



AIRPORT LAND USE COMMISSION RIVERSIDE COUNTY AGENDA

Riverside County Administrative Center
4080 Lemon Street, 1st Floor Board Chambers
Riverside, California

Thursday 9:30 A.M., July 12, 2018

CHAIR

Steve Manos
Lake Elsinore

VICE CHAIR

Russell Betts
Desert Hot Springs

COMMISSIONERS

Arthur Butler
Riverside

John Lyon
Riverside

Steven Stewart
Palm Springs

Richard Stewart
Moreno Valley

Gary Youmans
Temecula

STAFF

Director
Simon A. Housman

John Guerin
Paul Rull
Barbara Santos

County Administrative Center
4080 Lemon St, 14th Floor
Riverside, CA 92501
(951) 955-5132

www.rcaluc.org

NOTE: If you wish to speak, please complete a "SPEAKER IDENTIFICATION FORM" and give it to the Secretary. The purpose of the public hearing is to allow interested parties to express their concerns. Comments shall be limited to 5 minutes and to matters relevant to the item under consideration. Please do not repeat information already given. If you have no additional information, but wish to be on record, simply give your name and address and state that you agree with the previous speaker(s). Also please be aware that the indicated staff recommendation shown below may differ from that presented to the Commission during the public hearing.

Non-exempt materials related to an item on this agenda submitted to the Airport Land Use Commission or its staff after distribution of the agenda packet are available for public inspection in the Airport Land Use Commission's office located at 4080 Lemon Street, 14th Floor, Riverside, CA 92501 during normal business hours.

Live Streaming of the meeting will be available during the meeting on our website at www.rcaluc.org.

In compliance with the Americans with Disabilities Act, if any accommodations are needed, please contact Barbara Santos at (951) 955-5132 or E-mail at basantos@rivco.org. Request should be made at least 48 hours or as soon as possible prior to the scheduled meeting.

1.0 INTRODUCTIONS

1.1 CALL TO ORDER

1.2 SALUTE TO FLAG

1.3 ROLL CALL

2.0 PUBLIC HEARING: CONTINUED ITEMS

None

3.0 PUBLIC HEARING: NEW ITEMS

BERMUDA DUNES AIRPORT

- 3.1 ZAP1074BD18 – CCD Hotel and Resort, LLC (Representative: Caleb Ro) – City of La Quinta Planning Case Nos. SPA 2018-001 (Specific Plan Amendment) and SDP 2018-001 (Site Development Permit). SDP: The applicant proposes to construct a three-story 160 room hotel resort building totaling 68,021 square feet which includes swimming pools, spas, bars, and restaurants, and to convert the existing adjacent 28,893 square foot Fresh and Easy building into an indoor organic food and beverage market with dine-in facilities. The site includes 6.4 acres within the 10.79-acre Jefferson Square development located on the southwest corner of Jefferson Street and Fred Waring Drive. The applicant also proposes amending the 10.79-acre Jefferson Square Specific Plan to increase the allowable floor area ratio, amend the land uses to include the development of a 160-room hotel, a food market, and assorted retail and service-oriented shops, enhance circulation design, refine design guidelines and development standards, and provide new landscape design guidelines. (Airport Compatibility Zone E of the Bermuda Dunes Airport Influence Area). Staff Planner: Paul Rull at (951) 955-6893, or e-mail at prull@rivco.org

Staff Recommendation: CONSISTENT

HEMET-RYAN AIRPORT

- 3.2 ZAP1056HR18 – Bryan Clendenen – City of Hemet Planning Case No. SDR 18-003 (Site Development Review). The applicant proposes to construct two industrial buildings totaling 27,500 square feet in 2 phases on a 1.98 acre parcel located on the northwest corner of Wentworth Drive and Airway Place. A 15,400 square foot building is proposed in Phase I and a 12,100 square foot building in Phase II. (Airport Compatibility Zone C of the Hemet-Ryan Airport Influence Area). Staff Planner: Paul Rull at (951) 955-6893, or e-mail at prull@rivco.org

Staff Recommendation: CONDITIONALLY CONSISTENT

- 3.3 ZAP1051HR18 – FDC Commercial Construction (Representative: John Dykes) – City of Hemet Planning Case No. SDR18-006 (Site Development Review). The applicant is proposing to develop a construction storage yard facility with a 2,100 square foot single story office building on a 4.6-acre parcel located at 814 Airway Place, northerly of Wentworth Drive (Airport Compatibility Zones A and C of the Hemet-Ryan Airport Influence Area). Staff Planner: Paul Rull at (951) 955-6893, or e-mail at prull@rivco.org

Staff Recommendation: CONSISTENT

4.0 **ADMINISTRATIVE ITEMS**

4.1 Director's Approvals

4.2 Speculative Nonresidential Multiple Buildings Policy

4.3 ALUC Director's Report: The Path Forward Following the Release of the 2018 Air Installation Compatible Use Zones Report for March Air Reserve Base/Inland Port Airport

4.4 Approval of the New ALUC Logo

- 5.0 **Request for Specific Delegation of Authority** – Specific Plan Amendment (Deletion of Parcels) in Zone E of Palm Springs International Airport Influence Area. ZAP1066PS18. Request from John Criste and Pilar Lopez of Terra Nova Planning & Research, Inc. This proposal would qualify as a non-impact legislative amendment if it were proposed by a local jurisdiction, but, since it is being proposed by an applicant/landowner, the provisions of Resolution No. 2011-02 authorizing action by the ALUC Director do not apply. Therefore, this proposal is tentatively scheduled for ALUC Commission review at its August 9 meeting. The applicant's representatives request a specific delegation of authority to the ALUC Director to render a no impact consistency finding for this amendment prior to the August 9, 2018 hearing.

6.0 **APPROVAL OF MINUTES**

June 14, 2018

7.0 **ORAL COMMUNICATION ON ANY MATTER NOT ON THE AGENDA**

8.0 **COMMISSIONER'S COMMENTS**

**COUNTY OF RIVERSIDE
AIRPORT LAND USE COMMISSION**

STAFF REPORT

AGENDA ITEM: 3.1

HEARING DATE: July 12, 2018

CASE NUMBER: ZAP1074BD18 – CCD Hotel and Resort, LLC
(Representative: Caleb Ro)

APPROVING JURISDICTION: City of La Quinta

JURISDICTION CASE NOS: SPA 2018-001 (Specific Plan Amendment), SDP 2018-001
(Site Development Permit)

MAJOR ISSUES: None

RECOMMENDATION: Staff recommends that the Commission find the proposed Specific Plan Amendment CONSISTENT with the 2004 Bermuda Dunes Airport Land Use Compatibility Plan, and find the Site Development Permit CONSISTENT, subject to the conditions included herein.

PROJECT DESCRIPTION: The applicant proposes to construct a three-story 160 room hotel resort building totaling 68,021 square feet which includes swimming pools, spas, bars, and restaurants, and to convert the existing adjacent 28,893 square foot Fresh and Easy building into an indoor organic food and beverage market with dine-in facilities. The site includes 6.4 acres within the 10.79-acre Jefferson Square development. The applicant also proposes amending the 10.79-acre Jefferson Square Specific Plan to increase the allowable floor area ratio, amend the land uses to include the development of a 160-room hotel, food market, and assorted retail and service-oriented shops, enhance circulation design, refine design guidelines and development standards, and provide new landscape design guidelines.

PROJECT LOCATION: The site is located on the southwest corner of Jefferson Street and Fred Waring Drive, in the City of La Quinta, approximately 6,000 feet southeasterly of the easterly terminus of Runway 10-28 at Bermuda Dunes Airport.

LAND USE PLAN: 2004 Bermuda Dunes Airport Land Use Compatibility Plan

- a. Airport Influence Area: Bermuda Dunes Airport
- b. Land Use Policy: Compatibility Zone E

c. Noise Levels: Outside the 55 CNEL contour

BACKGROUND:

Non-Residential Intensity: Pursuant to the 2004 Bermuda Dunes Airport Land Use Compatibility Plan, the project site is located within Compatibility Zone E, which does not restrict non-residential intensity.

Prohibited and Discouraged Uses: The applicant does not propose any uses specifically prohibited or discouraged in Compatibility Zone E of the Bermuda Dunes Airport Influence Area.

Noise: The site is located outside the 55 CNEL contour for Bermuda Dunes Airport. No special measures to mitigate aircraft-generated noise are required.

Part 77: The elevation of Runway 10-28 at its easterly terminus is approximately 49 feet above mean sea level (AMSL). At a distance of approximately 6,000 feet from the runway, FAA review would be required for any structures with top of roof exceeding 109 feet AMSL. The project site elevation is 48 feet AMSL, and the maximum height of its proposed structures is 38 feet, for a maximum top point elevation of 86 feet AMSL. Therefore, Federal Aviation Administration (FAA) obstruction evaluation review for height/elevation reasons is not required.

Open Area: The site is located within Airport Compatibility Zone E of the Bermuda Dunes Airport Influence Area. Open areas are not required in Compatibility Zone E.

CONDITIONS

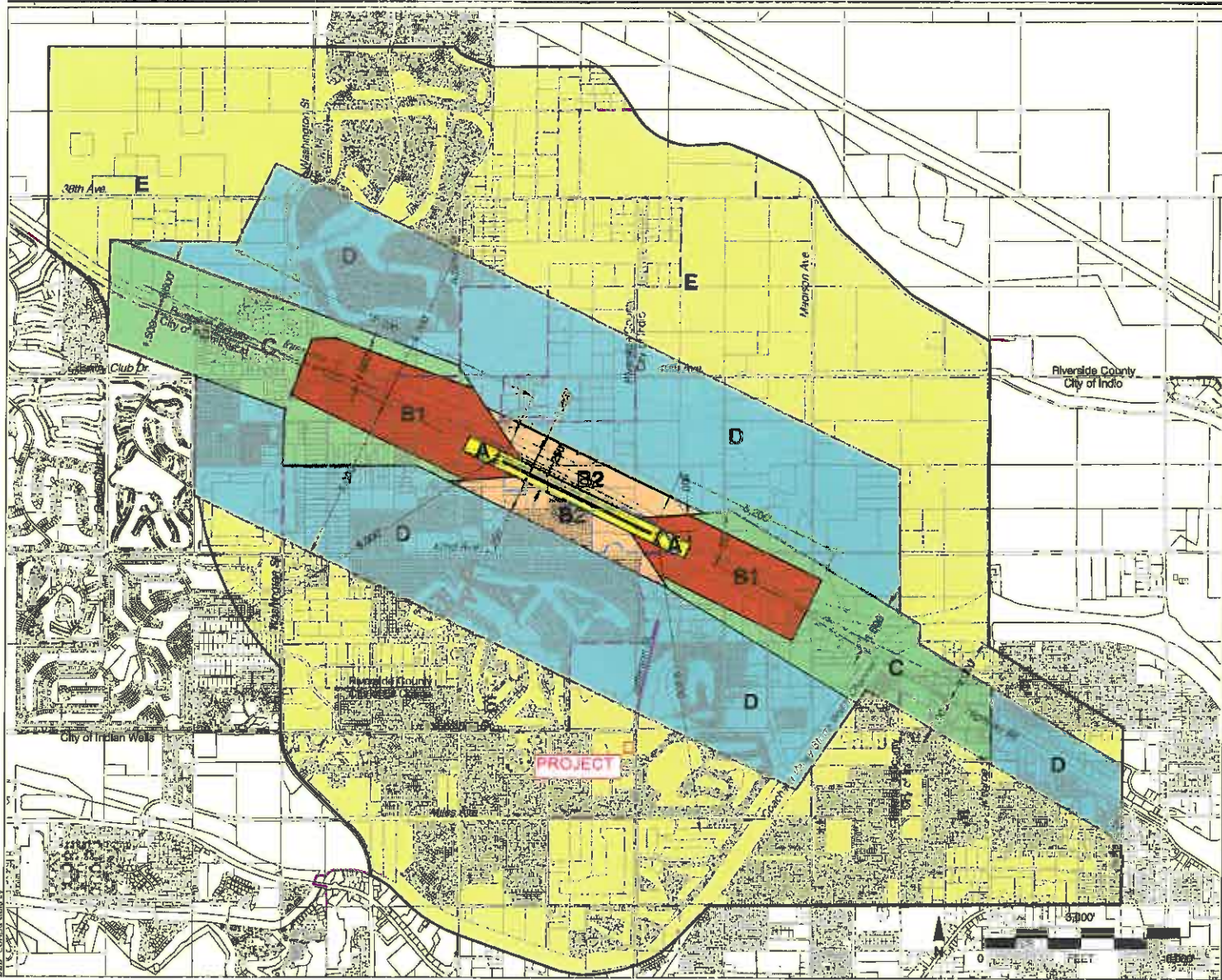
1. Any outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky.
2. The following uses/activities are not included in the proposed project and shall be prohibited at this site:
 - (a) Any use or activity which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
 - (b) Any use or activity which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
 - (c) Any use or activity which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air

navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, composting operations, production of cereal grains, sunflower, and row crops, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)

- (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
3. The attached notice shall be provided to all potential purchasers of the project site, lessees, concessionaries, and long-term tenants (over 30 days).
 4. Any new detention basin(s) on the site shall be designed so as to provide for a maximum 48-hour detention period following the conclusion of the storm event for the design storm (may be less, but not more), and to remain totally dry between rainfalls. Vegetation in and around the detention basin(s) that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping.

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b) (13)(A)



Legend

- Compatibility Zones**
- Airport Influence Area Boundary
 - Zone A
 - Zone B1
 - Zone B2
 - Zone C
 - Zone D
 - Zone E

- Boundary Lines**
- Airport Property Line
 - City Limits

Note
 Southwestern edge of Airport Influence Area boundary measured from a point 200 feet beyond runway ends in accordance with FAA airspace protection criteria (FAR Part 77). All other dimensions measured from runway ends and centerlines.

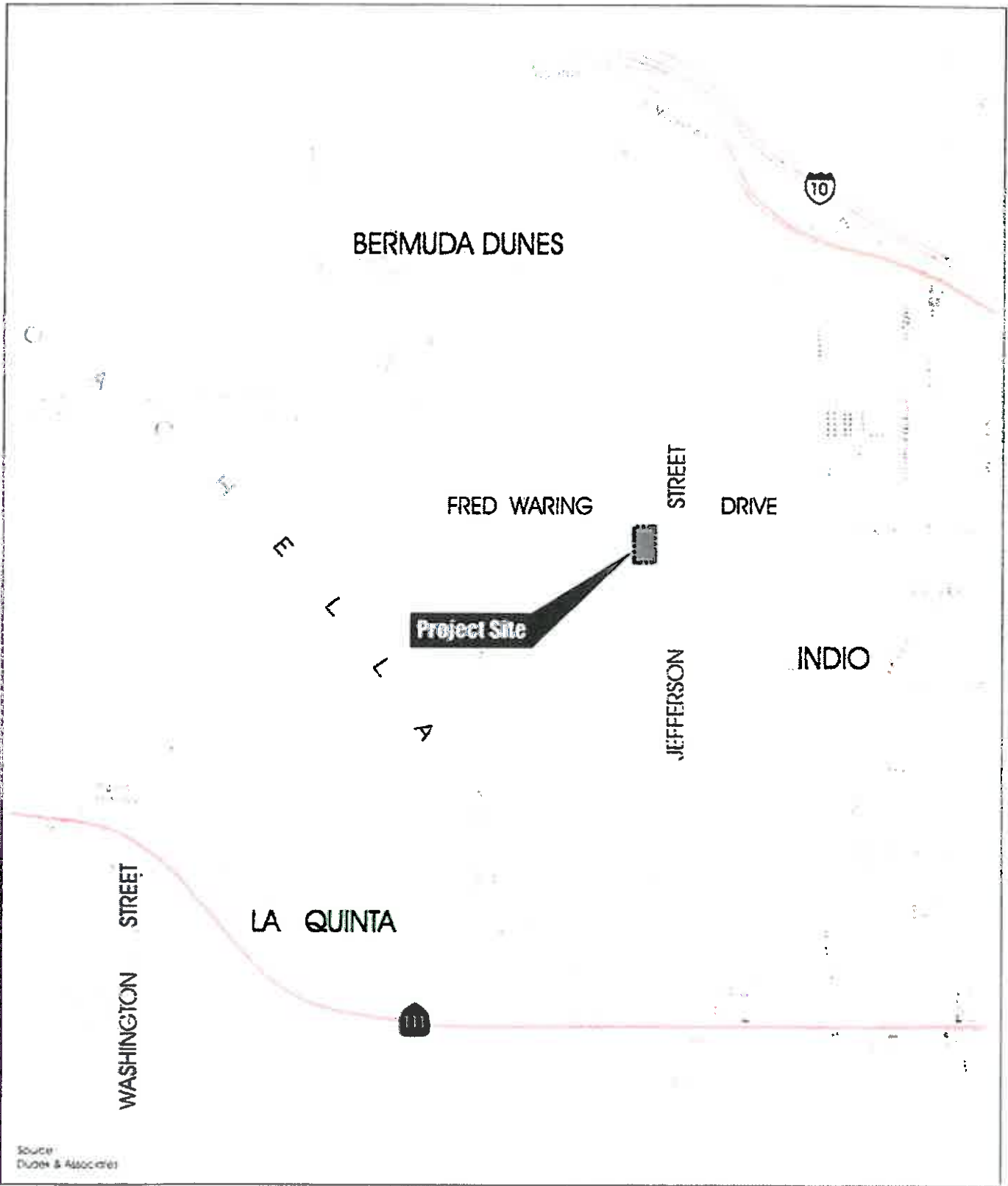
See Chapter 2, Table 2A for compatibility criteria associated with this map.

Riverside County
Airport Land Use Commission
Riverside County
Airport Land Use Compatibility Plan
Policy Document
 (Adopted December 2004)

Map BD-1

Compatibility Map
 Bermuda Dunes Airport





DRAWING TITLE
Vicinity Map

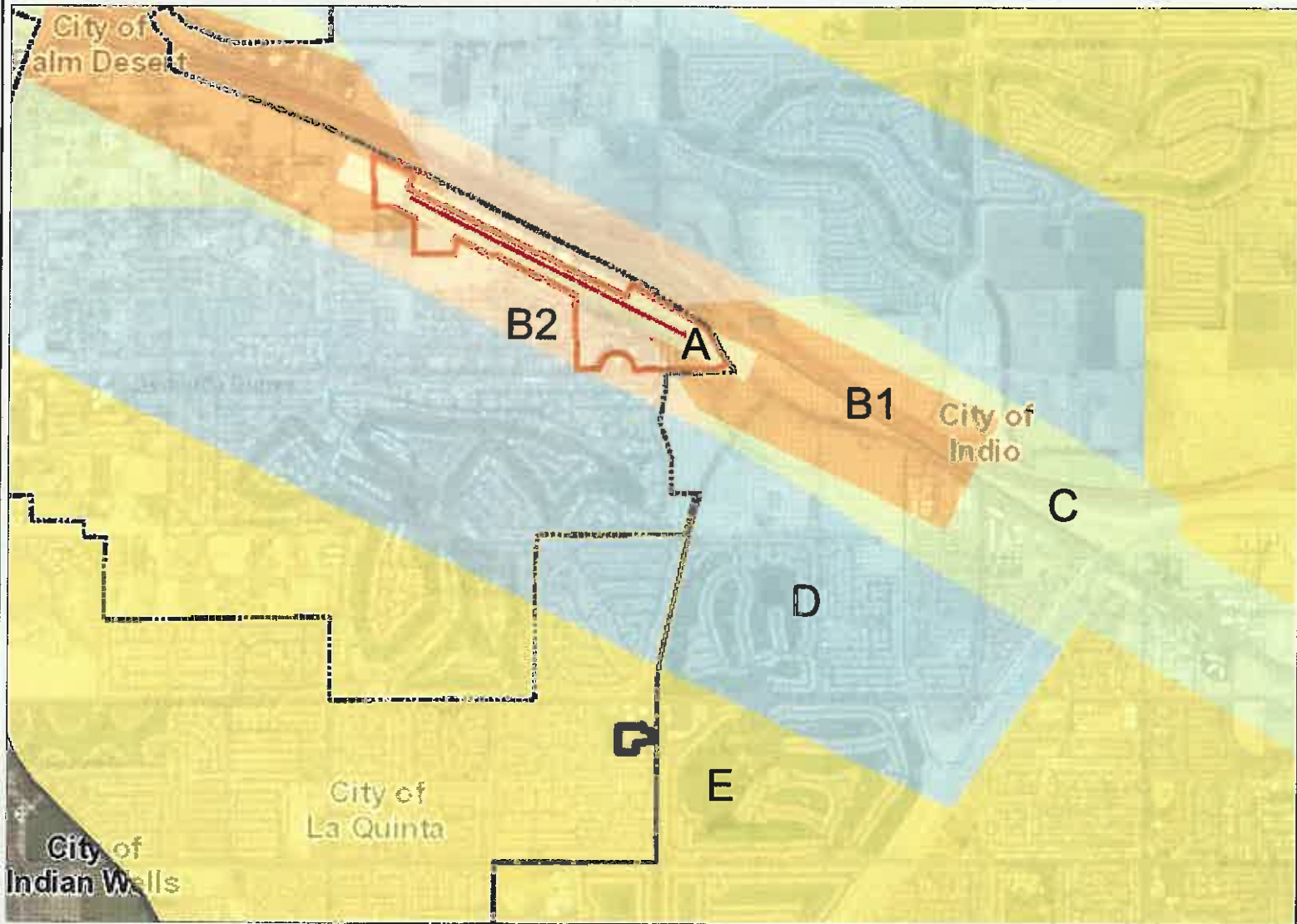


JEFFERSON SQUARE
 SPECIFIC PLAN

NOT TO SCALE

PROJECT NO.
2

Map My County Map



- Legend**
- Runways
 - Airports
 - Airport Influence Areas
 - Airport Compatibility Zones**
 - OTHER COMPATIBILITY ZONE
 - A
 - A-EXC1
 - B1
 - B1-APZ I
 - B1-APZ I-EXC1
 - B1-APZ II
 - B1-APZ II-EXC1
 - B1-EXC1
 - B2
 - B2-EXC1
 - C
 - C1
 - C1-EXC1
 - C1-EXC3
 - C1-EXC4
 - C1-HIGHT
 - C2
 - C2-EXC1
 - C2-EXC2
 - C2-EXC3
 - C2-EXC5
 - C2-EXC6



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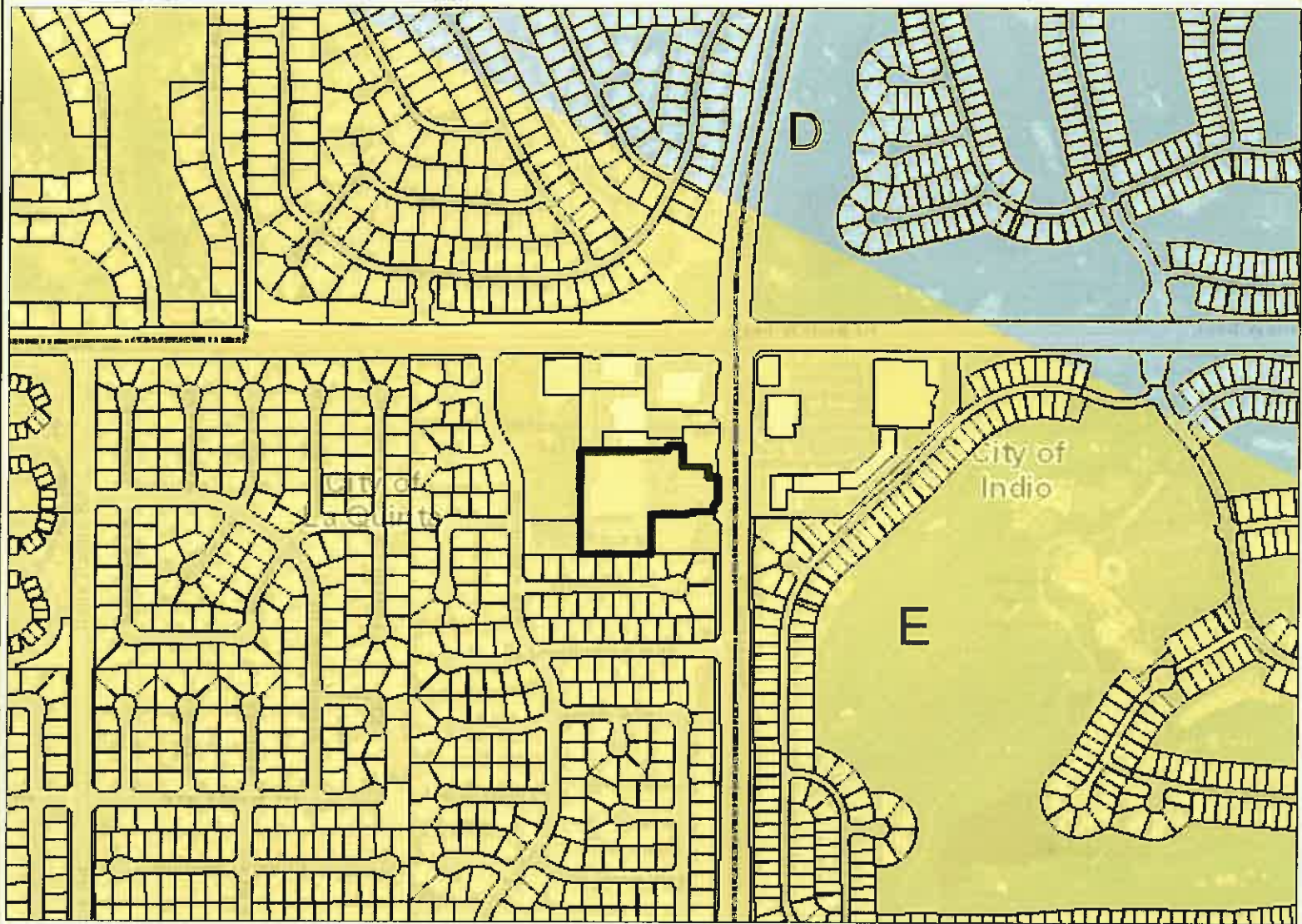


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Notes

Map My County Map



Legend

- Parcels
- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones**
- OTHER COMPATIBILITY_ZONE
- A
- A-EXC1
- B1
- B1-APZ I
- B1-APZ I-EXC1
- B1-APZ II
- B1-APZ II-EXC1
- B1-EXC1
- B2
- B2-EXC1
- C
- C1
- C1-EXC1
- C1-EXC3
- C1-EXC4
- C1-HIGHT
- C2
- C2-EXC1
- C2-EXC2
- C2-EXC3
- C2-EXC5



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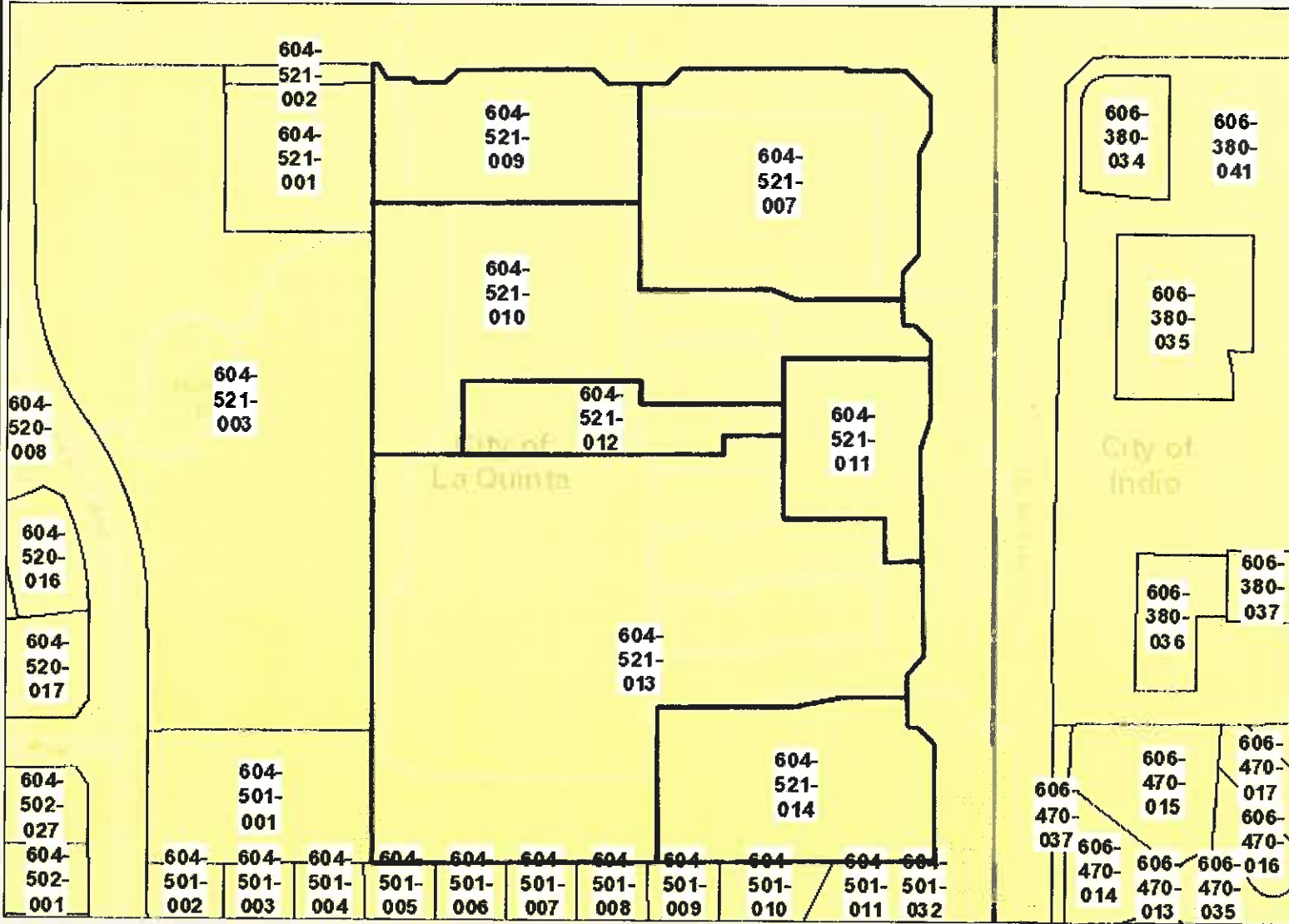
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Notes

Map My County Map



Legend

- Parcel APNs
- Parcels
- Runways
- Airports
- Airport Influence Areas
- Airport Compatibility Zones
- OTHER COMPATIBILITY ZONE
- A
- A-EXC1
- B1
- B1-APZ I
- B1-APZ I-EXC1
- B1-APZ II
- B1-APZ II-EXC1
- B1-EXC1
- B2
- B2-EXC1
- C
- C1
- C1-EXC1
- C1-EXC3
- C1-EXC4
- C1-HIGHT
- C2
- C2-EXC1
- C2-EXC2
- C2-EXC3



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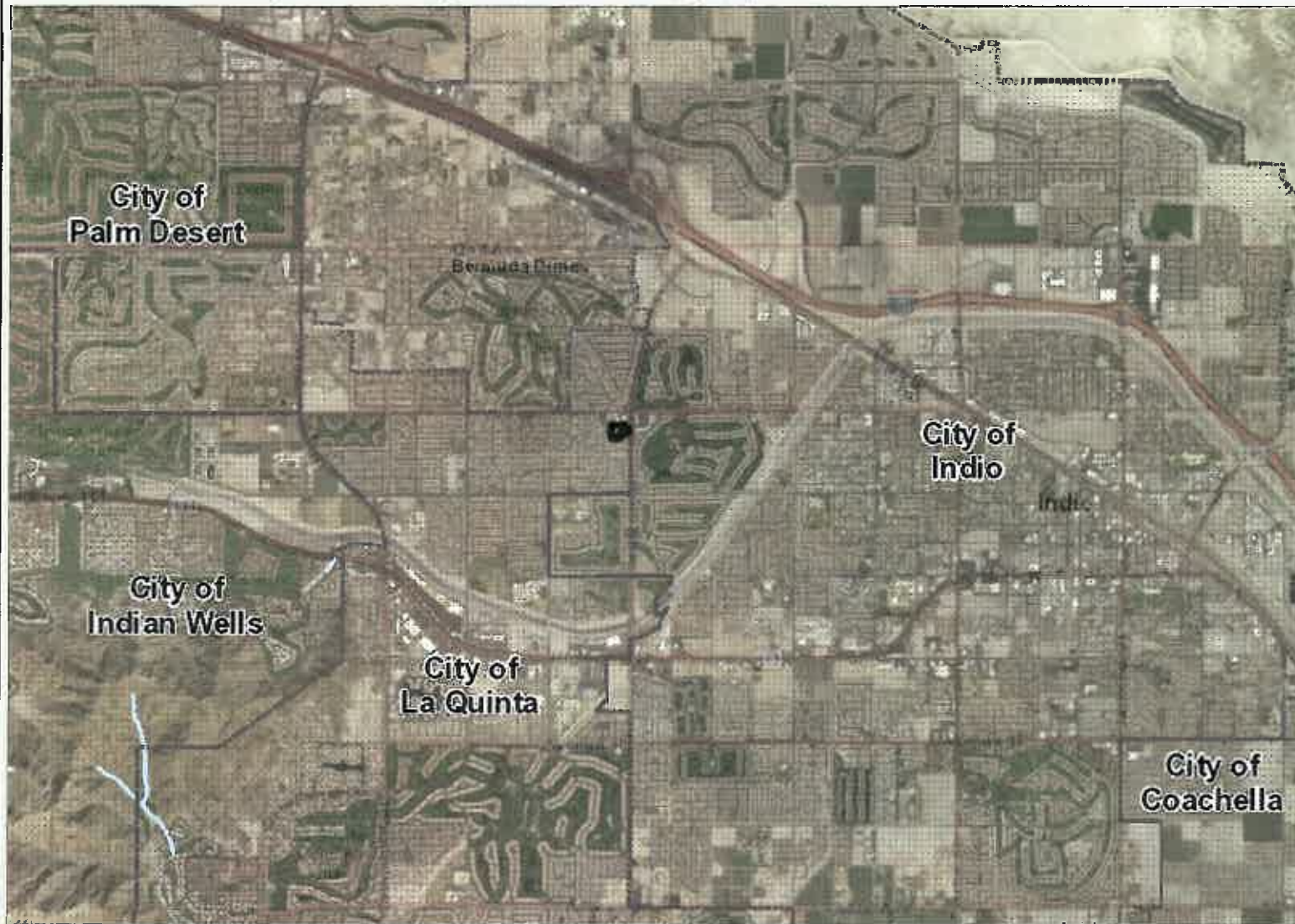
Notes



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Map My County Map



- Legend**
- Blue line: Blueline Streams
 - Grid pattern: City Areas
 - Thin grey line: World Street Map



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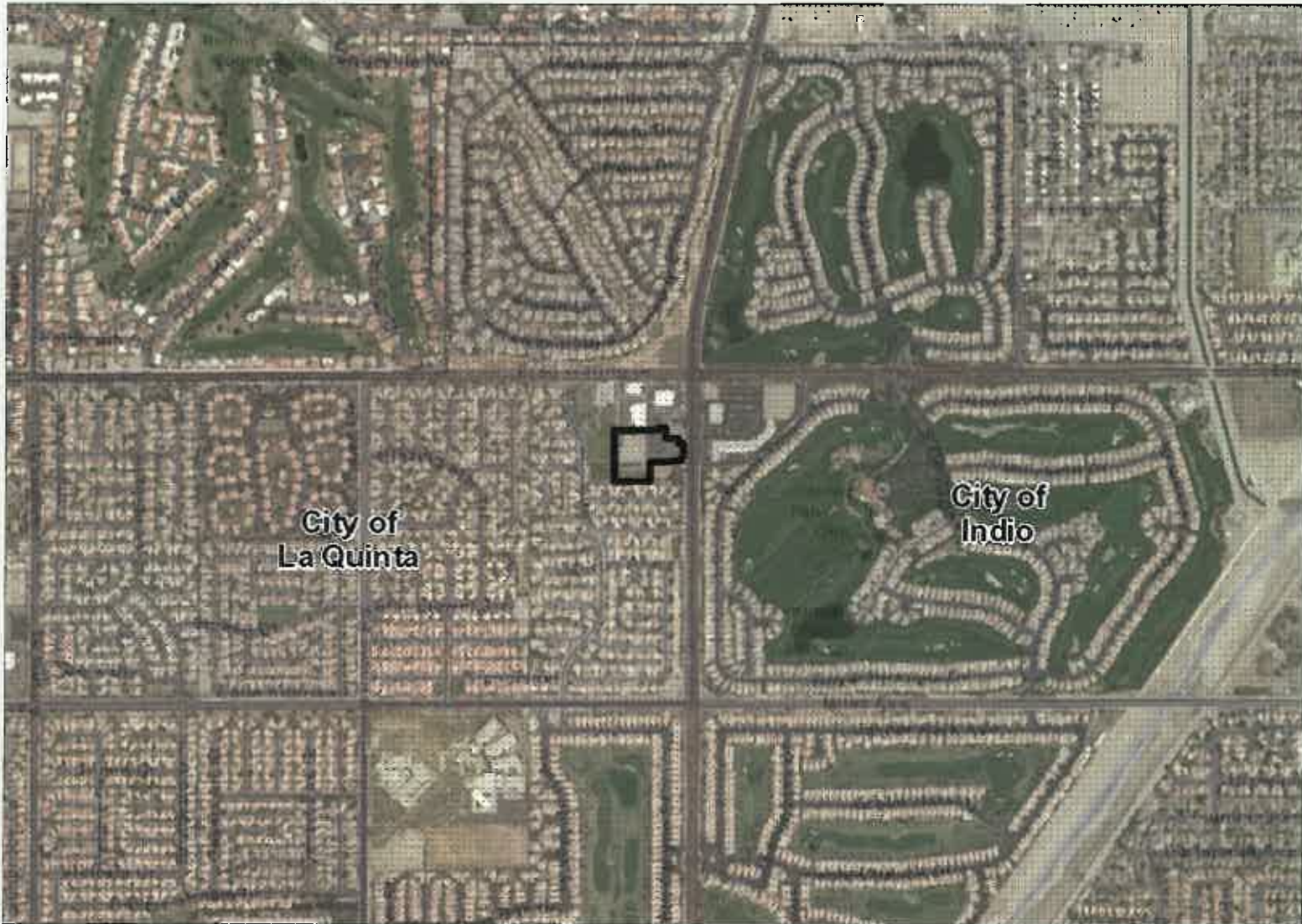


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Notes

Map My County Map



- Legend**
- Blueline Streams
 - ▣ City Areas
 - World Street Map



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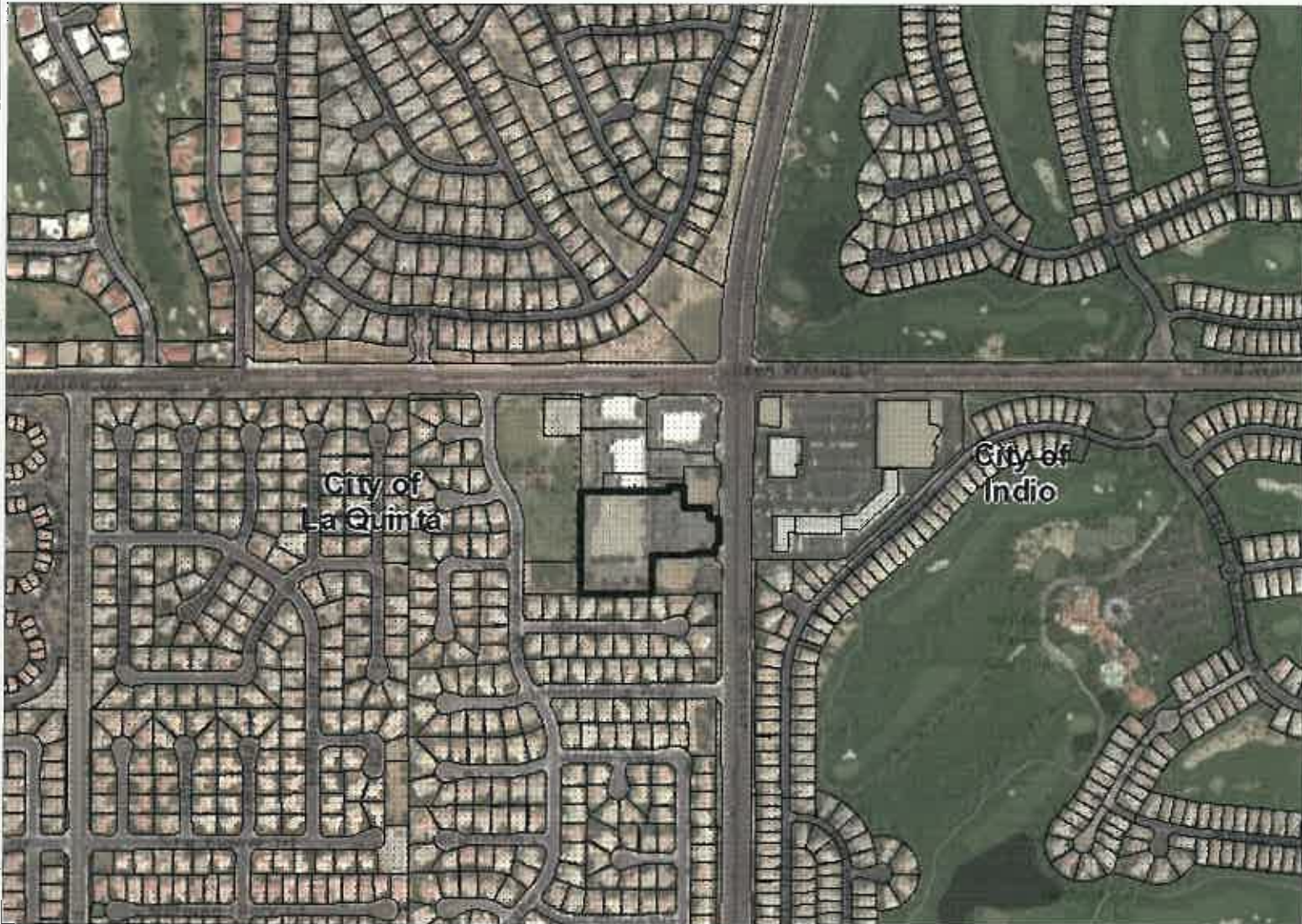
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Notes

Map My County Map



- Legend**
- Parcels
 - Blueline Streams
 - City Areas
 - World Street Map



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Notes



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Map My County Map



Legend

- Parcels
- Runways
- Airports
- Airport Influence Areas
- BlueLine Streams
- City Areas
- World Street Map



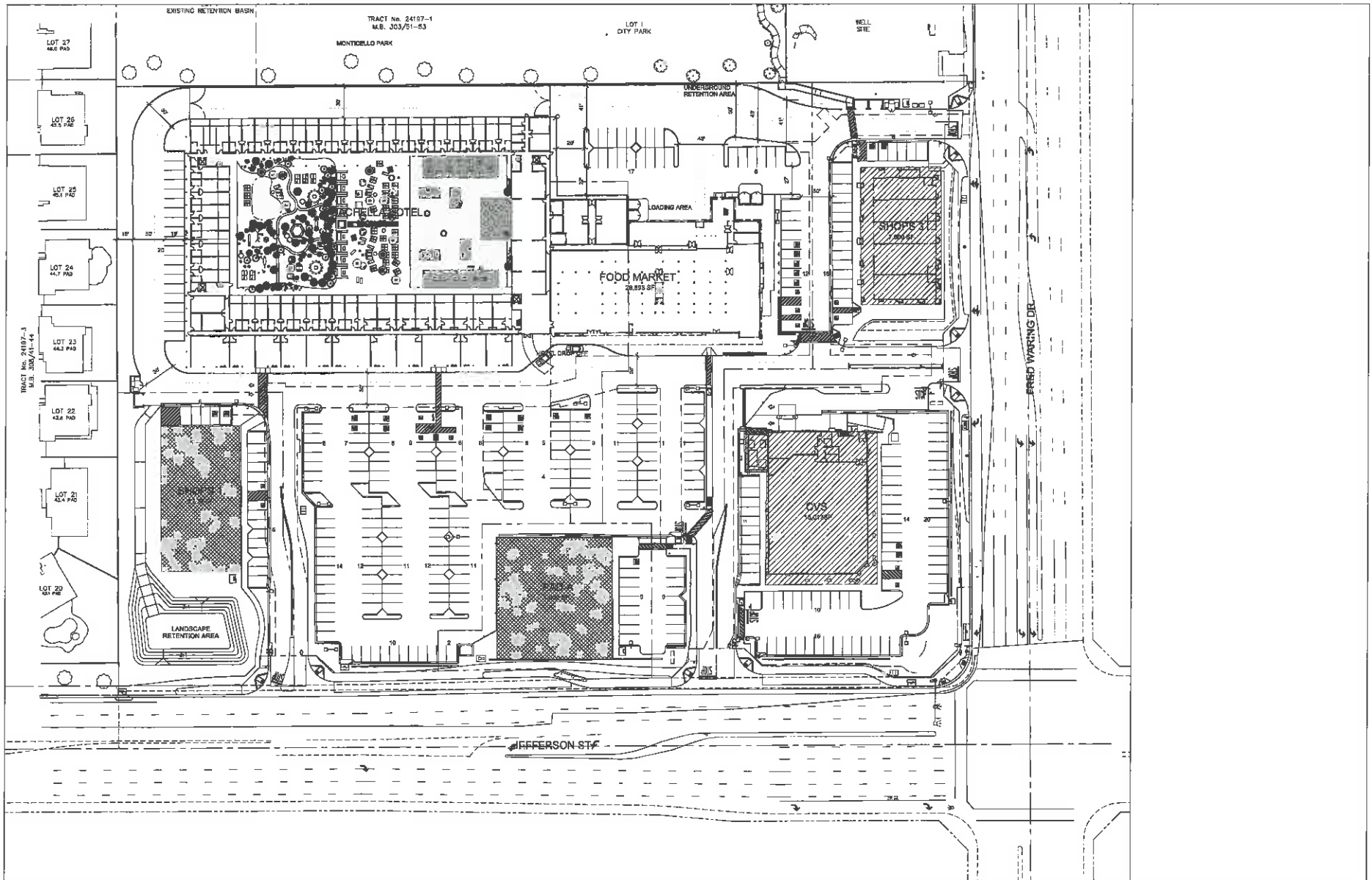
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Notes

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JEFFERSON SQUARE

DRAWING TITLE
SITE PLAN

SHEET
JSQ-PARTI-DR-PA-0501

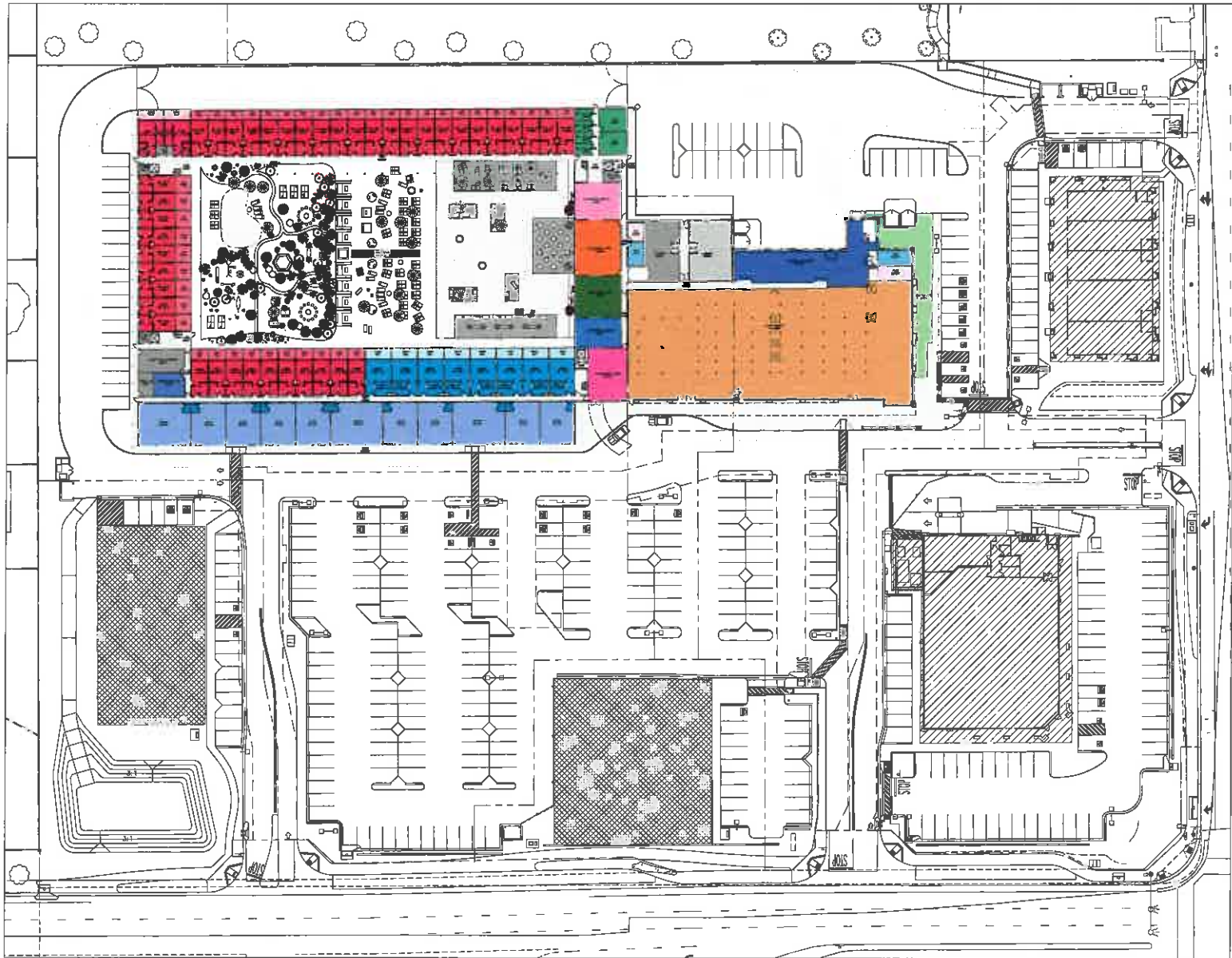
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REVISION **DATE**
A SITE DEVELOPMENT PERMIT 23.03.2018

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1/40"=1'-0" @ A1

CLIENT
CCD HOTEL & RESORTS
Rancho Mirage
41720 Rancho Las Palmas Drive Suite
0-3, Rancho Mirage, CA 92273
P 1 4 213 719 5810

PARTI



| PROGRAM LEGEND | |
|--------------------|-------------------|
| STANDARD ROOM | BALCONY/PATIO |
| FAMILY SUITE | BALCONY/PATIO |
| CASANA SUITES | PATIO |
| ON BED ROOM SUITE | BALCONY |
| PRESIDENTIAL SUITE | BALCONY |
| CHECKIN | MALE W.C. |
| LOUNGE | FEMALE W.C. |
| BAR | RETAIL W.C. |
| RESTAURANTS | STORAGE |
| SOCIAL | LOBBY CIRCULATION |
| SP/MTREATMENT | M.E.P. |
| FITNESS | LOADING BAY |
| BALLROOM | LAUNDRY |
| OFFICE | |
| SECURITY | |
| ROOF TOP GARDEN | |
| MARKET HALL | |
| RETAIL | |

| LEGEND | |
|-----------------|--------------------|
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| [Dashed Line] | LOTS DIVISION |
| [Dotted Line] | PUBLIC EASEMENT |
| [Dash-dot Line] | FIRE TRUCK ACCESS |
| [Long Dash] | VIEW ABOVE |
| [Hatched] | EXISTING BUILDINGS |
| [White] | UNDEVELOPED PLOTS |

PROJECT NAME
JEFFERSON SQUARE

DRAWING TITLE
GA LEVEL 01

SHEET
JSQ-PARTI-DR-PA-1001

NOTE:
1. Stone tiled flooring in front of retail units

REVISION
A SITE DEVELOPMENT PERMIT

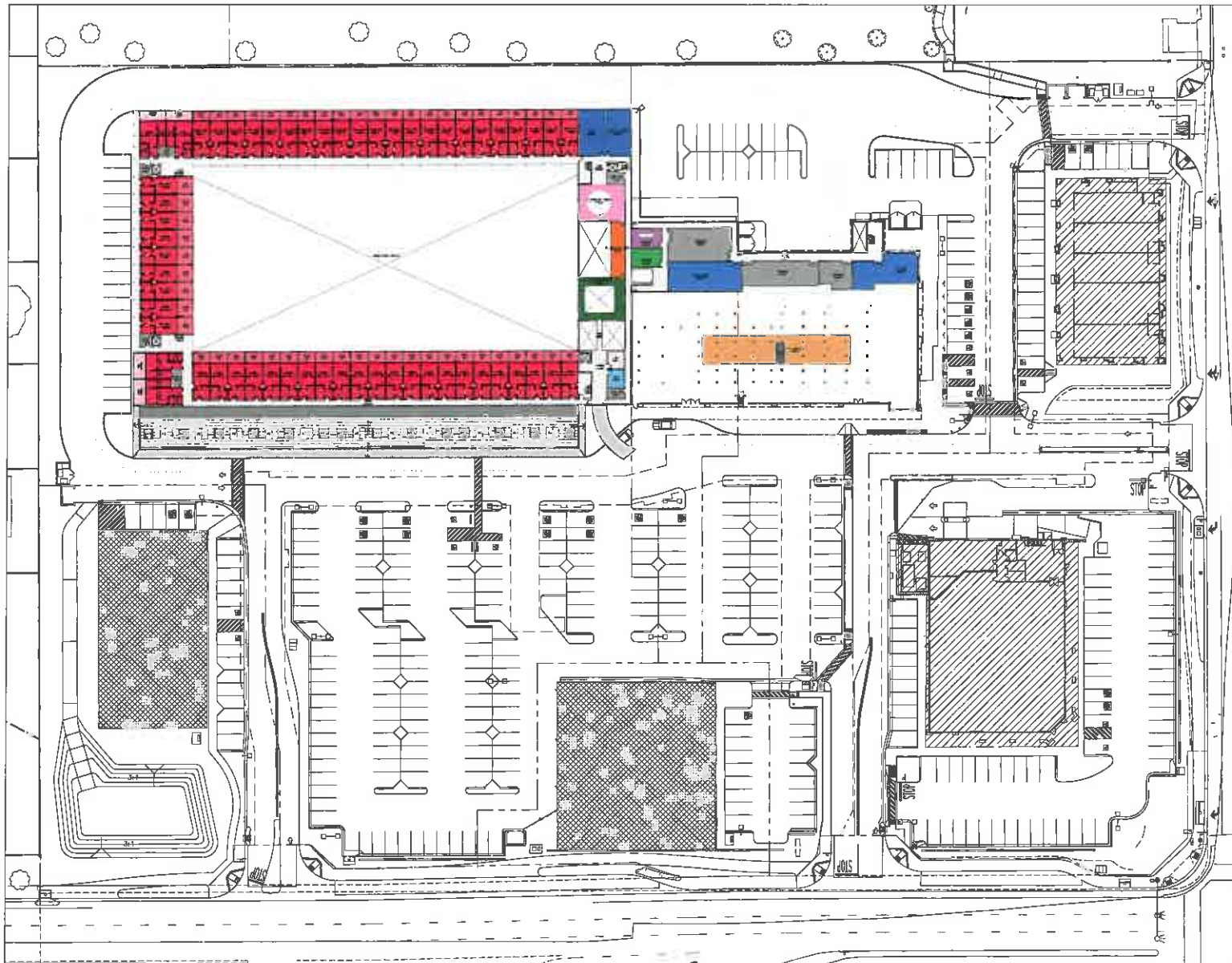
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23.03.2018

SCALE
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1/32"=1'-0" @ A1



CLIENT
CCD HOTEL & RESORTS
Rancho Mirage
41720 Rancho Las Palmas Drive Suite
D-3, Rancho Mirage, CA 92270
M + 1 213 718 8818

PARTI



| PROGRAM LEGEND | |
|--------------------|-------------------|
| STANDARD ROOM | BALCONY/PATIO |
| FAMILY SUITE | BALCONY/PATIO |
| CABANA SUITES | PATIO |
| ON BED ROOM SUITE | BALCONY |
| PRESIDENTIAL SUITE | BALCONY |
| CHECK-IN | MALE W.C. |
| LOUNGE | FEMALE W.C. |
| BAR | RETAIL W.C. |
| RESTAURANTS | STORAGE |
| SOCIAL | LOBBY CIRCULATION |
| SPMTREATMENT | M.E.P. |
| FITNESS | LOADING BAY |
| BALLROOM | LAUNDRY |
| OFFICE | |
| SECURITY | |
| ROOF TOP GARDEN | |
| MARKET HALL | |
| RETAIL | |

| LEGEND | |
|----------|--------------------|
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| [Symbol] | LOTS DIVISION |
| [Symbol] | PUBLIC EASEMENT |
| [Symbol] | FIRE TRUCK ACCESS |
| [Symbol] | VIEW ABOVE |
| [Symbol] | EXISTING BUILDINGS |
| [Symbol] | UNDEVELOPED PLOTS |

PROJECT NAME
JEFFERSON SQUARE

DRAWING TITLE
GA LEVEL 02

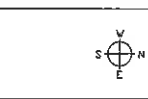
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JSQ-PART1-DR-PA-1002

NOTE:

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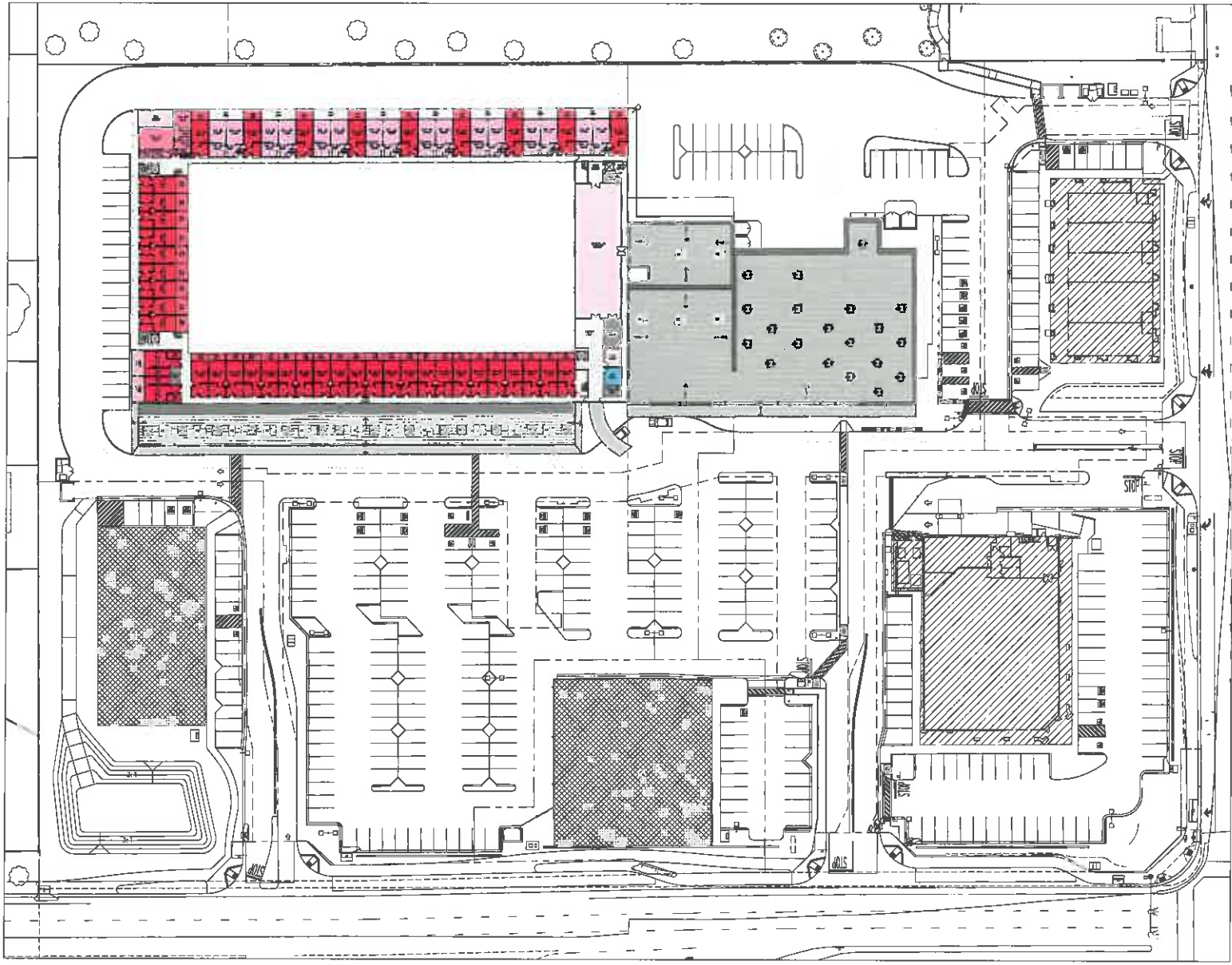
DATE
23.03.2018

SCALE
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1/32"=1'-0" @ A1



CLIENT
CCD HOTEL & RESORTS
Rancho Mirage
41700 Rancho Las Palms Drive Suite
D-3, Rancho Mirage, CA 92270
P 1 91 213 718 9810

PART I



| PROGRAM LEGEND | |
|--------------------|-------------------|
| STANDARD ROOM | BALCONYPATIO |
| FAMILY SUITE | BALCONYPATIO |
| CARANA SUITES | PATIO |
| ON BED ROOM SUITE | BALCONY |
| PRESIDENTIAL SUITE | BALCONY |
| CHECKIN | MALE W.C. |
| LOUNGE | FEMALE W.C. |
| BAR | RETAIL W.C. |
| RESTAURANTS | STORAGE |
| SOCIAL | LOBBY CIRCULATION |
| SPATREATMENT | M.E.P. |
| FITNESS | LOADING BAY |
| BALLROOM | LAUNDRY |
| OFFICE | |
| SECURITY | |
| ROOF TOP GARDEN | |
| MARKET HALL | |
| RETAIL | |

| LEGEND | |
|--------------------|--------------------|
| (Dashed line) | PLOT DIVISION |
| (Dotted line) | LOTS DIVISION |
| (Thin solid line) | PUBLIC EASEMENT |
| (Thick solid line) | FIRE TRUCK ACCESS |
| (Dotted line) | VIEW ABOVE |
| (Hatched pattern) | EXISTING BUILDINGS |
| (White) | UNDEVELOPED PLOTS |

PROJECT NAME
JEFFERSON SQUARE

DRAWING TITLE
GA LEVEL 03

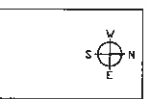
SHEET
JSQ-PART1-DR-PA-1003

NOTE:

REVISION
A SITE DEVELOPMENT PERMIT

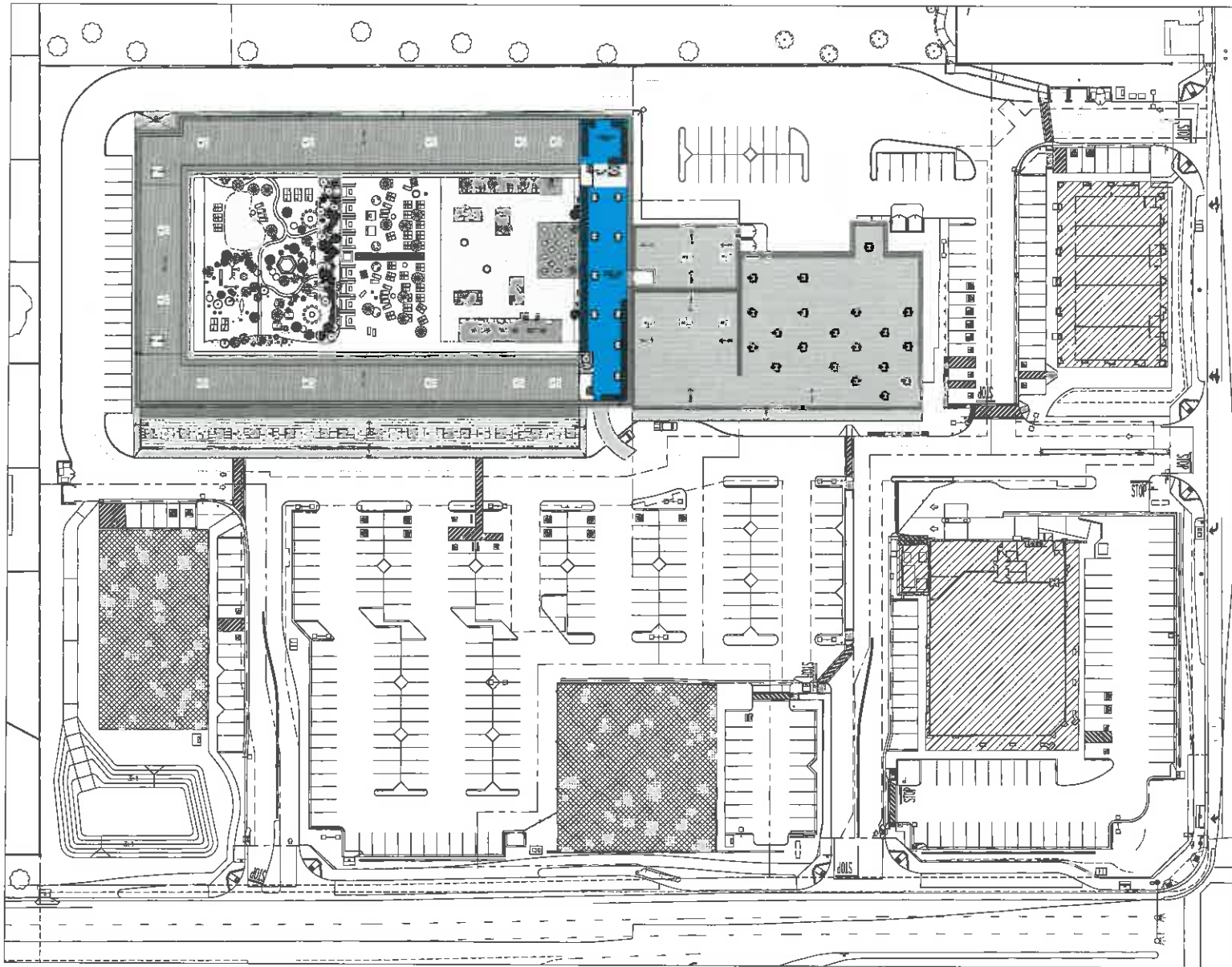
DATE
23.03.2018

SCALE
1/64"=1'-0" @ A3
1/32"=1'-0" @ A1



CLIENT
CCD HOTEL & RESORTS
Rancho Mirage
41750 Rancho Las Palmas Dr-Val Suite
D-S, Rancho Mirage, CA 92270
P 1 415 213 718 5515

PART I



| PROGRAM LEGEND | | | |
|----------------|--------------------|--------------|-------------------|
| [Red] | STANDARD ROOM | [Pink] | BALCONY/PATIO |
| [Light Blue] | FAMILY SUITE | [Light Blue] | BALCONY/PATIO |
| [Light Blue] | CABANA SUITES | [Light Blue] | PATIO |
| [Light Blue] | ON BED ROOM SUITE | [Light Blue] | BALCONY |
| [Light Blue] | PRESIDENTIAL SUITE | [Light Blue] | BALCONY |
| [Light Blue] | CHICKEN | [Light Blue] | MALE W.C. |
| [Light Blue] | LOUNGE | [Light Blue] | FEMALE W.C. |
| [Light Blue] | BAR | [Light Blue] | RETAIL W.C. |
| [Light Blue] | RESTAURANTS | [Light Blue] | STORAGE |
| [Light Blue] | SOCIAL | [Light Blue] | LOBBY CIRCULATION |
| [Light Blue] | SPA/TREATMENT | [Light Blue] | M.E.P. |
| [Light Blue] | FITNESS | [Light Blue] | LOADING BAY |
| [Light Blue] | BALLROOM | [Light Blue] | LAUNDRY |
| [Light Blue] | OFFICE | | |
| [Light Blue] | SECURITY | | |
| [Light Blue] | ROOF TOP GARDEN | | |
| [Light Blue] | MARKET HALL | | |
| [Light Blue] | RETAIL | | |

| LEGEND | |
|----------------|--------------------|
| [Dashed Line] | PLOT DIVISION |
| [Dotted Line] | LOTS DIVISION |
| [Dashed Line] | PUBLIC EASEMENT |
| [Dashed Line] | FIRE TRUCK ACCESS |
| [Dashed Line] | VIEW ABOVE |
| [Hatched Area] | EXISTING BUILDINGS |
| [White Area] | UNDEVELOPED PLOTS |

PROJECT NAME
JEFFERSON SQUARE

DRAWING TITLE
ROOF PLAN

SHEET
JSQ-PARTI-DR-PA-1004

NOTE:
1. REF. TO MATCH EXISTING RETAIL STORE "FRESH AND SWEET"
2. ROOF PATIO TO HAVE THREE DECKING

REVISION
A SITE DEVELOPMENT PERMIT

DATE
23.03.2018

SCALE
1/64"=1'-0" @ #3
1/32"=1'-0" @ #1



CLIENT
GCD HOTEL & RESORTS
Rancho Mirage
41750 Rancho Las Palms Drive Suite
B-3, Rancho Mirage, CA 92273
M (+) 213 716 5810

PARTI



01 NORTH EXTERNAL ELEVATION



02 EAST EXTERNAL ELEVATION



03 SOUTH EXTERNAL ELEVATION



04 WEST EXTERNAL ELEVATION

PROJECT NAME
JEFFERSON SQUARE

DRAWING TITLE
EXTERNAL ELEVATIONS

SHEET
JSQ-PARTI-DR-PA-1502

NOTE:

REVISION
A ALLUC SUBMISSION PACKAGE

DATE
30.05.2018

SCALE
1/64"=1'-0" @ ANSI A
1/32"=1'-0" @ ANSI C

CLIENT
CCD HOTEL & RESORTS
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PARTI

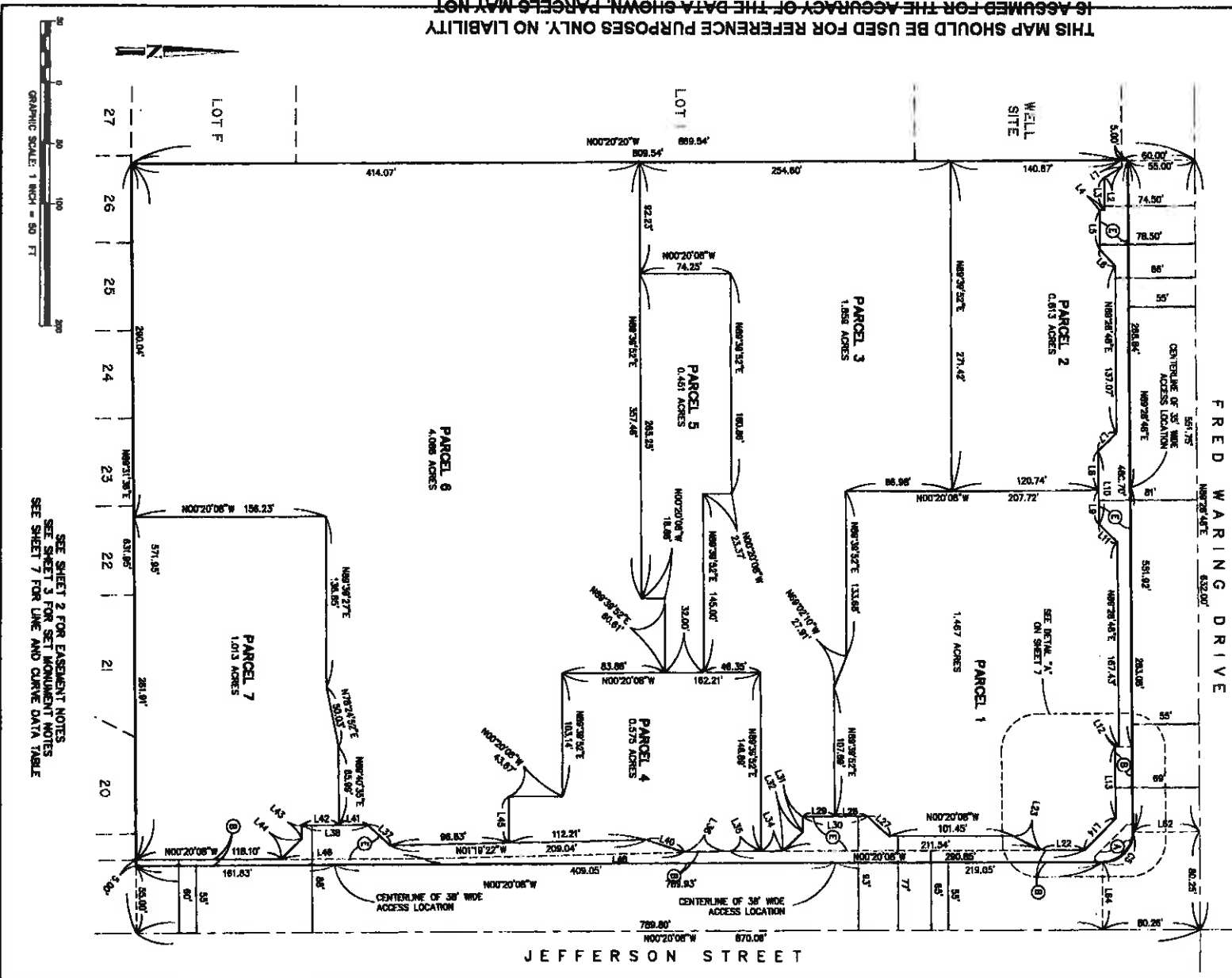
IN THE CITY OF LA QUINTA, COUNTY OF RIVERSIDE,
STATE OF CALIFORNIA

PARCEL MAP NO. 36241

BEING A SUBDIVISION OF A PORTION OF THE NORTHEAST QUARTER
OF THE NORTHWEST QUARTER OF SECTION 20, TOWNSHIP 5 SOUTH,
RANGE 7 EAST, SAN BERNARDINO MERRIAM.

GREGORY T. SCHLABALUM, PLS 6704
DRC ENGINEERING, INC.
DATE OF SURVEY: JANUARY, 2010

THIS MAP SHOULD BE USED FOR REFERENCE PURPOSES ONLY. NO LIABILITY
IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. PARCELS MAY NOT
COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.



SEE SHEET 2 FOR EASEMENT NOTES
SEE SHEET 3 FOR SET MONUMENT NOTES
SEE SHEET 7 FOR LINE AND CURVE DATA TABLE

JEFFERSON

SQUARE

Amended Specific Plan
City of La Quinta
18th May 2018

Applicant:
CCD Hotel & Resort

Design Team:
PARTI
DRC Engineering, Inc
Terra Nova Planning & Research Inc

PARTI

Jefferson Square
Amended Specific Plan

PREPARED FOR:

CCD Hotel & Resort
Rancho Mirage
41750 Rancho Las Palmas Drive Suite
0-3, Rancho Mirage, CA 92270

**ORIGINAL SPECIFIC PLAN
PREPARED BY:**

(2004)
Dudek & Associates, Inc
75-150 Sheryl Avenue, Suite C Palm Desert,
California 92211

(2007)
KIGY Group
Architecture and Planning
17992 Mitchell South Irvine, CA 92614

**MAY 2018 AMENDED PREPARED
BY:**

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Terra Nova Planning & Research, Inc
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Palm Desert, CA 92211

*Approved Specific plan:
January 20th 2004*

*Amended Specific plan:
June 2005*

*Amended Specific plan:
October 2007*

*Approved Amended Specific plan:
March 24th 2008*

*Amended Specific plan:
May 18 2018
With City of La Quinta Planning comments
04/13/18*

JEFFERSON

SQUARE

Amended Specific Plan
City of La Quinta
18th May 2018

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| PROJECT MASTER PLANS | • 028-047 |
| DEVELOPMENT REGULATIONS | • 048-051 |
| DESIGN GUIDELINES | • 052-071 |
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01_Intro
Amended Specific Plan

PART I
May 2018

01

INTRO

Introduction

A. AUTHORITY AND SCOPE

Section 65450 of the California Government Code grants local agencies the authority to prepare a specific plan of development over a given piece of property. Consistent with this authority and in accordance with La Quinta General Plan, General Land Use Policy 4, the city is requiring that a Specific Plan be prepared for the proposed commercial center. In order to approve the project, the City must make the findings required by La Quinta Zoning Code, Chapter 9.240: Specific Plans.

B PURPOSE AND INTENT

The purpose of this Specific Plan document is to address the land use issues associated with development of Jefferson Square in sufficient detail to ensure that the subject site develops in a manner which is consistent with the General Plan; protects the public health, safety and general welfare; is compatible with zoning on adjacent properties and is suitable and appropriate for the subject property (Zoning Code 9.240.010.E).

Ultimately the project seeks to provide the surrounding residential neighborhoods with a high quality and convenient commercial/retail and hospitality center.

In both text and illustration, this document depicts the character and configuration of the various components comprising the Specific Plan and establishes a foundation document that will govern further development of the site. In this way, the Specific Plan will serve to implement the City of La Quinta General Plan by specifying appropriate land uses, intensity of use, and development standards which are consistent with General Plan goals, objectives and policies.

The specific plan is a flexible document, which allows minor modifications to accommodate minor changes to floor areas

or tenant uses. Minor modifications to the specific plan are within the Community Development Director's power to approve, and do not require further consideration at public hearings.

C. DOCUMENT ORGANIZATION

The Jefferson Square Specific Plan is organized into six sections;

Section I provides a regulatory context for the project and an overview of key project elements.

Section II, provides a context for project planning and design by briefly describing the project's existing setting in terms of regulatory and use designations, and surrounding land uses. Against this background.

Section III, presents the primary master plan components of the Specific Plan.

Section IV, describes the development standards to which the project must adhere.

Section V contains design guidelines with respect to landscaping and architecture to ensure that the project is of a high quality and is well integrated into the community character.

Section VI discusses key operational guidelines for the project.

The majority of the document remains as approved as the Amended Specific Plan, 3/24/2008. New figures are provided as necessary to illustrate the current design.

D. PROJECT LOCATION

From a regional perspective, the current Jefferson Square Specific Plan (3/24/2008) is located in the Coachella Valley within the incorporated City of La Quinta as shown in Figure 2, Regional Location Map.

As shown in Figure 1, Regional Location

Map, Locally the project site is bounded by Fred Waring Drive and a residential development on the north;

Jefferson Street and a recently completed retail center within the City of Indio on the east; an existing well site, city park area, and retention basin buffer the site from residential along the west; and single family residential exists along the southern periphery of the site.

The current Specific Plan area is divided into 7 distinct land parcels comprising 10.27 acres in total (as shown in Figure 3).

The existing parcels contain:

Parcel 1 (1.467 acres)
CVS Pharmacy with drive-thru and associated parking

Parcel 2 (0.813 acres)
3 commercial/retail units and associated parking

Parcel 3 (1.859 acres)
Former Fresh & Easy retail store and associated parking

Parcel 4 (0.575 acres)
Undeveloped

Parcel 5 (0.451 acres)
3 commercial/retail units and associated parking

Parcel 6 (4.088 acres)
Undeveloped plot (proposed to be developed into a hospitality and retail center)

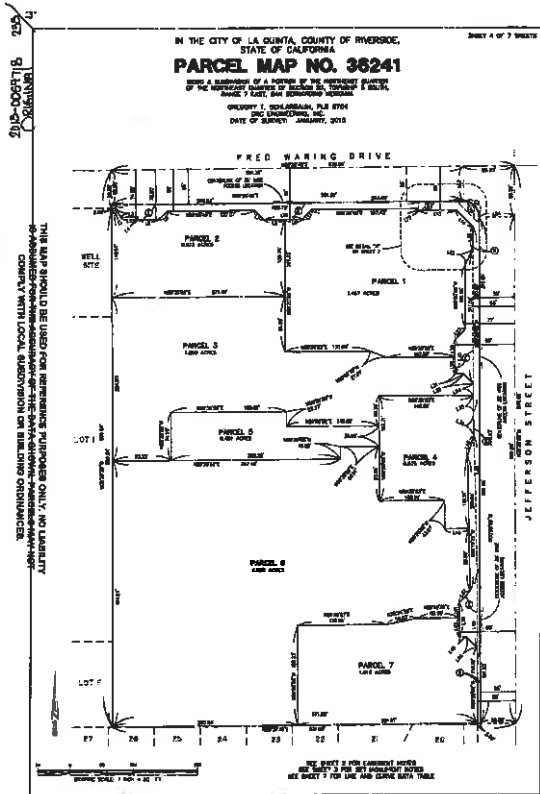
Parcel 7 (1.013 acres)
Undeveloped



(Figure 1) ①
Regional Map
Not to scale



(Figure 2) ①
Vicinity Map
Existing Specific Plan Area
(3/24/2008)
Not to scale



(Figure 3) ①
Existing Parcels on Jefferson Square
Parcel Map No. 36241 (Jan, 2010)
Not to scale



(Figure 4)
Jefferson Square

Introduction

E. PROJECT OVERVIEW

Project Summary:

The project proposes development of a neighborhood commercial/retail center on an approximate 10.79 acre site. The project will result in creation a single site area. Future submittal may be made to create individual parcels, but that subdivision is not requested at this time. The development will include the following uses:

- .Market
- .Drug Store
- .Retail/service shops
- .Bank
- .Restaurant
- .Hotel

In addition to the proposed buildings, the project will include associated parking, street improvements, pedestrian sidewalks, landscaping, an above ground retention basins as well as underground retention facilities and utilities. *The existing above ground retention basin adjacent to Monticello Park (west) will be converted to an underground retain basin.* For the most part, the Specific Plan will be consistent with the allowable uses and development standards of the site's neighbourhood commercial general plan and zoning designations. The adoption of the Specific Plan would allow drive-thru windows at the proposed drug store and bank building. A reduction in landscape setbacks from the City's standard of 15 feet to 1 foot minimum along the project's western boundary is also being pursued (Figure 5). The Specific Plan would provide a total of 361 parking spaces on site, *we would need an additional 30 stalls to meeting Parking Standards of the Zoning Ordinance, This can be achieved in 'Design review section 3a,3b or 4 in the Preapplication review 2017-0010:The Club Hotel and retail Parade'.* And would implement a reciprocal parking agreement among all uses on site which will be made part of the conditions of the Building

Management Association. A comparison of the Site Plan with development standards from the La Quintas Zoning Code is shown in Table 1 Site Plan Compliance.

The existing parcels 3 & 6 will be reintroduced as a year-round, indoor organic food market beverage market (with dine in facilities).

In addition to the undeveloped parcel 6, will be transformed into a commercial retail units to let, behind the retail units would then offer 160 guest rooms with publicly-accessible restaurant (possible use in retail units in parcel 6)

Requested Entitlements:

To facilitate this project, the developer is seeking the City of La Quinta's approval of an amended Specific Plan, and a Site Development Permit to develop the Specific Plan area.

| Development Standard | CN Zone | Specific Plan |
|---|---------|---------------|
| Min -Max Bldg Site (acres) | 1-20 | 10.79 |
| Max Structure Height (ft) | 35 | 35(1) |
| Max Structure Height (ft) 150 feet from Arterial Hwy. | 22 | 22(2) |
| Max Number of Stories | 2 | 3 |
| Max Floor Area Ratio (FAR) | 0.25 | 0.30(3) |
| Min Building Setback - Primary linage Corridor (ft) | 30 | 30 |
| Min Building Setback -from OS and Park District (ft) | 30 | 31(4) |
| Min Building Setback from Residential Districts (ft) | 30 | 61 |
| Min Landscape Setback -Primary Image Corridor (ft) | 20 | 20 |
| Min Landscape Setback -from OS and Park District (ft) | 15 | 1(5) |
| Min Landscape Setback -from Residential Districts (ft) | 15 | 15 |
| Min Setback from interior property lines | 0 | 0 |
| Building Landscape | 5% | 5% |
| Interior Parking Lot Landscape | 5% | 5% |
| Parking Spaces (1 space per 250 sq. ft.) | 364(6) | 361(7) |

1. Not including architectural appendages, such as a roof parapet, up to 38 feet.
2. Not including up to 10% of the building mass, which will extend up to 36 feet.
3. Building size may be slightly reduced or enlarged during final design. However, the maximum FAR of 0.30 will not be exceeded for the entire site, or at any individual lot.
4. The development standard is 30 feet; however, the current site plan setback is 31 feet.
5. The project's western property line along Monticello Park averages 11 feet, with a minimum of 7.5 feet and maximum of 24.7 feet. The development standard is for 5 feet minimum; however the current site plan minimum setback is 1 feet.
6. Current parking lot on the Jefferson Square site is 364
7. For the Specific Plan currently proposed 361 parking lot spaces, we would need an additional 30 parking lot spaces to achieve the required lots. To meet the La Quinta standardised we refer to the design review section 3a, 3b and 4 of the 'Preapplication review 2017-0010:The club hotel and retail parade'

Introduction

F. REQUIRED FINDINGS

According to the La Quinta Zoning Code, Chapter 9.240.010.E, the City Council must make four specific findings in order to approve the project. Each finding is listed below followed by a discussion of how each is satisfied by this project. The project's success in meeting the required findings is supported by the facts presented throughout the Specific Plan document.

1. *Consistency with the General Plan. The plan or amendment is consistent with the goals, objectives and policies of the General Plan.*

-The project proposes development of a commercial/retail, hospitality center and hotel on parcels 3,5 and 6 that will serve the surrounding neighborhood, which is consistent with the allowable uses under the proposed Neighborhood Commercial (CN) General Plan Land Use designation.

2. *Public Welfare. Approval of the plan or amendment will not create conditions materially detrimental to the public health, safety and general welfare.*

-The site plan for this project is consistent with City development standards which are established to protect the public health and safety.

-In accordance with the City's General Plan, the proposed commercial development is consistent with the proposed NC land use designation, which envisions commercial land uses such as: Food and drug stores; personal services; small restaurants; financial institutions; an organic food and beverage market; retail units and recreational facilities operated by the hotel and which will also serve the daily needs of adjacent neighborhoods.

3. *Land Use Compatibility. The specific plan is compatible with zoning on adjacent properties.*

-The subject property is general planned and zoned Neighborhood Commercial. The commercial property is physically separated and buffered from planned residential uses along the north by intervening roadways and landscape/sidewalk easements. Residential development to the south is buffered from the site by an existing 6' high block wall, a city park, well-site, and retention basin. An existing 6' high block wall located along a 2' berm with dense planting, separates the site and existing residential units to the west and south, as shown in Figure 4.

-The Specific Plan is compatible with planned land use on the City of Indio property to the east. The parcel of land immediately east of the site and Jefferson Street has been developed for commercial use and lies within the City of Indio.

-The proposed hotel's hours of use will extend beyond commercial/retail operating hours and will be host to recreational events that may run into the evening. The effect of this noise to the neighboring sites will be mitigated by the position of events spaces away from the southern residential properties.

4. *Property Suitability: The specific plan is suitable and appropriate for the subject property.*

-Consistent with the proposed CN land use designation for the site, the Specific Plan area is appropriately located at the intersection of two primary and major arterial roadways and nearby the recently opened I-10 highway interchange onto Jefferson Street.

-The project is being proposed in a location that will allow convenient access to commercial and retail uses by the surrounding residential communities, and also clear access to visitors to the hotel.

-The site will require minimal grading, and all utilities are readily available, and

can be routinely extended to serve the proposed uses.

-The site plan complies with City development standards, and implements General Plan Goals and Policies.



(Figure 5) Existing dense landscape buffer against residential zone to south of site



(Figure 5) Monticello Park (PR zone) serves as a valuable community asset to the west of the site; this project proposes a connection between the activity of the park and the hotel.

02_Project setting
Amended Specific Plan

PART II
May 2018

02

PROJECT

SETTING

Project Setting

A. EXISTING GENERAL PLAN AND ZONING

The 10.79 acre project site located at the southwest corner of Fred Waring Drive and Jefferson Street is designated as Neighborhood Commercial (NC) in the City's General Plan. As stated in Table 2.1 of the City's General Plan, the NC land use designation supports:

"The development of commercial land uses which serve the daily needs of the adjacent neighborhood on parcels of 10 to 20 acres. Typical land uses include food and drug stores, personal services, small restaurants, financial institutions, an organic food and beverage market; retail units and recreational facilities operated by the hotel and which will also serve the daily needs of adjacent neighborhoods." This designation generally occurs at arterial and major arterial. Consistent with the City's General Plan designation, the subject property is zoned Neighborhood Commercial (CN). The City of La Quinta Zoning Code, Section 9.70.060 states that the purpose and intent of the CN Zone is:

"To provide for the development and regulation of small-scale commercial areas located at the intersections of arterial highways as shown on the General Plan. The CN district is intended to provide for the sale of food, drugs, sundries, and personal services to meet the daily needs of a neighborhood area."

Existing General Plan and zoning designations for the site and surrounding properties are shown in Figure 3 Existing Land Use Designations. The Jefferson Square Specific Plan would result in development of commercial and service oriented land uses on an approximate 10.79 acre site located at the intersection of two major arterial roadways, which is consistent with the city's existing General Plan and zoning designations for the site.

The intent of the Jefferson Square Specific

Plan is to establish a site plan, design standards, and specific allowable land uses that will facilitate development of a commercial/retail/Hotel center that will.

CIRCULATION ELEMENT

The current Jefferson Square Specific Plan (3/24/2008) area is bordered by Fred Waring Drive on the north, and Jefferson Street on the east. The City's General Plan designates Fred Waring Drive as a Primary Arterial, and Jefferson Street as a Major Arterial. Both roadways are also designated as Primary Image Corridors in the General Plan. The development of the property is consistent with policies and programs outlined in the Circulation Element of the General Plan.

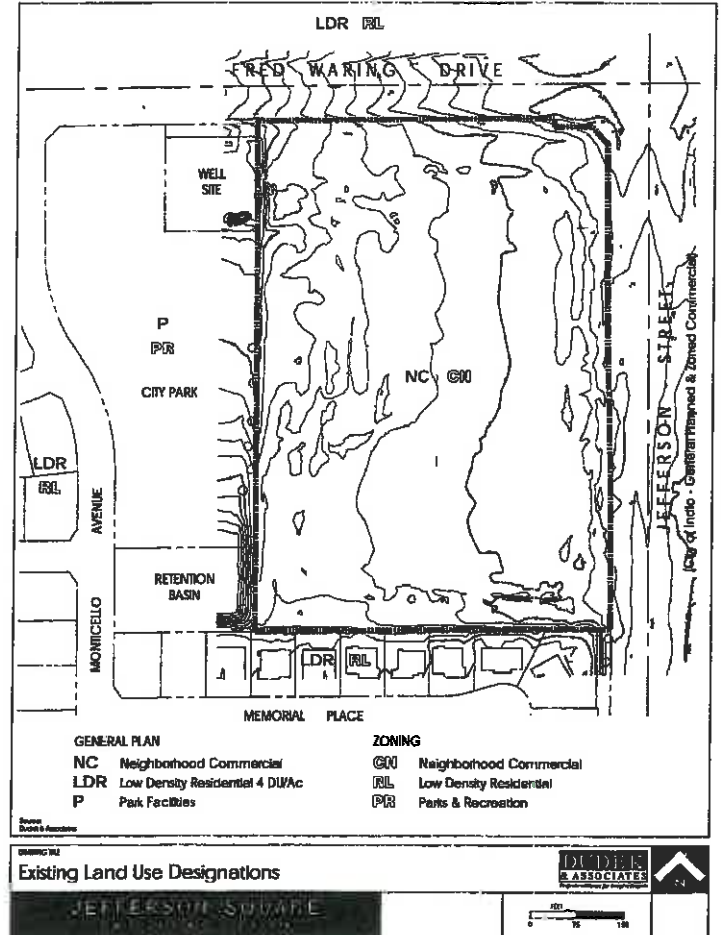
Policy 4: "Encourage expansion of ridership and the service area of the public transit systems operated by the Sunline Transit Authority within the City."

The project includes the provision for a bus stop on Jefferson Street. The project will identify a Transportation Demand Coordinator in accordance with City Ordinance (Section 9.180.030), who will be responsible for coordinating ride sharing, bus ridership, flexible work schedules, and other Transportation Demand Management program among employees.

Policy 5: "As a means of reducing traffic associated with work-related out-migration, make every reasonable effort to enhance the City's job/housing balance."

The project will result in the development of a commercial/retail and hospitality center on the site which would provide increased job opportunities in a housing rich area.

The proposed organic market (housed in the former Fresh & Easy building) will also support local farmers to sell their produce within a dedicated year-round, indoor farmers' market in La Quinta.



(Figure 6) Existing and Proposed Land Uses at Jefferson Square

Project Setting

Policy 6: "Develop and encourage the use of continuous and convenient bicycle routes and multi-use trails to places of employment, recreation, shopping, schools, and other high activity areas with potential for increased bicycle, equestrian, golf cart and other non-vehicular use."

The existing site infrastructure includes meandering pedestrian sidewalks and "on road" bicycle lanes fronting the development along Fred Waring Drive and Jefferson Street. The proposed development will extend the existing network of internal pedestrian walkways and bicycle racks will also be provided on site.

OPEN SPACE ELEMENT

The site has not been defined in the General Plan as an area that includes outstanding and significant natural or man-made features, there are no steep topographical or geo-technical constraints, nor does the site fall under any of the criteria for Open Space designation. Thus, development of the site is not in conflict with any of the City's Open Space policies, goals and programs.

The hotel's central courtyard will be open to the public during operational hours and will have an open pedestrian connection to Monticello Park (see site Drawing 4 Landscape Plan), providing an additional public amenity adjacent to the park.

PARK AND RECREATION ELEMENT

The site is not identified in the General Plan as an existing or proposed city park and/or recreational facility. Development of the Specific Plan area would not result in an increase in population generating a need for additional parkland or recreational facilities. The City's General Plan identifies Monticello Park as being located immediately adjacent to the site's western boundary. The existing site infrastructure includes pedestrian access

to the adjacent parkland: the proposed pedestrian connection between the hotel's open space with the parkland augments this objective of the General Plan. Thus, development of the site is not in conflict with any of the City's Parks and Recreation policies, goals and programs.

NATURAL RESOURCES ELEMENT

Development of the site will not degrade any aspects of the natural and man-made environment which are of aesthetic, environmental or cultural value to the City. Development of the Jefferson Square Specific Plan will be consistent with many of the policies and programs outlined in the Natural Resources Element of the General Plan.

Development of the site will not degrade any aspects of the natural and man-made environment which are of aesthetic, environmental or cultural value to the City. Development of the Jefferson Square Amended Specific Plan (12/2017) will be consistent with many of the policies and programs outlined in the Natural Resources Element of the General Plan.

Air Quality Policies-

Policy 2: "The City shall strive to maintain a balance between housing and commercial and industrial growth within the community to reduce the length of commuter trips."

The project will result in the development of a neighborhood commercial/retail center on site, which would provide the local community with a convenient location for buying goods/ services, which they would otherwise have to travel out of the area to obtain. The year-round organic food market will also serve as a useful resource for residents of La Quinta.

Policy 4: "The city shall encourage growth around activity Centers and arterial streets to provide more efficient travel patterns and transit service."

Policy 5: "The City shall promote the development of alternative modes of transportation to reduce motor vehicle emissions."

The existing site infrastructure includes alternative transportation amenities including; a bus stop along Jefferson Street, and "on road" bicycle lanes and pedestrian sidewalks fronting Fred Waring Drive and Jefferson Street (both primary and major arterial roads in the General Plan). The recently opened I-10 interchange will also bring more traffic around the site.

Energy and Mineral Resource Policies-

Policy 1: "The City shall encourage the incorporation of energy conservation features in the design of all new construction and the installation of energy-saving devices in existing development."

The proposed project shall comply with the City's energy conservation plans as identified in the City's General Plan. The City shall review all project related design and building plans to ensure compliance with energy saving techniques and policies, including compliance with Title 24 building standards of the California Administrative Code 1604(f).

Biological Resource Policies-

Policy 1: "The City shall continue to participate in regional efforts to protect wildlife habitat, including suitable habitat for rare and endangered species."

Policy 2: "Staff shall review all development applications for vacant land for their potential impacts to existing wildlife and habitat."

Policy 3: "Native, drought-tolerant desert plant materials shall be incorporated into the new development to the greatest extent practical. Invasive, non-native species shall be discouraged."

Prior to the mass grading activities, the project site was intensively surveyed by a qualified biologist for the presence of sensitive biological resources. The associated survey concluded that there were no sensitive biological resources within the site. The City's required design and environmental review and conditioning process will ensure that the project does not adversely affect any identified sensitive species. The project's proposed landscaping palette incorporates the use of native drought-tolerant plants (see Landscape Guidelines below).

Paleontologic Resource Policies.

Policy 1: "The City shall require the preparation of paleontologic resource analyses by a qualified paleontologist for all development proposals which occur in areas of High Sensitivity."

According to Exhibit 6.8 of the City's General Plan, the project site is located within an area of "low" paleontologic sensitivity, and therefore would require no further studies or conflict with any relevant General Plan policies and programs.

WATER RESOURCE POLICIES

Policy 1: "The City shall support the Coachella Valley Water District (CVWD) in its efforts to supply adequate domestic water to residents and businesses."

Prior to the issuance of grading permits, the developer shall secure the necessary commitments from CVWD for the project's domestic water needs.

Policy 4: "The City shall ensure that surface water resources are protected."

Policy 6: All development plans shall be reviewed for their potential to create surface and groundwater contamination hazards from point and non-point sources."

In accordance with the Federal Clean

Project Setting

Water Act, the project will be subject to the permit requirements of the National Pollution Discharge Elimination System (NPDES). The construction contractor, in consultation with the lead agency, shall be responsible for filing all required notices with the Regional Water Quality Control Board (RWQCB), preparing the Storm Water Pollution Prevention Plan (SWPPP), and implementing required Best Management Practices (BMPs). The City's required design and environmental review and conditioning process will ensure compliance with the City's applicable stormwater drainage standards.

INFRASTRUCTURE AND PUBLIC SERVICES ELEMENTS

Development of the site will not be in conflict with the policies and programs of the Infrastructure and Public Service Element. The necessary public utility infrastructure is readily available to the project site from the surrounding development, and the associated extensions are anticipated to be routine once construction begins. The project will incrementally increase the need for public services within the City, and therefore the developer will contribute the appropriate development fees to help fund the expansion of these services within the City.

ENVIRONMENTAL HAZARDS ELEMENT

The site is not identified in the Environmental Hazards Element as being located within an area that is susceptible to a significant risk from seismic, liquefaction or flood related hazards. Consistent with policy 5 of the Geologic and Seismic Hazards section, all structures on site will be built in accordance with the latest version of the California Building Code (CBC). The City's standard protocols for tentative tract map review, conditioning and approval, will ensure compliance with the relevant goals, policies and programs of the Environmental Hazards Element.

CULTURAL RESOURCE ELEMENT

According to Exhibit 9.1 of the City's General Plan, the project site does not contain any identified cultural or historic resources on site or in the immediate vicinity. Development of the property will be consistent with policies and programs outlined in the Cultural Resource Element of the General Plan.

Policy 1.2: "The City shall consider the identification of cultural resources as an integral part of the planning process."

Policy 2.1: "The City shall make all reasonable efforts to protect cultural resources under its regulatory control."

Prior to the mass grading activities, the project site was intensively surveyed by a qualified archaeologist for the presence of cultural resources. The associated survey concluded that there were no archaeological resources within the site. Construction specifications will be included, which require the contractor to immediately halt grading, or any other construction activity, if a buried cultural resource artefact/site is accidentally uncovered during grading operations. The specifications will require that the developer or contractor notify the City and summon a qualified specialist in order to determine the appropriate action for documenting and preserving a find.

B. EXISTING SITE CHARACTERISTICS

Existing site conditions are shown in Figure 10 Existing Site Plan. *Parcel 6 is vacant and contains sparse areas of desert scrub vegetation.* The site has been mass graded and generally slopes to the east at an approximate 1% grade. *Ground elevations on parcels 3 and 5 range from approximately 50 feet above sea level (asl) along the west to approximately 40 feet asl at the eastern boundary; existing building elevations reach up to 80 feet (asl).* There are no unique physical or topographic features on site.

The former Fresh & Easy building has remained empty since construction, and the building requires renovation to reinstate essential HVAC systems and to function as a commercial property. The proposed re-purposing of the building into an organic food and beverage market will require modifications to the building's fabric, without major structural changes to the existing foundations, walls or roof.

Off-site infrastructure include a traffic signal, and existing curb and gutter (with handicapped access) at the northeast corner of the site (Fred Waring Drive and Jefferson Street intersection), and four electrical transmission line poles, which flank the northern periphery of the site. The site is also bordered by 6' high masonry walls on the southern and western boundaries. Curb, gutter and deceleration lane improvements have been completed on Jefferson past the northern entry drive to the site.

C. SURROUNDING LAND USE

In order to provide a context for project planning, surrounding land use is shown in Figure 1. The subject land parcels are bordered on the north by Fred Waring Drive, which is a six lane primary arterial roadway with a 120 foot wide right-of-way. The Esplanade single family residential subdivision is located directly across Fred Waring Drive, north of the project site. The project site is bordered on the east by Jefferson Street, a major arterial with 120 foot wide right-of-way. Property to the east of Jefferson Street is within the City of Indio's jurisdictional boundaries and it has been developed as a retail center. The Heritage Palms Golf Resort is located across Jefferson Street to the southeast. Land use immediately west of the site includes an existing well site, City park, and an existing retention basin associated with the recently developed residential subdivision (Monticello) further to the west. The rear yards of approximately seven single family residences of the Monticello, neighborhood exist along the southern periphery of the site. These homes are separated from the project site by an elevated berm with a six foot high masonry block perimeter wall and a dense planted landscape buffer.



(Figure 7)
The former Fresh & Easy building



(Figure 8)
The view from western hotel bedrooms over Monticello Park



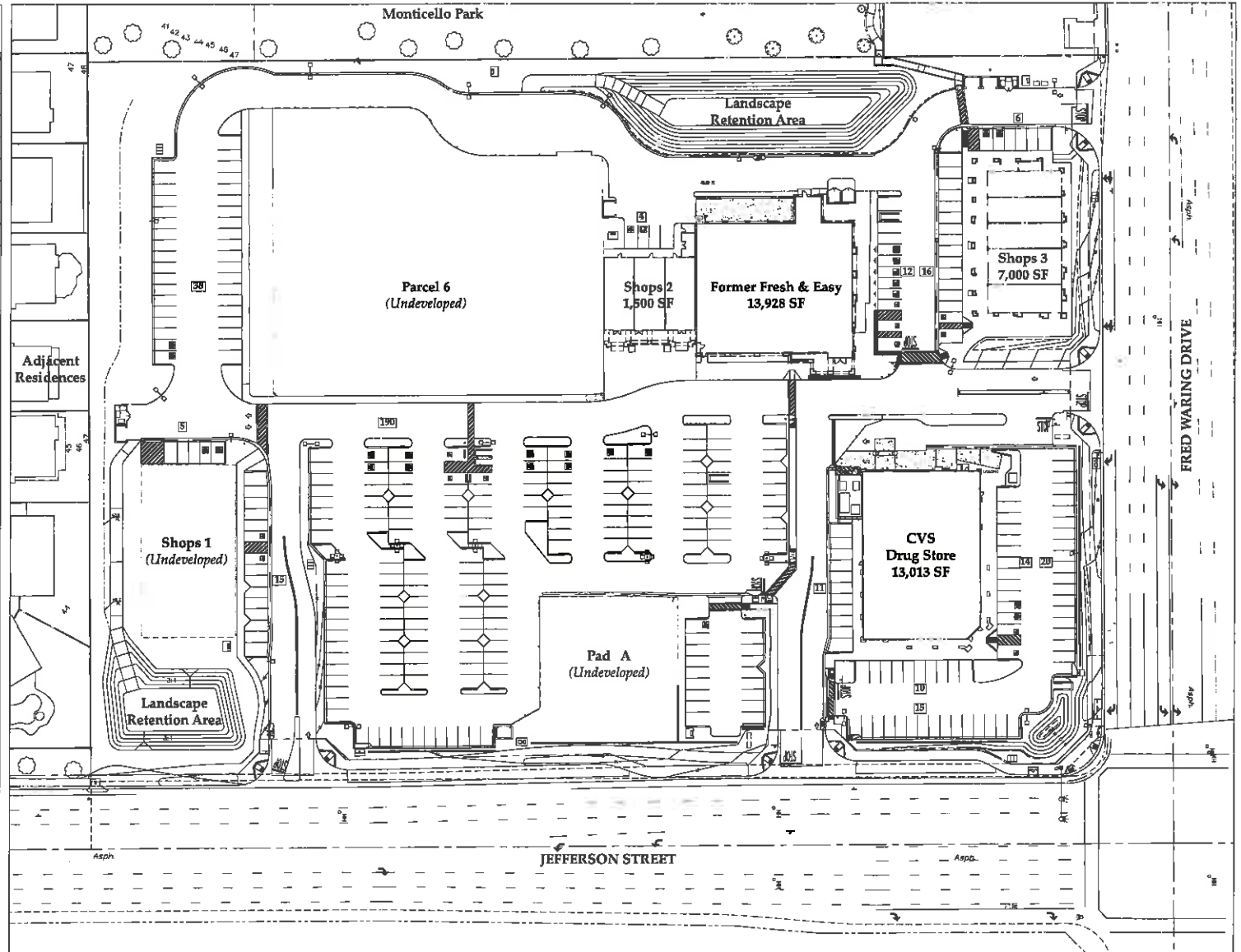
(Figure 9)
The existing dense landscape between the site and adjacent residential district

TOTAL SITE AREA: 10.79 AC (470,060 SF)
 TOTAL BUILT SITE COVERAGE: 29.82%

| USE | SQUARE FOOTAGE | PARKING RATE | REQUIRED PARKING (#STALLS) | PROPOSED PARKING (#STALLS) |
|--------------|------------------|--------------|----------------------------|----------------------------|
| OSH* | 2,500 SF | 4.0/1,000SF | 170 | |
| FRESH & EASY | 13,928 SF | 4.0/1,000SF | 56 | |
| DRUG CVS | 13,013 SF | 4.0/1,000SF | 52 | |
| SHOPS** | 6,500 SF | 4.0/1,000SF | 66 | |
| PADS** | 4,500 SF | 4.0/1,000SF | 18 | |
| TOTAL | 90,441 SF | | 362 | 362 |

LANDSCAPE PROVIDED:
 WITHIN PARKING: 13,971 SF (6.2%)
 PERIMETER & BUILDING AREAS: 25,185 SF (10.1%)
 RETENTION AREAS: 38,619 SF
TOTAL: 77,775 SF (16.5 of total site area%)

Notes:
 *The OSH retail (Parcel 6) store was never developed and has been empty for the past 12 years. During 2015 there was another proposal for a fitness center but was never built
 ** Shop1, Pad A has been undeveloped for the past 12 years and in future will be developed by others.



PROJECT NAME
 JEFFERSON SQUARE

DRAWING TITLE
 EXISTING SITE PLAN

SHEET
 JSD PARTI FIGURE 10

NOTE:

REVISION
 A JSD AMENDED S.P

DATE
 05.18.18

SCALE
 1/20"=1'-0" @ A3
 1/40"=1'-0" @ A1

CLIENT
 CCD HOTEL & RESORTS
 Rancho Mirage
 41750 Rancho Las Palmas Drive Suite
 0-3, Rancho Mirage, CA 92270
 M I +1 213 716 5810

PARTI

03_MASTER PLAN
Amended Specific Plan

PART I
May 2018

03

MASTER

PLAN

MASTER PLAN

A. SITE PLAN

As shown in Figure 12, the Amended Specific Plan (05/2018) would result in development of a food market (housed in the former Fresh & Easy store and the adjoining retail units), assorted retail and service oriented shops, possible restaurant uses and a 160-room hotel these are associated with parcels 3,5 and 6.

Though the other Parcels 4 and 7 which are currently undeveloped and in future will be assorted retail and service oriented shops, possible restaurant uses and one bank.

Though out the other Parcels they have been developed into retail and service orientated shops and a drive-thou Drug store

For the most part, the Specific Plan complies with the development standards of the proposed Commercial Neighborhood (CN) designation.

FLOOR AREA RATIO

However, this Amended Specific Plan (12/2017) seeks the City's discretionary approval to increase the allowable Floor Area Ratio (FAR) from 0.25 (as per code 9.90.040) to 0.30.

The proposed development footprints of the hotel and retail strip may be modified (enlarged or reduced) during final design, however, a maximum Floor Area Ratio (FAR) of 0.30 will not be exceeded over the entire site.

PARKING

The project provides landscape parking areas containing a total of 361 spaces.

The required number of spaces for the Jefferson Square site is 391: this figure has been calculated using 1 space per 300 sq ft of retail space and 1.1 spaces per hotel room (as per code 9.150.070).

This Amended Specific Plan (12/2017) seeks the City's discretionary approval of the project's parking provision (currently short by 30 parking spaces).

If the square footage of any of the buildings changes, the number of required spaces also changes. The site plan will accommodate this change by providing the correct amount of spaces using the 1 space per 300 sq ft for general retail uses under 100,000 sq ft GFA. If restaurant uses are included on the site, the number of spaces required would be calculated using the 1 space per 125 sq. ft. ratio. The City Ordinance provides for restaurant uses that are part of shopping centers that are not in excess of 20% of the shopping center gross floor area to be allowed to use the parking ratio for the shopping center instead of using a separate restaurant parking ratio.

SITE ACCESS

Ingress/egress for the site exists at two locations along Fred Waring Drive, and two locations from Jefferson Street. Left turn lanes from these roadways are provided at the western access along Fred Waring Drive, and the southern access on Jefferson Street. Deceleration lanes are provided at the two entrances on Jefferson Street, and the eastern entrance on Fred Waring Drive. There is also a dedicated right turn lane for eastbound traffic using Fred Waring Drive turning south onto Jefferson Street.

WATER SUPPLY

Domestic water services will be extended to the proposed hotel and retail site from an existing 18 inch water line at the northwest corner of the site along Fred Waring Drive, and an existing 12 inch water line near the southeast corner of the site at Jefferson Street: there is an existing connection to the former Fresh & Easy building which will be reinstated for use in the organic market. Sewer services will be extended from an existing 10

inch sewer line in Jefferson Street to the proposed hotel and retail site: there is an existing sewer connection to the former Fresh & Easy building.

DRAINAGE

On site drainage is currently conveyed to above ground retention basins, located on the south-east and north-west sides of the site, as well as to an underground retention system. The proposed additional car parking to the north west of the site will replace the above ground landscape retention area with a larger, underground catch basin that will connect to the existing retention system.

TRASH

Trash enclosures for the hotel and retail strip will be located at various points within the project site, and will be screened from view, to the extent feasible, by landscaping.

The existing site landscape along Fred Waring Drive and Jefferson Street accents the architectural theme of the existing buildings.

B. PHASING PLAN

The proposed La Quinta food market will open before the hotel.

C. LANDSCAPE PLAN

The purpose of the proposed landscape plan is to build upon the established standards of the existing site landscape and contribute to a coordinated project image and identity.

The proposed landscape design establishes levels of hierarchy that will provide a varied and high quality experience at the pedestrian and vehicular level within and surrounding the project: in particular, the project's relationships with residential properties and Monticello Park will be negotiated with a careful planting palette.

The landscape concept and the proposed plant palette for the project are shown in Figure 13.

In general, landscaping associated with the project will form a buffer zone with the residential properties to the south and create a relationship with the western edge of Monticello Park. The existing 5ft landscaped buffer condition with the Park was approved in the previous Specific Plan (3/24/2008) and this proposal will retain this minimum buffer zone. The hotel will also provide a publicly accessible landscaped courtyard with a range of plants outlined in the Landscape Plan.

The landscape concept for the project's boundaries to the west and south will complement existing turfed areas with a colorful mix of water efficient groundcovers and accent shrubs. The project maintain the existing streetscaping along Fred Waring Drive and Jefferson street with a plant palette and design concept which is compatible with City Design Guidelines.

Existing uncovered parking areas are shaded with a combination of Palo Verde, and Desert Museum trees. Palm trees have been used to provide vertical scale and aesthetic contrasts. Tipu Trees, Acacia, and Chitalpa Trees are already used to help screen views from adjacent residential areas. Species in addition to those listed are to be considered in order to provide diversity within the proposed development. The associated plant materials have been chosen for their adaptability to the desert climate of La Quinta, their relationship to the existing surrounding developments, and the intended use and function with the project. Shrubs along the street perimeters shall be minimum 5 to 15 gallon size.

D. CIRCULATION PLAN

As shown in Figure 14, the proposed Circulation Plan adds to the existing site circulation plan (as approved in the

MASTER PLAN

Specific Plan 3/24/2008) and is typical of a commercial center, with an internal system of sidewalks, walkways, and access aisles serving the various building locations, parking areas, and patio locations. On site circulation provides for both vehicular and pedestrian movement throughout the site.

VEHICULAR

External access to the various uses on site is from two locations along Fred Waring Drive, and two locations along Jefferson Street. Deceleration lanes are provided at the two entrances on Jefferson Street, and the eastern entrance on Fred Waring Drive. The southernmost access on Jefferson Street and the westernmost access on Fred Waring Drive provides left turning lanes into the site from these peripheral roadways. The remaining two ingress/egress locations provide restricted, right turn in - right turn out access only. There is also a dedicated right turn lane for eastbound traffic using Fred Waring Drive turning south onto Jefferson Street. On Jefferson Street, the left turning lane into the project is 650 feet south of the intersection with Fred Waring Drive. On Fred Waring Drive the left turning lane is 540 feet west of the intersection with Jefferson Street. Jefferson Street and Fred Waring Drive are designated in the general plan as major arterial roads. The half -width of a major arterial is 60 feet of right of way and 51 feet of pavement. The current half -width right of way for both streets received an additional 5 feet of dedicated right of way under the *previous Specific Plan (3/24/2008)*. The *previous Specific Plan* dedicated an additional 9 foot wide and 100 foot long right of way to accommodate the dedicated right turn lane at the southwest corner of Fred Waring Drive and Jefferson Street. The 12 foot wide and 50 foot long standard Sunline bus turnout on Jefferson Street has also been completed.

The Amended Specific Plan (05/2018) would provide a total of 361 parking spaces on

site, and would implement a reciprocal parking agreement among all uses on site which will be made part of the conditions of the Building Management Association.

The City of La Quinta Municipal Code No. 9.150.080.A8(b) requires that projects containing a total of 390-450 parking spaces, which take access from a major or primary arterial, to maintain a minimum distance of 70 feet from on site parking spaces and/ or parking isles to provide for stacking. However, deceleration lanes at both of the Jefferson Street entrances into the site have been implemented in lieu of the 70-foot throat requirement (as approved in the *Specific Plan 3/24/2008*). If the total number of parking spaces changes, the minimum distance from on site parking spaces and/ or parking isles also changes: the site plan provides for this by using a standard of a 90-foot throat, required for projects containing 451 or more parking spaces, in the deceleration lanes at three of the site entrances, as noted above.

Direct access to the drugstore drive through lanes is taken from the easternmost accessway location along Fred Waring Drive. A right turn is provided approximately 50 feet from the right-of-way, into two 12 foot wide drive thru lanes located on the north side of the drug store building. Each lane provides enough stacking to accommodate up to seven automobiles (- 120 feet) per lane, without obstructing the accessway. Drive-thru traffic exits the property at the northernmost ingress/egress location along Jefferson Street. The westernmost accessway along Fred Waring Drive provides access into the interior parcels via a 30 -foot wide lane located between the *food market* and Shops 3. *The westernmost entry serves as the primary van and delivery truck access for the food market and hotel BOH. Parcel 4* will have drive-thru lanes. Direct access to the drive-thru at *Parcel 4* will be from the southern accessway along Jefferson Street. To screen views of waiting cars from the

street, each drive thru will have a 4 foot wall or a combination of a wall and berm totaling 4 feet.

The primary internal circulation corridors extend from all access points on Jefferson Street and Fred Waring Drive. *Delivery trucks will access the loading docks at the side of the food market and hotel loading bay this is done by entering the northeast accessway on Fred Waring Drive, the would exit the the ssame way the delivery trucks came in. (Figure 14)*

PEDESTRIAN

Pedestrian sidewalks and on-street bicycle lanes are provided along both the Fred Waring Drive and Jefferson Street frontages (*Figure 14*). Sidewalks are 8 feet wide and on street bicycle lanes are 4 feet wide. A functional network of sidewalks and walkways are provided within the site to link individual building sites, and facilitate safe pedestrian movement throughout the development. A bus stop is provided along Jefferson Street which will be linked to the internal pedestrian system.

The project also creates new pedestrian access between the hotel and Monticello Park to encourage dialogue between activity in the hotel's courtyard and public activity in the park.

E. GRADING PLAN

The developer will submit a PM10 Plan (dust control plan) for the project in accordance with the applicable City and Southern California Air Quality Management District (SCAQMD) standards and codes, prior to the issuance of any grading permits. The subject property has already been mass graded to an average elevation of 45 feet above sea level. Precise grading of the site has created an above and underground retention system, and associated parking areas

designed to convey surface drainage flows to appropriate catch basins on site. *The proposed parking on top of the existing landscape retention area will be serviced by a catch basin attached to the existing underground system.*

The site has already been mass graded, precise grading would only result in minor deviations from existing grade. The associated earthwork will be fairly evenly distributed throughout the site with an average of less than one to two foot being added or removed at most locations. Final grading will match finished elevations on surrounding properties and will not result in significant manufactured cut/ fill slopes. Precise Grading Plans are subject to review and approval by the City according to standard engineering protocols. (*Figure 15*)

F. DRAINAGE PLAN

The project's construction contractor, in consultation with the City of La Quinta, shall be responsible for filing all required notices with the Regional Water Quality Control Board (RWQCB), preparing the Storm Water Pollution Prevention Plan (SWPPP), and implementing required Best Management Practices (BMPs) for the project. The project's drainage plan proposes to direct surface runoff into a number of catch basins located throughout the site (*Figure 16*) . Stormwater will be conveyed from the individual catch basins into an underground storm drain system, and ultimately to an underground retention system located near the center of the site and above ground retention basins, located on the west and south sides of the site. All stormwater will be retained on site. The exact size and design of the proposed storm drain facilities will be determined by the final engineering design and will be reviewed by the City via standard plan check protocols to ensure that the drainage is adequately addressed.

MASTER PLAN

G. SEWER PLAN

Sewer service to the project is provided by the Coachella Valley Water District (CVWD) via an existing 10 inch sewer line within the right of way of Jefferson Street along the site's eastern property line. One 8" main will run south east corner of project from front side of the hotel and will be connected to existing 10" sewer main in Jefferson Street. This line will pick up sewer laterals for the *hotel building and retail strip*. Another 8" sewer main will be constructed in northeast side of project which will start from the existing manhole located in Jefferson Street. This will extend westward into the central portion of the site, where a proposed manhole would be located and then ninety degrees south and north long the front of the *Market* where it would terminate at a manhole near shops.

2. Sewer laterals for the project will be connected to this sewer main.

H. WATER PLAN

Water Service will also be provided to the site by CVWD and is available to the property from an existing 18 inch water line located within Fred Waring Drive at the northwest corner of the site and existing 12 inch line in Jefferson Street at the southeast corner of the site as shown on conceptual sewer & water plan. Domestic, irrigation and fire flow water will be taken from these water lines. The project will include off site extensions to these existing water lines to facilitate the necessary on site extensions. New on site waterlines will consist of 12 inch main lines extending from CVWD's offsite service lines at two points, one along Fred Waring Drive and another at Jefferson Street using 12" double detector check assembly. 1.5 inch to 3 inch service lines will be used for lateral extensions to individual building pads. The internal system would result in a looped network of water lines designed to serve individual building pads, fire hydrants and the project's landscape irrigation

infrastructure.

I. OTHER UTILITY PLANS

Natural Gas-

Natural gas service is provided to the site by The Gas Company, which currently maintains a 4 inch gas line within the right of way for Fred Waring Drive, at the project's northwest corner. The required extensions to facilitate service to the site would be routine, and would be coordinated with The Gas Company through their design review and approval process prior to the issuance of grading permits for the project.

Electric-

Electric service is provided to the site by the Imperial Irrigation District (IID), which currently maintains existing above ground 92 kV and 12.5 kV transmission lines within the right of way for Fred Waring Drive along the project's northern property line. The project will extend lines from IID's existing 12.5 kV line onto the site. All on site transmission lines will be placed underground. IID anticipates service for this project to be routine.

Telephone-

Telephone service is provided to the site by Verizon, which maintains existing telephone lines within the right of way for Fred Waring Drive approximately 400 feet west of the project limits. Verizon serves the Monticello residential development area to the west of the property from a terminal located at the intersection of Monticello Avenue and Fred Waring Drive. Verizon engineering staff do not anticipate any difficulty extending services along Fred Waring Drive or Jefferson Street and connecting to the project. Service for this project would be routine.

Cable Television-

Cable Television service is provided to the site by Time Warner Cable and is available to the property from existing cable within the right of way for Fred Waring Drive along the project's northern property line. Installation of cable television would be coordinated with the extension of electrical service so that a single trench containing both facilities would be constructed. Time Warner Cable considers service for this project to be routine.

CAR PARKING AND LOADING

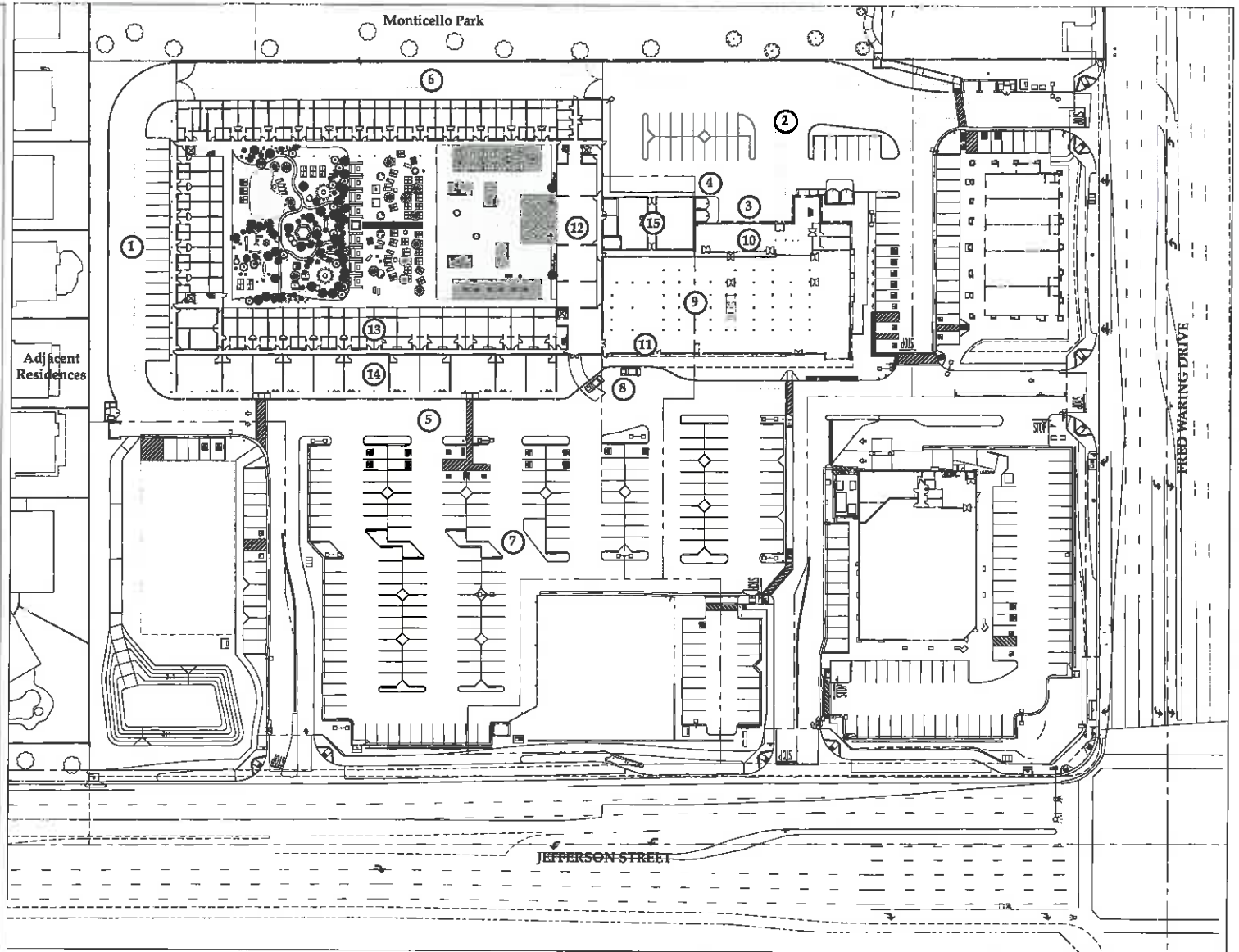
- ① Reconfigured parking lot zone to the south of the site proposed for the hotel and retail use. Trash bin moved slightly south to allow for fire truck turning radius.
- ② Proposed parking lot zone to the north west of the site will provide an additional 23 parking lots.
- The existing above landscape retention area will be replaced by an underground catch basin that connects to the existing retention system.
- ③ Reconfigured van/truck loading bays for the hotel and food market B.O.H.
- ④ Additional trash bins added for hotel.
- ⑤ Existing road extended from 28ft to 30ft to allow fire truck access.
- ⑥ 30ft hard surfaced road retained to fire truck access.
- ⑦ 194 existing parking system are retained, including all DDA spaces to the north of the site.
- ⑧ Proposed Hotel drop off zone.

CHANGES TO EXISTING STRUCTURES

- ⑨ The former Fresh and easy and 'shop 2' buildings will be repurposed to hold a food market.
- ⑩ The former F&E's existing walls will be retained to house the market's B.O.H.
- ⑪ The facade of 'shop 2' will be extended to meet the line of the former Fresh and easy buildings.

PROPOSED STRUCTURES

- ⑫ Hotel front of house, including lobby bar/ restaurant and events room.
- ⑬ Hotel rooms arranged around a courtyard
- ⑭ Retail units to let
- ⑮ Hotel B.O.H



PROJECT NAME
JEFFERSON SQUARE

DRAWING TITLE
PROPOSED CHANGES

SHEET
JOB PARTI FIGURE 11

NOTE:

REVISION
A JSD AMENDED S.P

DATE
05.18.18

SCALE
1/20"=1'-0" @ A3
1/40"=1'-0" @ A1



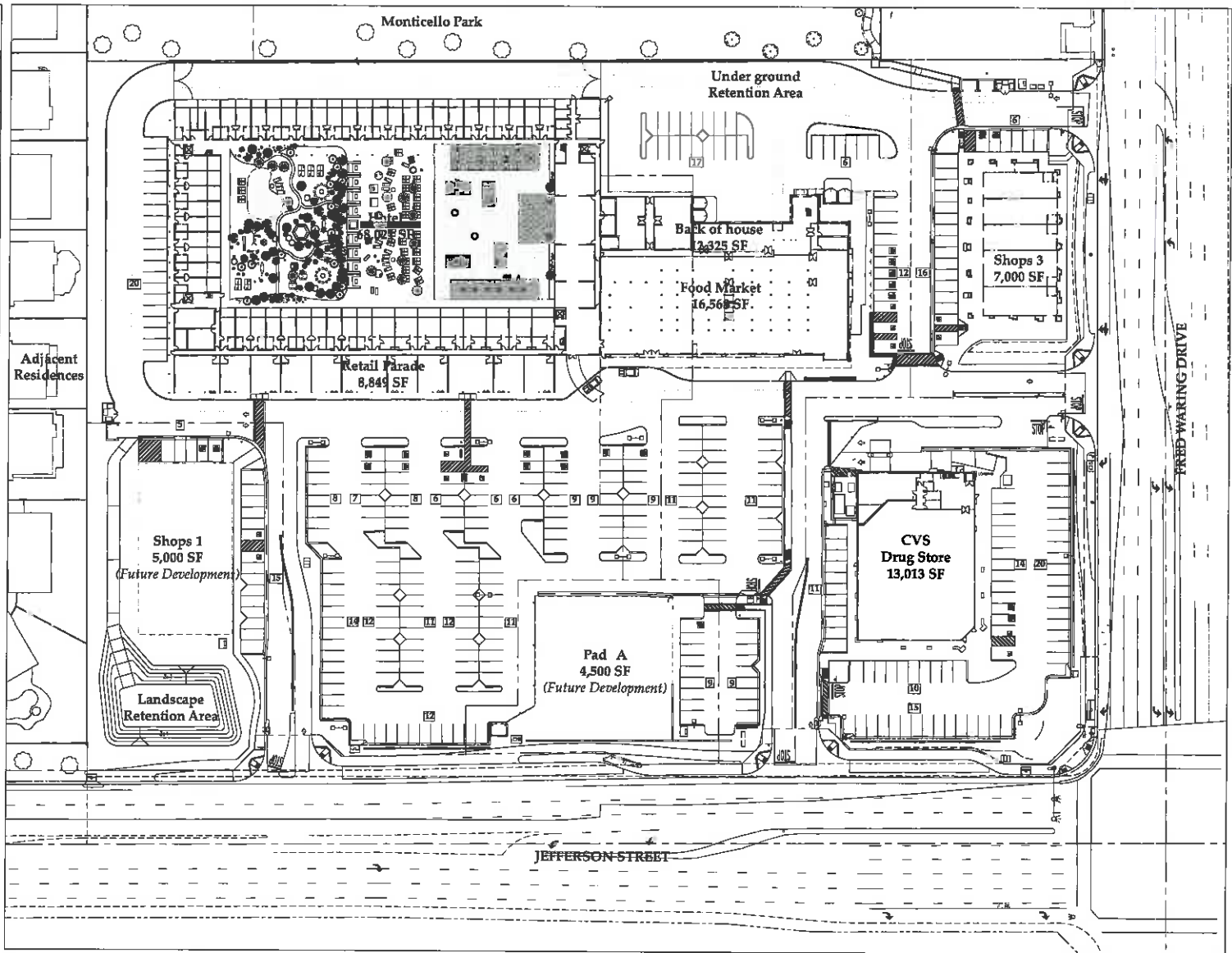
CLIENT
CCD HOTEL & RESORTS
Rancho Mirage
41250 Rancho Las Palmas Drive Suite
D-3, Rancho Mirage, CA 92270
P 1 41 213 716 5910

PARTI

| TOTAL SITE AREA: 10.79 AC (470,060 SF) | | | | |
|--|----------------|---------------|----------------------------|----------------------------|
| TOTAL BUILT SITE COVERAGE: 29.82% | | | | |
| USE | SQUARE FOOTAGE | PARKING RATE | REQUIRED PARKING (#STALLS) | PROPOSED PARKING (#STALLS) |
| HOTEL | 68,021 | GUEST RM X1.2 | 176 | |
| RETAIL PARADE | 8,849 | 1.0/300SF | 29 | |
| FOOD MARKET | 16,568 | 1.0/300SF | 55** | |
| SHOP 1 | 5,000 | 4.0/1,000SF | 20 | |
| SHOP 3 | 7,000 | 4.0/1,000SF | 28 | |
| PAD A | 4,500 | 4.0/1,000SF | 18 | |
| DRUG CVS | 13,013 | 4.0/1,000SF | 52 | |
| TOTAL | 135,276 | | 378 | 361* |

LANDSCAPE PROVIDED:
 WITHIN PARKING AND PERIMETER & BUILDING AREAS: 60,534 SF (13.54%)
 INTERNAL COURTYARD: 35,287 SF (7.89%)
TOTAL: 95,821 SF (21.43%)

Notes:
 *To meet the required 378 car lots within The Jefferson Square site we would need to refer to the 'preapplication review 2017-0018: The club hotel and retail parade' comments 3 and 4 of the 'planning division'.
 ** Food Market area excludes the back of house



PROJECT NAME
JEFFERSON SQUARE

DRAWING TITLE
LAND USE PLAN

SHEET
JSQ PARTI FIGURE 12

NOTE:

REVISION
A JSQ AMENDED S.P.

DATE
05.18.18

SCALE
1/20"=1'-0" @ A3
1/40"=1'-0" @ A1

CLIENT
CCD HOTEL & RESORTS
Rancho Mirage
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U-3, Rancho Mirage, CA 92270
H 1 +1 213 719 5610

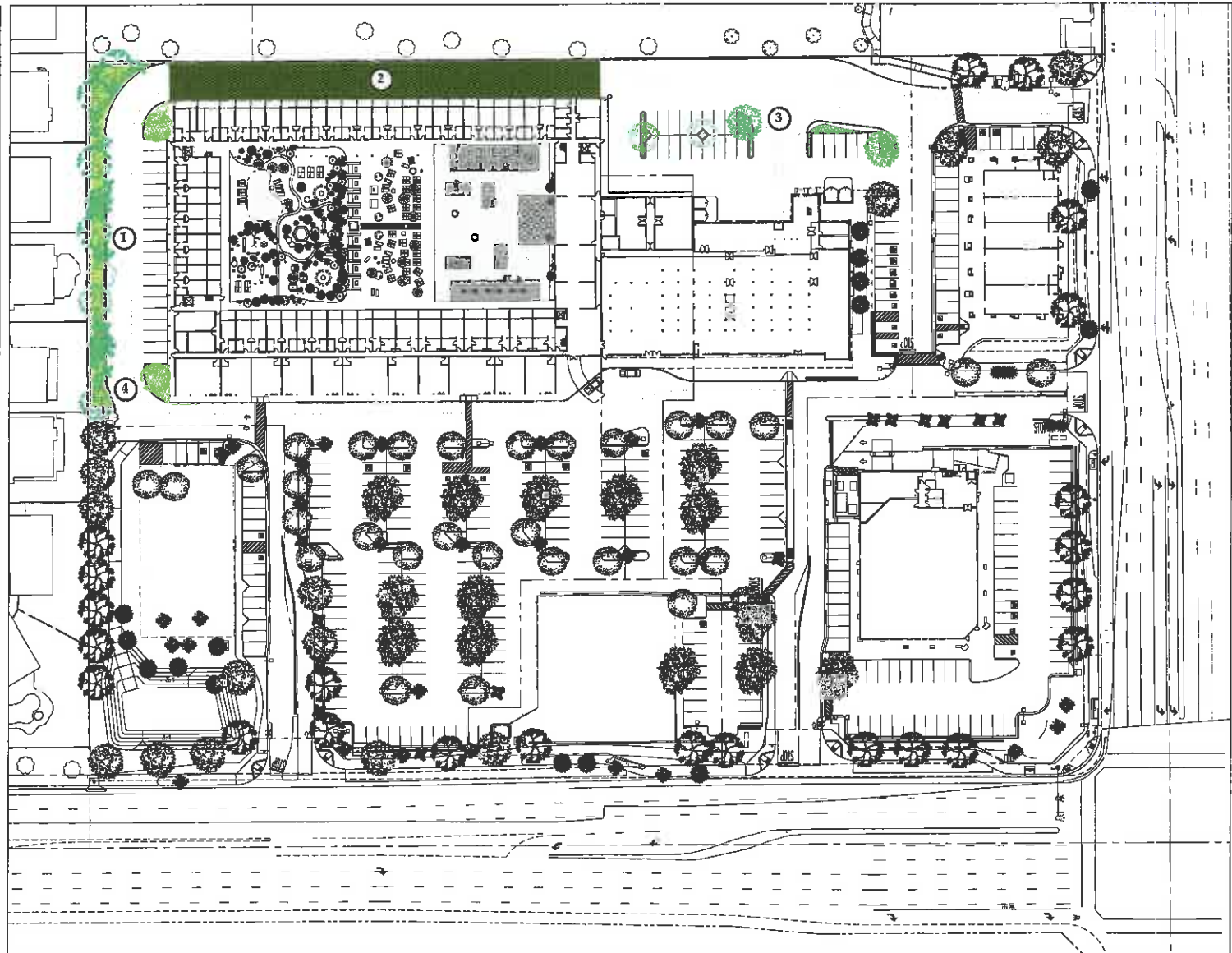


PARTI

PRELIMINARY LAND SCALELEGEND

| GROUND COVER | | | | TREES | | | |
|--------------|---|------------------------|------------------|----------|---|---------|--|
| SYMBOL | BOTANICAL NAME | COMMON NAME | SIZE | SYMBOL | BOTANICAL COMMON | SIZE | |
| [Symbol] | HEDYSAURA GLABRA | GREEN CARPET | 1 GAL. 8" 12" UC | [Symbol] | ACACIA SALICINA WILLOW ACACIA | 24" BOX | |
| [Symbol] | LANTANA HYBRID | SPREADING SUNSET | 5 GAL. | [Symbol] | CERCIDIMUM HYBRID DESERT MUSEUM | 36" BOX | |
| [Symbol] | LANTANA HYBRID | SPREADING SUNSET | 5 GAL. | [Symbol] | CERCIDIMUM FLORIDUM PALM VERDE | 24" BOX | |
| [Symbol] | LANTANA HYBRID | SPREADING SUNSET | 5 GAL. | [Symbol] | CHITALPA TASHKENTENSIS CHITALPA | 36" BOX | |
| [Symbol] | LANTANA HYBRID | SPREADING SUNSET | 5 GAL. | [Symbol] | BRACHIA ARNATA MEXICAN BLUE PALM/TIPUANA TIPU TREE | 12"6" | |
| [Symbol] | LANTANA HYBRID | SPREADING SUNSET | 5 GAL. | [Symbol] | BUTYA CAPITATA PINO PALM | 12"6" | |
| [Symbol] | HYMENOPHYLLIS ANGLIS | ANGELITA DANEY | 5"4" 15-CANES | [Symbol] | PARKINSONIA ACULEATA PALM VERDE | 24" BOX | |
| [Symbol] | YUCCA GORDONII | YUCCA | 5 GAL. | [Symbol] | BUTYA CAPITATA PINO PALM PROPOSED | 12"6" | |
| [Symbol] | DESERT GOLD 3/8 MINUS 2" DEPTH IN ALL DESERT PLANTERS | | | [Symbol] | BRACHIA ARNATA MEXICAN BLUE PALM/TIPUANA TIPU TREE PROPOSED | 12"6" | |
| [Symbol] | CALIFORNIA GOLD 3/8 MINUS 2" DEPTH IN ALL DESERT PLANTERS | | | [Symbol] | TIPUANA TIPU TIPU TREE PROPOSED | 36" BOX | |
| [Symbol] | 2" TO 4" SAJA CRESTA FRACTURED ROCK | | | [Symbol] | CERCIDIMUM FLORIDUM PALM VERDE PROPOSED | 24" BOX | |
| [Symbol] | SURFACE SELECT BOULDERS | | | [Symbol] | CHITALPA TASHKENTENSIS CHITALPA PROPOSED | 36" BOX | |
| [Symbol] | ASPHALVE FIRE TRUCK ACCESS LANE WITH PERIODE PARKING | | | | | | |
| SHRUBS | | | | | | | |
| SYMBOL | BOTANICAL NAME | COMMON NAME | SIZE | | | | |
| [Symbol] | QUINQUEFOIDA PARVIFLORA | RED HOT PINKS | 3 GAL. | | | | |
| [Symbol] | BOUGHAYVILLEA DELI LA LA | BOUGHAYVILLEA | 3 GAL. | | | | |
| [Symbol] | PARSA PINTA PALOCHERIMO | RED BIRD OF PARADISE | 3 GAL. | | | | |
| [Symbol] | DESERT NEVADIA | DESERT CASSIA | 3 GAL. | | | | |
| [Symbol] | ERUCA PARVIFLORA | BRITTLEBUSH | 3 GAL. | | | | |
| [Symbol] | ESQUERQUIA SPLENDENS | DOTYFIELD 15" 15-CANES | 3 GAL. | | | | |
| [Symbol] | HEPERALDE PARVIFLORA | RED YUCCA | 3 GAL. | | | | |
| [Symbol] | LARREA TRIDENATA | CREOSOTE BUSH | 3 GAL. | | | | |
| [Symbol] | LEUCOPHYLLUM FRUTICOSUM | TEXAS RANGER | 3 GAL. | | | | |
| [Symbol] | RAULONERIA LIMBOSERA | MICAL WEST | 1 GAL. | | | | |
| [Symbol] | RAULONERIA CAPILLARIS | AUTUMN GOLD | 1 GAL. | | | | |
| [Symbol] | RAULONERIA LIMBOSERA | DEER GRASS | 1 GAL. | | | | |
| [Symbol] | RAULONERIA LIMBOSERA | BAJA RUPELLIA | 1 GAL. | | | | |

- Notes:
- Proposed landscape buffer with adjacent residences with variety of tall trees and lower shrubs to obscure views into from the hotel.
 - New fire truck path constructed with permeable materials to facilitate drainage, Fire department to confirm if pavement is suitable.
 - Reconfigured delivery bay creates additional parking lots.
 - All proposed landscape work are illustrated in color.



PROJECT NAME
JEFFERSON SQUARE

DRAWING TITLE
PRELIMINARY LANDSCAPE PLAN

SHEET
JSQ PART I FIGURE 13

NOTE:

REVISION
A JSQ AMENDED S.P.

DATE
05.18.18

SCALE
1/20"=1'-0" @ A3
1/40"=1'-0" @ A1

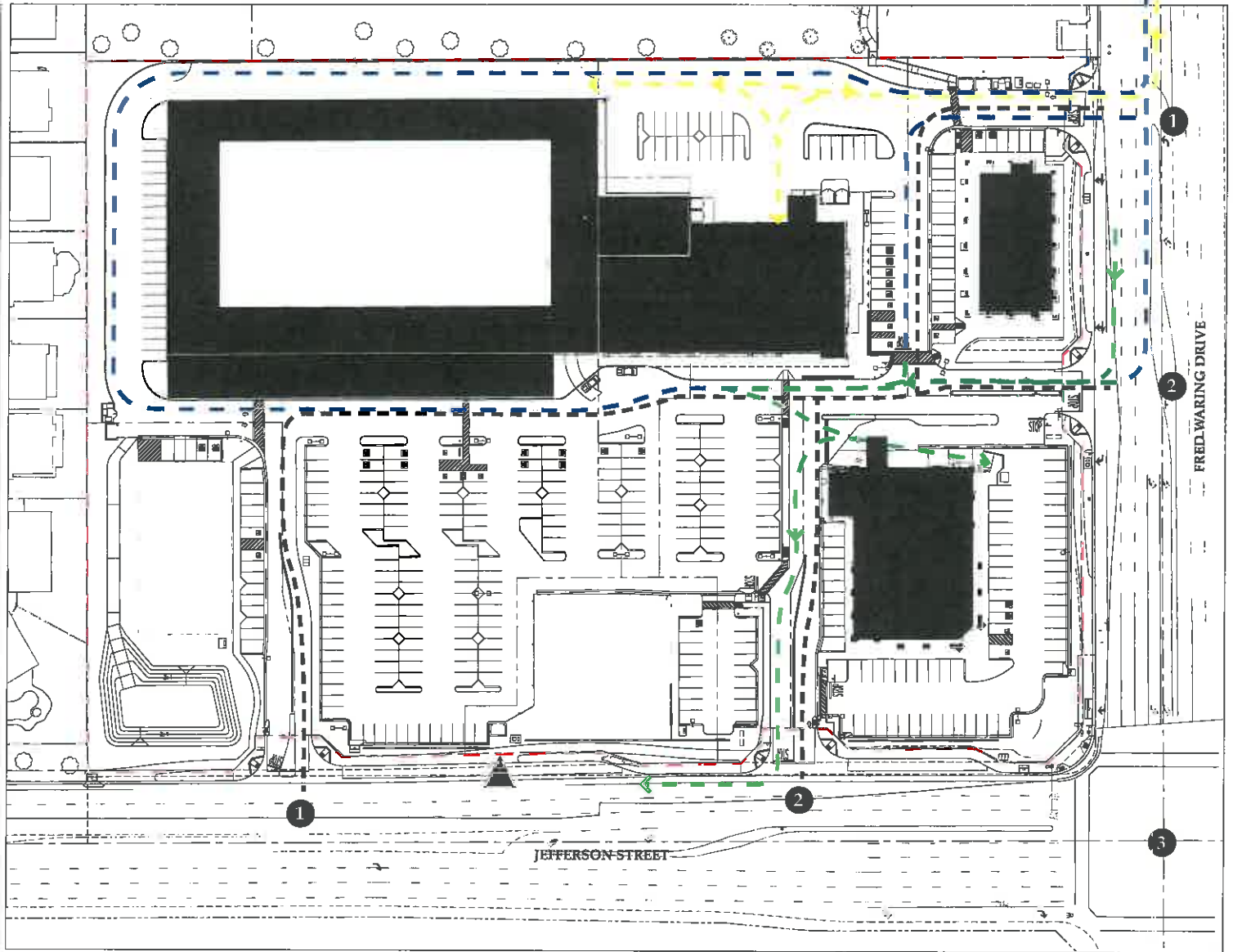


CLIENT
CCD HOTEL & RESORTS
Rancho Mirage
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PART I

LEGEND

- ① Unsignalized Intersection
- ② Restricted Access-Right turn/Turn out
- ▲ Bus stop
- ③ Signalized Intersection
- Vehicular circulation
- Food Market Truck Loading
- Drug Store Truck Loading



PROJECT NAME
JEFFERSON SQUARE

DRAWING TITLE
CIRCULATION PLAN

SHEET
JSQ PARTI FIGURE 14

NOTE:

REVISION
A JSQ AMENDED S.P.

DATE
05.18.18

SCALE
1/20"=1'-0" @ A3
1/40"=1'-0" @ A1

CLIENT
CCD HOTEL & RESORTS
Rancho Mirage
41700 Rancho Las Palms Drive Suite
D-3, Rancho Mirage, CA 92270
Tel: +1 213 718 5810

PARTI

PRELIMINARY GRADING PLAN

SWC OF JEFFERSON AVE AND FRED WARING DR.

LA QUINTA, CALIFORNIA

UTILITY PURVISORS

SEWER & WATER COACHELLA VALLEY WATER DISTRICT (760) 289-2951
 ELECTRIC SOUTHERN CALIFORNIA EDISON (760) 343-7796
 GAS THE GAS COMPANY (951) 202-4281
 TELEPHONE VERIZON (951) 427-2280
 CABLE TIME WARNER CABLEVISION (951) 483-8000
 (760) 340-1312

FLOOD ZONE

THE LAND SHOWN ON THIS SURVEY LIES WITHIN FLOOD ZONE "X" (UNSHADED), BEING AN AREA DETERMINED TO BE EXTENDED 300-YEAR FLOOD PLAIN PER FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NUMBER 900000000000 DATED AUGUST 28, 2006.

APPLICANT

CCD HOTEL & RESORTS, LLC
 41-700 MANCHEE LANE PALMAM DRIVE, SUITE 2-3
 PALM SPRINGS, CALIFORNIA 92270
 TEL: (760) 346-1100
 CONTACT: CALVIN SO

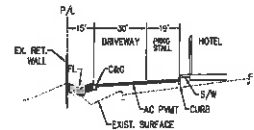
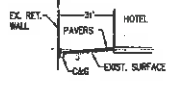
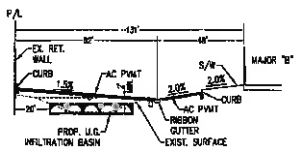
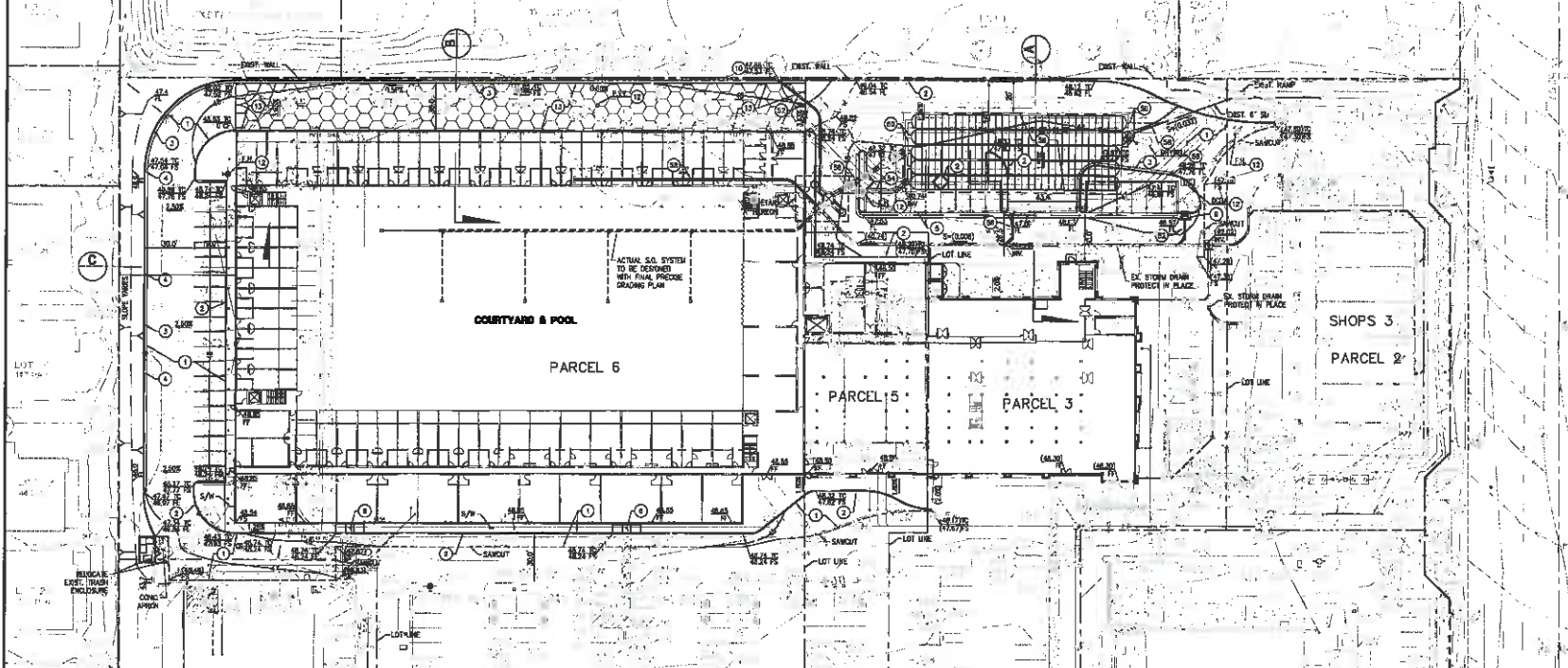
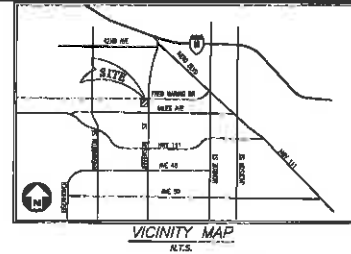
ASSESSORS PARCEL NO. 836-22-042
 836-22-043
 836-22-044
 836-22-045

PRELIMINARY EARTHWORK

CUT: 300 CY
 OVERCUT/UNDERCUT: 11,533 CY
 EARTH IMPORT/EXPORT: 5,700 CY

LEGAL DESCRIPTION:

PARCELS 1, 5 AND 6 OF PARCEL MAP NO. 28041 IN THE CITY OF LA QUINTA, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA BATTERED BY BOOK 20, PAGE 1 TO 3 INCLUSIVE, OF RANGE MAP IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

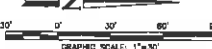
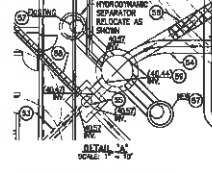


GRADING CONSTRUCTION NOTES:

1. CONSTRUCT 4" PRECAST 15'x15'x4" INCH 400 / 200 DIM CONCRETE CURBS
2. CONSTRUCT 6" CURB ONLY PER CITY OF LA QUINTA STD. PLAN NO. 210
3. CONSTRUCT 6" CURB AND GUTTER PER INTERIOR CITY OF LA QUINTA STD. PLAN NO. 211
4. CONSTRUCT 6" SLOTTED CURB FOR DRAINAGE
5. CONSTRUCT 3" WIDE GUTTER GUTTER
6. CONSTRUCT CURB RAMP
7. CONSTRUCT TRAMP ENCLAVINGS
8. CONSTRUCT CONCRETE LANDING (8'-12')
9. CONSTRUCT CONCRETE CURB WELT
10. CONSTRUCT 12"x12" BRICK PAVES
11. CONSTRUCT 12" DIA. ASPHALT CURVE
12. TO BE RELOCATED AS DESCRIBED
13. INSTALL CONCRETE DRAIN PAVES TO MEET THE MFL CURVA

STORM DRAIN CONSTRUCTION NOTES:

1. INSTALL 6" HOPE STORM DRAIN
2. INSTALL 12" HOPE STORM DRAIN
3. INSTALL 18" HOPE STORM DRAIN
4. INSTALL 18" HOPE STORM DRAIN
5. INSTALL 30" HOPE STORM DRAIN
6. EXTEND EXISTING MANHOLE ACCESS SHUNT TO NEW F.S.
7. INSTALL UNDERGROUND STORM CHAMBER SYSTEM, MC-800 BY AEG, INC.
8. RELOCATE EXISTING HYDRODYNAMIC SEPTIC/ALTERNATE UNIT
9. RE-CONCRETE EXISTING LOW-FLOW DISPERSION MANHOLE
10. INSTALL UNDERGROUND CHAMBER HEADER PIPE



100 S. 0th Springs Road
 Suite 210
 Anaheim Hills, CA 92809
 714-885-0889



| | |
|---------------|--|
| DATE: | |
| SCALE: | |
| PROJECT: | |
| DRAWING FILE: | |
| PROJECT NO.: | |
| SHEET NUMBER: | |

CCD HOTEL & RESORTS
SWC FRED WARING DR. & JEFFERSON ST.
LA QUINTA, CA
PRELIMINARY GRADING PLAN

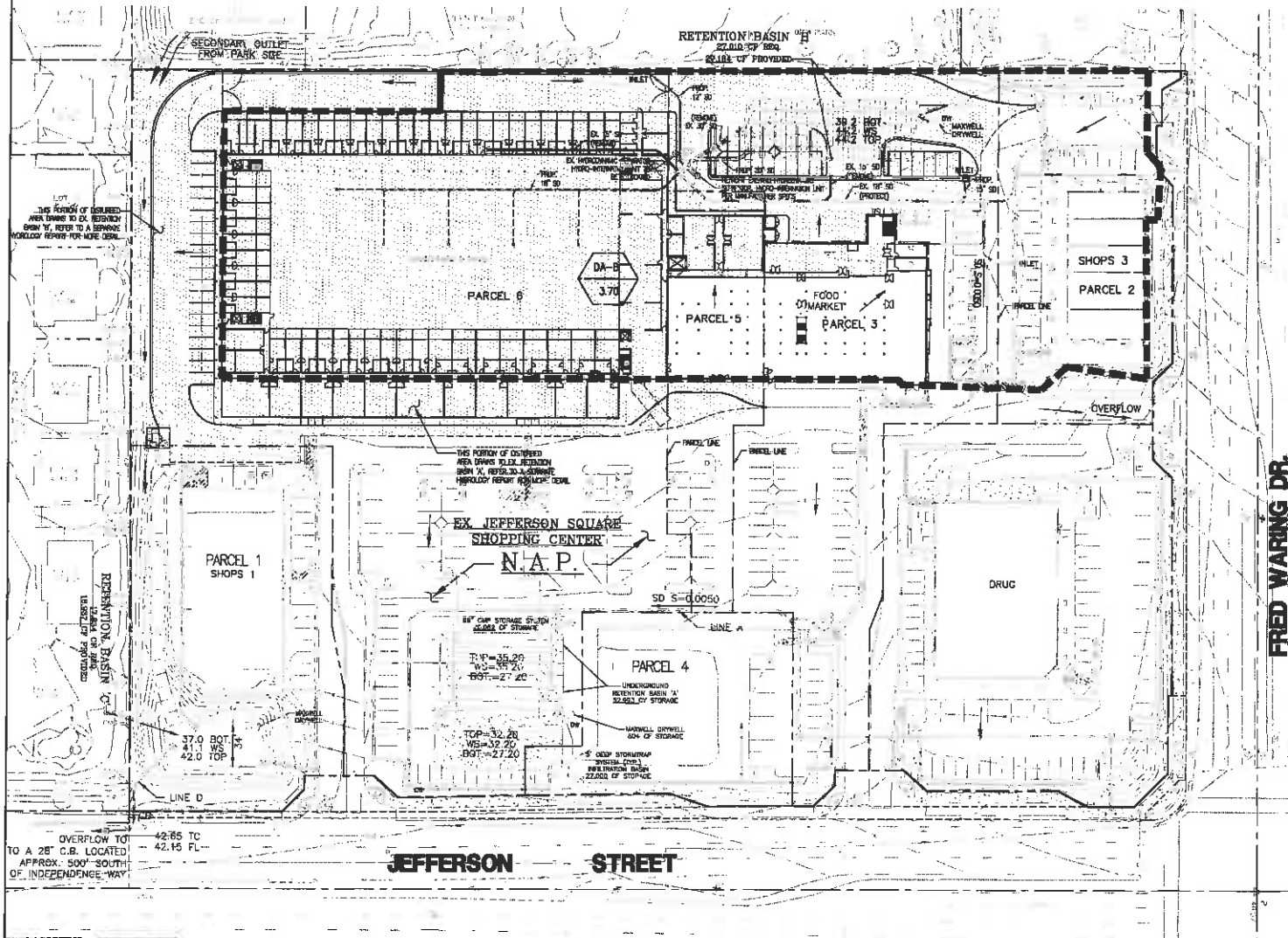
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 DATE: 03/21/18
 CHECKED BY: DR. DR. DR.
 DRAWING FILE: 1801900101
 PROJECT NO.: 18-008
 SHEET NUMBER: 1
 SCALE: PER PLAN

NOT FOR CONSTRUCTION





WQMP EXHIBIT

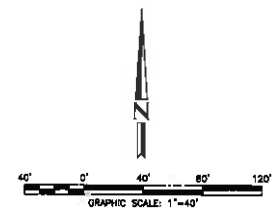
SWC OF JEFFERSON AVE AND FRED WARING DR.

LA QUINTA, CALIFORNIA



LEGEND:

-  TREATMENT AREA DESIGNATION
ACREAGE
 -  FLOW PATH
 -  DMA AREA BOUNDARY
 -  DISTURBED AREA
(3.5 ACRES)
- TOTAL PROJECT AREA = 6.4 ACRES
(PARCELS 3, 5, AND 6)



CCD HOTEL & RESORTS - LA QUINTA

WQMP EXHIBIT

LA QUINTA, CA

ORC Engineering, Inc.
Civil Engineering/Land Surveying/Land Planning

160 S. Old Springs Road
Suite 210
Anaheim Hills, CA 92808
714-685-6860

04 DEVELOPMENT REGULATIONS
Amended Specific Plan

PART I
May 2018

04
DEVEL-
OPMENT
REGS

DEVELOPMENT REGULATIONS

The development regulations contained herein provide specific standards relative to permitted land uses in addition to site design and construction regulations to be applied within the Specific Plan area. They are intended to protect the public health, safety and welfare and to create a harmonious relationship with surrounding land. In general, this Specific Plan is consistent with the CN Zone of the City of La Quinta Zoning Code unless a different standard is identified below. The proposed land uses are consistent with the NC land use designation in the City's General Plan. Should a development standard contained in this Specific Plan conflict with an equivalent standard contained in the City of La Quinta Zoning Code, the provisions of the Specific Plan shall take precedence. In instances where the Specific Plan does not address a particular regulation, the applicable portion of the City of La Quinta Zoning Code shall govern. The Community Development Director shall have the authority to approve minor adjustments during development permit review, so long as he determines such adjustments are consistent with the Specific Plan Land Use Plan.

A. PRINCIPAL USES PERMITTED

This Specific Plan shall allow all uses identified as Permitted as a principal use, Permitted as an accessory to the principal use, Permitted as a principal or accessory use if a Conditional Use Permit is approved, Permitted if a minor use permit is approved, and Permitted as a temporary use as identified in and subject to the provisions of the Neighborhood Commercial (CN) Zoning District described in Section 9. 80.040 of the La Quinta Zoning Code.

B. PROPERTY DEVELOPMENT STANDARDS

-Maximum structure height: 35 feet²

-Max Structure Height within 150 feet of Arterial Hwy: 22 feet³

-Maximum number of stories: 3

-Maximum Floor Area Ratio: 0.30

-Building Setbacks⁴
 -from Jefferson Street: 30 feet³
 -from Fred Waring Drive: 30 feet³
 -from common property line: 40 feet
 -from OS and Park Districts: 20 feet

-Landscape Setback⁵
 -from Jefferson Street: 20 feet³
 -from Fred Waring Drive: 20 feet³
 -from Open Space/Park Districts: 1 feet minimum
 -from residential areas : 15 feet

-Interior Landscape
 -parking areas: 5% of project area
 -non parking areas: 5% of project area

-Required Parking
 -Retail Stores: *One space per 300 square feet (sf) Gross Floor Area (GFA)*⁶
 -Restaurant: One space per 250 sf of GFA, when restaurant is not more than 20% of shopping center floor area.
 -Hotel: *1.1 spaces per guest room*⁷
 -A facility to accommodate a minimum of five bicycles shall be provided for any restaurant use.
 -Other Uses: The parking provisions of the La Quinta Zoning Code Section 9.150 shall apply.

2. Not including architectural appendages, such as a roof parapet or tower, up to 38 feet.

3. This does not affect the area of the proposed project but applies to other parcels contained within the previous Specific Plan (3/24/2008).

4. Number given is minimum building setback from the Street right-of-way. In addition to the required landscape setback, the building setback may contain parking, driveways and similar facilities.

5. Landscape setback shall consist of landscaped

area within the building setback. Number given is minimum landscaped area from the street right-of-way.

6. The previous Specific Plan (3/24/2008) proposed general retail development above 100,000 sq ft and thus required 1 space per 250 sq ft GFA. For general retail uses under 100,000 sq ft (as proposed in this project, 2017) the minimum parking requirement is 1 space per 300 sq ft GFA, as per Code 9.150.070

7. The minimum hotel parking requirement is 1.1 spaces per guest room, as per Code 9.150.070

05_DESIGN GUIDELINES
Amended Specific Plan

PART II
May 2018

05

DESIGN

GUIDE

DESIGN GUIDELINES

The Design Guidelines for the Specific Plan have been developed as a method of achieving a high quality, cohesive design character for the development of the proposed project in La Quinta. They provide specific design criteria for the development of the project, as well as encouraging creativity, imagination and a high level of harmony and consistency within the surrounding community. Adherence to the Design Guidelines will create a desirable asset to the community and enhance the project's overall value.

These guidelines will govern the design quality of the project for application in the following ways:

-To provide the City of La Quinta with the necessary assurance that the Specific Plan area will develop in accordance with the quality and character proposed;

-To provide guidance to developers, builders, engineers, architects, landscape architects and other professionals in order to maintain the desired design quality;

-To provide guidance to City staff, the Planning Commission and the City Council in the review of construction plans for the Specific Plan area.

A. ARCHITECTURAL GUIDELINES

The building design theme of this commercial complex strives to achieve a Mediterranean style architecture. In utilizing elements from this vernacular the complex achieves a massing and scale that is comforting and pleasing. Textured plaster, deep canopies, and trellises allow for contrast and shade, while simplified cornice detailing and the use of color unifies the different building elements within the complex. Figures 17,18 illustrate the typical building elevations and use of the vernacular to unify and provide a sense of scale for the in-line tenants. The figures also illustrate the use of the vernacular for a typical outlying pad building and how the architectural

style is continuous around the exterior of the pad building. Figure 16 shows cross sections of the site taken from various locations on the site. The elevations used for the specific plan provide a basis for acceptable materials and usage for the various buildings and do not deem to illustrate specific examples of tenants, or building occupants.

Through the use of extensive canopies, trellises, landscaping, patterned sidewalks and patios, the complex achieves a campus like environment, suitable for pedestrian movement between the various elements of the complex. (2008 SP)

Consciousness of design traditions and trends in desert architecture will inform the design parameters of Jefferson Square. This critical awareness of other approaches to desert design will ensure a comprehensive yet non-prescriptive set of architectural guidelines.

The ambition for the project's architectural guidelines is to outline the fundamental ingredients of enduring, unique design appropriate for Jefferson Square's climate and natural setting.

This approach will be governed under the hotel, retail parade and food market.

MASSING & SCALE

-Varied proportions are encouraged. Elements in facades should be spaced at regular intervals to create a visual rhythm, colonnade effect. Plaster pop-outs on the building sides, where not beneath an arcade, shall be 3'- 5' in depth, to the satisfaction of the Planning Director.

-Each building will incorporate a continuity of mass, scale and architectural features and similar detailing.

-The facade of in-line retail stores shall be off-set to help break up building mass and give the appearance of multiple buildings.

-Accent features such as medallions, awnings and color banding should be utilized encouraged, for continuity of scale between the elements buildings.

ROOF TREATMENTS

-Appropriate use of flat, hip, shed, and pitched gable roof forms are encouraged.

-Flat roofs may be used with a parapet alone, or in combination with other roof forms.

-The use of variable ridge lines on a single structure is encouraged.

-Roof pitch may vary between buildings in the complex.

-Mechanical equipment may be placed only on flat portions of roofs provided that they are screened from public view and that the screening is incorporated into building design.

-Roof pitch on any one structure should be consistent within the limitations of the material being used.

ARCHITECTURAL FEATURES AND DETAILS

-All mechanical equipment including fuse boxes, heating and cooling devices and satellite dishes shall be screened from public view. The building parapet heights shall be adjusted so that roof elements are screened from view.

-The use of curtain walls is not allowed. Separate screening walls, shall only be used as an exception, and shall be designed to utilize building materials and colors.

-Exterior walls should emphasize shadow relief using recesses, medallions, covered walkways, trellises, and landscaping where appropriate.

-Building entryways should be visually emphasized, and try to keep sense of pedestrian scale.

-Shaded walkways are encouraged in areas with high levels of pedestrian traffic.

-Conversion of first floor windows to exterior tenant entries is allowed subject to Staff approval of architectural details.

-Accent at corners of pad buildings by using small tower features is encouraged.

WALLS AND FENCES

-Walls are encouraged to use materials and colors which match or compliment associated/ adjacent buildings and context.

-Walls that create long, unbroken straight lines should be avoided when possible by varying the parapets or with use of color and accents

LIGHTING

-Exterior lighting, when used, should enhance the building design and the adjoining/ related landscape.

-Lighting standards and buildings fixtures should be of a design and size compatible with the building and adjacent areas. Exposed wall packs should be avoided.

-Lighting shall be restrained in design and excessive brightness (night glow) avoided.

-Standard design techniques should be employed to shield parking light fixtures and control direct glare and spill light emanating from these fixtures. Parking lot light poles should be equipped with a fixture and lamping that is compatible with adjacent properties, and a flush lens and should not exceed a maximum height of 18 feet above parking lot surface.

DESIGN GUIDELINES

MATERIALS & COLOURS

-The facade plays an integral role in building appearance and should use a continuous palette of similar materials and colors.

-Restraint should be exercised in the number of materials and colors selected for a given structure.

-Acceptable construction materials are steel, wood, stucco, concrete, plaster, ceramic tile, natural stone, aluminium and glass.

-Architectural details should be painted to match the facade.

-The following identifies the general colors and materials which will serve as a working palette to provide a basis of establishing architectural cohesiveness for the project (changes may occur at time of Architectural review) Trellis structures shall be color finished metal tube structures.

Paint Colors: (Manufacturer: Dunn Edwards Paint Company or equal)

Paint

1. Amber Dawn #DE2277
2. Biscuit #DE5330
3. Golden Crest #DE5353
4. Crossroads # DE5359
5. Lustrous Yellow #DE5472
6. Aloe Plant #DE5563
7. Light Aspiration #DE6185
8. Rattan Basket #DE6201
9. Calico Rock #DE6229
10. Union Springs #DE6243
11. Mesa Tan #DEC718
12. Adobe 4DEC726

Trim Colors

1. Calla Lily #DE5498
2. Marble Dust #DE6156
3. Porous Stone #DE6220

Stone

Eldorado Stone

Bouquet/ Flintstone

RoofTile

Monier Lifetile
Type: Slate
Color: Cherrywood

Metal Awnings

Berridge Double Rib Panel
Colors: Hartford Green & Colonial Red

Windows

Material: Steel or Aluminum Frames with true divided lights
Color: Ral #502 1
Glazing: Clear [Light to Medium Bronze Tint with prior written approval]

Hardscape Color Accents

Chrom&
#C-26 Antique Cork
#C-27 Westwood Brown

These conditions are applies to Parcels 4 & 7 which are currently undeveloped.

-The facade materials for the hotel, retail parade and food market development have been carefully chosen to sit harmoniously alongside the Mediterranean vernacular popular in La Quinta, whilst also being iconic contemporary and environmentally intelligent.

-The following identifies the general colors and materials which will serve as a working palette to provide a basis of establishing architectural cohesiveness for the project (changes may occur at time of Architectural review)

Mesh

Type: Stainless steel
Color: natural
Finish: Matt

Metal portecochera

Finish: Brass

Patterned Ceramic Tiles

Color: Red, Blue, White

Metal window frames

Finish: Powder coated
Colour: Varies

Metal Screen

Color: Dark brown

Concrete perforated blocks

Color: Light Grey

Cement Render

Color: Pink tinted, White

Broken Tiles

Color: Varies

Fabric curtains

Colour: White

Metal Balustrade

Color: Brown

DESIGN GUIDELINES

SUSTAINABILITY

Sustainable design adopts passive, low energy strategies to operate the building.

The project will prioritise passive methods of cooling, ventilation and shading which have governed the design of low-energy, sustainable desert buildings for centuries, including;

- natural wind ventilation
- solar panels for electricity production
- materials with high thermal mass for heat retention and release
- low energy water pumps and water recycling units

The project will harness natural ventilation driven by the prevailing wind. Differential temperatures created by a building fabric with high thermal mass also drives natural ventilation, and complements an efficient distribution of cooling vents across the building.

By utilising natural ventilation, recycling water and producing efficient on-site energy through solar panels the project will become an exemplar of global sustainable design in the heart of La Quinta.

These low energy production and conservation strategies will supplement existing utilities infrastructure at Jefferson Square: a strategy for their integration into the existing utilities plan will be developed with civil and environmental engineers.

LIGHT AND SHADE

The project will adopt a thorough solar shading strategy, which will be essential to mitigate overheating and will augment the environmental performance of the buildings' materials.

Precedents of successful desert shading strategies around the world range from filigree timber shading slats, to adjustable metal louvres which adapt to the changing sun position throughout the day.

The project's approach to modulate natural light and prevent overheating will be defined by the solar path across the site. The project's south facing facade will combat the high midday sun whilst the east and western facades will block low-oncoming rays from the morning or late-afternoon sun.

The project's precise shading strategy will be developed with environmental consultants and approved by the City Council during design reviews.

ICONIC DESIGN

Iconic design will complement the sophisticated environmental and material strategies to elevate the project to become a 'gem in the desert'; and located just beyond the new I-10 interchange, the proposed development will announce the gateway to La Quinta.

The project will create a unique atmosphere, memorable photo opportunities and become a landmark development to celebrate La Quinta's heritage.

The project will employ architecture with a distinctive, playful character that will embrace the creative design ideas that have made hospitality and retail developments successful in Palm Springs.

The strength of hospitality and retail development at Jefferson Square will be reinforced by iconic design: the project will seize the opportunity to set global design trends within the heart of La Quinta.

EXPERIENTIAL DESIGN

Allied with the broader environmental and architectural guidelines is the project's strategy for the more intimate pedestrian scale.

The project will choreograph unique experiences through framed views, material accents and sensitivity to the human experience of the site.

This attention to the architectural detail will ensure the project is coherent in quality and ambition across all scales of the development.

DESIGN GUIDELINES

B. SIGN GUIDELINES

A detailed sign program for the Specific Plan area will be submitted under a separate sign permit subsequent to Specific Plan approval. The developer shall secure the sign permit from the City of La Quinta Building and Safety Department by submitting three (3) copies of the fully dimensioned scaled drawings as follows:

- a) A site plan showing the location of the occupant space on the site.
- b) An elevation of the occupant space drawing to scale and showing sign placement and occupant space width.
- c) A detailed elevation of the sign drawn to scale and showing all colors, materials, dimensions and copy.
- d) Fabrication and installation details, including structural and engineering data, UL electrical specification, and type and intensity of illumination (for electrical signs).
- e) Any other drawing, details and information as required by the City of La Quinta.

Since the Jefferson Square Specific Plan site is located at a secondary gateway into the City of La Quinta, the project will provide an approximate 468 square foot area at the northeast corner of the site for a City monument sign. The design and ultimate construction of the City's monument sign will be the City's responsibility, and will be completed subsequent to development of the Specific Plan at the City's discretion. Landscaping and continued landscape maintenance within the sign area shall be the responsibility of the project's Building Management Association.

C. LIGHTING GUIDELINES

-Exterior lighting, when used, should enhance the building design and the adjoining landscape.

-Lighting standards and building fixtures should be of a design and size compatible with the building and adjacent areas.

-Lighting shall be restrained in design and excessive brightness (night glow) avoided.

-Standard design techniques will be employed to shield parking light fixtures from adjacent land uses and control direct glare and spill light emanating from these fixtures.

-Parking lot light poles will be equipped with a recessed lamp and a flush lens and not exceed a maximum height of 18 feet throughout the site.

-The average foot candles (fc) for the project site would be 1.8 fc, with a maximum of 4.9 fc and a minimum of 0.7 fc.

D. LANDSCAPE GUIDELINES

The guidelines presented herein are not intended to discourage creative design or individuality. Rather, they are intended to assist in providing the continuity and desired image which will make the proposed project a unique and special commercial community center.

General Guidelines

-Groundcovers should be used to enhance the appearance of the project and protect soil from erosion. Acceptable groundcover includes gravel, rocks or living plant materials. Tree bark and shredded wood products, which are lightweight and subject to wind and water erosion, are prohibited.

-Water efficient landscape materials, including native plants, with drip

irrigation should be used wherever possible as a means of conserving scarce water resources and minimizing maintenance costs.

-Landscaping should be designed to screen above ground utility equipment, service areas and trash containers. Homogenous, visually subtle plant materials should be selected for use in these areas in order not to focus attention on the objectionable items.

Entryways

-Areas which serve as a focus of vehicular traffic, such as project entries, should be accented by the use of colorful shrubs and ground covers for enhanced visual interest. These shrubs and ground covers may include Bougainvillea, Purple and gold Lantana, Verbena, and Angelita Daisy.

-Project entries should utilize vertical accents such as palm trees to provide a sense of arrival to the facility with California Fan Palms of varying heights.

-Plant materials at project entries should be located so as to avoid interfering with motorist sight lines. Plant combinations shall leave an area from 30 inches above grade open to allow for unobstructed vision of approaching vehicles and pedestrians.

Buildings

-Plant materials should be used to soften long stretches of blank wall surface.

-Landscape materials shall be selected with colors and textures which enhance architectural elements.

Streetscapes

-Streetscapes should incorporate informal masses of trees and shrubs.

-Streetscapes fronting the project should maintain a plant palette and

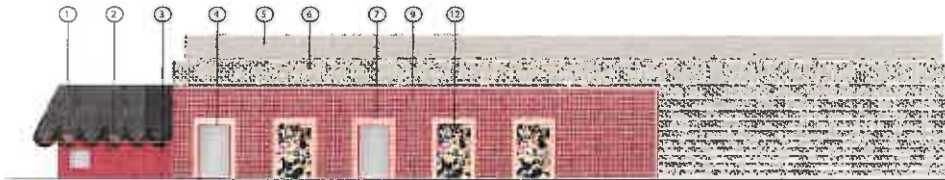
design concept which is compatible with surrounding finished street frontages.

Parking Lots

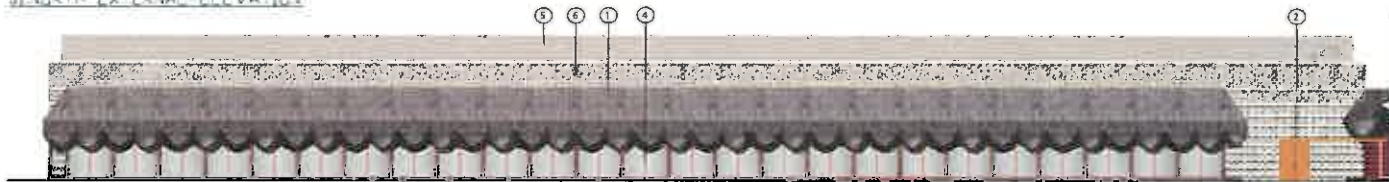
-Plant material will consist of Lantana groundcover, Palo Verde and Desert Museum trees, and Desert Cassia and Regal Mist, shrubs which will allow sight line over shrubs yet provide islands that are green.

-The design of parking lots should include provisions for canopy trees to provide shade for parked vehicles.

-Parking areas should be screened from adjacent roadways by the use of low walls, landscaping, or berms.



01 NORTH EXTERNAL ELEVATION



02 EAST EXTERNAL ELEVATION



1 Stainless steel mesh
Colour: natural
Finish: Matt



2 Metal perforated mesh
Finish: brass



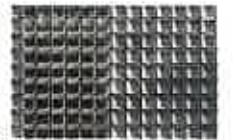
3 Red ceramic tiles



4 Dark metal mesh
Colour: black
Finish: matt



5 Dark metal mesh
Colour: black
Finish: matt



6 Light gray perforated metal mesh
Colour: light gray
Finish: matt



7 Solid orange



8 Solid light gray



9 Patterned ceramic tiles
Colour: red, blue, white



10 Dark metal mesh
Colour: black
Finish: matt



11 Fine metal balustrade
Colour: Iron



12 Mosaic broken tiles
Colour: Various

PROJECT NAME
JEFFERSON SQUARE

DRAWING TITLE
NORTH AND EAST
ELEVATION

SHEET
JSD PARTI (SHEET 01)

NOTE:

REVISION
A JSD AMENDED S.P

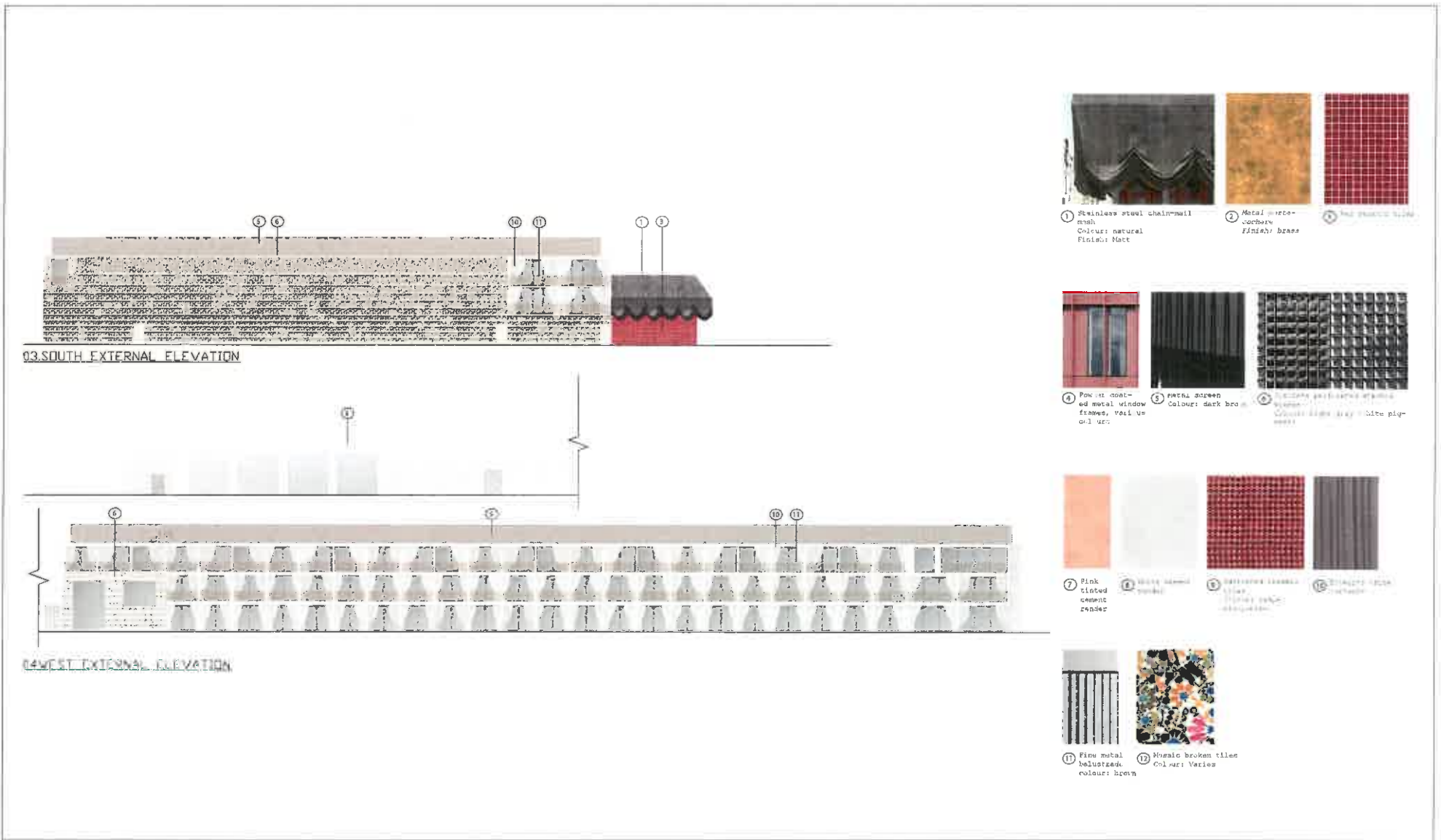
DATE
05.18.18

SCALE
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1/40"=1'-0" @ A1



CLIENT
CCD HOTEL & RESORTS
Rancho Mirage
41750 Rancho Las Palms Drive Suite
0-3, Rancho Mirage, CA 92270
Tel: +1 213 710 5810

PARTI



PROJECT NAME
JEFFERSON SQUARE

DRAWING TITLE
SOUTH AND WEST ELEVATION

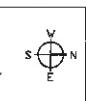
SHEET
JSQ PART1 FIGURE 18

NOTE:

REVISION
A JSQ AMENDED S.P

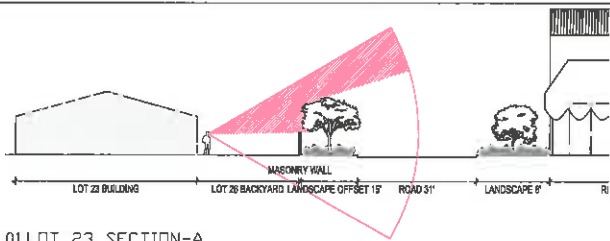
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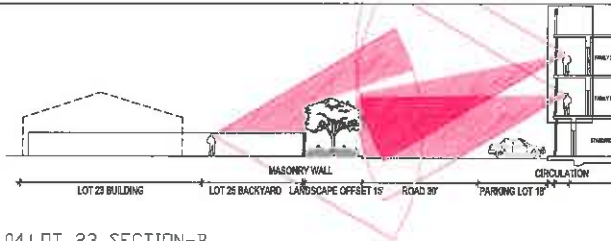


CLIENT
CCB HOTEL & RESORTS
Riverside Ridge
11755 Riverside Lane, Riverside, CA 92504
Tel: 951-515-1100

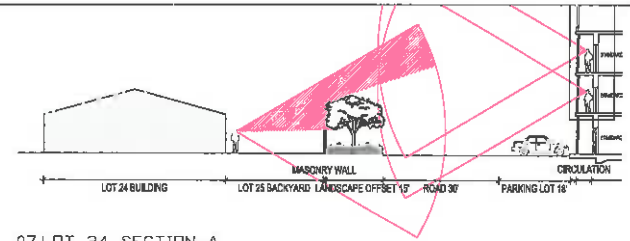
PART1



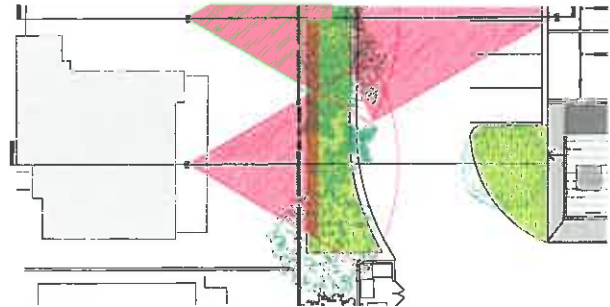
01.LOT 23 SECTION-A



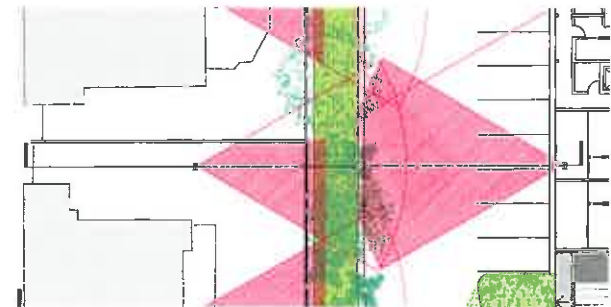
04.LOT 23 SECTION-B



07.LOT 24 SECTION-A



02.LOT 23 PLAN-A LEVEL 3



05.LOT 23 PLAN-B LEVEL 3



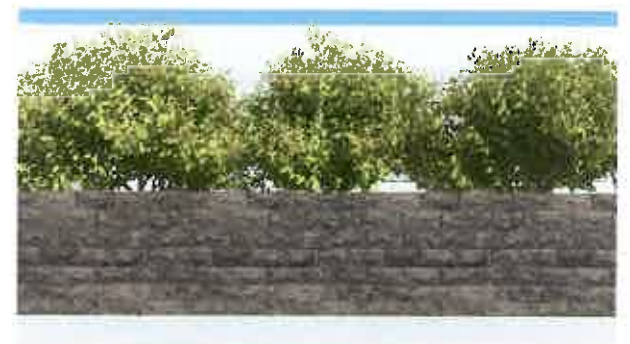
08.LOT 24 PLAN-A LEVEL 3



03.LOT 23 VISUALIZATION VIEW 01



06.LOT 23 VISUALIZATION VIEW 02



09.LOT 24 VISUALIZATION



PROJECT NAME
JEFFERSON SQUARE

DRAWING TITLE
SITE_SECTIONS_RESID

SHEET
JSQ-PARTI-DR-PA-2001

NOTE:

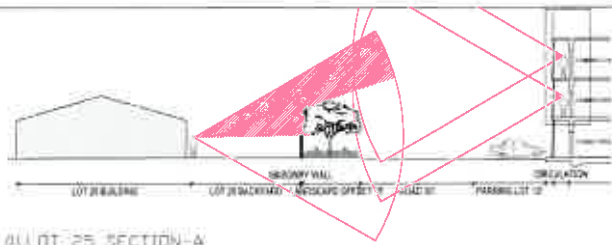
REVISION
A SITE DEVELOPMENT PERMIT 23.03.2018

SCALE
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1/32"=1'-0" @ A3

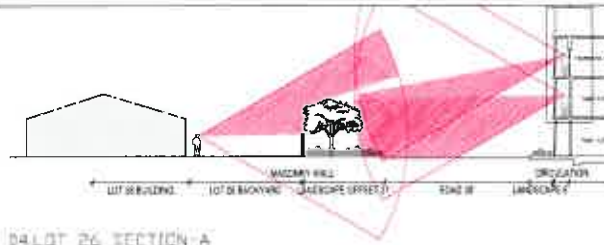


CLIENT
CCD HOTEL & RESORTS
Rancho Mirage
43750 Rancho Las Palmas Blvd Suite
D-3, Rancho Mirage, CA 92270
M + 1 213 718 5610

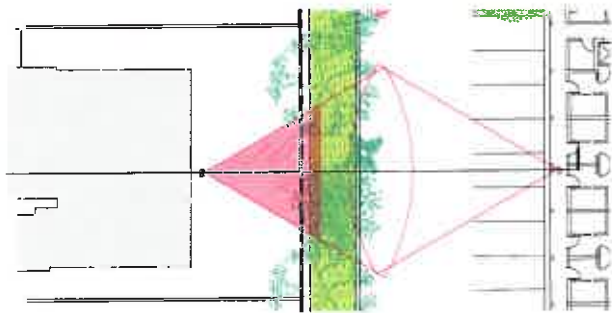
PARTI



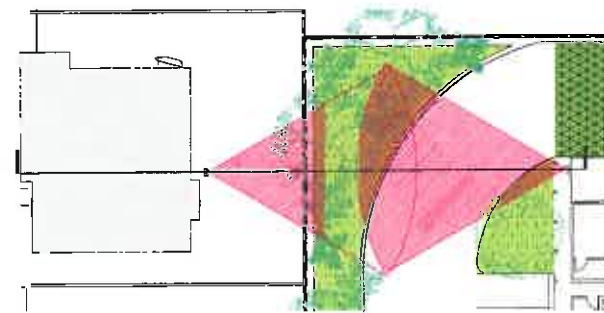
01 LOT 25 SECTION-A



04 LOT 26 SECTION-A



02 LOT 25 PLAN-A LEVEL 3



05 LOT 26 PLAN-A LEVEL 3



03 LOT 25 VISUALIZATION



06 LOT 26 VISUALIZATION



PROJECT NAME
JEFFERSON SQUARE

DRAWING TITLE
SITE_SECTIONS-RESID

SHEET
JQS-PART1-DR-PA-EDGE

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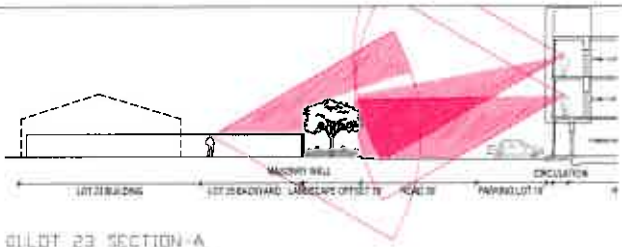
REVISION
A SITE DEVELOPMENT PERMIT 23.03.2019

SCALE
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1/32"=1'-0" @ A3

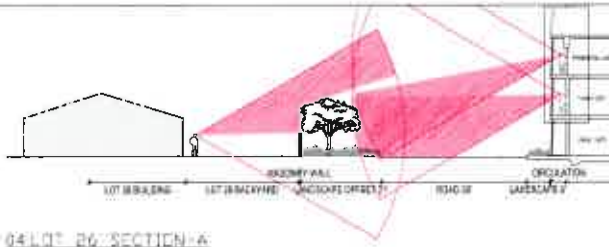


CLIENT
CCO HOTEL & RESORTS
Bryan Wang
10250 Avenida Las Palmas, Suite 400
Irvine, California, CA 92618
P: +1 949 266 5865

PARTI



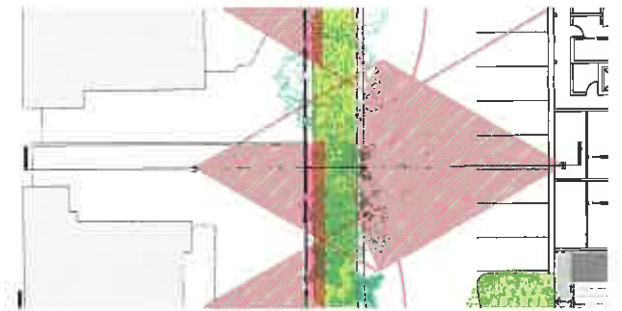
01.LOT 23 SECTION-A



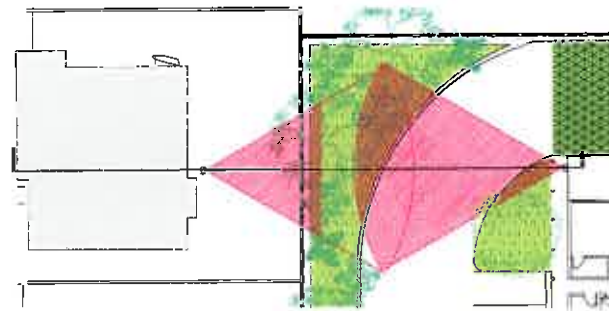
04.LOT 26 SECTION-A



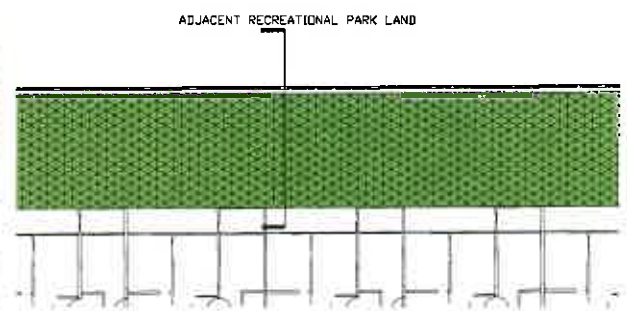
07.WEST PATIO/BALCONY SECTION-A



02.LOT 23 PLAN-A LEVEL 3



05.LOT 26 PLAN-A LEVEL 3



08.WEST BALCONY VIEW PLAN-A LEVEL 3



03.LOT 23 VISUALIZATION VIEW 01



06.LOT 26 VISUALIZATION



09.WEST BALCONY VISUALIZATION



- LOT 26 SECTION-A
- LOT 25 SECTION-A
- LOT 24 SECTION-A
- LOT 23 SECTION-B
- LOT 23 SECTION-A

PROJECT NAME
JEFFERSON SQUARE

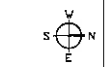
DRAWING TITLE
SITE_SECTIONS-HOTEL

SHEET
JSS-PARTI-DR-PA-0013

NOTE:

REVISION
A SITE DEVELOPMENT PERMIT 23.03.2018

SCALE
1/16"=1'-0" @ A1
1/32"=1'-0" @ A3



CLIENT
CCD HOTEL & RESORTS
Randy Wong
14700 Ramona, San Ramon, CA 94583
916-736-1000
© 2018 CCD Hotel & Resorts

PARTI

00_OPERATIONAL GUIDELINES
Amended Specific Plan

PART I
May 2018

06

OPERA-

TIONS

OPERATIONAL GUIDELINES

A. HOURS OF OPERATION

The retail strip and food market on site will operate from 6: 00 AM to 12: 00 AM, Monday through Sunday.

The hotel will also operate for public use during the same hours. For hotel guest will be able to move freely 24 hours a day seven days a week.

The Drug Store on parcel 1 is open 24 hours a day, seven days a week.

B. TRANSPORTATION DEMAND MANAGEMENT

According to the guidelines contained in the City's Transportation Demand Ordinance (Section 9. 180.030), this project is required to make provisions for transportation demand management. In response to this requirement, the project shall incorporate the following measures:

-The project shall make provisions for bicycle racks in accordance with City Zoning Code Section 9.150.050.D.3.c.

-The project shall identify a Transportation Demand Coordinator to promote participation in TDM programs among employees.

-The TDM Coordinator shall encourage ride sharing, bus ridership, telecommuting, flexible work schedules, and other TDM programs as feasible and appropriate.

C. MAINTENANCE

Maintenance of buildings, parking facilities, common walkways and landscaped areas, sewers, drainage facilities, utilities, and any other improvements not dedicated to public use shall be maintained by the project's Building Management Association. On site facilities and landscaping shall be maintained in a clean, attractive and safe condition in accordance with City regulations.

LA QUINTA **CLUBHOUSE**

PARTI

LA QUINTA

CLUBHOUSE

Architecture Design, Planning Submission
Issued March 2018

CONTENTS

INTRO • 007-016

- CONTEXT
- AMBITIONS
- LAYOUT

HOTEL • 017-041

MARKET • 042-052

RETAIL • 053-057

MATERIALS • 058-067

01_Introduction
La Quinta Clubhouse

PART I
March, 2018

01

INTRO

An introduction to the development ambitions at Jefferson Sq, La Quinta.

Context

Introduction

The 'La Quinta Clubhouse' is a mixed-use scheme, including: a 160 room hotel and associated facilities; food market; and retail strip. The proposal is situated at Jefferson Square in central La Quinta, in the Coachella Valley.

The La Quinta Clubhouse proposal sits on a currently empty plot in Parcel 6, and utilises the existing buildings on parcel 5 and 3.

Other program situated on Jefferson Square is outlined bellow.

Car park

- 362 spaces

Parcel 1

- CVS Pharmacy

Parcel 2

- Fitness Centre
- Palm Nails
- Ferry Physical
- Eclipse dentistry

Parcel 3 + 5

- Proposed food market and BoH

Parcel 4 (undeveloped)

Parcel 6

- Proposed Hotel and retail

Parcel 7 (undeveloped)

(1) *Rendered roof plan, PART I*



Ambitions

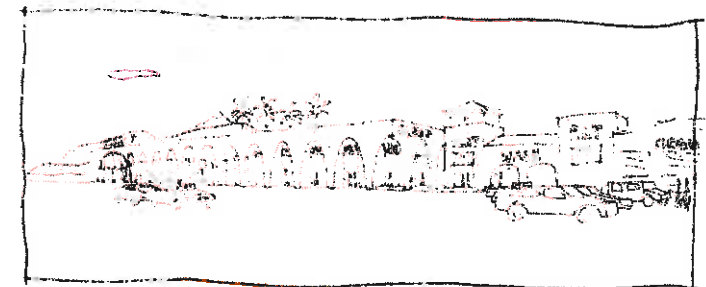
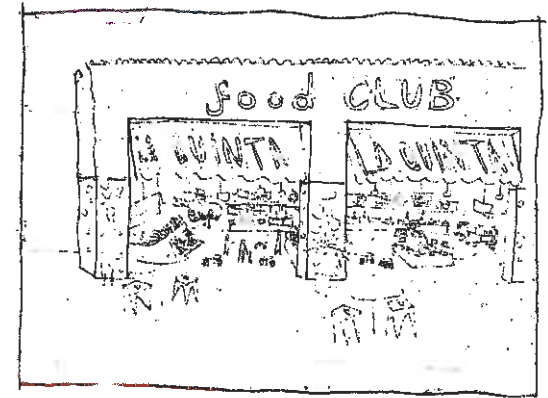
Intro

The La Quinta Clubhouse proposal is a synergy between different programs. A 160 room hotel is at the heart of it - containing a 'clubhouse' for eating and drinking, as well as gym, spa and conferencing facilities.

The design has been developed in innovative ways to inject new life into the hotel typology: smaller rooms with large, active social spaces provide a livelier and more interactive experience between guests; unique design will be a refreshing alternative to generic and soulless hotel stays; finally, a direct connection to a new food market will allow the hotel to provide a more varied and exciting food offering than most other hotels.

The proposed food market will be the largest venue of its type in the desert cities. Within it will be restaurants, bars, speciality stalls, deli-counters and grocery stores mixed together in a lively but unified way.

Finally, a high-end retail strip with a covered walkway for window-shopping provides a more 'boutique' browsing experience as opposed to the large scale retail units that are more familiar in the desert.



Layout

Introduction

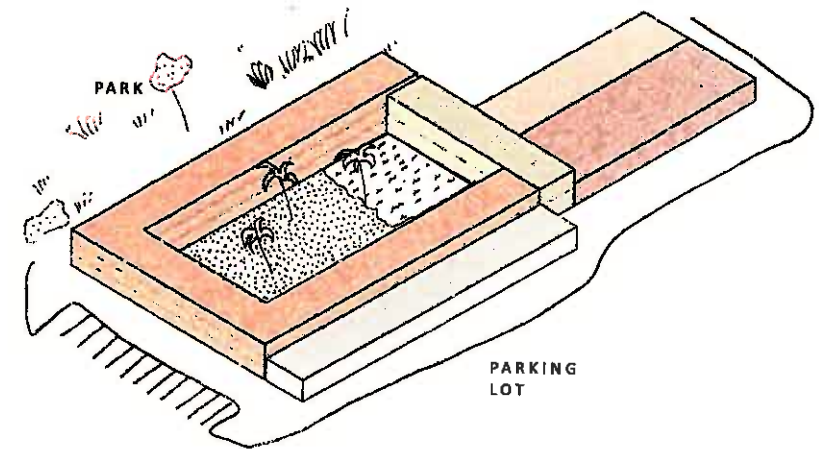
These proposals bring together the different ambitious programs into an exciting mixed-use solution that will deliver energy and life to Jefferson square.

The La Quinta Clubhouse organizes 160 rooms and suites around a central, leisure courtyard. All the hotel facilities are focused into a concise central block containing the 'clubhouse' (which serves guests food and drink), spa, gym, and conferencing facilities. It is adjacent to the public Food Market and Back of House, making it easy to service by hotel staff and food market vendors. On the other side, it overlooks and spills out onto the large hotel courtyard.

The food market sits alongside the Clubhouse, with a plaza in front containing tables and chairs that animate its frontage. Behind the food market is the Back of House and loading bays that connect up the hotel functions without being seen.

Finally, a high-end retail strip lines the Eastern side of the hotel with shop fronts animating this public edge.

(3)

**SLEEP**

- 160 Rooms and Suites
- Three sided courtyard
- Simple arrangement
- Generous terraces

- 7-15 high end shops

- Entrance
- Hotel shop
- 'Clubhouse'
- Gym and yoga
- Spa
- Ballroom
- Breakout rooms
- Offices
- Roof terrace
- Wedding lawn

EAT

- 7 restaurants
- 6 'hole in the wall' snacks
- 2 grocery stores
- 20 deli stalls
- 300+ seated capacity

WORK

- Plant
- Storage
- Delivery
- Laundry



(4) *View from carpark. PART I*

02_Hotel
La Quinta Clubhouse

PART I
March, 2018

02

HOTEL

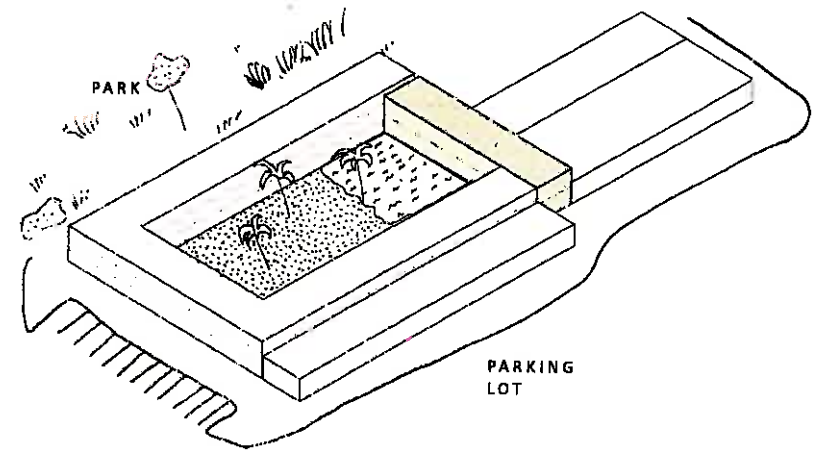
The strategic and spatial design of the hotel.



(1) *View of Hotel Entrance, PART I*

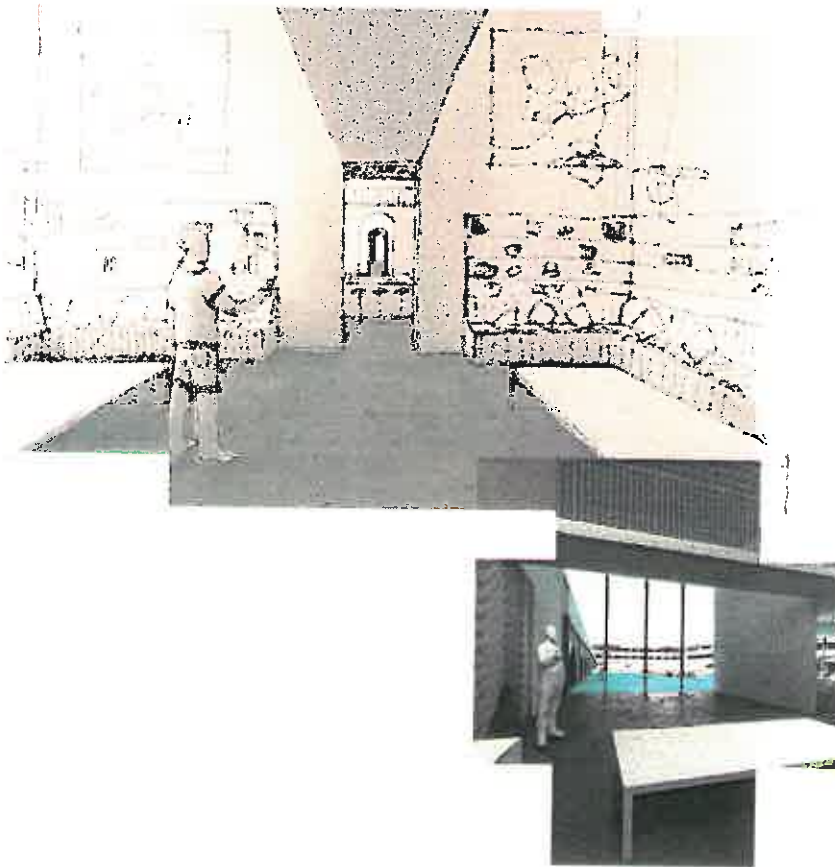
Clubhouse Hotel

The 'Clubhouse' is the central hub of the hotel; it lines one side of the courtyard, looking out over the pool. 'The Clubhouse' is for guests staying in the hotel, as well as external day visitors. Rather than distinct restaurants, bars and lobbies (as is typical with hotels), a new concept is proposed. The 'Clubhouse' provides different rooms - each with a different character and environment. Guests can sit anywhere to eat, drink or relax. The variety of Clubhouse rooms are outlined in the following pages.



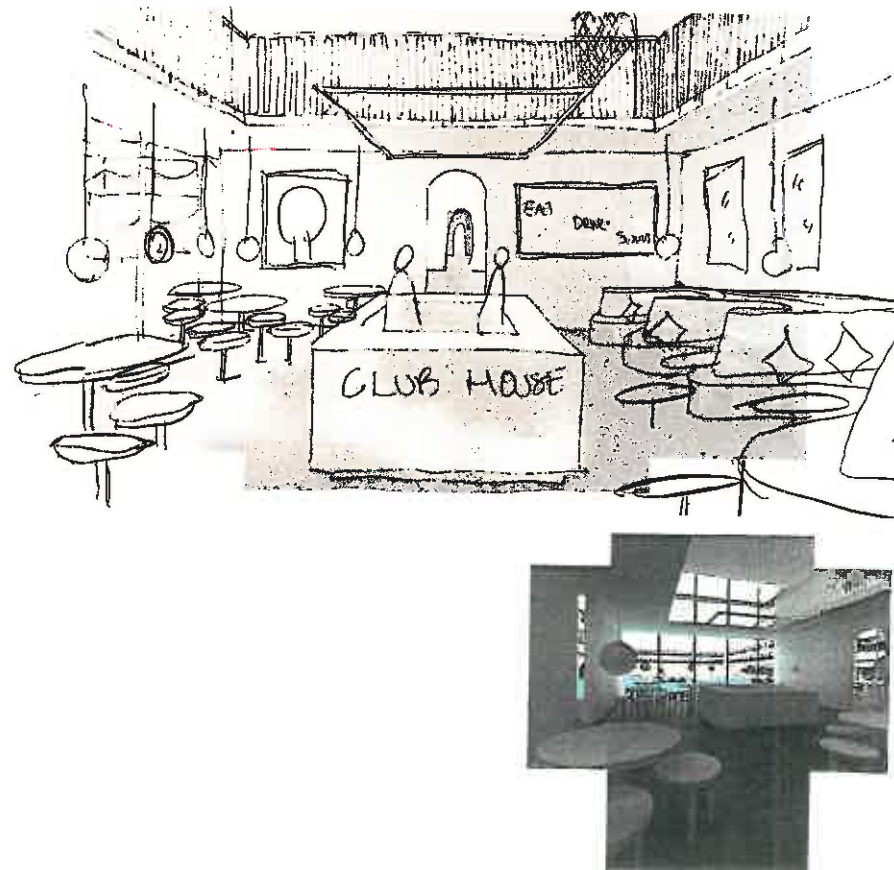
The Blue Room

An intimate space with grand ceilings sets the tone for a boutique and domestically scaled Clubhouse. Books line the walls and views are framed across the pool towards the courtyard. The blue room is a cosy place to relax, or have a drink in the evening. A central opening allows a striking view through the entire Clubhouse through which you can see the variety of spaces ahead.



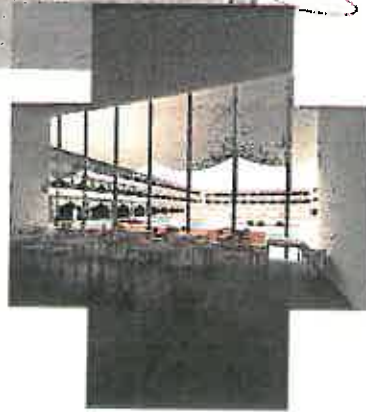
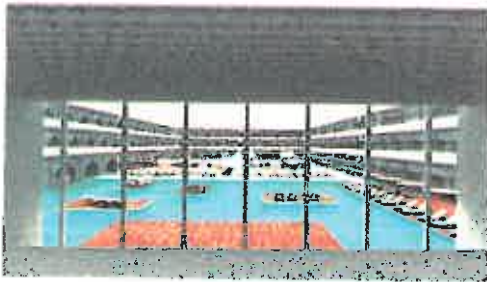
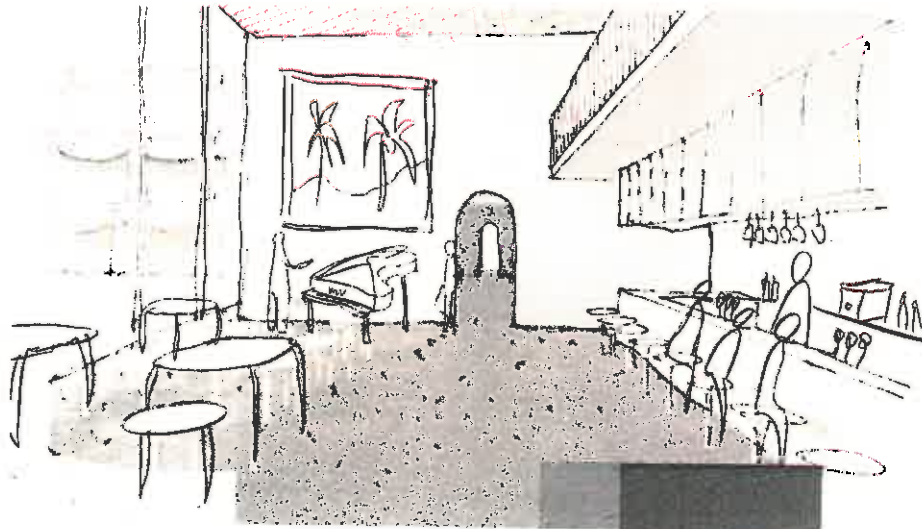
The Red Room

The red room is a two tiered space directed towards the large windows looking out over the pool. Two levels of seating that wrap around a central bar allow the space to feel active. If guests want something quieter, they can grab a drink from the central bar and move to the quieter Blue room. With light pouring in during the day, it is also a great place to relax in the afternoon.



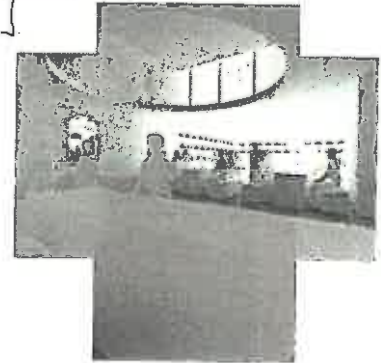
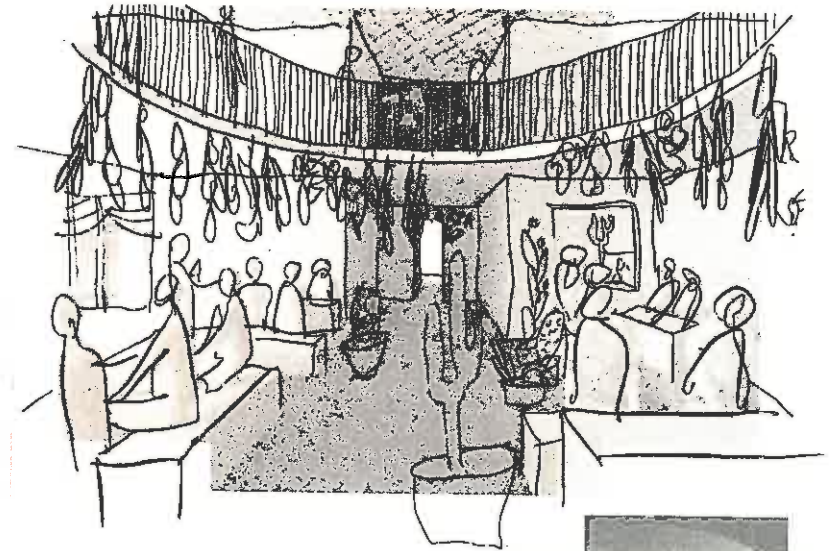
The White Room

The white room is the central room - it is double height with large open-able doors out onto an outdoor seating area surrounded by the pool. This large, dramatic space feels light and lively, with the potential for music and dancing in the evenings, and tables for pool-side drinks and dining all day.



The Green Room

The green room has a conservatory feel. Bright and airy, and scattered with indoor plants, it is used as a spill out room from the main dining space during breakfast. It provides a great space for coffees and a bit of work during the day. Following on from the Green Room is the Wellbeing Centre, walking through the leafy conservatory sets the tone for an afternoon at the spa, and is a relaxing place to have some tea post massage or yoga.



Conference Facilities

Hotel

Above the Clubhouse there are conference and event facilities with expansive views across the pool and courtyard. Connected to the main event space is a roof terrace and herb garden. This roof terrace includes a wedding lawn with views over the park towards the iconic desert mountains.



Courtyard Hotel

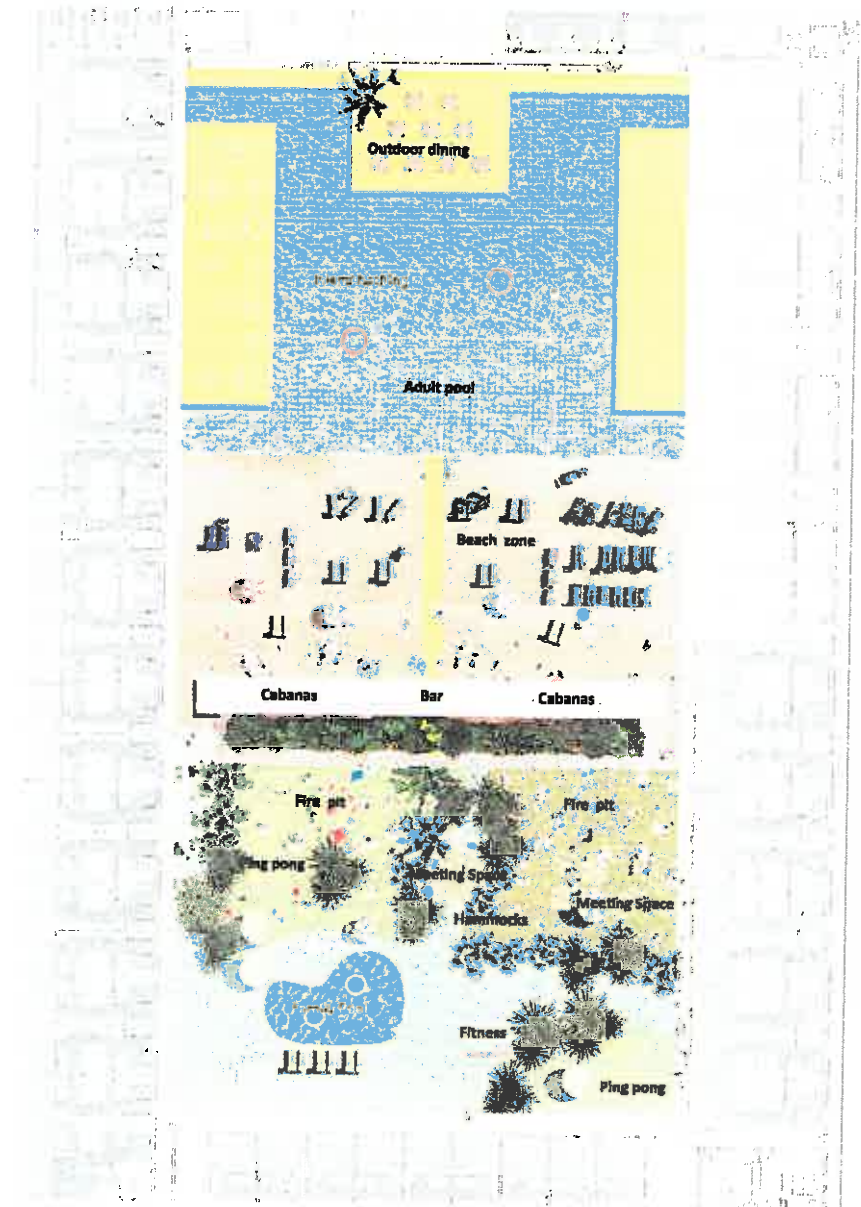
Within the hotel sits a large courtyard and leisure facility. The proposal seeks to emphasise the size of the courtyard by making the pool and landscaping full width and length.

At some points, the water extends almost up to the colonnade, allowing the building to reflect creating a dramatic relationship. Overhanging the pool is an exterior dining space, and within the water are areas for seating and sunbathing (seemingly floating). These gathering spots allow social spaces within the water.

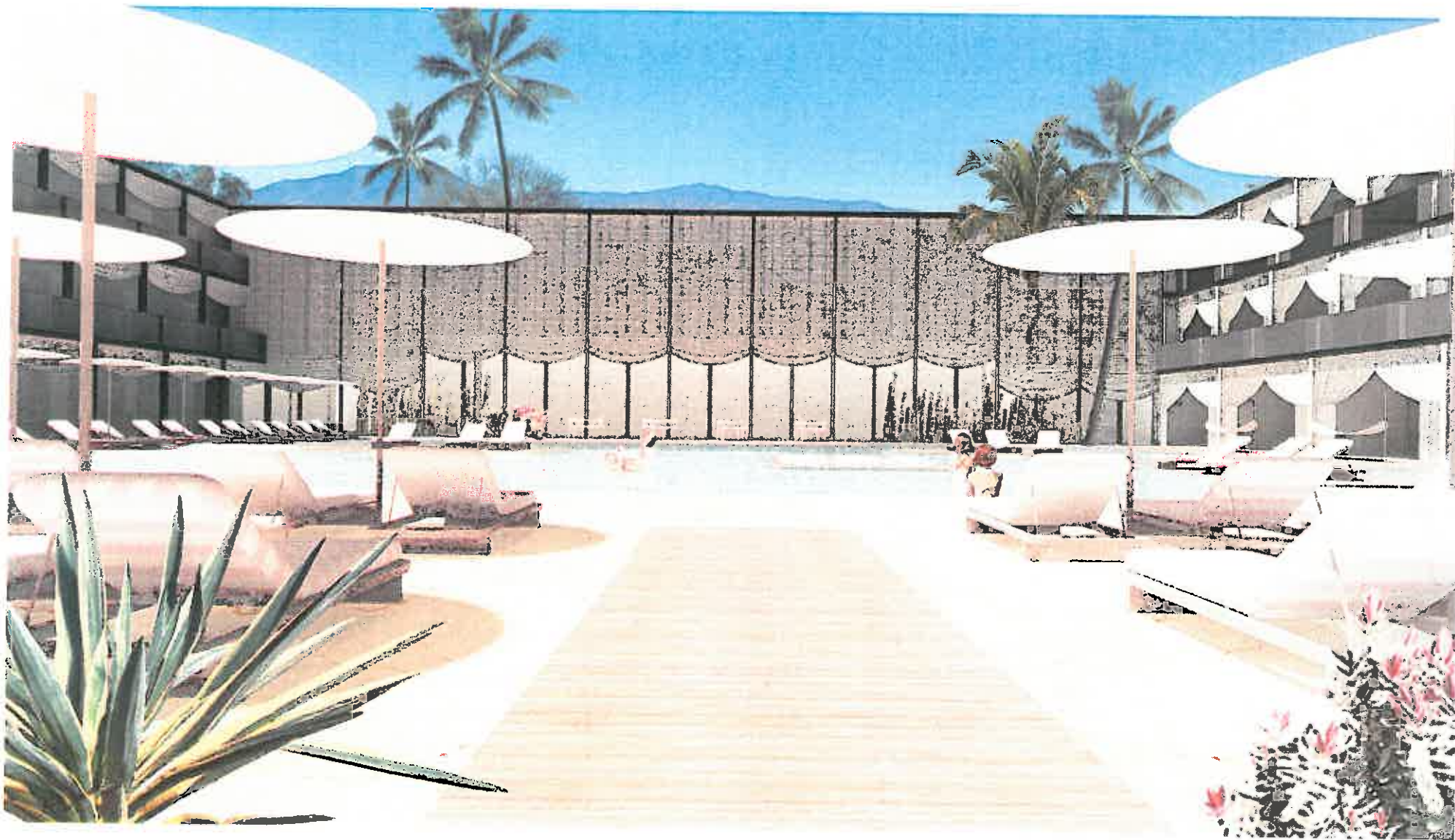
On the Western, more shaded side, is a kid's pool and gardens. In the middle is a flexible space to be used for specific occasions and events. These may include; outdoor dining; events or weddings; dj's and discos; or sports games. During the day it will be laid out with sunbeds.

Finally, planting will be kept low and varied (with only a few palm trees) to maintain views across the dramatic space.

(1) *Rendered courtyard plan, PART I*



(1)



(2) *Rendered courtyard visualisation*, PART I

Layout

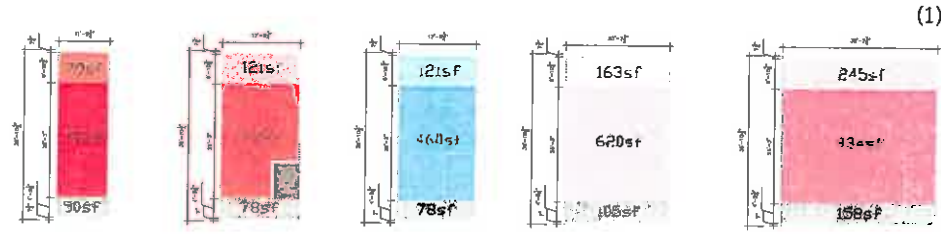
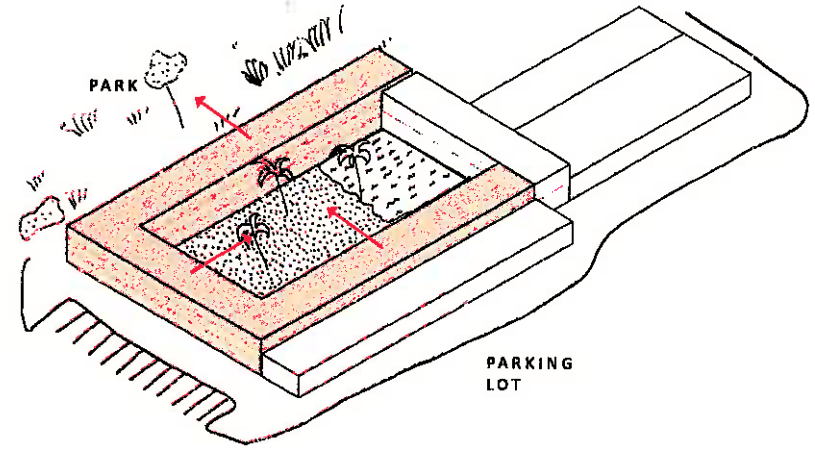
Hotel

The 160 guest rooms are presented in this chapter. They break down as;

- 90 King rooms
- 47 Double Queen rooms
- 6 Family suites
- 8 Cabana Pool suites
- 8 One bedroom suites
- 1 Presidential Suite

The Cabana pool suites are in the South Eastern side of the courtyard to benefit from afternoon sun and proximity to the bar and clubhouse facilities.

The other suites are all positioned on the 3rd floor overlooking the park, to benefit from the best mountain views.



140 Standard rooms 6 Family Suites 8 Cabana Suites 6 King Suites 2 Queen Suites 1 Presidential

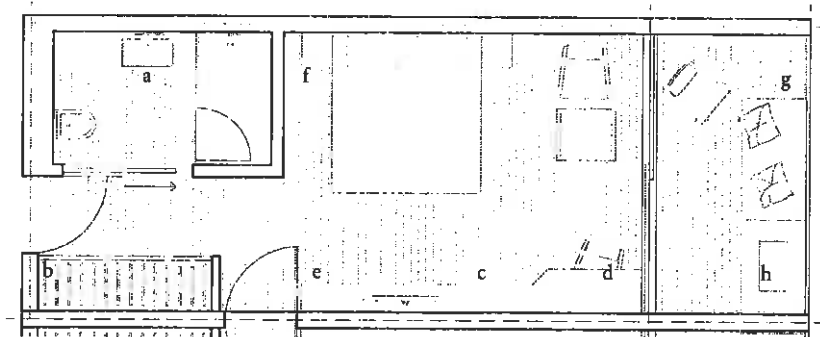
Rooms

Hotel

All rooms are generous and well proportioned, and they have been designed sustainably to make best use of the desert climate. Large private outdoor loggia adorn every room, these lounges feature outdoor curtains and fans to keep them cool and protected from the sun. Deep terraces allow for large glazed doors into the rooms, maximizing natural light while minimizing the heating effect of direct sunlight. These design features will reduce the need for mechanical lighting and cooling when compared with a traditional room design.

137 standard rooms benefit from these outdoor balconies, large showers and king-sized beds (or double queen). The remaining 23 suites differ in size and amenities; Cabana pool suites are adjacent to the pool; family suites contain a bunk-room for young children; and the larger suites have lounges and generous bathrooms.

Room plan: Standard room (300sqft)



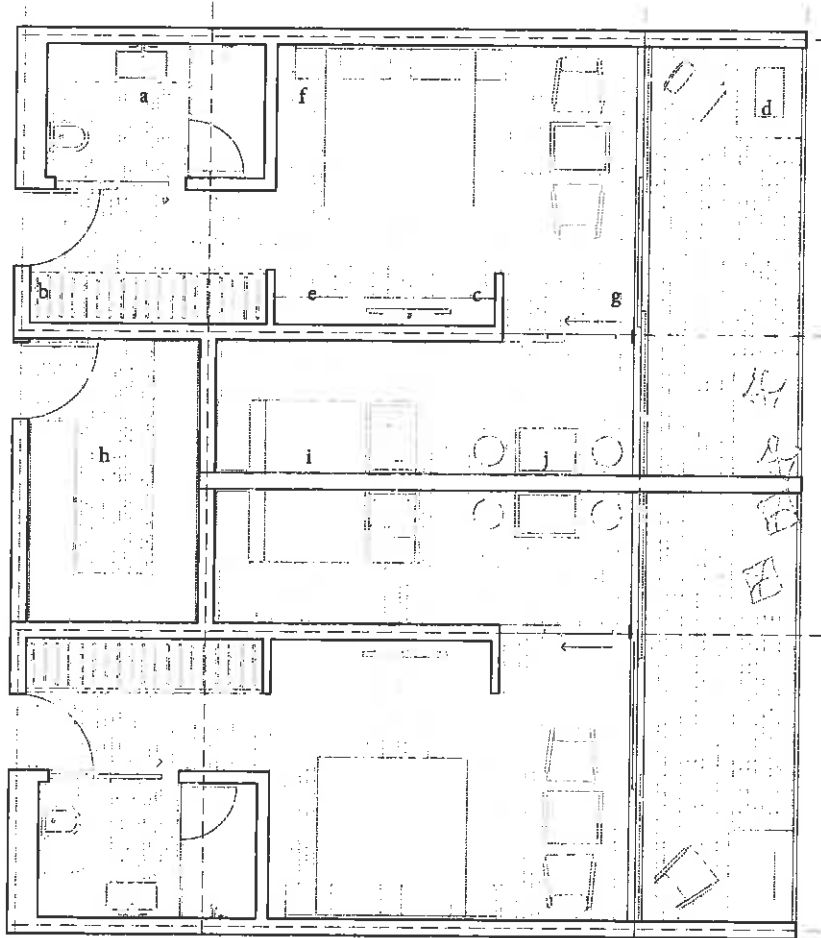
- a) Large Sink + Shower
- b) Closet
- c) Bar
- d) Dressing Table
- e) Media area
- f) QQ or King arrangement
- g) Curtains
- h) Fire pit



(3)

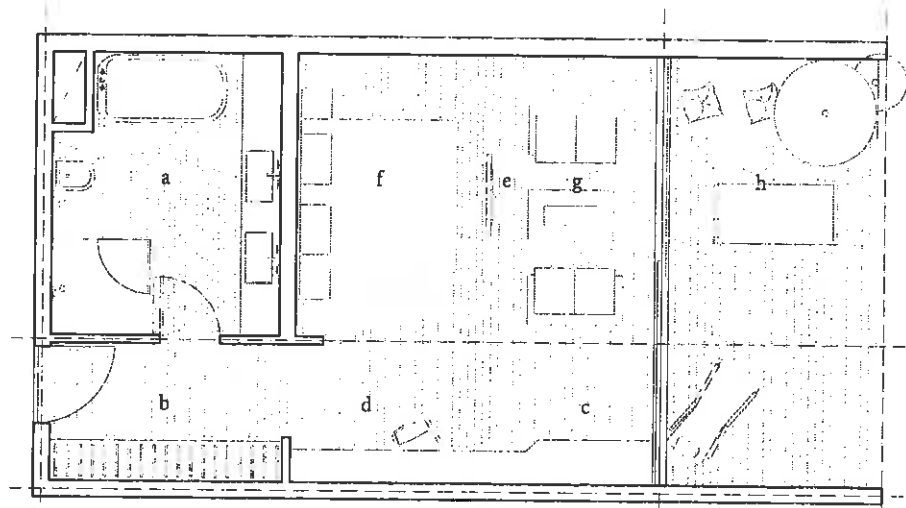
(3) *Rendered courtyard visualisation. PART I*

Room plan: Family Suite (410sft)



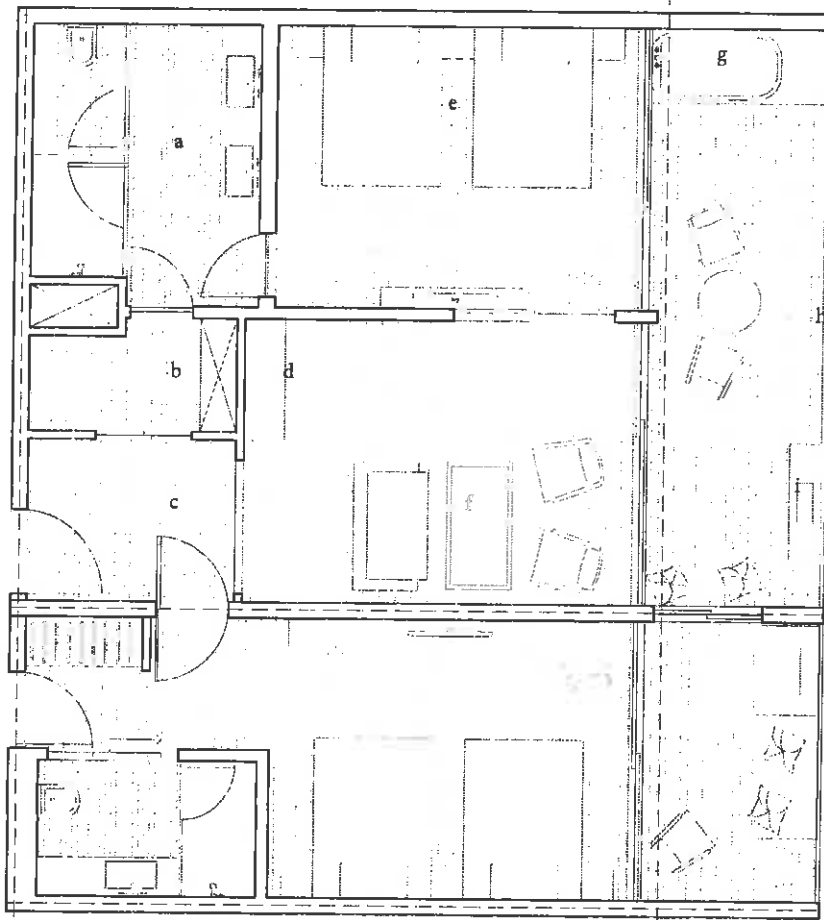
- a) Large Sink + Shower
- b) Closet
- c) Bar
- d) Fire pit
- e) Media area
- f) QQ or King arrangement
- g) Curtains
- h) Maids Room storage
- i) Bunk bed
- j) Play area

Room plan: Cabana Pool Suites (450sft)



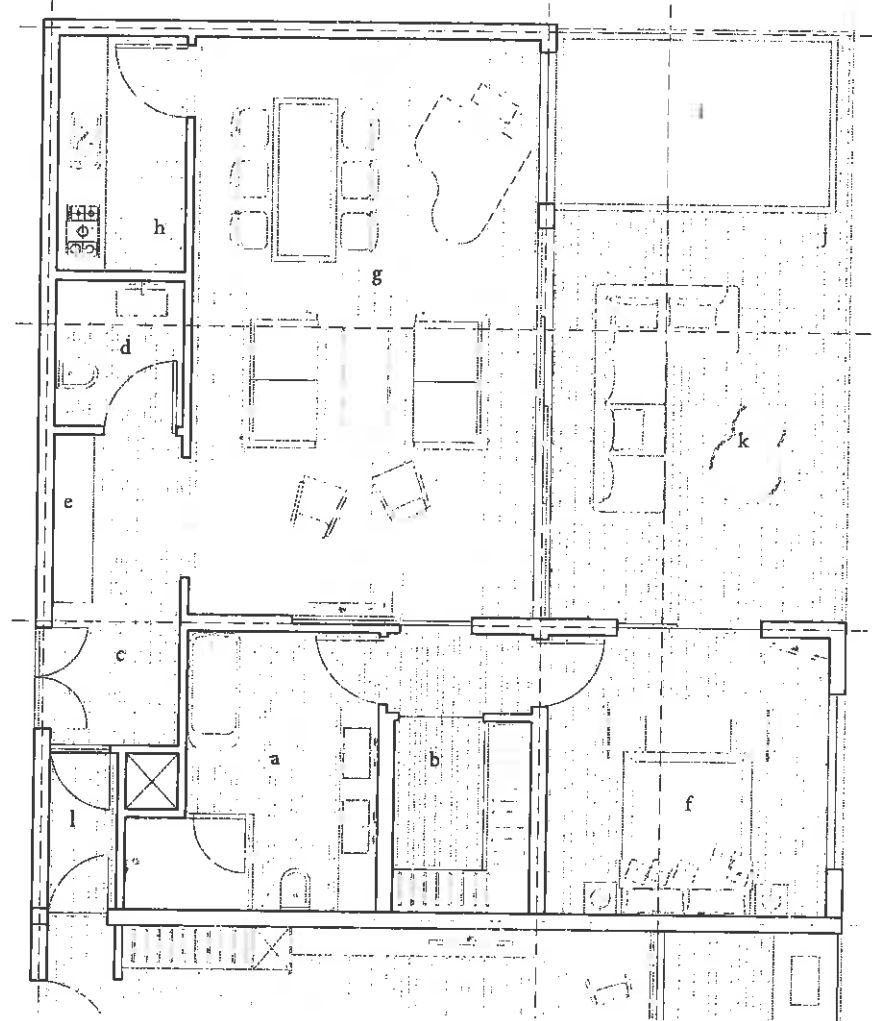
- a) Double sink, tub and shower
- b) Closet
- c) Bar / buffet
- d) Dressing table
- e) Two way TV
- f) Super King
- g) Lounge
- h) Private terrace

Room plan: One Bedroom Suites (620sft)



- a) Double sink, WC and Shower
- b) Dressing Room
- c) Lobby + Connection
- d) Wet bar
- e) QQ or King
- f) Lounge
- g) Terrace Bath
- h) Curtain
- i) Fire pit

Room plan: Presidential Suite (925sft)



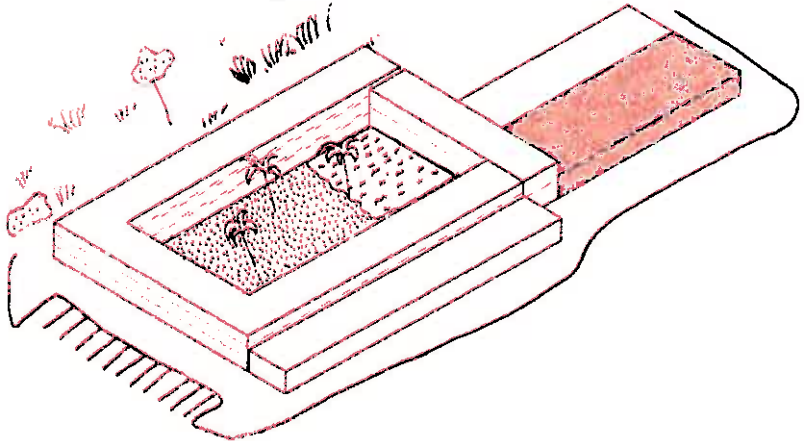
- a) Double sink, tub and shower
- b) Dressing Room
- c) Lobby + connection
- d) Separate WC
- e) Wet bar
- f) Super King
- g) Lounge, dining and piano
- h) Kitchenette
- i) Corner pool
- j) Curtain
- k) Fire pit
- l) Connecting QQ



(4) *Visualisation from Park. PART I*

03_Market
La Quinta Clubhouse

PART I
March, 2018



03

MARKET

An introduction to the strategy and design of the La Quinta food market.

Market
Spaces

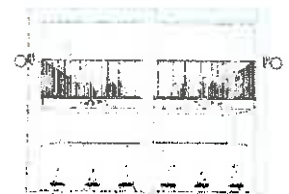
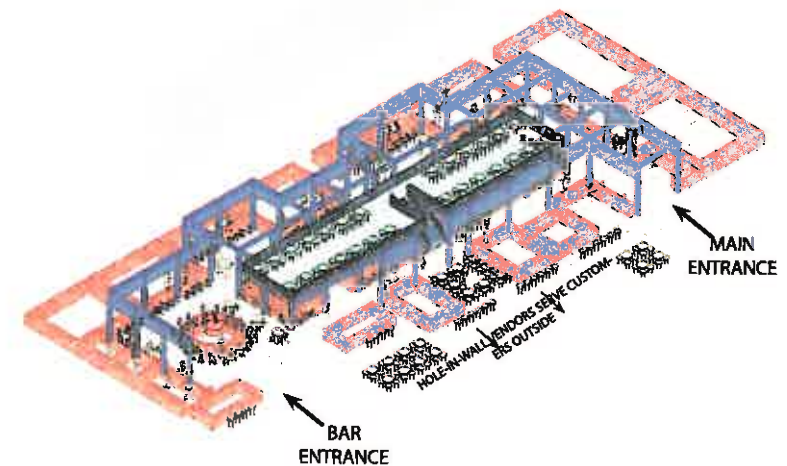
The large food market building will hold over 40 independent restaurants, stalls, shops and bars. It will be one of the most exciting facilities in the desert and will attract visitors into La Quinta.

The Market sits within an existing building that is being renovated to create this proposal. Inside, a new timber structure distributes the services and creates internal 'market streets'. These streets have entrances at each end and create a large loop, with smaller deli counters in the middle and larger units at the edges.

A variety of market stalls are proposed to create diversity, and to accommodate different types of vendors. Some will sell ingredients and produce, others hot food and tapas.

On the exterior, the Market Hall facade is tiled, referencing many traditional markets. Hanging over its frontage is a mesh curtain, which references traditional fabric market stalls whilst providing shelter for browsing or ordering at external kiosks.

(1)



(2)



(1) *Market layout axo., PART I*

(2) *Market stall diagrams, PART I*



(3) *Entrance visualisation of market from Fred Waring Drive, PART I*



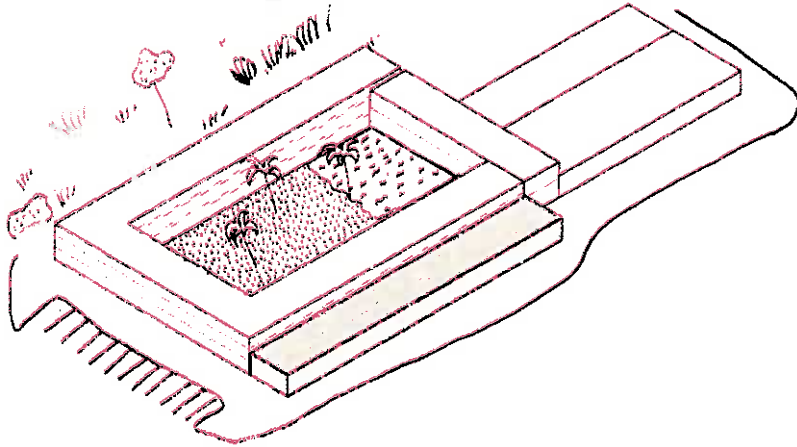
(4) *Market Entrance visualisation. PART I*



(5) *Market visualisation, PART I*

04_Retail
La Quinta Clubhouse

PART I
March, 2018



04

RETAIL

An introduction to the design and strategy of the retail strip

A high-end retail parade lines the car-park with a covered walkway for browsing. Similar to the retail strip at Palm desert, this will provide a more 'boutique' browsing experience as opposed to the large-scale retail units that are found elsewhere.

These top-lit retail spaces have the architectural quality of Art galleries. The elegant proportions will attract a carefully selected clutch of brands that synergise with the high-quality offer in the food market.

The 11 retail units are shallow to allow natural light to reach to the back and tall to allow for mezzanines and ventilation. Storerooms and staff bathrooms are hidden from view to unify and simplify the arcade. The retail sidewalk is covered by a mesh curtain that protects the glazed shop fronts from direct light, but allows for good visibility. This shimmering material will hang like fabric over the shops, recalling Mediterranean shop awnings and traditional desert tented structures.



(1) *Retail unit visualisation, PART I*

Aēsop.



(2) *Retail frontage visualisation, PART I*

05_Materials
La Quinta Clubhouse

PART I
March, 2018

05 MATERI- ALS

A description of the external materials used.

Facade

Materials

The materials for the La Quinta Clubhouse have been carefully chosen to sit harmoniously alongside the Mediterranean vernacular popular in La Quinta, whilst also being iconic, contemporary and environmentally intelligent.

East Façade

This Façade is the most public. It faces the parking lot towards Jefferson Avenue and forms a striking arrival for visitors.

Mesh:

The glazed frontages of the market and retail are east facing - in order to protect the shops from direct sunlight, a translucent metal-link mesh is proposed. The density of the mesh gives it transparency, and provides dappled shadows onto the sidewalk. However, from afar it appears light, ethereal, and fabric-like - referencing fabric hanging from market stalls. This 'hand-tied' aesthetic gives the frontages a more 'artisanal' edge to what is otherwise a sleek, contemporary building. At night, the mesh can light up creating an enticing glow - alerting passers-by of the activity within.

Coloured details:

Coloured details brighten up the otherwise neutral palette. Pastel coloured window frames reflect the tone of the mountains. A palette of brightly coloured tiles plays off traditional market frontages, and sets the tone for a more active Market building.

Entrance:

A large door and port-croche marks the entrance to the hotel. This is finished in an antique brass effect that stands out as a mysterious entrance port into an otherwise monolithic building. The Hotel volume, made from tessellated concrete blocks, is intriguing but visually closed off from the parking lot for the privacy of guests.



① Stainless steel chain-mail mesh
Colour: natural
Finish: Matt



② Metal porte-cochere
Finish: brass



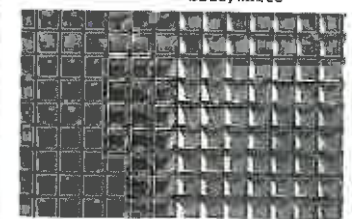
③ Patterned Ceramic tiles
Colour: red, - blue, white



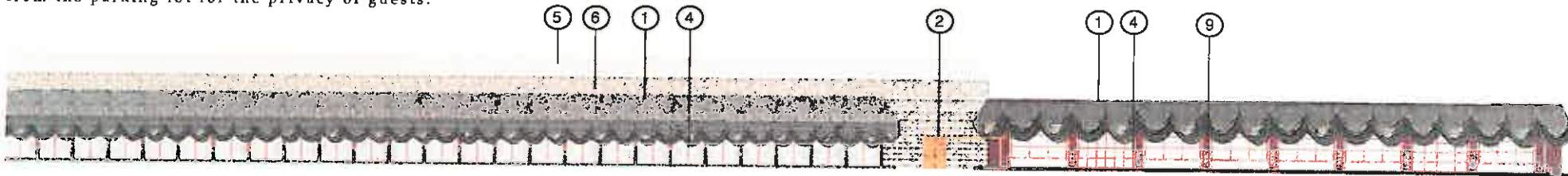
④ Powder coated metal window frames, various colours



⑤ Metal screen
Colour: dark brown



⑥ Concrete perforated stacked blocks
Colour: light grey (white pigment)



North Façade:

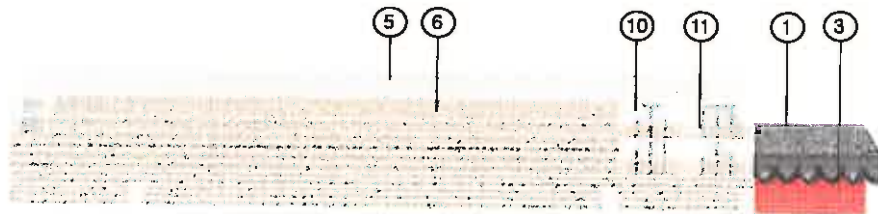
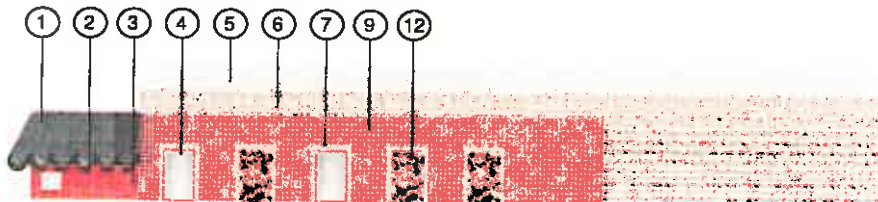
Visitors arriving from Fred Waring Drive will see this Market façade first. A mixture of ceramic and mosaic tiles will be used to make reference to the Mediterranean design heritage common in La Quinta and to reflect the clean and playful proposition inside.

South Façade:

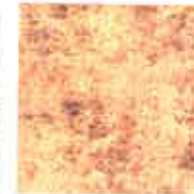
The south façade faces over a parking lot, planting offset, and then a neighbouring residential area. The proposed façade uses tessellating concrete blocks to prevent any chance of overlooking and to avoid light escaping into neighbouring yards.

Concrete blocks:

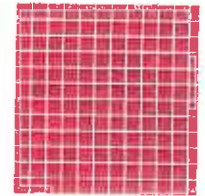
These pre-cast blocks defend against the hottest southern sun whilst providing important thermal mass to the open-air corridors, keeping them cool in the desert heat. They are hollow to allow angled views out from the corridor, but prevent direct overlooking. The blocks are angled to create an interesting texture - the surface of the blocks seemingly change as you move around it. This façade is also relatively thick, to give an effective sound buffer between the parking lot and the hotel guests.



① Stainless steel Chain-mail mesh
Colour: natural
Finish: Matt



② Metal porte-cochere
Finish: brass



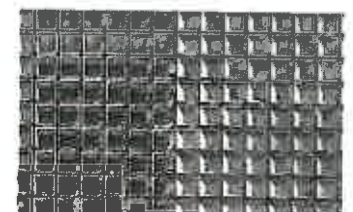
③ Red ceramic tiles



④ Powder coated metal window frames, various colours



⑤ Metal screen
Colour: dark brown



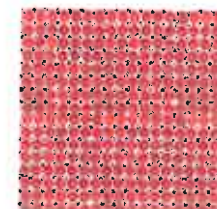
⑥ Concrete perforated stacked blocks
Colour: light grey (white pigment)



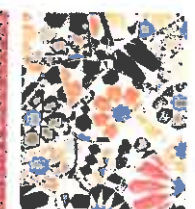
⑦ Pink tinted cement render



⑧ White cement render



⑨ Patterned Ceramic tiles
Colour: red, blue, white



⑫ Mosaic broken tiles
Colour: Varies



⑩ Exterior white curtains



⑪ Fine metal balustrade
colour: brown

West Façade

This façade looks over Monticello Park and the beautiful mountains beyond. As such, it is the most open, with rooms taking full advantage of this aspect. The guest-rooms have deep terraces and are draped with light, exterior-fabric curtains that allow users to create more privacy or shading on their balconies. This creates a striking elevation on the park side (and in the courtyard) that feels soft and domestic. The curtains create the sensation of movement, even if they are fixed, and the curtain-clad façades create an iconic reference point for the hotel.

The remainder of the façade is made up of the loading bay and BOH building. This is kept intentionally simple with white cement render.



⑤ Metal screen
Colour: dark brown

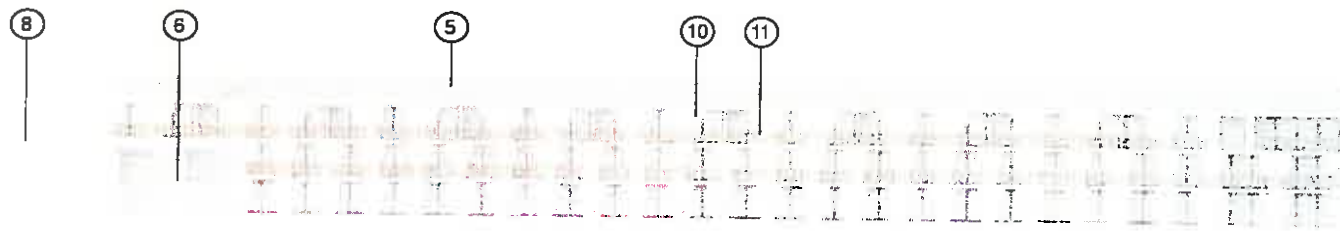


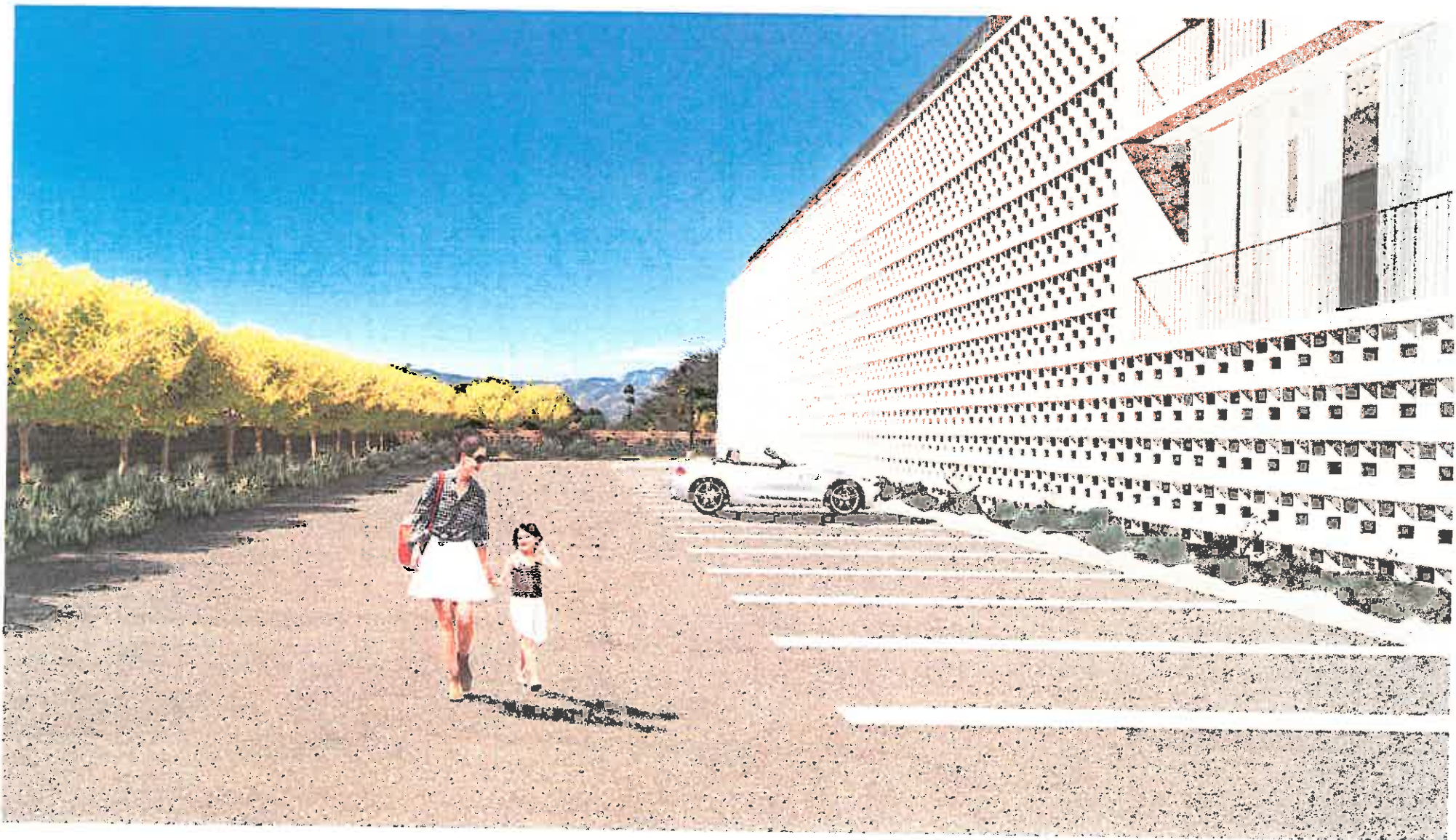
⑩ Exterior white curtains



⑪ Fine metal balustrade
colour: brown

⑧ White cement render





(1) *South facade visualisation. PART I*

NOTICE OF PUBLIC HEARING

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the application described below.

Any person may submit written comments to the ALUC before the hearing or may appear and be heard in support of or opposition to the project at the time of hearing. The proposed project application may be viewed at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Thursday from 8:00 a.m. to 4:30 p.m., except Wednesday, July 4 (Independence Day), and by prescheduled appointment on Fridays, from 9:00 a.m. to 5:00 p.m.

ATTENTION: ALUC reviews a proposed plan or project solely to determine whether it is consistent with the applicable Airport Land Use Compatibility Plan. The City of La Quinta will hold hearings on this project and should be contacted on non-ALUC issues.

PLACE OF HEARING: Riverside County Administration Center
4080 Lemon St., 1st Floor Board Chambers
Riverside, California

DATE OF HEARING: July 12, 2018

TIME OF HEARING: 9:30 A.M.

CASE DESCRIPTION:

ZAP1074BD18 – CCD Hotel and Resort, LLC (Representative: Caleb Ro) – City of La Quinta Planning Case Nos. SPA 2018-001 (Specific Plan Amendment) and SDP 2018-001 (Site Development Permit). SDP: The applicant proposes to construct a three-story 160 room hotel resort building totaling 68,021 square feet which includes swimming pools, spas, bars, and restaurants, and to convert the existing adjacent 28,893 square foot Fresh and Easy building into an indoor organic food and beverage market with dine-in facilities. The site includes 6.4 acres within the 10.79-acre Jefferson Square development located on the southwest corner of Jefferson Street and Fred Waring Drive. The applicant also proposes amending the 10.79-acre Jefferson Square Specific Plan to increase the allowable floor area ratio, amend the land uses to include the development of a 160-room hotel, a food market, and assorted retail and service-oriented shops, enhance circulation design, refine design guidelines and development standards, and provide new landscape design guidelines. (Airport Compatibility Zone E of the Bermuda Dunes Airport Influence Area).

FURTHER INFORMATION: Contact Paul Rull at (951) 955-6893. The ALUC holds hearings for local discretionary permits within the Airport Influence Areas, reviewing for aeronautical safety, noise and obstructions. All other concerns should be addressed to Ms. Cheri Flores of the City of La Quinta Planning Division at (760) 777-7067.



RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

APPLICATION FOR MAJOR LAND USE ACTION REVIEW

ALUC CASE NUMBER: ZAP1074BD18 DATE SUBMITTED: May 29, 2018

APPLICANT / REPRESENTATIVE / PROPERTY OWNER CONTACT INFORMATION

| | | |
|------------------------|--|------------------------------------|
| Applicant | CCD Hotel and Resort LLC | Phone Number 760-6101196 |
| Mailing Address | 41-750 Rancho Las Palmas Drive Suite O-3 | Email caleb@ccdhotelandresorts.com |
| | Rancho Mirage, CA 92270 | |
| Representative | PARTI | Phone Number 44(0)7595044168 |
| Mailing Address | 216 Drake House, Vauxhall SW8 2LR | Email Tom@parti.global |
| | United Kingdom, London | |
| Property Owner | CCD Hotel and Resorts LLC | Phone Number 760-6101196 |
| Mailing Address | 41-750 Rancho Las Palmas Drive Suite O-3 | Email Caleb@ccdhotelandresorts.com |
| | Rancho Mirage, CA 92270 | |

LOCAL JURISDICTION AGENCY

| | | |
|--------------------------------|---------------------|---|
| Local Agency Name | Cheri Flores | Phone Number 760-7777067 |
| Staff Contact | 78495 Calle Tampico | Email cflores@la-quinta.ort |
| Mailing Address | La Quinta, CA 92253 | |
| Local Agency Project No | SDP2018-0001 | Case Type <input checked="" type="checkbox"/> General Plan / Specific Plan Amendment <input type="checkbox"/> Zoning Ordinance Amendment <input type="checkbox"/> Subdivision Parcel Map / Tentative Tract <input type="checkbox"/> Use Permit <input checked="" type="checkbox"/> Site Plan Review/Plot Plan <input type="checkbox"/> Other |

PROJECT LOCATION

Attach an accurately scaled map showing the relationship of the project site to the airport boundary and runways

| | | | |
|------------------------------|-------------|--|--------------|
| Street Address | | | |
| Assessor's Parcel No. | 604-52-1013 | Gross Parcel Size | 6.4 Acres |
| Subdivision Name | | Nearest Airport and distance from Airport | Bermuda Dune |
| Lot Number | 3,5,6 | | |

PROJECT DESCRIPTION

If applicable, attach a detailed site plan showing ground elevations, the location of structures, open spaces and water bodies, and the heights of structures and trees; include additional project description data as needed

| | |
|-------------------------------------|---|
| Existing Land Use (describe) | NC (Neighborhood Commercial) |
| | To provide for the development and regulation of small scale commercial highways as shown on the general plan. The CN district is intended to provide for the sale of food, drugs, sundries, and personal services to meet the daily needs of a neighborhood area |

BD
DCE

| | | | |
|--------------------------------------|---|----------------------|-----|
| Proposed Land Use (describe) | NC The intent of the Jefferson Square Specific Plan is to establish a site plan, design standards, and specific allowable land uses that will facilitate development of a commercial/retail/Hotel center that will | | |
| For Residential Uses | Number of Parcels or Units on Site (exclude secondary units) _____ | | |
| For Other Land Uses (See Appendix C) | Hours of Operation _____ | | |
| | Number of People on Site _____ | Maximum Number _____ | |
| | Method of Calculation _____ | | |
| Height Data | Site Elevation (above mean sea level) | 87 | ft. |
| | Height of buildings or structures (from the ground) | 38 | ft. |
| Flight Hazards | Does the project involve any characteristics which could create electrical interference, confusing lights, glare, smoke, or other electrical or visual hazards to aircraft flight? <input type="checkbox"/> Yes | | |
| | <input checked="" type="checkbox"/> No | | |
| | If yes, describe _____ | | |
| | _____ | | |
| | _____ | | |

- A. **NOTICE:** Failure of an applicant to submit complete or adequate information pursuant to Sections 65940 to 65948 inclusive, of the California Government Code, MAY constitute grounds for disapproval of actions, regulations, or permits.
- B. **REVIEW TIME:** Estimated time for "staff level review" is approximately 30 days from date of submittal. Estimated time for "commission level review" is approximately 45 days from date of submittal to the next available commission hearing meeting.
- C. **SUBMISSION PACKAGE:**
1. Completed ALUC Application Form
 1. ALUC fee payment
 1. Plans Package (24x36 folded) (site plans, floor plans, building elevations, landscaping plans, grading plans, subdivision maps)
 1. Plans Package (8.5x11) (site plans, floor plans, building elevations, landscaping plans, grading plans, subdivision maps, zoning ordinance/GPA/SPA text/map amendments)
 1. CD with digital files of the plans (pdf)
 1. Vicinity Map (8.5x11)
 1. Detailed project description
 1. Local jurisdiction project transmittal
 3. Gummed address labels for applicant/representative/property owner/local jurisdiction planner
 3. Gummed address labels of all surrounding property owners within a 300 foot radius of the project site (**only required if the project is scheduled for a public hearing Commission meeting**). If more than 100 property owners are involved, please provide pre-stamped envelopes (size #10) with ALUC return address. *

* Projects involving heliports/helicopter landing sites will require additional noticing procedures.

**COUNTY OF RIVERSIDE
AIRPORT LAND USE COMMISSION**

STAFF REPORT

AGENDA ITEM: 3.2

HEARING DATE: July 12, 2018

CASE NUMBER: ZAP1056HR18 – Bryan Clendenen

APPROVING JURISDICTION: City of Hemet

JURISDICTION CASE NO: SDR 18-003 (Site Development Review)

MAJOR ISSUES: None

RECOMMENDATION: Staff recommends that the Commission find the Site Development Review CONDITIONALLY CONSISTENT with the 2017 Hemet-Ryan Airport Land Use Compatibility Plan, subject to the conditions included herein, and such additional conditions as may be required by the Federal Aviation Administration Obstruction Evaluation Service.

PROJECT DESCRIPTION: The applicant proposes to construct two industrial buildings totaling 27,500 square feet in two phases on a 1.98 acre parcel. A 15,400 square foot building is proposed in Phase 1 and a 12,100 square foot building in Phase II.

PROJECT LOCATION: The site is located on the northwest corner of Wentworth Drive and Airway Place, in the City of Hemet, approximately 839 feet southeasterly of the existing easterly terminus of Runway 5-23 at Hemet-Ryan Airport.

LAND USE PLAN: 2017 Hemet-Ryan Airport Land Use Compatibility Plan

- a. Airport Influence Area: Hemet-Ryan Airport
- b. Land Use Policy: Compatibility Zone C
- c. Noise Levels: 60 - 65 CNEL contour

BACKGROUND:

Non-Residential Average Intensity: Pursuant to the 2017 Hemet-Ryan Airport Land Use Compatibility Plan, the project site is located within Compatibility Zone C. Zone C restricts average intensity to 100 persons per acre.

The “Building Code Method” for calculating intensity utilizes “minimum floor area per occupant” criteria from the Building Code as a factor in projecting intensity. Pursuant to Appendix C, Table C-1, of the Riverside County Airport Land Use Compatibility Plan, the following rates were utilized for the project:

- Manufacturing areas – 1 person per 200 square feet,
- Office areas – 1 person per 200 square feet (with 50% reduction).

The applicant proposes two industrial buildings with a combined floor area of 27,500 square feet, accommodating a total occupancy of 138 persons. This results in an average intensity of 69 persons per acre, which is consistent with the Zone C criterion of 100 persons per acre.

A second method for determining total occupancy involves multiplying the number of parking spaces provided or required (whichever is greater) by average vehicle occupancy (assumed to be 1.5 persons per standard vehicle). Based on the number of parking spaces provided (30), the total occupancy would be projected at 45 persons, for an overall average intensity of 23 persons per acre.

Non-Residential Single-Acre Intensity: Compatibility Zone C restricts intensity to 300 persons in the most intensely utilized single-acre area. However, this number would only be consistent on sites of at least 3 acres.

Based on the site plan provided and occupancies as previously noted, the two buildings would not be located within the same single-acre area. The most intense single-acre area would include the entire 15,400 square foot industrial building, accommodating a total occupancy of 77 persons, which is consistent with the Compatibility Zone C single acre criterion of 300.

Prohibited and Discouraged Uses: The applicant does not propose any uses specifically prohibited or discouraged in Compatibility Zone C of the Hemet-Ryan Airport Influence Area. Such uses are prohibited pursuant to Condition No. 2(e).

Noise: The site is located within the 60-65 CNEL contour range from aircraft noise. Condition No. 6 requires noise attenuation measures to be incorporated in building design to the extent necessary to ensure that maximum interior noise levels from aircraft operations will not exceed 45 CNEL.

Part 77: The elevation of Runway 5-23 at its existing easterly terminus is approximately 1,508 feet above mean sea level (AMSL). At a distance of approximately 839 feet from the runway, FAA review would be required for any structures with top of roof exceeding 1,516 feet AMSL. The proposed pad elevation of the project site is 1,516 feet AMSL, and the height of the building is 24 feet, for a maximum top point elevation of 1,541 feet AMSL. Therefore, review of the proposed structure by the FAA Obstruction Evaluation Service (FAA OES) is required. A submittal to FAA OES has been made, and the project has been assigned Aeronautical Study Number 2018-AWP-10560-OE. At the time of writing of this staff report, no determination has been made, but the study is in a “Work in Progress” status.

Open Area: The site is located within Airport Compatibility Zone C of the Hemet-Ryan Airport Influence Area, which requires projects 10 acres or larger located easterly of Cawston Avenue to designate 20% of project area as ALUC-qualifying open area that could potentially serve as emergency landing areas. Since the overall project size is less than 10 acres, the open area requirement is not applicable to this project.

CONDITIONS:

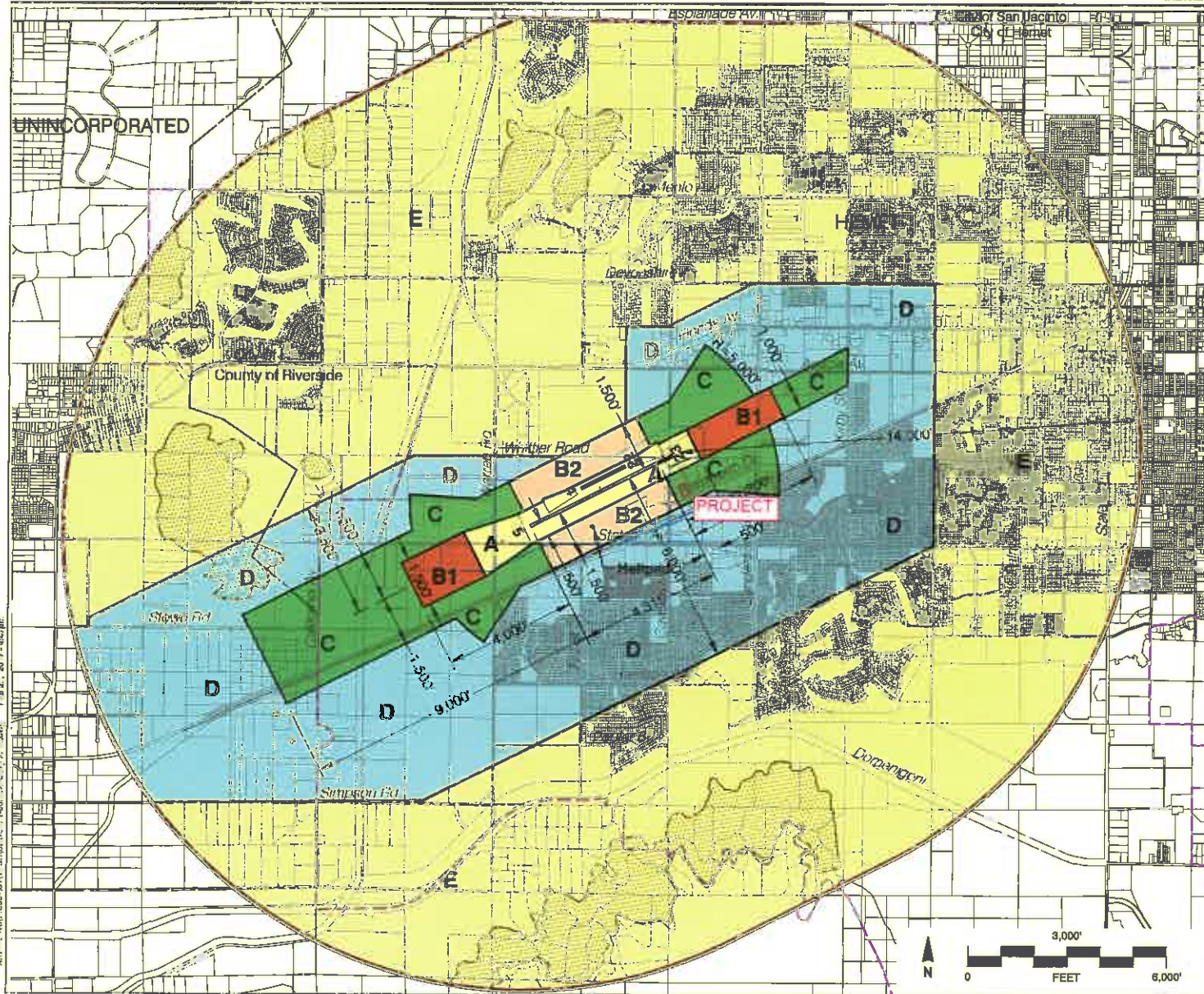
1. Any outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky.
2. The following uses/activities are not included in the proposed project and shall be prohibited at this site:
 - (a) Any use or activity which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
 - (b) Any use or activity which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
 - (c) Any use or activity which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, composting operations, production of cereal grains, sunflower, and row crops, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)
 - (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
 - (e) Children's schools, day care centers, libraries, hospitals, nursing homes, theaters, meeting halls and other assembly facilities, stadiums, and highly noise-sensitive outdoor nonresidential uses.
 - (f) Commercial or utility ground-mounted solar energy systems.

3. The attached notice shall be given to all prospective purchasers and/or tenants of the property, and shall be recorded as a deed notice.
4. Any new detention basin(s) on the site shall be designed so as to provide for a maximum 48-hour detention period following the conclusion of the storm event for the design storm (may be less, but not more), and to remain totally dry between rainfalls. Vegetation in and around the detention basin(s) that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping. Trees around the basin(s) shall not form a contiguous canopy and shall not produce fruit, seeds, or berries.
5. This finding of consistency is based on the use of the proposed industrial building for office, manufacturing, storage, and warehousing uses. The zoning of the property allows for additional uses that would require subsequent evaluation as to compliance with intensity limits prior to their being permitted at this location. These uses requiring such evaluation are as follows:

General retail uses (other than sale of products manufactured on-site); plant nurseries and greenhouses; commercial recreation facilities (indoor and/or outdoor); commercial trade schools; showroom design centers; ambulance services; adult businesses; animal services; business support services; health and fitness centers; mortuaries; service stations; auto repair shops; recycling processing facilities; scrap and dismantling yards; swap meets.
6. Noise attenuation measures shall be incorporated into the design of office areas of the buildings to the extent such measures are necessary to ensure that interior noise levels from aircraft operations are at or below 45 CNEL.

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b) (13)(A)



Legend

- Compatibility Zones**
- Airport Influence Area Boundary
 - Zone A
 - Zone B1
 - Zone B2
 - Zone C
 - Zone D
 - Zone E
 - Height Review Overlay Zone

Boundary Lines

- Airport Property Line
- City Limits
- City Sphere of Influence

Note

Airport Influence Area boundary measured from a point 200 feet beyond ends of proposed future 4,815 foot runway in accordance with FAA airspace protection criteria (FAR Part 77). All other dimensions measured from ends and centerlines of existing 4,315 foot runway.

Riverside County
 Airport Land Use Commission
Hemet-Ryan Airport
Land Use Compatibility Plan
 (Adopted February 9, 2017)

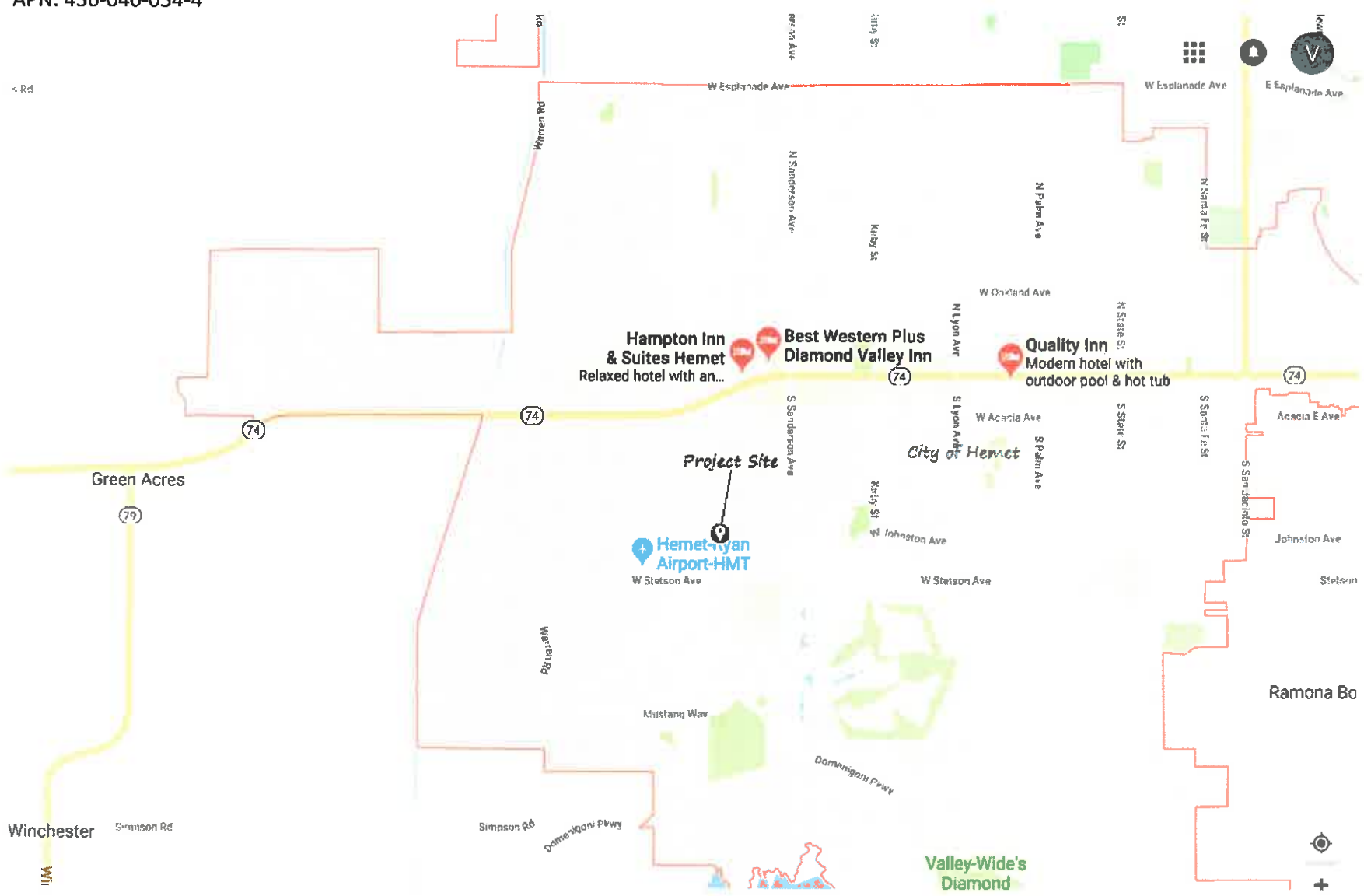
Map: HR-1

Compatibility Map
 Hemet-Ryan Airport

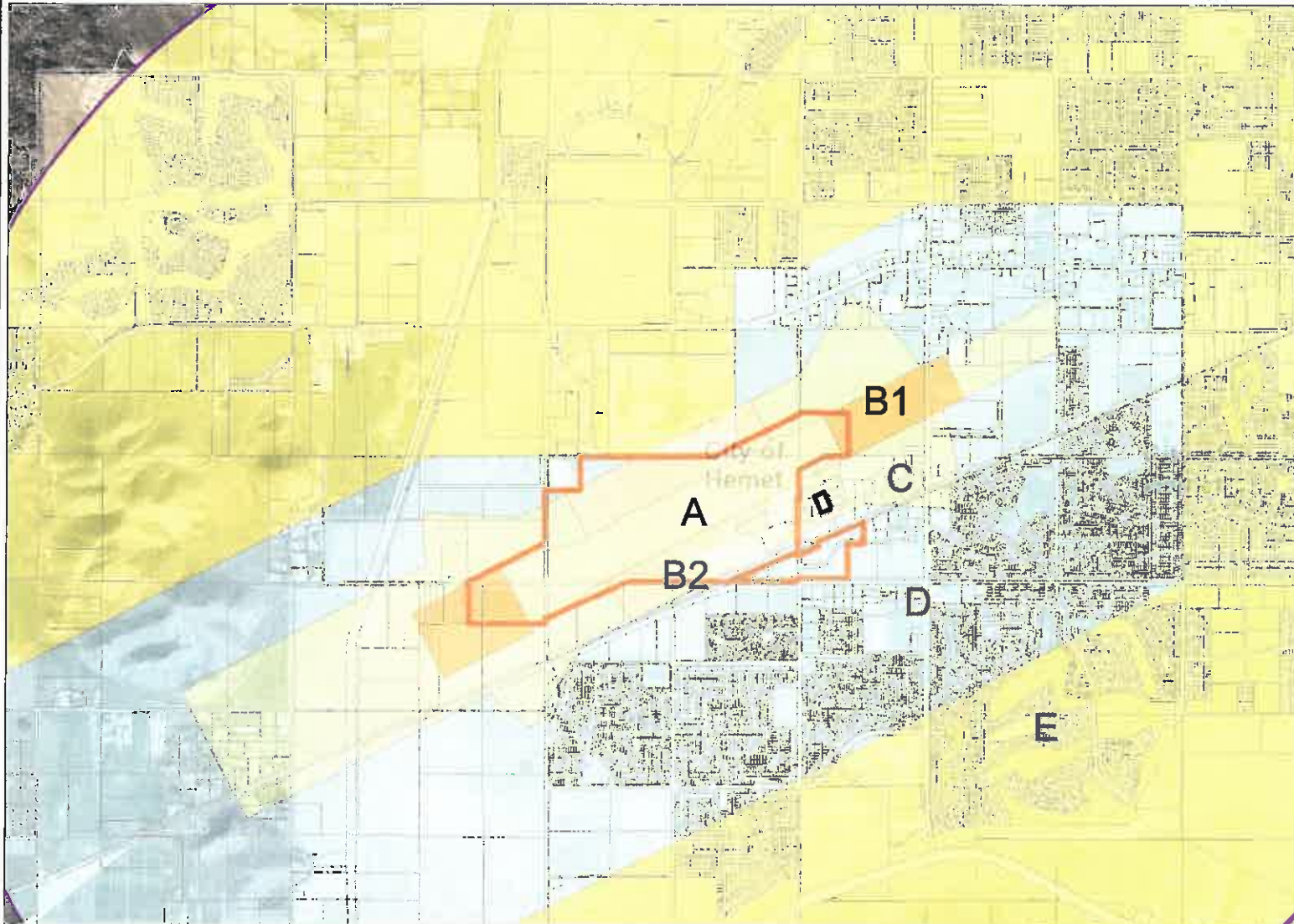
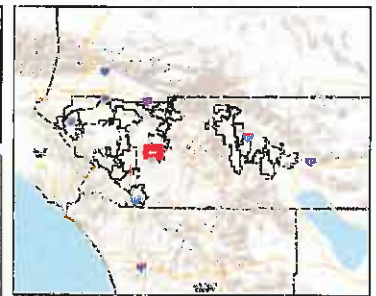
2017-2018 COMPATIBILITY MAP CITY OF HERMET, CA
 18 20 20 7-42-17

NWC Wentworth and Airway Place
Hemet, CA
APN: 456-040-054-4

SDR18-003



My Map



Legend

- Airports
- AIA
- Airport Compatibility**
- OTHER ZONE
- A
- A-EXC1
- B1
- B1-APZ I
- B1-APZ I-EXC1
- B1-APZ II
- B1-APZ II-EXC1
- B1-EXC1
- B2
- B2-EXC1
- C
- C1
- C1-EXC1
- C1-EXC3
- C1-EXC4
- C1-HIGHT
- C2
- C2-EXC1
- C2-EXC2
- C2-EXC3
- C2-EXC5
- C2-EXC6
- C2-HIGHT



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0 3,881 7,763 Feet

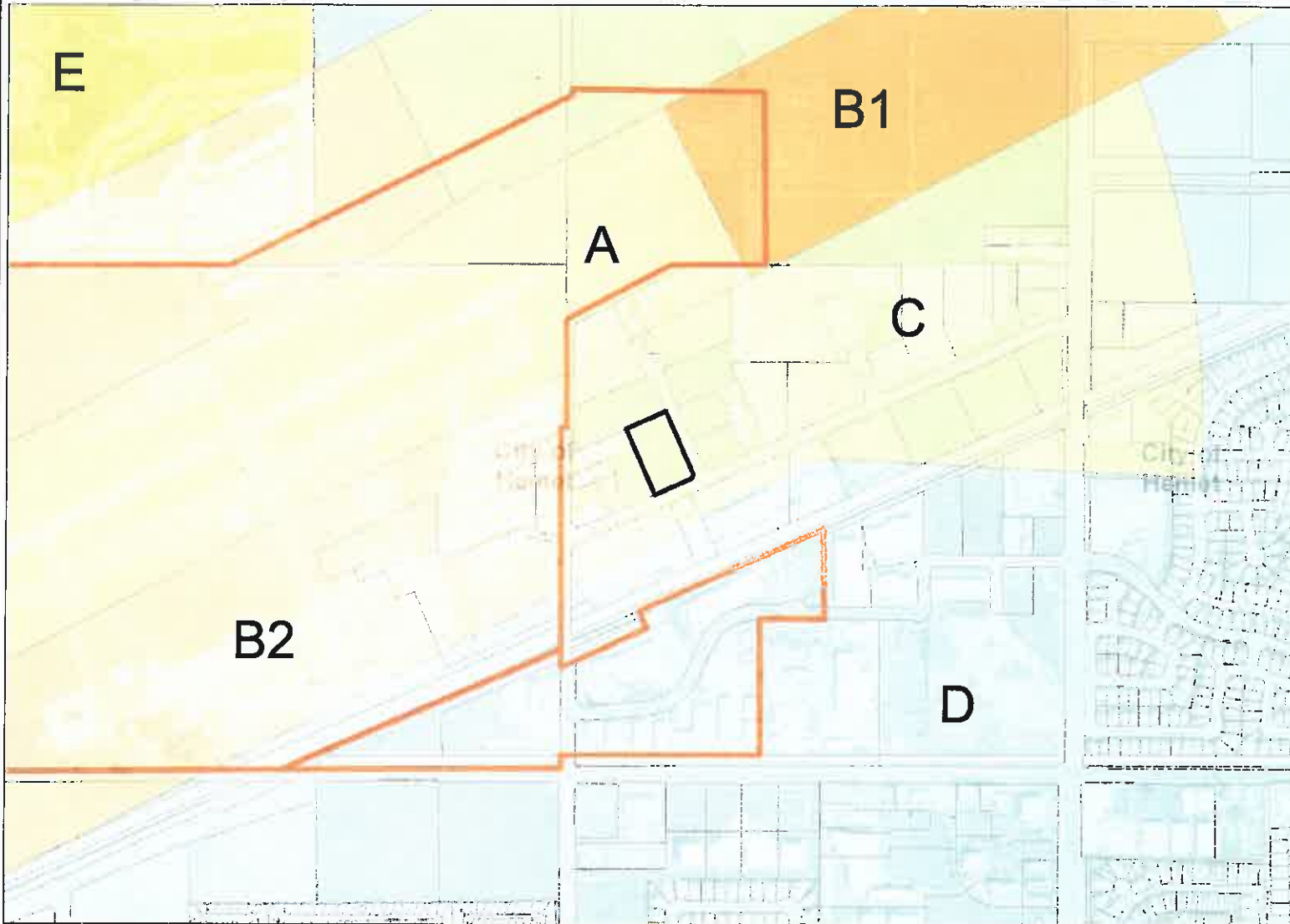
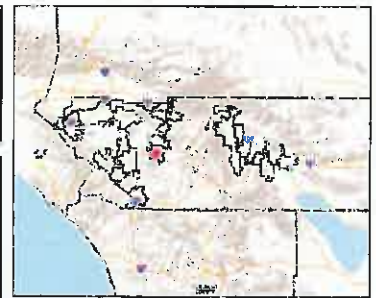


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Notes

My Map

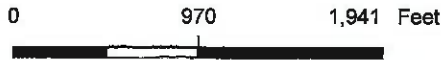


Legend

- Airports
- AIA
- Airport Compatibility**
- OTHER ZONE
- A
- A-EXC1
- B1
- B1-APZ I
- B1-APZ I-EXC1
- B1-APZ II
- B1-APZ II-EXC1
- B1-EXC1
- B2
- B2-EXC1
- C
- C1
- C1-EXC1
- C1-EXC3
- C1-EXC4
- C1-HIGHT
- C2
- C2-EXC1
- C2-EXC2
- C2-EXC3
- C2-EXC5
- C2-EXC6
- C2-HIGHT



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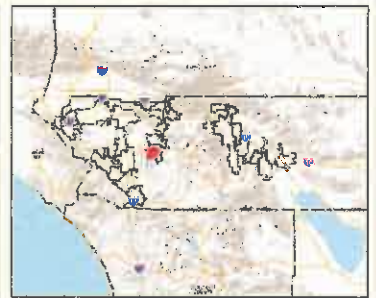


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Notes

My Map



Legend

- City Boundaries
- Cities
- roadsanno
- highways
 - HWY
 - INTERCHANGE
 - INTERSTATE
 - OFFRAMP
 - ONRAMP
 - USHWY
- counties
- cities
- hydrographylines
- waterbodies
 - Lakes
 - Rivers



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Notes

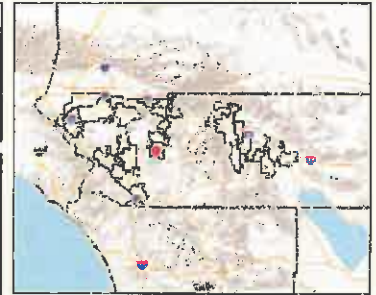
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My Map



Legend

- City Boundaries
- Cities
- roadsanno
- highways
 - HWY
 - INTERCHANGE
 - INTERSTATE
 - OFFRAMP
 - ONRAMP
 - USHWY
- counties
- cities
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- waterbodies
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0 970 1,941 Feet

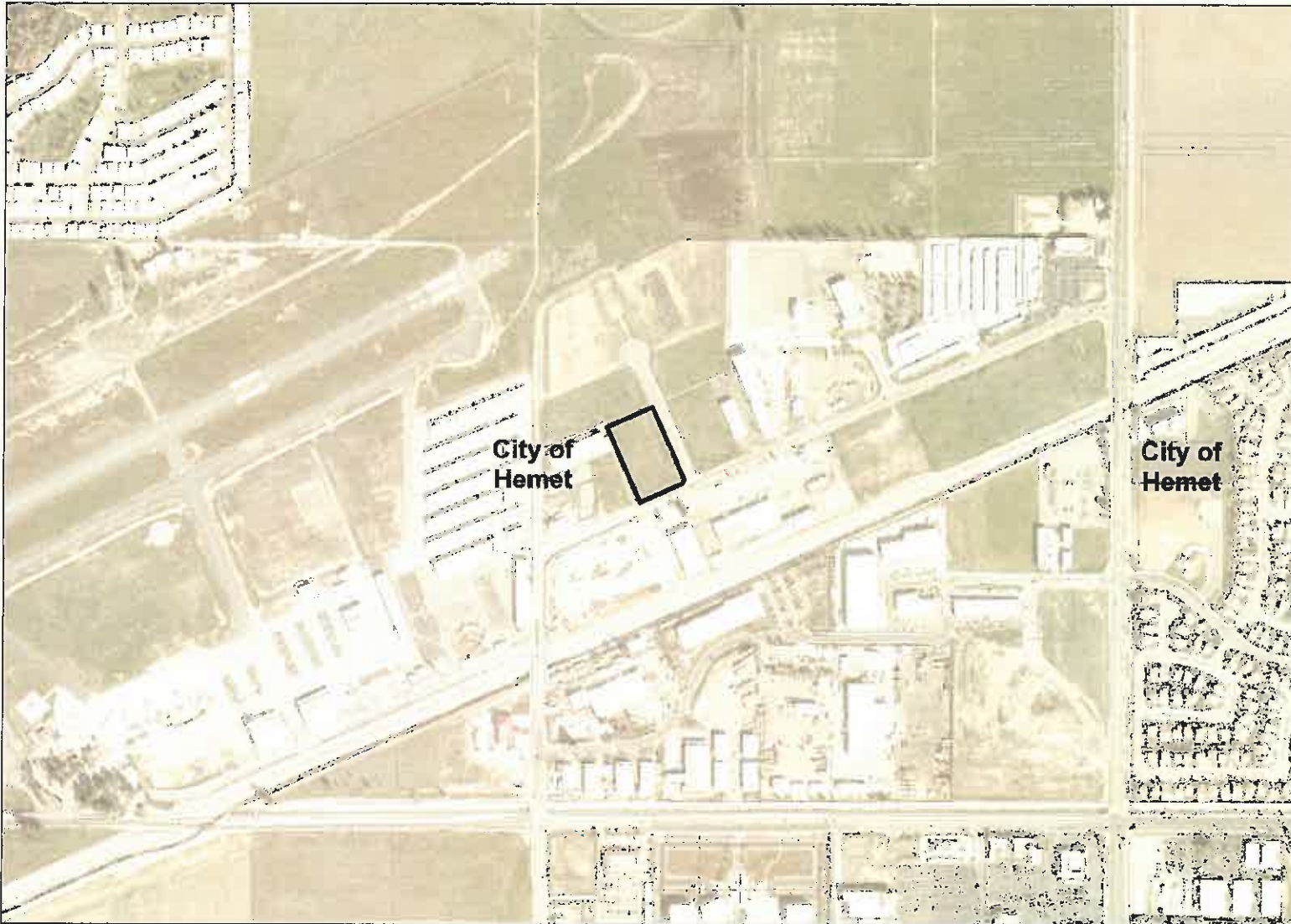
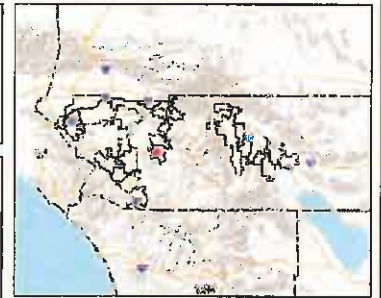


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Notes

My Map



Legend

-  City Boundaries
- Cities
- roadsanno
- highways
 -  HWY
 -  INTERCHANGE
 -  INTERSTATE
 -  OFFRAMP
 -  ONRAMP
 -  USHWY
-  counties
-  cities
- hydrographylines
- waterbodies
 -  Lakes
 -  Rivers



0 849 1,698 Feet



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Notes

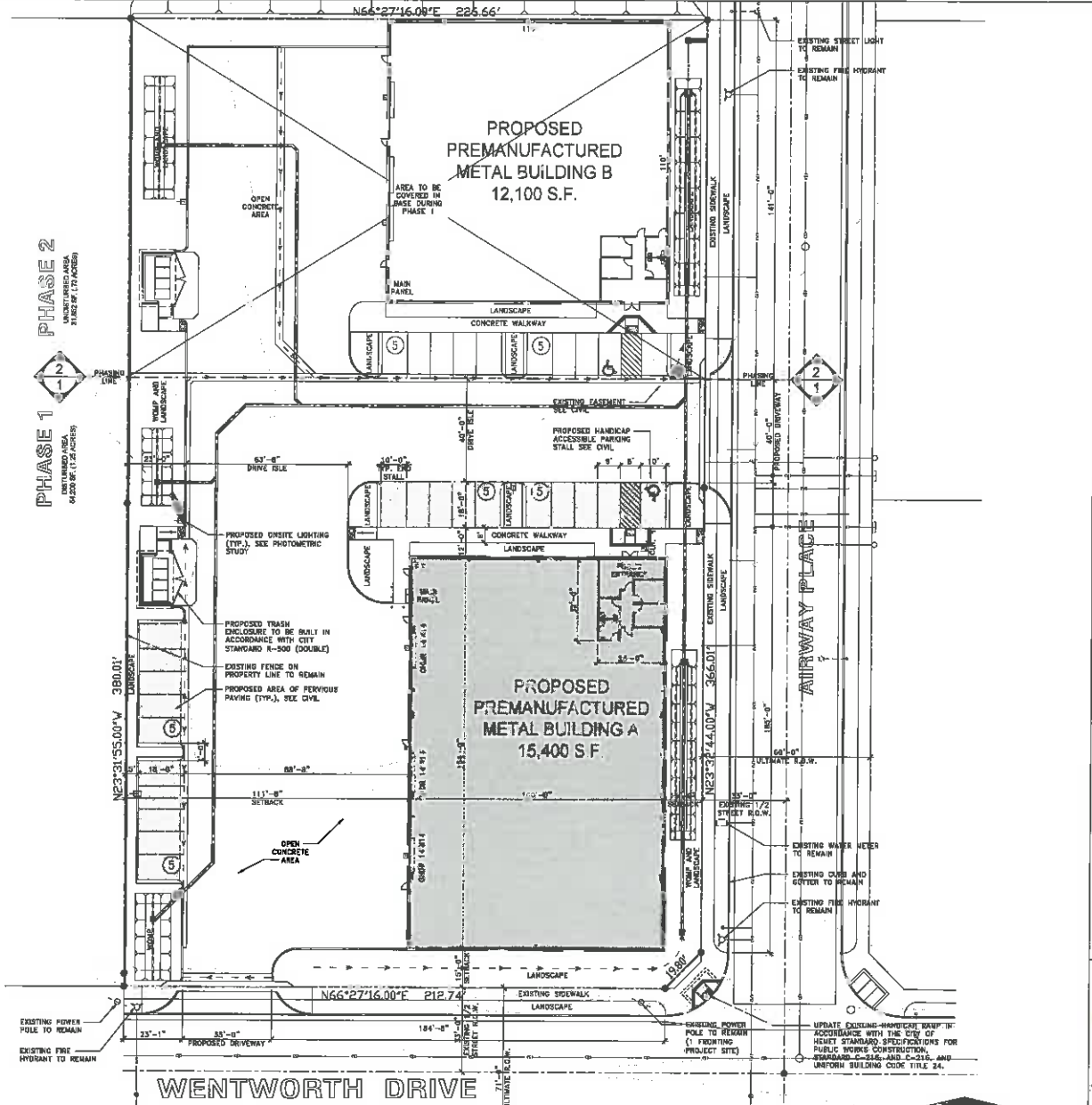


City of
Hemet

STREET A

WENTWORTH DR

6CP



ARCHITECTURAL SITE PLAN

SCALE: 1" = 20'-0"



SITE DATA
 ADDRESS: NWC WENTWORTH DRIVE & AIRWAY PLACE
 HEMET, CA 92343
 PERMIT #: PR 16401
 APN: 454-00-0044
 LOT SIZE: 64,602 S.F. (1.49 ACRES)
 BUILDING AREA: PREMANUFACTURED METAL BUILDING A: 15,400 S.F.; PREMANUFACTURED METAL BUILDING B: 12,100 S.F.; TRASH ENCLOSURES: 217 S.F. (0.17 AC)
 COUNTY: SWEDESBORO
 CONSTRUCTION TYPE: PREMANUFACTURED METAL BUILDINGS - 9-0 SPRIKLERED TRASH ENCLOSURES-TYPE II
 OCCUPANCY: PREMANUFACTURED METAL BUILDINGS-B TRASH ENCLOSURES: S1
 EXISTING LAND USE: PROPERTY VACANT NORTH VACANT SOUTH MANUFACTURING EAST VACANT WEST MANUFACTURING
 PROPOSED LAND USE: DRY STORAGE
 EXISTING ZONE: PROPERTY: M-2 (HEAVY MANUFACTURING) NORTH M-2 (HEAVY MANUFACTURING) SOUTH M-2 (HEAVY MANUFACTURING) EAST M-2 (HEAVY MANUFACTURING) WEST M-2 (HEAVY MANUFACTURING)
 PROPOSED ZONE: M-2 (HEAVY MANUFACTURING)
 GENERAL PLAN: M-2 (BUSINESS PARK)
 SCHOOL DISTRICT: HEMET UNIFIED SCHOOL DISTRICT
 FEMA FLOOD PLANS: FLOOD ZONE X
 WATER DISTRICT: SHAW
 MAX FAR COVERAGE: 0.15
 MAX LOT COVERAGE: 60%
 LOT COVERAGE: BUILDING AREA: 27,500 S.F. (100%) LANDSCAPE AREA: 13,097 S.F. (79%) PERVIOUS AREA: 47,597 S.F. (74%) BUILDING AREA: 27,500 S.F. (100%) TOTAL SITE AREA: 60,327 S.F. (1.00%)
 LANDSCAPE IN R.O.W.: 2,454 S.F.
 PARKING REQUIREMENTS: OFFICE: 1 SPACE / 350 S.F. DRY STORAGE: 1 SPACE / 1,000 S.F. REQUIRED: 25 SPACES TOTAL PRO. STALLS: 26 SPACES (INCLUDING 2 H.A.)

OWNER / APPLICANT
 BRYAN CLENDEN
 CLENDEN DEVELOPMENT CO.
 4184 DART STREET, SUITE 200A
 MURRETTA, CA 92383
 PHONE: (951) 294-2422
 FAX: (951) 89-2825
 CELL PHONE: (909) 735-2444
 E-MAIL: bryan@clendendev.com/clendengroup.com
ARCHITECT / APPLICANTS' REP.
 EMPIRE DESIGN GROUP, INC. PHYSICAL ADDRESS: 2451 WASHINGTON AVE. MURRETTA, CA 92342
 P.O. BOX 964 MURRETTA, CA 92341
 PHONE: (951) 89-1491 FAX: (951) 89-1442
 CELL PHONE: (951) 89-7801 E-MAIL: greg@empdesign.biz
CONTACT: GREGORY HANN, ARCHITECT
LEGAL DESCRIPTION
 THE LAND REFERRED TO HEREIN IS LOCATED IN THE CITY OF HEMET, IN THE COUNTY OF FRANKLIN, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:
 PARCEL 1 OF PARCEL 17-19-00-002 - THE CITY OF HEMET, COUNTY OF FRANKLIN, STATE OF CALIFORNIA, AS SHOWN IN PARCEL BOOK 223, PAGES 6A AND 7 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

SCOPE OF WORK
 1. PROVIDE CONCEPT PHASE 1 AND PHASE 2 LAYOUT, INCLUDING THE EXISTING AND PROPOSED PREMANUFACTURED METAL BUILDINGS AND PHASE TWO OF THE PERVIOUS, 50% OF ALL-LANDSCAPE, PRELIMINARY LAYOUT, METRIC COORDINATE SYSTEM, PARKING, LANDSCAPE, UTILITY, TRAFFIC, AND NEW OR EXISTING UTILITY APPROACHES, AS REQUIRED TO BE SHOWN ON THE SET.

DRAWING INDEX

| | |
|---------------|--|
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| SHEET 3 | CROSS SECTIONS |
| SHEET 4 | DETAIL SHEET |
| SHEET 5 | DETAIL SHEET |
| SHEET 6 | EROSION CONTROL PLAN |
| SHEET 7 | EROSION CONTROL PLAN |
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| LANDSCAPE | PRELIMINARY PLANTING PLAN |
| ARCHITECTURAL | |
| A-1 | BUILDING A FLOOR PLAN |
| A-1.1 | BUILDING A FLOOR PLAN (PHASE 2) |
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 951-89-1442 to 951-89-1443

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 HEMET, CA 92345

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 HEMET, CA 92345

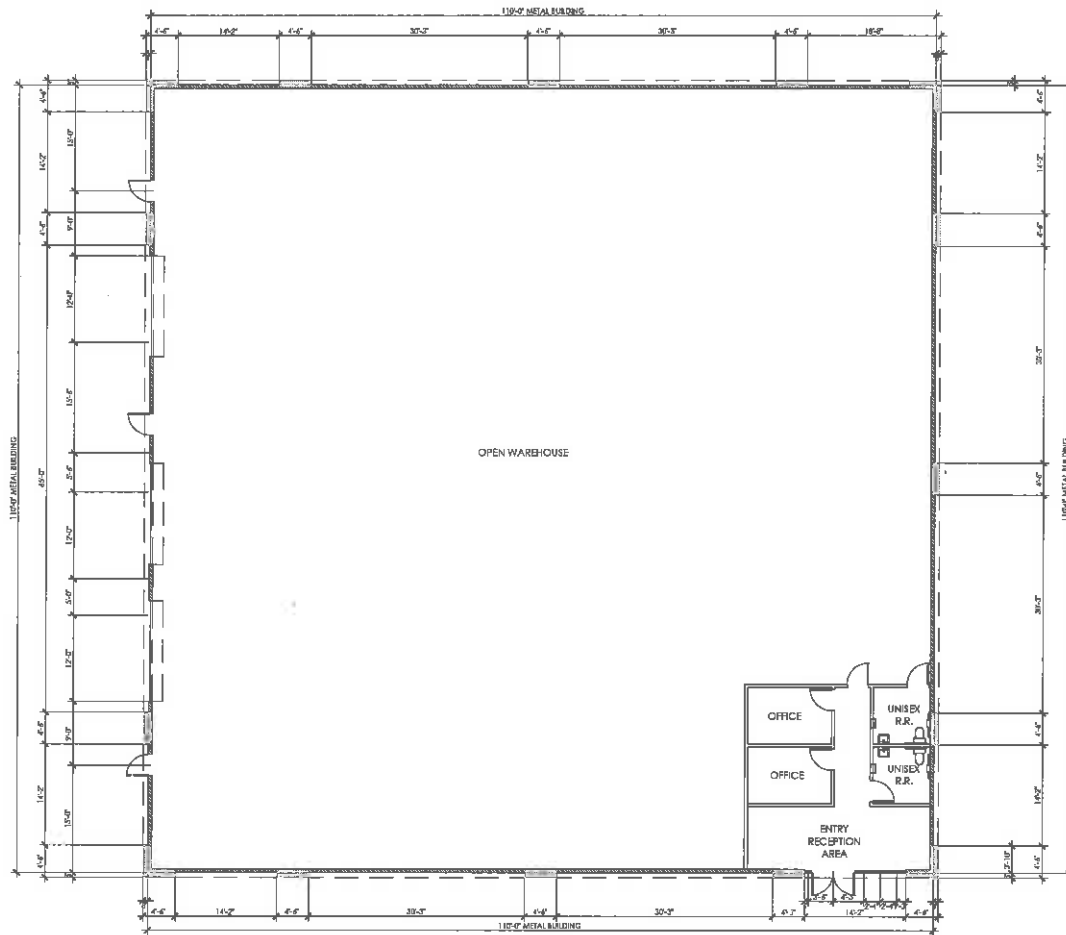
Architect of Record: GREGORY S. HANN, ARCHITECT, 2451 WASHINGTON AVE., MURRETTA, CA 92383, TEL: 951-89-1491, FAX: 951-89-1442, E-MAIL: greg@empdesign.biz

Date: MAY 13, 2008
 Project Number: EDG004270
 In: DATE: SHEET NUMBER: 1 of 8 (CONCEPT) 2 of 8 (PHASE 1) 3 of 8 (PHASE 2)

DESIGNED BY: GH
 DRAWN BY: GH
 CHECKED BY: GH
 APPROVED BY: GH

ARCHITECTURAL SITE PLAN / COVER PAGE

Sheet No: **AS 1**



BUILDING B FLOOR PLAN
 SCALE: 1/8"=1'-0"

WALL LEDGED:

- PREFABRICATED METAL BUILDING
- METAL PANELING - KINGSPAN PANELS
- 2X4 WOOD FRAMED INTERIOR WALL

KEYED NOTES:

FIGURE PHASE 2 BUILDING B LAYOUT, INTERIOR DESIGN SHOWN CONCEPTUAL AND TO BE FINALIZED AT A LATER DATE.

EMPIRE DESIGN GROUP, INC.



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 951-661-0100 FAX 951-661-0101

Professional Engineer License No. 44567
 Professional Architect License No. 10000
 27 Pages (including cover)

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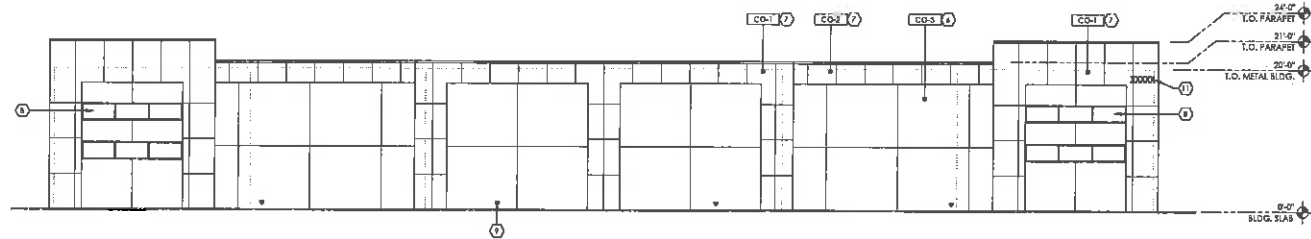
Date: MAY 12, 2009
 Project Number: EDG04370
 SHEET NO. 1 OF 27
 2-DWG (1/4" = 1'-0")

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| DESIGNED BY | SK |
| CHECKED BY | SK |
| DRAWN BY | SK |
| DATE | 05/12/09 |

BUILDING FLOOR PLAN

Sheet No.

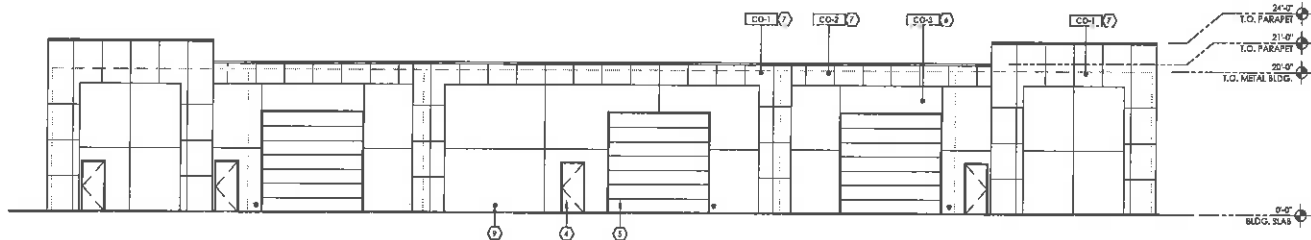
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PROPOSED EAST ELEVATION

SCALE: 1/8"=1'-0"

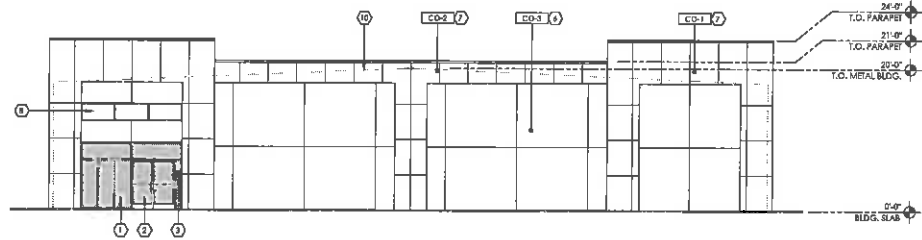
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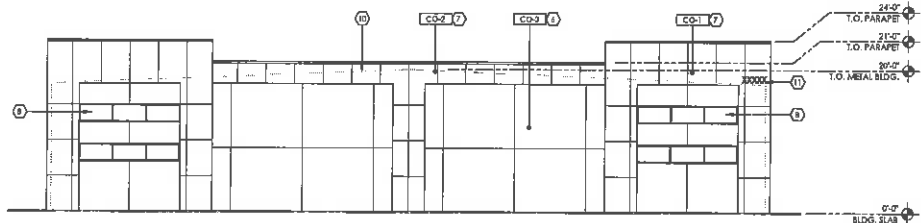
B



PROPOSED NORTH ELEVATION

SCALE: 1/8"=1'-0"

C



PROPOSED SOUTH ELEVATION

SCALE: 1/8"=1'-0"

D

KEYED NOTES:

- 1 ALUMINUM STOREFRONT WINDOW SYSTEM
- 2 DOUBLE 30FD ENTRANCE DOOR
- 3 ADA ACCESSORY SIGN
- 4 3' x 7' HOLLOW METAL MANDOOK (TYP)
- 5 12' x 14' DRIVE TRUCK DOOR (TYP)
- 6 METAL DETAILING (SMALLER SMOOTH SUCCO) - GINGSPAN PANELS
- 7 SPANREL GLASS WINDOW SYSTEM TO MATCH STOREFRONT (TYP)
- 8 5/16" 7/16" FORBIDEN BECOME DOWNPOUT NOZZLE NO-146 (TYP) - AMFG. TO BE TURN (602) 924-6770
- 9 DASHED LINE OF ROOF DECK BEYOND
- 10 ADDRESS SHALL BE POSTED ON THE UPPER 1/4 OF THE BUILDING, IN A LOCATION APPROVED BY THE CITY, IN A COLOR THAT CONTRASTS THE BACKGROUND AND A MINIMUM HEIGHT OF 12" AND A MINIMUM OF THREE WORDS. NUMBER SHALL NOT BE PLACED ON WINDOW SURFACES.

EXTERIOR COLORS:

- CO-1 TRANSM (L-3) - DECORATIVE PANEL
- CO-2 REGAL BLUE (R8) - DECORATIVE PANEL
- CO-3 DOVE GRAY (R8) - DECORATIVE PANEL

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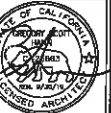
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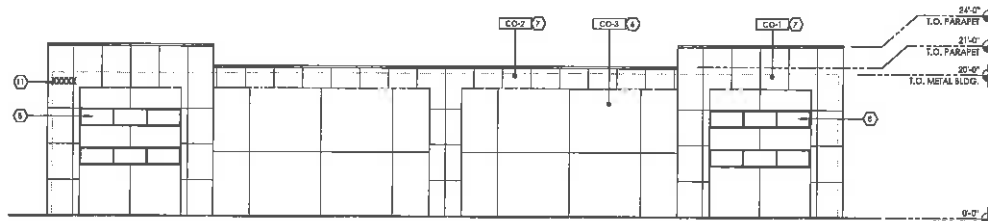
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| Date | 03/16/2008 | |
| Project Number | EDG043370 | |
| NO. | DATE | REVISION DESCRIPTION |
| 1 | 2-28-08 | ISSUE FOR CITY OF 2008 |

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|-----------|----|
| DRAWN BY: | EF |
| CHECK BY: | GH |
| SCALE BY: | JN |
| DATE BY: | |

PROPOSED EXTERIOR ELEVATIONS

SHEET NO.

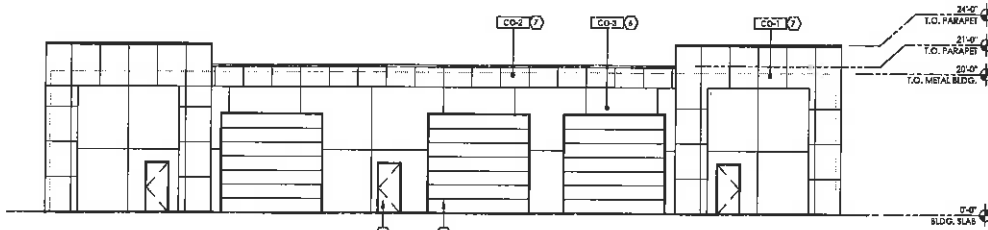
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PROPOSED EAST ELEVATION

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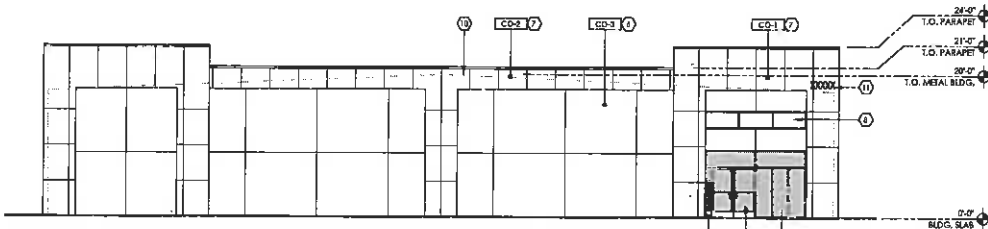
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PROPOSED WEST ELEVATION

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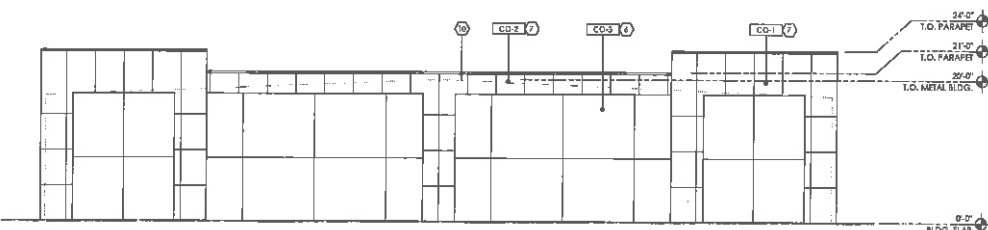
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PROPOSED SOUTH ELEVATION

SCALE: 1/8"=1'-0"

(C)



PROPOSED NORTH ELEVATION

SCALE: 1/8"=1'-0"

(D)

KEYED NOTES:

- 1 ALUMINUM STOREFRONT WINDOW SYSTEM
- 2 DOUBLE 3070 ENTRANCE DOOR
- 3 ADA ACCESSIBILITY SIGN
- 4 2'-7" HOLLOW METAL MANDOR (TYP.)
- 5 12'-14" DRIVE THRU DOOR (TYP.)
- 6 KINGSTON PANEL (IMBATED ROUGH STUCCO) - GRANESTONE
- 7 KINGSTON PANEL (IMBATED ROUGH STUCCO) - GRANESTONE
- 8 SPANDREL GLASS WINDOW SYSTEM TO MATCH STOREFRONT (TYP.)
- 9 5/16" FINISHED BRONZE DOWNSPOUT NOZZLE NO-168 (TYP.) - MATCH TO THE FURN. (602 92-1476)
- 10 DASHED LINE OF ROOM BEYOND
- 11 ADDRESSES SHALL BE LOCATED ON THE UPPER 1/4" OF THE BUILDING, IN A LOCATION APPROVED BY THE CITY, IN A COLOR THAT CONTRASTS THE BACKGROUND AND A MINIMUM HEIGHT OF 12" AND A MINIMUM 2" STROKE WIDTH. NUMBERS SHALL NOT BE PLACED ON WINDOW SURFACES.

EXTERIOR COLORS:

- CO-1 TRIC GRAY - SMOOTH STUCCO DECORATIVE METAL PANEL
- CO-2 TAUDE BLUE - SMOOTH STUCCO DECORATIVE METAL PANEL
- CO-3 DO - E GRAY - ROUGH STUCCO DECORATIVE METAL PANEL

EMPIRE DESIGN GROUP, Inc.



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EMPIRE DESIGN GROUP, INC. is a professional architectural and engineering firm. We are currently seeking qualified individuals for the following positions: ARCHITECTURAL DESIGNER, INTERIOR DESIGNER, and PROJECT MANAGER. For consideration, please send your resume and portfolio to: HR@empiredesign.com

ARCHITECT

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Date: 06/15/2006
Project Number: EDG04270
No. DATE REVISION DESCRIPTION
1-0-0-0
2-0-0-0
3-0-0-0

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| DESIGNED BY: | GH |
| CHECKED BY: | GH |
| DATE: | 06/15/06 |
| DRAWN BY: | GH |

PROPOSED EXTERIOR ELEVATIONS OF BUILDING B

Sheet No.

A 2.1

CITY OF HEMET PRELIMINARY GRADING PLAN HEMET INDUSTRIAL ASSOCIATES

GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS FOR THE IMPROVEMENTS OF DEVELOPMENTS WITHIN THE CITY OF HEMET IN ACCORDANCE WITH THE CITY OF HEMET ORDINANCES.
- THE CONTRACTOR OR DEVELOPER SHALL SECURE ALL PERMITS REQUIRED BY THE CITY OF HEMET.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE PUBLIC WORKS DEPARTMENT 72 HOURS IN ADVANCE, PRIOR TO THE COMMENCEMENT OF EACH PHASE OF WORK SO THAT THE CONSTRUCTION INSPECTOR CAN INSPECT THE WORK BEING DONE.
- ASPHALT CONCRETE PAVING SHALL COMPLY WITH RIVERSIDE COUNTY SPECIFICATIONS FOR 1/2" MAXIMUM AGGREGATE, THE MIX SHALL NOT BE LESS THAN 18% BY DRY WEIGHT. HEIGHT OF JUNCTION ASPHALT AS DEFINED IN SECTION 11 - UTILITIES MATERIALS OF THE STANDARD SPECIFICATION OF THE STATE OF CALIFORNIA DATED JULY, 1984.
- CURBS, GUTTERS, SIDEWALKS AND STREET STAKES SHALL BE INSTALLED AS PER CITY OF HEMET STANDARD SPECIFICATION FOR CURBS.
- ANY RELOCATION OF EXISTING FACILITIES SHALL BE THE RESPONSIBILITY AND AT THE EXPENSE OF THE SUBMITTER.
- SEWER PIPE MAY BE EITHER VITRIFIED CLAY OR POLYETHYLENE CHLORIDE AND MUST MEET SPECIFICATION FOR SANITARY SEWERS ON FILE WITH THE EASTERN MOUNTAIN WATER DISTRICT.
- SEWER LATERALS SHALL BE CARRIED TO PROPERTY LINES FOR EASTERN MOUNTAIN WATER DISTRICT. LOCATIONS SHALL BE MARKED ON THE CURB AS DIRECTED.
- SEWER INSTALLATION AND CONSTRUCTION SHALL COMPLY WITH REQUIREMENTS OF STANDARDS OF SPECIFICATIONS FOR SANITARY SEWERS FILED WITH EASTERN MOUNTAIN WATER DISTRICT.
- ALL SEWER LINES CONSTRUCTION SHALL BE INSPECTED AFTER INSTALLATION WITH A VISIBLE TELEVISION INSPECTION UNIT AT THE DEVELOPER'S EXPENSE. NO LESS THAN 10% MUST BE SUBMITTED TO THE PUBLIC WORKS DEPT. FOR REVIEW PRIOR TO APPROVAL OF THE OTHER FACILITIES.
- MANHOLES SHALL BE STANDARD 48" DIA. ECCENTRIC RISE CAST CONCRETE MANHOLES AS PER EASTERN MOUNTAIN WATER DISTRICT.
- THE TOP FIVE FEET OF ALL BRUSH BACULI AND ALL BEDDING SHALL BE COMPACTED TO 95% MINIMUM RELATIVE COMPACTNESS EXCEPT THAT THE TOP 12" INSECT OF 25% GRADE SHALL BE COMPACTED TO 95% MINIMUM RELATIVE COMPACTNESS. BELOW FIVE FEET SHALL BE COMPACTED TO 90% COMPACTED TO A DENSITY OF LESS THAN THAT OF THE UNDISTURBED SOIL SURROUNDING THE TRENCH.
- STREETS/ALLEYS ARE A CITY REQUIREMENT AND SHALL BE INSTALLED AS PER AGREEMENT BETWEEN SOUTHERN CALIFORNIA Edison COMPANY, CITY OF HEMET, AND THE OWNER.
- THERE SHALL BE A MINIMUM OF 4/8" OF FULL-FACE CURB BETWEEN THE PROLONGATION OF ANY PROPERTY LINE AND THE BEGINNING OF ANY DRIVEWAY APPROACH. THERE SHALL BE A MINIMUM OF 1/2" OF FULL-FACE CURB BETWEEN THE BEGINNING OF ANY DRIVEWAY APPROACH AND THE BEGINNING OF END OF THE CURB RETURN.
- DRIVEWAYS ARE TO BE CONSTRUCTED TO EACH LOT PER CITY STANDARDS NO. C-304, C-304-C, C-304-C-201. EXACT LOCATION AND WIDTH OF DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER. SIDEWALK AREA INCLUDES DRIVEWAY APPROACHES. QUANTITIES SHALL BE ADJUSTED ACCORDINGLY.
- ALL POSTS FOR STREET NAME SIGNS AND TURNING CORNER SIGNS SHALL BE INSTALLED PRIOR TO THE INSTALLATION OF CONCRETE SIDEWALK. EXACT LOCATIONS FOR SIDEWALKS SHALL BE DESIGNATED BY THE DESIGNER AND PUBLIC WORKS. ALL SIGNS SHALL BE FURNISHED BY THE CITY OF HEMET.
- INSTALL AUTOMATIC IRRIGATION SYSTEM TO ALL OFF-SITE VETERAN.
- ALL PERMITS ARE TO BE ISSUED BY THE CITY OF HEMET PRIOR TO THE PRELIMINARY CONSTRUCTION CONFERENCE BETWEEN THE DEVELOPER, HIS ENGINEER, CONTRACTOR, AND A REPRESENTATIVE OF THE DEPARTMENT OF PUBLIC WORKS.
- THE FINAL PAVING COURSE FOR ROADWAY AND AS SURFACE STREETS SHALL BE ONE TENTH OF A FOOT (10") IN THICKNESS AND A MINIMUM OF EIGHT FEET (8') IN WIDTH OR AS WIDE AS NECESSARY TO COVER ALL DRIVEWAYS AND OTHER LAP CRUSTING PARALLEL TWO FEET (2') ON EITHER SIDE OF DRIVEWAY. IN THICKNESS IS THE THICKNESS OF THE DRIVEWAY ALSO APPLIED TO PAVING BE HAS TO NEW CURB AND GUTTER FROM AN EXISTING STREET. IN SOME INSTANCES, IT WILL BE NECESSARY TO OVERLAY A MINIMUM OF ONE-HALF THE STREET TO BEYOND THE PROPOSED DRIVEWAY. THE FIELD BY THE PUBLIC WORKS INSPECTOR AND THE DEVELOPER. OWNER WILL BE RESPONSIBLE FOR PAYMENT THEREOF. THE FINAL PAVING COURSE SHALL BE Laid WITH A SELF-PROPELLED MECHANICAL SPREADING AND FINISHING MACHINE EQUIPPED WITH TAMPING BAR AND AUTOMATIC SCREENS (DUSTED GREEN OR APPROVED EQUAL).
- ALL STREET AND PARKING LOT SUB GRADE MATERIAL AND AND MATERIAL SHALL BE COMPACTED TO 95% DENSITY FOR THE TOP 12". BASE R-VALUES SHALL BE OBTAINED FROM THE PLACEMENT OF ANY AGGREGATE BASE MATERIAL.
- ALL STREETS SHALL BE FOR SEALED 10 DAYS AFTER ASPHALT PLACEMENT, (ONE GAL. PER SQ.YD. MINIMUM).
- FRIDGE RAMPS FOR THE HANDICAPPED AT ALL SIDEWALK INTERSECTIONS. THE INSPECTOR WILL LOCATE RAMPS AT TIME OF CONSTRUCTION. SIGNS RAISING FOR BLIND PERSONS SHALL BE PROVIDED AT ALL HANDICAPPED RAMPS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR THE DEVELOPER TO TEMPORARILY PATCH ALL UTILITY TRENCHES WITHIN EXISTING PAVED STREETS. THE TEMPORARY PATCH SHALL BE REPAIRED AND REPLACED WITH A PERMANENT PATCH AT THE END OF CONSTRUCTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE PUBLIC ENGINEER AFTER THE BASE COURSE FOR THE STREETS HAS BEEN PLACED AND BEFORE THE PAVING HAS BEEN INSTALLED SO THAT THE ENGINEER MAY INSTALL THE STREET CENTERLINE MARKINGS.
- THE CONTRACTOR/DEVELOPER WILL HOLD HARMLESS, INDemnify AND HOLD THE CITY OF HEMET, THE OWNER, THE ARCHITECT, THE ENGINEER AND HIS CONSULTANTS AND EACH OF THEIR OFFICES AND EMPLOYEES AND AGENTS, FROM AND ALL LIABILITY CLAIMS, LOSSES OR DAMAGES INCURRED OR ALLEGED TO ARISE FROM THE PERFORMANCE OF WORK PROVIDED HEREON. THIS SHALL INCLUDE THE SILENCE, NEGLIGENCE OF THE CITY OF HEMET, THE OWNER, THE ARCHITECT, THE ENGINEER AND HIS CONSULTANTS, AND EACH OF THEIR OFFICES AND EMPLOYEES AND AGENTS.
- A 72-HOUR NOTICE IS REQUIRED PRIOR TO PUBLIC WORKS INSPECTIONS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND/OR DEVELOPER TO PROTECT FROM DAMAGE ANY UTILITY OR OTHER APPURTENANCE THAT IS TO REMAIN IN PLACE, BE REINSTALLED, RELOCATED OR OTHERWISE REPAIRABLE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UTILITIES. FOR THE LOCATION OF UNMARKED UTILITIES, OR FOR EMERGENCY ASSISTANCE CALL.

TELEPHONE: 800-443-6000
 SOLICITORS: 800-443-6000
 ELECTRICAL: 800-443-6000
 WATER & SEWER: 800-798-2330
 WATER & SEWER: 700-258-1341
 CABLE SERVICE: 652-3020

GRADING NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE GRADING SCHEDULES OF THE CITY OF HEMET AND ANY SPECIAL REQUIREMENTS OF THE PERMIT AND THE UNIFORM BUILDING CODE, APPROX. 1993.
- NO GRADING SHALL BE COMPLETED WITHOUT FIRST NOTIFYING THE CITY ENGINEER. A PRE-GRADING MEETING AT THE SITE IS REQUIRED BEFORE START OF GRADING WITH FOLLOWING PEOPLE PRESENT: OWNER, GRADING CONTRACTOR, DESIGN CIVIL ENGINEER, SOILS ENGINEER/GEOLOGIST AND CITY INSPECTOR.
- THE SOILS ENGINEER SHALL CONDUCT INSPECTIONS AND SUBMIT A COMPLETE REPORT AND MAP UPON COMPLETION OF SOILS GRADING.
- THE FINAL COMPLETION REPORT AND APPROVAL FROM THE SOILS ENGINEER SHALL CONTAIN THE TYPE OF FIELD TESTING PERFORMED, EACH TEST SHALL BE IDENTIFIED WITH THE METHOD OF OBTAINING THE IN-SITU DENSITY, WHETHER SAND-CONE OR DRYING BIN AND SHALL BE NOTED FOR EACH TEST. SUFFICIENT MAXIMUM DENSITY DETERMINATIONS SHALL BE PERFORMED TO VERIFY THE ACCURACY OF THE MAXIMUM DENSITY CURVES USED BY THE FIELD TECHNICIAN.
- THE SOILS ENGINEER AND ENGINEERING GEOLOGIST SHALL EXERCISE SUFFICIENT SUPERVISORY CONTROL DURING GRADING TO INSURE COMPLIANCE WITH THE PLANS, SPECIFICATIONS AND CODE WITHIN HIS JURISDICTION.
- THE DESIGN CIVIL ENGINEER SHALL EXERCISE SUFFICIENT CONTROL OVER GRADING TO INSURE COMPLIANCE WITH THE PLANS, SPECIFICATIONS AND CODE WITHIN HIS JURISDICTION.
- GRADES SHALL BE CONTROLLED BY MARKERS.
- THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
- GRADING OPERATIONS AND MAINTENANCE OF EMBANKMENT WITHIN ONE HALF MILE OF HUMAN OCCUPANCY SHALL NOT BE CONDUCTED BETWEEN THE HOURS OF 9 P.M. AND 7 A.M. ON ANYTIME ON A SUNDAY OR FEDERAL DAY.
- REMOVE AND REPLACE OR REPAIR ANY APPURTENANCES DAMAGED OR BROKEN DURING CONSTRUCTION TO THE SATISFACTION OF THE PUBLIC WORKS DEPARTMENT.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL PUBLIC STREETS AFFECTED BY HIS OPERATIONS AT THE END OF EACH WORKING DAY.
- THE CONTRACTOR SHALL OBTAIN AN ENCLOSURE PERMIT FOR WORK WITHIN PUBLIC RIGHT-OF-WAY.
- A 2" MIN. 12" BY 4" BY 6" IS REQUIRED AT THE TOPS OF ALL SLOPES.
- REMOVING, LANDSCAPING AND IRRIGATION AS REQUIRED BY THE CITY OF HEMET.
- CUT SLOPES SHALL BE NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL.
- FILL SLOPES SHALL BE NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL.
- FILLS SHALL BE COMPACTED THROUGHOUT TO A MINIMUM OF 90% RELATIVE DENSITY. MAXIMUM DENSITY WILL BE DETERMINED BY ASTM 1557-70 OR APPROVED EQUAL. AREAS TO BE REPAIRED SHALL BE PROPERLY PREPARED AND APPROVED BY THE CITY ENGINEER AND SOILS ENGINEER PRIOR TO PLACING FILL.
- BLASTING PAD AND DRILLING SHALE SLOPS SHALL BE THE MINIMUM, EXCEPT AS SHOWN ON THE TYPICAL LOT.
- ALL GRADING SHALL BE PERFORMED IN CONFORMANCE WITH RECOMMENDATIONS OF THE PRELIMINARY SOILS INVESTIGATION ON.

EASTERN STRATA GEOLOGICAL SERVICES, DATED: JAN 14, 2003
 PROJECT NO. 111818-03-01

TWO SETS OF THE FINAL COMPLETION REPORT SHALL BE SUBMITTED TO THE BUILDING AND SAFETY DEPARTMENT WHICH SHALL INCLUDE FOUNDATION DESIGN RECOMMENDATIONS AND CERTIFICATION THAT GRADING HAS BEEN DONE IN CONFORMANCE WITH THE RECOMMENDATIONS OF THE PRELIMINARY SOILS REPORT.

DURING ROAD GRADING OPERATIONS AND PRIOR TO DISTRIBUTION OF PERMANENT DRAINAGE STRUCTURES, TEMPORARY DRAINAGE CONTROL SHOULD BE PROVIDED TO PREVENT FLOODING WATER AND DAMAGE TO ADJACENT PROPERTIES.

SOILS AND GEOLOGIST CERTIFICATION

THIS GRADING PLAN HAS BEEN REVIEWED BY THE UNDERSIGNED AND FOUND TO BE IN CONFORMANCE WITH THE RECOMMENDATIONS AS OUTLINED IN THE FOLLOWING SOILS AND GEOLOGICAL REPORT FOR THIS PROJECT ENTITLED:

PROPOSED COMMERCIAL DEVELOPMENT, PARCELS 1-3 OF PARCEL MAP 1400, LOCATED AT THE NORTHWEST INTERSECTION OF CANTON AND WENTWORTH DRIVE, CITY OF HEMET, RIVERSIDE COUNTY, CA

DATE: JUNE 8, 2003

FIRM NAME: EASTERN STRATA GEOLOGICAL SERVICES, INC.

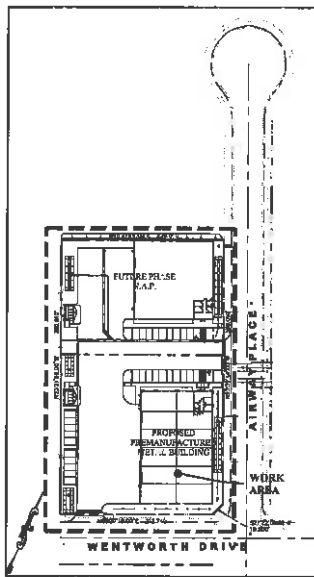
BY: STEPHEN H. POOLE, P.E. SE
 GEOLOGICAL ENGINEER DATE

NOTICE TO CONTRACTOR

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTIES. THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO OBTAIN, MAINTAIN AND HOLD DESIGN PROFESSIONAL LIABILITY FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT LIABILITY ARISING FROM THE SILENCE, NEGLIGENCE OF DESIGN PROFESSIONAL.

UNAUTHORIZED CHANGES & USES

CAUTION: THE ENGINEER PREPARED THESE PLANS WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

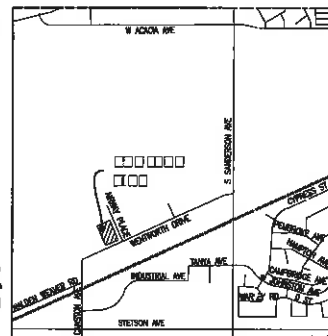


CONSTRUCTION NOTES

- CONSTRUCT 5" MINIMUM THICKNESS P.L.C.C. PAVING WITH CONSTRUCTION OF CURB AND GUTTER CENTER EVERY 10 FEET OR LESS PER GEOTECHNICAL RECOMMENDATION.
- CONSTRUCT 4" CURB AND GUTTER "TYPE A" PER CITY OF HEMET PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION STD. NO. C-200. HEIGHT CENTER HIGH TO 18".
- CONSTRUCT 4" CURB "TYPE B" PER CITY OF HEMET PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION STD. NO. C-200.
- CONSTRUCT CONCRETE DRIVEWAY APPROACH PER CITY OF HEMET PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION STD. NO. C-210A.
- CONSTRUCT 18" WIDE CURB OPENING PER DETAIL 5 ON SHEET 4.
- INSTALL ACCESSIBLE PAVING SIGN PER DETAIL 6 ON SHEET 4.
- PAINT HANDICAP PARKING AND STOPPING PER DETAIL 7 ON SHEET 4.
- PAINT 4" WIDE WHITE STROKE PER CITY OF HEMET PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION STD. NO. P-100 AND P-101.
- CONSTRUCT 30" CONCRETE V-GUTTER PER DETAIL 8 ON SHEET 4.
- INSTALL 24"X60" PRECAST CONCRETE CATCH BASIN (BROOKS #2400 OR APPROVED EQUAL) PER DETAIL 10 ON SHEET 4.
- CONSTRUCT ADA ACCESSIBLE RAMP PER CITY OF HEMET PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION STD. NO. C-216A.
- CONSTRUCT 12" WIDE "STEP-OFF" CONCRETE PER DETAIL 13 ON SHEET 4.
- INSTALL 12" PLUG FOR FUTURE SO CONNECTION.
- SAFETY AND REMOTE EXISTING CURB AND GUTTER AND 1 FT. WIDE A.C. PAVING. INSTALL A.C. PAVING TO MATCH EXISTING STRIP AFTER DRY APPROACH HAS BEEN CONSTRUCTED (AS DIRECTED BY CITY INSPECTOR).
- INSTALL PORTLAND CEMENT PER DETAIL 14 ON SHEET 4.
- CONSTRUCT 4" THICK CONCRETE SIDEWALK.
- CONSTRUCT TRASH ENCLOSURE PER ARCHITECTURAL PLAN.
- CONSTRUCT CURB OUTLET PER CITY OF HEMET PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION STD. NO. C-307.
- INSTALL 12" HOPE STORM DRAIN PIPE.
- CONSTRUCT BROWNING AREA PER DETAIL 21 ON SHEET 5.
- CONSTRUCT CONCRETE MASONRY BLOCK RETAINING WALL PER SEPARATE PERMIT. 4' HIGH MAXIMUM.
- INSTALL 2" S240 PFC DRAIN KIAM PIPE.
- INSTALL CLASS 1 AGGREGATE BASE PER GEOTECHNICAL RECOMMENDATION.
- INSTALL CLASS BASH FILTER INSERTS WITH FINE MESH SCREEN ON APPROVED EQUAL PER DETAIL 27 ON SHEET 4.
- INSTALL 4" HIGH CHAIN LINK FENCE PER ARCHITECTURAL PLANS.
- INSTALL 2" 4" HOPE STORM DRAIN PIPE.

QUANTITIES

| |
|------------|
| 22,800 SF. |
| 50 L.F. |
| 853 L.F. |
| 658 S.F. |
| 5 L.F. |
| 1 EA. |
| 1 L.S. |
| 911 L.F. |
| 4 EA. |
| 1 EA. |
| 1 DA. |
| 101 S.F. |
| 1 EA. |
| 139 L.F. |
| 2,023 S.F. |
| 2 EA. |
| 1 EA. |
| 915 L.F. |
| 1 L.S. |
| 337 L.F. |
| 10 L.S. |
| 29,700 SF. |
| 6 EA. |
| 300 L.F. |
| 13 L.F. |



LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF HEMET, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS: PARCELS 1 OF PARCEL MAP 1400, IN THE CITY OF HEMET, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP FILED IN BOOK 232, PAGES 43 AND 44 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

ADDRESS

100 WENTWORTH AND ARROYO PLAGE
 HEMET, CALIFORNIA 92343

APN NO.

450-040-024-4

OWNER/APPLICANT

BRYAN GLENNON
 GLENNON DEVELOPMENT CO.
 4800 DATE STREET, SUITE 203A
 MERRICK, CA 92665
 PHONE: (951) 894-5432
 FAX: (951) 894-2633
 CELL PHONE: (951) 728-6958
 E-MAIL: bryng@gledd.com

BENCHMARK

NO BENCHMARK

BASIS OF BEARINGS

NO BASIS OF BEARINGS

EARTHWORK QUANTITIES

| | |
|--------|----------|
| CUT | 150 CY |
| FILL | 4,300 CY |
| EXPORT | 0 CY |
| IMPORT | 4,150 CY |

*EARTHWORK QUANTITIES SHOWN HEREON ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING HIS OWN QUANTITIES FOR BIDDING PURPOSES.

TOPOGRAPHY

NO TOPOGRAPHY

SHEET INDEX

| | |
|--------------------------|---------|
| TITLE SHEET | SHEET 1 |
| PRELIMINARY GRADING PLAN | SHEET 2 |
| CROSS SECTIONS | SHEET 3 |
| DETAIL SHEET | SHEET 4 |
| DETAIL SHEET | SHEET 5 |
| EROSION CONTROL PLAN | SHEET 6 |
| EROSION CONTROL PLAN | SHEET 7 |
| HORIZONTAL CONTROL PLAN | SHEET 8 |

Underground Service Alert

Call: TOLL FREE 811

TWO WORKING DAYS BEFORE YOU DIG

REVISIONS:

| NO. | DATE | BY |
|-----|------|----|
| | | |
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| | | |

DESIGNED BY: SPACAN/ECG

APPROVED:

DATE: 6/29/03

PREPARED UNDER THE SUPERVISION OF:

KURT H. BROWN, P.E. REG. #4180 6/29/03

SCALE: 1"=40'

DATE: 6/29/03

APPROVED BY:

GEORGE BRANSON, CITE ENGINEER
 REG. NO. 39751 (E.C.P. #130 CITE)

DATE:



CITY OF HEMET

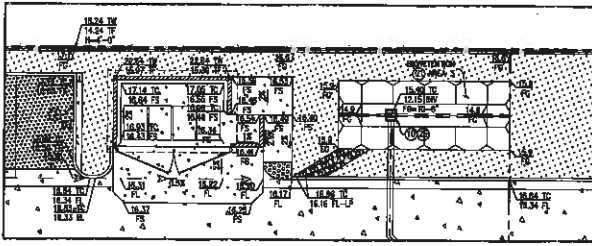
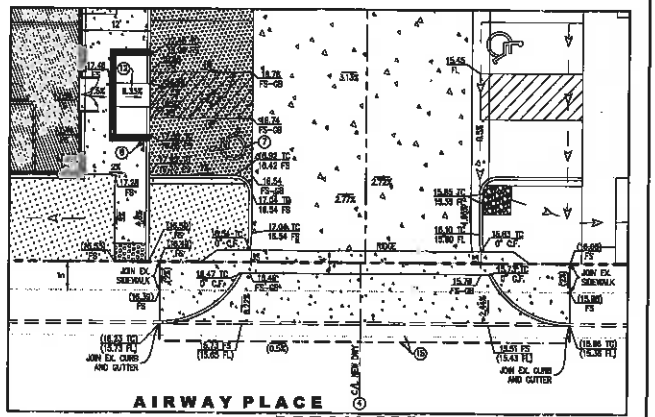
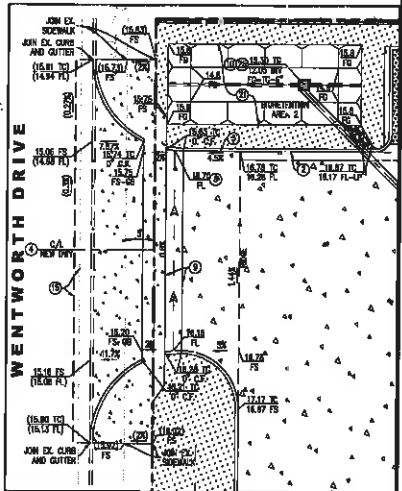
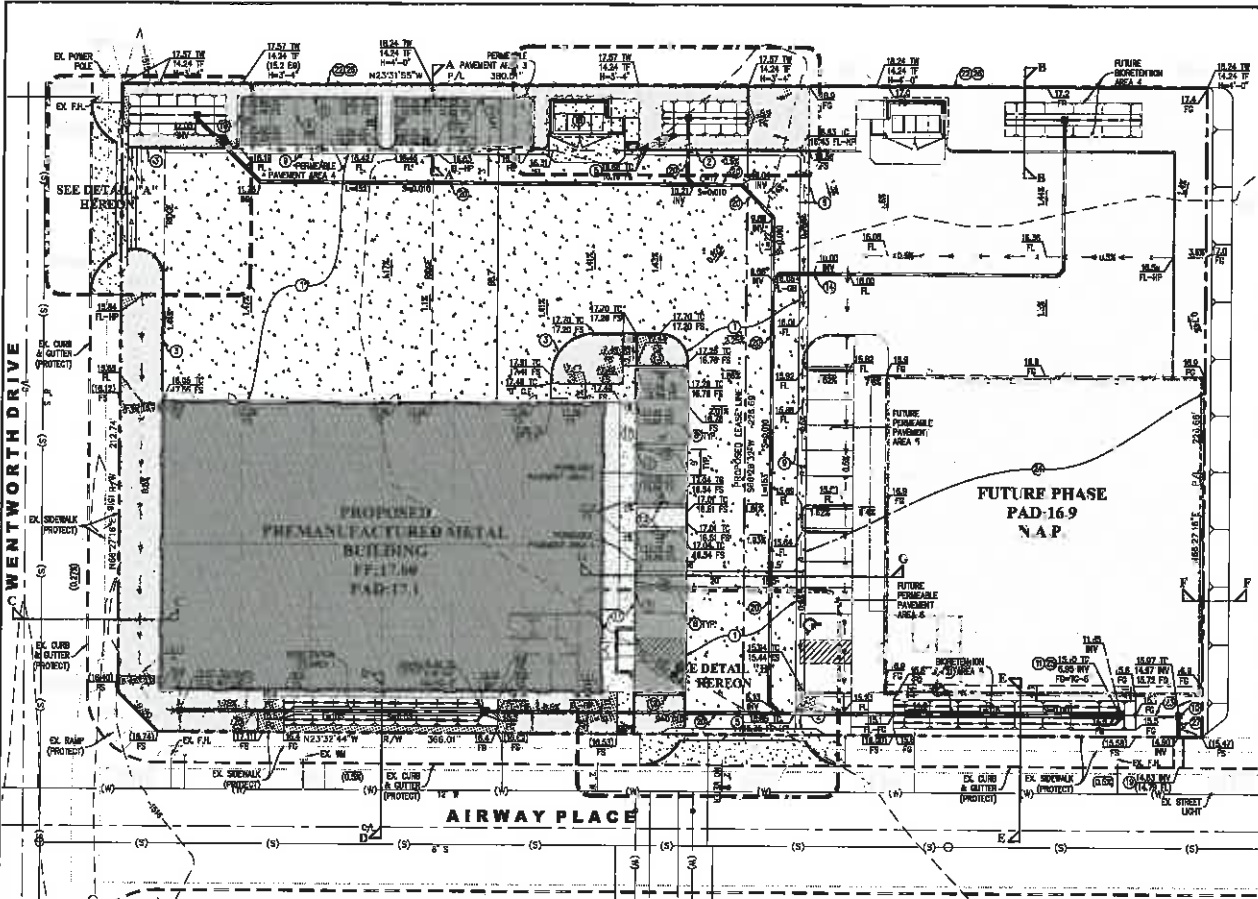
TITLE SHEET

CEMET INDUSTRIAL AND ASSOCIATES
 NO 0 0 ENT0 ORTO DRASE 0 AR0 AC PLAGE
 HEMET, CA 0245

FILE NO. OF_8_802678

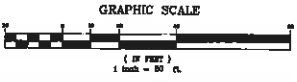
CONSTRUCTION NOTES

- 1) CONSTRUCT 5" MINIMUM THICKNESS P.C.C. FINISH WITH CONSTRUCTION OR EXPANSION JOINTS EVERY 10 FEET OR LESS PER GEOTECHNICAL RECOMMENDATION.
- 2) CONSTRUCT 4" CURB AND GUTTER TYPE "A" PER CITY OF HEMET PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION STD. NO. C-202. MOOPY GUTTER WIDTH TO 18".
- 3) CONSTRUCT 4" CURB TYPE "B" PER CITY OF HEMET PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION STD. NO. C-203.
- 4) CONSTRUCT COMMERCIAL DRIVEWAY APPROACH PER CITY OF HEMET PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION STD. NO. C-210A.
- 5) CONSTRUCT 18" WIDE CURB OPENING PER DETAIL 5 ON SHEET A.
- 6) INSTALL ACCESSIBLE PARKING SIGN PER DETAIL 6 ON SHEET A.
- 7) PAINT HANDICAP EMBLEM AND STRIPING PER DETAIL 7 ON SHEET A.
- 8) PAINT 4" WIDE WAVE STRIP PER CITY OF HEMET PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION STD. NO. P-403 AND P-401.
- 9) CONSTRUCT 18" CONCRETE Y-GUTTER PER DETAIL 9 ON SHEET A.
- 10) INSTALL 24"x24" PRECAST CONCRETE CATCH BASIN (BROOKS #2424 OR APPROVED EQUAL) PER DETAIL 10 ON SHEET A.
- 11) CONSTRUCT 36"x36" PRECAST CONCRETE CATCH BASIN (BROOKS #3638 OR APPROVED EQUAL) WITH SUMP PUMP, LIFT AND CONTROLLER (V.M. EMERGENCY POWER). CONTRACTOR SHALL PROVIDE SEPARATE FOUND.
- 12) CONSTRUCT ADA ACCESSIBLE RAMP PER CITY OF HEMET PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION STD. NO. C-210 AND C-210A.
- 13) CONSTRUCT 12" WIDE "STEP-OFF" CONCRETE PER DETAIL 13 ON SHEET A.
- 14) INSTALL 12" PLUG FOR FUTURE SO CONNECTION.
- 15) SAWCUT AND REMOVE EXISTING CURB AND GUTTER AND 1 FT WIDE A.C. PAVEMENT. INSTALL A.C. FINISH TO MATCH EXISTING SECTION AFTER CITY APPROVAL HAS BEEN OBTAINED. (AS DIRECTED BY CITY INSPECTOR).
- 16) INSTALL POROUS CONCRETE PER DETAIL 16 ON SHEET A.
- 17) CONSTRUCT 4" THICK CONCRETE SIDEWALK.
- 18) CONSTRUCT TIRISH ENCLOSURE PER ARCHITECTS PLAN.
- 19) CONSTRUCT CURB OPENING PER CITY OF HEMET PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION STD. NO. D-301.
- 20) INSTALL 12" HOPE STORM DRAIN P.P.C.
- 21) CONSTRUCT RETENTION AREA PER DETAIL 21 ON SHEET S.
- 22) CONSTRUCT CONCRETE MASONRY BLOCK RETAINING WALL PER SEPARATE PERMIT. 4' HIGH MAXIMUM.
- 23) INSTALL 2" SCH 40 PVC FORCE MAIN PIPE.
- 24) INSTALL CLASS 1 AGGREGATE BASE PER GEOTECHNICAL RECOMMENDATION.
- 25) INSTALL CATCH BASIN FILTER INSERTS WITH FINE MESH SCREEN OR APPROVED EQUAL PER DETAIL 27 ON SHEET S.
- 26) INSTALL 6" HIGH CHAIN LINK FENCE PER ARCHITECTURAL PLANS.
- 27) INSTALL 2-4" HOPE STORM DRAIN P.P.C.



NOTE:
PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY AND IF DETERMINED BY THE CITY ENGINEER, THE DEVELOPER SHALL REMOVE AND REPLACE SIDEWALK, CURB AND GUTTER, AND REPLACE WITH CURB & GUTTER, DRIVEWAY APPROACH AND SIDEWALK SECTIONS TO BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE HEAVY LOADS. ANY SIDEWALK, CURB AND GUTTER OR AC PAVEMENT DAMAGED DURING CONSTRUCTION SHALL BE REPLACED, AS DETERMINED BY THE CITY ENGINEER.

NOTE:
TRUCK ROUTES SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE CITY ENGINEER, AND SHALL CONFORM TO SECTION 78-51 OF THE MUNICIPAL CODE. FOR ALL EQUIPMENT OVER 10,000 LBS MOVED ON TO OR OFF-SITE.



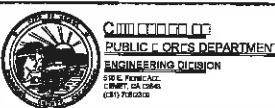
Underground Service Alert
Call: TOLL FREE
811
TWO WEEKS DAYS BEFORE YOU DIG

| REVISION | DATE | BY | APPROVED |
|----------|------|----|----------|
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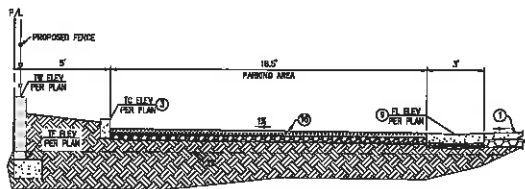
PREPARED UNDER THE SUPERVISION OF:
RORY M. SAXON, P.E. RCE 44180 8/30/18
DATE: 8/30/18
SCALE: 1"=200'
DATE: 8/30/18

APPROVED BY:
DORIS WAGNON, C.T.C. ENGINEER
RCE NO. 33781 (CEP. 1/30/18)
DATE: 8/30/18

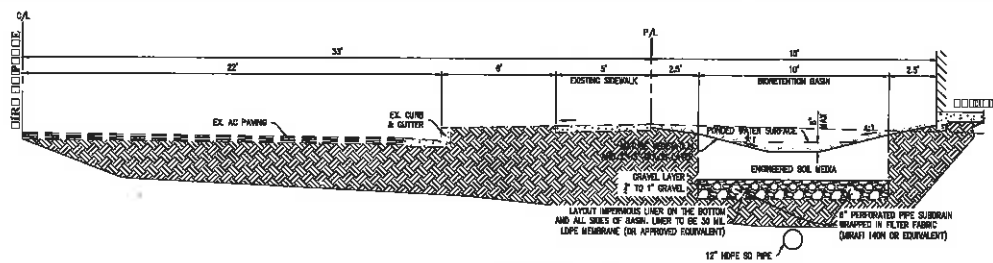


PRELIMINARY GRADING PLAN
CEMET INDUSTRIAL AND ASSOCIATES
NO. C.D. ENT OR TO DRILL OR AIR OR PLACE
CEMET, CA 92545

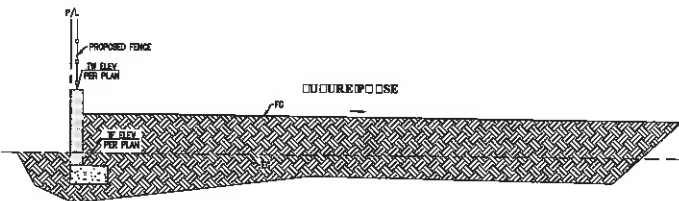
OF 8 SHEETS
FILE NO.



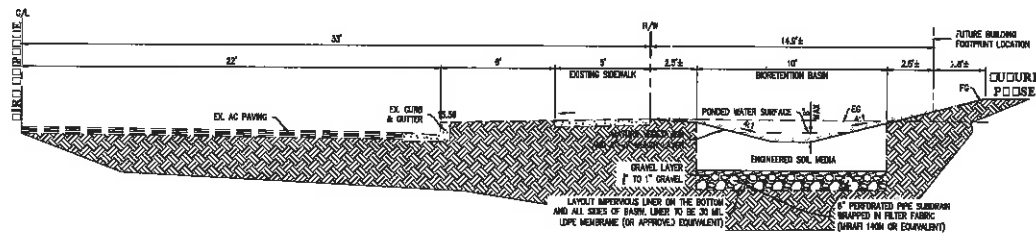
SECTION A-A
SCALE 1"=3'



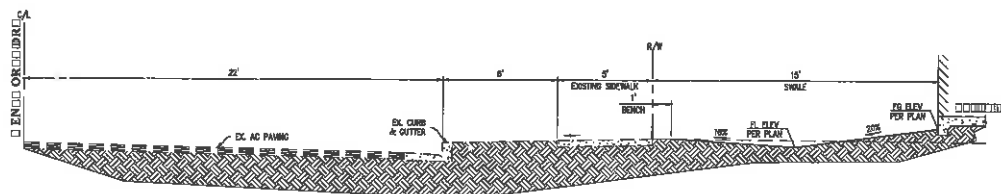
SECTION D-D
SCALE 1"=3'



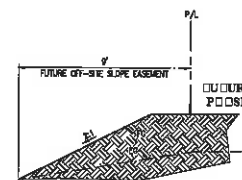
SECTION B-B
SCALE 1"=3'



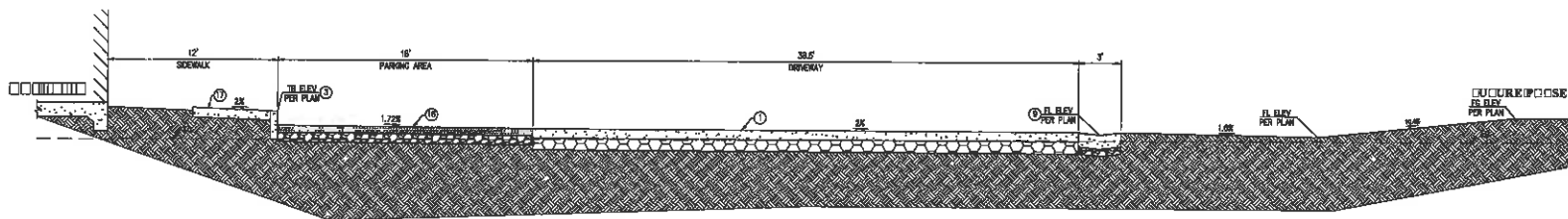
SECTION E-E
SCALE 1"=3'



SECTION C-C
SCALE 1"=3'



SECTION F-F
SCALE 1"=3'



SECTION G-G
HORIZ. 1"=1'
VERT. 1"=2'

Underground Service Alert



Call: TOLL FREE
811

| REVISIONS | | APPROVED |
|-----------|------|----------|
| NO. | DATE | BY |
| | | |
| | | |
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PREPARED UNDER THE SUPERVISION OF:
 GEORGE BARNARD, CIVIL ENGINEER
 RCE NO. 23751 DEPT. C-000 C.T.C.
 DATE: _____

APPROVED BY:
 GEORGE BARNARD, CIVIL ENGINEER
 RCE NO. 23751 DEPT. C-000 C.T.C.
 DATE: _____



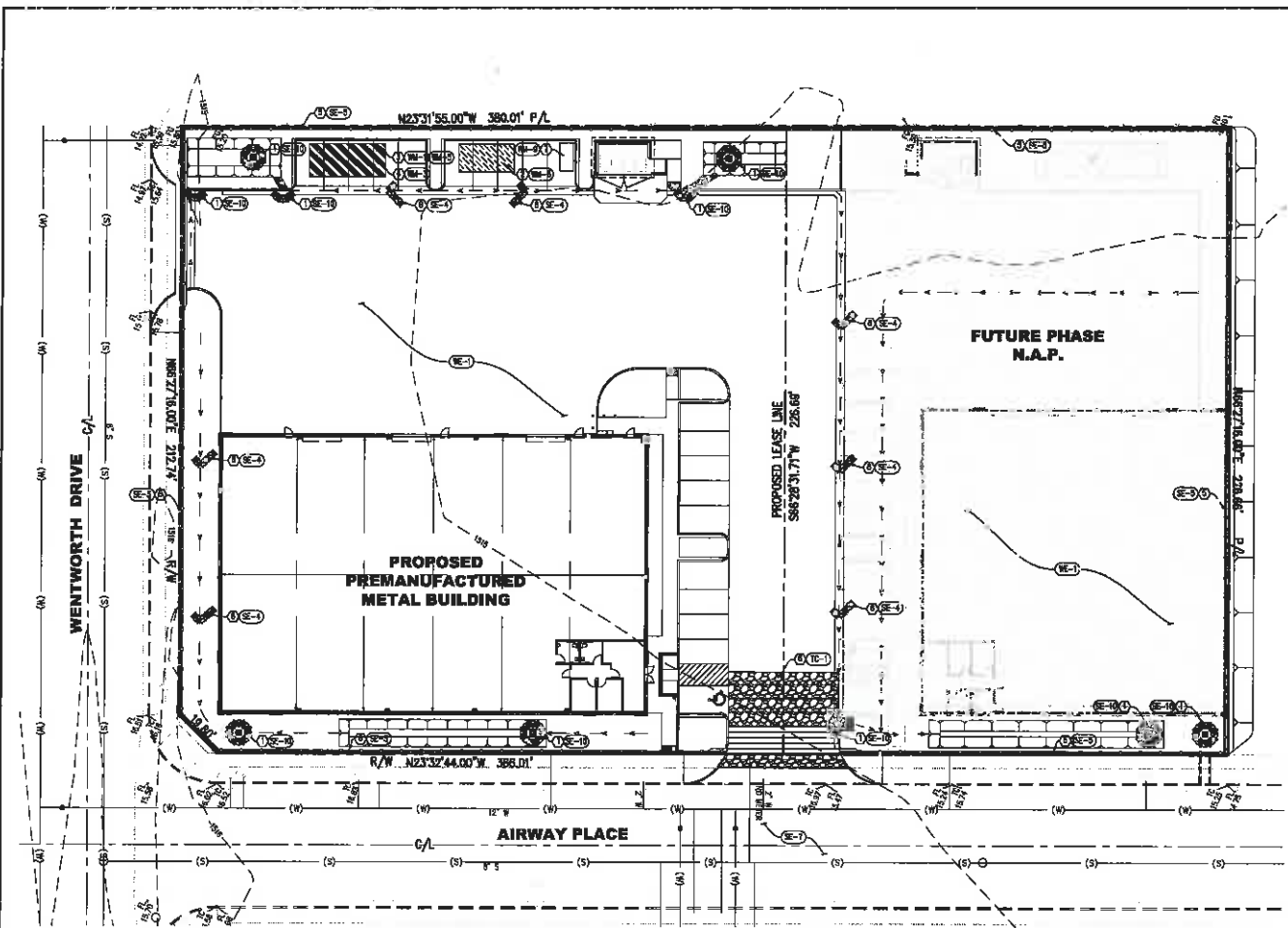
CIVIL ENGINEERING DIVISION
 PUBLIC WORKS DEPARTMENT
 510 S. PINE AVE.
 CEMET, CA 92528
 (951) 703-2100

CROSS SECTIONS
 CEMET INDUSTRIAL AND ASSOCIATES
 1100 CENTO ORTE DRIVE, AIRPORT PLACE
 CEMET, CA 92528

OF 8 SHEETS
 FILE NO. _____

C.C.

P.A.



LEGEND:

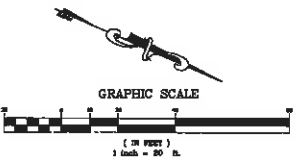
- GRAVEL BAGS (SE-4, SE-9 & SE-10 PER CASQA) - [Symbol]
- FIBER ROLL (SE-8 PER CASQA) - [Symbol]
- CONCRETE WASHOUT (M-8 PER CASQA) - [Symbol]
- EQUIPMENT & MATERIAL STORAGE AREA (M-1 & M-3 PER CASQA) - [Symbol]
- STABILIZED ENTRANCE (T-1 PER CASQA) - [Symbol]

BMP LEGEND (CASQA):

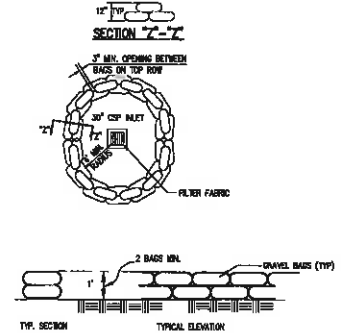
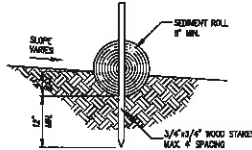
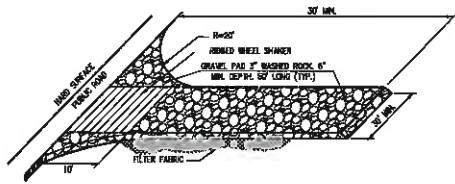
- SE-1 - SILT FENCES
- SE-4 - CHECK DAMS
- SE-8 - FIBER ROLLS
- SE-9 - GRAVEL BAG BERM
- SE-10 - STREET SWEEPING AND WASHING
- SE-11 - STORM INLET PROTECTION
- M-1 - MATERIAL DELIVERY STORAGE
- M-2 - MATERIAL USE
- M-3 - STOCK PILE MANAGEMENT
- M-4 - SOLID WASTE MANAGEMENT
- M-5 - CONCRETE WASTE MANAGEMENT
- M-6 - SANITARY/SEPTIC WASTE MANAGEMENT
- T-1 - STABILIZED CONSTRUCTION ENTRANCE
- WE-1 - WIND EROSION CONTROL

EROSION CONTROL CONSTRUCTION NOTES

| EROSION CONTROL CONSTRUCTION NOTES | QUANTITIES |
|---|------------|
| 1. INSTALL DOUBLE ROW OF GRAVEL BAGS & BUILT PROTECTION PER DETAILS ON SHEET 7 (SE-4 & SE-10 PER CASQA). | 22 EA |
| 2. INSTALL CONCRETE WASHOUT CONTAINER (M-8 PER CASQA). | 1 EA |
| 3. ESTABLISH EQUIPMENT & MATERIAL STORAGE AREA PER CALTRANS WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BEST MANAGEMENT PRACTICES (M-1 AND M-3 PER CASQA). | 1 L.S. |
| 4. ESTABLISH STOCKPILE MANAGEMENT AREA PER CALTRANS WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BEST MANAGEMENT PRACTICES (M-3 PER CASQA). | 1,387 L.F. |
| 5. INSTALL FIBER ROLL PER DETAIL ON SHEET 7 (SE-8 PER CASQA). | 1 L.S. |
| 6. INSTALL STABILIZED CONSTRUCTION ENTRANCE (T-1 PER CASQA). | 1 EA |
| 7. INSTALL PORTABLE TOILET (M-6 PER CASQA). | 19 EA |
| 8. INSTALL VELOCITY REDUCERS PER DETAIL ON SHEET 7 (SE-4 PER CASQA). | |



| <p>Underground Service Alert Call: TOLL FREE 811 TWO WORKING DAYS BEFORE YOU DIG</p> | <p>REVISIONS:</p> <table border="1"> <tr><th>NO.</th><th>DATE</th><th>BY</th></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table> | NO. | DATE | BY | | | | | | | | | | <p>APPROVED BY:</p> <p>[Signature]</p> | <p>PREPARED UNDER THE SUPERVISION OF:</p> <p>[Signature]</p> <p>DATE: 8/30/19</p> | <p>APPROVED BY:</p> <p>GEORGE BAGIONI, CIVIL ENGINEER RCE NO. 33781 DEEP. C 030 C1C</p> | <p>STATE OF CALIFORNIA CIVIL ENGINEER NO. 44180 Exp. 8/30/19</p> | <p>SAVON ENGINEERING SERVICES, INC. 885 TORRE MEMPHIS DRIVE, SUITE A, OAKLAND, CA 94612 TEL: (415) 835-1200 FAX: (415) 835-1165</p> | <p>ENGINEERING DEPARTMENT PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION</p> | <p>EROSION CONTROL PLAN CEMET INDUSTRIAL AND ASSOCIATES NO 0 0 ENTG 0 RTD 0 DRIDE 0 AIRD 0 AD PLACE CEMET, CA 12845</p> | <p>OF 0 SHEETS FILE NO.</p> |
|--|---|--|--------------|--------------|-------------|-------------|--------------|--------------|--------------|--|--|--|--|--|---|---|---|---|--|---|--|
| | NO. | DATE | BY | | | | | | | | | | | | | | | | | | |
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| <p>DESIGNED BY:</p> <p>DRAWN BY:</p> <p>CHECKED BY:</p> | <p>SCALE: 1"=200'</p> <p>DATE:</p> | <p>REMARKS: CHECKED BOX AT THE CORNER OF CONCRETE WALL AT END OF BRIDGE DRAINAGE AT THE NW CORNER OF SWETSON AND END OF DRIVE LINE.</p> | <p>DATE:</p> | <p>DATE:</p> | <p>C.C.</p> | <p>E.N.</p> | <p>DATE:</p> | <p>DATE:</p> | <p>DATE:</p> | | | | | | | | | | | | |



SECTION 05110 - EROSION CONTROL

SCALE: NOT TO SCALE

6

SECTION 05110 - EROSION CONTROL

SCALE: NOT TO SCALE

5

SECTION 05110 - EROSION CONTROL

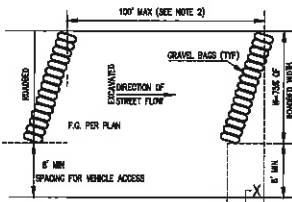
SCALE: NOT TO SCALE

2

SECTION 05110 - EROSION CONTROL

SCALE: NOT TO SCALE

1



- NOTES:**
- GRAVEL BAGS ARE ENCOURAGED OVER THE USE OF SANDBAGS AND MAY BE REQUIRED IN AREAS WHICH ARE PARTICULARLY SENSITIVE TO SEDIMENT GENERATION.
 - REQUIREMENTS FOR AND SPACING OF VELOCITY REDUCERS FOR SITUATIONS WITH GRADES OF LESS THAN 4% SHALL BE AS SHOWN ON THE APPROVED EROSION CONTROL PLAN.
 - THIS STANDARD DETAIL SHALL BE USED AS SHOWN ON THE APPROVED EROSION CONTROL PLAN.

| W | X |
|---------|----|
| 20'-30' | 2' |
| 31'-40' | 7' |
| 41'-50' | 8' |

SPACING OF ROWS OF GRAVEL BAGS

| SLOPE OF STREET | PAVED STREET | UNPAVED STREET |
|-----------------|--------------|----------------|
| 10% OR MORE | 20' | 20' (2 BAGS) |
| 5% TO 10% | 30' | 30' (2 BAGS) |
| 3% TO 5% | 40' | 40' (2 BAGS) |
| 3.0% OF LESS | 50' | 50' (2 BAGS) |

- NOTES:**
- INTERFERE WITH SHORT-TERM USE.
 - USE TO REDUCE NON-STORM WATER FLOW.
 - ALLOW FOR PROPER MAINTENANCE AND CLEANUP.
 - BAGS MUST BE REMOVED AFTER ADJACENT OPERATION IS COMPLETED.
 - NOT APPLICABLE BY AREAS WITH HIGH SELLS AND CLAYS WITHOUT FILTER FABRIC.

SECTION 05110 - EROSION CONTROL

SCALE: NOT TO SCALE

8

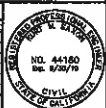
Underground Service Alert

Call: TOLL FREE 811

TWO WORKING DAYS BEFORE YOU DIG

| NO. | DATE | BY | APPROVED: |
|-----|------|----|-----------|
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| | | | |
| | | | |

DESIGNED BY: _____ DRAWN BY: _____ CHECKED BY: _____



PREPARED UNDER THE SUPERVISION OF:
 RAYMOND J. SAXON, P.E. NO. 44180 8/30/19
 SCALE: 1"=100'
 DATE: _____

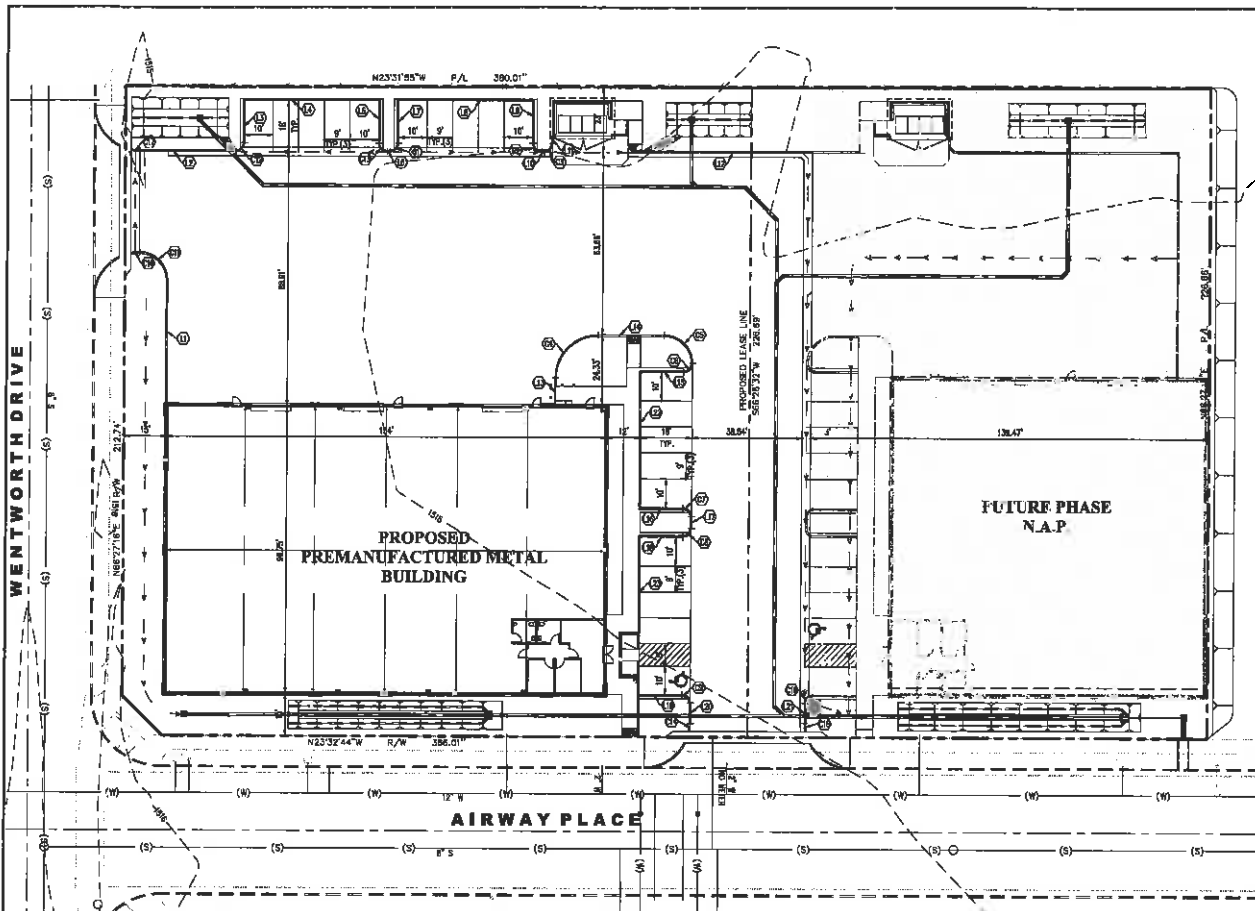
APPROVED BY:
 LORGE BRAGDON, CITE ENGINEER
 RCE NO. 35751 EXPIR. 11/30/21
 DATE: _____



CITY OF SAN DIEGO
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION
 410 E. FORTMEYER
 SAN DIEGO, CA 92161
 (619) 425-2300

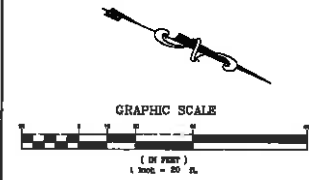
EROSION CONTROL PLAN
 CEMET INDUSTRIAL AND ASSOCIATES
 NO. 010 BENTON DRIVE, CARLSBAD PLACE
 CEMET, CA 92008

OF 8 SHEETS
 FILE NO. _____

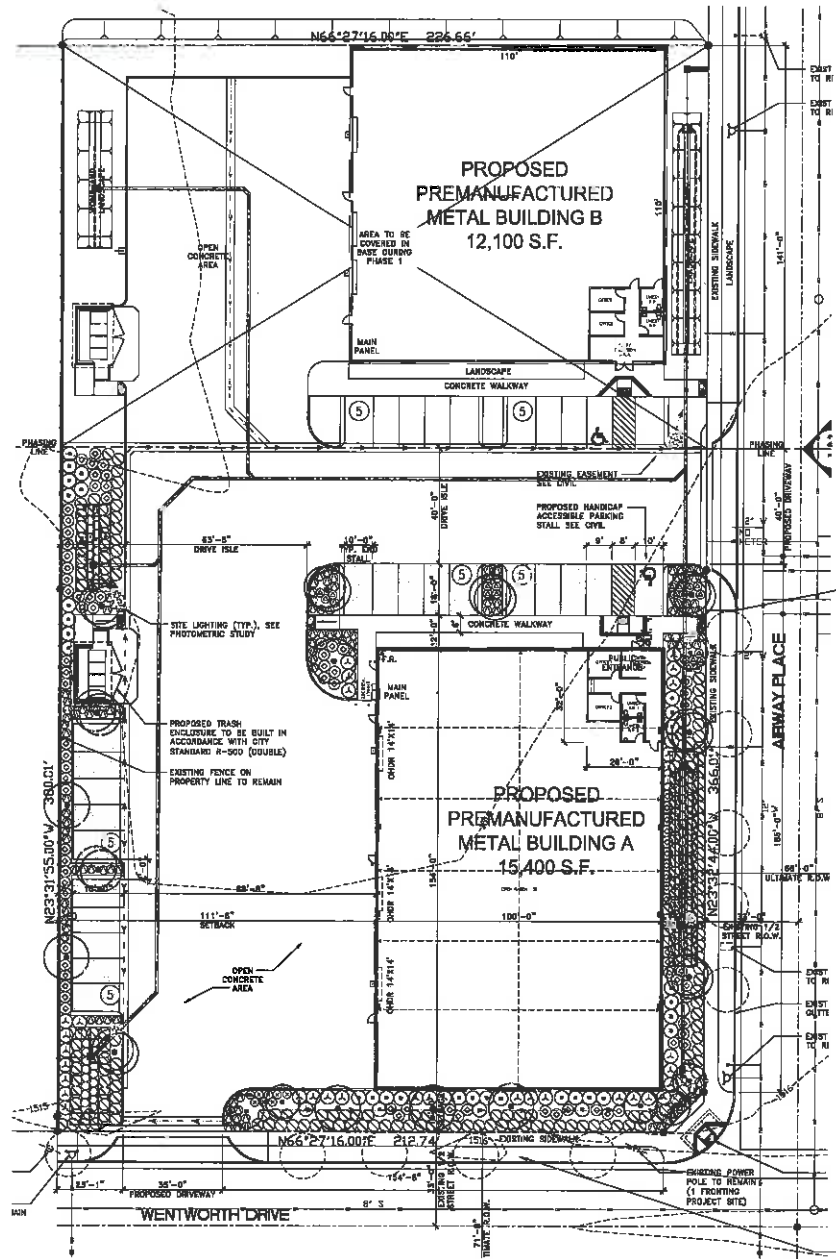


| LINE TABLE | | |
|------------|--------|---------------|
| LINE # | LENGTH | BEARING |
| L1 | 43.58 | S66°27'16\" W |
| L2 | 33.87 | S23°32'42\" E |
| L3 | 15.00 | N68°27'18\" E |
| L4 | 47.00 | S23°32'44\" E |
| L5 | 15.00 | S66°27'16\" W |
| L6 | 1.00 | N23°32'44\" W |
| L7 | 15.00 | S66°27'16\" W |
| L8 | 47.00 | S23°32'44\" E |
| L9 | 15.00 | S66°27'16\" W |
| L10 | 1.00 | N23°32'44\" W |
| L11 | 2.87 | S66°27'16\" W |
| L12 | 61.58 | N23°32'44\" W |
| L13 | 10.00 | S66°27'16\" W |
| L14 | 23.00 | S23°32'44\" E |
| L15 | 15.00 | S23°32'44\" E |
| L16 | 15.00 | S23°32'44\" E |
| L17 | 4.00 | S66°27'16\" W |
| L18 | 15.00 | S23°32'44\" E |
| L19 | 15.00 | S23°32'44\" E |
| L20 | 7.27 | S66°27'16\" W |
| L21 | 7.10 | S66°27'16\" W |
| L22 | 47.00 | N66°27'16\" E |
| L23 | 55.00 | N66°27'16\" E |

| CURVE TABLE | | | | |
|-------------|--------|--------|------------|---------|
| CURVE # | LENGTH | RADIUS | DELTA | TANGENT |
| C1 | 4.71 | 3.00 | 90°00'00\" | 3.00 |
| C2 | 4.71 | 3.00 | 90°00'00\" | 3.00 |
| C3 | 4.71 | 3.00 | 90°00'00\" | 3.00 |
| C4 | 23.56 | 15.00 | 90°00'00\" | 18.00 |
| C5 | 15.71 | 10.00 | 90°00'00\" | 10.00 |
| C6 | 4.71 | 3.00 | 90°00'00\" | 3.00 |
| C7 | 4.71 | 3.00 | 90°00'00\" | 3.00 |
| C8 | 4.71 | 3.00 | 90°00'00\" | 3.00 |
| C9 | 4.71 | 3.00 | 90°00'00\" | 3.00 |
| C10 | 3.15 | 3.00 | 90°07'06\" | 1.74 |
| C11 | 15.71 | 10.00 | 90°00'00\" | 10.00 |
| C12 | 4.71 | 3.00 | 90°00'00\" | 3.00 |
| C13 | 4.71 | 3.00 | 90°00'00\" | 3.00 |
| C14 | 2.78 | 18.00 | 8°58'24\" | 1.38 |
| C15 | 2.98 | 18.00 | 10°33'28\" | 1.48 |
| C16 | 3.02 | 18.00 | 10°49'38\" | 1.52 |
| C17 | 3.01 | 18.00 | 10°47'14\" | 1.51 |



| <p>Underground Service Alert Call: TOLL FREE 811</p> | <p>REVISIONS:</p> <table border="1"> <tr><th>NO.</th><th>DATE</th><th>BY</th><th>APPROVED</th></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table> | NO. | DATE | BY | APPROVED | | | | | | | | | | <p>SAWYER ENGINEERING SERVICES, INC. 20511 HURON DRIVE, SUITE A, OAKLAND, CA 94612 TEL: 914-282-2180 FAX: 914-282-4180</p> | <p>PREPARED UNDER THE SUPERVISION OF C.E. RORY M. BROWN, P.E. REG. 44181 07/20/19 DATE: _____</p> | <p>APPROVED BY: _____ LORIS BLAGOJEVIC, CIVIL ENGINEER RCE NO. 33781 CECP, C 030 CTC DATE: _____</p> | <p>PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION 519 E. FERRIS AVE. SUITE 101, OAKLAND, CA 94612 (510) 748-2810</p> | <p>HORIZONTAL CONTROL PLAN CEMET INDUSTRIAL AND ASSOCIATES NO. C-ENTD ORTO DRIVE @ AIRWAY PLACE DEMET, CA 0545</p> | <p>OF 8 SHEETS FILE NO. _____</p> |
|---|--|--|------------------------------|----------|----------|--|--|--|--|--|--|--|--|--|--|---|--|--|---|---------------------------------------|
| | NO. | DATE | BY | APPROVED | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| <p>DESIGNED BY: _____ DRAWN BY: _____ CHECKED BY: _____</p> | <p>SCALE: 1"=80' DATE: _____</p> | <p>BENCHMARK: CHANGED BASE AT THE COR. OF CONCRETE WALL AT END OF BRIDGE CROSSING AT THE END OF STREET AND CENTERLINE.</p> | <p>C.O. _____ P.O. _____</p> | | | | | | | | | | | | | | | | | |



EXISTING POA LANDSCAPE WITH KOELBOUTERIA BIPINNATA/CHINESE FLAME TREES AND LARIX. A SEPARATE CITY MAINTAINED LANDSCAPE SET SHALL BE SUBMITTED FOR APPROVAL.

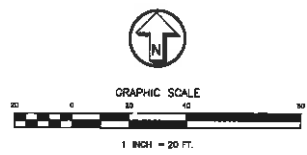
PLANTING LEGEND

| SYMBOL | ABBREVIATION | BOTANICAL NAME | COMMON NAME | SIZE | NUMBER | REMARKS | WATER USE |
|----------------|----------------|-----------------------------------|-------------------------|------------------|---------|---|-----------|
| TREES: | | | | | | | |
| (Symbol) | OLE. E. 'W.' | OLEA EUROPEA 'WILSONI' | FRUITLESS OLIVES | 24" BOX | 9 | DOUBLE STAKE / HEIGHT 8'-10" , SPREAD 3'-4" MIN. | L |
| (Symbol) | LAC. F. 'T.' | LAGERSTROEMIA PAPERI 'TUSCARORA' | RED CREPE MYRTLE | 24" BOX | 6 | MULTI-TRUNK / HEIGHT 6'-10" , SPREAD 3'-4" MIN. | L |
| (Symbol) | KOE. BIP. | KOELBOUTERIA BIPINNATA | CHINESE FLAME TREE | 24" BOX | 6 | DOUBLE STAKE / HEIGHT 8'-10" , SPREAD 3'-4" MIN. | M |
| SHRUBS: | | | | | | | |
| (Symbol) | ANH. FLA. | ANETHEMATHIS FLAMMUS 'VELVET RED' | RED KANGAROO PAWS | 1 GAL | 114 | FULL & BUSHY @ 2' O.C. | L |
| (Symbol) | RES. PAR. | HESPERALOE PARVIFLORA | RED YUCCA | 5 GAL | 85 | FULL & BUSHY @ 4' O.C. | L |
| (Symbol) | MYD. PAR. | MYOPORUM PARVIFOLIUM | PROSTRATE MYOPORUM | 1 GAL | 195 | FULL & SPREADING @ 2' O.C. | L |
| (Symbol) | DIK. BUC. | DIKETTIA BUCONIFOLIA | RED TRUMPET VINE | 5 GAL | 2 | ATTACH TO TRELLIS & WALLS | M |
| (Symbol) | PHO. L. 'P' | PHORAILIUM TENAX 'PURPUREUM' | NEW ZEALAND PURPLE FLAX | 5 GAL | 35 | FULL & BUSHY @ 5' O.C. | L |
| (Symbol) | LON. LON. | LOMANDIRA LONGIFOLIA | MATT RUSH | 1 GAL | 52 | 3' O.C. IN BASIN AREAS TYP. | L |
| (Symbol) | LAV. S. 'D.O.' | LAVANDULA STOECHAS 'OTTO QUAST' | SPANISH LAVENDER | 5 GAL | 20 | FULL & BUSHY @ 3' O.C. | L |
| (Symbol) | LEU. FRU. | LEUCOPHYLLUM FRUTICOSUM | TEXAS RANGER | 5 GAL | 35 | FULL & BUSHY @ 5' O.C. | L |
| (Symbol) | SAL. GRE. | SALVIA GREGR | RED SAGE | 5 GAL | 8 | FULL & BUSHY @ 3' O.C. | L |
| MULCH: | | | | | | | |
| (Symbol) | WOOD MULCH | FOREST FLOOR WOOD MULCH | WOOD MULCH | 3" MAX AS REQ'D. | 3' DEEP | INSTALL TO ALL PLANTING AREAS EXCEPT BIODIVERSAL. | |
| NOT SHOWN | | | | | | | |

EXISTING POA LANDSCAPE WITH CLIPANOPSIS ANACARDIODES/CARROTTWOOD TREES AND LARIX. A SEPARATE CITY MAINTAINED LANDSCAPE SET SHALL BE SUBMITTED FOR APPROVAL.

NOTES

- ALL PLANTING AND IRRIGATION SHALL CONFORM TO THE CITY OF HEMET WATER EFFICIENCY ORDINANCE 17-32.
- A DUMP IRRIGATION SYSTEM SHALL BE UTILIZED FOR THIS PROJECT PER THE CITY OF HEMET'S WATER CONSERVATION ORDINANCE. NO SPRAY IRRIGATION SHALL BE USED.
- ALL NATURAL PLANTING SHALL NOT INTERFERE WITH UTILITY LINES OR TRAFFIC SITE LINES.
- ALL UTILITIES SHALL BE SCREENED W/ PLANTING TYP.
- CONTACT CITY FOR ALL REQUIRED INSPECTIONS.
- TREES & SHRUBS SHALL BE PLACED A MINIMUM OF 5' AWAY FROM WATER METERS, GAS METERS, OR SCREEN LATERALS. A MINIMUM OF 10' AWAY FROM UTILITY POLES; & A MINIMUM OF 5' AWAY FROM FIRE HYDRANTS & FIRE DEPARTMENT SPRINKLER & STANDPIPE CONNECTIONS.



PRELIMINARY PLANTING PLAN

ALL ORNL, RESORB, & ANACARDIODES REPRESENTED HEREIN ARE THE PROPERTY OF ALHAMBRA GROUP LANDSCAPE ARCHITECTS & SHALL BE USED FOR THIS PROJECT ONLY EXCEPT BY THE WRITTEN PERMISSION OF SAID ARCHITECTS. ANY CHANGE MADE BY OTHER THAN SAID ARCHITECTS SHALL BE THE RESPONSIBILITY OF THE FACILITY OR OFFICER DESIGN THEREOF. CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO THE START OF ANY WORK & SHALL REPORT ANY DISCREPANCY TO THE ARCHITECT.

**NOTICE OF PUBLIC HEARING
RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION**

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the application described below.

Any person may submit written comments to the ALUC before the hearing or may appear and be heard in support of or opposition to the project at the time of hearing. The proposed project application may be viewed at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Thursday from 8:00 a.m. to 4:30 p.m., except Wednesday, July 4, and by prescheduled appointment on Fridays, from 9:00 a.m. to 5:00 p.m.

ATTENTION: ALUC reviews a proposed plan or project solely to determine whether it is consistent with the applicable Airport Land Use Compatibility Plan. The City of Hemet may hold hearings on this project and should be contacted on non-ALUC issues.

PLACE OF HEARING: Riverside County Administration Center
4080 Lemon St., 1st Floor Board Chambers
Riverside, California

DATE OF HEARING: July 12, 2018

TIME OF HEARING: 9:30 A.M.

CASE DESCRIPTION:

ZAP1056HR18 – Bryan Clendenen – City of Hemet Planning Case No. SDR 18-003 (Site Development Review). The applicant proposes to construct two industrial buildings totaling 27,500 square feet in 2 phases on a 1.98 acre parcel located on the northwest corner of Wentworth Drive and Airway Place. A 15,400 square foot building is proposed in Phase I and a 12,000 square foot building in Phase II. (Airport Compatibility Zone C of the Hemet-Ryan Airport Influence Area).

FURTHER INFORMATION: Contact Paul Rull at (951) 955-6893. The ALUC holds hearings for local discretionary permits within the Airport Influence Areas, reviewing for aeronautical safety, noise and obstructions. All other concerns should be addressed to Mr. H.P. Kang of the City of Hemet Planning Department at (951) 765-2373.



RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

APPLICATION FOR MAJOR LAND USE ACTION REVIEW

ALUC CASE NUMBER: ZAP1056HR18 DATE SUBMITTED: May 15, 2018

APPLICANT / REPRESENTATIVE / PROPERTY OWNER CONTACT INFORMATION

| | | |
|------------------------|---|---------------------------------------|
| Applicant | Bryan Clendenen | Phone Number 909 732-6666 |
| Mailing Address | 41606 Date Street, Suite 203A Murrieta, CA 92562 | Email bryan@guardianassetmanagers.com |
| Representative | Bryan Clendenen | Phone Number 909 732-6666 |
| Mailing Address | 41606 Date Street, Suite 203A Murrieta, CA 92562 | Email bryan@guardianassetmanagers.com |
| Property Owner | Temescal Canyon Business Park / | Phone Number 909 732-6666 |
| Mailing Address | 41606 Date Street, Suite 203A Murrieta, CA 92564 | Email bryan@guardianassetmanagers.com |

LOCAL JURISDICTION AGENCY

| | | |
|--------------------------------|---------------------------------------|--|
| Local Agency Name | City of Hemet | Phone Number 951 765-2456 |
| Staff Contact | H.P. Kang | Email HKang@cityofhemet.org |
| Mailing Address | 445 E. Florida Ave Hemet, CA 92545 | Case Type Minor Site Development |
| Local Agency Project No | SDR 18-003 | <input type="checkbox"/> General Plan / Specific Plan Amendment <input type="checkbox"/> Zoning Ordinance Amendment <input type="checkbox"/> Subdivision Parcel Map / Tentative Tract <input checked="" type="checkbox"/> Use Permit <input type="checkbox"/> Site Plan Review/Plot Plan <input type="checkbox"/> Other |

PROJECT LOCATION

Attach an accurately scaled map showing the relationship of the project site to the airport boundary and runways

| | | |
|------------------------------|---|--|
| Street Address | Northwest corner of Airway Place and Wentworth Drive Hemet, CA 92545 | |
| Assessor's Parcel No. | 456-040-054-4 | Gross Parcel Size 1.98 acres |
| Subdivision Name | | Nearest Airport and distance from Airport HMT / approx 1 mile |
| Lot Number | | |

PROJECT DESCRIPTION

If applicable, attach a detailed site plan showing ground elevations, the location of structures, open spaces and water bodies, and the heights of structures and trees; include additional project description data as needed

| | |
|-------------------------------------|-------------|
| Existing Land Use (describe) | vacant land |
| | |
| | |

Hem Ry
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| | | | |
|--------------------------------------|---|--|----------------------------|
| Proposed Land Use (describe) | New development of 2 phases- Phase 1 is a development of a 15,400 SF prefabricated metal building and phase 2 is a development of a similar 12,100 SF prefabricated metal building. | | |
| For Residential Uses | Number of Parcels or Units on Site (exclude secondary units) | N/A | |
| For Other Land Uses (See Appendix C) | Hours of Operation | TBD - Speculative building | |
| | Number of People on Site | Maximum Number | TBD - Speculative building |
| | Method of Calculation | | |
| Height Data | Site Elevation (above mean sea level) | | ft. |
| | Height of buildings or structures (from the ground) | 24' | ft. |
| Flight Hazards | Does the project involve any characteristics which could create electrical interference, confusing lights, glare, smoke, or other electrical or visual hazards to aircraft flight? | <input type="checkbox"/> Yes | |
| | If yes, describe | <input checked="" type="checkbox"/> No | |
| | | | |
| | | | |

- A. **NOTICE:** Failure of an applicant to submit complete or adequate information pursuant to Sections 65940 to 65948 inclusive, of the California Government Code, MAY constitute grounds for disapproval of actions, regulations, or permits.
- B. **REVIEW TIME:** Estimated time for "staff level review" is approximately 30 days from date of submittal. Estimated time for "commission level review" is approximately 45 days from date of submittal to the next available commission hearing meeting.
- C. **SUBMISSION PACKAGE:**
1. Completed ALUC Application Form
 1. ALUC fee payment
 1. Plans Package (24x36 folded) (site plans, floor plans, building elevations, landscaping plans, grading plans, subdivision maps)
 1. Plans Package (8.5x11) (site plans, floor plans, building elevations, landscaping plans, grading plans, subdivision maps, zoning ordinance/GPA/SPA text/map amendments)
 1. CD with digital files of the plans (pdf)
 1. Vicinity Map (8.5x11)
 1. Detailed project description
 1. Local jurisdiction project transmittal
 3. Gummed address labels for applicant/representative/property owner/local jurisdiction planner
 3. Gummed address labels of all surrounding property owners within a 300 foot radius of the project site (**only required if the project is scheduled for a public hearing Commission meeting**). If more than 100 property owners are involved, please provide pre-stamped envelopes (size #10) with ALUC return address. *

* Projects involving heliports/helicopter landing sites will require additional noticing procedures.

APN-456-040-054-4
Submittal Item #6

Dear City of Hemet Planning Staff:

We are excited to submit the attached project with the intention of building a 2-phase industrial park located at the SW Corner of Wentworth and Airway Place in the City of Hemet. Phase 1 will consist of a speculative 15,400 sft industrial building and offices and Phase 2 will consist of a 12,100 Sft industrial building and offices. The site is currently served with Water, Sewer, Electricity and Telephone with Natural Gas in close proximity. The site allows for parking and landscaping per the City Code for this specific use. The building will be a pre-engineered metal building with varying roof lines and covered with an insulated stucco paneling and flat panel to give it a modern look. This property and the surrounding area is either vacant land or metal building built decades ago. The users in the area are manufactures and contractors. It is our belief a small manufacturer will be the end user although at this time no user can be identified. Through our architect we believe we have come up with a design that is in compliance with the City Design Guidelines and is a vast improvement over the current facilities in the area. Any potential user will be required to meet all of the City General Plan, Zoning and Land Use Guidelines.

This is our first development project in Hemet and we are looking forward to providing a facility that can help the City attract good paying manufacturing jobs to its residents.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bryan Clendenen', with a long horizontal line extending to the right.

Bryan Clendenen
Managing Member
Temescal Canyon Business Park, LLC.
(951) 894-2432

**COUNTY OF RIVERSIDE
AIRPORT LAND USE COMMISSION**

STAFF REPORT

AGENDA ITEM: 3.3

HEARING DATE: July 12, 2018

CASE NUMBER: ZAP1051HR18 – FDC Commercial Construction
(Representative: John Dykes)

APPROVING JURISDICTION: City of Hemet

JURISDICTION CASE NO: SDR 18-006 (Site Development Review)

MAJOR ISSUES: None

RECOMMENDATION: Staff recommends that the Commission find the Site Development Review CONSISTENT with the 2017 Hemet-Ryan Airport Land Use Compatibility Plan, subject to the conditions included herein.

PROJECT DESCRIPTION: The applicant is proposing to develop a construction storage yard facility with a 2,100 square foot single story office building on a 4.6-acre parcel.

PROJECT LOCATION: The site is located at 814 Airway Place, northerly of Wentworth Drive, in the City of Hemet, approximately 467 feet southeasterly of the existing easterly terminus of Runway 5-23 at Hemet-Ryan Airport.

LAND USE PLAN: 2017 Hemet-Ryan Airport Land Use Compatibility Plan

- a. Airport Influence Area: Hemet-Ryan Airport
- b. Land Use Policy: Compatibility Zones A, C
- c. Noise Levels: 60 - 65 CNEL contour

BACKGROUND:

Non-Residential Average Intensity: Pursuant to the 2017 Hemet-Ryan Airport Land Use Compatibility Plan, the project site is located within Compatibility Zones A and C. Approximately 2.26 acres are located in Zone A, and 2.32 acres are located in Zone C. Zone A prohibits structures and restricts all intensities. Zone C restricts average intensity to 100 persons per acre. The project proposes no structures with floor area or storage of equipment in Zone A.

The “Building Code Method” for calculating intensity utilizes “minimum floor area per occupant” criteria from the Building Code as a factor in projecting intensity. Pursuant to Appendix C, Table C-1, of the Riverside County Airport Land Use Compatibility Plan, the following rates were utilized for the project:

- Lobby/reception – 1 person per 7 square feet
- Conference room/break room – 1 person per 15 square feet
- Office areas – 1 person/200 square feet (with 50% reduction);

The applicant proposes a 2,100 square foot office building, accommodating a total occupancy of 106 persons, and an average intensity of 46 persons per acre which is consistent with the Zone C criterion of 100 persons per acre. The total occupancy of 106 would only occur if the lobby, conference room, and break room were all functioning at maximum capacity simultaneously. There are no buildings with floor area being proposed in the Zone A portion of the site.

A second method for determining total occupancy involves multiplying the number of parking spaces provided or required (whichever is greater) by average vehicle occupancy (assumed to be 1.5 persons per standard vehicle). Based on the number of parking spaces provided (9), the total occupancy would be projected at 14 persons, for an overall average intensity of 6 persons per acre (for the Zone C portion).

Non-Residential Single-Acre Intensity: Compatibility Zone A prohibits structures and restricts all intensities. Zone C restricts single-acre intensity to 300 persons in the most intensely utilized acre. The project proposes no structures with floor area or storage of equipment in Zone A.

Based on the site plan provided and occupancies as previously noted, the maximum single-acre area would include the entire 2,100 square foot office building, accommodating a total occupancy of 106 persons, which does not exceed the Compatibility Zone C single acre criterion of 300.

Prohibited and Discouraged Uses: The applicant does not propose any uses specifically prohibited or discouraged in Compatibility Zones A and C of the Hemet-Ryan Airport Influence Area.

Noise: The site is located within the 60-65 CNEL contour range from aircraft noise. Noise attenuation measures may need to be included in order to demonstrate compliance with the 45 CNEL maximum interior noise level from aircraft operations.

Part 77: The elevation of Runway 5-23 at its existing easterly terminus is approximately 1,508 feet above mean sea level (AMSL). At a distance of approximately 467 feet from the runway, FAA review would be required for any structures with top of roof exceeding 1,513 feet AMSL. The elevation of the project site is 1,516 feet AMSL, and the height of the building is 17 feet, for a maximum top point elevation of 1,533 feet AMSL. Therefore, review of the proposed structure by the FAA Obstruction Evaluation Service (FAA OES) is required. “Determination of No Hazard to

Air Navigation” letters were issued by the FAA OES dated March 20, 2018, for Aeronautical Study Nos. 2018-AWP-4974-OE and 2018-AWP-4975-OE, and these studies revealed that the structures would exceed obstruction standards, but would not be a hazard to air navigation provided conditions are met. These FAA OES conditions have been incorporated into the project’s conditions.

Open Area: A portion of the site is located within Airport Compatibility Zone C of the Hemet-Ryan Airport Influence Area, which requires projects 10 acres or larger located easterly of Cawston Avenue to designate 20% of project area as ALUC-qualifying open area that could potentially serve as emergency landing areas. Since the overall project size is less than 10 acres, the Zone C open area requirement is not applicable to this project.

The portion of the site in Zone A is required to remain as open area.

CONDITIONS:

1. Any outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky.
2. The following uses/activities are not included in the proposed project and shall be prohibited at this site:
 - (a) Any use or activity which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
 - (b) Any use or activity which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
 - (c) Any use or activity which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, composting operations, production of cereal grains, sunflower, and row crops, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)
 - (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
 - (e) Children’s schools, day care centers, libraries, hospitals, nursing homes, theaters,

meeting halls and other assembly facilities, stadiums, and highly noise-sensitive outdoor nonresidential uses.

- (f) Commercial or utility ground-mounted solar energy systems.
3. Prior to issuance of building permits, the landowner shall convey an avigation easement to the County of Riverside as owner of Hemet-Ryan Airport. Contact the Riverside County Economic Development Agency-Aviation Division at (951) 955-9722 for additional information.
 4. The attached notice shall be given to all prospective purchasers and/or tenants of the property, and shall be recorded as a deed notice.
 5. Any new detention basin(s) on the site shall be designed so as to provide for a maximum 48-hour detention period following the conclusion of the storm event for the design storm (may be less, but not more), and to remain totally dry between rainfalls. Vegetation in and around the detention basin(s) that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping. Trees around the basin(s) shall not form a contiguous canopy and shall not produce seeds, fruit, or berries.
 6. This finding of consistency is based on the use of the proposed building for office, manufacturing, storage, and warehousing uses. The zoning of the property allows for additional uses that would require subsequent evaluation as to compliance with intensity limits prior to their being permitted at this location. These uses requiring such evaluation are as follows:

General retail uses (other than sale of products manufactured on-site); plant nurseries and greenhouses; commercial recreation facilities (indoor and/or outdoor); commercial trade schools; showroom design centers; ambulance services; adult businesses; animal services; business support services; health and fitness centers; mortuaries; service stations; auto repair shops; recycling processing facilities; scrap and dismantling yards; swap meets.
 7. Noise attenuation measures shall be incorporated into the design of the building to the extent such measures are necessary to ensure that interior noise levels from aircraft operations are at or below 45 CNEL.
 8. The Federal Aviation Administration has conducted an aeronautical study of the proposed building/structure (Aeronautical Study Nos. 2018-AWP-4974-OE and 2018-AWP-4975-OE) and has determined that neither marking nor lighting of the structure(s) is necessary for aviation safety. However, if marking and/or lighting for aviation safety are accomplished on a voluntary basis, such marking and/or lighting (if any) shall be installed in accordance with FAA Advisory Circular 70/7460-1 L Change 1 and shall be maintained in accordance

therewith for the life of the project.

9. The proposed building shall not exceed a height of 17 feet above ground level and a maximum elevation at top point of 1,533 feet above mean sea level.
10. The maximum height and top point elevation specified above shall not be amended without further review by the Airport Land Use Commission and the Federal Aviation Administration; provided, however, that reduction in structure height or elevation shall not require further review by the Airport Land Use Commission.
11. Temporary construction equipment used during actual construction of the building shall not exceed 17 feet in height and a maximum elevation of 1,533 feet above mean sea level, unless separate notice is provided to the Federal Aviation Administration through the Form 7460-1 process.
12. At least ten (10) days prior to start of construction, FAA Form 7460-2 (Part I) shall be completed by the project proponent or his/her designee and e-filed with the Federal Aviation Administration.
13. Within five (5) days after construction reaches its greatest height, FAA Form 7460-2 (Part II), Notice of Actual Construction or Alteration, shall be completed by the project proponent or his/her designee and e-filed with the Federal Aviation Administration. (Go to <https://oeaaa.faa.gov> for instructions.) This requirement is also applicable in the event the project is abandoned or a decision is made not to construct the applicable building.
14. Any roof-top equipment or change in height that exceeds a total height of 17 feet will require Form 7460-1 submittal, review, and issuance of a new "Determination of No Hazard to Air Navigation" by the Federal Aviation Administration Obstruction Evaluation Service.
15. No development, structures, or poles are permitted within the Zone A portion of the property.

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b) (13)(A)



Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2018-AWP-4974-OE

Issued Date: 03/20/2018

Fred Dowalter
 FDC Commercial Construction
 461 E. Menlo Avenue
 Hemet, CA 92543

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| | |
|------------|--|
| Structure: | Building Office |
| Location: | Hemet, CA |
| Latitude: | 33-44-07.50N NAD 83 |
| Longitude: | 117-00-48.20W |
| Heights: | 1516 feet site elevation (SE) 17 feet above ground level (AGL) 1533 feet above mean sea level (AMSL) |

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 1.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 09/20/2019 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before April 19, 2018. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Airspace Policy Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on April 29, 2018 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Policy Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed

structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Karen McDonald, at (310) 725-6557, or karen.mcdonald@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-AWP-4974-OE.

Signature Control No: 355836947-360393745

(DNH)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2018-AWP-4974-OE

The proposal, submitted by FDC Commercial Construction, will construct a 17-foot above ground level (agl) 1,533-foot above mean sea level (amsl), Office Building in Hemet, California.

This site point is approximately 0.47 nautical miles northeast of the Hemet-Ryan (HMT) airport reference point; 982 feet direct distance from the Runway 23 physical approach end, the closest civilian public-use landing area.

The HMT Field Elevation (FE) is 1,512 feet above mean sea level (amsl); Runway 23 physical approach end elevation is 1,508 feet amsl. The site elevation of this proposed structure point is 1,516 feet amsl.

The structure height exceeds the obstruction standards of Title 14 Code of Federal Regulations (CFR) Part 77, as follows:

Section 77.17(a)(3) - (TERPS criteria); would penetrate the HMT RWY 05 40:1 departure obstacle clearance surface (OCS) in the Initial Climb Area (ICA) by 7 feet . Mitigation: The proposed structure height would not require an increase in the existing published departure climb gradient (cg), nor would it require an increase in departure weather minimums. It qualifies as a 'low close-in' obstacle penetration with climb gradient termination altitude 200 feet or less above DER, and upon receipt from the sponsor of the 7460-2 Part 1, a note will be added to the 'Take-off Minimums and (Obstacle) Departure Procedures in the U.S. Terminal Procedures publication.

Details of this proposal were not distributed for public aeronautical comment because internal FAA evaluation finds that the adverse effect of this structure is known. There would be no derogation of the navigable airspace overlying the site. Existing obstacles and terrain control the development of future approach and departure instrument Terminal Procedures at HMT. Therefore, no further attempt to negotiate the structure to a lower height was considered necessary. This does not affect the right to petition for review determinations regarding structures which exceed the subject obstruction standards.

AERONAUTICAL STUDY FOR POSSIBLE EFFECT UPON THE OPERATION OF AN AIR NAVIGATION AID:

- None.

AERONAUTICAL STUDY FOR POSSIBLE INSTRUMENT FLIGHT RULES (IFR) EFFECT DISCLOSED THE FOLLOWING:

- The proposal would have no effect on any existing or proposed IFR arrival/departure routes, operations, or procedures.
- The proposal would have no effect on any existing or proposed IFR en route routes, operations, or procedures.
- The proposal would have no effect on any existing or proposed IFR minimum flight altitudes.

AERONAUTICAL STUDY FOR POSSIBLE VISUAL FLIGHT RULES (VFR) EFFECT DISCLOSED THE FOLLOWING:

- The proposal would have no effect on any existing or proposed VFR arrival or departure routes, operations or procedures.
- The proposal would not conflict with airspace required to conduct normal VFR traffic pattern operations at any known civilian public use or military airports, including HMT. The proposal does not penetrate the maneuvering area associated with VFR Traffic Pattern operations at HMT. Aircraft at normal Traffic Pattern altitudes and standard rates of descent have reasonable clearance above this structure.
- The proposal would not penetrate those altitudes normally considered available to airmen for VFR en route flight.

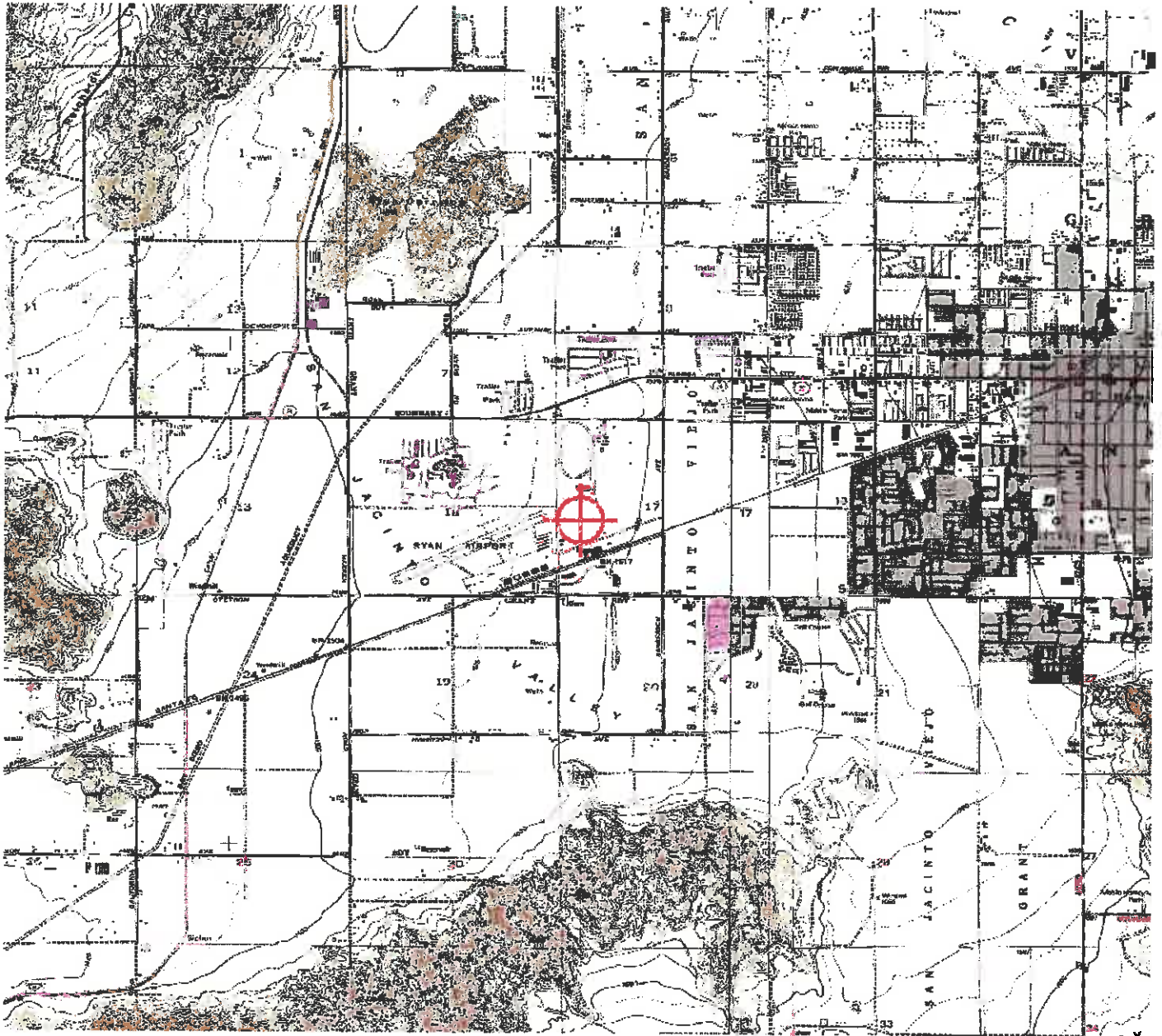
The cumulative impact of the proposed structure, when combined with other existing structures is not considered significant. Study did not disclose any adverse effect on existing or proposed civilian public-use or military airports or navigational facilities. Nor would the proposal affect the capacity of any known existing or planned civilian public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

This determination, issued in accordance with Part 77, concerns the effect of the proposal on the safe and efficient use of the navigable airspace by aircraft and does not relieve the sponsor of any compliance responsibilities relating to laws, ordinances, or regulations of any Federal, state, or local governmental bodies.

Determinations, which are issued in accordance with Part 77, do not supersede or override any state, county, or local laws, aviation easements, or ordinances, or local zoning maximum heights.

TOPO Map for ASN 2018-AWP-4974-OE





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2018-AWP-4975-OE

Issued Date: 03/20/2018

Fred Dowalter
 FDC Commercial Construction
 461 E. Menlo Avenue
 Hemet, CA 92543

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

| | |
|------------|---|
| Structure: | Building Trash enclosure |
| Location: | Hemet, CA |
| Latitude: | 33-44-08.20N NAD 83 |
| Longitude: | 117-00-50.30W |
| Heights: | 1515 feet site elevation (SE) 9 feet above ground level (AGL) 1524 feet above mean sea level (AMSL) |

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 1.

This determination expires on 09/20/2019 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before April 19, 2018. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Airspace Policy Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on April 29, 2018 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Policy Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Karen McDonald, at (310) 725-6557, or karen.mcdonald@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-AWP-4975-OE.

Signature Control No: 355836948-360394157

(DNH)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2018-AWP-4975-OE

The proposal, submitted by FDC Commercial Construction, will construct a 9-foot above ground level (agl) 1,524-foot above mean sea level (amsl), Trash Enclosure in Hemet, California.

This site point is approximately 0.44 nautical miles northeast of the Hemet-Ryan (HMT) airport reference point; 793 feet direct distance from the Runway 23 physical approach end, the closest civilian public-use landing area.

The HMT Field Elevation (FE) is 1,512 feet above mean sea level (amsl); Runway 23 physical approach end elevation is 1,508 feet amsl. The site elevation of this proposed structure point is 1,515 feet amsl.

The structure height exceeds the obstruction standards of Title 14 Code of Federal Regulations (CFR) Part 77, as follows:

Section 77.17(a)(3) - (TERPS criteria); would penetrate the HMT RWY 05 40:1 departure obstacle clearance surface (OCS) in the Initial Climb Area (ICA) by 2 feet . Mitigation: The proposed structure height would not require an increase in the existing published departure climb gradient (cg), nor would it require an increase in departure weather minimums. It qualifies as a 'low close-in' obstacle penetration with climb gradient termination altitude 200 feet or less above DER, and upon receipt from the sponsor of the 7460-2 Part 1, a note will be added to the 'Take-off Minimums and (Obstacle) Departure Procedures in the U.S. Terminal Procedures publication.

Details of this proposal were not distributed for public aeronautical comment because internal FAA evaluation finds that the adverse effect of this structure is known. There would be no derogation of the navigable airspace overlying the site. Existing obstacles and terrain control the development of future approach and departure instrument Terminal Procedures at HMT. Therefore, no further attempt to negotiate the structure to a lower height was considered necessary. This does not affect the right to petition for review determinations regarding structures which exceed the subject obstruction standards.

AERONAUTICAL STUDY FOR POSSIBLE EFFECT UPON THE OPERATION OF AN AIR NAVIGATION AID:

- None.

AERONAUTICAL STUDY FOR POSSIBLE INSTRUMENT FLIGHT RULES (IFR) EFFECT DISCLOSED THE FOLLOWING:

- The proposal would have no effect on any existing or proposed IFR arrival/departure routes, operations, or procedures.
- The proposal would have no effect on any existing or proposed IFR en route routes, operations, or procedures.
- The proposal would have no effect on any existing or proposed IFR minimum flight altitudes.

AERONAUTICAL STUDY FOR POSSIBLE VISUAL FLIGHT RULES (VFR) EFFECT DISCLOSED THE FOLLOWING:

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- The proposal would not penetrate those altitudes normally considered available to airmen for VFR en route flight.

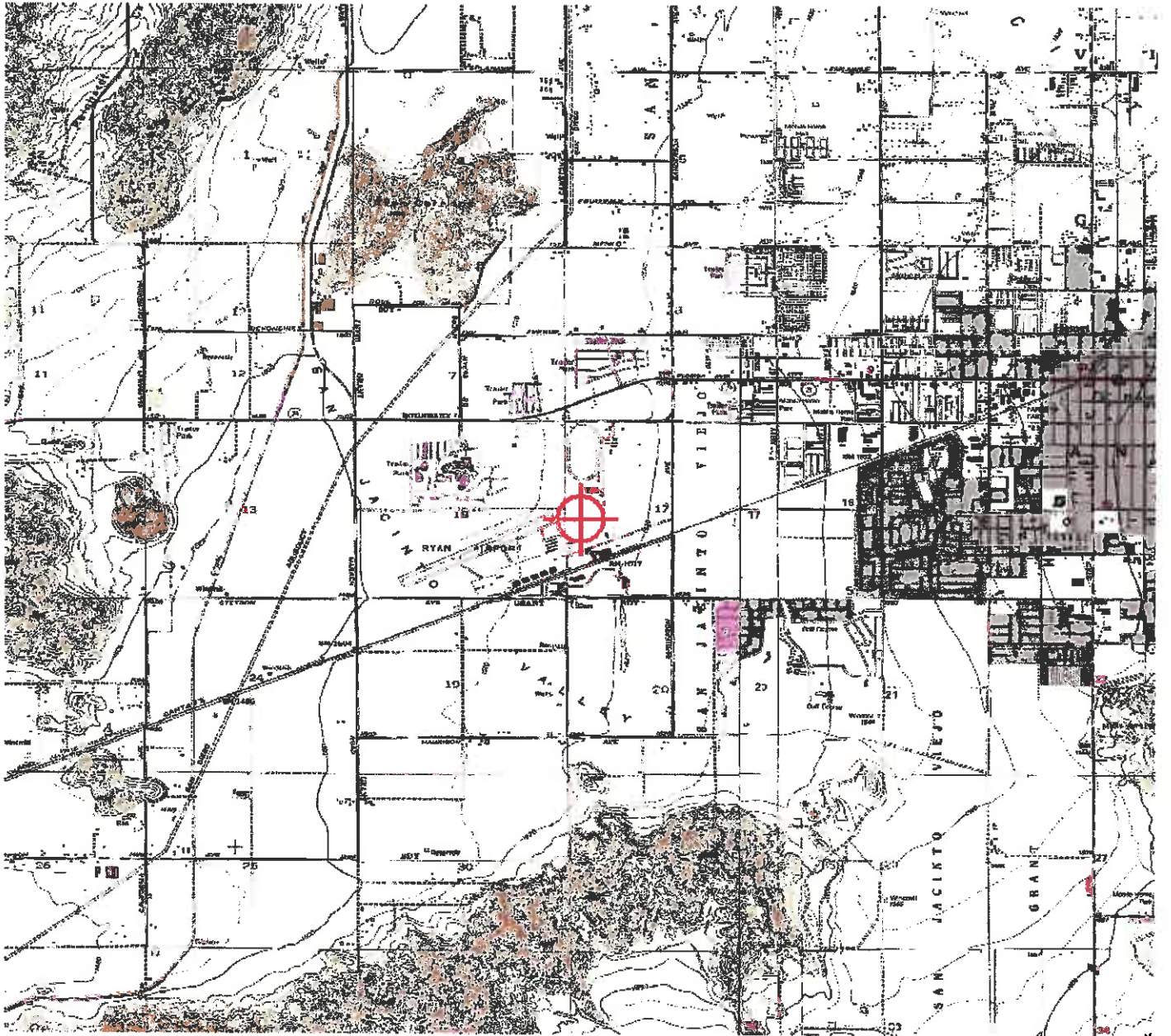
The cumulative impact of the proposed structure, when combined with other existing structures is not considered significant. Study did not disclose any adverse effect on existing or proposed civilian public-use or military airports or navigational facilities. Nor would the proposal affect the capacity of any known existing or planned civilian public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

This determination, issued in accordance with Part 77, concerns the effect of the proposal on the safe and efficient use of the navigable airspace by aircraft and does not relieve the sponsor of any compliance responsibilities relating to laws, ordinances, or regulations of any Federal, state, or local governmental bodies.

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TOPO Map for ASN 2018-AWP-4975-OE





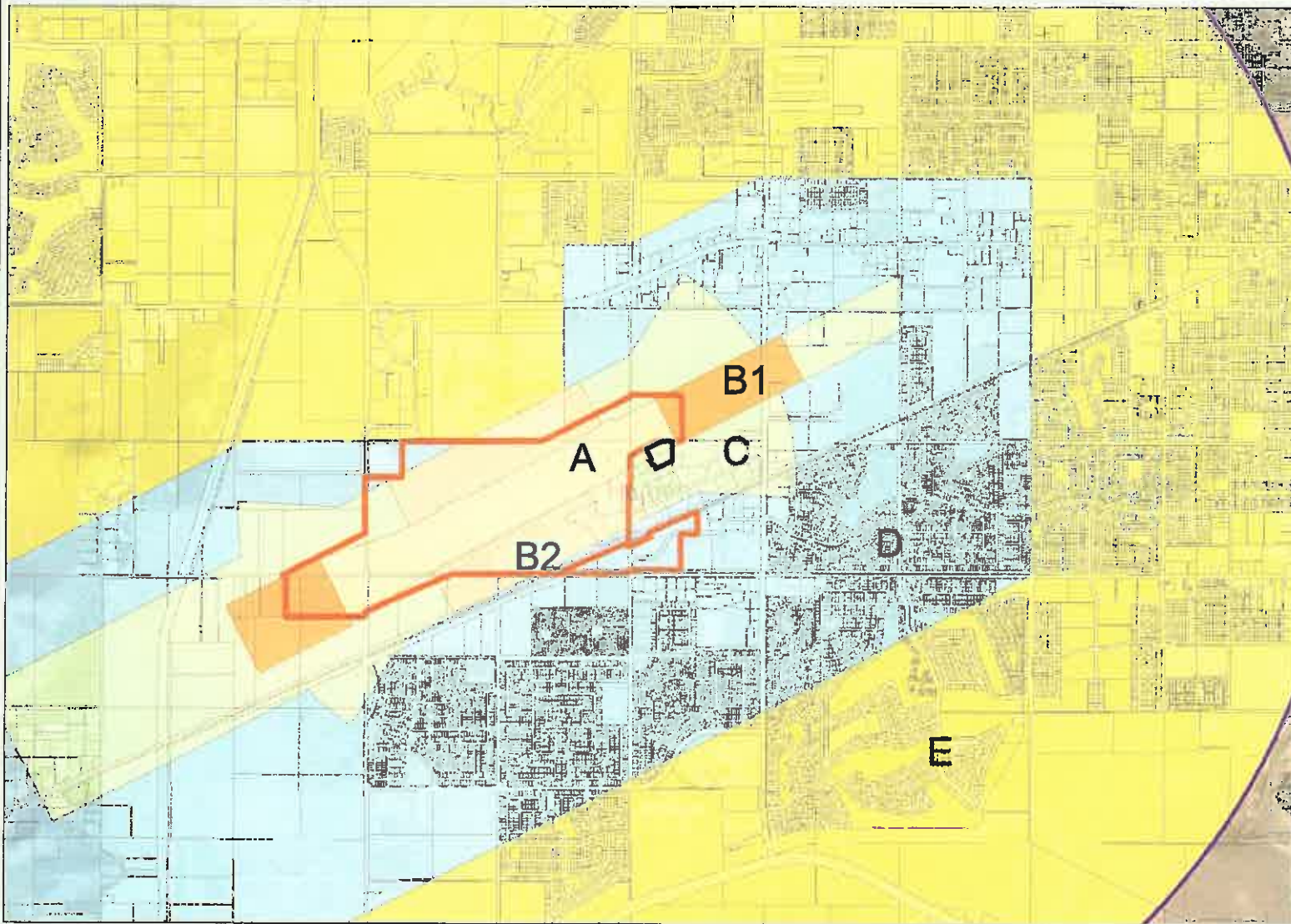
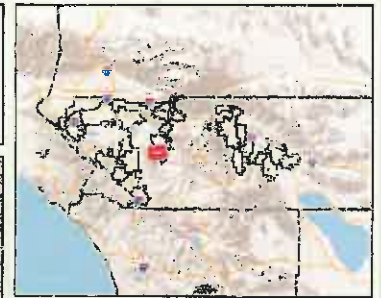
**PROJECT
LOCATION**



VICINITY MAP

NOT TO SCALE

My Map



Legend

- Airports
- AIA
- Airport Compatibility**
- OTHER ZONE
- A
- A-EXC1
- B1
- B1-APZ I
- B1-APZ I-EXC1
- B1-APZ II
- B1-APZ II-EXC1
- B1-EXC1
- B2
- B2-EXC1
- C
- C1
- C1-EXC1
- C1-EXC3
- C1-EXC4
- C1-HIGHT
- C2
- C2-EXC1
- C2-EXC2
- C2-EXC3
- C2-EXC5
- C2-EXC6
- C2-HIGHT



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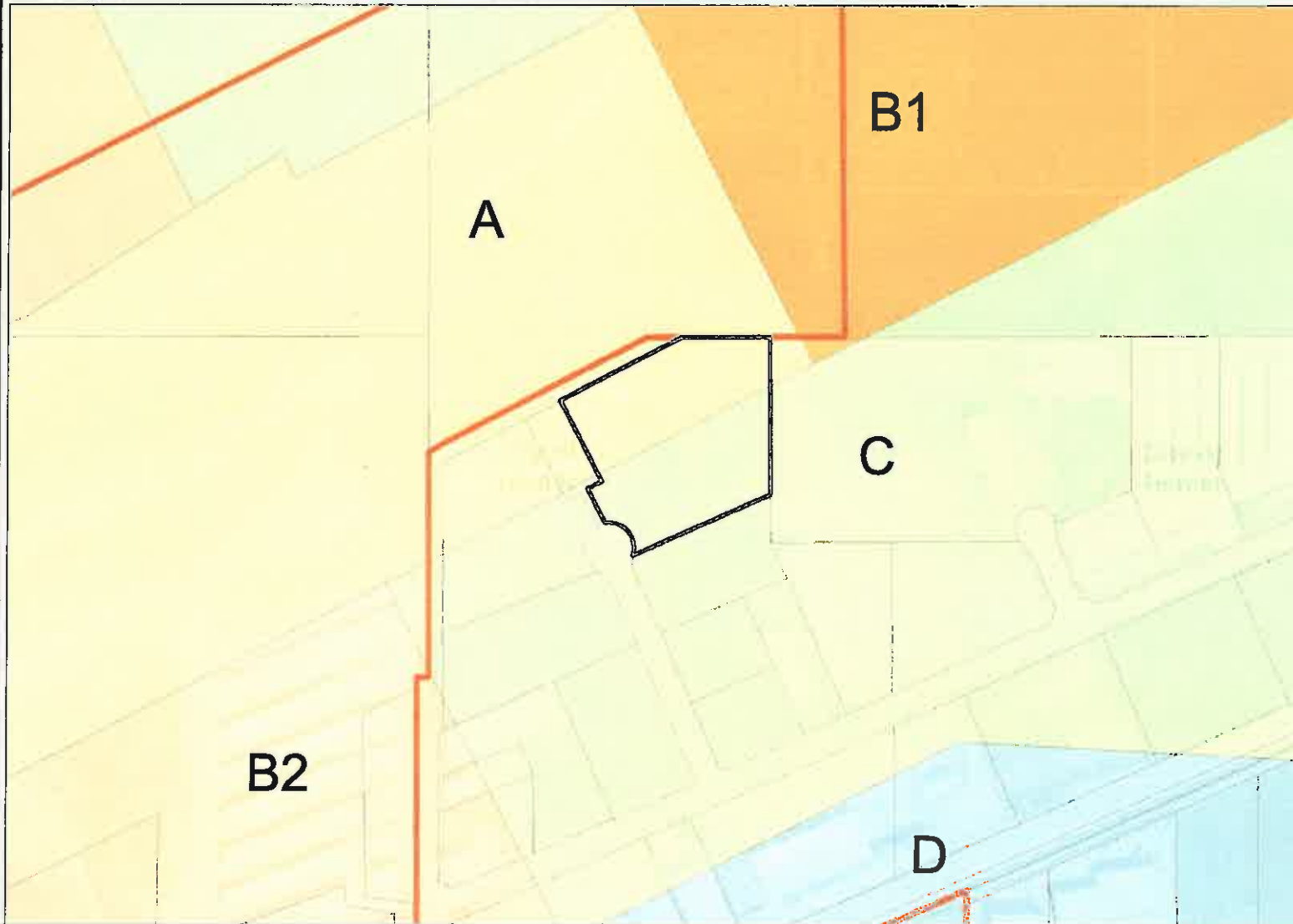
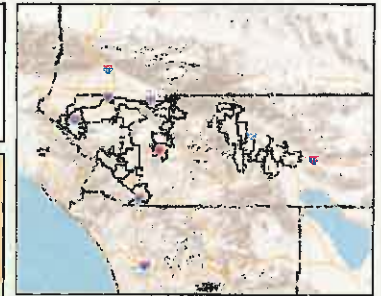


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Notes

My Map



Legend

- Airports
- AIA
- Airport Compatibility**
- OTHER ZONE
- A
- A-EXC1
- B1
- B1-APZ I
- B1-APZ I-EXC1
- B1-APZ II
- B1-APZ II-EXC1
- B1-EXC1
- B2
- B2-EXC1
- C
- C1
- C1-EXC1
- C1-EXC3
- C1-EXC4
- C1-HIGHT
- C2
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- C2-EXC5
- C2-EXC6
- C2-HIGHT



0 463 926 Feet



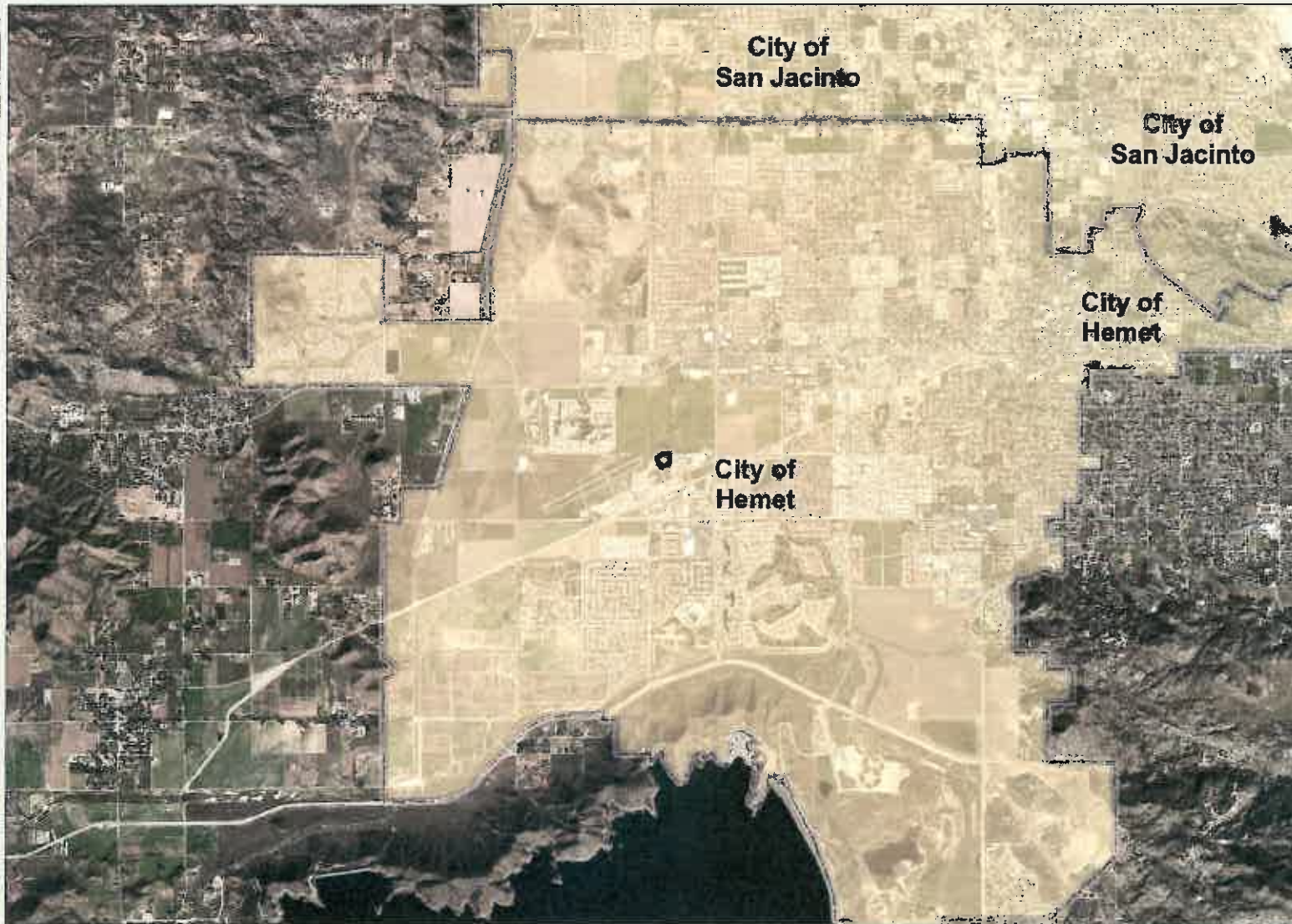
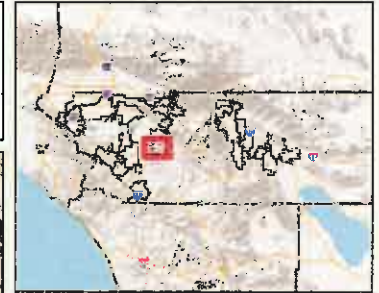
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Notes

My Map



Legend

-  City Boundaries
-  Cities
- highways_large
 -  HWY
 -  INTERCHANGE
 -  INTERSTATE
 -  USHWY
-  majorroads
-  counties
-  cities



0 7,411 14,821 Feet



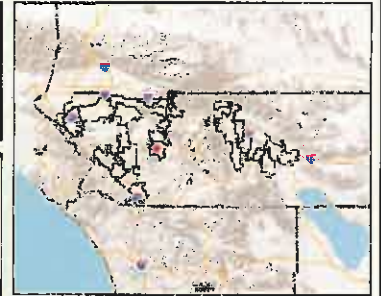
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Notes

My Map



Legend

- City Boundaries
- Cities
- roadsanno
- highways
 - HWY
 - INTERCHANGE
 - INTERSTATE
 - OFFRAMP
 - ONRAMP
 - USHWY
- counties
- cities
- hydrographylines
- waterbodies
 - Lakes
 - Rivers



0 463 926 Feet



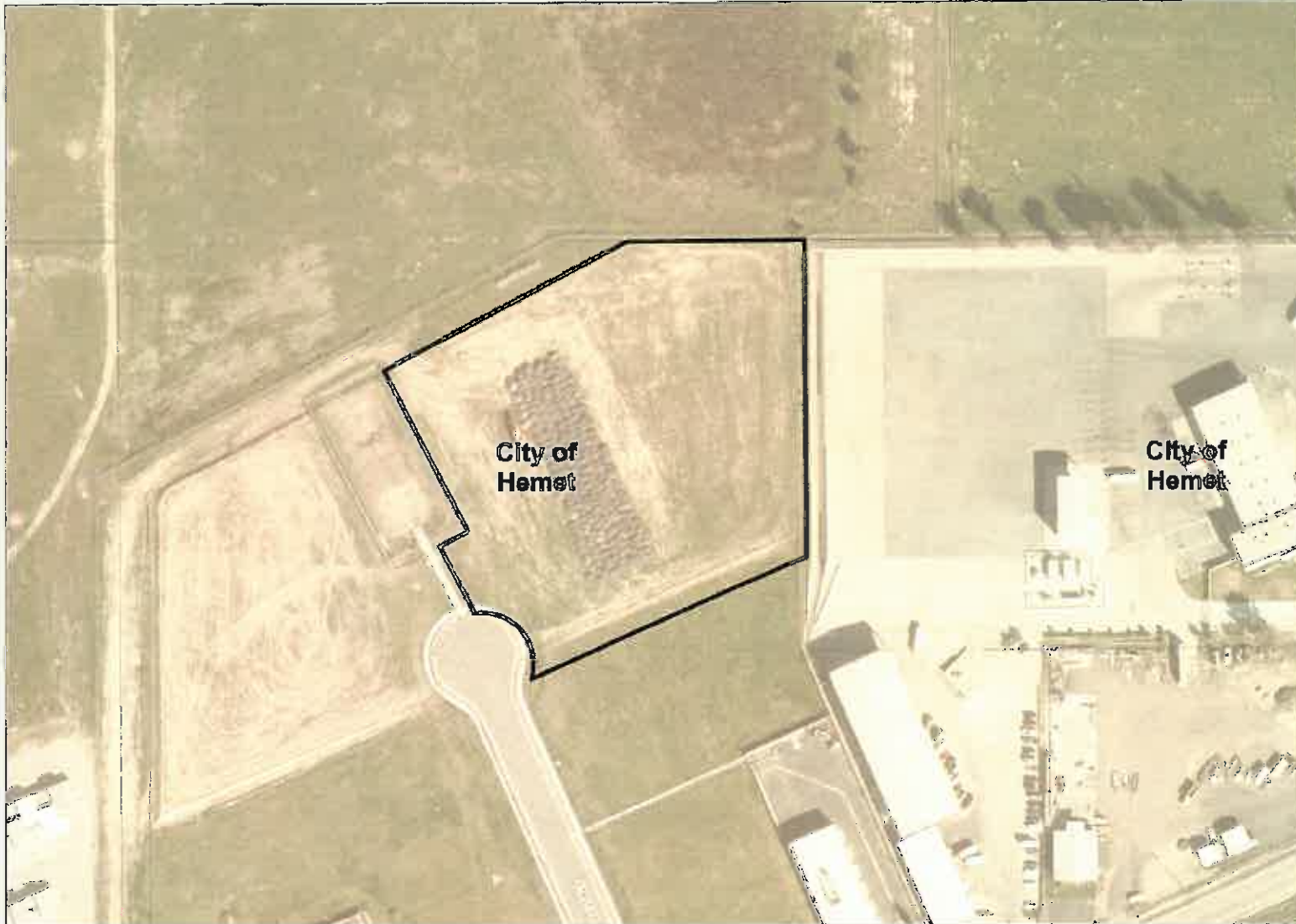
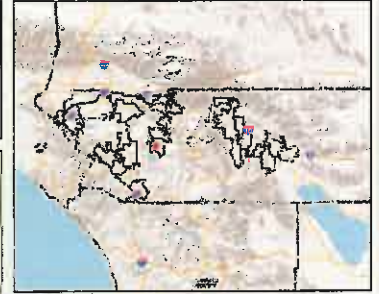
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

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Notes

My Map



Legend

-  City Boundaries
-  Cities
-  roadsanno
-  highways
-  HWY
-  INTERCHANGE
-  INTERSTATE
-  OFFRAMP
-  ONRAMP
-  USHWY
-  counties
-  cities
-  hydrographylines
-  waterbodies
-  Lakes
-  Rivers



0 232 463 Feet



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Notes

LANDSCAPE LEGEND:

| SYMBOL | SCIENTIFIC NAME | COMMON NAME | SIZE | QUANTITY | SYMBOL | SCIENTIFIC NAME | COMMON NAME | SIZE | QUANTITY |
|--|------------------------------------|--------------------|---------|----------|--------|-----------------------------------|------------------------|-------|----------|
| | CUPANOPSIS ANACARDIODES | CARROTWOOD | 24" BOX | 5 | | AGAPANTHUS AFRICANUS "QUEEN ANNE" | LILY OF THE NILE | 1 GAL | 31 |
| | LAGERSTROEMIA FAUJERI "TUSCARDORA" | RED CREPE MYRTLE | 24" BOX | 3 | | PHOTINIA FRASERI | PHOTINIA | 5 GAL | 27 |
| | KOELREUTERIA BIPINNATA | CHINESE FLAME TREE | 24" BOX | 3 | | LAVANDULA STOECHAS "OTTO QUAST" | SPANISH LAVENDAR | 5 GAL | 7 |
| MULCH AND GROUND COVER TO RECEIVE SHREDDED FOREST FLOOR WOOD MULCH, 3" MAX. THICKNESS, COLOR BY OWNER. | | | | | | MYOPORIUM PARVIFOLIUM | PROSTRATE MYOPORIUM | 1 GAL | 41 |
| | | | | | | SALVIA GREGGI "RED" | AUTUMN SAGE | 5 GAL | 11 |
| | | | | | | DIETICUS BUCCINATORIA | BLOOD RED TRUMPET VINE | 5 GAL | 4 |
| | | | | | | LOMANDRA LONGIFOLIA "BREEZE" | LOMANDRA | 1 GAL | 110 |

KEY NOTES:

- EXISTING CONCRETE APRON FOR ROLL GATE
- CONCRETE PATIO
- EXISTING KEY PAD ACCESS PEDESTAL
- EXISTING WROUGHT IRON ROLL GATE
- EXISTING WROUGHT IRON MAN GATE
- EXISTING CONCRETE SIDEWALK
- EXISTING CONCRETE CURB & GUTTER
- HANDICAP ACCESSIBLE ROUTE
- CONCRETE CURB PER CIVL DWG'S
- CONCRETE SIDEWALK PER CIVL DWG'S
- HANDICAP PARKING SIGNAGE
- HANDICAP PARKING STALL & ACCESS AISLE
- PARKING STRIPING
- CONCRETE BLOCK TRASH ENCLOSURE

PROJECT DATA:

LEGAL DESCRIPTION: PORTION OF PARCEL 5, PARCEL MAP 30602, PORTION OF SOUTHWEST CORNER OF SECTION 17, TOWNSHIP 5 SOUTH, RANGE 1 WEST

ASSESSOR PARCEL NR: 456-040-049

STREET ADDRESS: 814 AIRWAY PLACE HEMET, CA 92345

OWNER: JOSEPH AUGUSTINE TRUST
20 ALCOHOL PLACE
8740 L STREET
LINCOLN, NE 68510

PARCEL SIZE: 4.47 ACRES (194,713.2 SF)

PARCEL ZONING: M-2 (MANUFACTURING)

BUILDING AREA: 2,132.7 SF

FLOOR AREA RATIO: 1.1%

OCCUPANCY GROUP: 1

CONSTRUCTION TYPE: TYPE VB

HEIGHT:
BUILDING: 17'-0"
LIGHT POLE: 24'-0"
TRASH ENCLOSURE: 8'-8"

BUILDING SETBACKS: 15'-0" FRONT
0'-0" SIDE
0'-0" REAR

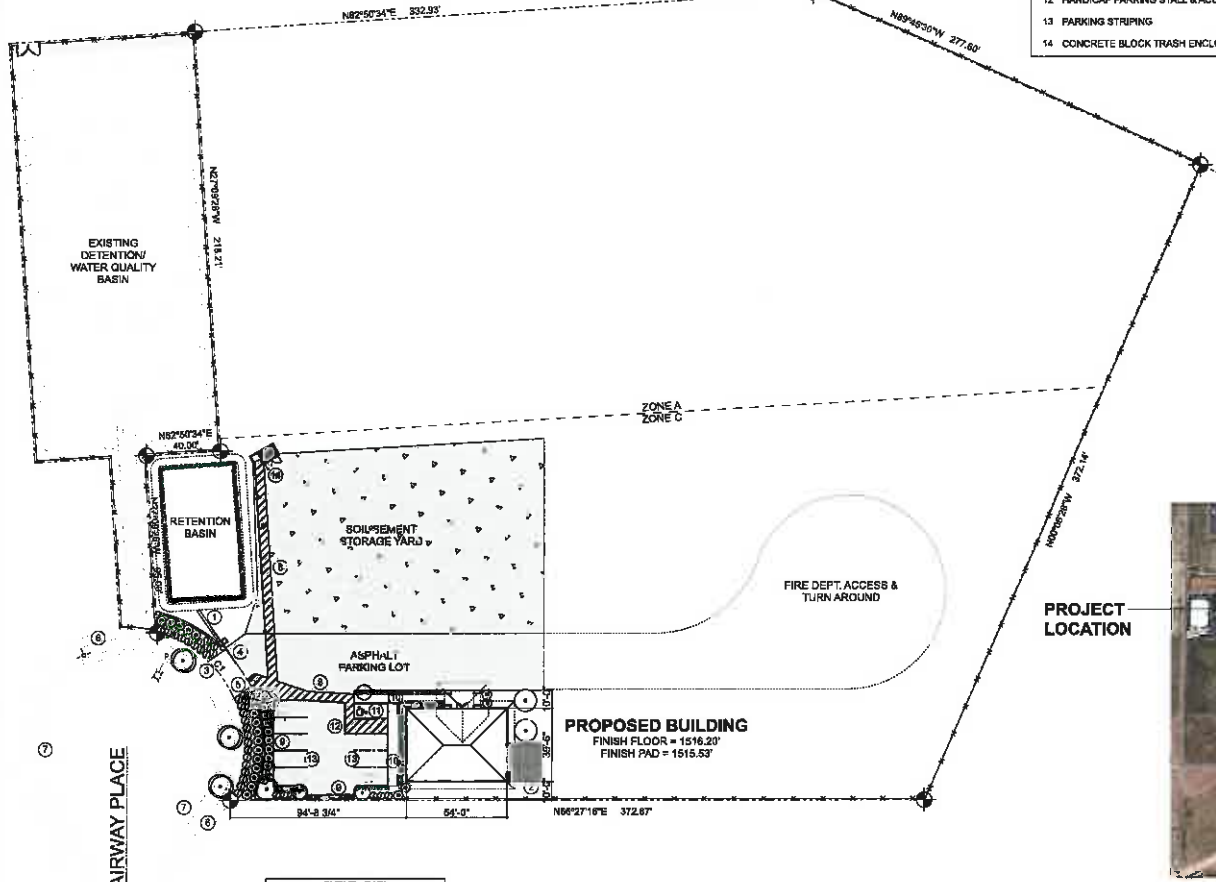
PARKING CALCULATION

PROPOSED BUILDING:
BUILDING AREA: 2,132.7 SF
PARKING REQUIREMENT: 1 SPACE PER 250 SF = 2132.7 / 250 = 8.6 = 9 SPACES

PARKING PROVIDED: 9 SPACES, W/ 1 SPACE BEING HANDICAP ACCESSIBLE

LEGEND:

- PROPOSED POLE MOUNTED LIGHT FIXTURE
- EXISTING POLE MOUNTED LIGHT FIXTURE
- EXISTING FIRE HYDRANT
- EXISTING CHAIN LINK FENCE
- EXISTING MASONRY FENCE



| CURVE DATA | | | |
|------------|--------|---------|------------|
| CURVE | RADIUS | LENGTH | DELTA |
| C1 | 63.06' | 113.50' | 109°22'49" |

SITE PLAN
SCALE: 1" = 30'



VICINITY MAP
NOT TO SCALE



461 E. Manlo Avenue
Hemet, 92543

CONSULTANTS

Blank area for consultant information.

PRELIMINARY
Not for Construction
or Recording

ROAD BUILDERS OFFICE BUILDING

814 AIRWAY PLACE
HEMET, CA
92545

| MARK | DATE | DESCRIPTION |
|------|------|-------------|
| | | |

PROJECT NO: 1780
MODEL FILE:
DRAWN BY: J.C.C.
COPYRIGHT:

SHEET TITLE

SITE PLAN

A-102



461 E. Menlo Avenue
Hemet, 92543

CONSULTANTS

PRELIMINARY
Not for Construction
or Recording

**ROAD BUILDERS
OFFICE BUILDING**

814 AIRWAY PLACE
HEMET, CA
92545

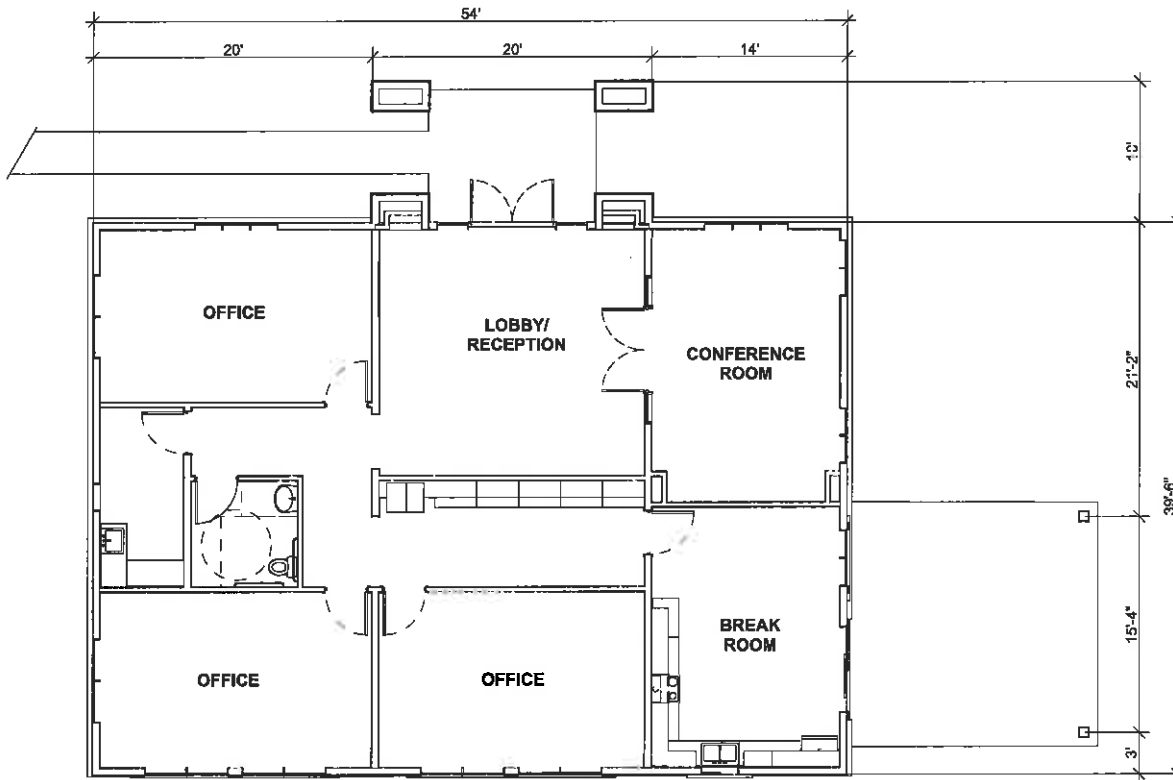
MARK DATE DESCRIPTION

PROJECT NO: 1789
MODEL FILE:
DRAWN BY: J.C.C.
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SHEET TITLE
SCHEMATIC FLOOR PLAN

A-101

SHEET 2 OF 7



FLOOR PLAN
SCALE: 1/8" = 1'-0"



461 E. Menlo Avenue
Hemet, 92543

CONSULTANTS

PRELIMINARY
Not for Construction
or Recording

**ROAD BUILDERS
OFFICE BUILDING**

814 AIRWAY PLACE
HEMET, CA
92546

| MARK | DATE | DESCRIPTION |
|-------------------------|------|-------------|
| PROJECT NO: 1780 | | |
| MODEL FILE: 1780.rvt | | |
| DRAWN BY: j.c.c. | | |
| COPYRIGHT: | | |

SHEET TITLE
Color Elevations

A-202

SHEET 6 OF 7



H
D
B
A
F
C

① Northwest Perspective



② Southwest Perspective

PROPOSED BUILDING MATERIALS

- BUILDING STRUCTURE:** WOOD FRAMING, CONCRETE SLAB-ON-GRADE, PREFAB. WOOD ROOF TRUSSES
- WALL MATERIALS:** 3-PART STUCCO (A) COLOR 1, (B) COLOR 2, STONE VENEER (C) SLATE, WOOD TRIM (D) PAINT, WOOD TRELLIS (E) STAIN
- ROOF MATERIALS:** CONCRETE ROOF TILE (H) TBD, SRI GREATER THAN 29
- DOORS/WINDOWS:** ALUMINUM STOREFRONT W/ STOREFRONT ENTRANCE (F) SOLAR BRONZE, ALUMINUM DOORS/WINDOWS (G) SOLAR BRONZE

BUILDING PARAMETERS

- BUILDING AREA:** 2,132.7 SQ.FT.
- BUILDING HEIGHT:** 17'-0" (RIDGE HEIGHT)
- ROOF SLOPE:** 3" / 12"
- FINISH FLOOR ELEVATION:** 1,516.20'



E
G
F

③ Southeast Perspective



④ Northeast Perspective

NOTICE OF PUBLIC HEARING
RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the application described below.

Any person may submit written comments to the ALUC before the hearing or may appear and be heard in support of or opposition to the project at the time of hearing. The proposed project application may be viewed at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Thursday from 8:00 a.m. to 4:30 p.m., except Wednesday, July 4, and by prescheduled appointment on Fridays, from 9:00 a.m. to 5:00 p.m.

ATTENTION: ALUC reviews a proposed plan or project solely to determine whether it is consistent with the applicable Airport Land Use Compatibility Plan. The City of Hemet may hold hearings on this project and should be contacted on non-ALUC issues.

PLACE OF HEARING: Riverside County Administration Center
 4080 Lemon St., 1st Floor Board Chambers
 Riverside, California

DATE OF HEARING: July 12, 2018

TIME OF HEARING: 9:30 A.M.

CASE DESCRIPTION:

ZAP1051HR18 – FDC Commercial Construction (Representative: John Dykes) – City of Hemet Planning Case No. SDR18-006 (Site Development Review). The applicant is proposing to develop a construction storage yard facility with a 2,100 square foot single story office building on a 4.6-acre parcel located at 814 Airway Place, northerly of Wentworth Drive (Airport Compatibility Zones A and C of the Hemet-Ryan Airport Influence Area).

FURTHER INFORMATION: Contact Paul Rull at (951) 955-6893. The ALUC holds hearings for local discretionary permits within the Airport Influence Areas, reviewing for aeronautical safety, noise and obstructions. All other concerns should be addressed to Ms. Carole Kendrick of the City of Hemet Planning Department at (951) 765-2373.



RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

APPLICATION FOR MAJOR LAND USE ACTION REVIEW

ALUC CASE NUMBER: ZAP 1051HR 18 DATE SUBMITTED: February 13, 2018

APPLICANT / REPRESENTATIVE / PROPERTY OWNER CONTACT INFORMATION

Hemet
A+C

| | | |
|-----------------|--|-------------------------------|
| Applicant | FDC Commercial Construction | Phone Number (951)925-8010 |
| Mailing Address | 461. E Menlo Ave Hemet, Ca 92545 | Email John@fdc.bz |
| Representative | John Dykes | Phone Number (951) 925-8010 |
| Mailing Address | 461 E. Menlo Ave Hemet, CA 9 | Email John@fdc.bz |
| Property Owner | Joseph Augustine | Phone Number (951)545-9555 |
| Mailing Address | 6710 L Street 20 Alodium Place Lincoln, NE 68510 | Email joe@roadbuildersinc.com |

LOCAL JURISDICTION AGENCY

| | | |
|-------------------------|---------------------------------------|--|
| Local Agency Name | City of Hemet | Phone Number (951) 765-2373 |
| Staff Contact | Carole Kendrick | Email ckendrick@cityofhemet.or |
| Mailing Address | 445 E. Florida Ave Hemet, CA 92543 | Case Type |
| Local Agency Project No | 15-003 | <input type="checkbox"/> General Plan / Specific Plan Amendment <input type="checkbox"/> Zoning Ordinance Amendment <input type="checkbox"/> Subdivision Parcel Map / Tentative Tract <input type="checkbox"/> Use Permit <input checked="" type="checkbox"/> Site Plan Review/Plot Plan <input type="checkbox"/> Other |

PROJECT LOCATION

Attach an accurately scaled map showing the relationship of the project site to the airport boundary and runways

| | | |
|-----------------------|---------------------------------------|---|
| Street Address | 814 Airway Place Hemet, CA 92545 | |
| Assessor's Parcel No. | 456-040-049 | Gross Parcel Size 4.47 Acres |
| Subdivision Name | PORTION OF PARCEL 5, PARCEL MAP 30602 | Nearest Airport and distance from Airport 0.7 Miles |
| Lot Number | | |

PROJECT DESCRIPTION

If applicable, attach a detailed site plan showing ground elevations, the location of structures, open spaces and water bodies, and the heights of structures and trees; include additional project description data as needed

| | |
|------------------------------|--|
| Existing Land Use (describe) | New Construction- 2100 Sqft, Concrete slab on grade, wood construction single story office building with related site work |
| | |
| | |

| | | | |
|---|--|----------------------------------|--|
| Proposed Land Use (describe) | Office building with storage yard for construction equipment | | |
| For Residential Uses | Number of Parcels or Units on Site (exclude secondary units) | | |
| For Other Land Uses (See Appendix C) | Hours of Operation | 7am-5pm M-F | |
| | Number of People on Site | 22 | Maximum Number |
| | Method of Calculation | 2016 CBC, Table 1004.1.2 | |
| Height Data | Site Elevation (above mean sea level) | 1516.2 | ft. |
| | Height of buildings or structures (from the ground) | Bldg - 17', Light poles- 24' ft. | |
| Flight Hazards | Does the project involve any characteristics which could create electrical interference, confusing lights, glare, smoke, or other electrical or visual hazards to aircraft flight? | | <input type="checkbox"/> Yes |
| | If yes, describe | | <input checked="" type="checkbox"/> No |

- A. NOTICE:** Failure of an applicant to submit complete or adequate information pursuant to Sections 65940 to 65948 inclusive, of the California Government Code, MAY constitute grounds for disapproval of actions, regulations, or permits.
- B. REVIEW TIME:** Estimated time for "staff level review" is approximately 30 days from date of submittal. Estimated time for "commission level review" is approximately 45 days from date of submittal to the next available commission hearing meeting.
- C. SUBMISSION PACKAGE:**
1. Completed ALUC Application Form
 1. ALUC fee payment
 1. Plans Package (24x36 folded) (site plans, floor plans, building elevations, landscaping plans, grading plans, subdivision maps)
 1. Plans Package (8.5x11) (site plans, floor plans, building elevations, landscaping plans, grading plans, subdivision maps, zoning ordinance/GPA/SPA text/map amendments)
 1. CD with digital files of the plans (pdf)
 1. Vicinity Map (8.5x11)
 1. Detailed project description
 1. Local jurisdiction project transmittal
 3. Gummed address labels for applicant/representative/property owner/local jurisdiction planner
 3. Gummed address labels of all surrounding property owners within a 300 foot radius of the project site (**only required if the project is scheduled for a public hearing Commission meeting**). If more than 100 property owners are involved, please provide pre-stamped envelopes (size #10) with ALUC return address. *

* Projects involving heliports/helicopter landing sites will require additional noticing procedures.



Road Builders Project Description
Land Use Application for New Construction
APN 456-040-049

The project, located on the parcel noted above, is approximately 4.47 acres of undeveloped land. The owner has been given approval to grade and store construction equipment on the site, with the explicit direction for the City of Hemet that he provide an office building in support of his business. This submittal is for said building, including the related site work in support of the building.

The building itself is approximately 2,100 SF, single story, concrete slab-on-grade, with wood framed walls with stucco and stone veneer exterior, and pre-fabricated wood roof trusses with concrete tile roofing. There is also a wood trellis on the east side of the building over a concrete patio area. The plate height of the walls is ten feet and twelve feet, with a ridge height of approximately seventeen feet. All colors to be determined by the owner.

Related site work involves three components: trash enclosure, site lighting, and surface paving. The trash enclosure is constructed of concrete block to match the existing masonry wall at the entrance, approximately six feet in height, with a metal trellis above, maximum height of nine feet. The site lighting consists of 2-3 light poles around the parking lot, with any remaining site lighting to be mounted on the office building. We are anticipating a maximum pole height of 24 feet, but the quantity and height may change once we have photometrics done (we will still stay at or under the 24 foot height). Lastly, there is the surface paving, which applies from the entrance to the property to the parking lot area, and a portion of the driveway on the north side of the parking lot and building itself.

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

STAFF REPORT

ADMINISTRATIVE ITEMS

4.1 Director's Approvals.

- A. During the period of May 16, 2018 through June 15, 2018, as authorized pursuant to Section 1.5.2(d) of the 2004 Riverside County Airport Land Use Compatibility Plan, ALUC Director Simon Housman reviewed two non-legislative cases (one within Zone D of the Palm Springs International Airport Influence Area and one within Zone E of the March Air Reserve Base/Inland Port Airport Influence Area) and issued determinations of consistency.

ZAP1062PS18 (Palm Springs International, Zone D) pertains to City of Cathedral City Case No. DR 18-001, a proposal to construct a 4,432 gross square foot building addition at the existing Palm Springs Nissan car dealership located on 1.93 acres (Assessor's Parcel Number 687-040-030) located at 68177 Kyle Road (on the east side of Kyle Road, southerly of Perez Road). The dealership's business area also includes Assessor's Parcel Numbers 687-040-026 and 687-040-029, which together add an additional 0.23 acre to the property. The site is located within Compatibility Zone D of the Palm Springs International Airport Influence Area. Within Compatibility Zone D of the Palm Springs International Airport Land Use Compatibility Plan (Palm Springs ALUCP), non-residential intensity is limited to an average of 100 persons per acre and a maximum of 300 persons in the most intensely utilized single-acre area. As this site is less than 3 acres in area, the average intensity limit is the controlling factor in determining consistency with intensity limits. The additional floor space will be utilized as follows: On the first floor, 1,844 square feet will be added to the service department area (open to customers) and 1,271 square feet will constitute a storage room and tool storage area. The second floor/mezzanine space will include a 357 square foot conference room, 223 square feet of office space, and 197 square feet of storage. This adds to 3,892 square feet of net area. Evaluating the additional service department area on the basis of one person per 60 square feet, the conference room on the basis of one person per 15 square feet, the office area on the basis of one person per 200 square feet, and the storage areas on the basis of one person per 300 square feet, the total additional occupancy would be 61 people. The existing 17,762 gross square foot (12,230 square foot net) auto dealership building accommodates an occupancy of 151 people, so the total revised occupancy would be 212 people, resulting in an average intensity of 98 people per acre (counting the actual site area as 2.16 acres). The total occupancy of 212 would be lower than the Zone D single-acre intensity limit of 300. The elevation of Runway 13R-31L at Palm Springs International Airport at its southerly terminus is approximately 395.5 feet above mean sea level. The site elevation is 300 feet above mean sea level, and the proposed structure height is 28 feet. The maximum top point elevation, then, at 328 feet above mean sea level, is lower than the runway elevation. Therefore, review by the Federal Aviation Administration Obstruction Evaluation Service (FAA OES) was not required. ALUC Director Simon Housman issued a determination of consistency for this project on June 4, 2018.

ZAP1316MA18 (March Air Reserve Base/Inland Port Airport, Zone E) pertains to County of Riverside Case No. PP26350 (Plot Plan), a proposal to construct a 60 foot tall "monopalm" wireless communications facility (cell tower) with a 910 square foot equipment shelter area on a 1.34-acre parcel located on the southeast corner of Parsons Road and Ontario Avenue in the unincorporated Glen Valley area and the Woodcrest

Zoning District. The site is located within Compatibility Zone E of the March Air Reserve Base/Inland Port Airport Influence Area, where non-residential intensity is not restricted. The elevation of Runway 14-32 at March Air Reserve Base/Inland Port Airport at its northerly terminus is approximately 1,535 feet above mean sea level (AMSL). At a distance of 21,500 feet from the runway to the project, Federal Aviation Administration Obstruction Evaluation Service (FAA OES) review could be required for any structures with a top of roof elevation exceeding 1,750 feet AMSL. The project site elevation is 1,644 feet AMSL and the maximum proposed structure height is 60 feet, resulting in a top point elevation of 1,704 feet AMSL. Therefore, FAA OES review for height/elevation reasons was not required. ALUC Director Simon Housman issued a determination of consistency for this project on June 11, 2018.

- B. Additionally, ALUC Director Simon Housman reviewed three jurisdiction-initiated non-impact legislative cases pursuant to ALUC Resolution No. 2011-02 and issued determinations of consistency.

ZAP1029RG18 (Citywide – portions of March, Riverside Municipal, and Flabob Airport Influence Areas) pertains to City of Riverside Case No. P18-0290 (Zoning Ordinance Amendment), a proposal to comprehensively update Chapter 19.556 of the City’s Zoning Code related to lighting. This is a reorganization and update to bring the existing provisions relating to lighting into compliance with State laws, such as Title 24 Building Energy Efficiency Standards, and to recognize technological advancements. The proposed changes include creation of lighting zones, specification of prohibited types of lighting, addition and modification of definitions relating to lighting, establishment of new design and development standards, and establishment of new procedures for review of lighting plans. None of the proposed changes affect residential density or non-residential intensity. ALUC’s requirement that lighting be hooded and facing downward is incorporated into the proposed development standards. Therefore, it was determined that this amendment has no possibility for having an impact on the safety of air navigation. ALUC Director Simon Housman issued a determination of consistency for this project on May 22, 2018.

ZAP1028RG18 (Countywide unincorporated areas) pertains to County of Riverside Case No. GPA180004 (General Plan Amendment), a proposal to strengthen the greenhouse gas emissions reduction programs and regulations included or referenced in the County’s General Plan, involving amendments to the policies included in the Air Quality Element, Mitigation Measure 4.7A-N1 as included in Environmental Impact Report No. 521 (EIR No. 521 MM 4.7.A-N1), Chapters 4 and 7 and the Table of Contents/List of Tables of the Riverside County Climate Action Plan, and the associated Greenhouse Gas Emissions Screening Tables document prepared by Atkins in March 2015. The amendment was prepared in accordance with the Riverside County Board of Supervisors’ executed Partial Settlement Agreement with the Sierra Club, the Center for Biological Diversity, and the San Bernardino Valley Audubon Society. This local agency proposal is not inconsistent with, nor has the possibility of being inconsistent with, the land use planning guidelines contained in the 2004 Riverside County Airport Land Use Compatibility Plan or any of the subsequently adopted Airport Land Use Compatibility Plans affecting land in the County of Riverside. Therefore, ALUC Director Simon Housman issued a determination of consistency for this project on June 4, 2018.

ZAP1030RG18 (Countywide unincorporated areas) pertains to County of Riverside Case No. GPA1226 (General Plan Amendment), a proposal to: (1) amend the Safety Element of the County’s General Plan by (a) replacing existing maps (specifically, Figure S-1 and Figures S-3 through S-8) with updated maps incorporating new hydrologic and geologic data that was not available to the County at the time of the original adoption of the Riverside County Integrated Project (RCIP) General Plan in 2003 and four new maps published by the California Geologic Survey, or based on information therefrom, and (b) updating and clarifying the text of the Section entitled “Seismically-induced Liquefaction, Landslides, and Rock Falls”;

and (2) amend the Land Use and Healthy Communities Elements by providing for discussions of environmental justice in both elements, identifying the locations of environmentally disadvantaged “environmental justice” communities, and adding and consolidating policies to address the physical and social needs of these communities, the impacts of the land use decision making process upon such communities, and means to provide for more robust public participation in the land use decision making process where such communities are affected. This local agency proposal is not inconsistent with, nor has the possibility of being inconsistent with, the land use planning guidelines contained in the 2004 Riverside County Airport Land Use Compatibility Plan or any of the subsequently adopted Airport Land Use Compatibility Plans affecting land in the County of Riverside. Therefore, ALUC Director Simon Housman issued a determination of consistency for this project on June 11, 2018.

4.2 Speculative Nonresidential Multiple Buildings Policy: See separate staff report.

4.3 ALUC Director’s Report: The Path Forward Following the Release of the 2018 Air Installation Compatible Use Zones Report for March Air Reserve Base/Inland Port Airport

ALUC Director Simon Housman will continue his briefing of the Commission.

4.4 Approval of the New ALUC Logo: Presentation by ALUC Director Simon Housman and ALUC/TLMA Secretary Barbara Santos

Y:\ALUC\ALUC Administrative Items\ADmin Item 07-12-18.doc



AIRPORT LAND USE COMMISSION RIVERSIDE COUNTY

June 4, 2018

CHAIR
Steve Manos
Lake Elsinore

VICE CHAIR
VACANCY

COMMISSIONERS

Arthur Butler
Riverside

John Lyon
Riverside

Russell Betts
Desert Hot Springs

Steven Stewart
Palm Springs

Richard Stewart
Moreno Valley

STAFF

Director
Simon A. Housman

John Guerin
Paul Ruil
Barbara Santos

County Administrative Center
4080 Lemon St., 14th Floor
Riverside, CA 92501
(951) 955-5132

www.rcaluc.org

Mr. Salvador Quintanilla, Project Planner
Ms. Melody Segura, Assistant Planner
City of Cathedral City Planning Department
68-700 Avenida Lalo Guerrero
Cathedral City, CA 92234

**RE: AIRPORT LAND USE COMMISSION (ALUC) DEVELOPMENT REVIEW –
DIRECTOR'S DETERMINATION**

File No.: ZAP1062PS18
Related File No.: DR 18-001 (Design Review)
APN: 687-040-030

Dear Mr. Quintanilla and/or Ms. Segura:

Under the delegation of the Riverside County Airport Land Use Commission (ALUC) pursuant to ALUC's general delegation as per Policy 1.5.2(d) of the Countywide Policies of the 2004 Riverside County Airport Land Use Compatibility Plan, staff reviewed City of Cathedral City Case No. DR18-001 (Design Review), a proposal to construct a 4,432 gross square foot building addition at the existing Palm Springs Nissan car dealership on 1.93 acres located at 68177 Kyle Road (on the east side of Kyle Road, southerly of Perez Road). The dealership's business area also includes Assessor's Parcel Numbers 687-040-026 and 687-040-029, which together add an additional 0.23 acre to the property.

The site is located within Airport Compatibility Zone D of the Palm Springs International Airport Influence Area (AIA). Within Compatibility Zone D of the Palm Springs International Airport Land Use Compatibility Plan, non-residential intensity is limited to 100 people per average acre and 300 people per single acre.

The additional floor space will be utilized as follows: On the first floor, 1,844 square feet will be added to the service department area (open to customers) and 1,271 square feet will constitute a storage room and tool storage area. The second floor/mezzanine space will include a 357 square foot conference room, 223 square feet of office space, and 197 square feet of storage. This adds to 3,892 square feet of net area. Pursuant to Appendix C, Table C-1, of the Riverside County Airport Land Use Compatibility Plan, the additional service department area was evaluated on the basis of one person per 60 square feet, the conference room on the basis of one person per 15 square feet, the office area on the basis of 1 person per 200 square feet, and the storage area on the basis of 1 person per 300 square feet, resulting in a total additional occupancy of 61 people. The existing 17,762 gross square foot (12,230 square foot net) auto dealership accommodates an occupancy of 151 people, for a total site occupancy of 212 people, resulting in an average intensity of 98 people per acre (counting the actual site area as 2.16 acres), and a single acre intensity of 212 people, which would be consistent with Zone D intensity criteria.

The elevation of Runway 13R-31L at Palm Springs International Airport at its southerly terminus is approximately 395.5 feet above mean sea level (395.5 feet AMSL). At a distance of approximately 14,711 feet from the runway to the project property line, Federal Aviation Administration Obstruction Evaluation Service (FAA OES) review would be required for any structures with top of roof exceeding 542.6 feet AMSL. The proposed site elevation is 300 feet AMSL, and the tallest proposed structure height is 28 feet, resulting in a maximum top point elevation of 328 feet AMSL, which is lower than the runway elevation. Therefore, review by the FAA OES was not required.

As ALUC Director, I hereby find the above-referenced project **CONSISTENT** with the 2005 Palm Springs Airport Land Use Compatibility Plan, provided that the City of Cathedral City applies the following recommended conditions:

CONDITIONS:

1. Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.
2. The following uses shall be prohibited:
 - (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
 - (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
 - (c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, outdoor production of cereal grains, sunflower, and row crops, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, and construction and demolition debris facilities.)
 - (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
3. The attached "Notice of Airport in Vicinity" shall be provided to all potential purchasers of the property and to the tenants of the buildings, and be recorded as a deed notice.
4. Any new detention basins on the site shall be designed so as to provide for a maximum 48-hour detention period following the conclusion of the storm event for the design storm (may be less, but not more), and to remain totally dry between rainfalls. Vegetation in and around the detention basin(s) that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping.
5. This project has been evaluated on the basis that the addition will include 1,844 square

feet of service department floor area open to the public, 357 square feet of conference room area, 223 square feet of office area, and 1,468 square feet of storage area. Any increase in building area or change in use that would increase the size of the conference room, provide additional area open to the public, or convert storage area to additional conference, office, or customer space will require an amended review by the Airport Land Use Commission.

If you have any questions, please contact Paul Rull, ALUC Urban Regional Planner IV, at (951) 955-6893, or John Guerin, ALUC Principal Planner, at (951) 955-0982.

Sincerely,

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION



Simon A. Housman, ALUC Director

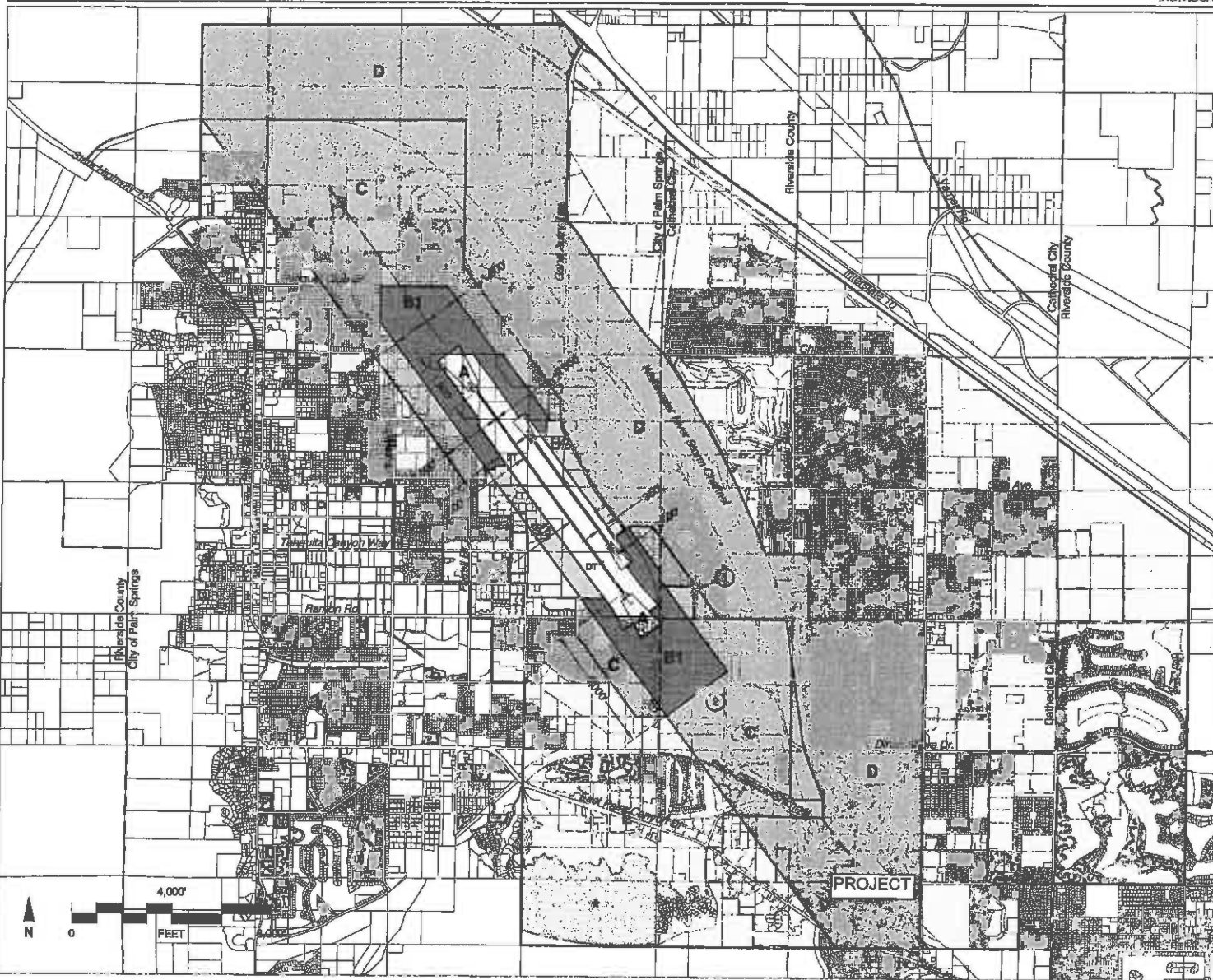
Attachment: Notice of Airport in Vicinity

cc: Palm Springs Nissan (applicant)
Robert Ricciardi (representative)
Slevin Auto Capital (property owner)
Thomas Nolan, Executive Director, Palm Springs International Airport
ALUC Case File

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NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b) (13)(A)



Legend

- Compatibility Zones**
- Airport Influence Area Boundary
 - Zone A
 - Zone B1
 - Zone B2
 - Zone C
 - Zone D
 - Zone E
 - Height Review Overlay Zone

- Boundary Lines**
- Airport Property Line
 - City Limits

- Notes**
- All dimensions measured from runway ends and centerlines.
 - DT = Displaced Threshold
 - See Chapter 2, Table 2A for compatibility criteria associated with this map.
 - See Policy PS.2.1.

Riverside County
Airport Land Use Commission
Riverside County
Airport Land Use Compatibility Plan
Policy Document
(Adopted March 2005)

Map PS-1

Compatibility Map
Palm Springs International Airport

PSP-ecomp.thrift



Cathar

Kieley Rd

Commercial Rd

Perez Rd

Kyle Rd

Perez Rd

Auto Park Dr

111

Highway 111

Cathedral Canyon Dr

Officer David Vasquez

Commercial Rd N

Sunair Plz

Barry Way Dr

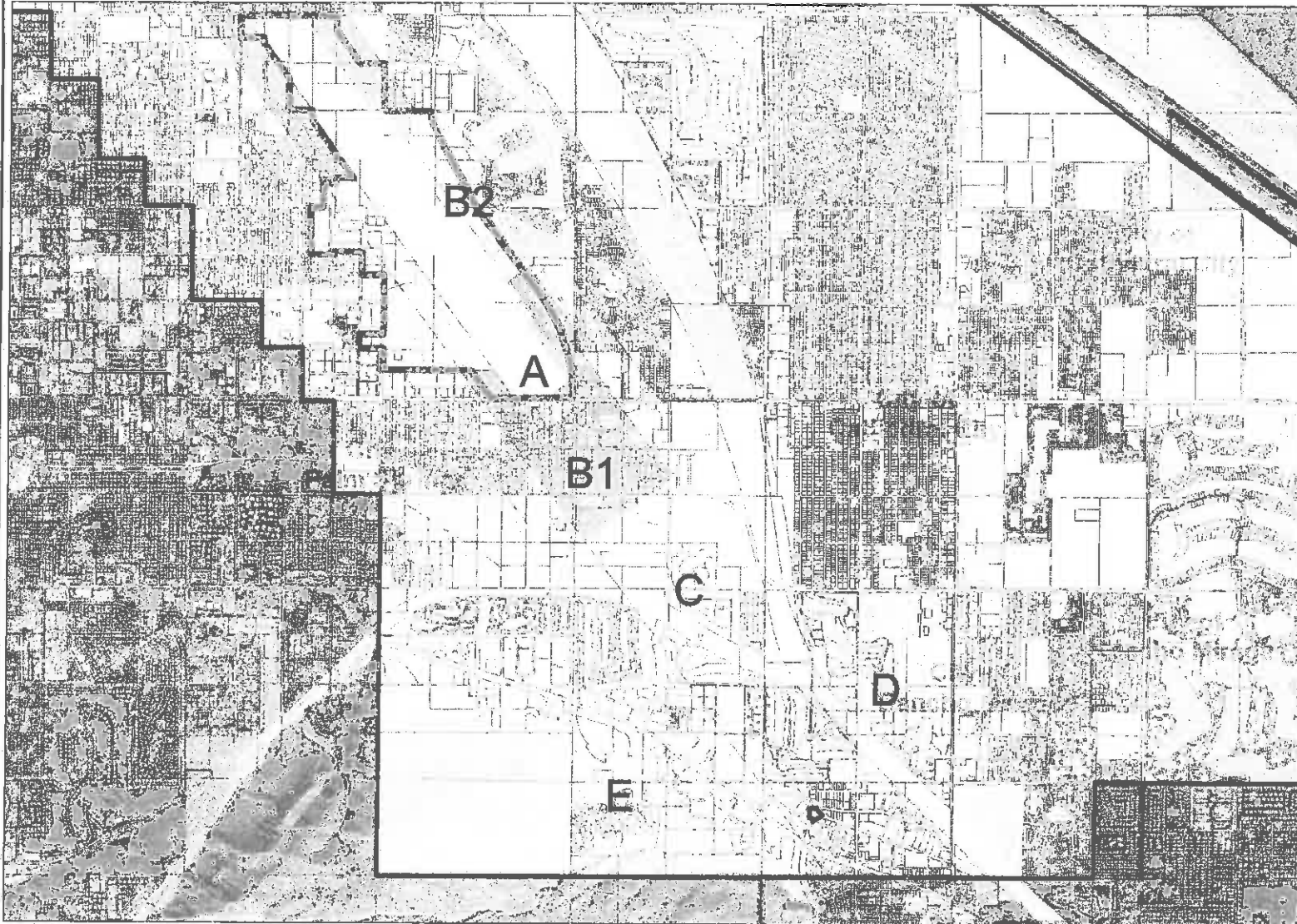
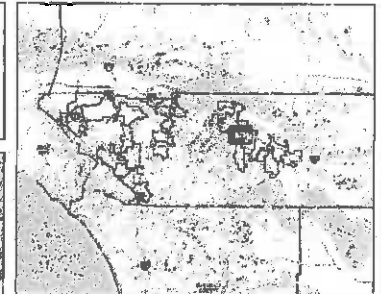
Jose Dr

Avenida Lora Guerrero

Cathe
City

Town Car

My Map



Legend

- Airports
- AIA
- Airport Compatibility**
- OTHER ZONE
- A
- A-EXC1
- B1
- B1-APZ I
- B1-APZ I-EXC1
- B1-APZ II
- B1-APZ II-EXC1
- B1-EXC1
- B2
- B2-EXC1
- C
- C1
- C1-EXC1
- C1-EXC3
- C1-EXC4
- C1-HIGHT
- C2
- C2-EXC1
- C2-EXC2
- C2-EXC3
- C2-EXC5
- C2-EXC6
- C2-HIGHT



IMPORTANT Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

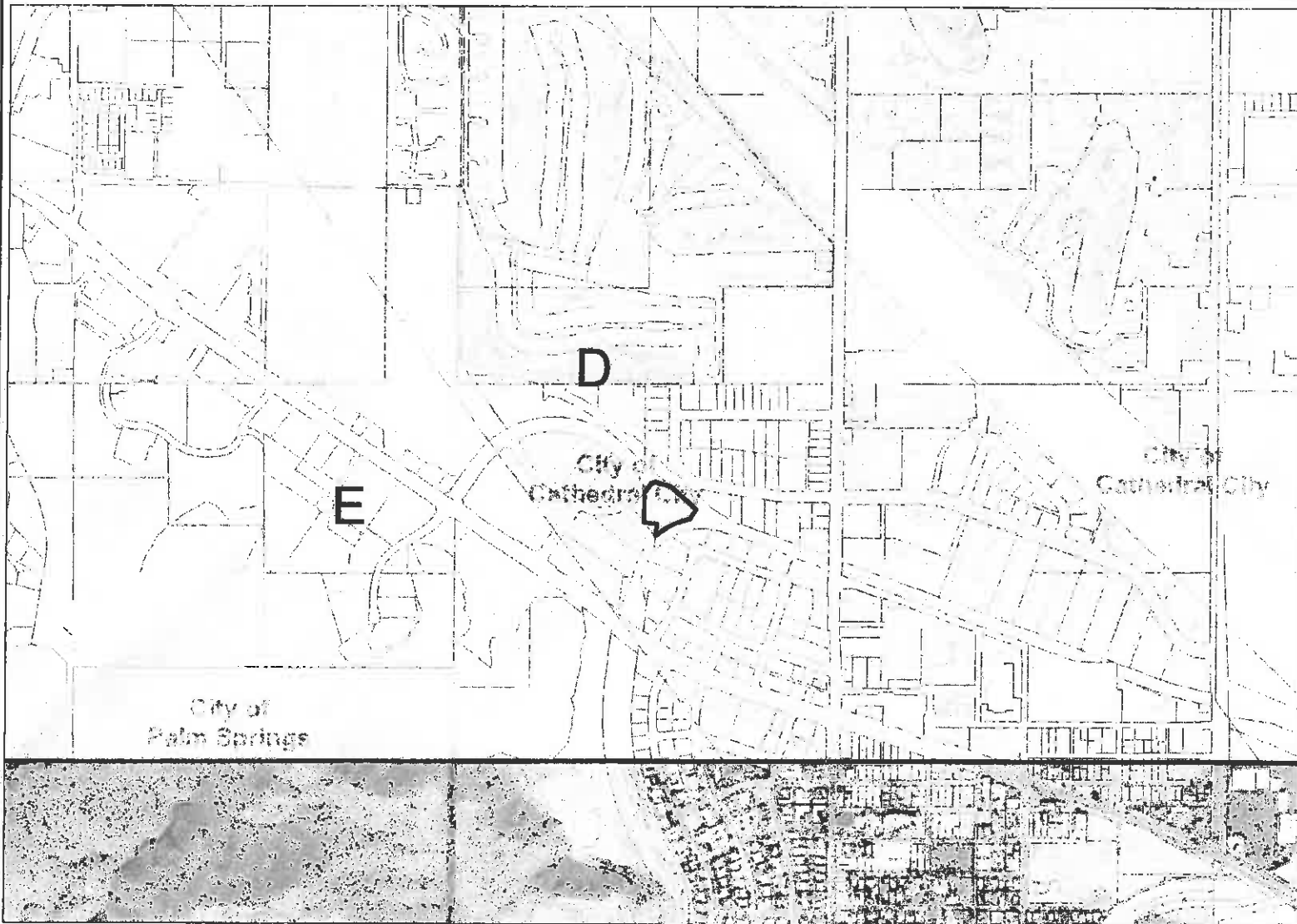
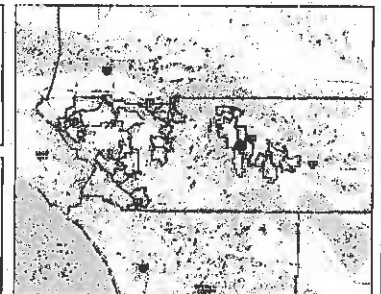


REPORT PRINTED ON... 5/14/2018 2:31:00 PM

© Riverside County RCIT GIS

Notes

My Map



Legend

- Airports
- AIA
- Airport Compatibility**
- OTHER ZONE
- A
- A-EXC1
- B1
- B1-APZ I
- B1-APZ I-EXC1
- B1-APZ II
- B1-APZ II-EXC1
- B1-EXC1
- B2
- B2-EXC1
- C
- C1
- C1-EXC1
- C1-EXC3
- C1-EXC4
- C1-HIGHT
- C2
- C2-EXC1
- C2-EXC2
- C2-EXC3
- C2-EXC5
- C2-EXC8
- C2-HIGHT



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0 1,290 2,580 Feet

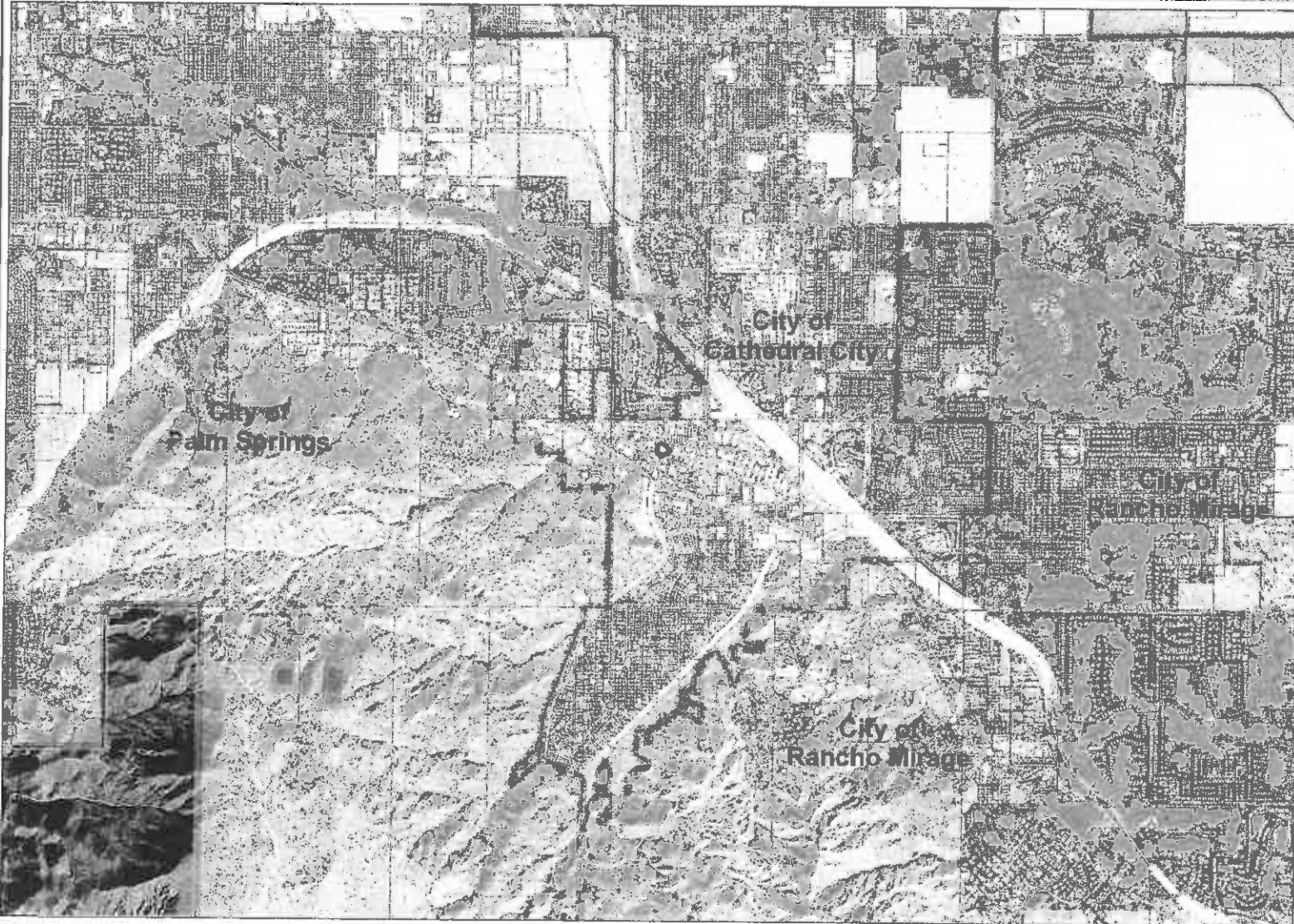
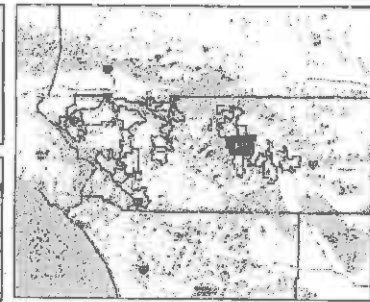


REPORT PRINTED ON... 5/14/2018 2:27:51 PM

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Notes

My Map



Legend

- City Boundaries
- Cities
- highways_large
 - HWY
 - INTERCHANGE
 - INTERSTATE
 - USHWY
- majorroads
- counties
- cities
- hydrographylines
- waterbodies
 - Lakes
 - Rivers



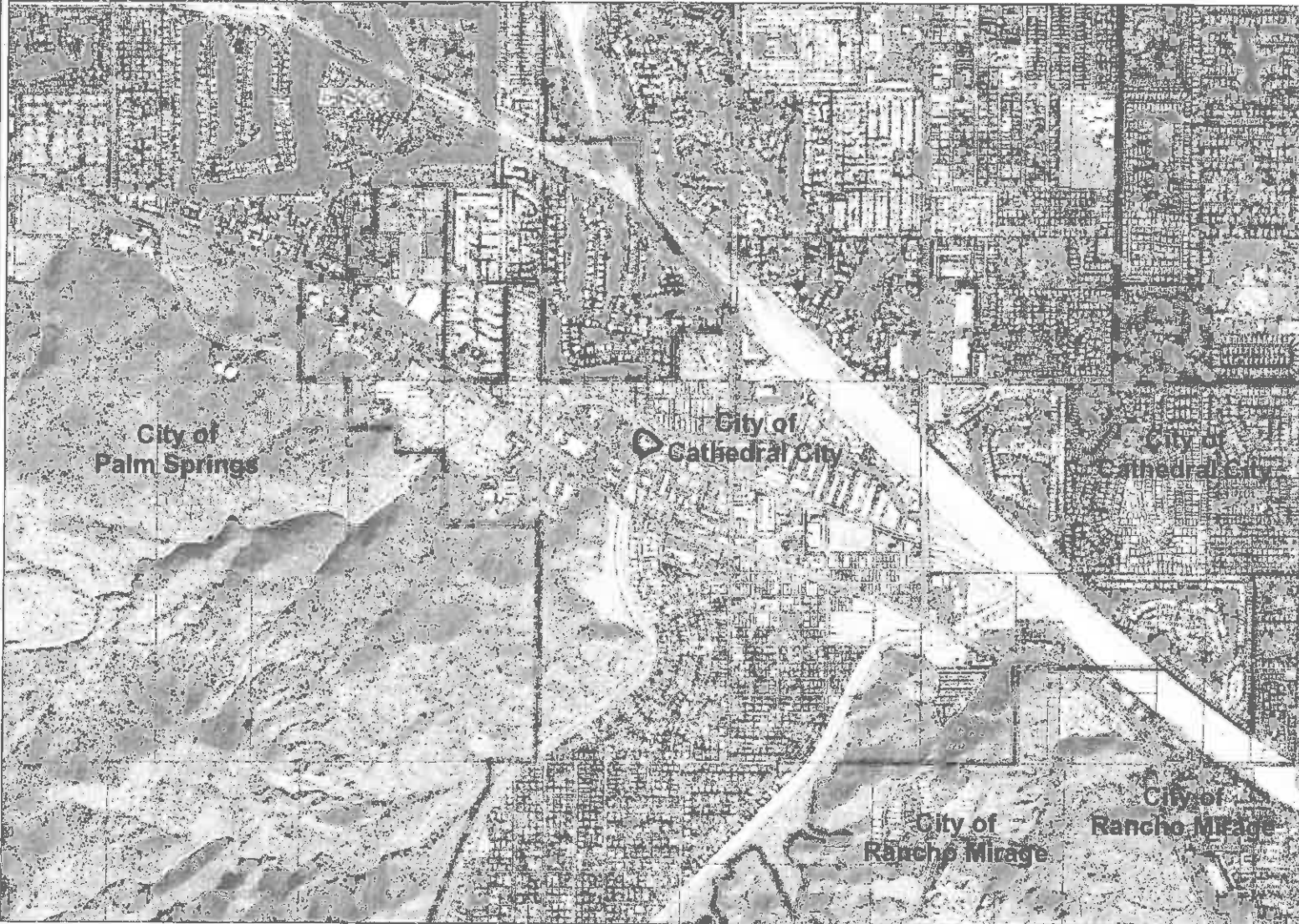
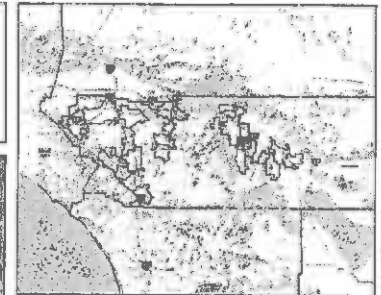
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Notes

My Map



Legend

- City Boundaries
- Cities
- roadsanno
- highways
- HWY
- INTERCHANGE
- INTERSTATE
- OFFRAMP
- ONRAMP
- USHWY
- roads
- Major Roads
- Arterial
- Collector
- Residential
- counties
- cities
- hydrographylines
- waterbodies
- Lakes
- Rivers



0 2,580 5,159 Feet



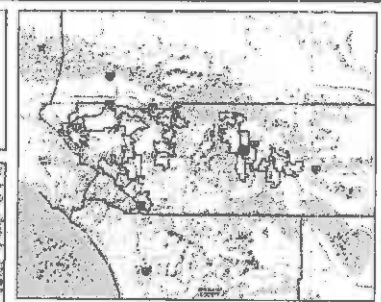
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Notes

My Map



Legend

-  City Boundaries
- Cities
- roadsanno
- highways
- HWY
- INTERCHANGE
- INTERSTATE
- OFFRAMP
- ONRAMP
- USHWY
-  counties
-  cities
- hydrography
- lines
- waterbodies
- Lakes
- Rivers



0 1,290 2,580 Feet



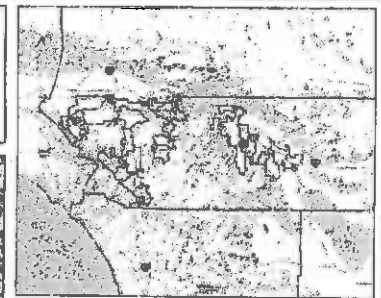
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Notes

My Map



Legend

- City Boundaries
- Cities**
- roadsanno
- highways
- HWY
- INTERCHANGE
- INTERSTATE
- OFFRAMP
- ONRAMP
- USHWY
- counties
- cities
- hydrographylines
- waterbodies
- Lakes
- Rivers



0 970 1,941 Feet



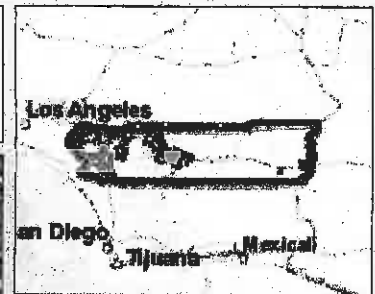
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Notes

Map My County Map



Legend

-  Parcels
-  Blueline Streams
-  City Areas
-  World Street Map



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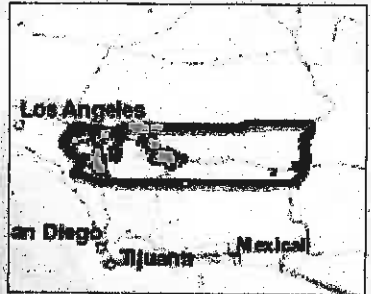
0 752 1,505 Feet

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Notes

Map My County Map



Legend

-  Parcels
-  Blue Line Streams
-  City Areas
-  World Street Map



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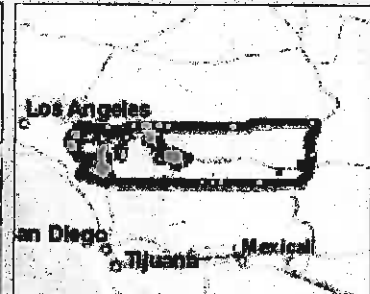
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Notes

Map My County Map



Legend

- Parcels
- Blueline Streams
- City Areas
- World Street Map



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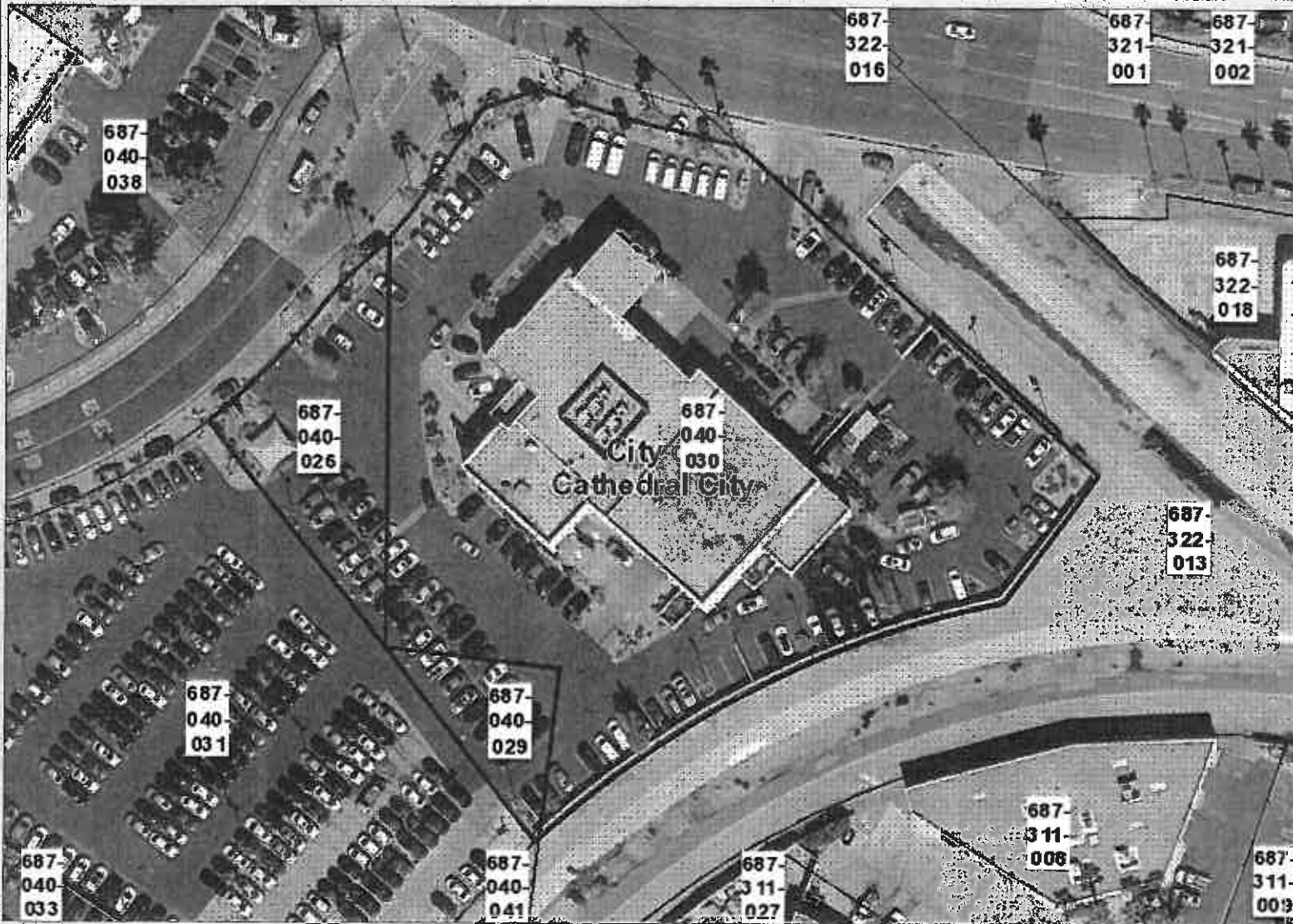
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Notes

Map My County Map



- Legend**
- Parcel APNs
 - Parcels
 - Blueline Streams
 - City Areas
 - World Street Map



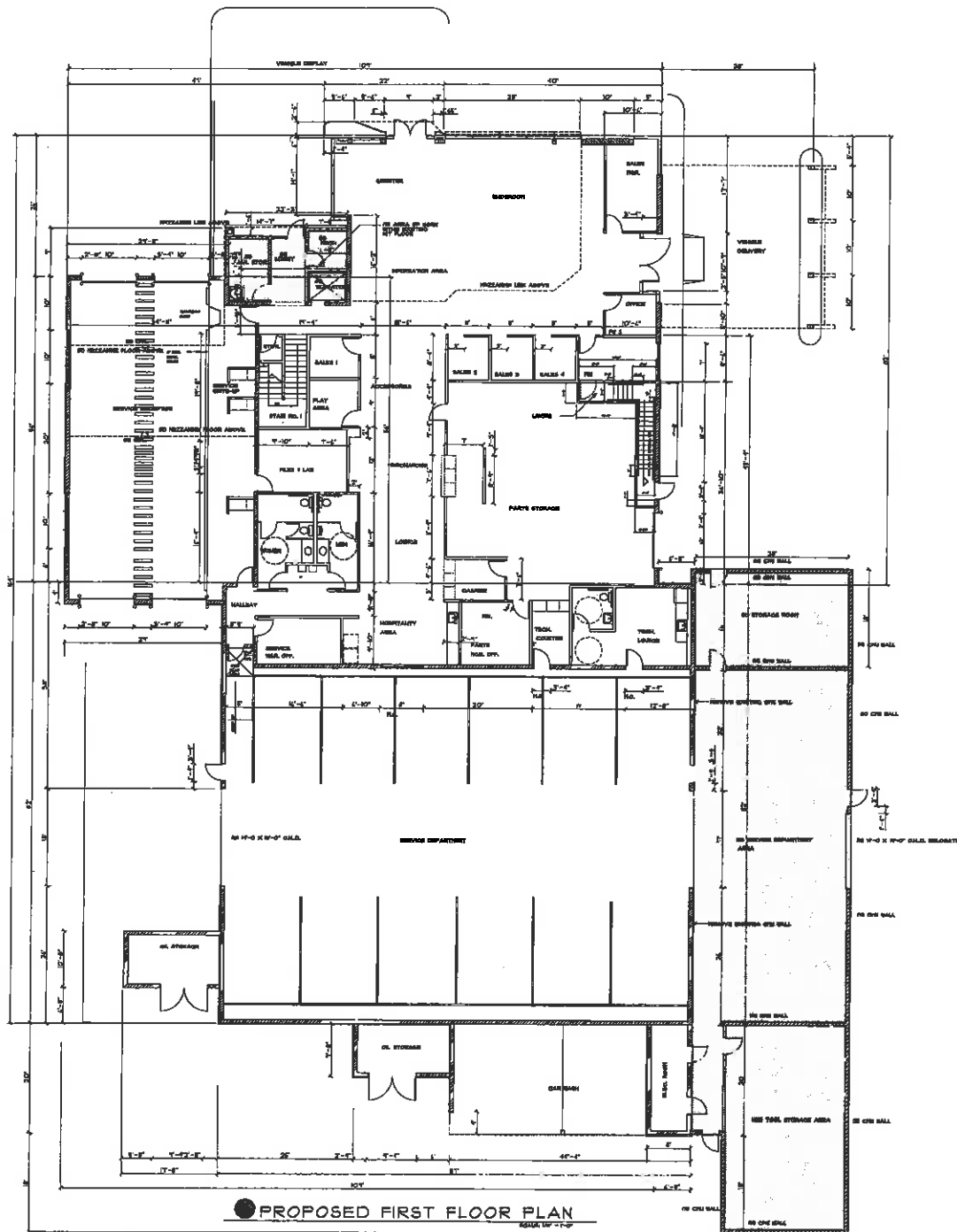
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Notes



Architect Planning Interior Design

ROBERT H. RICCIARDI
ARCHITECT
 ROBERT H. RICCIARDI P.C.A.R.E.
 70-400 GERRARD FORD DR. SUITE 118
 PALM SPRINGS, CALIFORNIA 92211
 TELEPHONE 951 / 652-6206
 FAX 951 / 610-0027



WALL LEGEND

-  EXISTING STONEPARTY EXTERIOR WALL
-  EXISTING INTERIOR WALL
-  EXISTING EXTERIOR CONCRETE WALL
-  NEW EXTERIOR CONCRETE WALL
-  NEW INTERIOR WALL
-  AREA OF PROPOSED ADDITION OR REMOVAL

| NO. | DATE | REVISIONS |
|-----|------|-----------|
| | | |

PROJECT:
 AN AUTOMOBILE DEALERSHIP FOR
PALM SPRINGS
NISSAN
 1875 67TH ROAD
 COTTAGEVILLE, CALIF. 92521

TITLE
PROPOSED FIRST FLOOR PLAN

DATE
 05/15/98
 DWG. NO.
 112
 NAME
 J. RICCIARDI
 APPROVED



SHEET NO.
P2.1
 OF 1

PALM SPRINGS NISSAN
ZAPI062PS18

BUILDING AREA OCCUPANT LOAD FACTOR (ALUC)

(E) SHOWROOM = 1,748 SQ.FT.

(E) OFFICES FIRST FLOOR = 1,306 SQ.FT.

(E) OFFICES SECOND FLOOR = 1,061 SQ.FT.

(N) CONFERENCE ROOM SECOND FLOOR = 357 SQ.FT.

(N) OFFICE SECOND FLOOR = 223 SQ.FT.

(E) PARTS STORAGE FIRST FLOOR = 1,262 SQ.FT.

(N) STORAGE ROOM FIRST FLOOR = 451 SQ.FT.

(N) TOOL STORAGE FIRST FLOOR = 820 SQ.FT.

(E) PARTS STORAGE SECOND FLOOR = 1,270 SQ.FT.

(N) STORAGE SECOND FLOOR = 197 SQ.FT.

(E) SERVICE RECEPTION FIRST FLOOR (6 STACKABLE CARS)

(E) SERVICE DEPARTMENT FIRST FLOOR = 5,583 SQ.FT.

(N) SERVICE DEPARTMENT FIRST FLOOR = 1,844 SQ.FT.

TOTAL = 7,427 SQ.FT.

REMOVE DRIVE AISLE AREA = 2,420 SQ.FT.

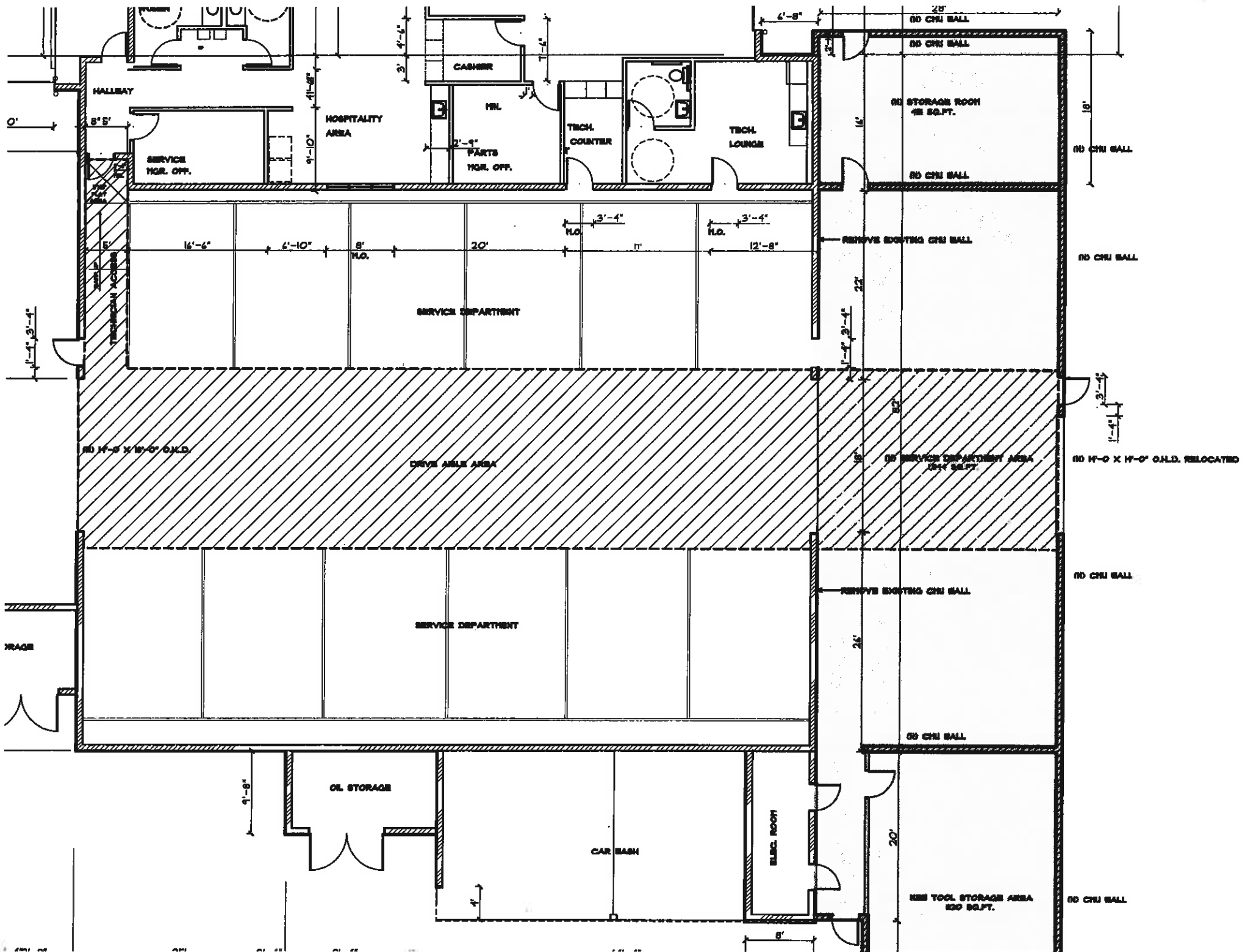
REMOVE TECHNICIAN ACCESS AREA = 123 SQ.FT.

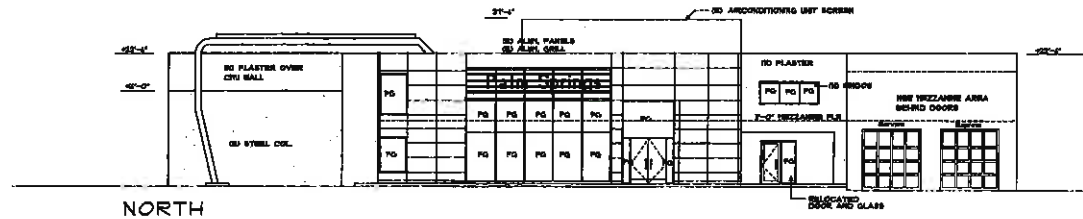
(N) SERVICE DEPARTMENT TOTAL = 4,884 SQ.FT.

(E) GROSS AREA OF BUILDING = 17,762 SQ.FT.

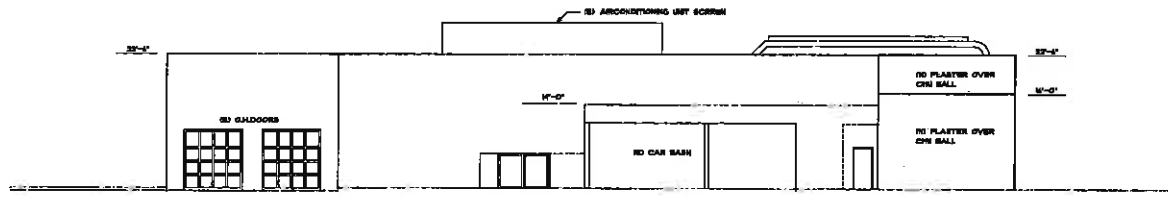
(N) ADDITION AREA OF BUILDING = 4,432 SQ.FT.

TOTAL AREA = 22,194 SQ.FT.

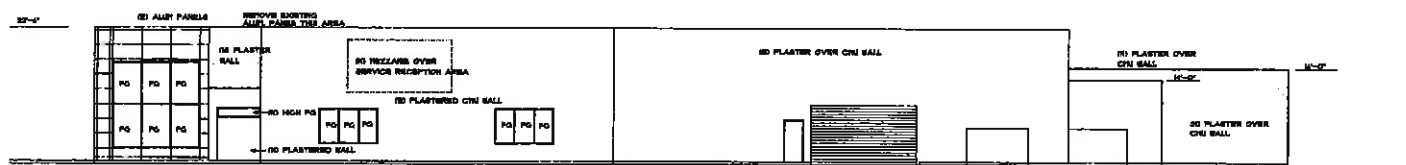




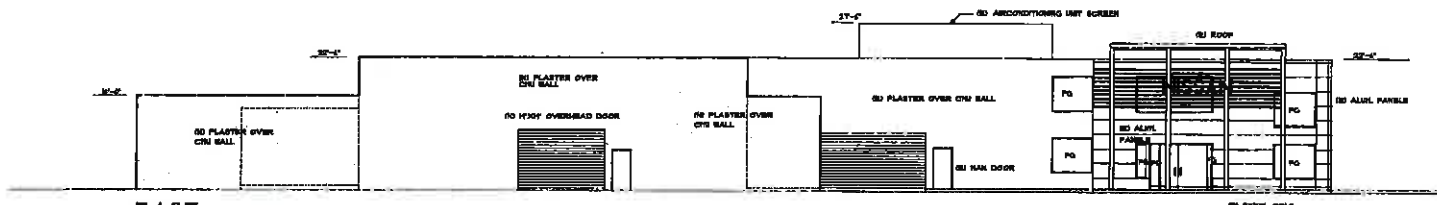
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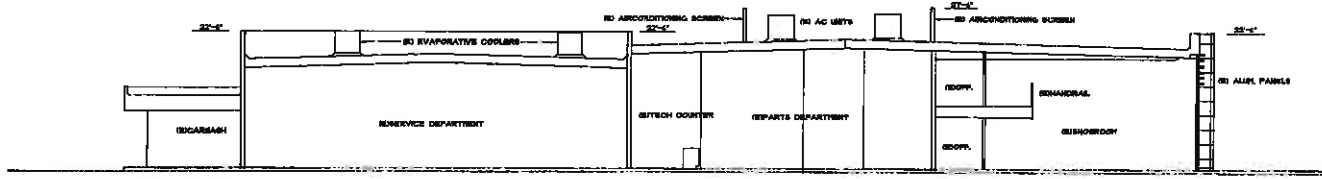
SOUTH



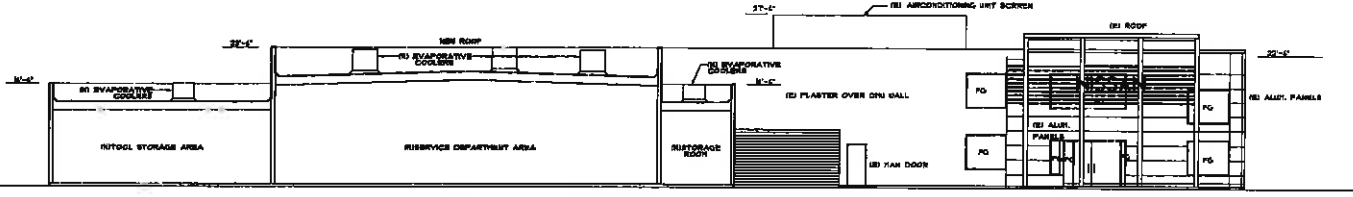
WEST



EAST

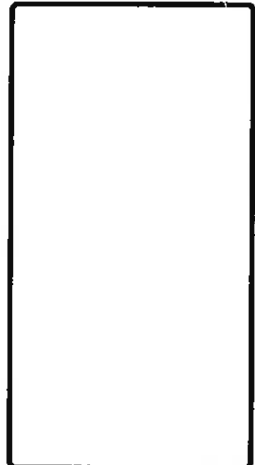


SECTION A



SECTION B

Architect: **ROBERT H. RICCIARDI ARCHITECT**
 P. H. Ricciardi
 75-400 GERRARD ROAD DR. SUITE 115
 PALM BEACH, CALIFORNIA 92071
 TELEPHONE: 760/610-0088
 FAX: 760/610-0087



| NO. | DATE | REVISION |
|-----|------|----------|
| | | |

PROJECT:
 AN AUTOMOBILE DEALERSHIP MODEL FOR
PALM SPRINGS NISSAN
80-01 WILD ROAD
 PALM SPRINGS, CA 92264

TITLE:
PROPOSED EXTERIOR ELEVATIONS AND SECTIONS

DATE: 08/2000
 DRAWN BY: H.E.
 SCALE: AS SHOWN
 PROJECT:



SHEET NO.:
PS.1
 OF 1

PAGE BREAK



AIRPORT LAND USE COMMISSION RIVERSIDE COUNTY



June 11, 2018

CHAIR
Steve Manos
Lake Elsinore

VICE CHAIR
VACANCY

COMMISSIONERS

Arthur Butler
Riverside

John Lyon
Riverside

Russell Betts
Desert Hot Springs

Steven Stewart
Palm Springs

Richard Stewart
Moreno Valley

Gary Youmans
Temecula

STAFF

Director
Simon A. Housman

John Guerin
Paul Ruff
Barbara Santos

County Administrative Center
4080 Lemon St., 14th Floor.
Riverside, CA 92501
(951) 955-5132

www.rcaluc.org

Mr. Kevin White, Project Planner
County of Riverside Planning Department
4080 Lemon Street, 12th Floor
Riverside CA 92501
(VIA HAND DELIVERY)

**RE: AIRPORT LAND USE COMMISSION (ALUC) DEVELOPMENT REVIEW –
DIRECTOR’S DETERMINATION**

File No.: ZAP1316MA18
Related File No.: PP26350 (Plot Plan)
APN: 266-303-013

Dear Mr. White:

Under the delegation of the Riverside County Airport Land Use Commission (ALUC) pursuant to Policy 1.5.2(d) of the Countywide Policies of the 2004 Riverside County Airport Land Use Compatibility Plan, staff reviewed County of Riverside Case No. PP26350 (Plot Plan), a proposal to construct a 60 foot tall “monopalm” wireless communication facility with a 910 square foot equipment shelter area on a 1.34 acre parcel located at an existing Edison electrical substation site on the southeast corner of Parsons Road and Ontario Avenue.

The site is located within Airport Compatibility Zone E of the March Air Reserve Base/Inland Port Airport Influence Area (AIA). Within Compatibility Zone E of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, non-residential intensity is not restricted.

The elevation of Runway 14-32 at March Air Reserve Base/Inland Port Airport at its northerly terminus is approximately 1,535 feet above mean sea level (1,535 AMSL). The site is located approximately 21,500 feet from the runway. At this distance, Federal Aviation Administration (FAA) review could be required for any structures exceeding 1,750 feet AMSL. The project site elevation is 1,644 feet AMSL and the maximum proposed structure height is 60 feet, resulting in a top point elevation of 1,704 feet AMSL. Therefore, Federal Aviation Administration Obstruction Evaluation Service review for height/elevation reasons was not required.

As ALUC Director, I hereby find the above-referenced project **CONSISTENT** with the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, provided that the County of Riverside applies the following recommended conditions:


1. Any new outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.

AIRPORT LAND USE COMMISSION

2. The following uses/activities are not included in the proposed project and shall be prohibited at this site, in accordance with Note 1 on Table 4 of the Lake Mathews/Woodcrest Area Plan:
 - (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
 - (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
 - (c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area.
 - (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
3. The attached notice shall be provided to all potential purchasers of the property and to lessees of the structure(s) thereon.
4. Any new aboveground detention basins on the site shall be designed so as to provide for a maximum 48-hour detention period following the conclusion of the storm event for the design storm (may be less, but not more), and to remain totally dry between rainfalls. Vegetation in and around the detention basin(s) that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping.
5. The following uses are specifically prohibited at this location: trash transfer stations that are open on one or more sides; commercial composting operations; recycling centers containing putrescible wastes; construction and demolition debris facilities; wastewater management facilities; aquaculture; incinerators.

If you have any questions, please contact Paul Rull, ALUC Urban Regional Planner IV, at (951) 955-6893.

Sincerely,
RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION



Simon A. Housman, ALUC Director

Attachments: Notice of Airport in Vicinity

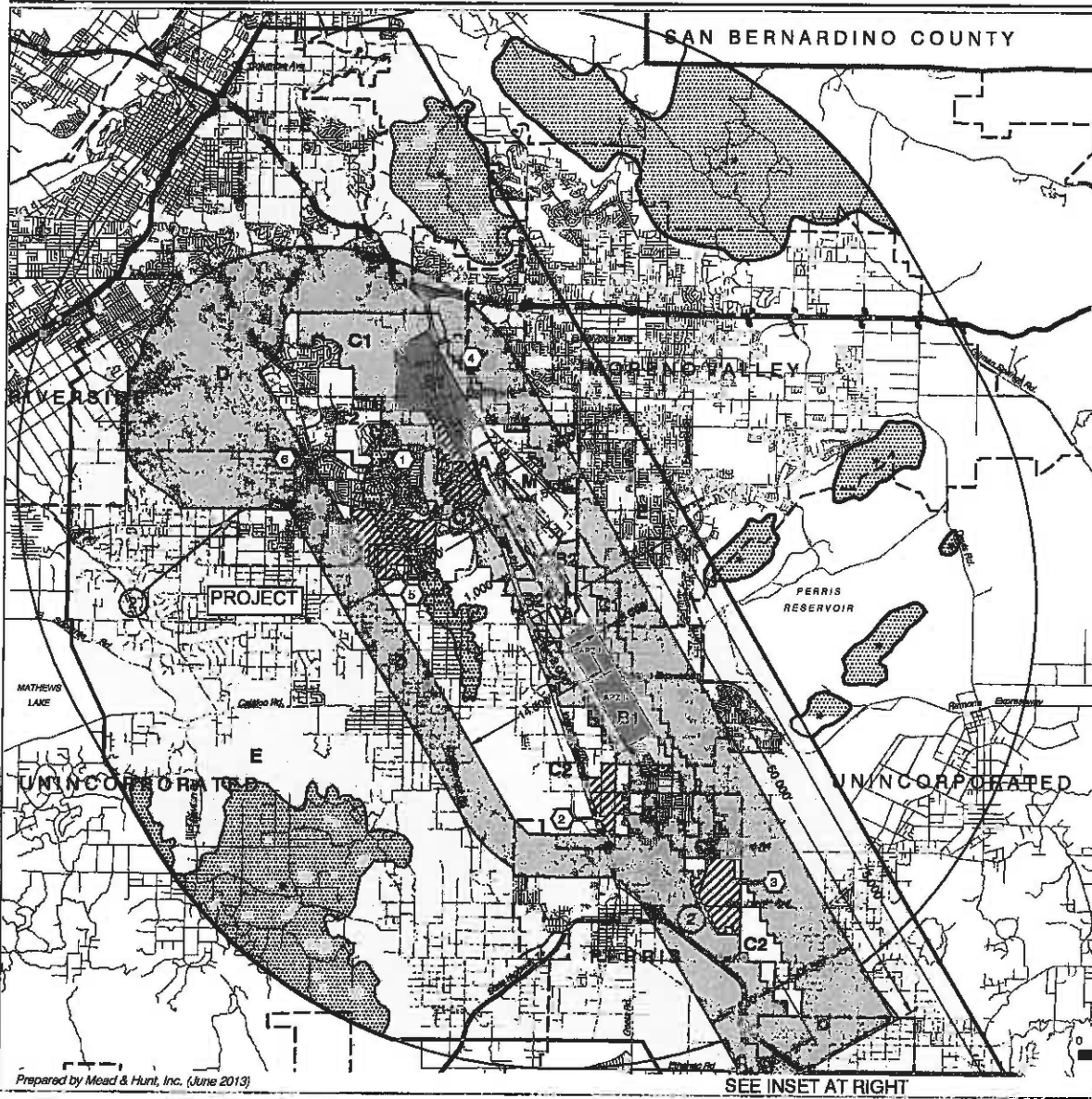
AIRPORT LAND USE COMMISSION

cc: Verizon Wireless (applicant)
SAC Wireless, Courtney Standridge - San Diego office (representative)
SAC Wireless – Chicago office (fee-payer)
Southern California Edison – Rosemead office (property owner/headquarters)
Southern California Edison – Pomona office (regional)
Gary Gosliga, Airport Manager, March Inland Port Airport Authority
Daniel “Rock” Rockholt or Denise Hauser, March Air Reserve Base
ALUC Case File

Y:\AIRPORT CASE FILES\March\ZAP1316MA18\ZAP1316MA18.LTR.doc

NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b) (13)(A)



LEGEND

Compatibility Zones

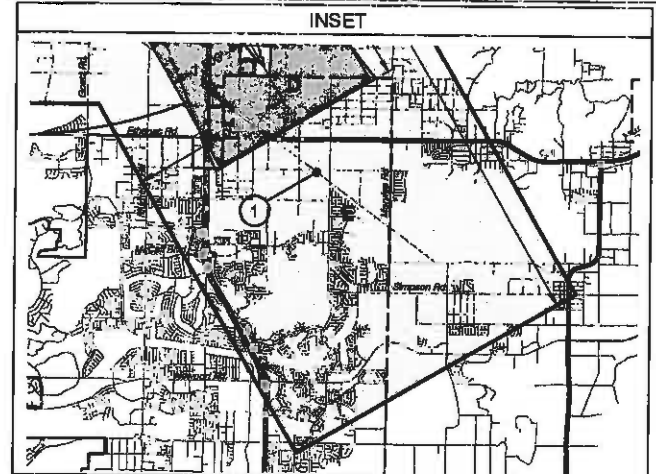
- Airport Influence Area Boundary
- Zone A
- Zone B1
- Zone B2
- Zone C1
- Zone C2
- Zone D
- Zone E
- Zone M
- High Terrain Zone
- FAR Part 77 Military Outer Horizontal Surface Limits
- FAR Part 77 Notification Area

Boundary Lines

- March Air Reserve Base / Air Force Property
- March Joint Powers Authority Property Line
- County Boundary
- City Limits
- ▨ Site-Specific Exceptions (existing local agency commitments to development projects)

- ① Point at which aircraft on Runway 32 ILS approach descend below 3,000 feet above runway end. Airport Elevation is 1,535 feet MSL.
- ② Point at which departing aircraft typically reach 3,000 feet above runway end.

- ① March JPA: March Business Center/Meridian
- ② Perris: Harvest Landing
- ③ Perris: Park West
- ④ Moreno Valley: Affordable Housing
- ⑤ March JPA: Ben Clark Training Center
- ⑥ Riverside: Ridge Crest Subdivision



Riverside County
Airport Land Use Commission

March Air Reserve Base / Inland Port Airport
Land Use Compatibility Plan
(Adopted November 13, 2014)

Map MA-1

Compatibility Map
March Air Reserve Base / Inland Port Airport

Note:
All dimensions are measured from runway ends and centerlines.

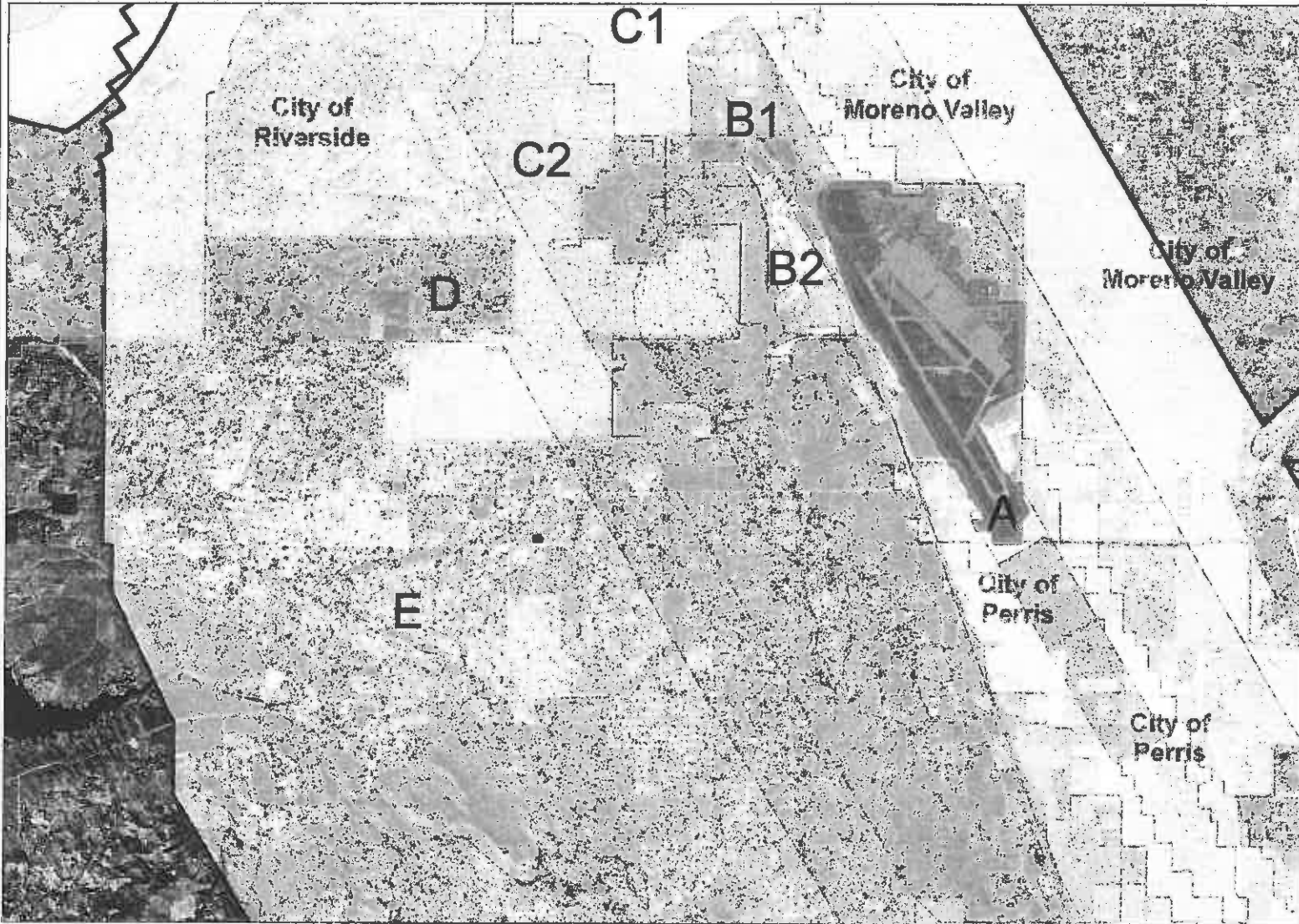
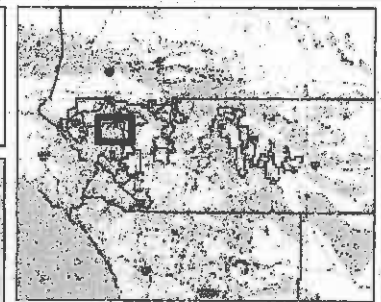


Base map source: County of Riverside 2013

Prepared by Mead & Hunt, Inc. (June 2013)

SEE INSET AT RIGHT

My Map



Legend

- Airports
- AIA
- Airport Compatibility**
- OTHER ZONE
- A
- A-EXC1
- B1
- B1-APZ I
- B1-APZ I-EXC1
- B1-APZ II
- B1-APZ II-EXC1
- B1-EXC1
- B2
- B2-EXC1
- C
- C1
- C1-EXC1
- C1-EXC3
- C1-EXC4
- C1-HIGHT
- C2
- C2-EXC1
- C2-EXC2
- C2-EXC3
- C2-EXC5
- C2-EXC6
- C2-HIGHT



0 9,703 19,407 Feet



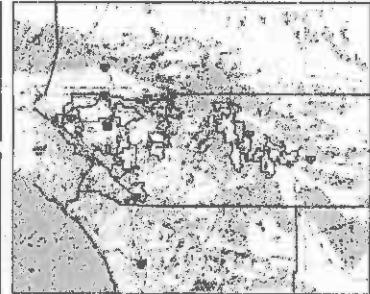
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Notes

My Map



Legend

- Airports
- AIA
- Airport Compatibility**
- OTHER ZONE
- A
- A-EXC1
- B1
- B1-APZ I
- B1-APZ I-EXC1
- B1-APZ II
- B1-APZ II-EXC1
- B1-EXC1
- B2
- B2-EXC1
- C
- C1
- C1-EXC1
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- C2-HIGHT



0 837 1,674 Feet



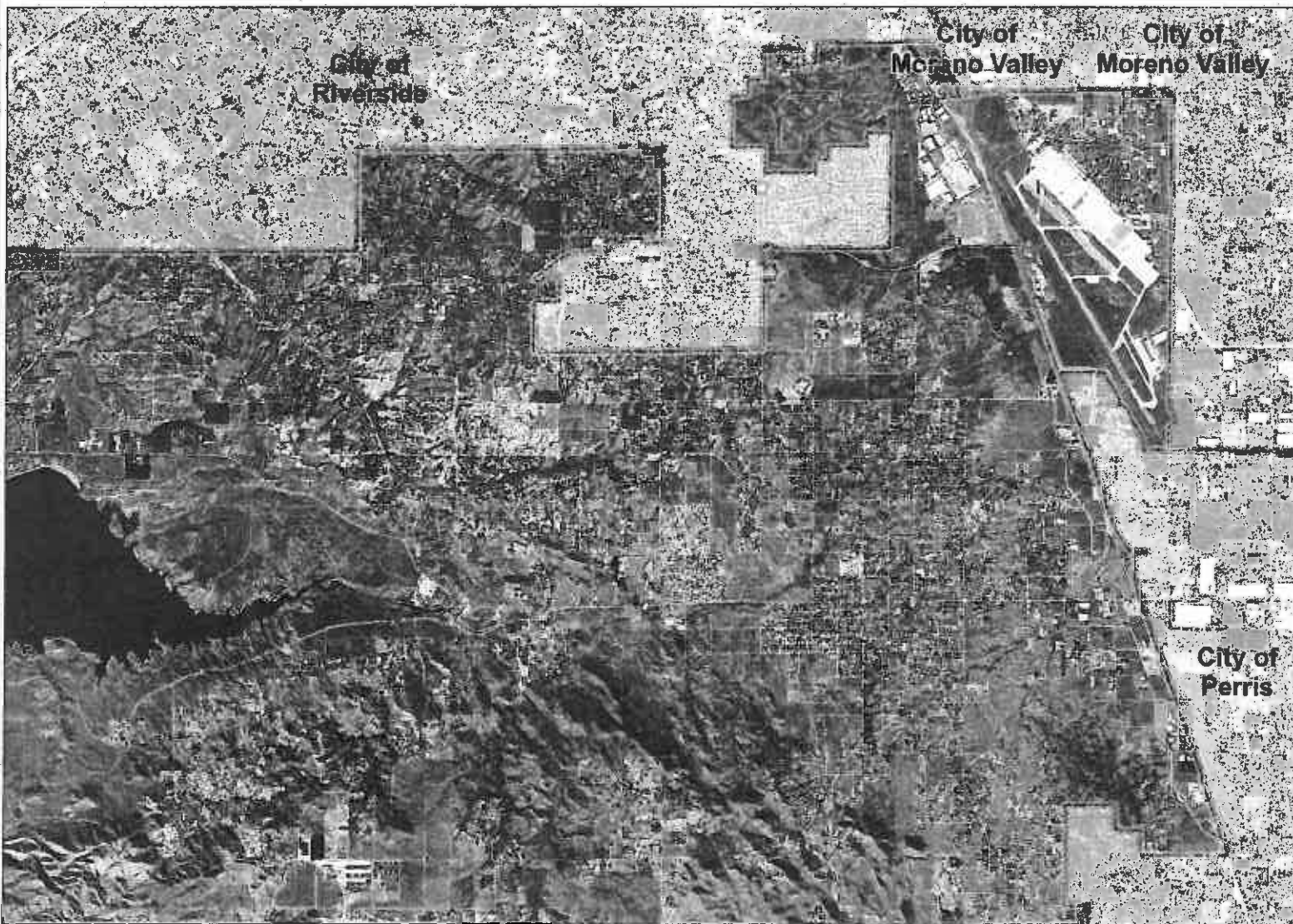
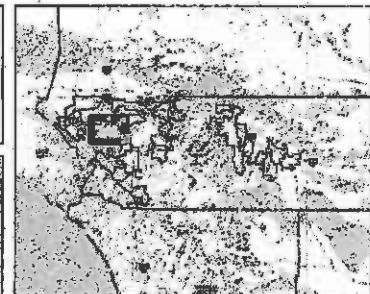
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Notes

My Map



Legend

- City Boundaries
- Cities**
- adjacent_highways**
 - Interstate
 - Interstate 3
 - State Highways; 60
 - State Highways 3
 - US HWY
 - OUT
- highways_large**
 - HWY
 - INTERCHANGE
 - INTERSTATE
 - USHWY
- counties
- cities



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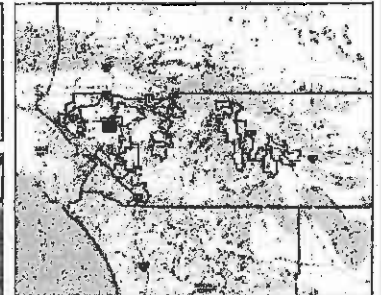


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Notes

My Map



Legend

-  City Boundaries
- Cities
- roadsanno
- highways
- HWY
- INTERCHANGE
- INTERSTATE
- OFFRAMP
- ONRAMP
- USHWY
- roads
- Major Roads
- Arterial
- Collector
- Residential
-  counties
-  cities
- hydrographylines
- waterbodies
- Lakes
- Rivers



0 2,426 4,852 Feet



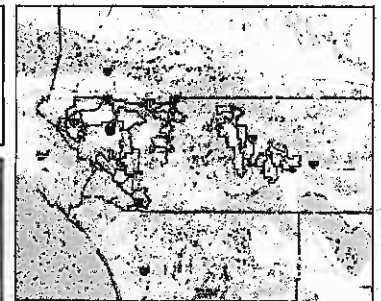
IMPORTANT Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

REPORT PRINTED ON... 5/29/2018 8:29:53 AM




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Notes

My Map



Legend

-  City Boundaries
- Cities
- roadsanno
- highways
- HWY
- INTERCHANGE
- INTERSTATE
- OFFRAMP
- ONRAMP
- USHWY
-  counties
-  cities
- hydrographylines
- waterbodies
- Lakes
- Rivers



0 837 1,674 Feet



IMPORTANT Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

REPORT PRINTED ON...5/29/2018 8:30:49 AM

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Notes



Lat:
 .on: >



CAJALCO SUBSTATION MARKHAM

MTX 44-BSC13
MCE 4x5 SITE
S/E CORNER OF PARSONS RD & ONTARIO AVE
PERRIS, CA 92379

OVERALL HEIGHT:
80'-0"
ELEVATION:
1842.22'

PROJECT TEAM

SITE ACQUISITION
SAG WIRELESS
8716 SHARDONA PLACE, STE 139
SAN DIEGO, CA 92122
PROJECT MANAGER:
COURTNEY STANHOPE (619) 983-0191
LEADING MANAGER:
DEANNA HOLDR (760) 800-4234

ARCHITECT/PLANNING/PROFESSIONAL ENGINEER:
WAT COMMUNICATIONS DESIGN GROUP, LLC
860 S. EASTERN AVE., SUITE 4200
LAS VEGAS, NV 89123
DIRECTOR: RYAN GROSS
MANAGER: (702) 696-9112

SURVEYOR:
UNITED NETWORK SOLUTIONS, INC.
4184 REWMON AVE STE 100
TERRACE, CA 92586
CONTACT: RIG CORDERO
TELEPHONE: (951) 852-0846

UTILITY COORDINATOR:
VINCIANUS SERVICE, INC.
10 PARTEUR, SUITE 100
IRVINE, CA 92614-3818
CONTACT: JOHN ASHBAH
TELEPHONE: (714) 488-1186

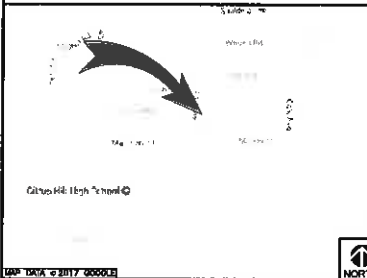
VERIZON WIRELESS SIGNATURE BLOCK

| DISCIPLINE: | SIGNATURE: | DATE: |
|------------------|------------|-------|
| RE VENDOR: | | |
| AAE VENDOR: | | |
| AAE COORDINATOR: | | |
| UTILITY VENDOR: | | |
| RF: | | |
| RE: | | |
| EE: | | |
| TRANSPORT: | | |

PROJECT DESCRIPTION

THIS PROJECT IS A VERIZON WIRELESS UNIMBARED TELECOMMUNICATION WIRELESS FACILITY. IT WILL CONSIST OF THE FOLLOWING:
• PROPOSED 80'-0" VERIZON ANTENNA RAD CENTER ON PROPOSED 80'-0" MONOPOLM TOWER (TOTAL AREA SQ. FT.)
• (2) EQUIPMENT CABINETS ON CONCRETE PAD
• (1) BATTERY GENERATOR WITH FUEL TANK ON CONCRETE PAD
• (1) PANEL ANTENNAS ON 35' HEALTH MONOPOLM TOWER
• (2) PIPES ON STEALTH MONOPOLM TOWER
• (2) HAYSTACK BOXES IN STEALTH ANTENNA STRUCTURE
• (2) DUAL-POLARIZED BROADBAND ANTENNAS
• (1) WIRE ANTENNA ONTO EQUIPMENT CABINET
• PROPOSED 40'-0" VERIZON WIRELESS COUPLER ON PROPOSED 80'-0" MONOPOLM TOWER
• PROPOSED 20AMP VERIZON WIRELESS POWER SERVICE WITH PROPOSED 20AMP METER
• PROPOSED 20AMP POWER PANEL ON PROPOSED H-FRAME
• PROPOSED 150' H-FRAME
• CONNECTION AS REQUIRED FOR POWER AND FIBER SERVICES
• PROPOSED TOWER BOX ON PROPOSED H-FRAME
• DC & FIBER CABLES ROUTED ON INSIDE OF TOWER

VICINITY MAP



DRIVING DIRECTIONS

FROM VERIZON OFFICE TO: S/E CORNER OF PARSONS RD & ONTARIO AVE PERRIS, CA 92379
HEAD SOUTHWEST, TURN LEFT ONTO SAND CANYON AVE. USE THE LEFT 2 LANES TO TURN LEFT TO MERGE ONTO I-15 N. MERGE ONTO I-15 N. USE THE RIGHT 2 LANES TO TAKE EXIT FOR CA-87 N TOWARD PERRIS. CONTINUE ONTO CA-87 N. USE THE RIGHT 2 LANES TO TAKE EXIT TO MERGE ONTO CA-87 N TOWARD HERRING. TAKE EXIT N TOWARD SAN BARNABAY. USE ANY LANE TO TURN LEFT ONTO INDIANA AVE. USE THE RIGHT 2 LANES TO TURN RIGHT ONTO VAN BUREN BOULEVARD. TURN RIGHT ONTO HOOVER RD. TURN LEFT ONTO MARION ST. TURN LEFT AT PARSONS RD. SITE WILL BE ON THE RIGHT.

PROJECT SUMMARY

APPLICANT/LESSEE
Verizon
1550 SAND CANYON AVENUE, 01
IRVINE, CA 92614
OFFICE: (949) 298-7000

ASSESSOR'S PARCEL NUMBER
APN: 298-300-013

PROPERTY OWNER:
S&W
2 INNOVATION WAY, 1ST FLOOR
POMONA, CA 91768
CONTACT NAME: PHIL HICKERSON
CONTACT NUMBER: (909) 895-3588

COORDINATES:
LATITUDE: 33° 51' 31.57" N
LONGITUDE: 117° 19' 36.11" W

APPLICANT'S REPRESENTATIVE
SAG WIRELESS
8716 SHARDONA PLACE, SUITE 139
SAN DIEGO, CA 92122
PROJECT MANAGER: DEANNA HOLDR
NUMBER: (760) 800-4234

TOWER OWNER:
Verizon
1550 SAND CANYON AVENUE, 01
IRVINE, CA 92614
OFFICE: (949) 298-7000

PROPERTY INFORMATION:
SITE NAME: MARKHAM
SITE ADDRESS: S/E CORNER OF PARSONS RD & ONTARIO AVE
PERRIS, CA 92379
JURISDICTION: COUNTY OF RIVERSIDE

CONSTRUCTION INFORMATION:
AREA OF CONSTRUCTION: AERIAL (608 SQ. FT.) GROUND (1480 SQ. FT.) (TOTAL 2088 SQ. FT.)
OCCUPANCY: N/A
TYPE OF CONSTRUCTION: N/A
CURRENT ZONING: RURAL RESIDENTIAL
ADA COMPLIANCE: FACILITY IS UNIMBARED AND NOT FOR HUMAN HABITATION. MAINTENANCE SERVICES ARE PROVIDED FROM ACCESSIBILITY REQUIREMENTS PER THE CBC SECTION 11B-2002.

GENERAL CONTRACTOR NOTES

DO NOT SCALE DRAWINGS
CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER/ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR THE SAME.

STRUCTURAL NOTE

NOTE:
THIS SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THE TOWER OR STRUCTURE. AN ANALYSIS OF THE TOWER OR STRUCTURE HAS BEEN PERFORMED BY METCON ENGINEERS, DATED 12/14/2017. THE ANTENNA AND EQUIPMENT SHOWN ON THIS PLAN ARE FOR REFERENCE ONLY AND THE HEIGHT, LOCATION AND MOUNTING SHOWN IN THE STRUCTURAL ANALYSIS SHALL SUPERSEDE THESE DRAWINGS.

CODE COMPLIANCE

- 2016 CALIFORNIA BUILDING CODE
- 2016 CALIFORNIA RESIDENTIAL CODE
- 2018 CALIFORNIA MECHANICAL CODE
- 2018 CALIFORNIA PLUMBING CODE
- 2018 CALIFORNIA ELECTRICAL CODE
- 2019 CALIFORNIA GREEN CODE

| SHEET | DESCRIPTION | REV |
|-------|--|-----|
| T-1 | TITLE SHEET & PROJECT DATA | 1 |
| SP-1 | GENERAL NOTES | 1 |
| SP-2 | GENERAL NOTES | 1 |
| TE-1 | TOPOGRAPHIC SURVEY | 1 |
| C-1 | OVERALL SITE PLAN | 1 |
| C-2 | ENLARGED SITE PLAN | 1 |
| CS-1 | SCHEMATIC PLAN | 1 |
| C-4 | FOUNDATION CONTROL PLAN, NOTES & DETAILS | 1 |
| C-6 | GROUNDING PLAN, NOTES & DETAILS | 1 |
| C-8 | EQUIPMENT SPECIFICATIONS | 1 |
| C-7 | EQUIPMENT DETAILS | 1 |
| A-1 | PROPOSED ELEVATIONS | 1 |
| A-2 | PROPOSED ELEVATIONS | 1 |
| A-3 | ENLARGED ANTENNA PLAN & DETAILS | 1 |
| S-1 | ENLARGED UTILITY PLAN | 1 |
| E-2 | ELECTRICAL & PUMP/GENERATOR DIAGRAM | 1 |
| E-3 | SINGLE LINE DIAGRAM & CIRCUIT SCHEDULE | 1 |
| E-4 | ELECTRICAL NOTES AND DETAILS | 1 |
| G-1 | EQUIPMENT & ANTENNA GROUNDING PLAN | 1 |
| G-2 | GROUNDING DETAILS | 1 |
| G-3 | GROUNDING DETAILS | 1 |
| SE-1 | SITE PLAN DETAILS & NOTES | 1 |
| SE-2 | STRUCTURAL NOTES | 1 |

| SHEET | TOWER DRAWINGS | REV |
|--------|--------------------------|-----|
| MP-1 | TITLE SHEET | 0 |
| MP-2 | ELEVATIONS VIEW & NOTES | 0 |
| MP-3 | DETAILS | 0 |
| MP-4 | ANTENNA MOUNT DETAILS | 0 |
| MP-5 | FOUNDATION OPT. 1 | 0 |
| MP-5.1 | FOUNDATION OPT. 2 | 0 |
| MP-6 | SPECIAL INSPECTION TABLE | 0 |

CONSTRUCTION DRAWINGS

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN CALIFORNIA (800) 474-6229
50-ALERT
TOLL FREE: 1-800-277-2800 OR
www.digalert.org
CALIFORNIA DIG ALERT
REDUCES RISK OF 1 WORKERS' DEATHS/INJURIES BEFORE YOU EXCAVATE

Know what's below.
Call before you dig.

ISSUE STATUS

| REV. | DATE | DESCRIPTION | BY |
|------|----------|--------------------|-----|
| 0 | 10/20/17 | ISSUE CONSTRUCTION | GC |
| 1 | 02/16/18 | ISSUE CONSTRUCTION | GC |
| 2 | 05/08/18 | CLIENT COMMENTS | PRM |
| 3 | 05/08/18 | CLIENT COMMENTS | DPF |
| 4 | 06/05/18 | UTILITY DESIGN | DPF |
| 5 | 07/17/18 | UTILITY DESIGN | DPF |

WT
W-T COMMUNICATION
DESIGN GROUP, LLC
DESIGN PROFESSIONAL
6942 Eastern Ave, Suite 208
Irvine, CA 92618
PH: (949) 298-7000 FAX: (949) 298-7010
www.wtdesign.com

Contract Form W-1 COMMUNICATIONS EQUIPMENT GROUP, LLC
PROJECT: 17-001

PROPRIETARY INFORMATION
THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY & CONFIDENTIAL TO WIRELESS WORLD.
ANY USE OR DISCLOSURE OTHER THAN AS IT RELATES TO WIRELESS WORLD IS EXPRESSLY PROHIBITED.

verizon
1550 SAND CANYON AVENUE, 01
IRVINE, CA 92618

JEFFREY B. GUYTON, P.E. 88
LICENSED STRUCTURAL ENGINEER
STATE OF CALIFORNIA
LICENSE # 6826
EXPIRES: 12/31/18 ISSUED: 08/24/18

MARKHAM
S/E CORNER OF PARSONS RD
& ONTARIO AVE
PERRIS, CA 92379

SHEET TITLE:
TITLE SHEET &
PROJECT DATA

T-1

- CENTERLINE: _____
 US CONDUCTORS: _____
 COAM LINES: _____
 WATER: _____
 UNKNOWN UTILITY: _____
 BOUNDARY: _____
 FENCE: _____
 WALL: _____
 EDGE OF PAVEMENT: _____
 OH CONDUCTORS: _____
 UTILITY BOX / METER AS NOTED: _____
 CONCRETE: _____
 BUILDING: _____
 POWER POLE: _____
 GUY WIRE: _____
 TREE: _____
 BUMP: _____

- LEGEND**
 AC: ASPHALT CONCRETE
 BLR: BUILDING
 BTM: BOTTOM
 COM: COMMUNICATIONS
 COR: CORNER
 EOP: EDGE OF PAVEMENT
 FNC: FENCE
 GUY: GUY WIRE
 HSG: NATIONAL GRID
 MSH: MASONRY
 SSM: SANDY SOIL
 TSM: TRANSFORMER
 VLT: WALL
 WM: WATER METER

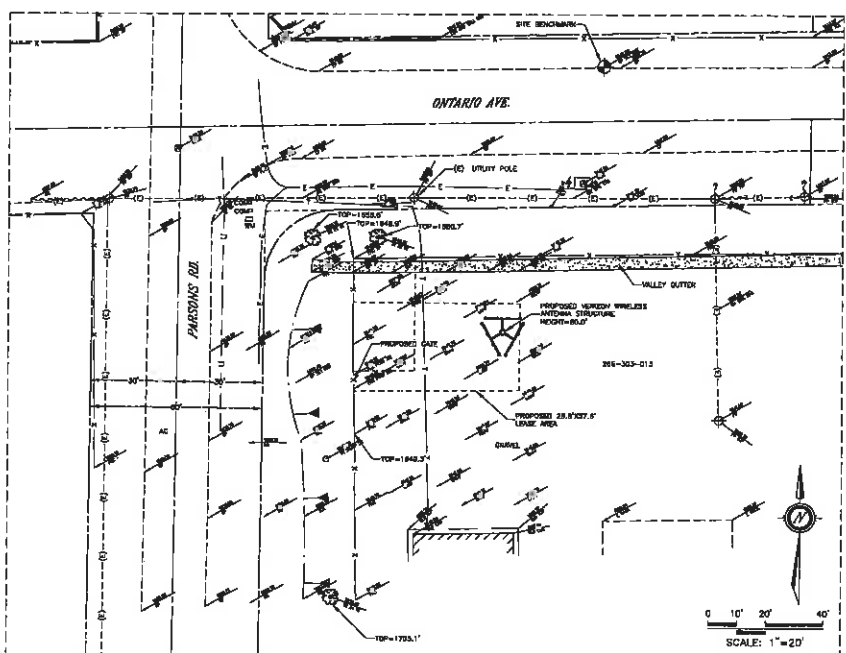
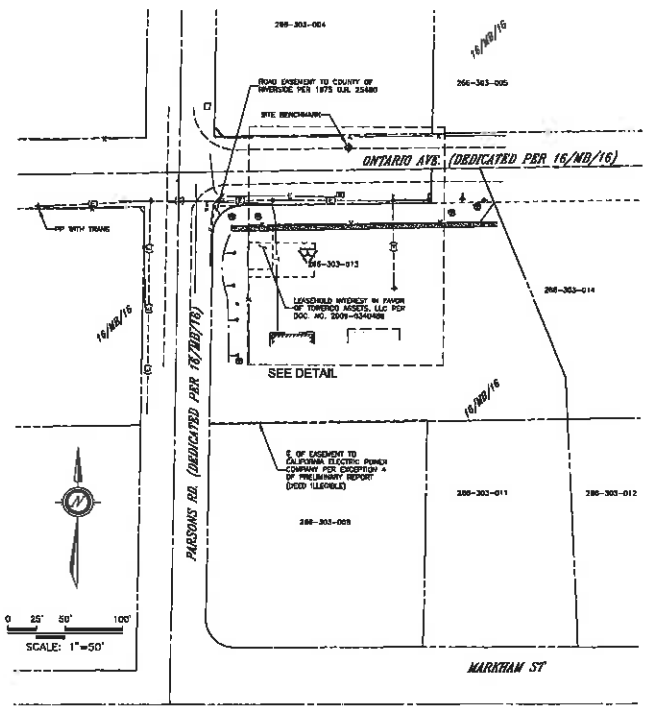
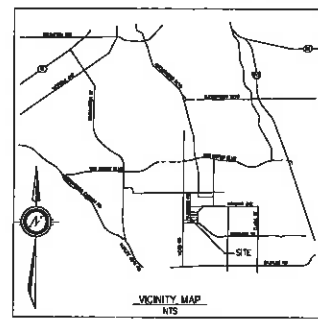
NOTES:
 BOUNDARY, EASEMENT AND RIGHT OF WAY INFORMATION SHOWN HEREON IS APPROXIMATE AND BASED ON RECORD INFORMATION ONLY AND DOES NOT REPRESENT A BOUNDARY SURVEY.
 ANY CHANGES MADE TO THE INFORMATION ON THIS DRAWING WITHOUT THE WRITTEN CONSENT OF THE ENGINEER RELIEVES THE ENGINEER OF ANY AND ALL LIABILITY.
 DATE OF SURVEY: 01/27/2017

UTILITY NOTE:
 UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND BASED ON SURFACE FEATURES AND OPEN (GROUND PENETRATING RADAR) ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND DEVELOPER TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION, REMOVAL, RELOCATION AND/OR REPLACEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.

TREE NOTE:
 THE HEIGHTS AND ELEVATIONS OF TREES, BUSHES AND OTHER VEGETATION ARE APPROXIMATE AND ONLY VALID FOR THE DATE OF THIS SURVEY. THEY ARE PROVIDED FOR GENERAL REFERENCE ONLY AND NOT FOR DESIGN PURPOSES.

FIELD INFORMATION
 SEE SHEET 15-2

VERTICAL BATHY:
 (NAVD_83) BY NGS OPUS SOLUTION (2001201)
SITE BENCHMARK:
 CONTROL POINT #1: CONC. NAIL, ELEVATION 1542.22



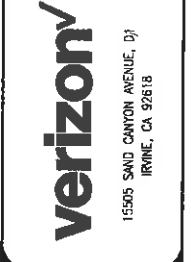
ISSUE STATUS

| REV. | DATE | DESCRIPTION | BY |
|------|---------|--------------------|----|
| A | 3/16/17 | TOPOGRAPHIC SURVEY | |
| A | 3/24/17 | PROP. APPROVA ACED | |



PROPRIETARY INFORMATION
 THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY & CONFIDENTIAL TO VERIZON WIRELESS.

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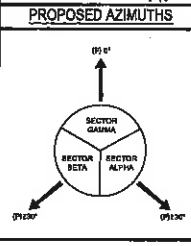
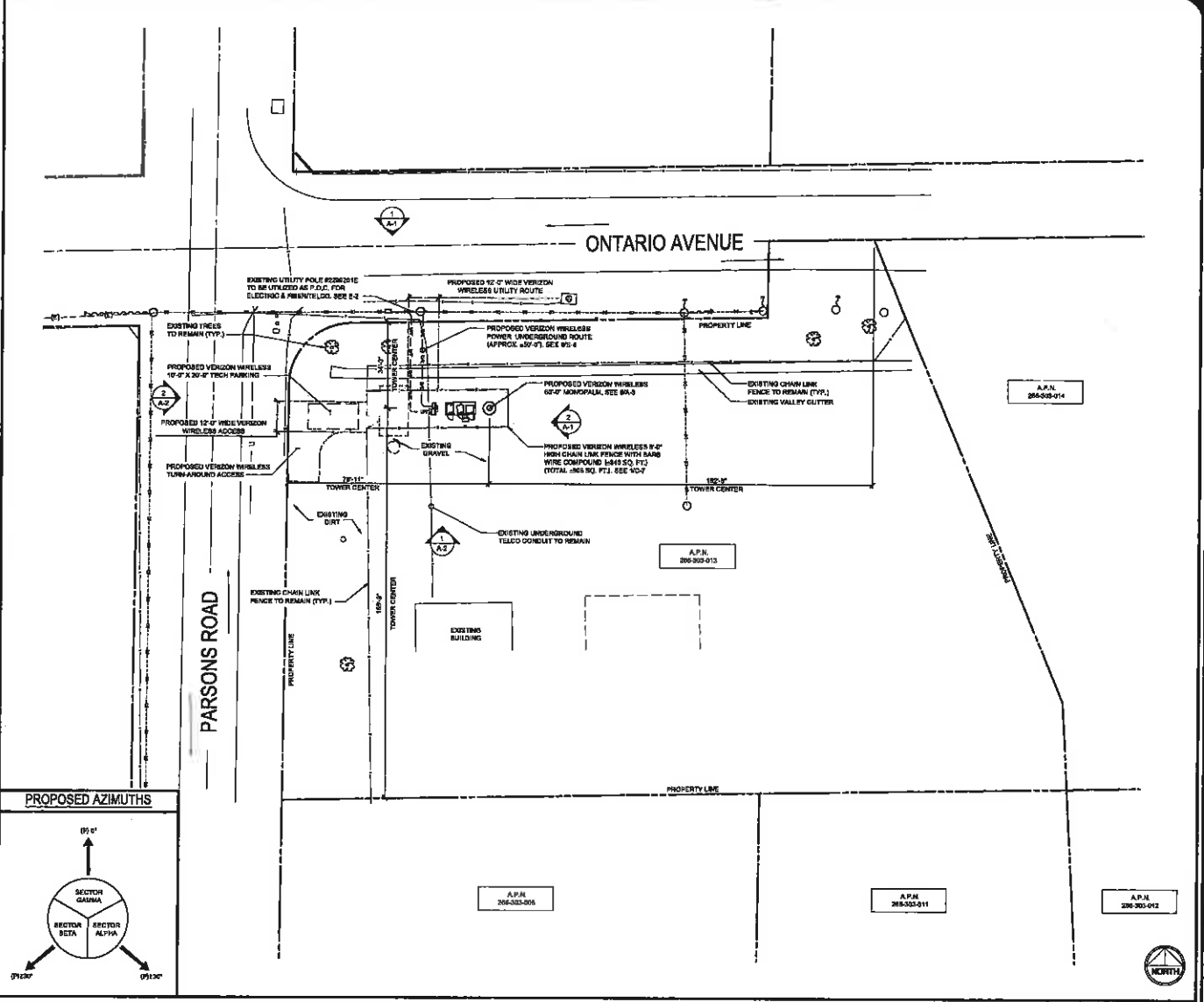
MARKHAM OF
 PARSONS RD. SOUTH
 ONTARIO AVE.

SHEET TITLE:
 TOPOGRAPHIC SURVEY

TS-1

| ABBREVIATIONS | | | |
|---------------|------------------|-------|---------------------|
| ACC | AIR CONDITIONING | LIBS | POUNDS |
| APPROX | APPROXIMATELY | MAX | MAXIMUM |
| BLOC | BUILDING | MECH | MECHANICAL |
| BLK | FLOORING | MTL | METAL |
| CLG | CEILING | MFR | MANUFACTURER |
| CLR | CLEAR | MGR | MANAGER |
| CONC | CONCRETE | MIN | MINIMUM |
| CONSTR | CONSTRUCTION | MISC | MISCELLANEOUS |
| CONT | CONTINUOUS | NA | NOT APPLICABLE |
| DBL | DOUBLE | NIC | NOT IN CONTRACT |
| DM | DIMETER | NTS | NOT TO SCALE |
| DWG | DRAWING | OC | ON CENTER |
| EQ | EQUAL | OD | OUTSIDE DIAMETER |
| EXT | EXTENSION | PLYWD | PLYWOOD |
| EXT | EXTENSION | PROJ | PROJECT |
| EXT | EXTENSION | PROP | PROPERTY |
| EXT | EXTENSION | PT | PRESSURE TREATED |
| EXT | EXTENSION | RT | ROUND |
| EXT | EXTENSION | RM | ROOM |
| EXT | EXTENSION | RO | ROUGH OPENING |
| EXT | EXTENSION | RWD | RAISED WALKWAY HEAD |
| EXT | EXTENSION | SHT | SHEET |
| EXT | EXTENSION | SM | SMALL |
| EXT | EXTENSION | SPC | SPECIFICATION |
| EXT | EXTENSION | SQ | SQUARE FOOT |
| EXT | EXTENSION | SS | STAINLESS STEEL |
| EXT | EXTENSION | STL | STEEL |
| EXT | EXTENSION | STRUT | STRUCTURAL |
| EXT | EXTENSION | STD | STANDARD |
| EXT | EXTENSION | SUSP | SUSPENDED |
| EXT | EXTENSION | TBRU | THICKER |
| EXT | EXTENSION | TMA | TOWER MOUNT |
| EXT | EXTENSION | TYP | TYPICAL |
| EXT | EXTENSION | UNL | UNLESS NOTED |
| EXT | EXTENSION | UNL | OTHERWISE |
| EXT | EXTENSION | VERT | VERTICAL |
| EXT | EXTENSION | VERIF | VERIFY IN FIELD |
| EXT | EXTENSION | W | WITH |
| EXT | EXTENSION | W/O | WITHOUT |
| EXT | EXTENSION | WP | WATER PROOF |

| LEGEND | |
|--------|-----------------------------|
| --- | SUBJECT BOUNDARY LINE |
| --- | RIGHT-OF-WAY CENTERLINE |
| --- | RIGHT-OF-WAY LINE |
| --- | ADJACENT BOUNDARY LINE |
| --- | UNDERGROUND ELECTRICAL LINE |
| --- | UNDERGROUND TELECO LINE |
| --- | UNDERGROUND PIPER LINE |
| --- | BURIED GAS LINE |
| --- | COVERHEAD TELEPHONE LINE |
| --- | BURIED WATER LINE |
| --- | BURIED SANITARY SEWER |
| --- | BURIED STORM DRAIN |
| --- | CHAIN LINK FENCE |
| --- | WINDIGHT IRON FENCE |
| ○ | TRANSFORMER |
| ○ | FIRE HYDRANT |
| ○ | LIGHT STANDARD |
| ○ | GATE VALVE |
| ○ | POWER VAULT |
| ○ | WATER METER |
| ○ | UTILITY BOX |
| ○ | CATCH BASIN, TYPE I |
| ○ | UTILITY POLE |
| ○ | CATCH BASIN, TYPE II |



NOTE: CONTRACTOR TO INSTALL A 17" x 20" FULL BOX FOR POWER & TELECO. FULL BOXES TO BE FIELD VERIFIED BY SDC CONSTRUCTION MANAGER.

NOTE: REFERENCE SURVEY BY UTILITY DESIGN SERVICES, INC. DATED 12/28/2017. FOR ALL PROPERTY LINES AND EXISTING EASEMENT INFORMATION.

NOTE: THE SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL ANALYSIS OF THE TOWER OR STRUCTURE. AN ANALYSIS OF THE TOWER OR STRUCTURE HAS BEEN PERFORMED BY VECTOR ENGINEERS, DATED 1/19/2017. THE FINDINGS AND COMMENTS SHOWN ON THIS PLAN ARE FOR REFERENCE ONLY AND THE DESIGN, LOCATION AND DIMENSIONS SHOWN IN THE STRUCTURAL ANALYSIS SHALL SUPERSEDE THESE DRAWINGS.

| ISSUE STATUS | | | | |
|--------------|------------|-------------------|-----|------|
| REV. | DATE | DESCRIPTION | BY | DATE |
| 10 | 10/26/2017 | 90% CONSTRUCTION | GC | |
| 1 | 07/20/18 | 100% CONSTRUCTION | GC | |
| 2 | 03/08/18 | CLIENT COMMENTS | CRM | |
| 3 | 03/08/18 | CLIENT COMMENTS | CRM | |
| 4 | 03/08/18 | UTILITY DESIGN | UDS | |
| 5 | 03/08/18 | UTILITY DESIGN | UDS | |

WT
W-T COMMUNICATION DESIGN GROUP, LLC
 8181 S. BROADWAY, SUITE 210
 IRVINE, CA 92618
 TEL: 949.261.1234 FAX: 949.261.1235
 WWW: WTDESIGN.COM
 CONTRACT & SCHEDULED BY: W-T COMMUNICATION DESIGN GROUP, LLC
 PROJECT # 170001

PROPRIETARY INFORMATION
 THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY & CONFIDENTIAL TO W-T COMMUNICATION DESIGN GROUP, LLC.
 ANY USE OR DISCLOSURE OTHER THAN AS IT RELATED TO THIS PROJECT IS EXPRESSLY PROHIBITED.

verizon
 15555 SAND CANYON AVENUE, D1
 IRVINE, CA 92618

JEFFREY B. GUTTORBY, P.E. DR.
 LICENSED STRUCTURAL ENGINEER
 STATE OF CALIFORNIA
 LICENSE # 92672
 EXPIRES 12/31/24
 FIRM # 021416

MARKHAM
 156 CORNER OF PARSONS RD
 & ONTARIO AVE
 PERRIS, CA 92379

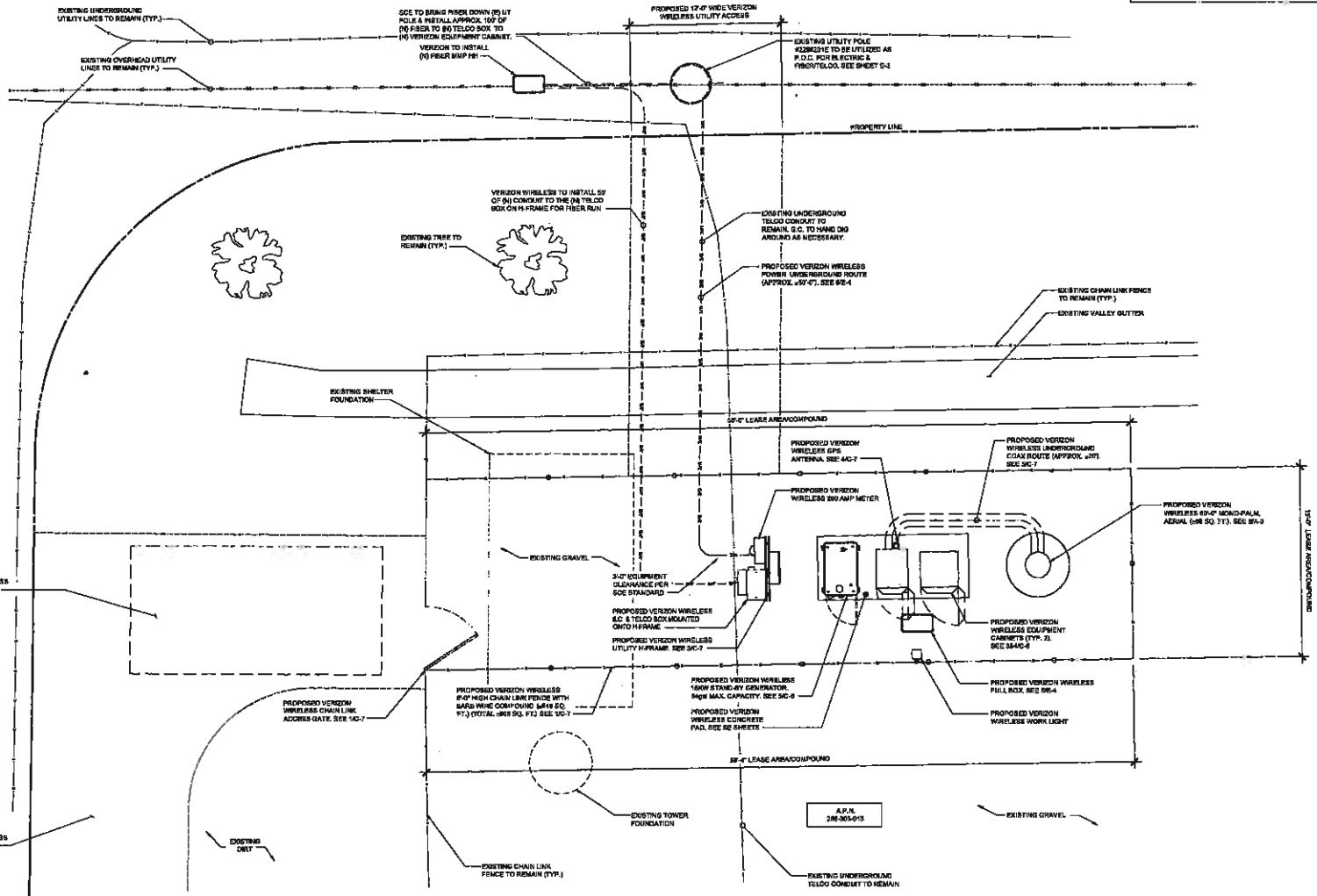
SHEET TITLE:
OVERALL SITE PLAN
C-1

ABBREVIATIONS & SYMBOLS

OVERALL SITE PLAN

SCALE: 1" = 20'-0"
 1

NOTE:
 REFER TO SURVEY BY UTILITY DESIGN SERVICES, INC.
 DATED 04/20/17, FOR ALL PROPERTY LINES AND
 EXISTING EASEMENT INFORMATION.



ENLARGED SITE PLAN

SCALE: 1/4" = 1'-0"

1

ISSUE STATUS

| REV. | DATE | DESCRIPTION | BY |
|------|----------|------------------|-----|
| 0 | 02/01/17 | 10% CONSTRUCTION | GC |
| 1 | 02/15/17 | | |
| 2 | 02/15/17 | CLIENT COMMENTS | ENR |
| 3 | 02/15/17 | CLIENT COMMENTS | ENR |
| 4 | 02/15/17 | UTILITY DESIGN | COU |
| 5 | 02/15/17 | UTILITY DESIGN | COU |
| 6 | 02/15/17 | UTILITY DESIGN | COU |

WT
 W-T COMMUNICATION
 DESIGN GROUP, LLC
 1500 SAND CANYON AVENUE, D1
 IRVINE, CA 92618

PROPRIETARY INFORMATION
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verizon
 1500 SAND CANYON AVENUE, D1
 IRVINE, CA 92618

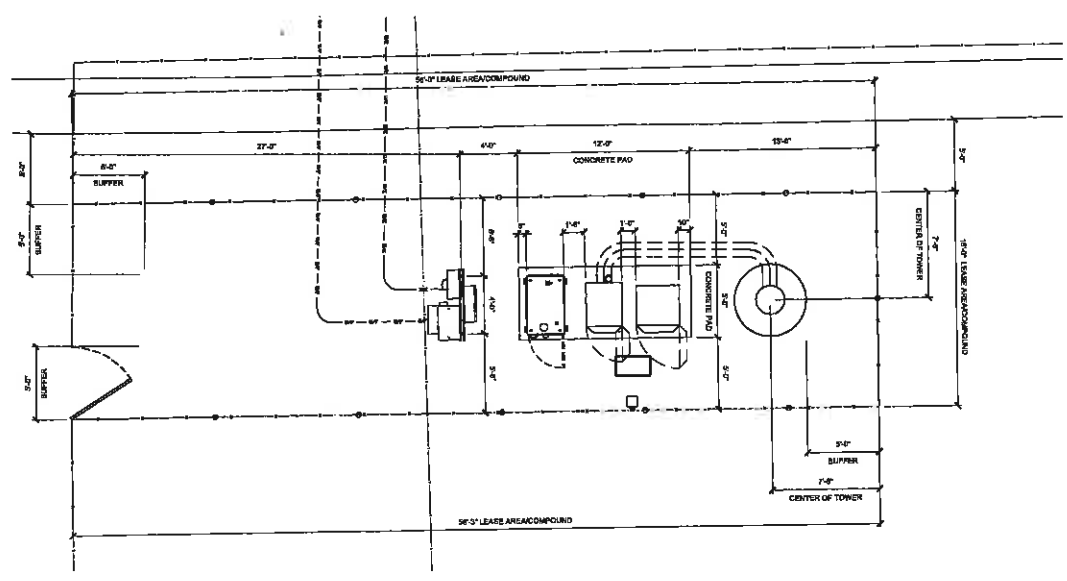
JEFFREY B. GUTOWSKY, P.E.
 LICENSED STRUCTURAL ENGINEER
 STATE OF CALIFORNIA
 LICENSE # 82812
 EXPIRES: 12/31/18

MARKHAM
 S/E CORNER OF PARSONS RD
 & ONTARIO AVE
 PERRIS, CA 92379

SHEET TITLE:
 ENLARGED SITE PLAN

C-2

NOTE:
 REFERENCE SURVEY BY UTILITY DESIGN SERVICES, INC.
 DATED 8/15/2017, FOR ALL PROPERTY LINES AND
 EASING EASEMENT INFORMATION.



| REV. | DATE | DESCRIPTION | BY |
|------|----------|-------------------|-----|
| 0 | 10/26/17 | 100% CONSTRUCTION | BC |
| 1 | 02/28/18 | 100% CONSTRUCTION | BC |
| 2 | 02/28/18 | CLIENT COMMENTS | SPM |
| 3 | 02/28/18 | CLIENT COMMENTS | CPM |
| 4 | 02/28/18 | UTILITY DESIGN | DYP |
| 5 | 02/28/18 | UTILITY DESIGN | DYP |

WT
 W.T. COMMUNICATION
 DESIGN GROUP, LLC
 1505 SAND CANYON AVENUE, D1
 IRVINE, CA 92618

PROPRIETARY INFORMATION
 THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF W.T. COMMUNICATION DESIGN GROUP, LLC. ANY USE OR DISCLOSURE OTHER THAN AS IT RELATES TO VERIZON WIRELESS IS EXPRESSLY PROHIBITED.

verizon
 1505 SAND CANYON AVENUE, D1
 IRVINE, CA 92618

JEFFREY & GUTOWSKI, P.E. SE
 LICENSED STRUCTURAL ENGINEER
 STATE OF CALIFORNIA
 LICENSE # 5086
 EXPIRES: 12/31/18

MARKHAM
 SE CORNER OF PARSONS RD
 & ONTARIO AVE
 PERRIS, CA 92379

SHEET TITLE:
GEOMETRIC PLAN

C-3

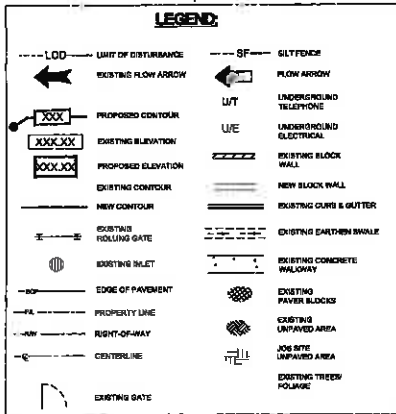
GEOMETRIC PLAN

SCALE: 1/4" = 1'-0"

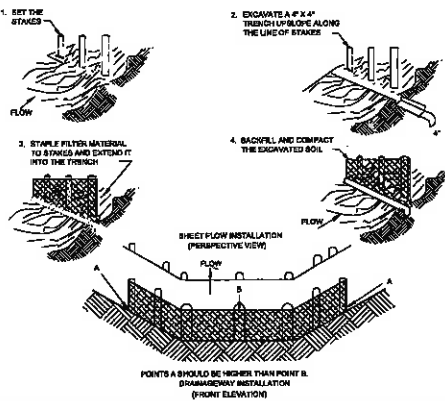
1



DATE PLOTTED: 11/15/17 10:58 AM; PLOTTER: HP DesignJet 2400; PLOT SCALE: 1/4" = 1'-0"



- STREETS ADJACENT TO THE SITE SHALL BE KEPT FREE OF DIRT, MUD AND DEBRIS.
- MINIMIZE BARE EARTH SURFACES DURING CONSTRUCTION.
- ALL DISTURBED AREAS SHALL BE SEEDING OR SOURED AS SOON AS IS PRACTICABLE.
- WHENEVER DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIALS IS DEPOSITED IN THE FLOW LANE OF GUTTERS, DRAINAGE STRUCTURES, OR DITCHES SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THIS LOOSE MATERIAL SHALL BE REMOVED.
- ALL SEDIMENT WILL BE PREVENTED FROM ENTERING ANY EXISTING STORM DRAINAGE SYSTEMS BY THE USE OF SAND BAGS, INTERCEPT DUMPS OR OTHER APPROVED FUNCTIONAL METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT RESULTING FROM HIS PROJECT FROM STORM SEWERS AND DRAINAGE STRUCTURES.
- CONSTRUCTION ACCESS POINTS TO THE SITE SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT TRACKING OF MUD OR SOIL ONTO PUBLIC THROUGHWAYS. AT THE END OF EACH DAY THE CONTRACTOR SHALL CLEAN UP ALL MUD OR SOIL WHICH HAS BEEN TRACKED ONTO PUBLIC STREETS OR AS REQUIRED BY LOCAL JURISDICTION.
- ALL EXISTING DRAINAGE COURSES ON THE PROJECT SITE MUST CONTINUE TO FUNCTION ESPECIALLY DURING STORM CONDITIONS. PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJACENT PROPERTIES DURING STORM OPERATIONS.

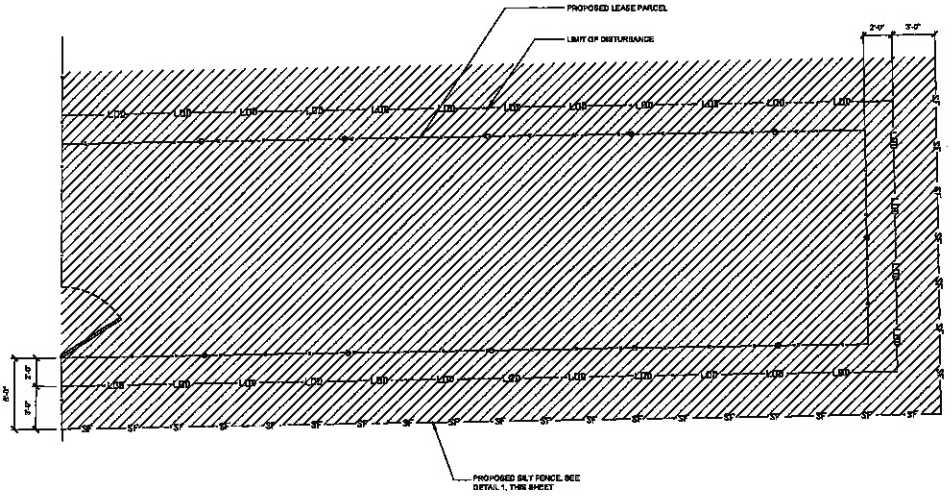


SILT FENCE

SCALE: NONE 1

GENERAL NOTES:

- STRAIN RAILS SHALL BE PLACED IN A SINGLE ROW AND STAKED WITH 1/2" X 1/2" STAKES PER RAIL. GAPS BETWEEN RAILS SHALL BE CHAINED WITH STRAIN BARS. SOIL SHALL BE KEPT UP TO 4' AWAY FROM THE SIDE OF BARRIERS.
- OTHER ACCEPTABLE EROSION CONTROL MEASURES ARE THE USE OF BERRMS, SEDIMENT BASINS, FIBER MATS, NETTING, ETC. AS APPROVED BY MUNICIPAL ENGINEERS.
- EROSION CONTROL MEASURES SHALL BE CONTINUOUSLY MAINTAINED UNTIL PERMANENT EROSION CONTROL FEATURES ARE COMPLETED.
- IF AFTER REPEATED FAILURES ON THE PART OF THE CONTRACTOR TO PROPERLY CONTROL EROSION, POLLUTION, AND/OR SILTATION, THE LOCAL JURISDICTION RESERVES THE RIGHT TO EFFECT NECESSARY CORRECTIVE MEASURES AND CHARGE ANY COSTS TO THE CONTRACTOR.



EROSION CONTROL PLAN

SCALE: 1/4" = 1'-0" 2

NOTE:
REFERENCE SURVEY BY UTILITY DESIGN SERVICES, INC. DATED 02/18/2017 FOR ALL PROPERTY LINES AND EXISTING EASEMENT INFORMATION.

FINISHED EQUIPMENT COMPOUND FLOOR TO BE 1" ABOVE FINISHED GRADE

NOTE:
A NEETING SURVEY IS REQUIRED IF CONSTRUCTION/RERAKING OCCURS BETWEEN FEB. 16TH THRU SEPT. 16TH.

NOTE:
PRIOR TO GRADING, A QUALIFIED PALEONTOLOGIST SHALL BE RETAINED DURING CONSTRUCTION FOR OBSERVATION AND REPORTING ON ANY PALEONTOLOGICAL IMPACTS.

ISSUE STATUS

| REV. | DATE | DESCRIPTION | BY |
|------|----------|--------------------|-----|
| 0 | 02/01/18 | 100% CONSTRUCTION | DC |
| 1 | 02/01/18 | ISSUE FOR COMMENTS | DPA |
| 2 | 02/01/18 | CLIENT COMMENTS | STS |
| 3 | 02/01/18 | UTILITY DESIGN | DPA |
| 4 | 02/01/18 | UTILITY DESIGN | DPA |

WT COMMUNICATION DESIGN GROUP, LLC.
 3000 S. GARDEN ST. SUITE 100
 LOS ANGELES, CA 90007
 (310) 551-1111
 WWW.WTGROUP.COM

PROPRIETARY INFORMATION
 THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY & CONFIDENTIAL TO VERIZON WIRELESS.

verizon
 1550 SAND CANYON AVENUE, D1
 IRVINE, CA 92618

JEFFERY S. GUTENBERG, P.E.
 LICENSED PROFESSIONAL ENGINEER
 STATE OF CALIFORNIA
 LICENSE # 51874
 10000 E. 15TH AVE. SUITE 100
 DENVER, CO 80231

MARKHAM
 SE CORNER OF PARSONS RD
 & ONTARIO AVE
 PERRIS, CA 92375

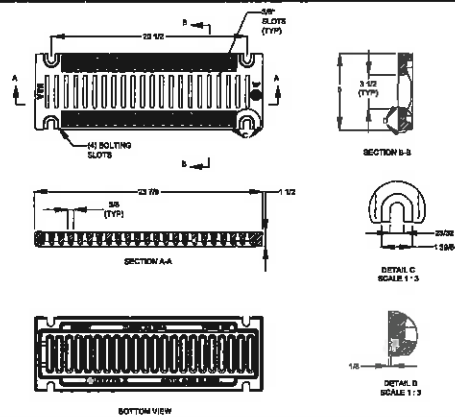
SHEET TITLE:
**EROSION CONTROL PLAN,
 NOTES & DETAILS**

C4

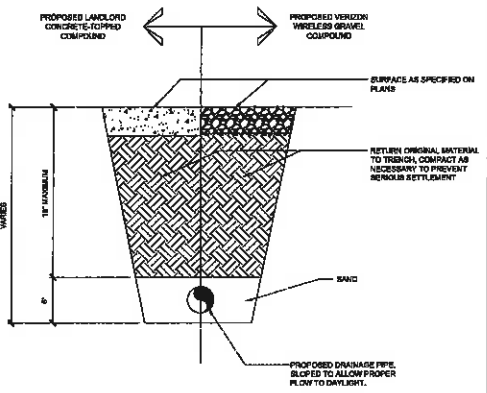
SEDIMENTATION AND EROSION CONTROL SPECIFICATIONS

1. MAY OR STRAW DITCH CHECKS SHALL BE INSTALLED AT INTERSECTIONS ON ALL SWALES. DITCH CHECKS SHALL BE MAINTAINED UNTIL DRAINAGE AREA TRIBUTARY TO DITCH CHECK HAS LIVED AND GROWING GRASS OR GROUND COVER AFTER LINE AND GROWING GRASS OR GROUND COVER HAS BEEN ESTABLISHED. DITCH CHECKS SHALL BE REPAIRED.
2. STRAW DITCH OR STRAW BALES SHALL BE INSTALLED AROUND EACH INLET OR CATCH BASIN THAT HAS A TYPE B GRATE. THESE SHALL BE MAINTAINED UNTIL CHANNEL AREA TRIBUTARY HAS GROWING GRASS OR GROUND COVER.
3. STREETS ADJACENT TO THE SITE SHALL BE KEPT FREE OF DIRT, MUD AND DEBRIS.
4. MINIMIZE BARE EARTH SURFACES DURING CONSTRUCTION.
5. ALL DISTURBED AREAS SHALL BE SEEDS OR SOILED AS SOON AS IS PRACTICABLE.
6. WHENEVER DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, OR DITCHES SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THIS LOOSE MATERIAL SHALL BE REMOVED.
7. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY EXISTING STORM DRAINAGE SYSTEMS BY THE USE OF SAND BAGS, RETENTION TRENCHES OR OTHER APPROVED FUNCTIONAL METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT RESULTING FROM HIS PROJECT FROM STORM SEWERS AND DRAINAGE STRUCTURES.
8. CONSTRUCTION ACCESS POINTS TO THE SITE SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT TRACKING OF MUD OR SOIL ONTO PUBLIC THOROUGHFARES. AT THE END OF EACH DAY THE CONTRACTOR SHALL CLEAN UP ALL MUD OR SOIL WHICH HAS BEEN TRACKED ONTO PUBLIC STREETS OR AS REQUIRED BY VILLAGE OPTIONS.

NOTES

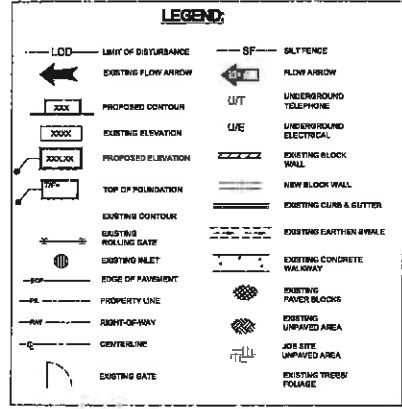


TRENCH GRATE DETAIL SCALE: NONE 1

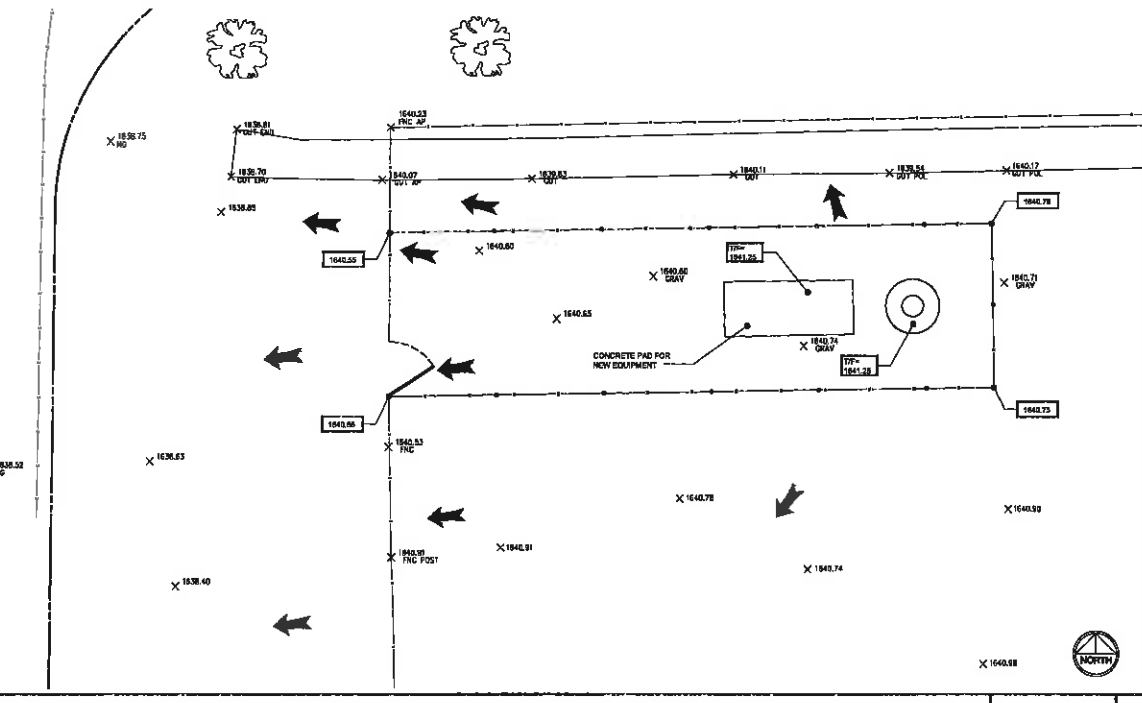


DRAIN PIPE TRENCH DETAIL SCALE: NONE 2

- NOTE: THIS PLAN SHOWS THE REQUIRED GRADING NECESSARY FOR A NEW TELECOMMUNICATION COMPOUND.
- NOTE: EXISTING FLOW OF EXISTING PROPERTY SHALL NOT BE DISTURBED DURING CONSTRUCTION.
- NOTE: EXISTING SITE SURFACE DRAINING ACROSS NATURAL SLOPE.
- NOTE: TOTAL AREA OF DISTURBANCE=1165 SQ.FT.
- NOTE: NEW CONCRETE PADS TO BE 6" ABOVE FINISHED GROUND.



- NOTE: THE SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS TOWER OR STRUCTURE. AN ANALYSIS OF THE TOWER OR STRUCTURE HAS BEEN PERFORMED BY VECTON ENGINEERS, DATED 12/24/07. THE ANALYSIS AND EQUIPMENT SHOWN ON THIS PLAN ARE FOR REFERENCE ONLY AND THE HEIGHT, LOCATION AND MOUNTING SHOWN IN THIS STRUCTURAL ANALYSIS SHALL SUPERSEDE THESE DRAWINGS.
- NOTE: REFERENCE ALLEVIATION BY UTILITY DESIGN SERVICES, INC. DATED 03/16/2007 FOR ALL PROPERTY LINES AND EXISTING EASEMENT INFORMATION.
- NOTE: TOWER EQUIPMENT NOT SHOWN FOR CLARITY.



EROSION CONTROL PLAN SCALE: 3/16" = 1' 3

ISSUE STATUS

| REV. | DATE | DESCRIPTION | BY |
|------|----------|-------------------|-----|
| 0 | 12/28/17 | 50% CONSTRUCTION | OC |
| 1 | 02/16/18 | 100% CONSTRUCTION | OC |
| 2 | 02/28/18 | CLIENT COMMENTS | DTP |
| 3 | 03/02/18 | CLIENT COMMENTS | DTP |
| 4 | 04/02/18 | UTILITY DESIGN | DTP |
| 5 | 04/11/18 | UTILITY DESIGN | DTP |

WT
 W-T COMMUNICATION DESIGN GROUP, LLC.
 5010 S. HAWTHORNE AVE. SUITE 200
 IRVINE, CA 92614
 (714) 952-8800
 WWW.WTDESIGN.COM

PROPRIETARY INFORMATION
 THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY & CONFIDENTIAL TO VERIZON WIRELESS.

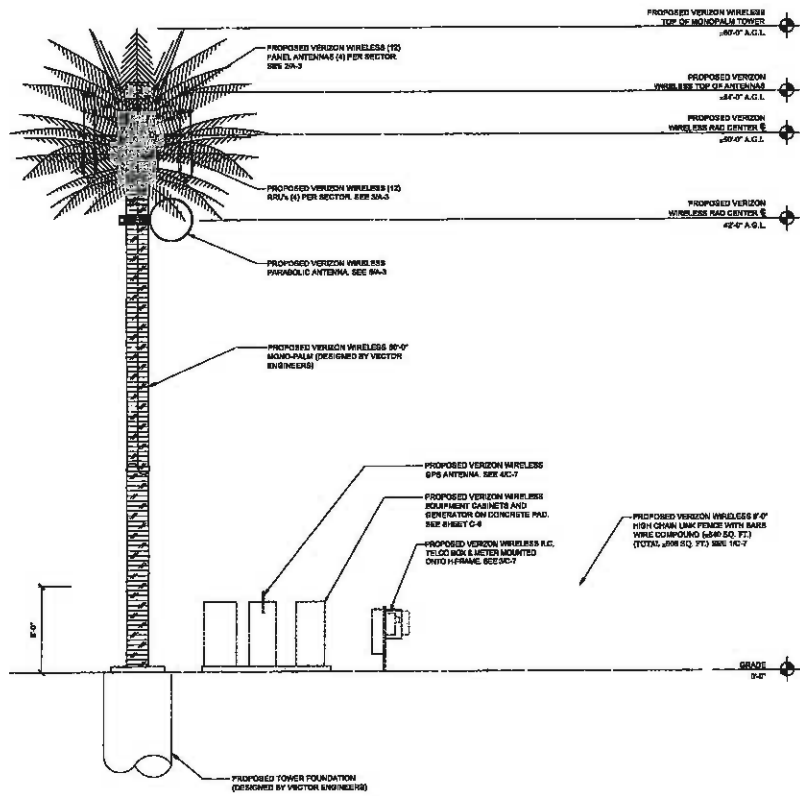
verizon
 1505 SAND CANYON AVENUE, 01
 IRVINE, CA 92616

JEFFERY S. BURNHAM, P.E.
 LICENSED PROFESSIONAL ENGINEER
 STATE OF CALIFORNIA
 LICENSE # 81826
 EXPIRES: 12/31/24
 ISSUED: 08/2018

MARKHAM
 SIE CORNER OF PARSONS RD
 & ONTARIO AVE
 PERRIS, CA 92379

SHEET TITLE:
 GRADING PLAN
 NOTES & DETAILS

C-5

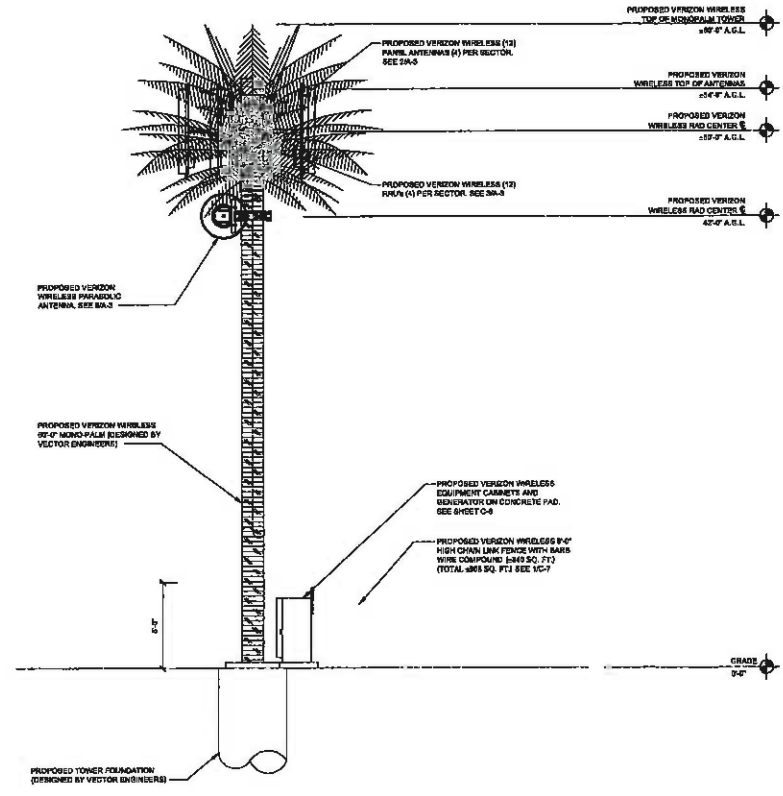


PROPOSED NORTH ELEVATION

SCALE: 3/16"=1'-0"

1

NOTE:
ALL PROPOSED ANTENNAS AND EQUIPMENT MOUNTED TO THE PROPOSED MONOPOLE POLE SHALL BE PAINTED GREEN TO MATCH PROMOS.



PROPOSED EAST ELEVATION

SCALE: 3/16"=1'-0"

2

NOTE:
W-7'S SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THE TOWER OR STRUCTURE. AN ANALYSIS OF THE TOWER OR STRUCTURE HAS BEEN PERFORMED BY VECTOR ENGINEERS, DATED 10/14/17. THE ANTENNA AND EQUIPMENT SHOWN ON THIS PLAN ARE FOR REFERENCE ONLY AND THE HEIGHT, LOCATION AND COUNTS SHOWN IN THE STRUCTURAL ANALYSIS SHALL SUPERSEDE THESE DRAWINGS.

NOTE:
ALL CABLES TO BE ROUTED ON THE INTERIOR OF MONOPOLE TOWER.

NOTE:
DC TO LABEL ALL ANTENNA MOUNTS WITH ANTENNA MOUNT CLASSIFICATION PER PLANS.

ISSUE STATUS

| REV. | DATE | DESCRIPTION | BY |
|------|----------|------------------|-----|
| 0 | 12/28/17 | 50% CONSTRUCTION | GC |
| 1 | 02/18/18 | 50% CONSTRUCTION | GC |
| 2 | 02/08/18 | CLIENT COMMENTS | SMJ |
| 3 | 02/08/18 | CLIENT COMMENTS | DTP |
| 4 | 04/20/18 | UTILITY DESIGN | DTP |
| 5 | 04/11/18 | UTILITY DESIGN | DTP |

WT
W-T COMMUNICATION DESIGN GROUP, LLC
WIRELESS INFRASTRUCTURE
10915 Laguna Ave. Suite 200
Irvine, CA 92618
PH: (949) 261-1100 FAX: (949) 261-1109
www.wtcommunications.com
A COMMUNICATIONS DESIGN GROUP COMPANY

PROPRIETARY INFORMATION
THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY TO W-T COMMUNICATIONS DESIGN GROUP, LLC. ANY USE OR DISCLOSURE OTHER THAN AS INTENDED BY W-T COMMUNICATIONS DESIGN GROUP, LLC IS STRICTLY PROHIBITED.

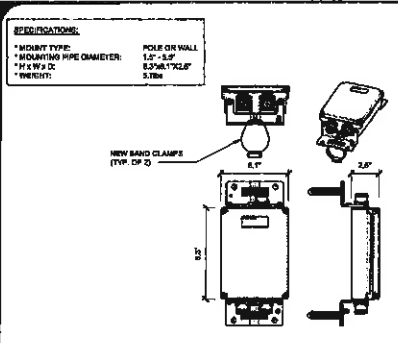
verizon
15565 SAND CANYON AVENUE, D1
IRVINE, CA 92618

JERRY R. GUTTORRELL, P.E.
LICENSED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA
LICENSE # 51858
EXPIRES 02/28/21 8:00PM DELIVER

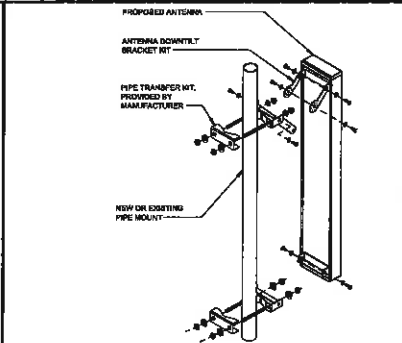
MARKHAM
SE CORNER OF PARSONS RD
& ONTARIO AVE
PERRIS, CA 92379

SHEET TITLE:
PROPOSED ELEVATIONS

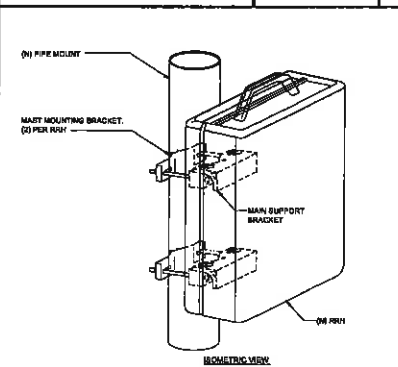
A-1



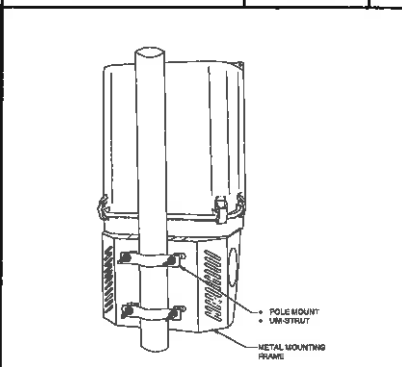
DIPLEXER SPECIFICATIONS SCALE: N.T.S. 1



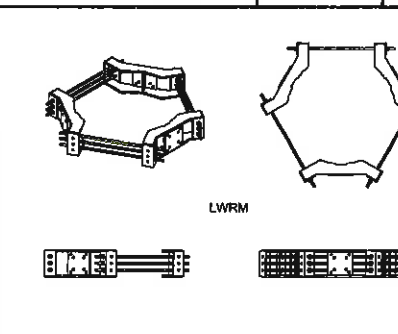
ANTENNA MOUNT SCALE: N.T.S. 2



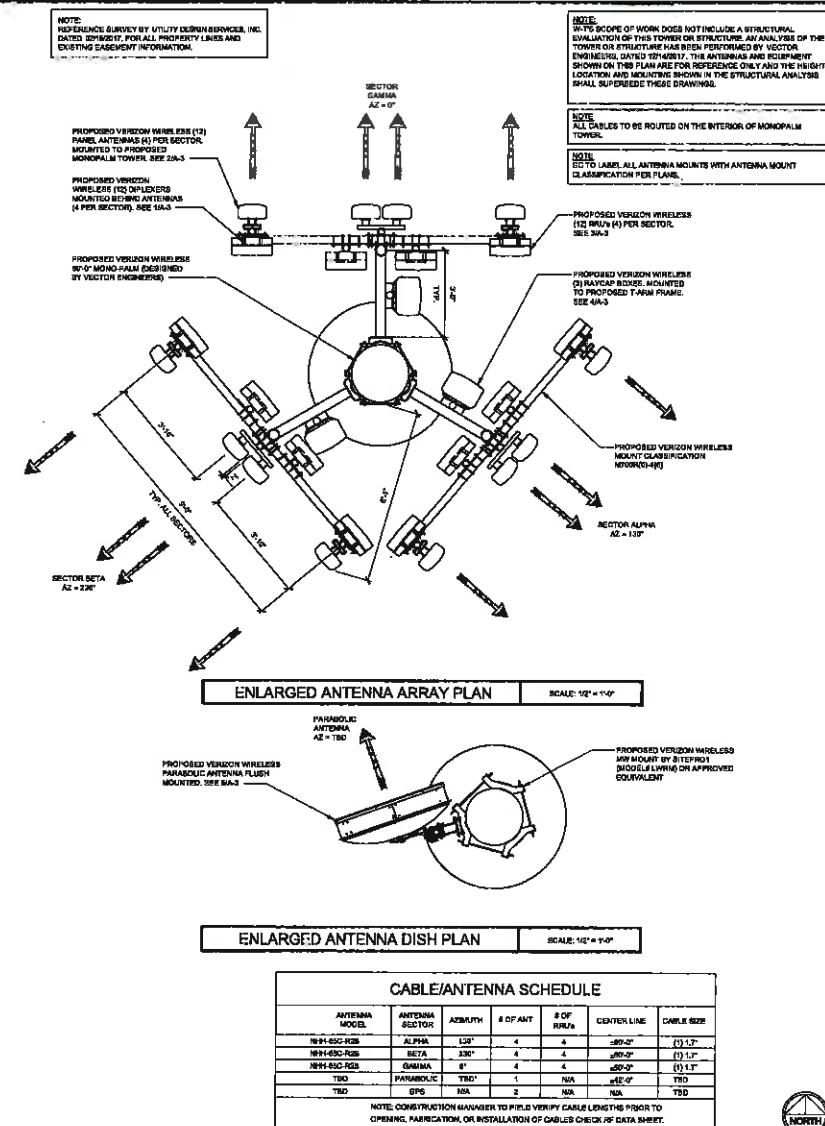
RRUs MOUNT DETAIL SCALE: N.T.S. 3



RAYCAP MOUNT DETAIL SCALE: N.T.S. 4



PARABOLIC ANTENNA VALMONT LWRM UNIVERSAL RING MOUNT & MM01 STAND-OFF MOUNT SCALE: N.T.S. 5



ENLARGED ANTENNA PLAN & CABLE/ANTENNA SCHEDULE 6

ISSUE STATUS

| REV. | DATE | DESCRIPTION | BY |
|------|----------|-------------------|-----|
| 0 | 10/26/17 | 50% CONSTRUCTION | GC |
| 1 | 02/05/18 | 100% CONSTRUCTION | GC |
| 2 | 03/06/18 | CLIENT COMMENTS | PRM |
| 3 | 02/06/18 | CLIENT COMMENTS | DTM |
| 4 | 04/20/18 | UTILITY DESIGN | DTM |
| 5 | 05/11/18 | UTILITY DESIGN | DTM |

WT
 W-T COMMUNICATION DESIGN GROUP, LLC.
 3800 Folsom Blvd. Suite 200
 Oakland, CA 94621
 (916) 762-8800
 www.wtdesign.com

PROPRIETARY INFORMATION
 THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY AND CONFIDENTIAL TO W-T COMMUNICATION DESIGN GROUP, LLC.

verizon
 15500 SAND CANYON AVENUE, D1
 IRVINE, CA 92618

JEFFREY S. SUTTON, P.E.
 LICENSED PROFESSIONAL ENGINEER
 STATE OF CALIFORNIA
 LICENSE # 61870
 EXPIRES 08/01/2024

MARKHAM
 150 E CORNER OF PARSONS RD
 & ONTARIO AVE
 PERRIS, CA 92370

SHEET TITLE:
ENLARGED ANTENNA PLAN & DETAILS



**5401 S. CANADA PLACE
TUCSON, AZ 85706
PH: (520) 663-1330**



| DATE: 12/14/17 | DESIGNED: FB | DRAWN: FB |
|----------------|--------------|-----------|
| REVISIONS | | |
| DATE | DESCRIPTION | |
| | | |
| | | |
| | | |

VERIZON

MARKHAM 60'-0" MONOPALM

CELL TREES, INC. JOB #:
17-082

LOCATION:

**S/E CORNER OF PARSONS RD. & ONTARIO AVE.
PERRIS, CA 92379
RIVERSIDE COUNTY**

DRAWING INDEX

- MP-1 TITLE SHEET
- MP-2 ELEVATION VIEW & NOTES
- MP-3 DETAILS
- MP-4 ANTENNA MOUNT DETAILS
- MP-5 FOUNDATION OPT. 1
- MP-5.1 FOUNDATION OPT. 2
- MP-6 SPECIAL INSPECTION TABLE



**5401 S. CANADA PLACE
TUCSON AZ 85706
PH: 520-663-1330**

JOB #: 17-082

TITLE SHEET

MARKHAM
60'-0" MONOPALM
S/E CORNER OF PARSONS RD. & ONTARIO AVE.
PERRIS, CA 92379



A1212-0123-171

DISCLAIMERS

1) ALL STRUCTURAL COMPONENTS TO BE CONNECTED TOGETHER SHALL BE COMPLETELY SET UP ON THE GROUND OR OTHERWISE VERIFIED FOR COMPATIBILITY PRIOR TO LIFTING ANY COMPONENT INTO PLACE. REPAIRS REQUIRED DUE TO FIT-UP OR CONNECTION COMPATIBILITY PROBLEMS AFTER PARTIAL ERECTION ARE THE FINANCIAL RESPONSIBILITY OF THE CONTRACTOR.

MP-1 REV 0

TOP OF BRANCHES
60'-0" A.G.L.

(81) PALM FRONDS,
8'-0" LONG MAX

NOTE: BRANCHES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND ARE NOT SHOWN TO SCALE.



FAUX BARK
FULL HEIGHT

GROUND LEVEL
0'-0" A.G.L.

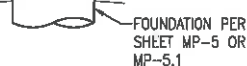


LAP LENGTH = 42"
(TOLERANCE = ±10%)



EXIT PORT CL
3'-0" A.G.L.

GROUND LEVEL
0'-0" A.G.L.



| MONOPOLE SECTION CHART | | | | | |
|------------------------|--------|--------|-----------|-----------|----------|
| SECTION | LENGTH | TOP Ø* | BOTTOM Ø* | THICKNESS | WEIGHT** |
| 1 | 40'-0" | 18.00" | 25.00" | 3/16" | 1.9 K |
| 2 | 14'-6" | 24.01" | 26.55" | 7/32" | 1.7 K |

POLE TAPER = 0.175 IN/FT
 *DIAMETER OF POLE SECTIONS AT LAP SPLICES MAY BE ADJUSTED BY UP TO 0.06" TO ACCOUNT FOR THE THICKNESS OF COATINGS
 **WEIGHT LISTED INCLUDES TOP CAP, PORT, AND BASE PLATE WEIGHT, BUT EXCLUDES WEIGHT OF GALVANIZING OR OTHER COATINGS AND MISC. ATTACHMENTS.

ELEVATIONS

NTS 1

GENERAL DESIGN NOTES:

STRUCTURAL DESIGN IS BASED ON THE CALIFORNIA BUILDING CODE, 2016 EDITION (2015 IBC) AND THE TIA-222-G STANDARD

DESIGN LOADS:

WIND:
 BASIC WIND SPEED: 110 MPH (3-SEC GUST) PER ASCE 7-10
 RISK CATEGORY / STRUCTURE CLASS: II
 EXPOSURE: C
 TOPOGRAPHIC CATEGORY: I
 CREST HEIGHT: 0 FT

ICE: NONE

SEISMIC:

IMPORTANCE FACTOR: 1.00
 MAPPED SPECTRAL RESPONSE ACCELERATIONS:
 $S_a = 1.500g$, $S_1 = 0.600g$
 SITE CLASS: C
 SPECTRAL RESPONSE COEFFICIENTS:
 $S_{m1} = 1.000g$, $S_{m2} = 0.520g$
 SEISMIC DESIGN CATEGORY: D
 BASIC SEISMIC-FORCE-RESISTING-SYSTEM:
 TELECOMMUNICATION TOWER: STEEL POLE
 SEISMIC BASE SHEAR, V: 4.9 K
 SEISMIC RESPONSE COEFFICIENT, C_s: 0.667
 RESPONSE MODIFICATION FACTOR, R: 1.5
 ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE

MATERIAL NOTES:

- 18-SIDED MONOPOLE SHAFT STEEL SHALL CONFORM w/ ASTM A572 GR. 65, U.N.O.
- BASE PLATE STEEL TO BE PER ASTM A572, GR. 50, U.N.O.
- PORT STEEL SHALL CONFORM w/ ASTM A572 GR. 65, U.N.O.
- ALL STEEL PIPE TO BE PER ASTM A53 GR. B (35 KSI), U.N.O.
- ALL STEEL RECTANGULAR TUBES (HSS) TO BE PER ASTM A500 GR.B (46KSI), U.N.O.
- ALL OTHER STEEL SHAPES & PLATES SHALL CONFORM w/ ASTM A36, U.N.O.
- ALL BOLTS FOR STEEL-TO-STEEL CONNECTIONS SHALL CONFORM w/ ASTM F3125 GR. A325, U.N.O.
- ALL ANCHOR BOLTS SHALL CONFORM w/ A615 GR. 75, U.N.O.
- ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS IN ACCORDANCE w/ THE LATEST VERSION OF THE AMERICAN WELDING SOCIETY AWS D1.1.
- ALL STEEL SURFACES SHALL BE GALVANIZED IN ACCORDANCE w/ ASTM A123 AND ASTM F2329 STANDARDS.
- ALL BOLTED CONNECTIONS SHALL BE TIGHTENED PER THE "TURN-OF-NUT" METHOD AS DEFINED BY AISC.
- SUBMIT FABRICATION DRAWINGS FOR ALL STEEL PARTS TO ENGINEER OF RECORD FOR REVIEW AND APPROVAL.

BASE DESIGN REACTIONS:

MOMENT, M = 658 K-FT (1.0 WIND)
 SHEAR, V = 14.0 K (1.0 WIND)
 AXIAL, P = 8.8 K (1.2 DEAD)

THE MONOPOLE, BASE PLATE, AND FOUNDATION ARE DESIGNED FOR THE DESIGN LOADING. THE ANTENNA MOUNTS ARE ONLY DESIGNED FOR THE INITIAL OCCUPANCY. SEE DTL 2/MP-3.

5028 E. Baseline Rd., Suite 107
Gilbert, AZ 85254 (480) 548-3314
www.vectorinc.com

| DATE: 12/14/17 | DESIGNED BY: PB | DRAWN BY: PB | |
|----------------|-----------------|--------------|--|
| REVISIONS | | | |
| DATE | DESCRIPTION | | |
| | | | |
| | | | |
| | | | |

5401 S. CANADA PLACE
TUCSON AZ 85706
PH: 520-863-1330

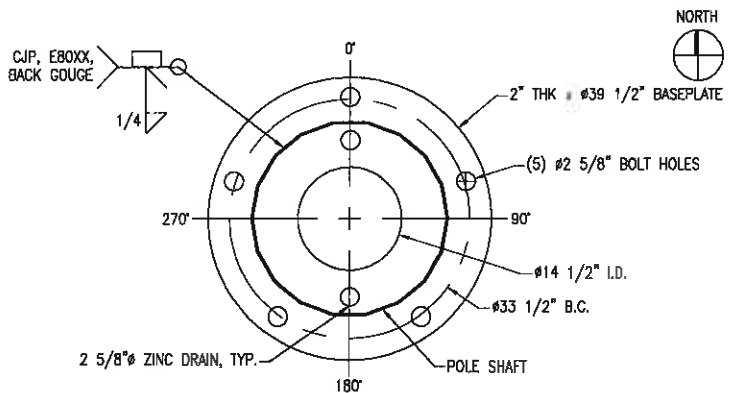
JOB #: 17-082

ELEVATION VIEW & NOTES

60'-0" MONOPALM
SEE CORNER OF PARSONS RD. & ONTARIO AVE.
FERRELL, CA 92578

A1212-0123-17!

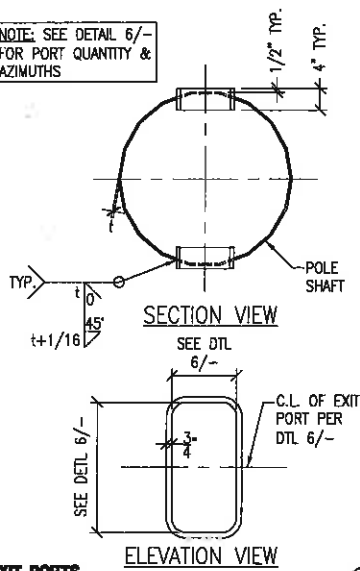
| | |
|------|----------|
| MP-2 | REV 0 |
|------|----------|



BASEPLATE

NTS. 5

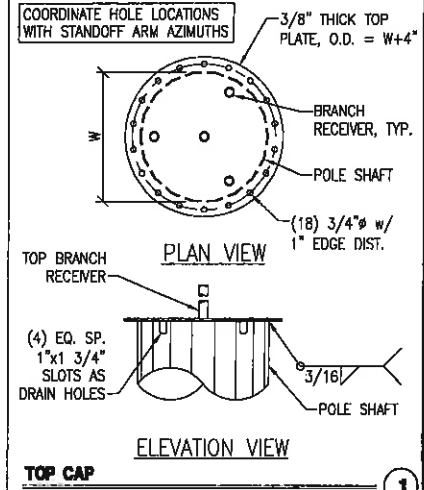
NOTE: SEE DETAIL 6/- FOR PORT QUANTITY & AZIMUTHS



EXIT PORTS

NTS. 3

COORDINATE HOLE LOCATIONS WITH STANDOFF ARM AZIMUTHS



TOP CAP

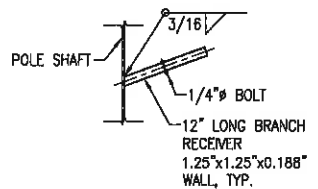
NTS. 1

INITIAL OCCUPANCY:
 ANTENNA C.L. @ 50'-0" A.G.L.:
 (12) JAHH-65C-R36/SBNHH-1065C
 (12) 28"x19"x11" RRU's
 (3) 28.93"x15.73"x10.31" RAYCAPS
 (3) 9'-6" T-ARM MOUNTS PER SHEET MP-4
 M.W. ANTENNA C.L. @ 42'-0" A.G.L.:
 (1) 4'-0" MICROWAVE DISH

DESIGN LOADING:
 ANTENNA C.L. @ 50'-0" A.G.L.:
 (12) 95.7"x13.8"x8.2" PANEL ANTENNAS
 (18) 28"x19"x11" RRU's
 (3) 28.93"x15.73"x10.31" RAYCAPS
 (3) 9'-6" T-ARM MOUNTS
 M.W. ANTENNA C.L. @ 42'-0" A.G.L.:
 SAME AS INITIAL

APPURTENANCES

NTS. 2



FRONT RECEIVER

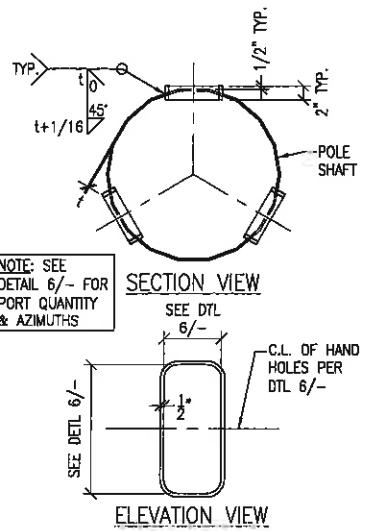
NTS. 7

| COAX PORT HOLE SCHEDULE | | | | |
|-------------------------|-----------|-----|--------------|----------|
| ELEV. | PORT SIZE | QTY | AZIMUTH | REF. DTL |
| 48'-0" | 8"x18" | 3 | 0°/120°/240° | 4/- |
| 40'-0" | 6"x12" | 1 | 270° | 4/- |
| 3'-0" | 9"x24" | 2 | 0°/180° | 3/- |

PORT SCHEDULE

NTS. 6

NOTE: SEE DETAIL 6/- FOR PORT QUANTITY & AZIMUTHS



HAND HOLES

NTS. 4



| DATE: 12/4/17 | DESIGNED: PB | DRAWN: PB |
|---------------|--------------|-----------|
| REVISIONS | | |
| DATE | DESCRIPTION | |
| | | |
| | | |

VERIZON



5401 S. CANADA PLACE
 TUCSON AZ 85706
 PH: 520-663-1330

JOB #: 17-082

DETAILS

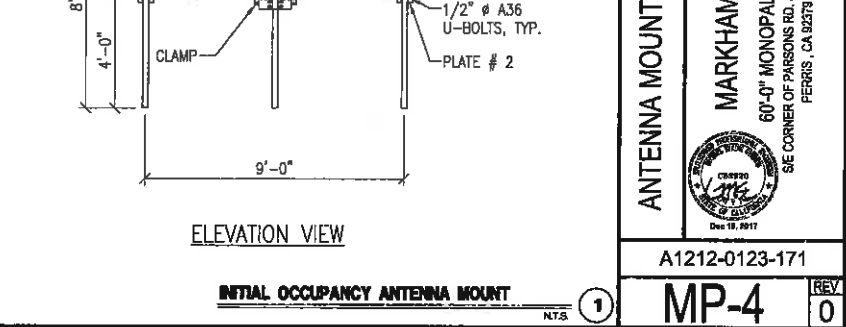
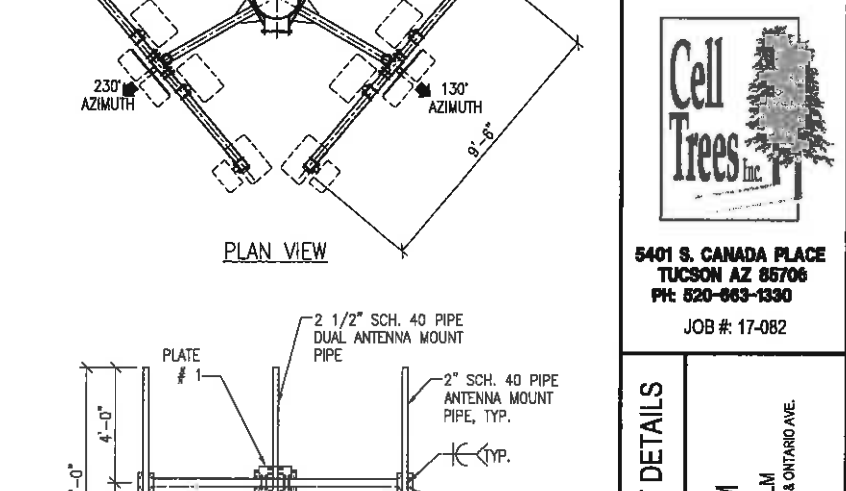
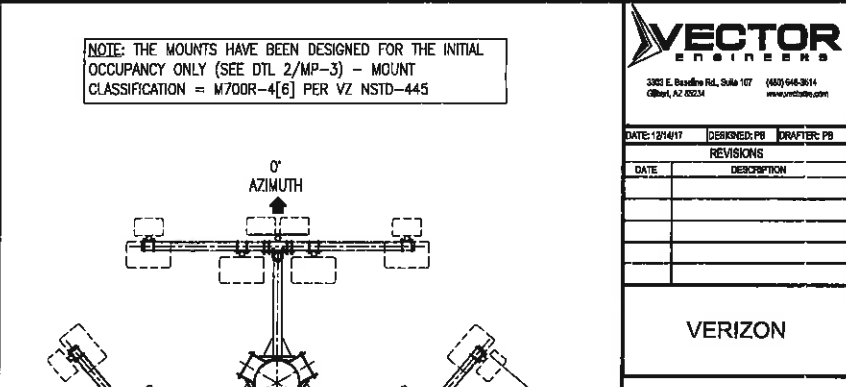
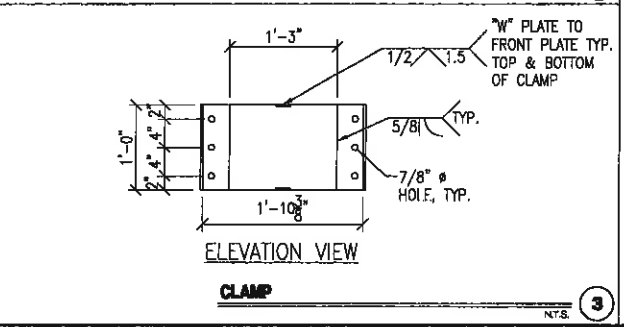
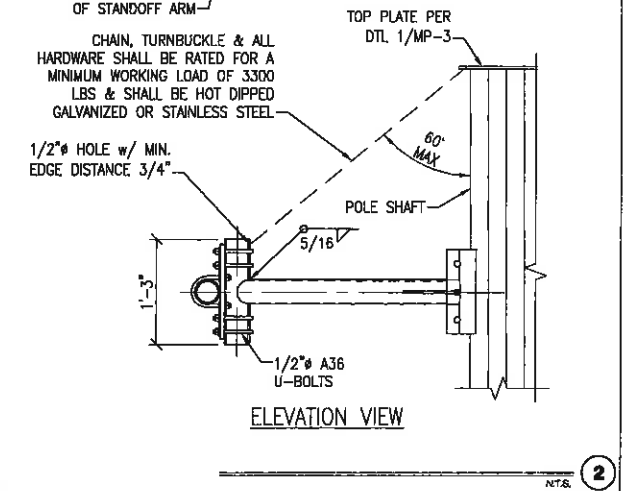
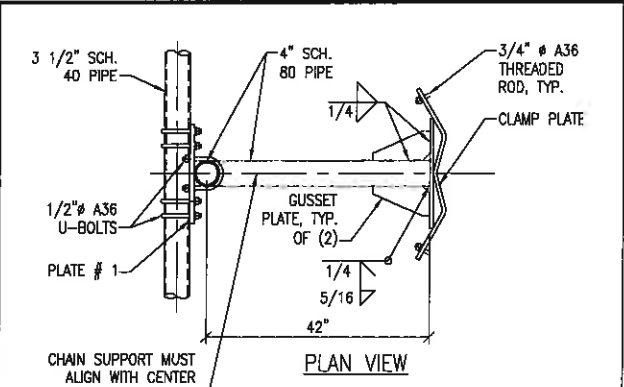
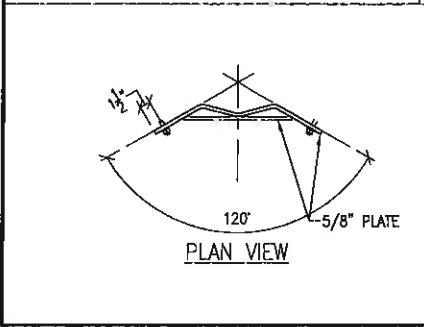
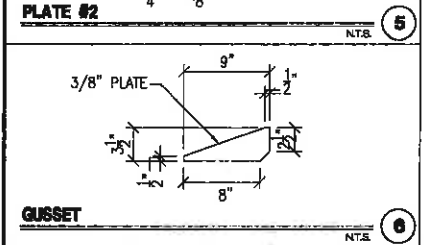
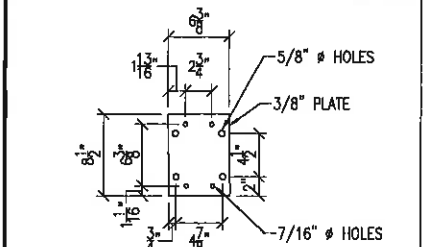
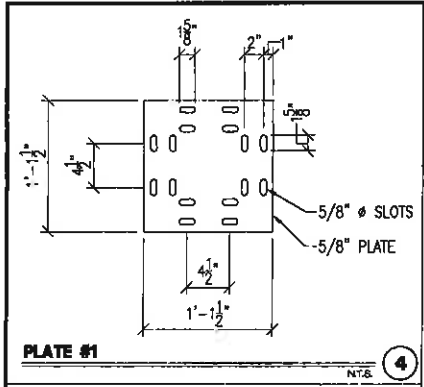
MARKHAM
 60'-0" MONOPALM
 SEE CORNER OF PARSONS RD. & ONTARIO AVE.
 PERRIS, CA 92379



A1212-0123-171

MP-3

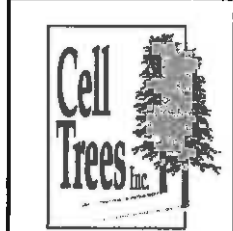
REV 0



VECTOR ENGINEERS
 3302 E. Broadway Rd., Suite 107 (402) 946-3611
 Omaha, NE 68134 www.vectoreng.com

| DATE | DESCRIPTION |
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| | |

DATE: 12/14/17 DESIGNED: PB DRAFTER: PB



VERIZON

5401 S. CANADA PLACE
 TUCSON AZ 85706
 PH: 520-863-1330
 JOB #: 17-082

ANTENNA MOUNT DETAILS

MARKHAM
 60'-0" MONOPALM
 SEE CORNER OF PARSONS RD. & ONTARIO AVE.
 PERRIS, CA 92373

A1212-0123-171

MP-4

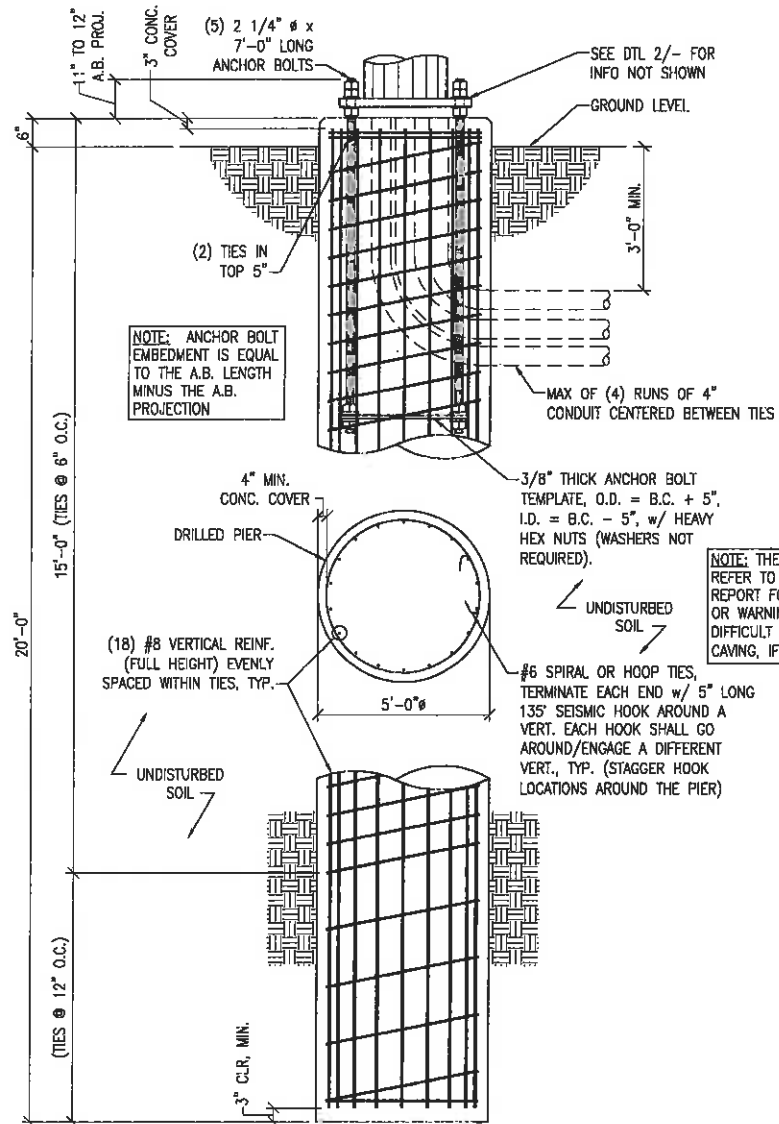
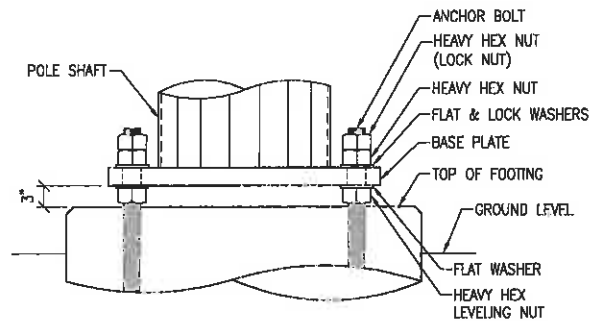
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FOUNDATION NOTES:

1. FOUNDATION DESIGN IS BASED ON THE FOLLOWING GEOTECHNICAL REPORT:

ASR ENGINEERING, INC.
 REPORT: 12-17039
 DATE: OCTOBER 9, 2017

- ALL CONCRETE SHALL USE TYPE II PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. CONCRETE SHALL HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.50. CONCRETE SHALL HAVE A SLUMP OF 5" ($\pm 1"$). ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH "THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE," ACI 318-14. FOUNDATION INSTALLATION SHALL BE IN ACCORDANCE WITH ACI 336, "STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF DRILLED PIERS," LATEST EDITION. SPECIAL INSPECTION SHALL BE PERFORMED AS REQUIRED PER CHAPTER 17 OF THE BUILDING CODE.
- REINFORCING STEEL SHALL CONFORM WITH THE REQUIREMENTS OF ASTM A-615, GRADE 60. ALL REINFORCING DETAILS SHALL CONFORM TO "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315, LATEST EDITION, UNLESS DETAILED OTHERWISE ON THIS DRAWING.
- INSTALLATION OF THE FOUNDATION MUST BE OBSERVED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER FIRM. GEOTECHNICAL ENGINEER TO PROVIDE A NOTICE OF INSPECTION FOR THE BUILDING INSPECTOR FOR REVIEW AND RECORD PURPOSES.



FOUNDATION

VECTOR ENGINEERS
 3303 E. Baseline Rd., Suite 107 Gilbert, AZ 85234 (480) 918-3414 www.vectoreng.com

DATE: 12/14/17 DESIGNED: PB DRAFTER: PB

| REVISIONS | |
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| DATE | DESCRIPTION |
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VERIZON

**5401 S. CANADA PLACE
 TUCSON AZ 85706
 PH: 520-683-1330**

JOB #: 17-082

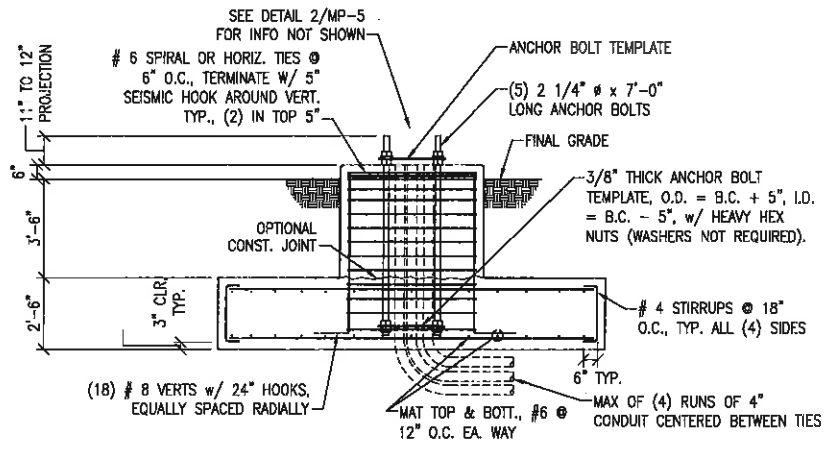
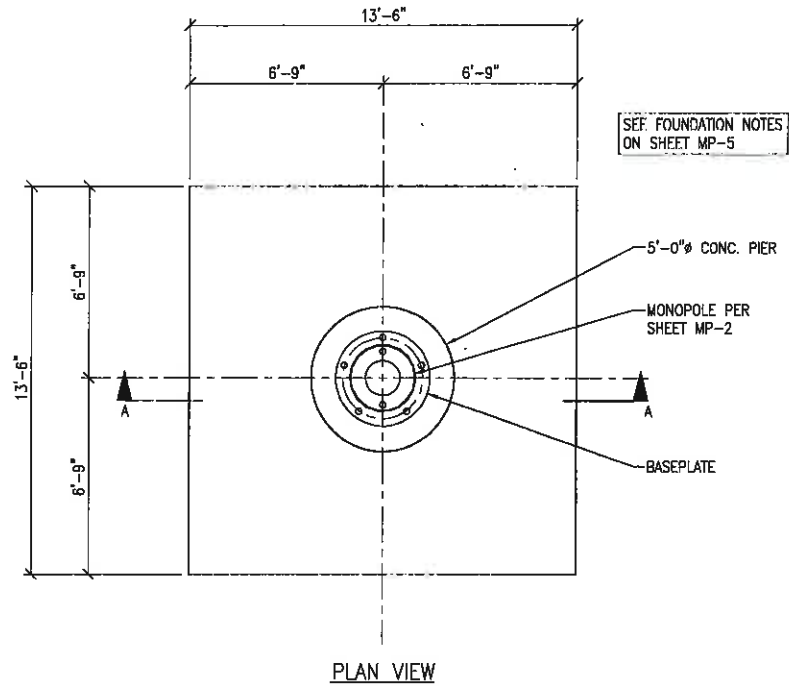
FOUNDATION OPT. 1

MARKHAM
 60'-0" MONOPALM
 SEE CORNER OF PARSONS RD. & ONTARIO AVE.
 PERRIS, CA 92379

A1212-0123-171

MP-5

REV 0



VECTOR ENGINEERS
 3301 E. Broadway Rd., Suite 107 Gilbert, AZ 85234 (480) 848-3714 www.vector.com

| DATE: 12/14/17 | DESIGNED: PB | DRAWN: PB |
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| REVISIONS | | |
| DATE | DESCRIPTION | |
| | | |
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VERIZON

**5401 S. CANADA PLACE
 TUCSON AZ 85708
 PH: 520-863-1330**

JOB #: 17-082

FOUNDATION OPT. 2

MARKHAM
 60'-0" MONOPALM
 SEE CORNER OF PARSONS RD. & ONTARIO AVE.
 PERRIS, CA 92479

A1212-0123-17

MP-5.1

REV 0

FOUNDATION N.T.E. ①

SUMMARY OF SPECIAL INSPECTION

| NO. | DESCRIPTION OF TYPE OF INSPECTION REQ'D, LOCATION, REMARKS, ETC. | INSPECTION TYPE |
|---|--|--|
| 1. REQUIRED INSPECTIONS FOR SOIL/FOUNDATION: | | |
| A. | VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND THAT THE MATERIALS BELOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY | PERIODIC |
| B. | PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS | PERIODIC |
| C. | VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL. | CONTINUOUS |
| D. | PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT IT HAS BEEN PREPARED PROPERLY | PERIODIC |
| 2. REQUIRED INSPECTIONS FOR CAST-IN-PLACE DEEP FOUNDATION ELEMENTS | | |
| A. | INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT | CONTINUOUS |
| B. | VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM ELEMENT DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END-BEARING STRATA CAPACITY. RECORD CONCRETE OR GROUT VOLUMES. | CONTINUOUS |
| 3. REQUIRED INSPECTIONS FOR CONCRETE CONSTRUCTION | | |
| A. | INSPECT REINFORCEMENT AND VERIFY PLACEMENT | PERIODIC |
| B. | INSPECT ANCHORS CAST IN CONCRETE - PLUMBNESS, ORIENTATION, TOP AND BOTTOM TEMPLATES ARE INSTALLED, AND THAT THE MINIMUM EMBEDMENT SPECIFIED BY THE FOUNDATION DESIGNER IS MET. | PERIODIC |
| C. | VERIFY USE OF REQUIRED DESIGN MIX AND COMPLIANCE WITH ACI 318-14 | PERIODIC |
| D. | PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE. | CONTINUOUS |
| E. | INSPECT CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES. | CONTINUOUS |
| F. | VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES | PERIODIC |
| G. | INSPECT FORMWORK FOR PROPER SHAPE, LOCATION AND DIMENSIONS. | PERIODIC |
| 4. BOLTING: | | |
| A. | ANCHOR BOLTS SHALL BE INSTALLED WITH A LOCKING MECHANISM AND BE TIGHTENED TO A "SNUG TIGHT" CONDITION PER AISC | PERIODIC |
| B. | ALL HIGH STRENGTH BOLTS, A325, SHALL BE TIGHTENED TO THE TURN OF NUT METHOD AS DEFINED BY AISC | PERIODIC |
| 5. FIELD WELDING: | | |
| A. | NO FIELD WELDING SHALL BE PERMITTED EXCEPT WHERE SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS | </= 5/16, PERIODIC > 5/16, CONTINUOUS |
| 6. SHOP WELDING: | | |
| A. | ALL SHOP WELDING OF STRUCTURAL STEEL SHALL BE PERFORMED BY AN APPROVED FABRICATOR'S SHOP PER 2016 CBC SECTION 1704.2.5 | PROVIDE CERTS. |
| B. | ALL WELDED CONNECTIONS SHALL CONFORM WITH THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY (AWS) D1.1 | N/A |
| C. | WELD ELECTRODES SHALL BE LOW HYDROGEN E70XX U.N.O. | N/A |
| D. | VISUAL INSPECTION OF ALL WELDS SHALL BE PERFORMED BEFORE GALVANIZING. | INSPECT AND REPORT |
| E. | IF A WELD IS IN QUESTION PER THE VISUAL INSPECTION THEN IT SHALL BE TESTED USING AN APPROPRIATE TEST, I.E. DIE PENETRATION, MAGNETIC PARTICLE, U.T., ETC. | INSPECT AND REPORT |

SPECIAL INSPECTION:

- SPECIAL INSPECTION SHALL BE PERFORMED ACCORDING TO 2016 CBC.
- THE SPECIAL INSPECTOR SHALL BE APPROVED BY THE LOCAL JURISDICTION TO PERFORM THE TYPES OF INSPECTION REQUIRED.
- ANY SUPPORT SERVICE PERFORMED BY THE ENGINEER OF RECORD DURING CONSTRUCTION SHALL BE DISTINGUISHED FROM INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ENGINEER OF RECORD ARE ONLY FOR THE PURPOSE OF ASSISTING IN THE QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH THE CONTRACT DOCUMENTS. THIS SUPPORT DOES NOT GUARANTEE THE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.



| DATE: 12/14/17 | DESIGNED: PB | DRAWN: PB |
|----------------|--------------|-----------|
| REVISIONS | | |
| DATE | DESCRIPTION | |
| | | |
| | | |

VERIZON



**5401 S. CANADA PLACE
TUCSON AZ 85706
PH: 520-963-1330**

JOB #: 17-082

SPECIAL INSPECTION TABLE

MARKHAM
60'-0" MONOPALM
S/E CORNER OF PARSONS RD. & ONTARIO AVE.
PERRIS, CA 92379



A1212-0123-171

MP-6 REV
0

PAGE BREAK



**AIRPORT LAND USE COMMISSION
RIVERSIDE COUNTY**



May 22, 2018

Mr. Jay Eastman, Principal Planner
City of Riverside Community Development Department Planning Division
3900 Main Street, 3rd Floor
Riverside CA 92522

CHAIR
Steve Manos
Lake Elsinore

VICE CHAIR
vacant

**RE: AIRPORT LAND USE COMMISSION (ALUC) DEVELOPMENT REVIEW –
DIRECTOR’S DETERMINATION**

COMMISSIONERS

Arthur Butler
Riverside

File No.: ZAP1029RG18
Related File No.: P18-0290 (Zoning Ordinance Amendment)
APN: Citywide

John Lyon
Riverside

Dear Mr. Eastman:

Russell Betts
Desert Hot Springs

Steven Stewart
Palm Springs

Richard Stewart
Moreno Valley

STAFF

Director
Simon A. Housman

John Guerin
Paul Rull
Barbara Santos

County Administrative Center
4080 Lemon St., 14th Floor.
Riverside, CA 92501
(951) 955-5132

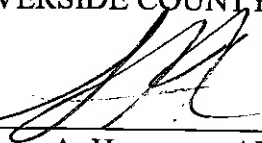
As authorized by the Riverside County Airport Land Use Commission (ALUC) pursuant to its Resolution No. 2011-02, as ALUC Director, I have reviewed City of Riverside Case No. P18-0290 (Zoning Ordinance Amendment), a proposal to amend the City’s Zoning Code with a comprehensive update to Chapter 19.556 Lighting. The proposed amendments includes: a re-organization and update to bring the existing Code into compliance with State laws (California Title 24 – Building Energy Efficiency Standards and the California Energy Commission) and technological advancements; new or modified definitions related to lighting; creation of lighting zones; new design and development standards; new procedures for reviewing lighting plans; and establishing prohibited types of lighting. There are no development standard changes or changes to zoning land uses that would increase residential density or non-residential intensity within the proposed amendment. ALUC’s standard lighting condition: “that all lighting shall be hooded and facing downward to prevent light spillage and reflection”, has been incorporated within the Development Standards of the proposed amendment. Therefore, this amendment has no possibility of having an impact on the safety of air navigation within airport influence areas located within the City of Riverside.

www.rcaluc.org

As ALUC Director, I hereby find the above-referenced project **CONSISTENT** with the 2014 March Air Reserve Base/Inland Port, 2005 Riverside Municipal, and 2004 Flabob Airport Land Use Compatibility Plans.

If you have any questions, please contact Paul Rull, ALUC Urban Regional Planner IV, at (951) 955-6893 or John Guerin, ALUC Principal Planner, at (951) 955-0982.

Sincerely,
RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION



Simon A. Housman, ALUC Director

AIRPORT LAND USE COMMISSION

Attachment for Airport Managers: Proposed Zoning Ordinance Amendment

cc: Kim Ellis, Manager, Riverside Municipal Airport
Gary Gosliga, March Inland Port Airport Authority
Daniel "Rock" Rockholt or Denise Hauser, March Air Reserve Base
Beth LaRock, Flabob Airport

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AIRPORT LAND USE COMMISSION

Attachment for Airport Managers: Proposed Zoning Ordinance Amendment

cc: Kim Ellis, Manager, Riverside Municipal Airport
Gary Gosliga, March Inland Port Airport Authority
Daniel "Rock" Rockholt or Denise Hauser, March Air Reserve Base
Beth LaRock, Flabob Airport

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PROPOSED TEXT OF CHAPTER 19.556 AS EXPANDED

Chapter 19.556

LIGHTING

- 19.556.100 Purpose.**
- 19.556.020 Definitions.**
- 19.556.030 Applicability.**
- 19.556.040 Exemptions.**
- 19.556.050 Permitted by Temporary, Conditional or Minor Conditional Use Permit.**
- 19.556.060 Lighting Zones.**
- 19.556.070 Design Review and Permitting.**
- 19.556.080 Design and Development Standards.**

19.556.010 Purpose.

This Chapter sets forth standards to ensure that outdoor lighting is adequate for safety, security and commerce while preserving the naturally dark night sky by mitigating artificial sky glow and preventing glare and light trespass.

19.556.020 Definitions.

For the purposes of this Chapter only, the following words and phrases are defined as follows:

“Architectural Floodlighting and Outlining” means the use of lighting to illuminate building facades, statuary, and similar edifices for appearance or other needs not involving visual tasks such as walking or driving.

“Artificial sky glow” means anthropogenic light scattered in the atmosphere that on clear nights reduces the ability to see stars and the Milky Way. It also has negative environmental impacts.

“Community & Economic Development Director” means the director of the Community & Economic Development Department of the City of Riverside or the person designated by the Community & Economic Development Director.

“Curfew” means the time each night that lighting shall be dimmed or turned off in accordance with Title 24, Part 6, Section 130.2 for non-residential lighting and Section 150.0 for residential lighting.

“Downlight” means that the luminaire emits no light above 90 degrees relative to nadir.

“Fully shielded” means a light fixture constructed and installed in such a manner that all light emitted by the fixture, either directly from the light source or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, is projected below the horizontal plane through the fixture’s lowest light-emitting part.

“Glare” means lighting entering the eye directly from a light fixture or indirectly from reflective surfaces that causes visual discomfort or reduced visibility.

“Light source” means, in generic terms, a source of optical radiation (i.e., “light”), often called a “lamp”, “bulb”, or “tube”. Examples include incandescent, fluorescent, high-intensity discharge (HID) lamps, and low-pressure sodium (LPS) lamps, as well as light-emitting diode (LED) modules and arrays.

“Light trespass” means light that falls beyond the property on which it originates. The amount of trespass is expressed in footcandles (fc) and is measured in the vertical plane at 5’ above grade at the property line of the site on which the light(s) is located. If the adjacent property is a public street or sidewalk, then the point at which trespassing light is measured shall be the center of the public property or right-of-way between the property on which the light originates and any adjacent property. Field measurements to determine light trespass compliance shall not include the effect of light produced by street lights.

“Lumen” means the unit of measure used to quantify the amount of visible light produced by a light source or emitted from a luminaire (as distinct from “watt,” a measure of power consumption).

“Luminaire” means outdoor electrically powered illuminating devices, including a light source, outdoor reflective or refractive surfaces, lenses, electrical connectors and components, and all parts used to mount the assembly, distribute the light and/or protect the light source, whether permanently installed or portable.

“Maximum Lumens” means the allowed maximum rated lumens per a photometric report or manufacturer’s product literature for a dedicated fluorescent, LED or HID luminaire or the rated lumens of the light source installed for a line voltage socket luminaire or a low voltage socket luminaire.

“Shielded Up-light” means a luminaire aimed upward within 30 degrees of straight up that employs a baffle or louver to prevent glare.

“Temporary lighting” means lighting that (a) employs a cord and plug that is not permanently wired and (b) is installed and removed when the temporary need is over, not to exceed 45 days, including but not limited to seasonal lighting.

“Outlining” means exposed light sources attached to structures for the primary purpose of attraction, branding or decoration.

19.556.030 Applicability.

Except as described below, all outdoor lighting installed or modified after the effective date of this Ordinance shall comply with these requirements. This includes, but is not limited to,

new lighting, replacement lighting, additions and alterations to existing lighting whether attached to structures, poles, the earth, or any other location. Applications for land use entitlements after the effective date of this ordinance shall comply with this chapter.

19.556.040 Exemptions.

- A. The following are not regulated by this Chapter:
1. Lighting within public right-of-way or easement.
 2. Lighting solely for signs (see 19.620).
 3. Repairs to existing luminaires, not including replacements or modifications.
 4. Temporary lighting.
 5. Underwater lighting in swimming pools and other water features.
 6. Short-term lighting associated with activities authorized by a Special Event Permit or Film Permit.
 7. Construction or emergency lighting which is temporary and is discontinued immediately upon completion of the construction work or abatement of the emergency.
 8. Lighting approved by Temporary, Minor Conditional or Conditional Use Permit.
 9. Lighting under the jurisdiction of Title 20 of the Riverside Municipal Code and for which a Certificate of Appropriateness has been granted.

19.556.050 Prohibited Lighting

- A. The following types of lighting are prohibited unless in conjunction with the exemptions provided in 19.556.040:
1. Dynamic lighting, such as moving lights, color changing lighting, or digital LED panels that flash, chase, change color, or changes intensity for any purpose other than serving as a traffic signal, safety light, or aviation or marine marker.
 2. Luminaires exceeding 500,000 peak candelas or 50,000 lumens

3. Aerial Laser lighting.
4. Lighting within Lighting Zone 0 except as permitted by Title 24, Part 6, Section 140.7.
5. Sport facility lighting.

19.556.060 Lighting Zones.**A. Lighting zones are defined as follows:**

1. Lighting Zone 0 (Zero) shall include undeveloped areas of parks, recreation areas, and wildlife preserves. These areas are undeveloped or intended to be preserved in a natural state that require little or no exterior light at night.
2. Lighting Zone 1 (One), shall include developed portions of parks, recreation areas, wildlife preserves, and the area within the Mt. Palomar Observatory boundary as shown in the General Plan which are suitable for low levels of exterior lighting at night.
3. Lighting Zone 2 (Two) shall include all areas of the City that are zoned RA-5, RC and RR which are suitable for modest levels of exterior lighting at night.
4. Lighting Zone 3 (Three) shall include all other areas of the City not in Lighting Zones 0, 1 or 2 which are suitable for medium to high levels of exterior lighting at night.

B. All proposed changes and appeals to Lighting Zone designations shall be approved by the City Council upon recommendation of the Planning Commission. The Community & Economic Development Director shall notify the California Energy Commission according to California Code of Regulations, Title 24, Part 1, Section 10-144(d).**19.556.070 Design Review and Permitting.****A. All proposed outdoor lighting installations involving new lighting or the modification, alteration, or replacement of outdoor lighting shall submit plans and related information as listed below:**

1. Plans depicting the proposed luminaires with certification from engineer, applicant and/or designee that the plans comply with this chapter.
2. Product specification data such as manufacturer's data sheets for each

luminaire and control device(s) or systems being used.

3. For non-residential properties, signed pages of required documents for Title 24 – Part 6 Section 140.7 and Title 24 – Part 11 Section 5.106.8 demonstrating compliance.
4. Details, elevations, summaries or calculations as required to demonstrate compliance with this Ordinance.
5. Such other data and information as may be required by the Community & Economic Development Director.

19.556.080 Design and Development Standards.

- A. All outdoor lighting shall be designed and implemented to mitigate light trespass onto adjacent properties and comply with the following:
 1. The correlated color temperature of all outdoor lighting shall be 3000 Kelvin or less, with tolerance within the ANSI standard C78.377 of LED sources.
 2. Shall comply with the California Title 24 California Code of Regulations, Title 24, Parts 1, 2, 6 and 11.
 3. Shall comply with Table 19.556.080 A – Lighting Limits for Residential Including Multifamily Properties with Fewer than 8 Units or Table 19.556.080 B – Lighting Limits for Non-Residential and Multifamily Residential Properties with 8 Units or more.
 - a. Except that, the maximum mounting height of luminaires (above adjacent grade) shall not apply to fully recessed luminaires.
 - b. Except that, the maximum mounting height for buildings with exterior entrance doors shall be 12 feet above adjacent floor unless recessed into an adjacent ceiling, soffit or overhang.
 - c. Average illumination of a façade or edifice shall not exceed 5 footcandles (50 lux).
 4. Lighting shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.

Table 19.556.080 A – Limits for Residential Including Multifamily with Less than 8 Units.

| Restriction | Lighting Zone 0 (Zero) | Lighting Zone 1 (One) | Lighting Zone 2 (Two) | Lighting Zone 3 (Three) |
|--|---|--|--|--|
| Automatic Lighting Controls | Per Title 24 Part 6 Section 150.0(k.) 3. (A).iii. | | | |
| Maximum lumens per fully shielded luminaire | 300 | 1000 | 2000 | 3000 |
| Unshielded and decorative lighting | Prohibited | One per residence not to exceed 300 lumens | Two per residence not to exceed 1000 lumens | Three per residence not to exceed 2000 lumens |
| Maximum mounting height of luminaires (above adjacent grade) | 8 feet | 12 feet | 12 feet | 25 feet |
| Landscape lighting maximum per luminaire | Prohibited | Downlight only not to exceed 300 lumens | Downlight and/or shielded uplight not to exceed 450 lumens per luminaire | Downlight and/or shielded uplight not to exceed 600 lumens per luminaire |
| Landscape lighting maximum lumens per acre | 0 | 6000 | 12000 | 18000 |
| Architectural Floodlighting | Prohibited | Prohibited | 20,000 lumens above horizontal plane | 20,000 lumens above horizontal plane |
| Maximum allowable light trespass | 0 | 0.1 footcandle (1 lux) | 0.2 footcandle (2 lux) | 0.5 footcandle (5 lux) |

Table 19.556.080 B – Limits for Non-Residential and Multifamily Properties more than 8 Units:

| Restriction | Lighting Zone 0 (Zero) | Lighting Zone 1 (One) | Lighting Zone 2 (Two) | Lighting Zone 3 (Three) |
|--|--|---|--|--|
| Maximum Allowed Lighting Watts | Per Title 24 Part 6 Section 140.7 | | | |
| Automatic Lighting Controls | Per Title 24 Part 6 Section 130.2 for non-residential properties and for multifamily residential properties of 8 residences or more. | | | |
| Backlight, uplight and glare limits | BUG 0,0,0 only | Per Title 24 Part 11 Section 5.106.8 | | |
| Unshielded and decorative lighting | Prohibited | Prohibited | Maximum 600 lumens per luminaire not to exceed 12000 lumens per acre. | Maximum 900 lumens per luminaire not to exceed 18000 lumens per acre |
| Maximum mounting height of luminaires (above adjacent grade) | 8 feet | 25 feet | | |
| Landscape lighting | Prohibited | Downlight only not to exceed 450 lumens | Downlight and/or shielded uplight not to exceed 600 lumens per luminaire | Downlight and/or shielded uplight not to exceed 900 lumens per luminaire |
| Maximum landscape lighting lumens per acre | 0 | 9000 | 12000 | 18000 |
| Architectural Floodlighting | Prohibited | Prohibited | 20,000 lumens above horizontal plane | 20,000 lumens above horizontal plane |
| Maximum allowable light trespass | 0 | 0.1 footcandle (1 lux) | 0.2 footcandle (2 lux) | 0.5 footcandle (5 lux) |

EXISTING TEXT OF CHAPTER 19.556 TO BE SUPERSEDED

Chapter 19.556**LIGHTING****19.556.010 Purpose.****19.556.020 Design and Development Standards.****19.556.010 Purpose.**

This Chapter sets forth standards for the lighting to ensure that lighting provided for projects is adequate to light the project for safety while not causing light spillage onto neighboring properties. (Ord. 6966 §1, 2007)

19.556.020 Design and Development Standards.

- A. Lighting for safety purposes shall be provided at entryways, along walkways, between buildings and within parking areas.
- B. Lighting support structures shall not exceed the maximum permitted building height.
- C. All on-site lighting shall provide an intensity of one foot-candle at ground level throughout the areas serving the public and used for parking.
- D. Flickering or flashing lights shall not be permitted.
- E. Light sources shall not be located in required buffer areas, except those required to illuminate pedestrian walkways.
- F. All lights shall be directed, oriented and shielded to prevent light from shining onto adjacent properties, onto public rights-of-way and into driveway areas in a manner that would obstruct drivers' vision.
- G. Light poles shall not exceed 20 feet in height, including the height of any concrete or other base material.
- H. The City may require submittal of an exterior lighting plan as part of any development application or as a condition of approval of a project. (Ord. 6966 §1, 2007)



**PLANNING COMMISSION HEARING DATE: MAY 31, 2018
AGENDA ITEM NO. 2**

SUMMARY

| | |
|-------------------------|---|
| Case Numbers | P18-0290 |
| Request | Consideration of a comprehensive update to Chapter 19.556 – Lighting of the Zoning Code (Title 19). Proposed amendments include, but are not limited to: 1) re-organization and update to bring the existing Code into compliance with State laws and technological advancements; 2) new or modified definitions related to lighting; 3) creation of lighting zones; 4) new design and development standards; 5) new procedures for reviewing lighting plans; and 6) establishing prohibited types of lighting. |
| Applicant | City of Riverside, Community & Economic Development Dept. |
| Project Location | Citywide |
| Ward | Citywide |
| Staff Planner | Christina Bartscher, AICP, Associate Planner; 951-826-2393; cbartscher@riversideca.gov |

RECOMMENDATIONS

Staff recommends that the Planning Commission recommend the following to the City Council:

1. Accept the Negative Declaration prepared for the project as complying with the California Environmental Quality Act (CEQA);
2. Find that, based on the Negative Declaration that has been prepared for the project, the project will not have a significant effect on the environment.
3. Approve Planning Case P18-0290 (Zoning Code Amendment), as shown in Exhibit 3 of the Planning Commission staff report.

AUTHORITY

Pursuant City Charter Article VIII, Section 806, and Riverside Municipal Code (RMC) Section 19.050.030, the Planning Commission is responsible for reviewing and making a recommendation

to the City Council on the proposed Zoning Code Amendment. Should the Commission choose to deny the project, the proposal will only move forward to the City Council if appealed.

PROPOSAL

The City's Community & Economic Development Department is proposing a Riverside Municipal Code (RMC) amendment to Title 19 (Zoning Code), which updates development regulations pertaining to outdoor lighting. Specifically, the amendment will be a comprehensive update to RMC Chapter 19.556 – Lighting. The revisions will:

- 1) Bringing the existing Code into compliance with new State laws and lighting technologies;
- 2) Provide clarity related to existing lighting definitions, and add new definitions, including those associated with newer technologies;
- 3) Establishes lighting zones in which different levels of maximum light intensity would be allowed;
- 4) Implements new development standards for all lighting projects, including new construction and renovations;
- 5) Creates new procedures for staff to review lighting plans; and

6) Establishes a list of lighting types that are prohibited. BACKGROUND

The proposed amendment to the existing Zoning Code's outdoor lighting standards were initiated to address three objectives, including: (a) updates to California Title 24 Building Energy Efficiency Standards; (b) a settlement agreement with Friends of the Hills, which requires the City to adopt a "dark sky ordinance"; and (c) an effort by Riverside Public Utility (RPU) to convert all public street lights in the City from high-pressure sodium streets (HPS) to more efficient LED street lights.

Energy Efficiency Standards:

California Title 24 – Building Energy Efficiency Standards is designed to ensure energy efficiency in buildings, and preserve environmental quality. Among other things, the Energy Standards establish requirements for outdoor lighting design and installation, whether attached to buildings, poles, structures or self-supporting, including in hardscape areas; lighting for building entrances, sales and non-sales canopies; lighting for all outdoor sales; and lighting for building facades.

The premises of the Energy Standards is to set an outdoor lighting "power allowances", which would ensure a consistent ambient level of light. This premise is based on (1) the human eye can naturally adjust to darker conditions; and (2) the human eye is prevented from adjusting to darker conditions when a bright light constricts the retina. Because most development projects today are designed with more lighting than is needed, the human eye is unable to see into the darkness beyond the project's bright light, which leads to the addition of more light to see farther. Additionally, one over-bright project begets another, as an adjacent property needs to add more lighting to compensate for the "night blindness" created by the first project, which ultimately leads to over-bright areas and significant amount of wasted energy. To reverse the trend of over-bright construction, the Energy Standards will limit the amount of light power that can be used for each project. The amount of power allowances is dependent on which "Lighting Zone" the project is located.

The Energy Commission has established outdoor power allowances and development standards for five different "Lighting Zones" (ranging from 0 through 4). Lighting Zone 0 (zero) has the lowest power allowance, with increasingly power allowed in Lighting Zones 1, 2, 3, and 4. The Energy Commission sets default Lighting Zones with boundaries based on the U.S. Census Bureau's urban and rural areas, and boundaries of wilderness and park areas.

The City of Riverside is completely contained within an urban boundary, per the U.S. Census. Therefore, the entire City defaults to Lighting Zone 3, which permit medium to high lighting power allowances, with additional restrictions for government designated parks, recreation areas, and wildlife preserves. However, local jurisdictions may deviate from the default zones, provided the changes are submitted to the Energy Commission. The City's proposed amendment seek to establish lighting zones that related to local conditions and desired aesthetics, such as preserving the natural Dark Sky.

Preserving the Dark Sky:

In 2008 the City of Riverside and *Friends of the Hills* entered into a settlement agreement, which required the City to amend General Plan 2025 and parts of the Municipal Code. Among other items, the agreement obligates the City to amend Title 19 to add "night-time sky" regulations, which would reduce light pollution, and include lighting restrictions recommended by the Mount Palomar Observatory.

While the City's proposed amendments address Title 24 Building Energy Efficiency Standards, they also seek to fulfill the 2008 agreement with the Friends of the Hills. The proposed amendments therefore sets forth standards to ensure lighting is adequate for safety, security and commerce; while preserving the naturally dark night sky through the mitigation of artificial sky glow, and preventing glare and light trespass.

Riverside Public Utilities Street Lighting Conversion:

The Riverside Public Utility (RPU) oversees the street lighting system within the City. On September 6, 2016 the City Council approved a Citywide Light Emitting Diode (LED) Conversion Program, which will convert all public streetlights from high-pressure sodium streets (HPS) lights to more efficient LED streetlights. These new lights provide better light quality and safety; energy efficient and cost savings; and reduce greenhouse gas emissions. While public street lights are not within the purview of the Zoning Code, updates to the Riverside Municipal Code (RMC) section 19.556 Outdoor Lighting was an item identified in the Scope of Work for the Citywide LED Conversion project. This is, in part, because LED lighting and mitigating over-bright development reduces energy consumption, which reduces the amount of energy RPU needs to produce or purchase.

The proposed amendments to RMC Section 19.556 – Outdoor Lighting integrate LED lighting technologies and benefits, including recommendations from a February of 2016 Council on Science and Public Health report that concluded LED lighting with a "color temperature" of 3000 Kelvin or lower discourage blue light emissions, glare, and other detrimental human and environmental effects.

DISCUSSION

The following is an overview of the proposed changes to Chapter 19.556 – Outdoor Lighting:

Reorganization and Update:

The proposed amendments are a complete redaction of the existing ordinance. The exiting ordinance only regulates height restrictions, maximum permitted lighting and shielding

requirements. The proposed ordinance seeks to expand the regulations to: Create lighting zones that maintain consistent ambient lighting levels, per California Title 24; adopt specific development standards for each lighting zone; updated definitions and terminology to be consistent with changes in technology; establish new or modified lighting plan submittal requirements; and define prohibited lighting types.

Lighting Zones:

Lighting Zones for the City are assigned as follows:

- Lighting Zone 0 (Zero) : Includes undeveloped areas of parks, recreation areas, and wildlife preserves. These areas are undeveloped, or intended to be preserved in a natural state, which requires little or no exterior light at night.
- Lighting Zone 1 (One) : Includes developed portions of parks, recreation areas, wildlife preserves, and the areas within the Mt. Palomar Observatory. The boundaries of these areas are as depicted in the General Plan. These areas are suitable for low levels of exterior lighting at night.
- Lighting Zone 2 (Two) : Includes all areas of the City that are zoned RA-5, RC and RR. These areas are suitable for modest levels of exterior lighting at night.
- Lighting Zone 3 (Three) : Includes all areas of the City not contained within Lighting Zones 0, 1 or 2. These areas are suitable for medium to high levels of exterior lighting at night.

Development Standards:

In addition to the standards established by the Energy Commission, the proposed changes apply additional development standards to protect the night sky from light pollution. These development standards are tailored to the individual lighting zones. Maximum lumens, mounting heights, and allowable light trespass are established for each lighting zone designation.

Definitions:

Technological advancements in the lighting industry, and energy cost savings, have boosted the conversion of high-pressure sodium bulbs to light emitting diodes (LED). The definition section has been updated to reflect the changes in technology and associated terminology.

Lighting Plan Review:

The proposed amendment changes the process for lighting plan submittals. In accordance with Title 24 Energy Efficiency Standards, lighting plans need to be accompanied by a signed self-certification documentation to ensure compliance.

Prohibited Lighting:

A section has been proposed to clarify types of lighting that are prohibited. This is necessary to address lighting types that can pose a danger to the public, or be a nuisance for nearby properties. The changes include the prohibition of dynamic or moving lights, aerial laser lighting, and luminaires in excess of 50,000 lumens.

ENVIRONMENTAL REVIEW

Planning Division Staff has determined that this project is will not have a significant effect on the environment, and a draft Negative Declaration (ND) has been prepared. This determination was made after conducting an initial study, which concluded that the proposed project consists of amendments to the lighting standards intended to reduce inappropriate or excessive use of artificial light thereby reducing overall effects of light pollution.

PUBLIC NOTICE AND COMMENTS

Pursuant to CEQA, a 20-day minimum review and comment period was provided for the Draft Negative Declaration (ND). The draft ND comment period was posted on May 4, 2018, and will end at 5:00 PM on May 25, 2018. A Notice of Intent was mailed to various Federal, State, regional, and local government agencies and other interested parties. The Notice of Intent was also published as a 1/8th page ad in the Press Enterprise. All comments received on the draft ND will be provided to the Commission for consideration.

APPEAL INFORMATION

Actions by the City Planning Commission, including any environmental finding, may be appealed to the City Council within ten calendar days after the decision. Appeal filing and processing information may be obtained from the Planning Department Public Information Section, 3rd Floor, City Hall.

EXHIBITS LIST

1. Staff Findings
2. Existing Ordinance
3. Proposed Text Amendments
4. 2008 Settlement Agreement with the Friends of the Hills
5. Report of the Council on Science and Public Health

Prepared by: Christina Bartscher, Associate Planner

Reviewed by: Jay Eastman, Principal Planner

Approved by: Rafael Guzman, Community & Economic Development Director



CITY OF
RIVERSIDE

COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT

PLANNING DIVISION

EXHIBIT 1 – STAFF FINDINGS

Case Numbers: P18-0290 (Zoning Code Text Amendments)

Zoning Code Amendment Findings Pursuant to Section 19.810.040

- a. The proposed Zoning Code Text Amendments are generally consistent with the goals, policies, and objectives of the General Plan because this proposal will be consistent with the. As a result of the proposed amendments, Title 19 will be revised to add “night-time sky” regulations to address light pollution consistent with the General Plan Policies OS-2.5, PF-6.3, PF-6.4 and PF-6.5.
- b. The proposal Zoning Code Text and Map Amendments will not directly adversely affect surrounding properties because the proposed amendments provide better protection to surrounding properties, by placing restrictions on the types of lighting and the reduction of glare and light pollution. In compliance with the California Environmental Quality Act (CEQA), a Draft Negative Declaration (ND) has been prepared to analyze potential environmental impacts as a result of the project. The ND concluded that the project could not have a significant effect on the environment.
- c. The proposal promotes public health, safety, and general welfare; it serves the goals and purposes of the Zoning Code; and the proposed Zoning Code Text Amendments will incorporate recommendations from a report by the Council on Science and Public Health, which are intended to reduce impacts on humans and the environment.

PAGE BREAK





AIRPORT LAND USE COMMISSION RIVERSIDE COUNTY

June 4, 2018

Ms. Phayvanh Nanthavongdouangsy, Principal Planner
Riverside County Planning Department
4080 Lemon Street, 12th Floor
Riverside CA 92501
(VIA HAND DELIVERY)

CHAIR
Steve Manos
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Vacancy

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Riverside

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Palm Springs

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Simon A. Housman

John Guerin
Paul Rull
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County Administrative Center
4080 Lemon St., 14th Floor.
Riverside, CA 92501
(951) 955-5132

**RE: AIRPORT LAND USE COMMISSION (ALUC) DEVELOPMENT REVIEW –
DIRECTOR’S DETERMINATION**

File No.: ZAP1028RG18
Related File No.: GPA180004 (General Plan Amendment)
APN: Countywide

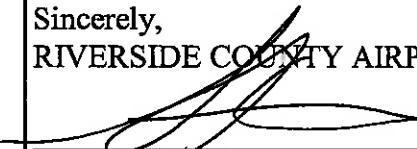
Dear Ms. Nanthavongdouangsy:

Under the delegation of the Riverside County Airport Land Use Commission (ALUC) pursuant to ALUC Resolution No. 2011-02, staff reviewed Riverside County Case No. GPA180004 (General Plan Amendment), a proposal to strengthen the greenhouse gas emissions reduction programs and regulations involving amendments to the policies included in the Air Quality Element of the Riverside County General Plan, Mitigation Measure 4.7.A-N1 as included in Environmental Impact Report No. 521 (EIR No. 521 MM 4.7.A-N1), Chapters 4 and 7 and the Table of Contents/List of Tables of the Riverside County Climate Action Plan, and the associated Greenhouse Gas Emissions Screening Tables document prepared by Atkins in March 2015 in accordance with the Riverside County Board of Supervisors’ executed Partial Settlement Agreement with the Sierra Club, the Center of Biological Diversity, and the San Bernardino Audubon Society, and determined that this local agency proposal is not inconsistent with, nor has the possibility to be inconsistent with, the land use planning guidelines contained in the 2004 Riverside County Airport Land Use Compatibility Plan or any of the subsequently adopted Airport Land Use Compatibility Plans affecting land in the County of Riverside. Therefore, as ALUC Director, I hereby find the above-referenced project **CONSISTENT** with all Riverside County Airport Land Use Compatibility Plans.

www.rcaluc.org

If you have any questions, please contact Paul Rull, ALUC Urban Regional Planner IV, at (951) 955-6893 or John Guerin, ALUC Principal Planner, at (951) 955-0982.

Sincerely,
RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION


Simon A. Housman, ALUC Director

Attachments: Proposed General Plan Amendment

Y:\AIRPORT CASE FILES\Regional\ZAP1028RG18\ZAP1028RG18.LTR.doc

The following section consists only of those pages that include new, amended, or deleted text of the applicable documents.

Changes in document dates, etc. are not included in this section.

inventory is for the County as a whole, as defined by its geographical borders and the other inventory is for the emissions resulting from the County's municipal operations.

- AQ 18.2 **Adopt GHG emissions reduction targets.** Pursuant to the results of the Carbon Inventory and Greenhouse Gas Analysis for Riverside County, future development proposed as a discretionary project pursuant to the General Plan shall achieve *sufficient reductions in a* greenhouse gas emissions ~~reduction of 25% compared to Business As Usual (BAU) project~~ in order to be found consistent with the County's Climate Action Plan. ~~(CAP). (AI 26)~~
- AQ 18.3 **Develop a Climate Action Plan for reducing GHG emissions.** The Riverside County CAP has been developed to formalize the measure necessary to achieve County GHG emissions reduction targets. The CAP includes both the policies necessary to meet stated targets and objectives are met. These targets, objectives and Implementation Measures may be refined, superseded or supplemented as warranted in the future. (AI 146)
- AQ 18.4 **Implement policies and measures to achieve reduction targets.** The County shall *require* implementation of the greenhouse gas reduction policies and measures established under the County Climate Action Plan for all new discretionary development proposals. ~~(AI 23, 147)~~
- AQ 18.5 **Monitor and verify results.** The County shall monitor and verify the progress and results, *and make any necessary revisions to, the CAP by 2020 and a minimum every four years thereafter. The progress and results of, and revisions to, the CAP will be made available to the public for review prior to approval. If monitoring reveals that the targets of the CAP are not being met, the CAP shall be revised to ensure that any changes needed to stay 'on target' with the stated goals are accomplished. _of the CAP periodically. When necessary, the CAPs "feedback" provisions shall be used to ensure that any changes needed to stay "on target" with stated goals are accomplished.* ~~(AI 26, 147)~~

General Plan Policies and Climate Action Plan

As indicated above, the CAP is an independent document that elaborates on the General Plan goals and policies relative to GHG emission and provides a specific implementation tool to guide decisions regarding Riverside County operations, retrofit programs for existing communities, as well as land use decisions. However, since the General Plan is the blueprint for future growth in Riverside County, the following policies provides additional guidance in review and discretionary approval of private land use projects (such as residential, commercial and industrial development).

Policies:

- AQ 19.1 Continue to coordinate with CARB, SCAQMD, and the State Attorney General's office to ensure that the milestones and reduction strategies presented in the General Plan and the CAP adequately address the county's GHG emissions. (AI 110, 111, 113)
- AQ 19.2 Utilize County's CAP as the guiding document for determining County's greenhouse gas reduction thresholds and implementation programs. Implementation of the CAP and its monitoring program shall include the ability to expand upon, or where appropriate, update or replace the Implementation Measures established herein such that the implementation of the CAP accomplishes the greenhouse gas reduction targets. (AI 146)

- ~~AQ 19.3 Require new development projects subject to County discretionary approval to achieve the greenhouse gas reduction targets established in the CAP either through: (AI 147)~~
- ~~a. Garnishing 100 points through the Implementation Measures found the County's CAP; or~~
- ~~b. Requiring quantification of project specific GHG emissions and reduction of GHG emissions to, at minimum, the applicable GHG reduction threshold established in the CAP.~~
- ~~AQ 19.4 All discretionary project proposals shall analyze their project specific GHG reduction targets in comparison to the "business as usual" (BAU) scenario for the development's operational life and the "operational life" of a new development shall be defined as a 30-year span. Other methods for calculating BAU and showing GHG emissions reductions may be used provided such methods are both scientifically defensible and show actual emission reduction measures incorporated into project design, mitigation or alternative selection. Alternatively, a project may use the CAP Screening Tables to show the attainment of the applicable number of points needed to ensure adequate GHG reductions and CAP compliance. (AI 47, 147)~~

“

The general planning process presents a powerful opportunity to carefully consider and shape future land use patterns and ensure that development is consistent with AB 32. As the Air Resources Board noted in its recent AB 32 Scoping Plan, 'local governments are essential partners in achieving California's goals to reduce greenhouse gas emissions.'

”

California Attorney General, Edmund G. Brown

- ~~a.~~ This reduction shall be measured in comparison to the “business as usual” (BAU) scenario for the development’s operational life. The BAU scenario shall be consistent with the General Plan build-out assumptions detailed in Appendix E-1 of the General Plan.
- ~~b.~~a. For the purposes of this policy, the “operational life” of a new development shall be defined as a 30-year span with construction emissions amortized over the 30 years.
- ~~c.~~b. For the purposes of this policy, “new development” refers to private development occurring pursuant to a discretionary land use approval issued by the County of Riverside and subject to binding Conditions of Approval. This definition generally corresponds to projects found non-exempt pursuant to the California Environmental Quality Act (CEQA), but is nevertheless subject to the sole discretion of the County of Riverside as lead agency.
- ~~d.~~c. Other methods for ~~calculating BAU and~~ showing GHG emissions reductions may be used provided such methods are both scientifically defensible and show actual emission reduction measures incorporated into project design, mitigation or alternative selection. That is, reductions must not be illusory “paper” reductions achieved merely through baseline manipulation.
- ~~e.~~d. Nothing in this policy shall be construed as accepting any proposed discretionary project from any legally applicable CEQA requirements or explicitly limiting the scope any analyses required to show CEQA compliance.

AQ 21.2 Implementation Measures found necessary for a given project pursuant to the CAP Screening Tables shall be incorporated into a project’s *Mitigation and Monitoring Program as required under CEQA to ensure the measures are implemented appropriately. Such Implementation Measures may also be separately incorporated into the* Conditions of Approval issued by the County. *In the event no Mitigation and Monitoring Program is required for a project, the Implementation Measures shall be incorporated into a project’s Conditions of Approval issued by the County.* ~~to ensure the measures are implemented appropriately. (AI-147)~~

AQ 21.3 Discretionary Measures - Because of the varied nature of the private development proposals reviewed by the County, in some cases, the Implementing Measures in the CAP may not provide the most appropriate means for achieving the required Interim GHG reductions. In such cases, the following alternate measures may be utilized, at the County’s discretion:

- a. For large-scale developments, such as specific plans, business parks, industrial centers, and those triggering a full Environmental Impact Report, a custom GHG analyses may be warranted to both assure compliance with the applicable targets herein and to provide a customized array of appropriate reduction measures.
- b. In such cases, the resultant GHG analysis may be used to develop customized GHG reduction measures in place of the CAP’s Implementing Measures, provided they achieve the stated targets or implement all feasible mitigation short of achieving the applicable targets.
- c. Project-specific analysis may be particularly valuable when assessing large-scale mixed use developments. In such developments, significant energy efficiencies and VMT reductions can result from smart growth design features, such as provision of housing, jobs, services and recreation within a 5- to 10-minute walking radius. Project-specific analysis in these cases may

Riverside County General Plan Update
 Mitigation Monitoring and Reporting Program

| Mitigation No. | Mitigation Measure | Person(s) to Verify | Timing of Verification | | | Responsible Party | Completed | | Comments |
|----------------|--|------------------------------|------------------------|--------------|------------|-------------------|-----------|------|----------|
| | | | Pre-Const | During Const | Post-Const | | Initials | Date | |
| | <ul style="list-style-type: none"> a. The construction contractor shall select the construction equipment used on site based on low emission factors and high energy efficiency. b. The construction contractor shall ensure that construction grading plans include a statement that all construction equipment will be tuned and maintained in accordance with the manufacturer's specifications. c. The construction contractor shall utilize electric- or diesel-powered equipment, in lieu of gasoline powered engines, where feasible. d. The construction contractor shall ensure that construction grading plans include a statement that work crews will shut off equipment when not in use. During smog season (May through October), the overall length of the construction period will be extended, thereby decreasing the size of the area prepared each day, to minimize vehicles and equipment operating at the same time. e. The construction contractor shall time the construction activities so as to not interfere with peak hour traffic and minimize obstruction of through traffic lanes adjacent to the site; if necessary, a flag person shall be retained to maintain safety adjacent to existing roadways. f. The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew. g. Item g, dust control measures omitted, since not applicable to GHGs. | | | | | | | | |
| 4.7.A-N1 | To ensure GHG emissions resulting from new development are reduced to levels necessary to meet state targets, the County of Riverside shall require all new discretionary development to comply with the Implementation Measures of the Riverside County Climate Action Plan for residential, commercial, industrial, institutional and mixed-use projects. or provide comparable custom measures backed by a project GHG study (for example, using CalEEMod modeling) demonstrating achievement of the same target. The target to be met is a GHG emissions reduction of 25% below emissions for the BAU scenario for residential, commercial, industrial, institutional and mixed-use projects. The BAU is based upon the 2020 adjusted BAU found in the Final Supplement to the AB 32 Scoping Plan (CARB 2011). | Riverside County or Designee | X | | | | | | |
| 4.7.A-N2 | In lieu of a project-specific analysis per Mitigation Measure 4.7.A-N1, a future discretionary project proposed pursuant to the Riverside County General Plan shall incorporate into the project design, operational | Riverside County or Designee | X | | | Riverside County | | | |

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- Restricting the number of parking spaces within the development by sharing parking among different land uses where feasible. For example, in areas where there are multiple land uses, provide resident restricted parking during nighttime hours (7pm to 7am) and open the parking lot for use by patrons of the surrounding commercial buildings during daytime hours; and
- Provide convenient pedestrian pathways through parking areas.

R2-T5: Roadway Improvements Including Signal Synchronization and Transportation Flow Management

This R2 measure would implement General Plan Policies AQ 12.1 and AQ 12.3. Proposed development projects that pay fare-share fees toward signal synchronization improvements or construct signalized intersections within a traffic signal synchronization system would gain points within the Screening Table through this R2 Measure. These modifications include, but are not limited to, synchronization of signals, improvement of traffic flow, the development of parallel roadways and support for the extension of freight rail into Riverside County's industrial areas. Even when required for other reasons, such as warranted by project traffic study results, such circulation improvements may still qualify for Screening Table points under this measure.

R2-T6: Provide a Comprehensive System of Facilities for Non-motorized Transportation

This measure emphasizes alternative non-motorized transportation hubs and encourages the creation of bike lanes and walking paths connecting to schools and other public facilities, provision of adequate bicycle parking; and encouragement of bicycle stations, attended parking, and other attended bicycle support facilities at intermodal hubs. Bicycle stations are full-service bicycle facilities that, in addition to providing secure, guarded bicycle parking, could include other amenities such as "valet" bicycle service, showers, bicycle rentals, or repair services. These types of facilities are intended for large residential and non-residential development as well as large employers (e.g., of 500 or more employees). In addition, the establishment of multi-use trails that promote off-street bicycle and pedestrian travel, as well as provision of secure bicycle racks, along these pathways would also promote their use.

R2-T7: Expand Renewable Fuel/Low-Emission Vehicle Use

Implementation of the following R2 measure would promote the expanded use of renewable fuel and low-emission vehicles within proposed projects. The project will earn points in the screening table by making low-emissions or electric vehicle use more accessible by including one or both of the following project components:

- Providing preferential parking for ultra-low emission, zero-emission, and alternative-fuel vehicles;
- Provide circuit and capacity in ~~all~~ garages of residential units and all new large-scale commercial buildings, over 162,000 square feet for installation of electric vehicle charging stations
 - Install electric vehicle charging stations in ~~all the~~ garages of residential units for new development projects
 - Install electric vehicle charging stations in garages or secure areas of parking for new large-scale commercial buildings over 162,000 square feet of floor space.

R2-E7: Commercial/Industrial Retrofit Program

This R2 measure would implement General Plan Policies AQ 5.2, AQ 5.4, OS 16.1, OS 16.7 and OS 16.9 and encourage all commercial or industrial buildings undergoing major renovations to reduce their energy consumption by a minimum of 20%. As with the new development, a menu of options will be provided to assure flexibility in the implementation of this reduction measure. Although not limited to these actions, this reduction goal can be achieved through the incorporation of the following energy efficiency and renewable energy technologies:

- Replace inefficient air conditioning and heating units with new energy efficient models
- Replace older, inefficient appliances with new energy efficient models
- Replace old windows and insulation with top-quality windows and insulation
- Install solar water heaters
- Replace inefficient and incandescent lighting with energy efficient lighting
- Weatherize the existing building to increase energy efficiency
- Install solar panels

R2-E8: Induction Streetlight Retrofits

New induction street lamps are estimated to last five times longer and consume 50% less energy than the traditional high pressure sodium (HPS) lamps. Changing out old lamps for new ones reduces electricity use and saves money in the long-run. Retrofitting streetlights shall be done in accordance with Riverside County's Mt. Palomar Lighting Ordinance, which requires use of low pressure sodium vapor (LPSV) street lighting within 15 miles of Mt. Palomar Observatory and Riverside County Ordinance No. 915 regulating light pollution countywide.

R2-E9: Increase Gas to Energy Production from Landfills

This R2 measure would implement General Plan Policies OS-10.1, OS-11.1 through OS-11.3 and OS-12 by increasing Riverside County's generation of electricity from waste-generated methane. Currently, the Badlands Landfill operates a 1.3 MW generation facility with a capacity for approximately 8,200 mWh annual generation. The El Sobrante Landfill currently operates a 3.8 MW generation facility with a capacity for generating 24,000 mWh annually. Under this measure, Riverside County will increase gas-to-energy generation by: (1) increasing the capacity at the Badlands to a 4 MW system and increasing operation to 90% by 2020; (2) increasing the El Sobrante's facility operation to 90%; and (3) installing a 1.3 MW system at the Lamb Canyon Landfill and having that facility in operation 90% of the year.

R2-E10: On-Site Renewable Energy Production

On-site renewable energy production (including but not limited to solar) shall be required for any tentative tract map, plot plan, or conditional use permit that proposes to add more than 75 new dwelling units of residential development or one or more new buildings totaling more than 100,000

gross square feet of commercial, office, industrial, or manufacturing development, as described further below:

- a. Any such development shall offset its energy demand as provided below, unless such offsets are demonstrated by the applicant to be infeasible:

 - i. Commercial, office, industrial or manufacturing development: 20 percent of energy demand*
 - ii. Multi-family residential development: 20 percent of energy demand*
 - iii. Single-family residential development: 30 percent of energy demand**

The County will revisit these offset requirements based on current technology each time it revises the CAP, with the expectation that offset requirements will increase over time.

- b. Examples of reasons that meeting on-site renewable energy production requirements may be infeasible include, but shall not be limited to:*

(1) for on-site solar energy production, the project site lacks available unshaded areas;

(2) the configuration of the parcels on which the buildings or buildings are planned to be located are not suited for any type of on-site renewable energy production; and

(3) on-site renewable energy production conflicts with other land use regulations applicable to a particular site, such as historic districts or Airport Influence Areas (e.g., where the Airport Land Use Commission or the County determines a technology to be hazardous for a site within an Airport Influence Area). If meeting the offset requirements in subpart (a) is infeasible, an applicant must nevertheless install on-site renewable energy production to the greatest extent feasible.

- c. Any determination that on-site renewable energy production is infeasible, including economic infeasibility, shall be supported by substantial evidence and independently verified by the County. A determination of infeasibility for development within an Airport Influence Area may be as part of the required Airport Influence Area may be made as part of the required Airport Land Use Commission review.*
- d. The feasibility of on-site renewable energy production shall be evaluated at the time of preparation of the first environmental review document (including by not limited to any environmental review for any specific plan adoption or amendment that proposes to add more than 75 units of residential or one or more buildings totaling more than 100,000 gross square feet of new commercial, office, industrial, or manufacturing development). The feasibility evaluation and supporting documentation shall be available for public review as content within the environmental review document, or as a supporting reference document.*

- e. *Implementation of feasible on-site renewable energy production shall be required as a condition of any new tract map, plot plan, or conditional use permit issued in connection with the development.*
- f. *The requirement for on-site renewable energy production is not intended to require a reduction in permissible project density or a change in permissible project type.*
- g. *The requirements of this settlement point shall apply regardless of whether the project meets the 3,000 MT CO₂E threshold discussed in the CAP. The requirements of this settlement point shall apply only to applications submitted 45 days or more after County's final action amending the CAP to include these requirements.*
- b. *Residential dwelling units in publicly subsidized projects to be constructed as housing for lower income households (as defined in Health and Safety Code section 50079.5) are exempt from the on-site renewable energy production requirements set forth in this Exhibit b to Agreement. Any other residential dwelling units or commercial, office, industrial, or manufacturing development built in conjunction with such units are not exempt, so long as they independently meet the size requirements identified in R2-E10 ~~Section 4 of this Exhibit B~~, above, except for mobilehome parks that separately qualify as exempt under ~~the Exhibit B section 4~~.*
- i. *Mobilehome parks that are reasonably anticipated to be used primarily for low-income families are also exempt from the on-site renewable energy requirements set forth in this R2-E10 ~~Section 4~~. Factors the County will consider in making this determination include the proposed mobilehome park's lot size, location, and proposed amenities. Mobilehome parks that include a golf course as a proposed amenity are not exempt from the on-site renewable energy requirements set forth in R2-E10 ~~the Exhibit B~~.*

C. R3 Energy Measures

The following R3 measures enhance and/or ensure the reductions accounted for within the R2 measures through education programs or are measures that will reduce emissions but cannot be quantified.

R3-E1: Energy Efficient Development, and Renewable Energy Deployment Facilitation and Streamlining

This measure would encourage Riverside County to identify and remove regulatory and procedural barriers to the implementation of green building practices and the incorporation of renewable energy systems. This includes the General Plan Energy Element Policies. Implementation of the Energy Element Policies includes updating of codes and zoning requirements and guidelines among others to facilitate renewable energy deployment and streamlining. This measure could be further enhanced by providing incentives for energy efficient projects such as priority in the reviewing, permitting and inspection process. Additional incentives could include permit streamlining and CEQA streamlining in exchange for incorporating green building practices or renewable energy systems.

7.6 STEP 6 – Monitoring and Inventorizing

The County of Riverside will create a system for monitoring the implementation of this CAP and adjusting the plan as opportunities arise. As the plan is implemented and as technology changes, the CAP should be revised to take advantage of new and emerging technology. If promising new strategies emerge, the County of Riverside will evaluate how to incorporate these strategies into the CAP. Further, state and federal action will also result in changes which will influence the level of Riverside County emissions.

Screening tables completed during project review, as described in Section 7.5 above, will serve as documentation of the implementation of reduction measures. The County of Riverside shall retain the completed screening tables in order to maintain a record of the types and levels of implementation of each of the R2 measures. The point values in the completed screening tables also document the estimated levels of emission reductions anticipated during implementation. By maintaining these records, the County of Riverside can monitor the CAP reduction measure implementation and compare the anticipated emission reductions with the goals for the CAP over time.

The GHG inventory will be periodically updated in coordination with the three phases noted above: 2013 (to update with the Regional Transportation Plan outputs and Phase 1 progress); 2017 (to review Phase 2 progress, allow for course corrections to keep progress on target for 2020, and to develop post-2020 forecasts for use in planning for after 2020); and 2020 (to establish baseline for post-2020 GHG reduction planning). ~~The County of Riverside will also implement a monitoring and reporting program to evaluate the effectiveness of reduction measures with regards to progress towards meeting the goals of the CAP.~~

To provide periodic updates to the CAP inventory of GHG emissions, Riverside County will use a Microsoft (MS) Excel format emissions inventory tool developed by the CAP consultant. This tool will include all the emission factors and emission sources specific to Riverside County. The tool will be designed such that Riverside County staff can input VMT, water use, solid waste and energy consumption data and the tool will quantify emissions for the unincorporated areas.

The County of Riverside will also implement a monitoring and reporting program to evaluate the effectiveness of reduction measures with regards to progress towards meeting the goals of the CAP. This program will ensure that the effectiveness of all implementation measures are reviewed in advance of 2020 and that adjustments to assigned point value to account for actual effectiveness are made in the post-2020 CAP. If measures included in this CAP are found to be ineffective, those measures will be removed or revised in the post-2020 CAP.

The CAP Implementation Coordinator shall be responsible for maintaining records of reduction measure implementation and insuring that the periodic updates to the emissions inventory are completed using the MS Excel based emission inventory tool.

7.7 STEP 7 – Beyond 2020

As described above under the discussion of Reduction Goals, 2020 is only a milestone in GHG reduction planning. Executive Order S-03-05 calls for a reduction of GHG emissions to a level 80 percent below 1990 levels by 2050, and this level is consistent with the estimated reductions needed to stabilize atmospheric levels of CO₂ at 450 parts per million (ppm). Thus, there will be a need to start planning ahead for the post-2020 period. The County of Riverside will commence planning for the post-2020 period starting in 2017, at the approximate midway point between plan implementation and the reduction target and after development of key ordinances and implementation of cost-effective measures. At that point, Riverside County will have implemented the first

two phases of this CAP and will have a better understanding of the effectiveness and efficiency of different reduction strategies and approaches. Further, the state's regulations under AB 32 would have been fully in force since 2012; federal programs and policies for the near term are likely to be well underway; market mechanisms like a cap and trade system are likely to be in force and will be influencing energy and fuel prices; and continuing technological change in the fields of energy efficiency, alternative energy generation, vehicles, fuels, methane capture and other areas will have occurred. Riverside County will then be able to take the local, regional, state and federal context into account. Further, starting in 2017 will allow for development of the post-2020 plan so that it can be ready for full implementation, including potential new policies, revisions to the General Plan (as necessary), programs, ordinances, and financing by 2020. The new plan will include a specific target for GHG reductions for 2035 and 2050. The targets will be consistent with broader state and federal reduction targets and with the scientific understanding of the needed reductions by 2050. The County of Riverside will adopt the new plan by January 1, 2020.

The new CAP adopted on or before January 1, 2020 will keep on track through 2035 to meet the 2050 goal by implementing the following.

- Increase energy efficiency and green building efforts (for County municipal facilities as well as private buildings within the unincorporated areas) so that the savings achieved in the 2020 to 2035 timeframe are approximately 69% those accomplished in 2020.
- Continue to implement land use and transportation measures to lower VMT and shift travel modes (assumed improvement of 8% compared to the unmitigated condition, which is within SCAG's assumed range of 8% to 12% of GHG reductions for 2035).
- Capture more methane from landfills receiving regional waste, move beyond 75% local waste diversion goal for 2020, and utilize landfill gas further as an energy source.
- Continue to improve local water efficiency and conservation.
- Continue to support and leverage incentive and rebate and other financing programs for residential and commercial energy efficiency and renewable energy installations to shorten payback period and costs and to develop programs that encourage increased use of small-scale renewable power as it becomes more economically feasible.
- *Require ongoing monitoring and verification of results. Every four years, the County will update the GHG inventory, review the effectiveness of specific measures, and revise their associated point value according to the available evidence. If existing measures are found to be ineffective, those measures will be removed or revised in the four-year cycle. The proposed changes will be available for public review and comment prior to approval at a public meeting.*

The conceptual effects of these strategies are presented in Table 7-2 and would represent an approximate doubling of effort from that planned at the state and County level for 2020. In total, the measures described above would produce reductions to bring the region's GHG emissions to an estimated 3 MMTCO_{2e} by 2035. While the potential mix of future GHG reduction measures presented in this section is preliminary, it serves to demonstrate that the current measures in the CARB Scoping Plan and the County's CAP can not only move the region to its 2020 goal, but can also provide an expandable framework for much greater long-term greenhouse gas emissions reductions toward the ultimate 2050 goal.

land uses but did not include industrial processes (i.e. oil refineries, heavy manufacturing, electric generating stations, mining operations, etc.). Emissions from each of these projects were calculated by SCAQMD to provide a consistent method of emissions calculations across the sample population further reducing potential errors in the statistical analysis. In calculating the emissions from projects within the sample population, construction period GHG emissions were amortized over 30-years (the average economic life of a development project).

This analysis determined that the 90th percentile ranged from 2,983 MT to 3,143 MT CO₂e per year. The **3,000 MT CO₂e per year** value is the low end value within that range rounded to the nearest hundred tons of emissions and is used in defining small projects that are considered less than significant and do not need to use the Screening Tables or alternative GHG mitigation analysis described below.

The **3,000 MT CO₂e per year** value is used in defining small projects that, when combined with the modest efficiency measures shown in the bullet points below are considered less than significant and do not need to use the Screening Tables or alternative GHG mitigation analysis described below. The efficiency measures required of small projects are summarized below:

- Energy efficiency of at least five percent greater than 2010 Title 24 requirements, and
- Water conservation measures that matches the California Green Building Code in effect as of January 2011.

Projects that Exceed 3,000 MT CO₂e Emission Level

METHODOLOGY FOR THE CALCULATION OF GHG EMISSIONS

~~Analysis of d-Development projects that are determined to be above exceeding the 3,000 MT CO₂e emissions level shall quantify and disclose the anticipated greenhouse gas emissions of the proposed project. can either be done through emissions calculations or by using the screening tables beginning on Page 7.~~

Total GHG emissions are the sum of emissions from both direct and indirect sources. Direct sources include mobile sources such as construction equipment, motor vehicles, landscape equipment; and stationary sources such as cooling and heating equipment. Indirect sources are comprised of electrical and potable water use, and the generation of solid waste and waste water.

Direct GHG emissions from mobile and stationary sources are determined as the sum of the annual GHG emissions from construction equipment, motor vehicles, landscape equipment, and heating and cooling equipment.

Screening Tables

The purpose of the Screening Tables is to provide guidance in measuring the reduction of greenhouse gas emissions attributable to certain design and construction measures incorporated into development projects. The analysis, methodology, and significance determination (thresholds) are based upon the Riverside County GHG Technical Report, which includes GHG emission inventories, a year 2020 emission reduction target, and the goals and policies to reach the target. The methodology for the development and application of the Screening Table is set forth in Appendix A, attached hereto.

Instructions for Application to Projects

The Screening Table assigns points for each option incorporated into a project as mitigation or a project design feature (collectively referred to as “feature”). The point values correspond to the minimum emissions reduction expected from each feature. The menu of features allows maximum flexibility and options for how development projects can implement the GHG reduction measures. Projects that garner at least 100 points will be consistent with the reduction quantities anticipated in the County’s GHG Technical Report. ~~As such, these projects that garner a total of 100 points or greater would not require quantification of project-specific GHG emissions.~~ Consistent with CEQA Guidelines, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.

Those Projects that do not garnish 100 points using the screening tables will need to provide additional analysis to determine the significance of GHG emissions. Nothing in this guidance shall be construed as limiting the County’s authority to adopt a statement of overriding consideration for projects with requiring the preparation of an EIR due to a project’s significant GHG impacts. The following tables provide a menu of performance standards/options related to GHG mitigation measures and design features that can be used to demonstrate consistency with the implementation measures and GHG reduction quantities in the GHG Technical Report.

Mixed use projects provide additional opportunities to reduce emissions by combining complimentary land uses in a manner that can reduce vehicle trips. Mixed use projects also have the potential to complement energy efficient infrastructure in a way that reduces emissions. For mixed use projects fill out both Screening Table 1 and Table 2, but proportion the points identical to the proportioning of the mix of uses. As an example, a mixed use project that is 50% commercial uses and 50% residential uses will show ½ point for each assigned point value in Table 1 and Table 2. Add the points from both tables. Mixed use projects that garner at least 100 points will be consistent with the reduction quantities in the County’s GHG Plan and are considered less than significant for GHG emissions.

CEQA THRESHOLDS AND SCREENING TABLES

| Feature | Description | Assigned Point Values | Project Points |
|--|---|----------------------------------|----------------|
| Implementation Measure IM T7: Electric Vehicle Use | | | |
| T7.A.1 Electric Vehicle Recharging | Provide circuit and capacity in garages of residential units for installation of electric vehicle charging stations | 1 point | |
| | Install electric vehicle charging stations <i>for each residential unit included in the project. Projects that include charging stations for fewer than all units shall receive points on a proportional basis. in the garages of residential units</i> | 8 points | |
| Implementation Measure IM T9: Increase Public Transit | | | |
| T9.A.1 Public Transit Access | The point value of a projects ability to increase public transit use will be determined based upon a Transportation Impact Analysis (TIA) demonstrating decreased use of private vehicles and increased use of public transportation. Increased transit accessibility (1-15 points) | TBD | |
| Implementation Measure IM L1: SCAQMD No New Wood Burning Stoves | | | |
| L1.A.1 Wood Burning | <i>As part of Rule 445 and the Healthy Hearths™ initiative, the South Coast Air Quality Management District adopted a rule for no permanently installed indoor or outdoor wood burning devices in new development. Project contains no wood burning stoves or fireplaces (required)</i> | 0 points | |
| Implementation Measure IM L2: Prohibit Gas-Powered Equipment | | | |
| L2.A.1 Landscape Equipment | Electric lawn equipment including lawn mowers, leaf blowers and vacuums, shredders, trimmers, and chain saws are available. When electric landscape equipment is used in place of conventional gas-powered equipment, direct GHG emissions from natural gas combustion are replaced with indirect GHG emissions associated with the electricity used to power the equipment. Project provides electrical outlets on the exterior of all building walls so that electric landscaping equipment is compatible with all built facilities. | 8 points | |
| Implementation Measure IM SW1: 80 Percent Solid Waste Diversion Program | | | |
| SW1.A.1 Recycling | County initiated recycling program diverting 80% of waste requires coordination in neighborhoods to realize this goal. The following recycling features will help the County fulfill this goal: Provide green waste composting bins at each residential unit Multi-family residential projects that provide dedicated recycling bins separated by types of recyclables combined with instructions/education program explaining how to use the bins and the importance of recycling. | 4 points 3 points | |
| Implementation Measure IM SW2: Construction and Demolition Debris Diversion Program | | | |
| SW2.A.1 Recycling of Construction/ Demolition | 50% of construction waste recycled (required) Recycle 55% of debris Recycle 60% of debris | 0 points 2 points 3 points | |

The following section consists of the entirety of the following documents: Air Quality Element (as amended), Climate Action Plan (as amended).

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Chapter 9

Air Quality Element

Introduction

“

Air quality attainment goals established by the South Coast Air Quality Management District have been more than met despite the substantial growth in the region in the last 20 years. Most of this is a result of significantly improved engine technology and the replacement of more polluting vehicles. However, local initiatives that expanded transit options, concentrated development more efficiently, and increased local employment opportunities have also contributed to air quality improvement.

”

- RCIP Vision

Why Is Air Quality Important?

The quality of the air we breathe directly affects our health, environment, economy and our quality of life. Because the inside of our bodies are in constant contact with the outside world through the oxygen we inhale, air pollutants make their way to our lungs and into our blood stream. Air pollutants are defined in the Clean Air Act as carbon monoxide, lead, nitrogen dioxide, ozone, sulfur dioxide, and inhalable airborne particulate matter smaller than ten microns (these are further broken down by size as those smaller than ten microns being called respirable particulate matter or PM₁₀, and those 2.5 microns or smaller being called fine particulate matter or PM_{2.5}). An overabundance of these pollutants in the air can cause mild to severe health effects, including increased hospitalization and emergency room visits, respiratory illnesses, increased risk of developing cancer, decreased breathing capacity, lung inflammation, and difficulty in exercising and even a reduction in life-span.

Just as we are affected by air pollution, so too are plants and animals. Animals must breathe the same air and are subject to the same types of negative health effects. Certain plants and trees may absorb air pollutants which can stunt their development or cause premature death. There are also numerous impacts to our economy including lost work days due to illness, a desire on the part of business to locate in areas with a healthy environment, and increased expenses from medical costs. Pollutants may also lower visibility and cause damage to property. Certain air pollutants are responsible for discoloring painted surfaces, eating away at stones used in buildings, dissolving the mortar that holds bricks together, and cracking tires and other items made from rubber.

What Can We Do About Air Quality

Air quality is a regional issue, effecting and affected by every city and county. Although Riverside County generates the lowest emissions of any county in the South Coast Air Basin, air quality in the County is among the Basin's worst due to onshore winds transporting vast amounts of pollutants from Los Angeles and Orange Counties into the Inland Empire.



Ambient Air -
 Outside air, any portion of the atmosphere not contained by walls and a roof.

While the County and the region have made great strides in reducing air pollution, it is committed to meeting state and federal air quality guidelines. Policies and programs addressed in this element will focus on the two main sources of air pollutant emissions: mobile sources and stationary sources. Mobile sources include automobiles, motorcycles, trucks and airplanes. Motor vehicles constitute the largest generator of air pollutant emissions in Riverside County. Stationary sources produce significant amounts of pollutants and include electrical power-generating facilities, manufacturing, fabrication, miscellaneous industrial processes and combustion of natural gas.

One of the intents of this Air Quality Element is to provide background information on the physical and regulatory environment affecting air quality in the County. This element also identifies goals, policies and programs that are meant to balance the County's actions regarding land use, circulation and other issues with their potential effects on air quality. This element in conjunction with local and regional air quality planning efforts addresses ambient air quality standards set forth by the Federal Environmental Protection Agency and the California Air Resources Board (CARB).

Specifically in California, more and more emphasis has been placed on reducing greenhouse gas emissions with specifically set reduction targets to curtail impacts associated with climate change. Thus, it is critical that the General Plan also include the policies needed for the County to systematically address climate change and greenhouse gas emissions reductions. The policies and programs set forth in this element are intended to protect the health and welfare of our residents by improving air quality, protect our natural resources through enhanced conservation efforts, and ensuring expected growth of our County does not occur at the cost of the global climate.

The Setting



Santa Ana Winds -
 Santa Ana winds are generally defined as warm, dry winds that blow from the east or northeast (offshore) occurring predominantly between the months of December and February. The winds develop when a region of high pressure builds over the Great Basin (the high plateau east of the Sierra Mountains and west of the Rocky Mountains including most of Nevada and Utah) and move locally across the Mojave Desert and then over and through passes in the San Gabriel, San Bernardino and San Jacinto Mountains.

Riverside County is located within three air basins, as can be seen on Figure AQ-1, Riverside County Air Quality Basins. They are the South Coast Air Basin (SCAB), Salton Sea Air Basin (SSAB) and the Mojave Desert Air Basin (MDAB). Air quality within each basin is not only affected by various emissions sources (mobile, industry, etc.), but also by atmospheric conditions such as wind speed, wind direction, temperature and rainfall. The following provides a description of each air basin and its relevant climate and meteorological conditions affecting air pollution.

South Coast Air Basin

Western Riverside County (west of the San Geronio Pass) is located within the South Coast Air Basin (SCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties. Air quality conditions in the SCAB are under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

According to the Air Quality Management Plan (AQMP) adopted by the SCAQMD for the air basin, the worst air quality problem in the nation occurs in the SCAB. With very light average wind speeds, the basin atmosphere has a limited capability to disperse air contaminants horizontally. The dominant daily

wind pattern is a daytime sea breeze (onshore breeze) and a nighttime land breeze (offshore breeze), broken only occasionally by winter storms and infrequent strong Santa Ana winds from the Great Basin, Mojave, and deserts to the north.

During the spring, most of the pollution produced during the day is moved inland out of the SCAB through mountain passes, or is lifted by the warm, vertical currents produced by the heating of mountain slopes. In this season, the basin can be “flushed” of pollutants by onshore breezes during the afternoon. From summer through the winter months, the flushing is less pronounced because of lower wind speeds, a persistent temperature inversion, and the earlier appearance of offshore winds. With extremely stagnant wind flows, the drainage winds may begin near the mountains by late afternoon. Remaining pollutants are trapped and begin to accumulate during the night and the following morning. A low average morning wind speed in pollution source areas is an important indicator of air stagnation potential.

The vertical dispersion of air pollutants in the SCAB is hampered by the presence of a temperature inversion in the layers of the atmosphere near the surface of the Earth. In a normal situation, as temperatures decrease with altitude, air continues to rise as it remains warmer than the surrounding air. With an inversion layer, air cannot continue to expand upwards, as it is trapped by the warmer air above. Because of the limited vertical dispersion, the inversion holds air pollutants near the ground, which results in high concentrations of air pollution especially in the inland areas of the SCAB.

However, as the day progresses and the sun warms the ground, the surface layer of air approaches a temperature equal to that of the inversion layer. When these temperatures become equal, the inversion layer begins to erode at its lower edge. If enough warming takes place, the inversion layer becomes weaker and weaker and finally breaks. The surface air layers can then mix upward without limit.

This phenomenon is frequently observed in the middle of late afternoon on hot summer days when the smog appears to clear up suddenly. Winter inversions frequently break by mid-morning, thereby preventing contaminant build-up.

The combination of low wind speeds and low level inversions produces the greatest concentration of pollutants. On high wind days other air pollutants including particulate matter such as dust and soil are swept and carried in the air. On days of no inversion or on days of winds averaging over 15 miles per hour, there will be no important smog effects, during either summer or winter.

In the winter, the greatest pollution problems are fine particulate matter and oxides of nitrogen because of extremely low level inversions and air stagnation during the night and early morning hours. Ozone levels are much lower during this season due to the lack of strong inversion during the daylight hours and the lack of intense sunlight which is needed to produce photochemical reactions.

In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and oxides of nitrogen to form more smog. Carbon monoxide is not as great a problem in summer because



Inversion layer -
A layer of warm air that traps the cooler air and any pollutants it carries below.



Smog - A combination of smoke, ozone, hydrocarbons, nitrogen oxides, and other chemically reactive compounds which, under certain conditions of weather and sunlight, may result in a murky brown haze that causes adverse health effects. The primary source of smog in California is motor vehicles.

inversions are not as low and intense in the surface boundary layer (within 100 feet of the ground) as in winter and because horizontal ventilation is better in summer.

The basin-wide average occurrence of inversion at the ground surface is 11 days per month; the averages vary from two days in June to 22 days in December and January. The potential for high concentration varies seasonally for many contaminants. During late spring, summer and early fall, light winds, low mixing heights and brilliant sunshine combine to produce conditions favorable for the maximum production of photochemical oxidants, mainly ozone. During the spring and summer, when fairly deep marine layers are frequently found in the Basin, sulfate concentrations are at their peak.

Salton Sea Air Basin



Subtropical High Cell -
An area of atmospheric high pressure located at approximately 30 degrees north and south latitude. Air tends to sink near high-pressure centers, which inhibits precipitation and cloud formation. This is why high-pressure systems tend to bring bright, sunny days with calm weather.

The middle part of Riverside County (between San Geronio Pass and Joshua Tree National Monument), belongs in the Salton Sea Air Basin (SSAB), along with Imperial County. Air quality conditions in this portion of the County, although in the SSAB, are also administered by the SCAQMD. The SCAQMD is responsible for the development of the regional Air Quality Management Plan and efforts to regulate pollutant emissions from a variety of sources.

The SSAB portion of Riverside County is separated from the SCAB region by the San Jacinto Mountains and from the Mojave Desert Air Basin to the east by the Little San Bernardino Mountains. During the summer, the SSAB is generally influenced by a Pacific Subtropical High Cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The SSAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist and unstable air masses from the south. The SSAB averages between three and seven inches of precipitation per year.

Mojave Desert Air Basin

The Mojave Desert Air Basin (MDAB), comprised of 21,000 square miles, encompasses the eastern portion of Riverside County consisting of the Palo Verde Valley along with portions of Los Angeles, Kern and San Bernardino Counties. Air quality conditions in the Riverside County MDAB are partly under the jurisdiction of the SCAQMD and partly under the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD).

The MDAB consists of an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains that dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the presence of the Sierra Nevada Mountains, which pose as a natural barrier to the north; air masses pushed onshore in Southern California by differential heating are channeled through the MDAB. The MDAB is separated from the Southern California coastal and central California valley regions by mountains whose passes from the main channels for these air masses.

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During the summer months, the MDAB is generally influenced by a Pacific Subtropical High Cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, with desert moisture arriving from infrequent warm, moist and unstable air masses from the south. The MDAB averages between three and seven inches of precipitation per year.

Regulatory Restrictions

The combination of geographical features and high levels of pollutants produced in the region have resulted in the CARB and the Environmental Protection Agency (EPA) designating the air basins in Riverside County as non-attainment areas (Table AQ-2). This means that due to the high level of pollutants in the region, the area is not expected to meet State or National Ambient Air Quality Standards in the near future.

The Federal Clean Air Act (1977 Amendments) requires that designated agencies in any region of the nation not meeting national clean air standards must prepare a plan demonstrating the steps that would bring the area into compliance with all national standards by December 31, 1987. In response, the Governor of California designated agencies to develop these plans.

Regional Air Pollution Regulations

For the South Coast Air Basin and the Salton Sea Air Basin, the agencies designated to develop regional air quality plans are the South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG). The two agencies first adopted an Air Quality Management Plan (AQMP) in 1979 and have revised it several times subsequently, as earlier attainment forecasts were shown to be overly optimistic. Equivalent regional air quality plans were created for the Mojave Desert Air Basin by the Mojave Desert Air Quality Management Basin (MDAQMD) in conjunction with SCAG.

In 1988, the California Legislature enacted the California Clean Air Act (CCAA). The CCAA requires regional emissions to be reduced by 5% per year, averaged over a 3-year period, until attainment can be demonstrated. Each region that did not meet a national or state air quality standard was required to prepare a plan which demonstrated how the 5% reductions were to be achieved. In response, the SCAQMD and MDAQMD revised their air quality plans to meet CCAA requirements.

The latest AQMP, approved in 1997, was designed to meet both federal and state air quality planning guidelines. Strategies for controlling air pollutant emissions in the AQMP are grouped into three “tiers,” based on their anticipated timing for implementation. Tier 1 consists of the implementation of best available current technology and management practices that can be adopted within five years. Tier II is based on anticipated advancement in current technology and vigorous regulatory action, while Tier III controls consist of implementation measures which first require the development of new technologies.

The MDAQMD adopted its Air Quality Attainment Plan in 1995 to meet state ozone standards and the Attainment Demonstration Plan in 1996 to meet federal ozone standards. While the Mojave Desert Air Basin is classified by



Indirect Source —
A facility, building, structure, installation, property, road, or highway which attracts, or may attract, mobile sources of pollution such as cars and trucks.

the state as a non-attainment area for PM₁₀ (coarse particles larger than 2.5 but smaller than 10 micrometers), state law does not require an air quality plan to meet this standard, and as such, no plan has been adopted.

To achieve the goals and objectives of the air quality plans at the local level, all cities and counties must adopt air quality elements or other elements/plans that fully address air quality as well as implement these plans to achieve compliance with state and federal standards. Local responsibilities for achieving compliance primarily focus on measures that control Indirect Sources such as facilities, buildings, structures, installations, real property, roads or highways that attract mobile sources of pollution.

More specifically, in regards to the topic of greenhouse gas (GHG) emissions, in June of 2005, Governor Schwarzenegger signed Executive Order S-3-05 which requires California to reduce GHG emissions to 2000 levels by the year 2010, to 1990 levels by the year 2020 and to 80% below 1990 levels by 2050. The following year, the Global Warming Solutions Act of 2006 (Assembly Bill 32) was enacted that codified the 2020 goal set by the Governor’s prior Order and also imposed for the State of California certain milestones for reducing GHG emissions. AB 32 requires CARB to promulgate regulations which will, by 2020, reduce GHG emissions to those emission levels that existed in 1990.

In 2008, the California Legislature also enacted Senate Bill 375 (SB 375) to establish a mechanism for accounting for GHG emissions on a regional basis and provide a framework for collaboration among local land use jurisdictions in achieving regional GHG reductions. SB 375 connects land use, transportation and AB 32 implementation to address emissions related to passenger vehicle travel. The law directs “sustainable communities’ strategy” and other plans to be prepared at the regional level working with local jurisdictions. In particular, Southern California Association of Government’s (SCAG) reduction target for per capita vehicular emissions is 8% by 2020 and 13% by 2035 (CAP 2011).

Issues and Policies

Air Quality Standards

Six criteria air pollutants have been established for every air basin within the State of California. These are pollutants for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set. As shown in Table AQ-1, Ambient Air Quality Standards, federal and state standards have been developed for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, lead and inhalable airborne particulates. Federal and state primary standards for air pollutants have been established to protect the public health, while secondary standards establish the levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

Table AQ-1 Ambient Air Quality Standards

| Pollutant | Averaging Time | State | Federal | |
|---|------------------------|----------------------|-----------------------|--------------------------|
| | | | Primary | Secondary |
| Ozone | 1 Hour | 0.09 ppm | | Same as Primary Standard |
| | 8 Hour | 0.07 ppm | 0.075 ppm | |
| Nitrogen Dioxide | Annual Arithmetic Mean | 0.030 ppm | 0.053 ppb | Same as Primary Standard |
| | 1 Hour | 0.18 ppm | 100 ppb | |
| Carbon Monoxide | 8 Hour | 9.0 ppm | 9.0 ppm | — |
| | 1 Hour | 20.0 ppm | 35.0 ppm | — |
| Respirable Particulate Matter (PM ₁₀) | 24 Hour | 50 µg/m ³ | 150 µg/m ³ | Same as Primary Standard |
| | Annual Arithmetic Mean | 20 µg/m ³ | B | |

| Pollutant | Averaging Time | State | Federal | |
|--|-------------------------|----------------------------|------------------------|--------------------------|
| | | | Primary | Secondary |
| Fine Particulate Matter (PM _{2.5}) | 24 Hour | No Separate State Standard | 35 µg/m ³ | Same as Primary Standard |
| | Annual Arithmetic Mean | 12 µg/m ³ | 15.0 µg/m ³ | |
| Sulfur Dioxide | 24 Hour | 0.04 ppm | – | 0.5 ppm |
| | 3 Hour | – | – | |
| | 1 Hour | 0.25 ppm | 75 ppb | |
| Lead | 30 Day Average | 1.5 µg/m ³ | – | Same as Primary Standard |
| | Calendar Quarter | – | 1.5 µg/m ³ | |
| | Rolling 3-Month Average | – | 0.15 µg/m ³ | |
| Sulfates | 24 Hour | 25 µg/m ³ | – | – |
| Hydrogen Sulfide | 1 Hour | 0.03 ppm | – | – |
| Vinyl Chloride | 24 Hour | 0.01 ppm | – | – |

Notes: ppm = parts per million; ppb = parts per billion; µg/m³ = micrograms per cubic meter of air. Additionally, see CARB Rulemaking for specific standards for "Visibility Reducing Particles."
Source: California Air Resources Board, Ambient Air Quality Standards, September 8, 2010.

Riverside County has made great strides in achieving state and federal air quality standards. The following provides a description of the six criteria air pollutants and their attainment status in each of the three Riverside County air basins. The following table summarizes the attainment status for these six pollutants within each of the three air quality basins covering Riverside County.

Table AQ-2 Attainment of State and Federal Criteria Air Pollutant Standards

| Air Basin | Ozone | Carbon Monoxide | Nitrogen Oxides | Sulfur Dioxide | Lead | Particulate Matter (PM ₁₀) | Particulate Matter (PM _{2.5}) |
|-----------|---|--------------------------------|--------------------------------|--------------------------------|--------------------------------|---|--|
| SCAQMD | Non-attainment (State and Federal) | Attainment (State and Federal) | Attainment (State and Federal) | Attainment (State and Federal) | Attainment (State and Federal) | Attainment (Maintenance) (Federal) Non-attainment (State) | Non-attainment (State and Federal) |
| SSAB | Non-attainment (State and Federal) | Attainment (State and Federal) | Attainment (State and Federal) | Attainment (State and Federal) | Attainment (State and Federal) | Non-attainment (State and Federal) | Attainment (State) Unclassified Attainment (Federal) |
| MDAQMD | Unclassifiable/Attainment (Federal) Non-attainment (State) | Attainment (State and Federal) | Attainment (State and Federal) | Attainment (State and Federal) | Attainment (State and Federal) | Non-attainment (State) Attainment/ Unclassified (Federal) | Unclassified Attainment (Federal) Attainment Unclassified ¹ (State) |

Notes:
1. After meeting attainment standards, the MDAQMD discontinued monitoring efforts; consequently it cannot be given full attainment status.
Source: Southern California Air Quality Management District and the Mojave Desert Air Quality Management District (February 2011)

Ozone

Ozone (O₃) is a pungent, colorless gas typical of Southern California smog. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. Ozone levels peak during the summer and early fall months.

SCAB, SSAB and MDAB are all designated as a non-attainment area for federal, state or both ozone standards, meaning that air quality standards are being exceeded. The Environmental Protection Agency (EPA) has classified the entire Southern California Association of Governments region as an extreme non-attainment area, and has mandated that the South Coast Air Quality Basin achieve attainment by 2010. The SSAB and MDAB are both designated as non-attainment areas for federal and state ozone standards.

Carbon Monoxide

Carbon monoxide (CO) is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue and impairments to central nervous system functions.

SCAB, SSAB and MDAB are all designated as an attainment area for federal and state CO standards.

Nitrogen Oxides

Nitrogen dioxide (NO₂), a reddish brown gas, and nitric oxide (NO), a colorless odorless gas, are jointly referred to as nitrogen oxides or NO_x. NO_x is a primary component of ozone and also contributes to other pollution problems such as high concentration of fine particulate matter, poor visibility, and acid deposition. NO₂ decreases lung function and may reduce resistance to infection.

The SCAB has not exceeded either federal or state standards for nitrogen dioxides in the past seventeen years and was recently designated as attainment for federal and state standards. The SSAB and MDAB are designated as attainment areas for both federal and state NO₂ standards.

Sulfur Dioxide

Sulfur dioxide (SO₂) is a colorless irritating gas created mainly by industrial facilities. SO₂ irritates the respiratory tract, injures lung tissue when combined with fine particulate matter and reduces visibility and the level of sunlight.

The SCAB, SSAB and MDAB are all designated as attainment areas for both federal and state sulfur dioxide standards.

Lead

Lead (Pb) is a gray-white metal that is soft, malleable, and resistant to corrosion. Sources of lead resulting in concentrations in the air include industrial sources and weathering of soils, followed by fugitive dust emissions. Health effects from exposure to lead include brain and kidney damage, learning disabilities, seizures and death. Fetuses, infants and children are more sensitive than others to the adverse effects of lead exposure. Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands and a lower intelligence quotient.

The SCAB, SSAB and MDAB are all designated as attainment areas for both federal and state lead standards.

Particulate Matter

Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse but “respirable” particles (larger than 2.5 but smaller than 10 micrometers, or PM₁₀) come from a variety of sources, including windblown dust and grinding operations. Fine particles (less than 2.5 micrometers, or PM_{2.5}) often come from fuel combustion, power plants and diesel buses and trucks. Fine particles can also be formed in the atmosphere through chemical reactions. PM₁₀ and its health effects are discussed in greater detail later in the Particulate Matter section of this Element.



Fugitive Dust -

Dust particles that are introduced into the air through certain activities such as soil cultivation, off-road vehicles, or any vehicles operating on open fields or dirt roadways.

The SCAB and SSAB are designated as non-attainment areas for both state and federal PM₁₀. The MDAB is designated as a non-attainment area for state PM₁₀ standards, but as an attainment unclassified area for federal standards (after meeting attainment standards, the MDAQMD discontinued monitoring efforts; consequently it cannot be given full attainment status).

Visibility Reducing Particles

Visibility reducing particles are primarily the result of fugitive dust such that they impede visibility. They differ from the description of particulate matter in that the particle size is large enough to be seen, not respirable, and therefore, does not have the health effects of respirable and fine particulates. Visibility reducing particles are those particulates seen in a cloud of dust stirred up during earth moving activities, vehicles traveling on dirt roads, or dust produced during high wind events. The State of California has not assigned attainment status for the SCAB, SSAB, or MDAB of the Visibility Reducing Particles standard. They are currently shown as “unclassified” in state attainment maps.

Sulfates

Sulfates are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and / or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to sulfur dioxide (SO₂) during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO₂ to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features. The California sulfates standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, due to fact that they are usually acidic, can harm ecosystems and damage materials and property. The SCAB, SSAB and MDAB are all designated as attainment areas for state sulfate standards.

Hydrogen sulfide (H₂S) gas is produced during the anaerobic decomposition of manure and waste as a byproduct of bacterial reduction of sulfur-containing compounds, including proteins. Concentrations of H₂S can form in sewers, septic tanks and confined areas of manure stockpiles. It is also a byproduct of oil extraction and refining. H₂S is colorless, with a characteristic odor of rotten eggs. Atmospheric H₂S is primarily oxidized to sulfur dioxide, which is eventually converted into sulfate, then sulfuric acid. When sulfuric acid is transported back to the earth through “acid rain,” it can damage plant tissue and aquatic ecosystems. H₂S can cause dizziness, irritation to eyes, mucous membranes, and the respiratory tract, nausea, and headaches at low concentrations. Exposure to higher concentrations (above 100 ppm), can cause olfactory fatigue, respiratory paralysis, and death. Brief exposures to high concentrations of hydrogen sulfide (greater than 500 ppm) can cause loss of consciousness. In most cases, the person appears to regain consciousness without any other effects. However, in many individuals, there may be permanent or long-term effects such as headaches, poor attention span, poor memory and poor motor function. H₂S can be detected by the nose at extremely low concentrations, as low as 1/400 the threshold for harmful human health effects. H₂S does not accumulate in the body, but is quickly excreted at normal exposure concentrations. Acute health effects don't occur until the exposure is greater than the body's ability to excrete the excess sulfur. Hydrogen sulfide can present a workplace hazard in confined spaces. Deaths due to breathing in large amounts of hydrogen sulfide have been reported in a variety of different work settings, including sewers, animal processing plants, waste dumps, sludge plants, oil and gas well drilling sites, and tanks and cesspools. California has ambient air standards for hydrogen sulfide. The SCAB, SSAB and MDAB are all designated as attainment areas for state hydrogen sulfide standards.

Vinyl Chloride

Vinyl chloride is a sweet smelling, colorless gas. Acute inhalation exposure to high levels of vinyl chloride has resulted in effects on the central nervous system, such as dizziness, drowsiness, headaches and giddiness. Vinyl chloride is reported to be slightly irritating to the eyes and respiratory tract. Acute exposure to extremely high levels of vinyl chloride has caused loss of consciousness, lung and kidney irritation, and inhibition of blood clotting. Tests involving acute exposure of mice have shown vinyl chloride to have high acute toxicity from inhalation exposure including risk of contracting rare lung and brain cancers. A small percentage of individuals occupationally exposed long-term to high level of vinyl chloride in air have developed a set of symptoms termed “vinyl chloride disease,” which is characterized by Reynaud’s phenomenon (fingers blanch and numbness and discomfort are experienced upon exposure to the cold, changes in the bones at the end of the fingers, joint and muscle pain and scleroderma-like skin changes (thickening of the skin, decreased elasticity and slight edema). For these reasons, California has included ambient air quality standards for vinyl chloride. The SCAB, SSAB and MDAB are all designated as attainment areas for state vinyl chloride standards.



Additional information on climate change is available from other sources online. Two notable resources include: The Intergovernmental Panel on Climate Change (IPCC), which summarizes the latest scientific researches, at www.ipcc.ch. And, the California Climate Change Portal hosted by the State, which provides relevant links at www.climatechange.ca.gov.

Greenhouse Gas Components

California has established programs aimed at reducing the emissions of greenhouse gases (GHGs). Unlike the criteria air pollutants discussed above, GHGs are not regulated because of their direct adverse effects on health, but rather for their role in global climate change. Some greenhouse gases, such as carbon dioxide occur naturally and are emitted to the atmosphere through both natural processes and human activities. Other GHGs, such as the fluorinated gases, are created and emitted solely through human activities. Under AB 32, Section 38505 of the California Health and Safety Code defines “greenhouse gases” as the four basic constituents following:

Carbon Dioxide

Carbon dioxide (CO₂) enters the atmosphere through the burning of fossil fuels, such as oil, coal and natural gas, solid waste decomposition, trees and wood products, and also through certain industrial processes, such as cement manufacturing. Carbon dioxide is the most important anthropogenic (human caused) GHG because it comprises the majority of total GHG emissions per year (approximately 77%) and is very long-lived in the atmosphere. Annual emissions of CO₂ have increased approximately 80% between 1970 and 2004.

Methane

Methane (CH₄) is the second largest component of human-emitted GHGs, accounting for approximately 14% of total emissions. Methane, however, is 21 times more potent than CO₂ in the atmosphere. In relative terms, one ton of methane has roughly the same environmental effect as 21 tons of CO₂. It is for this reason that the term “carbon dioxide equivalents” (CO₂e) is typically used when discussing GHG totals. Methane is emitted during the production and transportation of coal, oil and natural gas. It is also emitted by livestock and other agricultural practices, as well as decay of organic waste in landfills.

Nitrous Oxide

Nitrous oxide (N₂O), also commonly known as “laughing gas,” is the third principal GHG component, comprising approximately 8% of emissions. It is commonly emitted during agricultural and industrial activities, as well as during the combustion of fossil fuels and solid waste decay. In terms of carbon equivalency, one molecule of N₂O has roughly the same environmental effect as 310 molecules of CO₂.

Fluorinated Gases

In addition to the three principal components above, fluorinated gases also contribute to approximately 1% of total GHG emissions. These gases include: Hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), chlorofluorocarbons (CFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃). These compounds are powerful synthetic (man-made) GHGs that are emitted from a variety of industrial processes. They are used in refrigeration and semiconductor manufacturing, provide insulation for high-voltage industrial equipment, and also form as by-products of some metal refining processes, such as aluminum smelting. Since they are extremely potent and some may remain in the earth’s atmosphere for very long periods (e.g., 50,000 years), they are extremely important, despite their small percentage. They are also said to have “high global warming potential,” and as such are subject to increasingly stringent federal and state regulation.

Pollution Control Policies

Multi-jurisdictional Cooperation

Air pollutants are not limited to jurisdictional boundaries. Local land use patterns, emission sources, and airflow patterns throughout Southern California contribute to the air quality of Riverside County. While the County can enact policies that limit emissions within its boundaries, it is necessary to support efforts to decrease region-wide pollution emissions as surrounding jurisdictions significantly impact Riverside County’s air quality. The following policies are designed to establish a regional basis for improving air quality.



Carbon Dioxide Equivalents By converting all GHG emissions to carbon dioxide equivalent units (CO₂e), values can be standardized despite the GHGs’ differing degrees of “Global Warming Potential,” that is, relative environmental potency. GHG potency varies based on their chemistry and their duration in the atmosphere. For example, methane is 21 times more powerful than carbon dioxide in its capacity to trap heat, so in terms of carbon dioxide equivalents, one ton of methane equals 21 tons CO₂e.



SCAG - Southern California Association of Governments -

A regional council of government for planning and policy efforts coordinating its 6 member counties

Riverside, San Bernardino, Orange, Imperial, Los Angeles and Ventura Counties. Subregional Planning Agencies that coordinate with SCAG:

WRCOG - Western Riverside Council of Governments -

Coordinates regional policy and planning among 16 cities in western Riverside County, as well as utility providers and others.

CVAG - Coachella Valley Association of Government -

Coordinates regional planning and policy issues among 10 member cities, plus two Indian Tribes and various County agencies.



The General Plan policy and implementation item reference system:

Identifies which element contains the Policy, in this case the Land Use Element, and the sequential number.

LU 1.3: Neighborhood Commercial uses should be located near residential uses.

(AI 1 and AI 4):

Reference to the relevant Action Items contained in the implementation Program

Policies:

- AQ 1.1 Promote and participate with regional and local agencies, both public and private, to protect and improve air quality. (AI 111)
- AQ 1.2 Support Southern California Association of Government's (SCAG) Regional Growth Management Plan by developing intergovernmental agreements with appropriate governmental entities such as the Western Riverside Council of Governments (WRCOG), the Coachella Valley Association of Governments (CVAG), sanitation districts, water districts, and those subregional entities identified in the Regional Growth Management Plan. (AI 111)
- AQ 1.3 Participate in the development and update of those regional air quality management plans required under federal and state law, and meet all standards established for clean air in these plans. (AI 110)
- AQ 1.4 Coordinate with the SCAQMD and MDAQMD to ensure that all elements of air quality plans regarding reduction of air pollutant emissions are being enforced. (AI 111)
- AQ 1.5 Establish and implement air quality, land use and circulation measures that improve not only the County's environment but the entire region. (AI 111)
- AQ 1.6 Establish a level playing field by working with local jurisdictions to simultaneously adopt policies similar to those in this Air Quality Element.
- AQ 1.7 Support legislation which promotes cleaner industry, clean fuel vehicles and more efficient burning engines and fuels. (AI 113)
- AQ 1.8 Support the introduction of federal, state or regional enabling legislation to permit the County to promote inventive air quality programs, which otherwise could not be implemented. (AI 113)
- AQ 1.9 Encourage, publicly recognize and reward innovative approaches that improve air quality. (AI 113)
- AQ 1.10 Work with regional and local agencies to evaluate the feasibility of implementing a system of charges (e.g., pollution charges, user fees, congestion pricing and toll roads) that requires individuals who undertake polluting activities to bear the economic cost of their actions where possible. (AI 111)

- AQ 1.11 Involve environmental groups, the business community, special interests, and the general public in the formulation and implementation of programs that effectively reduce airborne pollutants.

Sensitive Receptors

Sensitive receptors refer to those segments of the population most susceptible to poor air quality (i.e. children, elderly and the sick) and to certain at-risk sensitive land uses such as schools, hospitals, parks, or residential communities. The intent of the following policies is to reduce the negative impacts of poor air quality on Riverside County's sensitive receptors.

Policies:

- AQ 2.1 The County land use planning efforts shall assure that sensitive receptors are separated and protected from polluting point sources to the greatest extent possible. (AI 114)
- AQ 2.2 Require site plan designs to protect people and land uses sensitive to air pollution through the use of barriers and/or distance from emissions sources when possible. (AI 114)
- AQ 2.3 Encourage the use of pollution control measures such as landscaping, vegetation and other materials, which trap particulate matter or control pollution. (AI 114)
- AQ 2.4 Consider creating a program to plant urban trees on an Area Plan basis that removes pollutants from the air, provides shade and decreases the negative impacts of heat on the air. (AI 114)

Mobile Pollution Sources

Mobile sources are subdivided into two categories: on-road (generally motorized vehicles like automobiles, motorcycles and trucks) and non-road sources (trains, boats, jet skis and all-terrain vehicles). Riverside County's land use distribution, proximity to Orange and Los Angeles Counties, and subsequent auto-generated traffic has had a tremendously detrimental impact on air quality. Vehicle miles traveled (VMT) have doubled over the past 20 years, with mobile pollution sources constituting approximately 60% of air pollution in the region.

Policies:

- AQ 3.1 Allow the market place, as much as possible, to determine the most economical approach to relieve congestion and cut emissions.
- AQ 3.2 Seek new cooperative relationships between employers and employees to reduce vehicle miles traveled.
- AQ 3.3 Encourage large employers and commercial/industrial complexes to create Transportation Management Associations. (AI 115)



Vehicle Miles Traveled (VMT):

Denote the distances traveled each day. VMT is also a prime indicator of the efficiency of the County's transportation network. And, since most motor vehicles directly emit greenhouse gases in operation, VMT also reflects air quality. Measures to reduce VMT usually improve air quality and lower greenhouse gas emissions too.

- AQ 3.4 Encourage employee rideshares and transit incentives for employers with more than 25 employees at a single location.

Stationary Pollution Sources



Please see the County Ordinance No. 742, Fugitive Dust Control in Urban Areas of the Coachella Valley, for additional information.

Stationary pollution sources are generally divided into two subcategories for analysis: point sources (such as power plants and refinery boilers) and area sources (including small emission sources such as residential water heaters and architectural coatings). Agricultural and industrial land uses are generally the main stationary pollution sources in Riverside County, though most urbanized land areas and their associated activities also contribute to poor air quality in the region. While industrial sources are addressed here, agricultural source impacts, due to their primary emissions of PM₁₀, are addressed in the Particulate Matter section of this element.

Policies:

- AQ 4.1 Require the use of all feasible building materials/methods which reduce emissions.
- AQ 4.2 Require the use of all feasible efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units.
- AQ 4.3 Require centrally heated facilities to utilize automated time clocks or occupant sensors to control heating where feasible.
- AQ 4.4 Require residential building construction to comply with energy use guidelines detailed in Part 6 (California Energy Code) and/or Part 11 (California Green Building Standards Code) of Title 24 of the California Code of Regulations.
- AQ 4.5 Require stationary pollution sources to minimize the release of toxic pollutants through:
- Design features;
 - Operating procedures;
 - Preventive maintenance;
 - Operator training; and
 - Emergency response planning
- AQ 4.6 Require stationary air pollution sources to comply with applicable air district rules and control measures.
- AQ 4.7 To the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD, MDAQMD, SCAB, the Environmental Protection Agency and the California Air Resources Board.

- AQ 4.8 Expand, as appropriate, measures contained in the County's Fugitive Dust Reduction Program for the Coachella Valley to the entire County.
- AQ 4.9 Require compliance with SCAQMD Rules 403 and 403.1, and support appropriate future measures to reduce fugitive dust emanating from construction sites.
- AQ 4.10 Coordinate with the SCAQMD and MDAQMD to create a communications plan to alert those conducting grading operations in the County of first, second, and third stage smog alerts, and when wind speeds exceed 25 miles per hour. During these instances all grading operations should be suspended. (AI 111)

Energy Efficiency and Conservation

Recycling and conservation efforts established and encouraged by the County of Riverside can reduce the amount of pollutants emitted within Riverside County. Efforts to recycle wastes can reduce the amount of pollutants emitted from the production of new materials while preserving raw materials. Conservation measures minimize the impacts of not only the consumption of, but also the production of energy sources.

Policies

- AQ 5.1 Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.
- AQ 5.2 Adopt incentives and/or regulations to enact energy conservation requirements for private and public developments. (AI 62)
- AQ 5.3 Update, when necessary, the County's Policy Manual for Energy Conservation to reflect revisions to the County Energy Conservation Program.
- AQ 5.4 Encourage the incorporation of energy-efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.

Jobs and Housing

Imagine commuting in the morning and driving only a few short miles to work. There would be no commutes over an hour, no crowded freeways that resemble parking lots and no fighting traffic. This is the life of people who live near work. And as more residents are able to live and work within Riverside County, this will be the commuting pattern of most residents. This will save fuel, ease congestion, speed traffic, cut emissions and improve air quality. However, if nothing is done, the risks are great. SCAG predicts that by the year 2010 commutes between Riverside County and Los Angeles County may increase by 600% over 2000 levels.

Part of the solution to the region's air quality problems is a better jobs-to-housing ratio. The objective of the jobs to housing ratio concept is to reduce Vehicle Miles Traveled (VMT) by locating jobs and housing closer together. In the ideal situation, the appropriate numbers of housing units in various income categories are provided to house Riverside County's workforce. While this



A "household" consists of all the people occupying a dwelling unit, whether or not they are related.

does not ensure that residents will live and work within Riverside County, the likelihood of it occurring does increase.

As stated in the General Plan Housing Element, traffic patterns on the major east-west transportation routes indicate that Riverside County serves as a bedroom community that supplies approximately 18% of the labor pool for the Los Angeles-Orange County metropolitan area (Table AQ-3, Home County by Work County). Statistics for 1990 to 2000 show that Riverside County's jobs-household ratio is slowly improving, however, from 0.80 jobs per household in 1990 to 0.90 in 1997 and 0.94 in 2000. The unincorporated area shows a severe shortage of jobs, however, with only 0.48 jobs per household in western Riverside County and 0.26 jobs per household in eastern Riverside County in 1997. This is the reverse of the jobs to housing ratio experienced in Los Angeles and Orange Counties where there were approximately 1.46 and 1.52 jobs per household respectively in the year 2000.

Whenever possible, the County of Riverside should offer incentives to businesses and individuals to control emissions and implement the AQMP. In job-poor areas, the County of Riverside should stress job creation and reductions in vehicle miles traveled to improve air quality over other less efficient methods. Among the positive approaches available to the County of Riverside to encourage job creation in job-poor areas are: education; job training and placement services; technical assistance to incoming businesses; reducing regulation and paperwork on businesses; fast-tracking and fee waivers; and low interest loans.

Table AQ-3 Home County by Work County

| Work County | Home County | | | | | |
|------------------|-------------|----------|-----------|----------------|----------|----------|
| | Los Angeles | Orange | Riverside | San Bernardino | Ventura | Imperial |
| Los Angeles | 90% | 17% | 8% | 16% | 18% | 0% |
| Orange | 6 | 79 | 10 | 7 | 0 | 0 |
| Riverside | 0 | 0 | 68 | 9 | 0 | 1 |
| San Bernardino | 2 | 2 | 8 | 68 | 0 | 0 |
| Ventura | 2 | 0 | 1 | 0 | 80 | 1 |
| San Diego | 0 | 1 | 4 | 0 | 1 | 1 |
| Imperial | 0 | 0 | 1 | 0 | 0 | 97 |

Source: 1999 SCAG State of the Commute Report

Education and Job Training

To stay competitive, the business community requires an educated and trained work force. While Riverside County residents are among the most talented and skilled in Southern California, job training and education programs should be provided as an incentive for businesses to locate within Riverside County. This will help ensure residents are trained and qualified to meet the specific needs of the business community.

Policies:

- AQ 6.1 Assist small businesses by developing education and job training programs, especially in job-poor areas. (AI 124)
- AQ 6.2 Collaborate with local colleges and universities to develop appropriate educational programs to assist residents in obtaining job skills to meet market demands.

Business Development

To the extent possible, the Air Quality Element will be an economic development program designed to enhance employment opportunities in Riverside County. Attempts to improve air quality should not prevent business development, especially within job-poor areas. In fact, business development should be identified as a critical factor in increasing air quality. Increasing employment opportunities within Riverside County will allow residents to obtain jobs locally and decrease commute times. Decreased commute times mean less time spent in air polluting vehicles.

Policies:

- AQ 7.1 Provide incentives to encourage new firms to locate within the County and existing firms to expand operations. (AI 18)
- AQ 7.2 Work with SCAQMD and MDAQMD to develop a means to encourage the location of new commercial and industrial development in those localities where jobs are most needed. (AI 18)
- AQ 7.3 Create a loan program to encourage small businesses to locate within the County. (AI 18)
- AQ 7.4 Offer incentives to businesses to control emissions and implement the AQMP. (AI 18)
- AQ 7.5 Reduce regulations on small businesses wherever possible and thereby encourage small business development and job creation. The County shall set performance standards as well as design standards, thus giving small business owners as many options as possible to comply with County regulations. (AI 18)
- AQ 7.6 Adopt policies freeing small businesses from unnecessary and duplicative paperwork. (AI 18)
- AQ 7.7 Assemble information collected from County agencies and departments concerning the business community to develop programs that better serve their needs. (AI 18)

Jobs-to-Housing Ratio

One of the challenges facing Riverside County is to provide the appropriate quantity of residential and employment-generating uses within close proximity to each other in order to reduce the amount of vehicle miles traveled and minimize impacts on air quality. In addition to providing incentives for businesses to locate within Riverside County, it is important to consider the jobs-to-housing ratio when approving the construction of new developments, including the use of mixed-use land patterns and the placement of new public facilities.

Policies:

- AQ 8.1 Locate new public facilities in job-poor areas of the county. (AI 18)
- AQ 8.2 Emphasize job creation and reductions in vehicle miles traveled in job-poor areas to improve air quality over other less efficient methods. (AI 18)



Please see the **General Plan Land Use Element Land Use Designation Policies** section and Appendix J, Community Center Guidelines for additional information.

AQ 8.3 Time and locate public facilities and services so that they further enhance job creation opportunities. (AI 18)

AQ 8.4 Support new mixed-use land use patterns and community centers which encourage community self-sufficiency and containment, and discourage automobile dependency. (AI 14)



Please see the **General Plan Circulation Element Planned Circulation Systems** section for further policies regarding alternative modes of travel.

AQ 8.5 Develop community centers in conformance with policies contained in the Land Use Element. (AI 14)

AQ 8.6 Encourage employment centers in close proximity to residential uses. (AI 14)

AQ 8.7 Implement zoning code provisions which encourage community centers, telecommuting and home-based businesses. (AI 1)

AQ 8.8 Promote land use patterns which reduce the number and length of motor vehicle trips. (AI 26)

AQ 8.9 Promote land use patterns that promote alternative modes of travel. (AI 26)

Multi-jurisdictional Coordination

The County of Riverside recognizes the regional context of the policies it creates. Because air pollutants do not recognize political boundaries, often the policies of one community may adversely impact residents of another. This is particularly true with respect to pollutants emitted by motor vehicles, which underscores the importance of regional and subregional cooperation.

Policies:

AQ 9.1 Cooperate with local, regional, state and federal jurisdictions to reduce vehicle miles traveled and motor vehicle emissions through job creation. (AI 18)

AQ 9.2 Attain performance goals and/or VMT reductions which are consistent with SCAG's Growth Management Plan. (AI 26)



Transportation Demand Management (TDM) - Low-cost ways to reduce demand by automobiles on transportation systems, such as programs to promote telecommuting, flextime and ridesharing.

Transportation Demand Management

Vehicles are an essential part of life in California. People use them to go to work, run errands and transport goods all across the state and nation. However, while they serve a valuable function, many streets and freeways are increasingly overburdened with traffic. Every day, cars and trucks jam onto the freeway at the beginning and end of each workday. Inching along the average twenty-two mile commute for Riverside County residents, automobiles spew pollutants into the air, while long sunny days change these pollutants into other noxious compounds. Most cars carry a single occupant, adding to the congestion and smog. When traffic does move, accidents often involving large trucks bring traffic to a grinding halt.

The good news is that our commute times and distance traveled to and from work have been stable over the last decade. The bad news is that Riverside County residents drive the furthest distance and have some of the longest commute times in all of Southern California (Tables AQ-4, AQ-5 and AQ-6).

Transportation Demand Management (TDM) can help unclog freeways and reduce commute times, thereby improving air quality. However, it means planning driving patterns to reduce the number of cars and trucks using the roads at any one time; this in the essence of TDM.

As stated in the Circulation Element, TDM strategies help reduce work-related trips by encouraging individuals who now drive alone to form carpools and vanpools, and to take the bus or light rail. Alternatively, workers may work longer hours and so eliminate a trip to the office once or twice a week. Two other TDM strategies that eliminate work trips are telecommuting and work-at-home programs. When individuals must drive, TDM calls for changes in their work schedules to avoid peak traffic periods. A similar TDM strategy encourages large trucks to operate at night. Because traffic at night is lighter, accidents are less likely, and when they do occur, they may not tie up the freeway for hours as they would during the day.

TDM strategies for reducing trips that are not work related are also important. Among these are merchant transportation incentives, such as discounts to customers who use public transit and free bus passes. Some measures reduce both work and non-work related trips. For example, by pricing parking spaces and providing convenient parking for people who rideshare, parking management encourages the use of carpools, vanpools and public transit. It also eliminates on-street parking which adds to congestion.

Table AQ-4 Commute Distance by Home County

| Home County | 1991 | 1992 | 1993 | 1995 | 1997 | 1998 | 2005 |
|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Los Angeles | 15.8 | 13.3 | 15.3 | 14.6 | 14.6 | 15.3 | 18.4 |
| | miles | miles | miles | miles | miles | miles | miles |
| Orange | 14.9 | 14.0 | 15.8 | 15.7 | 14.2 | 16.1 | 16.7 |
| Riverside | 20.9 | 22.8 | 22.2 | 24.1 | 21.0 | 21.6 | 25.1 |
| San Bernardino | 20.4 | 20.0 | 21.3 | 25.0 | 22.4 | 21.3 | 23.3 |
| Ventura | 17.7 | 15.4 | 16.2 | 17.8 | 15.9 | 16.3 | 19.1 |
| Imperial* | NA | NA | NA | 11.8 | 12.1 | 14.5 | 16.8 |

* Imperial County was included for the first time in the 1996 study.
Source: 2006 SCAG State of the Commute Report

Table AQ-5 Commuting Time for Trip to Work by Home County

| Home County | 1991 | 1992 | 1993 | 1995 | 1997 | 1998 | 2005 |
|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Los Angeles | 37 | 33 | 30 | 33 | 31 | 34 | 43 |
| | minutes | minutes | minutes | minutes | minutes | minutes | minutes |
| Orange | 32 | 29 | 30 | 30 | 31 | 33 | 37 |
| Riverside | 38 | 37 | 36 | 38 | 36 | 37 | 46 |
| San Bernardino | 35 | 36 | 36 | 38 | 37 | 35 | 43 |
| Ventura | 28 | 26 | 28 | 28 | 26 | 27 | 38 |
| Imperial* | NA | NA | NA | 20 | 23 | 24 | 29 |

* Imperial County was included for the first time in the 1996 study.
Source: 2006 SCAG State of the Commute Report

Table AQ-6 Commuting Time for Return Trip Home by Home County

| Home County | 1991 | 1992 | 1993 | 1995 | 1997 | 1998 | 2005 |
|------------------|-----------|-----------|-----------|------------|-----------|-----------|-----------|
| Los Angeles | 42 | 36 | 34 | 36 minutes | 38 | 41 | 54 |
| | minutes | minutes | minutes | | minutes | minutes | minutes |
| Orange | 35 | 34 | 38 | 37 | 34 | 41 | 42 |
| Riverside | 41 | 43 | 43 | 46 | 40 | 38 | 55 |
| San Bernardino | 42 | 39 | 42 | 47 | 39 | 41 | 59 |

| | | | | | | | |
|-----------|----|----|----|----|----|----|----|
| Ventura | 32 | 30 | 31 | 32 | 30 | 33 | 43 |
| Imperial* | NA | NA | NA | 21 | 24 | 23 | 33 |

* Imperial County was included for the first time in the 1996 study.
 Source: 2006 SCAG State of the Commute Report

TDM alone, however, is not the answer. Transit improvements and facility development must accompany these changes. Efforts to encouraging a shift to transit will fail unless transit operators make convenient, safe and reliable transit service available. Similarly, a lack of work centers now blocks the development of telecommuting. The County of Riverside can take steps to foster the development of such work centers. Changing transportation demand will also require facility development, such as park-n-ride lots, bus turnouts, off-site parking, and facilities for bicycles and pedestrians.



Please see the General Plan Circulation Element Transportation Demand Management section for additional information.

Riverside County’s Transportation Demand Management Ordinance for new developments, designed to meet the requirements of the Riverside County Congestion Management Program and the Air Quality Management Plan, promotes the development of TDM strategies early in the development review process. The ordinance sets goals for reducing vehicle trips generated by new developments, a minimum road level-of-service for all new development

projects and a reduction in overall vehicle trips emanating from the County. This ordinance also establishes potential TDM measures to be used where appropriate including off-site telecommunications facilities, carpooling, alternative work schedules, transit ridership incentives, and an enhanced pedestrian and bikeway circulation system.

Trip Reduction

As the automobile is the major source of air pollution in the region, the County of Riverside recognizes the importance of reducing the number of vehicle trips and miles traveled. Policies in this section are not intended to create additional regulation, but to create incentives to reduce vehicle trips, encourage alternative schedules and conform to policies created by regional governments.

Policies:

- AQ 10.1 Encourage trip reduction plans to promote alternative work schedules, ridesharing, telecommuting and work-at-home programs, employee education and preferential parking. (AI 47)
- AQ 10.2 Use incentives, regulations and Transportation Demand Management in cooperation with surrounding jurisdictions when possible to eliminate vehicle trips which would otherwise be made. (AI 47)
- AQ 10.3 Assist merchants in encouraging their customers to shift from single occupancy vehicles to transit, carpools, bicycles, or foot. (AI 48)
- AQ 10.4 Continue to enforce the County’s Transportation Demand Management Ordinance and update as necessary.

Special Events

Temporary special events provide recreational and retail opportunities for residents. However, these events may also result in traffic congestion on roadways adjacent to the event. The following policies are designed to alleviate traffic congestion and the accompanying pollution caused by excess vehicle travel times.

Policies:

- AQ 11.1 Establish requirements for special event centers to provide off-site parking and park-n-ride facilities at remote locations. Remote parking should be as close to practicable to the event site and the operator should supply shuttle services. (AI 116)
- AQ 11.2 Promote the use of peripheral parking by increasing on-site parking rates and offering reduced rates to peripheral parking with tickets sold for non-ridesharing patrons. (AI 116)
- AQ 11.3 Encourage special event center operators to advertise and offer discounted transit passes with event tickets. (AI 116)
- AQ 11.4 Encourage special event center operators to advertise and offer discount parking incentives to carpooling patrons, with two or more persons per vehicle, for on-site parking facilities. (AI 116)

Transportation Systems Management

Transportation systems management improves traffic flow through modification in the operation of existing transit facilities and fleets. This increases mobility and thereby improves air quality. Commerce, industry and public welfare require adequate mobility. Poor transportation systems management, on the other hand, creates congested highways, perpetuates poorly maintained and polluting fleets, weakens Riverside County's economy and diminishes its citizens' health and well-being.

Riverside County's rapidly growing population combined with unsynchronized traffic signals, delays at grade-level rail crossings, non-uniform street widths, inadequate roadway maintenance and poor emergency response, has resulted in increased congestion. Increased congestion means stop-and-go traffic and longer travel and idling time for cars, buses and trucks. Congestion increases transportation costs and vehicle emissions, and frays nerves. Moreover, a lack of fleets using alternative fuels adds to poor air quality.

Because transportation systems management provides an important weapon for relieving congestion, improving mobility, and enhancing air quality, the County of Riverside should use it extensively in its fight for cleaner air.



An at-grade railroad crossing is one where the street and the rail line form an intersection, and physically cross one-another.

Traffic Flow

It is a goal of Riverside County to manage its transportation systems in a manner in which mobility and efficiency are enhanced. Improving the flow of traffic promotes mobility on our streets, resulting in decreased impacts on air quality.

Policies:

AQ 12.1 Manage traffic flow through signal synchronization, while coordinating with and permitting the free flow of mass transit vehicles, when possible. (AI 117)



Channelization -
Involves the separation or regulation of conflicting traffic movements into definite paths of travel by traffic islands or pavement markings, to facilitate the safe and orderly movement of vehicles and pedestrians.

AQ 12.2 Synchronize signals throughout the County with those of its cities, adjoining counties and the California Department of Transportation. (AI 117)

AQ 12.3 Construct and improve traffic signals with channelization and Automated Traffic Surveillance and Control systems at appropriate intersections. (AI 117)

AQ 12.4 Eliminate traffic hazards and delays through highway maintenance, rapid emergency response, debris removal, and elimination of at-grade railroad crossings, when possible. (AI 119)

AQ 12.5 Encourage business owners to schedule deliveries at off-peak traffic periods.

Transportation System Management Improvements



High Occupancy Vehicles (HOV) Lanes -
Carpools, vanpools, buses and motorcycles are the only vehicles allowed to use HOV lanes. Generally, HOV lanes require two-person carpools, though there are some roadways that require a minimum of three (with the exception of super-ultra low-emission vehicles, which may use HOV lanes with a single occupant).

Proper management and oversight of the Riverside County-owned fleet can provide a highly effective tool for reducing direct and indirect impacts on air quality. It is therefore a goal of Riverside County to continually improve its own transportation system and cooperate with officials in all levels of government to enhance regional efforts to improve transportation systems management.

Policies:

AQ 13.1 Manage the County of Riverside transportation fleet fueling standards to achieve an appropriate alternate fuel fleet mix. (AI 118)

AQ 13.2 Cooperate with local, regional, state, and federal jurisdictions to better manage transportation facilities and fleets.

AQ 13.3 Encourage the construction of high-occupancy-vehicle (HOV) lanes whenever possible to relieve congestion, safety hazards and air pollution as described in the AQMP.

Transportation Facility Development

Regionally, transportation facility development means increasing capacity through the expansion of highway and transit systems to meet population and land use demand. Though major construction projects often require massive capital investment, mobility and capacity are increased. These projects include: major highways in high growth

regions, construction of high occupancy vehicle (HOV) lanes where severe traffic problems occur, and the construction of rapid transit corridors and facilities. Unfortunately, this strategy responds slowly to changing demands on the transportation system and may burden the region with debt.

Estimates for the development of additional facilities and systems over the next twenty years call for billions of dollars in investment. While federal government spending will account for a large portion of the funding required, additional revenues will have to be raised through a variety of means, including the gas tax, sales tax, user fees, tolls and bonds.

The costs of regional transportation projects also include growth in population, housing and services, and their impact on the transportation system. This raises traffic volume to or above the system's designed capacity while decaying air quality. When major transit corridors become congested, for example, daily commuters take alternate routes to avoid traffic delays. Once a new route becomes operational, commuters abandon these alternative routes for the new or improved systems until they too become congested. However, trying to build out of this situation does not solve the problem because it fuels an unbridled cycle of more growth, traffic, transportation facility development and smog. Continued transportation facility development results in increased growth, higher taxes, and minimal net gains in mobility for each dollar spent. All of this only lessens the chances for good air quality.

Just as there is a need regionally, capital improvements are also required locally to keep traffic moving and reduce emissions. It is the intent of the County of Riverside to continue such improvements. However, the County of Riverside recognizes that large construction projects are not always the best option for meeting transportation demands and that other, less expensive alternatives, are sometimes available. These alternatives include demand management, transportation systems management, and strategies to improve the job/housing ratio. While the County of Riverside cannot meet all of its mobility and air pollution challenges using these alternatives, they may supplement needed capital improvements to help meet Riverside County's transportation demands.

The transportation facility development required must improve mobility by encouraging multiple-occupancy vehicle use and alternative travel modes for both short and long trips. Therefore, the County of Riverside must emphasize construction projects such as single purpose, high occupancy vehicle lanes, park-n-ride lots, light rail and bus routes. It should also give priority to bicycle paths and trails, pedestrian overpasses, and bus turnouts. These projects improve mobility and air quality by encouraging efficient transportation use.

Policies:

- AQ 14.1 Emphasize the use of high occupancy vehicle lanes, light rail and bus routes, and pedestrian and bicycle facilities when using transportation facility development to improve mobility and air quality.
- AQ 14.2 When developing new capital facility improvement plans, also consider measures such as Transportation Demand Management, Transportation Systems Management, or job/housing balance strategies.
- AQ 14.3 Monitor traffic and congestion to determine when and where the County needs new transportation facilities to achieve increased mobility efficiency.



Please see the **General Plan Circulation Element, Planned Circulation Systems** section for additional information and policies.

- AQ 14.4 Preserve transportation corridors with high demand potential or regional significance for future expansion to meet project demand. (AI 53)

Particulate Matter

The Environmental Protection Agency (EPA) defines particulate matter (PM) as either airborne photochemical precipitates or windborne dust. Consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols, common sources of PM are manufacturing and power plants, agriculture, diesel trucks and other vehicles, construction sites, fire and windblown dust. Generally PM settles from atmospheric suspension as either particulate or acid rain and fog that has the potential to damage health, crops, and property. Particulate of 2.5 microns or smaller (2.5 microns is approximately equal to .000098 inches) may stay suspended in the air for longer periods of time and when inhaled can penetrate deep into the lungs. Among the health effects related to PM_{2.5} are premature death, decreased lung function and exacerbation of asthma and other respiratory tract illnesses.

Airborne particulate matter sized between 2.5 and 10 microns (10 microns is approximately equal to 0.0004 inches), known as PM₁₀ also pose a great risk to human health. PM₁₀ can easily enter the air sacs in the lungs where they may be deposited, resulting in an increased risk of developing cancer, potentially changing lung function and structure, and possibly exacerbating preexisting respiratory and cardiovascular diseases. It can also irritate the eyes, damage sensitive tissues, sometimes carry disease, and may even cause premature death. PM_{2.5} and PM₁₀ are especially hazardous to the old, young and infirm.

Although it produces less than 10% of the South Coast Air Basin's particulate matter, western Riverside County, which is part of the SCAB, exceeds federal standards more than any other urban area in the nation, and has the highest particulate concentration in the SCAB. These high levels of particulate matter are largely imported from the urbanized portions of Los Angeles and Orange Counties. This imported particulate is generally composed of photochemical precipitates rather than dust, smoke or soot. Riverside County is also responsible for generating large amounts of particulate matter from sources such as agriculture, warehousing operations, and truck traffic.

While Riverside County is dedicated to implementing policies to control particulate matter produced within its own boundaries, it has no control over particulate imported from beyond its boundaries. The solution to the problem of imported particulate matter in western Riverside County is the adoption of adequate control measures by those responsible jurisdictions in Los Angeles and Orange Counties. By adhering to the control measures contained in the AQMP, these jurisdictions can have a positive impact on particulate matter pollution in the SCAB portion of Riverside County.

The air quality concerns in the Salton Sea Air Basin (SSAB) portions of Riverside County differ somewhat from those in western Riverside County. Unlike the SCAB region, particulates in SSAB are primarily dust, smoke and soot. While in 1993 and 1994, PM₁₀ concentrations were under the federal standard, concentrations in 1995 were slightly above federal limits. The maximum annual average PM₁₀ concentration in 1995 was recorded at 4% above the federal standard; however, the measurement included one day with high winds without which the SSAB would have been under the federal standard. The far more stringent state standards were exceeded on 44% of the days in 1995.

The Mojave Desert Air Basin (MDAB), like the SCAB and SSAB, is designated as a non-attainment area for PM₁₀. Particulates in the MDAB are primarily fugitive caused by high winds or vehicle travel on unpaved roads. Particulates in the area are generally not caused by exhaust stacks or primary emission points.

While sources and severity of particulate pollution differ in subareas of Riverside County, it is Riverside County's objective to control particulate matter throughout all of Riverside County. However, where necessary, the County

of Riverside shall tailor its control measures and implementation procedures to best address the unique situations found in each area. One example of such an area is the Mira Loma community, where particulate pollutant levels are among the worst in the nation. In such an area, strong measures must be taken immediately to protect the health and welfare of residents, especially children, the elderly and those with respiratory illnesses.

Monitoring

Air quality monitoring stations are locating throughout Riverside County (Figure AQ-2). However, at times it may be necessary to locate additional monitors in those areas of the County suspected of producing excessively high levels of particulates. This more localized data may then assist control and law enforcement efforts in reducing and minimizing particulate matter levels.

Policies:

AQ 15.1 Identify and monitor sources, enforce existing regulations, and promote stronger controls to reduce particulate matter.

Multi-jurisdictional Cooperation

Particulate matter concentrations are a regional issue. In addition to those created in Riverside County, particulates originating in surrounding cities and counties are transported into Riverside County by prevailing winds. Therefore, any meaningful attempt to decrease particulate concentrations in Riverside County will involve cooperation with local and regional governments and a tightening of state and federal standards.

Policies:

- AQ 16.1 Cooperate with local, regional, state and federal jurisdictions to better control particulate matter.
- AQ 16.2 Encourage stricter state and federal legislation on bias belted tires, smoking vehicles, and vehicles that spill debris on streets and highways, to better control particulate matter. (AI 113)
- AQ 16.3 Collaborate with the SCAQMD and MDAQMD to require and/or encourage the adoption of regulations or incentives to limit the amount of time trucks may idle. (AI 120)
- AQ 16.4 Collaborate with the EPA, SCAQMD, MDAQMD, and warehouse owners and operators to create regulations and programs to reduce the amount of diesel fumes released due to warehousing operations. (AI 121)

Control Measures

Riverside County can implement simple control measures to reduce the amount of particulates produced within its borders. Strict enforcement of these and current regulations can then lead to a substantial decrease in particulate concentrations in the County of Riverside and neighboring areas.

Policies:

- AQ 17.1 Reduce particulate matter from agriculture, construction, demolition, debris hauling, street cleaning, utility maintenance, railroad rights-of-way, and off-road vehicles to the extent possible. (AI 123)
- AQ 17.2 Enforce regulations against illegal fires.
- AQ 17.3 Identify and create a control plan for areas within the County prone to wind erosion of soil.
- AQ 17.4 Adopt incentives, regulations and/or procedures to manage paved and unpaved roads and parking lots so they produce the minimum practicable level of particulates. (AI 111)
- AQ 17.5 Adopt incentives and/or procedures to limit dust from agricultural lands and operations, where applicable. (AI 123)
- AQ 17.6 Reduce emissions from building materials and methods that generate excessive pollutants, through incentives and/or regulations.
- AQ 17.7 Separate trucks from other vehicles in industrial areas of the County with the creation of truck-only access lanes to promote the free flow of traffic. (AI 43)
- AQ 17.8 Adopt regulations and programs necessary to meet state and federal guidelines for diesel emissions. (AI 121)
- AQ 17.9 Encourage the installation and use of electric service units at truck stops and distribution centers for heating and cooling truck cabs, and particularly for powering refrigeration trucks in lieu of idling of engines for power. (AI 120)
- AQ 17.10 Promote and encourage the use of natural gas and electric vehicles in distribution centers. (AI 146, 147)
- AQ 17.11 Create and implement street-sweeping plans, as appropriate, in areas of the County disproportionately affected by particulate matter pollution.

Riverside County Greenhouse Gas Emission Reduction Strategy

Riverside County is committed to providing a more livable, equitable, and economically vibrant community through the incorporation of sustainability features and reduction of greenhouse gas (GHG) emissions. In response to the growing regulatory requirements from both state and federal Governments, a GHG reduction strategy is developed for Riverside County to establish specific goals and policies that incorporate environmental responsibility into its daily management. The GHG reduction strategies outlined in this element will ensure that Riverside County activities and approvals occur to achieve that individual actions do not emit significant amounts of GHGs and that the emissions from the individual actions do not contribute to cumulatively significant GHG emissions. Thus, the following reduction strategies will eventually attain Riverside County's long-range GHG emission reduction goals as required by state and federal regulations.

Baseline Inventory of Greenhouse Gas Emissions

In order to achieve a better of understanding of Riverside County's reduction goals, a GHG emissions baseline inventory was conducted for unincorporated Riverside County in 2008. The following GHG emissions inventory identifies and categorizes the major sources and quantities of GHG emissions being produced by County residents, businesses, and government (County) operations currently. The total emissions from unincorporated Riverside County in 2008 totaled approximately 7.2 million metric tons of carbon dioxide equivalent (MMT CO_2e).

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Chapter 9 **Air Quality Element**

Figure AQ 2 South Coast Air Quality Management District and California Air Resources Board Air Monitoring Network in Riverside County

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Table AQ-7 (2008 Baseline GHG Emissions Inventory for Unincorporated Riverside County) summarizes net 2008 County emissions of CO₂e as broken down by emissions category. The categories included in this inventory are: transportation, energy, area source, water and wastewater, solid waste, and agriculture. As expressed in Table AQ-7, transportation and agricultural activities currently generate the highest rate of GHG emissions within unincorporated Riverside County.

**Table AQ-7: 2008 Baseline GHG Emissions Inventory
for Unincorporated Riverside County**

| Emissions Category | Metric Tons of CO ₂ e |
|--------------------------------------|----------------------------------|
| Transportation | 2,850,520 |
| Energy | 1,577,677 |
| Area Source Emissions | 269,181 |
| Purchased Water/Wastewater Treatment | 152,473 |
| Solid Waste | 132,666 |
| Agriculture | 2,030,431 |
| Total | 7,012,938 |

County of Riverside Climate Action Plan, 2011

GHG Emission Reduction Categories

While renewable energy sources, cleaner fuels and green technology will help reduce GHG emissions, significant changes are also needed in designing, constructing, and operating the built environment to meet the GHG reduction goals. Towards this end, the Riverside County has three main avenues in which to reduce GHG emissions.

1. **Riverside County Operations:** GHGs are emitted by Riverside County operations, buildings, fleet, equipment and other activities conducted in the functioning of county government. Since Riverside County has direct authority over these actions, they represent an area where proactive GHG reduction policies and programs may be most readily achieved.
2. **Riverside County Discretionary Approvals:** Riverside County approves private land use projects (such as residential, commercial and industrial development) and issues construction, mining and other permits through its discretionary approval process. All of these activities in turn result in GHG emissions, either directly (e.g., from construction equipment emissions and vehicle trips to the development) or indirectly (e.g., use of electricity for heating and cooling, water transport and treatment, irrigation, etc.).



**CAPCOA - The California
Air Pollution Control
Officers Association**

According to CAPCOA, improved planning and design can indirectly reduce GHG emissions associated with land use and transportation by significant amounts. As new planning policies are implemented, and transportation patterns and habits change in response, the reductions in the long run multiplies as it compounds every year.

3. **Emissions from Community Sources:** This category addresses emissions arising from private activities occurring within the geographic bounds of Riverside County. Although a range of private activities occurring within the community are beyond the realm of County of Riverside authority, voluntary reductions are still obtainable. The County of Riverside can further such voluntary reductions through a variety of non-mandatory efforts, such as public education classes, homeowner and business owner outreach or even the provision of financial incentives and rebates. Additionally, interagency coordination is another key element to long-range

efforts. This can include developing plans and programs in coordination with local water agencies, constituent cities, regional planning agencies, such as WRCOG and CVAG, as well as SCAG and state agencies.

Development of Riverside County Climate Action Plan (CAP)



Climate Action Plan “CAP” - Provides a programmatic plan by which the County will address the actions necessary to achieve greenhouse gas emissions reductions across the various sectors under County jurisdiction.

The efforts toward reducing GHG emissions in the County are closely related to the way in which Riverside County operates, makes its land use decisions, and provides incentives to retrofit existing communities as mentioned above. To this end, the main components of Riverside County’s vision for future decisions are founded in the General Plan policies and its programs. The General Plan provides direction to the Riverside County decision-makers on managing their resources and how future development should occur. It includes policies and programs within various elements and technical appendices that reduce GHG emissions in Riverside County. The current Riverside County General Plan reduces GHG emissions through sound planning measures, such as limiting water consumption, reducing waste, managing growth in a manner that accommodates growing populations without allowing urban sprawl, by reducing vehicle miles travelled and subsequently, emissions from motorized vehicles.

The General Plan includes Riverside County’s Climate Action Plan (CAP), which contains further guidance on Riverside County’s GHG inventory reduction goals, thresholds, policies, guidelines, and implementation programs. In particular, the CAP elaborates on the General Plan goals and policies relative to GHG emissions and provides a specific implementation tool to guide future decisions of the County of Riverside.

Through the CAP, the County of Riverside has made commitment to be in compliance with the changing GHG emissions reduction regulations of the federal and state governments. Following the state’s AB 32 GHG reduction target, Riverside County has set a goal to reduce emissions back to 1990 levels by the year 2020. The estimated community-wide emissions for the year 2020, based on population and housing growth projections associated with the assumptions used in the General Plan land use projections, are 10,268,937MT CO_{2e}. In order to reach the reduction target, Riverside County must offset this growth in emissions and reduce community-wide emissions to 6,036,971 MT CO_{2e} by the year 2020.

However, it is also important to note that in addition to the CAP, other existing state regulations will contribute to achieving GHG emissions reductions in Riverside County by the year 2020. Some of these regulations include updated building codes for energy efficiency, the low carbon fuel standard, Pavley I and II vehicle emissions standards, and the Renewable Portfolio Standard for utility companies. By supporting the State of California in the implementation of these measures, Riverside County will experience substantial GHG emissions reductions as well.

To be effective, the Riverside County CAP has addressed, and will continue implementation of, the following milestones and achieve the associated results, as outlined in the following policies:

Policies:

AQ 18.1 Baseline emissions inventory and forecast. Riverside County CAP has included baseline emissions inventory with data from the County’s CO_{2e} emissions, for specific sectors and specific years. The carbon inventory greatly aids the process of determining the type, scope and number of GHG reduction policies needed. It also facilitates the tracking of policy implementation and effectiveness. The carbon inventory for the County consists of two distinct components; one

inventory is for the County as a whole, as defined by its geographical borders and the other inventory is for the emissions resulting from the County's municipal operations.

- AQ 18.2 **Adopt GHG emissions reduction targets.** Pursuant to the results of the Carbon Inventory and Greenhouse Gas Analysis for Riverside County, future development proposed as a discretionary project pursuant to the General Plan shall achieve *sufficient reductions in a greenhouse gas emissions reduction of 25% compared to Business As Usual (BAU) project* in order to be found consistent with the County's Climate Action Plan. ~~(CAP). (AI 26)~~
- AQ 18.3 **Develop a Climate Action Plan for reducing GHG emissions.** The Riverside County CAP has been developed to formalize the measure necessary to achieve County GHG emissions reduction targets. The CAP includes both the policies necessary to meet stated targets and objectives are met. These targets, objectives and Implementation Measures may be refined, superseded or supplemented as warranted in the future. (AI 146)
- AQ 18.4 **Implement policies and measures to achieve reduction targets.** The County shall *require* implementation *ation of* the greenhouse gas reduction policies and measures established under the County Climate Action Plan for all new discretionary development proposals. ~~(AI 23, 147)~~
- AQ 18.5 **Monitor and verify results.** The County shall monitor and verify the progress and results, *and make any necessary revisions to, the CAP by 2020 and a minimum every four years thereafter. The progress and results of, and revisions to, the CAP will be made available to the public for review prior to approval. If monitoring reveals that the targets of the CAP are not being met, the CAP shall be revised to ensure that any changes needed to stay 'on target' with the stated goals are accomplished. of the CAP periodically. When necessary, the CAPs "feedback" provisions shall be used to ensure that any changes needed to stay "on target" with stated goals are accomplished.* ~~(AI 26, 147)~~

General Plan Policies and Climate Action Plan

As indicated above, the CAP is an independent document that elaborates on the General Plan goals and policies relative to GHG emission and provides a specific implementation tool to guide decisions regarding Riverside County operations, retrofit programs for existing communities, as well as land use decisions. However, since the General Plan is the blueprint for future growth in Riverside County, the following policies provides additional guidance in review and discretionary approval of private land use projects (such as residential, commercial and industrial development).

Policies:

- AQ 19.1 Continue to coordinate with CARB, SCAQMD, and the State Attorney General's office to ensure that the milestones and reduction strategies presented in the General Plan and the CAP adequately address the county's GHG emissions. (AI 110, 111, 113)
- AQ 19.2 Utilize County's CAP as the guiding document for determining County's greenhouse gas reduction thresholds and implementation programs. Implementation of the CAP and its monitoring program shall include the ability to expand upon, or where appropriate, update or replace the Implementation Measures established herein such that the implementation of the CAP accomplishes the greenhouse gas reduction targets. (AI 146)

~~AQ 19.3 Require new development projects subject to County discretionary approval to achieve the greenhouse gas reduction targets established in the CAP either through: (AI 147)~~

~~a. Garnishing 100 points through the Implementation Measures found the County's CAP; or~~

~~b. Requiring quantification of project specific GHG emissions and reduction of GHG emissions to, at minimum, the applicable GHG reduction threshold established in the CAP.~~

~~AQ 19.4 All discretionary project proposals shall analyze their project specific GHG reduction targets in comparison to the "business as usual" (BAU) scenario for the development's operational life and the "operational life" of a new development shall be defined as a 30-year span. Other methods for calculating EAU and showing GHG emissions reductions may be used provided such methods are both scientifically defensible and show actual emission reduction measures incorporated into project design, mitigation or alternative selection. Alternatively, a project may use the CAP Screening Tables to show the attainment of the applicable number of points needed to ensure adequate GHG reductions and CAP compliance. (AI 47, 147)~~

“

The general planning process presents a powerful opportunity to carefully consider and shape future land use patterns and ensure that development is consistent with AB 32. As the Air Resources Board noted in its recent AB 32 Scoping Plan, 'local governments are essential partners in achieving California's goals to reduce greenhouse gas emissions.'

”

California Attorney General, Edmund G. Brown

GHG Emission Reduction Focus Areas



Also see the following policies associated with Transportation-related greenhouse gas reductions:

Air Quality Element:

AQ 3.4, AQ 10.4, AQ 12.1-AQ 12.4, AQ 14.1, AQ 14.3

Circulation Element:

C 1.2, C 1.3, C 1.7, C 4.1-C 4.9, C 9.1, C 10.1, C 11.1-C 11.3, C 11.7, C 12.1-C 12.5, C 13.1-C 13.4, C 13.7, C 13.8, C 15.1-C 15.3, C 15.5, C 15.6, C 16.1-16.4, C 17.1-C 17.4, C 18.1, C 20.14

Healthy Communities Element:

HC 2.1, HC 6.1, HC 7.1, HC 13.2

Land Use Element:

LU 11.4, LU 13.3, LU 13.4, LU 13.7, LU 28.5

Multipurpose Open Space Element:

OS 16.3, OS 16.8

vehicles and vehicles that run on alternative fuels. Lastly, reducing VMT is largely a function of how communities are planned and developed. As such, this aspect of VMT reduction is addressed through the Land Use decisions made by the County of Riverside.

Reducing vehicle miles traveled, a substantial indicator of GHG production from transportation, is the basis for the following policy objectives and the related new development Implementation Measures presented in the CAP.

Policies:

AQ 20.1

Reduce VMT by requiring expanded multi-modal facilities and services that provide transportation alternatives, such as transit, bicycle and pedestrian modes. Improve connectivity of the

For regulatory purposes, the activities that contribute to GHG emissions can be divided up into eight categories: transportation, land use, energy use, water and biota use, waste generation, municipal (i.e., Riverside County) operations and existing uses not otherwise covered. These eight focus areas are key to achieving the General Plan and CAP milestones. It is helpful to look at GHG emissions based on these categories for two reasons. First, measures appropriate for one area may vary markedly from those of another area. Secondly, this allows reduction measures to be appropriately focused. For example, 100% of available resources would not be best spent if it only achieved reductions in an area responsible for 2% of the overall GHG emissions of the County of Riverside. Thus, for the eight focus areas, the following summary of the policy objectives are established on key areas for achieving GHG reductions.

1. Transportation-Related Objectives

The transportation sector is typically the largest single area of emissions in a given area. Within California, carbon emissions resulting from gasoline-powered vehicles produce roughly 38% of the state's total GHGs. Broadly, there are three ways to reduce GHG emissions from the transportation sector. One way is to implement policies that reduce dependence on personal motor vehicles and encourage alternative modes of transportation. Another way is to utilize vehicles that release fewer greenhouse gases, such as hybrids, more fuel efficient



Also see the following County Ordinances associated with Transportation-related greenhouse gas reductions:

Ordinance No. 706
"Mobile Source Air Pollution Reduction Programs (Funding)"

Ordinance No. 726
"Transportation Demand Management for New Development"

Ordinance No. 748
"Mitigation of Traffic Congestion through Signalization"

Ordinance No. 782 "Golf Cart Transportation Plan"

Ordinance No. 824
"Western Riverside County Traffic Uniform Mitigation Fee (TUMF) Program" (see also Ordinance No. 673)

multi-modal facilities by providing linkages between various uses in the developments. (AI 47, 53, 146)

- AQ 20.2 Reduce VMT by facilitating an increase in transit options. In particular, coordinate with adjacent municipalities, transit providers and regional transportation planning agencies to develop mutual policies and funding mechanisms to increase the use of alternative transportation. (AI 47, 53, 146)
- AQ 20.3 Reduce VMT and GHG emissions by improving circulation network efficiency. (AI 47, 53, 146)
- AQ 20.4 Reduce VMT and traffic through programs that increase carpooling and public transit use, decrease trips and commute times, and increase use of alternative-fuel vehicles. (AI 47, 146)
- AQ 20.5 Reduce emissions from standard gasoline vehicles, through VMT, by requiring all new residential units to install circuits and provide capacity for electric vehicle charging stations (AI 47, 53, 146)
- AQ 20.6 Reduce emissions from commercial vehicles, through VMT, by requiring all new commercial buildings, in excess of 162,000 square feet, to install circuits and provide capacity for electric vehicle charging stations.


2. Land Use-Related Objectives

Land use patterns play a significant role in affecting the number of VMT within a community. Thus, in addition to the transportation-related measures discussed above, it is important to encourage policies that promote efficient land use development. Since the efficient use of land can serve to reduce the amount of vehicle travel that results from commuting to jobs, shopping, entertainment and other destinations, reducing vehicle miles traveled through planning and more efficient land use can greatly contribute to reducing GHG emissions in Riverside County.

Reducing VMT through improved land use coordination and other planning efforts is the basis for the following policy objectives.


Policies:

- AQ 20.7 Reduce VMT through increased densities in urban centers and encouraging emphasis on mixed use to provide residential, commercial and employment opportunities in closer proximity to each other. Such measures will also support achieving the appropriate jobs-housing balance within the communities. (AI 47, 53, 117, 146)
- AQ 20.8 Reduce VMT by increasing options for non-vehicular access through urban design principles that promote higher residential densities with easily accessible parks and recreation opportunities nearby. (AI 115, 117, 146)
- AQ 20.9 Reduce urban sprawl in order to minimize energy costs associated with infrastructure construction and transmission to distant locations, and to maximize protection of open space. (AI 26)



Also see the following County Ordinance associated with Land Use -related greenhouse gas reductions:

**Ordinance No. 659
"Development Impact Fee (DIF) Program for Residential Development"**



Also see the following policies associated with Land Use -related greenhouse gas reductions:

Air Quality Element: AQ 8 1-AQ 8 9

Circulation Element: C 12 6

Healthy Communities Element:
HC 2.2, HC 3.1, HC 4.2, HC 5.1- HC 5.3, HC 5.6, HC 9.1, HC 9.3, HC 9.4, HC 14.2

Land Use Element:
LU 2.1, LU 3.1, LU 3.4, LU 4.1, LU 8.1, 8.4, LU 8.8- LU 8.10, LU 8.12, LU 9.3, LU 11.1, LU 11.3, LU 13.1, LU 13.2, LU 20.2, LU 21.2, LU 21.4, LU 21.6, LU 21.7, LU 28.2, LU 32.1, LU 32.9

Multipurpose Open Space Element: OS 1.1

3. Energy Efficiency and Energy Conservation Objectives

Energy used in homes and business, such as for heating, cooling and lighting, is one of the largest sources of a community’s GHG emissions. Most of the GHG emissions from energy use come from the combustion of fossil fuels, such as coal, oil and natural gas, for electricity generation. Thus, increasing energy efficiency has potential to reduce GHG.

Reducing GHG emissions through improved energy efficiency and energy conservation is the basis for the following policy objectives.



Also see the following County Ordinance associated with Wind Energy Efficiency and Energy Conservation-related greenhouse gas reductions:

Ordinance No. 655
"Regulating Light Pollution"

Policies:

- AQ 20.10 Reduce energy consumption of the new developments (residential, commercial and industrial) through efficient site design that takes into consideration solar orientation and shading, as well as passive solar design. (AI 147)
- AQ 20.11 Increase energy efficiency of the new developments through efficient use of utilities (water, electricity, natural gas) and infrastructure design. Also, increase energy efficiency through use of energy efficient mechanical systems and equipment. (AI 147)
- AQ 20.12 Support programs to assist in the energy-efficient retrofitting of older affordable housing units to improve their energy efficiency, particularly residential units built prior to 1978 when CCR Title 24 energy efficiency requirements went into effect. (AI 147)



Also see the following policies associated with Wind Energy Efficiency and Energy Conservation-related greenhouse gas reductions:

Air Quality Element Policies: AQ 4.2, AQ 5.3, AQ 5.4

Housing Element Policies: H 2.1, H 5.1

Multipurpose Open Space Element: OS 11.1, OS 16.1, OS 16.2, OS 16.5-OS 16.7

4. Water Conservation and Biota Conservation Objectives

Roughly 40% of a typical electric energy budget is used to transport (pump), treat and deliver potable water to serve communities. Substantial amounts of energy are also used for the treatment of wastewater, as well as for electricity generation itself. Thus, water conservation forms an essential element in both energy conservation and, ultimately, GHG emission reductions.

Conserving vegetative lands, particularly forest lands, facilitates biological carbon sequestration. When it comes to agricultural lands, their value in providing carbon sequestration must be weighed against the carbon releasing activities also associated with agricultural uses, such as livestock (which produce methane in their digestive systems), manure management (particularly for intensive uses like dairies), operation of agricultural equipment, fertilizer application and soil tillage (which release nitrous oxide), as well as emissions associated with the harvesting, processing and distribution of crops.

The need to reduce energy use through water conservation and the carbon sequestration benefits of biota preservation form the basis for the following policy objectives.

Policies:

- AQ 20.13 Reduce water use and wastewater generation in both new and existing housing, commercial and industrial uses. Encourage increased efficiency of water use for agricultural activities. (AI 147)
- AQ 20.14 Reduce the amount of water used for landscaping irrigation through implementation of County Ordinance 859 and increase use of non-potable water.
- AQ 20.15 Decrease energy costs associated with treatment of urban runoff water through greater use of bioswales and other biological systems.
- AQ 20.16 Preserve and promote forest lands and other suitable natural and artificial vegetation areas to maintain and increase the carbon sequestration capacity of such areas within the County. Artificial vegetation could include urban forestry and reforestation, development of parks and recreation areas, and preserving unique farmlands that provide additional carbon sequestration potential.
- AQ 20.17 Protect vegetation from increased fire risks associated with drought conditions to ensure biological carbon remains sequestered in vegetation and not released to the atmosphere through wildfires.



Also see the following policies associated with greenhouse gas reductions from Water Conservation and Biota Conservation:

Air Quality Element
AQ 2.4

Circulation Element:
C 5.2, C 20.1, C 20.10

Healthy Communities Element HC 4.1

Land Use Element:
LU 9.1, LU 9.4, LU 18.1-18.6, LU 20.1, LU 20.4-LU 20.7, LU 20.9, LU 24.1

Multipurpose Open Space Element:

OS 1.4, OS 2.1-OS 2.5, OS 3.3, OS 3.3, OS 3.6, OS 3.7, OS 4.3, OS 4.5-OS 4.7, OS 4.9, OS 5.5, OS 5.6, OS 6.2, OS 7.3, OS 7.5, OS 8.1, OS 8.2, OS 9.3, OS 9.4, OS 18.1, OS 18.4, OS 20.1, OS 20.2

Safety Element: S 4.22



Also see the following County Ordinances associated with greenhouse gas reductions from Water Conservation and Biota Conservation:

Ordinance No. 559 "Regulating the Removal of Trees"

Ordinance No. 625 "Agricultural Activities, Nuisance Defense ("Right to Farm Ordinance")"

Ordinance No. 663 "Riverside County Stephens' Kangaroo Rat Habitat Conservation Plan and Mitigation Fees"

Ordinance No. 695 "Requiring the Abatement of Hazardous Vegetation"

Ordinance No 754 "Stormwater/Urban Runoff Management and Discharge Control"

Ordinance No. 810 "Establishing an Interim Open Space Mitigation Fee"

Ordinance No. 859 "Establishing Water Efficient Landscaping Standards"

Ordinance No. 875 "Establishing Mitigation Fees for Coachella Valley Multi-Species Habitat Conservation Plan"



Also see the following policies associated with Alternative Energy Sources:

Land Use Element Policies:

LU 16.1

Multipurpose Open Space Element:

OS 11.1-OS 11.3, OS 12.1, OS 12.4, OS 13.1, OS 15.2, OS 16.9, OS 16.10



Also see the following policies and County Ordinances related to reducing greenhouse gas emissions through waste reduction:

Air Quality Element:

AQ 5.1

County Ordinances:

Ordinance No. 657
"Regulating Collection and Removal of Solid Waste"

Ordinance No. 718
"Medical Waste - Generation, Storage, Transportation"

Ordinance No. 745
"Comprehensive Collection and Disposal of Solid Waste"

5. Alternative Energy Objectives

Currently available sources of renewable energy amenable to development within Riverside County include solar, wind, water, biomass and geothermal. Renewable energy sources offer the potential for a clean, decentralized energy source that can significantly impact Riverside County's GHG emissions.

Increasing the use of alternative energy sources to reduce the amount of GHG is the basis for the following policy objectives.

Policies:

- AQ 20.18 Encourage the installation of solar panels and other energy-efficient improvements and facilitate residential and commercial renewable energy facilities (solar array installations, individual wind energy generators, etc.). (AI 147)
- AQ 20.19 Facilitate development and siting of renewable energy facilities and transmission lines in appropriate locations. (AI 147)

6. Waste Reduction Objectives

Although responsible for a relatively small portion of total community GHG emissions, solid waste management programs are important for GHG reduction. First, programs to increase the amount of solid waste that is "reduced, recycled or reused" decrease the number of truck trips necessary to dispose of such waste. Secondly, reducing the amount of solid waste entering a landfill expands the life of the facility. These result in less GHG emissions from the construction equipment used to build landfill sites. And, lastly, recycling and waste prevention programs make a significant contribution to reducing the energy and transportation needed to manufacture and ship virgin products and packaging.

Reducing the amount of waste generated, which indirectly reduces the over-consumption of a variety of natural resources, is the basis for the following policy objectives.

Policies:

- AQ 20.20 Reduce the amount of solid waste generation by increasing solid waste recycle, maximizing waste diversion, and composting for residential and commercial generators. Reduction in decomposable organic solid waste will reduce the methane emissions at County landfills. (AI 146)


7. Education, Coordination and Outreach Objectives

Although outside the realm of direct Riverside County control, existing uses, such as homes and businesses, represent a large area of ongoing GHG emissions. Unlike new discretionary permits and internal Riverside County operations, efforts to reduce emissions for these existing uses are mainly voluntary. Thus, education, community outreach and even incentive programs necessarily form an important element of the overall GHG reduction efforts of Riverside County.

The following policy objectives are based on efforts to indirectly reduce GHG emissions through voluntary efforts by the public and through programs developed in coordination with other agencies.

Policies:

- AQ 20.21 Provide homeowner education programs on the various voluntary ways in which they may reduce their homes' GHG emissions, e.g., improving home insulation, adding solar energy capabilities, and providing information on energy saving landscaping techniques. (AI 147)
- AQ 20.22 Develop motorist education programs on reducing VMT, idling and vehicle maintenance, while increasing carpooling and public transit usage. (AI 147)
- AQ 20.23 Develop education programs about green purchasing and waste reduction measures, e.g., use of sustainable materials, recycling, and composting. (AI 147)
- AQ 20.24 Develop programs to improve job-housing balances, such as through small business development, for areas that are housing rich but jobs poor. (AI 146)
- AQ 20.25 Coordinate County GHG emissions reduction efforts with those of other regional agencies and plans, i.e., SCAG's Compass Blueprint, Regional Transportation Plan (RTP) and SCAQMD's Air Quality Management Plans. In addition, coordinate with cities and sub-regional planning agencies, particularly WRCOG and CVAG, on efforts that jointly affect the County and the cities. Also, coordinate with utility and service providers to develop programs to improve energy efficiency, water efficiency and delivery or structural improvements to reduce demand or better coordinate infrastructure development, as appropriate. (AI 111, 146)
- AQ 20.26 Voluntary GHG reduction objectives for the community sector shall be achieved through development and implementation of specific implementation measures, as determined appropriate and feasible by the County. (AI 147)



Also see the following policies associated with greenhouse gas reductions through education, outreach and coordination:

Air Quality Element:
AQ 3.2, AQ 3.3, AQ 7.1- AQ 7.5, AQ 17.6

Circulation Element:
C 11.4

Healthy Communities Element:
HC 14.3

Land Use Element:
LU 8.6, LU 20.11

Multipurpose Open Space Element:
OS 1.3, OS 2.4, OS 6.11, OS 18.2

8. Municipal Operational Objectives

Built environment improvements include designing greater energy efficiency into new Riverside County buildings and retrofitting older facilities with upgrades to improve energy efficiency, such as additional insulation, low-emissive glass, cool roofs and programmable thermostats. Development of alternative energy sources powering Riverside County facilities can include solar collectors and, at Riverside County landfills, methane capture. Infrastructure improvements can include more efficient street and traffic signal lighting, use of low-emission surfacing materials and paints, and more energy efficient pumps and treatment plants. Water-efficient landscaping can be incorporated along roadways and Riverside County buildings, and urban runoff can be controlled through site design and the use of bioswales. And, in the transportation sector, the County of Riverside can directly reduce vehicle GHG emissions by transitioning its fleet to more fuel efficient vehicles, including the use of hybrid or other alternate fuels.

The various ways in which the County of Riverside can directly control the emission of GHG resulting from Riverside County operations form the basis for the following policy objectives.



Also see the following General Plan and County Board policies related to county operational greenhouse gas reductions:

Multipurpose Open Space Element:

OS 16.4, OS 16.12, OS 16.13

Board of Supervisors-Board Policies:

BOS A-64 "Environmental Purchasing"

BOS H-4 "Energy Conservation"

BOS H-25 "Water-Efficient Landscaping"

BOS H-29 "Sustainable

Policies:

AQ 20.27 Increase the average fuel efficiency of County-owned vehicles powered by gasoline and diesel through fleet transitioning programs. Also, reduce total vehicle miles traveled by County employees, both commuting to work sites and travel for the conduction of County activities. (AI 118, 146)

AQ 20.28 Increase the energy efficiency of all existing and new County buildings and infrastructure operation (roads, water, waste disposal and treatment, buildings, etc.). Also, decrease energy use through incorporating renewable energy facilities (such as, solar array installations, individual wind energy generators, geothermal heat sources) on County facilities where feasible and appropriate. (AI 146)

AQ 20.29 Establish purchasing and procurement policies that support the use of green products and services, minimize waste, and promote sustainability. (AI 146)

AQ 20.30 Reduce potable water use, wastewater and solid waste generation, and urban runoff at both new and existing County facilities and operations. Also, increase the amount of materials recycled from County facilities. (AI146)

AQ 21.1 The County shall require new development projects subject to County discretionary approval to incorporate measures to achieve 100 points through incorporation of the Implementation Measures (IMs) found in the Screening Tables within the Riverside County Climate Action Plan. One hundred points represent a project's fare-share of reduction in operational emissions associated with the developed use needed to reduce emissions down to the CAP Reduction Target. (AI 147)

- ~~a.~~ This reduction shall be measured in comparison to the “business-as-usual” (BAU) scenario for the development’s operational life. The BAU scenario shall be consistent with the General Plan build-out assumptions detailed in Appendix E-1 of the General Plan.
- ~~b.~~ a. For the purposes of this policy, the “operational life” of a new development shall be defined as a 30-year span with construction emissions amortized over the 30 years.
- ~~c.~~ b. For the purposes of this policy, “new development” refers to private development occurring pursuant to a discretionary land use approval issued by the County of Riverside and subject to binding Conditions of Approval. This definition generally corresponds to projects found non-exempt pursuant to the California Environmental Quality Act (CEQA), but is nevertheless subject to the sole discretion of the County of Riverside as lead agency.
- ~~d.~~ c. Other methods for ~~calculating BAU and~~ showing GHG emissions reductions may be used provided such methods are both scientifically defensible and show actual emission reduction measures incorporated into project design, mitigation or alternative selection. That is, reductions must not be illusory “paper” reductions achieved merely through baseline manipulation.
- ~~e.~~ d. Nothing in this policy shall be construed as accepting any proposed discretionary project from any legally applicable CEQA requirements or explicitly limiting the scope any analyses required to show CEQA compliance.

AQ 21.2 Implementation Measures found necessary for a given project pursuant to the CAP Screening Tables shall be incorporated into a project’s *Mitigation and Monitoring Program as required under CEQA to ensure the measures are implemented appropriately. Such Implementation Measures may also be separately incorporated into the Conditions of Approval issued by the County. In the event no Mitigation and Monitoring Program is required for a project, the Implementation Measures shall be incorporated into a project’s Conditions of Approval issued by the County.* ~~to ensure the measures are implemented appropriately.~~
(AI-147)

AQ 21.3 Discretionary Measures - Because of the varied nature of the private development proposals reviewed by the County, in some cases, the Implementing Measures in the CAP may not provide the most appropriate means for achieving the required Interim GHG reductions. In such cases, the following alternate measures may be utilized, at the County’s discretion:

- a. For large-scale developments, such as specific plans, business parks, industrial centers, and those triggering a full Environmental Impact Report, a custom GHG analyses may be warranted to both assure compliance with the applicable targets herein and to provide a customized array of appropriate reduction measures.
- b. In such cases, the resultant GHG analysis may be used to develop customized GHG reduction measures in place of the CAP’s Implementing Measures, provided they achieve the stated targets or implement all feasible mitigation short of achieving the applicable targets.
- c. Project-specific analysis may be particularly valuable when assessing large-scale mixed use developments. In such developments, significant energy efficiencies and VMT reductions can result from smart growth design features, such as provision of housing, jobs, services and recreation within a 5- to 10-minute walking radius. Project-specific analysis in these cases may

result in the need for fewer add-on Implementing Measures and potentially yield substantial savings on construction costs.

AQ 21.4 Implementation of the Climate Action Plan (CAP) and monitoring progress toward the CAP reduction targets shall include the ability to expand upon or, where appropriate, update or replace the Implementation Measures established herein such that the implementation of the CAP accomplishes the County’s GHG reduction targets. (AI 146)

AQ 22.1 The County shall implement programs and requirements to achieve the following objectives related to reducing greenhouse gas emissions associated with transportation (AI 110, 111, 120, 146, 147):

- a. Reduce vehicle miles traveled by providing or requiring expanded multi-modal facilities and services that provide transportation alternatives, such as transit, bicycle and pedestrian modes.
- b. Reduce vehicle miles traveled by facilitating an increase in transit options. In particular, coordinate with adjacent municipalities, transit providers and regional transportation planning agencies to develop mutual policies and funding mechanisms to increase the use of alternative transportation.
- c. Improve connectivity by requiring pedestrian linkages between developments and transportation facilities, as well as between residential and commercial, recreational and other adjacent land uses.
- d. Reduce air pollution and greenhouse gas emissions by improving circulation network efficiency.
- e. Reduce traffic through programs that increase carpooling and public transit use, decrease trips and commute times and increase use of alternative-fuel vehicles.
- f. Preserve transportation corridors for renewable energy transmission lines and for new transit lines, where appropriate.

AQ 23.1 The County shall implement programs and requirements to achieve the following objective related to reducing greenhouse gas emissions associated with land use patterns (AI 147):

- a. Reduce vehicle miles travelled (VMT) through increased densities in urban centers and emphasis on mixed use to provide localized residential, commercial and employment opportunities in closer proximity to each other.
- b. Prevent urban sprawl in order to minimize energy costs associated with infrastructure construction and transmission to distant locations and to maximize protection of open space, particularly forests, which provide carbon sequestration potential.
- c. Conserve energy by increasing the efficiency of delivery of services through the adoption and implementation of smart growth principles and policies.
- d. Reduce vehicle miles travelled by commuters through implementation of planning measures that provide appropriate jobs-housing balances within communities.

- e. Reduce vehicle miles travelled by increasing options for nonvehicular access through urban design principles that promote higher residential densities in attractive forms with easily accessible parks and recreation opportunities nearby.
- f. Improve energy efficiency through implementation of standards for new residential and commercial buildings that achieve energy efficiencies beyond that required under Title 24 of the California Code of Regulations.
- g. Reduce vehicle miles travelled by identifying sites for affordable housing for workers close to employment centers and encouraging development of such sites.

AQ 23.2 For discretionary actions, land use-related greenhouse gas reduction objectives shall be achieved through development and implementation of the appropriate Implementation Measures of the Climate Action Plan for individual future projects. County programs shall also be developed and implemented to address land use-related reductions for County operations and voluntary community efforts. (AI 147)

AQ 24.1 The County shall implement programs and requirements to achieve the following Objectives related to reducing greenhouse gas emissions achieved through improving energy efficiency and increasing energy conservation (AI 146):

- a. Require new development (residential, commercial and industrial) to reduce energy consumption through efficient site design that takes into consideration solar orientation and shading, as well as passive solar design. Passive solar design addressed the innate heating and cooling effects achieved through building design, such as selective use of deep eaves for shading, operable windows for cross-ventilation, reflective surfaces for heat reduction and expanses of brick for thermal mass (passive radiant heating).
- b. Require new development (residential, commercial and industrial) to design energy efficiency into the project through efficient use of utilities (water, electricity, natural gas) and infrastructure design.
- c. Require new development (residential, commercial and industrial) to reduce energy consumption through use of energy efficient mechanical systems and equipment.
- d. Establish or support programs to assist in the energy-efficient retrofitting of older affordable housing units.
- e. Actively seek out existing or develop new programs to achieve energy efficiency for existing structures, particularly residential units built prior to 1978 when Title 24 energy efficiency requirements went into effect.
- f. Balance additional upfront costs for energy efficiency and affordable housing economic considerations by providing or supporting programs to finance energy-efficient housing.

AQ 24.2 For discretionary actions, energy efficiency and conservation objectives shall be achieved through development and implementation of the appropriate Implementation Measures of the Climate Action Plan for all new development approvals. County programs shall also be developed and

implemented to address energy efficiency and conservation efforts for County operations and the community.

AQ 25.1 The County shall implement programs and requirements to achieve the following objectives related to reducing greenhouse gas emissions through water conservation (AI 146):

- a. Reduce water use in both new and existing housing, commercial and industrial uses.
- b. Reduce wastewater generation in both new and existing housing, commercial and industrial uses.
- c. Reduce the amount of water used for landscaping irrigation through implementation of County Ordinance No. 859.
- d. Increase use of non-potable water where appropriate, such as for landscaping and agricultural uses.
- e. Encourage increased efficiency of water use for agricultural activities.
- f. Decrease energy costs associated with treatment of urban runoff water through greater use of bioswales and other biological systems.

AQ 25.2 The County shall implement programs and requirements to achieve the following objectives related to reducing greenhouse gas emissions through biota conservation:

- a. Conserve biota that provides carbon sequestration through implementation of the Multiple Species Habitat Conservation Plans for western and eastern Riverside County.
- b. Preserve forest lands and other suitable natural vegetation areas to maintain the carbon sequestration capacity of such areas within the County.
- c. Promote establishment of vegetated recreational uses, such as local and regional parks, that provide carbon sequestration potential in addition to opportunities for healthy recreation.
- d. Promote urban forestry and reforestation, as feasible, to provide additional carbon sequestration potential.
- e. Promote the voluntary preservation of farmlands for carbon sequestration purposes. In particular, protect important farmlands and open space from conversion and encroachment by urban uses. Also, seek to retain large parcels of agricultural lands to enhance the viability of local agriculture and prevent the encroachment of sprawl into rural areas.
- f. Promote the voluntary preservation of areas of native vegetation that may contribute to biological carbon sequestration functions.
- g. Protect vegetation from increased fire risks associated with drought conditions to ensure biological carbon remains sequestered in vegetation and not released to the atmosphere through wildfires. In particular, prevent unnecessary intrusion of people, vehicles and development into natural open space areas to lessen risk of wildfire from human activities.

- AQ 25.3 For discretionary actions, greenhouse gas reduction objectives related to water and biota conservation shall be achieved through development and implementation of the applicable Implementation Measures of the Climate Action Plan. County programs shall also be developed and implemented to address conservation issues related to County operations and voluntary community efforts. (AI146)
- AQ 26.1 The County shall implement programs and requirements to achieve the following objectives related to reducing greenhouse gas emissions derived from energy generation (AI 146, 147):
- a. Encourage the installation of solar panels and other energy-efficient improvements.
 - b. Facilitate residential and commercial renewable energy facilities (solar array installations, individual wind energy generators, etc.).
 - c. Facilitate development of renewable energy facilities and transmission lines in appropriate locations.
 - d. Facilitate renewable energy facilities and transmission line siting.
 - e. Provide incentives for development of local green technology businesses and locally-produced green products.
 - f. Provide incentives for investment in residential and commercial energy efficiency improvements.
 - g. Identify lands suitable for wind power generation or geothermal production and encourage development of these alternative energy sources.
- AQ 26.2 For discretionary actions, the objectives for greenhouse gas reduction through increased use of alternative energy sources shall be achieved through development and implementation of the applicable Implementation Measures of the Climate Action Plan. County programs shall also be developed and implemented to address use of alternative energy for County operations and within the community. (AI 147)
- AQ 27.1 The County shall implement programs and requirements to achieve the following objectives related to reducing greenhouse gas emissions associated with wastes (AI 146, 147):
- a. Reduce the amount of solid waste generated.
 - b. Increase the amount of solid waste recycled by maximizing waste diversion, composting and recycling for residential and commercial generators.
 - c. Promote reductions in material consumption.
 - d. Decrease wastewater generation.
 - e. Reduce fugitive methane emissions and increase methane conversion to alternative energies at County landfills.

- AQ 27.2 Greenhouse gas reduction through the above waste reduction Objectives shall be achieved through development and implementation of the applicable Implementation Measures of the Climate Action Plan for new development. County programs shall also be developed and implemented to address waste reductions for County operations and voluntary community efforts. (AI 146)
- AQ 28.1 The County shall implement programs and requirements to achieve voluntary greenhouse gas emissions reductions through the following public education and outreach objectives (AI 147):
- a. Provide homeowner education programs on the various voluntary ways in which they may reduce their homes' GHG emissions.
 - b. Develop and implement motorist education programs on reducing vehicle miles travelled (VMT), idling, vehicle maintenance, etc.
 - c. Develop and implement incentive programs for increasing carpooling, public transit use and other similar means.
 - d. Develop and implement incentive programs for residential energy conservation, such as through retrofitting to improve insulation values, adding solar energy capabilities, planting deciduous trees to provide summer shade, etc.
 - e. Develop and implement programs designed to decrease transportation emissions, such as hybrid vehicle rebates, alternate fuel discounts, carpooling incentives, van pools, etc.
 - f. Develop and implement education programs about green purchasing and waste reduction measures, e.g., use of sustainable materials, composting and such.
 - g. Develop and implement programs to improve job-housing balances, such as through small business development, for areas that are housing rich but jobs poor.
 - h. Develop and implement programs to incentive recycling and other waste reduction programs.
- AQ 28.2 The County shall implement programs and requirements to achieve greenhouse gas emissions reductions through the following interagency coordination objectives (AI 146):
- a. Coordinate County regional GHG reduction efforts with those of other regional agencies and plans, i.e.:
 - SCAG Regional Blueprint Plan
 - SCAG Regional Transportation Plan (which will address SB375)
 - SCAQMD Air Quality Management Plans
 - SB 375 Coordination and "Sustainable Communities Strategies"
 - b. Coordinate with constituent cities and sub-regional planning agencies, particularly WRCOG and CVAG, on GHG reduction efforts that jointly affect the County and these cities.

- c. Coordinate with utility and service providers serving the County to develop programs to improve energy efficiency, water efficiency and delivery or structural improvements to reduce demand or better coordinate infrastructure development, as appropriate.
- d. Coordinate with regional agencies responsible for developing utility corridors, particularly for electricity transmission, to ensure alternate energy sources available to Riverside County are used to their fullest extent.

AQ 28.3 Voluntary greenhouse gas reduction objectives for the community sector shall be achieved through development and implementation of specific implementation measures, as determined appropriate and feasible by the County.

AQ 29.1 The County shall implement programs and requirements to achieve the following Objectives related to reducing greenhouse gas emissions from County transportation, such as fleet composition, construction equipment, employee commuting and travel on County business (AI 146):

- a. Increase the average fuel efficiency of County-owned vehicles powered by gasoline and diesel.
- b. Increase use of alternative and lower carbon fuels in the County vehicle fleet.
- c. Reduce total vehicle miles traveled by County employees, both commuting to work sites and travel for the conduction of County activities.

AQ 29.2 The County shall implement programs and requirements to achieve the following objectives related to reducing greenhouse gas emissions through improving energy efficiency for County facilities and operations (AI 146)

- a. Improve the energy efficiency of all existing and new County buildings.
- b. Improve the energy efficiency of County infrastructure operation (roads, water, waste disposal and treatment, buildings, etc.)
- c. Decrease energy use through incorporating renewable energy facilities (such as, solar array installations, individual wind energy generators, geothermal heat sources) on County facilities where feasible and appropriate.

AQ 29.3 The County shall implement programs and requirements to achieve the following objectives related to reducing greenhouse gas emissions through achieving waste reduction and resource efficiency for County facilities and operations (AI 146):

- a. Establish purchasing and procurement policies that support the use of green products and services, minimize waste and promote sustainability.
- b. Reduce potable water use at both new and existing County facilities and operations.
- c. Reduce wastewater generation and urban runoff in both new and existing County facilities and operations.

- d. Increase the amount of materials recycled from County facilities while decreasing the amount of solid waste generated by County facilities that requires landfill disposal.

AQ 29.4

Greenhouse gas emissions reduction objectives for County operations and facilities shall be achieved through development and implementation of enforceable and binding internal County policies, programs or similar means.

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ACRONYMS

| | |
|-------------------------------|---|
| AB 32 | Assembly Bill 32, The California Global Warming Solutions Act of 2006 |
| ARRA | American Recovery & Reinvestment Act |
| BAU | Business As Usual Scenario |
| BTU | British Thermal Unit |
| CARB | California Air Resources Board |
| CAA | Clean Air Act |
| CAAQS | California Ambient Air Quality Standards |
| Cal EPA | California Environmental Protection Agency |
| Cal Recycle | California Department of Resources Recycling and Recovery |
| CAS | California Climate Adaption Strategy |
| CCAT | California Climate Action Team |
| CCAR | California Climate Action Registry |
| CCR | California Code of Regulations |
| CCTP | Climate Change Technology Program |
| CEC | California Energy Commission |
| CEQA | California Environmental Quality Act |
| CFC | Chlorofluorocarbons |
| C ₂ F ₆ | Hexafluoroethane |
| CF ₄ | Carbon Tetrafluoride |
| CH ₄ | Methane |
| CIWMB | California Integrated Waste Management Board |
| CO ₂ | Carbon Dioxide |
| CO _{2e} | Carbon Dioxide Equivalent |
| CSI | California Solar Initiative |
| CWSRF | Clean Water State Revolving Funds |
| DPM | Diesel Particulate Matter |
| EECGB | Energy Efficiency Community Block Grant |
| EMFAC2007 | On-Road Emission Factors published by the CARB in 2007 |
| GCC | Global Climate Change |
| GHG | Greenhouse Gas |
| GWh | Gigawatt Hours |

| | |
|------------------|---|
| GWP | Global Warming Potential |
| HFC | Hydrofluorocarbons |
| HFC-23 | Trifluoromethane |
| HFC-134 | Hydrofluorocarbon 134 |
| HFC-152a | Difluoroethane |
| IPCC | Intergovernmental Panel on Climate Change |
| ITS | Intelligent Transportation Systems |
| LEED | Leadership in Energy and Environmental Design |
| MMT | Million Metric Tons |
| MT | Metric Tons |
| MWh | Megawatt Hours |
| N ₂ O | Nitrous Oxide |
| NSHP | New Solar Home Program |
| O ₃ | Ozone |
| RIP | Regional Improvement Program |
| RTIP | Regional Transportation Improvement Program |
| SCAG | Southern California Association of Governments |
| SCAQMD | South Coast Air Quality Management District |
| SCE | Southern California Edison |
| SCG | Southern California Gas Company |
| SIP | State Implementation Plan |
| SF ₆ | Sulfur Hexafluoride |
| STIP | State Transportation Improvement Plan |
| URBEMIS 2007 | Urban Emissions Model, version 9.2 published in June 2007 |
| USEPA | United States Environmental Protection Agency |
| VMT | Vehicle miles traveled |



Executive Summary

Riverside County is committed to providing a more livable, equitable, and economically vibrant community through the incorporation of sustainability features and reduction of greenhouse gas (GHG) emissions. By using energy more efficiently, harnessing renewable energy to power buildings, recycling waste, conserving and recycling water and enhancing access to sustainable transportation modes, Riverside will keep dollars in the local economy, create new green jobs and improve community quality of life. The efforts toward reducing GHG emissions described in this report would be done in coordination with Riverside County's land use decisions. The foundation of planning land use decisions is found in the General Plan policies and programs.

Through this Climate Action Plan (CAP), the County of Riverside has established goals and policies that incorporate environmental responsibility into its daily management of residential, commercial and industrial growth, education, energy and water use, air quality, transportation, waste reduction, economic development and open space and natural habitats to further their commitment.

The first step in completing the CAP was to complete a GHG emissions inventory. The CAP includes GHG inventories of community-wide and municipal sources based on the most recent data available for the year 2008. Sources of emissions include transportation, electricity and natural gas use, landscaping, water and wastewater pumping and treatment and decomposition of solid waste. Riverside County's 2008 inventory amounted to 7,012,938 MT CO_{2e} community-wide and 226,753 MT CO_{2e} from municipal operations.

Following the state's adopted AB 32 GHG reduction target, Riverside County has set a goal to reduce emissions back to 1990 levels by the year 2020. This target was calculated as a 15% decrease from 2008 levels, as recommended in the AB 32 Scoping Plan. The estimated community-wide emissions for the year 2020, based on population and housing growth projections associated with the assumptions used in the proposed General Plan Update, are 12,129,497 MT CO_{2e}. In order to reach the reduction target, Riverside County must offset this growth in emissions and reduce community-wide emissions to 5,960,998 MT CO_{2e} by the year 2020.

The development of this CAP coincides with Riverside County's General Plan Update. A community-wide emissions inventory is also calculated for the horizon year of 2035. The socioeconomic growth rates from the General Plan Update were used to estimate the 2035 emissions.

Various state policies have enacted programs that will also contribute to reduced GHG emissions in Riverside County by the year 2020. Some of these policies include updated building codes for energy efficiency, the low carbon fuel standard, Pavley vehicle emissions standards and the Renewables Portfolio Standard for utility companies. By supporting the state in the implementation of these measures, Riverside County will experience substantial GHG emissions reductions. These GHG reductions from the state measures are accounted for in the reduced inventories.

In order to reach the reduction target, the County of Riverside would also need to implement the additional local reduction measures described in this report. These measures encourage energy efficiency and renewable energy in buildings, transit oriented planning, water conservation and increase waste diversion. Table ES-1 (2008 and 2020 GHG Emissions Comparison), below, summarizes the community-wide emissions for 2008, 2020 and the reduced 2020 inventory with the inclusion of the proposed reduction measures.

Table ES-1 2008 and 2020 GHG Emissions Comparison

| Source Category | Metric tons of CO ₂ e | | | |
|---|----------------------------------|-------------------|------------------|---------------|
| | 2008 | 2020 BAU | Reduced 2020 | % Reduced |
| Transportation | 2,850,520 | 6,977,331 | 2,454,032 | 64.83% |
| Energy | 1,577,667 | 2,830,246 | 1,141,380 | 59.67% |
| Area Sources | 269,181 | 442,024 | 230,188 | 47.92% |
| Purchased Water | 152,473 | 175,344 | 109,021 | 37.82% |
| Solid Waste | 132,666 | 181,728 | 92,273 | 49.22% |
| Agriculture | 2,030,431 | 1,522,823 | 1,507,220 | 1.02% |
| Total | 7,012,938 | 12,129,497 | 5,534,113 | 54.37% |
| Emission Reduction Target ^a | | 5,960,998 | 5,960,998 | |

Note: Mass emissions of CO₂e shown in the table are rounded to the nearest whole number. Totals shown may not add up due to rounding.

a The reduction target for 2020 is based on a 15% decrease from Riverside County's 2008 emissions inventory.

Table ES-2 (Projected 2035 GHG Emissions Comparison) summarizes the 2035 emissions for Riverside County based on the anticipated growth rates included in Riverside County's General Plan update. After 2020, GHG emissions would continue to grow; however, the growth in Riverside County's future emissions would be offset by the reductions from incorporation of the CAP measures. The reduction measures included in the CAP have been developed to meet the 2020 reduction target; however, the implementation of the CAP would require periodic updates to ensure that Riverside County is continually tracking GHG emissions and making adjustments as necessary to ensure that future targets are met. The 2035 reduced inventory represents the estimated GHG emissions from Riverside County with the continued implementation of the reduction measures outlined in the CAP as well as the assumption that the current statewide measures would be extended beyond 2020. This represents a strategy for Riverside County to continue to reduce emissions below the 2020 reduction target through to 2035 and beyond.

Table ES-2 Projected 2035 GHG Emissions Comparison

| Source Category | Metric tons of CO ₂ e | | | |
|---|----------------------------------|-------------------|------------------|--------------|
| | 2008 | 2035 BAU | Reduced 2035 | % Reduced |
| Transportation | 2,850,520 | 9,318,041 | 2,617,363 | 71.9% |
| Energy | 1,577,677 | 3,610,701 | 1,323,685 | 63.3% |
| Area Sources | 269,181 | 529,384 | 256,478 | 51.6% |
| Purchased Water | 152,473 | 293,077 | 146,118 | 50.1% |
| Solid Waste | 132,666 | 220,747 | 107,198 | 51.4% |
| Agriculture | 2,030,431 | 1,522,823 | 1,486,815 | 2.4% |
| Total | 7,012,938 | 15,494,774 | 5,937,658 | 61.7% |
| 2020 Reduction Target ^a | | 5,964,354 | 5,964,354 | |

Note: Mass emissions of CO₂e shown in the table are rounded to the nearest whole number. Totals shown may not add up due to rounding.

a The reduction target for 2020 is based on a 15% decrease from Riverside County's 2008 emissions inventory.

This CAP describes a baseline for Riverside County's GHG emissions, projects how these emissions will grow, and includes strategies to reduce emissions to a level consistent with California's emissions reduction target. These strategies complement Riverside County's General Plan policies and are consistent with Riverside County's vision for a more sustainable community.



Chapter 1

Introduction

NOTE TO THE READER:

The County of Riverside is recirculating Draft Environmental Impact Report No. 521 (DEIR No. 521) for public review from February 21, 2015 through April 6, 2015 in accordance with the California Environmental Quality Act, Section 15088.5. Correlative changes were made to Draft General Plan Amendment No. 960 (GPA No. 960) and the Draft Climate Action Plan. The revised GPA No. 960 and CAP documents are made available for public reference.

The documents were previously circulated from May 1, 2014, through June 30, 2014. The circulation garnered a substantial amount of comments from government and regulatory agencies, interest groups, and Riverside County citizens, which resulted in the aforementioned changes. Additionally, several changes to the documents occurred in order to more accurately reflect the existing conditions of the County, and to further analyze impacts associated with the GPA No. 960. The following is a summary of the changes that occurred to the documents:

Draft General Plan Amendment No. 960:

- Data corrections to the Lakeview Nuevo Area Plan to reflect the removal of Specific Plan 342.
- Removal of the Lakeview Mountains Policy Area from the Lakeview Nuevo Area Plan.
- Addition of language clarifying the Wine Country Community Plan (GPA No. 1077) in relation to the Southwest Area Plan.
- Addition of language clarifying Airport Land Use consistency and Mixed Use Planning Areas.
- Addition of Policy S 1.4 requiring the County to implement the County of Riverside Multi-Jurisdictional Hazard Mitigation Plan.
- Addition of Policy OS 4.9 discouraging development within watercourses and areas within 100 feet of riparian vegetation.
- Minor modifications to text and policies as a result from comments received during the circulation of the draft document.

Draft EIR No. 521:

- The Draft EIR was updated to better reflect the existing conditions within the County.
- Several analysis sections of the Draft EIR were further refined in order to reflect changes associated with the updated background information. These sections included Air Quality, Greenhouse Gas, Biological Resources, Transportation and Circulation, Water Resources, and Cumulative Impacts.

- All analysis sections were updated where relevant to maintain consistency with any changes made in the Draft General Plan Update and Draft Climate Action Plan.

Draft Climate Action Plan:

- The Draft Climate Action Plan was updated with new implementation measures.

The recirculated documents better account for the changing environment in Riverside County and more accurately address future conditions. Although comments submitted during the previous comment period do not require a written response, it should be noted that these comments are part of the administrative record and were taken into consideration while drafting the revised document. Any comments made during the May 2014 circulation of the documents will be included in the administrative record; however they will not be addressed in the Response to Comments. Per Section 15088.5(f)(1) of the CEQA Guidelines, only those comments submitted in response to the recirculated Environmental Impact Report will receive a formal written response in the Response to Comments as a part of the Final EIR.

Introduction

The County of Riverside is committed to reducing GHG emissions in an effort to provide a more livable, equitable, and economically vibrant community. By using energy more efficiently, harnessing renewable energy to power our buildings, enhancing access to sustainable transportation modes and recycling waste, dollars are kept in our local economy, new green jobs are created and community quality of life improves. These efforts toward reducing GHG emissions must be done in coordination with Riverside County's land use decisions. The foundation of planning land use decisions are the General Plan policies and programs. The policies and programs of the Riverside County General Plan are intended to underlie most land use decisions. Preparing, adopting, implementing and maintaining a general plan serves to:

- Define the community's environmental, social, and economic goals.
- Provide citizens with information about their community and with opportunities to participate in the planning and decision-making processes of their community.
- Coordinate the community and environmental protection activities among local, regional, state and federal agencies.
- Guide in the development of the community.

In order to achieve these goals and to provide a more livable, equitable and economically vibrant community, the County of Riverside has committed to prepare and implement the Riverside County Climate Action Plan (CAP) to help ensure that the impact of development on air quality is minimized, energy is conserved and land use decisions made by Riverside County and all internal operations within Riverside County are consistent with adopted state legislation.

This section describes the purpose and goals of the CAP; describes the relationship of the CAP to the Riverside County General Plan, provides background information on GHG emissions; and summarizes the regulatory framework surrounding GHG emissions and climate change.

1.1 Purpose

The CAP was designed under the premise that the County of Riverside, and the community it represents, is uniquely capable of addressing emissions associated with sources under Riverside County's jurisdiction, and that Riverside County's emission reduction efforts should coordinate with the state strategies of reducing emissions in order to accomplish these reductions in an efficient and cost-effective manner. The County of Riverside developed this document with the following purposes in mind:

- Create a GHG emissions baseline from which to benchmark GHG reductions.
- Provide a plan that is consistent with and complementary to: the GHG emissions reduction efforts being conducted by the State of California through the Global Warming Solutions Act (AB 32), federal government through the actions of the Environmental Protection Agency (EPA), and the global community through the Kyoto Protocol.
- Guide the development, enhancement, and implementation of actions that reduce GHG emissions.
- Provide a policy document with specific implementation measures meant to be considered as part of the planning process for future development projects.

1.2 Goals

To fulfill the purposes of the CAP, the County of Riverside identified the following goals to be achieved:

- Provide a list of specific actions that will reduce GHG emissions, giving the highest priority to actions that provide the greatest reduction in GHG emissions and benefits to the community at the least cost.
- Reduce emissions attributable to Riverside County to levels consistent with the target reductions of AB 32.
- Establish a qualified reduction plan for which future development within Riverside County can tier and thereby streamline the environmental analysis necessary under the California Environmental Quality Act (CEQA).

1.3 Relationship to the County General Plan

The General Plan includes a series of linked documents including technical reports, and elements containing goals, policies and implementation programs that provide direction to the County of Riverside on managing its resources and how future development will occur.

The CAP is a separately bound document that will provide another implementation tool of the General Plan to guide development in Riverside County. The CAP focuses development on attaining the various goals and policies of the General Plan and all community plans relative to GHG emissions, and to achieve the goals outlined in Section 1.2 above.

1.4 Background

The CAP achieves the purpose and goals described above by providing:

- An analysis of GHG emissions and sources attributable to Riverside County.
- Estimates on how those emissions are expected to increase.
- Recommended policies and actions that can reduce GHG emissions to meet state, federal and international targets.
- A timeline of implementation.
- A defined tracking and reporting mechanism that will measure progress toward the goals.

In order to understand this process, the reader needs to know a few facts about GHG emissions, the climate change impacts anticipated within the County of Riverside and the international, federal, state and local regulatory framework designed to address climate change. The following information provides a brief background on these topics. A more complete description of the greenhouse effect, GHG emissions, and general climate change impacts can be found in Appendix A of this document.

A. Greenhouse Gases

Parts of the Earth's atmosphere act as an insulating "blanket" of just the right thickness, trapping sufficient solar energy to keep the global average temperature in a suitable range. This blanket is a collection of atmospheric gases called greenhouse gases, based on the idea that these gases also trap heat similar to the glass walls of a greenhouse. These gases, consisting mainly of water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone (O₃) and chlorofluorocarbons (CFC), all act as effective global insulators, reflecting back to earth infrared radiation. Human activities, such as producing electricity and driving internal combustion vehicles, emit these gases into the atmosphere.

Due to the successful global bans on chlorofluorocarbons (primarily used as refrigerants, aerosol propellants and cleaning solvents), Riverside County does not generate significant emissions of these GHGs. This also includes other synthesized gases such as hydrofluorocarbons (HFCs) and carbon tetrafluoride (CF₄) which have been banned and are no longer available on the market. Because of the ban, Riverside County will not generate emissions of these GHGs and therefore, they are not considered any further in this document. Sulfur hexafluoride (SF₆) is another GHG with a high global warming potential; it is mainly used as a gaseous dielectric medium in electric switchgear of high voltage electric transmission lines and medical use in retinal detachment surgery and ultrasound imaging. In both uses, SF₆ is not released to the atmosphere and therefore, it is not considered further in this document.

Because GHGs have variable potencies, a common metric of carbon dioxide equivalents (CO₂e) is used to report the combined potency from all of the GHGs. The potency each GHG has in the atmosphere is measured as a combination of the volume of its emissions and its global warming potential,¹ and is expressed as a function of

¹ The potential of a gas or aerosol to trap heat in the atmosphere.

the potency with respect to the same mass of CO₂. Thus, by multiplying the individual gas by its global warming potential, the emissions of each individual gas can be measured in terms of metric tons of CO₂e (MT CO₂e).

This CAP contains two types of GHG inventories, one covering community-wide emissions and the other for Riverside County's municipal emissions. The community-wide inventory focuses on the sources and amounts of GHG emissions generated from activities associated with land uses within the unincorporated areas under the jurisdictional control of the County of Riverside, while the municipal inventory covers emissions solely from the buildings, facilities, and vehicles under the operational control of the local government. The purpose of the inventories is to create a clear picture of how the unincorporated communities within Riverside County and the government operations uses fossil fuels and other forms of energy, and to pinpoint the activities and sectors contributing the most GHGs.

1.5 Regulatory Setting

In an effort to stabilize GHG emissions and reduce impacts associated with climate change, international agreements as well as federal and state actions were implemented beginning as early as 1988. The international, federal, state, regional and local government agencies discussed below work jointly, as well as individually, to address GHG emissions through legislation, regulations, planning, policy-making, education and a variety of programs.

A. International and Federal



Kyoto Protocol

The United States participates in the United Nations Framework Convention on Climate Change (UNFCCC) signed on March 21, 1994. Specifically, the Kyoto Protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. It has been estimated that if the commitments outlined in the Kyoto Protocol are met, global GHG emissions could be reduced by an estimated 5% from 1990 levels during the first commitment period of 2008–2012 (UNFCCC 1997). It should be noted that although the United States is a signatory to the Kyoto Protocol, Congress has not ratified the Protocol and the United States is not bound by the Protocol's commitments.

In December 2009, representatives from 170 countries met in Copenhagen to ratify an updated UNFCCC agreement known as the “Copenhagen Accord.” This accord is a voluntary agreement between the United States, China, India and Brazil that recognizes the need to keep global temperature rise to below 2°C and obliges signatories to establish measures to reduce greenhouse gas emissions and to prepare to provide help to poorer

countries in adapting to climate change. The countries met again in Cancun in December 2010 and adopted the Cancun Agreements, which reinforce and build upon the Copenhagen Accord. The nations agreed to recognize country targets, develop low-carbon development plans and strategies and report inventories annually. In addition, agreements were made regarding financing for developing countries, as well as for technology support and coordination among all nations. The next conference of the parties is scheduled for December 2011 in South Africa.

Climate Change Technology Program

In lieu of the Kyoto Protocol's mandatory framework, the United States has opted for a voluntary and incentive-based approach toward emissions reductions. The Climate Change Technology Program (CCTP) is a multi-agency research and development coordination effort led by the Secretaries of Energy and Commerce and charged with carrying out the President's National Climate Change Technology Initiative.

U.S. Environmental Protection Agency

The United States Environmental Protection Agency (USEPA) is responsible for implementing federal policy to address global climate change. The federal government administers a wide array of public-private partnerships to reduce GHG emissions generated by the United States. These programs focus on energy efficiency, renewable energy, methane and other non-CO₂ gases, agricultural practices and implementation of technologies to achieve GHG reductions. The USEPA implements several voluntary programs that help substantially reduce GHG emissions. These programs include: the State Climate and Energy Partner Network, which fosters the exchange of information between federal and state agencies regarding climate and energy; the Climate Leaders program for companies; the Energy Star® labeling system for energy-efficient products; and the Green Power Partnership for organizations interested in buying green power. All of these programs play a significant role in encouraging voluntary reductions from large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

It should be noted that in *Massachusetts v. Environmental Protection Agency* (Docket No. 05–1120), the U.S. Supreme Court held in April of 2007 that the USEPA has authority to regulate greenhouse gases and that the USEPA's reasons for not regulating this area did not fit the statutory requirements. As such, the Court ruled that the USEPA should be required to regulate CO₂ and other greenhouse gases as pollutants pursuant to Section 202(a)(1) of the federal Clean Air Act (CAA).

Towards this aim, in 2009 the USEPA issued a Final Rule for mandatory reporting of GHG emissions by fossil fuel suppliers, industrial gas suppliers, direct GHG emitters and manufacturers of heavy-duty and off-road vehicles and vehicle engines. It also requires annual reporting of emissions. The first annual reports required by the Rule were due in March 2011. This rule does not regulate the emission of GHGs; it only requires the monitoring and reporting of greenhouse gas emissions for those sources above certain thresholds (USEPA 2009). In addition, the USEPA adopted a Final Endangerment Finding for the six defined GHGs in December 2009. This Endangerment Finding is required for the USEPA to regulate GHG emissions under Section 202(a)(1) of the CAA.

On May 13, 2010, the USEPA issued a Final Rule that establishes a common sense approach to addressing greenhouse gas emissions from stationary sources under the CAA permitting programs. The rule is in its second phase, which continues through June 2013. In this phase, new construction projects that exceed a CO₂e threshold of 100,000 tons per year and modifications of existing facilities that increase CO₂e emissions by at least 75,000 tons per year are subject to permitting requirements. Additionally, operating facilities that emit at least 100,000

tons per year are subject to Title V permitting requirements for GHGs (USEPA 2010a). New and existing industrial facilities that meet or exceed that threshold require a permit under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs.

B. State

California Air Resources Board

The California Air Resources Board (CARB), a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, CARB conducts research, sets the California Ambient Air Quality Standards (CAAQS), compiles air emission inventories, develops suggested control measures and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints and barbecue lighter fluid) and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts. The SIP is required for the State of California to take over implementation of the federal Clean Air Act in California and consists of rules and technical documentation to support the State of California's plan for reducing emissions of criteria pollutants in areas that exceed EPA standards and are designated non-attainment.

Executive Order S-20-04

Governor Arnold Schwarzenegger signed Executive Order S-20-04 regarding Green Buildings on December 14, 2004. It established California's priority for energy and resource-efficient high performance buildings. The Executive Order sets a goal of reducing energy use in state-owned buildings by 20 percent by 2015 (from a 2003 baseline) and encourages the private commercial sector to set the same goal. Executive Order S-20-04 also directs compliance with the Green Building Action Plan which details the measures the state will take to meet these goals. To summarize, Executive Order S-20-04 and the Green Building Action Plan assigned the California Energy Commission to develop the following measures to achieve the goals of Executive Order S-20-04:

- Building efficiency benchmarking system for all state-owned and private commercial buildings.
- Develop commissioning and retro commissioning guidelines for commercial buildings.
- Develop and refine (Title 24) building energy efficiency standards applicable to commercial buildings sector to result in 20% reduction in energy use by 2015 using standards adopted in 2003 as the baseline.
- Consult and collaborate with the Department of General Services, Department of Finance and California Public Utility Commission on retrofitting all state-owned buildings.

Executive Order S-3-05

California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following GHG emission reduction targets:

- By 2010, California shall reduce GHG emissions to 2000 levels.

- By 2020, California shall reduce GHG emissions to 1990 levels.
- By 2050, California shall reduce GHG emissions to 80% below 1990 levels.

The first California Climate Action Team (CCAT) Report to the Governor in 2006 contained recommendations and strategies to help meet the targets in Executive Order S 3-05. In April 2010, the Draft California Action Team (CAT) Biennial Report expanded on the policy-oriented 2006 assessment. The new information detailed in the CAT Assessment Report includes development of revised climate and sea-level projections using new information and tools that have become available in the last two years, and an evaluation of climate change within the context of broader social changes such as land-use changes and demographic shifts (CCAT 2010). Action items in the report focus on the preparation of the Climate Change Adaptation Strategy, required by Executive Order S-13-08, described later in this report.

Assembly Bill 1493, Clean Car Standards

AB 1493 (also known as the Pavley Bill, in reference to its author Fran Pavley) was enacted in 2002 and requires the “maximum feasible and cost effective reduction” of GHGs from automobiles and light-duty trucks. Subsequently, in 2004, CARB approved the “Pavley I” regulations limiting the amount of GHGs that may be released from new passenger automobiles beginning with model year 2009 through 2016; these regulations would reduce emissions from new passenger automobiles by 30% from 2002 levels by 2016. The second set of regulations (“Pavley II”) is currently in development and will cover model years 2017 through 2025 in order to reduce emissions by 45% by the year 2020. The automotive industry legally challenged the bill claiming that the federal gas mileage standards preempted these state regulations. In 2005, California filed a waiver request to the USEPA in order to implement the GHG standards (Pavley I and II) and in March of 2008, the USEPA denied the request. However, in June 2009, the decision was reversed and the USEPA granted California the authority to implement the GHG reduction standards for passenger cars, pickup trucks, and sport utility vehicles.

In September 2009, CARB adopted amendments to the “Pavley I” regulations that cemented California’s enforcement of the Pavley rule starting in 2009 while providing vehicle manufacturers with new compliance flexibility. The amendments also coordinated California’s rules with the federal rules for passenger vehicles.

Assembly Bill 32, The Global Warming Solutions Act of 2006



In 2006, the California State Legislature adopted AB 32, *the California Global Warming Solutions Act of 2006*, focusing on reducing GHG emissions in California. GHGs as defined under AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. AB 32 required CARB to adopt rules and regulations directing state actions that would reduce GHG emissions to 1990 statewide levels by 2020. CARB was also required to publish a list of “discrete early action” GHG emission reduction measures that would be made enforceable by 2010. The law further required that such measures achieve the maximum technologically feasible and cost-effective reductions in GHGs from sources or categories of sources to achieve the statewide greenhouse gas emissions limit for 2020.

Towards this aim, in October 2007, CARB published its Final Report for Proposed Early Actions to Mitigate Climate Change in California. This report described recommendations for discrete early action measures to reduce GHG emissions. Resulting from this were three new regulations including: a low carbon fuel standard, reduction

of HFC-134a (a refrigerant chemical) emissions from non-professional servicing of motor vehicle air conditioning systems and improved landfill methane capture. CARB estimated that by 2020, reductions from these three measures would reduce emissions by approximately 13-26 million metric tons CO₂e.

In 2007, CARB released a report, *California 1990 GHG Emissions Level and 2020 Emissions Limit*, establishing that statewide levels of GHG emissions in 1990 were 427 MMT CO₂e. Additionally, in 2008, CARB adopted the *Climate Change Scoping Plan*, outlining the State of California's strategy to achieve the 2020 GHG limit. The Scoping Plan proposes a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify energy sources, save energy, create new jobs and enhance public health. The plan emphasizes a cap-and-trade program, but also includes the discrete early actions previously mentioned.

Senate Bill 97

SB 97, enacted in 2007, amended CEQA to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directed the California Office of Planning and Research (OPR) to develop revisions to the *State CEQA Guidelines* "for the mitigation of GHG emissions or the effects of GHG emissions" and directed the Resources Agency to certify and adopt these revised *State CEQA Guidelines* by January 2010 (See PRC Section 21083.05). The revisions were codified into the California Code of Regulations and became fully effective by July 2010. These revisions provide regulatory guidance for the analysis and mitigation of the potential effects of GHG emissions.

Among the changes resulting from SB 97 was the addition of criteria for Climate Action Plans used in the tiering and streamlining of CEQA analysis of GHGs for subsequent development projects. Riverside County has updated the Air Quality Element of the General Plan to include specific policies to address GHG emissions. The implementation mechanisms for these GHG-related policies are the Screening Tables for New Development, included in Appendix N of the General Plan. The Screening Tables allow new development projects a streamlined option for complying with the CEQA requirements for addressing GHG emissions. Additionally, Riverside County's Climate Action Plan details policies to reduce emissions from municipal and community-wide sources including emissions from existing buildings and new development. The addition to the *State CEQA Guidelines* reads as follows:

15183.5. Tiering and Streamlining the Analysis of Greenhouse Gas Emissions.

- (a) *Lead agencies may analyze and mitigate the significant effects of greenhouse gas emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce greenhouse gas emissions. Later project-specific environmental documents may tier from and/or incorporate by reference that existing programmatic review. Project-specific environmental documents may rely on an EIR containing a programmatic analysis of greenhouse gas emissions as provided in Section 15152 (tiering), 15167 (staged EIRs) 15168 (program EIRs), 15175-15179.5 (Master EIRs), 15182 (EIRs Prepared for Specific Plans), and 15183 (EIRs Prepared for General Plans, Community Plans, or Zoning).*
- (b) *Plans for the Reduction of Greenhouse Gas Emissions. Public agencies may choose to analyze and mitigate significant greenhouse gas emissions in a plan for the reduction of greenhouse gas emissions or similar document. A plan to reduce greenhouse gas emissions may be used in a cumulative impacts analysis as set forth below. Pursuant to Sections 15064(h)(3) and 15130(d), a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan or mitigation program under specified circumstances.*

- (1) *Plan Elements. A plan for the reduction of greenhouse gas emissions should:*
 - (A) *Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;*
 - (B) *Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable;*
 - (C) *Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area;*
 - (D) *Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;*
 - (E) *Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels;*
 - (F) *Be adopted in a public process following environmental review.*
- (2) *Use with Later Activities. A plan for the reduction of greenhouse gas emissions, once adopted following certification of an EIR or adoption of an environmental document, may be used in the cumulative impacts analysis of later projects. An environmental document that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project. If there is substantial evidence that the effects of a particular project may be cumulatively considerable notwithstanding the project's compliance with the specified requirements in the plan for the reduction of greenhouse gas emissions, an EIR must be prepared for the project.*

One of the goals of the CAP is to allow programmatic level review and mitigation of GHG emissions that allows for streamlining of CEQA review for subsequent development projects. To accomplish this, the CAP framework is designed to fulfill the requirements identified in CEQA Guidelines Section 15183.5, above.

Senate Bill 375

SB 375 established mechanisms for the development of regional targets for reducing passenger vehicle greenhouse gas emissions and was adopted by the State of California in September 2008. In response, in 2010, CARB adopted vehicular GHG emissions reduction targets developed in consultation with the state's metropolitan planning organizations (MPOs), which included the Southern California Association of Governments (SCAG), to which Riverside County belongs. The targets require a 7-8% reduction by 2020 and 13-16% reduction by 2035 for each MPO. The objective of these targets is to induce cities and counties to change their land use patterns and improve their transportation alternatives. Through the SB 375 process, MPOs, such as SCAG, are to work with local jurisdictions in the development of "Sustainable Communities Strategies" (SCS) designed to integrate development patterns and the transportation network in a way that reduces greenhouse gas emissions while meeting housing needs and other regional planning objectives. In particular, SCAG's reduction target for per capita vehicular emissions is 8% by 2020 and 13% by 2035 (CARB 2010b). SCAG is in the process of preparing its SCS according to its 2012 regional transportation plan (RTP) update schedule. To date, no region has adopted an SCS; the earliest RTP updates with SCSs are expected in 2012.

Executive Order S-13-08

On November 14, 2008, Governor Schwarzenegger issued Executive Order S-13-08, the Climate Adaptation and Sea Level Rise Planning Directive, which provides clear direction for how the State of California should plan for future climate impacts. Executive Order S-13-08 calls for the implementation of four key actions to reduce the vulnerability of California to climate change:

- Initiate California's first statewide Climate Change Adaptation Strategy (CAS) that will assess the state's expected climate change impacts, identify where California is most vulnerable, and recommend climate adaptation policies.
- Request that the National Academy of Sciences establish an expert panel to report on sea level rise impacts in California in order to inform state planning and development efforts.
- Issue interim guidance to state agencies for how to plan for sea level rise in designated coastal and floodplain areas for new and existing projects.
- Initiate studies on critical infrastructure projects and land-use policies vulnerable to sea level rise.

The resultant 2009 CAS Report summarizes the best known science on climate change impacts in the state to assess vulnerability and outlines possible solutions that can be implemented within and across state agencies to promote resiliency. This is the first step in an ongoing, evolving process to reduce California's vulnerability to climate impacts (California Natural Resources Agency 2009a).

California Code of Regulations (CCR) Title 24, Part 6

CCR Title 24, Part 6: *California's Energy Efficiency Standards for Residential and Nonresidential Buildings* (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Electricity production by fossil fuels results in GHG emissions, and energy-efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

The Energy Commission adopted the 2008 Standards on April 23, 2008, and the Building Standards Commission approved them for publication on September 11, 2008. These updates became effective on August 1, 2009. The Energy Commission adopted the 2008 changes to the Building Energy Efficiency Standards for several reasons:

- To provide California with an adequate, reasonably priced and environmentally sound supply of energy.
- To respond to AB 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its GHG emissions to 1990 levels by 2020.
- To pursue California energy policy, which states that energy efficiency is the resource of first choice for meeting California's energy needs.
- To act on the findings of California's Integrated Energy Policy Report (IEPR) that concludes that the Standards are the most cost-effective means to achieve energy efficiency, expects the Building Energy Efficiency Standards to continue to be upgraded over time to reduce electricity and peak demand and recognizes the role of the Standards in reducing energy related to meeting California's water needs and in reducing GHG emissions.

- To meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures into updates of state building codes.
- To meet the energy efficiency goals of Executive Order S-20-04 which established California's Green Building Initiative. The Executive Order seeks to improve the energy efficiency of nonresidential buildings through aggressive standards toward the target of a 20% reduction in building energy use from a 2003 baseline by the year 2015.

California Green Building Code

CCR Title 24, Part 11: California's Green Building Standard Code (CalGreen) was adopted in 2010 and went into effect January 1, 2011. CalGreen is the first statewide mandatory green building code and significantly raises the minimum environmental standards for construction of new buildings in California. The mandatory provisions in CalGreen will reduce the use of volatile organic compounds (VOC) emitting materials, strengthen water conservation, and require construction waste recycling.

C. Regional

Riverside County spans three different air basins: South Coast, Salton Sea, and Mojave Desert. The portions of Riverside County within the South Coast and Salton Sea Air Basins are regulated by the South Coast Air Quality Management District (SCAQMD), which also governs Los Angeles and Orange Counties, plus a small portion of San Bernardino County. The easternmost third of Riverside County, that within the Mojave Desert Air Basin, is under the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD), which also governs most of San Bernardino County. The AQMDs are responsible for promoting and improving the air quality of their jurisdiction's basins. This is accomplished through air quality monitoring, evaluation, education, implementation of control measures to reduce emissions from stationary sources, permitting and inspection of pollution sources, enforcement of air quality regulations and by supporting and implementing measures to reduce emissions from motor vehicles. Both the SCAQMD and the MDAQMD have stationary, area and mobile source² control measures designed to bring the area into compliance with the state ozone standards.

After AB 32 was passed, SCAQMD formed the Climate Change Committee along with the Greenhouse Gases CEQA Significance Thresholds Working Group and the SoCal Climate Solutions Exchange Technical Advisory Group. On September 5, 2008, the SCAQMD Board approved the SCAQMD Climate Change Policy, which outlines actions SCAQMD will take to assist businesses and local governments in implementing climate change measures, decrease the agencies carbon emissions and provide information to the public regarding climate change. On December 5, 2008, the SCAQMD Board approved interim CEQA GHG significance thresholds for stationary sources, rules, and plans. SCAQMD adopted a tiered approach for determining significance; projects that are exempt from CEQA or consistent with a local GHG reduction plan are determined less than significant. Tier 3, the primary tier the board will use for determining significance, has a screening significance threshold using the 90th percentile of emissions capture rate approach.

² Stationary sources emit pollutants from a fixed location, for example industrial boilers. Mobile sources are motor vehicles and other transportation sources that generate pollution through the combustion of fossil fuels. Area sources are those associated with the activities of a given area, such as from fireplaces and lawnmowers in a residential area.

D. Local

In light of state and regional efforts to reduce GHGs, there are several avenues of opportunity Riverside County faces. In preparing this CAP, the County of Riverside is able to streamline its CEQA review of individual projects. By having a GHG reduction plan that adequately addresses emissions at the plan level, the County of Riverside is able to determine that projects that are consistent with the plan will not have significant GHG-related impacts. Coordination with CARB, SCAQMD, and the State Attorney General's office ensures that the inventories and reduction strategies presented in this report adequately address the County of Riverside's emissions. The County of Riverside will use screening tables for new development (described in Section 4 of this report) in order to evaluate the consistency of individual projects with the goals and reduction measures outlined in this report.

The screening tables are setup similar to a checklist with points allocated to certain elements that reduce greenhouse gas emissions; if the project garners 100 points (by including enough GHG-reducing elements), then the project is consistent with Riverside County's plan for reducing emissions. This streamlined process relieves the Riverside County development projects from lengthy studies or uncertainties, particularly for small development proposals. The screening tables are set up in such a way that a new development project can earn points by reducing emissions from an existing source (by making an existing building more energy efficient, for example). This is particularly beneficial for jurisdictions, such as Riverside County, that have significant housing stock built prior to the 1974 inception of Title 24 energy efficiency standards and requirements. Thus, Riverside County is able to reduce emissions from both existing sources and future development.

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Chapter 2

Methodology

2.1 Overview

The first step in drafting this CAP is to prepare the GHG inventories for Riverside County. GHG inventories include all major sources of emissions attributable directly or indirectly to Riverside County's government operations or activities within the community the County of Riverside serves. GHG inventories are divided into two broad categories: government GHG inventories and community-wide GHG inventories. Government GHG inventories include emissions resulting from county government operations. Community-wide GHG inventories include a broader range of emissions associated with both the activities within the community Riverside County serves and the government operations. As such, the government GHG inventory is a subset of the larger community-wide GHG inventory. The methodology for preparing GHG inventories incorporates the protocols, methods, and emission factors found in the California Climate Action Registry (CCAR) *General Reporting Protocol* (version 3.1, January 2009), the *Local Government Operations Protocol* (LGOP) (version 1.1, May 2010), and the *Draft Community-wide GHG Emissions Protocol* under development by the Association of Environmental Professionals (AEP) and the International Council for Local Environmental Initiatives (ICLEI). The LGOP provides the guidance and protocols in the development of the government GHG inventory. Currently, there is not an adopted protocol for the development of community-wide GHG inventories. However, the AEP/ICLEI *Draft Community-wide GHG Emissions Protocol* provides draft guidance in the development of the community-wide inventory.

The LGOP and the draft AEP/ICLEI *Draft Community-wide GHG Emissions Protocol* categorize GHG emissions into three distinct "scopes" as a way of organizing GHG emissions, as follows:

- **Scope 1 Emissions** – All "direct" sources of community-wide GHG emissions from sources within the jurisdictional boundaries and unincorporated areas of Riverside County. This includes fuel burned onsite in buildings and equipment such as natural gas or diesel fuel; transportation fuels burned in motor vehicles; and wood-burning emissions from household hearths. For inventories of only government operations, these emissions are limited to activities under the operational control of the County of Riverside government.
- **Scope 2 Emissions** – Encompasses "indirect" sources of GHG emissions resulting from the consumption of purchased electricity, which is electricity used by the residents, businesses, and County of Riverside's facilities. An "indirect" source is one where the action that generates GHGs is separated from where the GHGs are actually emitted. For example, when a building uses electricity, it necessitates the burning of fossil fuels, such as coal or natural gas (and resultant release of GHGs) to generate electricity by a utility facility located elsewhere. Thus, they are distinguished from *direct* emissions (i.e., Scope 1 emissions) from electricity production, which are reported by the utility itself, in order to avoid double counting.

- **Scope 3 Emissions** – An optional reporting category that encompasses all other “indirect emissions” that are a consequence of activities of Riverside County’s residents and businesses, but occur from sources out of the jurisdictional control of the local government. The key to this category of emissions is that they must be “indirect or embodied emissions over which the local government exerts significant control or influence” (CCAR 2010). For example, when considering GHG emissions from trucks hauling waste under a county contract, the County of Riverside does not own the waste hauling trucks, but does have significant control over how many pickups the trucks make.

Scope 1 emissions are characterized in this report as “direct emissions” While Scope 2 emissions are characterized as “indirect source emissions.”

The analysis herein is tailored to include all existing and projected emission sources within the unincorporated areas of Riverside County to provide, to the fullest extent feasible, a comprehensive analysis of GHG reductions. The AB 32 Scoping Plan establishes a comprehensive program of regulatory and market mechanisms to achieve real, quantifiable, cost-effective reductions of GHG emissions.

2.2 Calculation of GHGs

The first step in developing the CAP was to establish an existing inventory of Riverside County’s GHG emissions. The purpose of this inventory is to create an existing inventory to align with the Riverside County General Plan Update. The CAP uses 2008 as the year on which to base the existing inventory; this is the most recent year for which reliable data concerning Riverside County’s residential, commercial, and government operations are available. This inventory provides a framework on which to design programs and actions that specifically target reductions by emissions sources. Programs and actions already in place within Riverside County are described in Chapter 4. The 2008 inventory serves as a reference against which to measure Riverside County’s progress towards reducing GHG emissions into the future, and also serves as documentation for potential emission trading opportunities.

The methodology used for the calculation of GHG emissions differs depending on the emission source, as described below. The emissions calculations follow the CCAR General Reporting Protocol, version 3.1; LGOP, version 1.1; and CARB’s Mandatory GHG Reporting Regulations (Title 17, California Code of Regulations, Sections 95100 et seq.). These protocols are consistent with the methodology and emission factors endorsed by CARB and USEPA. In cases where these protocols do not contain specific source emission factors, current industry standards or the USEPA’s *AP 42 Compilation of Air Pollution Emission Factors* were used.

In estimating Riverside County’s total GHG emissions in 2008, many data sources were utilized. For community energy statistics, the following agencies and Riverside County departments were consulted: Riverside County Planning Department, Southern California Edison (SCE), Imperial Irrigation District (IID) and Southern California Gas Company (SCG). Transportation data sources included Riverside County Transportation Department, Riverside County Economic Development Agency, Southern California Association of Governments (SCAG) and California Department of Transportation (CalTrans). Agricultural data sources included Riverside County Agricultural Commissioner and SCAG. Water use data was gathered from Coachella Valley Water District, Desert Water Agency, Eastern Municipal Water District, Western Municipal Water District, Palo Verde Irrigation District, San Geronio Pass Water Agency and Metropolitan Water District of Southern California. Solid waste data was collected from Riverside County Waste Management Department, California Integrated Waste Board (CIWB) and California Department of Resources Recycling and Recovery (Cal Recycle). Appendix C includes a compilation of all data inputs. In cases where specific data for 2008 was not available,

estimates were made by extrapolating from existing data the County of Riverside had that was as close to 2008 as possible. Details on the data inputs and estimates made when 2008 data was not available can be found in Appendices B and C of this CAP. The data used in the calculations for each inventory are summarized in Chapter 3. All of the contributors to GHG emissions (kilowatt-hours (kWh) of electricity generated by fossil fuel combustion in power plants, natural gas in therms, vehicle travel in VMT, and solid waste in tons) are expressed in the common unit of MT of CO₂e released into the atmosphere in a given year.

In addition, the costs associated with the GHG emissions were calculated for each sector (based on availability of data). The costs were based on the consumer fees for each fuel type included in the inventory. By including the costs, the County of Riverside can assess where consumers are spending the most money and utilize the information in making decisions on reduction measures. Coefficients, modeling inputs, and other assumptions, used in the calculations of GHGs are included in the Appendix of this report.

GHG emissions are typically segregated into direct and indirect sources as discussed previously. However, direct and indirect sources are not completely independent of each other and are often combined into other more encompassing categories. For example, although natural gas combustion is a direct source and electricity generation is an indirect source, they both are typically discussed under a heading of “Energy” when policies are put in place to reduce emissions. Therefore, this CAP discusses emissions with respect to the general source categories of Transportation, Energy, Area Source, Water, Wastewater, and Solid Waste.

A. Energy

Electricity

Emissions of CO₂, CH₄, and N₂O within Riverside County result from the use of electricity. Annual electricity usage in 2008, obtained from SCE and IID, the two major commercial electricity providers serving Riverside County territory, was used in determining community-wide electricity consumption and generation emission estimates for the existing inventory. For the municipal inventory, electricity use in government facilities and streetlights was included and categorized by department. For 2020, emissions estimates were based on the anticipated growth in population, housing and employment for the County of Riverside. The 2020 growth projections were interpolated from the General Plan Update growth rates.

SCE and IID provide electricity generated via a variety of sources, including combustion of natural gas and coal, nuclear, large hydroelectric, and renewable sources (solar, wind, etc.). Each of these sources of electricity emits different amounts of GHGs. Therefore, emissions from electricity were determined by multiplying annual usage in megawatt hours per year (MWh/year) by the SCE emission factors appropriate to the inventory year for CO₂, CH₄, and N₂O obtained from USEPA’s Emissions and Generation Resource Integrated Database (eGRID) (USEPA 2007).

Two gas-to-energy facilities are located in unincorporated Riverside County, one at the Badlands Landfill and one at the El Sobrante Landfill. These facilities take the methane collected from the decomposition of solid waste and convert it to electricity. The generation of electricity from these alternative generation sources results in emission reductions. Therefore, the operation of these facilities offset electrical consumption within the inventory by approximately 13,016 megawatt hours to account for the electricity generated by these facilities in 2008. Concerning the El Sobrante Landfill, the County of Riverside cannot claim all of the benefits associated with the gas-to-energy facility at the landfill. The El Sobrante landfill is privately owned and operated. The majority of the waste disposed of at the landfill is generated from outside of Riverside County boundaries. The County of Riverside collects fees and has indirect control over the waste collected from within Riverside County at the El

Sobrante Landfill; however, the County of Riverside does not have control over the landfill waste collected by the private operator from outside Riverside County boundaries. Therefore, the benefits from cogeneration are limited to the portion of methane associated with waste collected within Riverside County. As of the end of 2008, approximately 49 percent of the total waste deposited in the El Sobrante landfill originated within Riverside County with the remaining 51 percent originating outside of Riverside County. The 2008 baseline inventory calculates the benefit of the El Sobrante cogeneration based on the portion of waste collected within Riverside County. The contractual split of waste at El Sobrante Landfill was updated after 2008 such that 40 percent of the waste will come from within Riverside County with the remaining 60 percent coming from outside Riverside County. Cogeneration benefits at the El Sobrante Landfill for years 2020 and 2035 reflect the contractual split of waste.

Natural Gas Combustion

The residents and businesses of Riverside County emit GHGs from the combustion of natural gas, most often used for space heating. The annual natural gas usage for the unincorporated areas of Riverside County measured in million British Thermal Units (MMBTUs) was multiplied by the respective emissions factors for CO₂, CH₄, and N₂O to determine the emissions from natural gas combustion. Existing inventory consumption levels for municipal operations and the community as a whole were obtained from the Southern California Gas Company (SCG) and future community-wide consumption estimates were based on anticipated growth in Riverside County.

B. Water Supply

Water-related emissions included in this section are indirectly produced as a result of electrical consumption to pump and treat water imported from outside Riverside County. There are many water agencies that operate in Riverside County providing both potable and non-potable water to customers in the unincorporated areas. The six major water importers and wholesalers serving Riverside County are: Coachella Valley Water District (CVWD), Desert Water Agency (DWA), Eastern Municipal Water District (EMWD), Western Municipal Water District (WMWD), Palo Verde Irrigation District (PVID) and San Geronio Pass Water Agency (SGPWA). Serving EMWD and WMWD, the Metropolitan Water District of Southern California (MWD) holds the rights to a large portion of the State Water Project supply (the system of aqueducts and canals that distributes water from the Sacramento Bay-San Joaquin Delta across the state) and is the largest water wholesaler in California. The San Geronio Pass Water Agency also gets its water from the State Water Project. The water agencies in the eastern portion of Riverside County predominantly get their water from the Colorado River.

Each agency's water supply comes from a mixture of the following sources: the Bay-Delta via the State Water Project, the Colorado River, local groundwater, recycled water, and local surface water. The GHG emissions associated with water use come from the energy used to collect, treat, convey, and distribute the water. Water imported through the State Water Project and from the Colorado River have higher GHG emissions associated with them, when compared to local water sources, as these distant sources require energy intensive transport to reach Riverside County. This category, "Water Supply," addresses the GHG emissions resulting from energy used to pump/transport these imported sources of water from their sources to Riverside County. This separate category is necessary, as the energy used is accrued across a varied of providers and is not included in the data collected from SCE and IID. For local water sources, the data collected from SCE and IID include associated electricity usage and, hence GHG emissions are included under the "Electricity" category described above. Showing GHG emissions associated with local water sources in the "Electricity" category avoided double counting because the electricity used to pump local water supplies was embedded in the SCE reported electrical consumption data for unincorporated Riverside County.

C. Wastewater Treatment

As with the local water supply just mentioned, GHG emissions associated with wastewater (that is, sewage, urban runoff, and, in some cases, industrial or manufacturing runoff) are based on the electricity needed to pump and treat the wastewater. Again, since wastewater treatment occurs locally within Riverside County, these emissions are also accounted for under the “Electricity” section of the community-wide inventory to avoid double counting of GHG emissions identical to how locally pumped water were treated.

D. Solid Waste Management

Riverside County Waste Management Department is responsible for managing the County’s landfills, including both active and closed landfills, with one exception – the El Sobrante landfill, which is privately owned and operated. Table 2-1 (Riverside County Landfills), below, provides information on the closure year (either past or planned), the year the landfill gas (LFG) system was installed, the in place tonnage at the end of 2008 and the amount of waste disposed at each landfill in 2008. As discussed under “Electricity,” the County of Riverside collects fees and has control over the portion of the El Sobrante landfill waste collected from within Riverside County. Therefore, the emissions associated with solid waste within the inventory are limited to the portion of waste collected within Riverside County.

Riverside County’s municipal inventory includes the emissions associated with the landfills that are owned and managed by the County of Riverside. This includes emissions from county-owned vehicles and equipment as well as fugitive methane emissions from open and closed landfills that are managed by the County of Riverside. Riverside County’s emissions from vehicles and equipment associated with solid waste are included, respectively, in the vehicle fleet and off-road equipment sections of the municipal operations inventory.

Table 2-1 Riverside County Landfills

| Landfill Name (closure year) | Year LFG System Installed | In-place Tonnage (end of 2008) | Waste Disposed in 2008 |
|---------------------------------|---------------------------|-----------------------------------|------------------------|
| Badlands (2016) | 2001 | 8,389,807 | 582,404.62 |
| Blythe (2034) | 1998 | 609,373 | 15,178.80 |
| Coacheila (1997) | 2001 | 3,237,845 | - |
| Corona (1986) | 1988 | 3,200,000 | - |
| Desert Center | - | 40,425 | 15.25 |
| Double Butte (1994) | 1997 | 1,977,463 | - |
| Edom Hill (1997) | 2008 | 7,323,778 | - |
| Elsinore (1965) | 1993 | 1,140,000 | - |
| El Sobrante (2045)* | 1989 | 22,127,558 | 960,363.49 |
| Highgrove (1998) | 1998 | 3,496,425 | - |
| Lamb Canyon (2021) | 2001 | 6,376,349 | 688,142.35 |
| Mead Valley (1997) | 1995 | 2,312,837 | - |
| Mecca II | - | 228,088 | 8.86 |
| Oasis | - | 176,410 | 1,479.97 |
| W. Riverside (1993) | 1988 | 1,260,000 | - |

*El Sobrante is a privately operated landfill; all others are operated by Riverside County Waste Management. Waste Disposed in 2008 associated with the El Sobrante landfill represents only the in County portion (or approximately 49 percent) of the total waste disposed at this landfill.

Emissions from solid waste result from three different waste-related sources of emissions: transportation from its source to the landfill, operation of the equipment used at the landfill and the fugitive emissions from waste decomposition. Emissions from the transportation of solid waste are determined based on the average number of

miles traveled by each truck multiplied by the CO₂, CH₄, and N₂O emissions generated per mile traveled. These emissions are accounted for under the “Transportation,” Section 2.3.4, of the inventory, described below. The emissions from landfill equipment are dependent upon the type of equipment, fuel use and duration of use. Emissions from waste decomposition at both active and inactive landfills located in the unincorporated areas of Riverside County are included in the inventory. The operational information used in this section was collected from the Riverside County Waste Management Department.

Emissions from the equipment used at the landfills were calculated from total fuel use by the equipment and the emission factors for CO₂, CH₄ and N₂O, as determined from CARB off-road mobile source emission factors. Fugitive methane emissions from the decomposition of solid waste (typically buried) are calculated based on the annual waste generation multiplied by the applicable emission factors for waste production for CH₄. Many landfills now have a methane capture system in place; depending on the type of system, not all of the methane generated from the decomposition is included in the inventory. In Riverside County, three of the existing seven active landfills and nine inactive landfills have such systems. Although CO₂ is also a by-product of organic waste decomposition, the USEPA considers these emissions to be natural and not anthropogenic. Therefore, they are not included in the emissions inventory. Nitrous oxide is not a by-product of decomposition and, therefore, no fugitive emissions of nitrous oxide are anticipated or calculated from solid waste sources.

E. Area Source Emissions

Landscaping Emissions

Emissions of CO₂, CH₄ and N₂O are generated by the use of landscape equipment that runs on gasoline. CO₂ emissions were determined directly through URBEMIS2007 for the existing (2008) and 2020 community-wide inventories. URBEMIS2007 is a computer software package that is used for modeling projected emissions of air quality pollutants including carbon dioxide. From the CO₂ emissions, the approximate number of gallons of gasoline consumed by landscape equipment use was calculated (CARB 2007e). This number was then multiplied by emission factors presented in the General Reporting Protocol, version 3.1 (CCAR 2010) to derive both CH₄ and N₂O emissions. Landscaping emissions in the municipal inventory were calculated based on Riverside County’s inventory of equipment and fuel use along with the specific CO₂, CH₄ and N₂O emission factors for each equipment type.

Wood Burning Emissions

Direct CO₂ emissions are produced from the burning of wood in wood stoves and fireplaces. Natural gas-fired stoves, barbecues and other heating devices are not included in this subcategory; they have already been accounted for under “Energy.” Carbon dioxide, CH₄ and N₂O emissions from wood stoves and fireplaces are calculated based on the percentage of residential units using each type of hearth and the California average amount of wood burned per unit provided by the EIA 2005 Residential Energy Consumption Survey (EIA 2005). The emission coefficients used are taken from the USEPA’s AP-42 document (USEPA 1985).

F. Transportation

On-Road Vehicles

For Riverside's municipal inventory, CO₂, CH₄ and N₂O emissions from Riverside County's municipal fleet were calculated based on the fuel use and annual miles traveled by each vehicle. CO₂ emissions were calculated using the total fuel use multiplied by the emission factor for either gasoline or diesel fuel. CH₄ and N₂O emissions are based on the vehicle's age, model and miles traveled. The emissions were then organized by each department.

For the community-wide inventory, emissions from on-road vehicles include all generated from trips attributable to activities taking place in the unincorporated parts of Riverside County. Carbon dioxide emissions from vehicles were calculated utilizing EMFAC2007 emission factors for the existing and 2020 inventories. The Emission Factors (EMFAC) model was developed by the California Air Resources Board and is used to calculate CO₂ emission rates for on-road motor vehicles, from light-duty passenger vehicles to heavy-duty trucks that operate on highways, freeways, and local roads in California (CARB 2007b). Motor vehicle emissions of CH₄ and N₂O were calculated using USEPA emission factors for on-road vehicles based on the total annual mileage driven multiplied by their respective emission factors by year. Vehicle miles traveled (VMT) were provided by the Riverside County Transportation Department. VMT was derived from transportation modeling of the trips entering Riverside County, trips leaving Riverside County, and trips within Riverside County. Pass-through traffic (that is, trips beginning and ending outside of Riverside County) is not included in this analysis. Since trips entering and leaving Riverside County have only one end in Riverside County, only half of these miles were included in the emissions analysis, in order to reflect the split jurisdiction of these trips.

The transportation modeling (RIVTAM) assumed that all vehicles are either gasoline or diesel powered. The estimates therefore do not account for electrical, biodiesel (a blend of diesel and vegetable oil), or hydrogen powered systems. Any electrically powered vehicle which draws its power from a residential, commercial, or industrial land use within Riverside County will be accounted for under electrical usage, i.e., "Energy." Predicted 2020 BAU vehicle trips were estimated by using Riverside County General Plan buildout (approximately Year 2060) conditions and interpolating back to year 2020.

Aviation Emissions

Riverside County owns and operates five airports: Hemet-Ryan, French Valley, Chiriaco Summit, Desert Center and Jacqueline Cochran Regional Airport. The municipal inventory includes the emissions from the energy used to run the facilities and lights at the airports and the emissions from onsite equipment, while the community-wide inventory includes emissions from all aviation activities. The GHG emissions associated with aircraft trips within Riverside County were calculated based on annual fuel consumption (extrapolated from airport aviation fuel sales) and emission factors for jet fuel and aviation fuel for CO₂, CH₄ and N₂O. Fuel services are not provided at the Chiriaco Summit or Desert Center Airport, so all fuel consumption data was obtained from the three larger airports. March Air Reserve Base is not included here as it is not under the direct jurisdiction of the County of Riverside.

G. Agriculture

Riverside County has a large amount of agricultural land with a variety of cultivation uses. The most prominent uses are field and seed crops, including primarily alfalfa and wheat, as well as irrigated pasturelands and rangelands (for grazing). Other uses include fruit trees, vineyards, vegetables, and livestock. Agricultural practices contribute

directly to emissions of greenhouse gases through a variety of processes. Assessment of non-carbon-dioxide emissions are from the following source categories: enteric fermentation in domestic livestock, livestock manure management, crop cultivation and field burning of agricultural residues.

Livestock emissions are divided into two categories based on the emissions source: enteric fermentation and manure management. Enteric fermentation is defined as a fermentation process that takes place in the stomach of ruminant animals, such as cows, sheep and goats. This process produces methane that is released through belching and flatulence. Manure management is the process of gathering and disposing of manure generated by livestock. Management practices vary by type of livestock, but in the case of dairy cows, manure is often collected and stored in lagoons. As the manure breaks down, methane is released.

Methane and nitrous oxide is the primary greenhouse gases emitted from crop cultivation and associated activities. Rice cultivation and field burning of agricultural residues are contributing sources of CH₄ (USEPA 2009b). Agricultural-related emissions for 2008 were based on data from SCAG and the Riverside County Agricultural Commissioner.



Chapter 3

GHG Emissions Inventory

The following sections describe Riverside County’s 2008 government operations and community-wide GHG emissions inventories. The government operations inventory includes sources and quantities of GHG emissions from government owned or rented buildings, facilities, vehicles, and equipment. The community-wide emissions inventory identifies and categorizes the major sources and quantities of GHG emissions produced by residents, businesses, and municipal operations in the unincorporated areas of Riverside County using the best available data. By having the government emissions separated from the community as a whole, the local government can implement reduction strategies where it has direct control, closely monitor the changes in emissions over time, and set an example for the rest of Riverside County.

3.1 2008 Government Emissions Inventory

A. Data Inputs

Data for the government inventory was gathered from various Riverside County departments. Table 3-1 (2008 Government Data Inputs), below, summarizes the data inputs and sources for each of the emission categories included in the inventory.

Table 3-1 2008 Government Data Inputs

| Category | Data Input | Data Source |
|---|-------------|-----------------------------------|
| Electricity (kWh) | | |
| Consumption | 114,737,623 | SCE |
| Generation* | 13,015,642 | Riverside County Waste management |
| Natural Gas (therms) | 1,622,208 | SCG |
| Vehicle Fleet | | |
| Gasoline(gallons) | 3,419,635 | Riverside County Fleet Manager |
| Diesel (gallons) | 469,649 | |
| Off-Road Equipment | | Riverside County Fleet Manager |
| Gasoline(gallons) | 982 | |
| Diesel (gallons) | 1,031,016 | |
| LNG (gallons) | 368,838 | |
| Propane (gallons) | 3,607 | |
| Jet Fuel (gallons) | 1,832,210 | |
| Aviation Fuel (gallons) | 404,686 | |
| Solid Waste Landfill Gas Collection (MMSCF) | 2,406 | Riverside County Waste Management |

* El Sobrante is a privately operated landfill; all others are operated by Riverside County Waste Management Department. Electrical Generation for Riverside County reflects the Badlands facility and the portion of cogeneration at El Sobrante landfill associated with in-county disposal (or 49 percent) of the total generation at the El Sobrante facility.

Each data input was then multiplied by the associated emission factor to calculate the emissions inventory. Additionally, where possible, the emissions were categorized by county department.

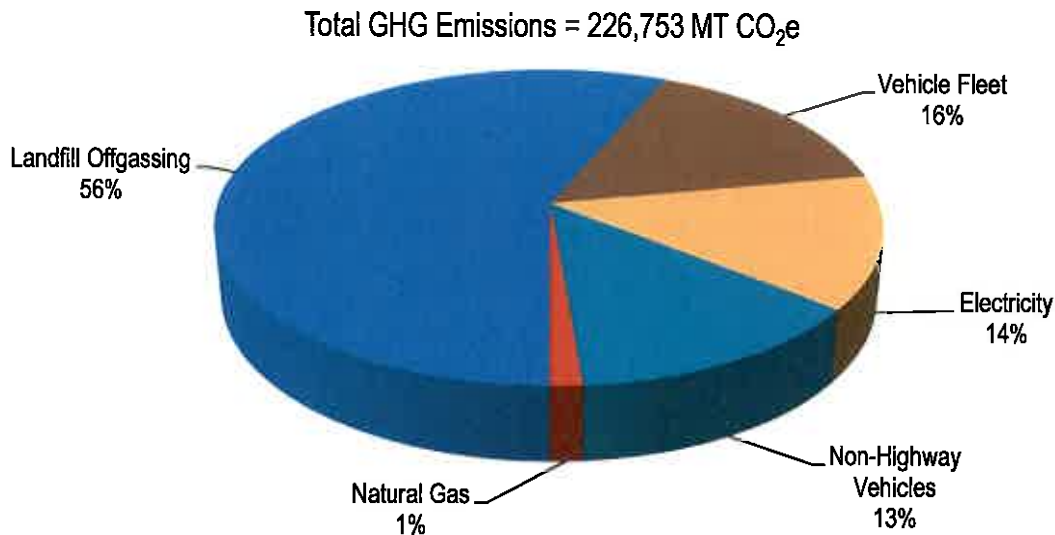
B. Emissions Summary

Riverside County emitted 226,753 MT CO₂e through its government operations in 2008. The emissions were calculated based on the vehicle and equipment fleet fuel use, energy accounts, and waste management. The largest portion of Riverside County’s 2008 government emissions were from landfill emissions (56%), followed by emissions from the vehicle fleet (16%). Table 3-2 (2008 Total Government Emissions) summarizes Riverside County’s 2008 emissions of CO₂e as broken down by emissions category. Figure 3-1 (2008 Government Emissions by Category) is a graphical representation of Table 3-2. A detailed breakdown of 2008 emissions by category is available in Appendix D of this CAP.

| Category | Metric tons of CO ₂ e |
|---------------------|----------------------------------|
| Landfill Offgassing | 127,850 |
| Vehicle Fleet | 35,331 |
| Electricity | 30,859 |
| Off-Road Equipment* | 29,649 |
| Natural Gas | 3,065 |
| Total | 226,753 |

*Off-Road Equipment includes front end loaders, dozers, forklifts, etc.

Figure 3-1 2008 Government Emissions by Category (metric tons CO₂e)



C. 2008 Government Department Emissions and Costs

For the government operations inventory, it is helpful to see which departments are generating the most emissions. This helps to pinpoint where emissions are coming from and where the focus should be placed for targeting emissions reductions. Table 3-3 (2008 Government Emissions and Costs by Department) summarizes the solid waste, electricity, natural gas, and vehicle fleet emissions by department. Figure 3-2 (2008 Government Emissions by Department) is a graphical representation of Table 3-3.

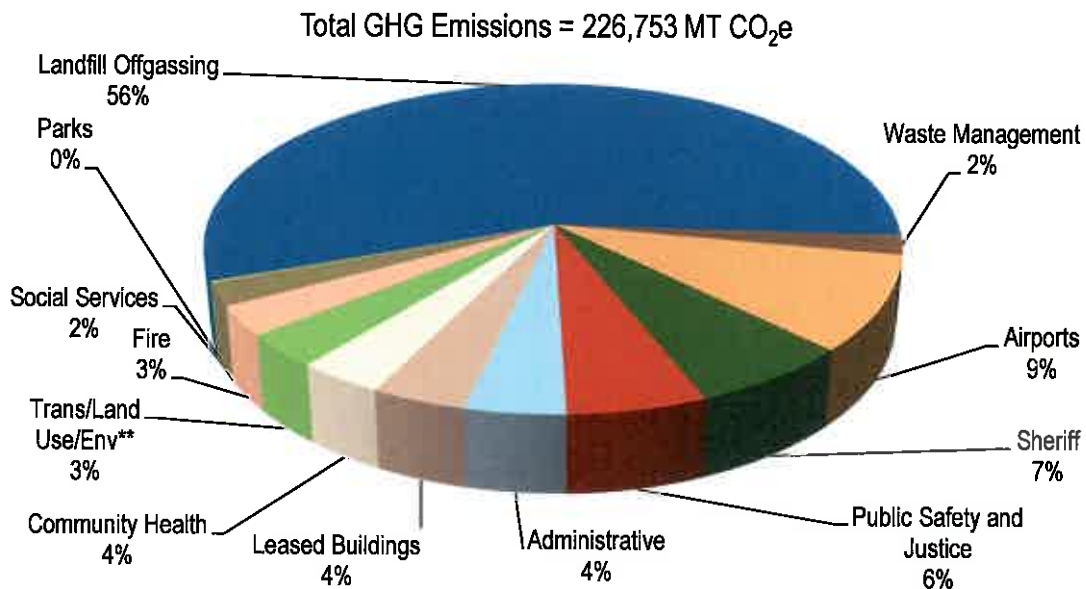
Landfill offgassing, while under the control of the waste management department, is listed as a separate category because the methane emitted from waste decomposition is the result of solid waste from the entire community, both unincorporated areas and municipal waste deposited in Riverside County Landfills. Separating out the emissions in this fashion gives a better comparison of the waste management department with other departments within the County of Riverside local government operations. Like the other departments, the waste management department emissions result from the utility consumption, mobile source emissions and waste generation associated with the everyday operations of the department. The sheriff's department accounts for the greatest energy costs primarily due to the numerous vehicles used by the sheriff's fleet.

Table 3-3 2008 Government Emissions and Costs by Department

| Category | Metric Tons of CO ₂ e | Energy Cost (\$) |
|-------------------------------------|----------------------------------|---------------------|
| Waste Management | 4,421 | \$1,405,038 |
| Landfill Offgassing | 127,850 | N/A |
| Airports | 21,250 | \$ 253,676 |
| Sheriff | 15,039 | \$ 5,008,600 |
| Public Safety and Justice | 12,981 | \$ 4,223,789 |
| Administrative | 9,259 | \$ 3,033,217 |
| Leased Buildings | 8,753 | \$ 2,848,502 |
| Community Health | 7,780 | \$ 2,540,726 |
| Transportation/Land Use/Environment | 7,493 | \$ 2,201,486 |
| Fire | 6,541 | \$ 1,975,982 |
| Social Services | 5,206 | \$ 1,719,473 |
| Parks | 179 | \$ 59,011 |
| Total | 226,753 | \$25,269,501 |

Note: Emission sources include electricity, natural gas, vehicle fuels, and solid waste decomposition. Costs include electricity, natural gas, and transportation fuels.

Figure 3-2 2008 Government Emissions by Department (metric tons CO₂e)



D. 2008 Total Government Cost Estimates

The costs associated with the inventory represent the municipal energy and fuel use costs. These cost estimates give the County of Riverside a perspective on where Riverside County is spending the most money and help to prioritize reduction measures toward the sectors that have the potential to both reduce emissions and costs. Riverside County's fuel purchases for the vehicle fleet made up the largest cost in 2008, followed closely by electricity costs. Table 3-4 (Estimated Government Energy Costs), below, summarizes the cost estimates for 2008.

Table 3-4 Estimated Government Energy Costs

| Source | Energy Cost |
|-------------------|---------------------|
| Vehicle Fleet | \$ 11,433,028 |
| Electricity | \$10,033,552 |
| Natural Gas | \$ 989,547 |
| Off-Road Vehicles | \$2,813,374 |
| Total | \$25,269,501 |

3.2 2008 Community-Wide Emissions Inventory

The community-wide inventory represents all emissions from sources located within the unincorporated areas of Riverside County. Therefore, the government operations emissions described in the previous section are a subset of the community-wide inventories presented here. In 2008, Riverside County emitted a total of 7,012,938 MT CO_{2e} from the community as a whole. The following sections describe the data inputs, emissions by source and emissions by land use in 2008.

A. Data Inputs

Data for the community-wide inventory was gathered from various Riverside County departments, SCE, IID, SCG, and reports. Table 3-5 (2008 Community-Wide Data Inputs), below, summarizes the data inputs and sources for each of the emission categories included in the inventory. Each data input was then multiplied by the associated emission factor to calculate the emissions associated with each source.

Table 3-5 2008 Community-Wide Data Inputs

| Category | Data Input | Data Source |
|---|---------------|-----------------------------------|
| Electricity | | |
| SCE (kWh) | 2,580,439,739 | SCE |
| IID (kWh) | 1,034,292,942 | IID |
| Generation* | 13,015,643 | Riverside County Waste Management |
| Natural Gas (therms) | 95,918,639 | SCG |
| Transportation | | |
| Annual VMT | 5,161,531,679 | Riverside County Traffic Modeling |
| Annual Trips | 862,485,528 | |
| Area Source (based on land use) | | |
| SFR (units) | 112,132 | Riverside County Planning |
| MFR (units) | 48,854 | |
| Commercial (ksf) | 169,585 | |
| Industrial (ksf) | 33,905 | |
| Solid Waste Landfill Gas (SCFM) (In County) | 4,910 | Riverside County Waste Management |

| Category | Data Input | Data Source |
|-----------------------------|------------|--|
| Purchased Water (acre-feet) | 193,802 | Water Agency Reports |
| Agriculture (acres) | | |
| Hay | 29,648 | Riverside County Agricultural Commissioner SCAG |
| Corn | 497 | |
| Oats | 1,150 | |
| Sorghum | 3,197 | |
| Wheat | 14,817 | |
| Cotton | 6,901 | |
| Vegetable & Fruit Trees | 43,898 | |
| Animals (head) | | |
| Dairy Cow | 43,773 | |
| Poultry | 5,260,914 | |
| Sheep | 12,700 | |

* El Sobrante is a privately operated landfill; all others are operated by Riverside County Waste Management Department. Electrical Generation for Riverside County reflects the Badlands facility and the portion of cogeneration at El Sobrante landfill associated with in-County disposal (or 49 percent) of the total generation at the El Sobrante facility.

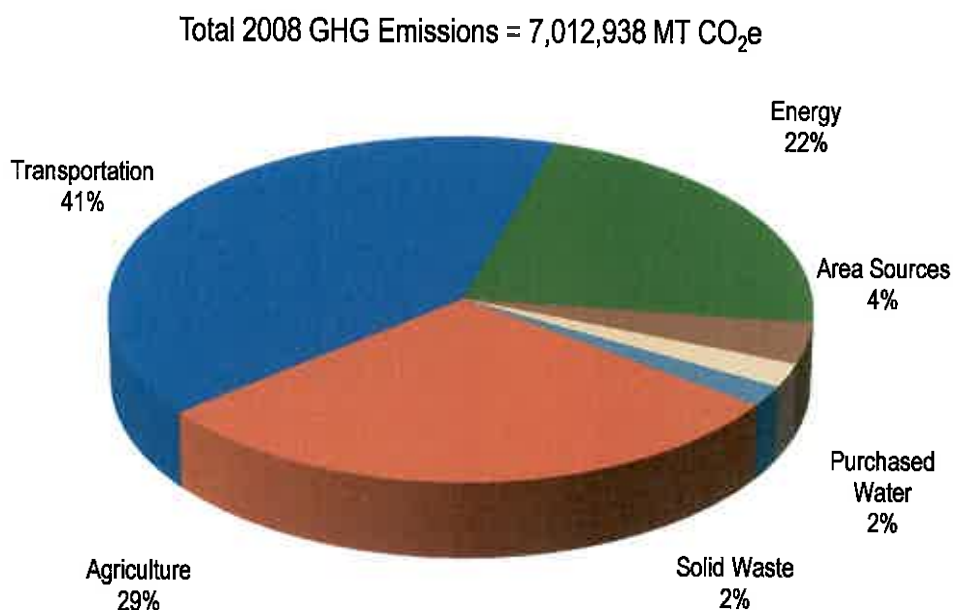
B. Emissions by Source

Table 3-6 (2008 Community-wide GHG Emissions by Source) summarizes net 2008 County emissions of CO₂e as broken down by emissions category. Riverside County as a whole emitted 7,012,938 MMT CO₂e in 2008. The largest portion of Riverside County's 2008 emissions were from transportation (41%), followed by agriculture (29%), and electricity and natural gas use in buildings (22%). Figure 3-3 (2008 Emissions Generated by Emissions Category) provides a comparison of GHG emissions by category.

Table 3-6 2008 Community-wide GHG Emissions by Source

| Emissions Category | Metric tons of CO ₂ e |
|--------------------|----------------------------------|
| Transportation | 2,850,520 |
| Energy | 1,577,667 |
| Area Sources | 269,181 |
| Purchased Water | 152,473 |
| Solid Waste | 132,666 |
| Agriculture | 2,030,431 |
| Total | 7,012,938 |

Figure 3-3 2008 Emissions Generated by Emissions Category (metric tons CO₂e)



3.3 2020 Business as Usual Community-Wide Emissions Inventory

In 2020, Riverside County is projected to emit a total of approximately 12.1 MMT CO₂e from BAU operations. BAU refers to continued operations and development of Riverside County according to 2008 policies, without the inclusion of proposed reduction or sustainability initiatives as part of this CAP. Reduction initiatives coming from the state or other agencies are not included in the BAU scenario; these reduction measures and their anticipated emission reductions in Riverside County are discussed in Chapter 4.

A. Data Inputs

Data for the 2020 BAU community-wide GHG inventory was estimated based on the General Plan growth rates for Riverside County. Table 3-7 (2020 BAU Community-Wide Data Inputs), below, summarizes Riverside County’s socioeconomic growth rates.

Table 3-7 2020 BAU Community-Wide Data Inputs

| Category | Data Input | Data Source |
|--|------------|--|
| Growth Rates (based on General Plan Update) ^a | | |
| Households | 62.4% | Riverside County TLMA/IT/GIS/ Demographics |
| Employment | 96.1% | |

^a Note: The growth rates represent the overall growth from 2008 to 2020 and are derived from the socioeconomic and land use factors used for the proposed General Plan Update.

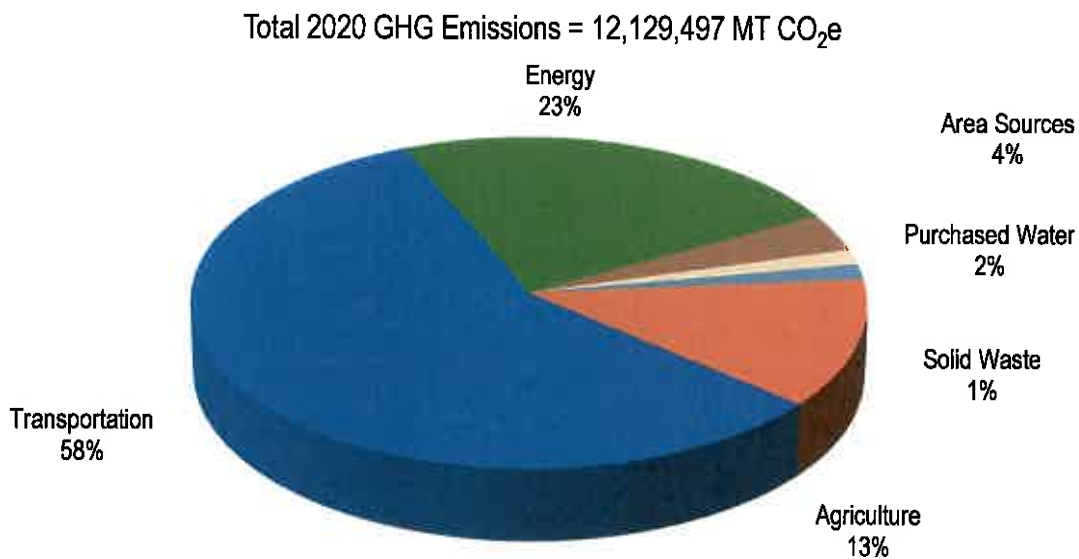
The socioeconomic growth rates were used to estimate the emissions associated with transportation, electricity, natural gas, water, area source, and solid waste.

B. 2020 BAU Emissions by Source

The 2020 BAU emissions are estimated based on the projected growth in Riverside County from 2008 to 2020. These projections include a 62.4% increase in households and a 96.1% increase in employment; these growth rates were applied, respectively, to residential and non-residential 2008 emissions in order to estimate 2020 BAU emissions. Table 3-8 (2020 GHG Emissions by Source) summarizes the net 2020 County emissions of CO₂e as broken down by emissions category. Figure 3-4 (2020 BAU Emissions Generated by Source) is a graphical representation of Table 3-8. A detailed breakdown of 2020 emissions by category is available in Appendix D of this CAP.

| Table 3-8 2020 GHG Emissions by Source | |
|---|----------------------------------|
| Emissions Category | Metric tons of CO ₂ e |
| Transportation | 6,977,331 |
| Energy | 2,830,246 |
| Area Sources | 442,024 |
| Purchased Water | 175,344 |
| Solid Waste | 181,728 |
| Agriculture | 1,522,823 |
| Total | 12,129,497 |

Figure 3-4 2020 BAU Emissions Generated by Source (metric tons CO₂e)



3.4 2035 Business As Usual Community-Wide Emissions Inventory

In 2035, Riverside County is projected to emit a total of 15.5 MMT CO₂e based on the growth rates associated with the proposed General Plan Update and without the inclusion of the proposed reduction measures presented in this CAP.

A. Data Inputs

Data for the 2035 BAU community-wide GHG inventory was estimated based on the General Plan socioeconomic growth rates for the County. Table 3-9 (2035 BAU Community-Wide Data Inputs), below, summarizes Riverside County's growth rates.

Table 3-9 2035 BAU Community-Wide Data Inputs

| Category | Data Input | Data Source |
|--|------------|---|
| Growth Rates (based on General Plan Update) ^a | | |
| Households | 92.6% | Riverside County TLMA/IT/GIS/ Demographics |
| Employment | 165.1% | |

^a Note: The growth rates represent the overall growth from 2008 to 2035 and are derived from the socioeconomic and land use factors used for the proposed General Plan Update.

The socioeconomic growth rates were used to estimate the emissions associated with transportation, electricity, natural gas, water, area source, and solid waste.

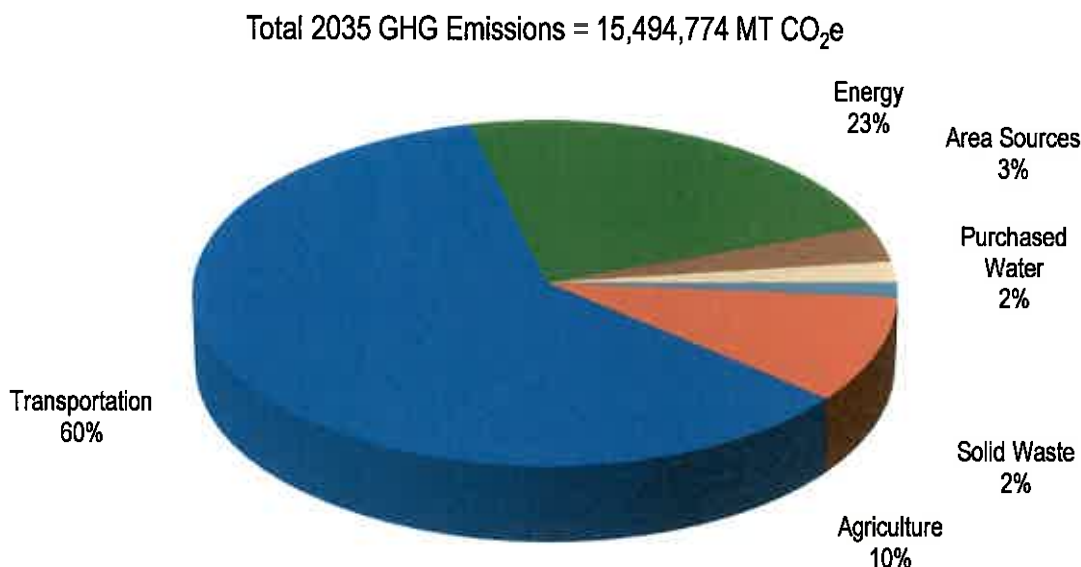
B. 2035 BAU Emissions by Source

The 2035 BAU emissions are estimated based on the projected growth in Riverside County from 2008 to 2035. These projections include a 92.6% increase in households and a 165.1% increase in employment; these growth rates were applied, respectively, to residential and non-residential 2008 emissions in order to estimate 2035 BSU emissions. Table 3-10 (2035 BAU GHG Emissions by Source) summarizes the net 2035 County emissions of CO₂e as broken down by emissions category. Figure 3-5 (2035 BAU GHG Emissions by Source) is a graphical representation of Table 3-10. A detailed breakdown of 2035 emissions by category is available in Appendix D of this CAP.

Table 3-10 2035 BAU GHG Emissions by Source

| Category | Metric tons of CO ₂ e |
|-----------------|----------------------------------|
| Transportation | 9,318,041 |
| Energy | 3,610,701 |
| Areas | 529,384 |
| Purchased Water | 293,077 |
| Solid Waste | 220,747 |
| Agriculture | 1,522,823 |
| Total | 15,494,774 |

Figure 3-5 2035 BAU GHG Emissions by Source



3.5 2020 Reduction Target

In order for California to meet the goals of AB 32, statewide GHG emissions will need to be reduced back to 1990 levels by 2020. To be consistent with the goals of AB 32, Riverside County would also need to achieve the same GHG emission reduction target. In the AB 32 Scoping Plan, CARB equated a return to 1990 levels to a 15% reduction from “current” levels. CARB states, “... ARB recommended a greenhouse gas reduction goal for local governments of 15 percent below today’s levels by 2020 to ensure that their municipal and community-wide emissions match the state’s reduction target” (CARB 2008). The reduction target calculated in the Scoping Plan was based on an inventory of the state’s 2004 GHG emissions (then considered to be “current” levels); these emissions represent a high-point in the economy before the economic recession. Riverside County’s reduction target is based on Riverside County’s 2008 GHG emissions inventory.

Consistent with the State of California’s adopted AB 32 GHG reduction target, Riverside County has set a goal to reduce GHG emissions back to 1990 levels by the year 2020. This target was calculated as a 15% decrease from 2008 levels, as recommended in the AB 32 Scoping Plan. The reduction target is displayed in Table 3-11 (2020 GHG Emissions Reduction Target). Having one overall reduction target, as opposed to targets for each sector, allows the County of Riverside the flexibility to reduce emissions from the sector with the most cost-effective reduction strategies (i.e., the greatest reduction in emissions at the least cost).

Table 3-11 2020 GHG Emissions Reduction Target

| | Metric Tons CO ₂ e |
|-----------------------|-------------------------------|
| 2008 Emissions | 7,012,938 |
| % Reduction | 15% |
| 2020 Reduction Target | 5,960,998 |

3.6 Emissions Comparison by Year

This report analyzes GHG emissions from the most current year with data available (2008) and estimates the future emissions for Riverside County in 2020 and 2035.

The 12.1 MMT CO₂e of GHG emissions for 2020 is an estimated increase of 5.1 MMT CO₂e above 2008 levels. The growth in emissions from 2008 to 2020 is a 73.0%. Table 3-12 (GHG Emissions by Source) shows a comparison of total emissions for 2008, 2020, and 2035 emissions.

Table 3-12 GHG Emissions by Source

| Source | Metric Tons CO ₂ e | | |
|-----------------|-------------------------------|-------------------|-------------------|
| | 2008 | 2020 BAU | 2035 BAU |
| Transportation | 2,850,520 | 6,977,331 | 9,318,041 |
| Energy | 1,577,667 | 2,830,246 | 3,614,223 |
| Area Sources | 269,181 | 442,024 | 529,384 |
| Purchased Water | 152,473 | 175,344 | 293,077 |
| Solid Waste | 132,666 | 181,728 | 220,747 |
| Agriculture* | 2,030,431 | 1,522,823 | 1,522,823 |
| Total | 7,012,938 | 12,129,497 | 15,494,774 |

*Note that Agriculture is assumed to decline between 2008 and 2020 as development of the unincorporated Riverside County area continues and then remain the same between 2020 through 2035 as the County of Riverside increases density of developed areas in order to maintain the remaining open spaces and agricultural lands.

The AB 32 Scoping Plan suggests local governments estimate a reduction target for 2020 that is 15% below current emissions. Table 3-13 (2020 GHG Emissions Reduction Target) shows the 2020 reduction target for Riverside County's community-wide emissions, the 2020 emissions projected for Riverside County, and the difference between the two. This difference represents the total emissions that Riverside County will need to reduce in order to meet the target by 2020.

Table 3-13 2020 GHG Emissions Reduction Target

| | Metric Tons CO ₂ e |
|--------------------------|-------------------------------|
| 2020 Emissions | 12,129,497 |
| 2020 Reduction Target | 5,960,998 |
| Amount to Reduce by 2020 | 6,168,500 |

With the reduction target set at 5,960,998 MT CO₂e, the County of Riverside will need to reduce emissions by 6,168,500 MT CO₂e from the BAU 2020 emissions. Chapter 4 describes the efforts currently underway in Riverside County and the reduction strategies that would be implemented to reduce emissions in Riverside County in order to reach the 2020 reduction target.



Chapter 4

GHG Emissions Reduction Programs and Regulations



The State of California has set specific targets for reducing GHG emissions from the burning of fossil fuels in both power plants and vehicles by adopting various regulations. In addition, state energy efficiency and renewable requirements provide another level of reductions. In order to provide credit to Riverside County for regulatory actions already taken or planned by the State of California, this CAP first evaluates the greenhouse gas reductions that will occur within Riverside County as a result of these actions. These will be identified in the CAP as R1 reduction measures. The R1 measures are included here to show all of the anticipated reduction strategies identified in the AB 32 Scoping Plan for implementation at the state level that will ultimately result in a reduction of GHG emissions at the county level. The R1 measures are not

administered or enforced by Riverside County, but Riverside County - by describing them herein- substantiates the reductions applied in association with these statewide measures.

R2 and R3 reduction measures will be incorporated at the county level to provide additional reductions in GHG emissions. R2 measures are those measures that can be quantified to show the value of the reduction from the incorporation of those measures; the R2 measures correspond to the Implementation Measures (IM) included in Appendix N of the General Plan. R3 measures are measures that, although they provide a vehicle through which reductions in emissions will occur, cannot be quantified at this time. The R3 measures are supportive measures or methods of implementation for the R2 measures. A complete list of assumptions and reductions for each of the R1 and R2 measures is included in Appendix E of this CAP.

The following reduction measures are organized herein by source category (energy, solid waste, area source emissions, agriculture, transportation, and industrial) then by R1, R2, and R3 measure. The method to be used for numbering the mitigation measures will be to list the R designation (R1, R2, or R3) then an abbreviation of the source category, followed by the order number. So, R1-E1 is the first R1 measure within the energy category, R1-E2 is the second measure within the energy category, and so on. The source category abbreviations are as follows: T – transportation; E – energy; S – solid waste; L – area source (landscaping) emissions; W – purchased water; A – agriculture; and I – industrial.

4.1 Existing Riverside County General Plan Policies Related to GHG

Policies to reduce GHG emissions often overlap with policies addressing energy conservation, reduced automobile use, water conservation and many other issues. Riverside County has many General Plan policies that

help to reduce GHG emissions while targeting another policy applicable to Riverside County. Table 4-1 (General Plan Policies Related to Reducing GHG Emissions) below summarizes these General Plan policies.

Table 4-1 General Plan Policies Related to Reducing GHG Emissions

| Sector | Element | Section | Policies |
|-----------------------------------|-----------------------------------|---|---|
| Energy Efficiency in Buildings | Land Use | Project Design | LU-4.1 |
| | Multipurpose Open Space | Energy Conservation | OS-16.1 through OS-16.10 |
| | | Stationary Emissions | AQ-4.1, AQ-4.1, AQ-4.4 |
| | Air Quality | Energy Efficiency and Conservation | AQ-5.1, AQ-5.2, AQ-5.4 |
| Regional Agency Coordination | Land Use | Administration | LU-1.5 |
| | Air Quality | Multi-Jurisdictional Cooperation | AQ-1.1 through AQ-1.4, AQ-1.7 |
| Smart Growth | Land Use | Efficient Use of Land | LU-2.1 |
| | | Economic Development | LU-7.12 |
| | | Air Quality | LU-10.1 |
| | Air Quality | Business Development | AQ-7.1, AQ-7.3 |
| | | Job-to-Housing Ratio | AQ-8.4 through AQ-8.9 |
| Water Conservation | Land Use | Project Design | LU-4.1 |
| | Circulation | Transportation System Landscaping | C-5.2 |
| | Multipurpose Open Space | Water Conservation | OS-2.1 through OS-2.5 |
| Reduce Automobile Use | Land Use | Efficient Use of Land | LU-2.1 |
| | | Project Design | LU-4.1 |
| | | Air Quality | LU-10.3, LU-10.4 |
| | | Circulation | LU-12.1, LU-12.3, LU-12.4 |
| | Circulation | Planned Circulation Systems | C-1.2, C-1.7 |
| | | Pedestrian Facilities | C-4.1, C-4.9 |
| | | Transportation System Landscaping | C-5.2 |
| | | Public Transportation System | C-9.2 |
| | | Fixed Route Transit Service | C-11.2, C-11.4 through C-11.7 |
| | | Transit Oasis and Transit Centers | C-12.1 through C-12.3 |
| | | Passenger Rail | C-13.1 through C-13.3 |
| | | Bikeways | C-17.3, C-17.4 |
| | | Environmental Considerations | C-20.12 |
| | Transportation Systems Management | C-21.1, C-21.9 | |
| | Multipurpose Open Space | Energy Conservation | OS-16.3, OS-16.8 |
| Air Quality | Mobile Pollution Sources | AQ-3.2, AQ-3.4 | |
| | Trip Reduction | AQ-10.1 through AQ-10.4 | |
| Renewable Energy/Alternative Fuel | Multipurpose Open Space | Renewable Energy | OS-10.1, OS-11.1 through OS-11.3, OS-12.1 |
| | Air Quality | Transportation System Management Improvements | AQ-13.1 |
| Reduce Waste | Air Quality | Energy Efficiency and Conservation | AQ-5.1 |

4.2 Transportation

A. R1 Transportation Measures

The following list of R1 transportation-related measures are those measures that California has identified in the AB 32 Scoping Plan that will result in emission reductions within Riverside County.

R1-T1: Assembly Bill 1493: Pavley I

Assembly Bill (AB) 1493 (Pavley) required CARB to adopt regulations that will reduce GHG from automobiles and light-duty trucks by 30% below 2002 levels by the year 2016, effective with 2009 models. By 2020, this requirement will reduce emissions in California by approximately 16.4 MMT of carbon dioxide equivalents (MMT CO_2e), representing 17.3% of emissions from passenger/light-duty vehicles in the State of California.

R1-T2: Assembly Bill 1493: Pavley II

California committed to further strengthening the AB1493 standards beginning in 2017 to obtain a 45% GHG reduction from 2020 model year vehicles. This requirement will reduce emissions in California by approximately 4.0 MMT CO_2e , representing 2.5% of emissions from passenger/light-duty vehicles in the State of California.

R1-T3: Executive Order S-1-07 (Low Carbon Fuel Standard)

The Low Carbon Fuel Standard (LCFS) will require a reduction of at least 10% in the carbon intensity of California's transportation fuels by 2020. By 2020, this requirement will reduce emissions in California by approximately 15 MMT CO_2e , representing 6.9% of emissions from passenger/light-duty vehicles in the State of California.

R1-T4: Tire Pressure Program

The AB32 early action measure involves actions to ensure that vehicle tire pressure is maintained to manufacturer specifications. By 2020, this requirement will reduce emissions in California by approximately 0.55 MMT CO_2e , representing 0.3% of emissions from passenger/light-duty vehicles in the State of California.

R1-T5: Low Rolling Resistance Tires

This AB32 early action measure would increase vehicle efficiency by creating an energy efficiency standard for automobile tires to reduce rolling resistance. By 2020, this requirement will reduce emissions in California by approximately 0.3 MMT CO_2e , representing 0.2% of emissions from passenger/light-duty vehicles in the State of California.

R1-T6: Low Friction Engine Oils

This AB32 early action measure would increase vehicle efficiency by mandating the use of engine oils that meet certain low friction specifications. By 2020, this requirement will reduce emissions in California by approximately 2.8 MMTCO_{2e}, representing 1.7% of emissions from passenger light-duty vehicles in the State of California.

R1-T7: Goods Movement Efficiency Measures

This AB32 early action measure targets system wide efficiency improvements in goods movement to achieve GHG reductions from reduced diesel combustion. By 2020, this requirement will reduce emissions in California by approximately 3.5 MMTCO_{2e}, representing 1.6% of emissions from all mobile sources (on-road and off-road) in the State of California.

R1-T8: Heavy-Duty Vehicle GHG Emission Reduction (Aerodynamic Efficiency)

This AB32 early action measure would increase heavy-duty vehicle (long-haul trucks) efficiency by requiring installation of best available technology and/or CARB approved technology to reduce aerodynamic drag and rolling resistance. By 2020, this requirement will reduce emissions in California by approximately 0.93 MMTCO_{2e}, representing 1.9% of emissions from heavy-duty vehicles in the State of California.

R1-T9: Medium and Heavy-Duty Vehicle Hybridization

The implementation approach for this AB 32 measure is to adopt a regulation and/or incentive program that reduces the GHG emissions of new trucks (parcel delivery trucks and vans, utility trucks, garbage trucks, transit buses, and other vocational work trucks) sold in California by replacing them with hybrids. By 2020, this requirement will reduce emissions in California by approximately 0.5 MMTCO_{2e}, representing 0.2% of emissions from all on-road mobile sources in the State of California. This reduction is also equivalent to a 1.0% reduction of emissions from all heavy-duty trucks in the State of California.

R1-T10: Regional SB 375 Targets

Regional transportation emission reduction targets have been established pursuant to SB 375. Statewide, this requirement is expected to reduce emissions by 5 MMTCO_{2e}, which is equivalent to 2% of emissions from all mobile emission sources. These emissions will be reduced through the implementation of Sustainable Community Strategies developed by the Metropolitan Planning Organizations (MPOs) throughout the state, SCAG for Riverside County. CARB, in conjunction with SCAG, has adopted a target of an 8% decrease in transportation emissions by 2020 for the region. The reductions from SB 375 overlap with many of the state transportation reduction measures described above. Therefore, this R1 measure is expected to reduce Riverside's transportation emissions by 6% (rather than the 8% target) beyond what the other state-level transportation measures will reduce.

B. R2 Transportation Measures

The following list of R2 measures are measures Riverside County can incorporate into the new development projects for the reduction of transportation-related emissions to achieve an AB 32 compliant reduction target.

R2-T1: Employment Based Trip and VMT Reduction

This R2 measure would implement General Plan Policies AQ 3.3, AQ 10.1, AQ 10.3, and AQ 10.4 through the adoption of a voluntary trip reduction program for new commercial and industrial development that promotes commuter choices, employer transportation management, guaranteed ride home programs and commuter assistance and outreach type programs intended to reduce commuter vehicle miles traveled. A guaranteed ride home program is a program that ensures employees that take advantage of carpooling opportunities are guaranteed a safe ride home should the employee miss the carpool pick-up time due to work-related activities. This could be as simple as the employer paying for taxi service for the employee. Surveys within California have shown that ridesharing increases by 5% when a guaranteed ride home program is available (FTA 2006). To gain points within the Screening Table, employers with more than 100 employees within unincorporated Riverside County would need to establish a trip reduction plan that would incorporate annual employee commute surveys, marketing of commute alternatives, ride matching assistance, and transit information at a minimum.

R2-T2: Increased Residential Density

Designing proposed projects with increased densities, where allowed by the General Plan and/or County zoning, could reduce GHG emissions associated with traffic in several ways. Increased densities affect the distance people travel and provide greater options for the mode of travel they choose. The reductions in GHG emissions are quantified based on reductions to VMT; the relationship between density and VMT is described by its elasticity. If a new development project demonstrates an increase in density (and hence a corresponding decrease VMT) beyond the average value for that particular land use type, then the project can garner points in the screening tables for new development. This strategy also provides a foundation for implementation of many other strategies which would benefit from increased densities. New development projects earn points for residential projects that increase housing density.

R2-T3: Mixed Use Development

Having different types of land uses near one another can decrease VMT since trips between land use types are shorter and may be accommodated by non-motorized methods of transportation. For example, when residential areas are in the same neighborhood as retail and office buildings, a resident does not need to travel outside of the neighborhood to meet his/her trips needs. A new development project will earn points in the screening tables by including diversity of land uses within a ¼ mile. Due to the variations available in implementing a mixed use project, the reductions, and applicable points associated, will be determined on a case-by-case basis.

R2-T4: Preferential Parking

This R2 measure would implement General Plan Policies AQ 3.3 and AQ 10.3 by encouraging proposed development projects to incorporate a comprehensive parking program for public and private parking lots to facilitate carpooling and alternate transportation. Incentives to encourage carpooling and the use of alternate transportation methods could include:

- Providing reserved preferential parking spaces for car-share, carpool, and ultra-low or zero emission vehicles;
- Provide larger parking spaces that can accommodate vans used for ride-sharing programs and reserve them for vanpools; and include adequate passenger waiting/loading areas;

- Restricting the number of parking spaces within the development by sharing parking among different land uses where feasible. For example, in areas where there are multiple land uses, provide resident restricted parking during nighttime hours (7pm to 7am) and open the parking lot for use by patrons of the surrounding commercial buildings during daytime hours; and
- Provide convenient pedestrian pathways through parking areas.

R2-T5: Roadway Improvements including Signal Synchronization and Transportation Flow Management

This R2 measure would implement General Plan Policies AQ 12.1 and AQ 12.3. Proposed development projects that pay fare-share fees toward signal synchronization improvements or construct signalized intersections within a traffic signal synchronization system would gain points within the Screening Table through this R2 Measure. These modifications include, but are not limited to, synchronization of signals, improvement of traffic flow, the development of parallel roadways and support for the extension of freight rail into Riverside County's industrial areas. Even when required for other reasons, such as warranted by project traffic study results, such circulation improvements may still qualify for Screening Table points under this measure.

R2-T6: Provide a Comprehensive System of Facilities for Non-motorized Transportation

This measure emphasizes alternative non-motorized transportation hubs and encourages the creation of bike lanes and walking paths connecting to schools and other public facilities, provision of adequate bicycle parking; and encouragement of bicycle stations, attended parking, and other attended bicycle support facilities at intermodal hubs. Bicycle stations are full-service bicycle facilities that, in addition to providing secure, guarded bicycle parking, could include other amenities such as "valet" bicycle service, showers, bicycle rentals, or repair services. These types of facilities are intended for large residential and non-residential development as well as large employers (e.g., of 500 or more employees). In addition, the establishment of multi-use trails that promote off-street bicycle and pedestrian travel, as well as provision of secure bicycle racks, along these pathways would also promote their use.

R2-T7: Expand Renewable Fuel/Low-Emission Vehicle Use

Implementation of the following R2 measure would promote the expanded use of renewable fuel and low-emission vehicles within proposed projects. The project will earn points in the screening table by making low-emissions or electric vehicle use more accessible by including one or both of the following project components:

- Providing preferential parking for ultra-low emission, zero-emission, and alternative-fuel vehicles;
- Provide circuit and capacity in ~~all~~ garages of residential units and all new large-scale commercial buildings, over 162,000 square feet for installation of electric vehicle charging stations
 - Install electric vehicle charging stations in ~~all the~~ garages of residential units for new development projects
 - Install electric vehicle charging stations in garages or secure areas of parking for new large-scale commercial buildings over 162,000 square feet of floor space.

R2-T8: Anti-Idling Enforcement

This R2 measure involves the adoption and enforcement of an Anti-Idling Policy for heavy-duty diesel trucks, including local delivery trucks and long-haul truck transport within unincorporated Riverside County. This policy would prohibit idling of on- and off-road heavy duty diesel vehicles for more than five minutes. This policy would be implemented by new commercial and industrial projects with loading docks or delivery trucks. Such projects would be required to post signage at all loading docks and/or delivery areas directing drivers to shut down their trucks after five minutes of idle time. Also, employers who own and operate truck fleets would be required to inform their drivers of the anti-idling policy.

R2-T9: Increase Public Transit

New development projects will expand the local transit network by coordinating with regional transit authorities to include bus turnouts and other transit accommodations in design plans. This will encourage the use of transit and therefore reduce VMT. Unincorporated Riverside County hosts one Metrolink transit station; expanding connections to this station as well as other Metrolink stations in the neighboring cities will increase ridership and decrease VMT.

R2-T10: Employee Commute Alternative Schedule

Encouraging telecommuting and alternative work schedules reduces the number of commute trips and therefore VMT traveled by employees. Alternative work schedules could take the form of staggered starting times, flexible schedules, or compressed work weeks. Employers are encouraged to offer enough flexibility for employees to adopt these alternative schedules.

C. R3 Transportation Measures

The following R3 measure enhances and ensures the reductions accounted for within the R2 measures through education programs or are measures that will reduce emissions but cannot be quantified.

R3-T1: Regional Land Use & Transportation Coordination

This R3 measure promotes the development and use of transit between the incorporated and unincorporated portions of Riverside County as well as within unincorporated Riverside County. This reduction measure will also be enhanced by the implementation of SCAG's RTP and SCS.

R3-T2: Government Fleet Alternative Vehicles

Riverside County municipal fleet consists of vehicles ranging from small passenger cars to large trucks and fire engines. As older vehicles retire, the new replacement vehicles will continue to increase the fuel efficiency of Riverside County's fleet. Riverside County's use of fuel efficient and alternative fuel vehicles helps to promote their use by local residents.

4.3 Energy

A. R1 Energy Measures

The following list of R1 building energy efficiency related measures are those measures that California has identified in the AB 32 Scoping Plan that will result in emission reductions within Riverside County.

R1-E1: Renewable Portfolio Standard for Building Energy Use

Senate Bills (SBs) 1075 (2002) and 107 (2006) created the State's Renewable Portfolio Standard (RPS), with an initial goal of 20% renewable energy production by 2010. Executive Order (EO) S-14-08 establishes a RPS target of 33% by the year 2020 and requires state agencies to take all appropriate actions to ensure the target is met. The 33% RPS by 2020 goal is supported by CARB, though its feasibility is not certain due to current limitations in production and transmission of renewable energy.



R1-E2 and R1-E3: AB1109 Energy Efficiency Standards for Lighting (Residential and Commercial Indoor and Outdoor Lighting)

Assembly Bill (AB1109) mandated that the California Energy Commission (CEC) on or before December 31, 2008, adopt energy efficiency standards for general purpose lighting. These regulations, combined with other state efforts, shall be structured to reduce statewide electricity consumption in the following ways:

- R1-E2: At least 50% reduction from 2007 levels for indoor residential lighting by 2018; and
- R1-E3: At least 25% reduction from 2007 levels for indoor commercial and outdoor lighting by 2018.

R1-E4: Electricity Energy Efficiency (AB32)

This measure captures the emission reductions associated with electricity energy efficiency activities included in CARB's AB32 Scoping Plan that are not attributed to other R1 or R2 reductions as described in this report. This measure includes energy efficiency measures that CARB views as crucial to meeting the statewide 2020 target, and will result in additional emissions reductions beyond those already accounted for in California's Energy Efficiency Standards for Residential and Non-Residential Buildings (Title 24, Part 6 of the California Code of Regulations; hereinafter referred to as, "Title 24 Energy Efficiency Standards"), Riverside County's adopted Green Building ordinance (effective January 1, 2011), etc. By 2020, this requirement will reduce emissions in California by approximately 21.3 MMTCO_{2e}, representing 17.5% of emissions from all electricity in the State of California. This measure includes the following strategies:

- "Zero Net Energy" buildings (buildings that combine energy efficiency and renewable generation so that they, based on an annual average, extract no energy from the grid);
- Broader standards for new types of appliances and for water efficiency;

- Improved compliance and enforcement of existing standards;
- Voluntary efficiency and green building targets beyond mandatory codes;
- Voluntary and mandatory whole-building retrofits for existing buildings;
- Innovative financing to overcome first-cost and split incentives for energy efficiency, on-site renewables, and high efficiency distributed generation;
- More aggressive utility programs to achieve long-term savings;
- Water system and water use efficiency and conservation measures;
- Additional industrial and agricultural efficiency initiatives; and
- Providing real time energy information technologies to help consumers conserve and optimize energy performance.

R1-E5: Natural Gas Energy Efficiency (AB32)

This measure captures the emission reductions associated with natural gas energy efficiency activities included in CARB's AB32 Scoping Plan that are not attributed to other R1 or R2 reductions, as described in this report. This measure includes energy efficiency measures that CARB views as crucial to meeting the statewide 2020 target, and will result in additional emissions reductions beyond those already accounted for in California's Energy Efficiency Standards for Residential and Non-Residential Buildings (Title 24, Part 6 of the California Code of Regulations; hereinafter referred to as, "Title 24 Energy Efficiency Standards"), Riverside County's adopted Green Building ordinance (effective January 1, 2011), etc. By 2020, this requirement will reduce emissions in California by approximately 4.3 MMTCO_{2e}, representing 6.2% of emissions from all natural gas combustion in the State of California. This measure includes the following strategies:

- "Zero Net Energy" buildings (buildings that combine energy efficiency and renewable generation so that they, based on an annual average, extract no energy from the grid);
- Broader standards for new types of appliances and for water efficiency;
- Improved compliance and enforcement of existing standards;
- Voluntary efficiency and green building targets beyond mandatory codes;
- Voluntary and mandatory whole-building retrofits for existing buildings;
- Innovative financing to overcome first-cost and split incentives for energy efficiency, on-site renewables, and high efficiency distributed generation;
- More aggressive utility programs to achieve long-term savings;
- Water system and water use efficiency and conservation measures;
- Additional industrial and agricultural efficiency initiatives; and
- Providing real time energy information technologies to help consumers conserve and optimize energy performance.

R1-E6: Increased Combined Heat and Power (AB32)

This measure captures the reduction in building electricity emissions associated with the increase of combined heat and power activities, as outlined in CARB's AB32 Scoping Plan. The Scoping Plan suggests that increased combined heat and power systems, which capture “waste heat” produced during power generation for local use, will offset 30,000 GWh statewide in 2020. Approaches to lowering market barriers include utility-provided incentive payments, a possible combined heat and power portfolio standard, transmission and distribution support systems, or the use of feed-in tariffs. By 2020, this requirement will reduce emissions in California by approximately 6.7 MMTCO_{2e}, representing 7.6% of emissions from all electricity in the State of California.

R1-E7: Industrial Efficiency Measures (AB32)

This measure captures the reduction in industrial building energy emissions associated with the energy efficiency measures for industrial sources included in CARB's AB32 Scoping Plan. By 2020, this requirement will reduce emissions in California by approximately 1.0 MMTCO_{2e}, representing 3.9% of emissions from all industrial natural gas combustion in the State of California. CARB proposes the following possible statewide measures:

- Oil and gas extraction;
- GHG leak reduction from oil and gas transmission;
- Refinery flare recovery process improvements; and
- Removal of methane exemption from existing refinery regulations.

R1-E8: Renewable Portfolio Standard (33 percent by 2020) Related to Water Supply and Conveyance

This measure would increase electricity production from eligible renewable power sources to 33% by 2020. A reduction in GHG emissions results from replacing natural gas-fired electricity production with zero GHG-emitting renewable sources of power. By 2020, this requirement will reduce emissions from electricity used for water supply and conveyance in California by approximately 21.3 MMTCO_{2e}, representing 15.2% of emissions from electricity generation (in-state and imports).

B. R2 Energy Measures

The following list of R2 measures are measures related to building energy efficiency Riverside County can incorporate into the new development projects are to achieve an AB 32 compliant reduction target of 15% below existing emissions levels by the year 2020.

R2-E1: Residential Energy Efficiency Program

This R2 measure would implement General Plan Policies AQ 5.2, AQ 5.4, LU 4.1e, OS 16.1 and OS 16.9, and involves the adoption of a program that facilitates energy efficient design for new residential buildings such that the residential units are 5% to 20% more efficient than the current Title 24 Standards. The high end of this energy efficiency program is equal to that of the LEED for Homes and ENERGY STAR programs; aspects of these programs are included as options for new development in the screening table, but attaining LEED or

ENERGY STAR certification is not an explicit requirement. The County of Riverside energy efficiency program is a voluntary program with a flexible menu of options for compliance included in the screening table.

The 2008 Title 24 Energy Standards were adopted by the Energy Commission in April 2008 and compliance with the 2008 standards went into effect January 1, 2010. In an effort to meet the overall goal of the California Energy Efficiency Strategic Plan of reaching zero net energy for residential buildings by 2020, the stringency of the Title 24 Energy Standards as regulated and required by the State of California will continue to increase every three years. As energy efficiency standards increase, Riverside County may want to periodically re-evaluate their percentage beyond Title 24 goal to ensure it is still a feasibly achievable goal. Residential developments within the unincorporated portions of Riverside County are encouraged to participate in the volunteer Residential Energy Efficiency Program. This voluntary program would set a minimum goal of achieving energy efficiency of 5% greater than current Title 24 Standards. Incentives to participate in this volunteer program include prioritization and streamlining of the application process for residential projects that achieve the minimum goal. Towards this end, Riverside County's screening tables for new development include a menu of options with points assigned to each option. As long as the proposed project meets the required point allotment (100 points total) the project will be deemed consistent with the Riverside County plan for reducing GHG emissions. This system will assure flexibility in the implementation of this reduction measure. This reduction goal can be achieved through the incorporation of the strategies outlined in the bullet points below, although the list is not exclusive and other actions are also feasible:

- Install energy efficient appliances, including air conditioning and heating units, dishwashers, water heaters, etc.;
- Install solar water heaters;
- Install energy conserving windows and insulation;
- Install energy efficient lighting;
- Optimize conditions for natural heating, cooling and lighting by building siting and orientation;
- Use features that incorporate natural ventilation;
- Install light-colored “cool” pavements, and strategically located shade trees along all bicycle and pedestrian routes; and
- Incorporate skylights; reflective surfaces and natural shading in building design and layouts.

R2-E2: Residential Renewable Energy Program

This R2 measure would implement General Plan Policies OS 10.1, OS 11.2, and OS 11.3, and facilitate the voluntary incorporation of renewable energy (such as photovoltaic panels) into new residential developments. For participating developments, the use of onsite renewable energy should be sufficient to reduce the new home's projected use of grid energy by 50%.

The California Energy Commissions' New Solar Homes Partnership is a component of the California Solar Initiative and provides rebates to developers of 6 or more units where 50% of the units include solar power. In addition, this measure would encourage that all residents be equipped with “solar ready” features where feasible, to encourage future installation of solar energy systems. Such features would include the proper solar orientation (south facing roof sloped at 20° to 55° from the horizontal), clear access on south-sloped roofs, electrical conduit installed for solar electric system wiring, plumbing installed for solar hot water systems and space provided for a

solar hot water tank. The incentive program should provide enough incentives to result in approximately 50% of new residential development participation in this program, thereby resulting in a 25% reduction in electrical consumption from new residential developments.

As an alternative to, or in support of, providing onsite renewable energy, the project proponent could also buy into a purchased energy offset program through the South Coast Air Quality Management District (SCAQMD), Southern California Edison (SCE), Mission Energy or others that will allow for the purchase of electricity generated from renewable energy resources offsite. Purchased energy offsets (or a combination of incorporated renewables and purchased offsets) must be equal to 25% of the total projected energy consumption for the development.

R2-E3: Residential Retrofit Implementation Program

This R2 measure would implement General Plan Policies OS 16.5, OS 16.7, and OS 16.9 and initiate a Riverside County program that facilitates the incorporation of energy reduction measures for residential buildings undergoing major renovations. AB 811 is a potential funding source to Riverside County for implementing incentive programs to encourage residences within Riverside County to undertake energy efficiency retrofitting and reducing energy consumption in retrofitted homes by a minimum of 15%. As with the new development, residential retrofits will comply with a menu of options of points assigned to them. As long as a developer meets the required total point allotment (100 points) the developer will meet the requirements to have the project deemed consistent with this plan. This system will be provided to assure flexibility in the implementation of all reduction measures. Although not limited to these actions, this reduction goal can be achieved through the incorporation of the following:

- Replace inefficient air conditioning and heating units with new energy efficient models
- Replace older, inefficient appliances with new energy efficient models
- Replace old windows and insulation with top quality windows and insulation
- Install solar water heaters
- Replace inefficient and incandescent lighting with energy efficient lighting
- Weatherize the existing building to increase energy efficiency

R2-E4: Residential Renewable Retrofit Program

This R2 measure would implement General Plan Policies OS 10.1, OS 11.2, and OS 11.3 and initiate an incentive program that encourages residents to retrofit their homes with photovoltaic panels such that 50% of all of the home's electrical usage is offset. The CEC's Solar Initiative has incentives available to homeowners.

R2-E5: Commercial Energy Efficiency Program

This R2 measure would implement General Plan Policies AQ 5.2, AQ 5.4, LU 4.1e, OS 16.1 and OS 16.9, and involves the adoption of a Riverside County Program that facilitates the energy efficient design for new commercial buildings so that new commercial buildings are 5% to 20% more efficient than the current Title 24 Standards. The high end of this voluntary energy efficiency program is 10% greater than the minimum requirements of the LEED and ENERGY STAR programs. As energy efficiency standards increase, Riverside

County may want to periodically re-evaluate their percentage beyond Title 24 goal to ensure it is still a feasibly achievable goal.

Commercial developments within the unincorporated portions of Riverside County are encouraged to participate in the voluntary Commercial Energy Efficiency Program. This voluntary program would set a minimum goal of achieving energy efficiency of 5% greater than current Title 24 Standards. Incentives to participate in this volunteer program would include prioritization and streamlining of the application process for commercial projects that achieve the minimum goal. As described in R2-E1 above, the Riverside County screening tables provide all developers with a list of potentially feasible GHG reduction measures that reflect the current state of the regulatory environment. The menu of options have points assigned to them and as long as the proposed project meets the required point allotment (100 points) it will be deemed to be consistent with Riverside County's GHG reduction plan. This system will provide flexibility in the implementation of all reduction measures. Although not limited to these actions, this reduction goal can be achieved through the incorporation of the following:

- Install energy efficient appliances, including air conditioning and heating units, dishwashers, water heaters, etc.;
- Install solar water heaters;
- Install top quality windows and insulation;
- Install energy efficient lighting;
- Optimize conditions for natural heating, cooling and lighting by building siting and orientation;
- Use features that incorporate natural ventilation;
- Install light-colored “cool” pavements, and strategically located shade trees along all bicycle and pedestrian routes; and
- Incorporate skylights, reflective surfaces and natural shading in building design and layouts.

R2-E6: Commercial/Industrial Renewable Energy Program

This R2 measure would implement General Plan Policies OS 10.1, OS 11.2 and OS 11.3, and facilitate the voluntary incorporation of onsite renewable (solar or other renewable) energy generation into the design and construction of new commercial, office and industrial development. A project can earn points in the screening table for renewable energy generation if it is incorporated such that a minimum of 20% of the proposed project's total energy needs are offset. In addition this measure would encourage all facilities be equipped with “solar ready” features where feasible, to facilitate future installation of solar energy systems. These features should include the proper solar orientation (south-facing roof sloped at 20° to 55° from the horizontal), clear access on south sloped roofs, electrical conduit installed for solar electric system wiring, plumbing installed for solar hot water systems and space provided for a solar hot water tank.

As an alternative to, or in support of, providing onsite renewable energy, the project proponent could buy into a purchased energy offset program through the South Coast Air Quality Management District (SCAQMD), Southern California Edison (SCE) or others that will allow for the purchase of electricity generated from renewable energy resources offsite. Purchased energy offsets (or a combination of incorporated renewables and purchased offsets) should equal 20% of the total projected energy consumption for the development.

R2-E7: Commercial/Industrial Retrofit Program

This R2 measure would implement General Plan Policies AQ 5.2, AQ 5.4, OS 16.1, OS 16.7 and OS 16.9 and encourage all commercial or industrial buildings undergoing major renovations to reduce their energy consumption by a minimum of 20%. As with the new development, a menu of options will be provided to assure flexibility in the implementation of this reduction measure. Although not limited to these actions, this reduction goal can be achieved through the incorporation of the following energy efficiency and renewable energy technologies:

- Replace inefficient air conditioning and heating units with new energy efficient models
- Replace older, inefficient appliances with new energy efficient models
- Replace old windows and insulation with top-quality windows and insulation
- Install solar water heaters
- Replace inefficient and incandescent lighting with energy efficient lighting
- Weatherize the existing building to increase energy efficiency
- Install solar panels

R2-E8: Induction Streetlight Retrofits

New induction street lamps are estimated to last five times longer and consume 50% less energy than the traditional high pressure sodium (HPS) lamps. Changing out old lamps for new ones reduces electricity use and saves money in the long-run. Retrofitting streetlights shall be done in accordance with Riverside County's Mt. Palomar Lighting Ordinance, which requires use of low pressure sodium vapor (LPSV) street lighting within 15 miles of Mt. Palomar Observatory and Riverside County Ordinance No. 915 regulating light pollution countywide.

R2-E9: Increase Gas to Energy Production from Landfills

This R2 measure would implement General Plan Policies OS-10.1, OS-11.1 through OS-11.3 and OS-12 by increasing Riverside County's generation of electricity from waste-generated methane. Currently, the Badlands Landfill operates a 1.3 MW generation facility with a capacity for approximately 8,200 mWh annual generation. The El Sobrante Landfill currently operates a 3.8 MW generation facility with a capacity for generating 24,000 mWh annually. Under this measure, Riverside County will increase gas-to-energy generation by: (1) increasing the capacity at the Badlands to a 4 MW system and increasing operation to 90% by 2020; (2) increasing the El Sobrante's facility operation to 90%; and (3) installing a 1.3 MW system at the Lamb Canyon Landfill and having that facility in operation 90% of the year.

R2-E10: On-Site Renewable Energy Production

On-site renewable energy production (including but not limited to solar) shall be required for any tentative tract map, plot plan, or conditional use permit that proposes to add more than 75 new dwelling units of residential development or one or more new buildings totaling more than 100,000

gross square feet of commercial, office, industrial, or manufacturing development, as described further below:

- a. Any such development shall offset its energy demand as provided below, unless such offsets are demonstrated by the applicant to be infeasible:*
 - i. Commercial, office, industrial or manufacturing development: 20 percent of energy demand*
 - ii. Multi-family residential development: 20 percent of energy demand*
 - iii. Single-family residential development: 30 percent of energy demand*

The County will revisit these offset requirements based on current technology each time it revises the CAP, with the expectation that offset requirements will increase over time.

- b. Examples of reasons that meeting on-site renewable energy production requirements may be infeasible include, but shall not be limited to:*

(1) for on-site solar energy production, the project site lacks available unshaded areas;

(2) the configuration of the parcels on which the buildings or buildings are planned to be located are not suited for any type of on-site renewable energy production; and

(3) on-site renewable energy production conflicts with other land use regulations applicable to a particular site, such as historic districts or Airport Influence Areas (e.g., where the Airport Land Use Commission or the County determines a technology to be hazardous for a site within an Airport Influence Area). If meeting the offset requirements in subpart (a) is infeasible, an applicant must nevertheless install on-site renewable energy production to the greatest extent feasible.

- c. Any determination that on-site renewable energy production is infeasible, including economic infeasibility, shall be supported by substantial evidence and independently verified by the County. A determination of infeasibility for development within an Airport Influence Area may be as part of the required Airport Influence Area may be made as part of the required Airport Land Use Commission review.*
- d. The feasibility of on-site renewable energy production shall be evaluated at the time of preparation of the first environmental review document (including by not limited to any environmental review for any specific plan adoption or amendment that proposes to add more than 75 units of residential or one or more buildings totaling more than 100,000 gross square feet of new commercial, office, industrial, or manufacturing development). The feasibility evaluation and supporting documentation shall be available for public review as content within the environmental review document, or as a supporting reference document.*

- e. *Implementation of feasible on-site renewable energy production shall be required as a condition of any new tract map, plot plan, or conditional use permit issued in connection with the development.*
- f. *The requirement for on-site renewable energy production is not intended to require a reduction in permissible project density or a change in permissible project type.*
- g. *The requirements of this settlement point shall apply regardless of whether the project meets the 3,000 MT CO₂E threshold discussed in the CAP. The requirements of this settlement point shall apply only to applications submitted 45 days or more after County's final action amending the CAP to include these requirements.*
- h. *Residential dwelling units in publicly subsidized projects to be constructed as housing for lower income households (as defined in Health and Safety Code section 50079.5) are exempt from the on-site renewable energy production requirements set forth in this Exhibit b to Agreement. Any other residential dwelling units or commercial, office, industrial, or manufacturing development built in conjunction with such units are not exempt, so long as they independently meet the size requirements identified in R2-E10 ~~Section 4 of this Exhibit B~~, above, except for mobilehome parks that separately qualify as exempt under ~~this Exhibit B section 4.i~~.*
- i. *Mobilehome parks that are reasonably anticipated to be used primarily for low-income families are also exempt from the on-site renewable energy requirements set forth in this R2-E10 ~~Exhibit B~~. Factors the County will consider in making this determination include the proposed mobilehome park's lot size, location, and proposed amenities. Mobilehome parks that include a golf course as a proposed amenity are not exempt from the on-site renewable energy requirements set forth in R2-E10 ~~this Exhibit B~~.*

C. R3 Energy Measures

The following R3 measures enhance and/or ensure the reductions accounted for within the R2 measures through education programs or are measures that will reduce emissions but cannot be quantified.

R3-E1: Energy Efficient Development, and Renewable Energy Deployment Facilitation and Streamlining

This measure would encourage Riverside County to identify and remove regulatory and procedural barriers to the implementation of green building practices and the incorporation of renewable energy systems. This includes the General Plan Energy Element Policies. Implementation of the Energy Element Policies includes updating of codes and zoning requirements and guidelines among others to facilitate renewable energy deployment and streamlining. This measure could be further enhanced by providing incentives for energy efficient projects such as priority in the reviewing, permitting and inspection process. Additional incentives could include permit streamlining and CEQA streamlining in exchange for incorporating green building practices or renewable energy systems.

R3-E2: Energy Efficiency Training & Public Education

This measure would provide public education and publicity about energy efficiency measures and reduction programs available within Riverside County, including rebates and incentives available for residences and businesses. In addition, this measure would provide training in green building materials, techniques, and practices for all plan review and building inspection staff.

R3-E3: Energy Efficiency and Solar Energy Financing

This measure would facilitate the incorporation of innovative, grant funded or low-interest financing programs for energy efficiency and renewable energy projects for both existing and new developments. This would include financing for heating, ventilation, air conditioning, lighting, water heating equipment, insulation, weatherization and residential and commercial renewable energy. A few potential options for funding this measure include:

- Use the money from offset purchases to provide grants to allow for the offset of some of the cost to existing residents in making energy efficiency upgrades.
- Target local funds to assist affordable housing developers to incorporate renewable energy sources and energy efficiency design features into low-income housing during development or through retrofit programs.
- Establish a Finance District, approve a bond purchase, and administer agreements to allow property owners to implement energy efficiency retrofits or designs and/or install renewable systems. Under this provision, repayment could be incorporated as a special tax on the property owner's property tax bill.
- Funding of other incentives to encourage the use of renewable energy sources and energy efficient equipment and lighting.

R3-E4: Cross-Jurisdictional Coordination

Under this reduction measure, Riverside County would coordinate with other local governments, special districts, nonprofit, and other organizations in order to optimize energy efficiency and renewable resource development and usage throughout Riverside County. This would allow for economies of scale and shared resources to more effectively implement these environmental enhancements.

4.4 Area Source Emissions

Area source emissions make up a small portion of Riverside County's total emissions; however, the following reduction measures can contribute toward reducing emissions in order to meet the AB 32 2020 reduction target. No statewide measures are related to area source emissions; however, the R2 measures are from the SCAQMD.

A. R2 Area Source Measures

R2-L1: Electric Landscaping Equipment

This measure reduces GHG emissions by substituting electric landscaping equipment for the traditional gas-powered equipment. Electric lawn equipment including lawn mowers, leaf blowers and vacuums, shredders, trimmers, and chain saws are available. When electric landscaping equipment is used in place of conventional equipment, direct GHG emissions from natural gas combustion are replaced with indirect GHG emissions associated with the electricity used to power the equipment. In the Screening Tables for New Development, projects would be able to earn points for including accessible outdoor outlets in the project design.

R2-L2 & R2-L3: SCAQMD Healthy Hearths

AQMD's Rule 445-Wood Burning Devices, adopted on March 7, 2008, applies to residents in the South Coast Air Basin and includes the following key components:

- R2-L2: No permanently installed indoor or outdoor wood burning devices in new developments;
- R2-L3: Establishes a mandatory wood burning curtailment program on high pollution days during November through February, beginning November 1, 2011. Based on current air quality conditions, there may be 10 to 25 mandatory curtailment days in specific areas (AQMD 2008).

B. R3 Area Source Measures

The following R3 measures are related to landscape strategies that will help reduce GHG emissions and can be incorporated into development projects without additional cost. These measures strategically place trees and other landscape mechanisms that create shade to reduce the heat island effect within parking lots and adjacent to buildings, which in turn, reduces the temperature of buildings and cars during the summer.

R3-L1: Expand County Tree Planting

This program evaluates the feasibility of expanding tree planting within Riverside County. This includes the evaluation of potential carbon sequestration from different tree species, potential reductions of building energy use from shading and GHG emissions associated with pumping water used for irrigation. Commercial and retail development should be encouraged to exceed shading requirements by a minimum of 10% and to plant low emission trees. All future development would be encouraged to preserve native trees and vegetation to the furthest extent possible.

R3-L2: Heat Island Plan

The implementation of this measure would include promoting the use of cool roofs, cool pavements, and parking lot shading to the entire County of Riverside by increasing the number of strategically placed shade trees. Further, Riverside County Design Guidelines should be amended to include that all new developments and major renovations (additions of 25,000 square feet or more) would be encouraged to incorporate the following strategies such that heat gain would be reduced for 50% of the non-roof impervious site landscape (including parking, roads, sidewalks, courtyards and driveways). The strategies include:

- Strategically placed shade trees;
- Paving materials with a Solar Reflective Index (SRI) of at least 29;
- Open grid pavement system; or
- Covered parking (with shade or cover having an SRI of at least 29).

4.5 Purchased Water

The purchased water imported from the State Water Project or from the Colorado River uses a large amount of energy for transportation. The following measures help to reduce the need for imported water and, therefore, reduce GHG emissions from the energy associated with water.

A. R1 Water Measures

R1-W1: Renewable Portfolio Standard Related to Water Supply and Conveyance

This measure would increase electricity production from eligible renewable power sources to 33% by 2020. A reduction in GHG emissions results from replacing natural gas-fired electricity production with zero GHG-emitting renewable sources of power. By 2020, this requirement will reduce emissions from electricity used for water supply and conveyance in California by approximately 21.3 MMT CO₂e, representing 15.2% of emissions from electricity generation (in-state and imports).

B. R2 Water Measures

R2-W1: Water Use Reduction Initiative

This initiative would reduce emissions associated with electricity consumption for water treatment and transportation. This measure encourages Riverside County to adopt a per capita water use reduction goal in support of the Governor's Executive Order S-14-08 which mandates the reduction of water use of 20% per capita. Riverside County's adoption of a water use reduction goal would introduce requirements for new development and would provide cooperative support for water purveyors that are required to implement these reductions for existing developments. Riverside County would also provide internal reduction measures such that County of Riverside facilities will support this reduction requirement. New development projects will be able to earn points in the Screening Tables for New Development by incorporating design features that reduce water use.

In addition, this R2 measure would implement General Plan Policies LU 4.1d and f, C 5.2 and OS 2.1 through OS 2.4 and provide incentives for all new proposed development projects to comply with the California Green Building Standards Code. Under the California Green Building Code, new developments are required to reduce indoor potable water use by 20% beyond the Energy Policy Act of 1992 fixture performance requirements, and to reduce outdoor potable water use by 50% from a mid-summer baseline average consumption through irrigation efficiency, native plant selection, the use of recycled water and/or captured rainwater, for example. The state is dependent upon local water purveyors and jurisdictions to implement these new requirements. This R2 measure

is provided here to enable its implementation and ensure points are allocated from the Screening Tables in accordance with the resultant benefits.

R2-W2: Increase Reclaimed Water Use

California water supplies come from a variety of sources including groundwater, surface water and reservoirs. For Southern California in particular, much of the water is transported over long distances, which can require a substantial amount of electricity. Recycled, or reclaimed, water is water reused after wastewater treatment for non-potable uses instead of returning the water to the environment. Since less energy is required to provide reclaimed water, fewer GHG emissions are associated with reclaimed water use compared to the average California water supply use. The Screening Table would allow new development to achieve points by including the use of recycled water.

4.6 Solid Waste

A. R1 Solid Waste Measure



The following R1 solid waste related measure is a measure that California has identified in the AB 32 Scoping Plan that will result in emission reductions within Riverside County.

R1-S1: Solid Waste Measures

The CARB Scoping Plan recommends three measures for reducing emissions from Municipal Solid Waste at the state level, including: 1) landfill methane control; 2) increase the efficiency of landfill methane capture; and 3) high recycling/zero waste. CARB is in the process of developing a discrete early action program for methane recovery (1), which was adopted in early 2010. This measure is expected to result in a 1.0 MMT CO₂e reduction by 2020. Other measures proposed by CARB include increasing efficiency of landfill methane capture (2) and instituting high recycling/zero waste policies (3). Potential reductions associated with these measures are still to be determined. CARB estimates a preliminary one-time cost for adoption of these measures to be approximately \$70 per ton of CO₂ reduced.

B. R2 Solid Waste Measures

The following list of R2 measures are candidate measures Riverside County can incorporate into the development review process related to solid waste to achieve an AB 32 compliant reduction target.

R2-S1: County Diversion Program

This R2 measure would implement General Plan Policy AQ 4.1 and AQ 5.1 through a countywide waste diversion plan to further exceed the state requirements by diverting 75% of all waste from landfills by 2020. The following is a potential list of waste reduction measures that can be incorporated into development projects that will further strengthen existing waste reduction/diversion programs:

- Encourage commercial, office, and industrial development to adopt a voluntary procurement standard and prioritize those products that have less packaging, are reusable, recyclable, or compostable;
- Include recycling and green waste collection infrastructure (assigned areas with separate designated bins for each type of recycled material) within residential, commercial, and industrial development;
- Require a minimum of 15% of materials used in construction be sourced locally, as feasible; and
- Encourage the use of recycled building materials and cement substitutes for new developments.

R2-S2: Construction Diversion Program

This R2 measure also implements General Plan Policies AQ 4.1 and AQ 5.1 by giving incentives through points within the Screening Table to new development projects that provide diversion of 60% of construction waste. This provides a 10% increase in diversion beyond the AB 2176, Section 42911, requirement that dictates that development projects provide adequate areas for collecting and loading recyclable materials and requires a 50% diversion rate prior to being issued a building permit.

C. R3 Solid Waste Measures

The following R3 measures enhance and/or ensure the reductions accounted for within the R2 measures through education programs that help participation and compliance of the R2 measures identified above.

R3-S1: Encourage Increased Efficiency of the Gas to Energy System at Landfills.

This R3 measure would encourage the landfills operated by Riverside County Waste Management to keep current with upgrades in efficiencies to landfill gas capture and gas to energy systems and to upgrade as feasible when significant increases in conversion efficiencies are available.

R3-S2: Waste Education Program

This R3 measure would provide countywide public education and increased publicity about commercial and residential recycling. This measure would educate the public about waste reduction options available at both residential and commercial levels, including composting, grass recycling, waste prevention and available recycling services.

R3-S2: On-Site Diversion and Conversion at County Landfills

This R3 measure would upgrade existing active Riverside County landfills to an integrated waste management operation that includes onsite recycling and reuse, in-situ composting, alternative landfill technology, such as bioreactor, as well as, waste conversion technologies, such as Anaerobic Digestion, Gasification, Pyrolysis, Hydrolysis, etc. Besides the direct benefits of fugitive LFG emission reductions and energy conversion, this landfill-based integrated waste management approach will have the additional environmental benefits of reducing regional VMT from waste material hauling and using existing permitted solid waste facilities equipped with compliant environmental protection systems.

4.7 Agriculture

A. R1 Agriculture Measure

The following R1 agriculture-related measure is a measure that California has identified in the AB 32 Scoping Plan that will result in emission reductions within Riverside County.

R1-A1: Methane Capture at Large Dairies

This is an AB 32 voluntary measure to encourage the installation of methane digesters to capture methane emissions at large dairies. By 2020, this requirement will reduce emissions in California by approximately one MMT CO_{2e}, representing 7.8% of CH₄ and N₂O emissions from manure management and enteric fermentation at dairies in the State of California.

B. R2 Agriculture Measures

Agriculture is an important, but separate, economic sector from new development projects within Riverside County. Because of the difference between agricultural activities and new residential, commercial and industrial development within Riverside County, IMs for agricultural source emissions are not recommended at this time.

C. R3 Agriculture Measure

The following R3 measure enhances and/or insures the reductions accounted for within the R2 measures through education programs that help participation and compliance of the R2 measures identified above.

R3-A1: Promote Soil Management Practices

Under this reduction measure, Riverside County would promote soil management practices that reduce nitrogen dioxide emissions through strategies such as fertilizer management, nitrification inhibitors, water management, and efficient use of fossil fuels.

4.8 Industrial

The following list of R1 industrial related measures are those measures that CARB has identified in the AB 32 Scoping Plan that will result in emission reductions within Riverside County. This section describes GHG emission reductions for the existing and proposed national, state, or regional industrial fuel combustion measures that will result in future GHG reductions for the industrial sector and do not require significant county action.

A. R1 Industrial Measures***R1-11: Oil and Gas Extraction Combustion Related GHG Emission Reduction***

This AB 32 measure would reduce combustion emissions from oil and gas extraction. By 2020, this requirement will reduce emissions in California by approximately 1.8 MMT CO_{2e}, representing 13% of combustion emissions from oil and gas extraction in the State of California.

R1-12: Stationary Internal Combustion Engine Electrification

This AB 32 measure would affect owners and operators of industrial and commercial engines over 50 horsepower used as primary power sources by replacing internal combustion engines with electric motors. By 2020, this requirement will reduce emissions in California by approximately 0.3 MMT CO_{2e}, representing 0.5% of combustion emissions from industrial sources (non-coal) in the State of California.

B. R2 Industrial Measures

Industrial point source emitters of GHGs are required to comply with Title V Permits under the federal Clean Air Act. As such, these types of emissions are not under the jurisdiction of Riverside County and, hence, no IMs were developed or are proposed for point source emitters. Other types of industrial emissions (mobile source, energy, etc.) are reduced through R1 measures and the measures described throughout this document.

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Chapter 5

Total Estimated Reductions

In 2020, Riverside County is projected to emit a total of 12,129,497 MT CO₂e without the incorporation of reduction measures. With implementation of the reduction measures discussed in Chapter 4, Riverside County emissions for 2020 would be reduced to 5,534,113 MT CO₂e. The statewide reduction measures (the R1 Measures in Chapter 4) would reduce close to half of Riverside County's emissions and make a substantial contribution toward reaching the 2020 reduction target. However, Riverside County would need to supplement the state measures with the implementation of the local implementation measures (IM measures) discussed in Chapter 4.

5.1 Reductions from Statewide Measures

The following tables summarize the GHG reductions afforded to Riverside County from the implementation of the statewide R1 reduction measures. Table 5-1 (Statewide Measures and Associated Emissions Reduced from the 2020 Inventory) shows the annual MT CO₂e and the corresponding percent of emissions reduced for each of the R1 statewide measures described in Chapter 4 during the year 2020. Note that some R1 measures are not quantifiable and are not included in Table 5-1.

Table 5-1 Statewide Measures and Associated Emissions Reduced from the 2020 Inventory

| Transportation | MT CO₂e Reduced | % of Transportation Emissions |
|---|-----------------------------------|--------------------------------------|
| R1-T1 & R1-T2: Pavley Vehicle Efficiency* | 257,519 | 3.7% |
| R1-T3: Low Carbon Fuel Standard | 188,757 | 2.7% |
| R1-T4: Tire Pressure | 14,167 | 0.2% |
| R1-T5: Low Rolling Resistance Tires | 9,417 | 0.1% |
| R1-T6: Low Friction Oils | 80,248 | 1.2% |
| R1-T7: Goods Movement Efficiency | 35,394 | 0.5% |
| R1-T8: Aerodynamic Efficiency | 41,357 | 0.6% |
| R1-T9: Medium/Heavy Duty Hybridization | 30,634 | 0.4% |
| R1-T10: Regional SB 375 Targets | 404,697 | 5.8% |
| Transportation Total | 1,062,190 | 15.2% |
| Energy | MT CO₂e Reduced | % of Energy Emissions |
| R1-E1: RPS – 33% Renewable by 2020 | 365,239 | 12.9% |
| R1-E2 & R1-E3: Lighting | 161,400 | 5.7% |
| R1-E4: Electrical Energy Efficiency | 127,288 | 4.5% |
| R1-E5: Natural Gas Energy Efficiency | 24,631 | 0.9% |
| R1-E6: Increased Combined Heat and Power | 96,397 | 3.4% |
| R1-E7: Industrial Efficiency | 80,180 | 2.8% |
| Energy Total | 855,135 | 30.2% |
| Purchased Water | MT CO₂e Reduced | % of Water Emissions |
| R1-W1: RPS – 33% Renewable by 2020 | 33,315 | 19.0% |
| Purchased Water Total | 33,315 | 19.0% |

| Agriculture | MT CO ₂ e Reduced | % of Agriculture Emissions |
|-----------------------------------|------------------------------|----------------------------|
| R1-A1: Methane Capture at Dairies | 15,604 | 1.0% |
| Agriculture Total | 15,604 | 1.0% |
| Total Reductions | 1,966,245 | 16.2% |

* Because Pavely I and Pavely II work in tandem for total reductions and would not have equivalent reductions if implemented independently of one another, they are shown together in this table

Table 5-2 (Statewide Reduction Summary for 2020 Inventory) compares the 2020 inventory (without the incorporation of any reduction measures) to the community-wide emissions with the statewide reductions. As shown in the table, the statewide reduction measures would reduce 16.2% of Riverside County’s total community wide annual emissions by the year 2020.

Table 5-2 Statewide Reduction Summary for 2020 Inventory

| | 2020 BAU MT CO ₂ e | State Reductions MT CO ₂ e | 2020 Reduced MT CO ₂ e | % Reduction |
|-----------------|-------------------------------|---------------------------------------|-----------------------------------|--------------|
| Transportation | 6,977,331 | 1,062,190 | 5,915,141 | 15.2% |
| Energy | 2,830,246 | 855,135 | 1,975,111 | 30.2% |
| Area Sources | 442,024 | 0 | 442,024 | 0.0% |
| Purchased Water | 175,344 | 33,315 | 142,029 | 19.0% |
| Solid Waste | 181,728 | 0 | 181,728 | 0.0% |
| Agriculture | 1,522,823 | 15,604 | 1,507,220 | 1.0% |
| Total | 12,129,497 | 1,966,245 | 10,163,253 | 16.2% |

Although the statewide measures would significantly reduce Riverside County’s emissions, they would not be enough to reach the established 2020 reduction target. Riverside County’s reduction target was calculated as 15% below 2008 levels, which equates to 5,960,998 MT CO₂e. The statewide reduction measures would bring Riverside County down to 10,163,253 MT CO₂e, which leaves 4,202,255 MT CO₂e to be reduced by measures implemented at the community level, see Table 5-3 (Comparison to Reduction Target).

Table 5-3 Comparison to Reduction Target

| | MT CO ₂ e |
|------------------------------|----------------------|
| 2020 with State Reductions | 10,163,253 |
| 2020 Reduction Target | 5,960,988 |
| Amount left to Reduce | 4,202,255 |

The measures described in Chapter 4 would be implemented to reduce the remaining 4,202,255 MT CO₂e in order to reach the 2020 reduction target for Riverside County. The 2020 Reduction Target is an estimated 50.9% below the 2020 inventory. The statewide reduction measures work to reduce Riverside County’s emissions by 16.2% from the 2020 inventory, as shown in Table 5-4 (Percentage Reduction from 2020 Inventory).

Table 5-4 Percentage Reduction from 2020 Inventory

| | % from 2020 Inventory |
|------------------------------|-----------------------|
| 2020 Reduction Target | 50.9% |
| State Reduction Measures | 16.2% |
| Amount left to Reduce | 34.7% |

The remaining 34.7% of emissions would be reduced through the implementation of the measures described in Chapter 4. Measures include several categories of reductions: the energy-efficiency measures that Riverside County has incorporated since 2008; measures that implement policies included in the proposed General Plan Update; and additional measures that applicants could include as part of their project when filling out the Screening Tables.

5.2 Reductions from Implementation Measures

The IMs discussed in Chapter 4 would be implemented primarily through the Screening Tables for New Development and with General Plan policies. The measures go beyond the state measures to reduce GHG emissions in order to meet the 2020 reduction target. Table 5-5 (R2 Measures and Associated Emissions reduced from 2020 Inventory) summarizes the MT CO₂e and the corresponding percentage of emissions reduced for each of the R2 measures.

Table 5-5 R2 Measures and Associated Emissions Reduced from 2020 Inventory

| Transportation | MT CO₂e Reduced | % of Transportation Emissions |
|--|-----------------------------------|--------------------------------------|
| R2-T1: Employment Based Trip and VMT Reduction | 870,619 | 12.5% |
| R2-T2: Increased Residential Density | 470,134 | 6.7% |
| R2-T3: Mixed Use Development | 451,851 | 6.5% |
| R2-T4: Preferential Parking | 15,293 | 0.2% |
| R2-T5: Roadway Improvements – Signals, Flow | 304,019 | 4.4% |
| R2-T6: Non-Motorized Transportation Facilities | 328,333 | 4.7% |
| R2-T7: Expand Alternative Fuel Vehicle Use | 451,928 | 6.5% |
| R2-T8: Anti-Idling Enforcement | 71,736 | 1.0% |
| R2-T9: Increase Public Transit | 382,918 | 5.5% |
| R2-T10: Employee Commute Alternative Schedules | 114,277 | 1.6% |
| Transportation Total | 3,461,109 | 49.6% |
| Energy | MT CO₂e Reduced | % of Energy Emissions |
| R2-E1: Residential Energy Efficiency Program | 72,480 | 2.6% |
| R2-E2: Residential Renewable Energy Program | 108,728 | 3.8% |
| R2-E3: Residential Retrofit Implementation Program | 70,365 | 2.5% |
| R2-E4: Residential Renewable Retrofit Program | 83,026 | 2.9% |
| R2-E5: Commercial Energy Efficiency Program | 182,796 | 6.4% |
| R2-E6: Commercial/Industrial Renewable Program | 261,923 | 9.3% |
| R2-E7: Commercial/Industrial Retrofit Program | 25,948 | 0.9% |
| R2-E8: Induction Streetlight Retrofits | 12,793 | 0.5% |
| R2-E9: Increase Gas-To-Energy Production | 15,672 | 0.6% |
| Energy Total | 833,731 | 29.5% |
| Area Source | MT CO₂e Reduced | % of Area Source Emissions |
| R2-L1: Electric Landscape Equipment | 123,959 | 28.0% |
| R2-L2: No New Wood-burning Devices | 75,241 | 17.0% |
| R2-L3: Mandatory Curtailment Days | 12,637 | 2.9% |
| Area Source Total | 211,837 | 47.9% |
| Water | MT CO₂e Reduced | % of Water Emissions |
| R2-W1: Water Use Reduction Initiative | 28,406 | 16.2% |
| R2-W2: Increase Reclaimed Water Use | 4,602 | 2.6% |
| Water Total | 33,007 | 18.8% |
| Solid Waste | MT CO₂e Reduced | % of Solid Waste Emissions |
| R2-W1: County Diversion Program | 82,371 | 45.3% |
| R2-W2: Construction Diversion Program | 7,058 | 3.9% |
| Solid Waste Total | 89,455 | 49.2% |
| Total Reductions | 4,629,410 | 38.2% |

With the statewide reduction measures and the implementation of the IMs, Riverside County would reduce its community-wide emissions to a level below the established 2020 reduction target. Table 5-6 (IM Reduction Summary for 2020 Inventory) summarizes the 2020 inventory emissions, the GHG reductions associated with the statewide and IMs, and the reduced 2020 emissions.

Table 5-6 IM Reduction Summary for 2020 Inventory

| | 2020 MT CO ₂ e | State Reductions MT CO ₂ e | IM Reductions MT CO ₂ e | Reduced 2020 MT CO ₂ e | % Reduction |
|-----------------|---------------------------|--|---------------------------------------|--------------------------------------|--------------|
| Transportation | 6,977,331 | 1,062,190 | 3,461,109 | 2,454,032 | 64.8% |
| Energy | 2,830,246 | 855,135 | 833,731 | 1,141,380 | 59.7% |
| Area Sources | 442,024 | 0 | 211,837 | 230,188 | 47.9% |
| Purchased Water | 175,344 | 33,315 | 33,007 | 109,021 | 37.8% |
| Solid Waste | 181,728 | 0 | 89,455 | 92,273 | 49.2% |
| Agriculture | 1,522,823 | 15,604 | 0 | 1,507,220 | 1.0% |
| TOTAL | 12,129,497 | 1,966,245 | 4,629,140 | 5,534,113 | 54.4% |

5.3 Reduced 2020 Community-Wide Emissions Inventory

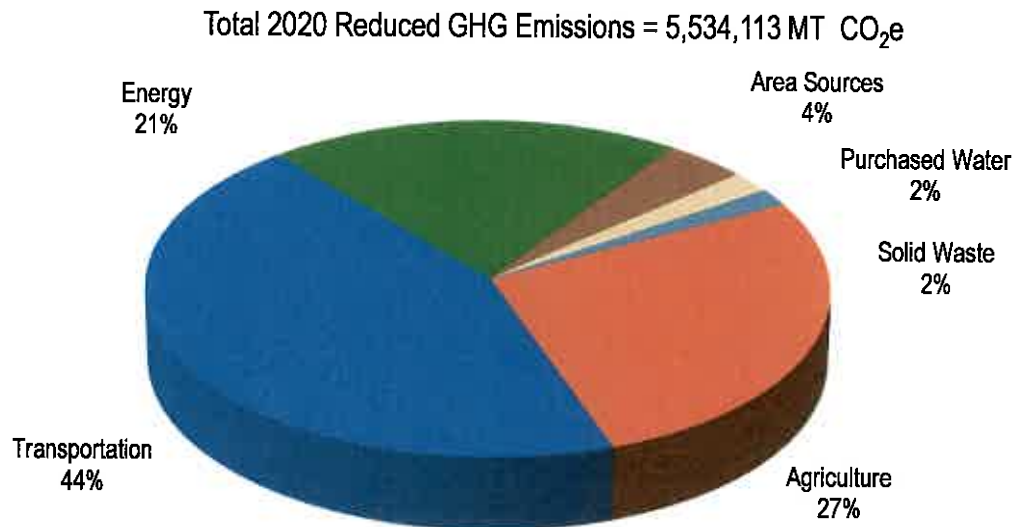
With the implementation of GHG reduction measures, Riverside County is projected to reduce its emissions to a total of 5,534,113 MT CO₂e, which is 426,884 MT CO₂e below the 2020 reduction target. This is a decrease of 54.4% from Riverside County’s 2020 BAU emissions inventory and 15% from the 2008 emissions. The reduction measures reduce GHG emissions from all sources of community-wide GHG emissions including transportation, energy, area sources, water, solid waste and agriculture. The following section describes the reduced emissions by source for the year 2020.

A. Emissions by Source

The emissions by source for the reduced 2020 inventory were calculated by applying a percent reduction to the 2020 emissions for each reduction measure. Table 5-7 (Reduced 2020 GHG Emissions by Source) summarizes the reduced 2020 County emissions of CO₂e as broken down by emissions category. Figure 5-1 (Reduced 2020 GHG Emissions Generated by Source) is a graphical representation of Table 5-7. A detailed breakdown of reduced 2020 emissions by category is available in Appendix D of this CAP.

Table 5-7 Reduced 2020 GHG Emissions by Source

| Category | Metric tons of CO ₂ e |
|-----------------|----------------------------------|
| Transportation | 2,454,032 |
| Energy | 1,141,380 |
| Area Sources | 230,188 |
| Purchased Water | 109,021 |
| Solid Waste | 92,273 |
| Agriculture | 1,507,220 |
| Total | 5,534,113 |

Figure 5-1 Reduced 2020 GHG Emissions Generated by Source

5.4 Reduced 2035 Community-Wide Emissions Inventory

Beyond 2035, Riverside County's GHG emissions would reduce with the continued implementation of the 2020 reduction strategies, expansion of the transit system according to the forthcoming SCAG RTP, and increased stringency of state reduction measures. In addition to the 2020 reduction measures, the following assumptions were included in the reduced 2035 GHG emissions:

- Pavley vehicle efficiency standards would continue beyond 2035 at a similar rate.
- The low carbon fuel standard would increase from 10% to 12%.
- Continued expansion of medium and heavy duty vehicle hybridization.
- Expanded SB 375 target with SCAG RTP/SCS implementation.
- 0.4% reduction in transportation emissions associated with CA High Speed Rail project.
- 30% increase in residential density post 2020.
- 10% increase in mixed use development post 2020.
- Expanded preferential parking programs.
- Expanded signal synchronization and traffic flow management programs.
- 60% increase in facilities for bicycle and pedestrian transportation post 2020.
- Double the number of electric vehicles post 2020.

- Expanded transportation network post 2020.
- Increased percent of RPS to 39% by 2035.
- Continued regulations for energy efficient lighting.
- Increased electrical and natural gas energy efficiency post 2020.
- Expanded combined heat and power systems.
- Increased industrial efficiency by 60% post 2020.
- New homes achieve energy efficiency 25% beyond current Title 24.
- 65% participation of new home with renewable energy systems.
- 50% of existing homes undergo energy efficiency and/or renewable energy retrofits.
- 25% of new commercial development installs renewable energy systems.
- 60% of existing commercial developments undergo energy efficiency retrofits.
- Water conservation expands to 30%.
- Reclaimed water use increases to 10%.
- Construction waste diversion doubles post 2020.
- Methane capture at dairies doubles post 2020.

With the continued implementation of the Screening Tables for New Development and predicted future developments at the state level, Riverside County’s 2035 emissions would be reduced down to a total GHG emissions inventory of approximately 5,937,658 MT CO₂e, this represents a 61.7% decrease from the 2035 BAU emissions inventory and is below the 2020 reduction target. The assumptions described above represent one possible scenario for achieving reductions beyond 2020. Future inventory updates, monitoring of reduction measures, and updating policies will be necessary to create a successful post 2020 plan.

A. Emissions by Source

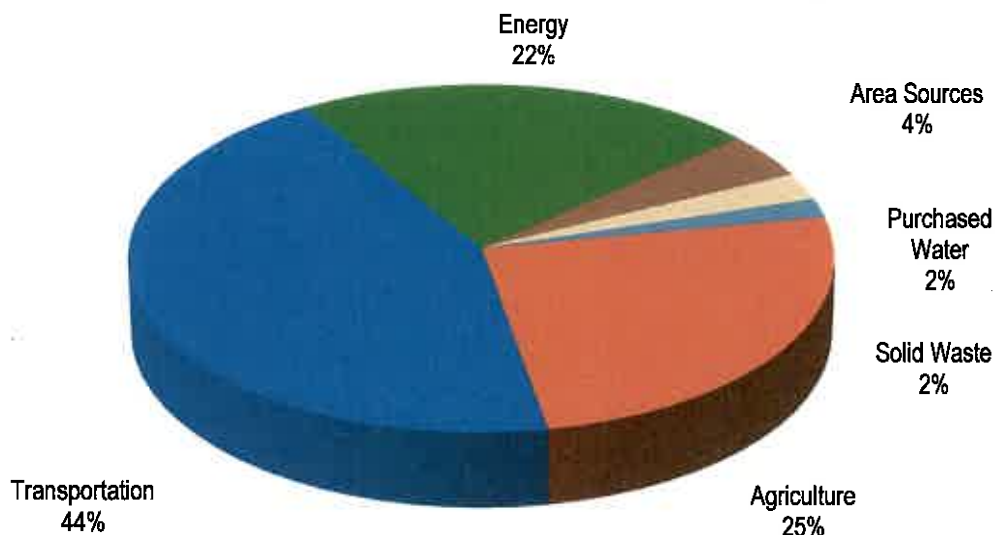
The emissions by source for the 2035 reduced inventory were calculated by applying a percent reduction to the 2035 emissions inventory for each reduction measure. Table 5-8 (Reduced 2035 GHG Emissions by Source) summarizes the 2035 County emissions of CO₂e as broken down by emissions category. Figure 5-3 (Reduced 2035 GHG Emissions by Source) is a graphical representation of Table 5-8. A detailed breakdown of the reduced 2035 emissions by category is available in Appendix D of this CAP.

Table 5-8 Reduced 2035 GHG Emissions by Source

| Category | Metric tons of CO ₂ e |
|-----------------|----------------------------------|
| Transportation | 2,617,363 |
| Energy | 1,323,685 |
| Area Sources | 256,478 |
| Purchased Water | 146,118 |
| Solid Waste | 107,198 |
| Agriculture | 1,485,815 |
| Total | 5,937,658 |

Figure 5-3 Reduced 2035 GHG Emissions by Source.

Total 2035 Reduced GHG Emissions = 5,937,658 MT CO₂e



5.5 Emissions Summary

With the implementation of the reduction measures outlined in Chapter 4, Riverside County would reduce its emissions to a level below the 2020 reduction target calculated in Chapter 3. This represents a 54.3% decrease from the 2020 BAU inventory and is consistent with the State of California’s GHG reduction goals. Table 5-9 (2020 GHG Emissions Comparison) summarizes the existing 2008 emissions, the 2020 BAU emissions inventory, and the reduced 2020 emissions.

Table 5-9 2020 GHG Emissions Comparison

| Source Category | Metric tons of CO ₂ e | | | |
|----------------------------------|----------------------------------|-------------------|------------------|--------------|
| | 2008 | 2020 BAU | Reduced 2020 | % Reduced |
| Transportation | 2,850,520 | 6,977,331 | 2,454,032 | 64.8% |
| Energy | 1,577,667 | 2,830,246 | 1,141,380 | 59.7% |
| Area Sources | 269,181 | 442,024 | 230,188 | 47.9% |
| Purchased Water | 152,473 | 175,344 | 109,021 | 37.8% |
| Solid Waste | 132,666 | 181,728 | 92,273 | 49.2% |
| Agriculture | 2,030,431 | 1,522,823 | 1,507,220 | 1.0% |
| Total | 7,012,938 | 12,129,823 | 5,534,113 | 54.4% |
| Emission Reduction Target | | 5,960,998 | 5,960,998 | |
| Below Reduction Target? | | No | Yes | |

Note: Mass emissions of CO₂e shown in the table are rounded to the nearest whole number. Totals shown may not add up due to rounding.

Beyond 2020, these reduction measures would continue to reduce emissions particularly from new development projects and transportation. Without reduction measures, Riverside County’s growth beyond 2020 would result in more GHG emissions; however, these emissions can be offset with the implementation of the Screening Tables for New Development and the General Plan’s policies to reduce GHG emissions. Table 5-10 (2035 GHG

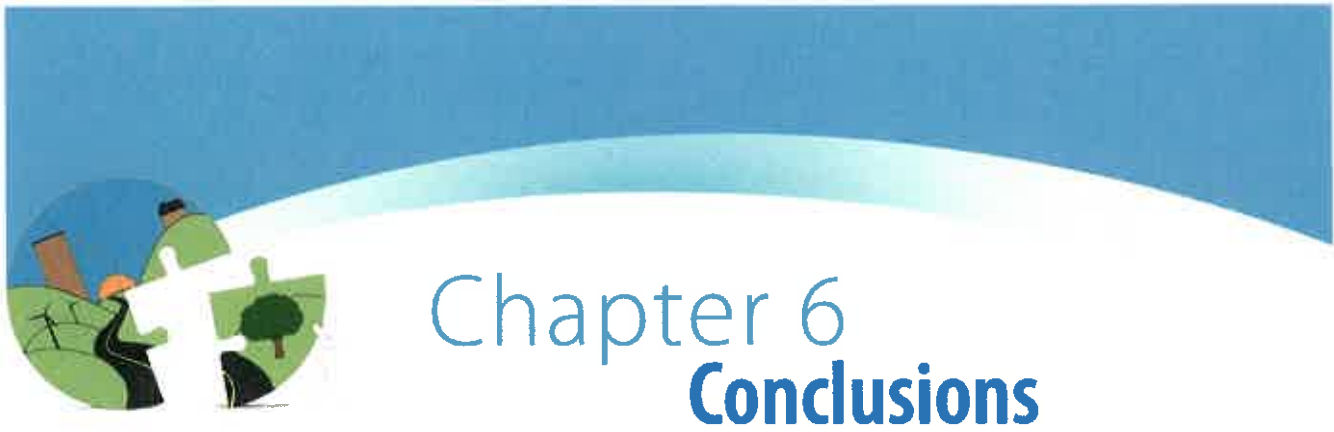
Emissions Comparison) summarizes Riverside County’s existing 2008 emissions, anticipated 2035 emissions inventory, and reduced 2035 emissions.

Table 5-10 2035 GHG Emissions Comparison

| Source Category | Metric tons of CO ₂ e | | | |
|----------------------------------|----------------------------------|-------------------|------------------|--------------|
| | 2008 | BAU 2035 | Reduced 2035 | % Reduced |
| Transportation | 2,850,520 | 9,318,041 | 2,617,363 | 71.9% |
| Energy | 1,577,667 | 3,610,701 | 1,323,685 | 63.3% |
| Area Sources | 269,181 | 529,384 | 256,478 | 51.6% |
| Purchased Water | 152,473 | 293,077 | 146,118 | 50.1% |
| Solid Waste | 132,666 | 220,747 | 107,198 | 51.4% |
| Agriculture | 2,030,431 | 1,522,823 | 1,486,815 | 2.4% |
| Total | 7,012,938 | 15,494,774 | 5,937,658 | 61.7% |
| Emission Reduction Target | | 5,960,998 | 5,960,998 | |
| Below Reduction Target? | | No | Yes | |

Note: Mass emissions of CO₂e shown in the table are rounded to the nearest whole number. Totals shown may not add up due to rounding.

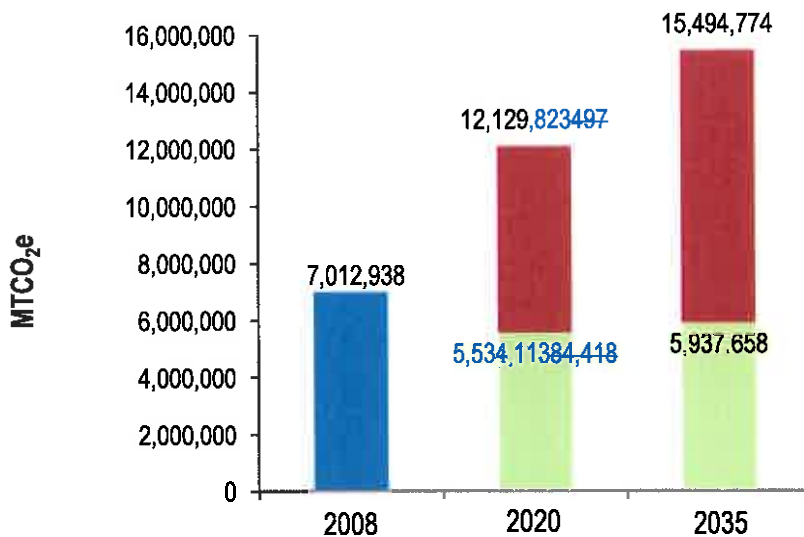
Table 5-10 shows that the continued implementation of the reduction measures combined with the anticipated increased stringency of state reduction measures would reduce 2035 emissions by 61.7%, which is below the 2020 reduction target. The State of California’s ambitious reduction target for the year 2050 is to reduce emissions 80% below 1990 emissions. In order to reach this target, technology must advance significantly and more stringent measures for building and vehicle efficiency must be implemented. While the measures included in this CAP would provide a plan for Riverside County to reduce emissions enough to meet the 2020 target and experience further reductions through to 2035, the CAP would need to be updated periodically in the future in order to update these measures.



Chapter 6 Conclusions

This CAP serves as a guide to help Riverside County implement the objectives of conserving resources and reducing GHG emissions. This document also serves as a technical resource for the proposed update of Riverside County’s current General Plan and other land use related documents that may require evaluation and documentation of GHG emissions. Figure 6-1 (Riverside County GHG Emissions by Year) shows a comparison between the emission inventories, including the reduced 2020 BAU and 2035 BAU inventories. The blue bar represents the calculated GHG inventory for Riverside County for 2008. The red bars show the projected growth in GHG emissions in 2020 BAU and 2035 BAU based on the General Plan growth rates. The green bars demonstrate the reduced inventories after the implementation of the statewide and community reduction measures described in Chapter 4.

Figure 6-1 Riverside County GHG Emissions by Year



This CAP sets a target to reduce community-wide GHG emission emissions by 15% from 2008 levels by 2020 consistent with the state reduction goals in AB 32. The CARB Scoping Plan outlines the reduction strategies designed to meet the statewide reduction goal of AB 32. Riverside County has a reduction strategy as described in Chapter 4 that would meet the state reduction goal. Reduction measures provided herein would ensure that Riverside County meets the AB 32 reduction target of reducing to 15% below 2008 levels (reduce down to

5,964,354 MT CO_{2e}) by 2020. Such programs include strengthening Riverside County's existing programs as well as implementing the Screening Tables for New Development. In some cases, implementation will require the cooperation of other agencies, private businesses, and residents. The success of these measures will be tracked using indicators and targets such as those described in this CAP. Even with the anticipated growth, the modernization of vehicle fleets, combined with the continued implementation of the proposed measures, will reduce GHG emissions by approximately 6,595,384 MT CO_{2e} from 2020 levels. Therefore, the implementation of the state (R1) measures combined with Riverside County's R2 and R3 measures will reduce GHG emissions down to 5,534,113 MT CO_{2e} by year 2020, which is 426,884 MT CO_{2e} below the reduction target.

Beyond 2020, Riverside County would continue implementation of the Screening Tables. During this time, the reduction measures implemented through the Screening Tables would continue to reduce GHG emissions from new development. Additionally, it is assumed that the state measures would be reinforced post-2020 to further reduce emissions. With these assumptions, Riverside County's emissions would decrease to a level below the 2020 reduction target by 2035. Continued implementation of this CAP in post 2020 years is discussed in Chapter 7.



Chapter 7

Implementation

This section describes implementation steps for the CAP to support achievement of the GHG reduction goals for the community at large. Success in meeting Riverside County's GHG emission reduction goal will depend on cooperation, innovation and participation by Riverside County and residents, businesses, and government entities in Riverside County's land use jurisdiction with regards to implementing the CAP. This section outlines key steps that the County of Riverside will follow for the implementation of this CAP.

7.1 STEP 1 – Administration and Staffing

The County of Riverside will appoint an Implementation Coordinator to coordinate implementation of this CAP. The Implementation Coordinator will oversee and document implementation of the reduction measures and provide periodic monitoring of emissions.

The Implementation Coordinator will, at a minimum, include the following departments, but will be expanded as needed to ensure coordinated leadership in plan implementation:

- Riverside County Executive Office (EO) – the executive office can provide economic, financial and administrative guidance and support to the Implementation Coordinator.
- Transportation Land Management Agency (TLMA) – Riverside County's Land Use umbrella agency will provide coordination between the various land use divisions, including, but not limited to Building & Safety and Transportation and will assist in the implementation of New Development Implementation Measures.
- Riverside County Economic Development Agency-Facilities Management Division – this county division administers the energy efficiency improvements to Riverside County owned facilities being constructed as a result of the Energy Efficiency and Conservation Block Grant (EECBG) funding.
- Planning Division – Planning can provide expertise in the project entitlement process and provide long-term planning support.

7.2 STEP 2 – Financing and Budgeting

The Implementation of the CAP will require creative, continuing and committed financing in order to work. Local, regional, state and federal public sources of funding will be needed along with the substantial involvement of the private sector. The Riverside County Implementation Plan will take into account the costs and staff resources throughout implementation of the plan as well as the financial benefits and cost savings. The following different financing options will be explored by the County of Riverside:

- State and Federal Grants and Low-interest Loans – As described below, there are a variety of grant and loan programs that exist in various sectoral areas.
- Support from Local Businesses, Non-Profits, and Agencies – Opportunities for public/private partnerships (like the SCE partnerships) exist to provide cooperation on many aspects of the CAP including energy efficiency retrofits, waste minimization, transit promotion and education.
- Self-Funding and Revolving Fund Programs – Innovative programs to fund residential solar investments.
- Agreements with Private Investors – Energy service companies and other private companies can finance up-front investments in energy efficiency and then be reimbursed through revenues from energy savings.
- Taxes and Bonds – Various local governments have used targeted finance instruments for solar, transportation, vehicle improvements and landfill methane controls.

Given that financing is vital to implementing many of the CAP measures, a review of current and potential funding sources was completed for the different sectors covered in this CAP and is presented below to help early phase implementation of the CAP. Whether at the federal, western regional or state level, it appears likely that there will be some form of a “cap and trade” system in place within several years. This system, depending on its particular character, is likely to influence energy prices (such as for electricity, natural gas, and vehicle fuels), and may make currently cost-ineffective measures more economically feasible in the medium term and allow the financing of a broader range of plan measures.

A. Energy Efficiency and Renewable Energy Financing

Federal Energy Efficiency Community Block Grants (EECBG). As part of the stimulus package (the “American Recovery and Reinvestment Act” or ARRA), signed into law by President Obama in spring 2009, block grants are available for energy efficiency planning and improvements in the building, transportation and other sectors. The purpose of the EECBG Program is to assist eligible jurisdictions in creating and implementing strategies to: reduce fossil fuel emissions in a manner that is environmentally sustainable and that maximizes, to the greatest extent practicable, benefits for local and regional communities; reduce the total energy use of the eligible entities; and improve energy efficiency in the building sector, the transportation sector and other appropriate sectors. Eligible activities include: development of an energy efficiency and conservation strategy; technical consultant services; residential and commercial building energy audits; financial incentive programs; energy efficiency retrofits; energy efficiency and conservation programs for buildings and facilities; development and implementation of certain transportation programs; building codes and inspections; certain distributed energy projects; material conservation programs; reduction and capture of methane and greenhouse gases from landfills and dairies; efficiency traffic signals and street lighting; renewable energy technologies on government buildings; and other appropriate activity.

Federal Tax Credits for Energy Efficiency. On October 3, 2008, President Bush signed into law the “Emergency Economic Stabilization Act of 2008.” This bill extended tax credits for energy efficient home improvements (windows, doors, roofs, insulation, HVAC and non-solar water heaters). These residential products during 2008 were not eligible for a tax credit, as previous tax credits had expired at the end of 2007. The bill also extended tax credits for solar energy systems and fuel cells to 2016. New tax credits were established for small wind energy systems and plug-in hybrid electric vehicles. Tax credits for builders of new energy efficient homes and tax deductions for owners and designers of energy efficient commercial buildings were also extended.

See: http://www.energystar.gov/index.cfm?c=products.pr_tax_credits.

SCE Energy Efficiency / Renewable Energy Incentives

- Online or mail-in Home Energy Efficiency Survey. This 15-minute survey gives helpful energy-saving tips that will also help the environment. The questions and tips are tailored for residential energy usage.
- Rebate programs for residential use include lighting, appliances, heating and cooling, multifamily housing, pool, solar leadership and customer generation.
- Energy Centers provide free information, training and support to make important Energy Management and energy efficiency choices.
- SCE Energy Manager offers online access to usage information and detailed cost analyses business energy use.
- Financial Offerings include on-Bill Financing, Zero-interest financing towards the purchase and installation of qualifying energy efficient equipment for commercial, industrial and agricultural customers.
- Regulation & Compliance Support “The Cool Planet Project” assists customers with recent installations or efficiency projects resulting in excess of one million kWh of energy in joining the Climate Registry.
- Solar Leadership helps create a cleaner energy future with innovative solutions that make it possible for you to join the solar movement.
- Self-Generation provides financial incentives for installing self-generation equipment to meet all or a portion of facility’s energy needs.
- Specialized Services for Facilities:
 - New Buildings – Receive technical assistance in the design and construction of new energy efficient buildings.
 - Savings by Design: New construction builders and buyers can receive design assistance, owner incentives, and design team incentives.
 - California Advanced Homes - Incentives, design assistance, and technical education and services to encourage home builders to build homes that exceed California’s Title 24 code standards by at least 15%.
 - Full-service solutions are available to qualifying customers to receive assistance in identifying and evaluating energy efficiency opportunities within existing buildings.
 - Retro Commissioning - Receive assistance to improve the bottom line in existing building’s operations through specialized services to detect inefficiencies in complex building systems, and to determine optimum operating conditions.
- Heating Ventilation & Air Conditioning - Lower operating costs and increase equipment life through proper HVAC installation and regular maintenance. Future programs will focus on two key components:
 - A/C Quality Maintenance, and
 - A/Q Quality Installation.

AB 811 Financing Districts. AB 811 permits the creation of assessment districts to finance installation of distributed generation renewable energy sources or energy efficiency improvements that are permanently fixed to residential, commercial, industrial, or other real property. Riverside County’s partnership with WRCOG in creation of the Energy Efficiency and Water Conservation Program allows home and business owners to utilize

this type of financing program and avoid upfront costs associated with energy system installations. Financing is repaid through the property tax bill and repayment obligations remain with the property when it is sold to a new owner.

California Energy Commission (CEC) Energy Efficiency Financing. The CEC offers up to \$3 million per application in energy efficiency financing and low interest loans to cities and counties for installing energy-saving projects. Examples of projects include: lighting systems, pumps and motors, streetlights and LED traffic signals, automated energy management systems/controls, building insulation, energy generation including renewable and combined heat and power projects, heating and air conditioning modifications and wastewater treatment equipment.

See <http://www.energy.ca.gov/efficiency/financing/>

California Energy Commission Bright Schools Program. This is a collaborative project of the CEC, California Conservation Corps, local utility companies and other qualifying energy service companies to assist schools in undertaking energy efficiency projects. Project staff will guide schools through identifying and determining a project's feasibility, securing financing for the project, and purchasing and installing the new energy efficient equipment.

See <http://www.energy.ca.gov/efficiency/brightschoools/index.html>

B. Transportation Financing

Federal Energy Efficiency Community Block Grants (EECBG). As described above, eligible activities include development and implementation of certain transportation programs and efficient traffic signals and street lighting.

Regional Transportation Improvement Program (RTIP). The Regional Transportation Improvement Program (RTIP) is funded from 75% of the funds made available for transportation capital improvement projects under the State Transportation Improvement Program (STIP). This program targets urban projects that are needed to improve transportation within the region. The Southern California Association of Governments (SCAG) and RCTC recommends to the California Transportation Commission (CTC) the selection of these projects, which can include state highway improvements, local roads, public transit, intercity rail, grade separations, and more.

Interregional Improvement Program (IIP). The Interregional Improvement Program (IIP) is funded from 25% of the funds made available for transportation capital improvement projects under the STIP. This program targets projects that are needed to improve interregional movement of people and goods. Caltrans recommends to the CTC the selection of these projects, which can include state highway improvements, intercity passenger rail, mass transit guide ways, or grade separation projects.

C. Waste Reduction Financing

California Integrated Waste Management Board Grants and Loans. The CIWMB offers funding opportunities authorized by legislation to assist public and private entities in the safe and effective management of the waste stream. See <http://www.ciwmb.ca.gov/grants/> for more details.

D. Water Conservation and Treatment Financing

Clean Water State Revolving Funds. CWSRFs fund water quality protection projects for wastewater treatment, nonpoint source pollution control, and watershed and estuary management. CWSRFs have funded over \$74 billion, providing over 24,688 low-interest loans to date.

See <http://www.epa.gov/owm/cwfinance/cwsrf/index.htm> for more details.

CWSRF's offer:

- **Low Interest Rates, Flexible Terms** – Nationally, interest rates for CWSRF loans average 2.3%, compared to market rates that average 5%. For a CWSRF program offering this rate, a CWSRF funded project would cost 22% less than projects funded at the market rate. CWSRFs can fund 100% of the project cost and provide flexible repayment terms up to 20 years.
- **Funding for Nonpoint Source Pollution Control and Estuary Protection** – CWSRFs provided more than \$167 million in 2009 to control pollution from nonpoint sources and for estuary protection, more than \$3 billion to date.
- **Assistance to a Variety of Borrowers** – The CWSRF program has assisted a range of borrowers including municipalities, communities of all sizes, farmers, homeowners, small businesses, and nonprofit organizations.
- **Partnerships with Other Funding Sources** – CWSRFs partner with banks, nonprofits, local governments, and other federal and state agencies to provide the best water quality financing source for their communities.

7.3 STEP 3 – Timeline and Prioritization

The County of Riverside will develop an implementation schedule based on the completion of the full cost effectiveness analysis. Prioritization will be based on the following factors:

- Cost effectiveness;
- GHG reduction efficiency;
- Availability of funding;
- Level of county control;
- Ease of implementation; and
- Time to implement.

In general consideration of these factors, the following is an outline of key priorities for three phases starting in 2012 through 2020.

- **Phase 1 (2012-2014):** Development of key ordinances, completion of key planning efforts, implementation of most cost-effective measures, and support of voluntary efforts.

- Phase 2 (2014–2017): Continued implementation of first tier measures, implementation of second tier measures, and implementation of key planning outcomes from Phase 1.
- Phase 3 (2017–2020): Continued implementation of first and second tier measures, implementation of third tier of measures.

Because the goals of this CAP are aggressive, success in meeting the CAP goals depend on some flexibility in the GHG reduction actions. The County of Riverside is committed to flexibility in implementing the reduction measures and meeting the goals of this CAP. Many of the reduction measures in this Plan may be implemented through a menu of options. The goals of each reduction measure can often be achieved through a variety of means, especially those related to building energy efficiency. For example, the County of Riverside will develop energy efficient design programs (measures R2-E3 and R2-E4). Compliance with the energy efficient design programs can be achieved through many combinations of actions including (but not limited to): installing energy efficient appliances, lighting, and HVAC systems; installing solar panels and solar water heaters; siting and orienting buildings to optimize conditions for natural heating, cooling, and lighting; installing top-quality windows and insulation; and incorporating natural shading, skylights, and reflective surfaces. Table 7-1 (GHG Reduction Measure Timeline and Phasing Schedule) presents the potential timeline and phasing schedule for the GHG reduction measures.

Table 7-1 GHG Reduction Measure Timeline and Phasing Schedule

| Reduction Measure | Phase |
|--|---------|
| Transportation | |
| R2-T1: Employment Based Trip and VMT Reduction | 1, 2, 3 |
| R2-T2: Increased Residential Density | 1, 2, 3 |
| R2-T3: Mixed Use Development | 1, 2, 3 |
| R2-T4: Preferential Parking | 1, 2, 3 |
| R2-T5: Roadway Improvements – Signals, Flow | 1 |
| R2-T6: Non-Motorized Transportation Facilities | 1, 2, 3 |
| R2-T7: Expand Alternative Fuel Vehicle Use | 1, 2, 3 |
| R2-T8: Anti-Idling Enforcement | 2 |
| R2-T9: Increase Public Transit | 2 |
| R2-T10: Employee Commute Alternative Schedules | 1, 2, 3 |
| Energy | |
| R2-E1: Residential Energy Efficiency Program | 1 |
| R2-E2: Residential Renewable Energy Program | 1 |
| R2-E3: Residential Retrofit Implementation Program | 2 |
| R2-E4: Residential Renewable Retrofit Program | 2 |
| R2-E5: Commercial Energy Efficiency Program | 1 |
| R2-E6: Commercial/Industrial Renewable Program | 1 |
| R2-E7: Commercial/Industrial Retrofit Program | 2 |
| R2-E8: Induction Streetlight Retrofits | 1 |
| Area Source | |
| R2-L1: Electric Landscape Equipment | 1 |
| R2-L2: No New Wood-burning Devices | 1 |
| R2-L3: Mandatory Curtailment Days | 1 |
| Water | |
| R2-W1: Water Use Reduction Initiative | 1 |
| R2-W2: Increase Reclaimed Water Use | 2, 3 |

| Reduction Measure | Phase |
|---------------------------------------|-------|
| Solid Waste | |
| R2-W1: County Diversion Program | 2 |
| R2-W2: Construction Diversion Program | 2 |

7.4 STEP 4 – Public Participation

The citizens and businesses in Riverside County are integral to the success of GHG reduction efforts. Their involvement is essential in order to reach the reduction goals because this CAP depends on a combination of state and local government efforts, public and private sources of finance and the voluntary commitment, creativity, and participation of the community at large. The County of Riverside must strike a balance between development and environmental stewardship to keep the economy strong and, at the same time, protect the environment. The County of Riverside will educate stakeholders such as businesses, business groups, residents, developers, and property owners about the CAP and encourage participation in efforts to reduce GHG emissions in all possible sectors.

7.5 STEP 5 – Project Review

The CEQA guidelines support projects that lower the carbon footprint of new development, and encourage programmatic mitigation strategies that may include reliance on adopted regional blueprint plans, CAPs and general plans that meet regional and local GHG emissions targets and that have also undergone CEQA review. The criteria needed to use adopted plans in evaluating impacts of GHG emissions from subsequent development projects is found in CEQA Guidelines Section 15183.5. Once adopted, this CAP fulfills these requirements. The County of Riverside is responsible for ensuring that new projects conform to these guidelines and meet the goals and requirements outlined in this CAP.

The County of Riverside will implement the reduction measures for new development during the CEQA review, through the use of a Riverside County GHG Screening Table document based upon the CAP. The Riverside County GHG Screening Table document will provide guidance for the analysis of development projects and divide projects into two broad categories based upon the CEQA review they are going through. The screening table will provide a menu of reduction options. If a project can obtain 100 points from the screening table, the mitigated project will implement pertinent reduction measures such that it meets the reduction goals of the CAP and a less than significant finding can be made for the project. The menu of options in the screening table is tied to the R2 Measures in the CAP and the IMs in the General Plan such that 100 points will meet the emission reductions associated with the R2 Measures and IMs. This menu allows for maximum flexibility for projects to meet its reduction allocation.

The methodology discussed above is described in more detail in the Riverside County GHG Screening Table document, presented in Appendix N of the General Plan and is consistent with the analysis and quantification methodology used in the CAP.

The Screening Tables also serve to document the implementation of reduction measures. Using the screening tables as a reduction measure monitoring tool is described in more detail in Section 7.6 below.

7.6 STEP 6 – Monitoring and Inventorizing

The County of Riverside will create a system for monitoring the implementation of this CAP and adjusting the plan as opportunities arise. As the plan is implemented and as technology changes, the CAP should be revised to take advantage of new and emerging technology. If promising new strategies emerge, the County of Riverside will evaluate how to incorporate these strategies into the CAP. Further, state and federal action will also result in changes which will influence the level of Riverside County emissions.

Screening tables completed during project review, as described in Section 7.5 above, will serve as documentation of the implementation of reduction measures. The County of Riverside shall retain the completed screening tables in order to maintain a record of the types and levels of implementation of each of the R2 measures. The point values in the completed screening tables also document the estimated levels of emission reductions anticipated during implementation. By maintaining these records, the County of Riverside can monitor the CAP reduction measure implementation and compare the anticipated emission reductions with the goals for the CAP over time.

The GHG inventory will be periodically updated in coordination with the three phases noted above: 2013 (to update with the Regional Transportation Plan outputs and Phase 1 progress); 2017 (to review Phase 2 progress, allow for course corrections to keep progress on target for 2020, and to develop post-2020 forecasts for use in planning for after 2020); and 2020 (to establish baseline for post-2020 GHG reduction planning). ~~The County of Riverside will also implement a monitoring and reporting program to evaluate the effectiveness of reduction measures with regards to progress towards meeting the goals of the CAP.~~

To provide periodic updates to the CAP inventory of GHG emissions, Riverside County will use a Microsoft (MS) Excel format emissions inventory tool developed by the CAP consultant. This tool will include all the emission factors and emission sources specific to Riverside County. The tool will be designed such that Riverside County staff can input VMT, water use, solid waste and energy consumption data and the tool will quantify emissions for the unincorporated areas.

The County of Riverside will also implement a monitoring and reporting program to evaluate the effectiveness of reduction measures with regards to progress towards meeting the goals of the CAP. This program will ensure that the effectiveness of all implementation measures are reviewed in advance of 2020 and that adjustments to assigned point value to account for actual effectiveness are made in the post-2020 CAP. If measures included in this CAP are found to be ineffective, those measures will be removed or revised in the post-2020 CAP.

The CAP Implementation Coordinator shall be responsible for maintaining records of reduction measure implementation and insuring that the periodic updates to the emissions inventory are completed using the MS Excel based emission inventory tool.

7.7 STEP 7 – Beyond 2020

As described above under the discussion of Reduction Goals, 2020 is only a milestone in GHG reduction planning. Executive Order S-03-05 calls for a reduction of GHG emissions to a level 80 percent below 1990 levels by 2050, and this level is consistent with the estimated reductions needed to stabilize atmospheric levels of CO₂ at 450 parts per million (ppm). Thus, there will be a need to start planning ahead for the post-2020 period. The County of Riverside will commence planning for the post-2020 period starting in 2017, at the approximate midway point between plan implementation and the reduction target and after development of key ordinances and implementation of cost-effective measures. At that point, Riverside County will have implemented the first

two phases of this CAP and will have a better understanding of the effectiveness and efficiency of different reduction strategies and approaches. Further, the state's regulations under AB 32 would have been fully in force since 2012; federal programs and policies for the near term are likely to be well underway; market mechanisms like a cap and trade system are likely to be in force and will be influencing energy and fuel prices; and continuing technological change in the fields of energy efficiency, alternative energy generation, vehicles, fuels, methane capture and other areas will have occurred. Riverside County will then be able to take the local, regional, state and federal context into account. Further, starting in 2017 will allow for development of the post-2020 plan so that it can be ready for full implementation, including potential new policies, revisions to the General Plan (as necessary), programs, ordinances, and financing by 2020. The new plan will include a specific target for GHG reductions for 2035 and 2050. The targets will be consistent with broader state and federal reduction targets and with the scientific understanding of the needed reductions by 2050. The County of Riverside will adopt the new plan by January 1, 2020.

The new CAP adopted on or before January 1, 2020 will keep on track through 2035 to meet the 2050 goal by implementing the following.

- Increase energy efficiency and green building efforts (for County municipal facilities as well as private buildings within the unincorporated areas) so that the savings achieved in the 2020 to 2035 timeframe are approximately 69% those accomplished in 2020.
- Continue to implement land use and transportation measures to lower VMT and shift travel modes (assumed improvement of 8% compared to the unmitigated condition, which is within SCAG's assumed range of 8% to 12% of GHG reductions for 2035).
- Capture more methane from landfills receiving regional waste, move beyond 75% local waste diversion goal for 2020, and utilize landfill gas further as an energy source.
- Continue to improve local water efficiency and conservation.
- Continue to support and leverage incentive and rebate and other financing programs for residential and commercial energy efficiency and renewable energy installations to shorten payback period and costs and to develop programs that encourage increased use of small-scale renewable power as it becomes more economically feasible.
- *Require ongoing monitoring and verification of results. Every four years, the County will update the GHG inventory, review the effectiveness of specific measures, and revise their associated point value according to the available evidence. If existing measures are found to be ineffective, those measures will be removed or revised in the four-year cycle. The proposed changes will be available for public review and comment prior to approval at a public meeting.*

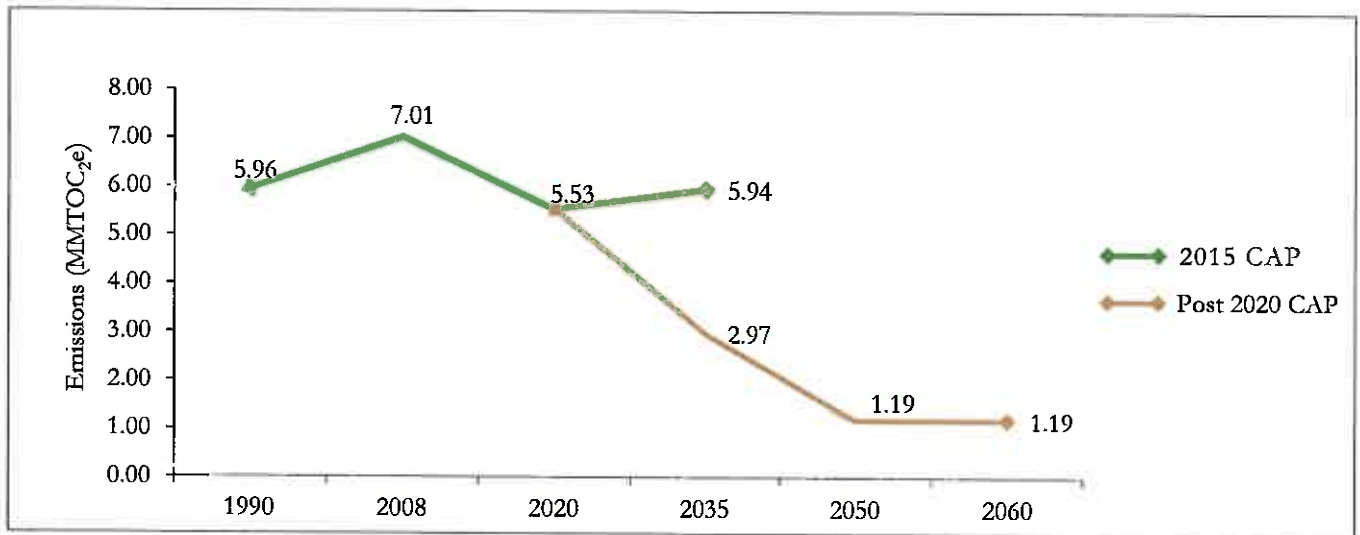
The conceptual effects of these strategies are presented in Table 7-2 and would represent an approximate doubling of effort from that planned at the state and County level for 2020. In total, the measures described above would produce reductions to bring the region's GHG emissions to an estimated 3 MMTCO_{2e} by 2035. While the potential mix of future GHG reduction measures presented in this section is preliminary, it serves to demonstrate that the current measures in the CARB Scoping Plan and the County's CAP can not only move the region to its 2020 goal, but can also provide an expandable framework for much greater long-term greenhouse gas emissions reductions toward the ultimate 2050 goal.

Table 7-2. Potential Reduction Measures to Reach a 2035 Goal of 2.3 MMTCO_{2e}

| | Reductions by 2035 in CAP | | | | Scenario for Additional Reductions by 2035 | | |
|--|---------------------------|--------------------|--------------------|-----------------|--|-----------------------------|---|
| | State | County | TOTAL | % BAU Reduction | Additional Reductions 2020–2035 | Effort Relative to this CAP | Notes |
| | MTCO _{2e} | MTCO _{2e} | MTCO _{2e} | % | MTCO _{2e} | % | |
| Building Energy (Residential, Commercial, Industrial) | 855,135 | 1,431,881 | 2,287,016 | 63.3% | 1,486,205 | 65% | CARB Scoping Plan calls for doubling of energy efficiency reductions between 2020 and 2030 (i.e., 100% effort relative to the period 2008–2020). The County would have to do 5% more in this sector to be on target. Additional GHG reductions during this period will come from a continued de-carbonization of electricity at the public utility level, more aggressive retrofitting of existing buildings and greatly increased use of small scale renewables. |
| Transportation | 1,062,190 | 5,638,488 | 6,700,678 | 71.9% | 1,713,327 | 25.6% | CARB Scoping Plan calls for a doubling of GHG reductions from vehicle fleet by 2030 compared to 2020 and more than doubling reduction of carbon intensity of transportation fuels (i.e., 100% effort relative to the period 2008–2020). The region would need to do about 8% more in this sector to stay on target. SCAG assumes between 8% and 12% in GHG reductions after 2020 for 2035 for VMT reduction. This analysis assumes 8% for local reductions. |
| Solid Waste Management | 0 | 113,549 | 113,549 | 51.4% | 23,733 | 20.9% | Assumed the County continue further efforts at methane control, waste diversion, and potential waste to energy projects to result in modest further reductions in sector (7%). Once capture technology is installed, additional reductions in this sector are somewhat limited. |
| Agriculture | 36,008 | 0 | 36,008 | 2.4% | 0 | 0% | No assumed change. |
| Wastewater Treatment | 0 | 0 | 0 | NA | 8,132 | 100% | Assumed additional 3% in reduction in sector due to installation of fugitive emission capture technology and additional water conservation. |
| Purchased Water | 33,315 | 113,644 | 146,959 | 50.1% | 12,023 | 8.1% | Assumed additional 5% in reduction in sector due to continued effort to conserve water at a similar rate as 2008-2020. |
| TOTAL | | | 9,284,210 | | 3,243,420 | | |

Figure 7-1 below shows the trajectory of emissions within this Draft 2015 CAP that achieves an AB 32 compliant reduction target of 5.96 million metric tons (MMT) CO₂e and the conceptual 2035 and 2050 reductions in a post 2020 CAP needed to reduce emissions down to 80% below 1990 levels by 2050 outlined in Executive Order S-3-05. Riverside County will develop the post-2020 CAP so that it can be ready for full implementation, including potential new policies, revisions to the General Plan (as necessary), programs, ordinances, and financing by 2020. The Post 2020 CAP will include a specific target for GHG reductions for 2035 and 2050. The targets will be consistent with broader state and federal reduction targets including Executive Order S-3-05 and with the scientific understanding of the needed reductions by 2050. The County of Riverside will adopt the new Post 2020 CAP by January 1, 2020.

Figure 7-1 Riverside County GHG Emissions by Year



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Chapter 8

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GREENHOUSE GAS EMISSIONS

Screening Tables County of Riverside, California

March 2015

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Introduction

The County of Riverside Climate Action Plan (CAP) includes measures developed in order to reduce 4,288,863 Metric Tons of Carbon Dioxide Equivalents (MTCO_{2e}) per year from new development by 2020 as compared to the 2020 unmitigated conditions.

Mitigation of GHG emissions impacts during the development review process of projects provides a cost effective way of implementing the GHG reduction strategies for reducing community-wide emissions associated with new development. The development review process procedures for evaluating GHG impacts and determining significance for CEQA purposes will be streamlined by (1) applying an emissions level that is determined to be less than significant for small projects, and (2) utilizing the Screening Tables to mitigate project GHG emissions that exceed the threshold level. Projects will have the option of preparing a project-specific technical analysis to quantify and mitigate GHG emissions. A threshold level above 3,000 MTCO_{2e} per year will be used to identify projects that require the use of Screening Tables or a project-specific technical analysis to quantify and mitigate project emissions.

The California Environmental Quality Act ("CEQA") requires assessment of the environmental impacts of proposed projects including the impacts of greenhouse gas emissions. The purpose of this document is to provide guidance on how to analyze greenhouse gas (GHG) emissions and determine the significance of those emissions during CEQA review of proposed development projects within the County of Riverside. The analysis, methodology, and significance determination (thresholds) are based upon the Riverside County GHG Technical Report, the GHG emission inventories within the Technical Report, and the GHG implementation measures that reduce emissions to the AB-32 compliant reduction target of the Technical Report. The screening tables can be used by the County of Riverside Planning Department for review of development projects in order to insure that the specific implementation measures in the Technical Report are applied as part of the CEQA process for development projects. The screening tables provide a menu of options that both insures implementation of the measures and flexibility on how development projects will implement the measures to achieve an overall reduction of emissions, consistent with the reduction target of the Technical Report.

California Environmental Quality Act

CEQA MANDATES FOR ANALYSIS OF IMPACTS

CEQA requires that Lead Agencies inform decision makers and the public regarding the following: potential significant environmental effects of proposed projects; feasible ways that environmental damage can be avoided or reduced through the use of feasible mitigation measures and/or project alternatives; and the reasons why the Lead Agency approved a project if significant environmental effects are involved (CEQA Guidelines §15002). CEQA also requires Lead Agencies to evaluate potential

CEQA THRESHOLDS AND SCREENING TABLES

environmental effects based to the fullest extent possible on scientific and factual data (CEQA Guidelines §15064[b]). A determination of whether or not a particular environmental impact will be significant must be based on substantial evidence, which includes facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts (CEQA Guidelines §15064f[5]).

The recently amended CEQA Guidelines (CEQA Guidelines §15064.4[a] [b]) explicitly require Lead Agencies to evaluate GHG emissions during CEQA review of potential environmental impacts generated by a proposed project. To assist in this effort, two questions were added to Appendix G of the CEQA Guidelines:

- Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Would the Project conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

Finally, under the “rule of reason,” an EIR is required to evaluate impacts to the extent that is reasonably feasible ([CEQA Guideline § 15151; *San Francisco Ecology Center v. City and County of San Francisco* (1975) 48 Cal.App.3rd 584]). While CEQA does require Lead Agencies to make a good faith effort to disclose what they reasonably can, CEQA does not demand what is not realistically possible ([*Residents at Hawks Stadium Committee v. Board of Trustees* (1979) 89 Cal.App.3rd 274, 286]).

Greenhouse Gas Impact Determination

STATEWIDE OR REGIONAL THRESHOLDS OF SIGNIFICANCE

There are currently no published statewide or regional thresholds of significance for measuring the impact of GHG emissions generated by a proposed project. CEQA Guidelines §15064.7 indicates only that, “each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects.” The County of Riverside CAP addresses cumulative GHG emissions, has a reduction target that reduces the cumulative GHG impacts to less than significant, has a set of reduction measures that achieves the reduction target and provides an implementation plan to implement the reduction measures. This document provides guidance in how to address GHG emissions in CEQA analysis and determine the significance of project generated GHG emissions.

QUANTITATIVE ANALYSIS RELATIVE TO THE RIVERSIDE GHG TECHNICAL REPORT

METHODOLOGY OVERVIEW

An individual project cannot generate enough GHG emissions to influence global climate change. The project participates in this potential impact by its incremental contribution combined with the cumulative increase of all other sources of GHGs, which when taken together may have a significant impact on global climate change. To address the State's requirement to reduce GHG emissions, the County prepared the CAP with the target of reducing GHG emissions within the unincorporated County by 15% below 2008 levels by the year 2020. The County's target is consistent with the AB 32 target and ensures that the County is providing GHG reductions locally that will complement the State and international efforts of stabilizing climate change.

Because the County's CAP addresses GHG emissions reduction in concert with AB 32 and international efforts to address global climate change and includes specific local requirements that will substantially lessen the cumulative problem compliance with the CAP fulfills the description of mitigation found in CEQA Guidelines §15130(a)(3) and §15183.5.

No single project has the ability to generate GHG emissions in sufficient quantities to change the global climate. Rather, it is the incremental contribution of all past, present, and future projects that when combined with all other anthropogenic sources of GHG emissions globally generates climate change impacts. Because GHG emissions are only important in the context of cumulative emissions, the focus of the analysis is on answering the question of whether incremental contributions of GHGs are a cumulatively considerable contribution to climate change impacts. The CAP includes a set of mitigation measures designed to substantially lessen cumulative impacts associated with GHG emissions as described in CEQA Guidelines §15130(a)(3), in determining if a project's effects will result in significant impacts. The CAP has the following components that fulfill cumulative mitigation for GHG emissions:

1. The CAP provides a community-wide GHG emissions reduction target that will substantially lessen the cumulative impact;
2. The CAP provides measures that new development projects will follow to meet the County's reduction target and substantially lessen the cumulative impact;
3. The CAP provides a set of GHG emission inventories that provides quantitative facts and analysis of how the measures within the CAP meet the reduction target that substantially lessens the cumulative impact;
4. The CAP provides an implementation, monitoring, and update program to insure that the reduction target is met.

The CAP satisfies the first condition by adopting a target of reducing GHG emissions down to 15 percent below existing levels within the County of Riverside by 2020. This reduction target is compliant with AB 32; the AB 32 Climate Change Scoping Plan states: "In recognition of the critical role local governments will play in the successful implementation of AB 32, ARB recommended a greenhouse gas reduction goal for local governments of 15 percent below today's levels by 2020 to ensure that their municipal and community-wide emissions match the State's reduction target" (Scoping Plan page ES-5, CARB, December 2008). In this way, the County is teaming with the State's efforts to reduce GHG emissions globally and substantially lessen the cumulative problem.

The CAP satisfies the second condition through the implementation of the reduction measures for new development. This document supplies the specific criteria that new development must follow to ensure that the reduction measures associated with new development are implemented and the reduction target is met.

The CAP satisfies the third criteria by providing a set of community-wide GHG emissions inventories for existing conditions, for future 2020 GHG emissions that are anticipated without the reduction measures (Business As Usual; BAU), and reduced levels of 2020 GHG emissions which demonstrates how the implementation of reduction measures achieves the reduction target (15 percent below existing GHG emission levels by 2020).

The CAP satisfies the fourth criteria through the implementation and monitoring program described in detail in Chapter 7 of the CAP. 3,000 MT CO₂e Emission Level

The County determined the size of development that is too small to be able to provide the level of GHG emission reductions expected from the Screening Tables or alternate emission analysis method. To do this the County determined the GHG emission amount allowed by a project such that 90 percent of the emissions on average from all projects would exceed that level and be "captured" by the Screening Table or alternate emission analysis method.

In determining this level of emissions the County used the database of projects kept by the Governor's Office of Planning and Research (OPR). That database contained 798 projects, 60 of which were extremely large General Plan Updates, Master Plans, or Specific Plan Projects. The 60 very large projects were removed from the database in order not to skew the emissions value, leaving a net of 738 projects. In addition, 27 projects were found to be outliers that would skew the emission value to high, leaving 711 as the sample population to use in determining the 90th percentile capture rate.

The analysis of the 738 projects within the sample population combined commercial, residential, and mixed use projects. Also note that the sample of projects included warehousing and other industrial

land uses but did not include industrial processes (i.e. oil refineries, heavy manufacturing, electric generating stations, mining operations, etc.). Emissions from each of these projects were calculated by SCAQMD to provide a consistent method of emissions calculations across the sample population further reducing potential errors in the statistical analysis. In calculating the emissions from projects within the sample population, construction period GHG emissions were amortized over 30-years (the average economic life of a development project).

This analysis determined that the 90th percentile ranged from 2,983 MT to 3,143 MT CO₂e per year. The **3,000 MT CO₂e per year** value is the low end value within that range rounded to the nearest hundred tons of emissions and is used in defining small projects that are considered less than significant and do not need to use the Screening Tables or alternative GHG mitigation analysis described below.

The **3,000 MT CO₂e per year** value is used in defining small projects that, when combined with the modest efficiency measures shown in the bullet points below are considered less than significant and do not need to use the Screening Tables or alternative GHG mitigation analysis described below. The efficiency measures required of small projects are summarized below:

- Energy efficiency of at least five percent greater than 2010 Title 24 requirements, and
- Water conservation measures that matches the California Green Building Code in effect as of January 2011.

Projects that Exceed 3,000 MT CO₂e Emission Level

METHODOLOGY FOR THE CALCULATION OF GHG EMISSIONS

~~Analysis of Development projects that are determined to be above exceeding the 3,000 MT CO₂e emissions level shall quantify and disclose the anticipated greenhouse gas emissions of the proposed project. can either be done through emissions calculations or by using the screening tables beginning on Page 7.~~

Total GHG emissions are the sum of emissions from both direct and indirect sources. Direct sources include mobile sources such as construction equipment, motor vehicles, landscape equipment; and stationary sources such as cooling and heating equipment. Indirect sources are comprised of electrical and potable water use, and the generation of solid waste and waste water.

Direct GHG emissions from mobile and stationary sources are determined as the sum of the annual GHG emissions from construction equipment, motor vehicles, landscape equipment, and heating and cooling equipment.

CEQA THRESHOLDS AND SCREENING TABLES

Indirect sources are determined based on source as follows. Electrical usage is reported as annual emissions from electrical usage. Potable water usage is reported as the annual emissions from electricity used for potable water treatment and transportation. Solid waste is reported as the sum of annual emissions from solid waste disposal treatment, transportation, and fugitive emissions of methane at the solid waste facilities. Wastewater usage is reported as the annual emissions from wastewater transport and treatment.

Analysis of development projects not using the screening tables should use the emission factors found in the latest version of the California Climate Action Registry (CCAR) General Reporting Protocol. Quantification of emissions from electricity used for potable water treatment and transportation as well as wastewater transport and treatment can be found in the California Energy Commission (CEC) document titled "Refining Estimates of Water-Related Energy Use in California (CEC December 2006).

Analysis of development projects not using the screening tables should use the latest version of the California Emissions Estimator Model (CalEEMod). Two modeling runs should be completed. The first modeling run calculates GHG emissions at 2011 levels of efficiency using energy efficiency standards (Title 24) and the California Air Resources Board (CARB) on road vehicle emissions factors (EMFAC2012) set at 2011. A second modeling run requires calculating GHG emissions at Project buildout year levels of efficiency, including Project design features and/or mitigation measures to reduce GHG emissions such that the levels of efficiency result in a 25% reduction of GHG emissions compared to the model run using 2011 levels of efficiency.

For analysis of development projects using the screening tables, please refer to the process described on page 7.

Screening Tables

The purpose of the Screening Tables is to provide guidance in measuring the reduction of greenhouse gas emissions attributable to certain design and construction measures incorporated into development projects. The analysis, methodology, and significance determination (thresholds) are based upon the Riverside County GHG Technical Report, which includes GHG emission inventories, a year 2020 emission reduction target, and the goals and policies to reach the target. The methodology for the development and application of the Screening Table is set forth in Appendix A, attached hereto.

Instructions for Application to Projects

The Screening Table assigns points for each option incorporated into a project as mitigation or a project design feature (collectively referred to as “feature”). The point values correspond to the minimum emissions reduction expected from each feature. The menu of features allows maximum flexibility and options for how development projects can implement the GHG reduction measures. Projects that garner at least 100 points will be consistent with the reduction quantities anticipated in the County’s GHG Technical Report. ~~As such, these projects that garner a total of 100 points or greater would not require quantification of project-specific GHG emissions.~~ Consistent with CEQA Guidelines, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.

Those Projects that do not garnish 100 points using the screening tables will need to provide additional analysis to determine the significance of GHG emissions. Nothing in this guidance shall be construed as limiting the County’s authority to adopt a statement of overriding consideration for projects with requiring the preparation of an EIR due to a project’s significant GHG impacts. The following tables provide a menu of performance standards/options related to GHG mitigation measures and design features that can be used to demonstrate consistency with the implementation measures and GHG reduction quantities in the GHG Technical Report.

Mixed use projects provide additional opportunities to reduce emissions by combining complimentary land uses in a manner that can reduce vehicle trips. Mixed use projects also have the potential to complement energy efficient infrastructure in a way that reduces emissions. For mixed use projects fill out both Screening Table 1 and Table 2, but proportion the points identical to the proportioning of the mix of uses. As an example, a mixed use project that is 50% commercial uses and 50% residential uses will show ½ point for each assigned point value in Table 1 and Table 2. Add the points from both tables. Mixed use projects that garner at least 100 points will be consistent with the reduction quantities in the County’s GHG Plan and are considered less than significant for GHG emissions.

CEQA THRESHOLDS AND SCREENING TABLES

Table 1: Screening Table for GHG Implementation Measures for Residential Development

| Feature | Description | Assigned Point Values | Project Points |
|--|--|-----------------------|----------------|
| Implementation Measure RE1: Energy Efficiency for New Residential | | | |
| E1.A Building Envelope | | | |
| E1.A.1 Insulation | <i>Baseline standard (walls R-13; roof/attic: R-30)</i> | 0 points | |
| | <i>Modestly Enhanced Insulation (walls R-13; roof/attic: R-38)</i> | 12 point | |
| | <i>Enhanced Insulation (rigid wall insulation R-13, roof/attic: R-38)</i> | 15 points | |
| | <i>Greatly Enhanced Insulation (spray foam wall insulated walls R-15 or higher, roof/attic R-38 or higher)</i> | 18 points | |
| E1.A.2 Windows | <i>Baseline standard (0.57 U-factor, 0.4 solar heat gain coefficient (SHGC) required)</i> | 0 points | |
| | <i>Modestly Enhanced Window (0.4 U-Factor, 0.32 SHGC)</i> | 6 points | |
| | <i>Enhanced Window (0.32 U-Factor, 0.25 SHGC)</i> | 7 points | |
| | <i>Greatly Enhanced Window (0.28 or less U-Factor, 0.22 or less SHGC)</i> | 9 points | |
| E1.A.3 Cool Roofs | <i>Modest Cool Roof (CRC Rated 0.15 aged solar reflectance, 0.75 thermal emittance)</i> | 10 points | |
| | <i>Enhanced Cool Roof (CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance)</i> | 12 points | |
| | <i>Greatly Enhanced Cool Roof (CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance)</i> | 14 points | |
| E1.A.4 Air Infiltration | Minimizing leaks in the building envelope is as important as the insulation properties of the building. Insulation does not work effectively if there is excess air leakage. | | |
| | <i>Air barrier applied to exterior walls, caulking, and visual inspection such as the HERS Verified Quality Insulation Installation (QII or equivalent)</i> | 10 points | |
| | <i>Blower Door HERS Verified Envelope Leakage or equivalent</i> | 8 points | |
| E1.A.5 Thermal Storage of Building | Thermal storage is a design characteristic that helps keep a constant temperature in the building. Common thermal storage devices include strategically placed water filled columns, water storage tanks, and thick masonry walls. | | |
| | <i>Modest Thermal Mass (10% of floor or 10% of walls: 12" or more thick exposed concrete or masonry. No permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)</i> | 2 points | |
| | <i>Enhanced Thermal Mass (20% of floor or 20% of walls: 12" or more thick exposed concrete or masonry. No permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)</i> | 6 points | |
| E1.B Indoor Space Efficiencies | | | |
| E1.B.1 Heating/ | <i>Minimum Duct Insulation (R-4.2 required)</i> | 0 points | |

CEQA THRESHOLDS AND SCREENING TABLES

| Feature | Description | Assigned Point Values | Project Points |
|---|--|-----------------------|----------------|
| Cooling Distribution System | <i>Modest Duct insulation (R-6)</i> | <i>7 points</i> | |
| | <i>Enhanced Duct Insulation (R-8)</i> | <i>8 points</i> | |
| | <i>Distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent)</i> | <i>12 points</i> | |
| E1.B.2 Space Heating/Cooling Equipment | <i>Baseline VAC Efficiency (SEER 13/60% AFUE or 7.7 HSPF)</i> | <i>0 points</i> | |
| | <i>Improved Efficiency HVAC (SEER 14/65% AFUE or 8 HSPF)</i> | <i>4 points</i> | |
| | <i>High Efficiency HVAC (SEER 15/72% AFUE or 8.5 HSPF)</i> | <i>7 points</i> | |
| | <i>Very High Efficiency HVAC (SEER 16/80% AFUE or 9 HSPF)</i> | <i>9 points</i> | |
| E1.B.3 Water Heaters | <i>Baseline Efficiency (0.57 Energy Factor)</i> | <i>0 points</i> | |
| | <i>Improved Efficiency Water Heater (0.675 Energy Factor)</i> | <i>12 points</i> | |
| | <i>High Efficiency Water Heater (0.72 Energy Factor)</i> | <i>15 points</i> | |
| | <i>Very High Efficiency Water Heater (0.92 Energy Factor)</i> | <i>18 points</i> | |
| | <i>Solar Pre-heat System (0.2 Net Solar Fraction)</i> | <i>4 points</i> | |
| | <i>Enhanced Solar Pre-heat System (0.35 Net Solar Fraction)</i> | <i>8 points</i> | |
| E1.B.4 Daylighting | Daylighting is the ability of each room within the building to provide outside light during the day reducing the need for artificial lighting during daylight hours. | | |
| | All peripheral rooms within the living space have at least one window (required) | 0 points | |
| | All rooms within the living space have daylight (through use of windows, solar tubes, skylights, etc.) | 1 points | |
| | All rooms daylighted | 2 points | |
| E1.B.5 Artificial Lighting | Baseline standard (required) | 0 points | |
| | <i>Efficient Lights (25% of in-unit fixtures considered high efficacy. High efficacy is defined as 40 lumens/watt for 15 watt or less fixtures; 50 lumens/watt for 15-40 watt fixtures,60 lumens/watt for fixtures >40watt)</i> | 8 point | |
| | <i>High Efficiency Lights (50% of in-unit fixtures are high efficacy)</i> | 10 points | |
| | <i>Very High Efficiency Lights (100% of in-unit fixtures are high efficacy)</i> | 12 points | |
| E1.B.6 Appliances | <i>Energy Star Refrigerator (new)</i> | 1 point | |
| | <i>Energy Star Dish Washer (new)</i> | 1 point | |
| | <i>Energy Star Washing Machine (new)</i> | 1 point | |
| E1.C Miscellaneous Residential Building Efficiencies | | | |
| E1.C.1 Building Placement | North/South alignment of building or other building placement such that the orientation of the buildings optimizes natural heating, cooling, and lighting. | 5 points | |
| E1.C.2 Shading | At least 90% OF south facing glazing will be shaded by vegetation or | 4 Points | |

CEQA THRESHOLDS AND SCREENING TABLES

| Feature | Description | Assigned Point Values | Project Points |
|--|---|---|----------------|
| | <i>overhangs on June 21st.</i> | | |
| E1.C3 Energy Star Homes | <i>EPA Energy Star for Homes (version 3 or above)</i> | 25 points | |
| E1.C.4 Independent Energy Efficiency Calculations | Provide point values based upon energy efficiency modeling of the Project. Note that engineering data will be required documenting the energy efficiency and point values based upon the proven efficiency beyond Title 24 Energy Efficiency Standards. | TBD | |
| E1.C.5 Other | This allows innovation by the applicant to provide design features that increases the energy efficiency of the project not provided in the table. Note that engineering data will be required documenting the energy efficiency of innovative designs and point values given based upon the proven efficiency beyond Title 24 Energy Efficiency Standards. | TBD | |
| E1.C.6 Existing Residential Retrofits | <p>The applicant may wish to provide energy efficiency retrofit projects to existing residential dwelling units to further the point value of their project. Retrofitting existing residential dwelling units within the unincorporated County is a key reduction measure that is needed to reach the reduction goal. The potential for an applicant to take advantage of this program will be decided on a case by case basis and must have the approval of the Riverside County Planning Department. The decision to allow applicants to ability to participate in this program will be evaluated based upon, but not limited to the following;</p> <p>Will the energy efficiency retrofit project benefit low income or disadvantaged residents?</p> <p>Does the energy efficiency retrofit project provide co-benefits important to the County?</p> <p>Point value will be determined based upon engineering and design criteria of the energy efficiency retrofit project.</p> | TBD | |
| Implementation Measure IM E2: New Home Renewable Energy | | | |
| E2.A.1 Photovoltaic | <p>Solar Photovoltaic panels installed on individual homes or in collective neighborhood arrangements such that the total power¹ provided augments:</p> <p>Solar Ready Homes (sturdy roof and electric hookups)</p> <p>10 percent of the power needs of the project</p> <p>20 percent of the power needs of the project</p> <p>30 percent of the power needs of the project</p> <p>40 percent of the power needs of the project</p> <p>50 percent of the power needs of the project</p> <p>60 percent of the power needs of the project</p> | <p>2 points</p> <p>10 points</p> <p>15 points</p> <p>20 points</p> <p>28 points</p> <p>35 points</p> <p>38 points</p> | |

¹ The term total power refers to the actual, expected output from the facility implemented and not the potential capacity of facility.

CEQA THRESHOLDS AND SCREENING TABLES

| Feature | Description | Assigned Point Values | Project Points |
|--|--|--|----------------|
| | 70 percent of the power needs of the project | 42 points | |
| | 80 percent of the power needs of the project | 46 points | |
| | 90 percent of the power needs of the project | 52 points | |
| | 100 percent of the power needs of the project | 58 points | |
| E2.A.2 Wind turbines | Some areas of the County lend themselves to wind turbine applications. Analysis of the areas capability to support wind turbines should be evaluated prior to choosing this feature. Individual wind turbines at homes or collective neighborhood arrangements of wind turbines such that the total power ² provided augments: 10 percent of the power needs of the project 20 percent of the power needs of the project 30 percent of the power needs of the project 40 percent of the power needs of the project 50 percent of the power needs of the project 60 percent of the power needs of the project 70 percent of the power needs of the project 80 percent of the power needs of the project 90 percent of the power needs of the project 100 percent of the power needs of the project | 10 points 15 points 20 points 28 points 35 points 38 points 42 points 46 points 52 points 58 points | |
| E2.A.3 Off-site renewable energy project | The applicant may submit a proposal to supply an off-site renewable energy project such as renewable energy retrofits of existing homes. These off-site renewable energy retrofit project proposals will be determined on a case by case basis and must be accompanied by a detailed plan that documents the quantity of renewable energy the proposal will generate. Point values will be determined based upon the energy generated by the proposal. | TBD | |
| E2.A.4 Other Renewable Energy Generation | The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided in the table. The ability to supply other renewable energy and the point values allowed will be decided based upon engineering data documenting the ability to generate electricity. | TBD | |
| Implementation Measure W1: Water Use Reduction Initiative | | | |
| W1.A Residential Irrigation and Landscaping | | | |
| W1.A.1 Water Efficient Landscaping | Limit conventional turf to < 20% of each lot (required) | 0 points | |
| | Eliminate conventional turf from landscaping | 3 points | |
| | <i>No conventional turf (warm season turf to < 50% of required landscape area and/or low water using plants are allowed)</i> | 3 points | |
| | <i>Only California Native Plants that requires no irrigation or some supplemental irrigation</i> | 8 points | |

² Ibid.

CEQA THRESHOLDS AND SCREENING TABLES

| Feature | Description | Assigned Point Values | Project Points |
|---|--|-----------------------|----------------|
| W1.A.2 Water Efficient irrigation systems | <i>Low precipitation spray heads < .75"/hr or drip irrigation</i> | 2 points | |
| | <i>Weather based irrigation control systems or moisture sensors (demonstrate 20% reduced water use)</i> | 3 points | |
| W1.A.3 Storm water Reuse Systems | Innovative on-site stormwater collection, filtration and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems will be determined based upon design and engineering data documenting the water savings. | TBD | |
| W1.B Residential Potable Water | | | |
| W1.B.1 Showers | <i>Water Efficient Showerheads (2.0 gpm)</i> | 3 points | |
| W1.B.2 Toilets | <i>Water Efficient Toilets (1.5 gpm)</i> | 3 points | |
| W1.B.3 Faucets | <i>Water Efficient faucets (1.28 gpm)</i> | 3 points | |
| W1.B.4 Dishwasher | <i>Water Efficient Dishwasher (6 gallons per cycle or less)</i> | 1 point | |
| W1.B.5 Washing Machine | <i>Water Efficient Washing Machine (Water factor <5.5)</i> | 1 point | |
| W1.B.6 WaterSense | EPA WaterSense Certification | 12 points | |
| W1.B.7 Potable Water Other | This allows innovation by the applicant to provide design features that reduce potable water use of the project not provided in the table. Note that engineering data will be required documenting the energy efficiency of innovative designs and point values given based upon the proven efficiency beyond Title 24 Energy Efficiency Standards. | TBD | |
| Implementation Measure IM W2: Increase Reclaimed Water Use | | | |
| W2.A.1 Recycled Water | 5% of the total project's water use comes from recycled/reclaimed water | 5 points | |
| Implementation Measure IM T2: Increase Residential Density | | | |
| T2.A.1 Residential Density | Designing the Project with increased densities, where allowed by the General Plan and/or Zoning Ordinance reduces GHG emissions associated with traffic in several ways. Increased densities affect the distance people travel and provide greater options for the mode of travel they choose. This strategy also provides a foundation for implementation of many other strategies which would benefit from increased densities. 1 point is allowed for each 10% increase in density beyond 7 units/acre, up to 500% (50 points) | 1-50 points | |

CEQA THRESHOLDS AND SCREENING TABLES

| Feature | Description | Assigned Point Values | Project Points |
|---|--|-----------------------------------|----------------|
| Implementation Measure IM T3: Mixed Use Development | | | |
| T3.A.1 Mixed Use | Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The point value of mixed use projects will be determined based upon a Transportation Impact Analysis (TIA) demonstrating trip reductions and/or reductions in vehicle miles traveled. Suggested ranges: Diversity of land uses complementing each other (2-28 points) Increased destination accessibility other than transit (1-18 points) Infill location that reduces vehicle trips or VMT beyond the measures described above (points TBD based on traffic data). | TBD | |
| T3.A.2 Residential Near Local Retail (Residential only Projects) | Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled. The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled (VMT) The suburban project will have at least three of the following on site and/or offsite within ¼-mile: Residential Development, Retail Development, Park, Open Space, or Office. The mixed-use development should encourage walking and other non-auto modes of transport from residential to office/commercial locations (and vice versa). The project should minimize the need for external trips by including services/facilities for day care, banking/ATM, restaurants, vehicle refueling, and shopping. | 1-16 points | |
| Implementation Measure IM T5: Traffic Flow Management Improvements | | | |
| T5.A.1 Signal Synchronization | Techniques for improving traffic flow include: traffic signal coordination to reduce delay, incident management to increase response time to breakdowns and collisions, Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions, and speed management to reduce high free-flow speeds. Signal synchronization Traffic signals connected to existing ITS | 1 point/signal 3 points/signal | |
| Implementation Measure IM T6: Bicycle/Pedestrian Infrastructure | | | |
| T6.A.1 Sidewalks | Provide sidewalks on one side of the street (required) Provide sidewalks on both sides of the street Provide pedestrian linkage between residential and commercial uses within 1 mile | 0 points 1 point 3 points | |
| T6.A.2 Bicycle paths | Provide bicycle paths within project boundaries Provide bicycle path linkages between residential and other land uses Provide bicycle path linkages between residential and transit | TBD 2 points 5 points | |

CEQA THRESHOLDS AND SCREENING TABLES

| Feature | Description | Assigned Point Values | Project Points |
|--|---|----------------------------------|----------------|
| Implementation Measure IM T7: Electric Vehicle Use | | | |
| T7.A.1 Electric Vehicle Recharging | Provide circuit and capacity in garages of residential units for installation of electric vehicle charging stations | 1 point | |
| | Install electric vehicle charging stations <i>for each residential unit included in the project. Projects that include charging stations for fewer than all units shall receive points on a proportional basis. in the garages of residential units</i> | 8 points | |
| Implementation Measure IM T9: Increase Public Transit | | | |
| T9.A.1 Public Transit Access | The point value of a projects ability to increase public transit use will be determined based upon a Transportation Impact Analysis (TIA) demonstrating decreased use of private vehicles and increased use of public transportation. Increased transit accessibility (1-15 points) | TBD | |
| Implementation Measure IM L1: SCAGMD No New Wood Burning Stoves | | | |
| L1.A.1 Wood Burning | As part of Rule 445 and the Healthy Hearths™ initiative, the South Coast Air Quality Management District adopted a rule for no permanently installed indoor or outdoor wood burning devices in new development. <i>Project contains no wood burning stoves or fireplaces (required)</i> | 0 points | |
| Implementation Measure IM L2: Prohibit Gas-Powered Equipment | | | |
| L2.A.1 Landscape Equipment | Electric lawn equipment including lawn mowers, leaf blowers and vacuums, shredders, trimmers, and chain saws are available. When electric landscape equipment is used in place of conventional gas-powered equipment, direct GHG emissions from natural gas combustion are replaced with indirect GHG emissions associated with the electricity used to power the equipment. Project provides electrical outlets on the exterior of all building walls so that electric landscaping equipment is compatible with all built facilities. | 8.2 points | |
| Implementation Measure IM SW1: 80 Percent Solid Waste Diversion Program | | | |
| SW1.A.1 Recycling | County initiated recycling program diverting 80% of waste requires coordination in neighborhoods to realize this goal. The following recycling features will help the County fulfill this goal: Provide green waste composting bins at each residential unit Multi-family residential projects that provide dedicated recycling bins separated by types of recyclables combined with instructions/education program explaining how to use the bins and the importance or recycling. | 4 points 3 points | |
| Implementation Measure IM SW2: Construction and Demolition Debris Diversion Program | | | |
| SW2.A.1 Recycling of Construction/ Demolition | 50% of construction waste recycled (required) Recycle 55% of debris Recycle 60% of debris | 0 points 2 points 3 points | |

CEQA THRESHOLDS AND SCREENING TABLES

| Feature | Description | Assigned Point Values | Project Points |
|---|--|-----------------------|----------------|
| Debris | Recycle 65% of debris | 4 points | |
| | Recycle 70% of debris | 5 points | |
| | Recycle 75% of debris | 6 points | |
| Implementation Measure IM O1: Other GHG Reduction Feature Implementation | | | |
| O1.A1 Other GHG Emissions Reduction Features | This allows innovation by the applicant to provide residential design features that the GHG emissions from construction and/or operation of the project not provided in the table. Note that engineering data will be required documenting the GHG reduction amount and point values given based upon emission reductions calculations using approved models, methods and protocols. | TBD | |
| Total Points Earned by Residential Project: | | | |

Table 2: Screening Table for GHG Implementation Measures for Commercial Development and Public Facilities

| Feature | Description | Assigned Point Values | Project Points |
|---|--|-----------------------|----------------|
| Implementation Measure III E5: Energy Efficiency for Commercial/Public Development | | | |
| E5.A Building Envelope | | | |
| E5.A.1 Insulation | <i>Baseline standard(walls R-13; roof/attic R-30)</i> | 0 points | |
| | <i>Modestly Enhanced Insulation (walls R-13, roof/attic R-38)</i> | 15 points | |
| | <i>Enhanced Insulation (rigid wall insulation R-13, roof/attic R-38)</i> | 18 points | |
| | <i>Greatly Enhanced Insulation (spray foam insulated walls R-15 or higher, roof/attic R-38 or higher)</i> | 20 points | |
| E5.A.2 Windows | Baseline standard (required) | 0 points | |
| | Modestly Enhanced Window Insulation (5% > Title 24) | 7 points | |
| | Enhanced Window Insulation (15%> Title 24) | 8 points | |
| | Greatly Enhanced Window Insulation (20%> Title 24) | 12 points | |
| E5.A.3 Cool Roofs | <i>Modest Cool Roof (CRRC Rated 0.15 aged solar reflectance, 0.75 thermal emittance)</i> | 12 points | |
| | <i>Enhanced Cool Roof (CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance)</i> | 14 points | |
| | <i>Greatly Enhanced Cool Roof (CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance)</i> | 16 points | |
| E5.A.4 Air Infiltration | Minimizing leaks in the building envelope is as important as the insulation properties of the building. Insulation does not work effectively if there is excess air leakage. | | |
| | <i>Air barrier applied to exterior walls, caulking, and visual inspection such as the HERS Verified Quality Insulation Installation (QII or equivalent)</i> | 12 points | |
| | <i>Blower Door HERS Verified Envelope Leakage or equivalent</i> | 10 points | |
| | <i>Title 24 standard (required)</i> | 0 points | |
| | <i>Modest Building Envelope Leakage (5% > Title 24)</i> | 4 points | |
| | <i>Reduced Building Envelope Leakage (15%> Title 24)</i> | 8 points | |
| <i>Minimum Building Envelope Leakage (20% > Title 24)</i> | 12 points | | |
| E5.A.5 Thermal Storage of Building | Thermal storage is a design characteristic that helps keep a constant temperature in the building. Common thermal storage devices include strategically placed water filled columns, water storage tanks, and thick masonry walls. | | |
| | <i>Modest Thermal Mass (10% of floor or 10% of walls 12" or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)</i> | 4 points | |
| | <i>Enhanced Thermal Mass (20% of floor or 20% of walls 12" or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood or other insulating</i> | 6 points | |

CEQA THRESHOLDS AND SCREENING TABLES

| Feature | Description | Assigned Point Values | Project Points |
|--|---|-----------------------|----------------|
| | <i>materials)</i> | | |
| E5.B Indoor Space Efficiencies | | | |
| E5.B.1 Heating/Cooling Distribution System | <i>Minimum Duct Insulation (R-4.2 required)</i> | 0 points | |
| | <i>Modest Duct insulation (R-6)</i> | 8 points | |
| | <i>Enhanced Duct Insulation (R-8)</i> | 10 points | |
| | <i>Distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent)</i> | 14 points | |
| E5.B.2 Space Heating/Cooling Equipment | <i>Baseline HVAC Efficiency (EER 13/60% AFUE or 7.7 HSPF)</i> | 0 points | |
| | <i>Improved Efficiency HVAC (EER 14/65% AFUE or 8 HSPF)</i> | 7 points | |
| | <i>High Efficiency HVAC (EER 15/72% AFUE or 8.5 HSPF)</i> | 8 points | |
| | <i>Very High Efficiency HVAC (EER 16/80% AFUE or 9 HSPF)</i> | 12 points | |
| E5.B.3 Commercial Heat Recovery Systems | Heat recovery strategies employed with commercial laundry, cooking equipment, and other commercial heat sources for reuse in HVAC air intake or other appropriate heat recovery technology. Point values for these types of systems will be determined based upon design and engineering data documenting the energy savings. | TBD | |
| E5.B.4 Water Heaters | <i>2008 Minimum Efficiency (0.57 Energy Factor)</i> | 0 points | |
| | <i>Improved Efficiency Water Heater (0.675 Energy Factor)</i> | 14 points | |
| | <i>High Efficiency Water Heater (0.72 Energy Factor)</i> | 16 points | |
| | <i>Very High Efficiency Water Heater (0.92 Energy Factor)</i> | 19 points | |
| | <i>Solar Pre-heat System (0.2 Net Solar Fraction)</i> | 4 points | |
| | <i>Enhanced Solar Pre-heat System (0.35 Net Solar Fraction)</i> | 8 points | |
| E5.B.5 Daylighting | Daylighting is the ability of each room within the building to provide outside light during the day reducing the need for artificial lighting during daylight hours. | | |
| | All peripheral rooms within building have at least one window or skylight | 1 point | |
| | All rooms within building have daylight (through use of windows, solar tubes, skylights, etc.) | 5 points | |
| | All rooms daylighted | 7 points | |
| E5.B.6 Artificial Lighting | Baseline standard (required) | 0 points | |
| | <i>Efficient Lights (25% of in-unit fixtures considered high efficacy. High efficacy is defined as 40 lumens/watt for 15 watt or less fixtures; 50 lumens/watt for 15-40 watt fixtures, 60 lumens/watt for fixtures >40watt)</i> | 9 points | |
| | <i>High Efficiency Lights (50% of in-unit fixtures are high efficacy)</i> | 12 points | |
| | <i>Very High Efficiency Lights (100% of in-unit fixtures are high efficacy)</i> | 14 points | |

CEQA THRESHOLDS AND SCREENING TABLES

| Feature | Description | Assigned Point Values | Project Points |
|---|--|--|----------------|
| E5.B.7 Appliances | <i>Star Commercial Refrigerator (new)</i> | 4 points | |
| | <i>Energy Star Commercial Dish Washer (new)</i> | 4 points | |
| | <i>Energy Star Commercial Cloths Washing</i> | 4 points | |
| E5.C Miscellaneous Commercial Building Efficiencies | | | |
| E5.C.1 Building Placement | North/South alignment of building or other building placement such that the orientation of the buildings optimizes conditions for natural heating, cooling, and lighting. | 6 points | |
| <i>Shading</i> | <i>At least 90% of south-facing glazing will be shaded by vegetation or overhangs at noon on Jun 21st.</i> | 6 Points | |
| E5.C.2 Other | This allows innovation by the applicant to provide design features that increases the energy efficiency of the project not provided in the table. Note that engineering data will be required documenting the energy efficiency of innovative designs and point values given based upon the proven efficiency beyond Title 24 Energy Efficiency Standards. | TBD | |
| E5.C.3 Existing Commercial building Retrofits | <p>The applicant may wish to provide energy efficiency retrofit projects to existing residential dwelling units to further the point value of their project. Retrofitting existing commercial buildings within the unincorporated County is a key reduction measure that is needed to reach the reduction goal. The potential for an applicant to take advantage of this program will be decided on a case by case basis and must have the approval of the Riverside County Planning Department. The decision to allow applicants to participate in this program will be evaluated based upon, but not limited to the following:</p> <p>Will the energy efficiency retrofit project benefit low income or disadvantaged communities?</p> <p>Does the energy efficiency retrofit project provide co-benefits important to the County?</p> <p>Point value will be determined based upon engineering and design criteria of the energy efficiency retrofit project.</p> | TBD | |
| Implementation Measure IM E6: New Commercial/Industrial Renewable Energy | | | |
| E6.A.1 Photovoltaic | <p>Solar Photovoltaic panels installed on commercial buildings or in collective arrangements within a commercial development such that the total power³ provided augments:</p> <p>Solar Ready Roofs (sturdy roof and electric hookups)</p> <p>10 percent of the power needs of the project</p> <p>20 percent of the power needs of the project</p> <p>30 percent of the power needs of the project</p> <p>40 percent of the power needs of the project</p> | <p>2 points</p> <p>8 points</p> <p>14 points</p> <p>20 points</p> <p>26 points</p> | |

³ Ibid.

CEQA THRESHOLDS AND SCREENING TABLES

| Feature | Description | Assigned Point Values | Project Points |
|--|--|---|----------------|
| | 50 percent of the power needs of the project | 32 points | |
| | 60 percent of the power needs of the project | 38 points | |
| | 70 percent of the power needs of the project | 44 points | |
| | 80 percent of the power needs of the project | 50 points | |
| | 90 percent of the power needs of the project | 56 points | |
| | 100 percent of the power needs of the project | 62 points | |
| E6.A.2 Wind turbines | Some areas of the County lend themselves to wind turbine applications. Analysis of the areas capability to support wind turbines should be evaluated prior to choosing this feature. Wind turbines as part of the commercial development such that the total power ⁴ provided augments: 10 percent of the power needs of the project 20 percent of the power needs of the project 30 percent of the power needs of the project 40 percent of the power needs of the project 50 percent of the power needs of the project 60 percent of the power needs of the project 70 percent of the power needs of the project 80 percent of the power needs of the project 90 percent of the power needs of the project 100 percent of the power needs of the project | 8 points 14 points 20 points 26 points 32 points 38 points 44 points 50 points 56 points 62 points | |
| E6.A.3 Off-site renewable energy project | The applicant may submit a proposal to supply an off-site renewable energy project such as renewable energy retrofits of existing residential or existing commercial/industrial. These off-site renewable energy retrofit project proposals will be determined on a case by case basis accompanied by a detailed plan documenting the quantity of renewable energy the proposal will generate. Point values will be based upon the energy generated by the proposal. | TBD | |
| E6.A.4 Other Renewable Energy Generation | The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided in the table. The ability to supply other renewable energy and the point values allowed will be decided based upon engineering data documenting the ability to generate electricity. | TBD | |
| Implementation Measure M W1: Water Use Reduction Initiative | | | |
| W1.C Irrigation and Landscaping | | | |
| W1.C.1 Water Efficient Landscaping | Limit conventional turf to < 20% of each lot (required) | 0 points | |
| | Eliminate conventional turf from landscaping | 3 points | |
| | Eliminate turf and only provide drought tolerant plants | 4 points | |
| | <i>Only California Native landscape that requires no or only</i> | 8 points | |

⁴ Ibid.

CEQA THRESHOLDS AND SCREENING TABLES

| Feature | Description | Assigned Point Values | Project Points |
|--|--|------------------------------|----------------|
| | <i>supplemental irrigation</i> | | |
| W1.C.2 Water Efficient irrigation systems | <i>Low precipitation spray heads < .75"/hr or drip irrigation Weather based irrigation control systems combined with drip irrigation (demonstrate 20 reduced water use)</i> | <i>1 point 5 points</i> | |
| W1.C.3 Storm water Reuse Systems | Innovative on-site stormwater collection, filtration and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems will be determined based upon design and engineering data documenting the water savings. | TBD | |
| W1.D Potable Water | | | |
| W1.D.1 Showers | <i>Water Efficient Showerheads (2.0 gpm) Title 24 standard (required)</i> | 3 points | |
| W1.D.2 Toilets | <i>Water Efficient Toilets/Urinals (1.5gpm) Waterless Urinals (note that commercial buildings having both waterless urinals and high efficiency toilets will have a combined point value of 6 points)</i> | <i>3 points 4 points</i> | |
| W1.D.3 Faucets | <i>Water Efficient faucets (1.28gpm)</i> | 3 points | |
| W1.D.4 Commercial Dishwashers | <i>Water Efficient dishwashers (20% water savings)</i> | 4 points | |
| W1.D.5 Commercial Laundry Washers | <i>Water Efficient laundry (15% water savings) High Efficiency laundry Equipment that captures and reuses rinse water (30% water savings)</i> | <i>3 points 6 points</i> | |
| W1.D.6 Commercial Water Operations Program | Establish an operational program to reduce water loss from pools, water features, etc., by covering pools, adjusting fountain operational hours, and using water treatment to reduce draw down and replacement of water. Point values for these types of plans will be determined based upon design and engineering data documenting the water savings. | TBD | |
| Implementation Measure W2: Increase Reclaimed Water Use | | | |
| W2.A.1 Recycled Water | Graywater (purple pipe) irrigation system on site | 5 points | |

CEQA THRESHOLDS AND SCREENING TABLES

| Feature | Description | Assigned Point Values | Project Points |
|---|--|---|----------------|
| Implementation Measure IM T1: Employment Based Trip and VMT Reduction Policy | | | |
| T1.A.1 Alternative Scheduling | Encouraging telecommuting and alternative work schedules reduces the number of commute trips and therefore VMT traveled by employees. Alternative work schedules could take the form of staggered starting times, flexible schedules, or compressed work weeks. Provide flexibility in scheduling such that at least 30% of employees participate in 9/80 work week, 4-day/40-hour work week, or telecommuting 1.5 days/week. | 5 points | |
| T1.A.2 Car/Vanpools | Car/vanpool program Car/vanpool program with preferred parking Car/vanpool with guaranteed ride home program Subsidized employee incentive car/vanpool program Combination of all the above | 1 point 2 points 3 points 5 points 6 points | |
| T1.A.3 Employee Bicycle/ Pedestrian Programs | Complete sidewalk to residential within ½ mile Complete bike path to residential within 3 miles Bike lockers and secure racks Showers and changing facilities Subsidized employee walk/bike program Note: combine all applicable points for total value | 1 point 1 point 1 point 2 points 3 points | |
| T1.A.4 Shuttle/Transit Programs | Local transit within ¼ mile Light rail transit within ½ mile Shuttle service to light rail transit station Guaranteed ride home program Subsidized Transit passes Note: combine all applicable points for total value | 1 point 3 points 5 points 1 points 2 points | |
| T1.A.5 CTR | Employer based Commute Trip Reduction (CTR). CTRs apply to commercial, offices, or industrial projects that include a reduction of vehicle trip or VMT goal using a variety of employee commutes trip reduction methods. The point value will be determined based upon a TIA that demonstrates the trip/VMT reductions. Suggested point ranges: Incentive based CTR Programs (1-8 points) Mandatory CTR programs (5-20 points) | TBD | |
| T1.A.6 Other Trip Reduction Measures | Point values for other trip or VMT reduction measures not listed above may be calculated based on a TIA and/or other traffic data supporting the trip and/or VMT reductions. | TBD | |
| Implementation Measure IM T3: Mixed Use Development | | | |
| T3.B.1 Mixed Use | Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The point value of mixed use projects will be | TBD | |

CEQA THRESHOLDS AND SCREENING TABLES

| Feature | Description | Assigned Point Values | Project Points |
|---|--|--|----------------|
| | determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled | | |
| T3.B.2 Local Retail Near Residential (Commercial only Projects) | <p>Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled.</p> <p>The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled.</p> | TBD | |
| Implementation Measure IM T4: Preferential Parking | | | |
| T4.A.1 Parking | <p>Provide reserved preferential parking spaces for car-share, carpool, and ultra-low or zero emission vehicles.</p> <p>Provide larger parking spaces that can accommodate vans used for ride-sharing programs and reserve them for vanpools and include adequate passenger waiting/loading areas.</p> | <p>1 point</p> <p>1 point</p> | |
| Implementation Measure IM T5: Signal Synchronization and Intelligent Traffic Systems | | | |
| T5.B.1 Signal Improvements | <p>Techniques for improving traffic flow include: traffic signal coordination to reduce delay, incident management to increase response time to breakdowns and collisions, Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions, and speed management to reduce high free-flow speeds.</p> <p>Synchronize signals along arterials used by project.</p> <p>Connect signals along arterials to existing ITS.</p> | <p>1 point/signal</p> <p>3 points/signal</p> | |
| Implementation Measure IM T6: Bicycle and Pedestrian Infrastructure | | | |
| T6.B.1 Sidewalks | <p>Provide sidewalks on one side of the street (required)</p> <p>Provide sidewalks on both sides of the street</p> <p>Provide pedestrian linkage between commercial and residential land uses within 1 mile</p> | <p>0 points</p> <p>1 point</p> <p>3 points</p> | |
| T6.B.2 Bicycle paths | <p>Provide bicycle paths within project boundaries</p> <p>Provide bicycle path linkages between commercial and other land uses</p> <p>Provide bicycle path linkages between commercial and transit</p> | <p>TBD</p> <p>2 points</p> <p>5 points</p> | |
| Implementation Measure IM T7: Electric Vehicle Use | | | |
| T7.B.1 Electric Vehicle Recharging | <p>Provide circuit and capacity in garages/parking areas for installation of electric vehicle charging stations.</p> <p>Install electric vehicle charging stations in garages/parking areas</p> | <p>2 points/area</p> <p>8 pts/station</p> | |
| Implementation Measure IM T8: Anti-Idling Enforcement | | | |
| T8.A.1 Commercial Vehicle Idling | All commercial vehicles are restricted to 5-minutes or less per trip on site and at loading docks. | 2 points Required of all | |

CEQA THRESHOLDS AND SCREENING TABLES

| Feature | Description | Assigned Point Values | Project Points |
|--|--|---|----------------|
| Restriction | | Commercial | |
| Implementation Measure IM T9: Increase Public Transit | | | |
| T9.B.1 Public Transit | The point value of a projects ability to increase public transit use will be determined based upon a Transportation Impact Analysis (TIA) demonstrating decreased use of private vehicles and increased use of public transportation. Increased transit accessibility (1-15 points) | TBD | |
| Implementation Measure IM L2: Prohibit Gas-Powered Landscaping Equipment | | | |
| L2.B.1 Landscaping Equipment | Electric lawn equipment including lawn mowers, leaf blowers and vacuums, shredders, trimmers, and chain saws are available. When electric landscape equipment is used in place of conventional gas-powered equipment, direct GHG emissions from natural gas combustion are replaced with indirect GHG emissions associated with the electricity used to power the equipment. Project provides electrical outlets on the exterior of all buildings so that electric landscaping equipment is compatible with all built facilities. | 2 points | |
| Implementation Measure IM SW1: 80 Percent Solid Waste Diversion Program | | | |
| SW1.B.1 Recycling | County initiated recycling program diverting 80% of waste requires coordination with commercial development to realize this goal. The following recycling features will help the County fulfill this goal: Provide separated recycling bins within each commercial building/floor and provide large external recycling collection bins at central location for collection truck pick-up Provide commercial/industrial recycling programs that fulfills an on-site goal of 80% diversion of solid waste | 2 points 5 points | |
| Implementation Measure IM SW2: Construction and Demolition Debris Diversion Program | | | |
| SW2.B.1 Recycling of Construction/ Demolition Debris | Recycle 2% of debris (required) Recycle 5% of debris Recycle 8 % of debris Recycle 10% of debris Recycle 12% of debris Recycle 15% of debris Recycle 20% of debris | 0 points 1 point 2 points 3 points 4 points 5 points 6 points | |
| Implementation Measure IM O1: Other GHG Reduction Feature Implementation | | | |
| O1.A1 Other GHG Emissions Reduction Features | This allows innovation by the applicant to provide commercial design features that the GHG emissions from construction and/or operation of the project not provided in the table. Note that engineering data will be required documenting the GHG reduction amount and point values given based upon emission reductions calculations using approved models, methods and protocols. | TBD | |
| Total Points Earned by Commercial/Industrial Project: | | | |

References

- Association of Environmental Professionals (AEP) White Paper: Alternative Approaches to Analyzing Greenhouse Gases and Global Climate Change Impacts in CEQA Documents, June 2007.
- Association of Environmental Professionals (AEP) White Paper: Community-wide Greenhouse Gas Emission Inventory Protocols, March 2011.
- Association of Environmental Professionals (AEP) White Paper: Forecasting Community-wide Greenhouse Gas Emission and Setting Reduction Targets, May 2012.
- Association of Environmental Professionals (AEP) California Environmental Quality Act 2010 Statute & Guidelines, January 2012.
- California Air Pollution Control Officers Association (CAPCOA), White Paper: CEQA and Climate Change, January 2008
- California Air Pollution Control Officers Association (CAPCOA), Quantifying Greenhouse Gas Mitigation Measures, August 2010
- California Air Resources Board, AB 32 Scoping Plan, December 2009
- California Air Resources Board, Final Supplement to the AB 32 Scoping Plan, August 2011
- California Climate Action Team's Final Report to the Governor and Legislature, March 2007
- California Climate Action Registry, General Reporting Protocol, Version 3.1, January 2009
- Riverside County, Draft Greenhouse Gas Technical Report, November 2010
- South Coast Air Quality Management District, Rules and Regulations, 2012
- U.S. Environmental Protection Agency, AP-42, Compilation of Air Pollutant Emission Factors, Fifth Edition, September 1995
- U.S. Environmental Protection Agency, AP-42, Final Rule on Update to the Compilation of Air Pollutant Emission Factors, October 2009

**APPENDIX A:
METHDOLOLGY FOR THE DEVELOPMENT
AND APPLICATION OF THE SCREENING TABLES**

METHODS SUMMARY

The point values in the Screening Tables were derived from the projected emissions reductions that each of the Implementation Measures (IM) within the Riverside County GHG Technical Report would achieve. The total emission reductions offered by each measure is based on both changes in existing land use activities as well as how new development is designed and built. In order to correctly allocate the emission reductions within the Screening Table, the amount of emission reductions afforded new development had to be segregated out of the aggregate total in a manner that is described below. Once the process of segregating new development out of the aggregate reduction totals was completed, the points were then proportioned by residential unit or square feet of commercial/industrial uses. This was accomplished by taking the predicted growth in households and commercial/industrial uses by the year 2020 and proportioning the appropriate IM reduction quantities for new development to the residential and commercial/industrial land use sectors within the Screening Table. These calculations result in point values that are allocated by residential unit or commercial/industrial square footage (measured in 1000 sq.ft.). Because of this, the size of the project is not relevant to the Screening Table. Regardless of size, each project needs to garnish 100 points to demonstrate consistency with the Technical Report. Efficiency, not size of the Project is critical. The following emission factor can be used in determining the amount of emissions reduced per point in the Screening Table:

The respective calculated emission values are in metric tons of carbon dioxide equivalents (MTCO_{2e})

For Residential Projects:

0.069 MTCO_{2e} per Point per Residential Unit

For Commercial and Industrial Projects:

0.031 MTCO_{2e} per Point per 1,000 Square Feet of gross Commercial/Industrial building area

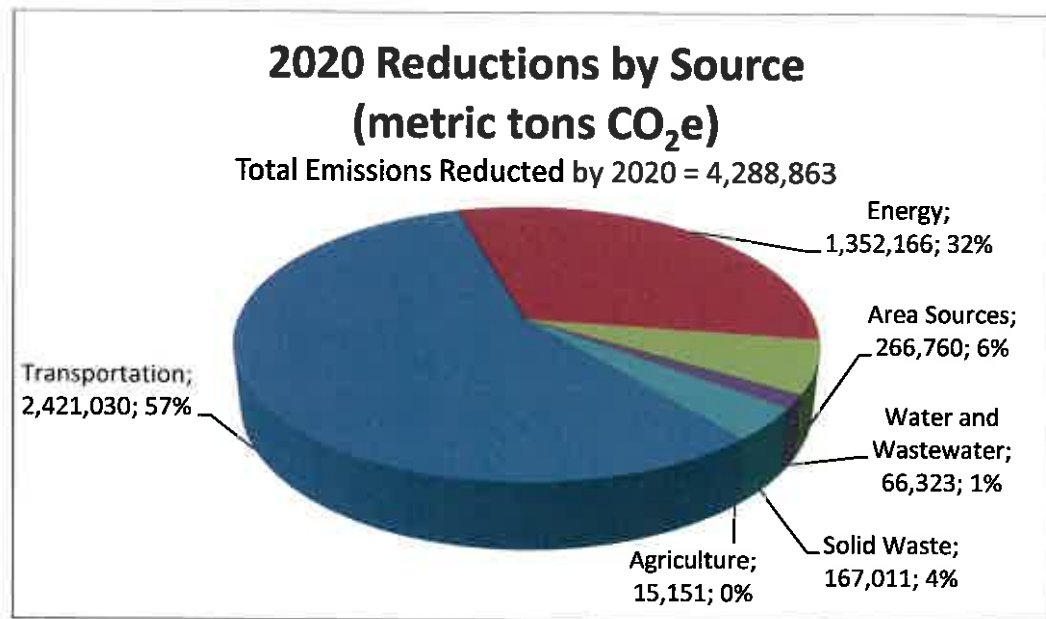
Note that the Screening Table and point values are best used for typical development projects processed by the County. Examples of typical development projects include residential subdivisions, multi-family residential apartments, condominiums and townhouses, retail commercial, big box retail, office buildings, business parks, and typical warehousing. Mixed use projects can use the Screening Tables following the instructions. Transit oriented development (TOD), and infill projects are able to use the Screening Tables, but the Screening Table points are likely to underestimate total emission reductions afforded these types of projects. Note that the Screening Tables include the opportunity to custom develop points (using the formula above) in order to account for the predicted reductions in vehicle trips and vehicle miles traveled within a project specific traffic study and GHG analysis. TOD and infill projects can be more accurately assessed and allocated points using this method.

However, more unusual types of industrial projects such as cement manufacturing, metal foundries, refrigerant manufacturing, electric generating stations, and oil refineries cannot use the Screening Tables because the emission sources for those types of uses were not contemplated in the table.

DEVELOPMENT OF THE POINT VALUES

The first step in developing the point system was the need to determine the total reductions afforded the GHG Plan. Figure 1 below shows the total emission reductions achieved by the GHG Plan. In total 4,288,863 MTCO₂e will be reduced as a result of the GHG Plan.

Figure 1



The next step in developing the point system is to segregate out the State efforts in reducing GHG emissions within the County. Table 1 shows the reductions allocated to State measures and County strategies.

Table 1

| Sector | 2020 Reduction (MTCO ₂ e) | | Total |
|---|--------------------------------------|-------------------|------------------|
| | State Strategies | County Strategies | |
| Transportation and Land Use | 914,490 | 1,506,540 | 2,421,030 |
| Building Energy -Energy Efficiency and Alternative Energy | 860,205 | 491,962 | 1,352,166 |
| Area Sources | 0 | 266,760 | 266,760 |
| Water Conservation | 33,172 | 33,151 | 66,323 |
| Solid Waste/Landfills | 0 | 167,011 | 167,011 |
| Agriculture | 0 | 15,573 | 15,573 |
| Total | 1,807,866 | 2,448,997 | 4,288,863 |

CEQA THRESHOLDS AND SCREENING TABLES

As shown in Table 1, 2,448,997 MTCO₂e are reduced by the County's Implementation Measure. This amount includes reductions afforded existing building retrofits, other changes to activities associated with existing land uses, as well as reductions associated with new development.

The next step is to segregate out of the County strategies total the amount of emissions that will be reduced within new development.

Table 2 on the next page summarizes the reduction in emissions afforded new development from the Implementation measures. Table 2 shows 1,302,569 MTCO₂e being reduced from new development as a result of the County strategies. Within the 1,302,569 MTCO₂e of new development reductions afforded County strategies, 619,336 MTCO₂e of emissions reduced is accomplished through new Commercial and Industrial Projects, and 683,233 MTCO₂e of emissions reduced is accomplished through new residential projects.

The next step in allocating point values is to determine the number of new homes and commercial buildings that are anticipated by year 2020. The County predicts that 100,477 new residential units will be needed by 2020 to accommodate the population growth by 2020. A total of approximately 195,547,000 square feet of new commercial and industrial buildings within the unincorporated County area is needed to accommodate anticipated job growth. This estimate is based on the relationship between past growth in employment to the average growth in commercial/industrial building area for Riverside County.

Dividing the 683,233 MTCO₂e reductions of emissions afforded the Implementation Measures for new residential development by the anticipated 100,477 new residential units that will be built yields 6.80 MTCO₂e per residential unit that needs to be reduced to fulfill the anticipated reductions of the GHG Technical Report. That amount equals 100 points, producing the following for the point values:

0.0680 MTCO₂e per Point per Residential Unit

A similar process was used to derive the point value for new commercial/Industrial development. Because commercial/industrial land uses are typically described in thousand square feet of building space, the point value was calculated as follows: **0.031 MTCO₂e per 1,000 Sq. Ft. of gross Commercial/Industrial building area.**

The final step was to allocate points to each of the reduction measures in order to provide the menu of point values. The spreadsheet on the next page shows emission reductions afforded each measure. Note that emissions associated with new development are reduced by the State's measures, as well as the County's Implementation measures. The Screening Tables focus on those measures the County is implementing associated with new development within the unincorporated County area. For this reason, the menu of options pertains to all of the Implementation Measures pertaining to new development.

CEQA THRESHOLDS AND SCREENING TABLES

Table 2

| Reduction Number | Reduction Measure Name | Reduced Emissions(MTCO_{2e}) | |
|--|--|---|--------------------|
| | | Commercial/Industrial | Residential |
| IM-E1 | New Residential Energy Efficiency | | 72,228.9 |
| IM-E2 | New Residential Renewable Energy | | 83,347.0 |
| IM-E5 | New Commercial Energy Efficiency | 126,589.3 | |
| IM-E6 | New Commercial/Industrial Renewable Energy | 34,576.5 | |
| IM-T1 | Employer VMT Reduction | 150,960.2 | |
| IM-T2 | Increased Residential Density | | 109,947.0 |
| IM-T3 | Mixed Use Development | 108,134.7 | 108,134.7 |
| IM-T4 | Preferential Parking | 848.9 | |
| IM-T5 | Road Imp/Sig.Sync/TFM | 18,718.0 | 40,647.4 |
| IM-T6 | Bicycle/Ped Infrastructure | 4,123.5 | 8,954.5 |
| IM-T7 | Electric Vehicle Use | 8,537.0 | 18,538.7 |
| IM-T8 | Anti-Idling Enforcement | 14,552.0 | |
| IM-T9 | Increase Public Transit | 31,147.2 | 67,638.3 |
| IM-T10 | Employee Commute Alt. Schedule | 28,592.8 | |
| IM-L1 | SCAQMD No New Woodburning Stoves | | 68,559.3 |
| IM-L2 | Prohibit Gas-Powered Equipment | 6,483.1 | 41,861.6 |
| IM-W1 | Water Use Reduction Initiative | 6,118.6 | 4,911.8 |
| IM-W2 | Increase Reclaimed Water Use | 991.2 | 795.7 |
| IM-SW1 | County Diversion Program | 46,140.0 | 24,844.6 |
| IM-SW2 | Construction Diversion Program | 32,823.3 | 32,823.3 |
| Total IM Reductions for New Development | | 619,336.4 | 683,233.0 |

PAGE BREAK



**AIRPORT LAND USE COMMISSION
RIVERSIDE COUNTY**



June 11, 2018

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Lake Elsinore

VICE CHAIR
VACANCY

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Mr. Robert Flores, Project Planner
Riverside County Planning Department
4080 Lemon Street, 12th Floor
Riverside CA 92501
(VIA HAND DELIVERY)

**RE: AIRPORT LAND USE COMMISSION (ALUC) DEVELOPMENT REVIEW –
DIRECTOR’S DETERMINATION**

File No.: ZAP1030RG18
Related File No.: GPA1226 (General Plan Amendment)
APN: Countywide

Dear Mr. Flores:

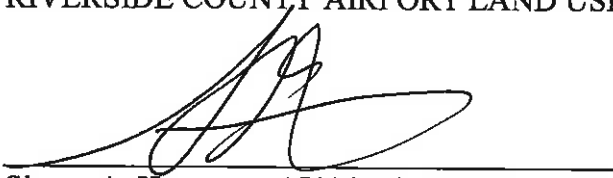
Under the delegation of the Riverside County Airport Land Use Commission (ALUC) pursuant to ALUC Resolution No. 2011-02, staff reviewed Riverside County Case No. GPA1226 (General Plan Amendment), a proposal to: (1) amend the Safety Element of the General Plan by (a) replacing existing maps (specifically, Figure S-1 and Figures S-3 through S-8) with updated maps incorporating new hydrologic and geologic data that was not available to the County at the time of the original adoption of the Riverside County Integrated Project (RCIP) General Plan in 2003 and four new maps published by the California Geologic Survey, or based on information therefrom, and (b) updating and clarifying the text of the Section entitled “Seismically-induced Liquefaction, Landslides, and Rock Falls”; and (2) amend the Land Use and Healthy Communities Elements by providing for discussions of environmental justice in both elements, identifying the locations of environmentally disadvantaged “environmental justice” communities, and adding and consolidating policies to address the physical and social needs of these communities, the impacts of the land use decision making process upon such communities, and means to provide for more robust public participation in the land use decision making process where such communities are affected.

As ALUC Director, I hereby find the above-referenced project **CONSISTENT** with the 2004 Riverside County Airport Land Use Compatibility Plan and all ALUCPs concurrently or subsequently adopted, as they may affect unincorporated Riverside County.

If you have any questions, please contact Paul Rull, ALUC Urban Regional Planner IV, at (951) 955-6893.

AIRPORT LAND USE COMMISSION

Sincerely,
RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

A handwritten signature in black ink, appearing to be 'SH', is written over a horizontal line.

Simon A. Housman, ALUC Director

Attachments: Proposed General Plan Amendment

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Seismically-Induced Liquefaction, Landslides, and Rock Falls



As demonstrated by past earthquakes, seismic settlement is primarily damaging in areas subject to differential settlement. These can include cut/fill transition lots built on hillsides, where a portion of the house is built over an area cut into the hillside while the remaining portion of the house projects over man-made fill. During an earthquake, even slight settlement of the fill can lead to a differentially-settled structure and significant repair costs.

Portions of the County of Riverside (*County*) are susceptible to liquefaction and landslides or rockfall, which are very destructive secondary effects of strong seismic shaking. This section addresses these hazards as they relate specifically to seismic events. General slope and soil instability hazards, which can occur in the absence of seismic shaking, are addressed separately in following sections of the Safety Element. *The County, based on geologic, geotechnical, seismic and hydrological data, created generalized hazards maps (maps) of the County for liquefaction potential and slope instability. These maps were created by the County to help guide geologic hazards analysis of sites being developed within the unincorporated portions of the County. It is intended that these maps be updated or replaced with maps released by the State of California under the State's Seismic Hazards Mapping Act.*

Liquefaction occurs primarily in saturated, loose, fine- to medium-grained soils in areas where the groundwater table is within approximately 50 feet of the surface. Shaking causes the soils to lose strength and behave as liquid. Excess water pressure is vented upward through fissures and soil cracks, and *can also result in a water-soil slurry bubbles—flowing* onto the ground surface. Liquefaction-related effects include loss of bearing strength, ground oscillations, lateral spreading, and flow failures or slumping. Site-specific geotechnical studies are the only practical and reliable way of determining the specific liquefaction potential of a site; however, a determination of general risk potential can be provided based on soil type and depth of groundwater. Areas identified as susceptible to liquefaction are identified in Figure S-3.

Areas indicated as susceptible to liquefaction in Figure S-3 are based on a combination of known factors in some areas and the absence of known factors in other areas. In addition, these potential hazard zones are not an absolute indication that the hazard truly exists nor are they an indicator of the extent of damage that may or may not occur at a given site. A good example is the area of March Air Reserve Base (MARB). The information used to construct the County's liquefaction potentials for this area indicated a high potential for liquefaction. Recent research confirms there is a potential for liquefaction to occur; however, this research also confirms minimal liquefaction-induced ground settlement is anticipated to occur for the areas that were studied. In most cases, proper design and construction of subgrade soils and building foundations provides a mechanism to mitigate the risk of seismic hazard to an acceptable level in conformance with the State Building Code. The representation of areas having a liquefaction potential on Figure S-3 is only intended as notification to seek further site-specific information and analysis of this potential hazard as part of future site development. It should not be solely relied upon, without site-specific information and analysis, for design or decision-making purposes.

Seismically-induced landslides and rock falls should be expected throughout the county in a major earthquake. Field investigation enables identification of slide-prone slopes before an earthquake occurs. Landslides and rock falls occur most often on steep or compromised slopes. Factors controlling the stability of slopes include: 1) slope height and steepness; 2) engineering characteristics of the earth materials comprising the slope; and 3) intensity of ground shaking. Figure S-4 maps areas with varying levels of earthquake-induced slope instability.

The Seismic Hazard Zone Maps are issued by the State of California and they address the seismic hazards of liquefaction and earthquake-induced landslides pursuant to the Seismic Hazards Mapping Act (SHMA). The SHMA requires the State Geologist to compile and issue maps identifying seismic hazard zones, also referred to as Zones of Required Investigation (ZORI). The purpose of these zones is to delineate areas within which soil conditions, topography and the likelihood of future ground shaking indicate sufficient hazard potential to justify a site-specific

geotechnical investigation. The Murrieta Quadrangle Seismic Hazard Zone Map area is shown on Figure S-3 and Figure S-4 and it is the first official Seismic Hazard Zone Map within Riverside County released by the California Geological Survey through its Seismic Hazards Zonation Program.

This Seismic Hazards Zonation Program will ultimately map the principal and major growth areas in seismically active areas of California. Each quadrangle map covers an area of approximately 60 square miles. There are sixteen other planned quadrangles within western Riverside County that will be incorporated into the Safety Element as they become available.

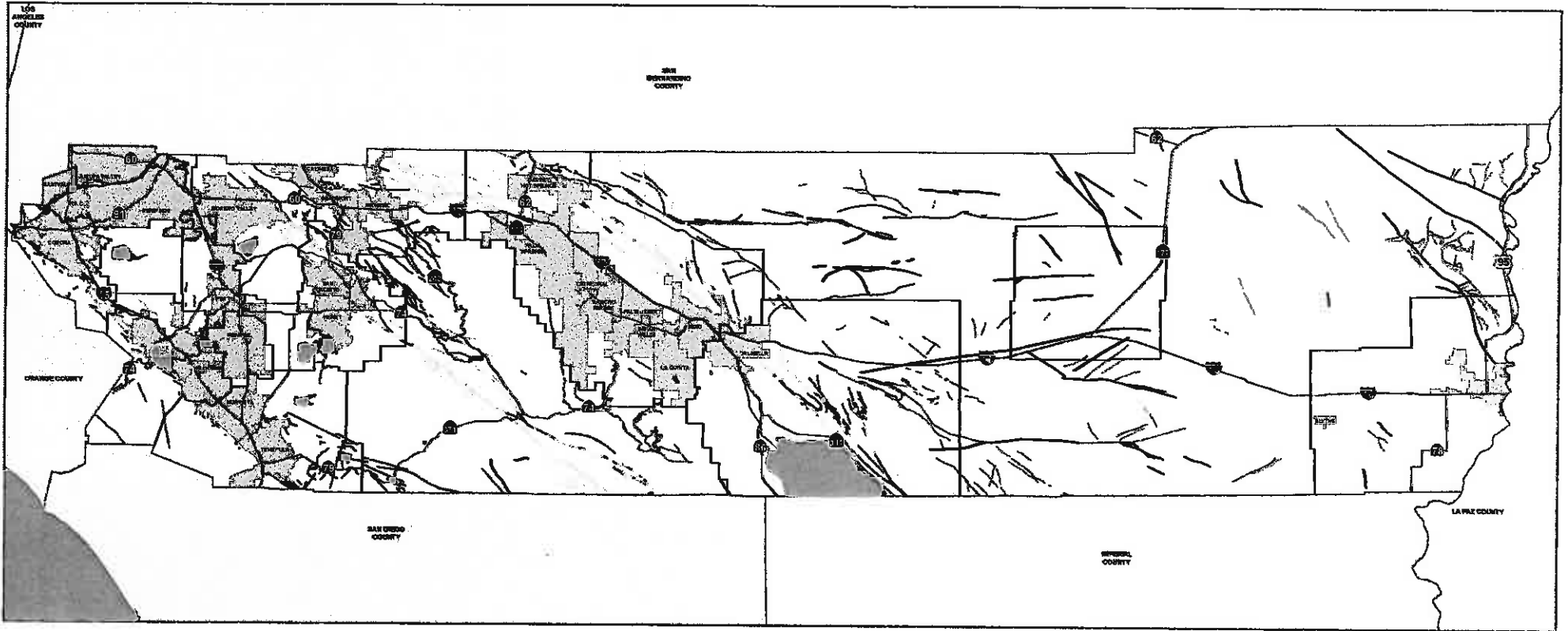
The following policies apply to Riverside County and California State identified liquefaction and slope instability hazardous zones:

Policies:

- S 2.2 Require geological and geotechnical investigations in areas with potential for earthquake-induced liquefaction, landsliding or settlement, for any building proposed for human occupancy and any structure whose damage would cause harm, except for accessory buildings. (AI 81)
- S 2.3 Require that a state-licensed professional investigate the potential for liquefaction in areas designated as underlain by “Susceptible Sediments” and “Shallow Ground Water” for all general construction projects, except for accessory buildings (Figure S-3).
- S 2.4 Require that a State-licensed professional investigate the potential for liquefaction in areas identified as underlain by “Susceptible Sediments” for all proposed critical facilities (Figure S-3).
- S 2.5 Require that engineered slopes be designed to resist seismically-induced failure. For lower-risk projects, slope design could be based on pseudo-static stability analyses using soil engineering parameters that are established on a site-specific basis. For higher-risk projects, the stability analyses should factor in the intensity of expected ground shaking, using a Newmark-type deformation analysis.
- S 2.6 Require that cut and fill transition lots be over-excavated to mitigate the potential of seismically-induced differential settlement.




Pseudo-static stability analyses requires detailed geotechnical investigations, including subsurface soil sampling and laboratory testing.




Data Source: California Geological Survey (2003)

- Faults Activity**
- ~ Historic
 - ~ Historic (Creep)
 - ~ Holocene
 - ~ Late Quaternary
 - ~ Quaternary
 - ~ Pre-Quaternary
 - City Boundary & M/JPA
 - Area Plan Boundary
 - Waterbodies
 - ~ Highways

Figure S-1



 April 6, 2018



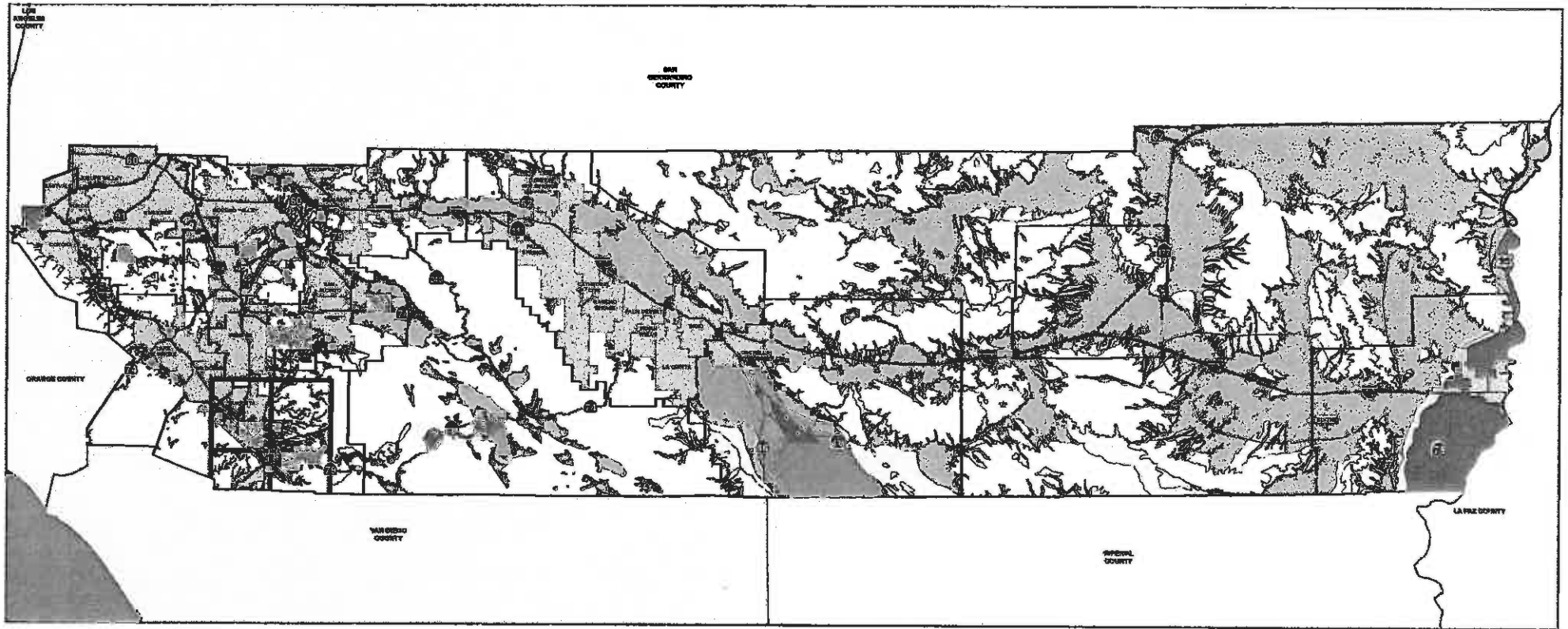
 0 10 20 Miles

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Disclaimer: For information within City boundary, refer to the City's General Plan, or March JPA General Plan.



MAPPED FAULTING IN RIVERSIDE COUNTY



Liquefaction Susceptibility

Seismic Hazard Zone Maps

- Very High
- High
- Moderate
- Low
- Very low
- City Boundary
- Area Plan Boundary
- Waterbodies
- Highways
- Quadrangles
- Liquefaction Zones
- Fault Zones

Data Source: County Geology (2013)/California Geological Survey (2018)

(See detail in Elsero, Southwest, San City / Meridian Valley Area Plans)

Figure S-3

April 8, 2018

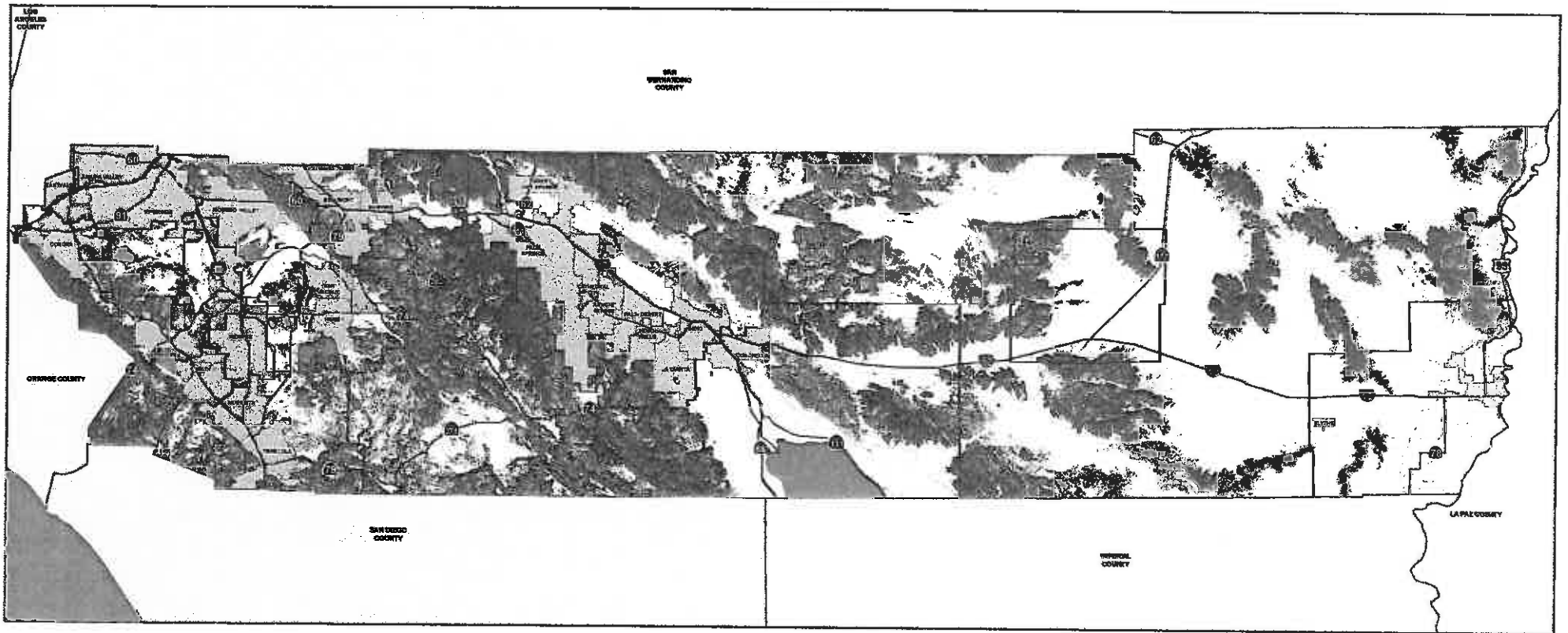
0 10 20 Miles

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GENERALIZED LIQUEFACTION



Data Source: Riverside County Contours/Intermap (2007)

Slope Angle

-  Less Than 15%
-  15%-25%
-  25%-30%
-  30% and Greater
-  City Boundary & MJPA
-  Area Plan Boundary
-  Waterbodies
-  Highways


April 6, 2018



Disclaimer: Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source-to-destination path, accuracy, timeliness, or completeness) of any of the data provided, and acknowledges legal responsibility for the information contained on this map. Any use of this product, with respect to liability and penalties shall be the sole responsibility of the user.

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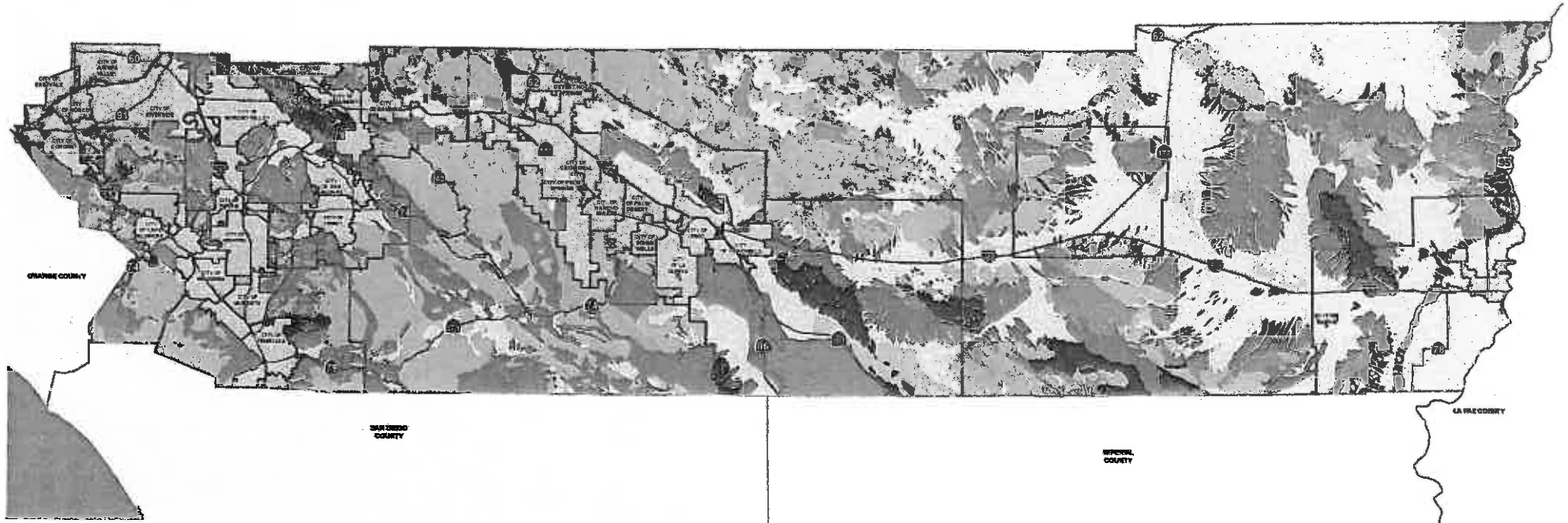


Figure S-5

**REGIONS UNDERLAIN BY
STEEP SLOPES**

LOS ANGELES COUNTY

SAN BERNARDINO COUNTY



Surficial Materials

- Holocene-age, fine-grained unconsolidated sediments, including stream-, lake-, and wind-deposited sediments. Deposits in this category include stream channel, alluvial fan, flood plain, colluvial dune, and lacustrine sediments.
- Holocene-age, coarse-grained unconsolidated sediments, including stream- and gravity-deposited sediments. Includes alluvial fan, stream channel, and terrace deposits.
- Pleistocene-age, fine-grained unconsolidated to moderately consolidated sediments.
- Pleistocene-age, coarse-grained unconsolidated to moderately consolidated sediments.

Soft-Rock and Moderately Consolidated to Undurated Sediments

- Tertiary-age and older, fine-grained soft rock and moderately consolidated to indurated sediments; generally bedded or fractured. Bedding or fractures assumed to provide planes of weakness along which slope instability could occur.
- Tertiary-age and older, coarse-grained soft rock and moderately consolidated to indurated sediments, typically massive to thickly bedded.

Metamorphic Rocks of Various Ages, including Meta-igneous and Metasedimentary rocks

- Massive igneous rocks.
- Foliated and/or fractured igneous rocks.

Igneous Rocks of Various Ages, both Volcanic and Plutonic

- Massive metamorphic rocks.
- Foliated and/or fractured metamorphic rocks.

Land slides

- Mapped land slides. For additional information, refer to the landslide susceptibility map.

City Boundary & MJPA

Area Plan Boundary

Waterbodies

Highways

April 6, 2018

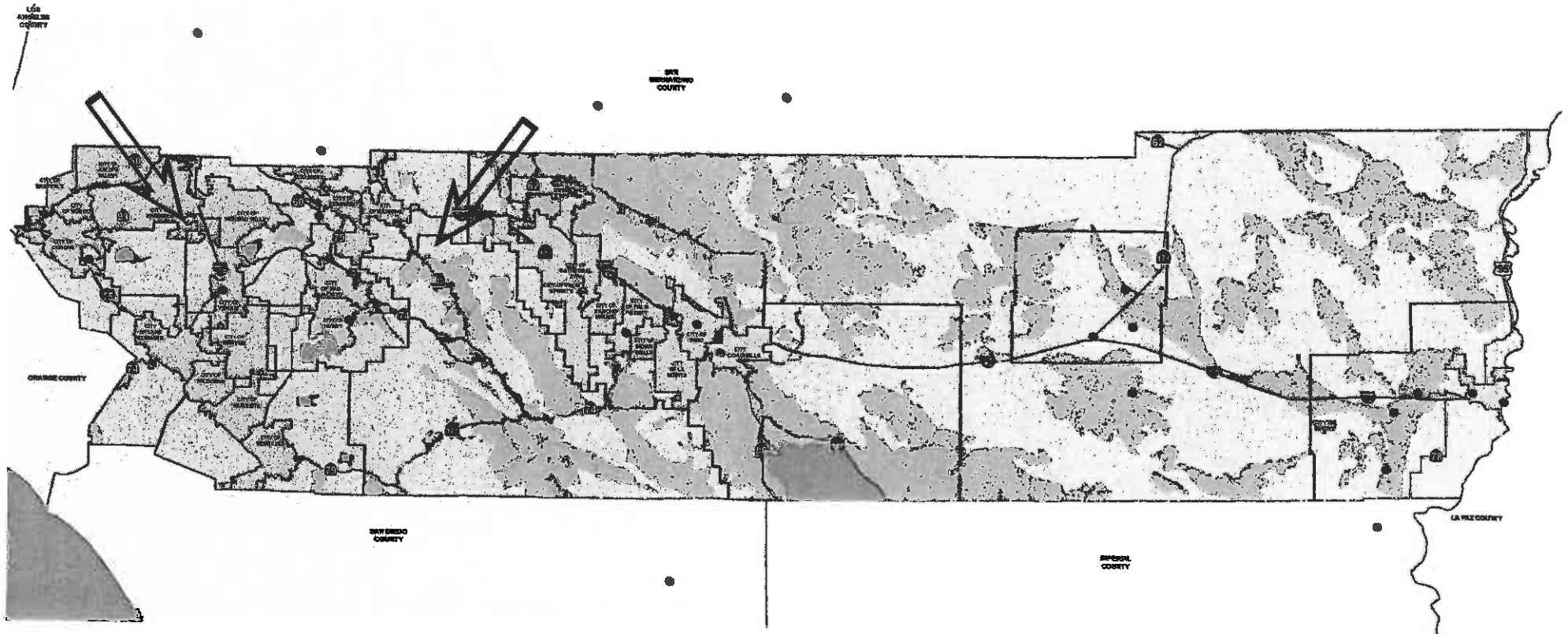
0 10 20 Miles

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Clarification: For information within City boundary, refer to the City's General Plan, or Sheriff's Office General Plan.



Figure S-6



Data Source: Earth Consultants International, FCIP (2004)

Wind Erodibility Rating

- Very High
- High
- Moderate
- Low
- City Boundary & M/JPA
- Area Plan Boundary
- Waterbodies
- Highways
- Weather Station
- General Wind Direction

Figure S-8

April 6, 2018

Disclaimer: Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of San Diego makes no warranty or guarantee as to the content, the accuracy or reliability, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and operations shall be the sole responsibility of the user. Disclaimer: For information within City boundary, refer to the City's General Plan, or their City General Plan.



**WIND EROSION
SUSCEPTIBILITY AREAS**

Land Use Element (add)

(Insert the following within the 4th section of this element – “Issues and Policies” – after “Policy Areas” that ends on page LU-74. The new subsection will be the fourth of the section). The policies after this section will have to be renumbered.

Environmental Justice

Environmental Justice is “the fair treatment of people of all races, cultures, and incomes with respect to development, adoption, implementation, and enforcement of environmental laws, regulations, and policies” (Gov. Code §65040.12). To this end, the state legislature approved Senate Bill (SB) 1000 in 2016 that requires local general plans to address environmental justice and include related policy, if a “disadvantaged community” is identified within the area covered by the general plan. In order to fully address environmental justice, the general plans must include new or existing policy intended to (1) reduce unique or compounded health risks in disadvantaged communities, (2) promote civic engagement in public decision-making process, and (3) prioritize improvements and programs that address the needs of disadvantage communities (Gov. Code §65302).

A disadvantaged community or **Environmental Justice Community** (“EJ Community”) is defined as a “low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation” or a geographic area that is identified by the California Environmental Protection Agency (“Cal EPA”) based on the area’s socioeconomic, public health, and environmental hazard criteria (Gov. Code §65302). Using an environmental health screening tool, CalEnviroScreen 3.0, Cal EPA was able to identify and designate EJ Communities throughout the state that are burdened by multiple sources of pollution. There are several EJ Communities located within the unincorporated areas of the County, as shown on Figure LU - 4.1, entitled “*Riverside County Environmental Justice Communities.*”

Senate Bill (SB) 244 (2011), as discussed in page LU-24, covers policy related to disadvantaged unincorporated communities (DUC) with its focus on socio-economic disadvantages, including specifically the availability of public services and facilities serving households earning eighty percent (80%) or less than the median household income of the County. While there is some overlap between SB 244 and the EJ Communities defined by Cal EPA through CalEnviroScreen 3.0, the focus of the latter is on public health and factors affecting the physical environment, collectively constituting an EJ Community.

Environmental Justice Policies

Environmental justice is addressed within the nine adopted elements of the County’s General Plan. However, in an effort to collectively address environmental justice, the *Healthy Communities Element* includes a section entitled, “Environmental Justice” where focused policy is found, some of which is derived from other policy within the General Plan. The goal of the section in the Healthy Communities Element is to ensure the proper application of environmental justice policies, in order to improve public health and the environment within EJ Communities.

Application of Environmental Justice Policies

Policies relevant to environmental justice apply particularly in the EJ Communities identified by the State of California. These communities are adapted from the state database and made part of the County’s General Plan. New development proposed within these boundaries will be evaluated for compliance

with environmental justice policies, or at a minimum, evaluated to determine whether the intent of the policies are being promoted by the proposed development. The entitlement process provides a key opportunity to address environmental justice policies through the creation of safe, healthy, and environmentally friendly communities.

The General Plan represents the build-out vision of Riverside County. As such, it not only addresses what the County envisions to be achieved from new development, it also provides a framework for the collective living and working environment of its residents. Therefore, not all of the policies in the Healthy Communities Element will apply to new development. The application of the relevant policies will be determined on a case-by-case basis. Policies not deemed relevant for evaluation in conjunction to new development will likely be evaluated by the County in cooperation with non-profit organizations, foundations, other government agencies, or entities outside County government, or may not involve the County government at all.

Healthy Communities Element

(Insert after the 2nd section of this element – “Policies” – that ends on page HC-12; the EJ section will be a separate section of this element and the last section. No renumbering of other policies necessary)

Environmental Justice

The Environmental Justice section of the Healthy Communities Element creates a comprehensive list of environmental justice policies that includes focused policies, some of which is derived from other policy within other general plan elements and area plans and all Healthy Communities Element (“HCE”) policies, which address various components of environmental justice in an Environmental Justice Community (“EJ Community”). The environmental justice policies, including all HC policies, shall apply to all communities shown on Figure LU-4.1, entitled “Riverside County Environmental Justice Communities,” within the General Plan Land Use Element.

Environmental justice policies in this section address five topics under the following categories:

Civic Engagement: this category will include policies that promote civic engagement in the public decision-making process.

Health Risk Reduction: this category includes subcategories addressing pollution prevention and the day to day living environment that are grouped under the following headings:

- Pollution Exposure
- Food Access
- Safe and Sanitary Homes
- Physical Activity

Public Facilities: this category includes policies that prioritize improvements and programs for public facilities.

Application of environmental justice policies, including the Healthy Community Element policies above, may increase civic engagement, reduce unique and compounded health risks, and prioritize improvements and programs for public facilities within EJ Communities, but it is important to recognize that the County cannot accomplish this effort alone, rather through collaboration and coordination with the unincorporated communities and constituents, stake holder groups, other government agencies or districts, and the development community. In fact, implementation of some policy may ultimately be done by non-County staff or using non-governmental funds.

Civic Engagement

This category includes policies that promote civic engagement in the public decision-making process.

Policies:

- HC 15.1 Encourage civic engagement in the local planning process, in furtherance of environmental justice planning. (AI 149)
- HC 15.2 Encourage collaboration, as feasible, between the County, community, and community-based organizations, as well as local stakeholders in promoting environmental justice. (AI 98)

- HC 15.3 As feasible, partner with local community-based organizations to promote civic engagement activities.
- HC 15.4 Include, as appropriate, environmental groups, the business community, special interests, and the general public in the formulation and implementation of programs that effectively reduce airborne pollutants. {Derived from AQ 1.11}
- HC 15.5 Encourage active public participation in hazardous waste and hazardous materials management decisions in Riverside County through the County's land use and planning processes. {Derived from S 6.1 b}
- HC 15.6 Encourage the utilization of multilingual staff personnel to assist in evacuation and short-term recovery activities, and meeting general community needs. (AI 97) {Derived from S 7.2}
- HC 15.7 Consider establishing a far-ranging, creative, forward-thinking public education and outreach campaign, to inform the community about: (AI 93, 96) {Derived from S 7.19}
 - a. The hazards they face.
 - b. The costs of doing nothing to mitigate the hazards.
 - c. What is known about each hazard.
 - d. Why jurisdictions don't have all the answers.
 - e. Mitigation incentives.
 - f. What the County of Riverside does for them.
 - g. What the County of Riverside cannot be expected to do for them.

Health Risk Reduction

This category includes policies that help reduce unique and compounded health risks. The following policies address pollution exposure and access to food and encourages safe and sanitary homes and an environment conducive to engaging in physical activity.

Pollution Exposure Policies:

- HC 16.1 The County should monitor changes to the Salton Sea that impact air quality and water quality and seek opportunities to address impacts to the maximum extent possible.
- HC 16.2 Assist communities, as feasible, in seeking funding for community initiated clean air projects.
- HC 16.3 Encourage the installation of on-site air monitoring equipment in areas of high exposure to air contaminants.
- HC 16.4 Assist low-income homeowners, as feasible, in seeking financial assistance for septic system repair in order to limit groundwater contamination by poorly maintained septic systems.
- HC 16.5 Encourage sensitive receptors, such as schools and hospitals, to be located away from uses that pose a hazard to human health and safety, including landfills, farm fields and other potentially hazardous sites.

- HC 16.6 Public facilities should be evaluated for health hazards or major sources of contamination.
- HC 16.7 Explore the potential for creating a cap or threshold on the number of pollution sources within EJ Communities.
- HC 16.8 Explore the feasibility of creating a partnership with the local air quality management district to establish a mitigation program to reduce the impact of air pollution.
- HC 16.9 Support compact development projects in appropriate locations that make the most efficient use of land and concentrate complementary uses close in proximity to transit and/or non-transit mobility options.
- HC 16.10 Encourage development of bicycle and pedestrian facilities to reduce dependency on fossil fuel based transportation.
- HC 16.11 Encourage the complete streets principles.
- HC 16.12 Seek opportunities to provide buffer spaces between high-volume roadways/ transportation corridors and sensitive land uses.
- HC 16.13 Seek to assure that sensitive receptors are separated and protected from polluting point sources to the greatest extent possible. (AI 114) {Derived from AQ 2.1}
- HC 16.14 Encourage that site plan designs protect people and land uses sensitive to air pollution through the use of barriers and/or distance from emissions sources when possible. (AI 114) {Derived from AQ 2.2}
- HC 16.15 Encourage the use of pollution control measures such as landscaping, vegetation and other materials, which trap particulate matter or control pollution. (AI 114) {Derived from AQ 2.3}
- HC 16.16 Encourage planting of urban trees on an Area Plan basis that removes pollutants from the air, provides shade and decreases the negative impacts of heat on the air. (AI 114) {Derived from AQ 2.4}
- HC 16.17 Support new development that emphasizes job creation and reductions in vehicle miles traveled in job-poor areas to improve air quality over other less efficient methods. (AI 18) {Derived from AQ 8.2}
- HC 16.18 Reduce VMT by encouraging expanded multi-modal facilities, linkages between such facilities, and services that provide transportation alternatives, such as transit, bicycle and pedestrian modes. {Derived from AQ 20.1}
- HC 16.19 Reduce VMT by facilitating an increase in transit options. In particular, coordinate with adjacent municipalities, transit providers and regional transportation planning agencies in the development of mutual policies and funding mechanisms to increase the use of alternative transportation. (AI 47, 53, 146) {Derived from AQ 20.2}

- HC 16.20 Reduce VMT and traffic by encouraging the creation of programs that increase carpooling and public transit use, decrease trips and commute times, and increase use of alternative-fuel vehicles. (AI 47, 146) {Derived from AQ 20.4}
- HC 16.21 Discourage industrial uses which use large quantities of water in manufacturing or cooling processes that result in subsequent effluent discharges. {Derived from ECVAP 8.3}
- HC 16.22 Discourage industrial uses which produce significant quantities of toxic emissions into the air. {Derived from ECVAP 8.4}
- HC 16.23 Ensure compatibility between industrial development and adjacent land uses. To achieve compatibility, industrial development projects may be required to include noise mitigation measures to avoid or minimize project impacts on adjacent uses. (AI 107) {Derived from N 3.3}
- HC 16.24 Limit the future conversion of mining operations to uses that are compatible with surrounding area. {Derived from RCBAP 15.1}
- HC 16.25 Enforce the land use policies and siting criteria related to hazardous materials and wastes through continued implementation of the programs identified in the County of Riverside Hazardous Waste Management Plan including the following: (AI 98) {Derived from S 6.1 a. and c.}
 - a. Ensure county businesses comply with federal, state and local laws pertaining to the management of hazardous wastes and materials including all Certified Unified Program Agency (CUPA) programs.
 - b. Encourage and promote the programs, practices, and recommendations contained in the Riverside County Hazardous Waste Management Plan, giving the highest waste management priority to the reduction of hazardous waste at its source.

Food Access Policies:

- HC 17.1 Cooperate with transit providers in the review of transit routes to provide service to jobs, shopping, schools, parks and healthcare facilities.
- HC 17.2 As feasible, orient buildings closer to streets and provide landscaped promenades that connect buildings to bus stops. {Derived from ECVAP 3.20}
- HC 17.3 Encourage development planning to locate buildings near streets, to facilitate use of interior spaces for recreational and other neighborhood uses, and to render buildings convenient to neighboring streets, other neighborhoods, shopping facilities, schools, parks, and other uses where the convenience of pedestrian and bicycle access would be facilitated. {Derived from ECVAP 3.61}

Safe and Sanitary Homes Policies:

- HC 18.1 As part of a requested inspection, undertake inspection procedures to identify and require a remedy of pollutants and safety hazards. ()

- HC 18.2 The County should seek and identify funding sources for an education program for housing related hazards, such as lead, asbestos, mold, pest, etc.
- HC 18.3 The County should support service agencies in applying for state and federal funding to upgrade water infrastructure, giving priority to communities that have contaminated drinking water.
- HC 18.4 In cooperation with service agencies, ensure sources of drinking water are protected from contamination.
- HC 18.5 In cooperation with service agencies, encourage innovative drinking water and waste water systems.
- HC 18.6 In cooperation with service agencies, encourage the consolidation of public drinking water systems or the extension of water service from existing systems, especially for communities that lack access to clean drinking water.
- HC 18.7 Discourage industrial uses that may conflict with residential land uses either directly or indirectly. {Derived from ECVAP 8.2}
- HC 18.8 All new residential uses shall be designed to sufficiently reduce noise levels and other potential impacts associated with retained on-site and adjacent industrial uses. {Derived from ELAP 7.26}
- HC 18.9 Require that new developments be located and designed to visually enhance, not degrade the character of the surrounding area through consideration of the following concepts. (AI 1, 3, 6, 14, 23, 24, 41, 62) {Derived from LU 4.1}
- a. Compliance with the design standards of the appropriate area plan land use category.
 - b. Require that structures be constructed in accordance with the requirements of Riverside County's zoning, building, and other pertinent codes and regulations.
 - c. Require that an appropriate landscape plan be submitted and implemented for development projects subject to discretionary review.
 - d. Require that new development utilize drought tolerant landscaping and incorporate adequate drought-conscious irrigation systems.
 - e. Pursue energy efficiency through street configuration, building orientation, and landscaping to capitalize on shading and facilitate solar energy, as provided for in Title 24 Part 6 and/or Part 11, of the California Code of Regulations (CCR).
 - f. Incorporate water conservation techniques, such as groundwater recharge basins, use of porous pavement, drought tolerant landscaping, and water recycling, as appropriate.
 - g. Encourage innovative and creative design concepts.
 - h. Encourage the provision of public art that enhances the community's identity, which may include elements of historical significance and creative use of children's art.
 - i. Include consistent and well-designed signage that is integrated with the building's architectural character.

- j. Provide safe and convenient vehicular access and reciprocal access between adjacent commercial uses.
- k. Locate site entries and storage bays to minimize conflicts with adjacent residential neighborhoods.
- l. Mitigate noise, odor, lighting, and other impacts on surrounding properties.
- m. Provide and maintain landscaping in open spaces and parking lots.
- n. Include extensive landscaping.
- o. Preserve natural features, such as unique natural terrain, arroyos, canyons, and other drainage ways, and native vegetation, wherever possible, particularly where they provide continuity with more extensive regional systems.
- p. Require that new development be designed to provide adequate space for pedestrian connectivity and access, recreational trails, vehicular access and parking, supporting functions, open space, and other pertinent elements.
- q. Design parking lots and structures to be functionally and visually integrated and connected.
- r. Site buildings access points along sidewalks, pedestrian areas, and bicycle routes, and include amenities that encourage pedestrian activity.
- s. Establish safe and frequent pedestrian crossings.
- t. Create a human-scale ground floor environment that includes public open areas that separate pedestrian space from auto traffic or where mixed, it does so with special regard to pedestrian safety.
- u. Recognize open space, including hillsides, arroyos, riparian areas, and other natural features as amenities that add community identity, beauty, recreational opportunities, and monetary value to adjacent developed areas.
- v. Manage wild land fire hazards in the design of development proposals located adjacent to natural open space.

HC 18.10 Monitor the capacities of infrastructure and services in coordination with service providers, utilities, and outside agencies and jurisdictions to ensure that growth does not exceed acceptable levels of service. (AI 3, 4, 32, 74) {Derived from LU 5.2}

HC 18.11 Limit or prohibit new development or activities in areas lacking water and access roads in the absence of a plan to address such deficiencies. {Derived from S 5.4}

Physical Activity Policies:

HC 19.1 Promote opportunities to provide recreational facilities around the shoreline of the Salton Sea that are accessible via public transit and active transportation.

HC 19.2 Encourage development of high-quality parks, green space, recreational facilities and natural environments for traditionally underserved communities.

HC 19.3 Prioritize creation of parks and open space in areas that are determined to be park poor.

HC 19.4 Promote pedestrian and bicycle access to parks and open space through infrastructure investments and improvements

- HC 19.5 Promote the preparation of a pedestrian network plan that allows for safe travel between all areas and destinations of the community.
- HC 19.6 Paseos, pedestrian and bicycle paths should be provided between residential structures, nonresidential structures, such as commercial and community facilities, and open space areas. {Derived from ELAP 7.22}
- HC 19.7 Plan for a system of local trails that enhances recreational opportunities and connects with regional trails. {Derived from LMWAP}
- HC 19.8 Incorporate open space, community greenbelt separators, and recreational amenities into development areas in order to enhance recreational opportunities and community aesthetics, and improve the quality of life. (AI 9, 28) {Derived from LU 9.3}
- HC 19.9 Paseos and pedestrian/bicycle connections should be provided between the Highest Density Residential uses and those nonresidential uses that would serve the local population. Alternative transportation mode connections should also be provided to the public facilities in the vicinity, including the elementary school, library, and community center. {Derived from MVAP 5.11}

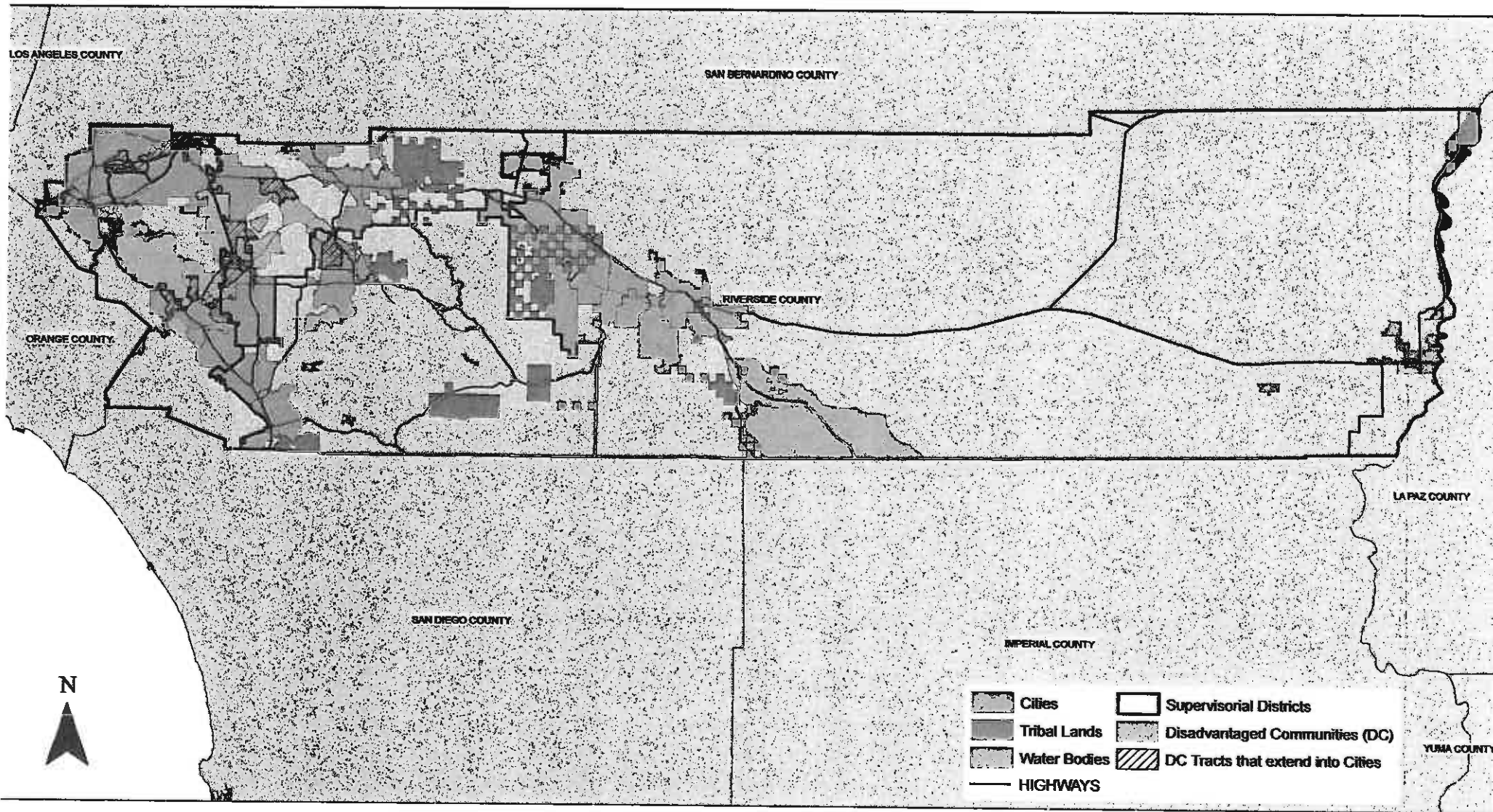
Public Facilities

This category includes policies that prioritize improvements and programs for public facilities.

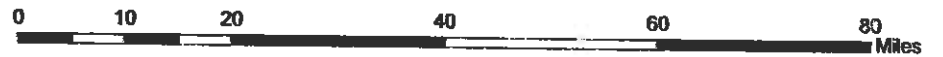
Policies:

- HC 20.1 New development should not hinder provision of public services.
- HC 20.2 New development should be designed, to the extent practical and appropriate to each use, in such a manner as to promote convenient internal pedestrian circulation among land uses (existing and proposed) within each neighborhood. {Derived from TCAP 7.6}
- HC 20.3 Enhance the quality of existing residential neighborhoods by including adequate maintenance of public facilities in the County's capital improvement program and requiring residents and landlords to maintain their properties in good condition. {Derived from HE 2.2}
- HC 20.4 New development and conservation land uses should not infringe upon existing essential public facilities and public utility corridors, which include county regional landfills, fee owned rights-of-way and permanent easements, whose true land use is that of public facilities. (AI 3) {Derived from LU 5.4}

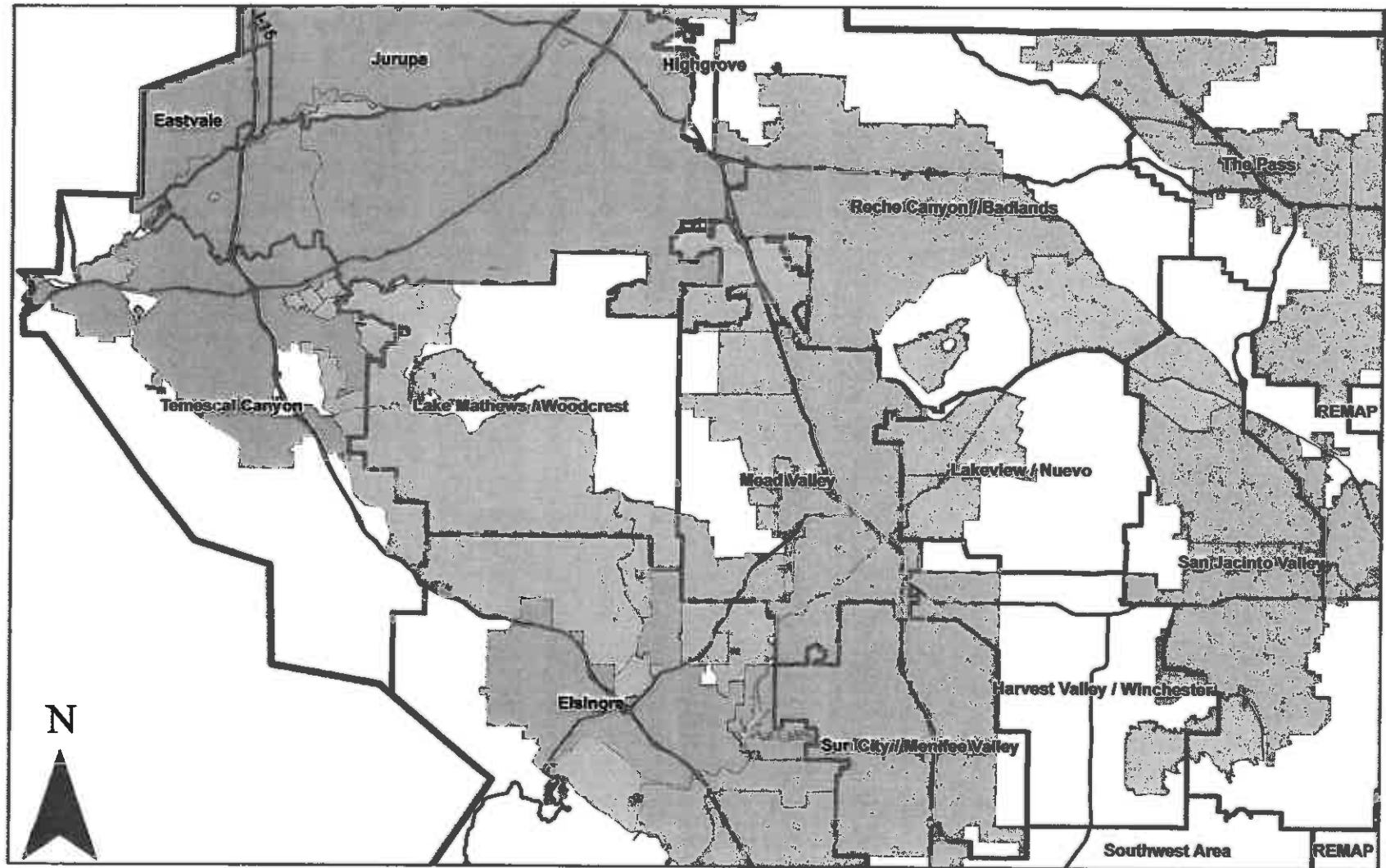
Disadvantaged Communities in Unincorporated Riverside County



Source: Riverside County, Cal EPA (OEHHA)



Area Plans with Disadvantaged Communities (West)

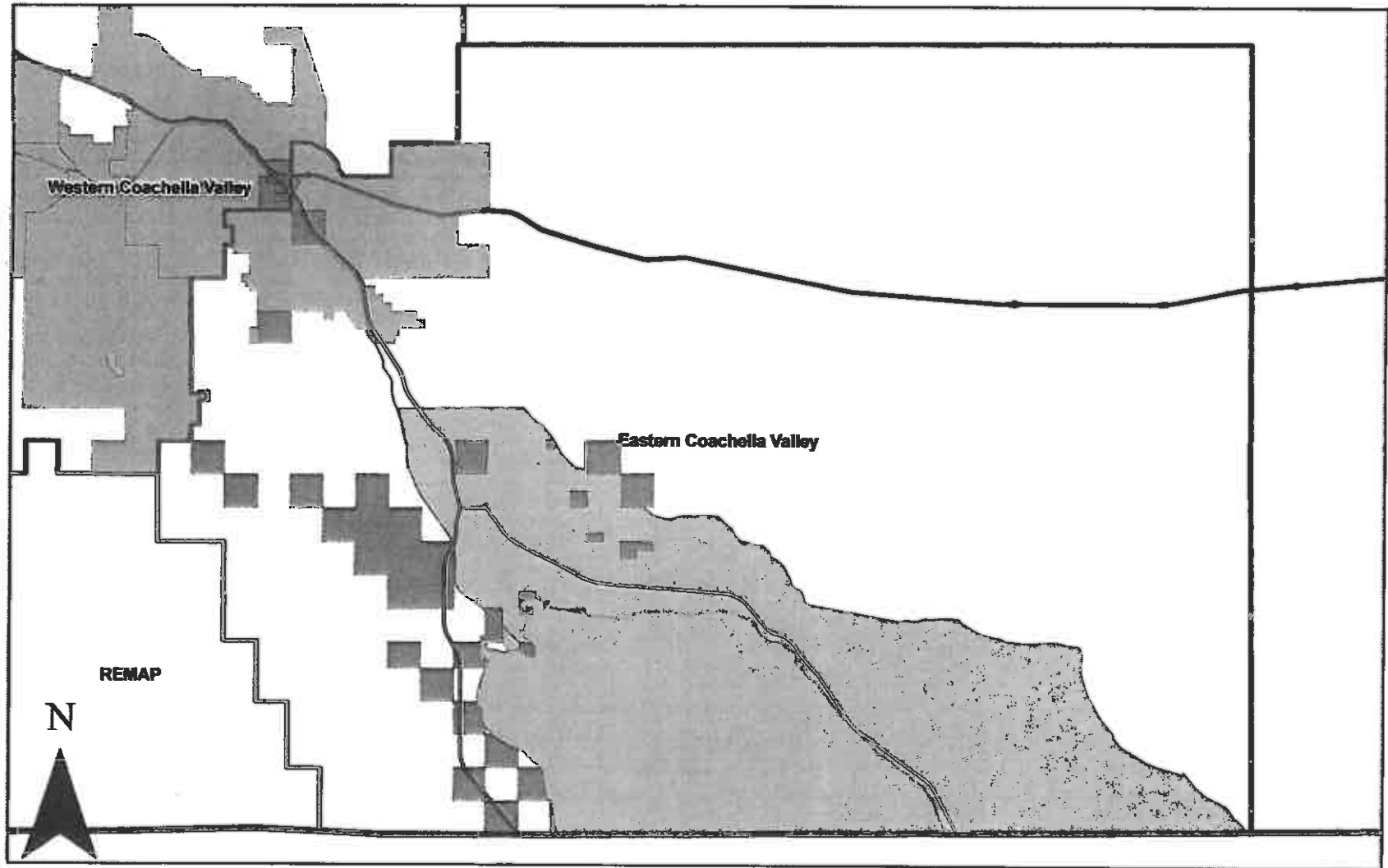


Source: Riverside County; Cal EPA (OEHHA)



 Riverside County Boundary  Area Plan Boundary  Disadvantaged Communities

Area Plans with Disadvantaged Communities (Center)

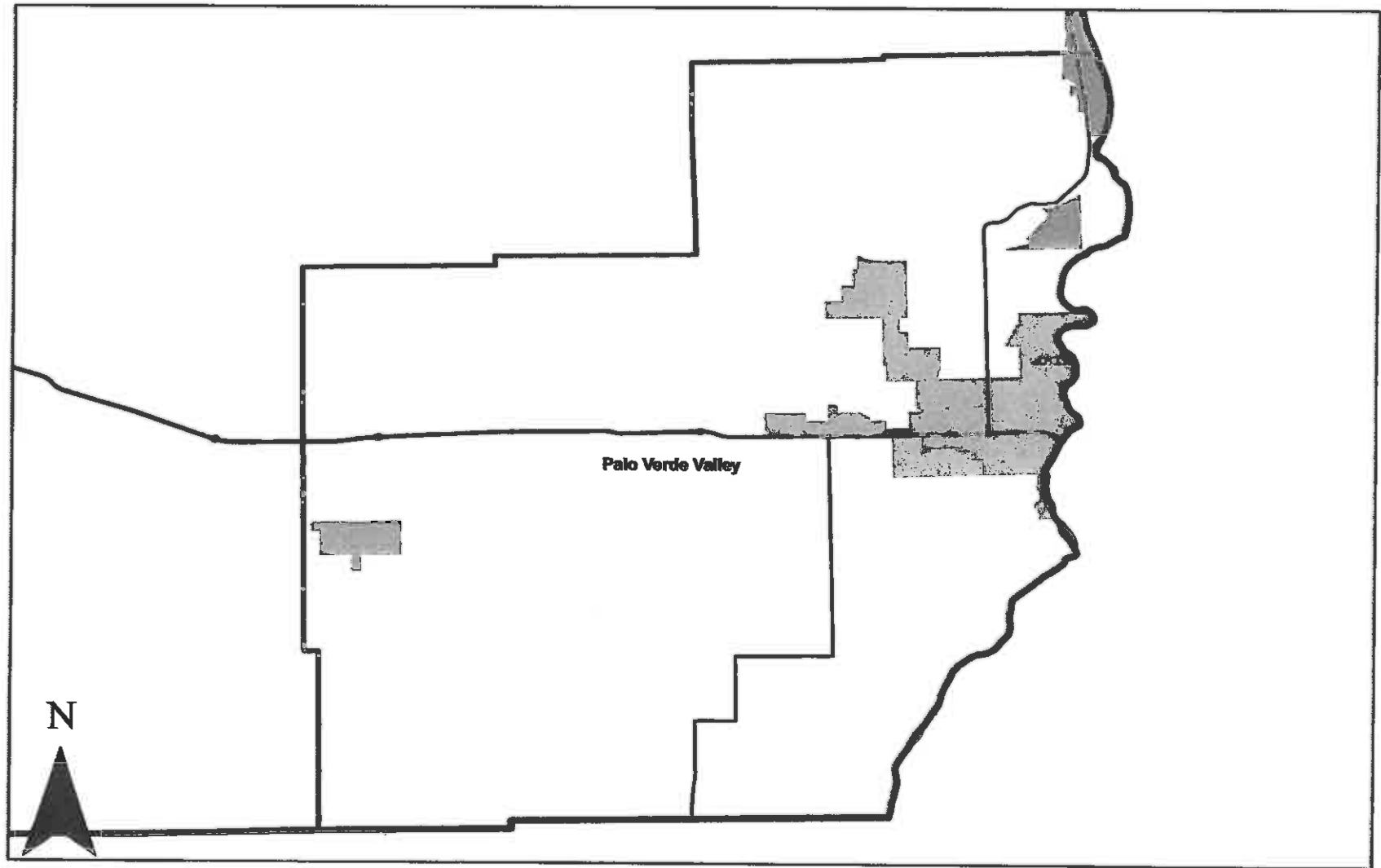


Source: Riverside County; Cal EPA (OEHA)



-  Riverside County Boundary
-  Area Plan Boundary
-  Disadvantaged Communities

Area Plans with Disadvantaged Communities (Center)



Source: Riverside County, Cal EPA (OEHHA)



-  Riverside County Boundary
-  Area Plan Boundary
-  Disadvantaged Communities

**COUNTY OF RIVERSIDE
AIRPORT LAND USE COMMISSION**

STAFF REPORT

AGENDA ITEM: 4.2 (Administrative Item)

HEARING DATE: July 12, 2018

CASE NUMBER: Speculative Nonresidential Multiple Buildings Policy

APPROVING JURISDICTION: Airport Land Use Commission

JURISDICTION CASE NO: Countywide

MAJOR ISSUES: Staff discovered that speculative commercial and industrial projects with multiple buildings on multiple lots (or also proposing multiple lots) required significant additional time to analyze and review, when compared to tenant specified single building commercial/industrial projects. This leads to an increase in the project's true cost of review which needs to be recaptured in order for the ALUC staff function to be financially solvent.

RECOMMENDATION: Staff recommends that the Commission considers the Speculative Nonresidential Multiple Buildings Project policy, and direct staff to pursue any, or none, of the policy options.

PROJECT DESCRIPTION: A proposal to adopt a Speculative Nonresidential Multiple Buildings Project policy and/or fee that will adjust for the extra time needed by staff to review these types of complex cases, or find the project inconsistent because consistency cannot be determined.

PROJECT LOCATION: This policy would be effective for projects located within the airport influence area countywide (including cities), except Compatibility Zone E and March's Compatibility Zone D, where non-residential intensity is not restricted.

LAND USE PLAN: Airport Land Use Compatibility Plans Countywide

- a. Airport Influence Area: All
- b. Land Use Policy: Non-Residential Intensity
- c. Noise Levels: N/A

BACKGROUND:

Issue: Speculative commercial and industrial projects that contain multiple buildings and lots require significant additional time for staff to review and analyze hypothetical building intensity assumptions

(when compared to projects that are tenant use specified). The main issue with speculative commercial/industrial buildings is the lack of identifiable tenant uses to accurately calculate building occupancy, which is used to determine consistency with average and single acre intensity criteria of the applicable compatibility zone. Without identifiable tenant uses, staff has to create and analyze multiple hypothetical scenarios with a variety of different commercial/industrial uses in order to calculate occupancy. This ambiguity is increased significantly when the project proposes multiple buildings, on multiple lots, over multiple compatibility zones. This complex calculation has to be redone every time the applicant makes a change in the design, size or location of the buildings or lots which occurs during the staff analysis process. Therefore, a policy is required to address the escalating time it takes staff to review these types of projects.

Analysis: In order to create a policy, staff analyzed previous speculative commercial/industrial cases that went to Commission between 2016 and now. Staff also reviewed tenant specified commercial/industrial cases in order to establish a benchmark of the time required to review tenant specified projects.

Table 1 – Speculative Nonresidential Buildings

| Case No. | No. Hours* | AIA Zone | No. Bldgs | Total Bldg Sq.Ft. | No. Lots | Case Description |
|-------------|------------|----------|-----------|-------------------|----------|--|
| ZAP1067BD16 | 54 | A, B1 | 17 | 153,815 | 1 | Multi commercial and industrial center |
| ZAP1286MA17 | 57 | C1 | 11 | 162,041 | 11 | Multi industrial center |
| ZAP1079FV18 | 79 | B1, C, D | 15 | 138,495 | 15 | Multi commercial center |

Table 2 – Tenant Specific Nonresidential Building

| Case No. | No. Hours* | AIA Zone | No. Bldgs | Total Bldg Sq.Ft. | No. Lots | Case Description |
|-------------|------------|----------|-----------|-------------------|----------|----------------------------|
| ZAP1066BD16 | 13 | B1, C, D | 2 | 28,140 | 1 | Car dealer auto repair |
| ZAP1069BD17 | 13 | D, E | 8 | 93,681 | 1 | Self-storage facility |
| ZAP1045PS17 | 19 | B1 | 1 | 3,465 | 1 | Contractor's storage yard |
| ZAP1078RI16 | 16 | E | 2 | 41,311 | 2 | Car dealership and repair |
| ZAP1275MA17 | 10 | C2 | 1 | 1,857 | 1 | Jack in the Box restaurant |

* The number of total hours spent by all ALUC staff persons.

As indicated in the tables above, the number of hours spent on speculative cases were two or three times as much as the time spent on tenant specified cases.

An example of a complex speculative case would be ZAP1079FV18, which was recently found consistent in May, 2018, after going to the Commission three times. The reason why it was continued so many times and so many hours were spent on the project was due to several factors:

- the speculative nature of the project required staff to go into great detail in their occupancy intensity calculations in hypothetical scenarios in the absence of a known tenant or use,
- each of these hypothetical calculations had to be applied to 15 different buildings,
- each of these hypothetical calculations had to be applied on a lot-by-lot basis for 15 lots to

- determine average acre intensity,
- each of these hypothetical calculations had to be analyzed under three different Compatibility Zone criteria, and
- upon reviewing staff's hypothetical scenarios, the applicant would propose new revisions in the usage of the building that would require staff to recalculate.

An example of a simple tenant specific case would be any of the cases identified in Table 2, as each of those cases resulted in a small fraction of the time spent on a speculative case. All of these cases were tenant specified which allowed staff to accurately and quickly calculate the building's floor use area. For example, ZAP1066BD16 was a proposal to construct a Fiesta Ford Quick Lane and Collision Center auto repair facility. The application included floor plans that identified exactly how the 28,140 square foot building was going to be used (i.e. 17,925 square foot service repair area, 244 square foot office area, 1,510 square foot customer area, and 7831 square foot storage area). This allowed staff to quickly calculate the project's average and single acre intensity and determine that the project was consistent with the Compatibility Zone C and D intensity criteria. (No buildings were proposed in the Zone B1 portion.)

The flat fee structure used by the ALUC is based on recapturing the cost of processing these types of non-speculative cases. The ALUC fee table below identifies the different fee amounts for each project case type. The ALUC already requires some additional project specific fees.

SCHEDULE OF DEVELOPMENT REVIEW FEES (effective 7/1/17)

| CASE TYPE | ALL OTHERS | | MARCH ZONE E | |
|---|--------------------|--------------------|--------------------|--------------------|
| | INITIAL REVIEW FEE | AMENDED REVIEW FEE | INITIAL REVIEW FEE | AMENDED REVIEW FEE |
| General Plan or General Plan Element (County or City) | \$3,696 | \$2,458 | \$2,310 | \$1,537 |
| Community Plan or Area Plan (County or City) | \$3,696 | \$2,402 | \$2,310 | \$1,502 |
| (New) Specific Plan or Master Plan | \$3,261 | N/A | \$2,038 | N/A |
| Specific Plan Amendment | N/A | \$2,181 | N/A | \$1,363 |
| General Plan Amendment | \$1,331 | N/A | \$832 | N/A |
| Change of Zone or Ordinance Amendment | \$1,331 | \$887 | \$832 | \$554 |
| Non-Impact Legislative Project (as determined by staff) | \$420 | N/A | \$375 | N/A |
| Tract Map | \$1,515 | \$1,017 | \$947 | \$636 |
| Conditional Use Permit or Public Use Permit | \$1,331 | \$887 | \$832 | \$554 |
| Plot Plan, Development Review Plan or Design Review | \$1,331 | \$887 | \$832 | \$554 |
| Parcel Map | \$1,331 | \$887 | \$832 | \$554 |
| Environmental Impact Report* | \$3,050 | \$2,033 | \$1,906 | \$1,271 |
| Other Environmental Assessments* | \$1,671 | \$1,109 | \$1,044 | \$693 |
| Building Permit or Tenant Improvement | \$573 | \$389 | \$359 | \$243 |

PROJECT SPECIFIC FEES (in addition to the above fees)

| | | | | |
|---|---------|---------|---------|---------|
| Location in APZ I or II of March AIA | \$2,500 | \$2,500 | N/A | N/A |
| Large Commercial Solar Project (Energy Generation Facility) | \$3,000 | \$3,000 | \$3,000 | \$3,000 |
| Heliports/Helicopter Landing Sites | \$1,000 | \$1,000 | \$1,000 | \$1,000 |

The proposed Nonresidential Speculative Project Fee would be a new project specific fee, an additional amount to the project case type fee and it would be listed under the existing category of additional “project specific fees”. Other project specific fees includes: Airport Protection Zones I and II of March Airport Influence Area, large scale commercial solar projects, and for heliports/helipads.

Recommendation: Staff recommends several alternatives for the Commission to consider.

1. **Find the Nonresidential Speculative project inconsistent.** The proposed policy would be:
“Projects would be determined to be inconsistent if consistency cannot be identified by calculation of intensity of use”.
2. **No changes to the fee schedule with a general retail intensity applied.** The proposed policy would be:
“Speculative projects that cannot identify a use or user on a floor plan will be analyzed and reviewed at a conservative general retail intensity of 1 person per 60 square feet or such other retail intensity level as has been adopted within the applicable Compatibility Plan, and no assembly-type uses or restaurants would be permitted”.
3. **Create an additional Project Specific fee for speculative nonresidential cases in Zones B, C and D.** The proposed policy would be:
“Projects that propose multiple speculative commercial and/or industrial buildings (4 or more) in Zones B, C, and D that do not identify the use of the floor area require a Project Specific Fee to recapture staff’s time and cost to review and analyze multiple hypothetical building intensity assumptions. The amount of the fee is \$8,210.00”

This fee will cover the cost of the additional time that is required by staff to calculate intensities for unidentified uses. It is estimated that the amount of case review time between speculative (79 hours) and tenant specific (19 hours) projects involving multiple buildings is approximately Sixty (60) hours.

This cost recovery calculation is based on the following:

- a. The analysis of the 3 speculative cases over a 3 year period results in an average review time of 63 hours, which would amount to an additional one-time fee of \$8,210.00 as recommended by the Transportation Land Management Agency (TLMA) Administrative Services Manager.
- b. Staff’s fully burdened cost rate (as identified by the TLMA Administrative Services Manager) for 60 hours equals \$8,820.00.

**AIRPORT LAND USE COMMISSION
MINUTE ORDER JUNE 14, 2018
RIVERSIDE MEETING**

A regular scheduled meeting of the Airport Land Use Commission was held on June 14, 2018 at the Riverside County Administrative Center, Board Chambers.

COMMISSIONERS PRESENT: Steve Manos, Chairman
Russell Betts
Arthur Butler
John Lyon
Steven Stewart
Richard Stewart
Gary Youmans

COMMISSIONERS ABSENT: None

STAFF PRESENT: Simon Housman, ALUC Director
John Guerin, Principal Planner
Paul Rull, Urban Regional Planner IV
Barbara Santos, ALUC Commission Secretary
Raymond Mistica, ALUC Counsel

OTHERS PRESENT: Matthew Fagan, Other Interested Person
Nancy Gutierrez, City of Hemet
Robin Lowe, Hemet West Mobile Home Park
Harvey Marcell, Marcell Associates
Lisette Sanchez-Mendoza, City of Murrieta

**AIRPORT LAND USE COMMISSION
MINUTE ORDER JUNE 14, 2018
RIVERSIDE MEETING**

I. **AGENDA ITEM 2.1:** ZAP1302MA18 – Trojan Solar/Southwest Premier Properties, LLC (Representative: Tom Malone/Teresa Harvey) – County of Riverside Permit No. BEL1800836 (Building Electrical Permit). A proposal to establish a 330 kW solar panel system on the rooftop of a 56,000 square foot building used as a cross dock loading platform on a 19.2 acre site located northerly of Placentia Avenue, easterly of Harvill Avenue, westerly of BNSF rail line and I-215 Freeway, and southerly of Walnut Street (Airport Compatibility Zone C2 of the March Air Reserve Base/Inland Port Airport Influence Area). Continued from May 10, 2018.

II. **MAJOR ISSUES**

No glare would occur within the final 2 mile approaches to runway 32 *and* runway 14. Low potential (“green”) level glare would occur outside the final 2 mile approach to runway 32 *and* runway 14 within the closed circuit traffic pattern envelope. FAA Interim Policy for FAA review of Solar Energy System Projects only applies to final approach within 2 miles from the end of the runway.

The Air Force submitted a comment letter dated May 9, 2018, identifying their concerns with the project’s solar glare study regarding their flight paths, which is the reason why the item was continued from the May 10 meeting. Since then, the applicant has revised the study (dated May 18, 2018) and has submitted it to the Air Force for their review and comment.

III. **STAFF RECOMMENDATION**

Staff recommends that the proposed Building Permit be found CONSISTENT, subject to the conditions included herein.

IV. **PROJECT DESCRIPTION**

The applicant proposes to establish a 330 kW solar panel system on the rooftop of a 56,000 square foot building used as a cross dock loading platform on a 19.2 acre site.

The original project to develop a truck terminal distribution facility (ZAP1246MA17) was found consistent by the Commission on May 11, 2017.

CONDITIONS:

1. Any outdoor lighting installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.
2. The following uses/activities are not included in the proposed project and shall be prohibited at this site, in accordance with Note A on Table 4 of the Mead Valley Area Plan.
 - (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
 - (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.

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RIVERSIDE MEETING**

- (c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area.
 - (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
3. The following uses/activities are specifically prohibited at this location: trash transfer stations that are open on one or more sides; recycling centers containing putrescible wastes; construction and demolition debris facilities; wastewater management facilities; incinerators; noise-sensitive outdoor nonresidential uses; and hazards to flight. Children's schools are discouraged.
 4. The following uses/activities are not included in the proposed project, but, if they were to be proposed through a subsequent use permit or plot plan, would require subsequent Airport Land Use Commission review:

Restaurants and other eating establishments; day care centers; health and exercise centers; churches, temples, or other uses primarily for religious worship; theaters.
 5. The attached notice shall be given to all prospective purchasers of the property and tenants of the building, and shall be recorded as a deed notice.
 6. The proposed detention basins on the site (including water quality management basins) shall be designed so as to provide for a maximum 48-hour detention period following the conclusion of the storm event for the design storm (may be less, but not more), and to remain totally dry between rainfalls. Vegetation in and around the detention basins that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping.
 7. March Air Reserve Base must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with Air Base radio communications could result. Sources of electromagnetic radiation include radio wave transmission in conjunction with remote equipment inclusive of irrigation controllers, access gates, etc.
 8. Any revisions to the solar panels will require a new solar glare analysis to ensure that the project does not create significant amounts of glare, and require ALUC review.
 9. In the event that any incidence of glint, glare, or flash affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an incidence, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such glint, glare, or flash. An "incidence" includes any situation that results in an accident, incident, "near-miss," or specific safety complaint regarding an in-flight experience to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of

**AIRPORT LAND USE COMMISSION
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RIVERSIDE MEETING**

the incidence. Suggested measures may include, but are not limited to, reprogramming the alignment of the panels, covering them at the time of day when incidences of glare occur, or wholly removing panels to diminish or eliminate the source of the glint, glare, or flash. For each such incidence made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

10. In the event that any incidence of electrical interference affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an incidence, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such interference. An "incidence" includes any situation that results in an accident, incident, "near-miss," report by airport personnel, or specific safety complaint to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the incidence. For each such incidence made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

V. MEETING SUMMARY

The following staff presented the subject proposal:

Staff Planner: Paul Rull at (951) 955-6893, or e-mail at prull@rivco.org.

No one spoke in favor, neutral or opposition to the project.

VI. ALUC COMMISSION ACTION

The ALUC by a unanimous vote of 7-0 found the project **CONSISTENT**.

VII. CD

The entire discussion of this agenda item can be found on CD and referenced by the meeting time listed below. For a copy of the CD, please contact Barbara Santos, ALUC Commission Secretary, at (951) 955-5132 or E-mail at basantos@rivco.org.

ITEM 2.1: TIME: 9:01 A.M.

**AIRPORT LAND USE COMMISSION
MINUTE ORDER JUNE 14, 2018
RIVERSIDE MEETING**

I. **AGENDA ITEM 3.1:** ZAP1028BA18 – Downing Construction, Inc. (Representative: Marcell & Associates) – City of Banning Case No. DR18-7004 (Design Review). The applicant proposes to construct a two-story 9,320 square foot contractor’s building and storage yard with a 400 square foot fueling area on 1.95 acres located at the terminus of Galleher Way, northerly of Lincoln Street, easterly of San Gorgonio Avenue, and southerly of John Street, the rail line, and Interstate 10 (Airport Compatibility Zone C of the Banning Municipal Airport Influence Area).

II. **MAJOR ISSUES**
None

III. **STAFF RECOMMENDATION**
Staff recommends that the Design Review be found CONDITIONALLY CONSISTENT, subject to the conditions included herein, and such additional conditions as may be required by the Federal Aviation Administration Obstruction Evaluation Service.

STAFF RECOMMENDED AT HEARING
CONSISTENT subject to updated conditions submitted at the meeting which includes FAA OES conditions

IV. **PROJECT DESCRIPTION**
The applicant proposes to construct a two-story 9,320 square foot contractor’s building and storage yard with a 400 square foot fueling area on 1.95 acres.

CONDITIONS:

1. Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.
2. The following uses shall be prohibited:
 - a. Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
 - b. Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
 - c. Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, production of cereal grains, sunflower, and row crops, artificial marshes, wastewater management facilities, composting operations, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)

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RIVERSIDE MEETING**

- d. Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
 - e. Children's schools, day care centers, libraries, hospitals, nursing homes, highly noise-sensitive outdoor nonresidential uses, and hazards to flight.
3. The attached notice shall be given to all prospective purchasers and/or tenants of the property, and shall be recorded as a deed notice.
 4. Any new detention basins on the site shall be designed so as to provide for a maximum 48-hour detention period following the conclusion of the storm event for the design storm (may be less, but not more), and to remain totally dry between rainfalls. Vegetation in and around the detention basins that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping.
 5. The evaluated project consists of a 9,320 square foot building, including 5,847 square feet of office area, 2,411 square feet of shop area, and 1,062 square feet of storage area. Any proposal to use the building for retail or assembly occupancies will require an amended review by the Airport Land Use Commission.
 6. Noise attenuation measures shall be incorporated into the design of the office portion of the building, to the extent such measures are necessary to ensure that interior noise levels from aircraft operations are at or below 45 CNEL.

The following conditions were added at the ALUC hearing pursuant to the terms of the FAA Obstruction Evaluation Service letter issued on June 13, 2018 for Aeronautical Study No. 2018-AWP-8510-OE.

7. **The Federal Aviation Administration has conducted an aeronautical study of the proposed project (Aeronautical Study No. 2018-AWP-8510-OE) and has determined that neither marking nor lighting of the structure(s) is necessary for aviation safety. However, if marking and/or lighting for aviation safety are accomplished on a voluntary basis, such marking and/or lighting (if any) shall be installed in accordance with FAA Advisory Circular 70/7460-1 L Change 1 and shall be maintained in accordance therewith for the life of the project.**
8. **The proposed structure(s) shall not exceed a height of 30 feet above ground level and a maximum elevation at top point of 2,338 feet above mean sea level.**
9. **The maximum height and top point elevation specified above shall not be amended without further review by the Airport Land Use Commission and the Federal Aviation Administration; provided, however, that reduction in structure height or elevation shall not require further review by the Airport Land Use Commission.**
10. **Temporary construction equipment used during actual construction of the structure(s) shall not exceed 30 feet in height and a maximum elevation of 2,338 feet above mean sea level, unless separate notice is provided to the Federal Aviation Administration through**

**AIRPORT LAND USE COMMISSION
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the Form 7460-1 process.

11. **Within five (5) days after construction reaches its greatest height, FAA Form 7460-2 (Part II), Notice of Actual Construction or Alteration, shall be completed by the project proponent or his/her designee and e-filed with the Federal Aviation Administration. (Go to <https://oeaza.faa.gov> for instructions.) This requirement is also applicable in the event the project is abandoned or a decision is made not to construct the structure(s).**

V. MEETING SUMMARY

The following staff presented the subject proposal:

Staff Planner: Paul Rull at (951) 955-6893, or e-mail at prull@rivco.org

The following spoke in favor of the project:

Harvey Marcell, Marcell Associates, P.O. Box 371, Banning, CA 92220

No one spoke in neutral or opposition to the project.

VI. ALUC COMMISSION ACTION

The ALUC by a unanimous vote of 7-0 found the project **CONSISTENT** subject to updated conditions submitted at the meeting which includes FAA OES conditions.

VII. CD

The entire discussion of this agenda item can be found on CD and referenced by the meeting time listed below. For a copy of the CD, please contact Barbara Santos, ALUC Commission Secretary, at (951) 955-5132 or E-mail at basantos@rivco.org.

ITEM 3.1: TIME: 9:07 A.M.

**AIRPORT LAND USE COMMISSION
MINUTE ORDER JUNE 14, 2018
RIVERSIDE MEETING**

I. **AGENDA ITEM 3.2:** ZAP1314MA18 – SCS Energy Solutions (Representative: Charles George) – City of Moreno Valley Case No. PEN18-0098 (Amended Plot Plan). A proposal to construct 7 rows of carport covers totaling 43,869 square feet and establish a rooftop 694.96 kW solar panel system above existing uncovered parking spaces within a 4.1-acre property (Assessor's Parcel Numbers 297-150-013 and 297-150-014) with an address of 22690 Cactus Avenue, located on the northwest corner of Cactus Avenue and Veterans Way, southerly of Goldencrest Drive. (Airport Compatibility Zone C1 of the March Air Reserve Base/Inland Port Airport Influence Area).

II. **MAJOR ISSUES**

No glare would occur within the final 2 mile approach to runway 14. However, there is low potential ("green") level glare within the final 2 mile approach to runway 32. FAA Interim Policy for FAA review of Solar Energy System Projects only applies to final approach within 2 miles from the end of the runway. Air Force/March Air Reserve Base officials have reviewed this proposal and found it acceptable.

III. **STAFF RECOMMENDATION**

Staff recommends that the proposed Amended Plot Plan be found CONSISTENT, subject to the conditions included herein.

IV. **PROJECT DESCRIPTION**

The applicant proposes to construct 7 rows of carport covers totaling 43,869 square feet and establish a rooftop 694.96 kW solar panel system above uncovered parking spaces located at an existing 4.1 acre commercial office center.

CONDITIONS:

1. Any outdoor lighting installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.
2. The following uses/activities are not included in the proposed project and shall be prohibited at this site, in accordance with Note A on Table 4 of the Mead Valley Area Plan.
 - a. Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
 - b. Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
 - c. Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area.
 - d. Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

**AIRPORT LAND USE COMMISSION
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3. The following uses/activities are specifically prohibited at this location: trash transfer stations that are open on one or more sides; recycling centers containing putrescible wastes; construction and demolition debris facilities; wastewater management facilities; incinerators; noise-sensitive outdoor nonresidential uses; and hazards to flight. Children's schools are discouraged.
4. The following uses/activities are not included in the proposed project, but, if they were to be proposed through a subsequent use permit or plot plan, would require subsequent Airport Land Use Commission review:

Restaurants and other eating establishments; day care centers; health and exercise centers; churches, temples, or other uses primarily for religious worship; theaters.
5. The attached notice shall be given to all prospective purchasers of the property and tenants of the building, and shall be recorded as a deed notice.
6. Any proposed detention basins on the site (including water quality management basins) shall be designed so as to provide for a maximum 48-hour detention period following the conclusion of the storm event for the design storm (may be less, but not more), and to remain totally dry between rainfalls. Vegetation in and around the detention basins that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping.
7. March Air Reserve Base must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with Air Base radio communications could result. Sources of electromagnetic radiation include radio wave transmission in conjunction with remote equipment inclusive of irrigation controllers, access gates, etc.
8. Any revisions to the solar panels will require a new solar glare analysis to ensure that the project does not create significant amounts of glare, and require ALUC review.
9. In the event that any incidence of glint, glare, or flash affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an incidence, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such glint, glare, or flash. An "incidence" includes any situation that results in an accident, incident, "near-miss," or specific safety complaint regarding an in-flight experience to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the incidence. Suggested measures may include, but are not limited to, reprogramming the alignment of the panels, covering them at the time of day when incidences of glare occur, or wholly removing panels to diminish or eliminate the source of the glint, glare, or flash. For each such incidence made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

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10. In the event that any incidence of electrical interference affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an incidence, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such interference. An "incidence" includes any situation that results in an accident, incident, "near-miss," report by airport personnel, or specific safety complaint to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the incidence. For each such incidence made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

V. MEETING SUMMARY

The following staff presented the subject proposal:

Staff Planner: Paul Rull at (951) 955-6893, or e-mail at prull@rivco.org

No one spoke in favor, neutral or opposition to the project.

VI. ALUC COMMISSION ACTION

The ALUC by a unanimous vote of 7-0 found the project **CONSISTENT**.

VII. CD

The entire discussion of this agenda item can be found on CD and referenced by the meeting time listed below. For a copy of the CD, please contact Barbara Santos, ALUC Commission Secretary, at (951) 955-5132 or E-mail at basantos@rivco.org.

ITEM 3.2: TIME: 9:13 A.M.

**AIRPORT LAND USE COMMISSION
MINUTE ORDER JUNE 14, 2018
RIVERSIDE MEETING**

- I. **AGENDA ITEM 3.3:** ZAP1313MA18 – MTC1/Mike Naggar and Associates (Representative: Carissa Hainsworth) – City of Menifee Case No. Change of Zone No. 2018-0094. A proposal to change the zoning of a one-acre parcel (Assessor's Parcel No. 331-140-010) located on the east side of Sherman Road, southerly of Ethanac Road and northerly of McLaughlin Road, from Rural Residential (R-R) to Manufacturing-Heavy (M-H). The parcel is part of a larger area being assembled for development of a warehousing/industrial project. (Airport Compatibility Zones D and E of the March Air Reserve Base/Inland Port Airport Influence Area).
- II. **MAJOR ISSUES**
None
- III. **STAFF RECOMMENDATION**
Staff recommends that the Commission find the proposed Zone Change CONSISTENT with the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan.
- IV. **PROJECT DESCRIPTION**
The applicant is proposing to change the zoning of a one-acre parcel located in the City of Menifee (Assessor's Parcel No. 331-140-010) from R-R (Rural Residential) to Manufacturing – Heavy (M-H). The parcel is part of a larger area being assembled for development of a warehousing/industrial project. (The larger surrounding area is part of the Menifee North Specific Plan and is subject to Specific Plan zoning that is based upon the M-H zone.)
- V. **MEETING SUMMARY**
The following staff presented the subject proposal:
Staff Planner: John Guerin at (951) 955-0982, or e-mail at jguerin@rivco.org

No one spoke in favor, neutral or opposition to the project.
- VI. **ALUC COMMISSION ACTION**
The ALUC by a unanimous vote of 7-0 found the project CONSISTENT.
- VII. **CD**
The entire discussion of this agenda item can be found on CD and referenced by the meeting time listed below. For a copy of the CD, please contact Barbara Santos, ALUC Commission Secretary, at (951) 955-5132 or E-mail at basantos@rivco.org.

ITEM 3.3: TIME: 9:20 A.M.

**AIRPORT LAND USE COMMISSION
MINUTE ORDER JUNE 14, 2018
RIVERSIDE MEETING**

I. **AGENDA ITEM 3.4:** ZAP1080FV18 – JBL Investments c/o MDMG Inc. (Representative: MFCS, Inc.) – County of Riverside Planning Case Nos. GPA170001 (General Plan Amendment), SP106 A17 (Specific Plan Amendment), CZ7347 (Change of Zone), TR37078 (Tentative Tract Map), PP170003 (Plot Plan). The applicant is proposing to establish 163 single family detached condominium units on 30.62 acres and a tentative tract map to divide the site into 8 lots located westerly of Winchester Road/Highway 79, northerly of Jean Nicholas Road, and easterly of Kooden Road. The proposed project requires a general plan amendment to the site's land use designation on the Southwest Area Plan and an amendment to its designation on the Dutch Village Specific Plan from Commercial Retail, Commercial Office, Light Industrial, and Open Space Conservation to High Density Residential as well as various specific plan text changes to reflect changes in the land use designation and to provide additional information regarding development with the Specific Plan Amendment area, and a change of zone from Scenic Highway Commercial, Commercial Office, Industrial Park and Open Area Combining Zone-Residential Developments to General Residential zone (Airport Compatibility Zone E of the French Valley Airport Influence Area).

II. **MAJOR ISSUES**
None

III. **STAFF RECOMMENDATION**
Staff recommends that the Commission find the proposed General Plan Amendment, Specific Plan Amendment and Change of Zone CONSISTENT with the 2007 French Valley Airport Land Use Compatibility Plan as amended in 2011, and find the proposed Tentative Tract Map and Plot Plan CONSISTENT, subject to the conditions included herein.

IV. **PROJECT DESCRIPTION**
The applicant is proposing to establish 163 single family detached condominium units on 30.62 acres and a tentative tract map to divide the site into 8 lots. The proposed project requires a general plan amendment to the site's land use designation on the Southwest Area Plan and an amendment to its designation on the Dutch Village Specific Plan from Commercial Retail, Commercial Office, Light Industrial, and Open Space Conservation to High Density Residential, as well as various specific plan text changes to reflect changes in the land use designation and to provide additional information regarding development within the Specific Plan Amendment area, and a change of zone from Scenic Highway Commercial, Commercial Office, Industrial Park and Open Area Combining Zone-Residential Developments to General Residential zone.

CONDITIONS:

1. Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky and shall comply with Riverside County Ordinance No. 655. Outdoor lighting shall be downward facing.
2. The review of this Tentative Tract Map is based on the proposed uses and activities noted in the project description. The following uses/activities are not included in the proposed project and shall be prohibited at this site as hazards to flight.
 - a. Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual

**AIRPORT LAND USE COMMISSION
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RIVERSIDE MEETING**

approach slope indicator.

- b. Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
 - c. Any use which would generate smoke or water vapor (such as incinerators) or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area.
 - d. Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
3. The attached notice shall be provided to all potential purchasers and tenants of the proposed dwelling units.
 4. The following uses/activities are specifically prohibited at this location due to their propensity to attract birds: aquaculture; trash transfer stations that are open on one or more sides; recycling centers containing putrescible wastes; artificial marshes; and wastewater management facilities.
 5. Any proposed detention basin or facilities shall be designed so as to provide for a detention period for the design storm that does not exceed 48 hours and to remain totally dry between rainfalls. Vegetation in and around such facilities that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping.
 6. Prior to building permit issuance, additional Federal Aviation Administration review may be required for buildings exceeding 48 feet in height or a maximum top point elevation of 1,496 feet above mean sea level.
 7. The Federal Aviation Administration has conducted an aeronautical study of the proposed project (Aeronautical Study Nos. 2018-AWP-9221-OE, and 2018-AWP-9222-OE) and has determined that neither marking nor lighting of the structure(s) is necessary for aviation safety. However, if marking and/or lighting for aviation safety are accomplished on a voluntary basis, such marking and/or lighting (if any) shall be installed in accordance with FAA Advisory Circular 70/7460-1 L Change 1 and shall be maintained in accordance therewith for the life of the project.
 8. The proposed buildings shall not exceed a height of 48 feet above ground level and a maximum elevation at top point of 1,496 feet above mean sea level.
 9. The maximum height and top point elevation specified above shall not be amended without further review by the Airport Land Use Commission and the Federal Aviation Administration; provided, however, that reduction in structure height or elevation shall not require further review by the Airport Land Use Commission.

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10. Temporary construction equipment used during actual construction of the structure(s) shall not exceed 48 feet in height and a maximum elevation of 1,496 feet above mean sea level, unless separate notice is provided to the Federal Aviation Administration through the Form 7460-1 process.
11. Within five (5) days after construction of any individual building reaches its greatest height, FAA Form 7460-2 (Part II), Notice of Actual Construction or Alteration, shall be completed by the project proponent or his/her designee and e-filed with the Federal Aviation Administration. (Go to <https://ocaaa.faa.gov> for instructions.) This requirement is also applicable in the event the project is abandoned or a decision is made not to construct the applicable structures(s).

V. MEETING SUMMARY

The following staff presented the subject proposal:

Staff Planner: Paul Rull at (951) 955-6893, or e-mail at prull@rivco.org

The following spoke in favor of the project:

Matthew Fagan, Other Interested Person, 42011 Avenida Vista, Temecula, CA 92591

No one spoke in neutral or opposition to the project.

VI. ALUC COMMISSION ACTION

The ALUC by a unanimous vote of 7-0 found the project **CONSISTENT**.

VII. CD

The entire discussion of this agenda item can be found on CD and referenced by the meeting time listed below. For a copy of the CD, please contact Barbara Santos, ALUC Commission Secretary, at (951) 955-5132 or E-mail at basantos@rivco.org.

ITEM 3.4 TIME: 9:23 A.M.

**AIRPORT LAND USE COMMISSION
MINUTE ORDER JUNE 14, 2018
RIVERSIDE MEETING**

- I. **AGENDA ITEM 3.5: ZAP1082FV18 – City of Murrieta** – City of Murrieta Case Nos. DCA-2017-1343 and 2017-1347 (Development Code Amendment). The City is proposing to amend various sections of its Municipal Development Code in order to address previous errors, omissions and inconsistencies, and to be consistent with state law. These amended sections include: purpose and effect of development code, land use table, off-street parking, child day care, recycling facilities, accessory dwelling units, conditional use permits, development plan permits, permit implementation time limits, tentative map expirations, and definitions (Airport Compatibility Zones B1, C, D, and E of the French Valley Airport Influence Area).
- II. **MAJOR ISSUES**
None
- III. **STAFF RECOMMENDATION**
Staff recommends that the Commission find the Development Code Amendments CONSISTENT with the 2007 French Valley Airport Land Use Compatibility Plan, as amended in 2011.
- IV. **PROJECT DESCRIPTION**
The City of Murrieta is proposing to amend various sections of its Municipal Development Code in order to address previous errors, omissions and inconsistencies, and to be consistent with state law. The amended sections include: Purpose and Effect of Development Code, Land Use table, Off-street Parking, Child Day Care, Recycling Facilities, Accessory Dwelling Units, Conditional Use Permits, Development Plan Permits, Permit Implementation time limits, Tentative Map expirations, and Definitions.
- V. **MEETING SUMMARY**
The following staff presented the subject proposal:
Staff Planner: Paul Rull at (951) 955-6893, or e-mail at prull@rivco.org
- The following spoke in favor of the project:
Lisette Sanchez-Mendoza, City of Murrieta, CA
- No one spoke in neutral or opposition to the project.
- VI. **ALUC COMMISSION ACTION**
The ALUC by a unanimous vote of 7-0 found the project CONSISTENT.
- VII. **CD**
The entire discussion of this agenda item can be found on CD and referenced by the meeting time listed below. For a copy of the CD, please contact Barbara Santos, ALUC Commission Secretary, at (951) 955-5132 or E-mail at basantos@rivco.org.
- ITEM 3.5: TIME: 9:27 A.M.

**AIRPORT LAND USE COMMISSION
MINUTE ORDER JUNE 14, 2018
RIVERSIDE MEETING**

I. **AGENDA ITEM 3.6:** ZAP1081FV18 – JJB Silverhawk LP/Hamann Construction (Representative: Linda Richardson) – County Planning Case Nos. PP26340, PP26341, PP26342, PP26343 (Plot Plans). A proposal to develop “Silverhawk Center,” consisting of four industrial buildings with a total gross floor area of 85,931 square feet to be located on the north side of Commerce Court, easterly of its intersection with Townview Avenue and westerly of its intersection with Calistoga Drive in the unincorporated community of French Valley. PP26340 proposes a 20,474 square foot building on APN 957-371-008. PP26341 proposes a 16,236 square foot building on APN 957-371-009. PP26342 proposes a 27,379 square foot building on APN 957-371-010. PP26343 proposes a 21,842 square foot building on APN 957-371-011. (Airport Compatibility Zones B1 and C of the French Valley Airport Influence Area).

II. **MAJOR ISSUES**

The building proposed through PP 26340 would have exceeded the average intensity criteria for Compatibility Zone B1, based on the applicant’s initial proposed allocation of 50 percent manufacturing use, 25 percent office use, and 25 percent warehousing use. The applicant team subsequently amended the allocation of uses within the building, such that 73 percent of the building will be for warehousing uses. Staff was initially concerned that the plot plan referenced “vegetated retention basins,” but the applicant team has clarified that the stormwater management bioretention basins will drawdown within 48 hours and that vegetation will be low and drought tolerant.

III. **STAFF RECOMMENDATION**

Staff recommends that PP26340 and PP26341, as amended, and PP 26342 and PP26343, as proposed, be found CONSISTENT with the 2007 French Valley Airport Land Use Compatibility Plan, as amended in 2011.

IV. **PROJECT DESCRIPTION**

The applicant proposes to develop “Silverhawk Center,” consisting of four industrial buildings with a total gross floor area of 85,931 square feet. Plot Plan No. 26340 proposes a 20,474 square foot building on APN 957-370-008. Plot Plan No. 26341 proposes a 16,236 square foot building on APN 957-370-009. Plot Plan No. 26342 proposes a 27,379 square foot building on APN 957-370-010. Plot Plan No. 26343 proposes a 21,842 square foot building on APN 957-370-011.

CONDITIONS:

The following conditions shall be applied to each of the proposed Plot Plans:

1. Any outdoor lighting installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky, and shall comply with the requirements of Riverside County Ordinance No. 655, as applicable. Outdoor lighting shall be downward facing.
2. The following uses/activities are not included in the proposed project and shall be prohibited at this site:
 - a. Any use or activity which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.

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- b. Any use or activity which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
 - c. Any use or activity which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, production of cereal grains, sunflower, and row crops, composting operations, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)
 - d. Any use or activity which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
 - e. Children's schools, day care centers, libraries, hospitals, skilled nursing and care facilities, highly noise sensitive outdoor nonresidential uses, and hazards to flight.
3. The attached "Notice of Airport in Vicinity" shall be provided to all prospective purchasers of the lots and tenants or lessees of the buildings.
 4. The proposed detention or retention basin(s) on the site shall be designed so as to provide for a maximum 48-hour detention period following the conclusion of the storm event for the design storm (may be less, but not more), and to remain totally dry between rainfalls. Vegetation in and around the detention basin(s) that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping. Trees around the basin(s) shall not form a contiguous canopy and shall not produce seeds, fruit, or berries.
 5. Noise attenuation measures shall be incorporated into the design of the office areas of the proposed buildings, to the extent such measures are necessary to ensure that interior noise levels from aircraft operations are at or below 45 CNEL.

In addition to Condition Nos. 1 through 5 above, the following additional conditions shall be applied to Plot Plan No. 26340:

6. Prior to issuance of building permits, the landowner shall convey an avigation easement to the County of Riverside as owner of French Valley Airport. Contact the Riverside County Economic Development Agency – Aviation Division at (951) 955-9722 for additional information.
7. This building may be utilized for office, manufacturing, and warehousing uses; however, not less than 12,274 square feet (60 percent of total square footage) of the building shall be limited to warehousing uses only.
8. In addition to the prohibited uses listed in Condition No. 2 above, the following uses are

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prohibited due to the location of the property in Compatibility Zone B1: places of worship; aboveground bulk storage of hazardous materials and/or more than 6,000 gallons of flammable materials; critical community infrastructure facilities.

In addition to Condition Nos. 1 through 5 above, the following additional conditions shall be applied to Plot Plan No. 26341:

6. Prior to issuance of building permits, the landowner shall convey an aviation easement to the County of Riverside as owner of French Valley Airport. Contact the Riverside County Economic Development Agency – Aviation Division at (951) 955-9722 for additional information.
7. This building may be utilized for office, manufacturing, and warehousing uses.
8. In addition to the prohibited uses listed in Condition No. 2 above, the following uses are prohibited due to the location of a portion of this property in Compatibility Zone B1: places of worship; aboveground bulk storage of hazardous materials and/or more than 6,000 gallons of flammable materials; critical community infrastructure facilities.

In addition to Condition Nos. 1 through 5 above, the following additional conditions shall be applied to Plot Plan No. 26342:

6. Prior to issuance of building permits, the attached “Notice of Airport in Vicinity” shall be recorded as a deed notice.
7. This building may be utilized for office, manufacturing, and warehousing uses; however, not less than 6,000 square feet (approximately 22 percent of total square footage) of the building shall be limited to warehousing uses only.

In addition to Condition Nos. 1 through 5 above, the following additional condition shall be applied to Plot Plan No. 26343:

6. Prior to issuance of building permits, the attached “Notice of Airport in Vicinity” shall be recorded as a deed notice.

V. MEETING SUMMARY

The following staff presented the subject proposal:

Staff Planner: John Guerin at (951) 955-0982, or e-mail at jguerin@rivco.org

No one spoke in favor, neutral or opposition to the project.

VI. ALUC COMMISSION ACTION

The ALUC by a unanimous vote of 7-0 found the project **CONSISTENT**.

VII. CD

The entire discussion of this agenda item can be found on CD and referenced by the meeting time listed below. For a copy of the CD, please contact Barbara Santos, ALUC Commission Secretary, at (951) 955-5132 or E-mail at basantos@rivco.org.

ITEM 3.6: TIME: 9:33 A.M.

**AIRPORT LAND USE COMMISSION
MINUTE ORDER JUNE 14, 2018
RIVERSIDE MEETING**

I. **AGENDA ITEM 3.7** ZAP1009CO18 – AT&T (Representative: Smartlink LLC, Tyler Kent) – City of Corona Planning Case No. MCUP2018-0001 (Conditional Use Permit). The applicant proposes to construct a 56 foot tall “monotree” wireless communication tower and associated facilities, including a 300 square foot equipment shelter area, on a 6.85 acre parcel located at 545 Alcoa Circle, southerly of Rincon Street, westerly of Lincoln Avenue, and easterly of Smith Avenue. (Note: A 75-foot crane may be in temporary use during construction.) (Airport Compatibility Zone C of the Corona Municipal Airport Influence Area).

II. **MAJOR ISSUES**
None

III. **STAFF RECOMMENDATION**
Staff recommends that the Commission find the Conditional Use Permit CONDITIONALLY CONSISTENT, subject to the conditions included herein, and such additional conditions as may be required by the Federal Aviation Administration Obstruction Evaluation Service.

STAFF RECOMMENDED AT HEARING

CONSISTENT subject to the updated conditions submitted at this meeting which incorporates the revised structure height of 55 feet, and includes conditions from the FAA OES.

IV. **PROJECT DESCRIPTION**

The applicant proposes to construct a 56 foot tall “monotree” wireless communication tower and associated facilities, including a 300 square foot equipment shelter area, on a 6.85 acre parcel. (A 75-foot crane may be in temporary use during construction.)

CONDITIONS:

1. Any outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky.
2. The following uses/activities are not included in the proposed project and shall be prohibited at this site:
 - (a) Any activity which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
 - (b) Any activity which would cause sunlight to be reflected toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach towards a landing at an airport.
 - (c) Any activity which would generate smoke or water vapor, or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, composting operations, production of cereal grains, sunflower, and row crops, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)

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- (d) Any activity which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
 - (e) Children's schools, day care centers, libraries, hospitals, nursing homes, highly noise-sensitive outdoor non-residential uses, and hazards to flight.
3. The attached disclosure notice shall be provided to all potential purchasers of the property, and shall be recorded as a deed notice.

The following conditions were added at the ALUC hearing pursuant to the terms of the FAA Obstruction Evaluation Service letter issued on June 8, 2018 for Aeronautical Study Nos. 2018-AWP-10168 and -10169-OE.

- 4. **The Federal Aviation Administration has conducted an aeronautical study of the proposed project (Aeronautical Study Nos. 2018-AWP-10168 and 10169-OE) and has determined that neither marking nor lighting of the structure(s) is necessary for aviation safety. However, if marking and/or lighting for aviation safety are accomplished on a voluntary basis, such marking and/or lighting (if any) shall be installed in accordance with FAA Advisory Circular 70/7460-1 L Change 1 and shall be maintained in accordance therewith for the life of the project.**
- 5. **The proposed structure shall not exceed a height of 55 feet above ground level and a maximum elevation at top point of 642 feet above mean sea level.**
- 6. **The maximum height and top point elevation specified above shall not be amended without further review by the Airport Land Use Commission and the Federal Aviation Administration; provided, however, that reduction in structure height or elevation shall not require further review by the Airport Land Use Commission.**
- 7. **Temporary construction equipment used during actual construction of the structure(s) shall not exceed 75 feet in height and a maximum elevation of 662 feet above mean sea level, unless separate notice is provided to the Federal Aviation Administration through the Form 7460-1 process.**
- 8. **Within five (5) days after construction of any individual building reaches its greatest height, FAA Form 7460-2 (Part II), Notice of Actual Construction or Alteration, shall be completed by the project proponent or his/her designee and e-filed with the Federal Aviation Administration. (Go to <https://oeaaa.faa.gov> for instructions.) This requirement is also applicable in the event the project is abandoned or a decision is made not to construct the applicable structures(s).**

V. MEETING SUMMARY

The following staff presented the subject proposal:

Staff Planner: Paul Rull at (951) 955-6893, or e-mail at prull@rivco.org

No one spoke in favor, neutral or opposition to the project.

VI. ALUC COMMISSION ACTION

The ALUC by a unanimous vote of 7-0 found the project CONSISTENT subject to the updated conditions submitted at this meeting which incorporates the revised structure height of 55 feet, and includes conditions from the FAA OES.

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VII. CD

The entire discussion of this agenda item can be found on CD and referenced by the meeting time listed below. For a copy of the CD, please contact Barbara Santos, ALUC Commission Secretary, at (951) 955-5132 or E-mail at basantos@rivco.org.

ITEM 3.7: TIME: 9:49 A.M.

**AIRPORT LAND USE COMMISSION
MINUTE ORDER JUNE 14, 2018
RIVERSIDE MEETING**

I. **AGENDA ITEM 3.8:** ZAP1055HR18 – City of Hemet (Representative: Nancy Gutierrez) - City of Hemet Case Nos.: GPA 18-001 (General Plan Amendment) and ZC 18-001 (Zone Change). GPA 18-001 is a proposal to amend the land use designation of up to 1,017 parcels City-wide covering 646 acres. Only 34 of the parcels (covering 46 acres) are presently vacant. ZC 18-001 is a proposal to change the zoning of 8,882 parcels City-wide covering 5,263 acres. 608 of these parcels covering 372 acres require approval of GPA 18-001. The zone change parcels fit into six categories: 172 with zoning that is inconsistent with the General Plan designation; 289 proposed for zoning that would be a better fit for either the General Plan designation or the existing land use or neighborhood character; 2,165 proposed for zoning that correctly reflects existing use and density; 3,728 proposed for addition of a suffix reflecting the average lot size of the tract in which the lot is located; 2,341 proposed for deletion of a "C" County suffix that should have been eliminated at the time of annexation; and 187 proposed for change in zoning district name from Residential Agricultural to Rural Residential. (Airport Compatibility Zones B1, C, D (East and West), and E of the Hemet-Ryan Airport Influence Area).

II. **MAJOR ISSUES**
None anticipated.

III. **STAFF RECOMMENDATION**
Staff recommends that the Commission find the proposed General Plan Amendment and Zone Change CONSISTENT with the Hemet-Ryan Airport Land Use Compatibility Plan.

IV. **PROJECT DESCRIPTION**
GPA 18-001 (General Plan Amendment) is a proposal to amend the land use designations of up to 1,017 parcels City-wide covering 646 acres. Only 34 of the parcels (covering 46 acres) are presently vacant. The General Plan Amendment affects parcels in Airport Compatibility Zones C, D (East and West), and E.

ZC 18-001 (Zone Change) is a proposal to change the zoning of 8,882 parcels City-wide covering 5,263 acres. 608 of these parcels covering 372 acres require approval of GPA 18-001. The zone change parcels fit into six categories: 172 with zoning that is inconsistent with the General Plan designation; 289 proposed for zoning that would be a better fit for either the General Plan designation or the existing land use or neighborhood character; 2,165 proposed for zoning that correctly reflects existing use and density; 3,728 proposed for addition of a suffix reflecting the average lot size of the tract in which the lot is located; 2,341 proposed for deletion of a "C" County suffix not eliminated at the time of annexation; and 187 proposed for change in zoning district name from Residential Agricultural to Rural Residential. The zone change affects parcels in Airport Compatibility Zones B1, B2, C, D (East and West), and E.

V. **MEETING SUMMARY**

The following staff presented the subject proposal:

Staff Planner: John Guerin at (951) 955-0982, or e-mail at jguerin@rivco.org

The following spoke in favor of the project:

Nancy Gutierrez, City of Hemet, 445 E. Florida Ave., Hemet, CA

The following spoke neither for or against the project, but added information to the decision making process:

Robin Lowe, Hemet West Mobile Home Park, Hemet, CA

No one spoke in opposition to the project.

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VI. ALUC COMMISSION ACTION

The ALUC by a unanimous vote of 7-0 found the project **CONSISTENT**.

VII. CD

The entire discussion of this agenda item can be found on CD and referenced by the meeting time listed below. For a copy of the CD, please contact Barbara Santos, ALUC Commission Secretary, at (951) 955-5132 or E-mail at basantos@rivco.org.

ITEM 3.8: TIME: 9:53 A.M.

**AIRPORT LAND USE COMMISSION
MINUTE ORDER JUNE 14, 2018
RIVERSIDE MEETING**

I. **AGENDA ITEM 3.9:** ZAP1315MA18 – San Bernardino Community College District (Representative: Burke, Williams & Sorensen, LLP, Erica Vega) – County of Riverside Case Nos. PPT180014 (Plot Plan) and VAR180002 (Variance), a proposal to replace an existing 204 foot tall communications tower with a 345 foot tall communications tower on an previously disturbed 3,600 square foot area (on a 299 acre parcel) located westerly of Box Mountain Road, northerly of Box Springs Road, approximately 3000 feet northwest of the large “M” mountain sign. (The variance is proposed because the tower would exceed the 105 foot height limitation for structures in the County’s W-2-20 [Controlled Development Areas, 20 acre minimum lot size] zone.) (Airport Compatibility Zone E High Terrain Zone of the March Air Reserve Base/Inland Port Airport Influence Area).

II. **MAJOR ISSUES**
None

III. **STAFF RECOMMENDATION**
Staff recommends that the Commission finds the proposed Plot Plan and Variance CONSISTENT, subject to the conditions included herein.

IV. **PROJECT DESCRIPTION**
A proposal to replace an existing 204 foot tall communications tower with a 345 foot tall communications tower on a previously disturbed 3,600 square foot area (on a 299 acre parcel). The variance is proposed because the tower would exceed the 105 foot height limitation for structures in the County’s W-2-20 (Controlled Development Areas, 20 acre minimum lot size) zone.

CONDITIONS:

1. Any outdoor lighting installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.
2. The following uses/activities are not included in the proposed project and shall be prohibited at this site, in accordance with Note A on Table 4 of the Reche Canyon/Badlands Area Plan:
 - a. Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
 - b. Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
 - c. Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area.
 - d. Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
3. The following uses/activities are specifically prohibited at this location: trash transfer stations

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that are open on one or more sides; recycling centers containing putrescible wastes; construction and demolition debris facilities; wastewater management facilities; incinerators; noise-sensitive outdoor nonresidential uses; and hazards to flight.

4. Prior to issuance of any building permits, the landowner shall convey and have recorded an aviation easement to the March Inland Port Airport Authority. Contact March Joint Powers Authority at (951) 656-7000 for additional information.
5. The attached notice shall be provided to all prospective purchasers of the property and lessees
6. Any proposed detention basins on the site (including water quality management basins) shall be designed so as to provide for a maximum 48-hour detention period following the conclusion of the storm event for the design storm (may be less, but not more), and to remain totally dry between rainfalls. Vegetation in and around the detention basins that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping.
7. March Air Reserve Base must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with Air Base radio communications could result. Sources of electromagnetic radiation include radio wave transmission in conjunction with remote equipment inclusive of irrigation controllers, access gates, etc.
8. The proposed structure shall be marked/lighted in accordance with Federal Aviation Administration (FAA) Advisory Circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, a med-dual system – Chapters 4, 8 (M-Dual), and 12, and such lighting shall be maintained therewith for the life of the project.
9. The proposed structure shall not exceed a height of 345 feet above ground level and a maximum elevation at top point of 3,284 feet above mean sea level.
10. The maximum height and top point elevation specified above shall not be amended without further review by the Airport Land Use Commission and the Federal Aviation Administration; provided, however, that reduction in structure height or elevation shall not require further review by the Airport Land Use Commission. Any change in height that exceeds a total height of 345 feet will require Form 7460-1 submittal, review, and issuance of a “Determination of No Hazard to Air Navigation” by the Federal Aviation Administration Obstruction Evaluation Service.
11. Temporary construction equipment used during actual construction of the structure shall not exceed 345 feet in height and a maximum elevation of 3,284 feet above mean sea level, unless separate notice is provided to the Federal Aviation Administration through the Form 7460-1 process.
12. At least 10 days prior to start of construction, Part 1 of FAA Form 7460-2, Notice of Actual Construction or Alteration, shall be completed by the project proponent or his/her designee and e-filed with the Federal Aviation Administration Obstruction Evaluation Service. Such e-filing shall also be conducted in the event the project is abandoned.

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13. Within five (5) days after construction reaches its greatest height, Part 2 of FAA Form 7460-2, Notice of Actual Construction or Alteration, shall be completed by the project proponent or his/her designee and e-filed with the Federal Aviation Administration Obstruction Evaluation Service. Such e-filing shall also be conducted in the event the project is abandoned.
14. Any failure or malfunction affecting a top light or flashing obstruction light, regardless of its position that lasts more than thirty (30) minutes shall be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

V. MEETING SUMMARY

The following staff presented the subject proposal:

Staff Planner: Paul Rull at (951) 955-6893, or e-mail at prull@rivco.org

No one spoke in favor, neutral or opposition to the project.

VI. ALUC COMMISSION ACTION

The ALUC by a unanimous vote of 7-0 found the project **CONSISTENT**.

VII. CD

The entire discussion of this agenda item can be found on CD and referenced by the meeting time listed below. For a copy of the CD, please contact Barbara Santos, ALUC Commission Secretary, at (951) 955-5132 or E-mail at basantos@rivco.org.

ITEM 3.9: TIME: 10:14 A.M.

**AIRPORT LAND USE COMMISSION
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I. 4.0 ADMINISTRATIVE ITEMS

4.1 Director's Approvals – Information Only

4.2 Election of Airport Land Use Commission Vice-Chair

Chair Manos nominates Commissioner Russell Betts for Vice Chair which was unanimously approved.

4.3 Approval and Adoption of the Proposed Amendment to the ALUC By-Laws and Resolution, and Setting of Time for Future Regular Meetings

The ALUC by a unanimous vote of 7-0 approved Resolution No. 2018-03 amending the ALUC By-laws. The ALUC by a unanimous vote of 7-0 approved the setting of time for future regular ALUC Commission meetings to 9:30 am.

4.4 ALUC Director's Report: The Path Forward Following the Release of the 2018 Air Installation Compatible Use Zones Report for March Air Reserve Base/Inland Port Airport

Simon Housman, ALUC Director presented a Power Point Presentation updating the Commission on the 2018 March Air Reserve Base (AICUZ) study. The ALUC Director's report will return for a course of action at the next ALUC Commission meeting on July 12.

4.5 Options for New ALUC Logo

The ALUC unanimously voted for ALUC Logo #2, with minor graphic changes to return to the next ALUC Commission meeting on July 12, 2018.

II. 5.0 APPROVAL OF MINUTES

The ALUC by a unanimous vote of 7-0 approved the May 10, 2018 minutes

III. 6.0 ORAL COMMUNICATION ON ANY MATTER NOT ON THE AGENDA

None

IV. 7.0 COMMISSIONER'S COMMENTS

None

V. 8.0 ADJOURNMENT

Steve Manos, Chair adjourned the meeting at 11:08 a.m.

VI. CD

The entire discussion of this agenda item can be found on CD and referenced by the meeting time listed below. For a copy of the CD, please contact Barbara Santos, ALUC Commission Secretary, at (951) 955-5132 or E-mail at basantos@rivco.org.

ITEM 4.0: TIME IS: 10:19 A.M.