well as trench spoils as they are removed. Soil shall be screened through 1/8-inch mesh screen. Any features encountered shall require the expansion of the trench to uncover the feature. The feature shall be documented, drawn, and photographed.
    - At the completion of Phase I, a letter report shall be submitted to the Director of the Department of Planning and Land Use. The letter report will evaluate the issues of site integrity, data redundancy, spatial and temporal patterning, features, and other relevant topics in order to assess the adequacy of the initial mechanical trenching. Based on this assessment, the letter report shall recommend the need for and scope of a second phase of field investigations.
    - Implement Phase II of fieldwork, as necessary.
    - Conduct artifact analysis using historical archaeological analytical techniques such as artifact function patterning, bottled products pattern analysis and ceramic economic indexing. Additional historic research shall be conducted as necessary to aid in analyzing and explaining the significance of patterns.

Prior to Recordation of the Final Map, the applicant shall:

- Complete and submit the Final Technical Report from the Principal Investigator to the satisfaction of the Director of Planning and Land Use.
- Provide evidence to the satisfaction of the Director of Planning and Land Use that all archaeological materials recovered during both the significance testing and data recovery phases have been curated at a San Diego facility that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Diego County, to be accompanied by payment of the fees necessary for permanent curation. Evidence shall be in the form of a letter from the curation facility identifying that archaeological materials have been received and that all fees have been paid.

***Grading Monitoring***

Prior to Approval of Grading or Improvement plans, the subdivider shall take the following action related to the grading monitoring and data recovery program to mitigate potential impacts to undiscovered buried archaeological resources to the satisfaction of the Director of Planning and Land Use:

- Provide evidence to the satisfaction of the Director of Planning and Land Use that a County certified archaeologist has been contracted to implement a grading monitoring and data recovery program. A letter from the Principal Investigator shall be submitted to the Director of Planning and Land Use. The letter shall include the following guidelines:

    - The project archaeologist shall contract with a Native American monitor to be involved with the grading monitoring program as outlined in the County of San Diego Report Format and Content Guidelines (2006).
    - The County certified archaeologist/historian and Native American monitor shall attend the pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program as outlined in the County of San Diego Report Format and Content Guidelines (2006).
    - The project archaeologist shall monitor all areas identified for development including off-site improvements.
    - An adequate number of monitors (archaeological/historical/Native American) shall be present to ensure that all earth moving activities are observed and shall be on-site during all grading activities for areas to be monitored.
    - During the original cutting of previously undisturbed deposits, the archaeological monitor(s) and Native American monitor(s) shall be onsite full-time to perform full-time monitoring. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections will be determined by the Project Archaeologist in consultation with the Native American monitor. Monitoring of

cutting of previously disturbed deposits will be determined by the Principal Investigator.

- Isolates and clearly non-significant deposits shall be minimally documented in the field and the monitored grading can proceed.
- In the event that previously unidentified potentially significant cultural resources are discovered, the archaeological monitor(s) shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery to allow evaluation of potentially significant cultural resources. The Principal Investigator shall contact the County Archaeologist at the time of discovery. The Principal Investigator, in consultation with the County staff archaeologist, shall determine the significance of the discovered resources. The County Archaeologist must concur with the evaluation before construction activities will be allowed to resume in the affected area. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the Principal Investigator and approved by the County Archaeologist, then carried out using professional archaeological methods.
- If any human bones are discovered, the Principal Investigator shall contact the County Coroner. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant (MLD) as identified by the Native American Heritage Commission shall be contacted by the Principal Investigator in order to determine proper treatment and disposition of the remains.
- Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The Principal Investigator shall determine the amount of material to be recovered for an adequate artifact sample for analysis.
- In the event that previously unidentified cultural resources are discovered, all cultural material collected during the grading monitoring program shall be processed and curated at a San Diego facility that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Diego County, to be accompanied by payment of the fees necessary for permanent curation. Evidence shall be in the form of a letter from the curation facility identifying that archaeological materials have been received and that all fees have been paid.
- Monthly status reports shall be submitted to the Director of Planning and Land Use starting from the date of the notice to proceed to termination of implementation of the grading monitoring program. The reports shall briefly summarize all activities during the period and the status of progress on overall plan implementation. Upon completion of the implementation phase, a final report shall be submitted describing the plan compliance procedures and site conditions before and after construction.
- In the event that previously unidentified cultural resources are discovered, a report documenting the field and analysis results and interpreting the artifact and research

data within the research context shall be completed and submitted to the satisfaction of the Director of Planning and Land Use prior to the issuance of any building permits. The report shall include Department of Parks and Recreation Primary and Archaeological Site forms.

- In the event that no cultural resources are discovered, a brief letter to that effect shall be sent to the Director of Planning and Land Use by the consulting archaeologist that the grading monitoring activities have been completed.

## VII. PERSONS AND AGENCIES CONSULTED

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|---|---|
| David Caterino | South Coastal Information Center |

## VIII. PERSONNEL

The following persons participated in the preparation of this report:

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|---|---|
| Mary Robbins-Wade, M.A. (R.P.A.) | Director of Cultural Resources |
| Andrew Giletti | Co-Field Director |
| Matt Murray | Co-Field Director |
| Matt Sivba | Crew Chief |
| Sarah Jenkins | Archaeologist |
| Amy Jordan | Archaeologist |
| Kyle Knabb | Archaeologist |
| Rich Knauel, M.A. | Graphic Artist |
| Tamara Leviton | Archaeologist |

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# APPENDIX A

# HISTORICAL ASSESSMENT OF THE D.O. MCCARTHY AND PETER AND LUCY BECKLEY FARMSTEAD SITES

BY STEPHEN R. VAN WORMER AND SUSAN D. WALTER

# Historical Assessment of the D. O. McCarthy and Peter and Lucy Beckley Farmstead Sites
# Otay Mesa, San Diego County, California

By

Stephen Van Wormer

and

Susan D. Walter

July 2005

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# HISTORICAL BACKGROUND

## Introduction

Since the late 1880s farmers on Otay Mesa have cultivated portions of the study area. The individual farmsteads on the Mesa made up a rural community centered around Alta School. These kinds of settlements were the most prevalent type of community in San Diego County during that period.

Development of Otay Mesa during the late 19th century was typical of most non-urbanized portions of San Diego County west of the peninsular range. The Mesa became the location of a farming community consisting of about 140 individuals tied together through geographical boundaries, a common schoolhouse, and a church.

Farmers living in small rural communities were instrumental in the development of San Diego County. They fed the growing urban population and provided business for local markets.

Following the Civil War, acquisition of 160 acres of land to farm became the dream and goal of thousands of young men and women in the United States as well as numerous European immigrants. They wanted to establish a home and earn a living, or benefit from rising land values that could be anticipated with increased settlement (Fite 1976). Pioneer farmers intended to establish agricultural communities patterned after those they had left in the east. These consisted of small towns and villages that provided at least minimal services for the surrounding farmsteads, which averaged from five to eight per square mile (Kiefer 1972).

Between 1870 and 1890 numerous farming communities became firmly established in San Diego (Van Wormer 1986a, 1986b). The first pioneer farmers came to San Diego in the 1870s as a result of the real estate promotion of Alonzo E. Horton. They moved into the county’s coastal and foothill valleys that constituted the choice agricultural regions of the growing city's vast hinterland (Van Wormer 1986a).

A pioneer farmer has been defined as any agricultural producer who established in any unsettled region and began farming on any scale (Fite 1976). Pioneer farmers in the 1870s quickly occupied most available river valley bottom lands, leaving the less desirable mesa tops such as Otay and Linda Vista, as well as the marginal mountain valleys east of El Cajon and Escondido, unsettled (Van Wormer 1986a, 1986b). Farmers settled in rural school district communities, which constituted the major type of social network developed by pioneer agriculturists during the 19th century. These communities were made up of an aggregate of people who lived within well-defined geographic boundaries, shared common bonds, and cooperated to solve mutual problems. They lived, not in small towns or villages, but on farmsteads tied together through a common school district, church, post office, and country store (Fuller 1981:421; Van Wormer 1986a). These were stable communities where " . . . men and women put down their roots, invested their money, and their lives . . ." (Fuller 1981).

Wheat became the chief crop of pioneer farmers during initial settlement. Grains could be planted with little investment and offer a quick cash return at the end of the season. The 1860s and 1870s saw a period of experimental farming in southern California in attempts to find crops other than wheat that could successfully be grown and marketed. Completion of railroads to the east in the 1870s and 1880s, combined with the growing of olives, oranges, and grapes, provided the solution. By the early 1880s, farmers discovered that moderate slopes and hills were better for cultivation of vines and fruits than valley bottomlands. The year 1882 saw the introduction of these methods to San Diego County and marked the beginning of commercial fruit cultivation.

Fruit production quickly spread and by the end of the decade had become a major product. By 1888 fruit trees in the county included 58,208 lemon, 51,571 olive, 102,013 orange, in addition to peach, quince, fig, plum, cherry, and apricot. By 1891 fruit trees in San Diego County totaled 1,062,711. Southern California's conversion to diversified farming had a dramatic effect on San Diego County with fields of wheat, oats, barley, and corn in the lowlands and mesa tops, and groves of fruit trees on the hill sides (Van Wormer 1986a).

The structural components of the farmsteads varied with each individual farmer. Generally, they consisted of a frame or adobe house that could range in style from a

modest two room vernacular structure to a large Victorian home. Out buildings included storage areas, barns, granaries, shops, springhouses, livestock pens, gardens, cow lots, cisterns, wells, and privies (Van Wormer 1986a, 1986b).

## The Alta School District Community on Otay Mesa

During the late 1880s, San Diego and all of Southern California experienced an economic boom unparalleled in the history of the region up to that time. The boom of the 1880s first manifested itself in San Diego in 1885, when eastern land speculators began to buy up San Diego County land in anticipation of a railroad connection between San Diego County and the transcontinental Santa Fe Line at Barstow. Suddenly, the growth of San Diego accelerated. In 1886 the population of the city jumped from 7,500 to 12,000 (Guinn 1907:202).

Land speculation provided the real stimulus to the economic boom. Land speculation fever seized San Diego in the spring of 1887. Speculators formed land companies and subdivided town sites throughout the county including Escondido, Coronado, Ocean Beach, El Cajon, Lakeside and Ramona (Pourade 1964:167-191). The real estate boom also stimulated a dramatic demand for county agricultural lands. From 696 in 1880, San Diego County farms increased to 2,472 by 1890 (Census 1883:34-35, 1890:124-25). This second backcountry boom brought the settlement of Otay Mesa by pioneer farmers. The pioneer stage of settlement was a passing phase characterized by a relatively high degree of self-sufficiency, low standard of living, and high mobility and development of formalized social and service institutions, such as a school, a church, a post office, and businesses (Fite 19776; Fuller 1981).

During the land boom of 1885 to 1887, Otay Mesa was promoted by speculators who owned portions of the plateau as a potential agricultural haven waiting only for thrifty and industrious people to develop it. Ads stated that " . . . the soil is rich and produces all of the cereals . . . and with water . . . will grow fruits, both of the deciduous and citrus varieties" (Guion, Hamilton, and Hartley 1887:1). Although the Mesa top was well above the Otay and Tijuana rivers, which constituted the only reliable local water source, this was not seen as a serious limitation to agricultural development.

Promoters announced plans to establish irrigation districts and build reservoirs and pipelines that would bring abundant water to Otay Mesa (*Otay Press* 7/25/1889, 1/1/1892:4). In the meantime, it was believed that profitable crops could be produced through reliance on the annual rainfall, or dry farming.

Southern California's weather had manifested an abnormally wet cycle during the late 1870s through the 1880s, fostering the belief that most crops could be successfully grown without irrigation. It was stated that if repeated plowing following the rains to work moisture into the soil was combined with thorough cultivation to keep fields free from weeds, dry farming could be depended upon. This promotion resulted in rapid occupation of Otay Mesa during the last half of the 1880s. Most settlers took up unoccupied government lands through homesteads, timber claims, or purchases (Painter 1985; Patents 7:171, 210; 9:352; 11:341).

Prior to the mid-1880s the Mesa remained sparsely occupied. U.S. Surveyor General's Office township plat maps from the late 1870s show a sheep camp on the southeast edge of the Mesa in Section 31, Township 18 South, Range 1 East and a cabin and "old well" in the center of the Mesa in Sections 33 and 27 of Township 18 South, Range 1 West (U.S. Surveyor General 1879a, 1879b). One of the earliest known settlers on the Mesa was Daniel O. McCarthy, who was living there in by October 1883 when he printed the following notice in the *San Diego Union*:

> STRAYED OR STOLEN
>
> On Friday or Saturday, October 5 or 6, a Sorrel Pony, star in forehead, saddle marked on both sides; brand of Manuel de Mara on near hip. The finder will please return to Harvey McCarthy at Ranch of D.O. McCarthy, Otay (*San Diego Union* 10-11-1883 2:3).

McCarthy appears to have been engaged in cattle ranching at this time. A little over a year later in November 1884 his name again appeared in the paper:

> Mr. D.O. McCarthy writes us from Bella Vista near the line that a very fatal cattle disease called black leg is raging in that locality. Out of a small

> band of nine head he lost four – nearly one half. The disease kills in twenty-four hours, and generally attacks the fattest cattle. A neighbor lost one third of forty head (*San Diego Union* 11-8-1884 3:1).

In 1885 four families lived on the Mesa. By 1887, 40 households resided there, constituting a community of 140 individuals including 25 school-age children. The settlement consisted of " . . . comfortable looking farmhouses and well defined barns." The size of farms ranged from around 160 acres to 320 acres (*San Diego Union* 1/6/1886:3, 1/5/1887:3, 1/1/1892:10).

The influx of so many families in just a few years created a building boom. The local newspaper, the *Otay Press*, regularly announced construction on Otay Mesa:

> Cap. H.P. Starr's new house of six or eight rooms makes a fine homelike appearance on the Mesa, surrounded by trees and other vegetation (12-5-1889).
>
> About fifty houses may be now seen in Otay, where but two years ago it numbered only five, and many of the dwellings are of fine order (12-26-1889).
>
> Henry Lohman is tearing down and remodeling his sheds and barn (5-9-1889).
>
> Mrs. C.H. Chittenden is building a new house on her ranch on the Mesa (9-5-1889).
>
> A shipment of windmills this week for the Mesa (9-12-1889).
>
> Conductor C.H. Cook has sunk a 123-foot well and put up a windmill on his place, recently purchased on the Mesa (9-12-1889).

> Captain H.P. Starr's new house on his ranch on the Mesa is about completed, and he will soon occupy the same. Beckley Brothers were the builder's (9-19-1889).
>
> J.W. Wheeler, of the Mesa, is now building a new house on his place down the valley (11-21-1889).
>
> Mrs. C.M. Wetmore, cousin of G.H. Wetmore, has purchased forty acres on the Otay Mesa and has just completed a residence on the place, and is setting out a large variety of fruit trees (8-14-1890).
>
> The house of C.M. Wetmore on the Mesa is now finished and ready for occupancy (8-21-1890).

By 1890, Otay Mesa was recognized as an established community with its own school, church, store, post office, and blacksmith shop. These developments occurred through mutual cooperation between farming families to solve common problems and achieve common goals. The first formal social institution established by pioneer farming communities was a school (Fuller 1981; Van Wormer 1986a). Otay Mesa residents organized and established the Alta School District in January 1886 (*San Diego Union* 1/6/1886:3). The schoolhouse was located in the center of the Mesa approximately 2 two miles northwest of the study area.

Construction of a new school produced a catalyst for community interaction and development (Fuller 1981; Van Wormer 1986a). Otay Mesa farmers came together to labor and donate their time, land, and money to build a schoolhouse. Children of different farming families attended the school and developed friendships. Parents served together on the school board and as School Census Marshals. Activities to build, maintain, and support the school created a need for neighbors to work together for the community's benefit.

In addition, the school was often the only public building available for use by the community and provided a location for gatherings, socials, church services, and holiday celebrations (Fuller 1981). Alta School became the place for various social activities.

On the evening of May Day, 1889, “a number of mesa young folks gathered at the school house for a social hop.” Unfortunately, they had failed to inform the school board trustees and found the building locked. The group then “retired to the residence of William McCool, where the evening and . . . hours were pleasantly spent listing to intoxicating music and tripping the light fantastic” (*Otay Press* 5/9/1889:3). Church services were held at the school on Sunday afternoons and evenings as well as “Sabbath school” at 2 o’clock. During Lent, special Lutheran services were given at the school on Sundays and Wednesdays for the large German community on Otay Mesa (*Otay Press* 4/18/1899:3; 10/10/1889:3).

The Mesa’s German Lutherans built their own church in 1889. Construction began in September and was completed by October when the building was dedicated (*Otay Press* 10-3-1889:3, 10-10-1889:3). The local paper announced “Otay Mesa has a German Lutheran Church service every Sabbath in the new church at 11: A.M. There will be regular preaching at the Mesa (Alta) School house twice a month by Reverend I. Goodall of National City” (*Otay Press* 11/28/1889:3). Known as St. John’s Lutheran Church, the building was 0.5 mile west of the school. The Lutheran Church served as an additional social catalyst for Otay Mesa’s German families. As with the school, donation of land, money, and labor brought families together for a common goal and the building served not only as a place for religious services but also for other activities. For example, on December 7, 1889, a church social was given by the Otay Mesa Lutherans, which the *Otay Press* described as “a social and pleasant affair” (*Otay Press* 12-12-1889). Many families on the Mesa took an active role in community activities, serving as trustees of the Lutheran church and on the school board (Road Survey 154, 305; Alta School Files 1916, 1917).

In addition to the school and community church, Daniel O. McCarthy established a store, blacksmith shop, and a post office known as Siempreviva on his farm at the southeast corner of the Mesa. The blacksmith shop opened in October 1889. The Siempreviva Grocery, built and run by his son, J. Harvey, opened the same month. The store was “well stocked with groceries that he is selling at San Diego prices.” At this time a petition signed by Otay Mesa Farmers was sent to Washington, D.C. asking for a post office to be called Siempreviva, which was established at McCarthy’ s place in February 1890 (*Otay Press* 9/19/1889:3, 10/3/1889: 3; 10-10-1889:3, 10/17/1889:3, 1/9/1891:3,

2/20/1890:3). The McCarthys also laid out a racetrack on their farm and horse races on the Mesa became regular events (*Otay Press* 2-28-1889:3; 8-21-1889:3)

The McCarthy's store at Siempreviva also became the election-polling place for the McCarthy Voting Precinct, which included the southern portion of Otay Mesa. The northern half fell within the Tia Juana Precinct. Its polling place was at the Tia Juana School House near present day San Ysidro (*Otay Press* 10-2-1890; 1-17-1892).

Another social organization was the Otay Mesa Horticultural Society organized in December 1889. Officers included President D. Cordus, Vice president Mrs. H.P. Starr, Secretary John McCool, and Treasurer Mrs. Lyman Modie. The members held monthly meetings "at the full of the moon" (*Otay Press* 12-12-1889).

In addition to the active social life on the Mesa, many of the pioneer farming families entertained visitors from a variety of locations, and made short trips to see nearby communities and sights. The *Otay Press* continually reported these comings and goings in its columns dedicated to local events as the following passages taken from various issues of the paper illustrate:

> Aunt Becky – everybody knows Aunt Becky, especially all the old soldiers – has been visiting at the house of Cap. H.P. Starr on the Otay Mesa for the past week, and in passing gave us one of her friendly calls (3-14-1889).
>
> Mary B. McCarthy, Maud Adams, and Master Fred Billings, all from San Diego, spent a few days last week, at D.O. McCarthy's on the Mesa. (3-25-1889).
>
> John McCool is writing music for the Otay Band (4-18-1889).
>
> Mrs. H.P. Starr of the Otay Mesa has returned from Coronado where she has been spending a week (5-2-1889).

> Visitors at McCools and at Mrs. Chittenden's (5-9-1889).
>
> Mr. Weir of Wisconsin, son in law of Henry Lohman, arrived in the latter part of April and proposes to make this his future home (5-9-1889).
>
> A party from McCool's spent Friday on the beach (5-9-1889).
>
> On Monday evening last, eight or ten couples enjoyed a social dance at the rancho of Will Ranch, on the Otay Mesa, several parties from Otay being present (2-13-1890).
>
> A family of Busches are here from Wisconsin visiting the Lohman tribe (2-28-1889).
>
> Mrs. G.W. Wetmore of San Diego is visiting at H.P. Starrs on the Mesa during the absence of her husband, now on a visit to Iowa (10-16-1890).
>
> F.W. Hefflon intends working the ranch of J.C. Pelton on the Mesa, and has moved his family on the place (9-12-1889).

In spite of prosperous beginnings, the farming community on Otay Mesa was crippled with severe environmental limitations. Early promises and attempts to bring water to the Mesa from outside sources failed. There were numerous schemes to solve the problem by land developers during the late 1880s and early 1890s. In 1887 Guion, Hamilton, and Hartley, speculators who promoted the Mesa during the land boom, promised that the 15,000 acres of Otay Mesa were " . . . soon to be watered by our reservoir now under construction" (Guion, Hamilton, and Hartley 1887:1). With the sudden end of the boom in late 1887, however, their promises remained unfulfilled. In 1889, the Tecate Water Company and a group of New York investors both announced plans to bring water from the mountains to Otay Mesa and Valley (*Otay Press* 4/18/1889:3). These plans also never materialized. In July 1889, thirty-three Otay Mesa farmers petitioned the County Board of Supervisors for formation of the Otay Mesa Irrigation District, whose purpose would be to sell bonds for construction of a reservoir and pipeline to bring water to the arid plateau (*Otay Press* 7/25/1889:3). This attempt also failed.

At first, lack of outside water did not provide restrictions. As previously noted, during the late 1880s, San Diego County enjoyed higher than average rainfall, and Otay Mesa farmers produced bountiful crops. The local paper celebrated every storm as convincing proof that Southern California was not a dry country. The paper described the "frequent showers" as "warm" or "pleasant," leaving the "earth carpeted with flowers," and " . . . making the early sown grain fields look fresh and green and causing the alfilrea[1] (sic.) to put forth on every hand, and at the bidding of the warm sunshine, all nature is putting her best attire . . ." (*Otay Press* 3-14-1889, 3-21-1889, 12-19-1889, 4-11-1889, 4-25-1889). In December 1889 "a brisk shower" brought half an inch of rain " . . . wetting down the ground to the depth of four inches, making the farmers . . . correspondingly happy" (*Otay Press* 12-5-1889).

With the first rains farmers were encouraged to begin plowing the ground to turn the moisture into the soil so that it would absorb enough to sustain crops. During the winter of 1889 *The Otay Press* stressed that "People in this section are not waiting for something to turn up, but are now at work turning up the moistened soil" (*Otay Press* 12-5-1889; 12-12-1889). Showers in January 1892 " . . . started the plows in every direction" and farmers were "now putting in full time, and great quantities of grain will be sown" (*Otay Press* 1-7-1892).

A fanciful theory was suggested to assure agriculturalists that there would always be enough moisture to maintain crops. It was felt that the water that fell as rain in the mountains did not "naturally come up in the ocean." Instead, it permeated the subsoil:

> . . . carrying on a sort of natural sub-irrigation, thus rendering the land doubly rich. Evaporation from the heat of the soil is drawn up through means of vegetation, and the sink of waters affords a reservoir from which a supply is drawn during the dry season. Nature in this sunny land has thus wisely formed the economic process of turning the rivers upside down, that the waters may be held in solution and go to water the soil in time of need, and not left on the surface to evaporate in thin air or be lost in the vast space of waters (*Otay Press* 10-3-1889).

In 1887 mesa farmers averaged three tons of grain hay per acre (*San Diego Union* 1/5/1887:3). In May 1889, the *Otay Press* reported:

> The wheat and barley crop of the Otay Mesa this season has been good, and a great amount has been sown. William McCool has cut 300 tons of hay, and if his remaining 200 acres now ripening fill well, he intends cutting it for grain, James McCool is now cutting 160 acres of his wheat and barley, the best of which he will harvest for threshing. Mr. Willis cuts 160 acres for grain. William Lohman has 80 acres of the finest barley we have ever seen that he intends cutting for grain. James Copley will cut the most of his 400 acres for threshing (*Otay Press* 5/16/1889:3).

The life of Otay Mesa families followed the seasons. Autumn and winter rains began the plowing of fields and sowing of seeds (*Otay Press* 10-24-1889; 12-26-1889; 2-28-1889). As showers continued through the winter and early spring crops sprouted and grew (*Otay Press* 3-3-1890). By late March grain was heading, and farmers were preparing to harvest (*Otay Press* 3-25-1889). Cutting began in early April and continued through May (*Otay Press* 4-8-1889; 4-11-1889; 5-2-1889; 5-9-1889). "The vast fields of grain . . . waving in the breeze like a miniature sea" were "laid low," by the "the busy 'click click' of the mowing machine . . . " (*Otay Press* 5-16-1889). Horse drawn reapers, headers, and binders cut, and bound the shocks of wheat and barley, which were then stacked in the fields (*Otay Press* 5-9-1889). By early May thrashing had commenced. The stacks were loaded onto a wagon and carried to a stationary thrashing machine that separated the shock from the seed and bagged the grain for market (Sears and Roebuck 1919a:105-113; Hurt 1982).

The annual spring harvest brought a frenzy of activity to the Mesa and surrounding countryside. Many farmers did not own their own equipment, and depended on the services of those who had machinery to bring in their crops. During the week of May 9, 1889, three grain headers began working on the Mesa, Henry Lohman purchased a new reaper "with which to harvest his excellent crop of barley and wheat," and two thrashing machines were busy separating the grain. The thrashers were owned by James Copley and James McCool (*Otay Press* 6-6-1889). Copley's was powered by a large steam traction engine while McCool's operated by horsepower. Both provided their own crews

and “thrash and bag the grain at thirteen cents per hundred.” Copley’s crew was fed from his portable kitchen described as a “boarding house on wheels” that “dispensed sweet culinary favor to hungry threshers” (*Otay Press* 5-9-1889).

The grain harvest continued throughout the spring and summer. Fields averaged fifteen sacks to the acre (*Otay Press* 5-23-1889). During the week of May 16, 1889 William McCool was busy “harvesting his broad fields of grain on the Mesa” (*Otay Press* 5-16-1889). The following month James Copley remained occupied “cutting and threshing away at his 400 acres of grain . . .“ (*Otay Press* 6-13-1889; 6-20-1889). By the end of June most of the grain had been cut but thrashing continued through August (*Otay Press* 6-27-1889; 7-11-1889; 8-22-1889). The *Otay Press* noted on July 11, 1889 that “Considerable grain, both wheat and barley, is being shipped from Otay, by rail, lately, while a large quantity is being hauled by teams to National City and San Diego” (*Otay Press* 7-11-1889). The following month on August 11, the paper again reported: “On Tuesday last, James Copley loaded two cars at the station with barley for the San Diego market, and he has 1,000 more sacks ready for shipment” (*Otay Press* 8-22-1889).

In addition to grains, fields of hay also had to be harvested during the spring and summer (*Otay Press* 4-11-1889, 4-18-1889, 4-18-1889, 4-25-1889, 5-2-1889). Although most of this crop was intentionally cultivated, the Mesa was a natural hay field where thousand of acres of wild oats grew “spontaneously.” They stood over five feet in height and were considered to make “the best of hay” when harvested at the proper time (*Otay Press* 4-18-1889).

Hay was cut with a hay mower, gathered into rows in the fields with a horse drawn hay rake, where it was left to dry, and then stacked and pressed into bales (Sears and Roebuck 1919b: 243-245; Hurt 1982: 84-100). Farmers began to gather this crop in early spring and by the first weeks of April “the busy hum of the mowing machine” could be “heard in the land” (*Otay Press* 4-11-1889). As with the grain harvest, the gathering of hay was dependent on machinery. Many farms had their own mower, but others depended on the services of those who had machinery to cut their crop. Although several “ranchers” in the Otay area had treated themselves to new hay cutters in the

spring of 1889, G.B. Anderson was “hard at work with his new mowing machine . . . cutting and raking all the hay he (could find)” (*Otay Press* 4-11-1889, 5-2-1889).

By the end of May the hay had been cut and stacked and the work of pressing it into bales began (*Otay Press* 5-8-1889; 5-16-1889). Hay presses were a more expensive piece of equipment than a mower and required a small crew to operate, so, as with thrashing machines, it was more common for the owner of a press to hire a crew and process the crops of other farmers for a fee as the following excerpts taken from the *Otay Press* illustrate:

> S.B. Modie of the Mesa, has a one half interest in a Dedrick hay press that he now offers for sale (4-11-1889, 4-25-1889).
>
> Mrs. C. Tibbetts of Otay Mesa, having purchased the baling machine owned by R. Tibbetts and J.M. Hartley, would announce to the public that the machine and crew are now ready for baling hay, and solicit orders at the price of $1.90 per ton, for clean wheat or barley hay. Orders may be left at the Press Office. C. Tibbetts, Otay Mesa (8-18-1892).
>
> Smith and Bird’s baling outfit of San Diego passed through here on Monday for the Otay Mesa, where they will bale 120 tons of hay for D.O. McCarthy (8-18-1892).
>
> Henry Lohman will press two stacks of hay for Mr. Bowers, of Otay, this week (5-9-1889).
>
> Hay balers have had a lively season of it, and eight or ten machines have been kept busy baling the provender during the last two months (8-21-1890).
>
> Rha Johnson finished baling 350 tons of hay on North Island for the Coronado Company, and next week he will proceed to bale 150 tons for Frank Johnson on the Mesa (8-21-1890).

> Jas. Copley has been busy with his hay press baling 120 tons for Z.M. Porter, 200 tons for Mr. Jacobson, and 125 tons for Mr. Ranks (8-21-1890).
>
> The farmers are now busy threshing their grains and baling their hay (7-18-1889).
>
> Loose hay is selling in the markets for $5 per ton and baled hay is quoted at $8 per ton. Vegetables have a dull sale and fruit is moderate (5-16-1889).

Mesa agricultural produce was hauled by wagon to the railroad station in Otay Valley where the National City and Otay Railroad delivered it to San Diego. Reports of two to three carloads of hay and grain a week continued from June of 1889 through February of 1890 (*Otay Press* 6/20/1889:3; 8/29/1889:3; 9/28/1889:3; 10/24/1889:3; 2/6/1889:3). In August 1889, it was reported that in one week William McCool had shipped 15 carloads of hay and 8 of grain[2] (*Otay Press* 8/28/1891:3). By October Mesa farmers had sent 3,000 tons of hay to San Diego (*Otay Press* 10/24/1889:3).

By September the harvest had ended. This was signified in 1889 when the *Otay Press* announced that the new thrashing machine of James Copley, which had processed over 45,000 sacks of grain that season throughout the Otay and Chula Vista region, was "now laid up for the year." This did not bring a period of rest, however, as it was now time to prepare the soils for the rain that would hopefully soon arrive. The same week that the thrashing machine was put away James Copley had "commenced plowing on his ranch on the Mesa, using his traction engine with six ten inch plows. He expects to break up 1,000 acres there this season with his steam plow" (*Otay Press* 9-19-1889).

Otay Mesa farmers experimented with other crops and also achieved promising results without irrigation during the wet years of the late 1880s and early '90s. In 1887, one harvested 40 bushels of corn to the acre (*San Diego Union* 1/15/1887:3). In 1889 D. Cordus produced a ton of raisins from three-year-old grapevine cuttings on his Otay Mesa farm, which prompted neighbors to set out vines (*Otay Press* 8/18/1889:3, 8-18-1889:3, 12/19/1889:3, 2-4-1892). Other Mesa residents planted lemon, orange, quince,

and apricot trees, vegetable gardens, and berry bushes (*Otay Press* 2/13/1890, 3/20/1890). In the spring of 1890 G.H. Wetmore set out ten acres of figs "of the Adriatic and Smyma variety, ten acres of raisin grapes, as well as lemon, orange, quince, and apricot trees." He then planted a timber claim with 1,000 Russian mulberry trees (*Otay Press* 2-13-1890). At a meeting of the Otay Mesa Horticultural Society, in March 1890, Fred Lohman exhibited "a fine specimen of the navel orange, measuring 12 3/8 inches, and also some large ripe blackberries, raised without irrigation" (*Otay Press* 3-20-1890).

In addition to crops, Otay Mesa agriculturalists raised some livestock. In the fall of 1889 J.C. Pelton began to operate a chicken ranch. He hired V.A. Peavy to build a brick brooder house that measured 14 by 34 feet, where he installed a "patent Petaluma incubator" with 600 eggs (*Otay Press* 10-24-1889). By the following February Pelton had 300 chicks hatched out and 3,000 more eggs in the course of incubation (*Otay Press* 2-13-1890, 2-10-1890). In the winter of 1892 a sheepherder, Andres Bereochea, grazed his flock on the Mesa. Sheep were often grazed for a potion of the year in Mexico and then driven northward to pastures in the United States. A large heard was sheared each season on the Otay Ranch at the east end of Otay Valley (*Otay Press* 7-11-1889).

The bountiful crops of the wet years were deceiving. By 1890, local papers were already reporting that the belief that anything could be grown profitably in San Diego County by dry farming was a myth and not to be counted on (*Otay Press* 12/19/1889:1).

Even during the wet years, Otay farmers had to deal with water scarcity. During the 1880s, some wells were dug on the Mesa and pumped with windmills. Water was found at 123 feet (*Otay Press* 9/12/1889:3). It was no small matter to hand dig a well through the Mesa hardpan to the water table. By 1892, it was reported that on the Mesa " . . . it is difficult in some places and impossible in others to secure wells for domestic use, many [residents] being obliged to haul their water from Otay Valley" (*San Diego Union* 1/1/1892:10). A horse drawn wagon carried water from the valley to Alta School, where Mesa farm families gathered to fill containers (Painter 1985: 70). The most reliable sources of water for domestic use were hand-dug cisterns approximately 20 feet in depth that collected rainwater runoff from structure roofs for storage. Many households had three or four (Painter 1985: 709).

The first two decades of the twentieth century saw a period of drought that brought hardship to Otay Mesa farmers and a gradual decline of the community that is reflected in Alta School census records. In 1893 twenty households had children attending the school. By 1899 the number had risen to 27 households (Alta School Census 1893, 1899). An extremely dry weather cycle had begun in 1897 and continued until 1905 (*San Diego Union* 12/10/1900:6; Lumis 1905). In 1900 the number of households with school age children dropped to eight. The following year, it had risen to eleven but never returned to the high numbers of the previous decade. In 1910 only nine families sent children to Alta School (Alta School Census 1900, 1901, 1910). The early teens saw another dry cycle and even more farming families gave up and left Otay Mesa (Piper 1986). The families that remained often sought outside work to supplement their income. Many found jobs at Hotel Del Coronado (*San Diego Union* 7/14/1974). During the decade of the 1920s, a nationwide agricultural depression brought hard times for all San Diego County farmers that became even worse with the Great Depression of the 1930s. These years of economic hardship saw an almost complete disappearance of the rural farm schoolhouse communities in the county (Van Wormer 1986a). One of the few to survive was the Alta School District community on Otay Mesa. Following World War II, at least 16 families lived on the Mesa including the Pipers (2 households), Wetmores, Lohmans, Kueblers, Beckleys (2 households), Rolls, Wolfs, Shaws, Petersons, Wrucks, Dallatts, McCown's, and Blalocks (McCown 2005; Blalock 2005, Painter 1985).

The Alta School House remained the center of the community (Figure 1). Otay Mesa families still served on the school board and sent their children to the school. The building also continued to be used for a variety of social occasions including meetings, dances, Fourth of July, May Day, and Christmas celebrations. The Otay Mesa Community Club sponsored many of these events. During the 1930s this organization built its own clubhouse on the south side of Otay Mesa Road, across from the schoolhouse. Following its completion, the meetings and celebrations formerly attended at the school were held at the clubhouse. Fourth of July parties included horse races, tug-of-wars, and lots of food. At Christmas Florence Beckley, the teacher at Alta School during this period, led the school children in a program at the clubhouse presented for all the families on the Mesa. Alta School continued to serve families on Otay Mesa until

1957 when it closed; primary school age children were then bused to Sunset and later Beyer Schools in San Ysidro. The clubhouse was used until the mid 1960s when it was torn down (McCown 2005, Blalock 2005).

There was no mail delivery on the Mesa during the late 1940s. Families had mailboxes along Otay Valley Road at the east end of Otay Valley. Agnes McCown, (a niece of William and Peter Beckley) who had moved to the Mesa in 1947 with her husband Richard, negotiated with the U.S. Postal Service to get mail delivered to Otay Mesa. Prior to this time the roads on the Mesa had no official designations. A meeting was held at the community clubhouse to name the roads so that addresses could be assigned for mail delivery. Each household designated the name for the roads on or near where they lived. Mrs. Shaw chose the name Lone Star. Mrs. Dallatt named Cactus Road after a cactus garden at her home. The Kueblers named Alta Road. The McCowns designated Heritage Road, Pete Beckley chose Siempreviva, and the Rolls named Airway Road (McCown 2005).

Hay and grain remained the staple crops on the Mesa during the first half of the 19$^{th}$ century. By the 1920s, tractors and trucks had replaced horse and steam power, but the annual harvest still remained a major task. Following the introduction of the combine after World War II, two men could conduct the entire harvest for a single farm. In 1960, 6,000 acres of barley were harvested on Otay Mesa. The Rolls harvested 75 tons, which was considered to be a poor year's yield. Sheep were brought to the Mesa each summer to graze on the barley stubble that remained after the crop had been gathered (*San Diego Union* 8-7-1960:51, 1-8).

In the 1960s the Otay Municipal Water District brought a dependable water supply for irrigation to the Mesa (Painter 1985). This resulted in a change in the types of crops grown there. Tomatoes became the dominant product. Other vegetables such as cucumbers, bell peppers, and celery were also grown. Hay and grain continued to remain important, especially on the east half of the plateau. The arrival of a dependable water supply also brought development. Change occurred slowly, and the plateau remained a place of open fields through the mid 1970's. With the establishment of an international border crossing in the spring of 1985, development accelerated and a number of housing tracts and industrial complexes have been built on Otay Mesa since

that time. Some areas are still farmed, especially on the eastern edge of the plateau along Alta Road and at the Martinez Farms on Cactus Road. However, these parcels are also slated for development and soon over 120 years of farming on Otay Mesa will come to an end.

**Figure 1: This photograph of Alta School appeared in the September 30, 1953 edition of the *San Diego Union*. The students are nine year old Sharon Piper, and six year old John Hood.**

## Otay Mesa Farmstead Sites in the Project Area

Portions of two farmstead sites associated with pioneer farming families on Otay Mesa are located within the project property. The D.O. McCarthy place was situated in the southern portion of the study area in the South Half of Section 31, Township 18 South, Range 1 East, San Bernardino Meridian, while the Peter Beckley farm was located at the northern end of the study area in the North East Quarter of Section 31.

### Daniel O. McCarthy Farmstead

Daniel O. McCarthy was one of the earliest known settlers on Otay Mesa. He seems to have always used the initials D.O., rather than his given name (Census Manuscript Returns 1880). From the late 1880s through the mid-1890s he and his son Harvey were some of the most influential members of the community of farmers on the Mesa, establishing a store, blacksmith shop, race track, post office, and election precinct polling place at their farm. Daniel had been born in North Carolina in 1832. His parents were Irish immigrants (Census Manuscript Returns 1880). He was in California by 1860 and from 1860 to 1865 published a newspaper called *The First American Flag*. McCarthy first arrived in San Diego in 1870. He was one of the original incorporators of the San Diego Water Company in 1873. He was also president of the Harbor Commission, and secretary of the San Diego Cooperative and Building Association (Smythe 1908; *San Diego Union* 6-15-1871; 11-30-1916). In 1877 he became the president of a Committee on Public Safety organized to protect the Chinese from rioting crowds (Pourade 1964). As a trustee of the San Diego and Arizona Mining Company he made several trips to Arizona to look after the company's properties (*San Diego Union* 4-14-1870; 5-12-1870; 8-11-1870; 8-18-1870). In 1880, forty-eight year old, D.O. McCarthy was employed as a miner. He lived with his family in the city of San Diego. The household included his wife Amanda, age 40; their son John Harvey, age 10; their six year old daughter Mary; Daniel's 33 year old sister Ellen Anderson; and two Indian servants, Pedro age 44, and 25 year old Ramona (Census Manuscript Returns 1880).

Daniel was living in the Otay Mesa area in October 1883 when he advertised in the *San Diego Union* for the return of a strayed or stolen horse. “The finder will please return to Harvey McCarthy at Ranch of D.O. McCarthy, Otay” (*San Diego Union* 10-11-1883 2:3). He appeared to have been engaged in cattle ranching at this time. A little over a year later in November 1884 his name again appeared in the paper:

> Mr. D.O. McCarthy writes us from Bella Vista near the line that a very fatal cattle disease called black leg is raging in that locality. Out of a small band of nine head he lost four – nearly one half. The disease kills in twenty-four hours, and generally attacks the fattest cattle. A neighbor lost one third of forty head (*San Diego Union* 11-8-1884 3:1).

On July 7 1889, Daniel O. McCarthy received a patent for 160 acres located in the Northeast Quarter of the Southwest Quarter and North Half of the Southeast Quarter, and the Southeast Quarter of the Southeast Quarter of Section 31, Township 18 South Range 1 East, San Bernardino Meridian (Patent Certificate 937). His was the most southeasterly farmstead on Otay Mesa and adjacent to the Mexican Border. Given the five year occupancy requirement to receive a homestead patent McCarty must have been on the acreage by 1884 when the above referenced notices in the *San Diego Union* appeared.

McCarty named his farm *Siempreviva*, after a small plant that grew on that portion of the mesa. The Spanish word means always alive in English. The plant lies dormant and appears dead during the dry season only to sprout anew after the first rains (Painter 1985). D.O. and his son J. Harvey appear to have lived on the mesa while the rest of the family remained in San Diego. The *Otay Press* made frequent references to the McCarthy’s activities as exemplified by the following examples:

> Mary B. McCarthy, Maud Adams, and Master Fred Billings, all from San Diego, spent a few days last week, at D.O McCarthy’s on the Mesa. (*Otay Press* 3-25-1889, 3-28-1889).

> Wm. McCool and D.O. McCarthy, extensive ranchers of the Otay Mesa, have this week been loading cars on the N.C. & O., with hay and grain for the San Diego market (8-8-1889; 8-15-1889)
>
> On Monday last, as D.O. McCarthy's teamster was driving to town with a load of hay, he accidentally slipped from the load and falling under the wheel had his leg broken above the ankle (7-25-1889).
>
> Mr. Wm. X. Gardner, employed on the ranch of D.O. McCarthy on the Mesa, met with quite a severe accident last week by an over exertion while in the act of freeing some colts form their entanglement, and for a time he was in a critical condition suffering with severe pains in his side, but we have since learned that he is a fair way for recovery (10-23-1890).
>
> Smith and Bird's baling outfit of San Diego passed through here on Monday for the Otay Mesa, where they will bale 120 tons of hay for D.O. McCarthy (8-18-1892).

As discussed in the preceding Historic Background section, D.O. McCarty and his son J. Harvey are best remembered for establishing a store, blacksmith shop, post office, and race track at their Otay Mesa ranch. In addition, it became the local voting precinct polling place. The blacksmith shop opened in October 1889. The Siempreviva Grocery, built and run J. Harvey, opened the same month. The store was "well stocked with groceries that he is selling at San Diego prices." At this time Otay Mesa farmers sent a signed petition to Washington, D.C. asking for a post office to be called Siempreviva, which was established at McCarthy' s place in February 1890 (*Otay Press* 9/19/1889:3; 10/3/1889:3; 10-10-1889:3; 10/17/1889:3; 1/9/1891:3; 2/20/1890:3).

The McCarthy's store at Siempreviva became the election-polling place for the McCarthy Voting Precinct, which included the southern portion of Otay Mesa. The northern half fell within the Tia Juana Precinct. Its polling place was at the Tia Juana School House near present day San Ysidro (*Otay Press* 10-2-1890; 1-17-1892).

The McCarthys also laid out a racetrack on their farm and horse races on the Mesa became regular events (*Otay Press* 2-28-1889:3; 8-21-1889:3). In February 1889 the *Otay Press* noted that "The horse-race that was to come off on the Otay Mesa last Sunday by local steeds for a purse of $30 . . ." had been "postponed to Sunday next on account of the heavy rains" (*Otay Press* 2-28-1899). On August 17 1890 Peter Beckley's horse won the race at Siempreviva (*Otay Press* 8-21-1890). A meeting was to be held at the store the following week, on August 24th to arrange for races on September 14, when prizes of $25 and $100 would be awarded (*Otay Press* 8-21-1890).

In the fall of 1891 D.O. and J. Harvey McCarthy and their Siempreviva ranch became the center of controversy and legal proceedings concerning accusations of smuggling livestock across the Mexican border into the United States. In July 1890 Otay Mesa farmers Henry and George Beckley had crossed the border into Mexico to purchase a pair of horses from José Yorba, who had a ranch south of McCarthy's, on the Mexican side of the international border. The horses were taken to McCarthy's corral where the sale was completed. The Beckleys paid for the animals with two promissory notes for the value of $80 which they gave to J. Harvey McCarthy, who credited an account Yorba carried at the Siempreviva Store. In addition to the price of the horses the Beckleys paid J. Harvey an additional $20 for the duty charged to import the horses from Mexico, which Harvey promised to pay to the customs collector when he was in San Diego. Four to five months later Harvey told the Beckleys that he had forgotten to pay the duty and would credit $20 to their account at the Siempreviva Store (*San Diego Union* 11-18-1891, 3:4, 11-19-1891, 5:2, 8-16-1892, 2: 1-2).

Because the duty had never been paid, port collector John R. Berry issued a warrant and J.H. McCarthy was arrested on November 9, 1891. His father was in Mexico at the time, but immediately returned and surrendered to the authorities. The custom officials pursued the case with a heavy hand. Three men were deputized, including Otay Mesa's W.M. McCool and ordered to enter Mexico and seize suspected contraband livestock from Yorba's ranch. Around six horses were taken and driven northward to McCarthy's corral. The horses escaped and began to trample the newly sprouted wheat fields. When José Yorba, and McCarthy's forman, Till Vasquez, tried to intervene, they were seized for resisting arrest, and Vasquez was struck over the head with a revolver (*San*

*Diego Union* 11-12-1891 5:4; 11-26-1891; 5:2; 4 -1-892, 5:1; 8-6-1892, 2: 1-2; 12-6-1891, 2: 1-2; *Otay Press* 2-25-1892).

The case against the McCarthys was dismissed for lack of evidence (*San Diego Union* 11-18-1891, 3:4; 11-19-1891, 5:2; 8-16-1892, 1:1-2). A number of arrests soon followed. George McCool of Otay Mesa and William Mousier of Tia Juana were arrested in November 1891 for having illegally entered upon the ranch of José Yorba in Lower California and taken horses by "force of arms" (*San Diego Union* 11-26-1891 5:2). Henry and George Beckley were arrested twice for having committed perjury while testifying in the McCarthy case: once in November 1891, and again in January 1892. On the second instance, they were taken from their home in the early morning hours of January 12 by a United States Marshall (*San Diego Union* 11-25-1891, 2:1; 1-13-1892, 5:3). The cases against the Beckleys were dismissed in April 1892 (*San Diego Union* 4-20-1892, 5:4).

The heavy-handed actions of the government officers and the number of arrests surrounding the case brought protest and accusations against Port Commissioner Berry from the *San Diego Union* (*San Diego Union* 12-6-1891, 2:1-2). This in turn prompted a government investigation. The resulting report by J.F. Evans, special agent of the treasury department, was not complimentary to the McCarthys. Evans stated:

> For several years fraud on the custom revenue laws had been practiced in that vicinity on a small scale. This fraud was rendered comparatively easy by the difficulty of efficiently guarding so long a boundary line, and was stimulated by the high duty imposed on horses and cattle....
>
> In particular, ... one D.O. McCarthy, who owns a ranch upon the boundary line upon which there is a small store whose business is derived from Mexicans to whom McCarthy sold American goods and from whom he took payment in Mexican products, possessed particularly favorable facilities for smuggling....
>
> Mr. McCarthy's character is well known in San Diego and ought to be at the department since he is the person at the head of the establishment on

> the border that Collector Berry has been endeavoring to suppress as a smuggling depot and the fact that his firm is involved in this business for border smuggling, accounts for the ferocious endeavors of himself and those he controls to crush out all who stand in his way....
>
> The Beckleys appeared against the McCarthys as witnesses for the government in prosecutions for smuggling and the McCarthys retaliated by having the Beckleys arrested for perjury. The report expresses a belief in the honesty of the Beckleys and advises the department to interfere to prevent their persecution by the McCarthys…. (*San Diego Union* 8-16-1892, 2: 1-2)

The McCarthys appear to have given up their Siempreviva Ranch soon after the smuggling case ended. By 1895 they no longer controlled the acreage and it was owned by the California Mortgage Company (Tax Factor Plat Books 1895, 1896). A building is shown on the property on the 1903 U.S.G.S. Cuyamaca Quadrangle that was surveyed in 1891 and 1901 to 1902. There are no buildings on the former McCarthy farmstead in a 1928 aerial photograph of the area (Aerial Photographs 1928). The family remained in San Diego, publishing a small newspaper called the *Vidette* until 1901 when they moved to Los Angeles. In 1916, at the age of 86, D.O. McCarthy returned to San Diego where he was hailed as a pioneer. He spent the time visiting the old location of his Otay Mesa ranch and reminiscing about the early days of the city of San Diego (*San Diego Union* 11-30-1916).

### Peter and Lucy Beckley Farmstead

During the first half of the 20th century, Peter and Lucy Beckley had a house, barn, grove of Eucalyptus trees, and a small orchard on the eastern edge of Otay Mesa in the Northeast Quarter of Section 31, Township 18 South, Range 1 East. This area had been used as a sheep camp during the late 1870s and probably through the early 1880s (General Land Office 1879). On April 5, 1890 Benjamin F. Moore received a patent for the Northeast Quarter of Section 31 (Patent Certificate 2073, 1890). He held the property for only a short while. From 1895 to 1896 the California Mortgage Land Company owned this quarter section, along with the South Half of Section 31 (Tax

Factor Plat Books 1895-1896). The property was apparently vacant during the period, for no buildings are shown in the area on the 1903 USGS Cuyamaca Quadrangle that was surveyed in 1891 and 1901 to 1902 (USGS 1903).

Born in Michigan on August 4, 1876, Peter had first come to the Mesa around 1887 when his widowed father homesteaded 160 acres northeast of present-day Brown Field. Peter lived on the original Beckley homestead with his father and three brothers, George, Herbert, and William through 1900 (Census Manuscript Returns 900). By 1910 he had married Lucy A. Peterson, a teacher at Alta School and had purchased the 160 acres located in Northeast Quarter of Section 31. On the 1910 United States Census Manuscript Returns thirty-three year old Peter is listed as head of the household. Lucy, who had been born in Iowa, was 42 years of age, and they had no children. They owned the farm, which was described as a “Hay Ranch” (Census Manuscript Returns1910, Alexander 1912).

The Beckleys built a single story house and large barn on a small ridge at the north end of their acreage, overlooking their fields to the south, east and west. The house had a porch on the south side. A cistern was located under the porch (McCown 2005). The house and barn can be seen in a 1928 aerial photograph of the area, as well as a grove of eucalyptus trees to the west of the area where the house and barn stood (Aerial Photograph 1928). The eucalyptus trees still stand on the property (2005).

Peter and Lucy Beckley remained on their farm for the remainder of their lives. Their major crop was dry farmed hay. They had no children (McCown 2005). The couple is listed on the 1920 and 1930 U.S. Census Manuscript Returns as continuing to own and run their own farm. In 1930 Peter was 53 and Lucy was 62 years old (Census Manuscript Returns 1920, 1930). Peter died in 1958 at the age of 75. He suffered a heart attack at his Otay Mesa home while picking fruit in the small orchard he and Lucy had planted. Lucy remained on the place until her death in 1961. The property then came under the control of the Kuebler family, who had a farm on Otay Mesa to the north of Peter and Lucy Beckley (McCown 2005).

# CONCLUSIONS

Since the late 19th century farmers have cultivated Otay Mesa. The individual farmsteads on the Mesa made up a rural community centered around Alta School. These kinds of settlements were the most prevalent type of community in San Diego County during that period. Portions of two farmstead sites associated with pioneer farming families on Otay Mesa are located within the project property. The D.O. McCarthy place was situated in the southern portion of the study area in the South Half of Section 31, Township 18 South, Range 1 East, San Bernardino Meridian, while the Peter Beckley farm was located at the northern end of the study area in the North East Quarter of Section 31. Because they are associated with pioneer farmers these sites may contain important historic archaeological resources.

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William McCool of the Otay Mesa shipped a carload of hay from Otay Station to San Diego this week (6-20-1889).

William McCool of the Mesa shipped a carload of hay to San Diego, Tuesday which sold for $10 per ton (7-25-1889).

William McCool of the Mesa is loading his hay on the N.C & O. for the San Diego market (8-1-1889).

Wm. McCool and D.O. McCarthy, extensive ranchers of the Otay Mesa, have this week been loading cars on the N.C. & O., with hay and grain for the San Diego market (8-8-1889).

On Monday last, as D.O. McCarthy's teamster was driving to town with a load of hay, he accidentally slipped from the load and falling under the wheel had his leg broken above the ankle (7-25-1889).

Two carloads of hay were shipped by Wm. McCool this week (8-22-1889).

William McCool continues to haul hay from his ranch on the Mesa, three carloads being shipped from the station this week. He is now shipping about fifteen carloads of hay and eight carloads of grain. This is a part of the products that may be raised on the higher mesa without irrigation (8-19-1889).

This week the hay shipments from this station have been quite lively. J.H. Guinon shipped 35 tons, destined for Seattle. William McCool has shipped several carloads, loading a car with hay drawn from his ranch on the Mesa, in one day, five teams being employed. Mr. Lohman, McCarthy and others have been shipping, and 180 tons have been freighted from here on the N.C. & O. during the week (9-5-1889).

Three carloads of hay from the Otay Mesa shipped from this station this week, 180 tons shipped last week, most of it being consigned for Seattle (9-12-1889).

The heavy shipment of hay from this station continues, two carloads today (9-19-1889).

Hay and grain continues to roll in from Otay Mesa, three cars are now loading at the depot (9-26-1889).

Wm. McCool shipped two carloads of hay from the station today, and more cars are loaded for shipment (10-10-1889).

Hay shipments from the Mesa continue. 3,000 tons have been shipped (10-31-1889).

On the ranch of Wm. McCool, on the Mesa, they have just completed bailing 500 tons of hay (8-14-1890).

J.M. McCool of the Otay mesa has been shipping three carloads of hay from the station during the past week (8-14-1890).

Mrs. C.H. Chittenden of the Otay Mesa, is shipping a carload of hay this week, that was baled on the ranch with her new hay press (8-14-1890).

Mrs. H. Chittenden is shipping hay from the Mesa this week (8-21-1890)

Mr. William McCool is now hauling and shipping 100 tons of hay from his ranch on the Mesa (8-21-1890).

The daily shipment of the 1,000 tons of hay from the Otay Mesa continues (10-9-1890).

Mr. L.B. Modie, has a new home about completed on his fine ranch on the Mesa. Preserving industry will tell on the Otay Mesa as well as elsewhere. Mr. M. is now engaged in hauling his hay to market, his returning load being material for the new cistern at the Alta schoolhouse (10-9-1890).

People of the Mesa must have the hay fever, as the continued shipment of hay from that locality has been going on for months. (10-16-1890).

# APPENDIX B

# CORRESPONDENCE WITH RESOURCE AGENCIES

HELIX
environmental planning, inc.

8100 La Mesa Blvd., Suite 150
La Mesa, CA 91941-6476
e-mail:admin@helixepi.com
fax (619) 462-0552
phone (619) 462-1515

Inland Empire Office
phone (909) 423-0701

June 2, 2005 JAD-01

Ms. Kathleen Brubaker
U.S. Fish and Wildlife Service
6010 Hidden Valley Road
Carlsbad, California 92009

Ms. Libby Lucas
California Department of Fish and Game
4949 Viewridge Avenue
San Diego, California 92123

Subject: Archaeological Testing on the Otay 310 Property

Dear Kathleen and Libby:

As we have discussed, Judd and Dillard 310, LLC, is proposing to conduct archaeological testing on the Otay 310 property in order to provide data necessary for a complete analysis of proposed development as part of the environmental review process under the California Environmental Quality Act. Affinis will be conducting the archaeological testing. Judd and Dillard 310, LLC, is proposing the following baseline biological information and methodology to accomplish these tasks while avoiding any potential take of listed species.

## PROJECT DESCRIPTION

The project is located in the extreme southeastern portion of Otay Mesa within the County of San Diego (Figures 1 and 2). The property is comprised of two parcels (APNs 648-070-03 and 648-080-27) situated south of the future alignment of Otay Mesa Road and east of the future alignment of Alta Road. This report evaluates the impacts of the Tentative Map (TM) proposed by the project applicant that will consist of industrial development on the site. Biological open space is proposed for the southeastern and eastern property boundaries.

## SITE DESCRIPTION

The topography of the site primarily consists of low rolling hills and mesas and includes several drainages that convey flows to the south. Elevations on site range from approximately 480 feet above mean sea level (AMSL), at points along the southern boundary, to approximately 700 feet AMSL in the site's northeastern corner. The U.S./Mexico border forms the southern boundary of the site. Several dirt roads cross the site and are regularly traveled by the U.S. Border Patrol. The subject property is undeveloped. Surrounding land uses include an auto auction lot on the northwestern boundary, a parachute landing area, industrial public uses to the west, and a mix of industrial, commercial and residential uses across the border in Mexico. Open space extends to the north and east of the site into the foothills of the San Ysidro Mountains.

## METHODS

HELIX Environmental Planning, Inc. (HELIX) has performed numerous biological surveys on site as part of the proposed Caltrans State Route 11 (SR 11) project. The project site lies completely within the area surveyed for SR 11. Biological studies conducted by HELIX include a survey for the western burrowing owl (*Athene cunicularia*), U.S. Fish and Wildlife Service (USFWS) protocol surveys for the coastal California gnatcatcher (*Polioptila californica californica*; CAGN), USFWS protocol dry and wet season surveys for San Diego fairy shrimp (*Branchinecta sandiegonensis*) and Riverside fairy shrimp (*Streptocephalus woottoni*), rare plant surveys, a wetland delineation, and vegetation mapping. This report also incorporates data from studies of coastal California gnatcatcher, quino checkerspot butterfly (*Euphydryas editha quino*; QCB), western burrowing owl, and spring-blooming rare plants, as conducted by EDAW, Inc. (EDAW) for the County of San Diego East Otay Mesa Specific Plan Area (EOMSPA) update (EDAW 2001a, 2001b). Surveys for the QCB, burrowing owl, and rare plants were performed again in 2005 by HELIX.

Vegetation was mapped in 2001 on a 1"=200' scale topographic map of the site with the aid of a January 2000 aerial photograph at the same scale. Sensitive plant surveys included a search on foot for sensitive species with potential to occur and were conducted by HELIX in 2000 and 2005, and EDAW in 2001.

The CAGN surveys conducted by HELIX in 2000 and EDAW in 2001 followed the survey guidelines for the species prepared by the USFWS.

Protocol surveys for the QCB were conducted by EDAW in 2001 pursuant to the Interim General Survey Protocols and Mitigation Guidelines. Surveys conducted in 2005 were conducted during a portion of the survey period, but did not meet protocol requirements.

## EXISTING CONDITIONS

### Vegetation

Five wetland/riparian or water-related habitats and two upland vegetation communities occur in the site in addition to eucalyptus woodland, agriculture, disturbed, and developed areas. Wetland/riparian or other water-related habitats include road pools, tamarisk scrub, disturbed wetland, and streambed (Figure 3). Upland habitats include Diegan coastal sage scrub (including disturbed) and non-native grassland (Table 1; Figure 3).

| Table 1<br>EXISTING VEGETATION COMMUNITIES | |
|---|---|
| VEGETATION/HABITAT TYPE | ACREAGE |
| **Riparian/Wetland/Streambed** | |
| Road pools | 0.21 |
| Tamarisk scrub | 1.20 |
| Disturbed wetlands (11300) | 0.04 |
| Streambed | 0.10 |
| **Wetland Total** | **1.95** |
| **Sensitive Upland Areas** | |
| Diegan coastal sage scrub (32500) | 11.38 |
| Diegan coastal sage scrub – disturbed (32500) | 0.93 |
| Non-native grassland (42200) | 288.39 |
| **Other Uplands** | |
| Eucalyptus woodland | 0.98 |
| Agriculture | 1.65 |
| Disturbed | 6.17 |
| Developed | 0.03 |
| **Uplands Total** | **309.53** |
| **GRAND TOTAL** | **311.48** |

## Sensitive Plants

Six sensitive plant species were detected on the project site (Figure 3). Species observed include Otay tarplant (*Deinandra conjugens*), California adolphia (*Adolphia californica*), San Diego barrel cactus (*Ferocactus viridescens*), San Diego marsh elder (*Iva hayesiana*), variegated dudleya (*Dudleya variegata*) and San Diego County viguiera (*Viguiera laciniata*).

## Sensitive Animals

Six sensitive animal species were observed on site including the QCB, burrowing owl, coastal western whiptail (*Cnemidophorus tigris multiscutatus*), California horned lark (*Eremophila alpestris actia*), loggerhead shrike (*Lanius ludovicianus*) and northern harrier (*Circus cyaneus*).

## PROPOSED ACTIVITY

Judd and Dillard 310, LLC, is requesting permission to conduct archaeological testing at ten recorded sites (See Table 2) scattered across the project site (Figure 3). One additional site occurs offsite to the west. The archaeological testing shall vary depending on the site. Testing options include:

- Shovel test pit (STP). These measure 50 cm by 30 cm. An area immediately adjacent would also be needed next to each STP.
- Units. These measure 1 m by 1 m. An area immediately adjacent would also be needed next to each Unit.
- Surface collection. This will require clearing of vegetation in order to see the ground to search for artifacts.
- Trenching. Trenching would be done with a rubber-tired backhoe. Each trench will be approximately 3 feet across, 30 feet long, and up to 3 feet deep. Four or five trenches will be required at the one site requiring trenching. Material will be side cast immediately adjacent to the trench, and backfilled upon completion of the assessment.

It is anticipated that the testing will take approximately three to four weeks. Access to the sites will occur on existing dirt roads. A biologist will be onsite during initial site access, and during the first day of testing. Follow up monitoring will be conducted at least twice per week throughout the testing process. Additionally, prior to moving to the next site, STP, Unit and trench locations and access routes will be staked with the biological monitor prior to initiating work.

Table 2
OTAY 310 ARCHAEOLOGICAL SITES TO BE TESTED

| Site Number | Site Dimensions | Proposed Testing |
|---|---|---|
| CA-SDI-8078 | 215 x 120 m (Affinis 1989) | Surface collection and 7 STPs (at 40 m). |
| CA-SDI-8081 | 300 x 130 m (Ogden 1991) 30,630 $m^2$ | OFF-PROPERTY TO WEST |
| CA-SDI-10,299 | 426 x 240 m (Smith 1984) 80,300 $m^2$ Overlaps historic site CA-SDI-11,802H | Surface collection, 6 STPs (at 40 m) |
| CA-SDI-11,793 | 350 x 170 m (Affinis 1989) 46,730 $m^2$ | Surface collection, 6 STPs (at 50 m), up |

| | | |
|---|---|---|
| | | to 2 units. Possibly up to 15 STPs |
| CA-SDI-11,799H | 150 x 120 m (Affinis 1989) 14,135 $m^2$<br>100 m along southern project boundary<br>Cistern south of property -- couldn't find cistern, but found depression filled w/ gravel that must be it | Surface collection, 4 STPs (at 25 m) |
| CA-SDI-11,800 | 305 x 185 m (Affinis 1989) 44,315 $m^2$ | Surface collection, 10 STPs (at 50 m). Possibly up to 15 STPs and 2 units |
| CA-SDI-11,801 | 4 m diameter (Affinis 1989) 13 $m^2$ | Surface collection, 1 STP |
| CA-SDI-11,802H | 180 x 130 m (Affinis 1989) 18,380 $m^2$ | Background research, backhoe trenches |
| CA-SDI-15,872 | 140 x 75 m (James and Briggs 2000) 8245 $m^2$<br>40 x 20 m concentration (Kyle 2001) | Surface collection, 5 STPs. Possibly up to 10 STPs |
| CA-SDI-15,873 | 80 x 25 m (James and Briggs 2000) 1570 $m^2$ | Surface collection, 2 STPs. Possibly up to 6 STPs. |
| CA-SDI-15,875 | 100 x 35 m (James and Briggs 2000) 2750 $m^2$ | Surface collection, 3 STPs. Possibly up to 8 STPs. |

Several specific avoidance measures shall be incorporated into the archaeological testing protocol including:

- Pre-clearing surveys for nesting birds for surface collection sites.
- Avoidance of all impacts to sensitive resources.
- Biological monitor present prior to initiation of each new test site.

Table 3 provides specific measures for each site.

TABLE 3
BIOLOGICAL AVOIDANCE MEASURES

| Site Number | Avoidance Measure |
|---|---|
| CA-SDI-8078 | No sensitive resources. Allow clearing after survey confirming no nesting birds. |
| CA-SDI-8081 | No sensitive resources. Allow clearing after survey confirming no nesting birds. |
| CA-SDI-10,299 | Red-tailed hawk nesting in eucalyptus tree. Can initiate work once young have fledged. |
| CA-SDI-11,793 | Avoid San Diego marsh elder, San Diego barrel cactus and San Diego County viguiera. No clearing of sage scrub for surface collection. Allow clearing of non-native grassland after survey confirming no nesting birds. |
| CA-SDI-11,799H | No sensitive resources. Burrowing owls previously observed at this location not observed in 2005. Allow clearing after survey confirming no nesting birds. |
| CA-SDI-11,800 | No sensitive resources. Allow clearing after survey confirming no nesting birds. |
| CA-SDI-11,801 | No sensitive resources. Allow clearing after survey confirming no nesting birds. |
| CA-SDI-11,802H | Red-tailed hawk nesting in eucalyptus tree. Can initiate work once young have fledged and confirm that no nesting birds occur. |
| CA-SDI-15,872 | No sensitive resources. Allow clearing after survey confirming no nesting birds. |
| CA-SDI-15,873 | No sensitive resources. Allow clearing after survey confirming no nesting birds. |
| CA-SDI-15,875 | No sensitive resources. Allow clearing after survey confirming no nesting birds. |

## DISCUSSION

The testing locations and access routes will be placed so as to completely avoid any sensitive biological resources on the site. No direct take of state or federally listed species will occur. A biological monitor will be onsite during the initiation of the archaeological testing, and periodically throughout the testing effort. The biological monitor shall have the ability to stop work immediately if any activity has the potential to impact sensitive resources. A compliance report will be provided to the U.S. Fish and Wildlife Service, California Department of Fish and Game, and County of San Diego upon completion of the work.

Based on the avoidance measures outlined above, no take of state or federally listed species will result from the proposed activities. Judd and Dillard 310, LLC, is requesting written concurrence so that they may proceed immediately with the proposed testing. Please let me know if you have any questions or additional information needs.

Sincerely,

Barry L. Jones
Senior Consulting Biologist

cc: Judd Halenza, Judd and Dillard 310, LLC
Mary Robbins-Wade, Affinis

Attachments: Figure 1 Project Vicinity Map
Figure 2 Project Location Map
Figure 3 Biological Resources and Proposed Archaeological Testing Locations

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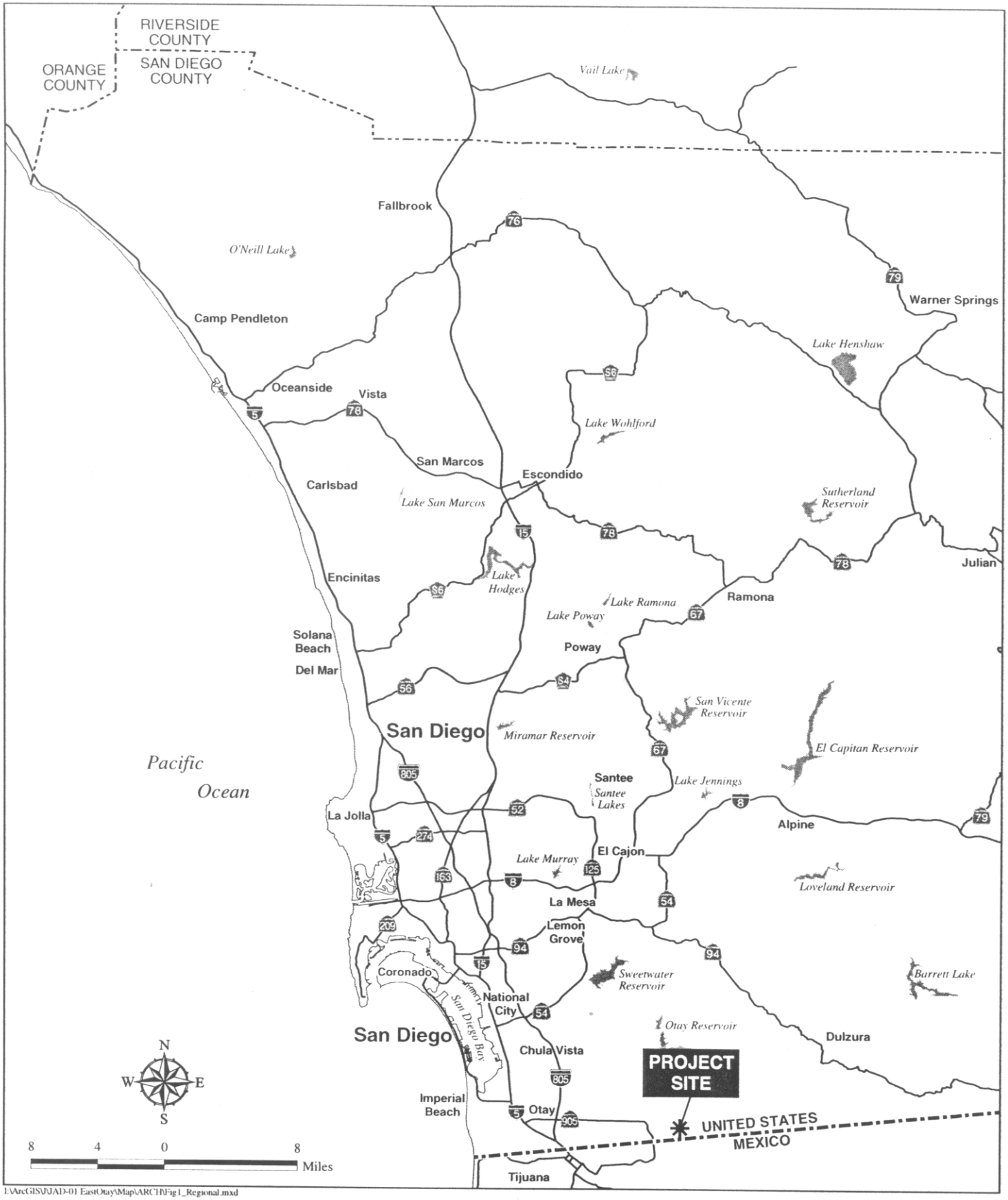


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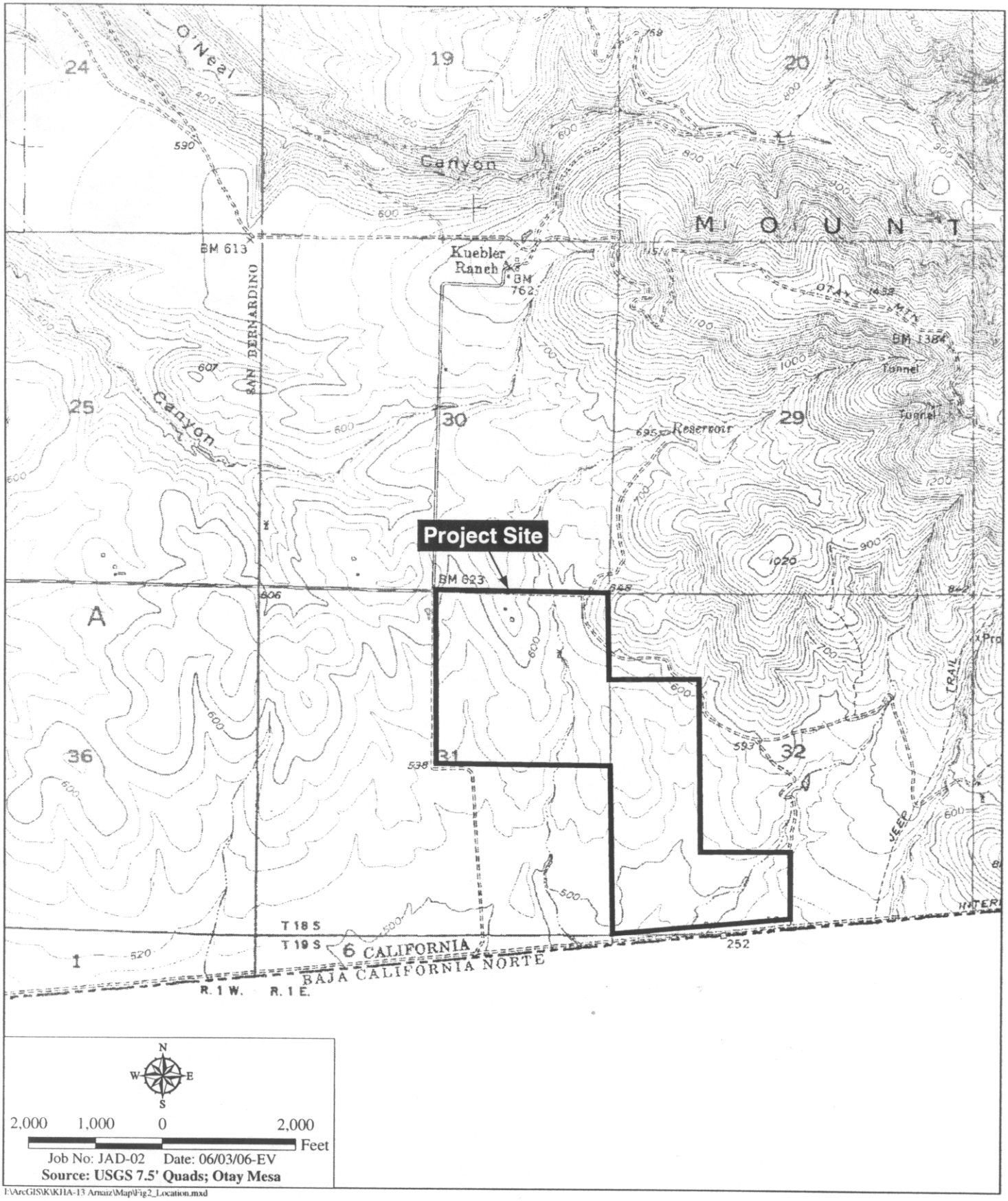
# Project Vicinity Map

310-ACRE EAST OTAY MESA PROJECT

HELIX

Figure 1

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# Project Location Map

310-ACRE EAST OTAY MESA PROJECT

HELIX

Figure 2

# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road
Carlsbad, California 92009

*FACSIMILE TRANSMITTAL FORM*

| *Date Sent:* | *No. of Pages:* | *Time Sent: (Pacific Time)* |
|---|---|---|
| 7/8/05 | 5 | 1400 |

***TO:*** Mr. Barry L. Jones
Kristen Forburger

***Fax No.:*** 619-462-0552
619-446-5499

***FROM:*** Carolyn Lieberman

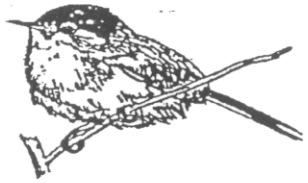
***Fax No: (760) 431-5902***
***Phone No.: (760) 431-9440***

***SUBJECT:*** Lonestar Ridge & Otay 310

***COMMENTS:***

***If you have any have problems receiving this fax, please call (760) 431-9440, extension 284. Thank you.***

*California Gnatcatcher*



***The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish and wildlife and their habitats for the continuing benefit of the American people.***

TAKE PRIDE IN AMERICA

U. S. Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road
Carlsbad, California 92011
(760) 431-9440
FAX (760) 431-5902 + 9618

CA. Department of Fish and Game
South Coast Regional Office
4949 Viewridge Avenue
San Diego, CA 92123
(858) 467-4201
FAX (858) 467-4299

In Reply Refer To:
FWS-SDG-4521.1

JUL 08 2005

Mr. Barry L. Jones
Helix Environmental Planning, Inc.
8100 La Mesa Blvd., Suite 150
La Mesa, CA 91941-6476

Re: Resource Testing on the Lonestar Ridge and Otay 310 Properties, located in Otay Mesa, San Diego County, California.

Dear Mr. Jones:

The U.S. Fish and Wildlife Service (Service) and California Department of Fish and Game (Department), collectively referred to as the "Wildlife Agencies," have reviewed your letters, dated June 2, 2005, requesting concurrence with the proposed archeological (also referred to as cultural resource) and geotechnical testing on the Lonestar Ridge property, located in the City of San Diego, and the proposed archeological testing on the Otay 310 property, located in the County of San Diego. Both properties occur within Otay Mesa. Federal and/or state listed species that have been observed on one or both properties include Quino checkerspot butterfly (*Euphydryas editha quino*), San Diego fairy shrimp (*Branchinecta sandiegonensis*), Riverside fairy shrimp (*Streptocephalus woottoni*), coastal California gnatcatcher (*Polioptila californica californica*), San Diego button celery (*Eryngium aristulatum* var. *parishii*), Otay tarplant (*Deinandra conjugens*), and Otay mesa mint (*Pogogyne nudiuscula*).

Your letters describe how the work will be conducted and conservation measures to avoid and minimize impacts to sensitive biological resources and federal and state listed species. In addition to the measures identified in your letters, we request that the additional conservation measures identified below be implemented to avoid potential adverse impacts to federal and state listed species on both properties:

1. Within the work areas, sensitive biological resources that are to be avoided will be staked and flagged prior to work to identify areas where access is precluded. In addition to other resources, this measure applies to already-mapped occurrences of sensitive plants and any additional occurrences that are found by the biological monitor who will be on site during the selection of the geotechnical testing locations and the initiation of the archeological testing. Photographs showing the staked and flagged sensitive biological resources shall be submitted to the Wildlife Agencies

prior to initiating work. The stakes and flags will be removed upon completion of work.

2. The Wildlife Agencies will be notified at least five working days prior to initiating archeological and geological testing.

3. Within 30 days of completing the work, a letter report shall be submitted to the Wildlife Agencies documenting that all conservation measures have been followed. The report will include: (a) maps identifying the exact locations of each test type (e.g., trenches, borings, surface collections); (b) pictures of the test areas before, during, and after project completion documenting that all impacts to sensitive resources, including federal and state listed species, were avoided; (c) the aerial extent of impacts to sensitive biological resources and habitats (i.e., non-native grassland); and (d) an aerial photograph depicting the location(s) of any newly observed sensitive resources.

4. If sensitive biological resources are impacted by archeological or geotechnical testing beyond what was anticipated, all work shall cease and the Wildlife Agencies immediately notified.

To avoid impacts to the Quino checkerspot butterfly on both properties, the following conservation measures shall be implemented:

5. Heavy equipment and disturbance of soil will not be permitted within 10 meters (33 feet) of larval host plants for the Quino checkerspot butterfly. Host plants include dwarf plantain (*Plantago erecta*), owl's clover (*Castilleja exserta*), and *Cordylanthus rigidus*.

6. Work will be conducted prior to the 2006 flight season of the Quino checkerspot butterfly (approximately December through April; Please check with our office for exact times, if needed).

To avoid impacts to vernal pools and the federal and state listed species that may occur therein, the following conservation measures shall be implemented while conducting archeological and geotechnical testing on the Lonestar Ridge property.

7. All work within the vicinity of vernal pools will be conducted outside the wet season (October to May).

8. Cultural resource trenches will not break the claypan of the soil horizon.

9. Trenching will not be conducted within 50 feet of the vernal pools located north of the westernmost cultural resource testing location.

10. Trenching will not be conducted north of the basin identified in the easternmost cultural resource testing location.

11. Backfilling of soils in the trenches will include compaction of soils so that the restored soils match the existing topography adjacent to the trenches.

12. No geotechnical testing will be conducted within 150 feet north or 100 feet south of any unvegetated basin or vernal pool.

13. While excavating test pits and borings, surficial soil will be segregated by soil horizon. Segregated surficial topsoil shall be backfilled into the test pits and borings in a manner that matches the appropriate soil horizon of the existing soil horizon profile. Backfilling the trenches and borings will include compaction of the soils so that the restored soils match the existing topography adjacent to the work.

To avoid impacts to the coastal California gnatcatcher, burrowing owl (*Athene cunicularia*), and San Diego marsh elder (*Iva hayesiana*), the following measures shall be implemented prior to conducting archeological testing on the Otay 310 property.

14. No access or work will be conducted within coastal sage scrub or within 50 feet of the edge of coastal sage scrub.

15. Figure 3 in the June 2, 2005, letter depicts occurrences of burrowing owls on site. Based on this Figure, the shortest distance between a proposed location for archeological testing and a burrowing owl occurrence is over 1000 feet. However, to ensure that the testing activities avoid impacts on burrowing owls, we request that the biological monitor survey for them in suitable habitat within and surrounding the areas proposed for testing. If active burrowing owl nests are found, a minimum of a 300-foot wide buffer should be maintained between the testing activities and the nests. Since the incubation period and fledging period for burrowing owl in southern California can extend to July 15 and September 1, respectively, this buffer should be maintained until after September 1.

16. There is eucalyptus woodland in two proposed locations for archeological testing - - CD-SDI-11,802H and CD-SDI-10,299. White-tailed kite (*Elanus leucurus*), a State Fully Protected Species, are known to nest in this area. We request that the requirement to delay work in this area until the young have fledged from an observed red-tailed hawk's nest, be broadened to apply to all additional raptor nests observed, if any, at the time work is scheduled to commence.

17. San Diego marsh elder occurs within one of the proposed archeological testing locations (CA-SDI-11,793). The Department considers the smooth tarplant as both locally and regionally sensitive. It is also included on the California Native Plant Society's List 2. All plants included on List 2 meet the definitions of section 1901, Chapter 10 (Native Plant Protection Act) or sections 2062 and 2067 of CESA and are eligible for listing. As such, and as required by section 15380 of the CEQA Guidelines, CEQA documents must fully consider List 2 species. The archeological testing should avoid this species because of its status, because no CEQA

documentation for this project has been yet circulated for public review, and no mitigation for loss of individuals of the species has been proposed.

The Wildlife Agencies have determined that the proposed archeological and geotechnical testing will not adversely affect federal and state listed species if done as described in your letters and if the additional conservation measures given above are followed.

The Wildlife Agencies retain the right to access and inspect the project site for compliance with the proposed project description and conservation measures of this letter. Any habitats destroyed beyond what was anticipated should be disclosed immediately to the Wildlife Agencies. Compensation for such habitat loss will be requested at a minimum ratio of 5:1 (habitat in kind).

For the protected or rare species observed in project surveys, we request that you submit a California Native Species Field Survey Form and survey map to the Natural Diversity Database (NDDB). The form is available online at http://www.dfg.ca.gov/whdab/natspec.pdf. Instructions for completing the form are available at http://www.dfg.ca.gov/whdab/fsfinst.pdf. Please send the form and survey map to:

Department of Fish and Game
California Natural Diversity Database,
1807 13th Street, Suite 202
Sacramento, CA 95814

and copies to:

Department of Fish and Game
South Coast Region
Attn.: Libby Lucas
4949 Viewridge Avenue
San Diego, CA 92123

Please contact Carolyn Lieberman of the Service at (760) 431-9440, or Libby Lucas of the Department at (858) 467-4230, if you have any questions or comments concerning this letter.

Sincerely,

for Therese O'Rourke
Assistant Field Supervisor
U.S. Fish and Wildlife Service

for Michael J. Mulligan
Deputy Regional Manager
California Department of Fish and Game

cc: Kristen Forburger, City of San Diego

HELIX
environmental planning, inc.

8100 La Mesa Blvd., Suite 150
La Mesa, CA 91941-6476
e-mail:admin@helixepi.com
fax (619) 462-0552
phone (619) 462-1515

Inland Empire Office
phone (909) 423-0701

July 12, 2005

JAD-01

Ms. Kathleen Brubaker
U.S. Fish and Wildlife Service
6010 Hidden Valley Road
Carlsbad, California 92009

Ms. Libby Lucas
California Department of Fish and Game
4949 Viewridge Avenue
San Diego, California 92123

Subject: Archaeological Testing on the Otay 310 Property

Dear Kathleen and Libby:

This letter is to inform you that the archaeological testing for the Otay 310 property is scheduled to begin immediately. The biological monitor will be present to insure compliance with the conditions in your letter dated July 8, 2005. The biological monitor will be surveying for nesting raptors and burrowing owls, and staking and flagging sensitive resources prior to initiating work. Please call me if you have any questions.

Sincerely,

Barry L. Jones
Senior Consulting Biologist

cc: Judd Halenza, Judd and Dillard 310, LLC
Mary Robbins-Wade, Affinis

## Jasmine Watts

**From:** Jasmine Watts
**Sent:** Monday, July 18, 2005 3:50 PM
**To:** 'ELucas@dfg.ca.gov'; 'Kathleen_Brubaker@fws.gov'; 'Carolyn_Lieberman@fws.gov'
**Cc:** Barry Jones
**Subject:** Staking of Sensitive Resources at Otay 310

Dear Ms. Kathleen Brubaker & Libby Lucas,

Per your request, attached are photographs showing the staked and flagged sensitive biological resources within the archaeological testing locations at the Otay 310 Properties.

On Monday July 18, 2005 I met Affinis archaeologists Mary Robbins and Matt Murray on site to show them which biological resources in their proposed test locations they were to avoid.

Sensitive resources (coastal sage scrub habitat and *Iva hayesiana* population) were observed within archaeological site CA-SDI-11,793 and those were staked and flagged with yellow and red tape. The coastal sage scrub (CSS) habitat bordering the northeastern corner of this test location was staked and a 50-ft. border was flagged (photos "Ca-SDI-11.793 CSS1b.JPG" and "Ca-SDI-11.793 CSS3b.JPG"). The archaeologists are aware that no work is to be conducted within 50 ft. of CSS habitat. The *Iva* population is located along the western perimeter of the test location (photo "CA-SDI-11.793 Ivahay-b.JPG").

No work will be conducted within archaeological sites CA-SDI-11,799H and CA-SDI-11,801 due to their proximity to burrowing owls. On a burrowing owl survey conducted Friday July 15, 2005 five burrowing owls were observed within the boundary of site CA-SDI-11,799H. The following Monday eight burrowing owls were observed in this location and their burrow was located within 300 ft. of site CA-SDI-11,801 (photo "8 BUOW-burrow4.JPG"). The archaeologists are aware that no work is to be conducted within 300 ft. of an active burrow.

No sensitive biological resources were observed within the other archaeological test locations proposed for work (the raptor nest observed within the eucalyptus woodland is not active at this time.). These include sites CA-SDI-10,299; CA-SDI-11,802H; CA-SDI-11,800; CA-SDI-15,875; CA-SDI-15,873; and CA-SDI-15,872. The remaining archaeological test locations in the southeastern portion of Otay 310 Properties are not proposed for work.

Work in the specified testing locations above will begin Wednesday July 20, 2005. I will meet the archaeologists on site to take photographs prior to work beginning.

The photographs do not illustrate well the staking and flagging of the sensitive resources, but the staking and flagging is very apparent in the field. I will take additional photos on Wednesday hoping to illustrate our efforts better. If you have any questions or concerns regarding this email, please feel free to contact Barry Jones or me at (619) 462-1515.

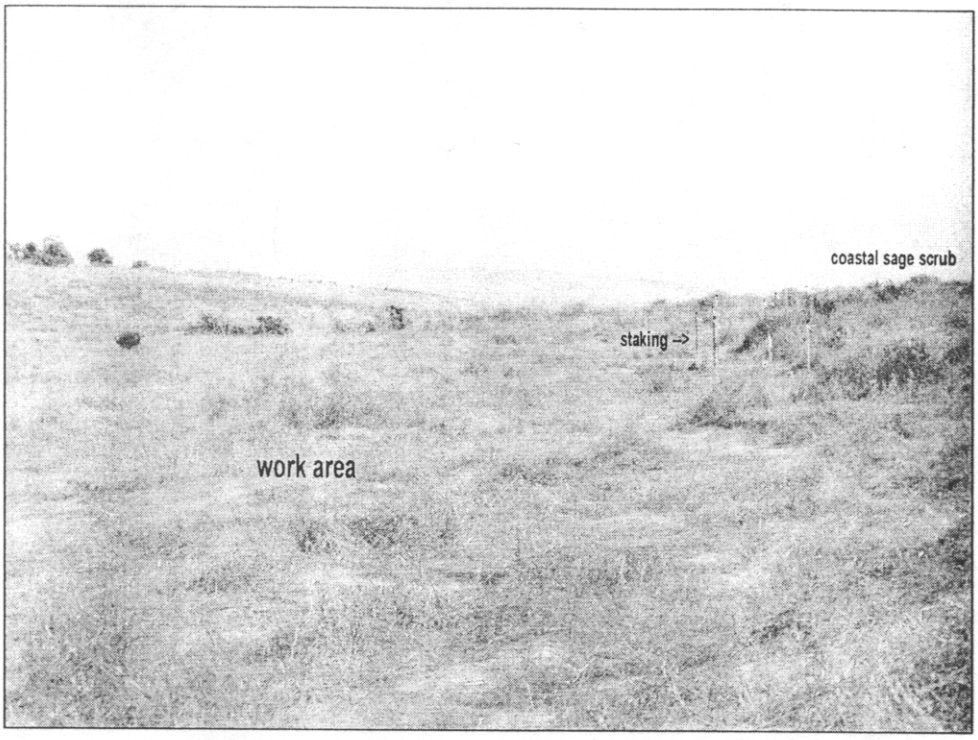
**Jasmine Watts, *Biologist***
**HELIX Environmental Planning, Inc.**
(619) 462-1515, fax (619) 462-0552
www.helixepi.com


Ca-SDI-11.793 CSS1b.jpg

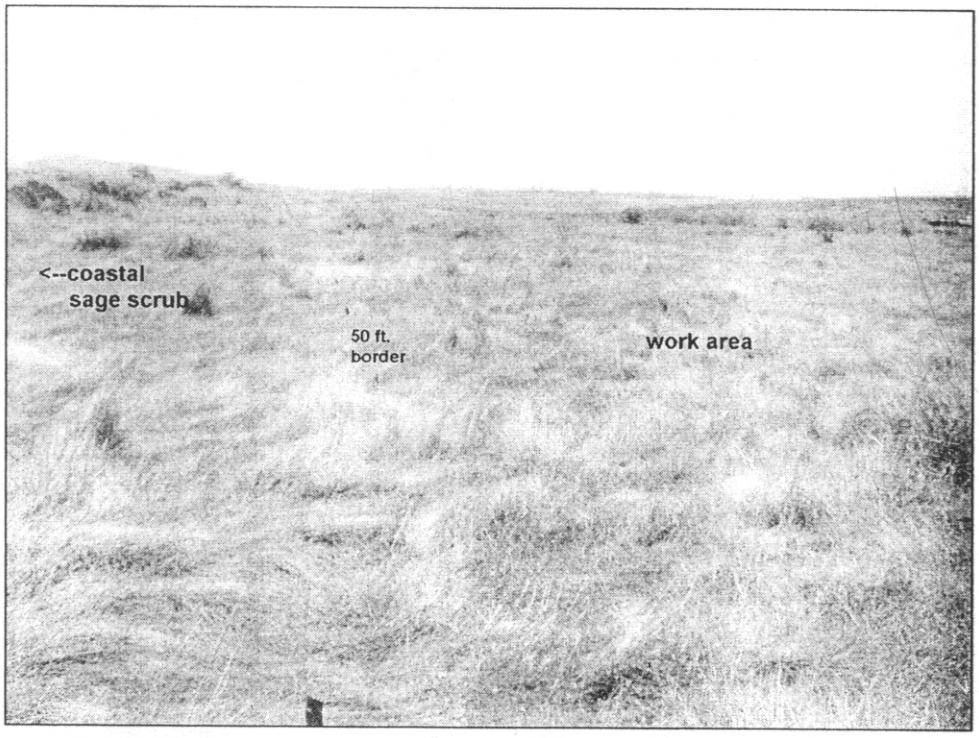

Ca-SDI-11.793 CSS3b.jpg


CA-SDI-11.793 Ivahay-b.JPG


8 BUOW-burrow4.JPG

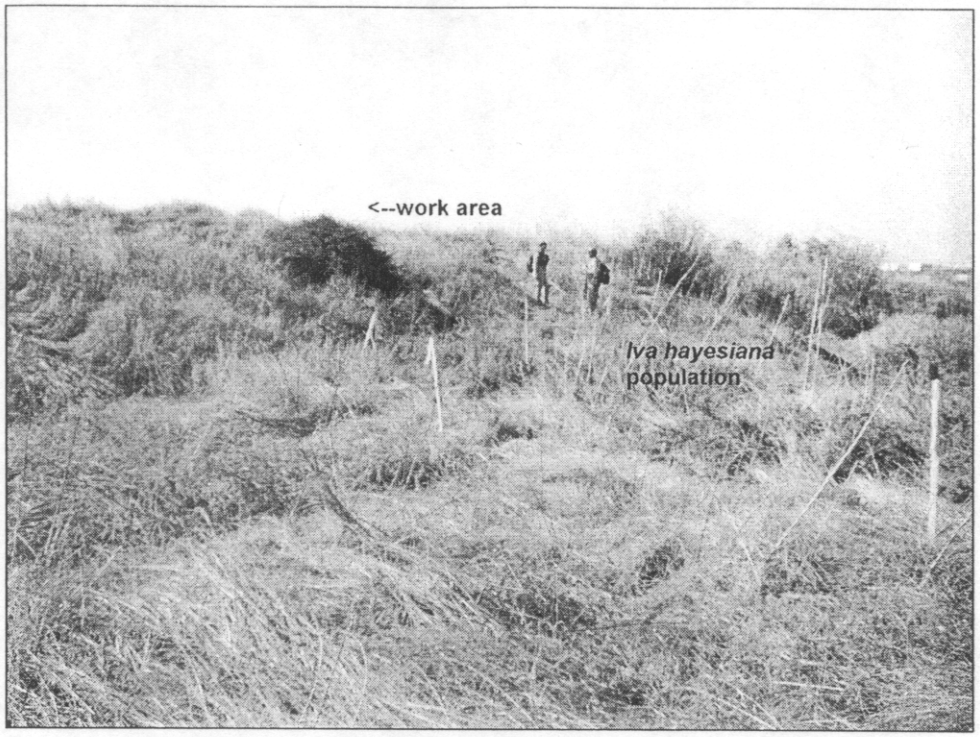



Archaeological Testing Location Ca-SDI-11,793

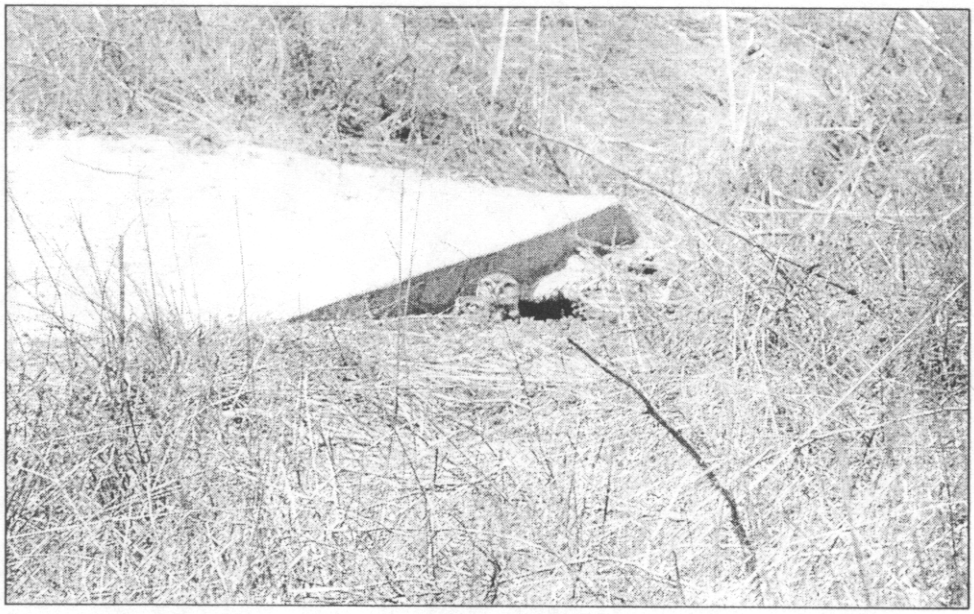



Archaeological Testing Location Ca-SDI-11,793

Otay 310 Properties (JAD-01)
Staking of Sensitive Biological Resources prior to Archaeological Testing (07/18/05)




Archaeological Testing Location Ca-SDI-11,793



Burrowing owl burrow location within close proximity to
Archaeological Test Locations CA-SDI-11,799H and CA-SDI-11,801

# APPENDIX C

# ARTIFACT CATALOGS

**JN 1966 Summary Table**

| SITE | ARTNUM | Unit type | Unit number | Upper depth | Lower depth | Class | Item | Material | CNT | WT |
|---|---|---|---|---|---|---|---|---|---|---|
| SDI-10299 | 2 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Medium to coarse grained metavolcanic | 1 | 52.3 |
| SDI-10299 | 4 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 5.6 |
| SDI-10299 | 5 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 8.7 |
| SDI-10299 | 6 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 37.2 |
| SDI-10299 | 7 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 21 |
| SDI-10299 | 8 | General surface | 0 | 0 | 0 | Flaked stone | Retouched/utilized flake | Fine grained metavolcanic | 1 | 122.5 |
| SDI-10299 | 9 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 9.3 |
| SDI-10299 | 10 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 27.5 |
| SDI-10299 | 1 | General surface | 0 | 0 | 0 | Flaked stone | Retouched/utilized flake | Fine grained metavolcanic | 1 | 9 |
| SDI-10299 | 3 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 22.5 |
| SDI-11793 | 4 | Shovel test pit | 8 | 0 | 10 | Flaked stone | Debitage | Medium to coarse grained metavolcanic | 1 | 4.1 |
| SDI-11793 | 7 | Shovel test pit | 12 | 10 | 20 | Flaked stone | Debitage | Medium to coarse grained metavolcanic | 1 | 60.7 |
| SDI-11793 | 8 | Shovel test pit | 15 | 20 | 30 | Flaked stone | Debitage | Medium to coarse grained metavolcanic | 1 | 14 |
| SDI-11793 | 1 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 3.628 |
| SDI-11793 | 2 | General surface | 0 | 0 | 0 | Flaked stone | Core | Fine grained metavolcanic | 1 | 45.9 |
| SDI-11793 | 3 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 11 |
| SDI-11793 | 5 | Shovel test pit | 8 | 0 | 10 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 2.4 |
| SDI-11793 | 6 | Shovel test pit | 9 | 0 | 10 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 2.2 |
| SDI-11800 | 2 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Medium to coarse grained metavolcanic | 1 | 9.8 |
| SDI-11800 | 3 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Medium to coarse grained metavolcanic | 1 | 5.6 |
| SDI-11800 | 5 | Shovel test pit | 4 | 20 | 30 | Flaked stone | Debitage | Medium to coarse grained metavolcanic | 1 | 10.5 |
| SDI-11800 | 1 | General surface | 0 | 0 | 0 | Flaked stone | Retouched/utilized flake | Fine grained metavolcanic | 1 | 58.6 |
| SDI-11800 | 1 | Shovel test pit | 1 | 10 | 20 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 2.7 |
| SDI-11800 | 4 | Shovel test pit | 1 | 10 | 20 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 2.7 |
| SDI-15872 | 1 | Shovel test pit | 4 | 20 | 30 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 8.2 |
| SDI-15872 | 2 | Shovel test pit | 1 | 0 | 10 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 0.7 |
| SDI-15875 | 1 | Shovel test pit | 3 | 20 | 30 | Flaked stone | Core | Fine grained metavolcanic | 1 | 76.2 |
| SDI-8078 | 5 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Medium to coarse grained metavolcanic | 1 | 323.8 |
| SDI-8078 | 6 | General surface | 0 | 0 | 0 | Flaked stone | Core | Medium to coarse grained metavolcanic | 1 | 303 |
| SDI-8078 | 7 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Medium to coarse grained metavolcanic | 1 | 3.6 |
| SDI-8078 | 8 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Medium to coarse grained metavolcanic | 1 | 31.4 |
| SDI-8078 | 1 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 8.6 |
| SDI-8078 | 2 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 15.7 |
| SDI-8078 | 3 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 7.8 |
| SDI-8078 | 9 | General surface | 0 | 0 | 0 | Flaked stone | Core | Fine grained metavolcanic | 1 | 212.2 |
| SDI-8078 | 10 | General surface | 0 | 0 | 0 | Flaked stone | Core | Fine grained metavolcanic | 1 | 43.4 |
| SDI-8078 | 11 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Fine grained metavolcanic | 1 | 108.2 |
| SDI-8078 | 13 | Shovel test pit | 5 | 0 | 10 | Flaked stone | Core | Fine grained metavolcanic | 1 | 51 |
| SDI-8078 | 4 | General surface | 0 | 0 | 0 | Flaked stone | Debitage | Quartzite | 1 | 1.7 |

# APPENDIX D

# RESEARCH DESIGN FOR ARCHAEOLOGICAL DATA RECOVERY:

# CA-SDI-11,799H AND CA-SDI-12,888H

# RESEARCH DESIGN FOR ARCHAEOLOGICAL EVALUATION: CA-SDI-11,799H AND CA-SDI-12,888H, OTAY CROSSINGS COMMERCE PARK, OTAY MESA, SAN DIEGO COUNTY, CALIFORNIA SPA 04-006; TM 5405

**Submitted to:**

**County of San Diego**
**Department of Planning and Land Use**
**5201 Ruffin Road, Suite B**
**San Diego, California 92123-1666**
**(858) 694-2960**

**Prepared for:**

**Otay Crossings Commerce Park, LLC**
**500 Stevens Avenue, Suite 208**
**Solana Beach, CA 92075**
**(858) 847-9322**

**Prepared by:**

**Affinis**
**Shadow Valley Center**
**847 Jamacha Road**
**El Cajon, California 92019**
**(619) 441-0144**

**Mary Robbins-Wade, M.A. (R.P.A.)**
**Director of Cultural Resources**

**Stephen R. Van Wormer**
**Historian, Walter Enterprises**

**November 2006**

**Affinis Job No. 1966**

## TABLE OF CONTENTS



## FIGURES

# I. INTRODUCTION

## PROJECT LOCATION

The Otay Crossings Commerce Park project is located within the East Otay Mesa Specific Plan Subarea 2, in the County of San Diego, in far southwestern San Diego County (Figure 1). The project area is at the eastern end of Otay Mesa, east of State Route 905 (SR 905), and is crossed by the proposed route of SR 11. The property is bounded on the north by an extension of Otay Mesa Road, on the south by an extension of Airway Road, and on the west by an extension of Alta Road (Figures 2 and 3). The project area is within Township 18 South, Range 1 West, Sections 31 and 32 on the USGS 7.5' Otay Mesa quadrangle (Figure 2).

## BACKGROUND

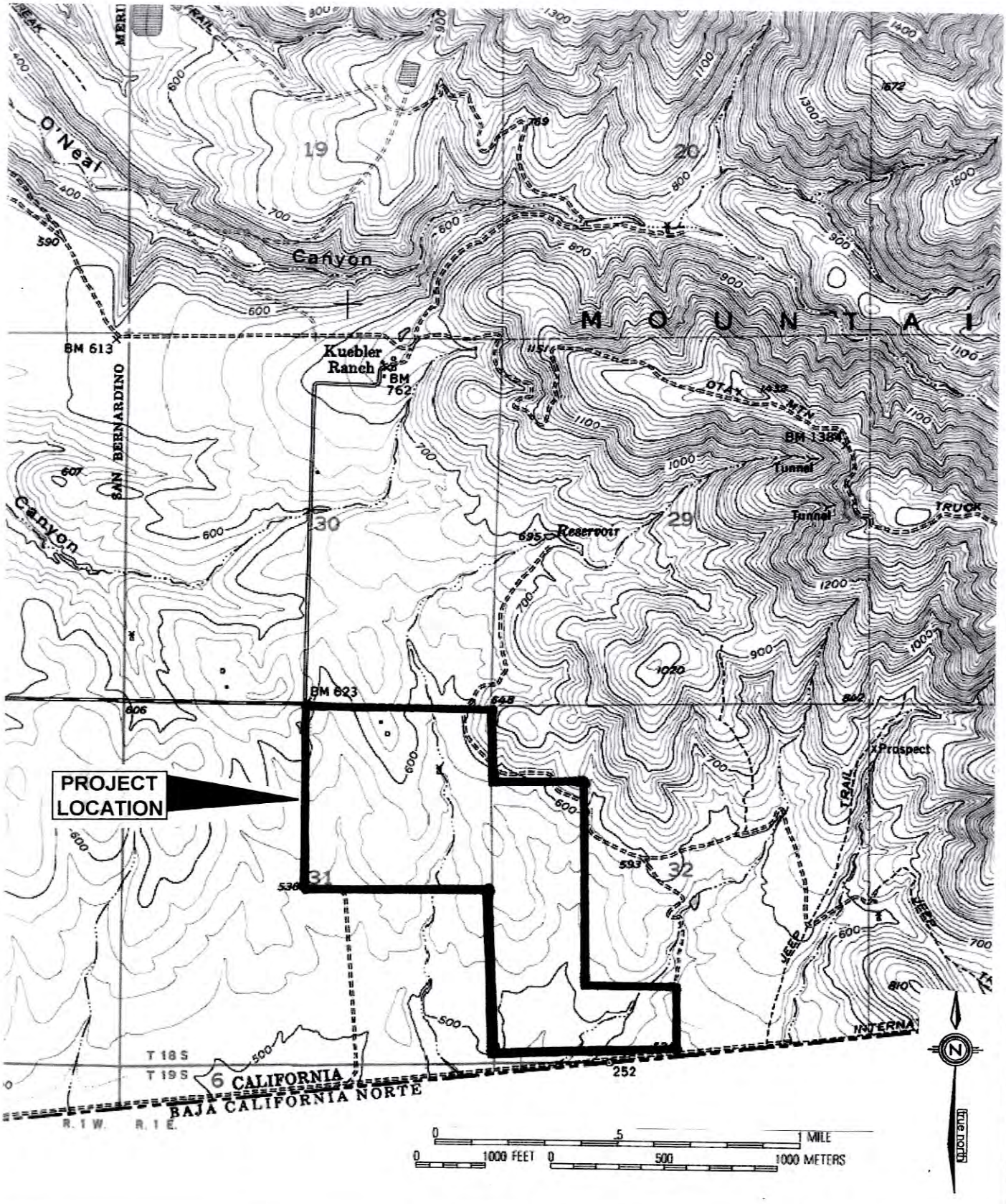
An evaluation program was conducted in 2005 and 2006 at the archaeological sites within the Otay Crossings Commerce Park project area and those that would be affected by off-site improvements related to the project (Robbins-Wade 2006). Testing could not be undertaken at two historic archaeological sites (CA-SDI-11,799H and CA-SDI-12,888H), due to the presence of nesting burrowing owls. In the absence of testing, these sites must be treated as significant under CEQA. Based on available information, however, the sites do not meet the criteria of RPO significance. A data recovery program must be undertaken at the sites, in order to mitigate potentially significant impacts from project implementation. This document is the research design that will guide that data recovery program.

# II. SITE DESCRIPTIONS/PREVIOUS RESEARCH

## CA-SDI-11,799H

CA-SDI-11,799H originally was described as a cistern into which lumber and other materials had been bulldozed. The site was recorded in conjunction with the Southeast Otay Mesa Sludge Processing Facilities survey (Robbins-Wade and Gross 1990). The cistern was in a cultivated field and was a short distance (approximately 90 m [300 ft]) east of the dirt extension of Alta Road. A bottle neck of sun-affected amethyst glass was collected at the cistern. There are enough materials associated with the site to suggest that a house or other structure was probably demolished on the site. The site is represented on the 1903 Cuyamaca quadrangle as one structure. It does not appear on any of the later topographic maps. The site is not shown on the 1879 Bureau of Land Management (BLM) map, but the "Old Road from San Diego to Lower California" is shown as running through the area at that time. CA-SDI-11,799H is located mainly to the south of the Otay Crossings Commerce Park project area, but it is mapped as extending a short distance into the Tentative Map area and the proposed Airway Road right-of-way.


| | | |
|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Regional location in San Diego County | Figure 1 |

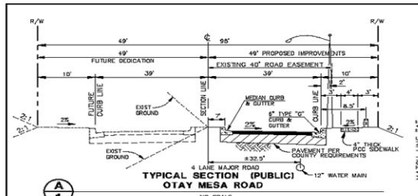



| | | |
|---|---|---|
| **Affinis**<br>Shadow Valley Center<br>847 Jamacha Road<br>El Cajon, CA 92019 | Project Location on USGS 7.5'<br>Otay Mesa Quadrangle | Figure 2 |

# COUNTY OF SAN DIEGO TRACT 5405 RPL5

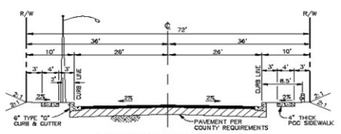
## OTAY CROSSINGS COMMERCE PARK, TENTATIVE MAP

SHEET 1 OF 2



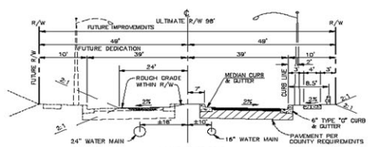

**TYPICAL SECTION (PUBLIC)**
**OTAY MESA ROAD**
NO SCALE

A/1



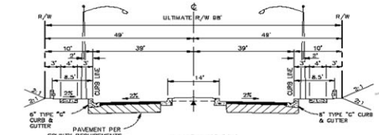

2 LANE INDUSTRIAL/COMMERCIAL LOCAL ROAD
**TYPICAL SECTION (PUBLIC)**
**INTERIOR STREETS "CALLE VENTNER"**
**CAMINO DEL MAYER (S/O SIEMPRE VIVA ROAD)**
**STREETS A, B, AND C**
NO SCALE

B/1



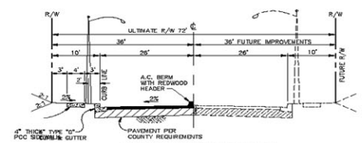

**TYPICAL SECTION (PUBLIC)**
**ALTA ROAD**
NO SCALE

C/1



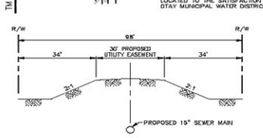

**TYPICAL SECTION (PUBLIC)**
**AIRWAY ROAD / SIEMPRE VIVA ROAD**
**CAMINO DEL MAYER (N/O SIEMPRE VIVA ROAD)**
NO SCALE

D/1



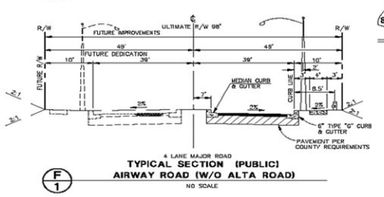

2 LANE INDUSTRIAL/COMMERCIAL LOCAL ROAD
**TYPICAL SECTION**
**INTERIOR STREET D**
NO SCALE

E/1



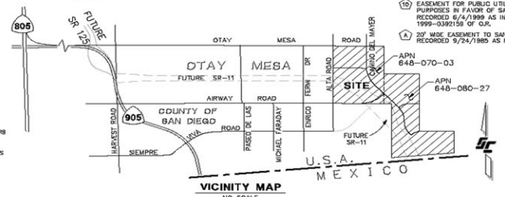

**TYPICAL SECTION**
**ALTA ROAD (S/O AIRWAY ROAD)**
**SIEMPRE VIVA ROAD (W/O ALTA ROAD)**
NO SCALE

G/1




**TYPICAL SECTION (PUBLIC)**
**AIRWAY ROAD (W/O ALTA ROAD)**
NO SCALE

F/1




**VICINITY MAP**
NO SCALE




**EASEMENT TABLE**

1. HIGHWAY EMBANKMENT, SLOPES, ELECTRICAL AND COMMUNICATIONS FACILITIES EASEMENT TO COUNTY OF SAN DIEGO RECORDED 11/5/1987 AS FILE NO. 87-624332, O.R. AND EXTENSION AGREEMENT WITH SAN DIEGO GAS & ELECTRIC COMPANY RECORDED 6/20/1989 AS FILE NO. 89-302885, O.R.
2. 20' WIDE EASEMENT TO OTAY MUNICIPAL WATER DISTRICT RECORDED 2/8/1967 AS FILE NO. 17466, O.R.
3. LINE EASEMENT TO SAN DIEGO GAS AND ELECTRIC CO. RECORDED 10/19/1948 IN BOOK 2985, PAGE 183, O.R.
4. 40' WIDE EASEMENT FOR COUNTY HIGHWAY (ROAD SURVEY 783) RECORDED 1/31/1939 IN BOOK 858, PAGE 177, O.R.
5. 30' WIDE EASEMENT TO SAN DIEGO GAS AND ELECTRIC COMPANY (OR WIDER IF REQUIRED BY NECESSARY CUTS AND FILLS) RECORDED 1/4/1983 AS FILE NO. 83-002642, O.R. AND RE-RECORDED 2/4/1983 AS FILE NO. 83-037084, O.R.
6. 20' WIDE EASEMENT TO OTAY MUNICIPAL WATER DISTRICT RECORDED 2/8/1967 AS FILE NO. 17470, AND RECORDED 2/15/1967 AS FILE NO. 20416, O.R.
7. EASEMENT FOR PUBLIC ROAD AND INCIDENTAL PURPOSES, RECORDED 3/8/1900 IN BOOK 257, PAGE 500 OF DEEDS.
8. EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES IN FAVOR OF SAN DIEGO GAS & ELECTRIC, RECORDED 12/7/1987 AS INSTRUMENT NO. 87-673753 OF O.R.
9. EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES IN FAVOR OF PACIFIC BELL, RECORDED 12/10/1987 AS INSTRUMENT NO. 87-682038 OF O.R.
10. EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES IN FAVOR OF SAN DIEGO GAS & ELECTRIC, RECORDED 6/4/1999 AS INSTRUMENT NO. 1999-0392158 OF O.R.
11. 20' WIDE EASEMENT TO SAN DIEGO GAS AND ELECTRIC COMPANY RECORDED 9/24/1985 AS FILE NO. 85-352966, O.R.

**ZONING APN # 648-070-03**

| ZONE | | EXISTING | | PROPOSED |
|---|---|---|---|---|
| LAND USE REGULATIONS | | S-88 | S-88 | S-88 |
| ANIMAL REGULATIONS | | A | – | – |
| DEVELOPMENT REGULATIONS | DENSITY | .05 | – | – |
| | LOT SIZE | 20 AC | 30,000 S.F. | 30,000 S.F. |
| | BUILDING TYPE | B | W | W |
| | MAXIMUM FLOOR AREA | – | – | – |
| | FLOOR AREA RATIO | – | 0.40 | 0.40 |
| | HEIGHT | C | P | P |
| | LOT COVERAGE | – | 0.40 | 0.40 |
| | SETBACK | C | V | V |
| | OPEN SPACE | – | – | – |
| SPECIAL AREA REGULATIONS | | C | B, POR, G | B, POR, G |

**ZONING APN # 648-080-27**

| ZONE | | EXISTING | | PROPOSED |
|---|---|---|---|---|
| LAND USE REGULATIONS | | S-88 | S-88 | S-88 |
| ANIMAL REGULATIONS | | – | – | – |
| DEVELOPMENT REGULATIONS | DENSITY | – | – | – |
| | LOT SIZE | 30,000 S.F. | 30,000 S.F. | 30,000 S.F. |
| | BUILDING TYPE | W | W | W |
| | MAXIMUM FLOOR AREA | – | – | – |
| | FLOOR AREA RATIO | 0.40 | 0.40 | 0.40 |
| | HEIGHT | P | P | P |
| | LOT COVERAGE | 0.40 | 0.40 | 0.40 |
| | SETBACK | V | V | V |
| | OPEN SPACE | – | – | – |
| SPECIAL AREA REGULATIONS | | B, POR, C | B | B, POR, C |

**LOT AREAS** (GROSS=NET)

| NO. | NET (Ac.) | NO. | NET (Ac.) | NO. | NET (Ac.) |
|---|---|---|---|---|---|
| 1 | 3.3 | 20 | 3.0 | 39 | 4.9 |
| 2 | 3.2 | 21 | 3.1 | 40 | 3.7 |
| 3 | 3.2 | 22 | 2.8 | 41 | 1.8 |
| 4 | 1.8 | 23 | 3.9 | 42 | 7.5 |
| 5 | 1.4 | 24 | 5.1 | 43 | 3.0 |
| 6 | 1.4 | 25 | 3.2 | 44 | 3.8 |
| 7 | 4.3 | 26 | 2.7 | 45 | 2.3 |
| 8 | 4.8 | 27 | 2.2 | 46 | 3.1 |
| 9 | 4.7 | 28 | 2.1 | 47 | 2.0 |
| 10 | 4.1 | 29 | 1.8 | 48 | 2.7 |
| 11 | 1.9 | 30 | 2.7 | 49 | 3.0 |
| 12 | 3.3 | 31 | 3.9 | 50 | 2.6 |
| 13 | 2.0 | 32 | 2.0 | 51 | 3.8 |
| 14 | 1.9 | 33 | 3.2 | 52 | 2.4 |
| 15 | 1.6 | 34 | 4.7 | 53 | 3.7 |
| 16 | 4.1 | 35 | 4.1 | 54 | 23.7 |
| 17 | 4.0 | 36 | 3.2 | 55 | 0.8 |
| 18 | 3.8 | 37 | 2.9 | 56 | 93.4 |
| 19 | 3.6 | 38 | 3.7 | | |

TOTAL LOT AREA = 266.4 AC.
ON SITE ROAD AREA 19.3 AC.
OTAY MESA ROAD AREA 2.4 AC.
ALTA ROAD AREA 3.0 AC.
AIRWAY ROAD AREA 0.4 AC.
TOTAL PROJECT BOUNDARY AREA = 311.5 AC.

**ASSESSOR'S PARCEL NUMBERS & TAX RATE AREA TABLE**

| PARCEL NUMBER | TAX RATE AREA |
|---|---|
| 648-070-03 | 84035 |
| 648-080-27 | 84035 |

NOTE: SEE "PRELIMINARY ROUTE STUDIES FOR CIRCULATION ELEMENT ALIGNMENT AND GRADE CORRESPONDING TO THE DESIGN REPRESENTED HEREON"

**SLOPE ANALYSIS TABLE**

| | |
|---|---|
| 0–15% SLOPES | 299.0± AC. |
| 15–25% SLOPES | 10.4± AC. |
| 25–50% SLOPES | 1.8± AC. |
| 50% OR GREATER SLOPES | 0.09± AC. |
| TOTAL | 311.3± AC. |

### GENERAL NOTES

1. EXISTING ZONING — S-88
2. PROPOSED ZONING — S-88
3. GROSS ACREAGE WITHIN SUBDIVISION BOUNDARY: 311.5 ACRES. NET AREA MINUS ROAD EASEMENTS: 286.4 ACRES. PROPOSED ON-SITE STREETS: 23.1 ACRES
4. TOTAL NUMBER OF LOTS: 56 COMMERCIAL/INDUSTRIAL LOTS. MINIMUM INDUSTRIAL LOT SIZE IS 0.80 ACRES.
5. CONTOUR INTERVAL OF 2 FEET (MEAN SEA LEVEL DATUM).
6. SPECIAL ASSESSMENT ACT PROCEEDINGS — MAY BE REQUESTED FOR THIS PROJECT.
7. IMPROVEMENTS, EASEMENTS AND DEDICATIONS ARE AS REQUIRED BY THE COUNTY ENGINEER.
8. UTILITIES:
   A. SEWER — EAST OTAY MESA SEWER MAINTENANCE DISTRICT
   B. WATER — OTAY WATER DISTRICT
   C. GAS & ELECTRIC — SAN DIEGO GAS & ELECTRIC COMPANY
   D. TELEPHONE — PACIFIC TELEPHONE COMPANY
9. FIRE PROTECTION — SAN DIEGO COUNTY RURAL FIRE DISTRICT
10. SCHOOLS: SAN YSIDRO SCHOOL DISTRICT
    SWEETWATER UNION HIGH SCHOOL DISTRICT
11. ALL PROPOSED UTILITIES TO BE UNDERGROUND.
12. ALL EXISTING EASEMENTS NOT REMAINING IN USE SHALL BE VACATED PRIOR TO RECORDATION OF THE FINAL MAP(S) SUBJECT TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS.
13. GENERAL PLAN REGIONAL CATEGORY: CUDA/ECA.
14. EXISTING TOPOGRAPHY WAS COMPILED USING PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY, BY PHOTO GEODETIC CORP. DATED 12-24-03
15. THE FOLLOWING WAIVERS FROM THE SUBDIVISION ORDINANCE DESIGN STANDARDS ARE REQUESTED: NONE.
16. LAMBERT COORDINATES: 138-1785
17. DRAINAGE: STREETS & STORM DRAIN AS REQUIRED.
18. ALL ONSITE STREETS WILL BE PUBLIC.
19. THIS IS A SOLAR SUBDIVISION AS REQUIRED BY SECTION 81.401 (n), OF THE SUBDIVISION ORDINANCE. ALL LOTS HAVE AT LEAST 100 SQ. FT. OF UNOBSTRUCTED ACCESS TO SUNLIGHT ON THE BUILDABLE PORTION OF THE LOT.
20. THIS PROJECT IS A MULTI-UNIT SUBDIVISION (5 UNITS) MULTIPLE FINAL MAPS MAY BE FILED PURSUANT TO SECTION 66456.1 OF THE SUBDIVISION MAP ACT.
21. STREET LIGHTS WILL BE INSTALLED TO COMPLY WITH THE REQUIREMENTS AS SPECIFIED BY THE COUNTY STANDARDS.
22. STORM DRAIN DETENTIONS WILL BE PROVIDED IN ACCORDANCE COUNTY REQUIREMENTS.
23. THIS PLAN IS PROVIDED TO ALLOW FOR FULL AND ADEQUATE DISCRETIONARY REVIEW OF A PROPOSED DEVELOPMENT PROJECT. THE PROPERTY OWNER ACKNOWLEDGES THAT ACCEPTANCE OR APPROVAL OF THIS PLAN DOES NOT CONSTITUTE AN APPROVAL TO PERFORM ANY GRADING SHOWN HEREON, AND AGREES TO OBTAIN A VALID GRADING PERMIT AND PERMISSIONS BEFORE COMMENCING SUCH ACTIVITY.

### LEGEND

| DESCRIPTION | SYMBOL |
|---|---|
| PROPOSED LOT NUMBER | 1 THRU 56 |
| SUBDIVISION BOUNDARY | |
| UNIT BOUNDARY | UNIT 1 / UNIT 2 |
| PROPOSED LOT LINE | |
| PROPOSED RIGHT-OF-WAY | |
| EASEMENT LINE | |
| PROPOSED PVC WATER MAIN (12" MINIMUM) | W W |
| PROPOSED SEWER MAIN W/MANHOLE | S |
| PROPOSED SEWER PUMP STATION | |
| PROPOSED SEWER FUTURE MAIN | SFM |
| EXISTING CONTOUR | 630 |
| EXISTING OVERHEAD ELECTRIC | OHE |

### BENCH MARK

BRASS DISC STAMPED "AM 154 1969" LOCATED 3.06 MILES EAST ALONG OTAY MESA ROAD FROM INTERSECTION OF OTAY VALLEY ROAD, 20.5' SOUTH OF CENTERLINE OF OTAY MESA ROAD AND ABOUT 170' EAST OF CENTERLINE INTERSECTION OF HARVEST ROAD. STEEL FENCEPOST MARKER LIES 1' SOUTH OF DISK. RECORD FROM COUNTY OF SAN DIEGO VERTICAL CONTROL RECORD. ELEVATION: 541.10 DATUM: U.S.C.& G.S., M.S.L.

### LEGAL DESCRIPTION

THE NORTHWEST QUARTER OF SECTION 31, TOWNSHIP 18 SOUTH, RANGE 1 EAST, SAN BERNARDINO BASE AND MERIDIAN IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT, TOGETHER WITH THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER, THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER, THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER, AND THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 31, TOWNSHIP 18 SOUTH, RANGE 1 EAST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

### OTAY SUBREGIONAL PLAN

EXISTING & PROPOSED: SPA 21 (CPA 92-04)
EAST OTAY MESA SPECIFIC PLAN SUBAREA 2

### GRADING QUANTITIES

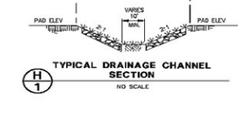
CUT: 1,883,000 CUBIC YARDS
FILL: 1,562,000 CUBIC YARDS
EXPORT: 0

### REGIONAL CATEGORY

CUDA/ECA

### PARK LAND DEDICATION

NOT REQUIRED IN INDUSTRIAL ZONE




**TYPICAL DRAINAGE CHANNEL SECTION**
NO SCALE

H/1

KEARNY
Real Estate Company

### OWNER/SUBDIVIDER

KEARNY REAL ESTATE COMPANY
4660 LA JOLLA VILLAGE DR. SUITE 1600
SAN DIEGO, CA. 92122
PHONE: 619-702-8130
FAX: 619-702-7812

KEARNY PCCP OTAY 311, LLC.

BY: _____
JOHN V. BRAGG JR. DATE:
VICE PRESIDENT

### ENGINEER OF WORK

STEVENS CRESTO ENGINEERING, INC.
9665 CHESAPEAKE DRIVE, SUITE 320
SAN DIEGO, CA 92123-1352
PHONE: (858) 694-5660
FAX: (858) 694-5661

MARK E. STEVENS R.C.E. 36502 DATE

REGISTERED PROFESSIONAL ENGINEER No. 36502 Exp. 9-30-09 CIVIL STATE OF CALIFORNIA

STEVENS-CRESTO ENGINEERING, INC.
CIVIL ENGINEERS - LAND PLANNERS - SURVEYORS
9665 CHESAPEAKE DRIVE, SUITE 320, SAN DIEGO, CA 92123-1352
PHONE: 858.694.5660 FAX: 858.694.5661 www.scengr.com

N:\DWG\Job\3060\3060P\MAPPING\Tentative Map\RPL5\3060 TM01.dwg 8/5/2006 8:08:28 PM PDT

**Affinis**
Shadow Valley Center
847 Jamacha Road
El Cajon, CA 92019

Tentative map

Figure 3

The site is part of the 160-acre D.O. McCarthy farmstead, which is discussed in detail in Appendix A of the testing report (Robbins-Wade 2006). McCarthy was living on Otay Mesa by 1883 and received a patent for the 160 acres in 1889. D.O. McCarthy and his son J. Harvey are best remembered for establishing a store, blacksmith shop, post office, and race track at their Otay Mesa ranch. In addition, it became the local voting precinct polling place. The blacksmith shop opened in October 1889. The Siempreviva Grocery, built and run by J. Harvey, opened the same month. The store was "well stocked with groceries that he is selling at San Diego prices." At this time Otay Mesa farmers sent a signed petition to Washington, D.C. asking for a post office to be called Siempreviva, which was established at McCarthy's place in February 1890.

By 1895, McCarthy no longer controlled the acreage, and it was owned by the California Mortgage Company. A building is shown on the property on the 1903 USGS Cuyamaca quadrangle that was surveyed in 1891 and 1901 to 1902. There are no buildings on the former McCarthy farmstead in a 1928 aerial photograph of the area. The family remained in San Diego, publishing a small newspaper called the *Vidette* until 1901, when they moved to Los Angeles. In 1916, at the age of 86, D.O. McCarthy returned to San Diego, where he was hailed as a pioneer. He spent the time visiting the old location of his Otay Mesa ranch and reminiscing about the early days of the city of San Diego.

CA-SDI-11,799H is mainly off-site to the south, but it is mapped as extending into the Tentative Map area and the proposed Airway Road right-of-way. During a field visit in March 2005, it was noted that the cistern has been filled since the 1990 survey; it is now discernible as a depression filled with gravel. The density of non-native grasses severely limited ground visibility except in the dirt roads.

**CA-SDI-12,888H**

CA-SDI-12,888H was recorded during the survey for the East Otay Mesa Specific Plan (Ogden and Gallegos & Associates 1993). The site was noted as fragments of porcelain, aqua glass, purple glass, and white ware ceramics in the "same location as a structure that was seen in the historic map check for 1880" (Ogden and Gallegos & Associates 1993:4-6). The site is mapped outside the Tentative Map area, within the right-of-way of the proposed Airway Road, at the southwest corner of two existing dirt roads that are the existing alignments of Alta Road and Airway Road.

No building is shown in this area on the 1903 USGS map or on the 1928 aerial photograph, but given the proximity of this site to CA-SDI-11,799H, it is possible that the two sites are part of the same historic archaeological resource. Both CA-SDI-11,799H and CA-SDI-12,888H are within the D.O. McCarthy property, which included not only McCarthy's home, but a grocery store, post office, blacksmith shop, and race track.

## III. RESEARCH DESIGN AND ARTIFACT ANALYSIS METHODS

### THEORETICAL BACKGROUND

The purpose of a research design is to define the research objectives of the project and explain how they will be accomplished. The objectives are a series of related goals. Each builds upon the other to move systematically toward more complex understandings of site function and lifestyles of the former inhabitants.

The artifact analysis and research objectives were framed and conducted within a theoretical context of functional pattern definition and consumerism studies. Functional pattern recognition and consumerism studies provide a theoretical background appropriate for the analysis of various aspects of human behavior during the later nineteenth and early twentieth centuries. Both provide a systematic approach to material culture studies as opposed to a particularistic one. The object of historic archaeological artifact analysis is not to reconstruct the past through detailed artifact descriptions or to pay tribute to some notable historic event or person, but to reveal broad trends and patterns that can expand our understanding of the processes that affected people. The focus is on differences in relationships between groups and cultures.

Based on methods originally developed by Stanley South and others, the purpose of pattern analysis is to develop functional artifact patterns or profiles. In order to determine the types of activities represented, artifacts are divided into functional categories or groups. The reason is to allow detection of relationships between functionally defined artifact groups at a generalized level of analysis and to thereby define broad patterned regularities (South 1977). The need for analysis at this level is to define functional patterned regularities before variation in the norm can be detected through cross-site comparison. South's models used a classification system with eight artifact groups. These are appropriate for sites that date prior to the Civil War; however, the quantity, variety, and availability of material items greatly increased after the Civil War, leading to the development of a consumer oriented culture by the end of the 19th century (Thomas 1982; Gordon and McArthur 1985; Spencer-Wood 1987a:369; Schlereth 1991).

The increase in availability of manufactured goods and consumer buying after 1860 necessitates a more complex classification system. A system of 20 artifact groups has proven successful for various site types in Southern California (Phillips and Van Wormer 1991; Van Wormer 1996a, 1996b; Van Wormer and Schaefer 1991). Artifacts in each group are quantified by estimated minimum number and weight, and the amount is converted into a percent of the total number and weight of artifacts from the deposit. It can thus be determined to what degree different activities are represented, resulting in a functional pattern or profile of the artifact assemblage. Bulk items such as concrete, building items, brick fragments, window glass, and tile are usually so fragmented that estimated minimum numbers cannot be calculated and in many cases would be inappropriate. These artifact types are quantified by weight only.

With this approach, archaeological refuse deposits take on meaning in relation to their ability to contribute to the definition of specific behavioral patterns. Trash filled privies, wells, and pits often contain artifact assemblages representing small, temporally and spatially distinct patterns of different households. A neighborhood dump may define a somewhat larger pattern, and a municipal dump, a still larger unit (Dickens and Crimmins 1982:106).

Archaeological studies in consumerism attempt to define archaeological situations in which pattern differences may be the result of socioeconomic status, ethnicity, household structure and lifestyle, market access, and biases in the archaeological and documentary records. Research in archaeology and on twentieth century consumer behavior have both found strong relationships between economic roles, social stratification, ethnic affiliation, and the types of material culture owned by households or excavated from sites (Spencer-Wood 1987b:1-3).

Studies in consumer behavior indicate people buy things for what they mean culturally, as well as for their functional purpose. Consumption is one of the important ways of signifying membership in a group, particularly in class, status, and ethnic groups, and therefore is an important reflection of lifestyle. Some groups, known as reference groups, exert a greater influence on individuals. Since individuals are influenced by the groups to which they belong, people can follow a group lifestyle. There will be variability in the group lifestyle as practiced by its individual members; however, there will be more similarity among individuals within the group than between groups (Henry 1991).

The primary cultural unit of historic archaeology has traditionally been the household, which is defined as a domestic residential group consisting of the inhabitants of a dwelling or set of dwellings and appears as a discrete group in historic documents (Henry 1987a, 1987b). It includes all the residents in the group that could have contributed to primary artifact deposits within the premises' yard or other defined boundary during a single time period (Spencer-Wood 1987b:2). The household can generally be seen as a member of the social group to which its members belong. Households are members of two powerful reference groups: social class and ethnic affiliation. This commonality of group membership allows comparison of large numbers of households on a consistent measure (Henry 1987a, 1987b). If a sufficient database has been developed, research can focus on analytical units larger than the single site, making comparisons within and between social groups possible (Henry 1987a, 1987b).

The study of consumer behavior requires a comparative database so patterns that characterize various social classes, ethnic groups, historical periods, and geographical regions can be compared (Lee Decker 1991). Intersite comparisons are used to assess the range of variation between groups and between households to define shared group behaviors (Spencer-Wood 1987b:7-8).

Several procedures have been developed to study consumerism and the relative value different groups placed on certain artifact classes. These include economic indexing, consumption pattern analysis, and dietary studies.

Economic indexing was first developed by George L. Miller for ceramic tableware. It is based on indices derived from cost relationships of tableware form and decoration during specific time periods (Miller 1980). Analytical methods based on Miller's work have been refined to establish consumer choice profiles (Spencer-Wood *et al*. 1987; Spencer-Wood 1987b). Indices have been developed by Henry for twentieth century ceramic assemblages (Henry 1982, 1987b). Similar types of indices have also been used for butchered bone and fish remains (Christenson 1996; Henry 1982, 1987a; Huelsbeck 1991; Schulz and Gust 1983; Singer 1987). Bottled products consumption patterns have proven useful to define site function and social group affiliation. Relative frequencies of bottled products differ between domestic households and commercial establishments as well as between social groups (Blanford 1988; Van Wormer 1983b, 1991).

## RESEARCH ISSUES

Relevant research issues for the potential historic archaeological sites within the Otay Crossings Commerce Park project area are presented below. They are designed to examine historic site formation and context, the definition of rural and urban consumption patterns, differences in cultural values and the definition of wealth between San Diego County farm families and urban dwellers, and to view in detail the types of tasks represented by the kitchen artifacts and how they reflect the role of women as producer in the farm household.

### Historic Site Formation and Context

The purpose of examining this issue is to determine how the archaeological deposit was formed and if the period of artifact deposition and the activity and population the artifacts represent can be defined. In order to assess the potential value of the archaeological deposits to answer relevant research questions, the following information had to be determined:

1. How was the deposit formed?

2. When did deposition of artifacts occur?

3. Are the artifacts of sufficient quantity and quality that functional profiles could be made?

### To Determine if Differences in Rural And Urban Households Can Be Identified

In rural San Diego County many people lived in dispersed family operated farms, and derived community identity from membership in rural school districts. These were the most common type of community in San Diego County from 1870 to about 1930. Members of agrarian rural school district communities shared a common lifestyle and cultural values, thus making them a distinct social and reference group. Previous research has indicated a distinct rural artifact pattern may be characteristic of assemblages representing rural school district communities in San Diego between 1870 and 1930 (Phillips and Van Wormer 1991; Van Wormer 1991; Van Wormer and Schaefer 1991). This pattern is defined by the following five characteristics:

1. Kitchen item frequencies are higher than or equal to those of consumer items.

2. Bottled product consumer items constitute 20 percent or less of the assemblage.

3. Beverage bottles make up less than 30 percent of the bottled products.

4. Ceramic index values are 2.0 or less.

5. Hardware and munitions frequencies are higher than urban assemblages.

Test Implications: Cross-site comparison of functional profiles, bottled product consumption patterns, ceramic index values, and artifact manufacture-deposition lag time from the assemblages and other rural and urban sites will allow comparison of patterns to see if distinct differences do occur in archaeological assemblages that reflects the diversity of rural and urban lifestyles and values.

**To Determine if Middle and Upper Class Urban Households Defined Wealth and Spent Money Differently than Members of Agrarian Rural School District Communities**

Although differences existed between rural and urban lifestyles, the parameters for each have not been well defined or explained. Research has indicated that after achieving a basic standard of living that included inexpensive ceramics, and few other "luxury items", successful farm families invested in equipment, land, livestock, outbuildings, and other aspects of the physical plant rather than the status symbols of urban dwellers, which were manifested in fine furniture, table settings, and clothes (Friedlander 1991).

Test Implications: This difference in values between working and upper middle class urban residents and successful farm families manifests itself in the archaeological record of urban and rural sites through the cross-site comparison of functional profiles, bottled product consumption patterns, economic indexing data, and artifact manufacture-deposition lag time profiles which will be defined in addressing the second research issue presented above. Additional historic research will provide explanations as to the cultural values and economic circumstances that resulted in the distinct economic and functional patterns for assemblages representing rural and urban social classes.

**Examination of Kitchen Activities**

Past archaeological investigations of farmsteads has revealed that kitchen items often dominate artifact assemblages. The reason for examining this issue is to view in detail the types of activities represented by the kitchen artifacts and how they reflect the role of women as producers in a farming household.

# IV. RESEARCH METHODS

## Field Methods

Backhoe trenching is recommended at these sites, to look for cultural features such as privy pits, root cellars, building foundations, and trash deposits. All the trench sidewalls would be examined by the archaeologists, as would trench spoils as they are removed. A sample of the soil from the trenches would be screened through 1/8-in. mesh screen. If features were encountered in the sidewall of a trench, the trench would be expanded to uncover the feature, which would be documented, drawn, and photographed.

## Laboratory Methods

All artifactual material collected would be cleaned, sorted, cataloged, and analyzed in order to prepare a comprehensive report. The theoretical background that will guide the analysis is addressed under Research Orientation.

## Report and Curation

A report would be prepared to the standards of the County of San Diego detailing the methods and results of the data recovery program. All cultural material collected, along with site maps, photographs, and field notes, would be permanently curated at the San Diego Archaeological Center or similar appropriate repository.

## V. REFERENCES


Blanford, J.

1987 Overseas Chinese Ethnicity and Euroamerican Glass Bottles at the Wong Ho Leun Site. In *Wong Ho Leun: An American Chinatown* 2:189-232. Great Basin Foundation, San Diego.

Christenson, Lynne E.

1996 Economic Analysis of Bone from Selected Historic Sites. *Proceedings of the Society for California Archaeology*, Volume 9, pp. 324-329.

Gordon, J., and J. McArthur

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