CITY OF
CHULA VISTA

Otay Ranch University Villages Project Comprehensive SPA Plan Amendment

Final Environmental Impact Report

SCH No. 2013071077

November 2014

276 Fourth Ave. • Chula Vista • California • 91910

FINAL

Environmental Impact Report for the Otay Ranch University Villages Project

Lead Agency

City of Chula Vista
276 Fourth Avenue
Chula Vista, California 91910

NOVEMBER 2014

Printed on 30% post-consumer recycled material.

TABLE OF CONTENTS

Section **Page**

ACRONYMS AND ABBREVIATIONS ACR-1

RESPONSES TO COMMENTS RTC-1

Errata RTC-2

1 EXECUTIVE SUMMARY 1-1

1.1 Project Location and Setting 1-2
1.2 Project Description 1-2
1.2.1 Project Objectives 1-6
1.2.2 Discretionary Actions 1-7
1.3 Areas of Controversy 1-9
1.4 Issues to be Resolved by the City Council 1-9
1.5 Project Alternatives 1-9
1.5.1 No Project Alternative 1-10
1.5.2 Existing GP and GDP Alternative 1-10
1.5.3 Reduced Density Alternative 1-11
1.5.4 Nuisance Easement Alternative 1-12
1.5.5 Otay SRP Alternative 1-13
1.5.6 Environmentally Superior Alternative 1-14
1.6 Summary Tables 1-15

2 INTRODUCTION 2-1

2.1 Project Purpose and Background 2-1
2.2 Hierarchy of Otay Ranch Planning Documents 2-2
2.2.1 City of Chula Vista General Plan/Otay Ranch General Development Plan 2-2
2.2.2 Otay Ranch Resource Management Plan and Multiple Species Conservation Program 2-6
2.2.3 Sectional Planning Area Plans 2-7
2.2.4 Subdivisions and Building Permits 2-8
2.3 Scope of the Environmental Impact Report 2-8
2.4 Environmental Procedures 2-9
2.4.1 California Environmental Quality Act Compliance 2-9
2.4.2 Notice of Preparation and Scoping 2-10
2.4.3 Overview of the EIR Process 2-11
2.5 Intended Uses of the EIR 2-11
2.6 Organization and Content of the EIR 2-12
2.7 Mitigation Monitoring and Reporting Program 2-13

TABLE OF CONTENTS (CONTINUED)

Section **Page**

3 ENVIRONMENTAL SETTING 3-1
3.1 Existing Site Conditions 3-1
3.1.1 Surrounding Land Uses 3-2
3.1.2 Natural Resources in Project Area 3-3
3.1.3 Existing Topography and Soils 3-4
3.1.4 Climate 3-5
3.1.5 Access 3-5
3.2 Existing Land Use Designations 3-6

4 PROJECT DESCRIPTION 4-1
4.1 Project Location 4-1
4.1.1 Village Three North and a Portion of Village Four 4-1
4.1.2 Village Eight East 4-2
4.1.3 Village Ten 4-2
4.2 Project Description 4-2
4.2.1 Overall Project Objectives 4-9
4.2.2 Development Program 4-10
4.2.3 Off-Site Improvements 4-55
4.2.4 Public Services and Utilities 4-57
4.2.5 Conceptual Grading 4-88
4.2.6 Tentative Maps 4-95
4.2.7 Construction Phasing 4-95
4.2.8 General Plan and Otay Ranch GDP Amendments 4-123
4.2.9 Sectional Planning Area Elements 4-151
4.2.10 Environmental Design Features 4-153
4.3 Discretionary Actions/Approvals 4-153

5 ENVIRONMENTAL IMPACT ANALYSIS 5.1-1
5.1 Land Use, Planning, and Zoning 5.1-1
5.1.1 Existing Conditions 5.1-1
5.1.2 Thresholds of Significance 5.1-17
5.1.3 Impacts 5.1-17
5.1.4 Level of Significance Prior to Mitigation 5.1-53
5.1.5 Mitigation Measures 5.1-53
5.1.6 Level of Significance After Mitigation 5.1-55
5.2 Land Form Alteration/Aesthetics 5.2-1
5.2.1 Existing Conditions 5.2-1

TABLE OF CONTENTS (CONTINUED)

Section **Page**

5.2.2 Thresholds of Significance 5.2-11
5.2.3 Impact Analysis 5.2-11
5.2.4 Level of Significance Prior to Mitigation 5.2-90
5.2.5 Mitigation Measures 5.2-91
5.2.6 Level of Significance After Mitigation 5.2-92
5.3 Transportation, Circulation, and Access 5.3-1
5.3.1 Existing Conditions 5.3-1
5.3.2 Thresholds of Significance 5.3-30
5.3.3 Impacts 5.3-33
5.3.4 Level of Significance Prior to Mitigation 5.3-156
5.3.5 Mitigation Measures 5.3-161
5.3.6 Level of Significance After Mitigation 5.3-187
5.3.7 Off-Site Project Frontage and Access 5.3-193
5.4 Air Quality 5.4-1
5.4.1 Existing Conditions 5.4-2
5.4.2 Thresholds of Significance 5.4-17
5.4.3 Impacts 5.4-18
5.4.4 Level of Significance Prior to Mitigation 5.4-37
5.4.5 Mitigation Measures 5.4-39
5.4.6 Level of Significance After Mitigation 5.4-41
5.5 Noise 5.5-1
5.5.1 Existing Conditions 5.5-1
5.5.2 Thresholds of Significance 5.5-13
5.5.3 Impacts 5.5-14
5.5.4 Level of Significance Prior to Mitigation 5.5-56
5.5.5 Mitigation Measures 5.5-60
5.5.6 Level of Significance After Mitigation 5.5-66
5.6 Cultural Resources 5.6-1
5.6.1 Existing Conditions 5.6-1
5.6.2 Thresholds of Significance 5.6-16
5.6.3 Impacts 5.6-17
5.6.4 Level of Significance Prior to Mitigation 5.6-20
5.6.5 Mitigation Measures 5.6-20
5.6.6 Level of Significance After Mitigation 5.6-23
5.7 Paleontological Resources 5.7-1
5.7.1 Existing Conditions 5.7-1

TABLE OF CONTENTS (CONTINUED)

Section **Page**

5.7.2 Thresholds of Significance 5.7-6
5.7.3 Impacts 5.7-6
5.7.4 Level of Significance Prior to Mitigation 5.7-8
5.7.5 Mitigation Measures 5.7-8
5.7.6 Level of Significance After Mitigation 5.7-10
5.8 Biological Resources 5.8-1
5.8.1 Existing Conditions 5.8-1
5.8.2 Methodology 5.8-7
5.8.3 Existing Conditions 5.8-9
5.8.4 Thresholds of Significance 5.8-54
5.8.5 Impacts 5.8-56
5.8.6 Cumulative Impacts 5.8-134
5.8.7 Level of Significance Prior to Mitigation 5.8-134
5.8.8 Mitigation Measures 5.8-137
5.8.9 Level of Significance After Mitigation 5.8-149
5.9 Agriculture and Forestry Resources 5.9-1
5.9.1 Existing Conditions 5.9-1
5.9.2 Thresholds of Significance 5.9-6
5.9.3 Impacts 5.9-9
5.9.4 Level of Significance Prior to Mitigation 5.9-11
5.9.5 Mitigation Measures 5.9-11
5.9.6 Level of Significance After Mitigation 5.9-11
5.10 Water Quality and Hydrology 5.10-1
5.10.1 Existing Conditions 5.10-1
5.10.2 Thresholds of Significance 5.10-21
5.10.3 Impacts 5.10-22
5.10.4 Level of Significance Prior to Mitigation 5.10-63
5.10.5 Mitigation Measures 5.10-63
5.10.6 Level of Significance After Mitigation 5.10-65
5.11 Geology and Soils 5.11-1
5.11.1 Existing Conditions 5.11-1
5.11.2 Thresholds of Significance 5.11-11
5.11.3 Impacts 5.11-11
5.11.4 Level of Significance Prior to Mitigation 5.11-16
5.11.5 Mitigation Measures 5.11-16
5.11.6 Level of Significance After Mitigation 5.11-16

TABLE OF CONTENTS (CONTINUED)

Section **Page**

5.12 Public Services 5.12-1
5.12.1 Fire Protection and Emergency Medical Services 5.12-1
5.12.2 Police Protection 5.12-33
5.12.3 Schools 5.12-40
5.12.4 Parks, Recreation, and Open Space 5.12-53
5.12.5 Library 5.12-76
5.13 Utilities 5.13-1
5.13.1 Water 5.13-1
5.13.2 Sewer 5.13-29
5.13.3 Solid Waste Disposal 5.13-43
5.13.4 Energy 5.13-49
5.14 Global Climate Change 5.14-1
5.14.1 Existing Conditions 5.14-1
5.14.2 Thresholds of Significance 5.14-19
5.14.3 Impacts 5.14-20
5.14.4 Level of Significance Prior to Mitigation 5.14-29
5.14.5 Mitigation Measures 5.14-29
5.14.6 Level of Significance After Mitigation 5.14-29
5.15 Hazards and Risk of Upset 5.15-1
5.15.1 Existing Conditions 5.15-1
5.15.2 Thresholds of Significance 5.15-17
5.15.3 Impacts 5.15-18
5.15.4 Level of Significance Prior to Mitigation 5.15-46
5.15.5 Mitigation Measures 5.15-46
5.15.6 Level of Significance After Mitigation 5.15-49
5.16 Housing and Population 5.16-1
5.16.1 Existing Conditions 5.16-1
5.16.2 Thresholds of Significance 5.16-6
5.16.3 Impacts 5.16-6
5.16.4 Level of Significance Prior to Mitigation 5.16-11
5.16.5 Mitigation Measures 5.16-11
5.16.6 Level of Significance After Mitigation 5.16-11
5.17 Mineral Resources 5.17-1
5.17.1 Existing Conditions 5.17-1
5.17.2 Thresholds of Significance 5.17-4
5.17.3 Impacts 5.17-4

TABLE OF CONTENTS (CONTINUED)

Section **Page**

5.17.4 Level of Significance Prior to Mitigation 5.17-7
5.17.5 Mitigation Measures 5.17-8
5.17.6 Level of Significance After Mitigation 5.17-8

6 CUMULATIVE IMPACTS 6-1
6.0 Introduction 6-1
6.1 Methodology 6-1
6.2 Cumulative Projects 6-3
6.2.1 Land Development 6-3
6.2.2 Adopted Plans 6-4
6.2.3 Previously Analyzed Land Uses 6-4
6.3 Cumulative Impact Analysis 6-8
6.3.1 Land Use 6-8
6.3.2 Landform and Aesthetics 6-11
6.3.3 Transportation and Circulation 6-14
6.3.4 Air Quality 6-17
6.3.5 Noise 6-21
6.3.6 Cultural Resources 6-23
6.3.7 Paleontological Resources 6-26
6.3.8 Biological Resources 6-27
6.3.9 Agricultural Resources 6-29
6.3.10 Water Quality and Hydrology 6-30
6.3.11 Geology and Soils 6-31
6.3.12 Public Services 6-32
6.3.13 Public Utilities 6-36
6.3.14 Climate Change 6-39
6.3.15 Hazards and Risk of Upset 6-40
6.3.16 Housing and Population 6-42
6.3.17 Mineral Resources 6-43

7 GROWTH INDUCEMENT 7-1
7.1 Growth Inducement due to Population Growth 7-2
7.2 Growth Inducement due to Economic Growth 7-3
7.3 Growth Inducement due to Additional Housing 7-3
7.4 Growth Inducement due to Removal of Obstacles 7-4
7.5 Taxation of Existing Public Facilities and Services 7-4
7.6 Other Activities of Potential Effect 7-4

TABLE OF CONTENTS (CONTINUED)

Section **Page**

8 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS 8-1
8.1 Significant Environmental Impacts Which Cannot be Avoided if the Project is Implemented 8-1

9 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL IMPACTS 9-1
9.1 Irreversible Environmental Changes Which Would Result if the Project is Implemented 9-1

10 PROJECT ALTERNATIVES 10-1
10.1 Introduction 10-1
10.2 Project Objectives 10-1
10.2.1 Overall Project Objectives 10-1
10.2.2 Village Three North and Portion of Village Four 10-2
10.2.3 Village Eight East 10-3
10.2.4 Village Ten 10-3
10.3 Alternatives Considered but Rejected 10-3
10.4 Alternatives Under Consideration 10-4
10.4.1 Existing GP and GDP Alternative 10-4
10.4.2 Reduced Density Alternative 10-24
10.4.3 Nuisance Easement Alternative 10-45
10.4.4 Otay SRP Alternative 10-63
10.4.5 No Project (No Build) Alternative 10-85
10.5 Summary Matrix 10-92
10.6 Fulfillment of Project Objectives 10-94
10.7 Environmentally Superior Alternative 10-96

11 REFERENCES 11-1
2 Introduction 11-1
3 Environmental Setting 11-1
4 Project Description 11-1
5.1 Land Use 11-2
5.2 Landform Alteration/Aesthetics 11-4
5.3 Transportation, Circulation, and Access 11-4
5.4 Air Quality 11-6
5.5 Noise 11-8
5.6 Cultural Resources 11-9
5.7 Paleontological Resources 11-10
5.8 Biological Resources 11-11

TABLE OF CONTENTS (CONTINUED)

Section **Page**

5.9 Agricultural Resources 11-13
5.10 Water Quality and Hydrology 11-13
5.11 Geology and Soils 11-15
5.12 Public Services 11-16
5.13 Utilities 11-17
5.14 Global Climate Change 11-20
5.15 Hazards and Risk of Upset 11-23
5.16 Housing and Population 11-23
5.17 Mineral Resources 11-24
6 Cumulative Impacts 11-25

12 LIST OF PREPARERS 12-1

12 MITIGATION MONITORING AND REPORTING PROGRAM MMRP-1

APPENDICES

A NOP and Comments Letters
B Plan Consistency
C Main Street Analysis
D Air Quality and GHG
E Biological Technical Report
F Cultural Resources
G Paleontological Resources
H Geotechnical Investigations
I Phase I Environmental Site Assessment and Addendum
J Fire Protection Plans
K Water Quality and Hydrology Tech Reports
L Noise Assessment Technical Report
M Traffic Impact Analysis
N Overview of Water Service
O Overview of Sewer Service
P Alternative Tech Memos
Q SDG&E Will Serve Letter

TABLE OF CONTENTS (CONTINUED)

Page

FIGURES

4-1 Regional Map 4-3
4-2 Vicinity Map 4-5
4-3 Project Area 4-7
4-4 Village Three North and a Portion of Village Four Site Utilization Plan 4-13
4-5 Village Three North and Portion of Village Four Circulation Plan 4-17
4-6 Parks and Open Space for Village Three North and Portion of Village Four 4-19
4-7 Bicycle Circulation Plan for Village Three North and Portion of Village Four 4-21
4-8 Pedestrian Circulation Plan for Village Three North and Portion of Village Four 4-23
4-9 Village Eight East Site Utilization 4-27
4-10 Village Eight East Circulation Plan 4-31
4-11 Parks and Open Space Plan for Village Eight East 4-33
4-12 Bicycle Circulation Plan for Village Eight East 4-37
4-13 Pedestrian Circulation Plan for Village Eight East 4-39
4-14 Village Ten Site Utilization 4-43
4-15 Village Ten Circulation Plan 4-45
4-16 Parks and Open Space for Village Ten 4-47
4-17 Bicycle Circulation Plan for Village Ten 4-51
4-18 Pedestrian Circulation Plan for Village Ten 4-53
4-19 Off-Site Improvement Areas 4-59
4-20 Potable Water Plan for Village Three North and Portion of Village Four 4-61
4-21 Potable Water Plan for Village Eight East 4-63
4-22 Potable Water Plan for Village Ten 4-65
4-23 Recycled Water Plan for Village Three North and Portion of Village Four 4-67
4-24 Recycled Water Plan for Village Eight East 4-69
4-25 Recycled Water Plan for Village Ten 4-71
4-26 Sewer Plan for Village Three North and Portion of Village Four 4-75
4-27 Sewer Plan for Village Eight East 4-77
4-28 Sewer Plan for Village Ten 4-79
4-29 Hydrologic Basin and Drainage System for Village Three North and Portion of Village Four 4-81

TABLE OF CONTENTS (CONTINUED)

Page

4-30 Hydrologic Basin and Drainage System for Village Eight East 4-83
4-31 Hydrologic Basin and Drainage System for Village Ten 4-85
4-32 Village Three North and a Portion of Village Four Fuel Modification Zones 4-89
4-33 Village Eight East Fuel Modification Zones 4-91
4-34 Village Ten Fuel Modification Zones 4-93
4-35 Conceptual Grading Plan for Village Three North and a Portion of Village Four 4-99
4-36 Concept Grading Plan for Village Eight East 4-101
4-37 Concept Grading Plan for Village Ten 4-103
4-38 Cut/Fill Plan for Village Three North and Portion of Village Four 4-105
4-39 Cut/Fill Plan for Village Eight East 4-107
4-40 Cut/Fill Plan for Village Ten 4-109
4-41 Tentative Map for Village Three North and Portion of Village Four 4-111
4-42 Tentative Map for Village Eight East 4-113
4-43 Tentative Map for Village Ten 4-115
4-44 Phasing Plan for Village Three North and Portion of Village Four 4-117
4-45 Phasing Plan for Village Eight East 4-119
4-46 Phasing Plan for Village Ten 4-121
4-47 Adopted Chula Vista General Plan Land Uses 4-125
4-48 Proposed Chula Vista General Plan Land Uses 4-127
4-49 Existing General Plan Circulation 4-129
4-50a Proposed General Plan Circulation 4-131
4-50b Proposed Circulation Element Network 4-133
4-51 Adopted Otay Ranch General Development Plan Land Uses 4-139
4-52 Proposed Otay Ranch General Development Plan Land Uses 4-141
4-53 Existing Otay Ranch GDP Circulation 4-143
4-54 Proposed Otay Ranch GDP Circulation 4-145
4-55 Existing MSHCP 4-147
4-56 Proposed Preserve 4-149
5.1-1 Brown Field Airport Influence Area 5.1-13
5.1-2 Odor Effects in Village Three North 5.1-25
5.2-1 Viewpoint Locations Map 5.2-13
5.2-2 Village Three North and Portion of Village Four–Key View 1 ..... 5.2-15
5.2-3a Village Three North and Portion of Village Four–Key View 2 ..... 5.2-19
5.2-3b Village Three North and Portion of Village Four–Key View 2 ..... 5.2-21

TABLE OF CONTENTS (CONTINUED)

Page

5.2-4a Village Three North and Portion of Village Four–Key View 3 ..... 5.2-23
5.2-4b Village Three North and Portion of Village Four–Key View 3 ..... 5.2-27
5.2-5 Village Eight East–Key View 4 ..... 5.2-29
5.2-6 Portion of Village Four–Key View 5 ..... 5.2-31
5.2-7 Village Three North–Key View 6 ..... 5.2-35
5.2-8a Village Eight East–Key View 7a..... 5.2-37
5.2-8b Village Eight East–Key View 7b 5.2-41
5.2-9 Village Eight North–Key View 8 ..... 5.2-43
5.2-10 Village Eight East–Key View 9 ..... 5.2-47
5.2-11 Village Ten–Key View 10..... 5.2-49
5.2-12 Village Ten–Key View 11..... 5.2-53
5.2-13 Village Ten–Key View 12..... 5.2-55
5.2-14 Village Ten–Key View 13..... 5.2-59
5.2-15 Village Ten–Key View 14..... 5.2-63
5.2-16 Village Ten–Key View 15..... 5.2-65
5.2-17 Village Ten–Key View 16..... 5.2-67
5.2-18 Steep Slope Map for Village Three North and Portion of Village Four 5.2-81
5.2-19 Steep Slope Map for Village Eight East..... 5.2-83
5.2-20 Steep Slope Map for Village Ten 5.2-85
5.3-1 Project Study Area..... 5.3.1-9
5.5-1 Location of Field Noise Measurements..... 5.5-7
5.5-2 Modeled Roadway Segments 5.5-15
5.5-3 Village Three Predicted Traffic Noise Contours (dB CNEL) Future (Year 2030) with Project with Walls 5.5-19
5.5-4 Village Eight East Predicted Traffic Noise Contours (dB CNEL) Future (Year 2030) with Project with Walls 5.5-25
5-5-5 Village Ten Predicted Traffic Noise Contours (dB CNEL) Future (Year 2030) with Project with Walls..... 5.5-31
5.5-6 Off-Site Improvement Areas 5.5-49
5.8-1 Special Status Species Overview Map 5.8-11
5.8-2 Special Status Species Map – Village Three North/Portion of Village Four 5.8-13
5.8-3 Special Status Species Map – Village Eight East..... 5.8-15
5.8-4 Special Status Species Map – Village Ten 5.8-17
5.8-5 Vegetation Index Map 5.8-27
5.8-6 Vegetation Map - Village Three North/Portion of Village Four 5.8-29

TABLE OF CONTENTS (CONTINUED)

Page

5.8-7 Vegetation Map – Village Eight East 5.8-31
5.8-8 Vegetation Map – Village Ten 5.8-33
5.8-9 Wetland Delineation Overview Map 5.8-39
5.8-10 Wetland Delineation Map – Village Three North/Portion of Village Four 5.8-41
5.8-11 Vernal Pool – Village Three North 5.8-43
5.8-12 Wetland Delineation Map – Village Eight East 5.8-45
5.8-13 Wetland Delineation Map – Village Ten 5.8-47
5.8-14 Special Status Species Impacts Overview Map 5.8-59
5.8-15 Special Status Species Impacts Map – Village Three North/Portion of Village Four 5.8-61
5.8-16 Special Status Species Impacts Map – Village Eight East 5.8-63
5.8-17 Special Status Species Impacts Map – Village Ten 5.8-65
5.8-18 Vegetation Impacts Index Map 5.8-69
5.8-19 Vegetation Impacts Map – Village Three North/Portion of Village Four 5.8-71
5.8-20 Vegetation Impacts Map – Village Eight East 5.8-73
5.8-21 Vegetation Impacts Map – Village Ten 5.8-75
5.8-22 Wetland Delineation Impacts Overview Map 5.8-79
5.8-23 Wetland Delineation Impacts Map – Village Three North/Portion of Village Four 5.8-81
5.8-24 Wetland Delineation Impacts Map – Village Eight East 5.8-83
5.8-25 Wetland Delineation Impacts Map – Village Ten 5.8-85
5.8-26 Otay Ranch University Villages Give/Take Analysis 5.8-89
5.8-27 Otay Ranch University Villages Give/Take Analysis – Species Map within Give/Take Areas 5.8-91
5.8-28 Otay Ranch University Villages Give/Take Analysis – Species Corridor Map within Give/Take Areas 5.8-93
5.8-29 Otay Ranch University Villages Give/Take Analysis: Proposed Change in Preserve 5.8-95
5.8-30 Otay Ranch University Villages Give/Take Analysis: Ultimate Preserve Boundary 5.8-97
5.8-31 University Villages Trails System 5.8-103
5.9-1 Important Farmlands 5.9-7
5.10-1 Village Three North and a Portion of Village Four Existing Hydrology Map 5.10-11
5.10-2 Village Eight East Existing Hydrology Map 5.10-15

TABLE OF CONTENTS (CONTINUED)

Page

5.10-3 Village Ten Existing Hydrology Map 5.10-17
5.10-4 Village Three North and a Portion of Village Four BMP Location Map 5.10-29
5.10-5 Village Eight East BMP Location Map 5.10-31
5.10-6 Village Ten BMP Location Map 5.10-33
5.10-7 Village Three North and a Portion of Village Four Developed Hydrology Map 5.10-43
5.10-8 Village Eight East Developed Hydrology Map 5.10-47
5.10-9 Village Ten Developed Hydrology Map 5.10-51
5.10-10 Developed Condition–Otay River Valley Dam Inundation Map 5.10-61
5.11-1 Southern California Major Faults 5.11-9
5.12-1 Village Three North and Portion of Village Four - Existing Fire Station Response Times for FS-07 ..... 5.12-13
5.12-2 Village Three North and Portion of Village Four 2025 Response Times for Fire Station No. 7 ..... 5.12-15
5.12-3 Village Three North and Portion of Village Four 2025 Response Times for Village Eight West Fire Station 5.12-17
5.12-4 Village Eight East Existing Response Times for Fire Station No.7 ..... 5.12-19
5.12-5 Village Eight East 2030 Response Times for Village Eight West Fire Station 5.12-21
5.12-6 Village Eight East 2030 Response Times for Fire Station EUC-B 5.12-23
5.12-7 Village Ten Existing Response Times for Fire Station No. 7 ..... 5.12-25
5.12-8 Village Ten 2030 Response Times for Village Eight West Fire Station 5.12-27
5.12-9 Village Ten 2030 Response Times for Fire Station EUC-B 5.12-29
5.12-10 Existing and Future Public School Locations 5.12-43
5.12-11 Greenbelts, Open Space, and Network Trails 5.12-57
5.12-12 Existing Public Park and Recreation Facilities 5.12-61
5.15-1 Regional Fuels Distribution 5.15-19
5.15-2 Fire History 5.15-21
5.15-3 FlamMap Flame Length Analysis - Summer Fire 5.15-23
5.15-4 FlamMap Flame Length Analysis - Fall Fire 5.15-25
5.15-5 Potential Risk Zone for Village Three and a Portion of Village Four 5.15-31
5.15-6 Brown Field Formerly Used Defense Site Overview 5.15-35
5.15-7 70-year Residential Exposure Scenario, Village Eight East 5.15-41
5.15-8 9-year Residential Exposure Scenario, Village Eight East 5.15-43
5.17-1 Mineral Resource Zones 5.17-5

TABLE OF CONTENTS (CONTINUED)

Page

6-1 Cumulative Projects 6-5
10-1 Existing GDP Allocations 10-7
10-2a Reduced Density Alternative–Village Three North and Portion of Village Four 10-25
10-2b Reduced Density Alternative–Village Eight East 10-27
10-2c Reduced Density Alternative–Village Ten 10-29
10-3 Village Three North Landfill Buffer Alternative 10-49
10-4a Otay Ranch SRP–Village Three North Alternative 10-65
10-4b Otay Ranch SRP–Village East East 10-67
10-4c Otay Ranch SRP–Village Ten 10-69

TABLES

1-1 Proposed Land Uses 1-4
1-2 Future Discretionary Approvals and Permits 1-8
1-3 Summary of Significant Environmental Analysis Results 1-15
1-4 Summary of Cumulative Impacts 1-98
1-5 Alternatives Impact Summary 1-106
2-1 Tiered Analysis by Environmental Issue 2-9
4-1 Proposed Land Uses 4-10
4-2 Proposed Development vs. Land Use Alternative for Village Eight East 4-26
4-3 Project Land Use by Study Year 4-97
4-4 Existing Village Three Land Uses 4-135
4-5 Proposed Village Three Land Uses 4-135
4-6 Existing Village Eight East Land Uses 4-136
4-7 Proposed Village Eight East Land Uses 4-136
4-8 Existing Planning Area Village Ten Secondary Land Uses* 4-136
4-9 Proposed Village Ten Land Uses 4-137
4-10 Future Discretionary Approvals and Permits 4-155
5.1-1 1 Odor Zone Impacts 5.1-27
5.1-2 Consistency with the SANDAG RCP Smart Growth Principles 5.1-35
5.1-3 Consistency with SANDAG 2050 RTP/SCS Policy Objectives 5.1-37
5.1-4 Comparison of the Proposed Project to the P-C Zoning Regulations 5.1-42
5.1-5 Comparison of the Proposed Project to the Otay Ranch RMP 5.1-49
5.2-1 Otay Ranch Steep Slopes 5.2-78

TABLE OF CONTENTS (CONTINUED)

Page

5.2-2 Project Consistency with OVRP Design Standards and Guidelines 5.2-88
5.2-3 Project Consistency with City of Chula Vista – Greenbelt Master Plan Policies 5.2-89
5.3-1 LOS Definitions 5.3-3
5.3-2 Signalized Intersection LOS for HCM Operational Analysis Method 5.3-4
5.3-3 LOS Criteria for Stop Controlled Unsignalized Intersections 5.3-4
5.3-4 City of Chula Vista Roadway Segment Daily Capacity and LOS Standards 5.3-5
5.3-5 City of San Diego Roadway Segment Daily Capacity and LOS Standards 5.3-5
5.3.6 Caltrans District 11 Freeway and State Highway Segment LOS Definitions 5.3-7
5.3-7 Traffic Flow Conditions at Ramp Intersections at Various Levels of Operation 5.3-7
5.3-8 Peak Hour Intersection LOS Results – Existing Conditions 5.3-19
5.3-9 Roadway Segment LOS Results – Existing Conditions (City of Chula Vista) 5.3-22
5.3-10 Roadway Segment LOS Results – Existing Conditions (City of San Diego) 5.3-24
5.3-11 Freeway / State Highway Segment LOS Results – Existing Conditions 5.3-25
5.3-12 Ramp Intersection Capacity Analysis – Existing Conditions 5.3-27
5.3-13 Ramp Metering Analysis – Existing Conditions 5.3-28
5.3-14 City of San Diego – Measures of Significant Project Traffic Impacts 5.3-33
5.3-15 Project Trip Generation 5.3-34
5.3-16 Peak-Hour Intersection LOS Results – Existing Plus Project (Buildout) Conditions 5.3-41
5.3-17 Roadway Segment LOS Results – Existing Plus Project (Buildout) Conditions (City of Chula Vista) 5.3-46
5.3-18 Roadway Segment LOS Results – Existing Plus Project (Buildout) Conditions (City of San Diego) 5.3-51
5.3-19 Freeway / State Highway Segment LOS Results – Existing Plus Project (Buildout) Conditions 5.3-54
5.3-20 Ramp Intersection Capacity Analysis – Existing Plus Project (Buildout) Conditions 5.3-56
5.3-21 Ramp Metering Analysis – Existing Plus Project (Buildout) Conditions 5.3-57
5.3-22 Peak Hour Intersection LOS Results – Year 2015 Conditions 5.3-62
5.3-23 Roadway Segment LOS Results – Year 2015 Conditions 5.3-66
5.3-24 Freeway / State Highway Segment LOS Results – Year 2015 Conditions 5.3-73
5.3-25 Ramp Intersection Capacity Analysis – Year 2015 Conditions 5.3-75

TABLE OF CONTENTS (CONTINUED)

Page

5.3-26 Ramp Metering Analysis – Year 2015 Conditions 5.3-76
5.3-27 Peak Hour Intersection LOS Results – Year 2020 Conditions 5.3-80
5.3-28 Roadway Segment LOS Results – Year 2020 Conditions 5.3-84
5.3-29 Freeway / State Highway Segment LOS Results – Year 2020 Conditions..... 5.3-92
5.3-30 Ramp Intersection Capacity Analysis – Year 2020 Conditions 5.3-92
5.3-31 Ramp Metering Analysis – Year 2020 Conditions 5.3-94
5.3-32 Peak Hour Intersection LOS Results – Year 2025 Conditions 5.3-99
5.3-33 Roadway Segment LOS Results – Year 2025 Conditions 5.3-102
5.3-34 Freeway / State Highway Segment LOS Results – Year 2025 Conditions..... 5.3-109
5.3-35 Ramp Intersection Capacity Analysis – Year 2025 Conditions 5.3-112
5.3-36 Ramp Metering Analysis – Year 2025 Conditions 5.3-113
5.3-37 Peak Hour Intersection LOS Results – Year 2030 Conditions 5.3-118
5.3-38 Roadway Segment LOS Results – Year 2030 Conditions (City of Chula Vista)..... 5.3-123
5.3-39 Roadway Segment LOS Results – Year 2030 Conditions (City of San Diego)..... 5.3-127
5.3-40 Freeway / State Highway Segment LOS Results – Year 2030 Conditions..... 5.3-131
5.3-41 Ramp Intersection Capacity Analysis – Year 2030 Conditions 5.3-133
5.3-42 Ramp Metering Analysis – Year 2030 Conditions 5.3-135
5.3-43 Peak Hour Intersection LOS Results – Year 2030 Conditions Without SR-125 / Lone Star Road Interchange 5.3-137
5.3-44 Roadway Segment LOS Results – Year 2030 Conditions Without SR-125 / Lone Star Road Interchange 5.3-138
5.3-45 Freeway/State Highway Segment LOS Results – Year 2030 Conditions Without SR-125 / Lone Star Road Interchange..... 5.3-139
5.3-46 Roadway Segment LOS Results – Proposed Plan vs. Adopted Plan (City of Chula Vista)..... 5.3-142
5.3-47 Roadway Segment LOS Results – Proposed Plan vs. Adopted Plan (City of San Diego)..... 5.3-149
5.3-48 Freeway / State Highway Segment LOS Results – Proposed Plan vs. Adopted Plan 5.3-150
5.3-49 Summary of Significant Impacts and Mitigation Measures 5.3-178
5.3-50 Mitigated Intersection LOS – Year 2020 Conditions..... 5.3-187
5.3-51 Mitigated Roadway Segment LOS – Year 2020 Conditions 5.3-188

TABLE OF CONTENTS (CONTINUED)

Page

5.3-52 Mitigated Ramp Metering Analysis – 2020 Conditions With Heritage Road 5.3-189
5.3-53 Mitigated Intersection LOS – Year 2025 Conditions 5.3-190
5.3-54 Mitigated Roadway Segment LOS – Year 2025 Conditions 5.3-191
5.3-55 Mitigated Intersection LOS – Year 2030 Conditions 5.3-192
5.3-56 University Villages Frontage and Access Threshold 5.3-194
5.4-1 Ambient Air Quality Standards 5.4-3
5.4-2 Sensitive Receptors 5.4-11
5.4-3 SDAB Attainment Classification 5.4-15
5.4-4 Ambient Air Quality Data (ppm unless otherwise indicated) 5.4-16
5.4-5 Frequency of Air Quality Standard Violations 5.4-16
5.4-6 City Of Chula Vista Air Quality Significance Thresholds 5.4-18
5.4-7 Project Consistency with RAQS Control Measures 5.4-20
5.4-8 Estimated Maximum Daily Construction Emissions (Unmitigated and Mitigated) (pounds/day)[1] 5.4-25
5.4-9 Estimated Daily Maximum Operational Emissions – 2030 (pounds/day) 5.4-27
5.4-10 CALINE4 Predicted CO Concentrations 5.4-35
5.5-1 City of Chula Vista Exterior Land Use/Noise Compatibility Guidelines 5.5-4
5.5-2 Exterior Noise Limits 5.5-5
5.5-3 Existing Community Noise Equivalent Level (CNEL) Distant from Existing Roadways 5.5-6
5.5-4 Existing Measured Average Sound Levels Associated with Local Roadways Near Proposed Project and Calibration Results 5.5-9
5.5-5 Existing Community Noise Equivalent Level (CNEL) Associated with Local Roadways 5.5-11
5.5-6 Traffic Noise Modeling Results - Village Three North 5.5-18
5.5-7 Traffic Noise Modeling Results - Village Three Existing Plus Project Conditions 5.5-22
5.5-8 Traffic Noise Modeling Results – Village Eight East 5.5-23
5.5-9 Traffic Noise Modeling Results - Village Eight East Existing Plus Project Conditions 5.5-27
5.5-10 Traffic Noise Modeling Results – Village Ten 5.5-29
5.5-11 Traffic Noise Modeling Results - Village Ten Existing Plus Project Conditions 5.5-33

TABLE OF CONTENTS (CONTINUED)

Page

5.5-12 Project Contribution to Off-Site Traffic Noise – Year 2030 (Off-Site Traffic Noise Level Increase) 5.5-44
5.5-13 Typical Noise Levels from Construction Activities for Large Construction Projects 5.5-52
5.6-1 Archaeological Site Evaluations and Test Results Village Three North and a Portion of Village Four 5.6-12
5.6-2 Archaeological Site Evaluations and Test Results – Village Eight East 5.6-13
5.6-3 Archaeological Site Evaluations and Test Results – Village Ten 5.6-15
5.6-4 Archaeological Site Evaluations and Test Results – Village Ten 5.6-16
5.8-1 Summary of Special-Status Plant Populations 5.8-10
5.8-2 Acreages of Existing Vegetation Community and Land Cover Types Within the Development Area 5.8-24
5.8-3 Jurisdictional Wetlands and Waters on Village Three North 5.8-38
5.8-4 Jurisdictional Wetlands and Waters on Village Eight East 5.8-50
5.8-5 Jurisdictional Wetlands and Waters on Village Ten 5.8-51
5.8-6 Permanent Impacts to Special-Status Plant Species 5.8-56
5.8-7 Direct Impacts to Sensitive Vegetation Communities 5.8-68
5.8-8 Impacts to On-Site Jurisdictional Wetlands and Waters 5.8-77
5.8-9 Impacts to Off-Site Jurisdictional Wetlands and Waters 5.8-78
5.8-10 Summary of Facilities Siting Criteria Village Three North - Main Street and Associated Utilities 5.8-110
5.8-11 Summary of Facilities Sting Criteria OVRP Trails (Villages Three North, Eight East and Ten) 5.8-112
5.8-12 Summary Facilities Siting Criteria Village Eight East - Main Access Road to Community Park (P-2) and Associated Facilities 5.8-113
5.8-13 Summary Facilities Siting Criteria Village Eight East - Sewer Line/Fire Access Roads and Associated Utilities 5.8-114
5.8-14 Summary Facilities Siting Criteria Village Ten - Detention Basins and Associated Utilities 5.8-116
5.8-15 Summary of Planned Facilities Siting Criteria Non-OVRP Trails 5.8-118
5.8-16 Proposed and Cumulative Impacts to Covered Habitat from Future Facilities within Otay Ranch 5.8-119
5.8-17 Impacts to Off-Site Vegetation Communities and Land Cover Types 5.8-121
5.8-18 Impacts to Jurisdictional Wetlands and Waters within Off-Site Areas 5.8-122
5.8-19 Impacts to Special-Status Plant Species Located Off-Site 5.8-122

TABLE OF CONTENTS (CONTINUED)

Page

5.8-20 Otay Ranch University Villages Proposed MSCP Preserve Boundary Adjustment–Give/Take Analysis 5.8-124
5.8-21 Summary of Give/Take for Covered Species for the University Villages 5.8-125
5.8-22 Summary of Give/Take for Non-Covered Special-Status Species for the University Villages 5.8-132
5.8-23 Summary of Total Impacts 5.8-135
5.8-24 Mitigation for Permanent Impacts to Upland Vegetation Outside of Otay Ranch (HLIT) 5.8-141
5.10-1 Village Three North and a Portion of Village Four Summary of Pre-Developed Flows to the Otay River 5.10-13
5.10-2 Village Eight East Summary of Pre-Developed Flows to the Otay River 5.10-14
5.10-3 Village Ten Summary of Pre-Developed Flows to the Otay River 5.10-19
5.10-4 Anticipated Pollutants from Project Site 5.10-24
5.10-5 Village Three North and a Portion of Village Four Summary of Developed Flows to the Otay River 5.10-41
5.10-6 Village Three North and a Portion of Village Four Summary of Pre vs. Post-Developed Condition Flows to the Otay River 5.10-42
5.10-7 Village Eight East Summary of Developed Flows to the Otay River 5.10-46
5.10-8 Village Eight East Summary of Pre vs. Post- Developed Condition Flows to the Otay River 5.10-46
5.10-9 Village Ten Summary of Developed Flows to the Otay River 5.10-50
5.10-10 Summary of Pre vs. Post- Developed Condition Flows to the Otay River V10 ..... 5.10-53
5.11-1 Principal Active Faults near Project Area 5.11-8
5.12-1 City of Chula Vista Fire Station Facilities 5.12-4
5.12-2 Chula Vista Fire Department Staffing 5.12-5
5.12-3 Village Three North and Portion of Village Four CVFD Emergency Response Analysis 5.12-9
5.12-4 Village Eight East CVFD Emergency Response Analysis 5.12-11
5.12-5 Village Ten CVFD Emergency Response Analysis 5.12-12
5.12-6 Project Area Schools 5.12-45
5.12-7 Student Generation for the Proposed Project 5.12-46
5.12-8 Park Acreage Demand by Village per Otay Ranch GDP 5.12-64
5.12-9 Park Acreage Demand by Village per PLDO 5.12-65

TABLE OF CONTENTS (CONTINUED)

Page

5.12-10 Comparison of the SPA Plans to Applicable Greenbelt Master Plan Goals and Policies 5.12-69
5.12-11 Comparison of the SPA Plans to the Applicable Park and Recreation Master Plan Policies 5.12-72
5.13-1 Average/Normal Water Year Supply and Demand Assessment (af/yr) 5.13-10
5.13-2 Single Dry Water Year Supply and Demand Assessment (af/yr) 5.13-11
5.13-3 Multiple Dry Year Supply and Demand Assessment (af/yr) 5.13-11
5.13-4 Projected Potable Water Demand by Village 5.13-18
5.13-5 Projected Potable Water Demand by Land Use 5.13-18
5.13-6 Projected Recycled Water Demand 5.13-23
5.13-6 (Continued) Projected Recycled Water Demand 5.13-24
5.13-7 University Villages Water Conservation Summary 5.13-24
5.13-8 Recommended Sewer Design Unit Generation Rates 5.13-30
5.13-9 Projected Sewage Flow Summary by Land Use 5.13-34
5.13-10 Salt Creek Sewer Impact Fees 5.13-35
5.13-11 University Villages EDU Summary 5.13-36
5.13-12 Proposed Project Solid Waste Generation 5.13-47
5.13-13 Average Existing Energy Consumption Rates 5.13-57
5.14-1 GHG Sources in California 5.14-18
5.14-2 Estimated Construction GHG Emissions (metric tons/year) 5.14-21
5.14-3 Estimated Operational GHG Emission (metric tons/year) 5.14-24
5.15-1 General Vegetation Types and Related Fuel Model Assignments in Vicinity of Project 5.15-15
5.16-1 San Diego Regional Population, Housing, and Employment Forecast 5.16-2
5.16-2 City of Chula Vista Population, Housing, and Employment Forecast 5.16-3
5.16-3 Chula Vista Projected Population in 2030 ..... 5.16-4
5.16-4a Existing Chula Vista GP Planned Residential in the Project Area 5.16-4
5.16-4b Existing Otay Ranch GDP Planned Residential in the Project Area 5.16-6
5.16-5a Estimated Residential Buildout – Chula Vista GP Planned vs. Proposed 5.16-7
5.16-5b Estimated Residential Buildout – Chula Vista Otay Ranch GDP Planned vs. Proposed 5.16-8
6-1 Geographic Scope of Cumulative Impact Analyses 6-2
6-2 Cumulative Projects 6-3
6-3 Cumulative Trip Generation 6-14
6-4 Cumulative Student Generation 10-35

TABLE OF CONTENTS (CONTINUED)

Page

10-1 Estimated Residential Buildout Existing GP and GDP Alternative vs. Proposed 10-6
10-2 Estimated Average Daily Trips for Proposed Project v. Existing GP and GDP Alternative 10-12
10-3 Estimated Residential Buildout Reduced Density Alternative vs. Proposed 10-24
10-4 Estimated Average Daily Trips for Proposed Project vs. Reduced Density Alternative 10-33
10-5 Estimated Residential Buildout of Nuisance Easement Alternative vs. Proposed Project 10-46
10-6 Nuisance Easement Alternative Average Daily Trip Calculations 10-51
10-7 Village Three North Nuisance Easement Alternative vs. Proposed Project Summary of Pre vs. Post-Developed Condition Flows to the Otay River 10-56
10-8 Estimated Residential Buildout Otay SRP Alternative vs. Proposed 10-64
10-9 Estimated Average Daily Trips for Proposed Project v. Otay SRP Alternative 10-73
10-10 Alternatives Impact Summary 10-93
10-11 Comparison of Consistency with Project Objectives 10-94

INTENTIONALLY LEFT BLANK

ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
2050 RTP	2050 Regional Transportation Plan
AB	Assembly Bill
ADT	average daily trips; average daily traffic
af	acre-feet
af/yr	acre-feet per year
ALUCP	Airport Land Use Compatibility Plan
ALUP	Airport Land Use Plan
amsl	above mean sea level
APCDs	Air Pollution Control Districts
AQIP	Air Quality Improvement Plan
AQMDs	Air Quality Management Districts
ATCM	Airborne Toxics Control Measure
BACT	Best Available Control Technology
BMP	best management practice
BNSF	Burlington Northern Santa Fe
BRT	Bus Rapid Transit
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalARP	California Accidental Release Prevention
CalGreen	California's Green Building Standards
CalOSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CFC	California Fire Code
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGS	California Geologic Survey
City	City of Chula Vista
CMP	Congestion Management Program
CNEL	community noise equivalent level
CPF	Community-Purpose Facility
CPUC	California Public Utilities Commission
CVMC	City of Chula Vista Municipal Code
CWA	Clean Water Act
dB	decibel

Acronym/Abbreviation	Definition
dBA	A-weighted decibel
DPM	diesel particulate matter
DSWM	Development Stormwater Manual
EC	Engineering Control
EDR	Environmental Data Resources Inc.
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification System
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
FPP	fire protection plan
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FUDS	Formerly Used Defense Site
GBS	Green Building Standards
GDP	General Development Plan
GDPA	General Development Plan Amendment
GHG	greenhouse gases
GMO	Growth Management Ordinance
GPA	General Plan Amendment
gpd	gallons per day
GWP	Global Warming Potential
HMP	Hydromodification Management Plan
HRA	Health Risk Assessment
HVAC	heating/ventilation and air conditioning equipment
I-	Interstate
IBC	International Building Code
IC	Institutional Control
ICC	International Code Council
ICLEI	International Council of Environmental Initiatives
IFC	International Fire Code
IMP	Integrated Management Practices
LCFS	Low Carbon Fuel Standard
LEA	local enforcement agency
Leq	equivalent level over a given time period
LFG	Landfill Gas
LID	Low Impact Development
LOA	Land Offer Agreement
LOS	level of service
LUST	Leaking Underground Storage Tank
MC	munitions constitutes
MEC	Munitions and Explosives of Concern

Acronym/Abbreviation	Definition
mgd	million gallons per day
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
mph	miles per hour
MRZ	Mineral Resource Zone
MSCP	Multiple Species Conservation Program
MSCPBA	Multiple Species Conservation Plan Boundary Adjustment
MSW	Municipal Solid Waste
NAAQS	National Ambient Air Quality Standards
NHTSA	National Highway Traffic Safety Administration
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NSPS	New Source Performance Standard
OCH	organochlorine herbicide
OCP	organochlorine pesticide
OPP	organophosphorous pesticide
OS	Open Space
OS/P	Open Space Preserve
OVRP	Otay Valley Regional Park
OWD	Otay Water District
P-1	Do not use alone (used rarely in Ch. 4)
P-2	Community Park
PEIR	Program EIR
PFFP	public facilities finance plan
PMI	point of maximum impact
POC	Point of Compliance
P-OS	Private Open Space
PRC	Public Resources Code
PRG	Preliminary Remediation Goals
PRMP	Parks and Recreation Master Plan
psi	pounds per square inch
QP	Qualified Paleontologist
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
RAQS	Regional Air Quality Strategy
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act
RFS	Renewable Fuel Standard
RMP	Resource Management Plan
RMPBA	Resource Management Plan Boundary Modification
RTP	Research Technology Park
RWQCB	Regional Water Quality Control Board

Acronym/Abbreviation	Definition
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy
SD&AE	San Diego and Arizona Eastern
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDIV	San Diego and Imperial Valley
SIP	State Implementation Plan
SPA	Sectional Planning Area
SR-	State Route
SRP	Subregional Plan
SWIS	Solid Waste Information System
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TACs	Toxic Air Contaminants
TAP	toxic air pollutant
TM	Tentative Map
TSDF	Treatment, Storage and Disposal Facilities
U.S.C.	United States Code
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
VCP	Voluntary Cleanup Program
VOCs	volatile organic compounds
WSA	water supply assessment
WSA&V	Water Supply Assessment and Verification

COMMENTS RECEIVED ON THE DRAFT EIR AND RESPONSES

The Draft EIR was circulated for public review from August 5, 2014 through September 18, 2014, in accordance with the 45-day comment period required under Section 15105(a) of the CEQA Guidelines. A total of 15 comment letters were received on the Draft EIR from agencies, organizations and individuals as shown in the list below. The Final EIR incorporates the Draft EIR, changes and additions to the Draft EIR based on comments received during the public review period, as well as minor revisions to further clarify information presented. Collectively, the revisions do not constitute significant changes in the project or environmental setting; no new significant environmental effects have been identified for the project; and the severity of identified environmental impacts would not increase.

A list of the agencies, organizations and individuals commenting on the Draft EIR is provided below:

- Comment Letter A: Bonita Valley Horsemen and Tijuana River Valley Equestrian Association
- Comment Letter B: San Diego County Archaeological Society, Inc.
- Comment Letter C: U.S. Fish and Wildlife Service and California Department of Fish and Wildlife
- Comment Letter D: Vulcan Materials Company
- Comment Letter E: Hazard Construction
- Comment Letter F: West Coast Sand and Gravel
- Comment Letter G: Coast Aggregates
- Comment Letter H: Flatiron Construction Corporation
- Comment Letter I: TC Construction Company, Inc.
- Comment Letter J: Caltrans, District 11
- Comment Letter K: Duane E. Bazzel
- Comment Letter L: County of San Diego, Planning and Development Services
- Comment Letter M: County of San Diego, Department of Environmental Health
- Comment Letter N: Allen Matkins Leck Gamble Mallory & Natsis LLP
- Comment Letter O: State of California, Governor's Office of Planning and Research (State Clearinghouse)

Copies of all letters received by the City of Chula Vista regarding the Draft EIR and the responses to comments follow.

ERRATA

After completion and circulation of the Draft EIR, several typographical errors were identified and/or clarifications to the EIR text were necessary. Minor typographical errors were corrected in the text. Clarifications are identified below. All of the corrections have been reviewed, and none of them effect the impact analysis conclusions. The clarifications are summarized below. Modified text is indicated in underline and strikeout format as follows:

~~Old Text~~ Revised Text

Specifically, these changes to the EIR are limited to the following sections:

Executive Summary – In Chapter 1.0, Executive Summary Page 1-14 has been revised to state that the Nuisance Easement Alternative would result in "fewer residential units within 1,000 feet of the active portion of the landfill" compared to the proposed project. Rather than stating that the Nuisance Easement Alternative would result in "~~no residential land uses within the 1,000-foot nuisance easement area~~." This statement has been revised to be consistent with the analysis for the Nuisance Easement Alternative.

Page 1-15 (MM LU-2), has been revised to delete the reference to delete the statement "~~and in Village Ten~~." Village Ten is not being mitigated by MM LU-2. Village Ten has its own project-specific mitigation measure and trigger, MM LU-3.

Page 1-16 (MM LU-4), has been revised to correct the parenthetical statement that General Plan Policy E 6.4, "will be" corrected. Since the Draft EIR went out for public review the City has amended General Plan Policy E 6.4; therefore "will be" has been removed from the statement "as ~~will be~~ corrected."

Pages 1-18 (MM TCA-1), 1-20 (MM TCA-3), 1-23 (MM TCA-11), and 1-28 (MM TCA-16), have all been revised to include reference to the "Growth Management Ordinance (GMO) (Chapter 19.09 of the Chula Vista Municipal Code)."

Page 1-24 (MM TCA-12), has been revised in the Final EIR to ensure that the "direct impact" in question, which results in the mitigation measure of constructing the Main Street Bridge, never actually occur because the mitigation measure pre-empts the impact.

Page 1-46 MM CUL-5, has been revised based on a comment received from the SDCAS also regarding the curation requirement. MM CUL-5 has also been simplified to remove the curation requirement that was redundant.

On Page I-55 in Table 1-3 MM BIO-16, this comment was moved from Page 1-68. In the Draft EIR MM BIO-16 was said to mitigate an impact due to conflicts with the provisions of an HCP,

NCCP, or other approved conservation plan. However, this mitigation measure reduces impacts to special-status species. Therefore, this mitigation measure has been moved under the threshold for special-species to help mitigate potentially significant impacts.

On Page 1- 57 in Table 1-3 MM BIO-17 and MM BIO-18 have been moved from Page 1-70. In the Draft EIR MM BIO-17 and MM BIO-18 were said to mitigate an impact due to inconsistency with the General Plan biological resource policies. However, as stated in Section 5.8 Biological Resources, these mitigation measures have been included in the Draft EIR to reduce impacts to special-status species. Therefore, this mitigation measure has been moved to mitigate the impact as stated in Section 5.8.

On Page 1-63 in Table 1-3 under the column titled Environmental Issues, the threshold regarding potential impacts on federally protected wetlands was not included; therefore, Page 1-63 has been revised to include the threshold in which the associated impact and mitigation measures are identified for.

On Page 1-65 in Table 1-3, the row associated with potential impacts to the movement of wildlife has been moved to Page 1-69 to improve upon the numerical flow of the mitigation measures. This threshold has also been revised to reference MM BIO-7 and MM BIO-16 through MM BIO-18. These mitigation measures were been included in the Draft EIR to reduce impacts to the movement of wildlife. Therefore, reference to the identified mitigation measures has been included.

On Page 1-71 in Table 1-3 MM HYD-6 and MM HYD-7 were said to mitigate significant impacts due to a violation of a water quality standard or waste discharge requirement. However, MM HYD-6 was included in the Draft EIR to mitigate impacts associated with erosion due to alteration of an existing drainage pattern. Therefore, this mitigation measure has been moved to the threshold in which it mitigates on Page 1-72. Additionally, MM HYD-7 was included in the Draft EIR to mitigate impacts associated with structures being placed within a 100-year flood hazard area. Therefore, this mitigation measure has been moved to the threshold in which it mitigates on Page 1-73.

On Page 1-72 in Table 1-3 under the threshold regarding project-related contribution to polluted runoff, the mitigation column has been revised to reference MM HYD-6 instead of ~~MM HYD-7~~. This was a typographical error in the Draft EIR.

On Page 1-72 in Table 1-3 under the threshold regarding the degradation of water quality, the mitigation column has been revised to reference MM HYD-6 instead of ~~MM HYD-7~~. This was a typographical error in the Draft EIR.

On Page 1-74 in Table 1-3 under the threshold regarding new or expanded stormwater drainage facilities, the mitigation column has been revised to reference MM HYD-1 and MM HYD-6 and "~~no additional mitigation required~~" has been removed.

On Page 1-91 in Table 1-3 under the threshold regarding the emission of potentially hazardous materials within one-quarter mile of a school, ~~MM HAZ-2A and MM HAZ-2B~~ have been deleted and reference to MM HAZ-1 has been added. MM HAZ-1 was been included in the Draft EIR to mitigate potential impacts due to emission of potentially hazardous materials. Therefore, this threshold has been revised to reference the correct mitigation measure (MM HAZ-1).

On Page 1-90 in Table 1-3 under the threshold regarding potentially hazardous materials on site, the column "Result of Impact Analysis" has been revised. The Draft EIR stated that a less than significant impact would occur because carcinogenic risks due to proximity to the landfill were below the SDAPCD threshold for sensitive receptors. However, as stated in Section 5.15 Hazardous Materials and Risk of Upset, this threshold was found to be potentially significant due to the potential presence of munitions and explosives of concern on the FUDS site in Village Ten. Therefore, this column has been revised to reference the correct impact analysis result.

Also under the threshold regarding potentially hazardous materials on site, the mitigation column has been revised to include MM HAZ-2A and MM HAZ-2B, which were deleted from Page 1-90. As stated in the Draft EIR in Section 5.15 Hazardous Materials, these mitigation measures have been included to reduce potential impacts due to the potential presence of munitions and explosives of concern on the FUDS site in Village Ten. Therefore, these MM HAZ-2A and MM HAZ-2B have been included under the correct threshold.

Page 1-91 (MM HAZ-2B) has been revised to reflect "trail improvement plans" for the OVRP/Greenbelt trail rather than "~~a grading permit,~~" and "or grading plans for" water quality basins has also been added.

Page 1-102 in Table 1-4, Summary of Cumulative Impacts, under the environmental issue regarding sewer, the "Result of Impact Analysis" column has been revised. The Draft EIR stated that the proposed project would result in a cumulatively significant impact. However, as stated in Section 6.0 Cumulative Impacts, the proposed project would not result in cumulative impacts. Therefore, the cumulative impact summary has been revised to reflect the analysis and significance determination found in Section 6.0.

On Page 1-105 in Table 1-5, Alternatives Impact Summary, the row which summarizes an alternative's ability to meet the project objectives under the Nuisance Easement Alternative has been revised. In the Draft EIR this table stated that the Nuisance Easement Alternative only partially met the project alternatives. However, as stated in Section 10.0 Alternatives, this

alternative would meet all the project objectives. Therefore, this column has been revised to reflect the conclusions in the Alternatives Section.

Project Description – The footnote on Page 4-55 has been revised to clarify that the off-site improvements, which are not identified in the list, are in fact included in the analysis in the EIR. This revision was made based on a comment received during public review of the Draft EIR (Comment N-11).

Land Use – In Section 5.1, Land Use Pages 5.1-33, 5.1-39, 5.1-48, and 5.1-55, have been revised to correct the parenthetical statement that General Plan Policy E 6.4, "will be" corrected. Since the Draft EIR went out for public review the City has amended General Plan Policy E 6.4; therefore "will be" has been removed from the statement "as ~~will be~~ corrected."

Landform Alteration /Aesthetics – Page 5.2-91 (MM AES-4) has been revised to state that a shadow analysis must be performed prior to design review approval for any structure ~~four~~ three stories and above. This revision was made based on a comment received during public review of the Draft EIR (Comment N-15).

Traffic –Page 5.3-8 has been revised to include the equation that was used to calculate the demand per hour per lane for the ramp meter analyses.

Table 5.3-13 on Page 5.3-28 has been revised to include a column for Peak hour Volume.

Page 5.3-46 has been revised to reflect "(LOS ~~E~~ D)" for the roadway segment on Heritage Road between Main Street and Avenida De Las Vistas. This was a typographical error in the Final EIR.

On Page 5.3-53 under the Ramp Intersection Capacity Analysis subheading, I-805 SB Ramps / Main Street intersection has been added to the list of intersections that would operate at over capacity as identified in Table 5.3-20. This was a typographical error in the Draft EIR.

Table 5.3-21 on Page 5.3-58 has been revised to include a column for Peak Hour Volume.

Page 5.3-59 has been revised to include the six missing freeway / State highway segments. This was a typographical error in the Draft EIR.

Page 5.3-61 was revised to include "(Assumed Build by Year 2015)" to clarify when the roadway improvements to be constructed by others would be built.

Table 5.3-26 on Page 5.3-77 has been revised to include two new columns for Peak Hour Volume under both the With Project and Without Project scenarios. Also, the Demand Volume numbers under the Without Project scenario have been revised.

Page 5.3-79 was revised to include "(Assumed Build by Year 2020)" to clarify when the roadway improvements to be constructed by others would be built.

Page 5.3-80 has been revised to reflect "(LOS ~~E~~ F)" for the intersection on Heritage Road / Main Street. This was a typographical error in the Final EIR.

Page 5.3-89 has been revised to identify over capacity conditions during the AM peak hour for both the I-805 SB Ramps / Olympic Parkway and I-805 SB Ramps / Main Street intersections. The intersection I-805 NB Ramps / Main Street has also been included as having over capacity impacts during the PM peak hour.

Table 5.3-31 on Page 5.3-97 has been revised to include two new columns for Peak Hour Volume under both the With Project and Without Project scenarios. Also, the Demand Volume numbers under the Without Project scenario have been revised.

Page 5.3-101 under the intersection for La Media Road / Olympic Parkway, the identified impact during PM peak hours has been deleted.

Page 5.3-109 under the subheading for Ramp Intersection Capacity Analysis has been revised to include "I-805 NB Ramps / Olympic Parkway – Over capacity during the AM and PM peak hour."

Table 5.3-36 on Page 5.3-114 has been revised to include two new columns for Peak Hour Volume under both the With Project and Without Project scenarios. Also, the Demand Volume numbers under the Without Project scenario have been revised.

Page 5.3-115 has been revised to include "Heritage Road / Energy Way (Int#64) – Signalized intersection" as an improvement to be constructed by others.

Page 5.3-115 has been revised to include "(Assumed Build by Year 2030)" to clarify when the roadway improvements to be constructed by others would be built.

"~~Heritage Road / Energy Way (Int #64)~~" on Page 5.3-116 has been removed as a roadway improvement to be constructed by others.

AM and PM Peak Hour Average Delay and LOS columns in Table 5.3-37 have been revised for the intersections at SR-125 SB Ramps / Main Street and SR-125 NB Ramps / Main Street. This was a typographical error.

Page 5.3-132 under the subheading for Ramp Intersection Capacity Analysis, an impact during "AM peak hour" was identified for the intersection I-805 SB Ramps / Main Street.

Table 5.3-42 on Page 5.3-137 has been revised to include two new columns for Peak Hour Volume under both the With Project and Without Project scenarios. Also, the Demand Volume numbers, Excess Demand Volume numbers, Delay time, and Queue time have been revised under the Without Project scenario.

Pages 5.3-162 (MM TCA-1), 5.3-164 (MM TCA-3), 5.3-168 (MM TCA-11), and 5.3-177 (MM TCA-16), have all been revised to include reference to the "Growth Management Ordinance (GMO) (Chapter 19.09 of the Chula Vista Municipal Code)."

MM TCA-12 on Page 5.3-166 in the Draft EIR has been revised in the Final EIR to ensure that the "direct impact" in question, which results in the mitigation measure of constructing the Main Street Bridge, never actually occur because the mitigation measure pre-empts the impact. The EDU threshold up through which the project is required to pay TDIF prior to needing the Main Street Bridge crossing is 4,737 EDU. The mitigation measure has been revised to state that no additional building permits will be issued past the 4,736th EDU unless the City has constructed the improvement. In addition, the caveat language has been added providing for (1) the developer can construct the improvement (Main Street crossing Wolf Canyon), (2) the developer can construct alternative improvements which reduce the need for the crossing, and (3) the developer can perform a traffic study to demonstrate the improvement is not needed and push out the trigger further.

MM TCA-14 on Page 5.3-174 has been revised to state that Caltrans "can and should" work with the Project Applicant to adjust the ramp meter as necessary.

MM TCA-16 on Page 5.3-179 in the Draft EIR has been revised in the Final EIR to delete "~~Heritage Road / Energy Way (Int #64) is included as a signalized intersection~~" under the 2030 scenario of assumed roadway and intersection improvements.

Table 5.3-49 on Page 5.3-182 under the column "Impacted Facilities" for La Media Road (SB) / Main Street (WB), "~~all-way stop controlled~~" has been removed.

Table 5.3-49 on Page 5.3-183 under the column "Impacted Facilities" for Heritage Road / Avenida De Las Vistas (SD), "~~all-way stop controlled~~" has been removed.

Table 5.3-49 on Page 5.3-187 under the column "Impacted Facilities" for I-805 NB On-Ramp @ Main Street, "Cumulative Impact: Adjust meter rate" has been moved from under the Year 2030 Plus Project to the Year 2020 Plus Project.

Table 5.3-56 on Page 5.3-198 has been revised to include a row for the Community Park Driveway that is assumed to be built in Year 2025.

Air Quality – In Section 5.4, Air Quality Page 5.4-21 and Page 5.4-22, have been revised to correct the parenthetical statement that General Plan Policy E 6.4, "will be" corrected. Since the Draft EIR went out for public review the City has amended General Plan Policy E 6.4; therefore "will be" has been removed from the statement "as ~~will be~~ corrected."

Cultural Resources – Page 5.6-22 MM CUL-5, has been revised based on a comment received from the SDCAS also regarding the curation requirement. MM CUL-5 has been simplified to remove the curation requirement that was redundant and now references curation requirements that will be required after an artifact has been displayed for public interpretation.

Biological Resources – Pages 5.8-105, 5.8-112, 5.8-113, and 5.8-116 have been revised to state, Salt Creek "Sewer Easement" rather than Salt Creek "~~Interceptor Road~~."

Pages 5.8-67, 5.8-100, 5.8-106, 5.8-119, 5.8-130, and 5.8-134 have been revised to state "Otay Ranch Preserve" rather than "~~Salt Creek~~ Preserve."

Hazards and Risk of Upset - Page 5.15-48 (MM HAZ-2B) has been revised to reflect "trail improvement plans" for the OVRP/Greenbelt trail rather than "~~a grading permit,~~" and "or grading plans for" water quality basins has also been added.

Significant and Unavoidable – Section 8.0 has been revised to include significant and unavoidable cumulative impacts to cultural resources, specifically archaeological resources. This section has also been revised to include "and cumulative" impacts to agricultural resources and "direct" impacts to global climate change. These revisions were based on the conclusions found in the Draft EIR.

Alternatives – Pages 10-47 and 10-52 have been revised to state that the Nuisance Easement Alternative would result in "fewer residential units within 1,000 feet of the active portion of the landfill" compared to the proposed project. Rather than stating that the Nuisance Easement Alternative would result in "~~no residential land uses within the 1,000-foot nuisance easement area~~." This statement has been revised to be consistent with the analysis for the Nuisance Easement Alternative.

Appendix B – Appendix B has been revised to include additional information on the Otay Ranch GDP Goal regarding aimed to diversify the economic base within Otay Ranch. Additionally, industrial and business park objectives have been included along with a comparison analysis.

Appendix M – Appendix M, Traffic Impact Analysis, has been revised based on comments received during public review of the Draft EIR. See revised Appendix M in this Final EIR.

Appendix N – The Overview of Water Service Report has been revised to reflect the land use acreages identified in the Draft EIR. The total water supply identified in the WSAV in the Draft

EIR was 2,137,232 gpd and with the revisions to the Water Service Report, the total is only 2,125,638 gpd, which is 11,594 gdp less than the WSAV.

Appendix O – The Overview of Sewer Service Report has been revised to reflect the land use acreages identified in the Draft EIR.

INTENTIONALLY LEFT BLANK

Comment Letter A

Marni Borg

From: Mark Kukuchek <mochek@cox.net>
Sent: Tuesday, September 02, 2014 6:18 PM
To: Marni Borg
Cc: 'Diane Carter'; victoriakrauss1216@yahoo.com; 'Mark Kukuchek'
Subject: EIR 13-01;SCH 2013071077

To: Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA. 91910

Reference: EIR 13-01;SCH 2013071077

As active members of the equestrian community and the presidents of our two local horse organizations we wish to make the following joint comments regarding the Otay Ranch University Villages SPA Plan Draft EIR. The Otay Valley Regional Park Concept Plan holds that all trails in the Western OVRP area must be multiuse including Equestrian use. There is currently an Equestrian Staging Area at Mace Street in Chula Vista and the long range plan would be that the OVRP Staging area at Otay Lakes County Park when constructed would include equestrian facilities. The long range vision for the OVRP trails would be that there would be parallel trails on both sides of the Otay River, east from Heritage Road to the Otay Lakes County Park. As stated previously, both of these trails must be multiuse (including equestrian use). While the EIR does not address the entire Eastern OVRP area and appears to acknowledge that the OVRP/Greenbelt Trail will be multiuse trails (including equestrian use) we are requesting confirmation to that fact. A-1

Additionally, a new bridge is planned where Heritage Road crosses the Otay River. The OVRP Concept Plan shows that the parallel river trails will pass under the bridge to keep trail users from having to cross the road at grade level and deal with vehicular traffic. The under bridge trails will need to be hardened to not erode during flood events and have enough clearance for mounted equestrians to pass underneath while riding (12 feet or more). A-2

Thank you for the opportunity to comment and if you need any further information you can contact the undersigned or one of our members, Mark Kukuchek, who is also a member of the OVRP Citizen Advisory Committee. A-3

Diane Carter
President of the Bonita Valley Horsemen

Victoria Krauss
President of the Tijuana River Valley Equestrian Association

INTENTIONALLY LEFT BLANK

Response to Comment Letter A

Bonita Valley Horsemen and Tijuana River Valley Equestrian Association Diane Carter, President of the Bonita Valley Horsemen and Victoria Krauss, President of the Tijuana River Valley Equestrian Association September 2, 2014

A-1 As stated in Section 5.8, Biological Resources, on Page 5.8-102, Village 3 North and a Portion of Village 4 SPA – Pages II-3, III-55, III-59, V-77 and V-92; Village 3 North and a Portion of Village 4 Village Design Plan – Page 66; Village 8 East SPA – Page I-5, III-62, III-69, V-87, V-103, IX-164; Village 8 East Village Design Plan – Page 50; Village 10 SPA – Pages I-5, III-59, V-83, V-97, IX-157; and Village 10 Village Design Plan – Page 50, all Greenbelt Trail segments will be multi-use trials which provide a variety of uses including, hiking, biking, and equestrian use.

A-2 This comment is not applicable to the proposed University Villages project. Improvements to Heritage Road south of Main Street, including the Heritage Road bridge, is included in the Chula Vista adopted FY 2012-13 through FY 2016-17 Capital Improvement Program (CIP) (STM364-Heritage Road Bridge Replacement) and therefore is a separate project. No further response is required.

A-3 No response to this comment is required.

INTENTIONALLY LEFT BLANK

Comment Letter B

San Diego County Archaeological Society, Inc.

Environmental Review Committee

11 September 2014

To: Ms. Marni Borg
Development Services Department
City of Chula Vista
276 Fourth Avenue
Chula Vista, California 91910

Subject: Draft Environmental Impact Report
University Villages Sectional Planning Area Plan and Tentative Map
EIR 13-01

Dear Ms. Borg:

I have reviewed the cultural resources aspects of the subject DEIR on behalf of this committee of the San Diego County Archaeological Society.

Based on the information contained in the DEIR and its Appendix F1, we have the following comments:

1. Along with the archaeological monitor, it is normal practice to include a Native American monitor. Mitigation Measure MM CUL-1 should be revised accordingly. B-1
2. Mitigation Measures MM CUL- both refer to curation of "significant artifacts" at a facility approved by the City. All prehistoric material other than human remains and associated burial material should be curated. Historic material is typically curated other than, for example, bulk construction material, of which a sample is curated. The decision on what to keep and what to discard should be made in consultation with the curation facility, as some historical material may be common at a particular site but uncommon elsewhere. B-2
3. Mitigation Measure MM CUL-5 says some recovered cultural material could go into a "temporary" exhibit. We suggest MM CUL-5 should specify that the exhibited material should be processed as a loan in accordance with the curation facility's procedures. This will avoid losing the connection between the exhibited material and the rest of the collection. B-3

Other than the above, we concur with the impact analysis and mitigation measures as defined in the DEIR.

Sincerely,

James W. Royle, Jr., Chairperson
Environmental Review Committee

P.O. Box 81106 San Diego, CA 92138-1106 (858) 538-0935

cc: Brian F. Smith & Associates
SDCAS President
File

Response to Comment Letter B

San Diego County Archaeological Society, Inc.
James W. Royle, Jr., Chairperson
September 11, 2014

B-1 The City of Chula Vista does not have a policy in place to have Native American monitors on a project site concurrent with the archaeological monitors. Additionally, Section 15064.5(f) of the CEQA Guidelines does not require or specifically recommend Native American monitoring for potential inadvertent discoveries of cultural resources. In accordance with CEQA, the City of Chula Vista has detailed mitigation measures to address the potential for significant archaeological resource impacts. Please see Mitigation Measures CUL-1, CUL-2 and CUL-3 in Section5.6, Cultural Resources, of the Draft EIR. As detailed in measure CUL-1, all ground disturbing activities in areas of undisturbed soil would be monitored by an archaeological monitor. Mitigation measures CUL-2 and CUL-3 as well as Cultural Resources Study for the University Villages Project at Otay Ranch (Appendix F) provide specific provisions for the identification and evaluation of any accidentally discovered resources.

B-2 As stated in Section 8, Mitigation Program of Appendix F in the Draft EIR, all artifacts recovered from the University Villages site shall be curated, including artifacts found during the testing phase. No further response is required.

B-3 MM CUL-5 has been revised to clarify that artifacts will be selected from the curated collections and temporarily loaned back to the project for a display per the curation facilities' procedures (see EIR Page 5.6-22). No new impacts would occur as a result of these modifications and no further revisions are necessary.

INTENTIONALLY LEFT BLANK

Comment Letter C

U.S. Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008
760-431-9440
FAX 760-431-9624

California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, California 92123
858-467-4201
FAX 858-467-4299

In Reply Refer To:
FWS/CDFW-SD-11B0147-14CPA0506

SEP 17 2014

Ms. Mami Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, California 91910

Subject: Draft Environmental Impact Report for the Otay Ranch University Villages Project (Villages 3, 8 East, and 10; SCH # 2013071077), City of Chula Vista, California.

Dear Ms. Borg:

This letter provides the U.S. Fish and Wildlife Service (Service) and California Department of Fish and Wildlife (Department) (collectively, the Wildlife Agencies) comments on the August 5, 2014, draft Environmental Impact Report (EIR) for the Otay Ranch University Villages Project (Villages 3, 8 East, and 10). The proposed project involves implementation of three Sectional Planning Area plans (Otay Ranch Village 3 North and a portion of Village 4, Otay Ranch Village 8 East, and Otay Ranch Village 10) for residential and commercial development on approximately 751 acres of land within Otay Ranch, located at the southern edge of the City of Chula Vista (City). As part of this response, the Wildlife Agencies are including general comments to assist the City in fulfilling the conservation obligations described in its Multiple Species Conservation Program (MSCP) Subarea Plan (SAP).

The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and threatened and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Federal Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*), including habitat conservation plans (HCP) developed under section 10(a)(1)(B) of the Act. The Department is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act (CEQA; §§ 15386 and 15381, respectively) and is responsible for ensuring appropriate conservation of the State's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act (Fish and Game Code § 2050 *et seq.*) and other sections of the Fish and Game Code. The Department also administers the Natural Community Conservation Planning (NCCP) program.

C-1

On January 11, 2005, the Service issued a section 10(a)(1)(B) permit pursuant to the Act for the City of Chula Vista MSCP SAP. The Department also issued Natural Community Conservation Plan Approval and Take Authorization per Section 2800 *et seq.*, of the California Fish and Game Code. The MSCP is a comprehensive, long-term habitat conservation planning program that

C-2

addresses the needs of multiple species and the preservation of natural vegetation communities within the southwestern subregion of San Diego County. The MSCP also addresses the loss of covered species and their habitats due to the direct, indirect, and cumulative impacts associated with land development. The City's MSCP SAP and its associated Implementing Agreement and permits are the means by which the City of Chula Vista has obligated to assemble the MSCP Preserve and to mitigate for impacts to covered species and their habitats.

C-2 Cont.

The Wildlife Agencies appreciate the efforts that have been made to comply with the City's SAP and offer the following comments and recommendations to ensure consistency with the SAP's conservation goals.

MSCP and Otay Ranch Specific Plan Implementation

Because the proposed project is one of the last large remaining village projects in the Otay Ranch Specific Plan within the City limits, we recommend the City assess its progress toward completing its conservation obligations associated with the MSCP Subarea Plan. Prior to approval of the proposed project, the Wildlife Agencies request a meeting with the City to assess progress towards fulfilling the conservation obligations associated with the Otay Ranch Specific Plan, and more generally, the City's MSCP SAP. For example, the original 1.188 conservation ratio in the Otay Ranch Specific Plan was sufficient to build out the Otay Ranch component of the MSCP Preserve; however, boundary adjustments and non-MSCP conservation purchases (e.g., Federal and State land acquisition) may have changed the conservation ratio necessary to build out the Preserve. In addition, development of portions of Otay Ranch, including parts of the currently proposed project, reflect implementation of the Baldwin Agreement that is included in the County of San Diego's MSCP SAP, and we recommend an assessment of consistency with that agreement. We recommend a meeting to evaluate the City's progress toward meeting its conservation obligations and to determine the appropriate steps remaining to fulfill these obligations.

C-3

Pages 5.8-107 of the draft EIR discusses Planned and Future Facilities associated with the proposed project and states that "Planned Facilities are identified in Table 6-1 of the MSCP Subarea Plan and no mitigation is required for these facilities;" however, certain Planned Facilities do require mitigation in the form of payment into the Preserve Management Endowment Fund (PMEF; SAP pages 8-10). The PMEF is intended to provide perpetual annual funding for enhanced management activities within the North City and Otay Ranch Preserve Management Areas as well as fund the Quino Checkerspot Butterfly (QCB) Habitat Enhancement Program. The facilities that are required to pay into the PMEF include the Salt Creek Sewer, Wolf Canyon Sewer, Main Street, and La Media Road. Based on information presented in the draft EIR, it appears that the proposed project will be using the same alignments or constructing portions of some of these Planned Facilities. We understand that some of these projects will not be constructed as originally envisioned; however, the obligation to establish and fully fund the PMEF remains. We recommend that the City evaluate the proposed project's potential obligation to pay into the PMEF and include a discussion in the final EIR.

C-4

Ms. Marni Borg (FWS/CDFW-SD-11B0147-14CPA0306) 3

Preserve Boundary Line Adjustment and Future Facilities Policy

Wildlife Agency approval is required for proposed boundary line adjustments to the MSCP Preserve (section 5.4.2 of the City's SAP) and when facilities larger than 2 acres are proposed within the MSCP Preserve (section 6.3.3.2 of the City's SAP).

As described in the Biological Technical Report (Appendix E in the draft EIR), the proposed project includes a boundary line adjustment to the MSCP Preserve that will result in a 50.7 acre addition of preserved land between Salt Creek and Lower Otay Lake, a 42.2 acre reduction of preserved land west of Salt Creek, and a 0.8 acre reduction of preserved land along Wolf Canyon. In total, the proposed boundary adjustment would add 7.7 acres to the MSCP Preserve including1.6 acres of maritime succulent scrub. Although there will be a net loss of 3.8 acres of intact coastal sage scrub, 8.8 acres of disturbed but functional coastal sage scrub will be added to the preserve. The addition of habitat between Salt Creek and Lower Otay Lake improves the preserve configuration by maintaining access to the lake and reducing edge effects. Based on this information, we agree that the proposed boundary adjustment meets the biological equivalency requirement of the City's MSCP Subarea Plan and concur with the proposed boundary line adjustment. C-5

The proposed detention basins associated with Village 10 will permanently impact 4 acres within the MSCP Preserve. As described in the Biological Technical Report, siting of these detention basins is consistent with the Future Facilities policy in that the basins will be placed in the least environmentally sensitive areas possible and total impacts have been reduced as much as possible. Furthermore, the basins will be designed to accommodate multiple development areas including the University Site, thereby reducing the need for this type of facility and associated impacts from upcoming projects.

Page 177 of the Biological Technical Report states "Construction of the basins and the associated outfall will not preclude wildlife from using the area since there is no barrier to movement by wildlife" and "The area will be revegetated with native upland herbaceous species so as to not preclude movement of wildlife through the area and also to provide foraging opportunities." These measures indicate that the basin areas will be revegatated and left open such that wildlife movement will not be impeded. C-6

Because the proposed basins are located in the least biologically sensitive area, will limit future needs for such facilities within the Preserve, and the basins will not impede wildlife movement, the Wildlife Agencies concur with the City's determination that the proposed Future Facilities are consistent with the City's MSCP SAP despite the exceedance of the 2 acre requirement. Our concurrence is contingent on the City requiring the revegetation of the basins and temporary impact areas, and ensuring that no additional project features (e.g., fencing of the basins) are constructed that would impede wildlife movement as conditions of approval for the project. The Wildlife Agencies appreciate the measures proposed to retain biological function in this area of the Preserve.

Project Specific Comments

1. Pages 5.8-9 of the draft EIR and page 77 of the Biological Technical Report state that burrowing owl (*Athene cunicularia*) habitat is present within the project site, but no owls were detected during focused surveys. We recommend early coordination with the City, applicant, and the Wildlife Agencies if burrowing owls are identified during subsequent surveys on the project site in order to develop an appropriate relocation strategy that maximizes the effectiveness of the relocation effort and avoids significant project delays. We also recommend a qualified biologist be on site on the day of initial ground disturbance to assess burrowing owl occupancy and initiate the appropriate response, if necessary. C-7

2. The Wildlife Agencies request the opportunity to review drafts of the Maritime Succulent Scrub Restoration Plan, Resource Salvage Plan, Revegetation Plan, Preserve Edge Plan, and the Area-Specific Management Directives associated with the proposed project. C-8

3. Page 161 of the Biological Technical Report includes a conceptual site plan for the Village 8 East Community Park and a brief analysis of potential direct and indirect impacts associated with the park. Given the sensitivity of the habitat to the north and south of the proposed community park, it is important that the proposed active recreation activities limit impacts to adjacent habitat. The Wildlife Agencies recommend an expanded analysis that includes a discussion of potential impacts to the Preserve associated with potential increased human access to the habitat adjacent to the park. We also recommend a more thorough analysis of potential indirect impacts (e.g., lighting and noise) to the Preserve before the site plan is finalized. Should this analysis identify additional impacts, appropriate avoidance, and minimization measures should be identified and included as part of the project. C-9

We appreciate the opportunity to comment on the subject draft EIR. To schedule a meeting, please contact Kyle Dutro of the Department at 858-467-4267/ kyle.dutro@wildlife.ca.gov; or Eric Porter of the Service at 760-431-9440/ eric_porter@fws.gov.

Sincerely,

for Karen A. Goebel
Assistant Field Supervisor
U.S. Fish and Wildlife Service

for, Gail K. Sevrens
Environmental Program Manager
California Department of Fish and Wildlife

ec:
Glen Laube, City of Chula Vista, Chula Vista, CA

Response to Comment Letter C

U.S. Fish and Wildlife Service and California Department of Fish and Wildlife
Karen A. Goebel, Assistant Field Supervisor
September 17, 2014

C-1 This comment does not address the adequacy of the environmental analysis in the EIR. No response is required.

C-2 This comment does not address the adequacy of the environmental analysis in the EIR. No response is required.

C-3 Chula Vista MSCP Staff met with Wildlife Agency Staff on October 7, 2014. The City provided the Agencies with a brief overview of the Otay Ranch RMP conveyance program which is triggered during the City's processing of a final map. City staff summarized the final map development acreages processed to date, the corresponding RMP conveyance obligations (i.e., 1.188 acres per 1 acre of development [minus RMP defined common use areas]), and the actual acreages conveyed to date. In addition, the City provided a forecast of remaining development areas, estimated conveyance obligations, and currently available preserve acreages within the Otay Ranch Preserve. Based on the information presented by the City, the Wildlife Agencies acknowledged that the City is currently achieving its conservation goal for Otay Ranch. As this comment is not directly related to the proposed project, revisions to the EIR are not necessary.

With regards to providing a consistency analysis with the County's MSCP Subarea Plan and Baldwin Agreement/Letter, the proposed project is located entirely within the City's jurisdictional boundaries and therefore subject to compliance with the City's MSCP Subarea Plan and associated conditions for coverage for Otay Ranch. The conditions for coverage for Otay Ranch are described in Section 7.6 of the City's MSCP Subarea Plan and include implementation of, and compliance with, the Otay Ranch RMP. Sections 5.1 (Land Use) and 5.8 (Biological Resources) address the project's consistency with the Chula Vista MSCP Subarea Plan, Otay Ranch RMP.

As noted in the Wildlife Agenesis comment, portions of Otay Ranch will be developed in the unincorporated County of San Diego. Otay Ranch development within the unincorporated County of San Diego is subject to the County of San Diego's MSCP Subarea Plan. Similar to the Chula Vista MSCP Subarea Plan, Otay Ranch development within the County of San Diego is also subject to implementation of, and compliance with, the Otay Ranch RMP. To that end, a consistency analysis of the County's MSCP Subarea Plan would not change the

findings of this EIR as both the City and County Subarea Plans rely on implementation of the same Otay Ranch RMP. As noted above, the Project's compliance with the Otay Ranch RMP is provided in Section 5.8 of the EIR. Implementation of the Otay Ranch RMP is assured through mitigation measures MM BIO-1 through MM BIO-18. For the reasons stated above, revisions to the EIR are not necessary as a result of this comment.

The Wildlife Agencies make reference to the Baldwin Agreement, which is an appendage to the County's MSCP Subarea Plan. Unlike the County's MSCP Subarea Plan, the Baldwin Agreement is not appended or incorporated by reference to the City's MSCP Subarea Plan or Implementing Agreement. However, for areas under its land use authority, the City has upheld the spirit and intent of the Baldwin Agreement through previously approved Otay Ranch General Development Plan Amendments dating back to 1998. Subsequent projects within Otay Ranch, including the proposed project, have all demonstrated consistency with the Otay Ranch GDP as amended from time to time. This comment does not address the accuracy or adequacy of the EIR and no further response is required.

C-4 Pursuant to the funding obligations specified in the City's MSCP Subarea Plan and Implementing Agreement, the City is committed to creating the PMEF, a non-wasting endowment program to fund enhanced management activities within the North City and Otay Ranch Preserve Management Areas (PMA). The PMEF will be established by the City through funding contributions associated with following capital improvement program (CIP) projects: Salt Creek Sewer; Wolf Canyon Sewer; Main Street, and La Media Road. Contributions into the PMEF will be made upon commencement of each respective CIP project. Therefore, as the obligation to create and/or contribute to the PMEF is not the responsibility of individual development projects including the proposed project, changes to the EIR are not necessary. However, the City has and will continue to provide the Wildlife Agencies a status of the PMEF though its annual MSCP reporting process. This comment does not address the accuracy or adequacy of the EIR and no further response is required.

C-5 This comment states that the Wildlife Agencies concur with the proposed boundary adjustment. No further response is required.

C-6 This comment states the Wildlife Agencies concur with the City's determination that the proposed Future Facilities are consistent with the City's MSCP SAP. As noted in the Wildlife Agencies comment, their concurrence is contingent on the City requiring revegetation of the basins and temporary construction areas and that no additional project features are constructed that could impede wildlife movement.

The following Tentative Map condition has been prepared and added as a condition of approval in order to ensure that the final design of the detention basins will retain the existing pre-development biological function of the area, to the maximum extent practicable:

"Prior to the issuance of land development permits, including clearing or grubbing and grading and/or construction permits for the water quality/detention basins located in the Preserve area south of the Village 10 SPA Plan development area, the Applicant shall prepare and submit a landscape plan and access control plan (e.g., fencing and signage) to ensure that the proposed facilities have been designed to retain the existing pre-development biological function of the area, to the maximum extent practicable. The existing pre-development condition provides foraging opportunities for raptors and an unimpeded wildlife corridor connecting Otay River Valley to Salt Creek Canyon. The landscape plan shall include native plant species complement the surrounding Preserve areas and incorporate a program for routine maintenance of the basins following construction. The maintenance program shall describe, at a minimum, the entity responsible for controlling invasive species, the maintenance activities and methods required to control invasive species, and a maintenance/monitoring schedule. This condition shall be to the satisfaction of the Otay Ranch Preserve Steward/Biologist (or designated Chula Vista POM joint staff representative) and the Development Services Director (or their designee)."

C-7 As identified in MM BIO-15 in Section 5.8.8 of the Draft EIR, prior to issuance of any land development permits (including clearing, grubbing, and grading permits), the Project Applicant shall retain a City-approved biologist to conduct focused pre-construction surveys for burrowing owls. The surveys shall be performed no earlier than 30 days prior to the commencement of any clearing, grubbing, or grading activities. The City will coordinate with the Wildlife Agencies as necessary following the results of the pre-construction surveys described in MM BIO-15.

If occupied burrows are detected, the City-approved biologist shall prepare a passive relocation mitigation plan subject to the review and approval by the Wildlife agencies and City, including any subsequent burrowing owl relocation plans to avoid impacts from construction-related activities. Therefore, coordination with the Wildlife Agencies has already been incorporated into mitigation for the proposed project and will be included in the MMRP for the proposed project. No revisions to the Draft EIR are necessary as a result of this comment.

C-8 The Maritime Succulent Scrub Restoration Plan, Resource Salvage Plan, Revegetation Plan, Preserve Edge Plan, and the Area-Specific Management Directives are required as mitigation for the proposed project in Section 5.8.8 of the

Draft EIR, Biological Resources. These plans are required in MM BIO-1 (Area Specific Management Directives), MM BIO-2 (Maritime Succulent Scrub Restoration Plan), MM BIO-3 (Revegetation Plan), MM BIO-12 (Resource Salvage Plan), and MM BIO-16 (Preserve Edge Plans). The City will coordinate with the Wildlife Agencies to provide the above plans associated with the proposed project at the time of preparation. The Preserve Edge Plans are included in the Village Three and Portion of Village Four SPA Plan, Village Eight East SPA Plan, and Village Ten SPA Plan and have been made available for review. No revision to the Draft EIR is necessary as a result of this comment.

C-9 As discussed in Draft EIR Section 5.8 Page 5.8-58, recreational uses are a minimum of 100 feet from the Preserve boundary. The Preserve Edge Plans prepared for Village Eight East describe avoidance of indirect effects that could occur along the Preserve/development interface. As stated on Page 28 of the Preserve Edge Plan, pursuant to the requirements of the MSCP Subarea Plan and RMP, the land plan has been designed to provide access to the preserve areas at designated locations, directing pedestrians to developed public trails within the Otay River Valley via designated public trails and roadways. The SPA Plan and Village Design Plan provide Wall and Fence Plans for Village Eight East. View fencing/walls along the Preserve Edge will be provided outside the Preserve, within the Brush Management Zone/100' Preserve Edge.

Additionally, as stated in the Preserve Edge Plan, the Village Eight East Design Plan includes criteria for the design of lighting for the village. Improvement plans for areas within the 100' Preserve Edge will include shielded lighting designs that avoid spillover light in the Preserve. Street lighting along the southern edge of Village 8 East and the Community Park Entry Drive will be located the greatest distance possible away from the Preserve, while meeting public safety lighting requirements. The Community Park Concept Plan incorporates active recreation uses such as lighted baseball fields, soccer fields, tennis courts, parking areas and security lighting on restroom and maintenance buildings in more centralized portions of the park (i.e. further from the Preserve).

MM BIO-17 requires a lighting study to also be conducted for the Community Park (P-2) in Village Eight East. As stated in the Preserve Edge Plan, Lighting Plans and accompanying photometric analyses must be prepared in conjunction with street improvement plans for streets adjacent to the Preserve and the community park planning process to illustrate the location of proposed lighting standards and type of light shielding measures. Lighting Plans must demonstrate that light spillage into the Preserve is avoided/minimized to the greatest extent possible. City of Chula Vista

updated street lighting standards require installation of energy saving LED lamps on all City streets.

Furthermore, the Village Eight East Community Park (P-2) has been designed to avoid siting potential noise-generating land uses in proximity to occupied habitat, and future park planning would meet Otay Ranch GDP, RMP, and MSCP siting criteria. As stated on Page 5.8-67 of the Draft EIR, the park design will include specific measures to address noise issues with respect to the Preserve and the special status species that are located within habitat adjacent to the Community Park (P-2), specifically MM BIO-17 and MM BIO-18. Details on the Community Park will be provided by the City when the park moves forward as a project. Currently, cursory analysis has been provided to reduce indirect effects and provide for compliance with MSPC adjacency guidelines. No revision to the Draft EIR is necessary.

INTENTIONALLY LEFT BLANK

Comment Letter D

Vulcan
Materials Company
WEST REGION

September 17, 2014

Ms. Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: University Villages Sectional Planning Area Plan and Tentative Map
Draft Environmental Impact Report (EIR 13-01; SCH 2013071077)

Dear Ms. Borg:

Thank you for the opportunity to comment on the EIR for University Villages. We have reviewed the document, and found that the Quarry Access Road section of the Traffic Impact Analysis does not appropriately address the issue of ultimate access to the Otay Valley Quarry that we have discussed with the applicant and City staff.

The Otay Valley Quarry Reclamation Plan was approved by the City of Chula Vista on 6/14/11. The use was recognized by the City as regionally significant because of the declining supply of aggregate material in San Diego County. The mine is a vested use in the City of Chula Vista that is expected to continue until 2089 or beyond. That use relies on its access road to Main Street (sometimes called Wiley Road).

On 11/12/13, our consultants, the Atlantis Group, met with the applicant, applicant's engineer and City staff at staff's request to review a realignment of the quarry access road.

On 12/11/13, Atlantis Group submitted preliminary comments on the applicant's proposal (see attachment 1). At that time, we believed that both Otay Valley Quarry, LLC (owner of Village 4) and Vulcan Materials (owner and operator of the quarry) would be added to the EIR distribution list. Otay Valley Quarry, LLC was included on the notice, but Vulcan Materials was not.

On 2/7/14, Atlantis Group forwarded specific comments to City staff (see attachment 2) with very specific criteria that were necessary to retain viable trucking operations. We believed that our comments would either be incorporated, and that we would be advised of any differences. On several occasions, our consultant contacted city staff for an update on the project schedule and the intersection design, and were provided with no updates or indications that our comments were not being incorporated.

D-1

500 NORTH BRAND BLVD, SUITE 500 • GLENDALE, CALIFORNIA 91203 • TELEPHONE 323-258-2777

Ms. Marni Borg
September 17, 2014
Page 2 of 2

On 9/9/14, when checking the City's website for another issue, Atlantis Group noticed that the EIR for University Villages was online. In reviewing the EIR, including the Traffic Impact Analysis, Atlantis found that the intersection design in the interim (through 2025) condition looked virtually unchanged from the draft we reviewed at the 11/12/13 meeting.

The Otay Valley Quarry has vested right to operate, including viable access for the truck trips, and the horizontal and vertical requirements of the rock trucks. The design shown in the EIR and the SPA Plan could be a major safety hazard to the Otay Valley Quarry and its customers.

D-1
Cont.

Therefore, we request that the intersection design be modified to meet the Otay Valley Quarry's operational requirements so that it can continue to supply material to the San Diego region.

We will appreciate the opportunity to meet with the staff, and the applicant if possible, to discuss the realignment of the road and the resulting changes to the intersection.

Sincerely,

VULCAN MATERIALS COMPANY,
West Region

Patrick Coughlin
Operations Manager

Attachments: (18 pages)
1. Letter dated 12/11/13 and cover email
2. Memorandum dated 1/10/14 and cover email dated 2/7/14
3. Chen Ryan Quarry Access Traffic Analysis
4. Otay Ranch Village Preserve Edge Plan

cc: Gary Halbert, City Manager,
Kelly Broughton, Development Services Director
Tom Adler, Land Development Manager
Joe Gamble, Project Manager
Steve Power, Senior Planner
Marcela Escobar-Eck, Atlantis Group
John Atkins, Vulcan Materials Company
Sean Palmer, Vulcan Materials Company

Kathi Riser

From: Kathi Riser
Sent: Wednesday, December 11, 2013 4:52 PM
To: 'Joe Gamble'
Cc: Marcela Escobar-Eck
Subject: RE: Otay Quarry Access
Attachments: Chuck Miller.vcf; Pat Coughlin.vcf

Hi Joe,
Thanks for the quick follow-up. Here is the information for Chuck Miller (Otay Quarry) and and Pat Coughlin (Vulcan Materials).
Best regards,
Kathi

From: Joe Gamble [mailto:JGamble@chulavistaca.gov]
Sent: Wednesday, December 11, 2013 4:15 PM
To: Kathi Riser
Cc: Marcela Escobar-Eck
Subject: RE: Otay Quarry Access

Hi Kathi

In regards to page 2 request of your letter, could you please provide contact information for your clients so we can add their names and addresses to the hearing and EIR distribution notice list.

Thank you

Joe Gamble

From: Kathi Riser [mailto:kriser@atlantissd.com]
Sent: Wednesday, December 11, 2013 2:41 PM
To: Tom Adler
Cc: Joe Gamble; Chuck Miller (cmiller@danskig.com); Coughlin, Pat; John Atkins; Marcela Escobar-Eck
Subject: Otay Quarry Access

Hi Tom,
Attached please find our preliminary comments on the Main Street/Heritage Road plans and the quarry access road realignment.
We hope to have more specific comments after the quarry operator's engineer has completed their evaluation.
Best regards,
Kathi Riser
Sr. Land Use Consultant
Atlantis Group
619-523-1930 (office)
619-818-0053 (cell)
2488 Historic Decatur Road, Suite 200
San Diego, CA 92106
www.atlantissd.com

D-2

1

Atlantis Group, LLC
2488 Historic Decatur Road, Suite 200
San Diego, CA, 92106
Phone: (619) 523-1930
Kliser@AtlantisSD.com
www.AtlantisSD.com

December 11, 2013

Mr. Tom Adler, Land Development Manager
Development Services
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910San Diego

RE: Main Street/Heritage Road

Dear Tom,

We appreciate the information we learned at the meeting on November 12th concerning the City project for the Main Street/Heritage Road project, and the proposal to reconfigure the access road to the Otay Quarry with the Otay Ranch Village 3 VTM. D-3

On behalf of Otay Valley Quarry (Owner) and Vulcan Materials (Operator), we offer the following general comments:

1. As a vested use that will continue operations for 80-100 years, the quarry expects to export approximately 3,000,000 tons of materials each year. Assuming 12,000 tons per day and 25 tons per truckload, that averages 480 trucks per day; therefore, there will be a truck entering and leaving the quarry approximately every 30 seconds between the hours of 5:00 AM and 2:00PM on weekdays. We assume the City has taken these volumes into consideration. D-4

2. The quarry entrance should be 80' wide to accommodate trucks and allow for quarry road maintenance equipment to have enough room to turn around. D-5

3. We recommend an acceleration lane east bound on Main Street from the quarry access road. D-6

4. We recommend a right-turn deceleration lane on Main Street between Heritage Road and the quarry access road. D-7

5. We recommend a traffic signal be installed at the quarry access road (<500' from Heritage). D-8

6. As designed, the traffic island in Main Street will be difficult for trucks to avoid. We will provide a wheel-base dimension for the engineer to accommodate in the design revisions. D-9

Mr. Tom Adler
December 11, 2013
Page 2 of 2

We will be providing more detailed technical comments in the next few weeks.

Will the City's project be presented at a public hearing? If so, Otay Valley Quarry and Vulcan would like to be notified of any such hearing. Also, both would like to be added to the notice list for the distribution of the Village 3 EIR.

D-10

Please feel free to call me if you have any questions about this response.

Sincerely,

Marcela Escobar-Eck
Principal

cc: Chuck Miller, Otay Valley Quarry, LLC
Pat Coughlin, Vulcan Materials
John Atkins, Vulcan Materials

Kathi Riser

To: Kathi Riser
Subject: RE: Vulcan Response to Proposed Instersection, Main and Heritage

From: Kathi Riser
Sent: Friday, February 07, 2014 4:21 PM
To: Joe Gamble (JGamble@chulavistaca.gov)
Cc: 'tadler@chulavistaca.gov'; hphelps@chulavistaca.gov
Subject: FW: Vulcan Response to Proposed Instersection, Main and Heritage

Hi Joe,
I just realized I should have sent these to you.
Kathi

From: Kathi Riser
Sent: Friday, February 07, 2014 4:20 PM
To: 'tadler@chulavistaca.gov'; 'hphelps@chulavistaca.gov'
Subject: FW: Vulcan Response to Proposed Instersection, Main and Heritage

I apologize that I didn't forward these comments to you, although I did send preliminary comments in December.
Can you tell me the status of the Main Street alignment plans? We need to assure Vulcan that their concerns are being addressed, and we need the information as we work through the Village 4 design.
Thanks,
Kathi

D-11

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

ENGINEERING MEMORANDUM

DATE: January 10, 2014

TO: Pat Coughlin, Vulcan Materials Company
John Atkins, Vulcan Materials Company

FROM: Cory Schrack, PE
Nasland Engineering

SUBJECT: Vulcan Materials, Chula Vista: Access Road Analysis

The following road study memorandum serves to address the Chula Vista Facility's needs related to the road improvements proposed by the City of Chula Vista. Upon review of the proposed alignment drawings prepared by Hunsaker & Associates dated November 7, 2013, we offer the following design comments: D-12

1. The recommended configuration for the quarry entrance is shown on Attachment A. The approximate dimensions shown will optimize the usability of the new quarry entrance. The subsequent design points support the configuration shown on Attachment A. Autoturn software with several vehicle sizes was utilized to determine the required configuration. Refer to Attachment B for the vehicle turning movements analyzed. D-13

2. The quarry entrance should have curb return radii of 100-ft on the West side to accommodate the nine axle trucks that access the site several times per year to bring heavy equipment to the site. A dedicated right turn lane should be provided on eastbound Main Street. D-14

3. The quarry entrance should have curb return radii of 105-ft on the East side to accommodate the nine axle trucks that access the site several times per year. A separate right turn lane should be provided where the turn lane meets Main Street. An acceleration lane should be provided eastbound onto Main Street. D-15

4. The proposed median on Main Street will need to be reduced to make left turns feasible for trucks exiting the quarry heading westbound. If necessary for traffic channelization, a painted median may be acceptable. D-16

5. A traffic signal should be installed at the quarry entrance intersection with Main Street, as stated in the letter from the Atlantis Group dated December 11, 2013. The amount of traffic from the quarry should be studied in detail by a Traffic Engineer, including sufficient green time to allow the trucks to clear the intersection. Signal Timing with the intersection of Main Street and Heritage Road will also be critical for efficient operation of the quarry exit. It should also be D-17

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

noted that the quarry has vested mining rights with no restrictions on volume or hours of operation, and therefore the proposed entrance limits the ability to allow the necessary access for trucks and other construction equipment. D-17 Cont.

6. A turnaround area should be included near the quarry entrance to accommodate the turning movements of water trucks, graders, trucks, and loaders used by the quarry to calm dust from the unpaved entrance road. This equipment is not permitted to operate on public roads and cannot utilize the intersection to turn around. We recommend the turnaround area to be paved. A 100-ft radius would be appropriate for this purpose. D-18

7. At the intersection of Main Street and Heritage Road, design of the southeasterly curb return radius should take into account the size of trucks turning eastbound on Main Street from northbound Heritage Road. A 50-ft radius should be sufficient. D-19

8. Phasing of construction for the main street improvements should also be incorporated in the construction documents for the road. Access to the quarry shall be maintained at all times. Consideration for a temporary access road from Heritage Road should be made. D-20

9. If the improvements shown on the *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013* are to be implemented prior to construction of eastbound Main Street, the following considerations should be incorporated into the interim conditions. D-21

   a. Provide for the turn-around requirements of the quarry water truck (100-ft radius).
   b. Optimize traffic signal timing, taking into account the anticipated traffic volumes from the quarry.
   c. Design of the southeasterly curb return radius should take into account the size of trucks entering the quarry from northbound Heritage Road.

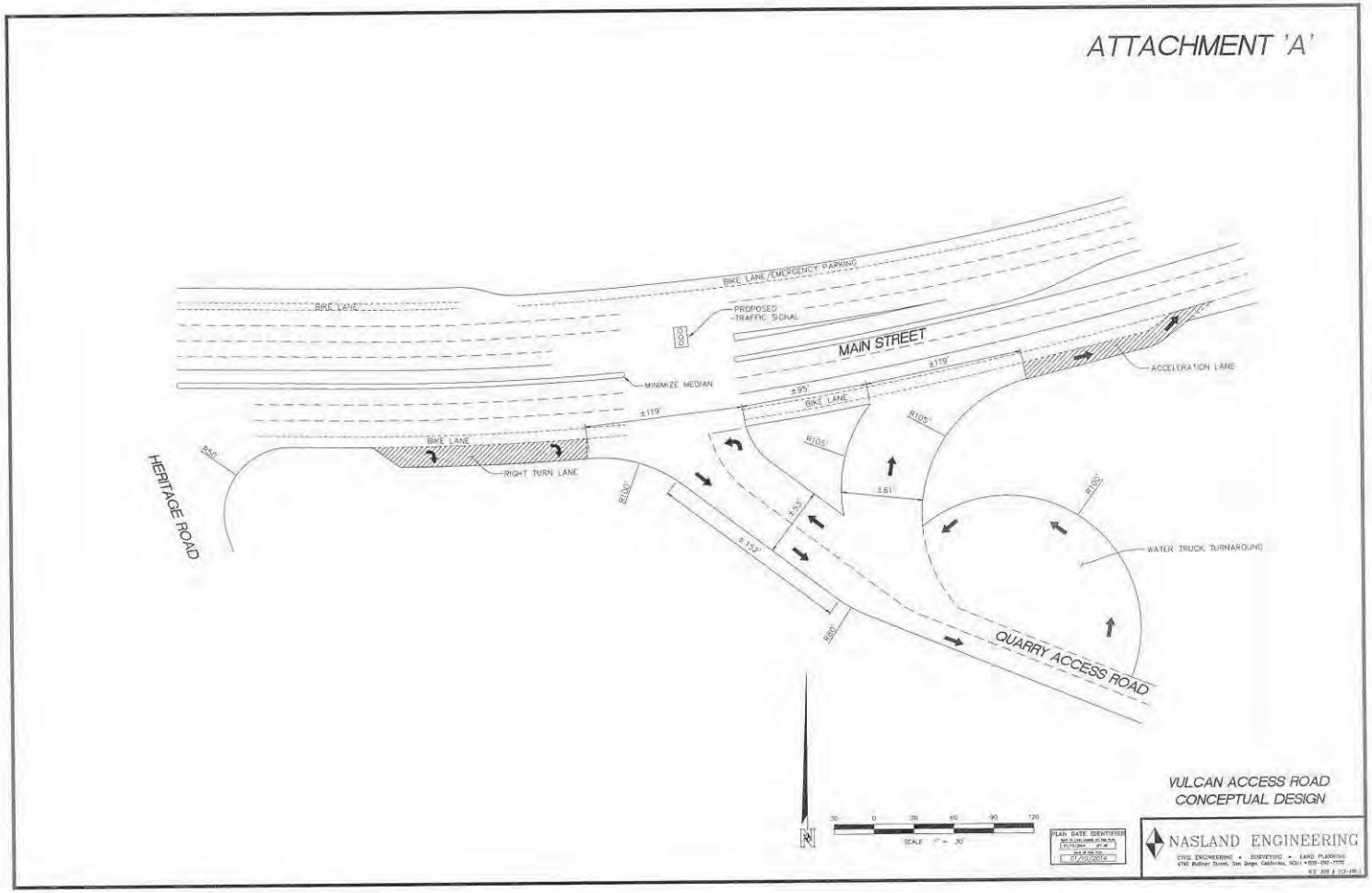
References:

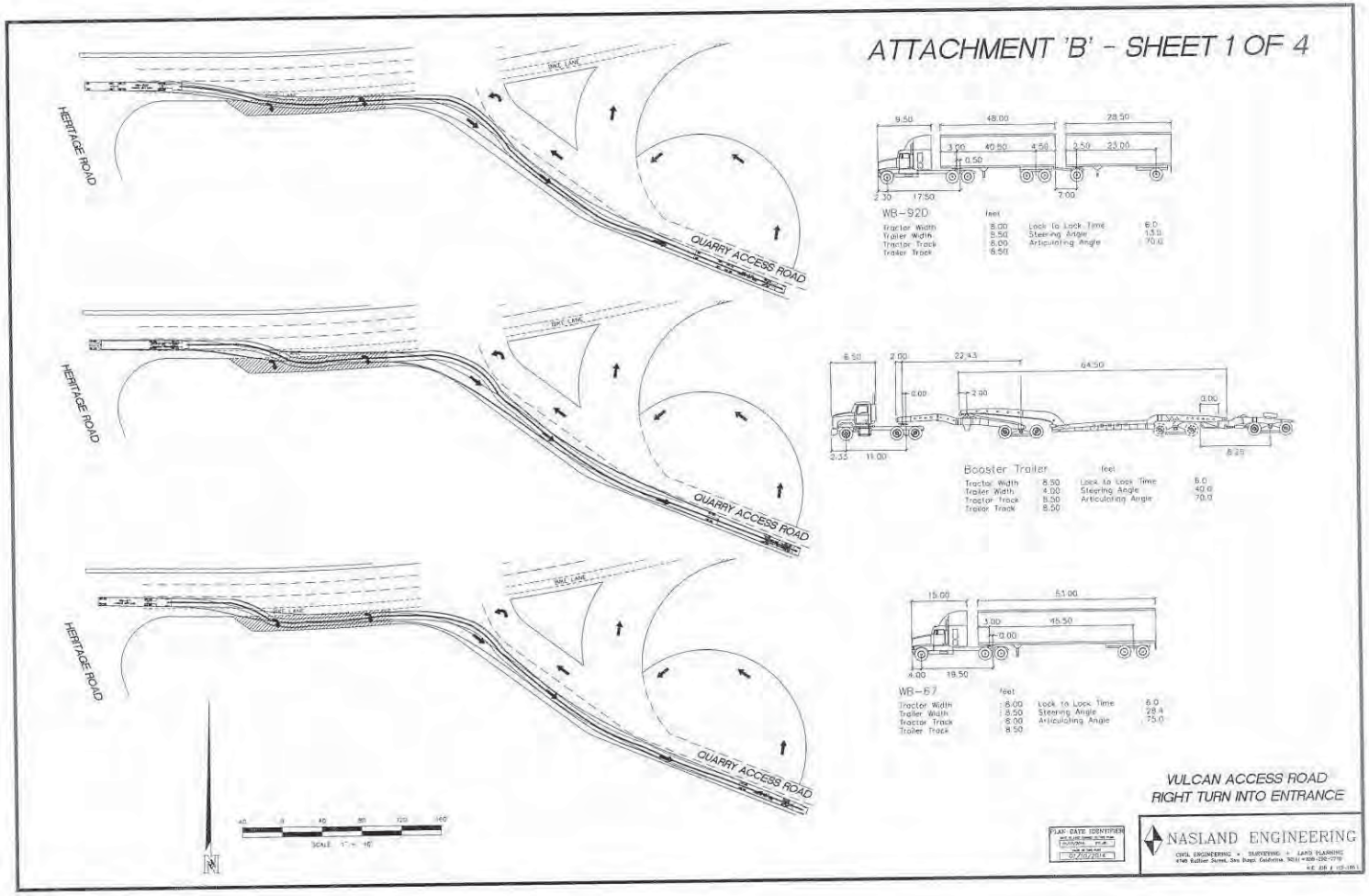
A. *Letter to the City of Chula Vista from Atlantis Group, dated December 11, 2013*
B. *Quarry Access Road exhibit prepared by Hunsaker & Associates, dated November 7, 2013*
C. *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013*

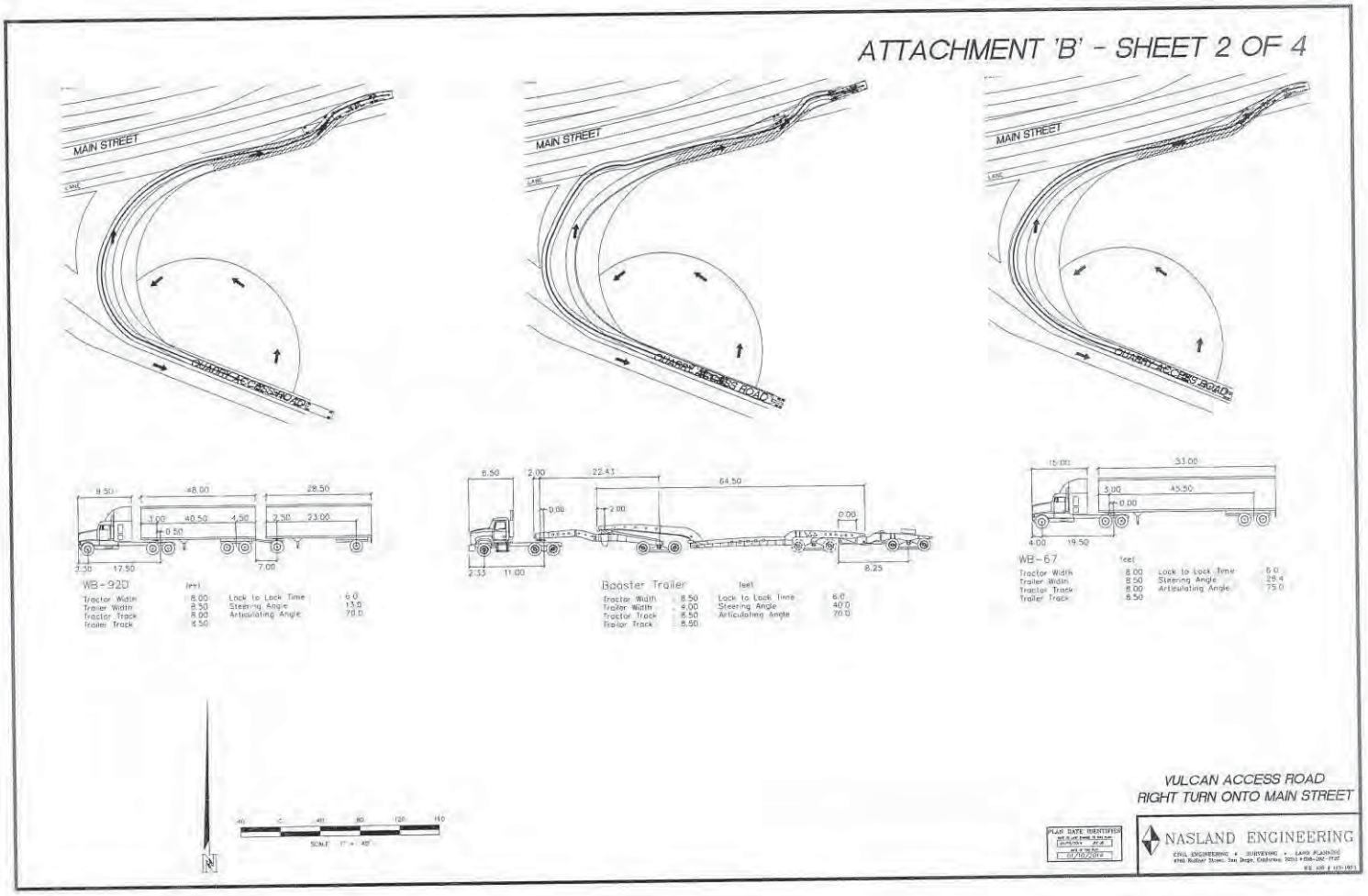
I hope the above information is helpful. Please contact me if I can be of further service or provide additional information regarding this project.

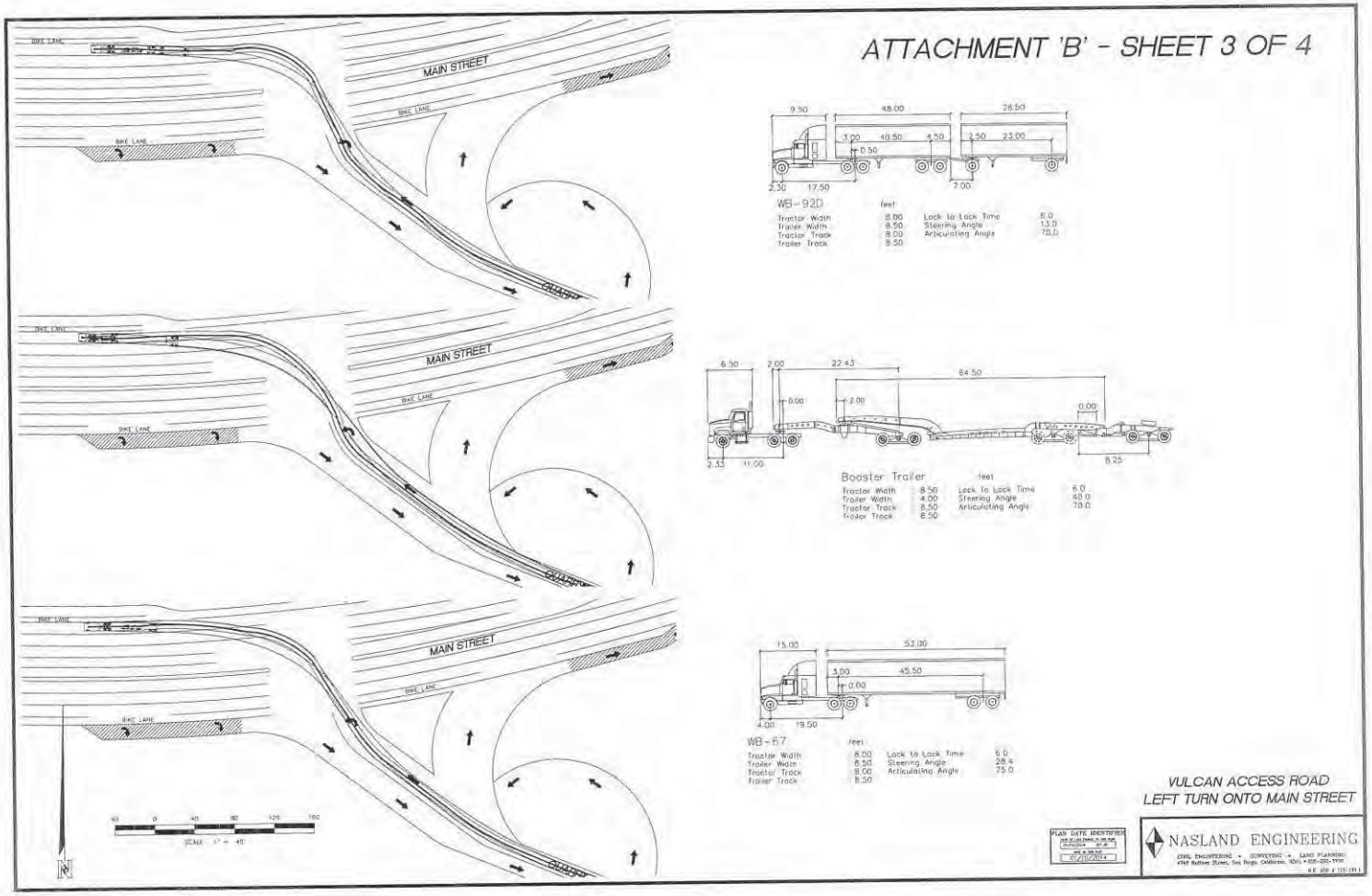
Sincerely,

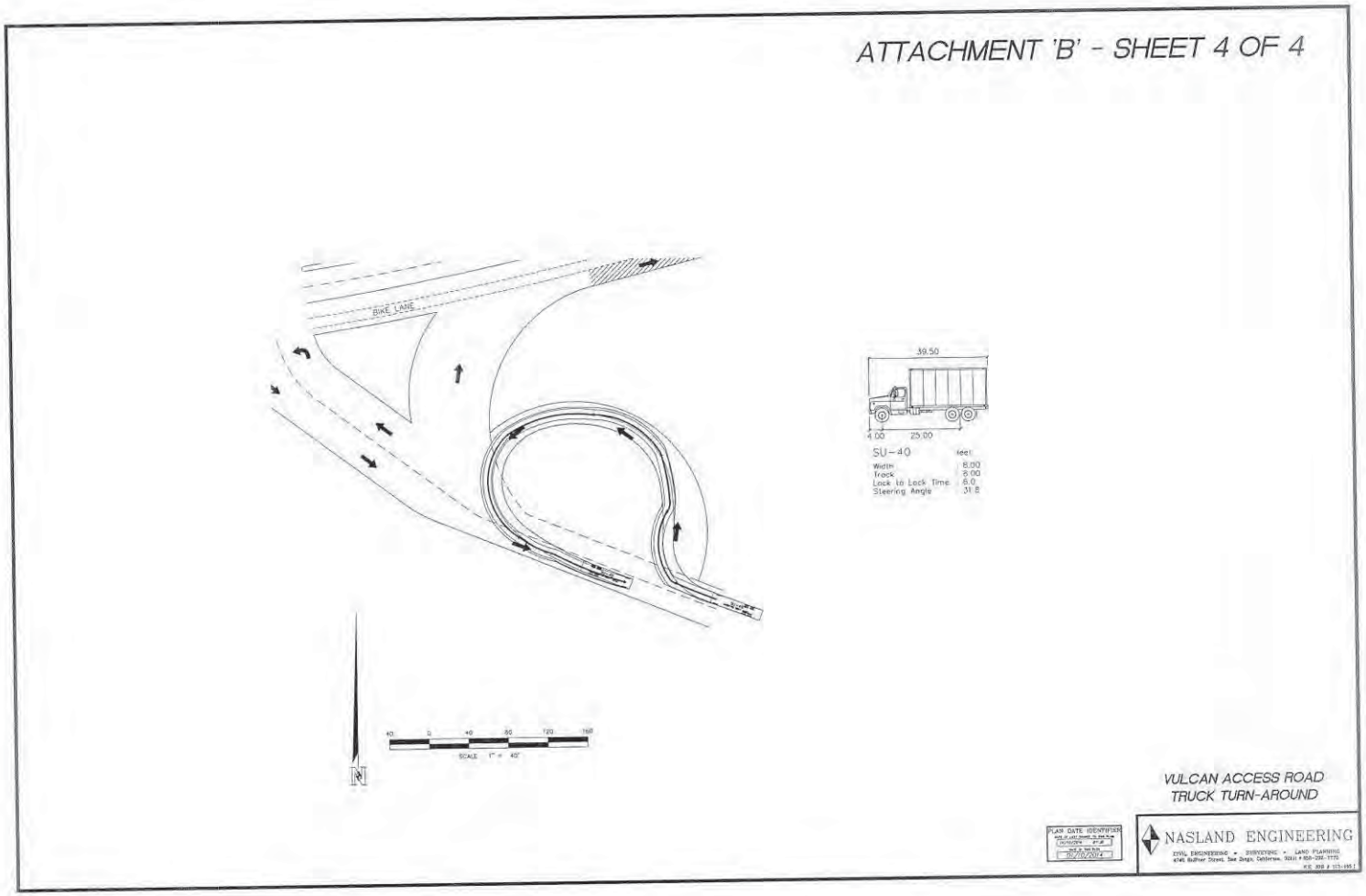
Cory Schrack, P.E.

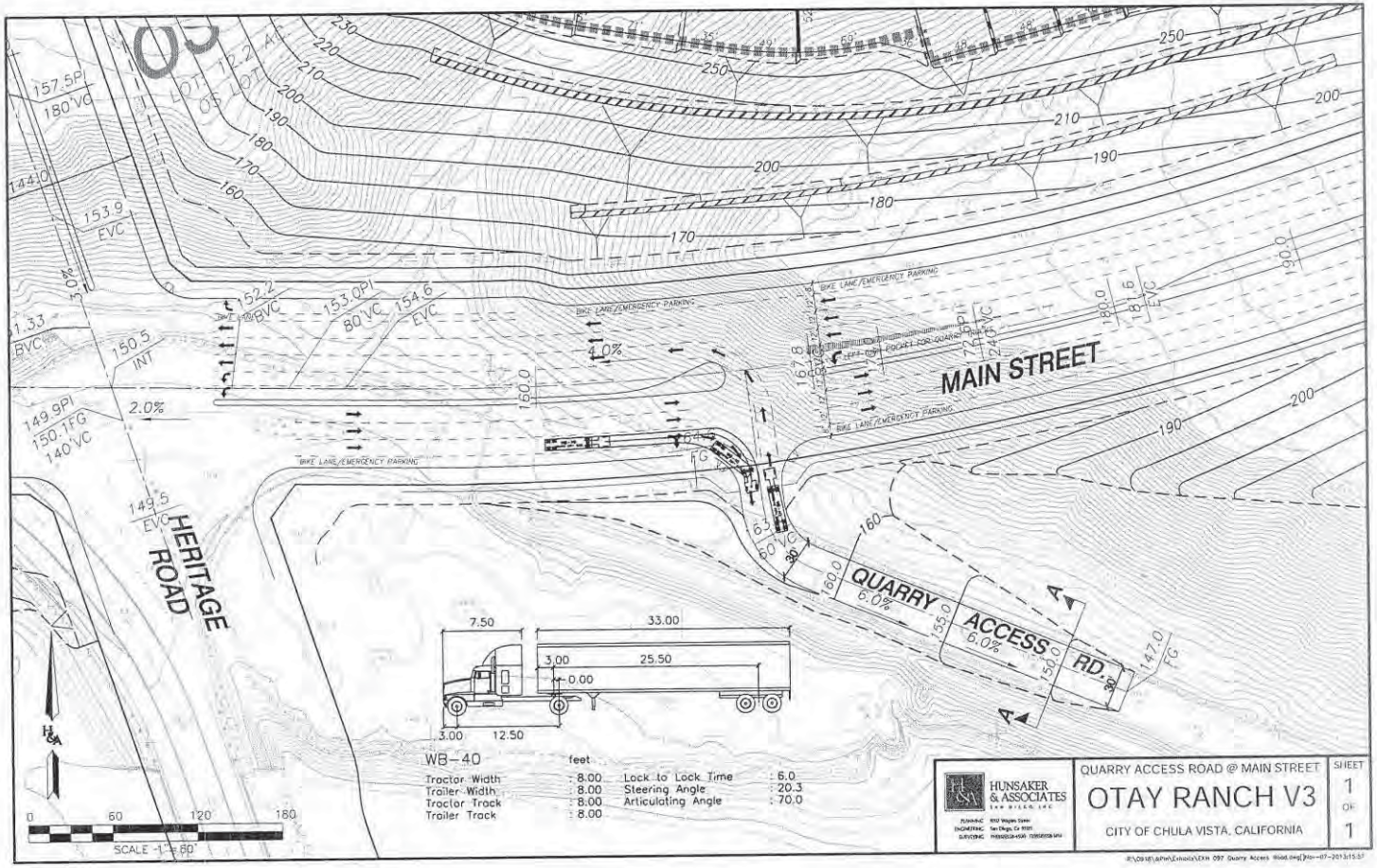

ATTACHMENT 'A'
BIKE LANE/EMERGENCY PARKING
BIKE LANE
PROPOSED TRAFFIC SIGNAL
MAIN STREET
MINIMIZE MEDIAN
ACCELERATION LANE
BIKE LANE
RIGHT TURN LANE
HERITAGE ROAD
WATER TRUCK TURNAROUND
QUARRY ACCESS ROAD
VULCAN ACCESS ROAD
CONCEPTUAL DESIGN
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 1 OF 4
HERITAGE ROAD
BIKE LANE
QUARRY ACCESS ROAD
WB-92D
feet
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 13.0
Articulating Angle 70.0
Booster Trailer
feet
Tractor Width 8.50
Trailer Width 4.00
Tractor Track 8.50
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 40.0
Articulating Angle 70.0
WB-67
feet
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 28.4
Articulating Angle 75.0
VULCAN ACCESS ROAD
RIGHT TURN INTO ENTRANCE
NASLAND ENGINEERING
SCALE 1" = 40'


ATTACHMENT 'B' - SHEET 2 OF 4
MAIN STREET
QUARRY ACCESS ROAD
WB-92D
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 13.0
Articulating Angle 70.0
Booster Trailer
Tractor Width 8.50
Trailer Width 4.00
Tractor Track 8.50
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 40.0
Articulating Angle 70.0
WB-67
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 28.4
Articulating Angle 75.0
VULCAN ACCESS ROAD
RIGHT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 3 OF 4
MAIN STREET
BIKE LANE
WB-92D
feet
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 13.0
Articulating Angle 70.0
Booster Trailer
feet
Tractor Width 8.50
Trailer Width 4.00
Tractor Track 8.50
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 40.0
Articulating Angle 70.0
WB-67
feet
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 28.4
Articulating Angle 75.0
VULCAN ACCESS ROAD
LEFT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 4 OF 4
BIKE LANE
39.50
4.00
25.00
SU-40
feet
Width 8.00
Track 8.00
Lock to Lock Time 6.0
Steering Angle 31.8
SCALE 1" = 40'
N
VULCAN ACCESS ROAD
TRUCK TURN-AROUND
NASLAND ENGINEERING


MAIN STREET
HERITAGE ROAD
QUARRY ACCESS RD.
BIKE LANE/EMERGENCY PARKING
WB-40
feet
Tractor Width : 8.00
Trailer Width : 8.00
Tractor Track : 8.00
Trailer Track : 8.00
Lock to Lock Time : 6.0
Steering Angle : 20.3
Articulating Angle : 70.0
HUNSAKER & ASSOCIATES
QUARRY ACCESS ROAD @ MAIN STREET
OTAY RANCH V3
CITY OF CHULA VISTA, CALIFORNIA
SHEET 1 OF 1
SCALE 1" = 60'

14.0 Quarry Access

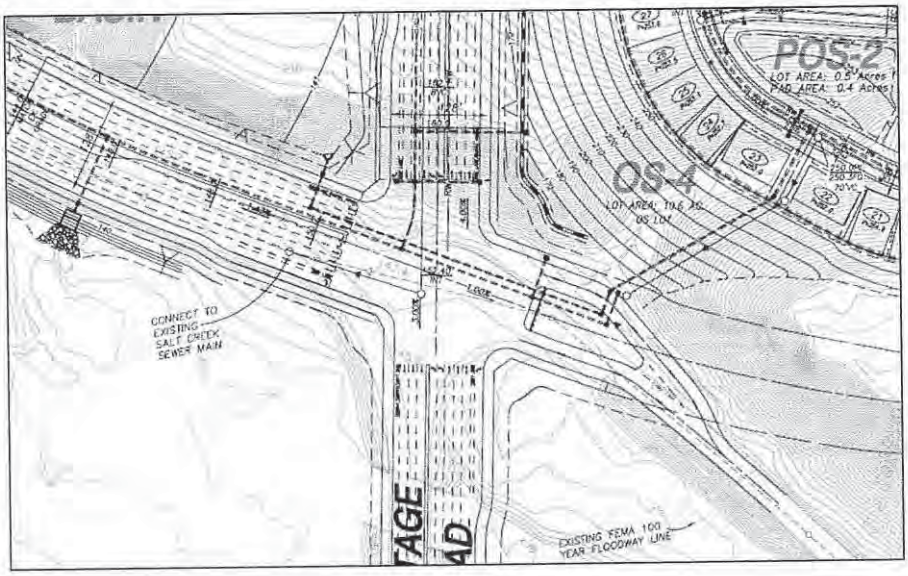
This chapter discusses traffic operations and safety at the quarry access off of Main Street under conditions with (ultimate) and without (interim) the Main Street connection over Wolf Canyon.

The following operational assumptions were derived based upon input from the quarry manager:

- Typical operation hours are between 7:00 am and 3:00 pm – Quarry traffic would be very unlikely to occur during the PM peak hour and thus the traffic operations analysis was based on the AM peak hour;
- Approximately 600 daily truck trips are generated by quarry activities – Approximately 1,500 ADT is generated by the quarry based on a 2.5 Passenger-Car Equivalent (PCE) factor per HCM 2010 (Exhibit 11-10); and
- One truckload every 30 seconds at the highest production – 120 trucks (300 PCE) would enter/exit the quarry during the AM peak hour, assuming a worst case scenario.

14.1 Interim Design

Main Street over Wolf Canyon is not likely to be constructed until Year 2025. The following drawing displays the proposed interim layout for quarry access in relation to the intersection of Heritage Road and Main Street. The access would be east of the intersection, to the southeast.



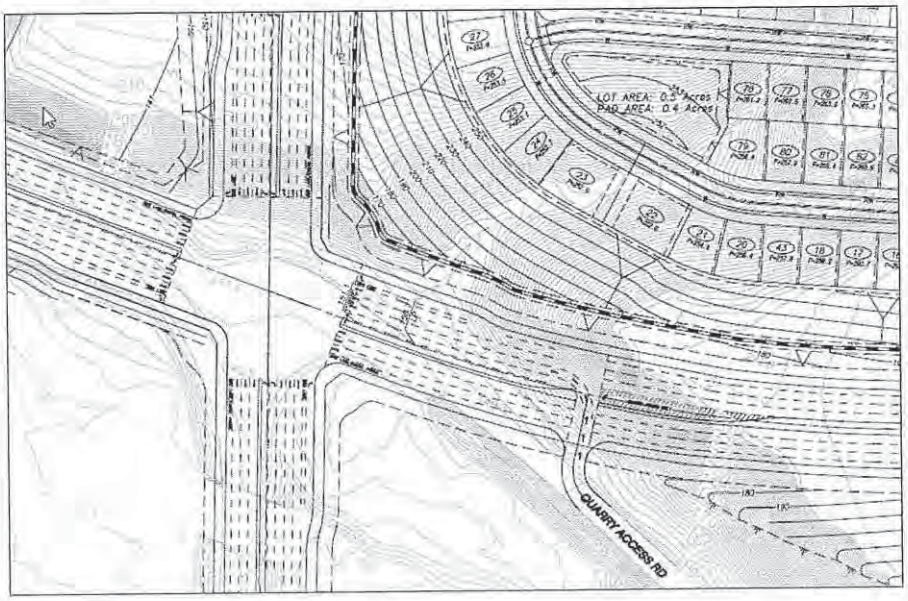
As shown, Main Street would terminate at the quarry access road approximately 210' east of Heritage Road.

Traffic Operation and Safety

Since no traffic movements would be in conflict with the ingress/egress at the quarry access, no traffic operations or safety issues would be anticipated in the interim years. The traffic signal at the Heritage Road and Main Street intersection should be designed as a standard eight-phase actuated signal. The westbound green indication would only be triggered by the arrival of westbound traffic. Proper signage should be displayed indicating that the east leg (Main Street, east of Heritage Road) is for "Quarry Access Only".

14.2 Ultimate Design

The layout below represents the proposed ultimate design for the quarry access in relation to the intersection of Heritage Road and Main Street, when Main Street between Heritage Road and La Media is constructed.



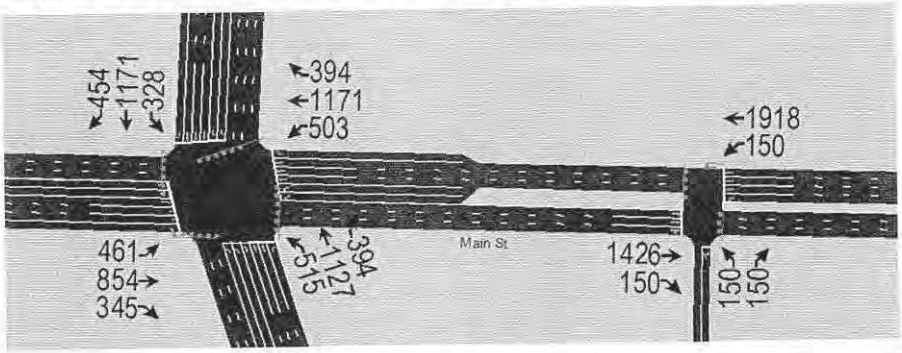
As shown, the quarry access road would be located approximately 350' east of Heritage Road.

Traffic Operation and Safety

A 50%/50% east/west directional split from/to the quarry was assumed and the following indicates the worst case quarry trip generation and ingress/egress volumes at the access point off of Main Street during the AM peak hour:

- 60 truck trips (150 PCE) making a right-turn (eastbound) to enter the quarry;
- 60 truck trips (150 PCE) making a left-turn (westbound) to enter the quarry; and
- 120 truck trips (300 PCE) exiting the quarry with 60 truck trips (150 PCE) each making left and right–turns onto Main Street.

The graphic below illustrates the AM peak hour turning movements at this intersection.



The quarry access is proposed to be signalized at Main Street. It is important to note that this proposed traffic signal must be coordinated with the traffic signal at the Heritage Road and Main Street intersection. **Table 14.1** displays intersection level of service and average vehicle delay results for both Heritage Road / Main Street and Quarry Access Road / Main Street intersections under the Year 2030 conditions. Level of service calculation worksheets are provided in **Appendix AC.**

TABLE 14.1
PEAK HOUR INTERSECTION LEVEL OF SERVICE RESULTS
QUARRY ACCESS YEAR 2030 CONDITIONS

Intersection	AM Peak Hour	
	Avg. Delay (sec.)	LOS
39. Heritage Road / Main Street	46.1	D
65. Quarry Access Road / Main Street	9.0	A

Source: Chen Ryan Associates; February 2014

As shown in the table, the quarry access at Main Street would operate at LOS A with minimum delay in Year 2030. The 50th (average) and 95th (maximum) queue length at the westbound (Main Street) left-turn into the quarry would be 57' and 177', respectively. Thus, it is recommended that the westbound left-turn pocket be designed at 200' to accommodate the maximum queue.

In addition to the 200' westbound left-turn pocket length, the following is also recommended to ensure safety and smooth operations at the intersection of Quarry Access Road and Main Street:

- "No-Turn On Red" sign and/or signal indication to be placed at the northbound quarry access approach to prohibit trucks from making right turns onto Main Street on red;
- Proper signage and pavement marking to be installed indicating "Quarry Access Only";
- Adequate turning radii to be provided for trucks; and
- No pedestrian crossing at Main Street.

B. FACILITIES AND IMPROVEMENTSPROPOSED WITHIN THE PRESERVE

The facilities described below and depicted on Exhibit 1 are proposed within the MSCP Preserve and are not subject to this Preserve Edge Plan, but rather are discussed for context purposes only. Per the MSCP Subarea Plan, certain infrastructure and roads planned in conjunction with development will be allowed to be constructed, operated and maintained within the Preserve. The Subarea Plan anticipated these "Planned" and "Future" facilities and requires compliance with the siting criteria identified in Section 6.3.3.4 or the Subarea Plan. The Project's Biological Report provides the siting criteria analysis. Facilities proposed within the Preserve include:

1. Access Facilities

The Village 3 North and a Portion of Village 4 SPA Plan ("Project") includes the extension of Main Street and Heritage Road through the Project site. In conjunction with the extension of Main Street, modifications to the off-site Quarry Access (Wiley Road) are also proposed.

- Both Main Street and Heritage Road are 6-Lane Prime Arterials on the Chula Vista General Plan Circulation Element. These roadways are identified on Table 6.1 of the Chula Vista MSCP Subarea Plan as "Planned Facilities." In addition to roadway improvements, utilities are co-located within the right-of-way to serve both Village 3 North and portions of Village 2. The Project's Biological Technical Report includes a detailed analysis of the Heritage Road and Main Street grading impacts as they relate to the MSCP Planned and Future Facility Siting Criteria. (Exhibit 2)

- The Quarry Access (Wiley Road) located off-site south of Village 3 North has been redesigned to intersect with Main Street east of Heritage Road. This two lane improved road serves the existing Otay Quarry and has been designed at the steepest gradient physically possible in order to minimize grading impacts on the Preserve. The Project's Biological Report includes a detailed analysis of the impacts as they relate to the MSCP Planned and Future Facility Siting Criteria. (Exhibit 2)

UNIVERSITY VILLAGES SECTIONAL PLANNING AREA PLAN
Otay Ranch Village 3 North and a Portion of Village 4

Preserve Edge Plan

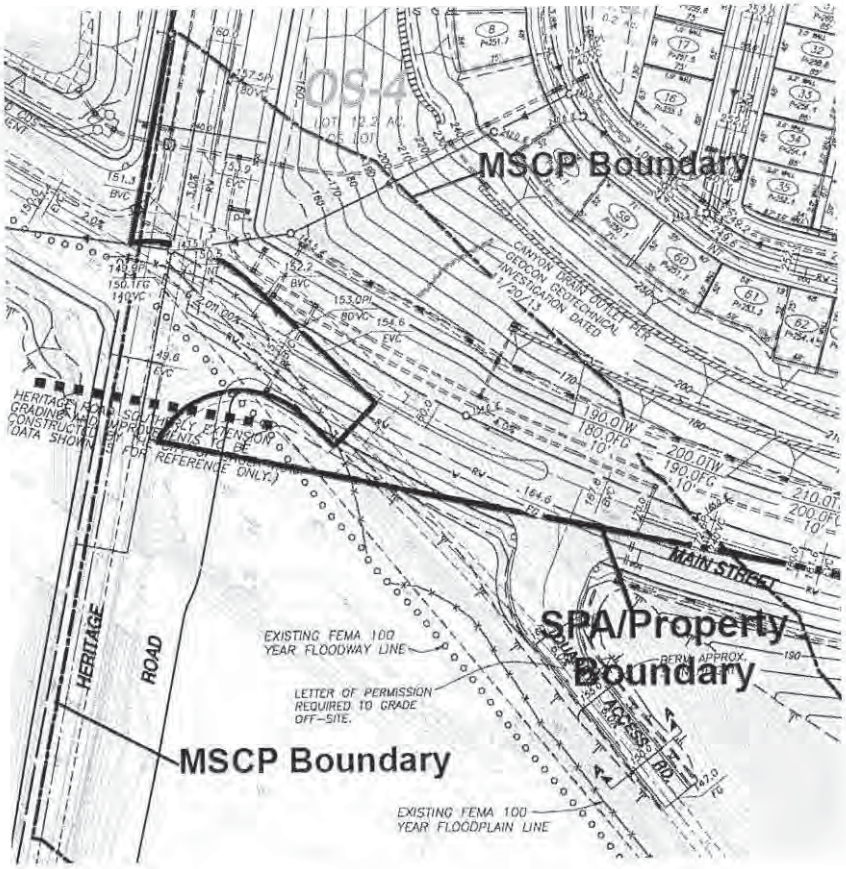


Exhibit 2
Heritage Road/Main Street, Off-site Quarry Access Facility within the Preserve

4
July 25, 2014

Response to Comment Letter D

Vulcan Materials Company
Patrick Coughlin, Operations Manager
September 17, 2014

D-1 The design shown in the Draft EIR proposes a safe ingress and egress that would result in no safety hazards, comparable to existing conditions. The existing ingress and egress is an uncontrolled intersection whereby trucks leaving the quarry are required to stop, but traffic from both the south and west is uncontrolled; thus, large trucks must merge with moving traffic. The DEIR proposes for access to the quarry to come from an all-way signalized intersection. Safe ingress and egress would also be provided during the interim at a stop controlled intersection. Interim conditions are addressed on Page 292 in the TIA. For detailed information regarding the specific comments contained later in this comment letter, please refer to the responses below.

D-2 This comment does not address the adequacy of the environmental analysis in the EIR. No response is required.

D-3 This comment does not address the adequacy of the environmental analysis in the EIR. No response is required.

D-4 The University Village TIA, Section 14, Page 292 discusses traffic operations and safety at the quarry access off of Main Street under conditions with (ultimate) and without (interim) the Main Street connection over Wolf Canyon.

The following operational assumptions were derived based upon input from the quarry manager:

- Typical operation hours are between 7:00 am and 3:00 pm – Quarry traffic would be very unlikely to occur during the PM peak hour and thus the traffic operations analysis was based on the AM peak hour;
- Approximately 600 daily truck trips are generated by quarry activities – Approximately 1,500 ADT is generated by the quarry based on a 2.5 Passenger-Car Equivalent (PCE) factor per HCM 2010 (Exhibit 11-10); and
- One truckload every 30 seconds at the highest production – 120 trucks (300 PCE) would enter/exit the quarry during the AM peak hour, assuming a worst case scenario.

The Project TIA analyzed higher volumes than the expected operations described in the 12/11/13 memo.

D-5 The current Village 3 Tentative Map includes an 80-foot wide quarry access road.

D-6 City staff does not believe an acceleration lane is necessary, and does not recommend such a facility on a 6-lane prime arterial (Main Street). An acceleration lane on Main Street is inconsistent with City design standards for a 6-lane prime arterial. Because a signal is planned at the Quarry Access Road, and the signal will be synchronized with the signal at Main Street and Heritage Road and right on red movements will not be permitted, trucks leaving the quarry will not encounter conflicts with either right or left turns exiting the quarry.

D-7 City staff believes that a deceleration lane on Main Street is inconsistent with City design standards for a 6-lane prime arterial.

D-8 A traffic signal is proposed at the Quarry Access Road.

D-9 The project engineer has revised the Village 3 North Tentative Map to reflect a painted median on approximately 50 feet at the eastern portion of the median.

D-10 Otay Valley Quarry and Vulcan have been included on the noticing list for this project for past distributions, including public review of the Draft EIR. This comment does not address the adequacy of the environmental analysis in the EIR. No further response is required.

D-11 This comment does not address the adequacy of the environmental analysis in the EIR. No further response is required.

D-12 This comment does not address the adequacy of the environmental analysis in the EIR. No further response is required.

D-13 Per prior direction from Marcela Escobar (Atlantis Group), Hunsaker & Associates utilized the WB-67 turning template to design the quarry access road reflected on the Village 3 North TM.

D-14 The current design provides 30’ curb radii. The project engineer has evaluated the design and can increase the curb radii on the west side to 100 feet, without creating additional grading impacts. There is an approximately 10’ grade difference between the quarry road and Main Street in the location proposed for a 20’ long dedicated right turn lane, resulting in 12% grade on the dedicated right turn ramp. Providing such additional width in this location results in excessive grading within the MSCP

Preserve and does not comply with siting criteria in the MSCP. As noted previously, a signal is provided at the Quarry Access Road, synchronized with the signal at Main Street and Heritage Road to the west. This provides for right turns out of the quarry without conflicts with eastbound traffic.

D-15 The current design provides 30' curb radii. The project engineer has evaluated the design and can increase the curb radii on the east side to 50 feet. See the prior response above (D-6) regarding the acceleration lane.

D-16 The project engineer has revised the Village 3 North Tentative Map to reflect a painted median on approximately 50 feet at the eastern portion of the median. A design waive would be required to reduce the length of the left turn pocket.

D-17 The proposed project includes a signal at the Quarry Access Road at Main Street. Signal synchronization is controlled by the City of Chula Vista and will be timed to provide sufficient time for trucks to clear the intersection.

D-18 There is an approximately 10' grade difference between the quarry road and Main Street in the location proposed for a dedicated right turn lane. Climbing 10' on a 20' long ramp results in 12% grades on the ramp. Providing such additional width in this location results in excessive grading within the MSCP Preserve and does not comply with siting criteria in the MSCP and is therefore infeasible. A more feasible option is to utilize street-legal water trucks so they can utilize the public streets as the turnaround.

D-19 Improvements at Main Street and Heritage Road are currently designed with the City standard 30' radius. This comment was forwarded to the project engineer for review. The engineer determined that the 50' radius could be accommodated at this location. However, the City has not directed any changes to the current design at this time.

D-20 Comment noted. This issue will be resolved during final engineering.

D-21 The Heritage Road Bridge Replacement Project is a City of Chula Vista CIP project. These comments should be directed to the City and that project.

INTENTIONALLY LEFT BLANK

Comment Letter E

HAZARD
CONSTRUCTION

Phone (858) 587-3600
Fax (858) 453-6034
6465 Marindustry Drive
San Diego, CA 92121
hazardconstruction.com
License No. 750542A

September 17, 2014

Ms. Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: University Villages Sectional Planning Area Plan and Tentative Map
Draft Environmental Impact Report (EIR 13-01; SCH 2013071077)

Dear Ms. Borg:

Thank you for the opportunity to comment on the EIR for University Villages. We are a customer of Vulcan Materials, the operator of the Otay Valley Quarry, with whom we purchase thousands of yards of material a year and generate thousands of truck trips in order to help rebuild the ageing infrastructure in San Diego County. We have great concern with the ability of our trucks to safely enter and exit the quarry utilizing this proposed Quarry Access Road found in the Traffic Impact Analysis. The lack a properly timed traffic signal to allow safe passage of trucks over four plus lanes of traffic is disastrous and the lack of proper deceleration and acceleration lanes into the quarry for trucks of this size will surely cause havoc with the traffic volumes proposed in the future.

We understand that the Otay Valley Quarry has been approved to operate until 2089 or beyond. Aggregate is an increasingly scarce resource in Southern California, and this is one of the few remaining quarries in a region that has not approved a new quarry in many years. The quarry has always taken its access to and from Main Street via the graded road, sometimes called Wiley Road. A change to this access is necessary for future development of the area but planning now will help to eliminate headaches down the line (2025 and beyond).

We request that the intersection design be modified to meet the Otay Valley Quarry's operational requirements so that we can continue to obtain needed construction materials for the infrastructure needs of San Diego County. See attached Memorandum dated 1/10/14 from Nasland Engineering.

If you have any questions or would like to discuss this matter further we would be happy to do so.

E-1

Sincerely,

Jason A. Mordhorst
President

Attachments: Memorandum dated 1/10/14 from Nasland Engineering

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

ENGINEERING MEMORANDUM

DATE: January 10, 2014

TO: Pat Coughlin, Vulcan Materials Company
John Atkins, Vulcan Materials Company

FROM: Cory Schrack, PE
Nasland Engineering

SUBJECT: Vulcan Materials, Chula Vista: Access Road Analysis

The following road study memorandum serves to address the Chula Vista Facility's needs related to the road improvements proposed by the City of Chula Vista. Upon review of the proposed alignment drawings prepared by Hunsaker & Associates dated November 7, 2013, we offer the following design comments:

1. The recommended configuration for the quarry entrance is shown on Attachment A. The approximate dimensions shown will optimize the usability of the new quarry entrance. The subsequent design points support the configuration shown on Attachment A. Autoturn software with several vehicle sizes was utilized to determine the required configuration. Refer to Attachment B for the vehicle turning movements analyzed.

2. The quarry entrance should have curb return radii of 100-ft on the West side to accommodate the nine axle trucks that access the site several times per year to bring heavy equipment to the site. A dedicated right turn lane should be provided on eastbound Main Street.

3. The quarry entrance should have curb return radii of 105-ft on the East side to accommodate the nine axle trucks that access the site several times per year. A separate right turn lane should be provided where the turn lane meets Main Street. An acceleration lane should be provided eastbound onto Main Street.

4. The proposed median on Main Street will need to be reduced to make left turns feasible for trucks exiting the quarry heading westbound. If necessary for traffic channelization, a painted median may be acceptable.

5. A traffic signal should be installed at the quarry entrance intersection with Main Street, as stated in the letter from the Atlantis Group dated December 11, 2013. The amount of traffic from the quarry should be studied in detail by a Traffic Engineer, including sufficient green time to allow the trucks to clear the intersection. Signal Timing with the intersection of Main Street and Heritage Road will also be critical for efficient operation of the quarry exit. It should also be

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

noted that the quarry has vested mining rights with no restrictions on volume or hours of operation, and therefore the proposed entrance limits the ability to allow the necessary access for trucks and other construction equipment.

6. A turnaround area should be included near the quarry entrance to accommodate the turning movements of water trucks, graders, trucks, and loaders used by the quarry to calm dust from the unpaved entrance road. This equipment is not permitted to operate on public roads and cannot utilize the intersection to turn around. We recommend the turnaround area to be paved. A 100-ft radius would be appropriate for this purpose.

7. At the intersection of Main Street and Heritage Road, design of the southeasterly curb return radius should take into account the size of trucks turning eastbound on Main Street from northbound Heritage Road. A 50-ft radius should be sufficient.

8. Phasing of construction for the main street improvements should also be incorporated in the construction documents for the road. Access to the quarry shall be maintained at all times. Consideration for a temporary access road from Heritage Road should be made.

9. If the improvements shown on the *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013* are to be implemented prior to construction of eastbound Main Street, the following considerations should be incorporated into the interim conditions.

    a. Provide for the turn-around requirements of the quarry water truck (100-ft radius).
    b. Optimize traffic signal timing, taking into account the anticipated traffic volumes from the quarry.
    c. Design of the southeasterly curb return radius should take into account the size of trucks entering the quarry from northbound Heritage Road.

References:

A. *Letter to the City of Chula Vista from Atlantis Group, dated December 11, 2013*
B. *Quarry Access Road exhibit prepared by Hunsaker & Associates, dated November 7, 2013*
C. *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013*

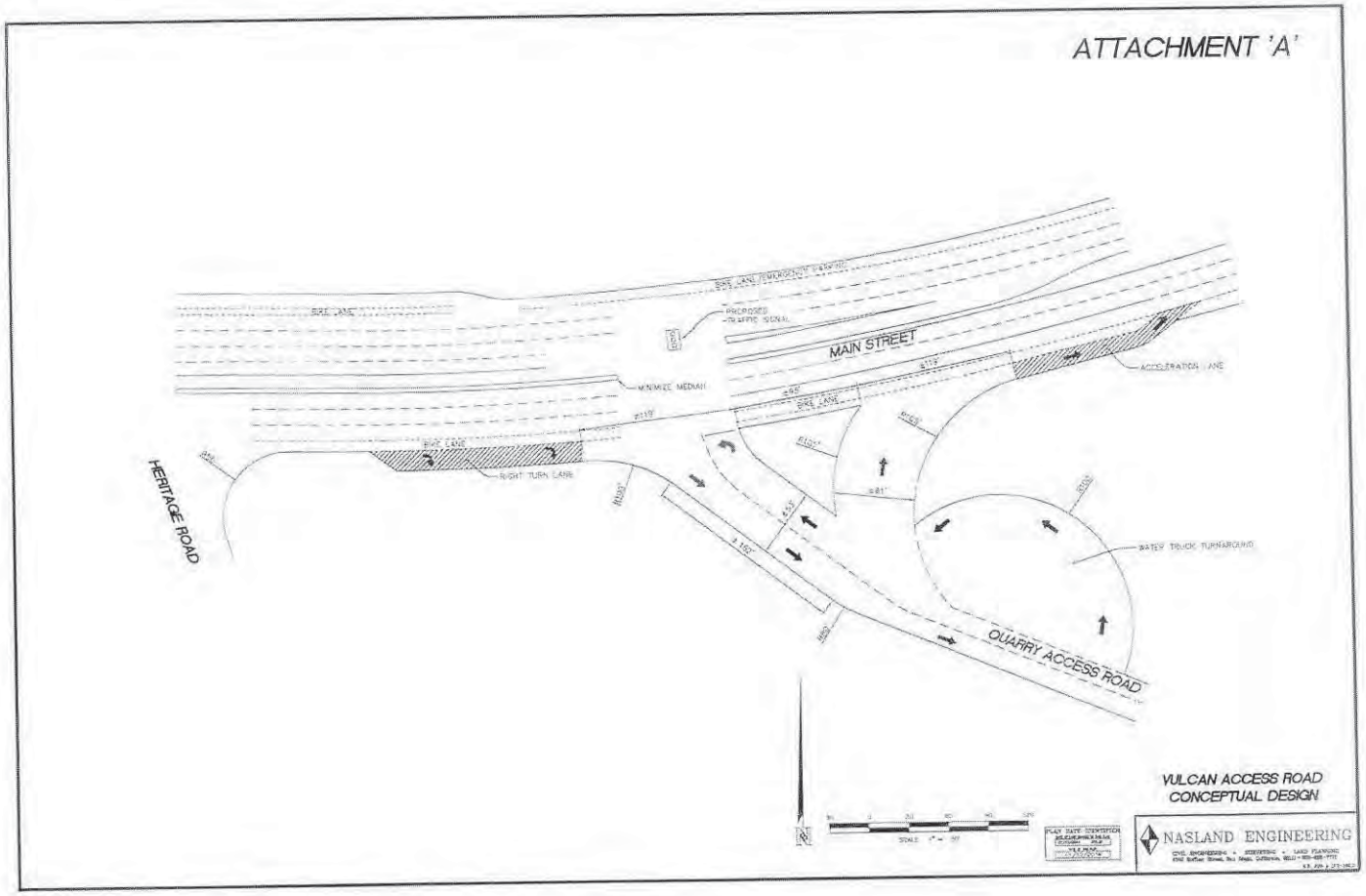
I hope the above information is helpful. Please contact me if I can be of further service or provide additional information regarding this project.

Sincerely,

Cory Schrack, P.E.

2

Civil Engineering Surveying Land Planning


ATTACHMENT 'A'
MAIN STREET
HERITAGE ROAD
QUARRY ACCESS ROAD
VULCAN ACCESS ROAD
CONCEPTUAL DESIGN
NASLAND ENGINEERING

Response to Comment Letter E

Hazard Construction
Jason A. Mordhorst, President
September 17, 2014

E-1 Please refer to responses D-1 through D-21 above for Comment Letter D.

INTENTIONALLY LEFT BLANK

Comment Letter F

September 17, 2014

Ms. Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: University Villages Sectional Planning Area Plan and Tentative Map
Draft Environmental Impact Report (EIR 13-01; SCH 2013071077)

Dear Ms. Borg:

Thank you for the opportunity to comment on the EIR for University Villages. We have reviewed the document and found that the design of the Quarry Access Road found in the Traffic Impact Analysis does not appropriately address the operational needs of the Otay Valley Quarry. It does not incorporate the design parameters submitted by the quarry operator to the City during the project review (see attached).

We understand that the Otay Valley Quarry has been approved to operate until 2089 or beyond. Aggregate is an increasingly scarce resource in Southern California, and this is one of the few remaining quarries in a region that has not approved a new quarry in many years. The quarry has always taken its access to and from Main Street via the graded road, sometimes called Wiley Road.

Realistic use of the quarry requires realistic access that accommodates the quantity of truck trips, the horizontal and vertical requirements of the rock trucks, and minimal waiting times to turn onto Main Street. The design shown in the EIR and the SPA Plan could be a major safety hazard to the Otay Valley Quarry and its customers.

We request that the intersection design be modified to meet the Otay Valley Quarry's operational requirements so that we can continue to supply needed construction materials to the San Diego region.

F-1

Sincerely,
Jeff Stuckman
West Coast Sand & Gravel

By: [signature]
Its: Chief Operating Officer

Attachments: Memorandum dated 1/10/14 from Nasland Engineering
Traffic Impact Analysis – Chen Ryan

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

ENGINEERING MEMORANDUM

DATE: January 10, 2014

TO: Pat Coughlin, Vulcan Materials Company
John Atkins, Vulcan Materials Company

FROM: Cory Schrack, PE
Nasland Engineering

SUBJECT: Vulcan Materials, Chula Vista: Access Road Analysis

The following road study memorandum serves to address the Chula Vista Facility's needs related to the road improvements proposed by the City of Chula Vista. Upon review of the proposed alignment drawings prepared by Hunsaker & Associates dated November 7, 2013, we offer the following design comments:

1. The recommended configuration for the quarry entrance is shown on Attachment A. The approximate dimensions shown will optimize the usability of the new quarry entrance. The subsequent design points support the configuration shown on Attachment A. Autoturn software with several vehicle sizes was utilized to determine the required configuration. Refer to Attachment B for the vehicle turning movements analyzed.

2. The quarry entrance should have curb return radii of 100-ft on the West side to accommodate the nine axle trucks that access the site several times per year to bring heavy equipment to the site. A dedicated right turn lane should be provided on eastbound Main Street.

3. The quarry entrance should have curb return radii of 105-ft on the East side to accommodate the nine axle trucks that access the site several times per year. A separate right turn lane should be provided where the turn lane meets Main Street. An acceleration lane should be provided eastbound onto Main Street.

4. The proposed median on Main Street will need to be reduced to make left turns feasible for trucks exiting the quarry heading westbound. If necessary for traffic channelization, a painted median may be acceptable.

5. A traffic signal should be installed at the quarry entrance intersection with Main Street, as stated in the letter from the Atlantis Group dated December 11, 2013. The amount of traffic from the quarry should be studied in detail by a Traffic Engineer, including sufficient green time to allow the trucks to clear the intersection. Signal Timing with the intersection of Main Street and Heritage Road will also be critical for efficient operation of the quarry exit. It should also be

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

noted that the quarry has vested mining rights with no restrictions on volume or hours of operation, and therefore the proposed entrance limits the ability to allow the necessary access for trucks and other construction equipment.

6. A turnaround area should be included near the quarry entrance to accommodate the turning movements of water trucks, graders, trucks, and loaders used by the quarry to calm dust from the unpaved entrance road. This equipment is not permitted to operate on public roads and cannot utilize the intersection to turn around. We recommend the turnaround area to be paved. A 100-ft radius would be appropriate for this purpose.

7. At the intersection of Main Street and Heritage Road, design of the southeasterly curb return radius should take into account the size of trucks turning eastbound on Main Street from northbound Heritage Road. A 50-ft radius should be sufficient.

8. Phasing of construction for the main street improvements should also be incorporated in the construction documents for the road. Access to the quarry shall be maintained at all times. Consideration for a temporary access road from Heritage Road should be made.

9. If the improvements shown on the *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013* are to be implemented prior to construction of eastbound Main Street, the following considerations should be incorporated into the interim conditions.

    a. Provide for the turn-around requirements of the quarry water truck (100-ft radius).
    b. Optimize traffic signal timing, taking into account the anticipated traffic volumes from the quarry.
    c. Design of the southeasterly curb return radius should take into account the size of trucks entering the quarry from northbound Heritage Road.

References:

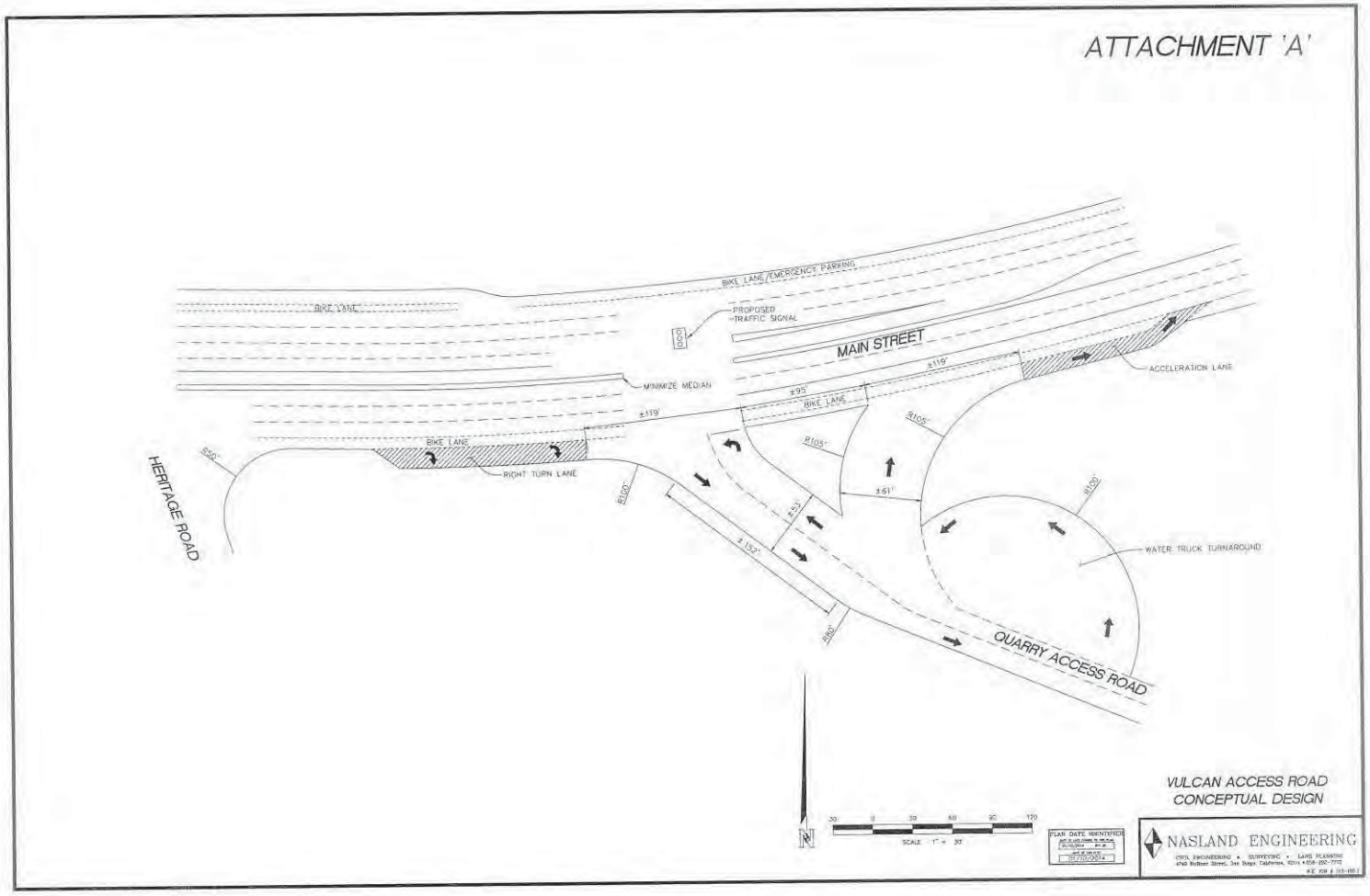
A. *Letter to the City of Chula Vista from Atlantis Group, dated December 11, 2013*
B. *Quarry Access Road exhibit prepared by Hunsaker & Associates, dated November 7, 2013*
C. *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013*

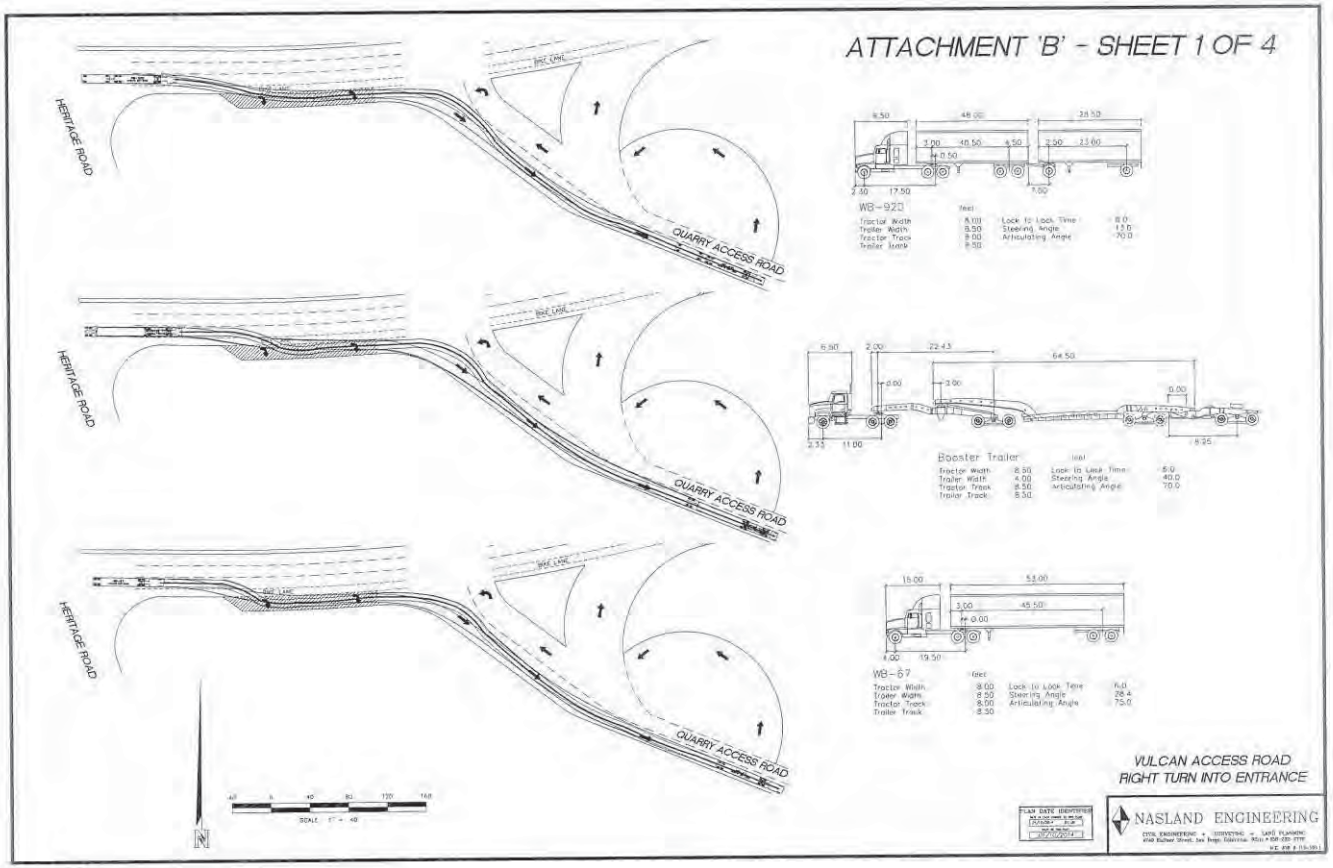
I hope the above information is helpful. Please contact me if I can be of further service or provide additional information regarding this project.

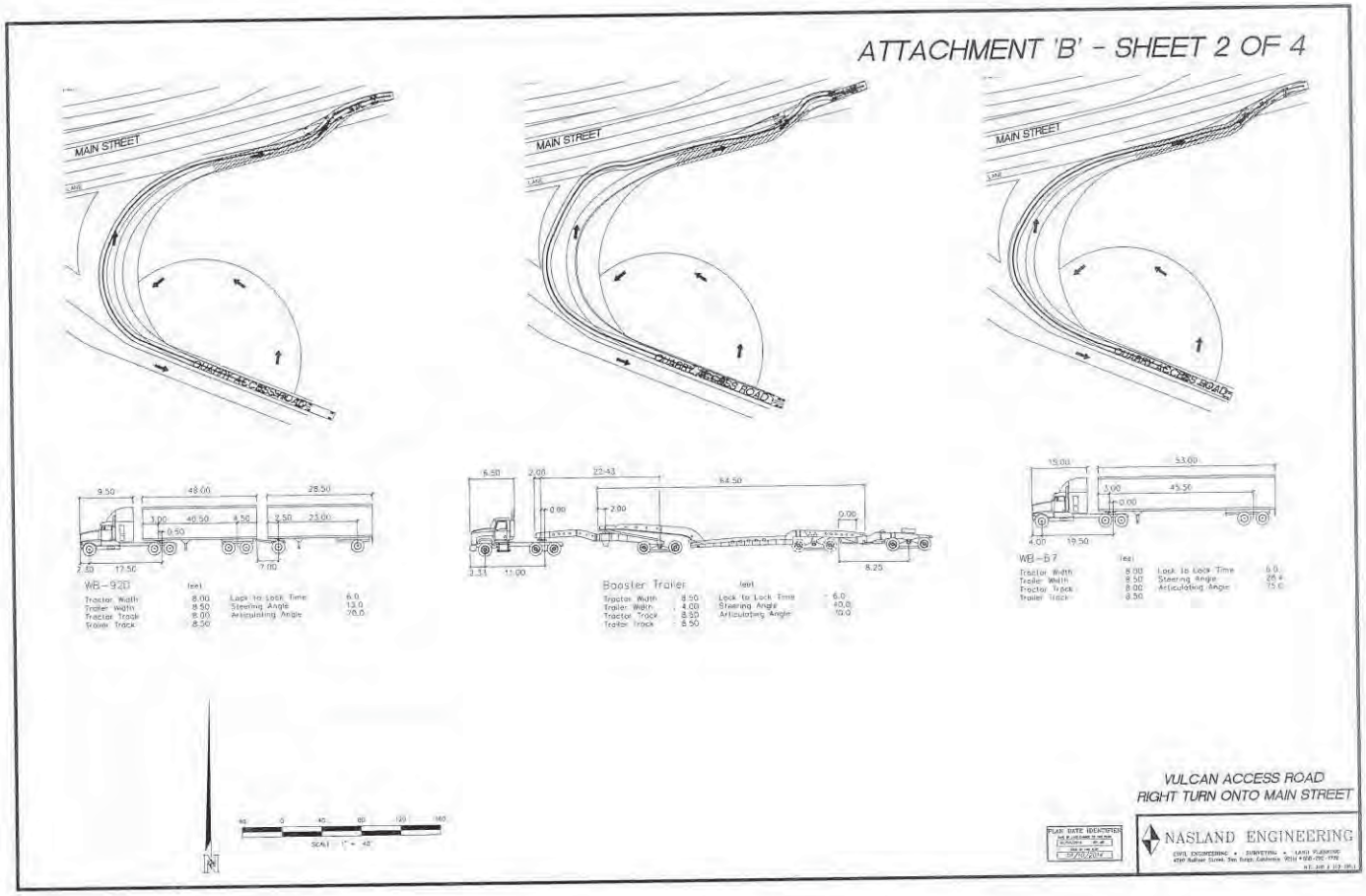
Sincerely,

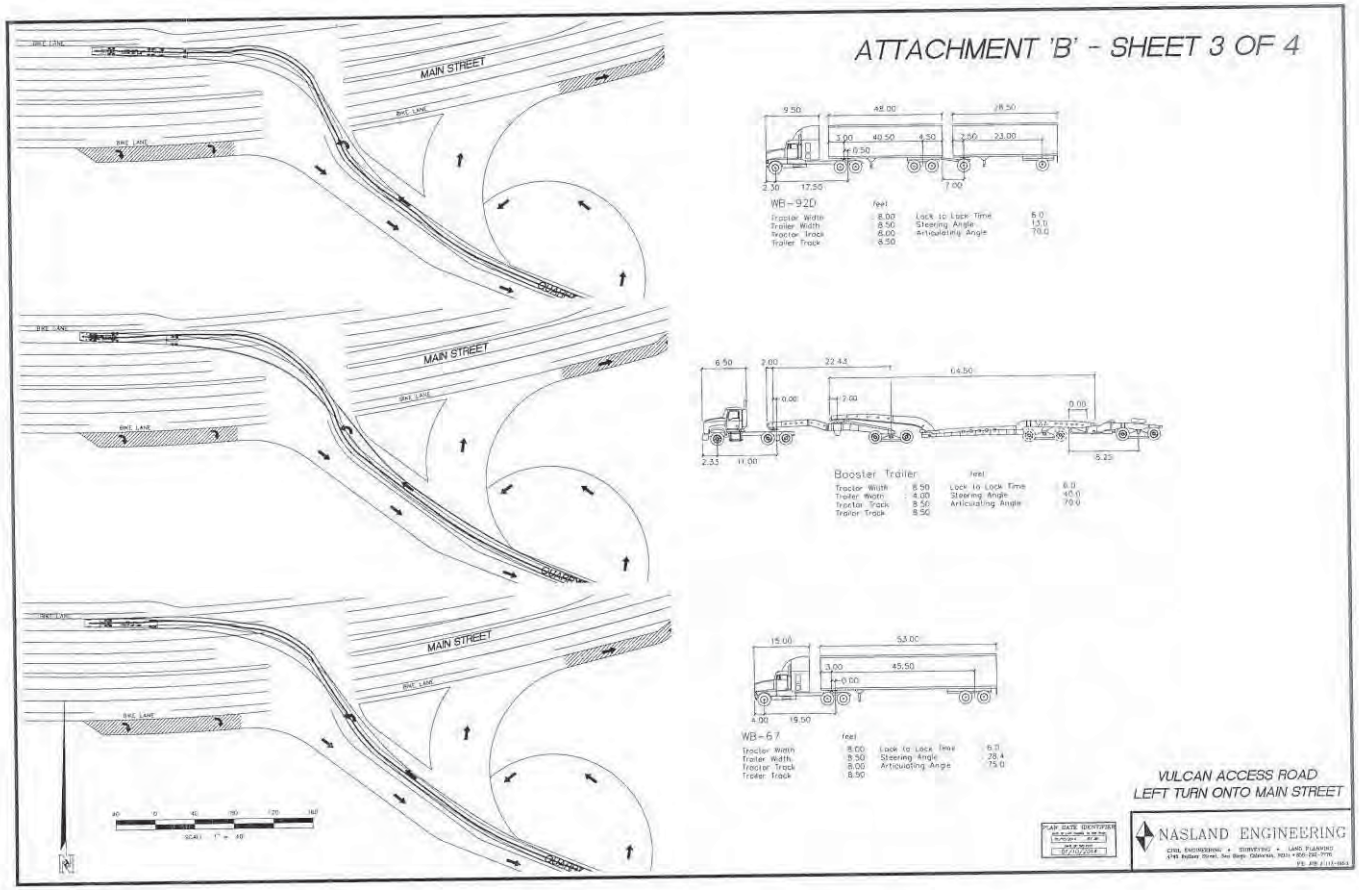
Cory Schrack, P.E.

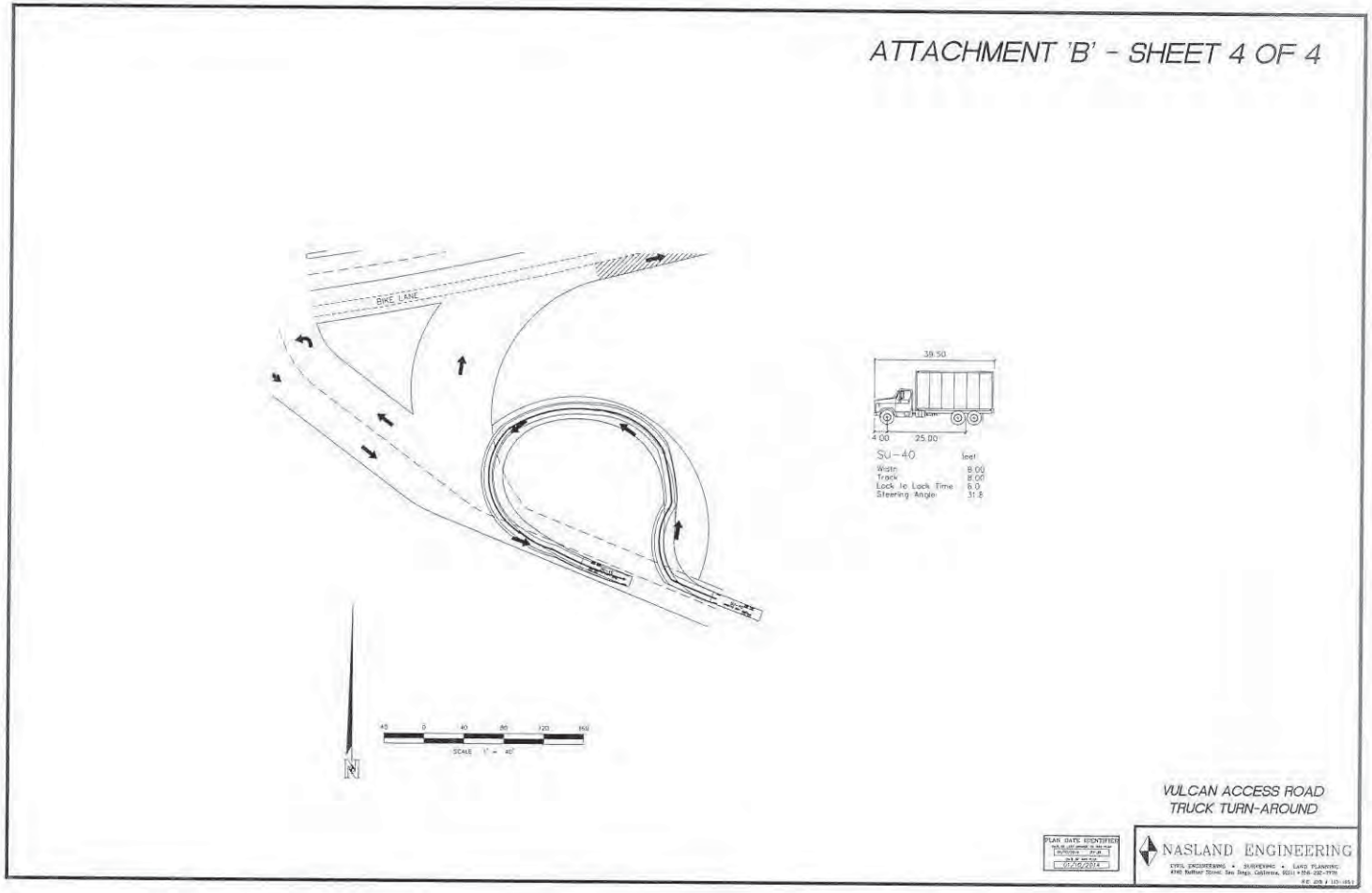
2


ATTACHMENT 'A'
BIKE LANE/EMERGENCY PARKING
BIKE LANE
PROPOSED TRAFFIC SIGNAL
MAIN STREET
MINIMIZE MEDIAN
±119'
±95'
BIKE LANE
ACCELERATION LANE
R105'
R105'
BIKE LANE
RIGHT TURN LANE
R50'
HERITAGE ROAD
R100'
±61'
±53'
±152'
R100'
WATER TRUCK TURNAROUND
R80'
QUARRY ACCESS ROAD
VULCAN ACCESS ROAD
CONCEPTUAL DESIGN
SCALE 1" = 30'
PLAN DATE IDENTIFIED
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 1 OF 4
HERITAGE ROAD
QUARRY ACCESS ROAD
WB-92D
Booster Trailer
WB-67
VULCAN ACCESS ROAD
RIGHT TURN INTO ENTRANCE
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 2 OF 4
MAIN STREET
QUARRY ACCESS ROAD
WB-92D
Booster Trailer
WB-67
VULCAN ACCESS ROAD
RIGHT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 3 OF 4
MAIN STREET
BIKE LANE
WB-92D
feet
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 13.0
Articulating Angle 70.0
Booster Trailer
feet
Tractor Width 8.50
Trailer Width 4.00
Tractor Track 8.50
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 40.0
Articulating Angle 70.0
WB-67
feet
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 28.4
Articulating Angle 75.0
VULCAN ACCESS ROAD
LEFT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 4 OF 4
BIKE LANE
39.50
4.00
25.00
SU-40
feet
Width 8.00
Track 8.00
Lock to Lock Time 6.0
Steering Angle 31.8
SCALE 1" = 40'
VULCAN ACCESS ROAD
TRUCK TURN-AROUND
PLAN DATE IDENTIFIED
07/16/2014
NASLAND ENGINEERING
CIVIL ENGINEERING • SURVEYING • LAND PLANNING

14.0 Quarry Access

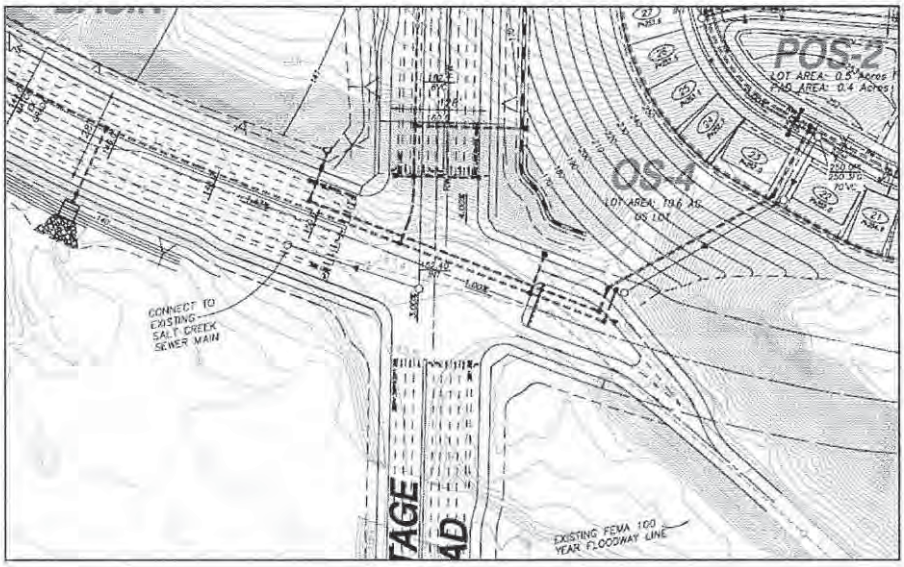
This chapter discusses traffic operations and safety at the quarry access off of Main Street under conditions with (ultimate) and without (interim) the Main Street connection over Wolf Canyon.

The following operational assumptions were derived based upon input from the quarry manager:

- Typical operation hours are between 7:00 am and 3:00 pm – Quarry traffic would be very unlikely to occur during the PM peak hour and thus the traffic operations analysis was based on the AM peak hour;
- Approximately 600 daily truck trips are generated by quarry activities – Approximately 1,500 ADT is generated by the quarry based on a 2.5 Passenger-Car Equivalent (PCE) factor per HCM 2010 (Exhibit 11-10); and
- One truckload every 30 seconds at the highest production – 120 trucks (300 PCE) would enter/exit the quarry during the AM peak hour, assuming a worst case scenario.

14.1 Interim Design

Main Street over Wolf Canyon is not likely to be constructed until Year 2025. The following drawing displays the proposed interim layout for quarry access in relation to the intersection of Heritage Road and Main Street. The access would be east of the intersection, to the southeast.



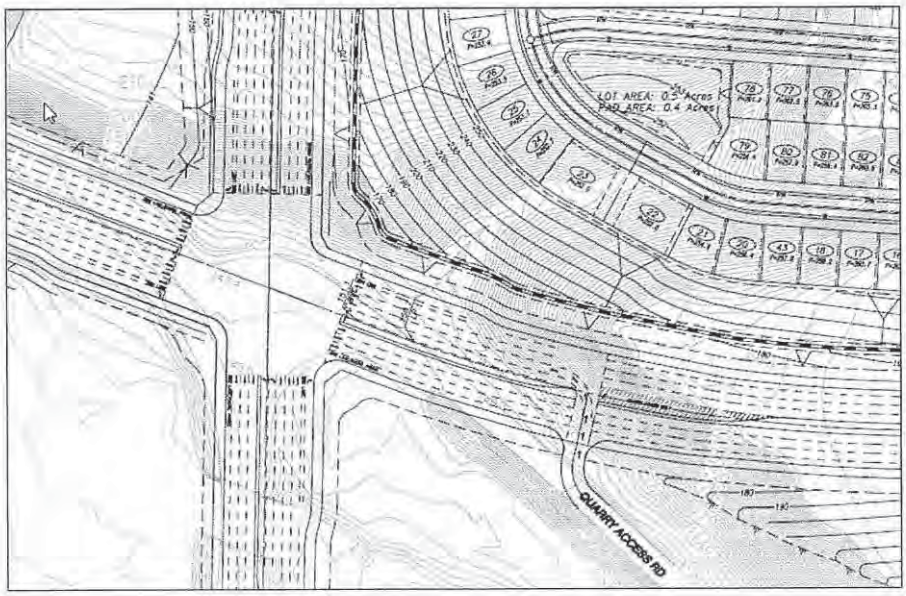
As shown, Main Street would terminate at the quarry access road approximately 210' east of Heritage Road.

Traffic Operation and Safety

Since no traffic movements would be in conflict with the ingress/egress at the quarry access, no traffic operations or safety issues would be anticipated in the interim years. The traffic signal at the Heritage Road and Main Street intersection should be designed as a standard eight-phase actuated signal. The westbound green indication would only be triggered by the arrival of westbound traffic. Proper signage should be displayed indicating that the east leg (Main Street, east of Heritage Road) is for "Quarry Access Only".

14.2 Ultimate Design

The layout below represents the proposed ultimate design for the quarry access in relation to the intersection of Heritage Road and Main Street, when Main Street between Heritage Road and La Media is constructed.



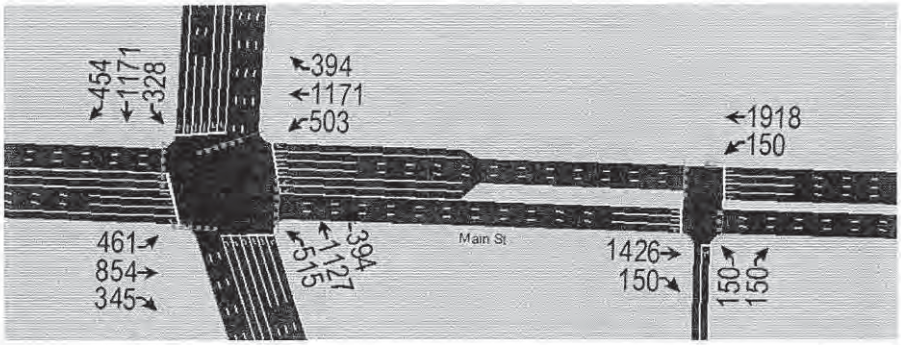
As shown, the quarry access road would be located approximately 350' east of Heritage Road.

Traffic Operation and Safety

A 50%/50% east/west directional split from/to the quarry was assumed and the following indicates the worst case quarry trip generation and ingress/egress volumes at the access point off of Main Street during the AM peak hour:

- 60 truck trips (150 PCE) making a right-turn (eastbound) to enter the quarry;
- 60 truck trips (150 PCE) making a left-turn (westbound) to enter the quarry; and
- 120 truck trips (300 PCE) exiting the quarry with 60 truck trips (150 PCE) each making left and right–turns onto Main Street.

The graphic below illustrates the AM peak hour turning movements at this intersection.



The quarry access is proposed to be signalized at Main Street. It is important to note that this proposed traffic signal must be coordinated with the traffic signal at the Heritage Road and Main Street intersection. **Table 14.1** displays intersection level of service and average vehicle delay results for both Heritage Road / Main Street and Quarry Access Road / Main Street intersections under the Year 2030 conditions. Level of service calculation worksheets are provided in **Appendix AC.**

TABLE 14.1
PEAK HOUR INTERSECTION LEVEL OF SERVICE RESULTS
QUARRY ACCESS YEAR 2030 CONDITIONS

Intersection	AM Peak Hour	
	Avg. Delay (sec.)	LOS
39. Heritage Road / Main Street	46.1	D
65. Quarry Access Road / Main Street	9.0	A

Source: Chen Ryan Associates; February 2014

As shown in the table, the quarry access at Main Street would operate at LOS A with minimum delay in Year 2030. The 50th (average) and 95th (maximum) queue length at the westbound (Main Street) left-turn into the quarry would be 57' and 177', respectively. Thus, it is recommended that the westbound left-turn pocket be designed at 200' to accommodate the maximum queue.

In addition to the 200' westbound left-turn pocket length, the following is also recommended to ensure safety and smooth operations at the intersection of Quarry Access Road and Main Street:

- "No-Turn On Red" sign and/or signal indication to be placed at the northbound quarry access approach to prohibit trucks from making right turns onto Main Street on red;
- Proper signage and pavement marking to be installed indicating "Quarry Access Only";
- Adequate turning radii to be provided for trucks; and
- No pedestrian crossing at Main Street.

Response to Comment Letter F

West Coast Sand and Gravel
Jeff Struiksma
September 17, 2014

F-1 Please refer to responses D-1 through D-21 above for Comment Letter D.

INTENTIONALLY LEFT BLANK

Comment Letter G

September 17, 2014

Ms. Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: University Villages Sectional Planning Area Plan and Tentative Map
Draft Environmental Impact Report (EIR 13-01; SCH 2013071077)

Dear Ms. Borg:

Thank you for the opportunity to comment on the EIR for University Villages. We have reviewed the document and found that the design of the Quarry Access Road found in the Traffic Impact Analysis does not appropriately address the operational needs of the Otay Valley Quarry. It does not incorporate the design parameters submitted by the quarry operator to the City during the project review (see attached).

We understand that the Otay Valley Quarry has been approved to operate until 2089 or beyond. Aggregate is an increasingly scarce resource in Southern California, and this is one of the few remaining quarries in a region that has not approved a new quarry in many years. The quarry has always taken its access to and from Main Street via the graded road, sometimes called Wiley Road. G-1

Realistic use of the quarry requires realistic access that accommodates the quantity of truck trips, the horizontal and vertical requirements of the rock trucks, and minimal waiting times to turn onto Main Street. The design shown in the EIR and the SPA Plan could be a major safety hazard to the Otay Valley Quarry and its customers.

We request that the intersection design be modified to meet the Otay Valley Quarry's operational requirements so that we can continue to supply needed construction materials to the San Diego region.

Sincerely,

Daniel Brown

By: Daniel Brown
Its: Const Aggregates

Attachments: Memorandum dated 1/10/14 from Nasland Engineering
Traffic Impact Analysis – Chen Ryan

INTENTIONALLY LEFT BLANK

Response to Comment Letter G

Construction Aggregates
Daniel Brown
September 17, 2014

G-1 Please refer to responses D-1 through D-21 above for Comment Letter D.

INTENTIONALLY LEFT BLANK

Comment Letter H

Build the Best. ***Be the Best.***

FLATIRON

Flatiron Construction Corp.
Western Region
1770 La Costa Meadows Drive
San Marcos, CA 92078
760 916 9100 MAIN
760 916 9101 FAX
www.flatironcorp.com

September 17, 2014

Ms. Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: University Villages Sectional Planning Area Plan and Tentative Map
Draft Environmental Impact Report (EIR 13-01; SCH 2013071077)

Dear Ms. Borg:

Thank you for the opportunity to comment on the EIR for University Villages. We have reviewed the document and found that the design of the Quarry Access Road found in the Traffic Impact Analysis does not appropriately address the operational needs of the Otay Valley Quarry. It does not incorporate the design parameters submitted by the quarry operator to the City during the project review (see attached).

We understand that the Otay Valley Quarry has been approved to operate until 2089 or beyond. Aggregate is an increasingly scarce resource in Southern California, and this is one of the few remaining quarries in a region that has not approved a new quarry in many years. The quarry has always taken its access to and from Main Street via the graded road, sometimes called Wiley Road.

Realistic use of the quarry requires realistic access that accommodates the quantity of truck trips, the horizontal and vertical requirements of the rock trucks, and minimal waiting times to turn onto Main Street. The design shown in the EIR and the SPA Plan could be a major safety hazard to the Otay Valley Quarry and its customers.

We request that the intersection design be modified to meet the Otay Valley Quarry's operational requirements so that there is no disruption to the supply of needed construction materials in the San Diego region.

H-1

Sincerely,
Flatiron West, Inc.

Dale A. Nelson
Vice President & District Manager

Attachments: Memorandum dated 1/10/14 from Nasland Engineering
Traffic Impact Analysis – Chen Ryan

An Equal Opportunity Employer

A HOCHTIEF Company

14.0 Quarry Access

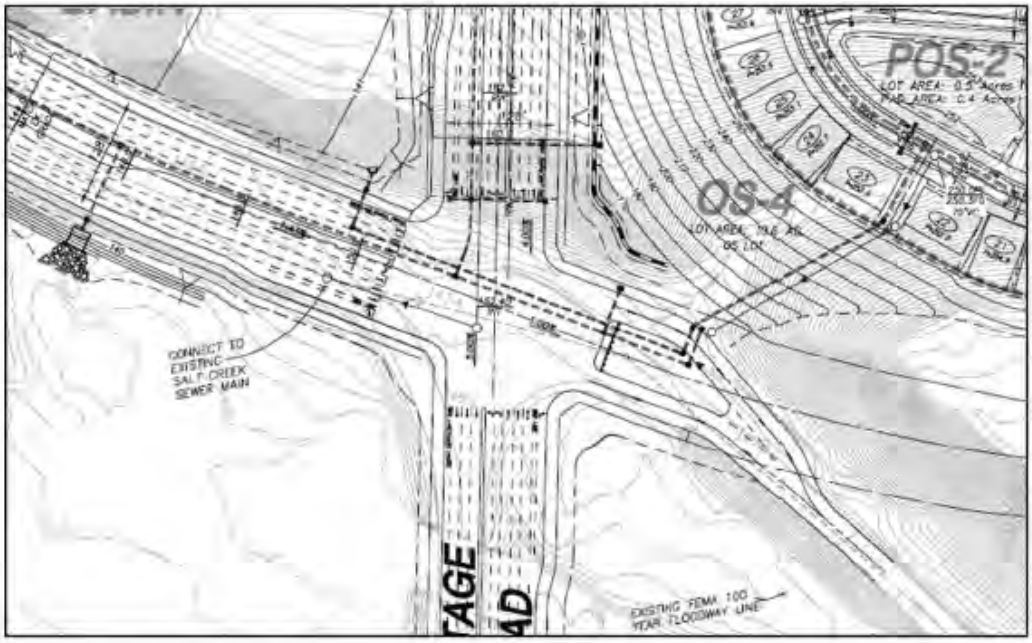
This chapter discusses traffic operations and safety at the quarry access off of Main Street under conditions with (ultimate) and without (interim) the Main Street connection over Wolf Canyon.

The following operational assumptions were derived based upon input from the quarry manager:

- Typical operation hours are between 7:00 am and 3:00 pm – Quarry traffic would be very unlikely to occur during the PM peak hour and thus the traffic operations analysis was based on the AM peak hour;
- Approximately 600 daily truck trips are generated by quarry activities – Approximately 1,500 ADT is generated by the quarry based on a 2.5 Passenger-Car Equivalent (PCE) factor per HCM 2010 (Exhibit 11-10); and
- One truckload every 30 seconds at the highest production – 120 trucks (300 PCE) would enter/exit the quarry during the AM peak hour, assuming a worst case scenario.

14.1 Interim Design

Main Street over Wolf Canyon is not likely to be constructed until Year 2025. The following drawing displays the proposed interim layout for quarry access in relation to the intersection of Heritage Road and Main Street. The access would be east of the intersection, to the southeast.



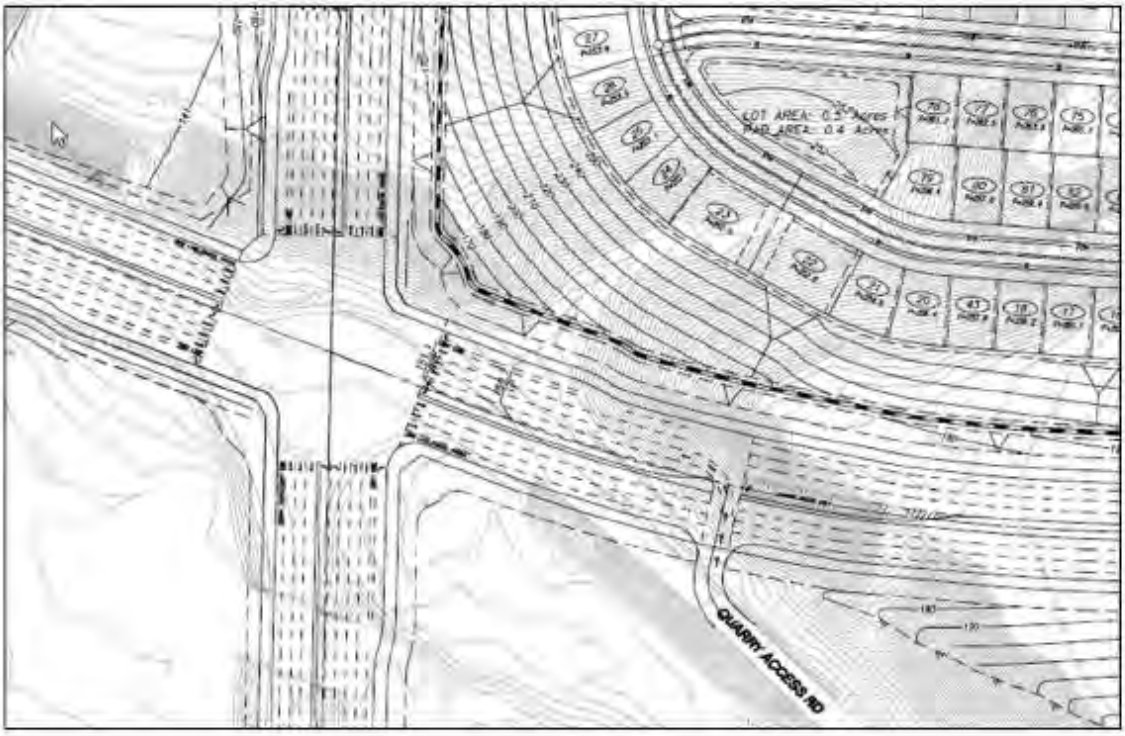
As shown, Main Street would terminate at the quarry access road approximately 210' east of Heritage Road.

Traffic Operation and Safety

Since no traffic movements would be in conflict with the ingress/egress at the quarry access, no traffic operations or safety issues would be anticipated in the interim years. The traffic signal at the Heritage Road and Main Street intersection should be designed as a standard eight-phase actuated signal. The westbound green indication would only be triggered by the arrival of westbound traffic. Proper signage should be displayed indicating that the east leg (Main Street, east of Heritage Road) is for "Quarry Access Only".

14.2 Ultimate Design

The layout below represents the proposed ultimate design for the quarry access in relation to the intersection of Heritage Road and Main Street, when Main Street between Heritage Road and La Media is constructed.



As shown, the quarry access road would be located approximately 350' east of Heritage Road.

Traffic Operation and Safety

A 50%/50% east/west directional split from/to the quarry was assumed and the following indicates the worst case quarry trip generation and ingress/egress volumes at the access point off of Main Street during the AM peak hour:

- 60 truck trips (150 PCE) making a right-turn (eastbound) to enter the quarry;
- 60 truck trips (150 PCE) making a left-turn (westbound) to enter the quarry; and
- 120 truck trips (300 PCE) exiting the quarry with 60 truck trips (150 PCE) each making left and right–turns onto Main Street.

The graphic below illustrates the AM peak hour turning movements at this intersection.

The quarry access is proposed to be signalized at Main Street. It is important to note that this proposed traffic signal must be coordinated with the traffic signal at the Heritage Road and Main Street intersection. **Table 14.1** displays intersection level of service and average vehicle delay results for both Heritage Road / Main Street and Quarry Access Road / Main Street intersections under the Year 2030 conditions. Level of service calculation worksheets are provided in **Appendix AC.**

TABLE 14.1
PEAK HOUR INTERSECTION LEVEL OF SERVICE RESULTS
QUARRY ACCESS YEAR 2030 CONDITIONS

Intersection	AM Peak Hour	
	Avg. Delay (sec.)	LOS
39. Heritage Road / Main Street	46.1	D
65. Quarry Access Road / Main Street	9.0	A

Source: Chen Ryan Associates; February 2014

As shown in the table, the quarry access at Main Street would operate at LOS A with minimum delay in Year 2030. The 50th (average) and 95th (maximum) queue length at the westbound (Main Street) left-turn into the quarry would be 57' and 177', respectively. Thus, it is recommended that the westbound left-turn pocket be designed at 200' to accommodate the maximum queue.

In addition to the 200' westbound left-turn pocket length, the following is also recommended to ensure safety and smooth operations at the intersection of Quarry Access Road and Main Street:

- "No-Turn On Red" sign and/or signal indication to be placed at the northbound quarry access approach to prohibit trucks from making right turns onto Main Street on red;
- Proper signage and pavement marking to be installed indicating "Quarry Access Only";
- Adequate turning radii to be provided for trucks; and
- No pedestrian crossing at Main Street.

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

ENGINEERING MEMORANDUM

DATE: January 10, 2014

TO: Pat Coughlin, Vulcan Materials Company
John Atkins, Vulcan Materials Company

FROM: Cory Schrack, PE
Nasland Engineering

SUBJECT: Vulcan Materials, Chula Vista: Access Road Analysis

The following road study memorandum serves to address the Chula Vista Facility's needs related to the road improvements proposed by the City of Chula Vista. Upon review of the proposed alignment drawings prepared by Hunsaker & Associates dated November 7, 2013, we offer the following design comments:

1. The recommended configuration for the quarry entrance is shown on Attachment A. The approximate dimensions shown will optimize the usability of the new quarry entrance. The subsequent design points support the configuration shown on Attachment A. Autoturn software with several vehicle sizes was utilized to determine the required configuration. Refer to Attachment B for the vehicle turning movements analyzed.

2. The quarry entrance should have curb return radii of 100-ft on the West side to accommodate the nine axle trucks that access the site several times per year to bring heavy equipment to the site. A dedicated right turn lane should be provided on eastbound Main Street.

3. The quarry entrance should have curb return radii of 105-ft on the East side to accommodate the nine axle trucks that access the site several times per year. A separate right turn lane should be provided where the turn lane meets Main Street. An acceleration lane should be provided eastbound onto Main Street.

4. The proposed median on Main Street will need to be reduced to make left turns feasible for trucks exiting the quarry heading westbound. If necessary for traffic channelization, a painted median may be acceptable.

5. A traffic signal should be installed at the quarry entrance intersection with Main Street, as stated in the letter from the Atlantis Group dated December 11, 2013. The amount of traffic from the quarry should be studied in detail by a Traffic Engineer, including sufficient green time to allow the trucks to clear the intersection. Signal Timing with the intersection of Main Street and Heritage Road will also be critical for efficient operation of the quarry exit. It should also be

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

noted that the quarry has vested mining rights with no restrictions on volume or hours of operation, and therefore the proposed entrance limits the ability to allow the necessary access for trucks and other construction equipment.

6. A turnaround area should be included near the quarry entrance to accommodate the turning movements of water trucks, graders, trucks, and loaders used by the quarry to calm dust from the unpaved entrance road. This equipment is not permitted to operate on public roads and cannot utilize the intersection to turn around. We recommend the turnaround area to be paved. A 100-ft radius would be appropriate for this purpose.

7. At the intersection of Main Street and Heritage Road, design of the southeasterly curb return radius should take into account the size of trucks turning eastbound on Main Street from northbound Heritage Road. A 50-ft radius should be sufficient.

8. Phasing of construction for the main street improvements should also be incorporated in the construction documents for the road. Access to the quarry shall be maintained at all times. Consideration for a temporary access road from Heritage Road should be made.

9. If the improvements shown on the *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013* are to be implemented prior to construction of eastbound Main Street, the following considerations should be incorporated into the interim conditions.

    a. Provide for the turn-around requirements of the quarry water truck (100-ft radius).
    b. Optimize traffic signal timing, taking into account the anticipated traffic volumes from the quarry.
    c. Design of the southeasterly curb return radius should take into account the size of trucks entering the quarry from northbound Heritage Road.

References:

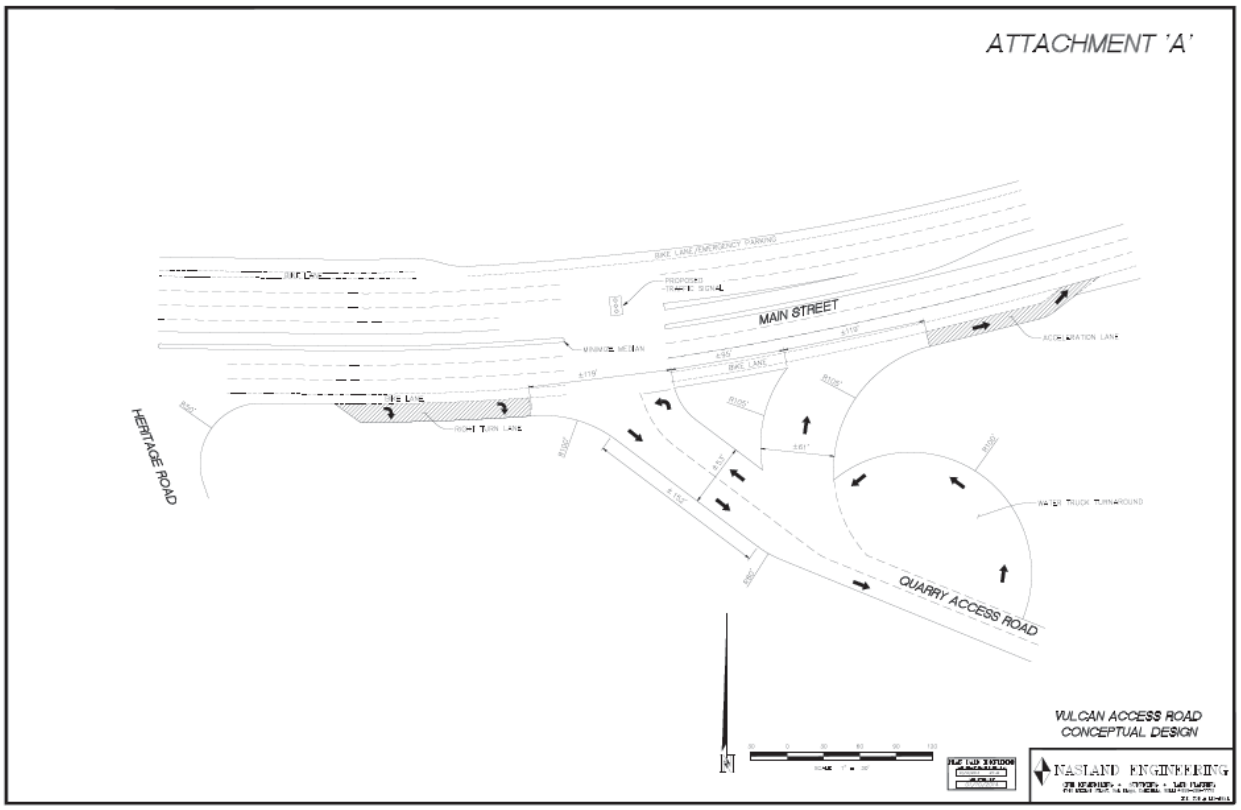
A. *Letter to the City of Chula Vista from Atlantis Group, dated December 11, 2013*
B. *Quarry Access Road exhibit prepared by Hunsaker & Associates, dated November 7, 2013*
C. *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013*

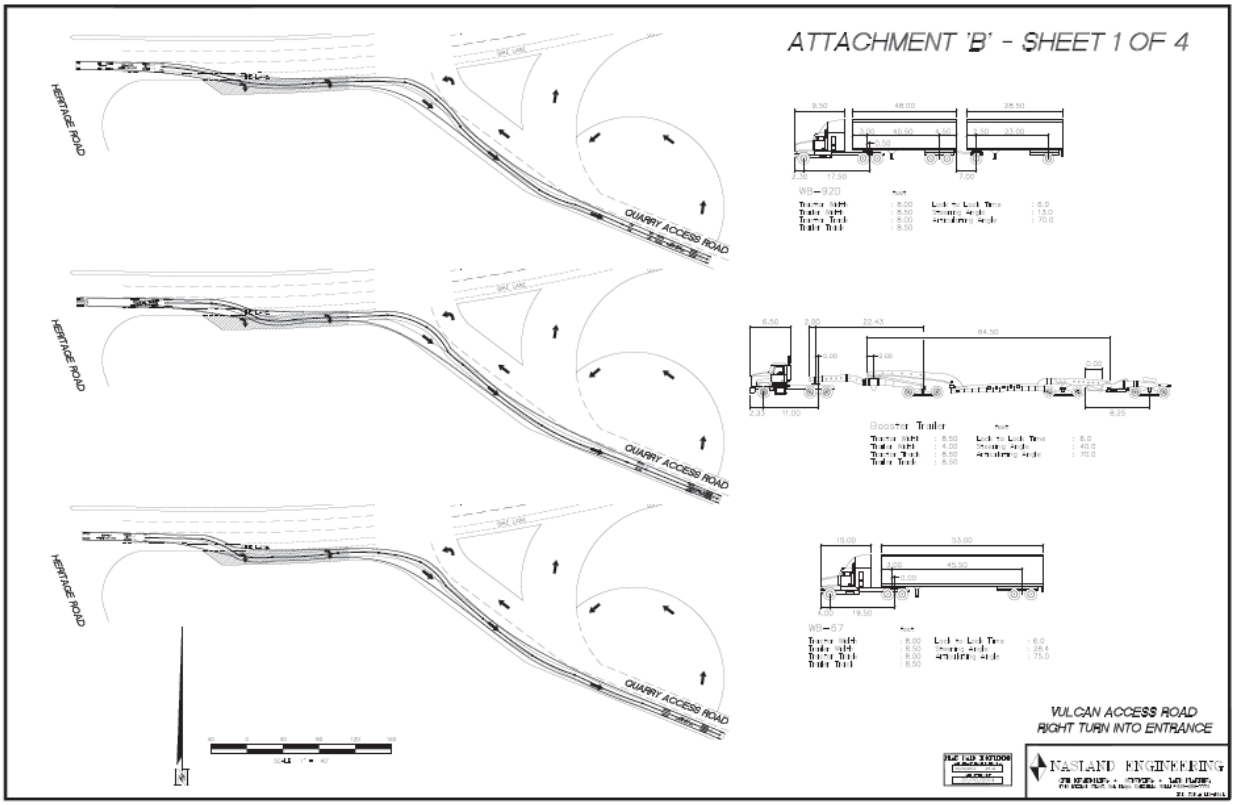
I hope the above information is helpful. Please contact me if I can be of further service or provide additional information regarding this project.

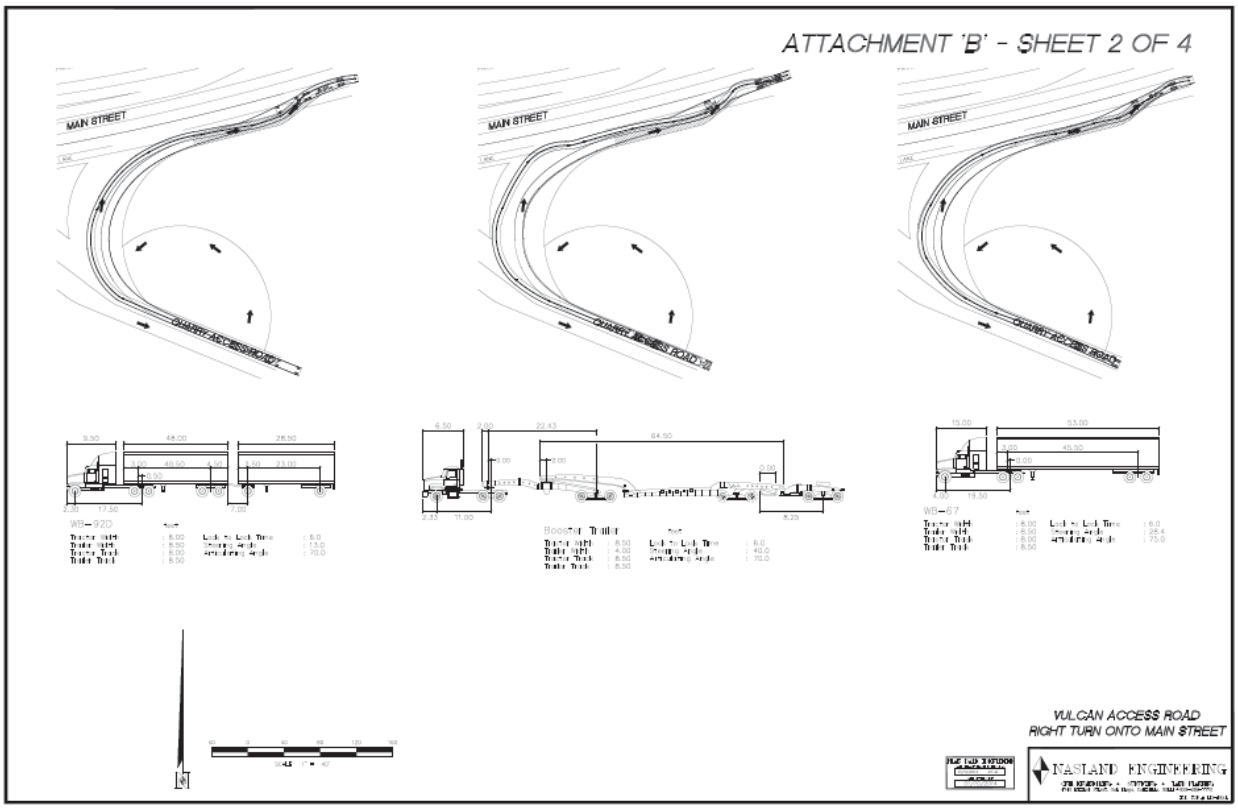
Sincerely,

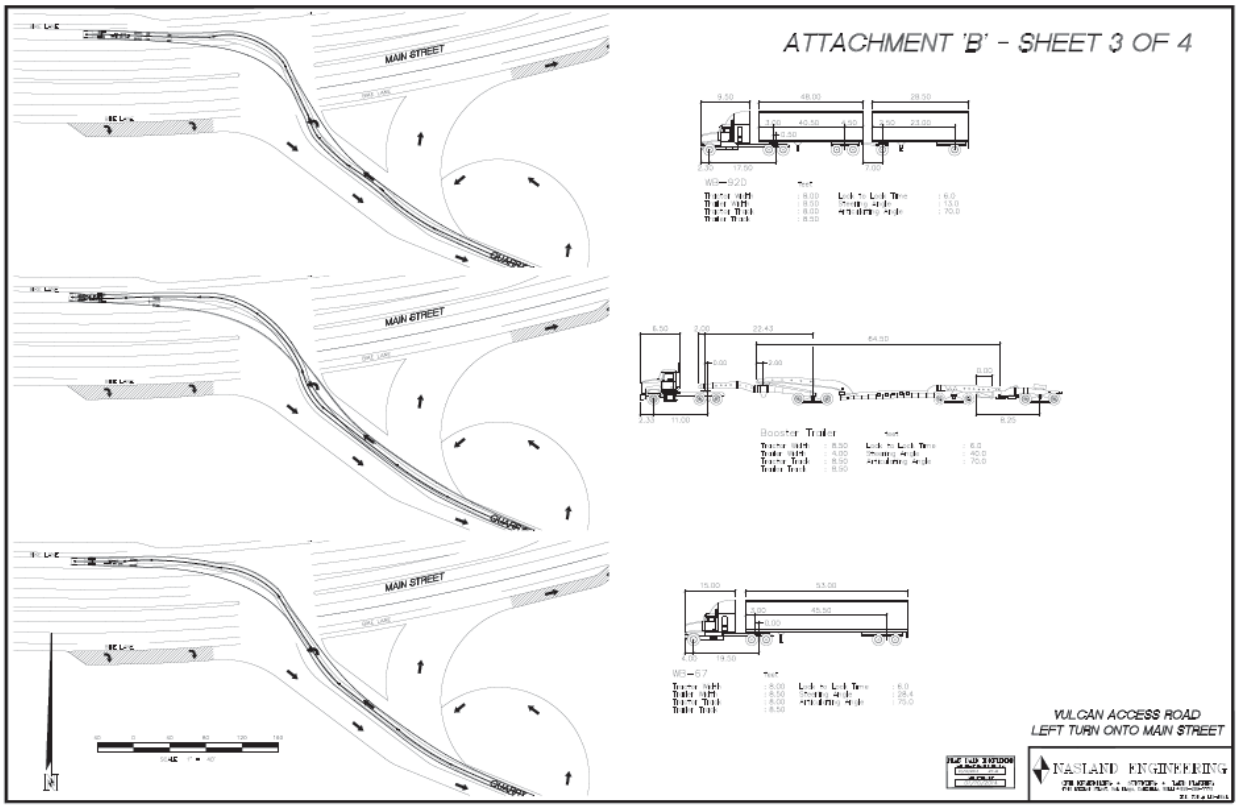
Cory Schrack, P.E.

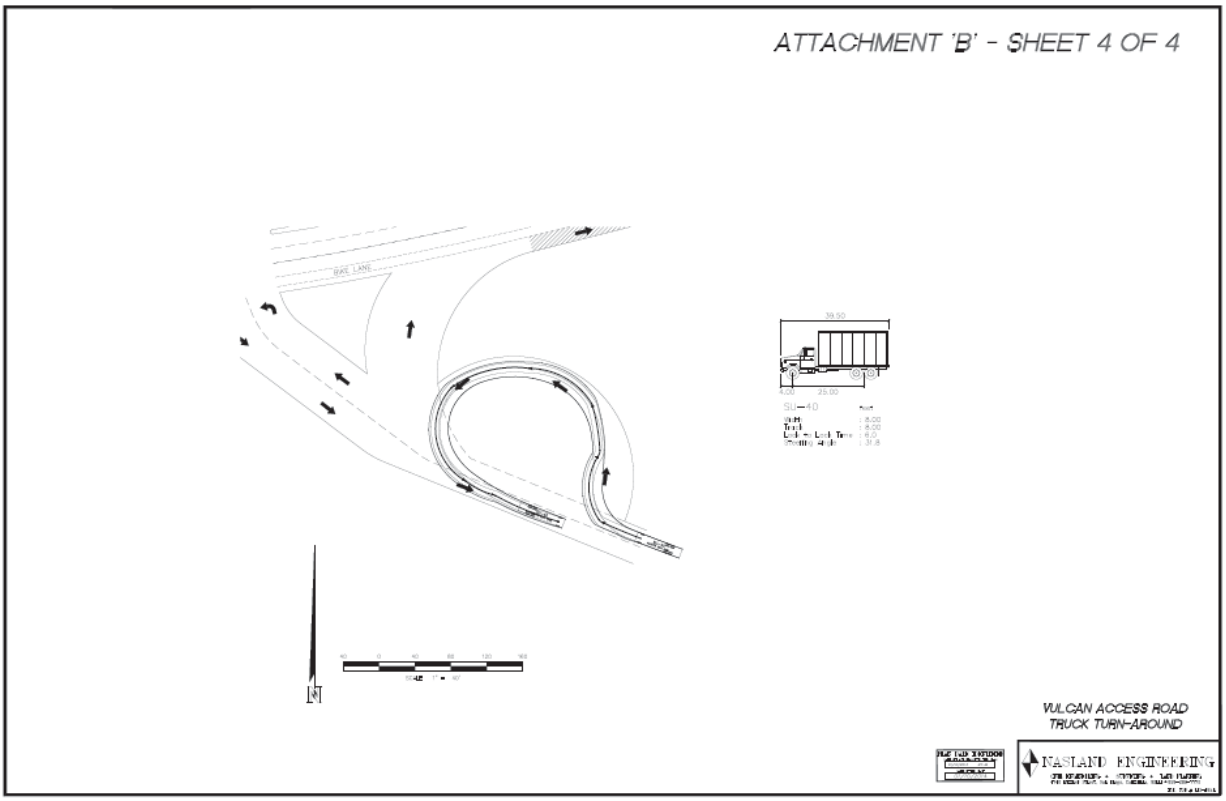
2

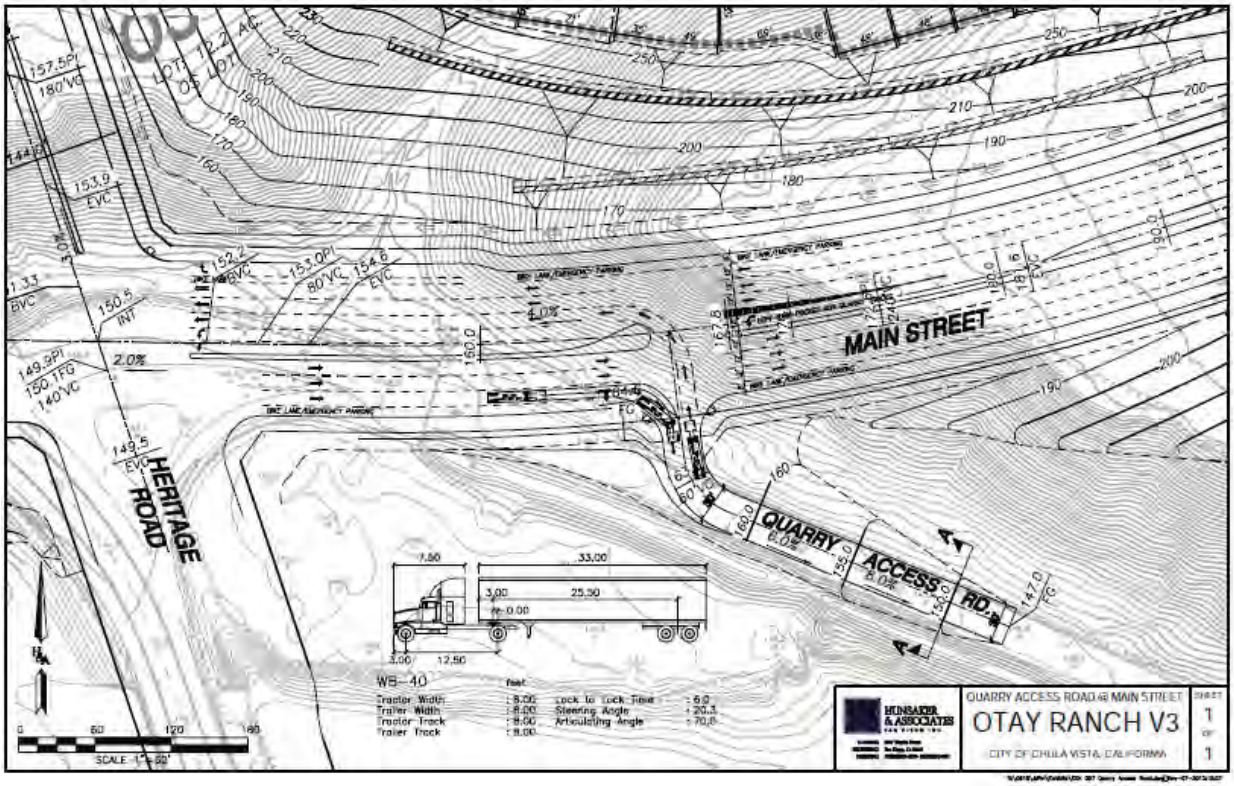

ATTACHMENT 'A'
BIKE LANE/EMERGENCY PARKING
PROPOSED TRAFFIC SIGNAL
MAIN STREET
MINIMUM MEDIAN
ACCELERATION LANE
BIKE LANE
RIGHT TURN LANE
HERITAGE ROAD
WATER TRUCK TURNAROUND
QUARRY ACCESS ROAD
VULCAN ACCESS ROAD
CONCEPTUAL DESIGN
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 1 OF 4
HERITAGE ROAD
QUARRY ACCESS ROAD
BIKE LANE
WB-92D
Roadster Trailer
WB-67
VULCAN ACCESS ROAD
RIGHT TURN INTO ENTRANCE
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 2 OF 4
MAIN STREET
MAIN STREET
MAIN STREET
WB-92D
Booster Trailer
WB-67
VULCAN ACCESS ROAD
RIGHT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 3 OF 4
MAIN STREET
MAIN STREET
MAIN STREET
WB-92D
Booster Trailer
WB-67
VULCAN ACCESS ROAD
LEFT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 4 OF 4
VULCAN ACCESS ROAD
TRUCK TURN-AROUND
NASLAND ENGINEERING


MAIN STREET
HERITAGE ROAD
QUARRY ACCESS RD.
WB-40
QUARRY ACCESS ROAD @ MAIN STREET
OTAY RANCH V3
CITY OF CHULA VISTA, CALIFORNIA
HUNSAKER & ASSOCIATES

Response to Comment Letter H

Flatiron West, Inc.
Dale A. Nelson, Vice President and District Manager
September 17, 2014

H-1 Please refer to responses D-1 through D-21 above for Comment Letter D.

INTENTIONALLY LEFT BLANK

Comment Letter I

TC Construction Company, Inc.

September 17, 2014

Ms. Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: University Villages Sectional Planning Area Plan and Tentative Map
Draft Environmental Impact Report (EIR 13-01; SCH 20130710/7)

Dear Ms. Borg:

Thank you for the opportunity to comment on the EIR for University Villages. We have reviewed the document and found that the design of the Quarry Access Road found in the Traffic Impact Analysis does not appropriately address the operational needs of the Otay Valley Quarry. It does not incorporate the design parameters submitted by the quarry operator to the City during the project review (see attached).

We understand that the Otay Valley Quarry has been approved to operate until 2089 or beyond. Aggregate is an increasingly scarce resource in Southern California, and this is one of the few remaining quarries in a region that has not approved a new quarry in many years. The quarry has always taken its access to and from Main Street via the graded road, sometimes called Wiley Road. I-1

Realistic use of the quarry requires realistic access that accommodates the quantity of truck trips, the horizontal and vertical requirements of the rock trucks, and minimal waiting times to turn onto Main Street. The design shown in the EIR and the SPA Plan could be a major safety hazard to the Otay Valley Quarry and its customers.

We request that the intersection design be modified to meet the Otay Valley Quarry's operational requirements so that we can continue to supply needed construction materials to the San Diego region.

Sincerely,

By: __Austin Cameron____
Its: ___President_____
Attachments: Memorandum dated 1/10/14 from Nasland Engineering
Traffic Impact Analysis – Chen Ryan

TC Construction Co., Inc., Corporate Office [illegible]
Offices in San Diego County, Corporate | Inland Empire | Imperial County
www.tcinc50.com

14.0 Quarry Access

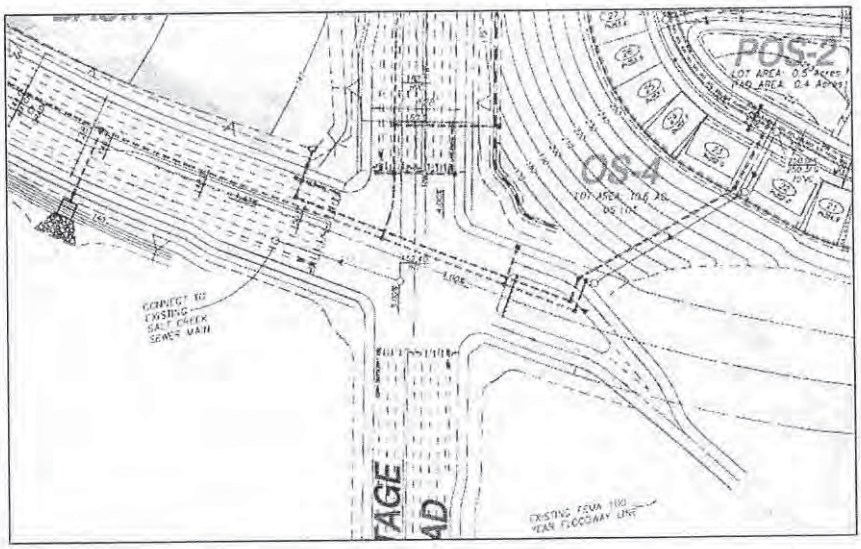
This chapter discusses traffic operations and safety at the quarry access off of Main Street under conditions with (ultimate) and without (interim) the Main Street connection over Wolf Canyon.

The following operational assumptions were derived based upon input from the quarry manager:

- Typical operation hours are between 7:00 am and 3:00 pm – Quarry traffic would be very unlikely to occur during the PM peak hour and thus the traffic operations analysis was based on the AM peak hour;
- Approximately 600 daily truck trips are generated by quarry activities – Approximately 1,500 ADT is generated by the quarry based on a 2.5 Passenger-Car Equivalent (PCE) factor per HCM 2010 (Exhibit 11-10); and
- One truckload every 30 seconds at the highest production – 120 trucks (300 PCE) would enter/exit the quarry during the AM peak hour, assuming a worst case scenario.

14.1 Interim Design

Main Street over Wolf Canyon is not likely to be constructed until Year 2025. The following drawing displays the proposed interim layout for quarry access in relation to the intersection of Heritage Road and Main Street. The access would be east of the intersection, to the southeast.



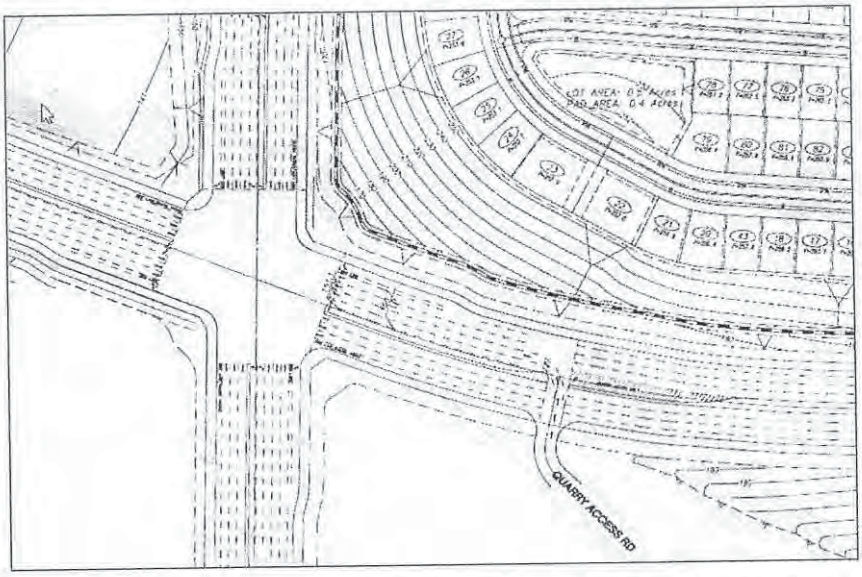
As shown, Main Street would terminate at the quarry access road approximately 210' east of Heritage Road.

Traffic Operation and Safety

Since no traffic movements would be in conflict with the ingress/egress at the quarry access, no traffic operations or safety issues would be anticipated in the interim years. The traffic signal at the Heritage Road and Main Street intersection should be designed as a standard eight-phase actuated signal. The westbound green indication would only be triggered by the arrival of westbound traffic. Proper signage should be displayed indicating that the east leg (Main Street, east of Heritage Road) is for "Quarry Access Only".

14.2 Ultimate Design

The layout below represents the proposed ultimate design for the quarry access in relation to the intersection of Heritage Road and Main Street, when Main Street between Heritage Road and La Media is constructed.



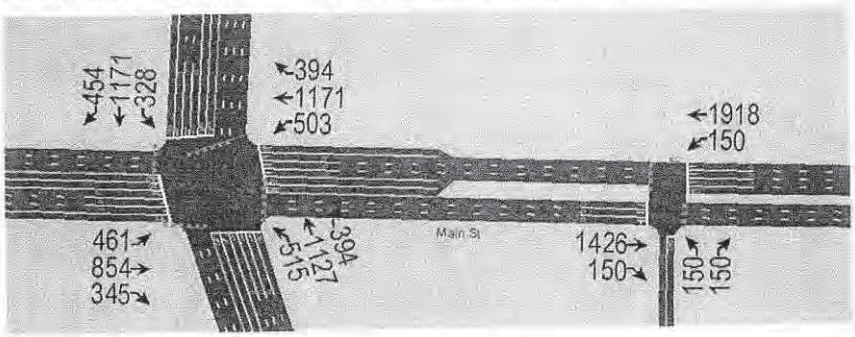
As shown, the quarry access road would be located approximately 350' east of Heritage Road.

Traffic Operation and Safety

A 50%/50% east/west directional split from/to the quarry was assumed and the following indicates the worst case quarry trip generation and ingress/egress volumes at the access point off of Main Street during the AM peak hour:

- 60 truck trips (150 PCE) making a right-turn (eastbound) to enter the quarry;
- 60 truck trips (150 PCE) making a left-turn (westbound) to enter the quarry; and
- 120 truck trips (300 PCE) exiting the quarry with 60 truck trips (150 PCE) each making left and right–turns onto Main Street.

The graphic below illustrates the AM peak hour turning movements at this intersection.



The quarry access is proposed to be signalized at Main Street. It is important to note that this proposed traffic signal must be coordinated with the traffic signal at the Heritage Road and Main Street intersection. **Table 14.1** displays intersection level of service and average vehicle delay results for both Heritage Road / Main Street and Quarry Access Road / Main Street intersections under the Year 2030 conditions. Level of service calculation worksheets are provided in **Appendix AC.**

TABLE 14.1
PEAK HOUR INTERSECTION LEVEL OF SERVICE RESULTS
QUARRY ACCESS YEAR 2030 CONDITIONS

Intersection	AM Peak Hour	
	Avg. Delay (sec.)	LOS
39. Heritage Road / Main Street	46.1	D
65. Quarry Access Road / Main Street	9.0	A

Source: Chen Ryan Associates; February 2014

As shown in the table, the quarry access at Main Street would operate at LOS A with minimum delay in Year 2030. The 50th (average) and 95th (maximum) queue length at the westbound (Main Street) left-turn into the quarry would be 57' and 177', respectively. Thus, it is recommended that the westbound left-turn pocket be designed at 200' to accommodate the maximum queue.

In addition to the 200' westbound left-turn pocket length, the following is also recommended to ensure safety and smooth operations at the intersection of Quarry Access Road and Main Street:

- "No-Turn On Red" sign and/or signal indication to be placed at the northbound quarry access approach to prohibit trucks from making right turns onto Main Street on red;
- Proper signage and pavement marking to be installed indicating "Quarry Access Only";
- Adequate turning radii to be provided for trucks; and
- No pedestrian crossing at Main Street.

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

ENGINEERING MEMORANDUM

DATE: January 10, 2014

TO: Pat Coughlin, Vulcan Materials Company
John Atkins, Vulcan Materials Company

FROM: Cory Schrack, PE
Nasland Engineering

SUBJECT: Vulcan Materials, Chula Vista: Access Road Analysis

The following road study memorandum serves to address the Chula Vista Facility's needs related to the road improvements proposed by the City of Chula Vista. Upon review of the proposed alignment drawings prepared by Hunsaker & Associates dated November 7, 2013, we offer the following design comments:

1. The recommended configuration for the quarry entrance is shown on Attachment A. The approximate dimensions shown will optimize the usability of the new quarry entrance. The subsequent design points support the configuration shown on Attachment A. Autoturn software with several vehicle sizes was utilized to determine the required configuration. Refer to Attachment B for the vehicle turning movements analyzed.

2. The quarry entrance should have curb return radii of 100-ft on the West side to accommodate the nine axle trucks that access the site several times per year to bring heavy equipment to the site. A dedicated right turn lane should be provided on eastbound Main Street.

3. The quarry entrance should have curb return radii of 105-ft on the East side to accommodate the nine axle trucks that access the site several times per year. A separate right turn lane should be provided where the turn lane meets Main Street. An acceleration lane should be provided eastbound onto Main Street.

4. The proposed median on Main Street will need to be reduced to make left turns feasible for trucks exiting the quarry heading westbound. If necessary for traffic channelization, a painted median may be acceptable.

5. A traffic signal should be installed at the quarry entrance intersection with Main Street, as stated in the letter from the Atlantis Group dated December 11, 2013. The amount of traffic from the quarry should be studied in detail by a Traffic Engineer, including sufficient green time to allow the trucks to clear the intersection. Signal Timing with the intersection of Main Street and Heritage Road will also be critical for efficient operation of the quarry exit. It should also be

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

noted that the quarry has vested mining rights with no restrictions on volume or hours of operation, and therefore the proposed entrance limits the ability to allow the necessary access for trucks and other construction equipment.

6. A turnaround area should be included near the quarry entrance to accommodate the turning movements of water trucks, graders, trucks, and loaders used by the quarry to calm dust from the unpaved entrance road. This equipment is not permitted to operate on public roads and cannot utilize the intersection to turn around. We recommend the turnaround area to be paved. A 100-ft radius would be appropriate for this purpose.

7. At the intersection of Main Street and Heritage Road, design of the southeasterly curb return radius should take into account the size of trucks turning eastbound on Main Street from northbound Heritage Road. A 50-ft radius should be sufficient.

8. Phasing of construction for the main street improvements should also be incorporated in the construction documents for the road. Access to the quarry shall be maintained at all times. Consideration for a temporary access road from Heritage Road should be made.

9. If the improvements shown on the *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013* are to be implemented prior to construction of eastbound Main Street, the following considerations should be incorporated into the interim conditions.

    a. Provide for the turn-around requirements of the quarry water truck (100-ft radius).
    b. Optimize traffic signal timing, taking into account the anticipated traffic volumes from the quarry.
    c. Design of the southeasterly curb return radius should take into account the size of trucks entering the quarry from northbound Heritage Road.

References:

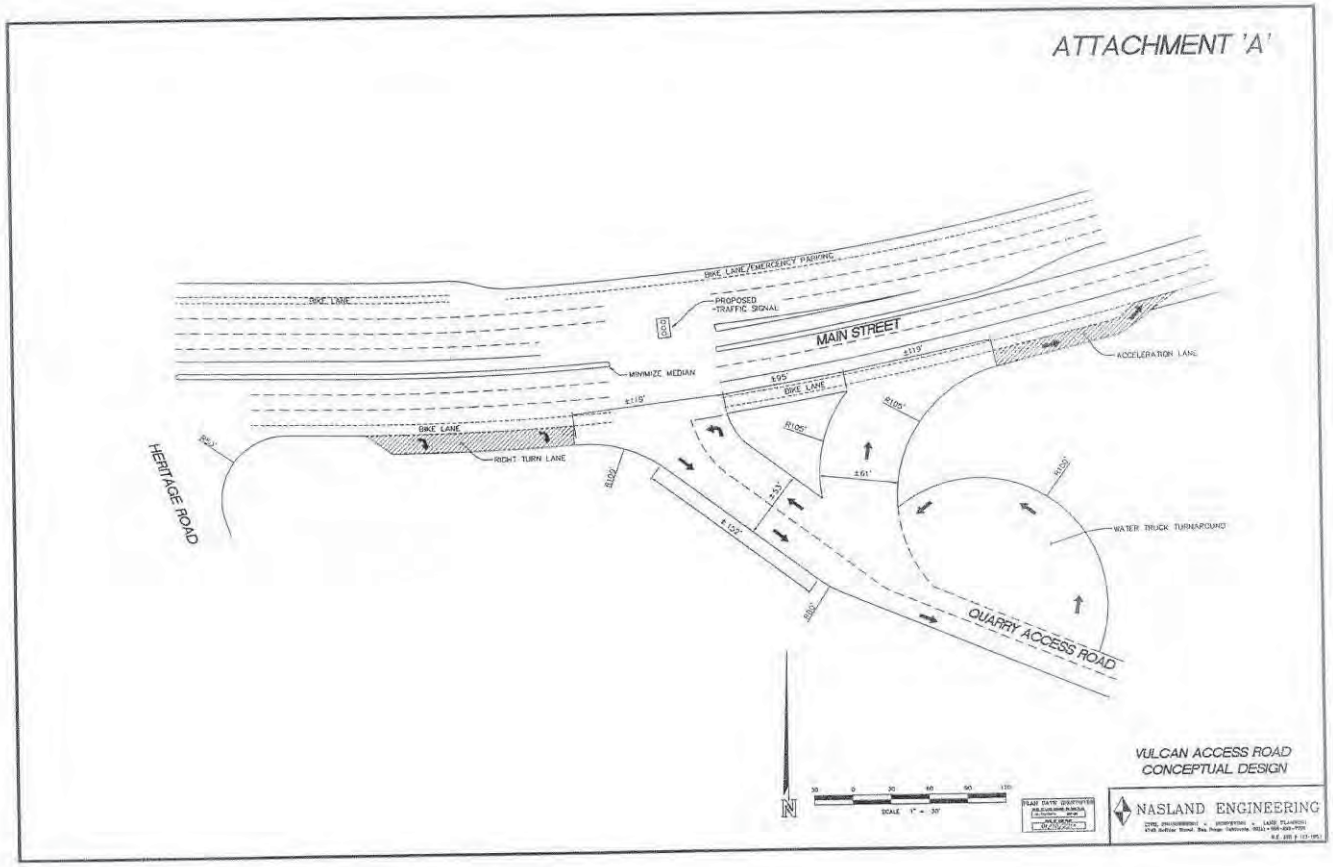
A. *Letter to the City of Chula Vista from Atlantis Group, dated December 11, 2013*
B. *Quarry Access Road exhibit prepared by Hunsaker & Associates, dated November 7, 2013*
C. *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013*

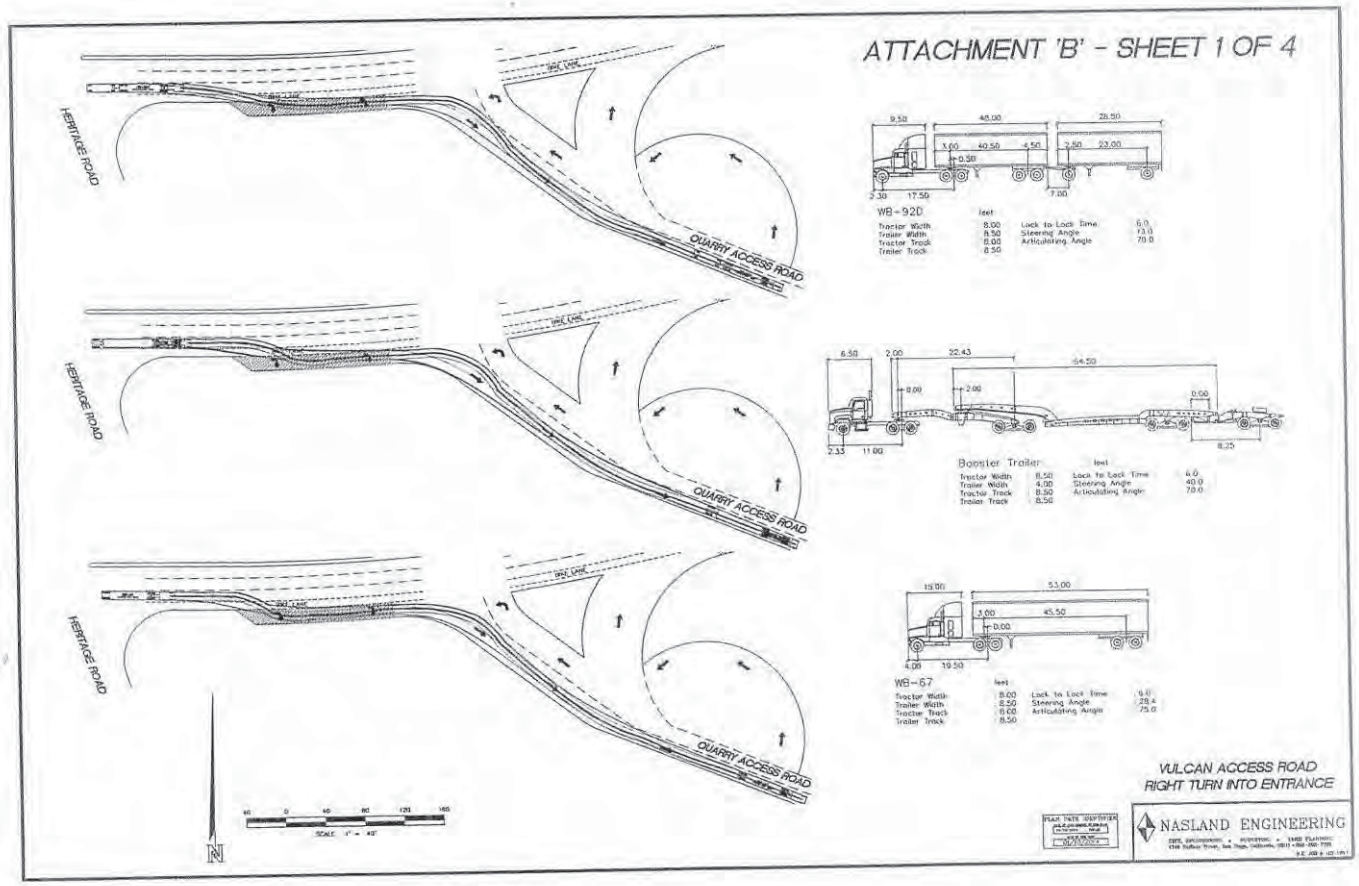
I hope the above information is helpful. Please contact me if I can be of further service or provide additional information regarding this project.

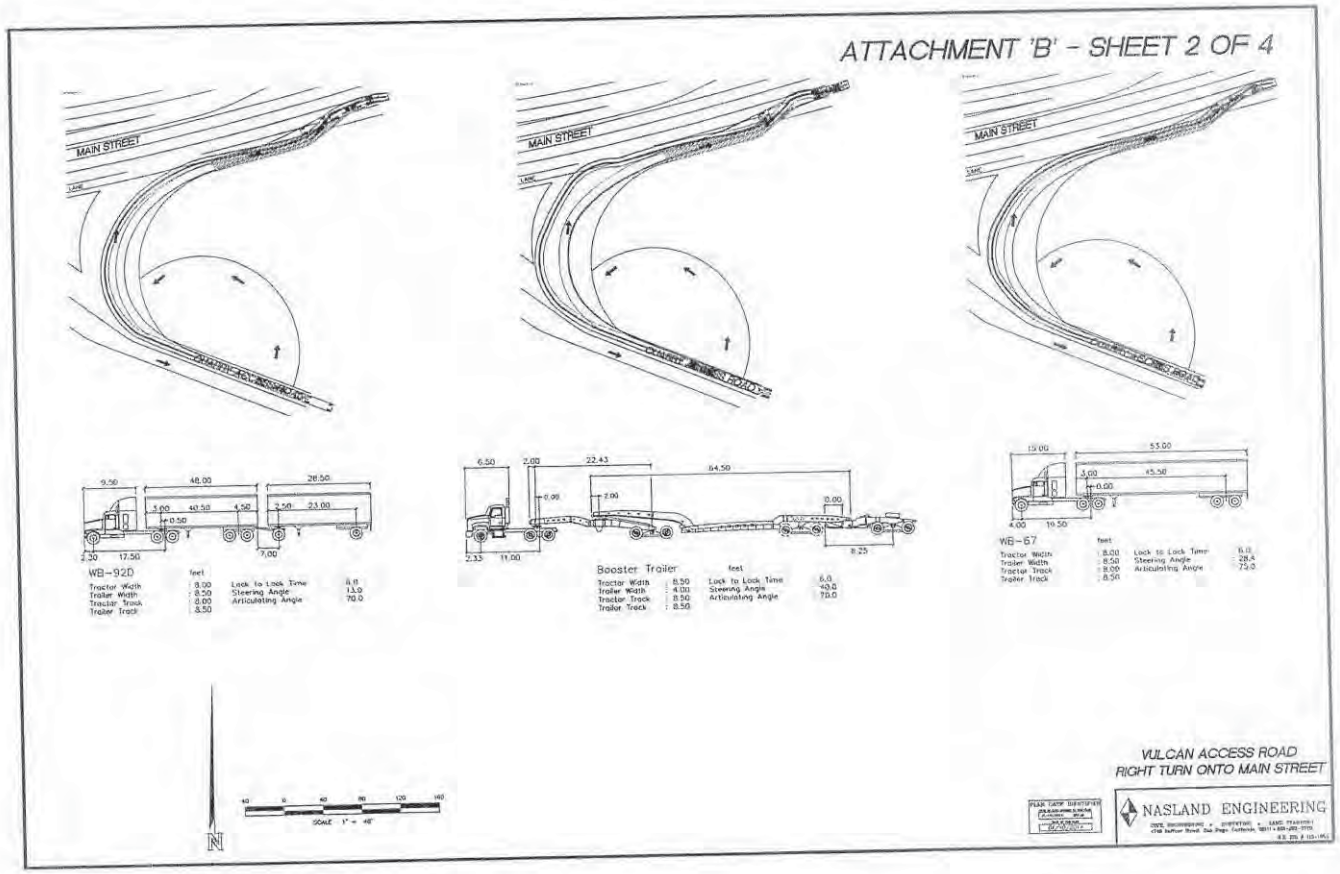
Sincerely,

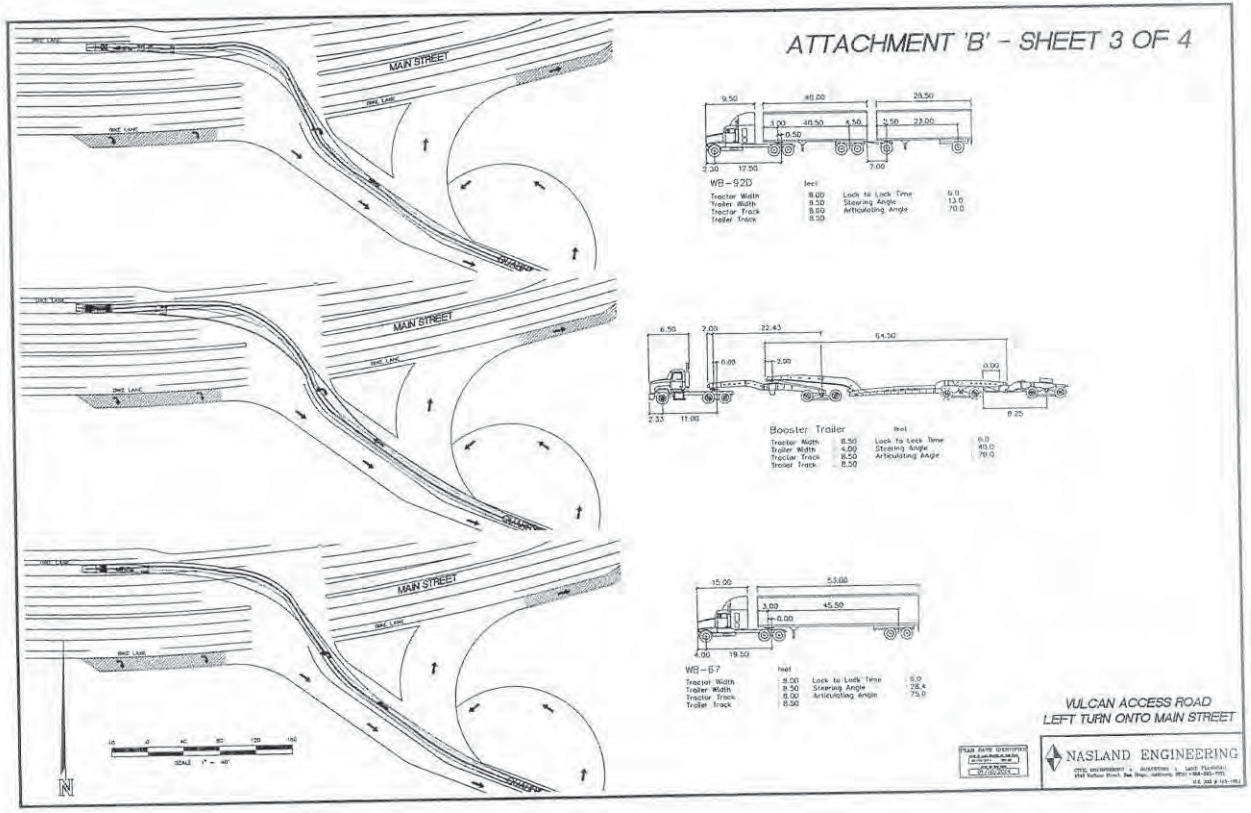
Cory Schrack, P.E.

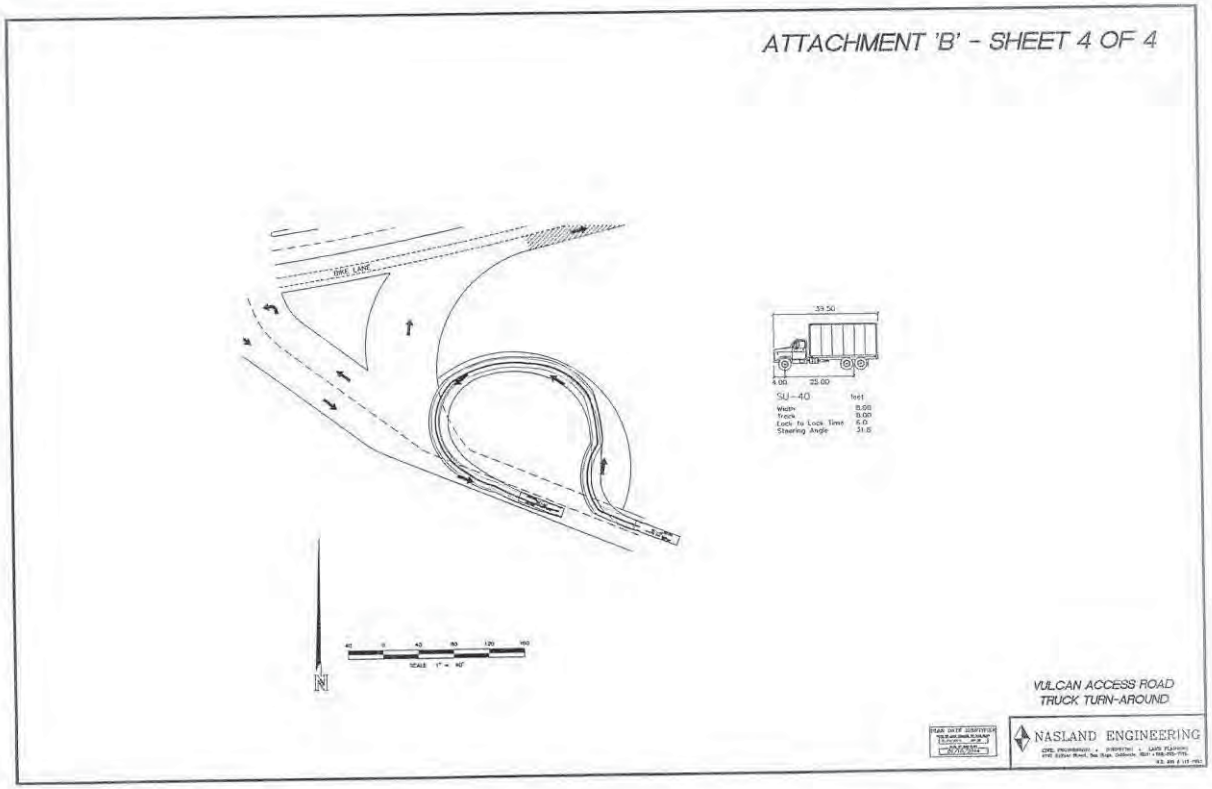
2

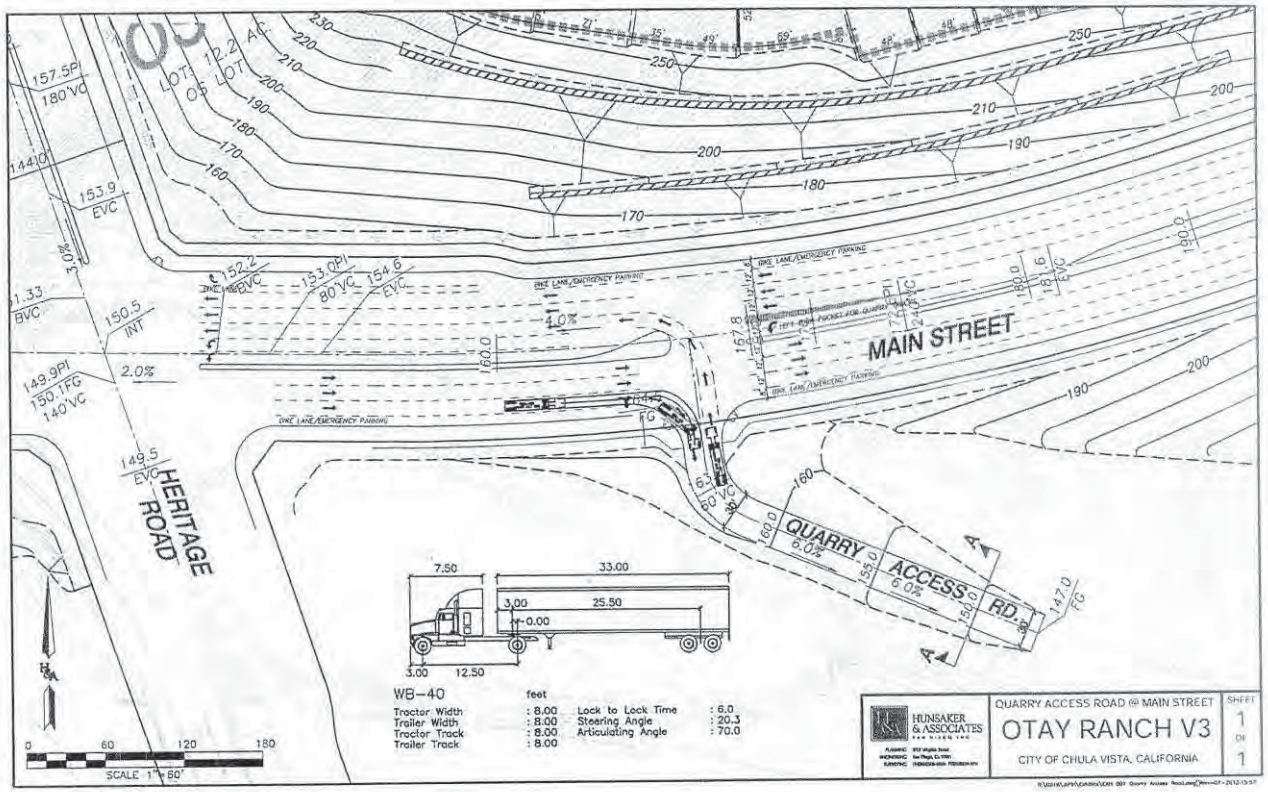

ATTACHMENT 'A'
BIKE LANE/EMERGENCY PARKING
BIKE LANE
PROPOSED
TRAFFIC SIGNAL
MAIN STREET
MINIMIZE MEDIAN
ACCELERATION LANE
BIKE LANE
RIGHT TURN LANE
HERITAGE ROAD
WATER TRUCK TURNAROUND
QUARRY ACCESS ROAD
VULCAN ACCESS ROAD
CONCEPTUAL DESIGN
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 1 OF 4
HERITAGE ROAD
QUARRY ACCESS ROAD
WB-92D
Booster Trailer
WB-67
VULCAN ACCESS ROAD
RIGHT TURN INTO ENTRANCE
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 2 OF 4
MAIN STREET
MAIN STREET
MAIN STREET
WB-92D
Booster Trailer
WB-67
VULCAN ACCESS ROAD
RIGHT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 3 OF 4
MAIN STREET
MAIN STREET
MAIN STREET
WB-92D
Booster Trailer
WB-67
VULCAN ACCESS ROAD
LEFT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 4 OF 4
ONE LANE
39.50
4.00
25.00
SU-40
feet
Width 8.00
Track 8.00
Lock to Lock Time 6.0
Steering Angle 31.0
N
VULCAN ACCESS ROAD
TRUCK TURN-AROUND
NASLAND ENGINEERING


MAIN STREET
HERITAGE ROAD
QUARRY ACCESS RD.
BIKE LANE/EMERGENCY PARKING
WB-40
Tractor Width : 8.00
Trailer Width : 8.00
Tractor Track : 8.00
Trailer Track : 8.00
Lock to Lock Time : 6.0
Steering Angle : 20.3
Articulating Angle : 70.0
SCALE 1" = 60'
HUNSAKER & ASSOCIATES
QUARRY ACCESS ROAD @ MAIN STREET
OTAY RANCH V3
CITY OF CHULA VISTA, CALIFORNIA
SHEET 1 OF 1

INTENTIONALLY LEFT BLANK

Response to Comment Letter I

TC Construction Company, Inc.
Austin Cameron, President
September 17, 2014

I-1 Please refer to responses D-1 through D-21 above for Comment Letter D.

INTENTIONALLY LEFT BLANK

Comment Letter J

DEPARTMENT OF TRANSPORTATION
DISTRICT 11, DIVISION OF PLANNING
4050 TAYLOR ST, M.S. 240
SAN DIEGO, CA 92110
PHONE (619) 688-6960
FAX (619) 688-4299
TTY 711
www.dot.ca.gov

September 17, 2014

11-SD-125
PM 4.961
DEIR Village 3, 4, 8E, 10

Ms. Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Dear Ms. Borg:

The California Department of Transportation (Caltrans) has reviewed the Draft Environmental Impact Report (DEIR) for the Otay Village 3, 4, 8 East, and 10, projects near State Route 125 (SR-125). Caltrans has the following comments: J-1

1. The ramp metering analysis summary on page 240 is incomplete and needs to be revised. J-2
2. Per tables 3.5, 6.5, 7.5, 8.5, and 9.5 in the report, the ramp meter demand is shown as follows: J-3
   a. I-805 NB ramps and Olympic Parkway
      i. Existing: 741 Caltrans is: 2,016
      ii. 2015: 520
      iii. 2020: 576
      iv. 2025: 589
      v. 2030: 861
   b. I-805 NB ramps and Main Street
      i. Existing: 292 Caltrans is: 789
      ii. 2015: 408
      iii. 2020: 589
      iv. 2025: 491
      v. 2030: 641

However, the AM peak hour intersection volumes from figures 3-2A, 6-2A, 7-2A, 8-2A, 9-2A for these ramps is as follows:

4. I-805 NB ramps and Olympic Parkway

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Ms. Marni Borg
September 17, 2014
Page 2

vi. Existing: 1,853
vii. 2015: 1,305
viii. 2020: 1,444
ix. 2025: 1,478
x. 2030: 2,157

b. I-805 NB ramps and Main Street
xi. Existing: 753
xii. 2015: 1,025
xiii. 2020: 1,476
xiv. 2025: 1,233
xv. 2030: 1,608

J-3 Cont.

The traffic study at the NB on ramps for I-805 and Olympic Parkway and I-805 and Main Street is flawed and needs to be revised and justified. The ramp meter analysis numbers do not match the intersection peak hour numbers. Additionally, the volumes are less than the existing at Olympic Parkway for the 2015, 2020, and 2025 years. Justification as to why the volumes are decreasing needs to be provided. Also the existing volumes do not match Caltrans existing volumes of 2,016 for the NB ramps at I-805 and Olympic Parkway and 789 for the NB ramps at I-805 and Main Street.

3. Page 246 of the Traffic Impact Study indicates a mitigation measure to adjust the meter rate for the NB on ramps at I-805 and Main Street. Adjusting the meter rate requires approval of the Caltrans District 11 ramp metering division. An alternative mitigation shall be provided if the ramp meter adjustments are not approved by the Caltrans ramp metering division. If ramp metering adjustment is not approved then mitigation should include an additional metered on ramp lane for a total of 4 lanes which includes 3 SOV lanes and 1 HOV lane. J-4

4. The Village 3 North trip distribution is flawed. Figure 4-1B.1 for 2015 shows 79% and 21% leaving the village, but figure 4-1C.1 for 2020 shows only 75% and 19% leaving the village. This shows that 6% of the trips are unaccounted for. The 2015 distribution also shows only 10% of trips traveling to the northeast of Village 3 North. However, the 2025 distribution shows about 35% of trips traveling northeast of Village 3 North and the 2030 distribution shows 40% of trips traveling northeast of Village 3 North. What is the new demand that is created to the northeast of Village 3 North that causes such a dramatic shift in the project trips? The I-805 and Main Street interchange should still be analyzed with the 2015 distribution. J-5

5. Currently there are no funding mechanisms or environmental approvals for the interchanges at SR-125 and Main Street and SR-125 and Otay Valley Road. However, it is understood the city is updating their Development Impact Fee (DIF) Program to include the freeway ramps. J-6

6. Caltrans has previously reviewed the traffic impact studies for Otay Ranch Village 2, Otay Ranch Village 8 west, and Otay Ranch Village 9. Every previous traffic impact study and the current Otay Ranch Village 3 north, 4, 8 east, and 10 traffic impact study indicate a J-7

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability."

Ms. Merri Borg
September 17, 2014
Page 3

significant impact at the I-805 and Olympic Parkway Interchange. However, every traffic impact study offers no mitigation.

The traffic volumes for each traffic study for the existing (ground) conditions with the project build-out conditions peak hour are listed below. These volumes are listed because the California Environmental Quality Act (CEQA) mandates the assessment of existing (ground) conditions with project build-out conditions. The existing traffic volumes and the total of all the Otay Ranch Villages' volumes are also listed below.

a. Existing
   i. Entering volume of 3384 for the AM southbound ramps
   ii. Entering volume of 4538 for the PM southbound ramps
   iii. Entering volume of 4840 for the AM northbound ramps
   iv. Entering volume of 4840 for the PM northbound ramps
b. Otay Ranch Village 8 west
   i. Entering volume of 509 for the AM southbound ramps
   ii. Entering volume of 665 for the PM southbound ramps
   iii. Entering volume of 798 for the AM northbound ramps
   iv. Entering volume of 985 for the PM northbound ramps
c. Otay Ranch Village 9
   i. Entering volume of 400 for the AM southbound ramps
   ii. Entering volume of 445 for the PM southbound ramps
   iii. Entering volume of 651 for the AM northbound ramps
   iv. Entering volume of 722 for the PM northbound ramps
d. Otay Ranch Village 2
   i. Entering volume of 370 for the AM southbound ramps
   ii. Entering volume of 228 for the PM southbound ramps
   iii. Entering volume of 642 for the AM northbound ramps
   iv. Entering volume of 409 for the PM northbound ramps
e. Otay Ranch Village 3 north, 4, 8 east, 10
   i. Entering volume of 329 for the AM southbound ramps
   ii. Entering volume of 537 for the PM southbound ramps
   iii. Entering volume of 612 for the AM northbound ramps
   iv. Entering volume of 777 for the PM northbound ramps
f. Sum of volumes from Otay Ranch Villages 3 north, 4, 8 east, 10, 8 west, 9, and 2

J-7 Cont.

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability."

Ms. Marni Borg
September 17, 2014
Page 4

i. Entering volume of 1608 for the AM southbound ramps, this is an increase of 47.5% from the existing volume.

ii. Entering volume of 1875 for the PM southbound ramps, this is an increase of 41.3% from the existing volume.

iii. Entering volume of 2703 for the AM northbound ramps, this is an increase of 55.8% from the existing volume.

iv. Entering volume of 2893 for the PM northbound ramps, this is an increase of 59.8% from the existing volume.

J-7 Cont.

The increases in volume above range from 41.3% to 59.8%. These significant increases in volume warrant improvements at the I-805 and Olympic Parkway interchange. The Otay Ranch Village community needs to be treated as a single entity and provide mitigation at the I-805 and Olympic Parkway interchange. The mitigation may require widening of the Olympic Parkway bridge, additional lanes at the northbound off ramp, northbound on ramp, southbound off ramp, and on Olympic Parkway west of I-805.

7. Page 88 of the traffic impact analysis states mitigation measures: "Construction of an additional left-turn lane at the I-805 southbound off-ramp, as well as a 3rd through lane along the Olympic Parkway eastbound approach. The recommended improvements would require widening of Orange Avenue/Olympic Parkway; however, there are right-of-way constraints that would make such improvements infeasible. An engineering right-of-way assessment was conducted and included in Appendix H. Therefore, the impact will remain significant and unavoidable at this location." Pages 141-142 and 212 of the traffic impact analysis also describe how the impact at this location will remain significant and unavoidable, and "There are no other feasible physical improvements that would reduce the remaining cumulative impact to less than significant." Caltrans disagrees and recommends the following improvements:

J-8

a. Widen the Olympic Parkway bridge east of the SB on and off ramps.

b. Widen I-805 northbound off-ramp to Olympic Parkway to provide for an additional exclusive northbound right turn lane. This widening might require a retaining wall or concrete barrier on I-805 northbound off-ramp. The proposed lane configuration for this approach is an exclusive northbound left turn lane, a shared thru and left, and 2 exclusive northbound right turn lanes.

c. Widen westbound Olympic Parkway at I-805 northbound on-ramp to provide for an additional exclusive westbound right turn lane. Retaining wall might be needed for this modification. This proposed improvement will result in two westbound thru lanes, and 2 exclusive westbound right turn lanes.

d. Olympic Parkway and Oleander Avenue
   - Remove the traffic signal
   - Remove eastbound and westbound left turn lanes
   - Modify the raised median to prohibit vehicles from making a left turn from Oleander Avenue to Olympic Parkway. The intersection will be a right in / right out only from Oleander Avenue
   - Add an eastbound and westbound through lanes on Olympic Parkway

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Ms. Marni Borg
September 17, 2014
Page 5

Note: Mitigation improvements may also need to consider Caltrans intersection control evaluation policy (ICE) for the impacts to I-805 and Olympic Parkway and I-805 and Main Street. J-8 Cont.

Comments on Section 5.3 of the EIR: Transportation Circulation Access:

1. Table 5.3-20 shows I-805 SB Ramps/ Main Street operating at over capacity during the PM peak hour. Please include it with the list on page 5.3-52. J-9
2. Table 5.3-26, on page 5.3-74, shows the "with project" demand on I-805 NB On-Ramp at Olympic Parkway is less than the "without project" demand. Please clarify. J-10
3. Table 5.3-30 shows the following intersections operating at over capacity: J-11
   a. I-805 SB Ramps/ Olympic Pkwy operate at over capacity during the AM peak hour.
   b. I-805 SB Ramps/ Main Street operate at over capacity during the AM peak hour.
   c. I-805 NB Ramps/ Main Street operate at over capacity during the PM peak hour.

   Please include the above intersections with the list on page 5.3-87.
4. Table 5.3-31, page 5.3-93, shows the "with project" demand on I-805 NB On-Ramp at Olympic Parkway is less than the "without project" demand. Please clarify. J-12
5. Table 5.3-35 shows I-805 NB Ramps/ Olympic Parkway operates at over capacity during the AM and PM peak hours. Please include it with the list on page 5.3-106. J-13
6. Table 5.3-36, on page 5.3-111, shows the "with project demand on I-805 NB On-Ramp at Olympic Pkwy is less than the "without project" demand. Please clarify. J-14
7. Table 5.3-41 shows I-805 SB Ramps/ Main Street operates at over capacity during the AM peak hours. Please include it with the list on page 5.3-128. J-15

General Comments:

Caltrans is currently in the process of developing a Project Study Report (PSR) for the Main Street, Rock Mountain and Otay Valley Road interchanges. It is recommended as part of the EIR that the City coordinate with Caltrans to incorporate information from the PSR where applicable. J-16

Any work performed within Caltrans right-of-way (R/W) will require discretionary review and approval by Caltrans and an encroachment permit will be required for any work within the Caltrans R/W prior to construction. Current policy allows Highway Improvement Projects costing $1 million or less to follow the Caltrans Encroachment Permit process. Highway Improvement Projects costing greater than $1 million but less than $3 million would be allowed to follow a streamlined project development process similar to the Caltrans Encroachment Permit process. In order to determine the appropriate permit processing of projects funded by others, it is recommended the concept and project approval for work to be done on the State Highway System be evaluated through the completion of a Permit Engineering Evaluation Report (PEER). A PEER should always be prepared, regardless of the cost of improvements, when new operating improvements are constructed by the permittee that become part of the State Highway System. These include but are not limited to, signalization, channelization, turn pockets, widening. J-17

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Ms. Marni Borg
September 17, 2014
Page 6

realignment, public road connections, and bike paths and lanes. After approval of the PEER and necessary application and supporting documentation an encroachment permit can be issued. J-17 Cont.

As part of the encroachment permit process, the applicant must provide an approved final environmental document including the California Environmental Quality Act (CEQA) determination addressing any environmental impacts within the Caltrans' R/W, and any corresponding technical studies. If these materials are not included with the encroachment permit application, the applicant will be required to acquire and provide these to Caltrans before the permit application will be accepted. Identification of avoidance and/or mitigation measures will be a condition of the encroachment permit approval as well as procurement of any necessary regulatory and resource agency permits. Encroachment permit submittals that are incomplete can result in significant delays in permit approval. J-18

Additional information regarding encroachment permits may be obtained by contacting the Caltrans Permits Office at (619) 688-6158. Early coordination with Caltrans is strongly advised for all encroachment permits. J-19

If you have any questions, please contact Roger Sanchez of the Development Review branch at (619) 688-6494.

Sincerely,

JACOB ARMSTRONG, Branch Chief
Development Review Branch

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Response to Comment Letter J

Caltrans, District 11
Jacob Armstrong, Branch Chief
September 17, 2014

J-1 This comment does not address the adequacy or accuracy of the information provided in the Draft EIR. No further response is necessary.

J-2 This comment is general in nature and does not identify any specific ways in which analysis is incomplete or inadequate; nevertheless, the following explanation is provided regarding the ramp metering analysis.

The ramp metering analysis on Page 203 of the University Villages Traffic Impact Analysis for Villages 3 North, 8 East and 10 (Page 207 of the revised TIA) shows the ramp metering analysis for the two existing ramp meters at I-805. In order to provide clarification, Table 9.5 on Page 204 of the TIA (Page 208 of the revised TIA) has been revised to show the full peak hour volume. This is a complete analysis of all ramps meter in the project study area as required by the City of Chula Vista.

The ramp metering analysis summary (Table 10.4), beginning on Page 241 of the revised TIA, provides the ramp metering analysis for all required ramps under each study scenario (Existing, Existing + Project, 2015, 2020, 2025, and 2030 Buildout) for both AM and PM Peak Hour. Table 10.4 reflects the conclusions of Section 5 – 9 of the TIA, is accurate based on traffic counts (for the "Existing" scenario) and the Series 11 Year 2015 SANDAG Transportation Model, "Southbay 2, University Villages" model (for all other scenarios) and complete based on the City of Chula Vista requirements establishing the project study area; therefore, no revisions are required.

In addition, please see response to comments J-3 and J-4 below in regard to the ramp metering rate adjustment for further details regarding the ramp metering analysis performed in the project traffic study.

J-3 The ramp meter demands (Dvol) displayed in tables 3.5, 6.5, 7.5, 8.5, and 9.5 in the TIA represent peak hour demand per lane and calculated using the following formula, which is a traffic engineering standard practice:

$$D_{vol} = \frac{(P_{vol} - H_{vol})}{N}$$

- Dvol (Demand Volume per hour per Lane): total peak hour demand expected to use the on-ramp (non-HOV lane only);
- Pvol (Peak Hour Ramp Volume): sum of all peak hour volumes using the on-ramp;
- Hvol (HOV lane volume): based on field observation, approximately 20% of the Pvol utilized the HOV lane; and
- N: number of non-HOV lanes at the on-ramp.

Figures 3-2A, 6-2A, 7-2A, 8-2A, and 9-2A represent the total peak hour volumes (i.e. – the sum of all lanes) on the subject on-ramp, identified as Pvol in the above formula.

For clarity, these tables have been updated to include the total on-ramp volumes in addition to the current per-lane volumes for reference such that they reflect the volumes in figures 3-2A, 6-2A, 7-2A, 8-2A, and 9-2A. These changes are only editorial and do not affect the results of the analysis. As shown in the expanded tables 3.5, 6.5, 7.5, 8.5, and 9.5 both the information presented in the tables and figures are accurate based on the above equation, which as referenced, is a traffic engineering standard practice. Therefore, the ramp metering analysis is correct, not flawed, and no further response is required.

Traffic volumes forecast for the years 2015, 2020, and 2025 scenarios were developed using the Series 11 Year 2015 SANDAG Transportation Model, "Southbay 2, University Villages" model. A copy of the model output is provided in Appendix A of the University Villages TIA. The Southbay 2 model has also been used as the base model by the Village 8 West, Village 9 and Village 2 traffic reports.

As shown in Appendix A (and replicated below), the year 2015, 2020, and 2025 conditions, traffic volumes shifted from Olympic Parkway, decreasing from 48,508 under the Existing Condition to 42,800 under the 2030 buildout condition. This result appeared counter-intuitive (i.e. – as development occurs and additional trips are generated and added to the circulation network it was expected that traffic would increase on local major arterials, not decrease), so prior to completing the TIA the City required the traffic engineer to perform a screenline analysis to confirm the validity of the model. The results of the screen line analysis is shown below:

Roadway	Existing	2015	2020	2025	2030
East H Street	72,700*	66,100	66,900	69,000	65,800
Telegraph Canyon Road	59,100*	61,500	63,200	64,500	61,000

E Palomar Street	7,200*	26,100	30,500	32,000	29,900
Olympic Parkway	48,508	42,600	44,200	47,600	42,800
Main Street	31,341	38,200	46,200	49,100	61,800
TOTAL	218,849	234,500	251,000	262,200	261,300

* 2010 ADT obtained from SANDAG

As shown in the table, the total screenline ADTs for the east-west traveling roadways show gradual increases over each of the analysis years into the future, beginning with approximately 219,000 ADT under the Existing condition and increasing by roughly 42,500 ADT to a total of 261,300 under 2030 buildout. The decreased traffic volumes along Olympic Parkway were due to the forecasted travel pattern shift to other east-west roadways, in particular Main Street and E. Palomar, and shifts to SR-125, which effectively takes trips off the east-west roadways.

The existing traffic count for the University Villages TIA was conducted by NDS on May 18, 2011. Count worksheets are provided in Appendix B of the University Villages TIA. Due to fluctuations in traffic volume on a day-to-day basis, it is unreasonable to expect the volumes utilized in the University Villages TIA to match Caltrans traffic volumes.

J-4 The City acknowledges that adjusting the ramp metering requires Caltrans approval. TCA-14 is a mitigation measure required prior to the buildout condition, which is 2030. The measure has been clarified to require that the applicant "work with Caltrans," and that Caltrans "can and should" adjust the meter rate so that it reflects the buildout traffic volumes. This is consistent with PRC 21081(a)(2) – changes that could mitigate or avoid significant impacts "are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency." Based on the following analysis, this is a feasible, reasonable mitigation measure that is proportional to the impact (CEQA Guidelines 15126.4).

Based on the ramp metering rates provided by Caltrans, the Main Street on-ramp rate is approximately half of the rates at adjacent interchanges of I-805/Telegraph Canyon Road and I-805/Olympic Parkway. The table below shows a comparison between the I-805 main line ADT and the existing ramp metering rates along I-805 in the vicinity of the project site.

Freeway Segment	2030 ADT	Intersection / On-Ramp	# of Lanes	Existing Ramp Metering Rate (min – max) / lane / hour
I-805 from East H Street	174,100	I-805 NB Ramps @	2 SOV + 1	636 – 804

to Telegraph Canyon Road		Telegraph Canyon Road	HOV	
I-805 from Telegraph Canyon Road to East Palomar Street	153,200			
I-805 from East Palomar Street to Olympic Parkway	153,200	I-805 NB Ramps @ Olympic Parkway	2 SOV + 1 HOV	778 – 996
I-805 from Olympic Parkway to Main Street	121,500			
I-805 from Main Street to Palm Avenue	116,300	I-805 NB Ramps @ Main Street	2 SOV + 1 HOV	346 - 480

As shown in the table above, the I-805 mainline volumes vary between 116,300 ADT and 174,100 ADT between Palm Avenue and Telegraph Canyon Road, and the associated ramp metering rate at each of the NB On-Ramps varying between 346 vehicles per hour per lane to 996 vehicles per hour per lane. The following factors indicate that the Main Street on-ramp metering rate is underutilized (likely due to low demand under the existing condition), and that the ramp metering rate can be adjusted to meet future demand as the demand increases:

- The purpose of ramp metering is to regulate the flow on the main line (i.e. the freeway/highway) by reducing the disruption of traffic from too many vehicles entering the main line at the same time;
- The section of I-805, between Olympic Parkway and Palm Avenue (south of Main Street), is projected to have significantly lower traffic volumes when comparing the mainline flow at nearby interchanges, indicating that the main line volume near the Main Street on-ramp can accommodate additional volume from the Main Street on-ramp (if needed);
- The Main Street on-ramp metering rate is set based on existing traffic volume, which is significantly lower than the demand at nearby on-ramp (Olympic Avenue and Telegraph Canyon Road) with similar number of lanes.

Therefore it can be concluded that the ramp metering rate at the Main Street on-ramp can be adjusted to accommodate the additional traffic volume, and that Caltrans has the discretion to change this meter rate.

The alternative mitigation measure proposed by the comment would not effectively mitigate the impact because strictly adding an additional SOV lane without any adjustment to the meter rate; would not allow for any additional vehicles to enter the freeway and thus reduce the identified impact. In addition

to not mitigating the impact, the improvement suggested would result in far greater impacts due to any widening associated with adding a fourth lane. Not only would these additional physical impacts occur, but the improvements would be within Caltrans ROW and there is no assurance that the improvements would be approved.

Based on this observation, it is reasonable, feasible (based on other ramp rates), and logical (the least environmentally impactful measure compared to building additional ramp lanes, etc.) to increase meter rates at the Main Street on-ramp, especially given that Caltrans can and should adjust the meter rate per PRC 21081(a)(2).

J-5 The City of Chula Vista worked closely with SANDAG in developing the South Bay Subarea model used in assessing future traffic volumes and trip distribution patterns in 5 year increments for the University Villages project. The distribution of the external project trips was based upon a computer generated "Select Zone" analysis utilizing the Series 11 Year 2015 SANDAG Transportation Model, "Southbay 2, University Villages". The select zone model run is included as Appendix A of the University Villages TIA.

As shown in Appendix A, under the Year 2020 conditions, 6% of the project trips travel to land uses along Main Street, between Brandywine Avenue and Heritage Road. These percentages were not shown in Figure 4-1C of the TIA; however, the University Villages TIA has been updated to provide the information. In addition, all project distribution figures (4-1A.1, 4-1A.2, 4-1A.3, 4-1A.4, 4-1B.1, 4-1C.1, 4-1C.2, 4-1C.3, 4-1D.1, 4-1D.2, 4-1D.3, 4-1D.4, 4-1E.1, 4-1E.2, 4-1E.3, and 4-1E.4) were updated to display project traffic depicted in other neighborhoods of Otay Ranch. These graphical changes are informational only for clarification purposes and do not affect the results of the analysis.

As shown in Appendix A of the University Villages TIA, the Year 2025 and Year 2030 models included additional land uses from other projects within the Otay Ranch Development area, including the following:

Village 2 (Residential, Light Industrial, & Commercial land uses),

- Village 8 West (Residential & Commercial land uses),
- Village Eight East (Residential & Mixed-use Commercial land uses),
- Village 9 (Residential & Commercial land uses),
- Village Ten (Residential & Mixed-use Commercial land uses) and

- University & Regional Technology Center (Education & Light-Industrial land uses).
- Other land uses assumed by City staff to be constructed by the Year 2025 and Year 2030 scenarios.

These additional land uses predominately to the north and east of the University Villages project areas, along with the circulation network changes (in particular the connection of Main Street to the east from Heritage Road), resulted in additional trips traveling within the Otay Ranch area instead of getting on the freeways because many of these are new destinations within eastern Chula Vista and would replace trips otherwise required to use freeways. It is very important to note that the project trip distribution is based on the SANDAG's select zone assignments.

As described above, the 2015 distribution is per the Southbay model results. The changes in the trip distribution patter are due to new land uses and circulation network changes which occur after 2015 to the north and east of the University Villages project areas. It would be inaccurate to model these future years based on the 2015 distribution. Therefore, the Village 3 North trip distribution for the various study timeframes is not flawed and the analysis is accurate as included in the TIA. No revisions to the TIA or EIR are warranted.

J-6 Comment noted. The City of Chula Vista is currently updating its Transportation Development Impact Fee (TDIF) Program. As the comment notes, the SR-125 and Main Street as well as the SR-125 and Otay Valley Road interchanges are included in the City's updated TDIF program. In addition, those portions of these improvements which are within the project boundaries are included within this EIR for certain "on the ground" impacts including impacts to biology, paleontological resources and cultural resources. It is reasonable to expect that these improvements will be implemented, and the mitigation is consistent with CEQA standards for enforceability.

J-7 Each of the projects listed in the comment are separate project under CEQA. Specific to the University Villages (Village 3 North, 4, 8 East and 10 as referenced in the comment) project, the 2030 analysis was a "cumulative" analysis in that it did include projected ADT from each of the other listed Otay Ranch projects (as well as buildout of other land uses in the City of Chula Vista). The University Villages EIR identifies a cumulative impact at the I-805 and Olympic Parkway interchange.

The Existing Plus Project (University Villages) scenario was conducted and included in Chapter 5 and the TIA.

No scenario was modeled which considered Existing Plus Otay Ranch projects. This is not required by CEQA or the City of Chula Vista. However, as mentioned above, Chapter 9 does consider buildout of the City of Chula Vista which includes the other Otay Ranch Projects.

As concluded in Chapter 9 of the TIA, the University Villages project has a cumulative impact at the I-805 and Olympic Parkway interchange. As documented on Page 215 of the University Villages TIA and Section 5.3 of the EIR, there is currently no approved plan or program in place into which the project applicant could pay its fair share toward such improvement identified by Caltrans in this comment. Therefore, mitigation is infeasible and the impact will remain cumulatively significant and unavoidable at the I-805 / Olympic Parkway interchange.

Additionally, it should be noted that the widening of Olympic Parkway bridge is not identified in the City of Chula Vista's CIP or supported by other funding sources; therefore, it is not reasonable to assume that this could be a feasible mitigation.

Nevertheless, contribution to the City's Transportation Development Impact Fees (TDIF) program is required for the proposed project to address the project's potential cumulative impacts to transportation facilities serving project development. The TDIF program collects a project's fair share fee contributions based on the project's traffic impacts and utilizes those funds to mitigate impacts to City roadway facilities. There are a number of improvements in the surrounding areas that are within the TDIF program, such as the construction of Heritage Road from Main Street to Olympic Parkway, extension of Main Street, and the Palomar Street DAR, which would reduce the traffic volumes through the Olympic Parkway/I-805 interchange.

Additionally, the City of Chula Vista has historically used TDIF funding to contribute toward numerous Caltrans interchange projects along the I-805 corridor. The TDIF program was used to construct I-805/Olympic Parkway interchange, I-805/Telegraph Canyon interchange and I-805/H 8th Street interchange. Over more than two decades, the City has contributed toward interchange improvements along State facilities. As such, the TDIF fees collected for the proposed project may be used to make improvements to freeway interchanges, as recommended by the commenter.

The EIR has clearly stated project impacts related to State facilities and has provided adequate mitigation measures within the City's or Applicant's control, or

has identified significant unavoidable impacts where appropriate. No revision to the Draft EIR is necessary as a result of this comment.

J-8 Page 88 of the TIA is providing the results of the Existing Plus Project scenario and what would be required to mitigate the impact. However, mitigation is not based on Existing Plus Project because it results in unrealistic mitigation measures such as the one described in the comment (i.e. – triple left turns). The University Villages project would contribute to a cumulative impact to this location.

The potential mitigation measures recommended by Caltrans in comments 7a, 7b, and 7c, are not identified in the City of Chula Vista's CIP or supported by other funding sources. In addition, there is currently no approved plan or program in place into which the project applicant could pay its fair share toward such improvements, therefore it is not reasonable to assume that this could be a feasible mitigation.

With respect to Item 7d, Oleander Avenue provides important connections north and south of Olympic Parkway. By converting this intersection to right-in / right-out only would prohibit vehicles from making left-turns and going through on Oleander. The City of Chula Vista has no plan to close the median at Oleander Avenue. In addition, by only allowing right-in / right-out at this intersection would force traffic to either make U-turns at adjacent intersections or divert onto different routes, this could results in potential traffic impacts at other locations.

The University Villages project is not proposing any intersection traffic control changes or other physical improvements at the ramp intersections of I-805/Olympic Parkway and I-805/Main Street; hence, Intersection Control Evaluation (ICE) was not conducted for this project.

J-9 Comment noted. Table 5.3-20 is correct and identifies all ramps operating "over" capacity; however, the results were transposed incorrectly in the subsequent list. Both the TIA (Page 107) and EIR (Page 5.3-56) have been corrected to include this intersection. These changes are only editorial and do not affect the results of the analysis.

J-10 Comment noted. Table 5.3-26 is correct and identifies all ramps operating "over" capacity; however, the results were transposed incorrectly in the subsequent list. This was a typographical error during the production process. The TIA (Page 112) and EIR (Page 5.3-76) have been corrected to reflect the correct "without project" demand. However, this error would not affect the results of the analysis.

J-11 Comment noted. Table 5.3-20 is correct and identifies all intersections operating at "over" capacity; however the results were transposed incorrectly in the subsequent list. Both the TIA (Page 133) and EIR (Page 5.3-56) have been corrected to include this intersection. These changes are only editorial and do not affect the results of the analysis.

J-12 Comment noted. This was a typographical error during production process. The TIA (Page 140) and EIR (Page 5.3-95) have been corrected to reflect the correct "without project" demand. However, this error would not affect the results of the analysis.

J-13 Comment noted. Both the TIA (Page 173) and EIR (Page 5.3-109) have been corrected to include this intersection. These changes are only editorial and do not affect the results of the analysis.

J-14 Comment noted, this was a typographical error during production process. The TIA (Page 174) and EIR (Page 5.3-114) have been corrected to reflect the correct "without project" demand. However, this error would not affect the results of the analysis.

J-15 Comment noted. Table 5.3-41 is correct and identifies all ramps that are operating "over" capacity; however, the results were transposed incorrectly in the subsequent list. Both the TIA (Page 204) and EIR (Page 5.3-132) have been corrected to include this intersection. These changes are only editorial and do not affect the results of the analysis.

J-16 This comment requests that the City incorporate the Caltrans Project Study Report (PSR) for the Main Street, Rock Mountain and Otay Valley Road interchanges into the Draft EIR. As stated by the commenter, this report is currently being prepared and therefore was not available for incorporation into the Draft EIR traffic analysis. As of publication of the Final EIR, the PSR has not yet been received by the City of Chula Vista. No revision to the Draft EIR is required in response to this comment. This comment does not address the adequacy or accuracy of the information provided in the Draft EIR. No further response is necessary.

J-17 Refer to response to comment J-16. This comment does not address the adequacy or accuracy of the information provided in the Draft EIR. No further response is necessary.

J-18 This comment does not address the adequacy or accuracy of the information provided in the Draft EIR. No further response is necessary.

J-19 This comment does not address the adequacy or accuracy of the information provided in the Draft EIR. No further response is necessary.

INTENTIONALLY LEFT BLANK

Comment Letter K

September 18, 2014

Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

RE: EIR 13-01; SCH 2013071077

Having reviewed the Otay Ranch University Villages SPA Plan Draft EIR I have the following comments/concerns. The design planning for Villages 3 North, Village 8 East, and Village 10 will define the northern edge of the Otay Valley Regional Park (OVRP), and even provide development of an active recreation area within the OVRP as a community park. Therefore, attention to all details of the proposed development project should include how implementation will impact the adjacent regional park. Some of those details are included in the following concerns: K-1

1. Assure that trails from Village Three be provided access to the east/west OVRP trail system (Wylie Rd), including a transition that will enable crossing beneath a reconstructed Heritage Road Bridge. K-2

2. Assure that a staging area with access to the OVRP trail system be provided within the proposed community park in Village 8 East. K-3

3. The Chula Vista Greenbelt Master Plan provides for a trail along the west side of Salt Creek, connecting to the east/west OVRP trail system to the south. While the trail is continued through Village 10, it unfortunately changes from a "Regional Trail" design to ultimately a narrower on-sidewalk design. It is unfortunate, and a lost opportunity, that the trail design does not have consistency of materials and widths with the trail constructed north of Village 10. While consistency of design is a lost opportunity and a difficult design change, a connection to the OVRP is welcomed and consistent with the Greenbelt Master Plan. K-4

4. Do not preclude the opportunity for equestrian usage with the OVRP multi-use trail system (Wylie Rd), including the provision of a twelve-foot (12') minimum height under a re-constructed Heritage Bridge. K-5

As a former city planner (now retired) with the City of Chula Vista that was involved in the preparation of the General Plan, the Otay Ranch General Development Plan and Greenbelt Master Plan I am very familiar with the content of those documents. I am also involved as a member of the OVRP Citizen Advisory Committee and a long-time Chula Vista resident. Please consider the concerns above in the preparation of the Final EIR and implementation documents. K-6

Sincerely,

Duane E. Bazzel
1110 Magellan Way
Chula Vista, CA 91910

INTENTIONALLY LEFT BLANK

Response to Comment Letter K

Duane E. Bazzel
September 18, 2014

K-1 The Village Design Plans for Village 3 North, 8 East and 10, address the OVRP Standards and Guidelines, Section 5, Private Development Guidelines on a village-by-village basis through grading design, retaining wall and fencing location, materials and design, landscape buffers, landscape palettes, and lighting placement and design.

Village 3 North Design Plan, Page 28 states: The OVRP Standards and Guidelines, Section 5, Private Development Guidelines include principles for private development adjacent to the OVRP. Consistent with these principles, manufactured perimeter slopes adjacent to the OVRP complement and do not negatively impact the park by utilizing the following techniques:

- Perimeter slopes follow the existing topography, blending the site into natural topography and preserving natural drainages between Village 10 and the Otay River Valley.
- Landscape buffers are planted with native plant materials, consistent with the Village 8 East Fire Protection Plan and Preserve Edge Plan.
- Retaining walls are planted and irrigated to avoid large expanses of blank walls and blending the retaining walls into the natural setting, making them virtually undetectable with full landscape cover. Wherever possible plantable retaining walls are split into two sections, providing opportunities to screen the walls with native landscaping in front of the wall and reduce single wall heights.
- Non-residential fencing at the perimeter is typically post & rail, permitting views to and from the park.
- Residential fencing at the perimeter is typically, 2’ of block with 4’ of view fencing, permitting views to and from the park.
- Lighting at the perimeter must be directed away from the Preserve/OVRP by placing light fixtures in appropriate locations and shielding lamps.

Village 8 East Village Design Plan, Page 16 states: The OVRP Standards and Guidelines, Section 5, Private Development Guidelines include principles for private development adjacent to the OVRP. Consistent with these principles, manufactured perimeter slopes adjacent to the OVRP complement and do not negatively impact the park by utilizing the following techniques:

- Perimeter slopes follow the existing topography, blending the site into natural topography and preserving natural drainages between Village 8 East and the Otay River Valley.
- Landscape buffers are planted with native plant materials, consistent with the Village 8 East Fire Protection Plan and Preserve Edge Plan.
- Retaining walls are planted and irrigated to avoid large expanses of blank walls and blending the retaining walls into the natural setting, making them virtually undetectable with full landscape cover. Wherever possible plantable retaining walls are split into two sections, providing opportunities to screen the walls with native landscaping in front of the wall and reduce single wall heights.
- Non-residential fencing at the perimeter is typically post & rail, permitting views to and from the park.
- Residential fencing at the perimeter is typically, 2' of block with 4' of view fencing, permitting views to and from the park.
- Lighting at the perimeter must be directed away from the Preserve/OVRP by placing light fixtures in appropriate locations and shielding lamps.

The Village 10 Design Plan, Page 17 states: The OVRP Standards and Guidelines, Section 5, Private Development Guidelines include principles for private development adjacent to the OVRP. Consistent with these principles, manufactured perimeter slopes adjacent to the OVRP complement and do not negatively impact the park by utilizing the following techniques:

- Perimeter slopes follow the existing topography, blending the site into natural topography and preserving natural drainages between Village 10 and the Otay River Valley.
- Landscape buffers are planted with native plant materials, consistent with the Village 8 East Fire Protection Plan and Preserve Edge Plan.
- Retaining walls are planted and irrigated to avoid large expanses of blank walls and blending the retaining walls into the natural setting, making them virtually undetectable with full landscape cover. Wherever possible plantable retaining walls are split into two sections, providing opportunities to screen the walls with native landscaping in front of the wall and reduce single wall heights.
- Non-residential fencing at the perimeter is typically post & rail, permitting views to and from the park.

- Residential fencing at the perimeter is typically, 2' of block with 4' of view fencing, permitting views to and from the park.
- Lighting at the perimeter must be directed away from the Preserve/OVRP by placing light fixtures in appropriate locations and shielding lamps.

These techniques are intended to soften the development edges adjacent to the Otay Valley Regional Park, provide vistas from development areas to the OVRP and buffer development from the regional park.

K-2 As shown in Figure 4-8, trails from Village Three will be provided access to the east / west OVRP trail system (Wiley Road). There will be a Village Trail located in the southeastern portion of Village 3 that will provide access to the Regional Trail along Main Street. Pedestrians will be able to access the future Greenbelt trail via a connection in the southeast quadrant of future Heritage Road and Main Street. All trails within the Preserve must be designed to minimize and avoid impacts as required by the MSCP SAP. As such, alignments have been focused on existing disturbed roads, predominately the Salt Creek sewer maintenance road/Wiley Road.

Improvements to Heritage Road south of Main Street, including the Heritage Road bridge, is included in the Chula Vista adopted FY 2012-13 through FY 2016-17 Capital Improvement Program (CIP) (STM364-Heritage Road Bridge Replacement) and therefore is a separate project. No further response is required.

K-3 As stated in Section 5.8 Biological Resources Page 5.8-99, the Village Eight East Community Park (P-2) is located on the site designated in the OVRP Concept Plan as Active Recreation 11 (AR-11). The Village Eight East SPA Plan, Community Park (P-2) Concept Plan, Exhibit 36, includes active and passive park uses, including a "Trail Staging Area for Chula Vista Greenbelt/OVRP Trail." The final design of the Community Park will be determined through the Chula Vista Park Master Plan process, with input from the OVRP Citizen's Advisory Committee and OVRP Policy Committee. The trail staging area and trail connections from the Community Park to the OVRP/Chula Vista Greenbelt Trail are intended to be part of the final Community Park design, consistent with the OVRP Concept Plan and Trail Guidelines; however, they must also meet MSCP SAP requirements to minimize impacts to the Preserve. . Proposed connections from the Community Park to the Greenbelt Trail (OVRP) are depicted in Figure 5.12-11of the EIR.

K-4 As shown in Figure 4-18 of the EIR, and the Village Ten SPA Plan, Trails Plan, Exhibit 22, a network of trails provide pedestrian connections through Village 10 and include a connection to the Chula Vista Greenbelt. Specific trail dimensions and materials are presented in the Village 10 SPA Plan, Exhibits 23 through 28.

The Regional Trail located along Hunte Parkway, north of Village Ten, connects to Village Ten via the 10' wide Village Pathway along Discovery Falls Road. An additional north/south connection is provided along University Drive. The final design of this trail connection will be determined through the University SPA Planning effort.

The Village Pathway continues through the Village Ten core area between Discovery Falls Road and Otay Valley Road. In keeping with the residential character of the single family neighborhoods, the trail transitions to the 6' wide Promenade Trail. The Promenade Trail extends to a Private Recreation Facility (CPF-3) that includes the 20' wide combined Village Trail/Maintenance Access Road (providing access to the City of San Diego waterline facilities) that connects along the Village Ten perimeter slope to the Rural Trail that traverses the adjacent Preserve areas to connect to the Chula Vista Greenbelt Trail.

Due to topographic constraints and the MSCP requirement to minimize impacts and use existing dirt roads as trail connections, the rural trail will be an 8-foot wide trail that will be improved consistent with the Greenbelt Master Plan Rural Trail Standards. The widths and materials planned for each discrete trail segment are compatible with the adjacent land uses.

K-5 As stated in Section 5.8 Biological Resources Page 5.8-102, all Greenbelt trail segments will be multi-use trails which provide a variety of uses including, hiking, biking and equestrian use, where identified. The trails and trail alignments have been developed to minimize impacts as required by the MSCP SAP. As stated in Section 5.8 Biological Resources, Page 5.8-102, equestrian usage on the OVRP/Chula Vista Greenbelt Trail located within the existing Wiley Road/Salt Creek Sewer Easement, is not precluded. See response A-1 above regarding the multi-use Chula Vista Greenbelt/OVRP Trail.

Improvements to Heritage Road south of Main Street, including the Heritage Road bridge, is included in the Chula Vista adopted FY 2012-13 through FY 2016-17 Capital Improvement Program (CIP) (STM364-Heritage Road Bridge Replacement) and therefore is a separate project. No further response is required.

K-6 This comment does not address the adequacy or accuracy of information provided in the Draft EIR. No response is required.

Comment Letter L

County of San Diego

MARK WARDLAW
(DIRECTOR)
PHONE (858) 694-2962
FAX (858) 694-2555

PLANNING & DEVELOPMENT SERVICES
5510 OVERLAND AVENUE, SUITE 310, SAN DIEGO, CA 92123
www.sandiegocounty.gov

DARREN GRETLER
ASSISTANT DIRECTOR
PHONE (858) 694-2962
FAX (858) 694-2555

September 18, 2014

Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Via email to mborg@chulavistaca.gov

COMMENTS ON THE UNIVERSITY VILLAGES SECTIONAL PLANNING AREA PLAN AND TENTATIVE MAP DRAFT ENVIRONMENTAL IMPACT REPORT (EIR 13-01; SCH 2013071077)

Dear Ms. Borg,

The County of San Diego has received and reviewed the Draft Environmental Impact Report for the Otay Ranch University Villages project, dated August 5, 2014, and appreciates this opportunity to comment. The County Planning & Development Services (PDS) and Department of Public Works (DPW) have completed their review and have the following comments regarding the content of the above documents. L-1

General Comments

1. The Water Quality and Hydrology Technical Reports notes that the Otay River is exempt from Hydromodification under the March 2011 Final HMP. However, under R9-2013-0001 this exemption will no longer be available unless a study is submitted with the Watershed Management Area Analysis and Water Quality Improvement Plan for the San Diego Bay Watershed to the San Diego Regional Water Quality Board for review and concurrence. If the Otay Ranch project does not get prior lawful approval before new development regulations go into effect under R9-2013-0001 the project may need to be redesigned and the Water Quality Technical Report may need to be revised. L-2

2. The Traffic Impact Analysis forecasts 2,500 average daily trips (ADT) at Project Buildout onto County roadways (e.g. Figure 4-2E.1, 2030 SANDAG Series 11 - Select Zone Run). The project should consider a contribution to the County's Transportation Impact Fee (TIF) program to mitigate the project's cumulative traffic impacts to County roadways. L-3

The County of San Diego appreciates the opportunity to participate in the environmental review process for this project. If you have any questions regarding these comments, please contact Sheri McPherson, Land Use/Environmental Planner at (858) 694-3064 or email sheri.mcpherson@sdcounty.ca.gov L-4

Sincerely,

Darren Gretler, Assistant Director
Planning & Development Services

e-mail cc:
Michael De La Rosa, Policy Advisor, Board of Supervisors, District 1
Conor McGee, CAO Staff Officer, LUEG
Richard Chin, Associate Transportation Specialist, Department of Public Works
Rebecca Lafreniere, Chief, Department of Environmental Health
Sheri McPherson, Land Use/Environmental Planner, Planning & Development Services

Response to Comment Letter L

County of San Diego, Planning and Development Services
Darren Gretler, Assistant Director
September 18, 2014

L-1 This comment does not address the adequacy or accuracy of information provided in the Draft EIR. No response is required.

L-2 The analysis in Section 5.10 recognizes that the city will have to comply with water quality and hydromodification management plans as applicable. MM HYD-6 on Page 5.10-65 requires that the proposed project comply with city hydromodification criteria (Municipal Permit Order R9-2007-0001 Section D.1.g) or the hydrograph modification management plan, as applicable. Recognizing that permit requirements get amended, the mitigation measure has been revised as follows:

- **MM HYD-6** *Hydromodification Criteria*. The Project Applicant shall comply, to the satisfaction of the City Engineer, with city hydromodification criteria (Muncipal Permit Order R9-2007-001, <u>as may be amended</u>) or hydrograph modification management plan, as applicable, addressed regionally at the SPA Plan level concurrent with grading and improvement plans for each village.

L-3 Trips generated from the proposed project were modeled using the "Southbay 2 University Villages" traffic model. The distribution includes trips on to County roadways to the south of the project site. In accordance with the City's traffic impact analysis guidelines, the study area included some locations in the County. None of the County intersections were significantly impacted by project traffic. The project is not subject to the County's TIF program. No further response is required.

L-4 This comment does not address the adequacy or accuracy of information provided in the Draft EIR. No response is required.

INTENTIONALLY LEFT BLANK

Comment Letter M

County of San Diego

ELIZABETH A. POZZEBON
DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
SOLID WASTE LOCAL ENFORCEMENT AGENCY
5500 OVERLAND AVENUE, SUITE 170, SAN DIEGO, CA 92123
Phone: (858) 694-2888 Fax: (858) 495-5704
www.sdcdeh.org

AMY HARBERT
ASSISTANT DIRECTOR

September 18, 2014

City of Chula Vista
Attn: Ms. Marni Borg
276 Fourth Avenue
Chula Vista, CA 91910

COUNTY OF SAN DIEGO SOLID WASTE LOCAL ENFORCEMENT AGENCY COMMENTS ON UNIVERSITY VILLAGES SECTIONAL PLANNING AREA AND TENTATIVE MAP DRAFT ENVIRONMENTAL IMPACT REPORT – EIR 13-01

Dear Ms. Borg:

The County of San Diego Department of Environmental Health Solid Waste Local Enforcement Agency (LEA) appreciates the opportunity to review and comment on the draft Environmental Impact Report (DEIR) for the above project. M-1

The LEA would like to reiterate our long standing position that open space, commercial or industrial land uses are in alignment with nearby (less than 1,000 feet away) active landfill activities. While a health risk assessment conducted for the project determined that potential health impacts to residents would likely be less than significant, the development of residential land uses within 1,000 feet of an active landfill may, based on experience, result in nuisance impacts to those residents from odors, dust, noise, landfill gas and/or vectors. M-2

The LEA prefers the "Nuisance Easement" alternative described in the Draft EIR which will develop industrial land uses in the Village Three North area adjacent to the Otay landfill. Per the Draft EIR, this alternative is consistent with the City of Chula Vista's General Plan Policy E 6.4 which avoids placement of sensitive receptors (residential properties, schools, etc.) within 1,000 feet of a "toxic emitter" and the landfill is identified as a "major toxic emitter" in the Draft EIR. M-3

Should you have any questions, please do not hesitate to call either KanLyn Merlos, LEA Supervisor at (858) 495-5799 or myself at (858) 694-2801.

Sincerely,

MELISSA PORTER, Environmental Health Specialist
Local Enforcement Agency

cc: Rodney Lorang, County Counsel
Neil Mohr, Republic Services
Megan Fischer, CalRecycle
LEA file

INTENTIONALLY LEFT BLANK

Response to Comment Letter M

County of San Diego, Department of Environmental Health
Melissa Porter, Environmental Health Specialist
September 18, 2014

M-1 This comment does not address the adequacy or accuracy of information provided in the Draft EIR. No response is required.

M-2 The City of Chula Vista entered into an agreement with the Otay Landfill operator that clearly identified the limits of the "active" portion of the landfill from which the 1,000 feet is measured. See EIR Page 5.1-27 for a complete description of the Amended and Restated Otay Landfill Expansion Agreement. MM LU-4 restricts any residential uses unless, and until, the landfill moves further away from the proposed R-1 neighborhood such that no residential use (i.e. – new homes) is constructed within the 1,000' setback from the active portion of the landfill.

A Nuisance Study was conducted for the proposed project and included as Appendix D Part II in the Draft EIR. This study reviewed the potential for nuisance odor, vectors, stormwater and noise. Odor complaint data was included as an appendix to the Nuisance Study. The use of past odor complaints as a gauge of potential nuisance is standard practice in CEQA analyses. In fact, the nuisance study went beyond the typical qualitative analysis and quantified the future potential. The study was looking at any odor complaints that were verified as causing a nuisance by air agency. The Nuisance Study did not identify any potentially significant nuisance impacts

Additionally, as stated in Section 5.1, Land Use Page 5.1-23 of the Draft EIR, odor control practices are in place at all landfills, and odor control is under the purview of the SDAPCD. Landfill odor control practices include application of odor absorbing materials or collecting and treating gases from the landfill before they are released into the surrounding community. No revisions to the Draft EIR are necessary as a result of this comment.

M-3 The General Plan does preclude residential development within 1,000 feet of a major toxic emitter, including the Otay Landfill; however, the landfill recently went forward with an agreement with the City that clearly identified the limits of the "active" portion of the landfill from which the 1,000 feet is measured. This is consistent with the City's policy regarding Electrical Generating Facilities, which clearly measures from the source of the emissions, not the property line. See EIR Page 5.1-27 for a complete description of the Amended and Restated Otay Landfill Expansion

Agreement. The landfill expansion agreement is a public document that was approved by the City Council on August 12, 2014.

As stated in MM LU-4, prior to approval of each residential building permit in Village Three North and a Portion of Village Four, the applicant shall provide evidence satisfactory to the Development Services Director (or their designee) that each proposed residential unit to be constructed shall be located at least 1,000 feet away from the then active solid waste disposal areas of the Otay Landfill as required by General Plan Policy E 6.4 (as corrected) and by Section 2.5 of the Amended and Restated Otay Landfill Expansion Agreement.

Notwithstanding the typically ministerial nature of building permit approvals, the City shall have and retain discretion here to deny any building permit application regarding any residential lot or parcel that does not comply with this Mitigation Measure.

Therefore, the project would comply with General Plan E 6.4 (as corrected) and no further response is required.

Comment Letter N

Allen Matkins

Allen Matkins Leck Gamble Mallory & Natsis LLP
Attorneys at Law
501 West Broadway, 15th Floor | San Diego, CA 92101-3541
Telephone: 619.233.1155 | Facsimile: 619.233.1158
www.allenmatkins.com

Jeffrey A. Chine
E-mail: jchine@allenmatkins.com
Direct Dial: 619.235.1525 File Number: 256583-00002/SD822564.01

Via Email/U.S. Mail

September 24, 2014

Marni Borg
City of Chula Vista
Development Services Department
276 Fourth Avenue
Chula Vista, CA 91910

Re: Comments on the University Villages Sectional Planning Area and Tentative Map Draft Environmental Impact Report (EIR 13-01; SCH 2013071077)

Dear Ms. Borg:

On behalf of our client, Otay Land Company, LLC ("OLC"), we appreciate the opportunity to submit these comments to the City of Chula Vista ("City") on the Draft Environmental Impact Report ("DEIR") for the University Villages Sectional Planning Area (SPA) Plan and conceptual Tentative Map (TM) (collectively, the "Project"). As you know, OLC has major land holdings within Otay Ranch immediately adjacent to the proposed Project.

OLC provides these comments in the spirit of promoting the seamless integration of the Project into the recently approved OLC Villages 8 West and 9, and the future University. OLC supports the merits of the Project, as well as the University as the heart and economic engine that will ensure the long-term success of Otay Ranch, and appreciates the importance of the Project to the realization of the University. As you know, the ultimate ownership of the Project site has become increasingly uncertain and there is a possibility that the Project may be broken up into several parcels held by different owners. Given these uncertainties, OLC submits these comments in the best interest of all concerned, including the City, OLC, and the future owner(s) of the Project. We believe that by addressing the issues outlined herein, the City will help ensure the cohesive future development of Otay Ranch and avoid planning, environmental, and practical difficulties inherent in the "checkerboard" ownership of land within the master-planned community. Simply deferring the resolution of important concerns discussed in this comment letter ultimately delays the realization of our shared vision for the future development of Otay Ranch.

N-1

The Project proposes 6,897 residential dwelling units and 40,000 square feet of mixed-use commercial/retail square footage within Village Three North and a portion of Village Four, Village

Eight East and Village Ten. In addition, the Project would set aside 28.6 acres for industrial uses and 5.2 acres for office uses in Village Three/Portion of Village Four, together with a variety of other land uses (parks, schools, community purpose facilities, open space, preserve, etc.) across the Project site. The Project site currently is vacant and generally is composed of gently sloping terrain covered with primarily non-native grasslands crossed by dirt roads and old cattle trails. Approximately 476 of the 1,375-acre site is designated as Farmland of Local Importance. Historically, the Project site was used for dry farming, and cattle and sheep grazing.

As detailed below, we have concluded that while aspects of the DEIR satisfy the requirements of the California Environmental Quality Act ("CEQA"), there are numerous areas where the document as presently drafted falls short of the minimum informational requirements of the law, uses inappropriate standards, contains deficient analysis, or fails to mitigate identified impacts. OLC believes that these deficiencies can be remedied, resulting in an adequate environmental document that serves to inform the public and educate the decisionmakers regarding the environmental consequences of the proposed Project.

N-1 Cont.

I. CEQA OVERVIEW

The goal of CEQA is clear – to protect the environment. (Public Resources Code § 21000.) This overarching goal has four basic purposes:

1. Inform governmental decisionmakers and the public about the potential, significant environmental effects of proposed activities;

2. Identify ways that environmental damage can be avoided or significantly reduced;

3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and

4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved. (CEQA Guidelines § 15002(a).)[1]

Two years after CEQA was enacted, the California Supreme Court declared that CEQA must be interpreted liberally "to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247, 259.)

N-2

[1] The CEQA Guidelines are found at 14 Cal Code Regs. §§ 15000, *et seq*.

To ensure that the goal and purposes of CEQA can be met, CEQA requires the preparation of an informational document, often in the form of an EIR, to provide public agencies and the public in general with detailed information about the effect a proposed project may have on the environment, to list ways in which the significant effects of such a project might be minimized, and to indicate alternatives to such a project. (Public Resources Code § 21061.) The courts have held that the "EIR is the heart of CEQA;" it acts "as an environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." (*County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810; *see also*, CEQA Guidelines § 15003(a).) The EIR demonstrates "to an apprehensive citizenry that the agency has in fact analyzed and considered the ecological implications of its action." (*No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 86; *see also*, CEQA Guidelines § 15003(d).)

An EIR "must contain facts and analysis, not just the agency's bare conclusions or opinions. An EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." (*Laurel Heights Improvement Association v. Regents of University of California* (1988) 47 Cal.3d 376, 404-405; *citations omitted*.)

Ultimately, a "failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process" and resulting in a "prejudicial abuse of discretion." (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 712.)

N-2 Cont.

II. TRANSPORTATION, CIRCULATION AND ACCESS ANALYSIS

The DEIR traffic analysis contains a number of questionable or incorrect assumptions, deficient impact analysis, and inappropriate or unsupported mitigation, as discussed below.

A. Direct Impacts

The traffic analysis determined that the Project would result in the following direct impacts:

- Heritage Road and Olympic Parkway intersection;
- La Media Road and Olympic Parkway intersection;
- Olympic Parkway between Heritage Road and Santa Venetia Street; and
- Heritage Road between East Palomar Street and Olympic Parkway.

The DEIR concludes that these potentially significant direct impacts can be mitigated by Mitigation Measure TCA-12, which requires the Project applicant to pay Transportation

N-3

Development Impact Fees for the construction of Main Street between Heritage Road and La Media Road, as a Six-Lane Prime Arterial, including the construction of Main Street bridge, the signalization of Quarry Driveway / Main Street (Int #65), and the signalization of Village Three North R-20 Driveway / Main Street (Int #66).

The impacts identified above are direct in nature, rather than cumulative impacts. While the payment of impact fees is recognized as mitigation for cumulative impacts under certain circumstances, the payment of fees is not effective to mitigate direct impacts. (See *Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, 1187-1189.) Consequently, the direct impacts referenced above remain significant and unmitigated. The DEIR should be revised accordingly and recirculated to disclose these impacts. N-3 Cont.

B. Freeway Ramp Meters

The DEIR determined that the Project would result in a cumulative traffic impact on the I-805 northbound on ramp at Main Street. Ramp meters are within the jurisdiction of the California Department of Transportation ("Caltrans"), not the City. As a result, Mitigation Measure TCA-14 directs that prior to Project buildout, the Project applicant must work with Caltrans to adjust the ramp meter rate at this location "such that the ramp meter reflects the additional vehicles attributable to the project." Based on this mitigation, the DEIR concludes that the impact has been mitigated below a level of significance. However, there is no indication or evidence that Caltrans will change ramp meter timing as recommended by the DEIR. Indeed, Caltrans is resistant to adjusting meter timing and typically prefers congestion on local roadways rather than Caltrans' facilities. Consequently, the mitigation measure is speculative and there is no reason to believe that it will be effective or enforceable in reducing the relevant impact to below a level of significance. The impact thus remains significant and unmitigated. The DEIR should be revised and the DEIR recirculated to disclose this impact. N-4

C. Fehr & Peers Memorandum

OLC requested that the traffic engineers at Fehr & Peers review and comment on the Project's traffic analysis. Attached to this comment letter is their memorandum raising a number of questions and comments. We ask that the City respond to the points raised therein. N-5

III. LAND USE, PLANNING AND ZONING ANALYSIS

CEQA mandates that an EIR examine the consistency of a proposed project with applicable land use plans. The DEIR analysis of Land Use, Planning, and Zoning impacts must be revised for the reasons discussed below. N-6

A. General Plan and General Development Plan

DEIR Appendix B includes numerous tables addressing the Project's consistency with the General Plan and the General Development Plan. For instance, Appendix B concludes that the proposed Project's land uses are compatible with existing and planned land uses. This conclusion is reached despite the proposed reduction of land designated as Limited Industrial by 136.7 acres and the increase of land designated as residential by 129.1 acres in Village Three North/Portion of Village Four, as well as the replacement of the University designation with residential and recreation uses in Village Ten. As a result, the Project surpasses the current General Plan and General Development Plan population and housing estimates. Contrary to the conclusion reached by the DEIR, by replacing job-creating land uses with additional housing, the Project is inconsistent with the General Plan's Economic Development Element, and more specifically, the important balance that is needed between jobs and housing, which the City vigorously has protected.

Figure 6-1 of the current General Plan clearly shows Village Three North/Portion of Village Four as Employment Land Areas, which areas are "essential to the City's job creation goals." Rather than acknowledging the inconsistency between the Project and the Economic Development Element as a significant land use impact, the DEIR dismisses the issue, citing an Employment Lands Analysis ("ELA") and Fiscal Impact Analysis. Neither of those documents is included in the DEIR nor its appendices. The DEIR should be recirculated together with both of those documents to allow the decisionmakers and the public an opportunity to review the studies that form the basis of the DEIR's conclusions.

As currently drafted, the DEIR contains inadequate analysis of the Project's direct and cumulative Land Use, Planning, and Zoning and Housing and Population impacts. It includes the bare conclusion that the City will have sufficient lands for future industrial development despite the acreage reductions described above. Insofar as the General Plan already designates Village Three North/Portion of Village Four, the Regional Technology Park ("RTP") and the University all as Employment Land Areas, the assertion that approximately 2.25 million square feet of eliminated industrial capacity will be accommodated on the RTP or University sites is not supported, either by evidence or common sense. The DEIR likewise strains credulity by concluding that despite such a significant loss in industrial acreage, the proposed land uses in Village Three North/Portion of Village Four will create capacity for an estimated 460 additional jobs over previous employment estimates. Even if that were the case, the commercial-retail and office jobs that will replace the industrial jobs planned for in the General Plan and General Development Plan would not be of the same caliber.

For these reasons, we believe that the DEIR should be revised and recirculated together with the documents upon which it relies to reach the conclusion that the significant loss of employment generating lands is consistent with the General Plan and the General Development Plan and that the Project will not be detrimental to the future economic vitality and quality of life for City residents.

N-6
Cont.

B. Surrounding Land Uses

The DEIR states that by reducing the industrial acreage in Village Three North/Portion of Village Four, the Project is "more compatible with the adjacent residential land use south of Heritage Road." In doing so, the DEIR fails to acknowledge the primary reason that Village Three North/Portion of Village Four is designated as industrial: the immediate adjacency to the Otay Landfill, as well as the property's adjacency to industrially zoned lands to the northeast in Village Two, and to existing industrial uses to the west of Village Three North. N-7

1. Otay Landfill

By redesignating employment generating industrial land for additional housing, the Project proposes to place residences within 1,000 feet of the landfill. According to the DEIR, residential units will be placed 450 feet from the Otay Landfill property line and 700 feet from the "waste containing portion of the landfill (i.e. – the portion of the landfill eligible to accept waste)." The Project is thus inconsistent with General Plan Environmental Policy 6.4, which prohibits the siting of sensitive receptors, *i.e.*, homes, schools, and park facilities, within 1,000 feet of a toxic emitter like the Otay Landfill. The DEIR fails to adequately address this inconsistency.

The DEIR would require that, prior to approval of each residential building permit in Village Three North/Portion of Village Four, the Project applicant provide evidence to the Development Services Director that each proposed residential unit "shall be located at least 1,000 feet away from the then active solid waste disposal areas of the Otay Landfill as required by General Plan Policy E 6.4 (as will be corrected) and by Section 2.5 of the Amended and Restated Otay Landfill Expansion Agreement." Mitigation Measure LU-4 states that the City "shall have and retain discretion here to deny any building permit application regarding any residential lot or parcel that does not comply with this Mitigation Measure." N-8

However, the General Plan policy in question directs the City not to site "sensitive receptors within 1,000 feet" of major toxic air emitters.[2] The distinction sought to be created by the DEIR between the "then active solid waste disposal areas" of the landfill and the landfill itself is not found in the General Plan policy. Indeed, the DEIR discloses that residential units will be located 700 feet from the "waste containing portion of the landfill (i.e. – the portion of the landfill eligible to accept waste)." There is no legal or regulatory basis for the "active" landfill description upon which the proposed mitigation is founded. The "active" landfill strategy employed by the DEIR contravenes the plain language and meaning of General Plan Environmental Policy 6.4. The proposed mitigation does not render the Project consistent with the Policy. As a result, the DEIR should

[2] As explained in the DEIR, General Plan Environmental Policy 6.4 is being amended in the very near future to confirm and clarify that the policy is applicable "to other forms or types of possible toxic air emitters."

conclude that the Project is inconsistent with the Policy and disclose a significant and unmitigated impact. N-8 Cont.

Further, Mitigation Measure LU-4 cites to Section 2.5 of the Amended and Restated Otay Landfill Expansion Agreement. As with the ELA referenced above, this Agreement is not included in the DEIR or its appendices. The DEIR should be revised to disclose the General Plan inconsistency and recirculated together with the Agreement upon which it relies. N-9

Moreover, when the 2005 General Plan/General Development Plan Amendment EIR was approved, Mitigation Measure 5.11-2 stated that no residential uses shall be permitted within 1,000 feet of the Otay Landfill unless a project specific analysis is completed to demonstrate that odor effects fall below odor thresholds for common compounds. The DEIR references a Village Three North Nuisance Study, but that study was not included in the DEIR or its appendices. The DEIR attempts to summarize the study, but that summary, and in particular Figure 5.1-2, are inadequate.

In addition, although the DEIR relies on the uncirculated Nuisance Study to support its odor analysis, it is unclear whether odors are in fact controlled or can be controlled when houses are placed in Village Three North/Portion of Village Four. The DEIR Nuisance Study apparently is based on a model that took into account prior complaints about the landfill smell. No information is provided as to the timing or source of those complaints. That missing information is critical to a full review of the issue because the Noise section of the DEIR discloses that "there were some 'Area of Concern' notes regarding proper waste coverage" made by the County of San Diego Local Enforcement Agency ("LEA"). If waste is not being properly covered, then odors (and vectors) will increase. These facts make full disclosure of the Nuisance Study all the more critical. The public should have been given access to the actual Nuisance Study in an appendix, as with the other technical reports upon which the DEIR relies.

2. Other Uses

There are other surrounding land uses that may be impacted by the Project's redesignation of industrial land as residential. For instance, the DEIR states that auto dismantlers and an operations center for the landfill are located 150 feet away from proposed residential units. The DEIR fails to adequately address these potential conflicts. The DEIR also fails to consider the Project's compatibility with nearby correctional facilities. The City should revise the DEIR to take into account the Project's impact on these existing uses. N-10

3. Off-Site Improvements

The DEIR includes a long list of Off-Site Improvements that are needed for the Project. However, the DEIR fails to disclose the location, purpose, or ownership of Off-Site Improvement Areas 11 and 20. The DEIR should be revised to provide that information to the decisionmakers and the public. N-11

C. San Diego Association of Governments and Smart Growth

When the proposed Project's new (and unaccounted for) housing units are built in Village Three North/Portion of Village Four, the DEIR claims that these units will help the City meet the San Diego Association of Government's ("SANDAG") growth forecasts. This determination is inconsistent with the Housing and Population section of the DEIR, which states that the Project "conflict[s] with current adopted growth forecasts developed by SANDAG." Ultimately, the information provided to the decisionmakers and the public in the DEIR should be internally consistent and accurate. Inconsistent or inaccurate analysis in the Land Use, Planning, and Zoning and Housing and Population sections of the DEIR should be corrected. N-12

Similar to the jobs/housing balance discussion above, the DEIR contains an inadequate analysis of the Project's consistency with SANDAG's Regional Comprehensive Plan ("RCP") Smart Growth Principles and the 2050 Regional Transportation Plan ("RTP")/SCS Policy Objectives. Because it redesignates vast expanses of industrial land for additional residential development, the Project appears inconsistent with the Jobs/Housing Mix principle of the RCP or the Mobility and Social Equity objectives of the RTP. As you know, these issues have been closely monitored by the California Attorney General and thus, additional care should be paid to ensure the Project's compliance with the RCP and RTP. N-13

IV. LANDFORM ALTERATION/AESTHETICS ANALYSIS

The DEIR includes Existing Key View 5, but neglects to provide Proposed Key View 5 in the Landform Alteration/Aesthetics section of the DEIR. That oversight prevents the public and decisionmakers from understanding the Project's potential significant aesthetic impacts. N-14

In addition, the shadow analysis mitigation recommended for the proposed Project differs from the measures imposed by the City for OLC's Village 8 West. Specifically, the City required OLC to conduct a shadow analysis for any structure above three stories. The DEIR recommends a shadow study for any structure above four stories. No explanation for this change in City policy is provided. This inconsistency undermines the credibility of the DEIR and should be corrected. N-15

V. HEALTH RISK ASSESSMENT ANALYSIS

The DEIR includes a Health Risk Assessment ("HRA") that considered whether the immediately adjacent Otay Landfill would have a potential health impact on future residential uses within 1,000 feet of the landfill. The HRA acknowledges that the landfill's source locations were approximated since "site-specific data was not available for many parameters." Nevertheless, the DEIR determines that the calculated cancer risk for residential receptors, commercial and industrial receptors does not exceed the referenced threshold. This conclusion is undermined by the recognition that the analysis is based on "guesswork" and not site-specific details. N-16

Further, the DEIR defines the applicable cancer risk threshold as 1.0 in 1 million for areas proposed for residential development. Both the DEIR and the HRA state that an "area beyond the Landfill's property boundary exceeds the referenced threshold [*i.e.*, 1.0 in 1 million], but that location is proposed for industrial use; thus the residential receptor threshold is not applicable." Both the DEIR and the HRA then state – in the very next sentence – that "carcinogenic risks to commercial and industrial receptors do not exceed the conservative 1.0 in 1 million risk threshold at any location outside the Landfill's property boundary." The DEIR and the HRA are internally inconsistent – either the 1.0 in 1 million threshold is exceeded outside of the landfill's boundary in the industrially designated areas or it is not. The ambiguity caused by this disconnect renders the Air Quality and Hazards and Risk of Upset analysis of little value. N-16 Cont.

As drafted, the DEIR relies on an HRA with unreliable conclusions due to the lack of site-specific data and internal inconsistencies. Consequently, the DEIR fails to inform the decisionmakers and public about this critical health risk issue.

VI. NOISE ANALYSIS

The DEIR states that the Otay Landfill produces noise-generating activities, such as horns, amplified sound or explosive-noise devices, to deter avian vectors. Although these activities are considered part of the ambient noise environment, the DEIR nevertheless acknowledges that the LEA has some "Area of Concern" notes with regard to the landfill's efforts to keep waste covered. Keeping waste covered is the primary control mechanism for vectors. If the Otay Landfill does not maintain sufficient waste coverage, the landfill operator will be forced to increase its noise-generating activities to keep vectors away from the landfill. The DEIR does not consider the impact an increase in noise-generating activities will have on the Village Three North/Portion of Village Four residential units, school, and park facilities. The DEIR must be revised and recirculated after that analysis has been completed so that the decisionmakers and public can understand this potential significant impact. N-17

Further, the DEIR recommends noise impact mitigation for residential units, non-residential commercial/mixed-use commercial, industrial facilities, and schools. However, the DEIR fails to recommend mitigation for other noise sensitive land uses including parks, outdoor use areas, and community facilities. When it approved the Village 8 West project, the City imposed noise mitigation to address those specific uses. Again, this lack of mitigation and inconsistent application of City standards undermines the validity of the DEIR. N-18

VII. CUMULATIVE PALEONTOLOGICAL ANALYSIS

The DEIR determines that although the extent of potential paleontological resources in the area is unknown, the Project would have a less than significant cumulative impact on paleontological resources with the implementation of recommended mitigation measures. As with the other impact areas discussed in this comment letter, that conclusion is contrary to the one N-19

\

reached in the Village 8 West EIR. It is not clear from the information provided to the decisionmaker and the public how or why a different conclusion was reached months after the City approved Village 8 West. Again, the credibility of the DEIR is undermined by this inconsistency. N-19 Cont.

VIII. WATER SUPPLY ANALYSIS

The DEIR states that "there are sufficient existing and planned water supplies to meet projected water demands of the proposed project and other existing and planned development projects within the [Otay Water District ("OWD")] service area over the next 20-year planning horizon in normal and in single and multiple dry years." In addition, the DEIR indicates that "adequate long-term water supply will be available to the proposed project and other existing and reasonably foreseeable planned development in the OWD service area." Therefore, the DEIR concludes that the Project will have a less than significant impact on both short- and long-term water supplies, and that the Project will not result in a cumulatively considerable water supply impact. When the City recently approved Villages 8 West and 9, the EIRs concluded that those projects would result in significant water supply impacts. N-20

Similarly, the City previously required OLC to mitigate the Villages 8 West and 9 potential impacts on recycled water facilities. In contrast, the DEIR concludes that the proposed Project will not result in a significant impact on recycled water facilities, and as a result, no mitigation is proposed. The conflicting water supply and recycled water positions taken with regard to the projects within Otay Ranch should be explained and reconciled. N-21

IX. SIGNIFICANT AND UNAVOIDABLE IMPACTS SUMMARY

The DEIR summary in Chapter 8, Significant and Unavoidable Impacts, omits the cumulative Cultural Resources impact, the cumulative Agricultural Resources impact, and the direct Global Climate Change impact caused by the Project. The summary should be revised accordingly. N-22

X. CITY OF SAN DIEGO LAND OWNERSHIP

The City of San Diego ("San Diego") owns fee title to land in Villages Eight East and Ten that is included in the proposed Project. The land has been used in connection with San Diego's potable water storage and transmission. To our knowledge, San Diego has not consented to the Project, nor signed any of the pending Project applications. This raises a variety of concerns.

Both the California Subdivision Map Act ("SMA") and the City's regulations require that *all* owners of land must sign applications for the subdivision of such land. This is a condition precedent for the processing of subdivision applications. Aside from the subdivision applications, it is inappropriate for the City to process any private land use or development applications without the consent of affected landowners. The DEIR acknowledges that San Diego owns land within the Project. The DEIR acknowledges that the Project design is incompatible with San Diego's N-23

ownership in that extensive grading and private improvements are proposed within San Diego's property. However, the DEIR mistakenly treats San Diego's fee ownership as a utility easement and proposes mitigation requiring the relocation of the utility easements. This mitigation is inadequate and inappropriate to address the fundamental problem outlined above. Absent the written consent of San Diego, no further processing of the Project applications, including the DEIR, should occur. Further, no public hearings regarding land owned by San Diego may be held. To do so would violate the SMA, City regulations, and the due process rights of San Diego. N-23 Cont.

XI. OTAY LAND COMPANY LAND OWNERSHIP

The Project proposes to revise the boundaries between Villages 9 and Ten to incorporate a portion of existing Village 9 into Village Ten. The DEIR fails to disclose that the redesignated portion of Village 9 is owned by OLC and that OLC recently obtained entitlements for that property. The DEIR contains no analysis of this proposed change, or the potential effects of that change, on the remainder of Village 9. N-24

XII. CONCLUSION

Thank you for the opportunity to comment on the DEIR. We are available to discuss these comments with you or to answer any questions about the concerns raised herein.

Very truly yours,

Jeffrey A. Chine

cc: Paul Borden

FEHR & PEERS

To: Jeff O'Connor, Otay Land Company

Jeff Chine, Allen Makins

From: Dawn Wilson, PE, TE

Date: September 24, 2014

Subject: Peer Review of University Villages TIA (prepared by Chen Ryan Associates, July 31, 2014)

Per your request, Fehr & Peers has conducted a peer review of the traffic impact analysis report for the University Villages project, which includes Village 3, Village 4, Village 8E and Village 10. Please consider the following comments:

Roadway Network Assumptions

The following key roadway network issues were identified as part of this analysis.

- Village 10 extends a new roadway south of Main Street and east of Eastlake at Discovery Falls. This new road wraps through the University and ties into Village 9 and Eastlake Parkway. In addition, Eastlake Parkway is proposed to be renamed between Discovery Falls and Otay Valley Road as "University Drive" B. The road classifications shown on Figure 1-6 of the TIA illustrate the choppy street designations through Village 10. **Explain how roadway classifications will transition through the Village and demonstrate that there will be no queuing or operational impacts where road classifications change. Demonstrate that the capacity reduction on Eastlake Parkway will not negatively impact traffic on Street B in Village 9.** N-25

- Methodology for assuming new roadways: In Village 8W and Village 9, Otay Land Company was required to show a need for new roadways before they were included in the roadway network. For example, an intersection or a roadway segment would need to fail in a study scenario (2015, 2020, 2025) before a new road could be integrated into the roadway network for the next study year scenarios (if it failed in 2015, then new roadway would be added to the network that would offset the impact in 2020). This methodology was followed in the University Villages TIA through year 2025. However, as described below, the 2030 analysis includes new roadways not justified by the results of the 2025 analysis. **The TIA should demonstrate the need for the new roads "constructed by others" prior to including them in the TIA. Analysis of 2030 conditions should be conducted without these improvements to demonstrate they are necessary prior to inclusion in the analysis.** N-26

- 2030 Roadway Network Assumptions: In 2030, both the bridge and interchange were included in the analysis. The TIA states the following roadways will be "Constructed by Others" and are assumed to be completed by 2030:

  - Construction of Main Street from SR-125 to Eastlake Parkway
  - Construction of the Main Street Interchange
  - Construction of Otay Valley Road between "subdivision boundary" and Village 9 Street "B" including an overpass at SR-125
  - Heritage Road/Energy Way is signalized

  There is no direct correlation between the need for these roadways and the results of the 2025 analysis. The roadways are consistent with the 2030 Circulation Element classifications and the buildout out of the circulation system. **Analysis should be revised to evaluate potential project impacts without these planned, but unfunded improvements to determine potential project impacts without the new linkages. Then mitigation measures, including adding these roadways, should be identified to offset project related impacts.** N-27

Technical Analysis

- Existing Conditions Analysis: In the Village 8W and Village 9 TIA's the NB on ramps at I-805/Main Street operated at LOS F in the a.m. peak. In the University Villages TIA, this intersection operates at LOS D with an average intersection delay of 43.2 seconds. The ramp meter analysis also shows that there are no queues on Main Street approaching I-805. This appears inconsistent with field observations of morning peak commuter patterns near the I-805 freeway. **The TIA should include a summary of field inspected queues along Olympic Parkway and Main Street to justify the findings of the operational analysis.** N-28

- Existing Conditions Analysis: The traffic count data for this project is dated 2011. The TIA is dated 2014. The standard length of time traffic counts are considered "current" is 12 to 18 months. Therefore, the data used in this analysis is no longer current. Information on current conditions should be provided to demonstrate no change in conditions has occurred since the TIA was initiated. **The TIA should demonstrate that traffic patterns in the study area have not changed since 2011 considering the reduction in Tolls on SR-125 that occurred during the time period between when data was collected and the TIA was provided for review.** N-29

- Trip Distribution: One unusual pattern was identified for the near-term Village 3 distribution. For the 2015 conditions distribution, there is a 20% drop in traffic at Brandywine. If 20% of the trips use Brandywine, it is not clear why this roadway was not included in the roadway segment analysis. **Trip distribution figures should be revised to clarify the 20% drop in traffic along Main Street.** N-30

Additional analysis of Brandywine Road may be necessary should the trip threshold for inclusion in the TIA be reached or exceeded.

- Year 2015 Analysis: The project will construct Heritage Road by 2015 for access to the project site. According to the analysis, Heritage Road will be constructed as a 6-lane prime to Main Street. This results in a STOP controlled intersection at Main Street/Heritage. It is unreasonable to assume that a 6-lane by 4-lane road would be All-Way STOP controlled. More reasonable intersection geometry or traffic control should have been assumed in this analysis. The AWS is assumed through 2020. **The project should either reduce the number of lanes through the intersection and revise the analysis accordingly or analyze as a signalized intersection. The proposed geometry and traffic control is not reasonable.** N-31

- 2020 Analysis: The TIA states the project will construct Main Street from Heritage Road to SR-125 to provide access to Village 8E. There is no mention in the text that Main Street will be constructed as a 4-lane couplet. However, the intersection analysis does consider the intersection configuration illustrated in Village 8W & Village 9 TIA's. **The TIA should be revised such that the PFFP and descriptions of Main Street through Village 8W should clearly indicate the construction of the four-lane couplet at La Media Road.** N-32

- 2020 Analysis: 36% of trips use Magdalena from Village 8E. Magdalena is not a circulation element road. The remaining trips from Village 8E pass through the La Media/Main Street Couplet. The TIA assumes that the couplet is All Way STOP (AWS) control for all four intersections in 2020. The project identifies the AWS as failing and the mitigation is to install traffic signals. **When fully constructed, the couplet at La Media Road/Main Street will be signalized. Interim All-Way Stop condition evaluated in the TIA is infeasible. The TIA should be revised to reflect the buildout of the couplet as discussed in the Village 8W TIA.** N-33

I-805/SR-125 Discussion

- I-805/SR-125 discussion: The TIA includes a statement regarding the assumptions in the traffic model used and the change in funding for the I-805 Phase 2 project. The TIA states that the model included assumptions consistent with the analysis conducted in Village 8W and Village 9 (I-805 improved to include Phase 2 widening and additional toll lanes and SR-125 is a toll facility). However, the technical analysis throughout the study includes only the Phase I improvements (currently under construction – 2 HOV lanes and Palomar DAR) and assumes SR-125 is a toll facility. The project therefore results in significant/unavoidable impacts through year 2030 on I-805. The University Villages then cite the SANDAG study that concludes that if SR-125 tolls are reduced, both freeways will operate at acceptable LOS. The impacts on I-805 are therefore unmitigated (based on the analysis) and no mitigation measures are identified. N-34

Mitigation

- 2020 Mitigation: The mitigation for direct impacts in 2020 is the construction of Heritage Road. Heritage is planned and is indicated to be constructed as a 6-lane roadway. The mitigated condition analysis considers the benefits of the Heritage to Olympic Parkway, but does not consider the shift in traffic to Main Street. Heritage Road is forecast to reduce the ADT on Olympic Parkway by more than 20,000 vpd, but it unclear where the trips go. **Additional analysis is necessary to determine if there are residual impacts associated with this shift in traffic.** N-35

- 2025 Mitigation: The project has a Direct Impact to Heritage Road & Olympic Parkway. The recommended mitigation is the payment of TDIF fees to construct Main Street. The text states that Phase I of the Main Street project is included in the 2013-2016 CIP Program. It is also stated in the text that the City will be responsible for evaluating the environmental impacts of this road project. **Project specific mitigation measures should be identified and evaluated in the TIA to offset the impacts in 2025. This may include the construction of Main Street or other measures to reduce the project impact to less than significant. Payment of TDIF fees is adequate for cumulative, but not direct impacts under CEQA.** N-36

- 2025 Mitigation: There is also a direct impact at La Media / Olympic Parkway with TDIF as the recommended mitigation measure. Similar discussion to the Heritage & Olympic intersection is provided. **Project specific mitigation measures should be identified and evaluated in the TIA to offset the impacts in 2025. This may include the construction of Main Street or other measures to reduce the project impact to less than significant. Payment of TDIF fees is adequate for cumulative, but not direct impacts under CEQA.** N-37

Conclusion

In addition to the issues and questions raised above, key issues that require additional or revised analysis include:

- Near Term analysis of Brandywine to address the drop in trip distribution on Main Street (Village 3) N-38
- Analysis of potential impacts associated with the extension of Heritage from Olympic to Main Street not considered N-39
- Analysis of potential project mitigation measures to offset the direct impacts in 2025 in lieu of payment of TDIF fees N-40

INTENTIONALLY LEFT BLANK

Response to Comment Letter N

Allen Matkins Leck Gamble Mallory &Natsis LLP
Jeffery A. Chine, Attorney at Law
September 24, 2014

N-1 This comment does not address the adequacy or accuracy of information provided in the Draft EIR. No response is required.

N-2 This comment does not address the adequacy or accuracy of information provided in the Draft EIR and no response is necessary.

N-3 MM TCA-12 on Page 5.3-166 in the Draft EIR has been revised in the Final EIR to ensure that the "direct impact" in question, which results in the mitigation measure of constructing the Main Street Bridge, never actually occur because the mitigation measure pre-empts the impact. The EDU threshold up through which the project is required to pay TDIF prior to needing the Main Street Bridge crossing is 4,737 EDU. The mitigation measure has been revised to state that no additional building permits will be issued past the 4,736th EDU unless the City has constructed the improvement. In addition, the caveat language has been added providing for (1) the developer can construct the improvement (Main Street crossing Wolf Canyon), (2) the developer can construct alternative improvements which reduce the need for the crossing, and (3) the developer can perform a traffic study to demonstrate the improvement is not needed and push out the trigger further. The revised MM TCA-12 is provided below:

- **MM TCA-12 Intersections**: Heritage Road / Olympic Parkway (CV) and La Media Road / Olympic Parkway (CV); **Roadways**: Olympic Parkway, between Heritage Road and Santa Venetia Street (CV); and Heritage Road, between East Palomar Street and Olympic Parkway (CV) –Prior to the issuance of each building permit, the Project Applicant shall pay the appropriate Transportation Development Impact Fees (TDIF) for the construction of Main Street, between Heritage Road and La Media Road, as a Six-Lane Prime Arterial, including the construction of Main Street bridge, the signalization of Quarry Driveway / Main Street (Int #65), and the signalization of Village Three North R-20 Driveway / Main Street (Int #66). The project will signalize the intersection of Village Three North R-20 Driveway / Main Street (Int #66) in conjunction with the construction of Main Street, while the TDIF program will signalize the intersection of Quarry Driveway / Main Street (Int #65). The analysis shows the need for Main Street from the Heritage Road to La Media Road

is triggered by the 4,737th EDU. If the project equivalent dwelling unit limit of 4,736 EDU is reached prior to this roadway segment being constructed and open to traffic , then one of the following steps shall be taken as determined by the City Engineer:

i. Development in Villages 3, 8E and 10 shall stop until the future roadway is constructed by the City; or

ii. City and the Applicant shall meet to determine the need for the incomplete roadway segments. Because a number of factors, including changes to the tolling structure at SR-125, may affect future traffic patterns in Otay Ranch, additional traffic analysis of the roadway network and levels of service assessment may be necessary at that time to determine: (i) if such improvements are in fact necessary; and (ii) the scope and timing of additional circulation improvements, if any; or

iii. Applicant shall construct the missing roadway link and receive a transportation development impact fee credit for the improvements as applicable; or

iv. An alternative measure is selected by the City in accordance with the City of Chula Vista Growth Management Ordinance.

v. All to the satisfaction of the City Engineer.

The revisions made to MM TCA-12 do not result in new or additional impacts. No further response is required.

N-4 Please see response to comment J-3.

N-5 The City has reviewed the Fehr & Peers memorandum and responses to their comments are provided below (N-25 through N-40).

N-6 The project includes a General Plan Amendment which proposes to amend the City's General Plan to allow for the reduction in Industrial lands in Village Three North and the corresponding increase in residential density. The GPA is supported by several documents including the General Plan Amendment Report, General Plan Consistency Analysis, General Plan Amended Pages, and an Employment Lands Analysis.

The ELA was prepared at the direction of the City and funded by both the project applicant and Otay Land Company, on whose behalf this comment letter is written. The ELA incorporates the anticipated land uses within Villages Three North, Eight West, Eight East, Nine, Ten in an effort to provide a complete view of the future

availability of employment lands in Chula Vista. This was specifically directed by the City because it was recognized that while the project included increases in residential densities, it was the adjacent land uses that were planned for higher density employment opportunities. These employment opportunities include the Village Eight West and Nine town centers which are anticipated to accommodate up to 1.8 million square feet of office/commercial/retail uses.

As stated further in the comment but dismissed, the ELA documents that even with the proposed GPA and the loss of industrial lands, the city will maintain sufficient Employment Lands based on current and planned uses, including the above referenced Villages 8 West and Village 9 Town Centers, and the Eastern Urban Center, as well as other industrial land uses currently under-developed due to lack of market demand. In fact, even with the slow down caused by the recent recession and the resulting stop Page of any new additional industrial acreage, the ELA concludes there are still several years of inventory within the Chula Vista submarket.

The FIA and ELA are primarily finance-based documents that were not distributed as part of the public review record, which is standard City practice, because they are not environmental documents; however, as they were "City-prepared" documents, they are considered public and would have been made available upon request.

In regards to the projects consistency with the Economic Development Element policies, while the project specifically proposes a reduction in industrial lands, the overall intent of maintaining the jobs/housing balanced is achieved. The provision of housing by the proposed project in close proximity to the planned town centers and RTP only increase the feasibility and demand for these employment uses.

Regarding the assertion that the retail jobs are not of the same caliber as the industrial jobs, the only policy in the Economic Development Element that addresses this issue is ED 2.6. However, ED 2.6 is a policy regarding leveraging incentives to create high quality jobs. This project is not inconsistent with this policy because it is not interfering with the City's ability to leverage any incentive programs.

N-7 The DEIR clearly shows the landfill as an adjacent land use, calls out this fact in the Environmental Setting, states that the current General Plan Land Use is for Industrial, and discloses the General Plan Policy E 6.4 regarding land uses adjacent to what the City defines as a "toxic emitter". The DEIR goes on to analyze how the proposed GPA would allow for residential uses by converting industrial land to Mixed Use Residential, Medium and Low Medium density residential. The General Plan Consistency Analysis concludes this is consistent with the General Plan, including

Policy E 6.4 (as further discussed in response N-8). The DEIR also analyzes the proximity to the landfill in the Land Use, Hazards and Air Quality sections.

Additional surrounding land uses that could conflict with the project site were analyzed in the DEIR, specifically, in the Land Use Section, Page 5.1-28. These industrial uses are buffered from the project by Heritage Road and landscaped slopes. Noise from the current operations was included in the noise measurements taken in Village Three North and analyzed in Section 5.5, Noise of this EIR. The correctional uses were even further away from the project site, on the south side of the Otay River Valley over 0.5 miles away.

N-8 The General Plan does preclude residential development within 1,000 feet of a major toxic emitter, including the Otay Landfill; however, the landfill recently went forward with an agreement with the City that clearly identified the limits of the active portion of the landfill from which the 1,000 feet is measured. This is consistent with the City's policy regarding setbacks from other emitters such as Electrical Generating Facilities, which clearly measures from the source of the emissions, not the property line. The City and landfill acknowledged this exact practice when drawing the landfill buffer as it is not 1,000 feet from the property line in the northeastern edge of the landfill. See EIR Page 5.1-27 for a complete description of the Amended and Restated Otay Landfill Expansion Agreement. MM LU-4 restricts any residential uses unless, and until, the landfill moves further away from the proposed R-1 neighborhood such that no residential use (i.e. new homes) is constructed within the 1,000' setback from the active portion of the landfill. The landfill expansion agreement is a public document that was approved by the City Council on August 12, 2014.

The EIR does conclude that there is a potential inconsistency with General Plan Policy E 6.4, which is the reason for MM LU-4 being required. This mitigation will ensure that no residential land uses are developed within 1,000 feet of the active landfill. The Amended and Restated Landfill Expansion Agreement ensures that the active portion of the landfill will not move closer to the project site. Thus, the project is consistent with General Plan Policy E 6.4.

N-9 The Nuisance Study was included in Appendix D as Part II and the odor complaint data was included as an appendix to the Nuisance Study.

The use of historical odor complaints is standard practice in CEQA analyses. The date and complaint number of each complaint is included in Appendix B of the Nuisance Study. Those dates and numbers are:

- APCD2006-CMP-0181 – complaint received 10/23/06

- APCD2004-CMP-0202 – complaint received 11/05/04
- APCD2002-CMP-0336 – complaint received 11/27/02
- APCD2002-CMP-0321 – complaint received 11/21/02
- APCD2002-CMP-0320 – complaint received 11/20/02

The exact location is not available from the San Diego Air Pollution Control District (SDAPCD) for each complaint due to privacy concerns, but the approximate location of each complaint is shown in Figure 3 of the Nuisance Study. Furthermore, the use of modeling to address potential odor issues goes well beyond the typical level of odor evaluation required by CEQA. Odor is typically addressed through a qualitative evaluation for CEQA purposes; however, the Nuisance Study includes quantitative evaluation of odor emissions and impacts from the Otay Landfill.

Issues related to the LEA "Areas of Concern" have been fully disclosed in Appendix D of the Nuisance Study, which includes the monthly LEA site inspection reports for the Otay Landfill from October 2012 through February 2014, 17 reports in all. Furthermore, each of these reports is publicly available on the CalRecycle website.

During a site visit on August 8, 2013, the LEA observed that alternative daily cover (ADC) was not being covered within 21 days of placement, as required by the Solid Waste Facility (SWF) permit for the Otay Landfill. In the August 8, 2013 site visit report, the LEA required the site operator to develop a protocol where the date of the placement of the ADC would be recorded and tracked to ensure that it was not left exposed for more than 21 days. The six subsequent site inspection reports included in Appendix D of the Nuisance Report do not indicate that ADC is an area of concern. Additional LEA site visits since February 2014 have not noted that ADC is an "Area of Concern." These subsequent reports indicate that Otay Landfill has implemented the procedures required by the LEA and that the "Area of Concern" has been addressed.

N-10 These uses were analyzed in the EIR, specifically in the Land Use Section, Page 5.1-28. They are buffered from the project by Heritage Road and landscaped slopes. Noise from the current operations was included in the noise measurements taken in Village Three North and analyzed in Section 5.5, Noise of this EIR. The correctional uses were even further away from the project site, on the south side of the Otay River Valley over 0.5 mile away. It should be noted that neither the Village 8 West nor Village 9 EIRs considered potential compatibility with these facilities. No further response is required.

N-11 The footnote on page 4-55 of the EIR states that although Off-Site Improvement Areas 11 and 20 are located on site (i.e., - within the SPA Plan boundaries), they are under a different ownership and are therefore not included. The footnote has been revised to clarify why there were excluded and that impacts from these areas have been included as part of the analysis of the EIR. No potential impacts were missed by not including these areas. No further response is required.

N-12 SANDAG's projections acknowledge they are not a controlling document; rather, they are predictive in nature. The EIR acknowledges that the project is not consistent with the current SANDAG projections; (See Page 5.16-9) however, in general, it is true that the City of Chula Vista and greater San Diego region are growing and will require additional housing units to accommodate anticipated population growth and this project will help meet those projections. In recognition of this, SANDAG is in the process of updating regional growth forecasts and has included the proposed project within their estimates, which are anticipated to be adopted in 2015. The proposed project would pay its fair share for impacts cause by the addition increase in population included the public facilities development impact fee and the transportation development impact fee. The project will provide for housing to support the planned town centers/urban centers in Villages Eight East, Nine and the Eastern Urban Center. With adopted of the proposed GPA and GDPA, the project would be consistent with the City's General Plan and the Otay Ranch General Development Plan. Therefore, the issue raised in this comment has already been incorporated into the Draft EIR, and no revisions to the Draft EIR are necessary as a result of this comment.

N-13 The EIR includes a consistency analysis for the RCP Jobs/Housing Mix principles in the Land Use section (Page 5.1-37 approx.) and the RTP/SCS Policy Objectives (Page 5.1-39 approx.).

The proposed project is consistent with RCP Jobs/Housing Mix principle because it provides a variety of housing choices within proximity of existing and planned employment centers, including the Eastern Urban Center, the Otay Ranch Town Center, and the Village Eight West and Village Nine Town Centers and the Village Three North Business Park. In addition, the proposed project results in job-producing land uses (Industrial, and Mixed Use Retail/Office) in proximity to residential land uses. The proposed project is consistent with the RTP/SCS Mobility and Social Equity objectives because the project is designed to facilitate connections between people and jobs and other activities, by providing both residential and job-producing land uses, including industrial and office uses. Additionally, the proposed project would include transit stops that will ultimately connect with the future University/

RTP site which will provide employment opportunities. The proposed project is also designed to encourage alternative transportation modes such as walking and biking. Although transit is not currently running through the project area, the villages are designed to accommodate transit in the future. Transit stops will also be provided within one-quarter mile of residential areas. Therefore, this comment has already been incorporated into the Draft EIR, and no revisions to the Draft EIR are necessary as a result of this comment.

N-14 Page 5.2-33 of the Draft EIR explains why no simulation was done for KVP5. The KVP5 view is of the area proposed for a park, and since the plans for the park are not available, it would be speculative to create a photosimulation at this time. The text on Page 5.2-33 explains what would likely be visible from this location in the future. No further response is required.

N-15 Village 8 West had a lower standard (three stories instead of four) because of the more dense character of the Town Center compared to the traditional multi-family housing proposed by the project. In order to be consistent, the proposed mitigation measure has been revised to match the Village Eight West EIR.

N-16 Site specific data were used where available (e.g. historical waste placement data); however, not all data are available (e.g. speciated chemical concentrations). When site-specific data are not available, default parameters from regulatory and technical documents are used. These defaults are conservative in nature while being representative of landfills in general. The sources used to obtain default parameters (e.g. Waste Industry Air Coalition [WIAC] Comparison of Recent Landfill Gas Analyses with Historic AP-42 Values) have been used in landfill permitting, HRAs, and CEQA analyses and accepted by state and local regulatory agencies. The default values have undergone considerable review and evaluation both in their development and their use; consequently, they should not be characterized as "guesswork" but as the "best available data." The defaults provide reasonable estimated values for use when site specific values are not available. Finally, the methodologies used to develop the defaults are conservative in nature will tend to overestimate health risk.

Consistent with United States Environmental Protection Agency (EPA) and California guidance, the HRA Report uses separate exposure parameters for residential and commercial/industrial receptors, and risks for each receptor type are calculated independently using the Hotspots Analysis and Reporting Program (HARP) software. Two different cancer risk values were calculated, one for each type of receptor (i.e. residential risk and commercial/industrial worker risk). As noted in the HRA Report, residential receptors have the highest level of exposure and represent the most conservative receptor scenario.

The HRA Report is unambiguous that the cancer risk threshold of one (1) in a million (1x10-6) is not exceeded for either residential or commercial/industrial receptors at a location where that specific type of receptor would be located. The DEIR correctly notes that the cancer risk isopleths for residential receptors extends outside the Otay Landfill property line, but that residential cancer risk isopleth does not extend to residential areas of the proposed Project; therefore, the cancer risk for residential receptors does not exceed 1x10-6.

The risk to a residential receptor is irrelevant to commercial/industrial receptors because those receptors would occupy the receptor location much less than a residential receptor, and only the cancer risk calculated for a commercial/industrial receptor should be used to evaluate the cancer risk at locations designated for commercial/industrial use. That cancer risk to a commercial/industrial receptor does not exceed 1.0x10-6 at any location outside the Otay Landfill property. Therefore, it can reliably be stated the cancer risk is not exceeded for either residential or commercial/industrial receptors.

N-17 The noise measurements that were taken in Village Three North would have included any noise generated by the Otay Landfill. While the LEA has noted areas of concern in the past, the landfill operator has remedied those concerns. The request from the comment is to consider not only potential impacts of the environment on the project (*Ballona Wetlands Trust v. City of Los Angeles* (2011) 201 Cal.App.4th 455), but also would require the project to anticipate future potential changes that may or may not occur on the landfill site and how the landfill operator would choose to respond to such changes. If the landfill was required in the future to perform any of the referenced noise-generating activities, the landfill would have to analyze how those activities may impact surrounding land uses. No further response is required.

N-18 The Draft EIR determined that there were no impacts to the listed uses; however, there is a mitigation measure for parks (MM NOI-6) to limit noise from parks until 10:00 PM to conform with the City's noise standards and to minimize noise impacts adjacent to the Preserve (MM BIO-17). Therefore, the issue raised in this comment has already been incorporated into the Draft EIR, and no revisions to the Draft EIR are necessary as a result of this comment.

N-19 This comment is incorrect. Page 6-13 of the Village 8 West EIR indicates the same conclusion. The analysis contained in the University Village EIR is accurate and consistent with the analyses contained in other recent City-prepared EIRs. No revisions to the Draft EIR are necessary as a result of this comment.

N-20 As indicated in Section 5.13 of the EIR, based on the WSAV for the proposed project, and the UWMPs of MWD, SDCWA, and OWD, there are sufficient existing and planned water supplies to meet projected water demands of the proposed project and other existing and planned development projects within the OWD service area over the next 20-year planning horizon in normal and in single and multiple dry years. Accordingly, despite ever-present water supply challenges including the current Drought State of Emergency, OWD and the regional water agencies (MWD and SDCWA) have determined that sufficient water supplies are, or will be, available to serve the proposed project, in combination with existing and other planned development within the OWD service area. Based on the water agency documentation, project impacts on water supplies — both short and long term — are considered less than significant.

The commenter notes that the Village 8 West and Village 9 EIRs concluded that impacts related to water supply would be significant and unavoidable. However, it is important to note that those EIRs tiered off of a supplemental EIR to the General Plan Update EIR (SEIR 09-01) and did not change the significance finding from either of those program-level EIRs, while the University Villages EIR has sufficient evidence to indicate that project-related impacts would be less than significant and therefore makes the appropriate significance determination.

N-21 Refer to response to comment N-20. Furthermore, as indicated in Section 5.13 of the EIR, the proposed project includes construction of potable and recycled water facilities, as recommended in the Overview of Water Service for Otay Ranch University Villages.

N-22 Chapter 8 Page 8-3 has been revised to include these impacts, which were clearly disclosed in Chapter 5 of the EIR. No further response is required.

N-23 Both Villages Eight West and Village Nine included the same situation where the City of San Diego owned fee title over their waterlines. Similar to those projects, the project includes mitigation measures to ensure the water lines would be moved prior to any impact/conflict occurring (MM LU-1 through MM LU-3). This would ensure that while the project is planning development over the waterlines, no actual development could occur until such time as the City of San Diego consented. This is a reasonable exercise of the City of Chula Vista's land use authority.

The City of San Diego is processing a Waterline Participation Agreement, which includes the Applicant and Otay Land Company, to relocate the water lines as shown on the TMs. The City of San Diego is fully aware of the proposed project, how the waterline and the City's ownership is being portrayed on the project

Tentative Maps, and has inserted language in the participation agreement providing that the City does not need to sign the TM to allow the project to continue processing. Thus, the project does not treat the ownership as an easement, rather, the project is complying with the City of San Diego's request. Therefore, this comment has already been incorporated into the Draft EIR, and no revisions to the Draft EIR are necessary as a result of this comment.

N-24 The boundary between Villages Nine, Ten and the University site were negotiated at great length between the applicant, the City and Otay Land Company. The ultimate configuration was based on a proposal made by, and agreed to, by Otay Land Company. This configuration included Otay Land Company allowed the Village Ten SPA Plan Area to overlap Village Nine and was subject to a future land swap whereby Otay Land Company would benefit by receiving a corresponding acreage for development further to the north, at the intersection of Hunte Parkway and Eastlake Parkway. The attorney who signed the comment letter drafted the first iteration of the land swap agreement.

Chapter 3, Project Description, does include reference to amending the Village 9 SPA Plan in several locations (Pages 4-2, 4-151, and 4-154). The EIR also includes General Plan and Otay Ranch GDP consistency analyses, as well as GPA and GDPA showing the proposed change from Mixed Use (MU) to Median Residential (M). Therefore, the issue raised in this comment has already been incorporated into the Draft EIR, and no revisions to the Draft EIR are necessary as a result of this comment.

N-25 The University Villages project proposed a General Plan Amendment (GPA) to provide an efficient and comprehensive roadway network that provides connectivity among the various land uses near Villages 9 and 10, including connections to the planned University Campus and the Research Technology Park (RTP) site.

Cross-sections for Discovery Falls Drive and University Drive were developed with Chula Vista Planning and Public Works staff, including the City's traffic engineer. The intention is to provide an efficient and sustainable roadway network that can accommodate the forecasted traffic volumes and at the same time provide a friendly environment for pedestrians and bicyclists. In addition to the cross-sections, the proposed roadway classifications were developed in coordination with city staff based on a potential layout for the University and RTP site. It should be noted that the proposed circulation network was the result of extensive discussions between the applicant, the City and Otay Land Company, on whose behalf the subject comment letter was submitted.

Because the University and RTP site are still in the beginning planning stages, the final configuration of those uses was not available for analysis; however, the City provided direction on how certain land uses and vehicles trips would "load" on to the future circulation network. The City based its assumptions on the best available information at the time and reasonable projections for the University and RTP site. Please see **Attachment A** which shows the assumptions provided by the City to perform the traffic impact analysis, including the cross-section/classification development process, and the project Average Daily Traffic (ADT). This was an iterative process with the City whereby the applicant demonstrated that based on the direction from Chula Vista staff, the proposed classifications and sections would adequately accommodate the planned traffic volumes. Only once the City reviewed the analysis and agreed with the conclusions did the traffic study move forward.

As it relates to how roadway classifications will transition through the Village, Attachment A shows that both Discovery Falls and University Drive/EastLake Parkway are required to be four lanes south of Hunte Park until each reaches the first intersection. South of these points, both Discovery Falls and University Drive/EastLake Parkway can transition from four lane roads to two lane collectors. This is because many of the trips on these roads are heading to the University and RTP as final trip destinations, not through these land uses to other destinations. Thus, the project proposes for University Drive and Discovery Falls to be two lanes south of the first intersection south of Hunte Parkway. However, the exact locations of these intersections are not known at this time.

While Eastlake Parkway/University Drive is proposed to be reduced from a four lane road to a two lane road, an additional parallel road (Discovery Falls) is proposed to be added to the Circulation Network, thus, overall capacity is not compromised. As shown in Attachment A, all roadway segments along Discovery Falls Drive and University Drive are projected to operate at acceptable LOS A. Additionally, as shown on Page 190 of the University Villages TIA, the following four (4) intersections are projected to operate at acceptable LOS C or better during the peak hours under the Year 2030 condition, including the intersection of Village 9 Street "B" / Discovery Falls Drive, which is the primary connection between Village 10 and Village 9.

75. Village 9 Street "B" / Discovery Falls Drive – LOS A during both the AM and PM peak hours;
76. Santa Julliard / Discovery Falls Drive – LOS A during both the AM and PM peak hours;

77. University Drive / Discovery Falls Drive –LOS C during both the AM and PM peak hours; and
78. Santa Davis / Discovery Falls Drive – LOS A during both the AM and PM peak hours.

As discussed above, all roadway segments along Discovery Falls Drive and University Drive are projected to operate at LOS A with their respective roadway cross section, and all associated intersections (#75 - #78) are projected to operate at LOS C or better. Therefore, the proposed roadway cross section are sufficient to accommodate the projected traffic, not overly constructed, and does not negatively impact Street B in Village 9.

It should be noted that the University Villages project is currently in the Tentative Map stage; therefore, intersection design, including pocket length, signing, and striping for the four intersections listed above are not ready. Turning pocket length will be designed based on the projected 95th percentile queue length shown below. Queuing analysis worksheet are provided in **Attachment B**.

Intersection	Turning Movement	AM	PM
75. Village 9 Street "B" / Discovery Falls Drive	WBL	69	88
	SBL	65	123
76. Santa Julliard / Discovery Falls Drive	WBL	41	37
77. University Drive / Discovery Falls Drive	EBL	91	74
	WBL	57	123
78. Santa Davis / Discovery Falls Drive	WBL	45	99

Source: Chen Ryan Associates, October 2014

N-26 Village 8 West and Village 9 assumed a variety of circulatory roadway and intersection improvements would be performed by others as expressed by the caveat statements shown in both Village 8 West and Village 9 TIA (Page 50-51 of the Village 8 West TIA and Pages 38-39 of the Village 9 TIA, as shown in **Attachment C**). The caveat stated that if the roadway improvements that were assumed to be made by the Village 8 West and Village 9 TIA were not constructed when scheduled, then either development in Village 8 West / Village 9 would stop, or the city and the applicant would meet to determine the need for that incomplete roadway infrastructure or the applicant would construct the missing roadway infrastructure. The University Villages TIA implemented the same caveat approach.

As shown on Page 217 of the University Villages TIA, the same caveat statements are provided for assumed circulatory roadway infrastructure and require the University

Villages applicant to follow the same stipulations as those required for Village 8 West and Village 9.

Regarding the 2030 analysis, standard industry practice is to include buildout of the Circulation Element for the horizon year scenario, which in this case is 2030. This is a reasonable and prudent approach because one purpose of the General Plan Circulation Element is to identify not only existing roadways, but also roadway improvements that are expected to be completed during the life of the General Plan. For those reasons, all Circulation Element roadways were included in the analysis to provide the reader with an understanding of how the circulation system functioned at buildout of the City. The University Villages TIA identifies "triggers" by which these improvements are required in order to avoid potential impacts and includes the standard caveat language for the Circulation Element roadways, including the 2030 improvements (as shown on Page 217 of the University Villages TIA), that if these facilities are not constructed prior to the specific triggers, the applicant would be required to halt construction, perform the improvement, perform an alternative improvements that would have a similar effect on level of service, or perform an additional traffic study demonstrating sufficient capacity exists and designating a new trigger. This approach ensures that traffic conditions will not exceed those disclosed in the TIA, either because the improvements are not actually necessary at that time, construction halts, or the applicant performs the improvement or an alternative improvement.

N-27 See response to comment N-26 above regarding treatment of Circulation Element roadways in the 2030 Analysis.

Additionally, the first three improvements listed are funded by the updated City of Chula Vista TDIF Program (scheduled for approval in November 2014); therefore, it is reasonable to assume that these facilities will be constructed by the horizon year.

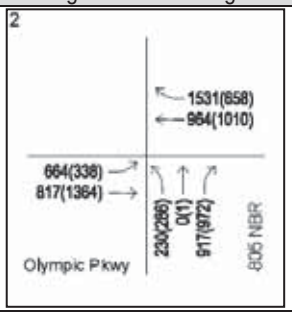
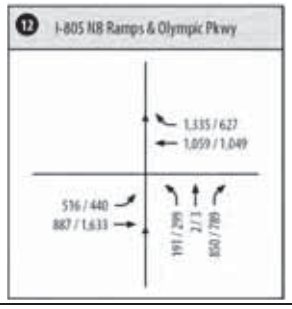
- Construction of Main Street from SR-125 to Eastlake Parkway;
- Construction of the Main Street interchange; and
- Construction of Otay Valley Road between "subdivision boundary" and Village 9 Street "B" including an overpass at SR-125.

With respect to the Heritage Road / Energy Way signalization, it has been revised in the TIA from "constructed by others" to "constructed by the project" and will be a design feature of the project. This change will not affect the results of the findings in the TIA; therefore, no additional analysis is required nor is recirculation triggered.

N-28 It should be noted that the commenter mentioned the I-805/Main Street interchange; however, Page 13 of the Village 8 West TIA showed that the I-805 NB Ramps / Olympic Parkway intersection is operating at LOS F and not the I-805 NB Ramps / Main Street, which is shown as operating at LOS C or better during the peak hours.

Based upon a comparison between the Village 8 West / Village 9 TIA and the University Villages TIA, it has been determined that the AM peak hour LOS for the I-805 NB Ramps / Olympic Parkway intersection is different for the following reasons:

- The Village 8 West and Village 9 TIA peak hour intersection count collected by RBF for this intersection (as shown in Exhibit 6 of both the Village 8 West and Village 9 TIAs) is different than those collected for the University Villages TIA. The figure below provides a comparison between the Village 8 West / Village 9 traffic count vs. the University Villages TIA Traffic Count.

Village 8 West / Village 9	University Villages
	
Count Date: 5/4/2010	Count Date: 5/19/2011

As shown, data collected for the University Villages TIA is a newer and more accurate count. Because the counts were taken over a year apart, and because traffic is never the same on any two days, it makes sense that the I-805 NB Ramps at Olympic Parkway would have different LOS among the different TIA.

- The Village 8 West and Village 9 TIA was conducted using Traffix (intersection analysis software) and the Highway Capacity Manual (HCM) 2000 methodology (an older methodology). The University Villages TIA use the Synchro analysis software and the HCM 2010 methodology (the most up to date methodology).
- The Village 8 West and Village 9 TIA use the Traffix software standard peak hour factor (PHF) of .92 for all turning movements, whereas the University Villages TIA use actual PHF from the existing count. Peak Hour Factor is the peak 15-minute flow rate, which play a significant role in determining an

intersection impact. Since the University Villages TIA use the actual PHF instead of the default PHF, it can be concluded that the University Villages TIA reflect the existing condition more accurately than the Village 8 West / Village 9 TIA.

Per the commenter's request, a field review using a video recording device was conducted on 10/2/2014 to determine the AM peak hour operating conditions for both the I-805 / Olympic Parkway and I-805 / Main Street interchanges. The field review results indicated that the peak hour intersection LOS, as well as the ramp metering analysis for both interchange, are accurate and reflect the existing field conditions. Please see **Attachment D** for screen shots of the existing AM peak hour operation condition for both the I-805 / Olympic Parkway and I-805 / Main Street interchanges.

N-29 The University Villages TIA was initiated in 2011. The May 2011 counts utilized in this TIA remain valid for establishing the baseline conditions because the City has not experienced significant growth since that time. Due to the ongoing effects of the recession, Chula Vista generally, and the project vicinity more specifically, saw very little new construction during this time. Without new growth to cause new traffic, there was no reason to update the traffic counts. As a comparison with the Village 8 West and Village 9 TIAs, the counts in those TIAs ranged between 2006 and 2011 and those projects were approved in late 2013 and 2014, respectively, without updating the traffic counts.

There was no accurate, verifiable model available at the time of the Notice of Preparation that included any way to account for the reduced tolls on SR-125. Specific to the question of SR-125, please see response to comment N-34 below.

Therefore, the issue raised in this comment has already been incorporated into the TIA and Draft EIR, and no revisions to the Draft EIR are necessary as a result of this comment.

N-30 The distribution of the external project trips was based upon a computer generated "Select Zone" analysis utilizing the Series 11 Year 2015 SANDAG Transportation Model, "Southbay 2, University Villages". The select zone model run is included as Appendix A of the University Villages TIA.

As shown in Appendix A, under the Year 2015 condition, 7% of the project trips would travel to land uses along Main Street between Brandywine Avenue and Heritage Road The remaining 13% of the project trips would utilize Brandywine.

Under the Year 2015 scenario, the project would generate 6,110 external ADT (as shown in Table 4.3 of the University Villages TIA), resulting in 794 ADT (13% x 6,110) on Brandywine, which is less than 800 daily trips using. Thus, this roadway was not required to be analyzed per the City of Chula Vista Traffic Impact Study Guidelines. All Circulation Element roadways where the project contributes 800 or more ADT were included as a part of the project study area.

N-31 This comment is incorrect that the analysis assumed that the Heritage Road / Main Street intersection would operate as a STOP controlled 6-lane by 4-lane road. While the proposed project will construct Heritage Road to its full Circulation Element classification width as a 6-lane prime arterial. However, the project would stripe Heritage Road as a 4-lane roadway until a 6-lane roadway is needed, similar to the current treatment of Heritage Road and Olympic Parkway.

As mentioned in the responses to comment #2 above, the project is required to demonstrate the need for a facility (including intersection control), before it is included in the interim years roadway network. Therefore, the intersection of Heritage Road / Main Street was analyzed as an All-way STOP controlled intersection to show the need for a signalized intersection. Additionally, as shown in Figure 6-1A and Figure 7-1A of the University Villages TIA, the intersection of Heritage Road / Main Street was analyzed as a 4-lane by 4-lane All-Way STOP controlled intersection (with 1 exclusive SB right-turn lane). This intersection geometry and traffic control is reasonable and feasible. The comment suggests that either lanes should be reduced and the analysis revised, or it should be analyzed as a signalized intersection. Consistent with the comment, the intersection was analyzed with reduced lanes.

Additionally, as documented in Chapter 13 of the University Villages TIA, an analysis was conducted to determine the appropriate trigger for the signalization of the Heritage Road / Main Street intersection, including a signal warrant analysis. Please see Chapter 13 of the University Villages TIA for more detail.

N-32 The Village 8 West TIA was “DRAFT” while the University Village TIA was being prepared and not available for review. Therefore, without knowing what the Village 8 West study assumed from a network perspective in the La Media Road / Main Street area, the University Villages TIA assumed the couplet configuration based on the available information from the General Plan Circulation Element Map. This is consistent with the City’s preference to assume full construction of a facility rather than partial improvements. However, this assumption was overly conservative as the University Villages project does not need the entire couplet system to serve as access or circulation by the Year 2020.

However, in response to this comment, an analysis for the La Media Road and Main Street area using the same geometric configuration as the Village 8 West TIA was prepared. This analysis has been provided as **Attachment E**, demonstrating the level of service based on the revised configuration. The comment is attempting to commit the University Villages applicant to perform off-site improvements on the commenters Village 8 West property which would be the result of the University Villages project taking a conservative approach in the analysis. As shown in Attachment E, the full couplet is not required to accommodate project traffic. The City of Chula Vista would not require an off-site property owner to "overbuild" such a facility. The PFFP does not need to be revised and the analysis contained in the TIA and EIR are accurate.

N-33 The distribution of the external project trips was based upon a computer generated "Select Zone" analysis utilizing the Series 11 Year 2020 SANDAG Transportation Model, "Southbay 2, University Villages". Even though Magdalena is not a Circulation Element road, it was studied in this TIA to capture any potential traffic impact. As shown on Page 129 of the TIA, Magdalena would operate at acceptable LOS A with the addition of project traffic.

Please see response to comment N-32 above for more information regarding the La Media Road / Main Street couplet. As mentioned in the responses to comment N-26 above, the project is required to demonstrate the need for a facility (including intersection control), before it is included in the interim years roadway network. Therefore, the intersections in the Village Eight West couplet were analyzed as All-way STOP controlled intersections to show the need for a signalized intersection.

N-34 Comment noted. It should be reiterated that the project traffic study was initiated in 2011. Traffic modeling was conducted on December 1, 2011 and the SANDAG Board action which eliminated the Phase 2 project took place AFTER the modeling was performed for the proposed project. No model was available at that time or up through the beginning of the EIR public review period which would enable the traffic study to determine the price sensitivity of the reduced tolls on SR-125.

N-35 A Year 2020 scenario with Heritage Road connection was conducted using the Series 11 Year 2020 SANDAG Transportation Model, provided in Appendix A of the University Villages TIA. Please see **Attachment F** for a screen shot of the Series 11 Year 2020 SANDAG Transportation Model, which shows the effect of the completion of the Heritage Road connection (including manual adjustments due to traffic generated by the additional approximately 1,600 units from the Village 2 SPA). As shown in Attachment F, the highest projected volume with the Heritage Road connection is 48,600 ADT, resulting in Main Street operating at LOS C under

the Year 2020 with Heritage Road connection scenario. In addition, Heritage Road south of Main Street is projected to operate at LOS A under the Year 2020 scenario (as shown in Table 7.2 of the University Villages TIA). Therefore, potential impacts were thoroughly assessed and no additional analysis is required.

N-36 The connection of Main Street from Heritage Road to La Media Road is a City CIP Project (STM357). According to the City's CIP, the estimated cost of this improvement is at least $73 million. In addition, while the General Plan establishes a general alignment for Main Street, there are several factors which preclude determining the exact alignment at this time. These included biological resources and the potential for those resources to change over 10 years within Wolf Canyon and the development plans of the Village Four property owner. Thus, it is not financially feasible for the proposed project to fund the entire construction of a regional facility, nor was it feasible to reasonably predict the precise alignment for study with this project.

In recognition that no single project could feasibly fund the construction of this improvement and that future environmental, technical and engineering analyses is required to determine the precise alignment and impacts, the City of Chula Vista included the Main Street crossing in both the Eastern TDIF Program, as well as the City's Capital Improvement Plan (CIP) Program. This ensures all projects contribute to the construction of the crossing, as all projects will benefit from this improvement. The City has committed to building the improvement through the CIP Program. It is already part of the 2013-2016 CIP budget.

However, to ensure that this critical improvement is made to avoid traffic impacts, Mitigation Measure MM-TCA-12 has been revised such that the City will not issue building permits beyond 4,736 EDU unless the improvement has been constructed. Also refer to response to comment N-3.

N-37 See response to comment N-36. No new impacts occur as a result of this comment and no further response is necessary.

N-38 Please see response to comment N-30 above. As documented in the response to comment above, this roadway segment does not meet the City's threshold to be included as a part of the project study area. Thus, no additional analysis is required.

N-39 Please see response to comment N-35 above. As shown, the opening of the Heritage Road connection would not result in any additional impacts and was thoroughly studied in the TIA, thus no additional analysis is required.

N-40 The Main Street bridge is a CIP project. Please see response to comment N-36. No additional analysis is required. Also refer to response to comment N-3.

Comment Letter O

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

September 19, 2014

Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Subject: Otay Ranch University Villages Project
SCH#: 2013071077

Dear Marni Borg:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on September 18, 2014, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

O-1

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH#	2013071077
Project Title	Otay Ranch University Villages Project
Lead Agency	Chula Vista, City of
Type	EIR Draft EIR
Description	This project proposes 6,897 homes and associated village land uses on ~755 acres and includes roughly 620 acres of Open Space Preserve for a total Project area of ~1,357 acres. Implementation of the Project requires Chula Vista General Plan Amendments, a Chula Vista Multiple Species Conservation Program Boundary Adjustment, Otay Ranch General Development Plan Amendments, and Otay Ranch Resource Management Plan Boundary Adjustment. This application also proposes an amendment to the Sectional Planning Area (SPA) Plan for Otay Ranch Villages 2, 3, and a portion of 4 adopted by the Chula Vista City Council on June 4, 2006, as amended.

Lead Agency Contact

Name	Marni Borg		
Agency	City of Chula Vista		
Phone	(619) 409-5913	*Fax*	
email			
Address	276 Fourth Avenue		
City	Chula Vista	*State* CA	*Zip* 91910

Project Location

County	San Diego		
City	Chula Vista		
Region			
Lat / Long	32° 36' 0" N / 116° 57' 54" W		
Cross Streets	Main St/Heritage Rd; southwest of Main St/SR 125; south of Hunte Pkwy/Eastlake Plwy		
Parcel No.	Various		
Township	*Range*	*Section*	*Base*

Proximity to:

Highways	SR 125
Airports	Brown Field
Railways	
Waterways	
Schools	Olympian HS, High Tech HS
Land Use	Residential, Commercial, Retail, and Business Park Development with supporting civic and public uses such as libraries, parks, schools, as well as an ~11,375 acre open space preserve system. Z: Planned Community Zone (P-C), Sectional Planning Area (SPA) Plan.
Project Issues	Air Quality; Water Quality; Other Issues; Aesthetic/Visual; Agricultural Land; Forest Land/Fire Hazard; Biological Resources; Archaeologic-Historic; Geologic/Seismic; Toxic/Hazardous; Minerals; Noise; Population/Housing Balance; Public Services; Traffic/Circulation; Drainage/Absorption; Flood Plain/Flooding; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Vegetation; Wetland/Riparian; Water Supply; Wildlife; Growth Inducing; Landuse; Cumulative Effects
Reviewing Agencies	Resources Agency; Department of Conservation; Department of Fish and Wildlife, Region 5; Cal Fire; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Services, California; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 12; Department of Housing and Community Development; Air Resources Board; Regional Water Quality Control Board, Region 9; Native American Heritage Commission

O-1 Cont.

Document Details Report
State Clearinghouse Data Base

Date Received 08/05/2014 *Start of Review* 08/05/2014 *End of Review* 09/18/2014

O-1
Cont.

INTENTIONALLY LEFT BLANK

Response to Comment Letter O

State of California, Governor's Office of Planning and Research (State Clearinghouse) Scott Morgan, Director September 19, 2014

O-1 This comment does not address the adequacy of the environmental analysis in the EIR. No response is required.

INTENTIONALLY LEFT BLANK

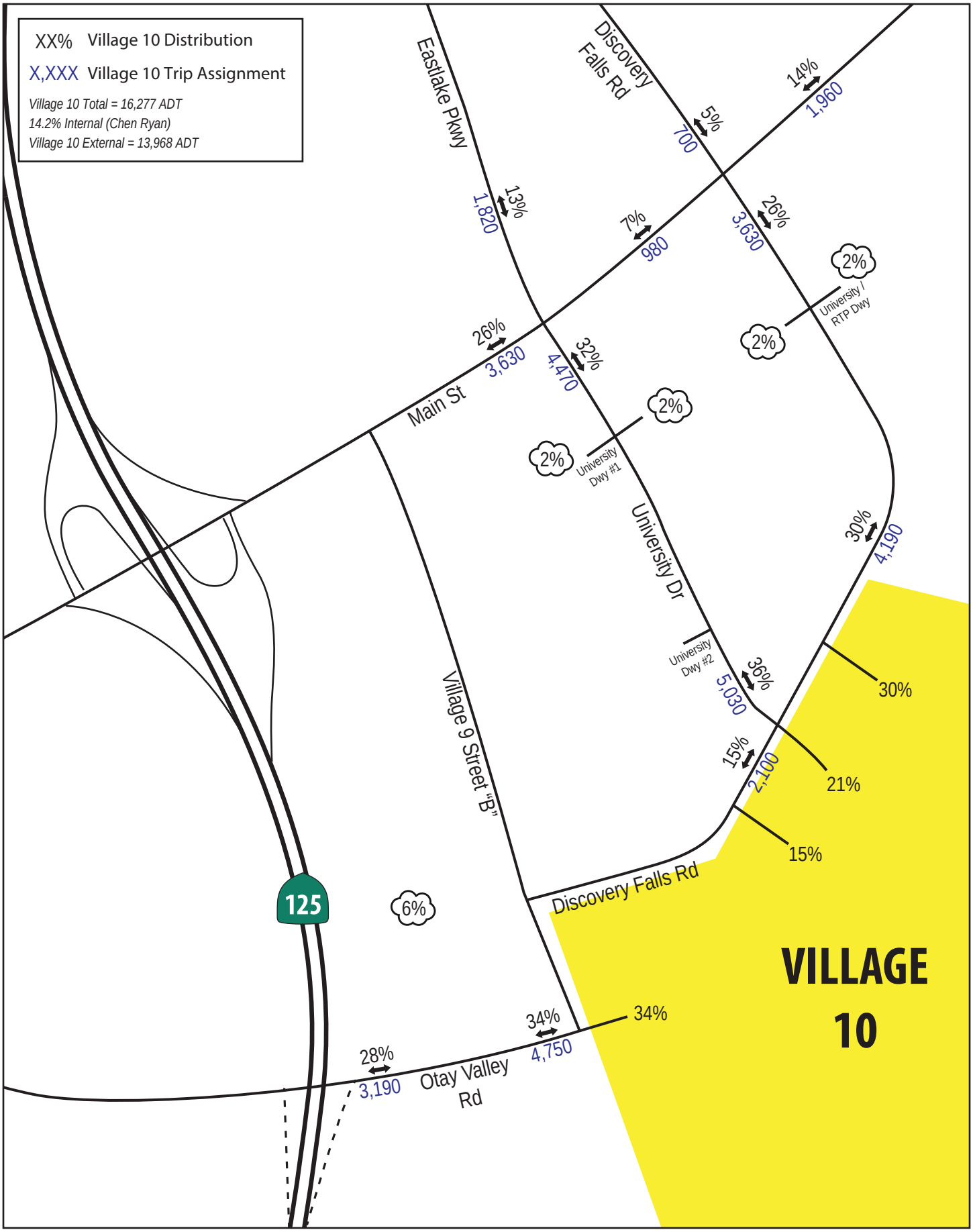
ATTACHMENT A

Discovery Falls Drive and University Drive Cross Section Development

ATTACHMENT A

DISCOVERY FALLS DRIVE AND UNIVERSITY DRIVE CROSS SECTION DEVELOPMENT

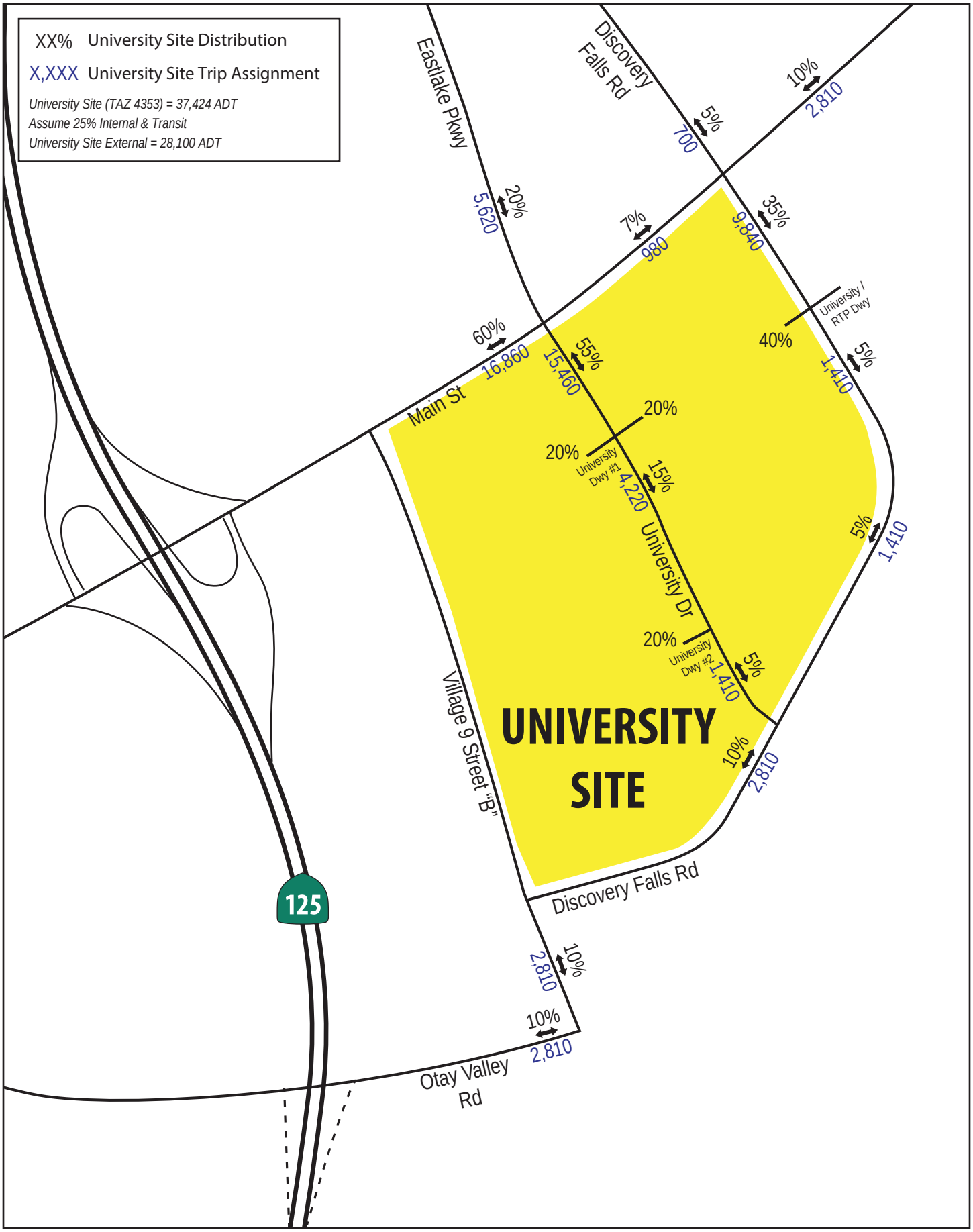
The following attachment document the trip distribution that was used to develop the cross section for both the University Drive and Discovery Falls Drive (East Lake Parkway).



Discovery Falls Drive & University Drive Cross-Section Development

CHEN RYAN

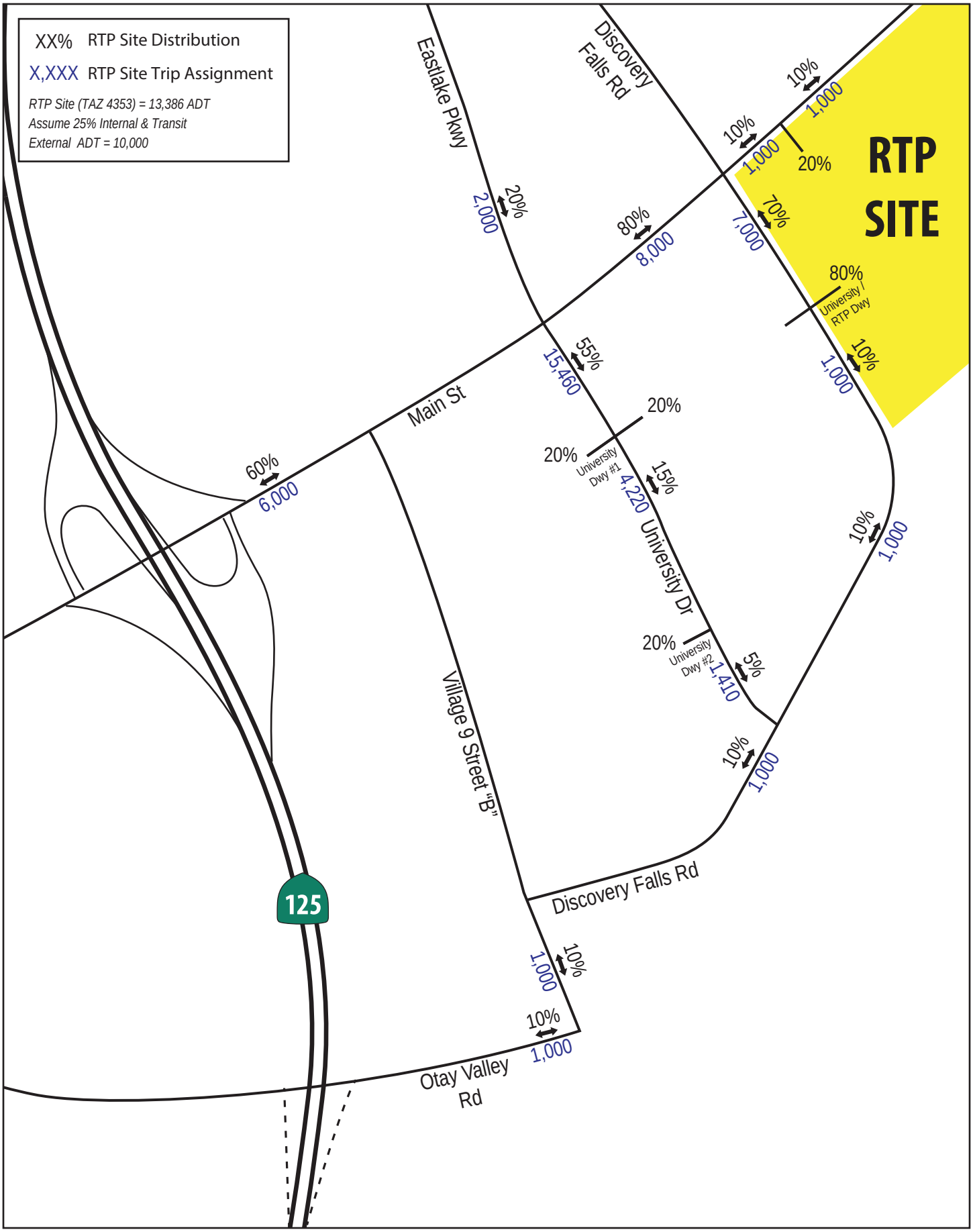
Figure 1
Village 10 Distribution and Volumes



Discovery Falls Drive & University Drive Cross-Section Development

CHEN RYAN

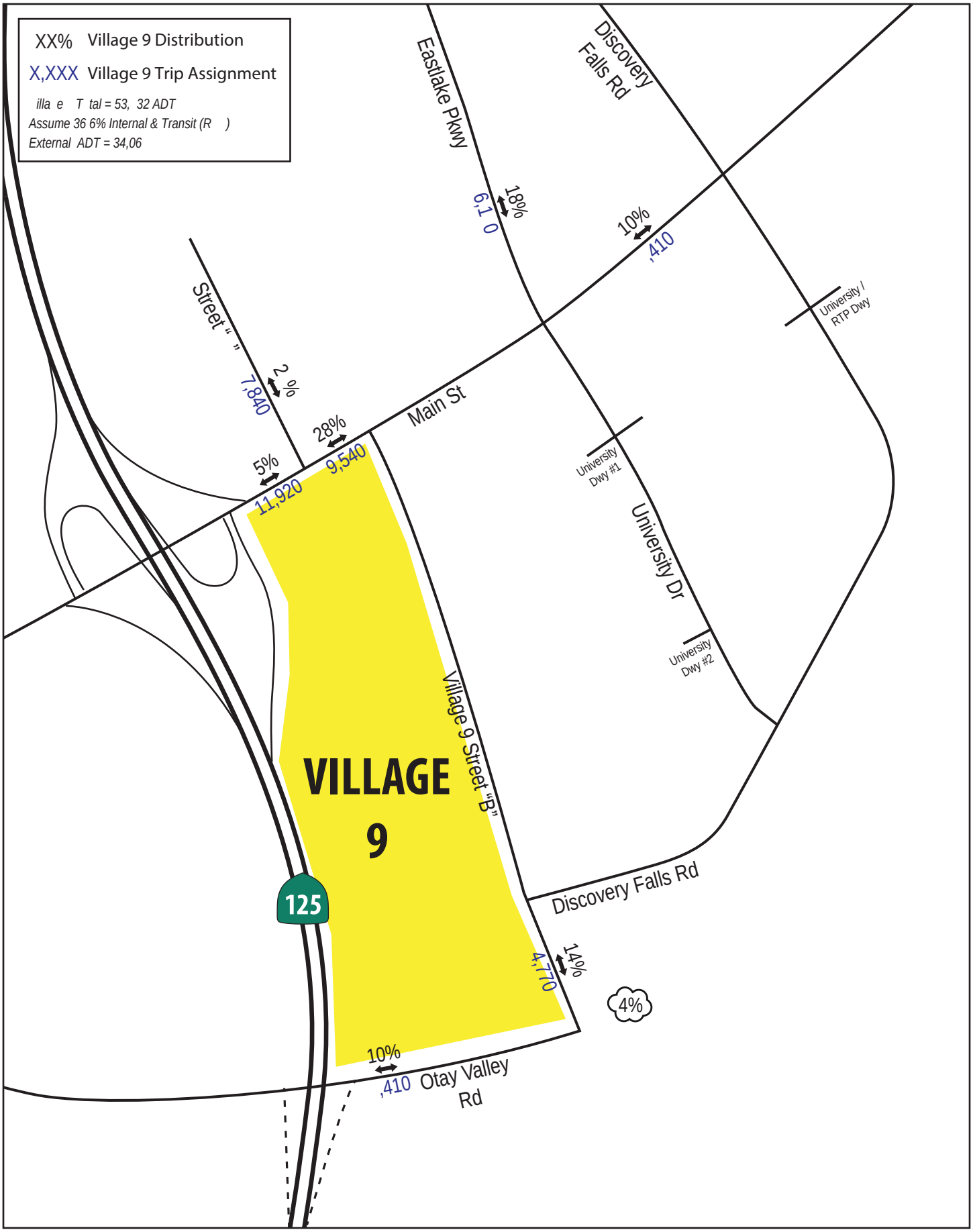
Figure 2
University Site Distribution and Volumes



Discovery Falls Drive & University Drive Cross-Section Development

CHEN RYAN

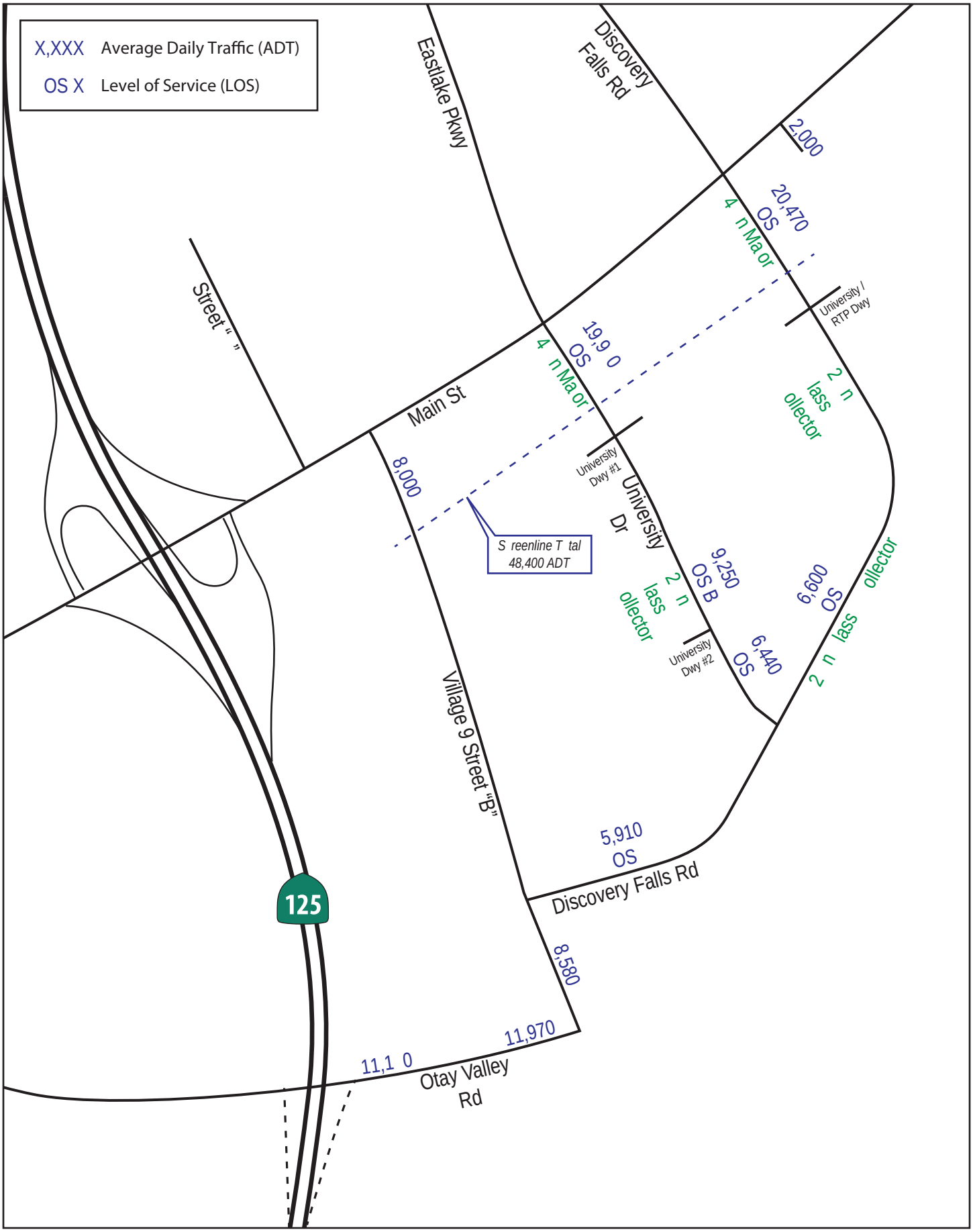
Figure 3
RTP Site Distribution and Volumes



Discovery Falls Drive & University Drive Cross-Section Development

CHEN RYAN

Figure 4
Village 9 Distribution and Volumes



Discovery Falls Drive & University Drive Cross-Section Development

CHEN RYAN

Figure 5

Total ADT (Village 9, Village 10, University & RTP)

ATTACHMENT B

Intersection Queuing Analysis – Year 2030 Base Plus Project Scenario

ATTACHMENT B

INTERSECTION QUEUING ANALYSIS – YEAR 2030 BASE PLUS PROJECT SCENARIO

The following attachment show the queuing analysis results for all major intersections near Village 9.

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	100	100	158	21	247	79	231
v/c Ratio	0.34	0.34	0.41	0.15	0.30	0.37	0.24
Control Delay	21.4	24.1	9.5	28.4	15.8	29.5	11.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.4	24.1	9.5	28.4	15.8	29.5	11.6
Queue Length 50th (ft)	24	29	5	7	57	24	36
Queue Length 95th (ft)	63	69	47	26	130	65	115
Internal Link Dist (ft)	770		1455		192		542
Turn Bay Length (ft)							
Base Capacity (vph)	588	578	622	144	816	216	955
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.17	0.25	0.15	0.30	0.37	0.24

Intersection Summary

Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	174	53	242	142
v/c Ratio	0.32	0.30	0.36	0.17
Control Delay	16.4	25.7	13.7	2.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	16.4	25.7	13.7	2.8
Queue Length 50th (ft)	30	15	50	2
Queue Length 95th (ft)	88	41	96	23
Internal Link Dist (ft)	1455		399	200
Turn Bay Length (ft)				
Base Capacity (vph)	537	177	670	847
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.32	0.30	0.36	0.17

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	89	179	42	211	26	326	35	137
v/c Ratio	0.41	0.18	0.35	0.24	0.27	0.77	0.37	0.29
Control Delay	40.0	11.2	47.9	16.7	47.8	35.5	51.9	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.0	11.2	47.9	16.7	47.8	35.5	51.9	13.2
Queue Length 50th (ft)	45	44	22	66	14	130	18	20
Queue Length 95th (ft)	91	92	57	138	41	223	#57	68
Internal Link Dist (ft)		399		337		373		1423
Turn Bay Length (ft)								
Base Capacity (vph)	382	1008	119	874	95	599	95	614
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.18	0.35	0.24	0.27	0.54	0.37	0.22

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	350	44	226	142
v/c Ratio	0.27	0.23	0.15	0.51
Control Delay	7.0	31.0	2.5	15.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	7.0	31.0	2.5	15.4
Queue Length 50th (ft)	59	18	15	11
Queue Length 95th (ft)	133	45	43	55
Internal Link Dist (ft)	337		108	324
Turn Bay Length (ft)				
Base Capacity (vph)	1304	189	1519	1207
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.27	0.23	0.15	0.12

Intersection Summary

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	131	89	143	42	363	132	274
v/c Ratio	0.51	0.41	0.48	0.30	0.45	0.53	0.28
Control Delay	33.6	38.0	16.6	41.8	18.2	40.1	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.6	38.0	16.6	41.8	18.2	40.1	13.6
Queue Length 50th (ft)	49	40	14	20	107	60	75
Queue Length 95th (ft)	105	88	67	55	227	123	156
Internal Link Dist (ft)	927		383		361		1020
Turn Bay Length (ft)							
Base Capacity (vph)	399	388	447	145	813	315	983
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.23	0.32	0.29	0.45	0.42	0.28

Intersection Summary

Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	331	151	221	85
v/c Ratio	0.30	0.48	0.14	0.33
Control Delay	9.9	24.6	2.3	11.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	9.9	24.6	2.3	11.4
Queue Length 50th (ft)	58	45	14	3
Queue Length 95th (ft)	138	84	37	34
Internal Link Dist (ft)	364		432	186
Turn Bay Length (ft)				
Base Capacity (vph)	1109	353	1551	527
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.30	0.43	0.14	0.16

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	84	279	171	242	16	126	84	273
v/c Ratio	0.35	0.44	0.51	0.30	0.12	0.36	0.35	0.53
Control Delay	30.2	20.2	28.6	15.1	31.5	16.4	30.2	16.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.2	20.2	28.6	15.1	31.5	16.4	30.2	16.7
Queue Length 50th (ft)	28	77	56	61	6	21	28	50
Queue Length 95th (ft)	74	172	123	134	24	63	74	132
Internal Link Dist (ft)		432		246		494		1525
Turn Bay Length (ft)								
Base Capacity (vph)	274	641	446	846	137	577	274	721
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.44	0.38	0.29	0.12	0.22	0.31	0.38

Intersection Summary

Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	362	145	379	116
v/c Ratio	0.33	0.49	0.26	0.42
Control Delay	9.7	28.6	3.0	15.6
Queue Delay	0.3	0.0	0.0	0.0
Total Delay	10.0	28.6	3.0	15.6
Queue Length 50th (ft)	64	47	29	11
Queue Length 95th (ft)	143	99	66	52
Internal Link Dist (ft)	246		244	197
Turn Bay Length (ft)				
Base Capacity (vph)	1092	399	1519	356
Starvation Cap Reductn	274	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.44	0.36	0.25	0.33

Intersection Summary

ATTACHMENT C

Except of Caveat Statements

ATTACHMENT C

Except of caveat statements from:

- Otay Ranch Village 8 West Traffic Impact Analysis; and
- Otay Ranch Village 9 Traffic Impact Analysis.

PAGES 50 – 51 OF THE OTAY RANCH VILLAGE 8 WEST TIA

2030 CONDITIONS

In addition to the developments assumed through 2025, this scenario assumes buildout of Village 8 West to include the construction of a middle school, an additional 60,000 square feet of commercial retail, and 9.4 acres of park space. This scenario assumes the 2025 mitigated street network. **Table 23** summarizes the forecasted Village 8 West 2030 project trip generation.

Table 23
2030 Project Trip Generation

Land Use	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	Inbound	Outbound	Total	Inbound	Outbound
Park (Active Recreation)	17.4 acres	870	35	17	17	70	35	35
Urban & Neighborhood Park	10.6 acres	53	2	1	1	4	2	2
Single Family Residential	621 DU	6,210	497	149	348	621	435	186
Multi-Family Residential	1,429 DU	11,432	915	183	732	1,143	800	343
Elementary School	11.4 acres	1,140	365	219	146	103	41	62
Jr. High/Middle School	21.0 acres	2,205	706	423	282	198	79	119
Office (<100 KSF)	50 KSF	1,000	140	129	14	130	26	104
Commercial Retail	250 KSF	20,000	800	480	320	2,000	1,000	1,000
SUBTOTAL		**43,084**	**3,467**	**1,604**	**1,864**	**4,283**	**2,425**	**1,858**
Internal Capture[1]		*-14,826*	*-632*	*-316*	*-316*	*-1,300*	*-650*	*-650*
Transit Reduction[2]		*-2,154*	*-173*	*-80*	*-93*	*-214*	*-121*	*-93*
TOTAL		**26,104**	**2,662**	**1,208**	**1,455**	**2,769**	**1,654**	**1,115**
Total EDU's		**2,610**						

Note: based on *SANDAG, Not So Brief Guide, April 2002*
[1] Internal Capture Rates provided from *ITE Trip Generation Handbook.* Internal capture rates vary by each combination of land uses.
[2] Transit Reduction Rates provided from SANDAG; a transit reduction of 5% is assumed by project buildout.

The 2030 scenario includes analysis of the forecasted traffic volumes from the SANDAG model run for year 2030, including anticipated land uses and traffic associated with projects expected to be constructed by 2030.

The traffic analysis assumes the 2025 mitigated network plus the following:

- Street "A" will be constructed from Main Street to Otay Valley Road as a two-lane Collector
- Construction of Main Street from Heritage Road to La Media Road (constructed by others)

The 2025 mitigated roadway network is required to be constructed prior to the construction of the first EDU following the 2025 development phase (2,234 EDUs). Any additional development cannot occur until the 2025 mitigated roadway network is in place. If the project equivalent dwelling unit exceeds the 2025 development phase (2,234 EDUs) prior to the completion of all of the above-listed assumed and planned off-site and on-site improvements being constructed and open to traffic, then one of the following steps shall be taken as determined by the City Engineer:

1. Development in Village 8 West will stop until those assumed future roadways are constructed by others; or

2. City and OLC shall meet to determine the need for the incomplete roadway segments. A number of factors, including changes to the tolling structure at SR-125, may affect the traffic patterns in the Otay Ranch. Additional traffic analysis of the roadway network and levels of service assessment may be necessary to determine if such improvements are necessary and the scope and timing of additional circulation improvements; or

3. Developer shall construct the missing roadway links and receive TDIF credit for those improvements as applicable; or

4. An alternative measure is selected by the city in accordance with the city of Chula Vista Growth Management Ordinance.

5. All to the satisfaction of the City Engineer.

The roadway network used in evaluating the 2030 conditions is illustrated in **Exhibit 35**. The 2030 roadway network does not represent the City's ultimate Circulation Element network. The 2030 roadway network lacks a few components of the ultimate infrastructure that is planned in the study area, and it has been determined that these remaining components of the ultimate roadway network are not necessary to mitigate the project's impacts.

Access to Village 8 West will be provided along Main Street, La Media Road, Otay Valley Road, Street "A" and Magdalena Avenue. Street "A" is not included in the roadway segment analysis as it is a local street not subject to LOS requirements. Operating conditions of Street "A" and the associated internal intersections are discussed in the On-Site Street Improvements Phase and Operational Analysis section provided later in this report.

PAGES 38-39 OF THE OTAY RANCH VILLAGE 9 TIA

2030 CONDITIONS

In addition to the developments assumed through 2025, this scenario assumes buildout of Village 9 to include the construction of an elementary school, 21 additional single family dwelling units, 223 additional high density multi family dwelling units, an additional 625,000 square feet of office, and 5 acres of community purpose facilities. This scenario assumes the 2025 mitigated street network. **Table 19** summarizes the forecasted Village 9 2030 project trip generation.

Table 19
2030 Project Trip Generation Table

Land Use	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	Inbound	Outbound	Total	Inbound	Outbound
Urban & Neighborhood Park	27.5 acres	138	6	3	3	11	6	5
Single Family Residential	266 DU	2,660	213	64	149	266	186	80
High Density Multi-Family Residential	3,734 DU	22,404	1,792	358	1,434	2,016	1,411	605
Elementary School	19.8 acres	1,980	633	379	254	178	71	107
Office (>400 KSF)	1,200 KSF	14,400	1,872	1,685	187	1,872	374	1,498
Commercial Retail	300 KSF	12,000	480	288	192	1,200	600	600
Community Purpose Facility	5 acres	150	8	5	3	12	6	6
SUBTOTAL		**53,732**	**5,003**	**2,781**	**2,222**	**5,555**	**2,654**	**2,901**
Internal Capture[1]		-11,606	-469	-234	-234	-1,214	-607	-607
Transit Reduction[2]		-8,059	-750	-417	-333	-833	-398	-435
TOTAL		**34,067**	**3,784**	**2,130**	**1,655**	**3,509**	**1,649**	**1,859**
TOTAL EDU		**3,407**						

Note: based on *SANDAG, Not So Brief Guide, April 2002*
[1] Internal Capture Rates provided from *ITE Trip Generation Handbook.* Internal capture rates vary by each combination of land uses.
[2] Transit Reduction Rates provided from SANDAG; a transit reduction of 15% is assumed by project buildout.

The 2030 scenario includes analysis of the forecasted traffic volumes from the SANDAG model run for year 2030, including anticipated land uses and traffic associated with projects expected to be constructed by 2030.

The traffic analysis assumes the 2025 mitigated network plus the following off-site roadway improvement:

- Construction of Main Street from Heritage Road to La Media Road (constructed by others)
- Construction of "Village Path" pedestrian/bicycle bridge over SR-125 to provide non-motorized access between Village 9 and Village 8 East (constructed by others)

The 2030 analysis includes the 2025 on-site roadway network plus the following on-site roadway improvements that will be constructed by the project by 2030, as stated in the PFFP analysis presented later in the report:

- Construction of Street "A" from Village 9 northern boundary to Main Street
- Construction of Street "B" from Village 9 northern boundary to Campus Boulevard
- Installation of traffic signal at Main Street / Street "B"

The 2025 mitigated roadway network is required to be constructed prior to the construction of the first EDU following the 2025 development phase (3,074 EDUs). Any additional development cannot occur until the 2025 mitigated roadway network is in place. If the project equivalent dwelling unit limit for 2025 (3,074 EDU as shown in Tables 15 and 18) is reached prior to all of the above-listed off-site and roadway improvements are constructed and open to traffic, then one of the following steps shall be taken as determined by the City Engineer:

1. Development in Village 9 will stop until those assumed future roadways are constructed by others; or

2. City and OLC shall meet to determine the need for the incomplete roadway segments. A number of factors, including changes to the tolling structure at SR-125, may affect the traffic patterns in the Otay Ranch. Additional traffic analysis of the roadway network and levels of service assessment may be necessary to determine if such improvements are necessary and the scope and timing of additional circulation improvements; or

3. Developer shall construct the missing roadway links and receive TDIF credit for those improvements as applicable; or

4. An alternative measure is selected by the City in accordance with the City of Chula Vista Growth Management Ordinance; or

5. All to the satisfaction of the City Engineer.

All on-site improvements will be constructed in accordance with the PFFP. The roadway network used in evaluating the 2030 conditions is illustrated in **Exhibit 29**. The 2030 roadway network does not include all future roadways included in the City's Circulation Element. The analysis conducted in this report demonstrates that the remaining future planned roadways (Eastlake Parkway from Main Street to Otay Valley Road and the Otay Valley Road/SR-125 interchange) are not necessary to mitigate the project's impacts.

ATTACHMENT D

AM Peak Hour Field Review

ATTACHMENT D

AM PEAK HOUR FIELD REVIEW

I-805 NB RAMPS / MAIN STREET

I-805 NB RAMPS / OLYMPIC PARKWAY

The following are screen capture of the field review video for the I-805 NB Ramps / Main Street and I-805 NB Ramps / Olympic Parkway intersection, including the On-Ramp condition.

INTERSECTION: MAIN STREET / I-805 NB RAMP

TIME: 7:35 AM

As shown in the images above, the I-805 NB Ramps / Main Street interchange is currently not experiencing any significant delay or queuing.

INTERSECTION: OLYMPIC PARKWAY / I-805 NB RAMPS

TIME: 7:44 AM

As shown in the images above, the I-805 NB Ramps / Olympic Parkway interchange is currently not experiencing any significant delay or queuing.

ATTACHMENT E

La Media Road/Main Street – V8W Geometrics Analysis Memo

ATTACHMENT E - La Media Road / Main Street – V8W Geometrics Analysis Memo

CHEN RYAN

MEMORANDUM

TO: Mr. Sean Kilkenny

FROM: Monique Chen, PE
Phuong Nguyen, PE

DATE: October 10, 2014

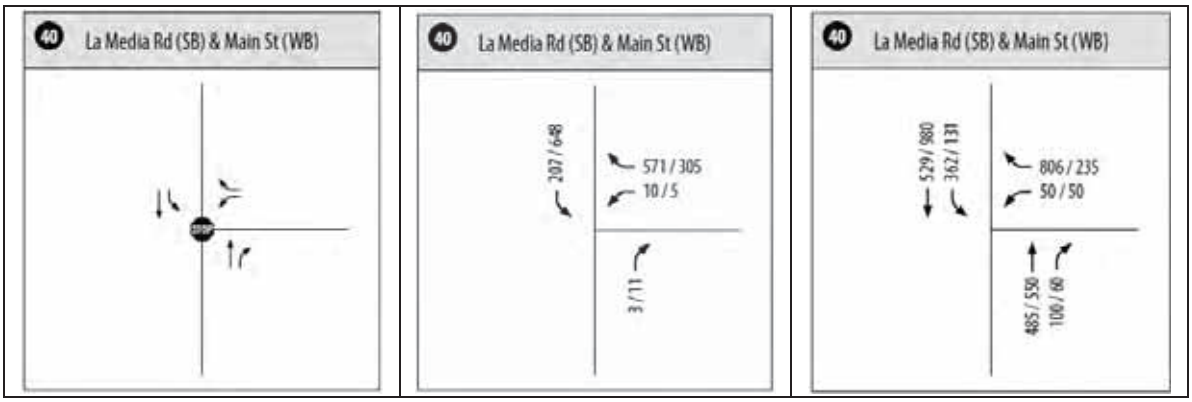
RE: **La Media Road / Main Street Couplet (Year 2020) Analysis**

This memorandum provides an analysis of the La Media Road / Main Street couplet in Year 2020 conditions for the University Villages project using the same assumptions that were used by the Villages 8 West TIA. The Village 8 West TIA's assumption of the La Media Road / Main Street couplet in Year 2020 is different than those assumed in the University Villages TIA. The La Media Road / Main Street couplet is within the Village 8 West project area, and was proposed by the project applicant as part of the Village 8 West Town Center. The Village 8 West TIA was "DRAFT" while the University Villages TIA was being prepared and not available for review. Therefore, without knowing what the Village 8 West study assumed from a network perspective in the La Media Road / Main Street area, the University Villages TIA assumed the couplet configuration based on the available information from the General Plan Circulation Element Map. This is consistent with the City's preference to assume full construction of a facility rather than partial improvements. However, this assumption was overly conservative as the University Villages project does not generate the demand for, or result in impacts which require mitigation that would be required to construct the entire couplet by the Year 2020. Therefore, the following additional analysis was conducted to determine if the couplet assumption by the Village 8 West TIA, when analyzed using the traffic volume in the University Villages TIA, would result in additional or different impacts.

The analysis for the La Media Road/Main Street area has been re-evaluated using the same geometric configuration as those shown on Exhibit 5C of the Village 8 West TIA. **Figure 1** displays the assumed intersection configuration, project trip distribution, and peak hour traffic volumes used in this analysis. It should be noted that the Village 8 West TIA assumed that the intersection of La Media Road (SB) / Main Street (WB) would be constructed as a three-way signalized intersection. However, in order to demonstrate the need for a facility (including intersection control), before it is included in the interim years roadway network, the intersection of La Media Road (SB) / Main Street (WB) was analyzed as a three-way stop controlled intersection.

FIGURE 1
LA MEDIA ROAD (SB) / MAIN STREET (WB)
INTERSECTION GEOMETRICS AND PEAK HOUR VOLUMES
YEAR 2020 CONDITION

Intersection Geometrics	Project Trip Assignment	Year 2020 Peak Hour Volumes



Source: Chen Ryan Associates, October 2014

Table 1 below provides the intersection delays and LOS for the La Media Road (SB) / Main Street (WB) intersection under the Year 2020 conditions with the University Villages projected 2020 land uses. As shown in the table, the intersection of La Media Road (SB) / Main Street (WB) would operate at unacceptable LOS F during both the AM and PM peak hours. Since the percent of entering volume at this intersection from the project is greater than 5% of the overall intersection volume (33.8% and 43.9% during the AM and PM peak, respectively), the project would have a direct impact to the intersection of La Media Road (SB) / Main Street (WB). Signalization would mitigate this traffic impact (consistent with the mitigation assumption in the University Villages TIA). Mitigated intersection result is also shown in Table 1. Intersection analysis worksheet are provided in **Attachment 1**.

INTERSECTION LEVEL OF SERVICE
LA MEDIA ROAD (SB) / MAIN STREET (WB)
YEAR 2020 CONDITIONS

Intersection	Before Mitigation				After Mitigation			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Avg. Delay (Sec.)	LOS	Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS
40. La Media Road (SB) / Main Street (WB)	61.3	F	67.3	F	28.4	C	28.8	C

Source: Chen Ryan Associates, October 2014

As shown, the intersection of La Media Road / Main Street would operate at acceptable LOS C or better under the mitigated conditions. This finding is consistent with the result shown in Chapter 7 of the University Villages TIA that Year 2020 traffic impacts at La Media Road/Main Street can be mitigated with intersection signalization. However, because the TIA used the conservative assumption that the entire couplet would be constructed by 2020, the analysis in the University Villages TIA results in four impacts (one at each intersection in the couplet) and four mitigation measures (to signalize each of the intersections). Therefore, the University Villages project would not have any additional impacts outside one of those already documented in the TIA and in fact would have three fewer impacts if analyzed under the same assumptions as the Village 8 West TIA. No additional analysis is required.

ATTACHMENT A - La Media Road / Main Street – V8W Geometrics Analysis

PEAK HOUR INTERSECTION ANALYSIS – YEAR 2020 SCENARIO

LA MEDIA ROAD / MAIN STREET

YEAR 2020 SCENARIO

Intersection	
Intersection Delay, s/veh	61.3
Intersection LOS	F

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Vol, veh/h	0	50	806	0	485	100	0	362	529
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	53	848	0	511	105	0	381	557
Number of Lanes	0	1	1	0	1	1	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	64.2	60.3	59.3
HCM LOS	F	F	F

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	0%	0%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	485	100	50	806	362	529
LT Vol	485	0	0	0	0	529
Through Vol	0	100	0	806	0	0
RT Vol	0	0	50	0	362	0
Lane Flow Rate	511	105	53	848	381	557
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	1	0.21	0.123	1	0.865	1
Departure Headway (Hd)	7.873	7.174	8.428	7.229	8.176	7.676
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	459	500	424	501	446	473
Service Time	5.625	4.926	6.217	5.019	5.912	5.413
HCM Lane V/C Ratio	1.113	0.21	0.125	1.693	0.854	1.178
HCM Control Delay	70.3	11.8	12.4	67.4	44.7	69.3
HCM Lane LOS	F	B	B	F	E	F
HCM 95th-tile Q	13.1	0.8	0.4	13.6	8.8	13.2

Intersection	
Intersection Delay, s/veh	67.3
Intersection LOS	F

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Vol, veh/h	0	50	540	0	550	60	0	568	980
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	53	568	0	579	63	0	598	1032
Number of Lanes	0	1	1	0	1	1	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	62.6	64.7	70.1
HCM LOS	F	F	F

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	0%	0%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	550	60	50	540	568	980
LT Vol	550	0	0	0	0	980
Through Vol	0	60	0	540	0	0
RT Vol	0	0	50	0	568	0
Lane Flow Rate	579	63	53	568	598	1032
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	1	0.127	0.124	1	1	1
Departure Headway (Hd)	7.965	7.266	8.455	7.256	8.177	7.678
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	457	496	425	500	448	485
Service Time	5.676	4.976	6.179	4.98	5.886	5.387
HCM Lane V/C Ratio	1.267	0.127	0.125	1.136	1.335	2.128
HCM Control Delay	70.6	11	12.4	67.2	71.6	69.2
HCM Lane LOS	F	B	B	F	F	F
HCM 95th-tile Q	13	0.4	0.4	13.6	12.8	13.3

YEAR 2020 (MITIGATED) SCENARIO

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	50	806	485	100	362	529
Number	5	12	4	14	3	8
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	53	374	511	105	381	557
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	477	425	568	483	426	1131
Arrive On Green	0.27	0.27	0.30	0.30	0.24	0.61
Sat Flow, veh/h	1774	1583	1863	1583	1774	1863
Grp Volume(v), veh/h	53	374	511	105	381	557
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1583	1774	1863
Q Serve(g_s), s	1.4	14.6	16.9	3.2	13.4	10.8
Cycle Q Clear(g_c), s	1.4	14.6	16.9	3.2	13.4	10.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	477	425	568	483	426	1131
V/C Ratio(X)	0.11	0.88	0.90	0.22	0.89	0.49
Avail Cap(c_a), veh/h	606	541	579	492	441	1158
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.7	22.5	21.4	16.7	23.7	7.1
Incr Delay (d2), s/veh	0.1	12.9	16.9	0.2	19.9	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	7.9	11.3	1.4	8.9	5.5
LnGrp Delay(d),s/veh	17.8	35.4	38.3	16.9	43.6	7.4
LnGrp LOS	B	D	D	B	D	A
Approach Vol, veh/h	427		616			938
Approach Delay, s/veh	33.2		34.7			22.1
Approach LOS	C		C			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		21.3	19.5	23.6				43.1
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		22.0	16.0	20.0				40.0
Max Q Clear Time (g_c+I1), s		16.6	15.4	18.9				12.8
Green Ext Time (p_c), s		0.7	0.1	0.7				7.4

Intersection Summary	
HCM 2010 Ctrl Delay	28.4
HCM 2010 LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	50	540	550	60	568	980
Number	7	14	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	53	200	579	63	598	1032
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	265	236	660	561	630	1409
Arrive On Green	0.15	0.15	0.35	0.35	0.35	0.76
Sat Flow, veh/h	1774	1583	1863	1583	1774	1863
Grp Volume(v), veh/h	53	200	579	63	598	1032
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1583	1774	1863
Q Serve(g_s), s	2.2	10.4	24.7	2.3	27.9	25.7
Cycle Q Clear(g_c), s	2.2	10.4	24.7	2.3	27.9	25.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	265	236	660	561	630	1409
V/C Ratio(X)	0.20	0.85	0.88	0.11	0.95	0.73
Avail Cap(c_a), veh/h	334	298	680	578	648	1448
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.7	35.2	25.7	18.4	26.7	5.6
Incr Delay (d2), s/veh	0.4	16.4	12.2	0.1	23.3	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	5.6	14.9	1.0	17.7	13.6
LnGrp Delay(d),s/veh	32.1	51.6	37.9	18.5	50.0	7.5
LnGrp LOS	C	D	D	B	D	A
Approach Vol, veh/h	253		642			1630
Approach Delay, s/veh	47.5		36.0			23.1
Approach LOS	D		D			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	34.1	34.1		16.7		68.3		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	31.0	31.0		16.0		66.0		
Max Q Clear Time (g_c+I1), s	29.9	26.7		12.4		27.7		
Green Ext Time (p_c), s	0.3	3.4		0.3		16.1		

Intersection Summary	
HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C

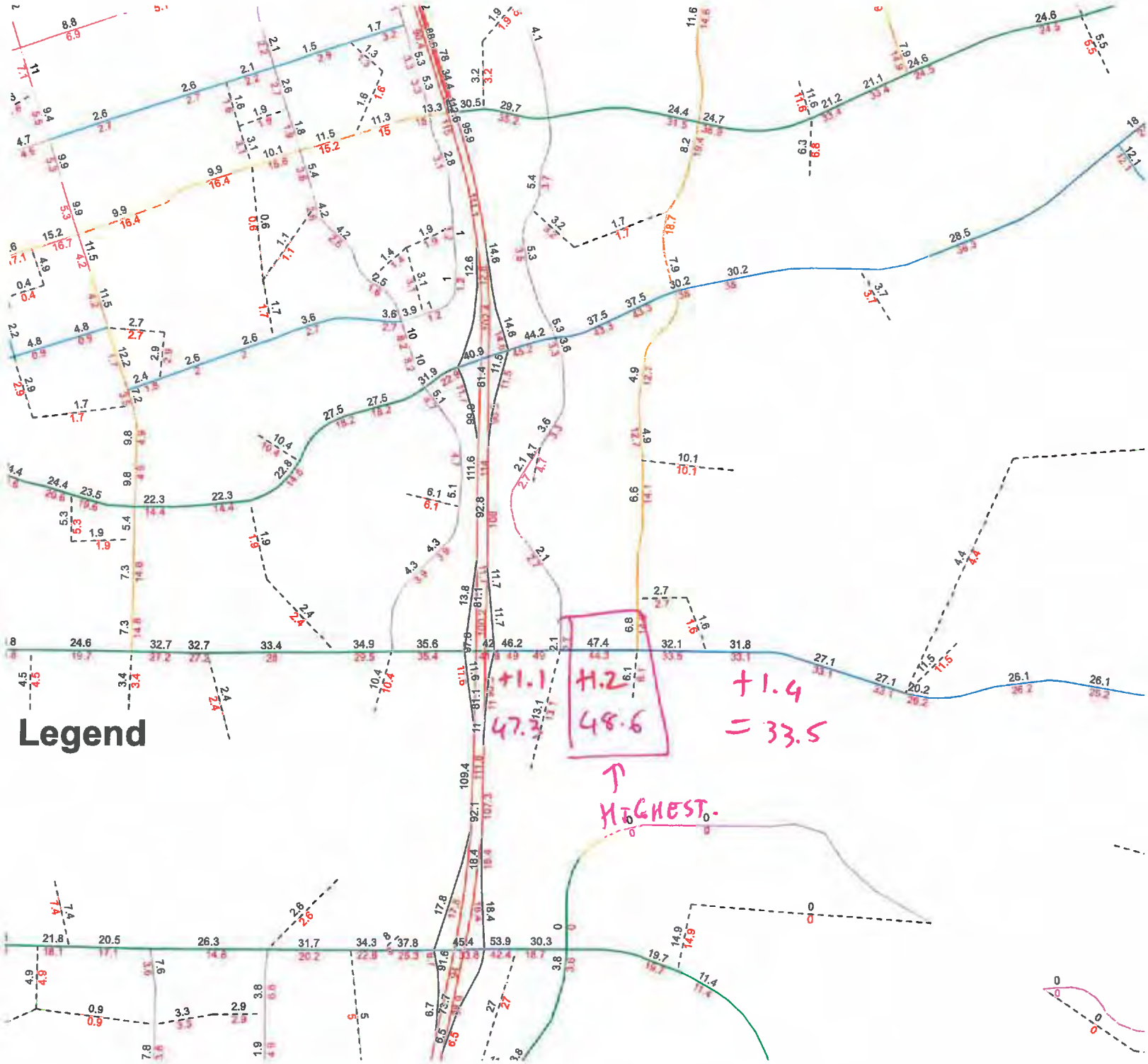
ATTACHMENT F

Year 2020 Base Plus Project Model with Manual Increase of Village 2 SPA Traffic

ATTACHMENT F

YEAR 2020 BASE PLUS PROJECT MODEL W/ MANUAL INCREASE OF VILLAGE 2 SPA TRAFFIC.

YEAR
SAN C



COMMENTS RECEIVED ON THE DRAFT EIR AND RESPONSES

The Draft EIR was circulated for public review from August 5, 2014 through September 18, 2014, in accordance with the 45-day comment period required under Section 15105(a) of the CEQA Guidelines. A total of 15 comment letters were received on the Draft EIR from agencies, organizations and individuals as shown in the list below. The Final EIR incorporates the Draft EIR, changes and additions to the Draft EIR based on comments received during the public review period, as well as minor revisions to further clarify information presented. Collectively, the revisions do not constitute significant changes in the project or environmental setting; no new significant environmental effects have been identified for the project; and the severity of identified environmental impacts would not increase.

A list of the agencies, organizations and individuals commenting on the Draft EIR is provided below:

- Comment Letter A: Bonita Valley Horsemen and Tijuana River Valley Equestrian Association
- Comment Letter B: San Diego County Archaeological Society, Inc.
- Comment Letter C: U.S. Fish and Wildlife Service and California Department of Fish and Wildlife
- Comment Letter D: Vulcan Materials Company
- Comment Letter E: Hazard Construction
- Comment Letter F: West Coast Sand and Gravel
- Comment Letter G: Coast Aggregates
- Comment Letter H: Flatiron Construction Corporation
- Comment Letter I: TC Construction Company, Inc.
- Comment Letter J: Caltrans, District 11
- Comment Letter K: Duane E. Bazzel
- Comment Letter L: County of San Diego, Planning and Development Services
- Comment Letter M: County of San Diego, Department of Environmental Health
- Comment Letter N: Allen Matkins Leck Gamble Mallory & Natsis LLP
- Comment Letter O: State of California, Governor's Office of Planning and Research (State Clearinghouse)

Copies of all letters received by the City of Chula Vista regarding the Draft EIR and the responses to comments follow.

ERRATA

After completion and circulation of the Draft EIR, several typographical errors were identified and/or clarifications to the EIR text were necessary. Minor typographical errors were corrected in the text. Clarifications are identified below. All of the corrections have been reviewed, and none of them effect the impact analysis conclusions. The clarifications are summarized below. Modified text is indicated in underline and strikeout format as follows:

~~Old Text~~ Revised Text

Specifically, these changes to the EIR are limited to the following sections:

Executive Summary – In Chapter 1.0, Executive Summary Page 1-14 has been revised to state that the Nuisance Easement Alternative would result in "fewer residential units within 1,000 feet of the active portion of the landfill" compared to the proposed project. Rather than stating that the Nuisance Easement Alternative would result in "~~no residential land uses within the 1,000-foot nuisance easement area~~." This statement has been revised to be consistent with the analysis for the Nuisance Easement Alternative.

Page 1-15 (MM LU-2), has been revised to delete the reference to delete the statement "~~and in Village Ten~~." Village Ten is not being mitigated by MM LU-2. Village Ten has its own project-specific mitigation measure and trigger, MM LU-3.

Page 1-16 (MM LU-4), has been revised to correct the parenthetical statement that General Plan Policy E 6.4, "will be" corrected. Since the Draft EIR went out for public review the City has amended General Plan Policy E 6.4; therefore "will be" has been removed from the statement "as ~~will be~~ corrected."

Pages 1-18 (MM TCA-1), 1-20 (MM TCA-3), 1-23 (MM TCA-11), and 1-28 (MM TCA-16), have all been revised to include reference to the "Growth Management Ordinance (GMO) (Chapter 19.09 of the Chula Vista Municipal Code)."

Page 1-24 (MM TCA-12), has been revised in the Final EIR to ensure that the "direct impact" in question, which results in the mitigation measure of constructing the Main Street Bridge, never actually occur because the mitigation measure pre-empts the impact.

Page 1-46 MM CUL-5, has been revised based on a comment received from the SDCAS also regarding the curation requirement. MM CUL-5 has also been simplified to remove the curation requirement that was redundant.

On Page I-55 in Table 1-3 MM BIO-16, this comment was moved from Page 1-68. In the Draft EIR MM BIO-16 was said to mitigate an impact due to conflicts with the provisions of an HCP,

NCCP, or other approved conservation plan. However, this mitigation measure reduces impacts to special-status species. Therefore, this mitigation measure has been moved under the threshold for special-species to help mitigate potentially significant impacts.

On Page 1- 57 in Table 1-3 MM BIO-17 and MM BIO-18 have been moved from Page 1-70. In the Draft EIR MM BIO-17 and MM BIO-18 were said to mitigate an impact due to inconsistency with the General Plan biological resource policies. However, as stated in Section 5.8 Biological Resources, these mitigation measures have been included in the Draft EIR to reduce impacts to special-status species. Therefore, this mitigation measure has been moved to mitigate the impact as stated in Section 5.8.

On Page 1-63 in Table 1-3 under the column titled Environmental Issues, the threshold regarding potential impacts on federally protected wetlands was not included; therefore, Page 1-63 has been revised to include the threshold in which the associated impact and mitigation measures are identified for.

On Page 1-65 in Table 1-3, the row associated with potential impacts to the movement of wildlife has been moved to Page 1-69 to improve upon the numerical flow of the mitigation measures. This threshold has also been revised to reference MM BIO-7 and MM BIO-16 through MM BIO-18. These mitigation measures were been included in the Draft EIR to reduce impacts to the movement of wildlife. Therefore, reference to the identified mitigation measures has been included.

On Page 1-71 in Table 1-3 MM HYD-6 and MM HYD-7 were said to mitigate significant impacts due to a violation of a water quality standard or waste discharge requirement. However, MM HYD-6 was included in the Draft EIR to mitigate impacts associated with erosion due to alteration of an existing drainage pattern. Therefore, this mitigation measure has been moved to the threshold in which it mitigates on Page 1-72. Additionally, MM HYD-7 was included in the Draft EIR to mitigate impacts associated with structures being placed within a 100-year flood hazard area. Therefore, this mitigation measure has been moved to the threshold in which it mitigates on Page 1-73.

On Page 1-72 in Table 1-3 under the threshold regarding project-related contribution to polluted runoff, the mitigation column has been revised to reference MM HYD-6 instead of ~~MM HYD-7~~. This was a typographical error in the Draft EIR.

On Page 1-72 in Table 1-3 under the threshold regarding the degradation of water quality, the mitigation column has been revised to reference MM HYD-6 instead of ~~MM HYD-7~~. This was a typographical error in the Draft EIR.

On Page 1-74 in Table 1-3 under the threshold regarding new or expanded stormwater drainage facilities, the mitigation column has been revised to reference MM HYD-1 and MM HYD-6 and "~~no additional mitigation required~~" has been removed.

On Page 1-91 in Table 1-3 under the threshold regarding the emission of potentially hazardous materials within one-quarter mile of a school, ~~MM HAZ-2A and MM HAZ-2B~~ have been deleted and reference to MM HAZ-1 has been added. MM HAZ-1 was been included in the Draft EIR to mitigate potential impacts due to emission of potentially hazardous materials. Therefore, this threshold has been revised to reference the correct mitigation measure (MM HAZ-1).

On Page 1-90 in Table 1-3 under the threshold regarding potentially hazardous materials on site, the column "Result of Impact Analysis" has been revised. The Draft EIR stated that a less than significant impact would occur because carcinogenic risks due to proximity to the landfill were below the SDAPCD threshold for sensitive receptors. However, as stated in Section 5.15 Hazardous Materials and Risk of Upset, this threshold was found to be potentially significant due to the potential presence of munitions and explosives of concern on the FUDS site in Village Ten. Therefore, this column has been revised to reference the correct impact analysis result.

Also under the threshold regarding potentially hazardous materials on site, the mitigation column has been revised to include MM HAZ-2A and MM HAZ-2B, which were deleted from Page 1-90. As stated in the Draft EIR in Section 5.15 Hazardous Materials, these mitigation measures have been included to reduce potential impacts due to the potential presence of munitions and explosives of concern on the FUDS site in Village Ten. Therefore, these MM HAZ-2A and MM HAZ-2B have been included under the correct threshold.

Page 1-91 (MM HAZ-2B) has been revised to reflect "trail improvement plans" for the OVRP/Greenbelt trail rather than "~~a grading permit,~~" and "or grading plans for" water quality basins has also been added.

Page 1-102 in Table 1-4, Summary of Cumulative Impacts, under the environmental issue regarding sewer, the "Result of Impact Analysis" column has been revised. The Draft EIR stated that the proposed project would result in a cumulatively significant impact. However, as stated in Section 6.0 Cumulative Impacts, the proposed project would not result in cumulative impacts. Therefore, the cumulative impact summary has been revised to reflect the analysis and significance determination found in Section 6.0.

On Page 1-105 in Table 1-5, Alternatives Impact Summary, the row which summarizes an alternative's ability to meet the project objectives under the Nuisance Easement Alternative has been revised. In the Draft EIR this table stated that the Nuisance Easement Alternative only partially met the project alternatives. However, as stated in Section 10.0 Alternatives, this

alternative would meet all the project objectives. Therefore, this column has been revised to reflect the conclusions in the Alternatives Section.

Project Description – The footnote on Page 4-55 has been revised to clarify that the off-site improvements, which are not identified in the list, are in fact included in the analysis in the EIR. This revision was made based on a comment received during public review of the Draft EIR (Comment N-11).

Land Use – In Section 5.1, Land Use Pages 5.1-33, 5.1-39, 5.1-48, and 5.1-55, have been revised to correct the parenthetical statement that General Plan Policy E 6.4, "will be" corrected. Since the Draft EIR went out for public review the City has amended General Plan Policy E 6.4; therefore "will be" has been removed from the statement "as ~~will be~~ corrected."

Landform Alteration /Aesthetics – Page 5.2-91 (MM AES-4) has been revised to state that a shadow analysis must be performed prior to design review approval for any structure ~~four~~ three stories and above. This revision was made based on a comment received during public review of the Draft EIR (Comment N-15).

Traffic –Page 5.3-8 has been revised to include the equation that was used to calculate the demand per hour per lane for the ramp meter analyses.

Table 5.3-13 on Page 5.3-28 has been revised to include a column for Peak hour Volume.

Page 5.3-46 has been revised to reflect "(LOS ~~E~~ D)" for the roadway segment on Heritage Road between Main Street and Avenida De Las Vistas. This was a typographical error in the Final EIR.

On Page 5.3-53 under the Ramp Intersection Capacity Analysis subheading, I-805 SB Ramps / Main Street intersection has been added to the list of intersections that would operate at over capacity as identified in Table 5.3-20. This was a typographical error in the Draft EIR.

Table 5.3-21 on Page 5.3-58 has been revised to include a column for Peak Hour Volume.

Page 5.3-59 has been revised to include the six missing freeway / State highway segments. This was a typographical error in the Draft EIR.

Page 5.3-61 was revised to include "(Assumed Build by Year 2015)" to clarify when the roadway improvements to be constructed by others would be built.

Table 5.3-26 on Page 5.3-77 has been revised to include two new columns for Peak Hour Volume under both the With Project and Without Project scenarios. Also, the Demand Volume numbers under the Without Project scenario have been revised.

Page 5.3-79 was revised to include "(Assumed Build by Year 2020)" to clarify when the roadway improvements to be constructed by others would be built.

Page 5.3-80 has been revised to reflect "(LOS ~~E~~ F)" for the intersection on Heritage Road / Main Street. This was a typographical error in the Final EIR.

Page 5.3-89 has been revised to identify over capacity conditions during the AM peak hour for both the I-805 SB Ramps / Olympic Parkway and I-805 SB Ramps / Main Street intersections. The intersection I-805 NB Ramps / Main Street has also been included as having over capacity impacts during the PM peak hour.

Table 5.3-31 on Page 5.3-97 has been revised to include two new columns for Peak Hour Volume under both the With Project and Without Project scenarios. Also, the Demand Volume numbers under the Without Project scenario have been revised.

Page 5.3-101 under the intersection for La Media Road / Olympic Parkway, the identified impact during PM peak hours has been deleted.

Page 5.3-109 under the subheading for Ramp Intersection Capacity Analysis has been revised to include "I-805 NB Ramps / Olympic Parkway – Over capacity during the AM and PM peak hour."

Table 5.3-36 on Page 5.3-114 has been revised to include two new columns for Peak Hour Volume under both the With Project and Without Project scenarios. Also, the Demand Volume numbers under the Without Project scenario have been revised.

Page 5.3-115 has been revised to include "Heritage Road / Energy Way (Int#64) – Signalized intersection" as an improvement to be constructed by others.

Page 5.3-115 has been revised to include "(Assumed Build by Year 2030)" to clarify when the roadway improvements to be constructed by others would be built.

"~~Heritage Road / Energy Way (Int #64)~~" on Page 5.3-116 has been removed as a roadway improvement to be constructed by others.

AM and PM Peak Hour Average Delay and LOS columns in Table 5.3-37 have been revised for the intersections at SR-125 SB Ramps / Main Street and SR-125 NB Ramps / Main Street. This was a typographical error.

Page 5.3-132 under the subheading for Ramp Intersection Capacity Analysis, an impact during "AM peak hour" was identified for the intersection I-805 SB Ramps / Main Street.

Table 5.3-42 on Page 5.3-137 has been revised to include two new columns for Peak Hour Volume under both the With Project and Without Project scenarios. Also, the Demand Volume numbers, Excess Demand Volume numbers, Delay time, and Queue time have been revised under the Without Project scenario.

Pages 5.3-162 (MM TCA-1), 5.3-164 (MM TCA-3), 5.3-168 (MM TCA-11), and 5.3-177 (MM TCA-16), have all been revised to include reference to the "Growth Management Ordinance (GMO) (Chapter 19.09 of the Chula Vista Municipal Code)."

MM TCA-12 on Page 5.3-166 in the Draft EIR has been revised in the Final EIR to ensure that the "direct impact" in question, which results in the mitigation measure of constructing the Main Street Bridge, never actually occur because the mitigation measure pre-empts the impact. The EDU threshold up through which the project is required to pay TDIF prior to needing the Main Street Bridge crossing is 4,737 EDU. The mitigation measure has been revised to state that no additional building permits will be issued past the 4,736th EDU unless the City has constructed the improvement. In addition, the caveat language has been added providing for (1) the developer can construct the improvement (Main Street crossing Wolf Canyon), (2) the developer can construct alternative improvements which reduce the need for the crossing, and (3) the developer can perform a traffic study to demonstrate the improvement is not needed and push out the trigger further.

MM TCA-14 on Page 5.3-174 has been revised to state that Caltrans "can and should" work with the Project Applicant to adjust the ramp meter as necessary.

MM TCA-16 on Page 5.3-179 in the Draft EIR has been revised in the Final EIR to delete "~~Heritage Road / Energy Way (Int #64) is included as a signalized intersection~~" under the 2030 scenario of assumed roadway and intersection improvements.

Table 5.3-49 on Page 5.3-182 under the column "Impacted Facilities" for La Media Road (SB) / Main Street (WB), "~~all-way stop controlled~~" has been removed.

Table 5.3-49 on Page 5.3-183 under the column "Impacted Facilities" for Heritage Road / Avenida De Las Vistas (SD), "~~all-way stop controlled~~" has been removed.

Table 5.3-49 on Page 5.3-187 under the column "Impacted Facilities" for I-805 NB On-Ramp @ Main Street, "Cumulative Impact: Adjust meter rate" has been moved from under the Year 2030 Plus Project to the Year 2020 Plus Project.

Table 5.3-56 on Page 5.3-198 has been revised to include a row for the Community Park Driveway that is assumed to be built in Year 2025.

Air Quality – In Section 5.4, Air Quality Page 5.4-21 and Page 5.4-22, have been revised to correct the parenthetical statement that General Plan Policy E 6.4, "will be" corrected. Since the Draft EIR went out for public review the City has amended General Plan Policy E 6.4; therefore "will be" has been removed from the statement "as ~~will be~~ corrected."

Cultural Resources – Page 5.6-22 MM CUL-5, has been revised based on a comment received from the SDCAS also regarding the curation requirement. MM CUL-5 has been simplified to remove the curation requirement that was redundant and now references curation requirements that will be required after an artifact has been displayed for public interpretation.

Biological Resources – Pages 5.8-105, 5.8-112, 5.8-113, and 5.8-116 have been revised to state, Salt Creek "Sewer Easement" rather than Salt Creek "~~Interceptor Road~~."

Pages 5.8-67, 5.8-100, 5.8-106, 5.8-119, 5.8-130, and 5.8-134 have been revised to state "Otay Ranch Preserve" rather than "~~Salt Creek~~ Preserve."

Hazards and Risk of Upset - Page 5.15-48 (MM HAZ-2B) has been revised to reflect "trail improvement plans" for the OVRP/Greenbelt trail rather than "~~a grading permit,~~" and "or grading plans for" water quality basins has also been added.

Significant and Unavoidable – Section 8.0 has been revised to include significant and unavoidable cumulative impacts to cultural resources, specifically archaeological resources. This section has also been revised to include "and cumulative" impacts to agricultural resources and "direct" impacts to global climate change. These revisions were based on the conclusions found in the Draft EIR.

Alternatives – Pages 10-47 and 10-52 have been revised to state that the Nuisance Easement Alternative would result in "fewer residential units within 1,000 feet of the active portion of the landfill" compared to the proposed project. Rather than stating that the Nuisance Easement Alternative would result in "~~no residential land uses within the 1,000-foot nuisance easement area~~." This statement has been revised to be consistent with the analysis for the Nuisance Easement Alternative.

Appendix B – Appendix B has been revised to include additional information on the Otay Ranch GDP Goal regarding aimed to diversify the economic base within Otay Ranch. Additionally, industrial and business park objectives have been included along with a comparison analysis.

Appendix M – Appendix M, Traffic Impact Analysis, has been revised based on comments received during public review of the Draft EIR. See revised Appendix M in this Final EIR.

Appendix N – The Overview of Water Service Report has been revised to reflect the land use acreages identified in the Draft EIR. The total water supply identified in the WSAV in the Draft

EIR was 2,137,232 gpd and with the revisions to the Water Service Report, the total is only 2,125,638 gpd, which is 11,594 gdp less than the WSAV.

Appendix O – The Overview of Sewer Service Report has been revised to reflect the land use acreages identified in the Draft EIR.

INTENTIONALLY LEFT BLANK

Comment Letter A

Marni Borg

From: Mark Kukuchek <mochek@cox.net>
Sent: Tuesday, September 02, 2014 6:18 PM
To: Marni Borg
Cc: 'Diane Carter'; victoriakrauss1216@yahoo.com; 'Mark Kukuchek'
Subject: EIR 13-01;SCH 2013071077

To: Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA. 91910

Reference: EIR 13-01;SCH 2013071077

As active members of the equestrian community and the presidents of our two local horse organizations we wish to make the following joint comments regarding the Otay Ranch University Villages SPA Plan Draft EIR. The Otay Valley Regional Park Concept Plan holds that all trails in the Western OVRP area must be multiuse including Equestrian use. There is currently an Equestrian Staging Area at Mace Street in Chula Vista and the long range plan would be that the OVRP Staging area at Otay Lakes County Park when constructed would include equestrian facilities. The long range vision for the OVRP trails would be that there would be parallel trails on both sides of the Otay River, east from Heritage Road to the Otay Lakes County Park. As stated previously, both of these trails must be multiuse (including equestrian use). While the EIR does not address the entire Eastern OVRP area and appears to acknowledge that the OVRP/Greenbelt Trail will be multiuse trails (including equestrian use) we are requesting confirmation to that fact. A-1

Additionally, a new bridge is planned where Heritage Road crosses the Otay River. The OVRP Concept Plan shows that the parallel river trails will pass under the bridge to keep trail users from having to cross the road at grade level and deal with vehicular traffic. The under bridge trails will need to be hardened to not erode during flood events and have enough clearance for mounted equestrians to pass underneath while riding (12 feet or more). A-2

Thank you for the opportunity to comment and if you need any further information you can contact the undersigned or one of our members, Mark Kukuchek, who is also a member of the OVRP Citizen Advisory Committee. A-3

Diane Carter
President of the Bonita Valley Horsemen

Victoria Krauss
President of the Tijuana River Valley Equestrian Association

INTENTIONALLY LEFT BLANK

Response to Comment Letter A

Bonita Valley Horsemen and Tijuana River Valley Equestrian Association Diane Carter, President of the Bonita Valley Horsemen and Victoria Krauss, President of the Tijuana River Valley Equestrian Association September 2, 2014

A-1 As stated in Section 5.8, Biological Resources, on Page 5.8-102, Village 3 North and a Portion of Village 4 SPA – Pages II-3, III-55, III-59, V-77 and V-92; Village 3 North and a Portion of Village 4 Village Design Plan – Page 66; Village 8 East SPA – Page I-5, III-62, III-69, V-87, V-103, IX-164; Village 8 East Village Design Plan – Page 50; Village 10 SPA – Pages I-5, III-59, V-83, V-97, IX-157; and Village 10 Village Design Plan – Page 50, all Greenbelt Trail segments will be multi-use trials which provide a variety of uses including, hiking, biking, and equestrian use.

A-2 This comment is not applicable to the proposed University Villages project. Improvements to Heritage Road south of Main Street, including the Heritage Road bridge, is included in the Chula Vista adopted FY 2012-13 through FY 2016-17 Capital Improvement Program (CIP) (STM364-Heritage Road Bridge Replacement) and therefore is a separate project. No further response is required.

A-3 No response to this comment is required.

INTENTIONALLY LEFT BLANK

Comment Letter B

San Diego County Archaeological Society, Inc.

Environmental Review Committee

11 September 2014

To: Ms. Marni Borg
Development Services Department
City of Chula Vista
276 Fourth Avenue
Chula Vista, California 91910

Subject: Draft Environmental Impact Report
University Villages Sectional Planning Area Plan and Tentative Map
EIR 13-01

Dear Ms. Borg:

I have reviewed the cultural resources aspects of the subject DEIR on behalf of this committee of the San Diego County Archaeological Society.

Based on the information contained in the DEIR and its Appendix F1, we have the following comments:

1. Along with the archaeological monitor, it is normal practice to include a Native American monitor. Mitigation Measure MM CUL-1 should be revised accordingly. B-1
2. Mitigation Measures MM CUL- both refer to curation of "significant artifacts" at a facility approved by the City. All prehistoric material other than human remains and associated burial material should be curated. Historic material is typically curated other than, for example, bulk construction material, of which a sample is curated. The decision on what to keep and what to discard should be made in consultation with the curation facility, as some historical material may be common at a particular site but uncommon elsewhere. B-2
3. Mitigation Measure MM CUL-5 says some recovered cultural material could go into a "temporary" exhibit. We suggest MM CUL-5 should specify that the exhibited material should be processed as a loan in accordance with the curation facility's procedures. This will avoid losing the connection between the exhibited material and the rest of the collection. B-3

Other than the above, we concur with the impact analysis and mitigation measures as defined in the DEIR.

Sincerely,

James W. Royle, Jr., Chairperson
Environmental Review Committee

P.O. Box 81106 San Diego, CA 92138-1106 (858) 538-0935

cc: Brian F. Smith & Associates
SDCAS President
File

Response to Comment Letter B

San Diego County Archaeological Society, Inc.
James W. Royle, Jr., Chairperson
September 11, 2014

B-1 The City of Chula Vista does not have a policy in place to have Native American monitors on a project site concurrent with the archaeological monitors. Additionally, Section 15064.5(f) of the CEQA Guidelines does not require or specifically recommend Native American monitoring for potential inadvertent discoveries of cultural resources. In accordance with CEQA, the City of Chula Vista has detailed mitigation measures to address the potential for significant archaeological resource impacts. Please see Mitigation Measures CUL-1, CUL-2 and CUL-3 in Section5.6, Cultural Resources, of the Draft EIR. As detailed in measure CUL-1, all ground disturbing activities in areas of undisturbed soil would be monitored by an archaeological monitor. Mitigation measures CUL-2 and CUL-3 as well as Cultural Resources Study for the University Villages Project at Otay Ranch (Appendix F) provide specific provisions for the identification and evaluation of any accidentally discovered resources.

B-2 As stated in Section 8, Mitigation Program of Appendix F in the Draft EIR, all artifacts recovered from the University Villages site shall be curated, including artifacts found during the testing phase. No further response is required.

B-3 MM CUL-5 has been revised to clarify that artifacts will be selected from the curated collections and temporarily loaned back to the project for a display per the curation facilities' procedures (see EIR Page 5.6-22). No new impacts would occur as a result of these modifications and no further revisions are necessary.

INTENTIONALLY LEFT BLANK

Comment Letter C

U.S. Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008
760-431-9440
FAX 760-431-9624

California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, California 92123
858-467-4201
FAX 858-467-4299

In Reply Refer To:
FWS/CDFW-SD-11B0147-14CPA0506

SEP 17 2014

Ms. Mami Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, California 91910

Subject: Draft Environmental Impact Report for the Otay Ranch University Villages Project (Villages 3, 8 East, and 10; SCH # 2013071077), City of Chula Vista, California.

Dear Ms. Borg:

This letter provides the U.S. Fish and Wildlife Service (Service) and California Department of Fish and Wildlife (Department) (collectively, the Wildlife Agencies) comments on the August 5, 2014, draft Environmental Impact Report (EIR) for the Otay Ranch University Villages Project (Villages 3, 8 East, and 10). The proposed project involves implementation of three Sectional Planning Area plans (Otay Ranch Village 3 North and a portion of Village 4, Otay Ranch Village 8 East, and Otay Ranch Village 10) for residential and commercial development on approximately 751 acres of land within Otay Ranch, located at the southern edge of the City of Chula Vista (City). As part of this response, the Wildlife Agencies are including general comments to assist the City in fulfilling the conservation obligations described in its Multiple Species Conservation Program (MSCP) Subarea Plan (SAP).

The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and threatened and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Federal Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*), including habitat conservation plans (HCP) developed under section 10(a)(1)(B) of the Act. The Department is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act (CEQA; §§ 15386 and 15381, respectively) and is responsible for ensuring appropriate conservation of the State's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act (Fish and Game Code § 2050 *et seq.*) and other sections of the Fish and Game Code. The Department also administers the Natural Community Conservation Planning (NCCP) program.

C-1

On January 11, 2005, the Service issued a section 10(a)(1)(B) permit pursuant to the Act for the City of Chula Vista MSCP SAP. The Department also issued Natural Community Conservation Plan Approval and Take Authorization per Section 2800 *et seq.*, of the California Fish and Game Code. The MSCP is a comprehensive, long-term habitat conservation planning program that

C-2

addresses the needs of multiple species and the preservation of natural vegetation communities within the southwestern subregion of San Diego County. The MSCP also addresses the loss of covered species and their habitats due to the direct, indirect, and cumulative impacts associated with land development. The City's MSCP SAP and its associated Implementing Agreement and permits are the means by which the City of Chula Vista has obligated to assemble the MSCP Preserve and to mitigate for impacts to covered species and their habitats.

C-2 Cont.

The Wildlife Agencies appreciate the efforts that have been made to comply with the City's SAP and offer the following comments and recommendations to ensure consistency with the SAP's conservation goals.

MSCP and Otay Ranch Specific Plan Implementation

Because the proposed project is one of the last large remaining village projects in the Otay Ranch Specific Plan within the City limits, we recommend the City assess its progress toward completing its conservation obligations associated with the MSCP Subarea Plan. Prior to approval of the proposed project, the Wildlife Agencies request a meeting with the City to assess progress towards fulfilling the conservation obligations associated with the Otay Ranch Specific Plan, and more generally, the City's MSCP SAP. For example, the original 1.188 conservation ratio in the Otay Ranch Specific Plan was sufficient to build out the Otay Ranch component of the MSCP Preserve; however, boundary adjustments and non-MSCP conservation purchases (e.g., Federal and State land acquisition) may have changed the conservation ratio necessary to build out the Preserve. In addition, development of portions of Otay Ranch, including parts of the currently proposed project, reflect implementation of the Baldwin Agreement that is included in the County of San Diego's MSCP SAP, and we recommend an assessment of consistency with that agreement. We recommend a meeting to evaluate the City's progress toward meeting its conservation obligations and to determine the appropriate steps remaining to fulfill these obligations.

C-3

Pages 5.8-107 of the draft EIR discusses Planned and Future Facilities associated with the proposed project and states that "Planned Facilities are identified in Table 6-1 of the MSCP Subarea Plan and no mitigation is required for these facilities;" however, certain Planned Facilities do require mitigation in the form of payment into the Preserve Management Endowment Fund (PMEF; SAP pages 8-10). The PMEF is intended to provide perpetual annual funding for enhanced management activities within the North City and Otay Ranch Preserve Management Areas as well as fund the Quino Checkerspot Butterfly (QCB) Habitat Enhancement Program. The facilities that are required to pay into the PMEF include the Salt Creek Sewer, Wolf Canyon Sewer, Main Street, and La Media Road. Based on information presented in the draft EIR, it appears that the proposed project will be using the same alignments or constructing portions of some of these Planned Facilities. We understand that some of these projects will not be constructed as originally envisioned; however, the obligation to establish and fully fund the PMEF remains. We recommend that the City evaluate the proposed project's potential obligation to pay into the PMEF and include a discussion in the final EIR.

C-4

Ms. Marni Borg (FWS/CDFW-SD-11B0147-14CPA0306) 3

Preserve Boundary Line Adjustment and Future Facilities Policy

Wildlife Agency approval is required for proposed boundary line adjustments to the MSCP Preserve (section 5.4.2 of the City's SAP) and when facilities larger than 2 acres are proposed within the MSCP Preserve (section 6.3.3.2 of the City's SAP).

As described in the Biological Technical Report (Appendix E in the draft EIR), the proposed project includes a boundary line adjustment to the MSCP Preserve that will result in a 50.7 acre addition of preserved land between Salt Creek and Lower Otay Lake, a 42.2 acre reduction of preserved land west of Salt Creek, and a 0.8 acre reduction of preserved land along Wolf Canyon. In total, the proposed boundary adjustment would add 7.7 acres to the MSCP Preserve including1.6 acres of maritime succulent scrub. Although there will be a net loss of 3.8 acres of intact coastal sage scrub, 8.8 acres of disturbed but functional coastal sage scrub will be added to the preserve. The addition of habitat between Salt Creek and Lower Otay Lake improves the preserve configuration by maintaining access to the lake and reducing edge effects. Based on this information, we agree that the proposed boundary adjustment meets the biological equivalency requirement of the City's MSCP Subarea Plan and concur with the proposed boundary line adjustment. C-5

The proposed detention basins associated with Village 10 will permanently impact 4 acres within the MSCP Preserve. As described in the Biological Technical Report, siting of these detention basins is consistent with the Future Facilities policy in that the basins will be placed in the least environmentally sensitive areas possible and total impacts have been reduced as much as possible. Furthermore, the basins will be designed to accommodate multiple development areas including the University Site, thereby reducing the need for this type of facility and associated impacts from upcoming projects.

Page 177 of the Biological Technical Report states "Construction of the basins and the associated outfall will not preclude wildlife from using the area since there is no barrier to movement by wildlife" and "The area will be revegetated with native upland herbaceous species so as to not preclude movement of wildlife through the area and also to provide foraging opportunities." These measures indicate that the basin areas will be revegatated and left open such that wildlife movement will not be impeded. C-6

Because the proposed basins are located in the least biologically sensitive area, will limit future needs for such facilities within the Preserve, and the basins will not impede wildlife movement, the Wildlife Agencies concur with the City's determination that the proposed Future Facilities are consistent with the City's MSCP SAP despite the exceedance of the 2 acre requirement. Our concurrence is contingent on the City requiring the revegetation of the basins and temporary impact areas, and ensuring that no additional project features (e.g., fencing of the basins) are constructed that would impede wildlife movement as conditions of approval for the project. The Wildlife Agencies appreciate the measures proposed to retain biological function in this area of the Preserve.

Project Specific Comments

1. Pages 5.8-9 of the draft EIR and page 77 of the Biological Technical Report state that burrowing owl (*Athene cunicularia*) habitat is present within the project site, but no owls were detected during focused surveys. We recommend early coordination with the City, applicant, and the Wildlife Agencies if burrowing owls are identified during subsequent surveys on the project site in order to develop an appropriate relocation strategy that maximizes the effectiveness of the relocation effort and avoids significant project delays. We also recommend a qualified biologist be on site on the day of initial ground disturbance to assess burrowing owl occupancy and initiate the appropriate response, if necessary. C-7

2. The Wildlife Agencies request the opportunity to review drafts of the Maritime Succulent Scrub Restoration Plan, Resource Salvage Plan, Revegetation Plan, Preserve Edge Plan, and the Area-Specific Management Directives associated with the proposed project. C-8

3. Page 161 of the Biological Technical Report includes a conceptual site plan for the Village 8 East Community Park and a brief analysis of potential direct and indirect impacts associated with the park. Given the sensitivity of the habitat to the north and south of the proposed community park, it is important that the proposed active recreation activities limit impacts to adjacent habitat. The Wildlife Agencies recommend an expanded analysis that includes a discussion of potential impacts to the Preserve associated with potential increased human access to the habitat adjacent to the park. We also recommend a more thorough analysis of potential indirect impacts (e.g., lighting and noise) to the Preserve before the site plan is finalized. Should this analysis identify additional impacts, appropriate avoidance, and minimization measures should be identified and included as part of the project. C-9

We appreciate the opportunity to comment on the subject draft EIR. To schedule a meeting, please contact Kyle Dutro of the Department at 858-467-4267/ kyle.dutro@wildlife.ca.gov; or Eric Porter of the Service at 760-431-9440/ eric_porter@fws.gov.

Sincerely,

for Karen A. Goebel
Assistant Field Supervisor
U.S. Fish and Wildlife Service

for, Gail K. Sevrens
Environmental Program Manager
California Department of Fish and Wildlife

ec:
Glen Laube, City of Chula Vista, Chula Vista, CA

Response to Comment Letter C

U.S. Fish and Wildlife Service and California Department of Fish and Wildlife
Karen A. Goebel, Assistant Field Supervisor
September 17, 2014

C-1 This comment does not address the adequacy of the environmental analysis in the EIR. No response is required.

C-2 This comment does not address the adequacy of the environmental analysis in the EIR. No response is required.

C-3 Chula Vista MSCP Staff met with Wildlife Agency Staff on October 7, 2014. The City provided the Agencies with a brief overview of the Otay Ranch RMP conveyance program which is triggered during the City's processing of a final map. City staff summarized the final map development acreages processed to date, the corresponding RMP conveyance obligations (i.e., 1.188 acres per 1 acre of development [minus RMP defined common use areas]), and the actual acreages conveyed to date. In addition, the City provided a forecast of remaining development areas, estimated conveyance obligations, and currently available preserve acreages within the Otay Ranch Preserve. Based on the information presented by the City, the Wildlife Agencies acknowledged that the City is currently achieving its conservation goal for Otay Ranch. As this comment is not directly related to the proposed project, revisions to the EIR are not necessary.

With regards to providing a consistency analysis with the County's MSCP Subarea Plan and Baldwin Agreement/Letter, the proposed project is located entirely within the City's jurisdictional boundaries and therefore subject to compliance with the City's MSCP Subarea Plan and associated conditions for coverage for Otay Ranch. The conditions for coverage for Otay Ranch are described in Section 7.6 of the City's MSCP Subarea Plan and include implementation of, and compliance with, the Otay Ranch RMP. Sections 5.1 (Land Use) and 5.8 (Biological Resources) address the project's consistency with the Chula Vista MSCP Subarea Plan, Otay Ranch RMP.

As noted in the Wildlife Agenesis comment, portions of Otay Ranch will be developed in the unincorporated County of San Diego. Otay Ranch development within the unincorporated County of San Diego is subject to the County of San Diego's MSCP Subarea Plan. Similar to the Chula Vista MSCP Subarea Plan, Otay Ranch development within the County of San Diego is also subject to implementation of, and compliance with, the Otay Ranch RMP. To that end, a consistency analysis of the County's MSCP Subarea Plan would not change the

findings of this EIR as both the City and County Subarea Plans rely on implementation of the same Otay Ranch RMP. As noted above, the Project's compliance with the Otay Ranch RMP is provided in Section 5.8 of the EIR. Implementation of the Otay Ranch RMP is assured through mitigation measures MM BIO-1 through MM BIO-18. For the reasons stated above, revisions to the EIR are not necessary as a result of this comment.

The Wildlife Agencies make reference to the Baldwin Agreement, which is an appendage to the County's MSCP Subarea Plan. Unlike the County's MSCP Subarea Plan, the Baldwin Agreement is not appended or incorporated by reference to the City's MSCP Subarea Plan or Implementing Agreement. However, for areas under its land use authority, the City has upheld the spirit and intent of the Baldwin Agreement through previously approved Otay Ranch General Development Plan Amendments dating back to 1998. Subsequent projects within Otay Ranch, including the proposed project, have all demonstrated consistency with the Otay Ranch GDP as amended from time to time. This comment does not address the accuracy or adequacy of the EIR and no further response is required.

C-4 Pursuant to the funding obligations specified in the City's MSCP Subarea Plan and Implementing Agreement, the City is committed to creating the PMEF, a non-wasting endowment program to fund enhanced management activities within the North City and Otay Ranch Preserve Management Areas (PMA). The PMEF will be established by the City through funding contributions associated with following capital improvement program (CIP) projects: Salt Creek Sewer; Wolf Canyon Sewer; Main Street, and La Media Road. Contributions into the PMEF will be made upon commencement of each respective CIP project. Therefore, as the obligation to create and/or contribute to the PMEF is not the responsibility of individual development projects including the proposed project, changes to the EIR are not necessary. However, the City has and will continue to provide the Wildlife Agencies a status of the PMEF though its annual MSCP reporting process. This comment does not address the accuracy or adequacy of the EIR and no further response is required.

C-5 This comment states that the Wildlife Agencies concur with the proposed boundary adjustment. No further response is required.

C-6 This comment states the Wildlife Agencies concur with the City's determination that the proposed Future Facilities are consistent with the City's MSCP SAP. As noted in the Wildlife Agencies comment, their concurrence is contingent on the City requiring revegetation of the basins and temporary construction areas and that no additional project features are constructed that could impede wildlife movement.

The following Tentative Map condition has been prepared and added as a condition of approval in order to ensure that the final design of the detention basins will retain the existing pre-development biological function of the area, to the maximum extent practicable:

"Prior to the issuance of land development permits, including clearing or grubbing and grading and/or construction permits for the water quality/detention basins located in the Preserve area south of the Village 10 SPA Plan development area, the Applicant shall prepare and submit a landscape plan and access control plan (e.g., fencing and signage) to ensure that the proposed facilities have been designed to retain the existing pre-development biological function of the area, to the maximum extent practicable. The existing pre-development condition provides foraging opportunities for raptors and an unimpeded wildlife corridor connecting Otay River Valley to Salt Creek Canyon. The landscape plan shall include native plant species complement the surrounding Preserve areas and incorporate a program for routine maintenance of the basins following construction. The maintenance program shall describe, at a minimum, the entity responsible for controlling invasive species, the maintenance activities and methods required to control invasive species, and a maintenance/monitoring schedule. This condition shall be to the satisfaction of the Otay Ranch Preserve Steward/Biologist (or designated Chula Vista POM joint staff representative) and the Development Services Director (or their designee)."

C-7 As identified in MM BIO-15 in Section 5.8.8 of the Draft EIR, prior to issuance of any land development permits (including clearing, grubbing, and grading permits), the Project Applicant shall retain a City-approved biologist to conduct focused pre-construction surveys for burrowing owls. The surveys shall be performed no earlier than 30 days prior to the commencement of any clearing, grubbing, or grading activities. The City will coordinate with the Wildlife Agencies as necessary following the results of the pre-construction surveys described in MM BIO-15.

If occupied burrows are detected, the City-approved biologist shall prepare a passive relocation mitigation plan subject to the review and approval by the Wildlife agencies and City, including any subsequent burrowing owl relocation plans to avoid impacts from construction-related activities. Therefore, coordination with the Wildlife Agencies has already been incorporated into mitigation for the proposed project and will be included in the MMRP for the proposed project. No revisions to the Draft EIR are necessary as a result of this comment.

C-8 The Maritime Succulent Scrub Restoration Plan, Resource Salvage Plan, Revegetation Plan, Preserve Edge Plan, and the Area-Specific Management Directives are required as mitigation for the proposed project in Section 5.8.8 of the

Draft EIR, Biological Resources. These plans are required in MM BIO-1 (Area Specific Management Directives), MM BIO-2 (Maritime Succulent Scrub Restoration Plan), MM BIO-3 (Revegetation Plan), MM BIO-12 (Resource Salvage Plan), and MM BIO-16 (Preserve Edge Plans). The City will coordinate with the Wildlife Agencies to provide the above plans associated with the proposed project at the time of preparation. The Preserve Edge Plans are included in the Village Three and Portion of Village Four SPA Plan, Village Eight East SPA Plan, and Village Ten SPA Plan and have been made available for review. No revision to the Draft EIR is necessary as a result of this comment.

C-9 As discussed in Draft EIR Section 5.8 Page 5.8-58, recreational uses are a minimum of 100 feet from the Preserve boundary. The Preserve Edge Plans prepared for Village Eight East describe avoidance of indirect effects that could occur along the Preserve/development interface. As stated on Page 28 of the Preserve Edge Plan, pursuant to the requirements of the MSCP Subarea Plan and RMP, the land plan has been designed to provide access to the preserve areas at designated locations, directing pedestrians to developed public trails within the Otay River Valley via designated public trails and roadways. The SPA Plan and Village Design Plan provide Wall and Fence Plans for Village Eight East. View fencing/walls along the Preserve Edge will be provided outside the Preserve, within the Brush Management Zone/100' Preserve Edge.

Additionally, as stated in the Preserve Edge Plan, the Village Eight East Design Plan includes criteria for the design of lighting for the village. Improvement plans for areas within the 100' Preserve Edge will include shielded lighting designs that avoid spillover light in the Preserve. Street lighting along the southern edge of Village 8 East and the Community Park Entry Drive will be located the greatest distance possible away from the Preserve, while meeting public safety lighting requirements. The Community Park Concept Plan incorporates active recreation uses such as lighted baseball fields, soccer fields, tennis courts, parking areas and security lighting on restroom and maintenance buildings in more centralized portions of the park (i.e. further from the Preserve).

MM BIO-17 requires a lighting study to also be conducted for the Community Park (P-2) in Village Eight East. As stated in the Preserve Edge Plan, Lighting Plans and accompanying photometric analyses must be prepared in conjunction with street improvement plans for streets adjacent to the Preserve and the community park planning process to illustrate the location of proposed lighting standards and type of light shielding measures. Lighting Plans must demonstrate that light spillage into the Preserve is avoided/minimized to the greatest extent possible. City of Chula Vista

updated street lighting standards require installation of energy saving LED lamps on all City streets.

Furthermore, the Village Eight East Community Park (P-2) has been designed to avoid siting potential noise-generating land uses in proximity to occupied habitat, and future park planning would meet Otay Ranch GDP, RMP, and MSCP siting criteria. As stated on Page 5.8-67 of the Draft EIR, the park design will include specific measures to address noise issues with respect to the Preserve and the special status species that are located within habitat adjacent to the Community Park (P-2), specifically MM BIO-17 and MM BIO-18. Details on the Community Park will be provided by the City when the park moves forward as a project. Currently, cursory analysis has been provided to reduce indirect effects and provide for compliance with MSPC adjacency guidelines. No revision to the Draft EIR is necessary.

INTENTIONALLY LEFT BLANK

Comment Letter D

Vulcan
Materials Company
WEST REGION

September 17, 2014

Ms. Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: University Villages Sectional Planning Area Plan and Tentative Map
Draft Environmental Impact Report (EIR 13-01; SCH 2013071077)

Dear Ms. Borg:

Thank you for the opportunity to comment on the EIR for University Villages. We have reviewed the document, and found that the Quarry Access Road section of the Traffic Impact Analysis does not appropriately address the issue of ultimate access to the Otay Valley Quarry that we have discussed with the applicant and City staff.

The Otay Valley Quarry Reclamation Plan was approved by the City of Chula Vista on 6/14/11. The use was recognized by the City as regionally significant because of the declining supply of aggregate material in San Diego County. The mine is a vested use in the City of Chula Vista that is expected to continue until 2089 or beyond. That use relies on its access road to Main Street (sometimes called Wiley Road).

On 11/12/13, our consultants, the Atlantis Group, met with the applicant, applicant's engineer and City staff at staff's request to review a realignment of the quarry access road.

On 12/11/13, Atlantis Group submitted preliminary comments on the applicant's proposal (see attachment 1). At that time, we believed that both Otay Valley Quarry, LLC (owner of Village 4) and Vulcan Materials (owner and operator of the quarry) would be added to the EIR distribution list. Otay Valley Quarry, LLC was included on the notice, but Vulcan Materials was not.

On 2/7/14, Atlantis Group forwarded specific comments to City staff (see attachment 2) with very specific criteria that were necessary to retain viable trucking operations. We believed that our comments would either be incorporated, and that we would be advised of any differences. On several occasions, our consultant contacted city staff for an update on the project schedule and the intersection design, and were provided with no updates or indications that our comments were not being incorporated.

D-1

500 NORTH BRAND BLVD, SUITE 500 • GLENDALE, CALIFORNIA 91203 • TELEPHONE 323-258-2777

Ms. Marni Borg
September 17, 2014
Page 2 of 2

On 9/9/14, when checking the City's website for another issue, Atlantis Group noticed that the EIR for University Villages was online. In reviewing the EIR, including the Traffic Impact Analysis, Atlantis found that the intersection design in the interim (through 2025) condition looked virtually unchanged from the draft we reviewed at the 11/12/13 meeting.

The Otay Valley Quarry has vested right to operate, including viable access for the truck trips, and the horizontal and vertical requirements of the rock trucks. The design shown in the EIR and the SPA Plan could be a major safety hazard to the Otay Valley Quarry and its customers.

D-1
Cont.

Therefore, we request that the intersection design be modified to meet the Otay Valley Quarry's operational requirements so that it can continue to supply material to the San Diego region.

We will appreciate the opportunity to meet with the staff, and the applicant if possible, to discuss the realignment of the road and the resulting changes to the intersection.

Sincerely,

VULCAN MATERIALS COMPANY,
West Region

Patrick Coughlin
Operations Manager

Attachments: (18 pages)
1. Letter dated 12/11/13 and cover email
2. Memorandum dated 1/10/14 and cover email dated 2/7/14
3. Chen Ryan Quarry Access Traffic Analysis
4. Otay Ranch Village Preserve Edge Plan

cc: Gary Halbert, City Manager,
Kelly Broughton, Development Services Director
Tom Adler, Land Development Manager
Joe Gamble, Project Manager
Steve Power, Senior Planner
Marcela Escobar-Eck, Atlantis Group
John Atkins, Vulcan Materials Company
Sean Palmer, Vulcan Materials Company

Kathi Riser

From: Kathi Riser
Sent: Wednesday, December 11, 2013 4:52 PM
To: 'Joe Gamble'
Cc: Marcela Escobar-Eck
Subject: RE: Otay Quarry Access
Attachments: Chuck Miller.vcf; Pat Coughlin.vcf

Hi Joe,
Thanks for the quick follow-up. Here is the information for Chuck Miller (Otay Quarry) and and Pat Coughlin (Vulcan Materials).
Best regards,
Kathi

From: Joe Gamble [mailto:JGamble@chulavistaca.gov]
Sent: Wednesday, December 11, 2013 4:15 PM
To: Kathi Riser
Cc: Marcela Escobar-Eck
Subject: RE: Otay Quarry Access

Hi Kathi

In regards to page 2 request of your letter, could you please provide contact information for your clients so we can add their names and addresses to the hearing and EIR distribution notice list.

Thank you

Joe Gamble

From: Kathi Riser [mailto:kriser@atlantissd.com]
Sent: Wednesday, December 11, 2013 2:41 PM
To: Tom Adler
Cc: Joe Gamble; Chuck Miller (cmiller@danskig.com); Coughlin, Pat; John Atkins; Marcela Escobar-Eck
Subject: Otay Quarry Access

Hi Tom,
Attached please find our preliminary comments on the Main Street/Heritage Road plans and the quarry access road realignment.
We hope to have more specific comments after the quarry operator's engineer has completed their evaluation.
Best regards,
Kathi Riser
Sr. Land Use Consultant
Atlantis Group
619-523-1930 (office)
619-818-0053 (cell)
2488 Historic Decatur Road, Suite 200
San Diego, CA 92106
www.atlantissd.com

D-2

1

Atlantis Group, LLC
2488 Historic Decatur Road, Suite 200
San Diego, CA, 92106
Phone: (619) 523-1930
Kliser@AtlantisSD.com
www.AtlantisSD.com

December 11, 2013

Mr. Tom Adler, Land Development Manager
Development Services
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910San Diego

RE: Main Street/Heritage Road

Dear Tom,

We appreciate the information we learned at the meeting on November 12th concerning the City project for the Main Street/Heritage Road project, and the proposal to reconfigure the access road to the Otay Quarry with the Otay Ranch Village 3 VTM. D-3

On behalf of Otay Valley Quarry (Owner) and Vulcan Materials (Operator), we offer the following general comments:

1. As a vested use that will continue operations for 80-100 years, the quarry expects to export approximately 3,000,000 tons of materials each year. Assuming 12,000 tons per day and 25 tons per truckload, that averages 480 trucks per day; therefore, there will be a truck entering and leaving the quarry approximately every 30 seconds between the hours of 5:00 AM and 2:00PM on weekdays. We assume the City has taken these volumes into consideration. D-4

2. The quarry entrance should be 80' wide to accommodate trucks and allow for quarry road maintenance equipment to have enough room to turn around. D-5

3. We recommend an acceleration lane east bound on Main Street from the quarry access road. D-6

4. We recommend a right-turn deceleration lane on Main Street between Heritage Road and the quarry access road. D-7

5. We recommend a traffic signal be installed at the quarry access road (<500' from Heritage). D-8

6. As designed, the traffic island in Main Street will be difficult for trucks to avoid. We will provide a wheel-base dimension for the engineer to accommodate in the design revisions. D-9

Mr. Tom Adler
December 11, 2013
Page 2 of 2

We will be providing more detailed technical comments in the next few weeks.

Will the City's project be presented at a public hearing? If so, Otay Valley Quarry and Vulcan would like to be notified of any such hearing. Also, both would like to be added to the notice list for the distribution of the Village 3 EIR.

D-10

Please feel free to call me if you have any questions about this response.

Sincerely,

Marcela Escobar-Eck
Principal

cc: Chuck Miller, Otay Valley Quarry, LLC
Pat Coughlin, Vulcan Materials
John Atkins, Vulcan Materials

Kathi Riser

To: Kathi Riser
Subject: RE: Vulcan Response to Proposed Instersection, Main and Heritage

From: Kathi Riser
Sent: Friday, February 07, 2014 4:21 PM
To: Joe Gamble (JGamble@chulavistaca.gov)
Cc: 'tadler@chulavistaca.gov'; hphelps@chulavistaca.gov
Subject: FW: Vulcan Response to Proposed Instersection, Main and Heritage

Hi Joe,
I just realized I should have sent these to you.
Kathi

From: Kathi Riser
Sent: Friday, February 07, 2014 4:20 PM
To: 'tadler@chulavistaca.gov'; 'hphelps@chulavistaca.gov'
Subject: FW: Vulcan Response to Proposed Instersection, Main and Heritage

I apologize that I didn't forward these comments to you, although I did send preliminary comments in December.
Can you tell me the status of the Main Street alignment plans? We need to assure Vulcan that their concerns are being addressed, and we need the information as we work through the Village 4 design.
Thanks,
Kathi

D-11

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

ENGINEERING MEMORANDUM

DATE: January 10, 2014

TO: Pat Coughlin, Vulcan Materials Company
John Atkins, Vulcan Materials Company

FROM: Cory Schrack, PE
Nasland Engineering

SUBJECT: Vulcan Materials, Chula Vista: Access Road Analysis

The following road study memorandum serves to address the Chula Vista Facility's needs related to the road improvements proposed by the City of Chula Vista. Upon review of the proposed alignment drawings prepared by Hunsaker & Associates dated November 7, 2013, we offer the following design comments: D-12

1. The recommended configuration for the quarry entrance is shown on Attachment A. The approximate dimensions shown will optimize the usability of the new quarry entrance. The subsequent design points support the configuration shown on Attachment A. Autoturn software with several vehicle sizes was utilized to determine the required configuration. Refer to Attachment B for the vehicle turning movements analyzed. D-13

2. The quarry entrance should have curb return radii of 100-ft on the West side to accommodate the nine axle trucks that access the site several times per year to bring heavy equipment to the site. A dedicated right turn lane should be provided on eastbound Main Street. D-14

3. The quarry entrance should have curb return radii of 105-ft on the East side to accommodate the nine axle trucks that access the site several times per year. A separate right turn lane should be provided where the turn lane meets Main Street. An acceleration lane should be provided eastbound onto Main Street. D-15

4. The proposed median on Main Street will need to be reduced to make left turns feasible for trucks exiting the quarry heading westbound. If necessary for traffic channelization, a painted median may be acceptable. D-16

5. A traffic signal should be installed at the quarry entrance intersection with Main Street, as stated in the letter from the Atlantis Group dated December 11, 2013. The amount of traffic from the quarry should be studied in detail by a Traffic Engineer, including sufficient green time to allow the trucks to clear the intersection. Signal Timing with the intersection of Main Street and Heritage Road will also be critical for efficient operation of the quarry exit. It should also be D-17

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

noted that the quarry has vested mining rights with no restrictions on volume or hours of operation, and therefore the proposed entrance limits the ability to allow the necessary access for trucks and other construction equipment. D-17 Cont.

6. A turnaround area should be included near the quarry entrance to accommodate the turning movements of water trucks, graders, trucks, and loaders used by the quarry to calm dust from the unpaved entrance road. This equipment is not permitted to operate on public roads and cannot utilize the intersection to turn around. We recommend the turnaround area to be paved. A 100-ft radius would be appropriate for this purpose. D-18

7. At the intersection of Main Street and Heritage Road, design of the southeasterly curb return radius should take into account the size of trucks turning eastbound on Main Street from northbound Heritage Road. A 50-ft radius should be sufficient. D-19

8. Phasing of construction for the main street improvements should also be incorporated in the construction documents for the road. Access to the quarry shall be maintained at all times. Consideration for a temporary access road from Heritage Road should be made. D-20

9. If the improvements shown on the *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013* are to be implemented prior to construction of eastbound Main Street, the following considerations should be incorporated into the interim conditions. D-21

   a. Provide for the turn-around requirements of the quarry water truck (100-ft radius).
   b. Optimize traffic signal timing, taking into account the anticipated traffic volumes from the quarry.
   c. Design of the southeasterly curb return radius should take into account the size of trucks entering the quarry from northbound Heritage Road.

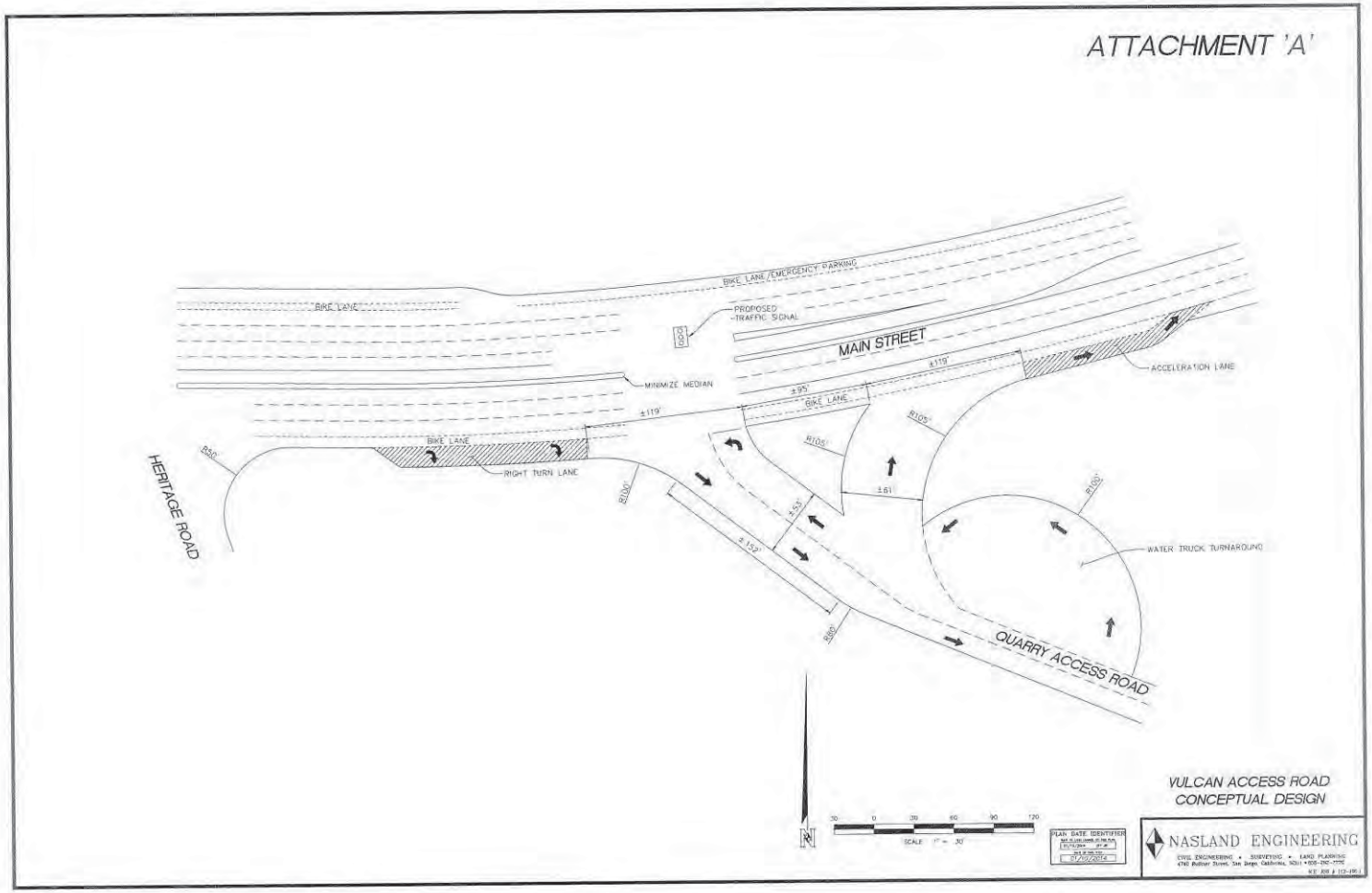
References:

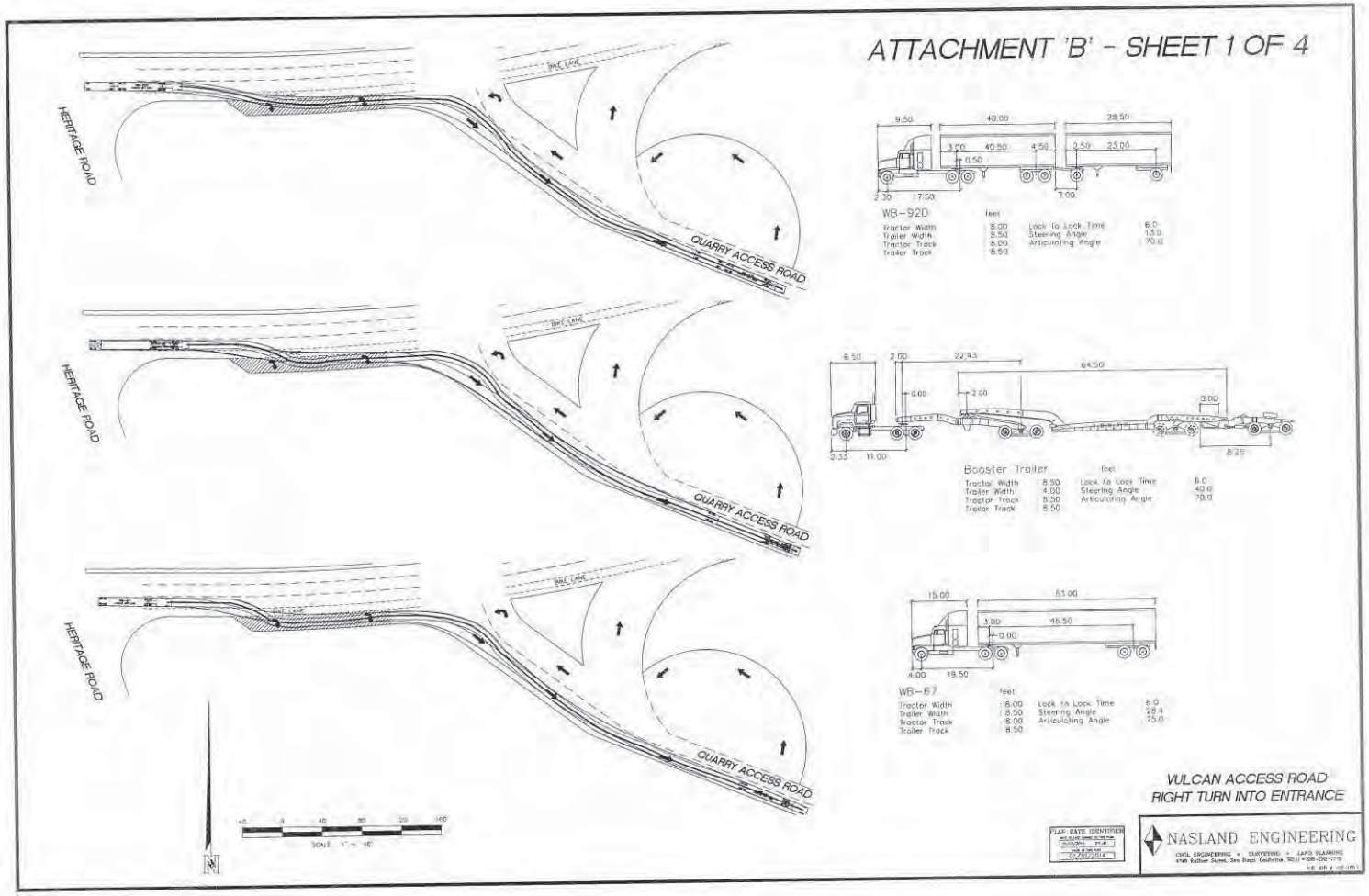
A. *Letter to the City of Chula Vista from Atlantis Group, dated December 11, 2013*
B. *Quarry Access Road exhibit prepared by Hunsaker & Associates, dated November 7, 2013*
C. *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013*

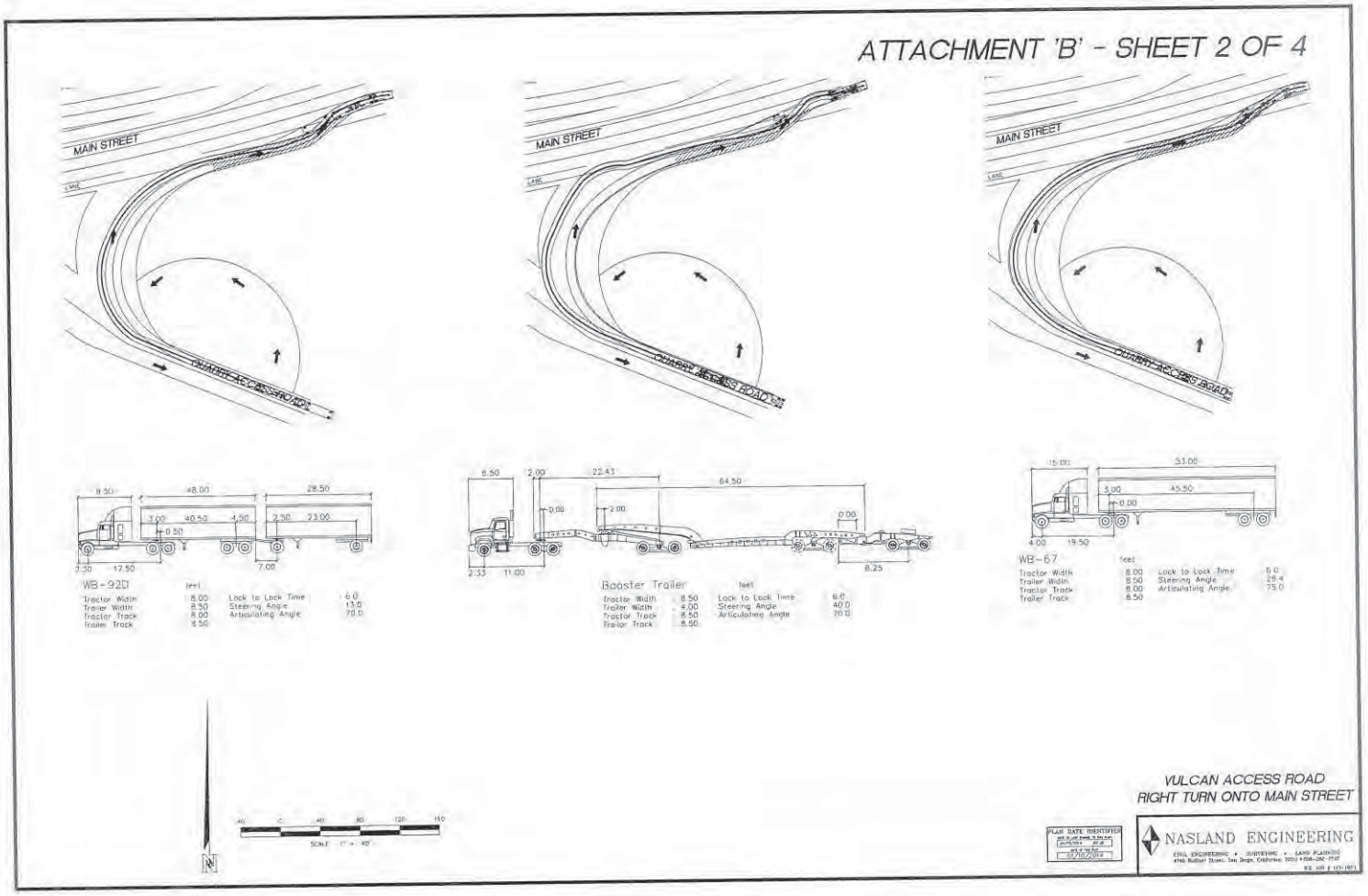
I hope the above information is helpful. Please contact me if I can be of further service or provide additional information regarding this project.

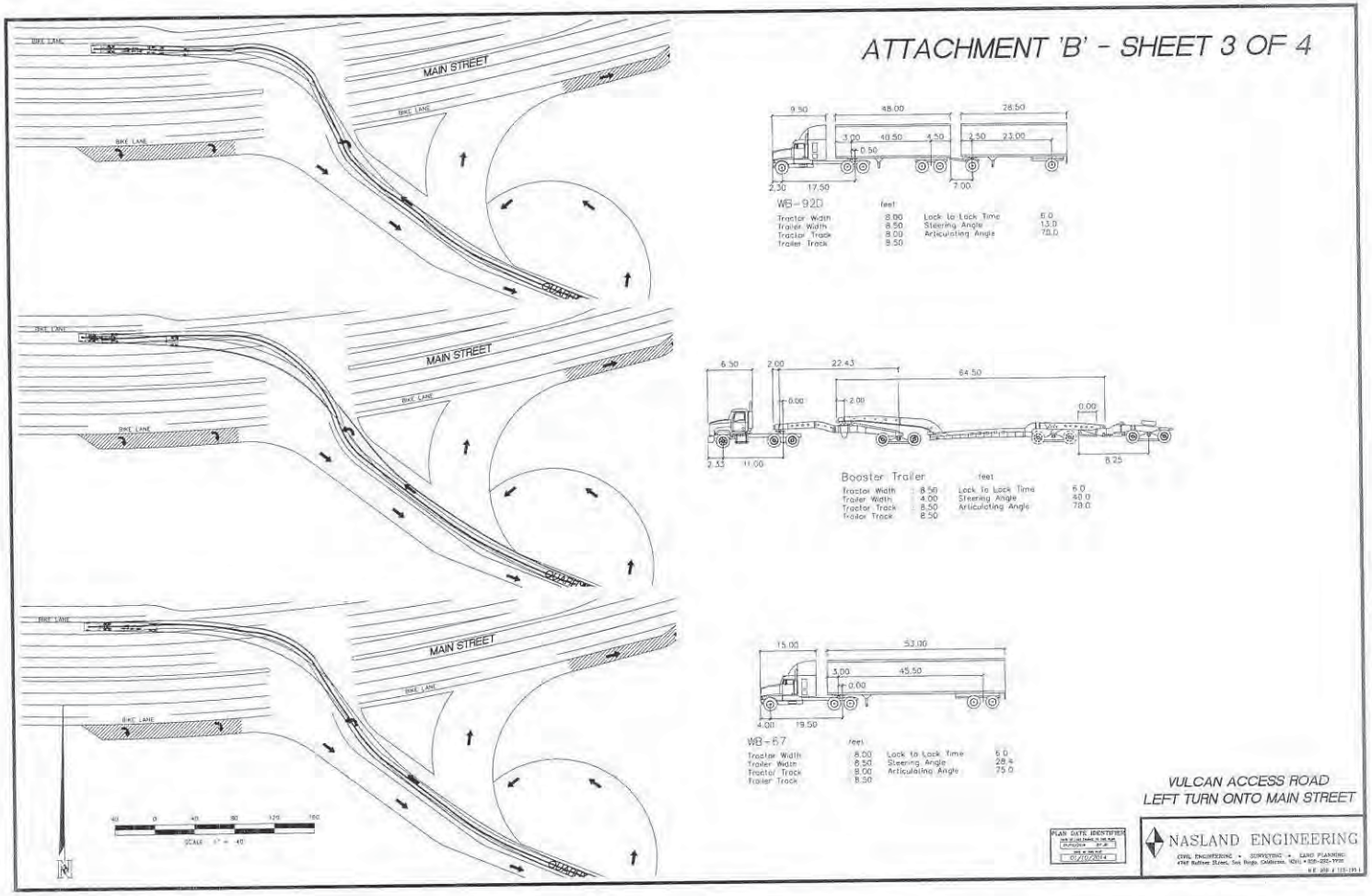
Sincerely,

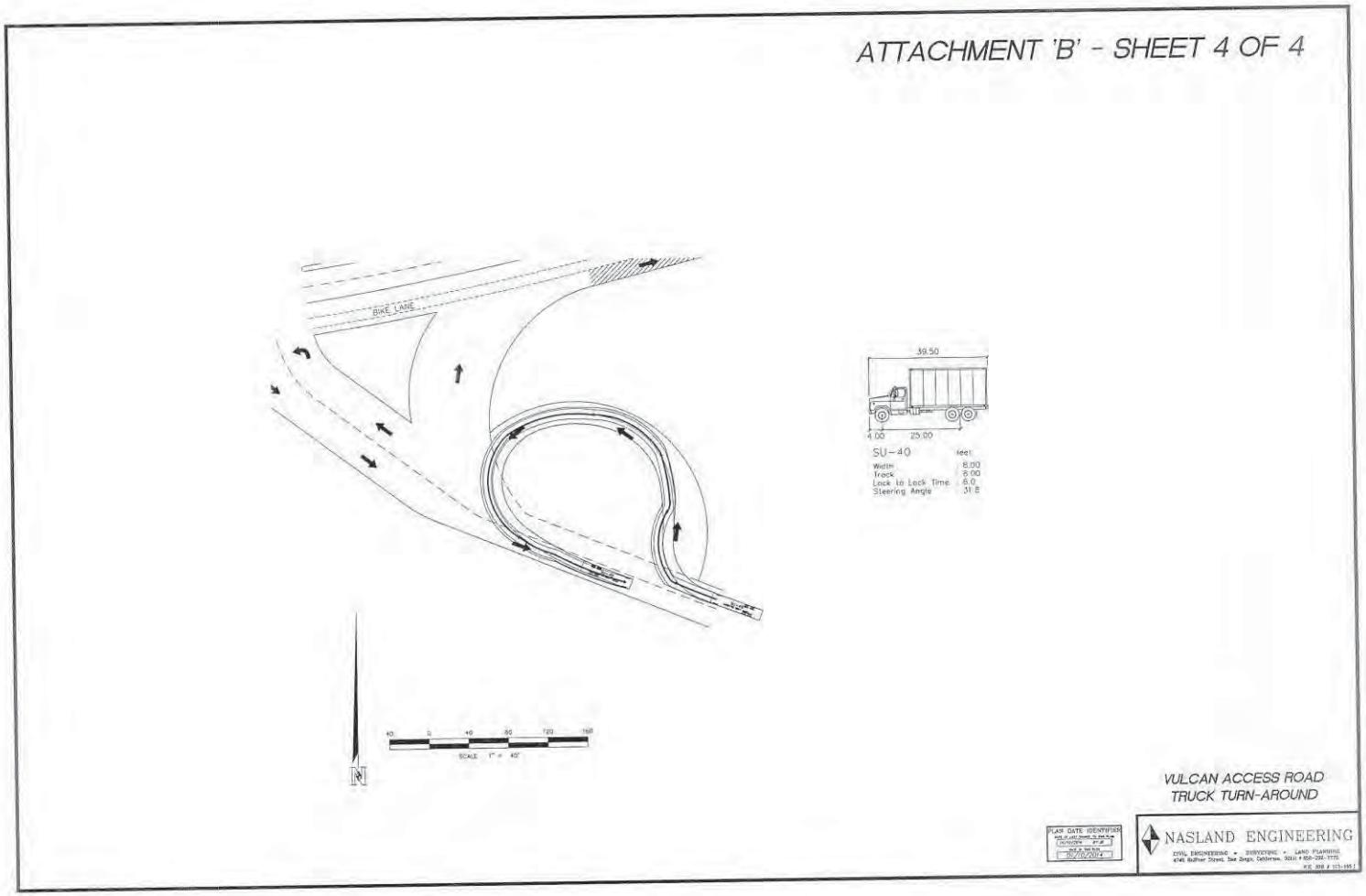
Cory Schrack, P.E.

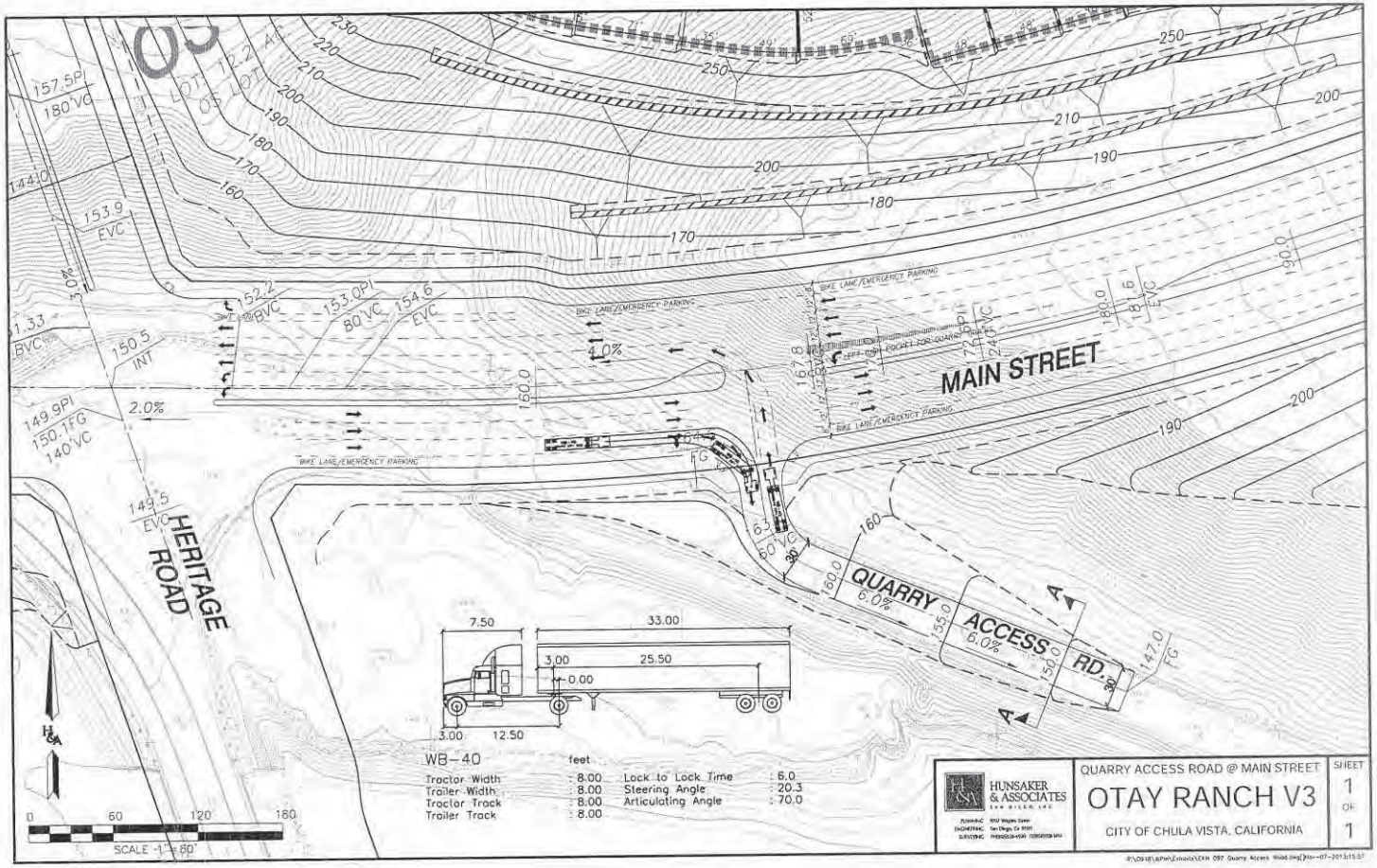

ATTACHMENT 'A'
BIKE LANE/EMERGENCY PARKING
BIKE LANE
PROPOSED TRAFFIC SIGNAL
MAIN STREET
MINIMIZE MEDIAN
ACCELERATION LANE
BIKE LANE
RIGHT TURN LANE
HERITAGE ROAD
WATER TRUCK TURNAROUND
QUARRY ACCESS ROAD
VULCAN ACCESS ROAD
CONCEPTUAL DESIGN
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 1 OF 4
HERITAGE ROAD
BIKE LANE
QUARRY ACCESS ROAD
WB-92D
feet
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 13.0
Articulating Angle 70.0
Booster Trailer
feet
Tractor Width 8.50
Trailer Width 4.00
Tractor Track 8.50
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 40.0
Articulating Angle 70.0
WB-67
feet
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 28.4
Articulating Angle 75.0
VULCAN ACCESS ROAD
RIGHT TURN INTO ENTRANCE
NASLAND ENGINEERING
SCALE 1" = 40'


ATTACHMENT 'B' - SHEET 2 OF 4
MAIN STREET
QUARRY ACCESS ROAD
WB-92D
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 13.0
Articulating Angle 70.0
Booster Trailer
Tractor Width 8.50
Trailer Width 4.00
Tractor Track 8.50
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 40.0
Articulating Angle 70.0
WB-67
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 28.4
Articulating Angle 75.0
VULCAN ACCESS ROAD
RIGHT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 3 OF 4
MAIN STREET
BIKE LANE
WB-92D
feet
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 13.0
Articulating Angle 70.0
Booster Trailer
feet
Tractor Width 8.50
Trailer Width 4.00
Tractor Track 8.50
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 40.0
Articulating Angle 70.0
WB-67
feet
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 28.4
Articulating Angle 75.0
VULCAN ACCESS ROAD
LEFT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 4 OF 4
BIKE LANE
39.50
4.00
25.00
SU-40
feet
Width 8.00
Track 8.00
Lock to Lock Time 6.0
Steering Angle 31.8
SCALE 1" = 40'
N
VULCAN ACCESS ROAD
TRUCK TURN-AROUND
NASLAND ENGINEERING


MAIN STREET
HERITAGE ROAD
QUARRY ACCESS RD.
BIKE LANE/EMERGENCY PARKING
WB-40
feet
Tractor Width : 8.00
Trailer Width : 8.00
Tractor Track : 8.00
Trailer Track : 8.00
Lock to Lock Time : 6.0
Steering Angle : 20.3
Articulating Angle : 70.0
HUNSAKER & ASSOCIATES
QUARRY ACCESS ROAD @ MAIN STREET
OTAY RANCH V3
CITY OF CHULA VISTA, CALIFORNIA
SHEET 1 OF 1
SCALE 1" = 60'

14.0 Quarry Access

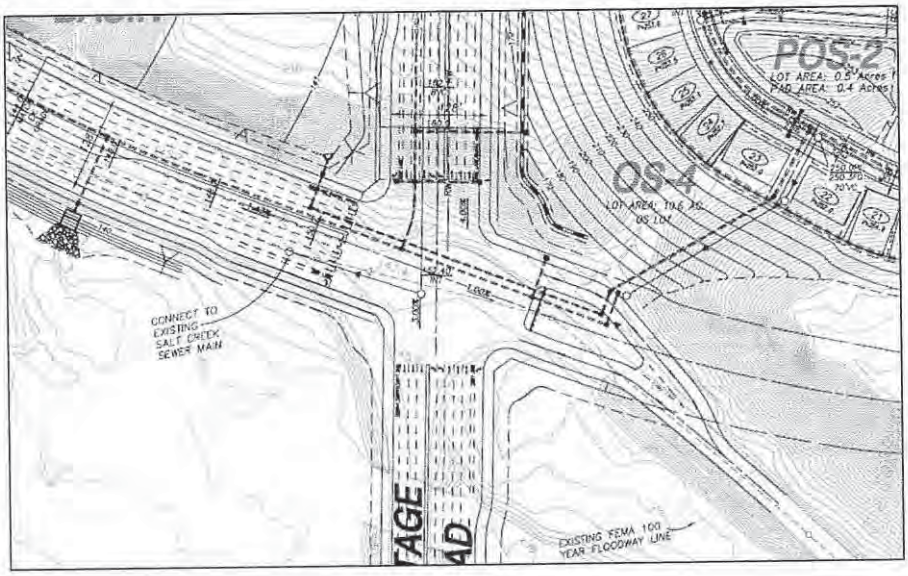
This chapter discusses traffic operations and safety at the quarry access off of Main Street under conditions with (ultimate) and without (interim) the Main Street connection over Wolf Canyon.

The following operational assumptions were derived based upon input from the quarry manager:

- Typical operation hours are between 7:00 am and 3:00 pm – Quarry traffic would be very unlikely to occur during the PM peak hour and thus the traffic operations analysis was based on the AM peak hour;
- Approximately 600 daily truck trips are generated by quarry activities – Approximately 1,500 ADT is generated by the quarry based on a 2.5 Passenger-Car Equivalent (PCE) factor per HCM 2010 (Exhibit 11-10); and
- One truckload every 30 seconds at the highest production – 120 trucks (300 PCE) would enter/exit the quarry during the AM peak hour, assuming a worst case scenario.

14.1 Interim Design

Main Street over Wolf Canyon is not likely to be constructed until Year 2025. The following drawing displays the proposed interim layout for quarry access in relation to the intersection of Heritage Road and Main Street. The access would be east of the intersection, to the southeast.



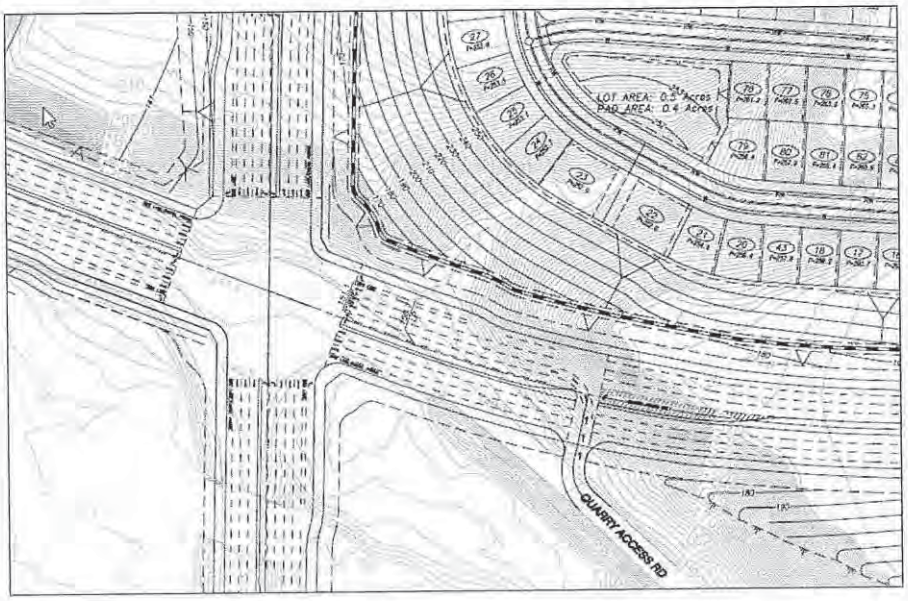
As shown, Main Street would terminate at the quarry access road approximately 210' east of Heritage Road.

Traffic Operation and Safety

Since no traffic movements would be in conflict with the ingress/egress at the quarry access, no traffic operations or safety issues would be anticipated in the interim years. The traffic signal at the Heritage Road and Main Street intersection should be designed as a standard eight-phase actuated signal. The westbound green indication would only be triggered by the arrival of westbound traffic. Proper signage should be displayed indicating that the east leg (Main Street, east of Heritage Road) is for "Quarry Access Only".

14.2 Ultimate Design

The layout below represents the proposed ultimate design for the quarry access in relation to the intersection of Heritage Road and Main Street, when Main Street between Heritage Road and La Media is constructed.



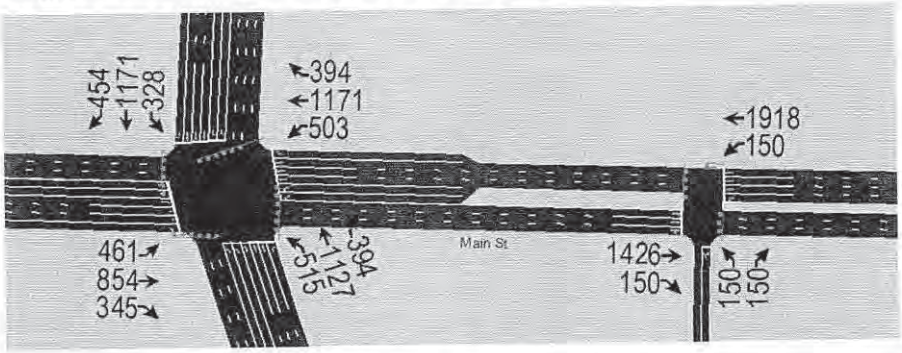
As shown, the quarry access road would be located approximately 350' east of Heritage Road.

Traffic Operation and Safety

A 50%/50% east/west directional split from/to the quarry was assumed and the following indicates the worst case quarry trip generation and ingress/egress volumes at the access point off of Main Street during the AM peak hour:

- 60 truck trips (150 PCE) making a right-turn (eastbound) to enter the quarry;
- 60 truck trips (150 PCE) making a left-turn (westbound) to enter the quarry; and
- 120 truck trips (300 PCE) exiting the quarry with 60 truck trips (150 PCE) each making left and right–turns onto Main Street.

The graphic below illustrates the AM peak hour turning movements at this intersection.



The quarry access is proposed to be signalized at Main Street. It is important to note that this proposed traffic signal must be coordinated with the traffic signal at the Heritage Road and Main Street intersection. **Table 14.1** displays intersection level of service and average vehicle delay results for both Heritage Road / Main Street and Quarry Access Road / Main Street intersections under the Year 2030 conditions. Level of service calculation worksheets are provided in **Appendix AC.**

TABLE 14.1
PEAK HOUR INTERSECTION LEVEL OF SERVICE RESULTS
QUARRY ACCESS YEAR 2030 CONDITIONS

Intersection	AM Peak Hour	
	Avg. Delay (sec.)	LOS
39. Heritage Road / Main Street	46.1	D
65. Quarry Access Road / Main Street	9.0	A

Source: Chen Ryan Associates; February 2014

As shown in the table, the quarry access at Main Street would operate at LOS A with minimum delay in Year 2030. The 50th (average) and 95th (maximum) queue length at the westbound (Main Street) left-turn into the quarry would be 57' and 177', respectively. Thus, it is recommended that the westbound left-turn pocket be designed at 200' to accommodate the maximum queue.

In addition to the 200' westbound left-turn pocket length, the following is also recommended to ensure safety and smooth operations at the intersection of Quarry Access Road and Main Street:

- "No-Turn On Red" sign and/or signal indication to be placed at the northbound quarry access approach to prohibit trucks from making right turns onto Main Street on red;
- Proper signage and pavement marking to be installed indicating "Quarry Access Only";
- Adequate turning radii to be provided for trucks; and
- No pedestrian crossing at Main Street.

B. FACILITIES AND IMPROVEMENTSPROPOSED WITHIN THE PRESERVE

The facilities described below and depicted on Exhibit 1 are proposed within the MSCP Preserve and are not subject to this Preserve Edge Plan, but rather are discussed for context purposes only. Per the MSCP Subarea Plan, certain infrastructure and roads planned in conjunction with development will be allowed to be constructed, operated and maintained within the Preserve. The Subarea Plan anticipated these "Planned" and "Future" facilities and requires compliance with the siting criteria identified in Section 6.3.3.4 or the Subarea Plan. The Project's Biological Report provides the siting criteria analysis. Facilities proposed within the Preserve include:

1. Access Facilities

The Village 3 North and a Portion of Village 4 SPA Plan ("Project") includes the extension of Main Street and Heritage Road through the Project site. In conjunction with the extension of Main Street, modifications to the off-site Quarry Access (Wiley Road) are also proposed.

- Both Main Street and Heritage Road are 6-Lane Prime Arterials on the Chula Vista General Plan Circulation Element. These roadways are identified on Table 6.1 of the Chula Vista MSCP Subarea Plan as "Planned Facilities." In addition to roadway improvements, utilities are co-located within the right-of-way to serve both Village 3 North and portions of Village 2. The Project's Biological Technical Report includes a detailed analysis of the Heritage Road and Main Street grading impacts as they relate to the MSCP Planned and Future Facility Siting Criteria. (Exhibit 2)

- The Quarry Access (Wiley Road) located off-site south of Village 3 North has been redesigned to intersect with Main Street east of Heritage Road. This two lane improved road serves the existing Otay Quarry and has been designed at the steepest gradient physically possible in order to minimize grading impacts on the Preserve. The Project's Biological Report includes a detailed analysis of the impacts as they relate to the MSCP Planned and Future Facility Siting Criteria. (Exhibit 2)

UNIVERSITY VILLAGES SECTIONAL PLANNING AREA PLAN
Otay Ranch Village 3 North and a Portion of Village 4

Preserve Edge Plan

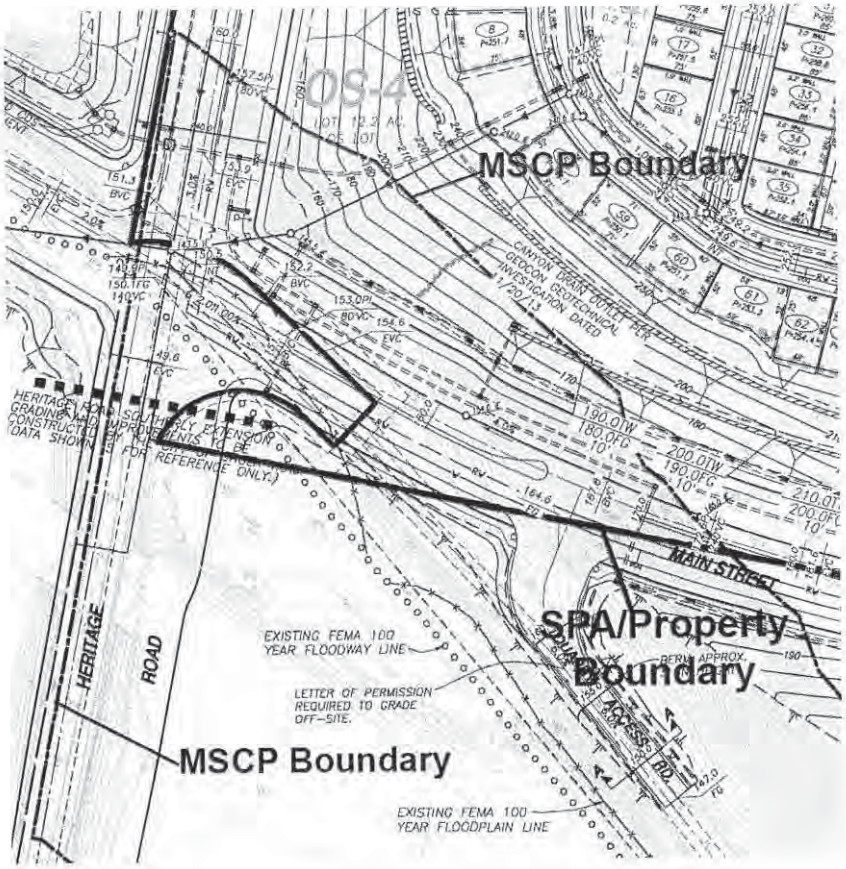


Exhibit 2
Heritage Road/Main Street, Off-site Quarry Access Facility within the Preserve

4
July 25, 2014

Response to Comment Letter D

Vulcan Materials Company
Patrick Coughlin, Operations Manager
September 17, 2014

D-1 The design shown in the Draft EIR proposes a safe ingress and egress that would result in no safety hazards, comparable to existing conditions. The existing ingress and egress is an uncontrolled intersection whereby trucks leaving the quarry are required to stop, but traffic from both the south and west is uncontrolled; thus, large trucks must merge with moving traffic. The DEIR proposes for access to the quarry to come from an all-way signalized intersection. Safe ingress and egress would also be provided during the interim at a stop controlled intersection. Interim conditions are addressed on Page 292 in the TIA. For detailed information regarding the specific comments contained later in this comment letter, please refer to the responses below.

D-2 This comment does not address the adequacy of the environmental analysis in the EIR. No response is required.

D-3 This comment does not address the adequacy of the environmental analysis in the EIR. No response is required.

D-4 The University Village TIA, Section 14, Page 292 discusses traffic operations and safety at the quarry access off of Main Street under conditions with (ultimate) and without (interim) the Main Street connection over Wolf Canyon.

The following operational assumptions were derived based upon input from the quarry manager:

- Typical operation hours are between 7:00 am and 3:00 pm – Quarry traffic would be very unlikely to occur during the PM peak hour and thus the traffic operations analysis was based on the AM peak hour;
- Approximately 600 daily truck trips are generated by quarry activities – Approximately 1,500 ADT is generated by the quarry based on a 2.5 Passenger-Car Equivalent (PCE) factor per HCM 2010 (Exhibit 11-10); and
- One truckload every 30 seconds at the highest production – 120 trucks (300 PCE) would enter/exit the quarry during the AM peak hour, assuming a worst case scenario.

The Project TIA analyzed higher volumes than the expected operations described in the 12/11/13 memo.

D-5 The current Village 3 Tentative Map includes an 80-foot wide quarry access road.

D-6 City staff does not believe an acceleration lane is necessary, and does not recommend such a facility on a 6-lane prime arterial (Main Street). An acceleration lane on Main Street is inconsistent with City design standards for a 6-lane prime arterial. Because a signal is planned at the Quarry Access Road, and the signal will be synchronized with the signal at Main Street and Heritage Road and right on red movements will not be permitted, trucks leaving the quarry will not encounter conflicts with either right or left turns exiting the quarry.

D-7 City staff believes that a deceleration lane on Main Street is inconsistent with City design standards for a 6-lane prime arterial.

D-8 A traffic signal is proposed at the Quarry Access Road.

D-9 The project engineer has revised the Village 3 North Tentative Map to reflect a painted median on approximately 50 feet at the eastern portion of the median.

D-10 Otay Valley Quarry and Vulcan have been included on the noticing list for this project for past distributions, including public review of the Draft EIR. This comment does not address the adequacy of the environmental analysis in the EIR. No further response is required.

D-11 This comment does not address the adequacy of the environmental analysis in the EIR. No further response is required.

D-12 This comment does not address the adequacy of the environmental analysis in the EIR. No further response is required.

D-13 Per prior direction from Marcela Escobar (Atlantis Group), Hunsaker & Associates utilized the WB-67 turning template to design the quarry access road reflected on the Village 3 North TM.

D-14 The current design provides 30’ curb radii. The project engineer has evaluated the design and can increase the curb radii on the west side to 100 feet, without creating additional grading impacts. There is an approximately 10’ grade difference between the quarry road and Main Street in the location proposed for a 20’ long dedicated right turn lane, resulting in 12% grade on the dedicated right turn ramp. Providing such additional width in this location results in excessive grading within the MSCP

Preserve and does not comply with siting criteria in the MSCP. As noted previously, a signal is provided at the Quarry Access Road, synchronized with the signal at Main Street and Heritage Road to the west. This provides for right turns out of the quarry without conflicts with eastbound traffic.

D-15 The current design provides 30' curb radii. The project engineer has evaluated the design and can increase the curb radii on the east side to 50 feet. See the prior response above (D-6) regarding the acceleration lane.

D-16 The project engineer has revised the Village 3 North Tentative Map to reflect a painted median on approximately 50 feet at the eastern portion of the median. A design waive would be required to reduce the length of the left turn pocket.

D-17 The proposed project includes a signal at the Quarry Access Road at Main Street. Signal synchronization is controlled by the City of Chula Vista and will be timed to provide sufficient time for trucks to clear the intersection.

D-18 There is an approximately 10' grade difference between the quarry road and Main Street in the location proposed for a dedicated right turn lane. Climbing 10' on a 20' long ramp results in 12% grades on the ramp. Providing such additional width in this location results in excessive grading within the MSCP Preserve and does not comply with siting criteria in the MSCP and is therefore infeasible. A more feasible option is to utilize street-legal water trucks so they can utilize the public streets as the turnaround.

D-19 Improvements at Main Street and Heritage Road are currently designed with the City standard 30' radius. This comment was forwarded to the project engineer for review. The engineer determined that the 50' radius could be accommodated at this location. However, the City has not directed any changes to the current design at this time.

D-20 Comment noted. This issue will be resolved during final engineering.

D-21 The Heritage Road Bridge Replacement Project is a City of Chula Vista CIP project. These comments should be directed to the City and that project.

INTENTIONALLY LEFT BLANK

Comment Letter E

HAZARD
CONSTRUCTION

Phone (858) 587-3600
Fax (858) 453-6034
6465 Marindustry Drive
San Diego, CA 92121
hazardconstruction.com
License No. 750542A

September 17, 2014

Ms. Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: University Villages Sectional Planning Area Plan and Tentative Map
Draft Environmental Impact Report (EIR 13-01; SCH 2013071077)

Dear Ms. Borg:

Thank you for the opportunity to comment on the EIR for University Villages. We are a customer of Vulcan Materials, the operator of the Otay Valley Quarry, with whom we purchase thousands of yards of material a year and generate thousands of truck trips in order to help rebuild the ageing infrastructure in San Diego County. We have great concern with the ability of our trucks to safely enter and exit the quarry utilizing this proposed Quarry Access Road found in the Traffic Impact Analysis. The lack a properly timed traffic signal to allow safe passage of trucks over four plus lanes of traffic is disastrous and the lack of proper deceleration and acceleration lanes into the quarry for trucks of this size will surely cause havoc with the traffic volumes proposed in the future.

We understand that the Otay Valley Quarry has been approved to operate until 2089 or beyond. Aggregate is an increasingly scarce resource in Southern California, and this is one of the few remaining quarries in a region that has not approved a new quarry in many years. The quarry has always taken its access to and from Main Street via the graded road, sometimes called Wiley Road. A change to this access is necessary for future development of the area but planning now will help to eliminate headaches down the line (2025 and beyond).

We request that the intersection design be modified to meet the Otay Valley Quarry's operational requirements so that we can continue to obtain needed construction materials for the infrastructure needs of San Diego County. See attached Memorandum dated 1/10/14 from Nasland Engineering.

If you have any questions or would like to discuss this matter further we would be happy to do so.

E-1

Sincerely,

Jason A. Mordhorst
President

Attachments: Memorandum dated 1/10/14 from Nasland Engineering

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

ENGINEERING MEMORANDUM

DATE: January 10, 2014

TO: Pat Coughlin, Vulcan Materials Company
John Atkins, Vulcan Materials Company

FROM: Cory Schrack, PE
Nasland Engineering

SUBJECT: Vulcan Materials, Chula Vista: Access Road Analysis

The following road study memorandum serves to address the Chula Vista Facility's needs related to the road improvements proposed by the City of Chula Vista. Upon review of the proposed alignment drawings prepared by Hunsaker & Associates dated November 7, 2013, we offer the following design comments:

1. The recommended configuration for the quarry entrance is shown on Attachment A. The approximate dimensions shown will optimize the usability of the new quarry entrance. The subsequent design points support the configuration shown on Attachment A. Autoturn software with several vehicle sizes was utilized to determine the required configuration. Refer to Attachment B for the vehicle turning movements analyzed.

2. The quarry entrance should have curb return radii of 100-ft on the West side to accommodate the nine axle trucks that access the site several times per year to bring heavy equipment to the site. A dedicated right turn lane should be provided on eastbound Main Street.

3. The quarry entrance should have curb return radii of 105-ft on the East side to accommodate the nine axle trucks that access the site several times per year. A separate right turn lane should be provided where the turn lane meets Main Street. An acceleration lane should be provided eastbound onto Main Street.

4. The proposed median on Main Street will need to be reduced to make left turns feasible for trucks exiting the quarry heading westbound. If necessary for traffic channelization, a painted median may be acceptable.

5. A traffic signal should be installed at the quarry entrance intersection with Main Street, as stated in the letter from the Atlantis Group dated December 11, 2013. The amount of traffic from the quarry should be studied in detail by a Traffic Engineer, including sufficient green time to allow the trucks to clear the intersection. Signal Timing with the intersection of Main Street and Heritage Road will also be critical for efficient operation of the quarry exit. It should also be

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

noted that the quarry has vested mining rights with no restrictions on volume or hours of operation, and therefore the proposed entrance limits the ability to allow the necessary access for trucks and other construction equipment.

6. A turnaround area should be included near the quarry entrance to accommodate the turning movements of water trucks, graders, trucks, and loaders used by the quarry to calm dust from the unpaved entrance road. This equipment is not permitted to operate on public roads and cannot utilize the intersection to turn around. We recommend the turnaround area to be paved. A 100-ft radius would be appropriate for this purpose.

7. At the intersection of Main Street and Heritage Road, design of the southeasterly curb return radius should take into account the size of trucks turning eastbound on Main Street from northbound Heritage Road. A 50-ft radius should be sufficient.

8. Phasing of construction for the main street improvements should also be incorporated in the construction documents for the road. Access to the quarry shall be maintained at all times. Consideration for a temporary access road from Heritage Road should be made.

9. If the improvements shown on the *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013* are to be implemented prior to construction of eastbound Main Street, the following considerations should be incorporated into the interim conditions.

    a. Provide for the turn-around requirements of the quarry water truck (100-ft radius).
    b. Optimize traffic signal timing, taking into account the anticipated traffic volumes from the quarry.
    c. Design of the southeasterly curb return radius should take into account the size of trucks entering the quarry from northbound Heritage Road.

References:

A. *Letter to the City of Chula Vista from Atlantis Group, dated December 11, 2013*
B. *Quarry Access Road exhibit prepared by Hunsaker & Associates, dated November 7, 2013*
C. *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013*

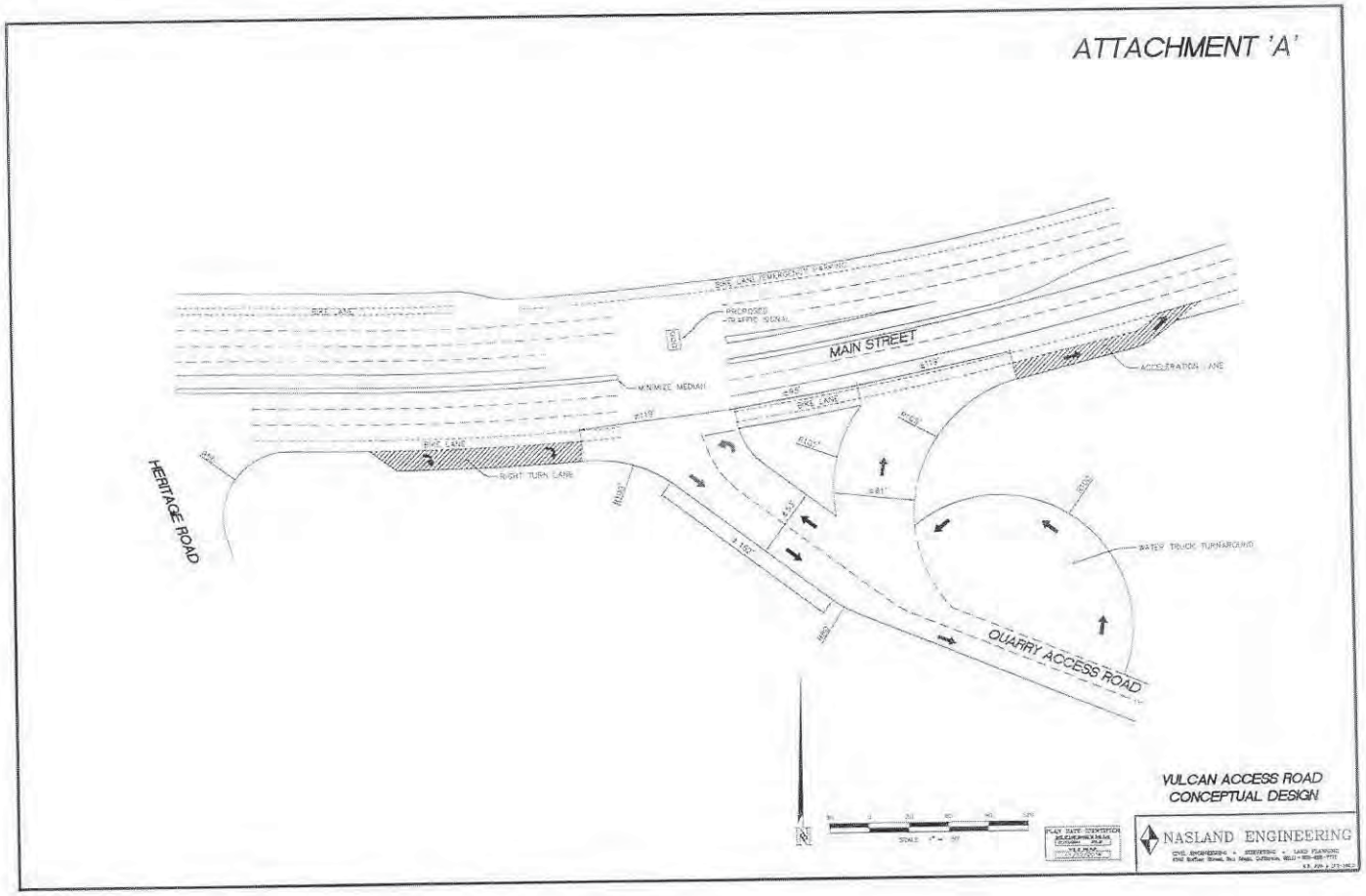
I hope the above information is helpful. Please contact me if I can be of further service or provide additional information regarding this project.

Sincerely,

Cory Schrack, P.E.

2

Civil Engineering Surveying Land Planning


ATTACHMENT 'A'
MAIN STREET
HERITAGE ROAD
QUARRY ACCESS ROAD
VULCAN ACCESS ROAD
CONCEPTUAL DESIGN
NASLAND ENGINEERING

Response to Comment Letter E

Hazard Construction
Jason A. Mordhorst, President
September 17, 2014

E-1 Please refer to responses D-1 through D-21 above for Comment Letter D.

INTENTIONALLY LEFT BLANK

Comment Letter F

September 17, 2014

Ms. Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: University Villages Sectional Planning Area Plan and Tentative Map
Draft Environmental Impact Report (EIR 13-01; SCH 2013071077)

Dear Ms. Borg:

Thank you for the opportunity to comment on the EIR for University Villages. We have reviewed the document and found that the design of the Quarry Access Road found in the Traffic Impact Analysis does not appropriately address the operational needs of the Otay Valley Quarry. It does not incorporate the design parameters submitted by the quarry operator to the City during the project review (see attached).

We understand that the Otay Valley Quarry has been approved to operate until 2089 or beyond. Aggregate is an increasingly scarce resource in Southern California, and this is one of the few remaining quarries in a region that has not approved a new quarry in many years. The quarry has always taken its access to and from Main Street via the graded road, sometimes called Wiley Road.

Realistic use of the quarry requires realistic access that accommodates the quantity of truck trips, the horizontal and vertical requirements of the rock trucks, and minimal waiting times to turn onto Main Street. The design shown in the EIR and the SPA Plan could be a major safety hazard to the Otay Valley Quarry and its customers.

We request that the intersection design be modified to meet the Otay Valley Quarry's operational requirements so that we can continue to supply needed construction materials to the San Diego region.

F-1

Sincerely,
Jeff Stuckman
West Coast Sand & Gravel

By: [signature]
Its: Chief Operating Officer

Attachments: Memorandum dated 1/10/14 from Nasland Engineering
Traffic Impact Analysis – Chen Ryan

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

ENGINEERING MEMORANDUM

DATE: January 10, 2014

TO: Pat Coughlin, Vulcan Materials Company
John Atkins, Vulcan Materials Company

FROM: Cory Schrack, PE
Nasland Engineering

SUBJECT: Vulcan Materials, Chula Vista: Access Road Analysis

The following road study memorandum serves to address the Chula Vista Facility's needs related to the road improvements proposed by the City of Chula Vista. Upon review of the proposed alignment drawings prepared by Hunsaker & Associates dated November 7, 2013, we offer the following design comments:

1. The recommended configuration for the quarry entrance is shown on Attachment A. The approximate dimensions shown will optimize the usability of the new quarry entrance. The subsequent design points support the configuration shown on Attachment A. Autoturn software with several vehicle sizes was utilized to determine the required configuration. Refer to Attachment B for the vehicle turning movements analyzed.

2. The quarry entrance should have curb return radii of 100-ft on the West side to accommodate the nine axle trucks that access the site several times per year to bring heavy equipment to the site. A dedicated right turn lane should be provided on eastbound Main Street.

3. The quarry entrance should have curb return radii of 105-ft on the East side to accommodate the nine axle trucks that access the site several times per year. A separate right turn lane should be provided where the turn lane meets Main Street. An acceleration lane should be provided eastbound onto Main Street.

4. The proposed median on Main Street will need to be reduced to make left turns feasible for trucks exiting the quarry heading westbound. If necessary for traffic channelization, a painted median may be acceptable.

5. A traffic signal should be installed at the quarry entrance intersection with Main Street, as stated in the letter from the Atlantis Group dated December 11, 2013. The amount of traffic from the quarry should be studied in detail by a Traffic Engineer, including sufficient green time to allow the trucks to clear the intersection. Signal Timing with the intersection of Main Street and Heritage Road will also be critical for efficient operation of the quarry exit. It should also be

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

noted that the quarry has vested mining rights with no restrictions on volume or hours of operation, and therefore the proposed entrance limits the ability to allow the necessary access for trucks and other construction equipment.

6. A turnaround area should be included near the quarry entrance to accommodate the turning movements of water trucks, graders, trucks, and loaders used by the quarry to calm dust from the unpaved entrance road. This equipment is not permitted to operate on public roads and cannot utilize the intersection to turn around. We recommend the turnaround area to be paved. A 100-ft radius would be appropriate for this purpose.

7. At the intersection of Main Street and Heritage Road, design of the southeasterly curb return radius should take into account the size of trucks turning eastbound on Main Street from northbound Heritage Road. A 50-ft radius should be sufficient.

8. Phasing of construction for the main street improvements should also be incorporated in the construction documents for the road. Access to the quarry shall be maintained at all times. Consideration for a temporary access road from Heritage Road should be made.

9. If the improvements shown on the *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013* are to be implemented prior to construction of eastbound Main Street, the following considerations should be incorporated into the interim conditions.

    a. Provide for the turn-around requirements of the quarry water truck (100-ft radius).
    b. Optimize traffic signal timing, taking into account the anticipated traffic volumes from the quarry.
    c. Design of the southeasterly curb return radius should take into account the size of trucks entering the quarry from northbound Heritage Road.

References:

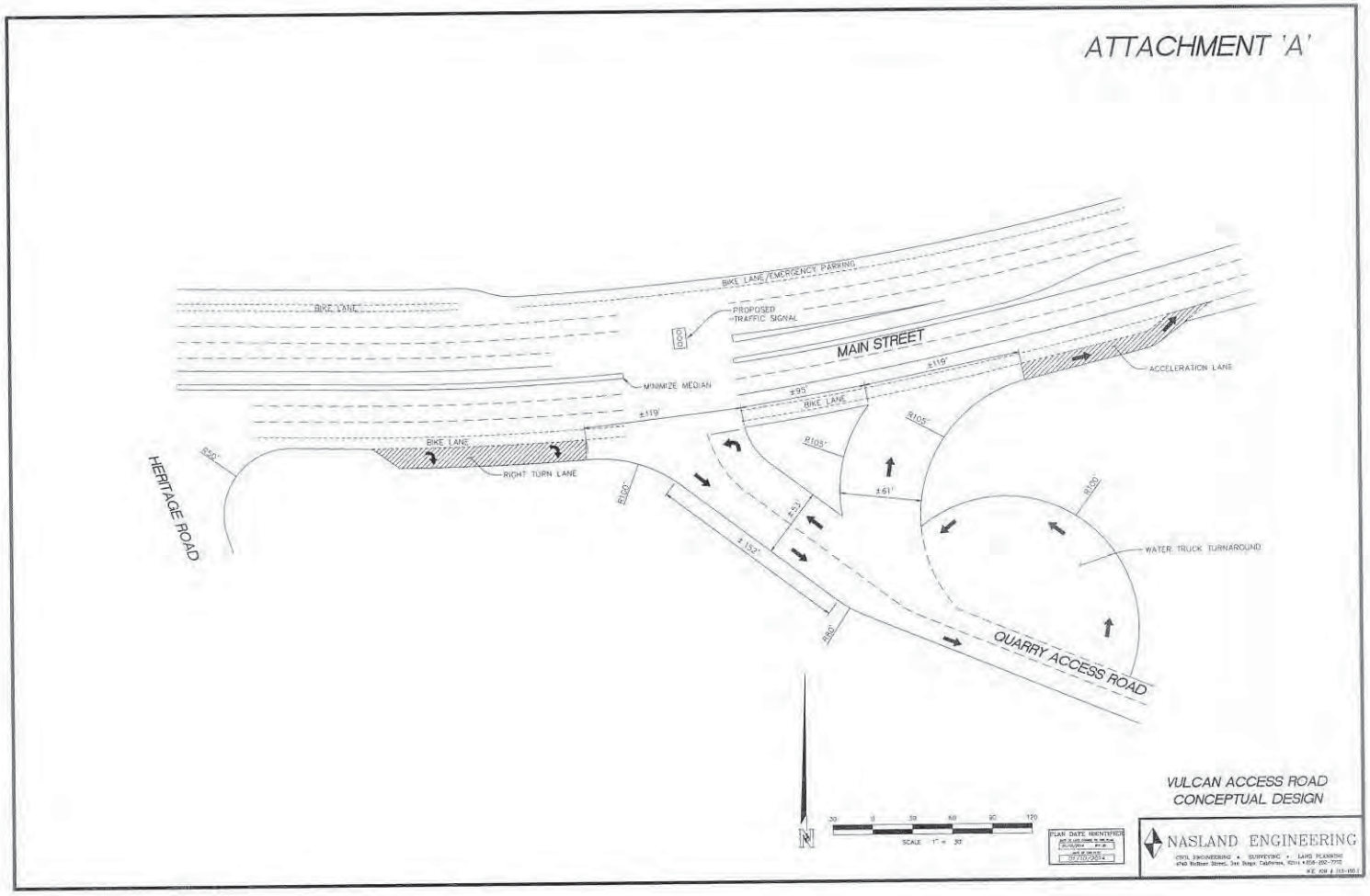
A. *Letter to the City of Chula Vista from Atlantis Group, dated December 11, 2013*
B. *Quarry Access Road exhibit prepared by Hunsaker & Associates, dated November 7, 2013*
C. *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013*

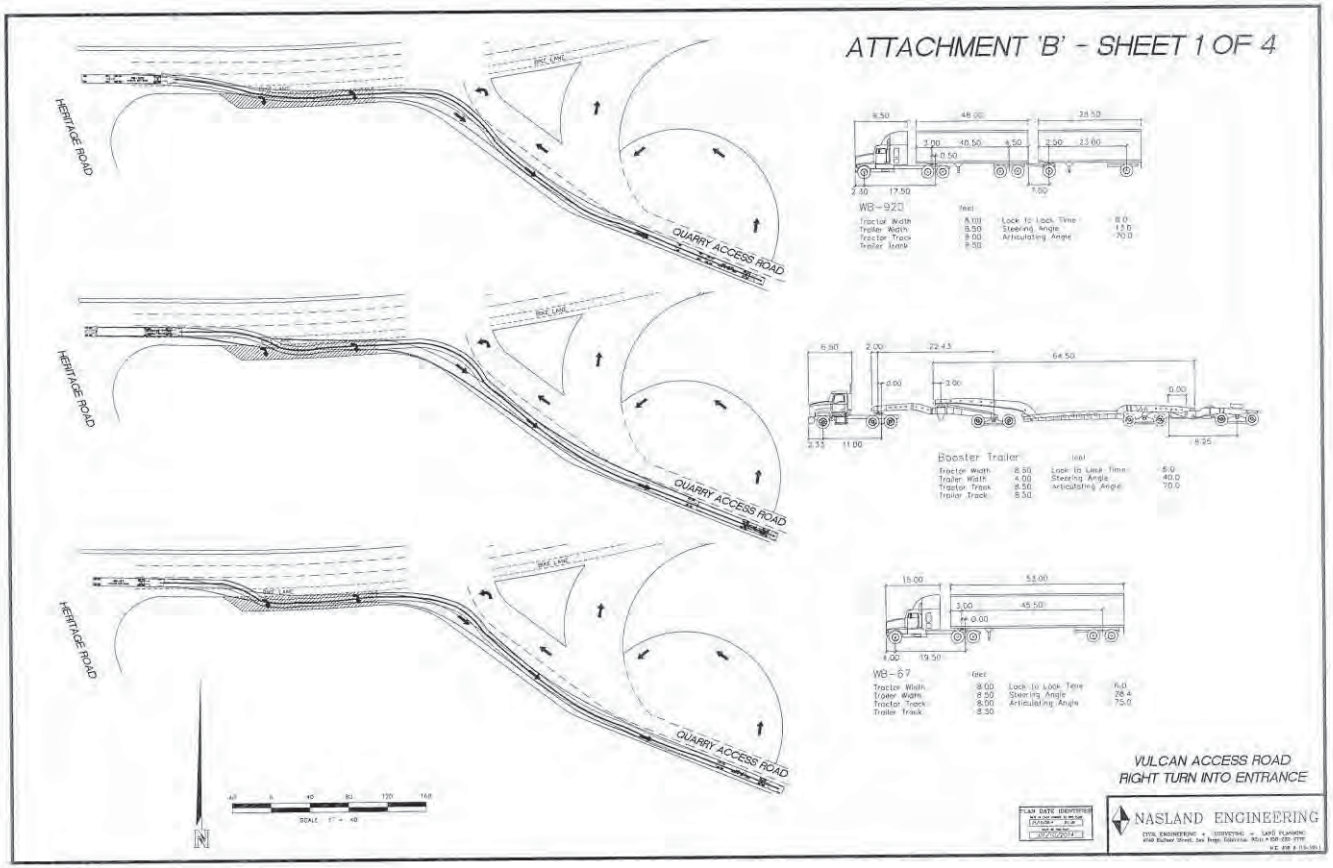
I hope the above information is helpful. Please contact me if I can be of further service or provide additional information regarding this project.

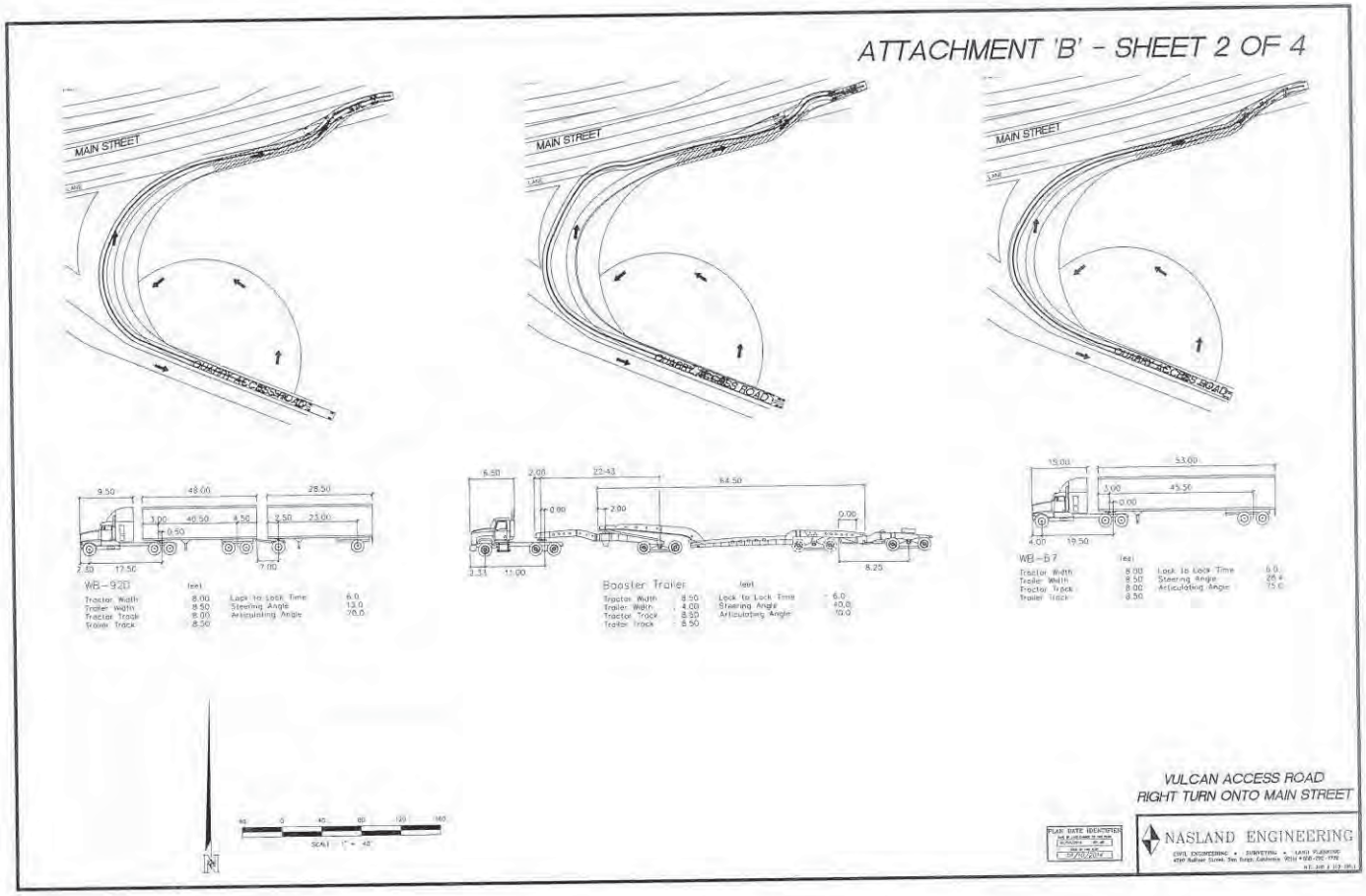
Sincerely,

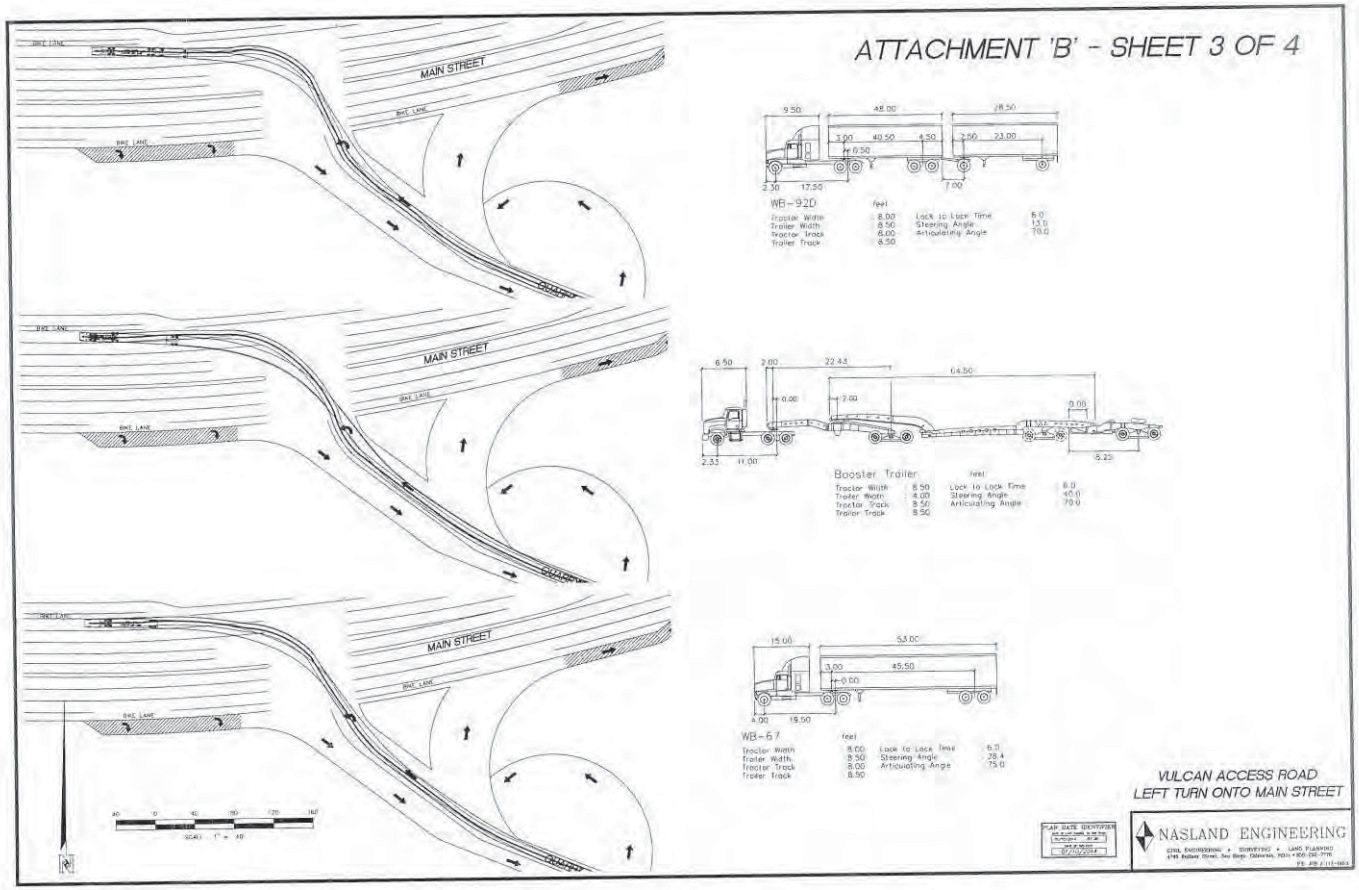
Cory Schrack, P.E.

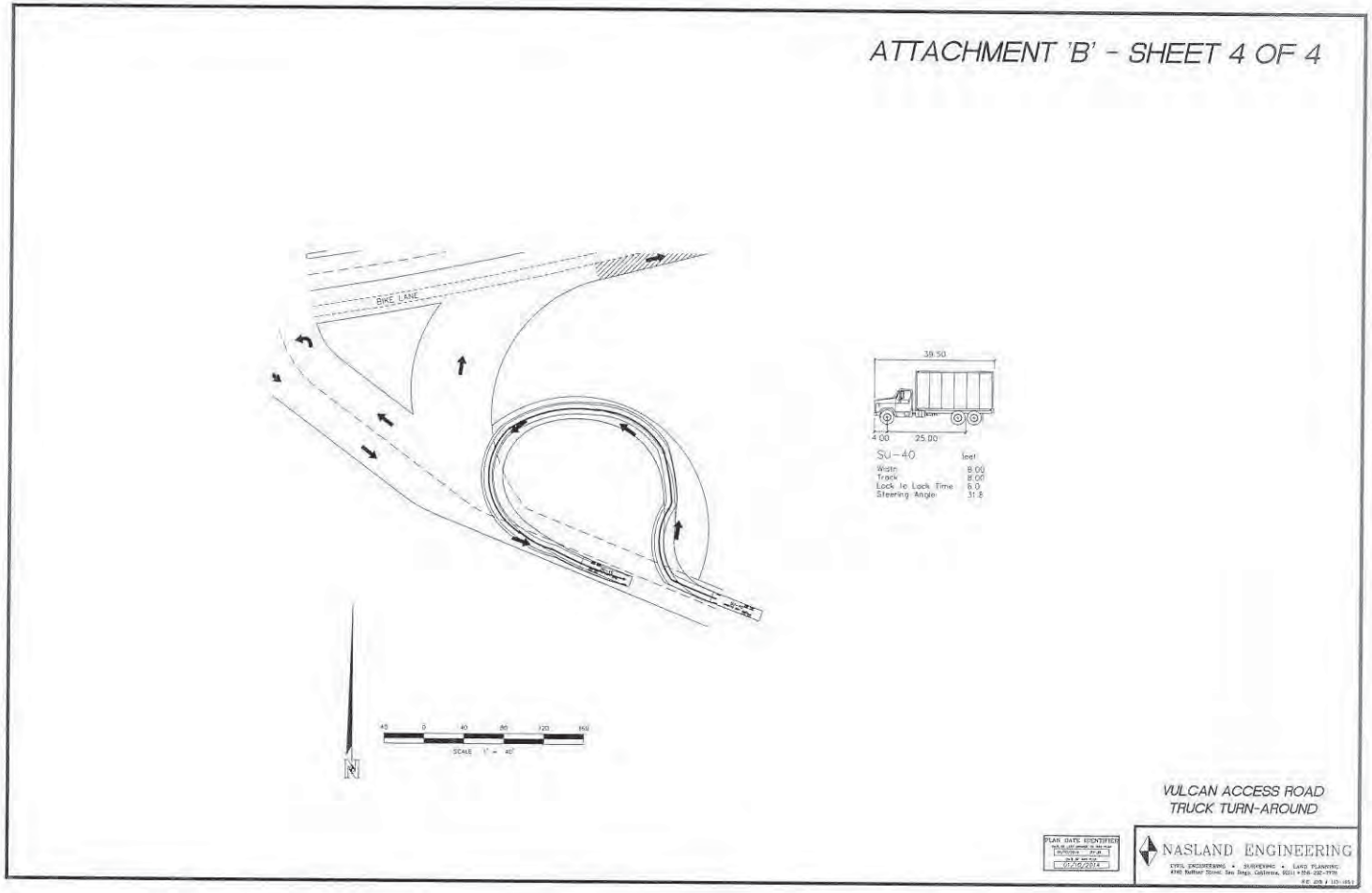
2


ATTACHMENT 'A'
BIKE LANE/EMERGENCY PARKING
BIKE LANE
PROPOSED TRAFFIC SIGNAL
MAIN STREET
MINIMIZE MEDIAN
±119'
±95'
BIKE LANE
ACCELERATION LANE
R105'
R105'
BIKE LANE
RIGHT TURN LANE
R50'
HERITAGE ROAD
R100'
±61'
±53'
±152'
R100'
WATER TRUCK TURNAROUND
R80'
QUARRY ACCESS ROAD
VULCAN ACCESS ROAD
CONCEPTUAL DESIGN
SCALE 1" = 30'
PLAN DATE IDENTIFIED
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 1 OF 4
HERITAGE ROAD
QUARRY ACCESS ROAD
WB-92D
Booster Trailer
WB-67
VULCAN ACCESS ROAD
RIGHT TURN INTO ENTRANCE
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 2 OF 4
MAIN STREET
QUARRY ACCESS ROAD
WB-92D
Booster Trailer
WB-67
VULCAN ACCESS ROAD
RIGHT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 3 OF 4
MAIN STREET
BIKE LANE
WB-92D
feet
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 13.0
Articulating Angle 70.0
Booster Trailer
feet
Tractor Width 8.50
Trailer Width 4.00
Tractor Track 8.50
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 40.0
Articulating Angle 70.0
WB-67
feet
Tractor Width 8.00
Trailer Width 8.50
Tractor Track 8.00
Trailer Track 8.50
Lock to Lock Time 6.0
Steering Angle 28.4
Articulating Angle 75.0
VULCAN ACCESS ROAD
LEFT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 4 OF 4
BIKE LANE
39.50
4.00
25.00
SU-40
feet
Width 8.00
Track 8.00
Lock to Lock Time 6.0
Steering Angle 31.8
SCALE 1" = 40'
VULCAN ACCESS ROAD
TRUCK TURN-AROUND
PLAN DATE IDENTIFIED
07/16/2014
NASLAND ENGINEERING
CIVIL ENGINEERING • SURVEYING • LAND PLANNING

14.0 Quarry Access

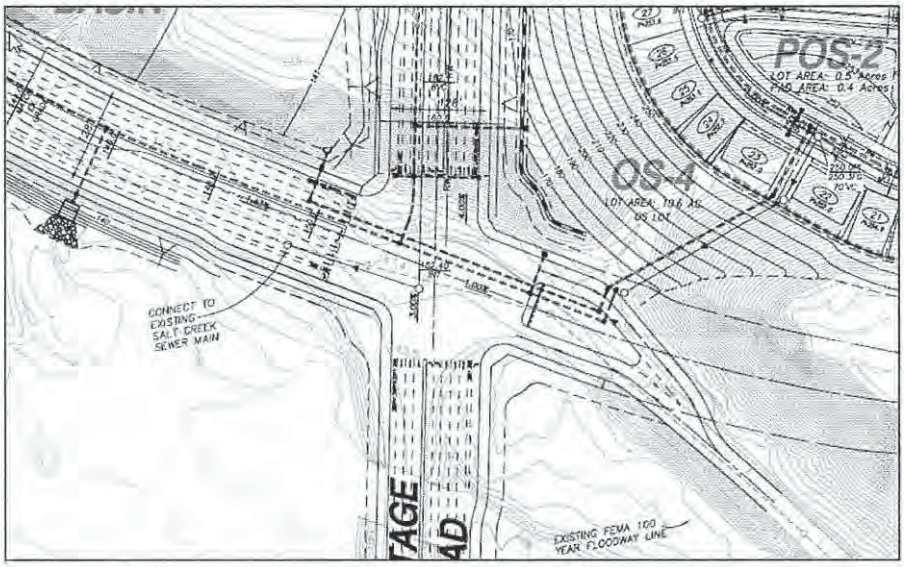
This chapter discusses traffic operations and safety at the quarry access off of Main Street under conditions with (ultimate) and without (interim) the Main Street connection over Wolf Canyon.

The following operational assumptions were derived based upon input from the quarry manager:

- Typical operation hours are between 7:00 am and 3:00 pm – Quarry traffic would be very unlikely to occur during the PM peak hour and thus the traffic operations analysis was based on the AM peak hour;
- Approximately 600 daily truck trips are generated by quarry activities – Approximately 1,500 ADT is generated by the quarry based on a 2.5 Passenger-Car Equivalent (PCE) factor per HCM 2010 (Exhibit 11-10); and
- One truckload every 30 seconds at the highest production – 120 trucks (300 PCE) would enter/exit the quarry during the AM peak hour, assuming a worst case scenario.

14.1 Interim Design

Main Street over Wolf Canyon is not likely to be constructed until Year 2025. The following drawing displays the proposed interim layout for quarry access in relation to the intersection of Heritage Road and Main Street. The access would be east of the intersection, to the southeast.



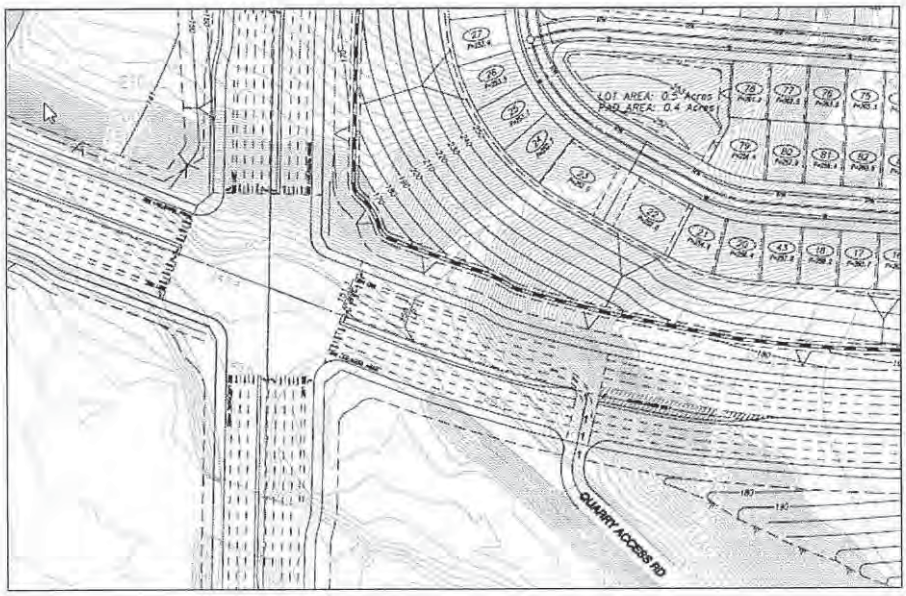
As shown, Main Street would terminate at the quarry access road approximately 210' east of Heritage Road.

Traffic Operation and Safety

Since no traffic movements would be in conflict with the ingress/egress at the quarry access, no traffic operations or safety issues would be anticipated in the interim years. The traffic signal at the Heritage Road and Main Street intersection should be designed as a standard eight-phase actuated signal. The westbound green indication would only be triggered by the arrival of westbound traffic. Proper signage should be displayed indicating that the east leg (Main Street, east of Heritage Road) is for "Quarry Access Only".

14.2 Ultimate Design

The layout below represents the proposed ultimate design for the quarry access in relation to the intersection of Heritage Road and Main Street, when Main Street between Heritage Road and La Media is constructed.



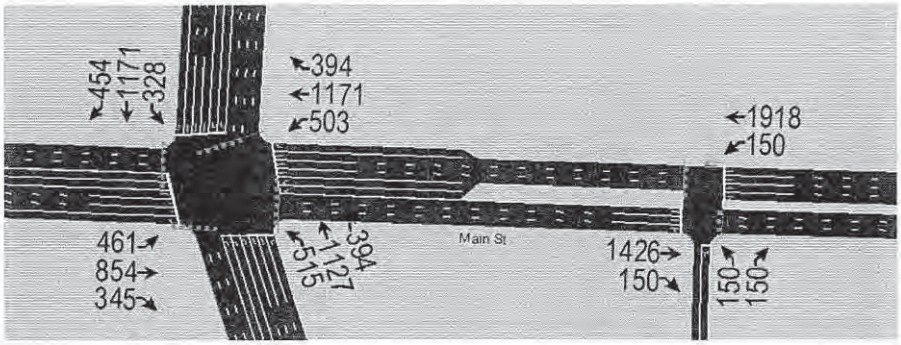
As shown, the quarry access road would be located approximately 350' east of Heritage Road.

Traffic Operation and Safety

A 50%/50% east/west directional split from/to the quarry was assumed and the following indicates the worst case quarry trip generation and ingress/egress volumes at the access point off of Main Street during the AM peak hour:

- 60 truck trips (150 PCE) making a right-turn (eastbound) to enter the quarry;
- 60 truck trips (150 PCE) making a left-turn (westbound) to enter the quarry; and
- 120 truck trips (300 PCE) exiting the quarry with 60 truck trips (150 PCE) each making left and right–turns onto Main Street.

The graphic below illustrates the AM peak hour turning movements at this intersection.



The quarry access is proposed to be signalized at Main Street. It is important to note that this proposed traffic signal must be coordinated with the traffic signal at the Heritage Road and Main Street intersection. **Table 14.1** displays intersection level of service and average vehicle delay results for both Heritage Road / Main Street and Quarry Access Road / Main Street intersections under the Year 2030 conditions. Level of service calculation worksheets are provided in **Appendix AC.**

TABLE 14.1
PEAK HOUR INTERSECTION LEVEL OF SERVICE RESULTS
QUARRY ACCESS YEAR 2030 CONDITIONS

Intersection	AM Peak Hour	
	Avg. Delay (sec.)	LOS
39. Heritage Road / Main Street	46.1	D
65. Quarry Access Road / Main Street	9.0	A

Source: Chen Ryan Associates; February 2014

As shown in the table, the quarry access at Main Street would operate at LOS A with minimum delay in Year 2030. The 50th (average) and 95th (maximum) queue length at the westbound (Main Street) left-turn into the quarry would be 57' and 177', respectively. Thus, it is recommended that the westbound left-turn pocket be designed at 200' to accommodate the maximum queue.

In addition to the 200' westbound left-turn pocket length, the following is also recommended to ensure safety and smooth operations at the intersection of Quarry Access Road and Main Street:

- "No-Turn On Red" sign and/or signal indication to be placed at the northbound quarry access approach to prohibit trucks from making right turns onto Main Street on red;
- Proper signage and pavement marking to be installed indicating "Quarry Access Only";
- Adequate turning radii to be provided for trucks; and
- No pedestrian crossing at Main Street.

Response to Comment Letter F

West Coast Sand and Gravel
Jeff Struiksma
September 17, 2014

F-1 Please refer to responses D-1 through D-21 above for Comment Letter D.

INTENTIONALLY LEFT BLANK

Comment Letter G

September 17, 2014

Ms. Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: University Villages Sectional Planning Area Plan and Tentative Map
Draft Environmental Impact Report (EIR 13-01; SCH 2013071077)

Dear Ms. Borg:

Thank you for the opportunity to comment on the EIR for University Villages. We have reviewed the document and found that the design of the Quarry Access Road found in the Traffic Impact Analysis does not appropriately address the operational needs of the Otay Valley Quarry. It does not incorporate the design parameters submitted by the quarry operator to the City during the project review (see attached).

We understand that the Otay Valley Quarry has been approved to operate until 2089 or beyond. Aggregate is an increasingly scarce resource in Southern California, and this is one of the few remaining quarries in a region that has not approved a new quarry in many years. The quarry has always taken its access to and from Main Street via the graded road, sometimes called Wiley Road. G-1

Realistic use of the quarry requires realistic access that accommodates the quantity of truck trips, the horizontal and vertical requirements of the rock trucks, and minimal waiting times to turn onto Main Street. The design shown in the EIR and the SPA Plan could be a major safety hazard to the Otay Valley Quarry and its customers.

We request that the intersection design be modified to meet the Otay Valley Quarry's operational requirements so that we can continue to supply needed construction materials to the San Diego region.

Sincerely,

Daniel Brown

By: Daniel Brown
Its: Const Aggregates

Attachments: Memorandum dated 1/10/14 from Nasland Engineering
Traffic Impact Analysis – Chen Ryan

INTENTIONALLY LEFT BLANK

Response to Comment Letter G

Construction Aggregates
Daniel Brown
September 17, 2014

G-1 Please refer to responses D-1 through D-21 above for Comment Letter D.

INTENTIONALLY LEFT BLANK

Comment Letter H

Build the Best. ***Be the Best.***

FLATIRON

Flatiron Construction Corp.
Western Region
1770 La Costa Meadows Drive
San Marcos, CA 92078
760 916 9100 MAIN
760 916 9101 FAX
www.flatironcorp.com

September 17, 2014

Ms. Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: University Villages Sectional Planning Area Plan and Tentative Map
Draft Environmental Impact Report (EIR 13-01; SCH 2013071077)

Dear Ms. Borg:

Thank you for the opportunity to comment on the EIR for University Villages. We have reviewed the document and found that the design of the Quarry Access Road found in the Traffic Impact Analysis does not appropriately address the operational needs of the Otay Valley Quarry. It does not incorporate the design parameters submitted by the quarry operator to the City during the project review (see attached).

We understand that the Otay Valley Quarry has been approved to operate until 2089 or beyond. Aggregate is an increasingly scarce resource in Southern California, and this is one of the few remaining quarries in a region that has not approved a new quarry in many years. The quarry has always taken its access to and from Main Street via the graded road, sometimes called Wiley Road.

Realistic use of the quarry requires realistic access that accommodates the quantity of truck trips, the horizontal and vertical requirements of the rock trucks, and minimal waiting times to turn onto Main Street. The design shown in the EIR and the SPA Plan could be a major safety hazard to the Otay Valley Quarry and its customers.

We request that the intersection design be modified to meet the Otay Valley Quarry's operational requirements so that there is no disruption to the supply of needed construction materials in the San Diego region.

H-1

Sincerely,
Flatiron West, Inc.

Dale A. Nelson
Vice President & District Manager

Attachments: Memorandum dated 1/10/14 from Nasland Engineering
Traffic Impact Analysis – Chen Ryan

An Equal Opportunity Employer

A HOCHTIEF Company

14.0 Quarry Access

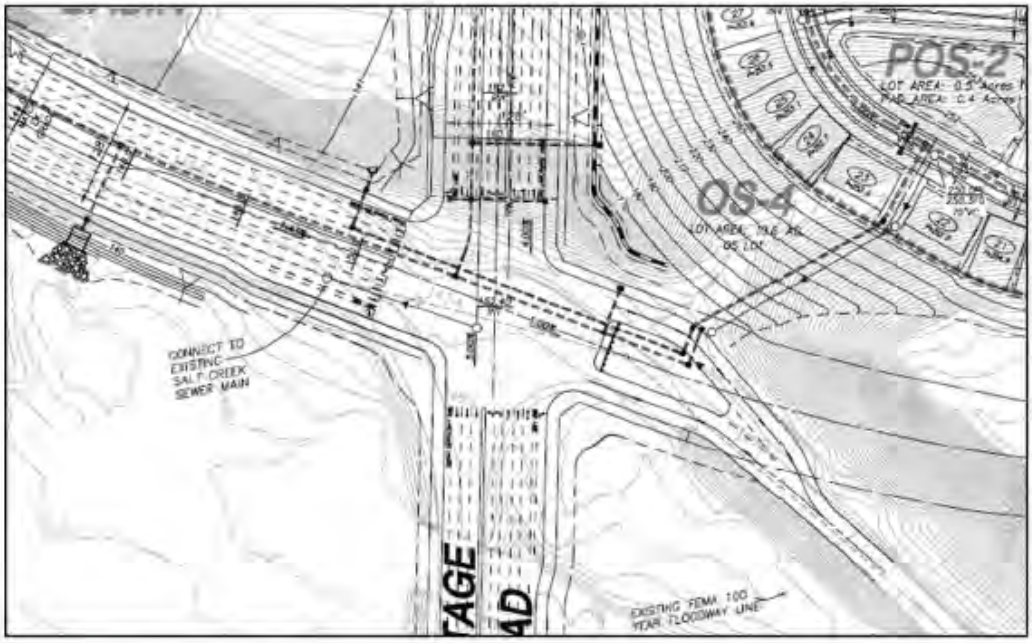
This chapter discusses traffic operations and safety at the quarry access off of Main Street under conditions with (ultimate) and without (interim) the Main Street connection over Wolf Canyon.

The following operational assumptions were derived based upon input from the quarry manager:

- Typical operation hours are between 7:00 am and 3:00 pm – Quarry traffic would be very unlikely to occur during the PM peak hour and thus the traffic operations analysis was based on the AM peak hour;
- Approximately 600 daily truck trips are generated by quarry activities – Approximately 1,500 ADT is generated by the quarry based on a 2.5 Passenger-Car Equivalent (PCE) factor per HCM 2010 (Exhibit 11-10); and
- One truckload every 30 seconds at the highest production – 120 trucks (300 PCE) would enter/exit the quarry during the AM peak hour, assuming a worst case scenario.

14.1 Interim Design

Main Street over Wolf Canyon is not likely to be constructed until Year 2025. The following drawing displays the proposed interim layout for quarry access in relation to the intersection of Heritage Road and Main Street. The access would be east of the intersection, to the southeast.



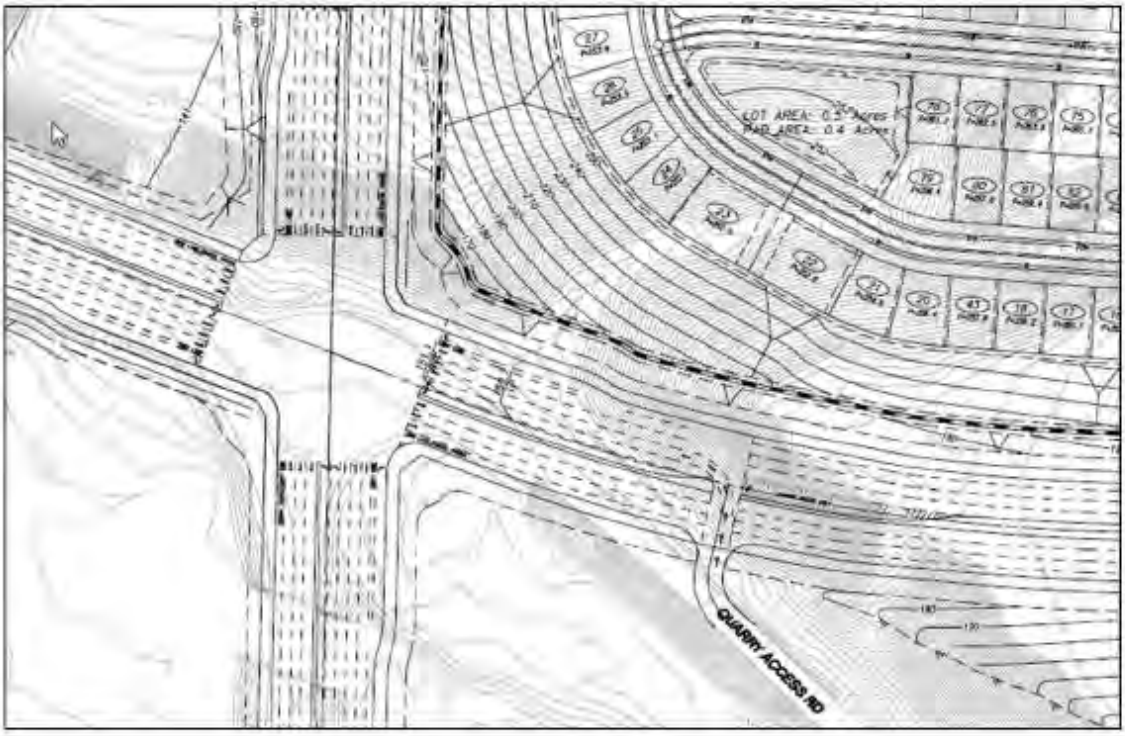
As shown, Main Street would terminate at the quarry access road approximately 210' east of Heritage Road.

Traffic Operation and Safety

Since no traffic movements would be in conflict with the ingress/egress at the quarry access, no traffic operations or safety issues would be anticipated in the interim years. The traffic signal at the Heritage Road and Main Street intersection should be designed as a standard eight-phase actuated signal. The westbound green indication would only be triggered by the arrival of westbound traffic. Proper signage should be displayed indicating that the east leg (Main Street, east of Heritage Road) is for "Quarry Access Only".

14.2 Ultimate Design

The layout below represents the proposed ultimate design for the quarry access in relation to the intersection of Heritage Road and Main Street, when Main Street between Heritage Road and La Media is constructed.



As shown, the quarry access road would be located approximately 350' east of Heritage Road.

Traffic Operation and Safety

A 50%/50% east/west directional split from/to the quarry was assumed and the following indicates the worst case quarry trip generation and ingress/egress volumes at the access point off of Main Street during the AM peak hour:

- 60 truck trips (150 PCE) making a right-turn (eastbound) to enter the quarry;
- 60 truck trips (150 PCE) making a left-turn (westbound) to enter the quarry; and
- 120 truck trips (300 PCE) exiting the quarry with 60 truck trips (150 PCE) each making left and right–turns onto Main Street.

The graphic below illustrates the AM peak hour turning movements at this intersection.

The quarry access is proposed to be signalized at Main Street. It is important to note that this proposed traffic signal must be coordinated with the traffic signal at the Heritage Road and Main Street intersection. **Table 14.1** displays intersection level of service and average vehicle delay results for both Heritage Road / Main Street and Quarry Access Road / Main Street intersections under the Year 2030 conditions. Level of service calculation worksheets are provided in **Appendix AC.**

TABLE 14.1
PEAK HOUR INTERSECTION LEVEL OF SERVICE RESULTS
QUARRY ACCESS YEAR 2030 CONDITIONS

Intersection	AM Peak Hour	
	Avg. Delay (sec.)	LOS
39. Heritage Road / Main Street	46.1	D
65. Quarry Access Road / Main Street	9.0	A

Source: Chen Ryan Associates; February 2014

As shown in the table, the quarry access at Main Street would operate at LOS A with minimum delay in Year 2030. The 50th (average) and 95th (maximum) queue length at the westbound (Main Street) left-turn into the quarry would be 57' and 177', respectively. Thus, it is recommended that the westbound left-turn pocket be designed at 200' to accommodate the maximum queue.

In addition to the 200' westbound left-turn pocket length, the following is also recommended to ensure safety and smooth operations at the intersection of Quarry Access Road and Main Street:

- "No-Turn On Red" sign and/or signal indication to be placed at the northbound quarry access approach to prohibit trucks from making right turns onto Main Street on red;
- Proper signage and pavement marking to be installed indicating "Quarry Access Only";
- Adequate turning radii to be provided for trucks; and
- No pedestrian crossing at Main Street.

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

ENGINEERING MEMORANDUM

DATE: January 10, 2014

TO: Pat Coughlin, Vulcan Materials Company
John Atkins, Vulcan Materials Company

FROM: Cory Schrack, PE
Nasland Engineering

SUBJECT: Vulcan Materials, Chula Vista: Access Road Analysis

The following road study memorandum serves to address the Chula Vista Facility's needs related to the road improvements proposed by the City of Chula Vista. Upon review of the proposed alignment drawings prepared by Hunsaker & Associates dated November 7, 2013, we offer the following design comments:

1. The recommended configuration for the quarry entrance is shown on Attachment A. The approximate dimensions shown will optimize the usability of the new quarry entrance. The subsequent design points support the configuration shown on Attachment A. Autoturn software with several vehicle sizes was utilized to determine the required configuration. Refer to Attachment B for the vehicle turning movements analyzed.

2. The quarry entrance should have curb return radii of 100-ft on the West side to accommodate the nine axle trucks that access the site several times per year to bring heavy equipment to the site. A dedicated right turn lane should be provided on eastbound Main Street.

3. The quarry entrance should have curb return radii of 105-ft on the East side to accommodate the nine axle trucks that access the site several times per year. A separate right turn lane should be provided where the turn lane meets Main Street. An acceleration lane should be provided eastbound onto Main Street.

4. The proposed median on Main Street will need to be reduced to make left turns feasible for trucks exiting the quarry heading westbound. If necessary for traffic channelization, a painted median may be acceptable.

5. A traffic signal should be installed at the quarry entrance intersection with Main Street, as stated in the letter from the Atlantis Group dated December 11, 2013. The amount of traffic from the quarry should be studied in detail by a Traffic Engineer, including sufficient green time to allow the trucks to clear the intersection. Signal Timing with the intersection of Main Street and Heritage Road will also be critical for efficient operation of the quarry exit. It should also be

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

noted that the quarry has vested mining rights with no restrictions on volume or hours of operation, and therefore the proposed entrance limits the ability to allow the necessary access for trucks and other construction equipment.

6. A turnaround area should be included near the quarry entrance to accommodate the turning movements of water trucks, graders, trucks, and loaders used by the quarry to calm dust from the unpaved entrance road. This equipment is not permitted to operate on public roads and cannot utilize the intersection to turn around. We recommend the turnaround area to be paved. A 100-ft radius would be appropriate for this purpose.

7. At the intersection of Main Street and Heritage Road, design of the southeasterly curb return radius should take into account the size of trucks turning eastbound on Main Street from northbound Heritage Road. A 50-ft radius should be sufficient.

8. Phasing of construction for the main street improvements should also be incorporated in the construction documents for the road. Access to the quarry shall be maintained at all times. Consideration for a temporary access road from Heritage Road should be made.

9. If the improvements shown on the *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013* are to be implemented prior to construction of eastbound Main Street, the following considerations should be incorporated into the interim conditions.

    a. Provide for the turn-around requirements of the quarry water truck (100-ft radius).
    b. Optimize traffic signal timing, taking into account the anticipated traffic volumes from the quarry.
    c. Design of the southeasterly curb return radius should take into account the size of trucks entering the quarry from northbound Heritage Road.

References:

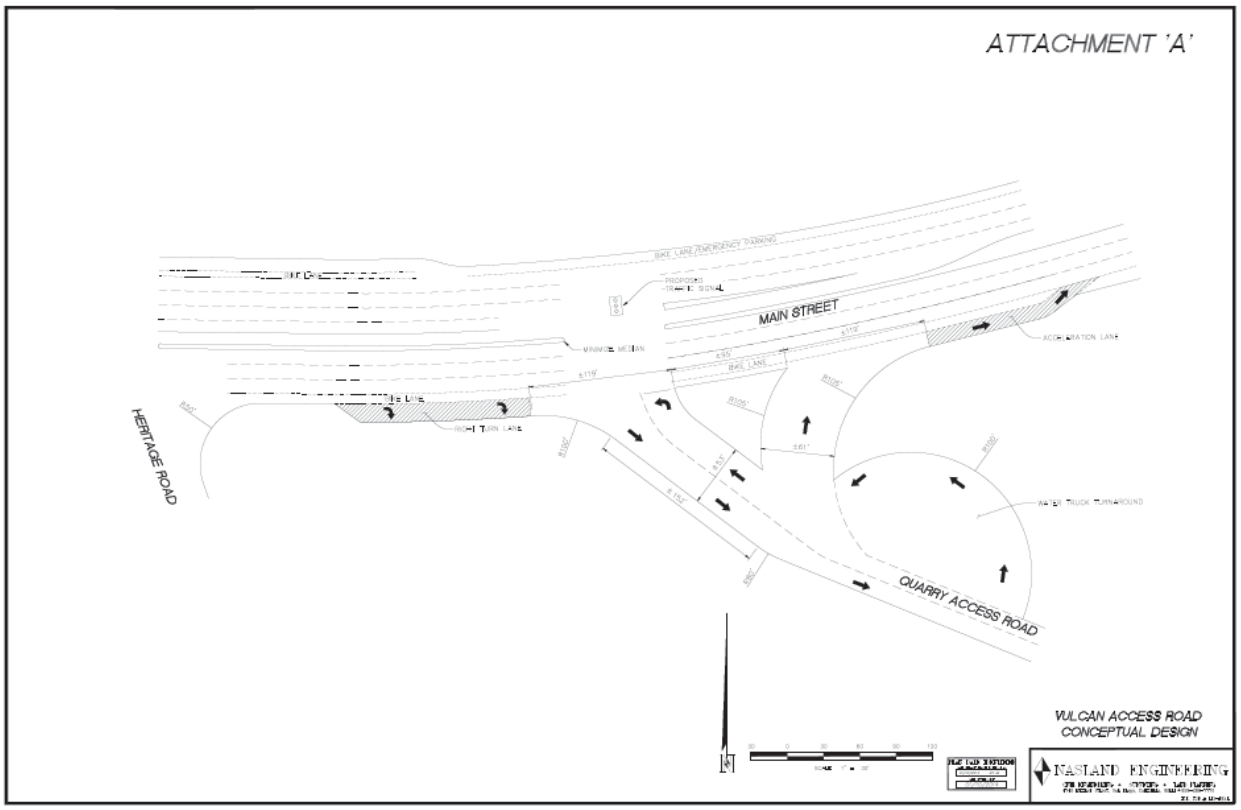
A. *Letter to the City of Chula Vista from Atlantis Group, dated December 11, 2013*
B. *Quarry Access Road exhibit prepared by Hunsaker & Associates, dated November 7, 2013*
C. *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013*

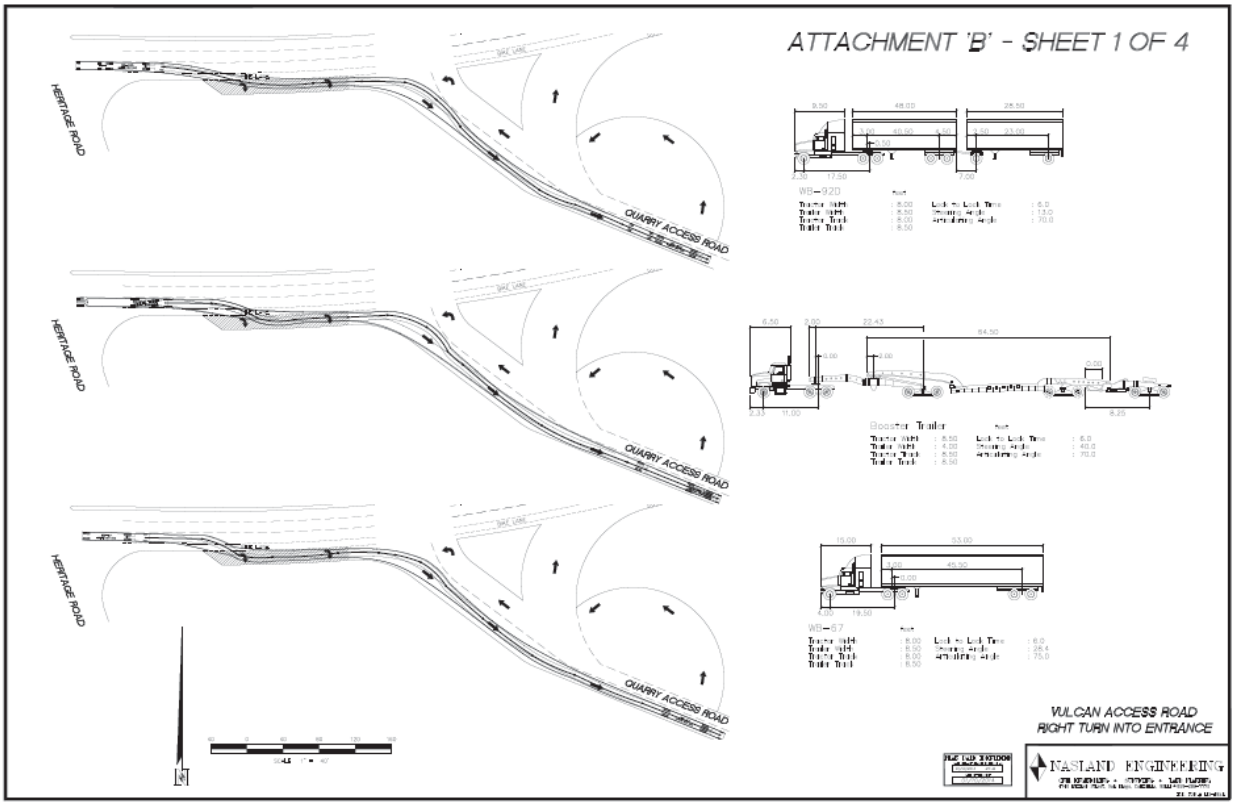
I hope the above information is helpful. Please contact me if I can be of further service or provide additional information regarding this project.

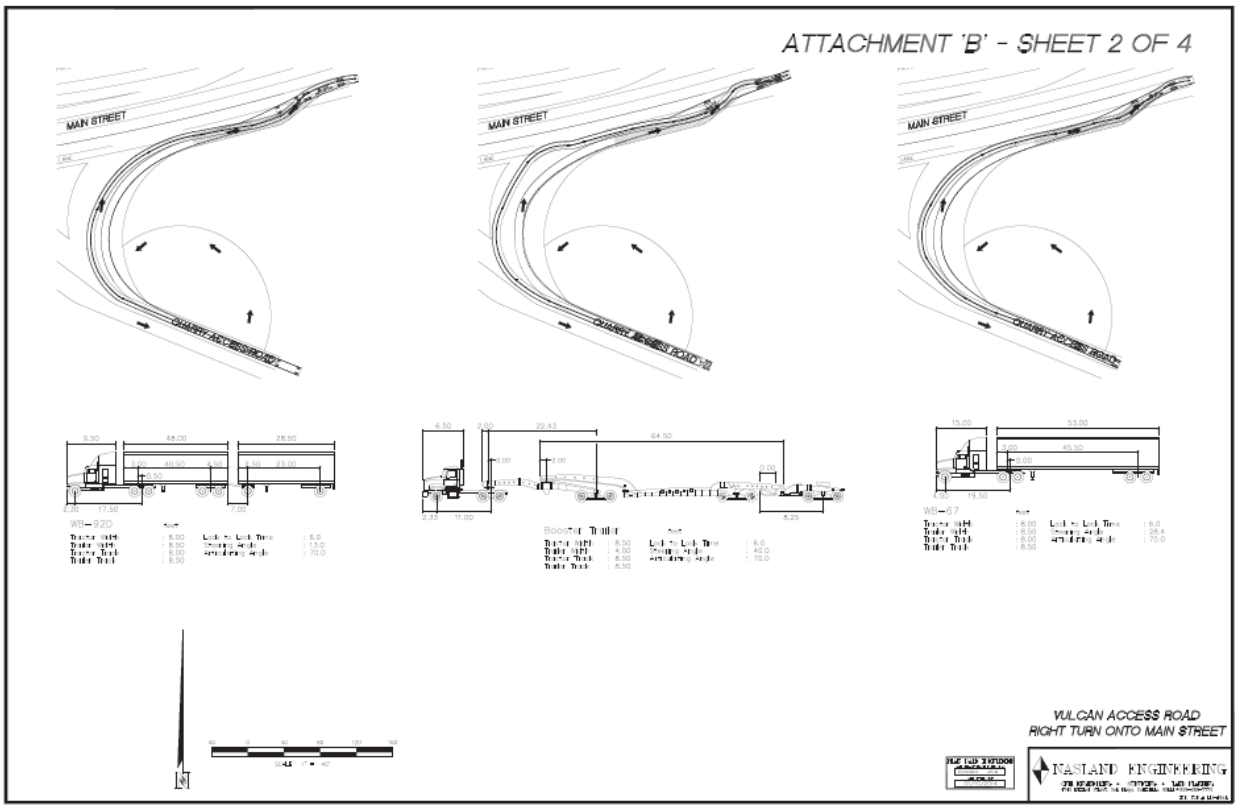
Sincerely,

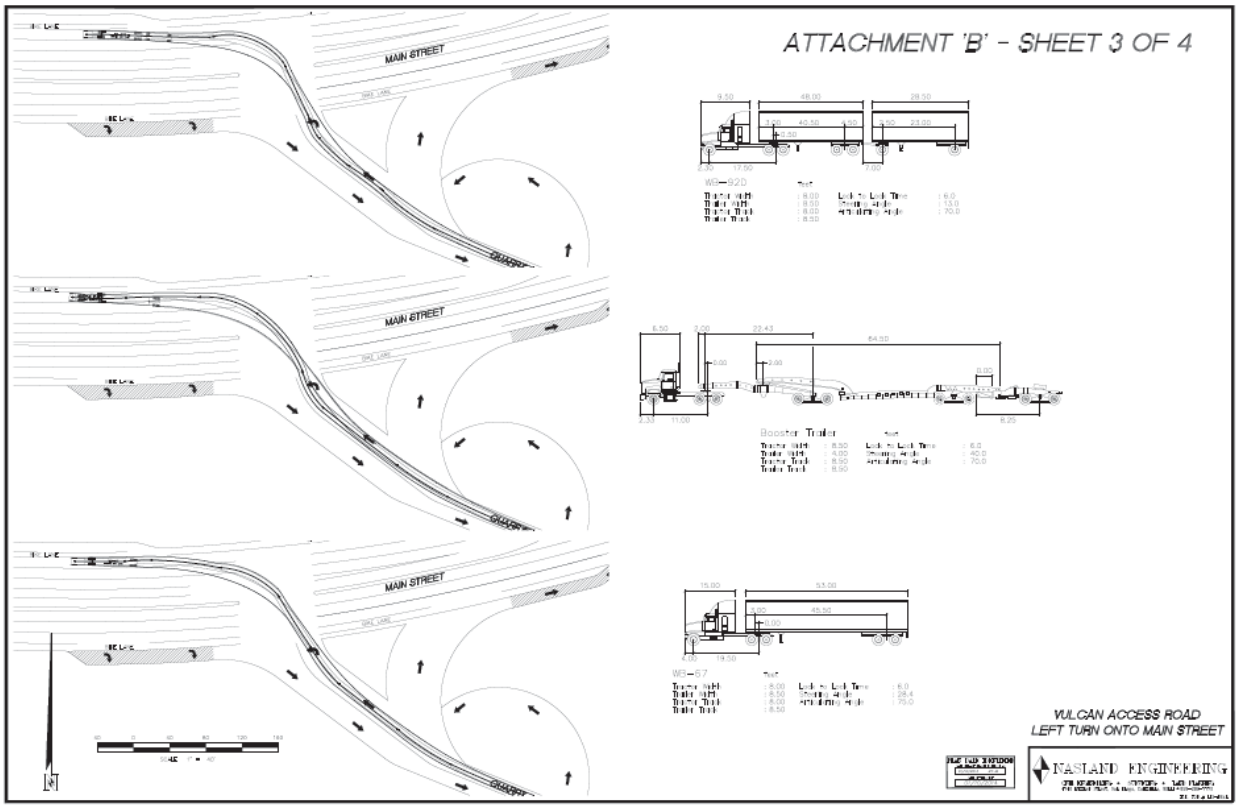
Cory Schrack, P.E.

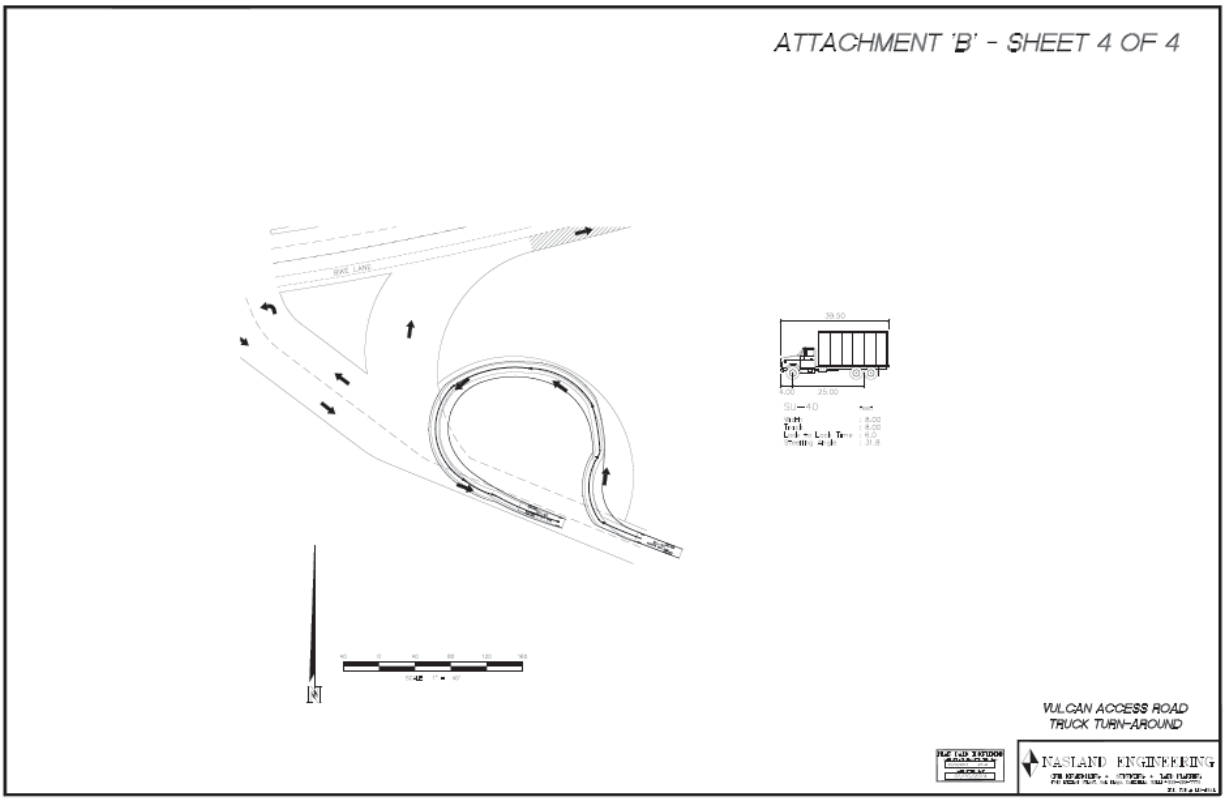
2

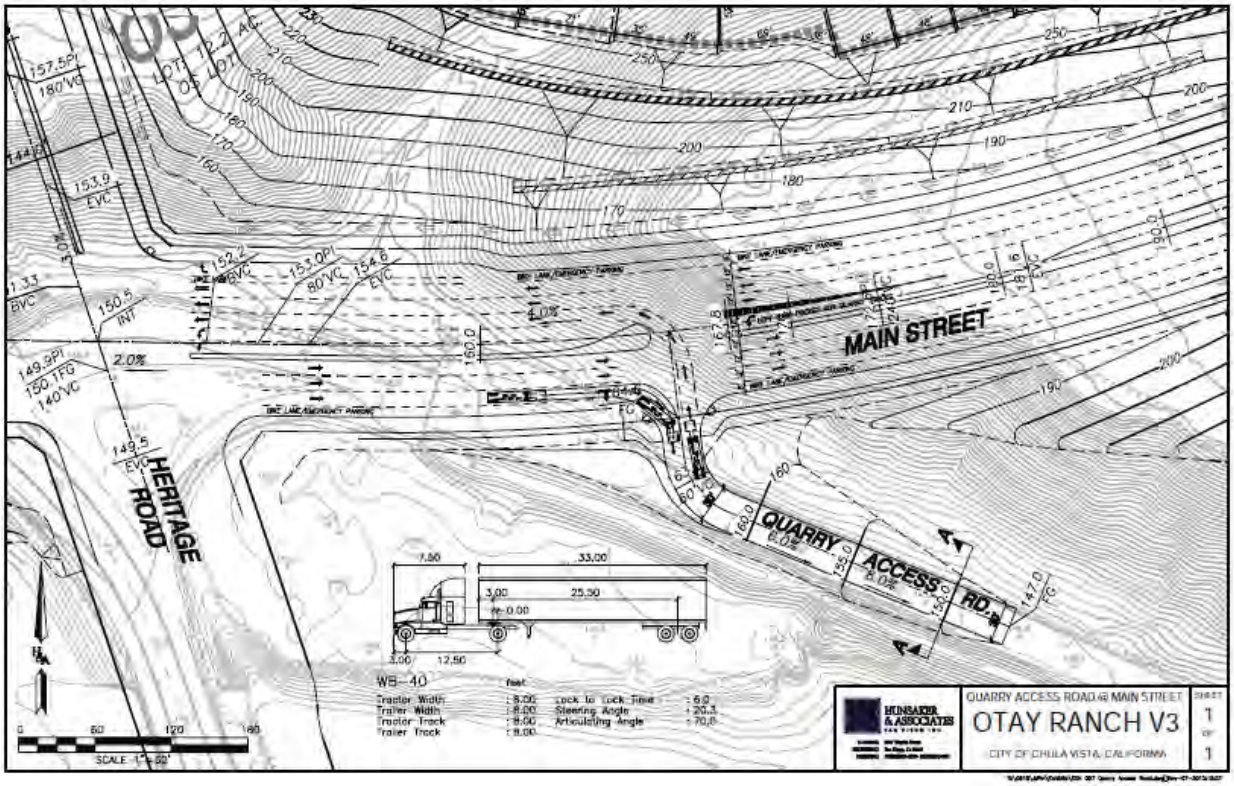

ATTACHMENT 'A'
BIKE LANE/EMERGENCY PARKING
PROPOSED TRAFFIC SIGNAL
MAIN STREET
MINIMUM MEDIAN
ACCELERATION LANE
BIKE LANE
RIGHT TURN LANE
HERITAGE ROAD
WATER TRUCK TURNAROUND
QUARRY ACCESS ROAD
VULCAN ACCESS ROAD
CONCEPTUAL DESIGN
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 1 OF 4
HERITAGE ROAD
QUARRY ACCESS ROAD
BIKE LANE
WB-92D
Roadster Trailer
WB-67
VULCAN ACCESS ROAD
RIGHT TURN INTO ENTRANCE
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 2 OF 4
MAIN STREET
MAIN STREET
MAIN STREET
WB-92D
Booster Trailer
WB-67
VULCAN ACCESS ROAD
RIGHT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 3 OF 4
MAIN STREET
MAIN STREET
MAIN STREET
WB-92D
Booster Trailer
WB-67
VULCAN ACCESS ROAD
LEFT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 4 OF 4
VULCAN ACCESS ROAD
TRUCK TURN-AROUND
NASLAND ENGINEERING


MAIN STREET
HERITAGE ROAD
QUARRY ACCESS RD.
WB-40
QUARRY ACCESS ROAD @ MAIN STREET
OTAY RANCH V3
CITY OF CHULA VISTA, CALIFORNIA
HUNSAKER & ASSOCIATES

Response to Comment Letter H

Flatiron West, Inc.
Dale A. Nelson, Vice President and District Manager
September 17, 2014

H-1 Please refer to responses D-1 through D-21 above for Comment Letter D.

INTENTIONALLY LEFT BLANK

Comment Letter I

TC Construction Company, Inc.

September 17, 2014

Ms. Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Re: University Villages Sectional Planning Area Plan and Tentative Map
Draft Environmental Impact Report (EIR 13-01; SCH 20130710/7)

Dear Ms. Borg:

Thank you for the opportunity to comment on the EIR for University Villages. We have reviewed the document and found that the design of the Quarry Access Road found in the Traffic Impact Analysis does not appropriately address the operational needs of the Otay Valley Quarry. It does not incorporate the design parameters submitted by the quarry operator to the City during the project review (see attached).

We understand that the Otay Valley Quarry has been approved to operate until 2089 or beyond. Aggregate is an increasingly scarce resource in Southern California, and this is one of the few remaining quarries in a region that has not approved a new quarry in many years. The quarry has always taken its access to and from Main Street via the graded road, sometimes called Wiley Road. I-1

Realistic use of the quarry requires realistic access that accommodates the quantity of truck trips, the horizontal and vertical requirements of the rock trucks, and minimal waiting times to turn onto Main Street. The design shown in the EIR and the SPA Plan could be a major safety hazard to the Otay Valley Quarry and its customers.

We request that the intersection design be modified to meet the Otay Valley Quarry's operational requirements so that we can continue to supply needed construction materials to the San Diego region.

Sincerely,

By: __Austin Cameron____
Its: ___President_____
Attachments: Memorandum dated 1/10/14 from Nasland Engineering
Traffic Impact Analysis – Chen Ryan

TC Construction Co., Inc., Corporate Office [illegible]
Offices in San Diego County, Corporate | Inland Empire | Imperial County
www.tcinc50.com

14.0 Quarry Access

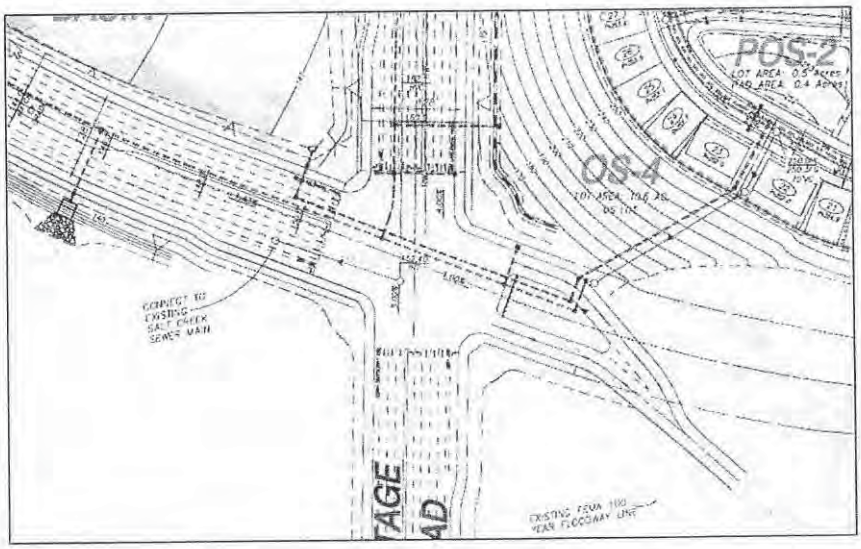
This chapter discusses traffic operations and safety at the quarry access off of Main Street under conditions with (ultimate) and without (interim) the Main Street connection over Wolf Canyon.

The following operational assumptions were derived based upon input from the quarry manager:

- Typical operation hours are between 7:00 am and 3:00 pm – Quarry traffic would be very unlikely to occur during the PM peak hour and thus the traffic operations analysis was based on the AM peak hour;
- Approximately 600 daily truck trips are generated by quarry activities – Approximately 1,500 ADT is generated by the quarry based on a 2.5 Passenger-Car Equivalent (PCE) factor per HCM 2010 (Exhibit 11-10); and
- One truckload every 30 seconds at the highest production – 120 trucks (300 PCE) would enter/exit the quarry during the AM peak hour, assuming a worst case scenario.

14.1 Interim Design

Main Street over Wolf Canyon is not likely to be constructed until Year 2025. The following drawing displays the proposed interim layout for quarry access in relation to the intersection of Heritage Road and Main Street. The access would be east of the intersection, to the southeast.



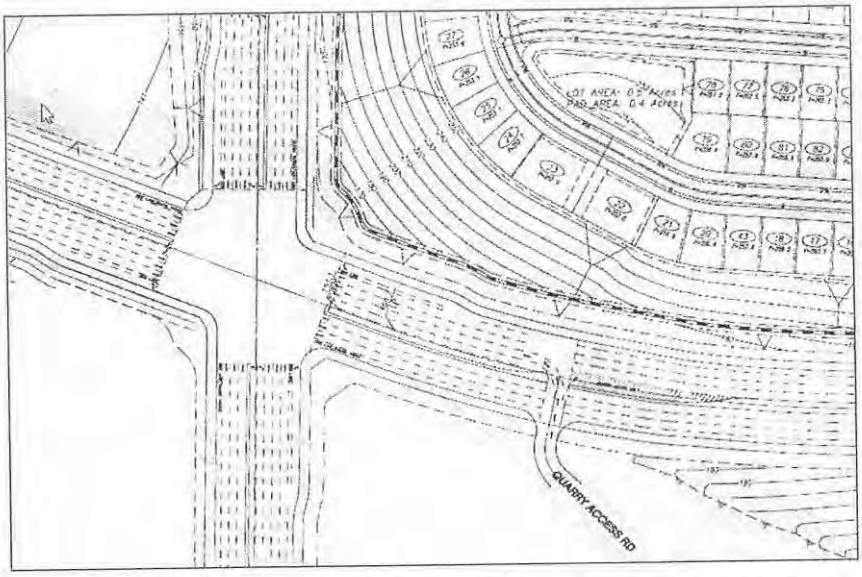
As shown, Main Street would terminate at the quarry access road approximately 210' east of Heritage Road.

Traffic Operation and Safety

Since no traffic movements would be in conflict with the ingress/egress at the quarry access, no traffic operations or safety issues would be anticipated in the interim years. The traffic signal at the Heritage Road and Main Street intersection should be designed as a standard eight-phase actuated signal. The westbound green indication would only be triggered by the arrival of westbound traffic. Proper signage should be displayed indicating that the east leg (Main Street, east of Heritage Road) is for "Quarry Access Only".

14.2 Ultimate Design

The layout below represents the proposed ultimate design for the quarry access in relation to the intersection of Heritage Road and Main Street, when Main Street between Heritage Road and La Media is constructed.



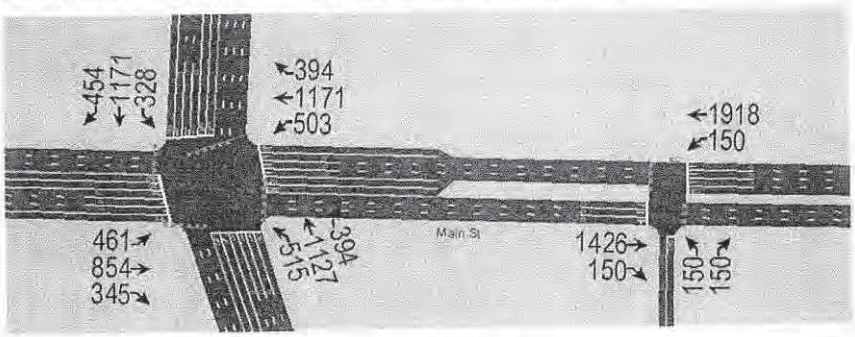
As shown, the quarry access road would be located approximately 350' east of Heritage Road.

Traffic Operation and Safety

A 50%/50% east/west directional split from/to the quarry was assumed and the following indicates the worst case quarry trip generation and ingress/egress volumes at the access point off of Main Street during the AM peak hour:

- 60 truck trips (150 PCE) making a right-turn (eastbound) to enter the quarry;
- 60 truck trips (150 PCE) making a left-turn (westbound) to enter the quarry; and
- 120 truck trips (300 PCE) exiting the quarry with 60 truck trips (150 PCE) each making left and right–turns onto Main Street.

The graphic below illustrates the AM peak hour turning movements at this intersection.



The quarry access is proposed to be signalized at Main Street. It is important to note that this proposed traffic signal must be coordinated with the traffic signal at the Heritage Road and Main Street intersection. **Table 14.1** displays intersection level of service and average vehicle delay results for both Heritage Road / Main Street and Quarry Access Road / Main Street intersections under the Year 2030 conditions. Level of service calculation worksheets are provided in **Appendix AC.**

TABLE 14.1
PEAK HOUR INTERSECTION LEVEL OF SERVICE RESULTS
QUARRY ACCESS YEAR 2030 CONDITIONS

Intersection	AM Peak Hour	
	Avg. Delay (sec.)	LOS
39. Heritage Road / Main Street	46.1	D
65. Quarry Access Road / Main Street	9.0	A

Source: Chen Ryan Associates; February 2014

As shown in the table, the quarry access at Main Street would operate at LOS A with minimum delay in Year 2030. The 50th (average) and 95th (maximum) queue length at the westbound (Main Street) left-turn into the quarry would be 57' and 177', respectively. Thus, it is recommended that the westbound left-turn pocket be designed at 200' to accommodate the maximum queue.

In addition to the 200' westbound left-turn pocket length, the following is also recommended to ensure safety and smooth operations at the intersection of Quarry Access Road and Main Street:

- "No-Turn On Red" sign and/or signal indication to be placed at the northbound quarry access approach to prohibit trucks from making right turns onto Main Street on red;
- Proper signage and pavement marking to be installed indicating "Quarry Access Only";
- Adequate turning radii to be provided for trucks; and
- No pedestrian crossing at Main Street.

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

ENGINEERING MEMORANDUM

DATE: January 10, 2014

TO: Pat Coughlin, Vulcan Materials Company
John Atkins, Vulcan Materials Company

FROM: Cory Schrack, PE
Nasland Engineering

SUBJECT: Vulcan Materials, Chula Vista: Access Road Analysis

The following road study memorandum serves to address the Chula Vista Facility's needs related to the road improvements proposed by the City of Chula Vista. Upon review of the proposed alignment drawings prepared by Hunsaker & Associates dated November 7, 2013, we offer the following design comments:

1. The recommended configuration for the quarry entrance is shown on Attachment A. The approximate dimensions shown will optimize the usability of the new quarry entrance. The subsequent design points support the configuration shown on Attachment A. Autoturn software with several vehicle sizes was utilized to determine the required configuration. Refer to Attachment B for the vehicle turning movements analyzed.

2. The quarry entrance should have curb return radii of 100-ft on the West side to accommodate the nine axle trucks that access the site several times per year to bring heavy equipment to the site. A dedicated right turn lane should be provided on eastbound Main Street.

3. The quarry entrance should have curb return radii of 105-ft on the East side to accommodate the nine axle trucks that access the site several times per year. A separate right turn lane should be provided where the turn lane meets Main Street. An acceleration lane should be provided eastbound onto Main Street.

4. The proposed median on Main Street will need to be reduced to make left turns feasible for trucks exiting the quarry heading westbound. If necessary for traffic channelization, a painted median may be acceptable.

5. A traffic signal should be installed at the quarry entrance intersection with Main Street, as stated in the letter from the Atlantis Group dated December 11, 2013. The amount of traffic from the quarry should be studied in detail by a Traffic Engineer, including sufficient green time to allow the trucks to clear the intersection. Signal Timing with the intersection of Main Street and Heritage Road will also be critical for efficient operation of the quarry exit. It should also be

Nasland

T (858) 292-7770
F (858) 571-3241
4740 Ruffner Street
San Diego, CA 92111
nasland.com

noted that the quarry has vested mining rights with no restrictions on volume or hours of operation, and therefore the proposed entrance limits the ability to allow the necessary access for trucks and other construction equipment.

6. A turnaround area should be included near the quarry entrance to accommodate the turning movements of water trucks, graders, trucks, and loaders used by the quarry to calm dust from the unpaved entrance road. This equipment is not permitted to operate on public roads and cannot utilize the intersection to turn around. We recommend the turnaround area to be paved. A 100-ft radius would be appropriate for this purpose.

7. At the intersection of Main Street and Heritage Road, design of the southeasterly curb return radius should take into account the size of trucks turning eastbound on Main Street from northbound Heritage Road. A 50-ft radius should be sufficient.

8. Phasing of construction for the main street improvements should also be incorporated in the construction documents for the road. Access to the quarry shall be maintained at all times. Consideration for a temporary access road from Heritage Road should be made.

9. If the improvements shown on the *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013* are to be implemented prior to construction of eastbound Main Street, the following considerations should be incorporated into the interim conditions.

    a. Provide for the turn-around requirements of the quarry water truck (100-ft radius).
    b. Optimize traffic signal timing, taking into account the anticipated traffic volumes from the quarry.
    c. Design of the southeasterly curb return radius should take into account the size of trucks entering the quarry from northbound Heritage Road.

References:

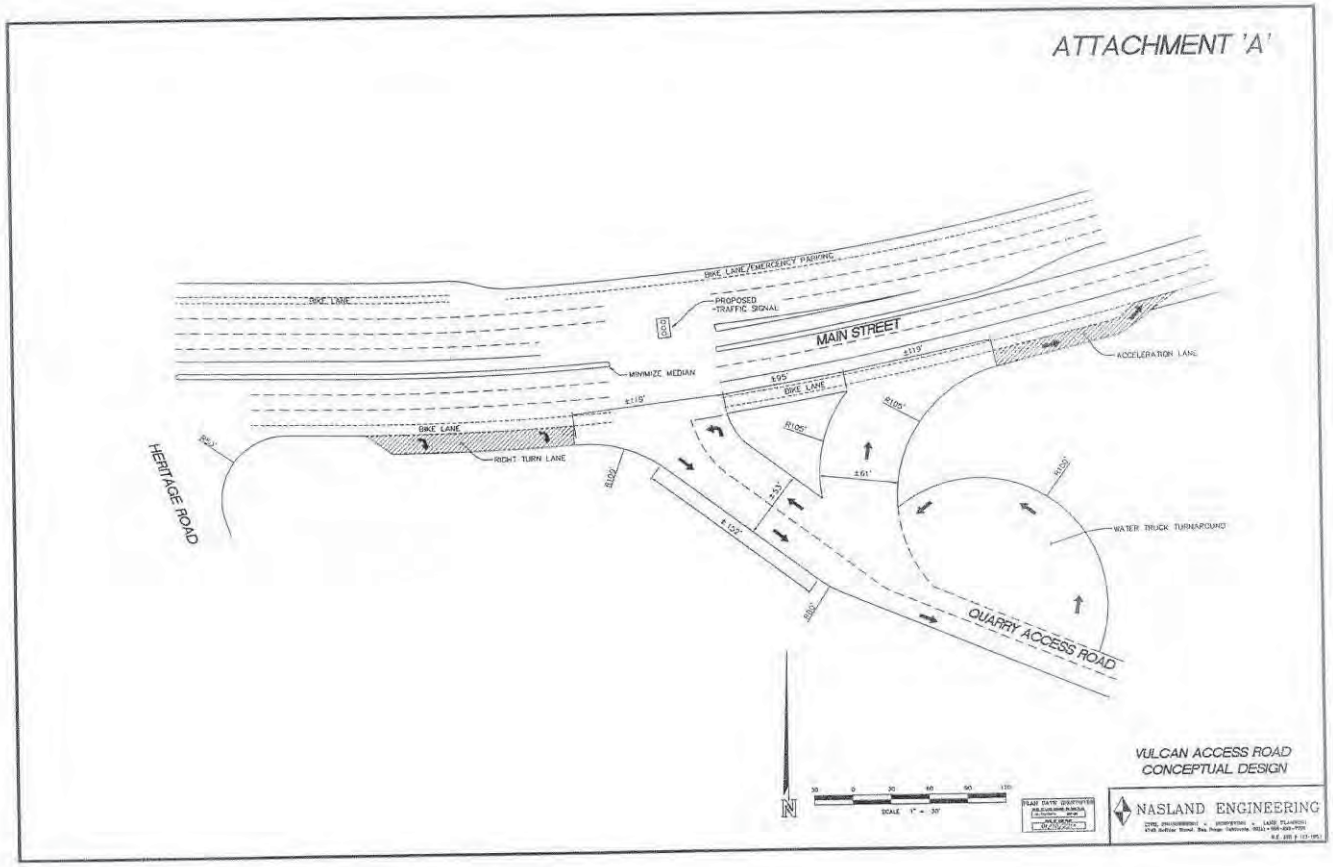
A. *Letter to the City of Chula Vista from Atlantis Group, dated December 11, 2013*
B. *Quarry Access Road exhibit prepared by Hunsaker & Associates, dated November 7, 2013*
C. *Heritage Road Bridge Replacement Alternative 3 prepared by Moffat & Nichol and the City of Chula Vista, dated June 13, 2013*

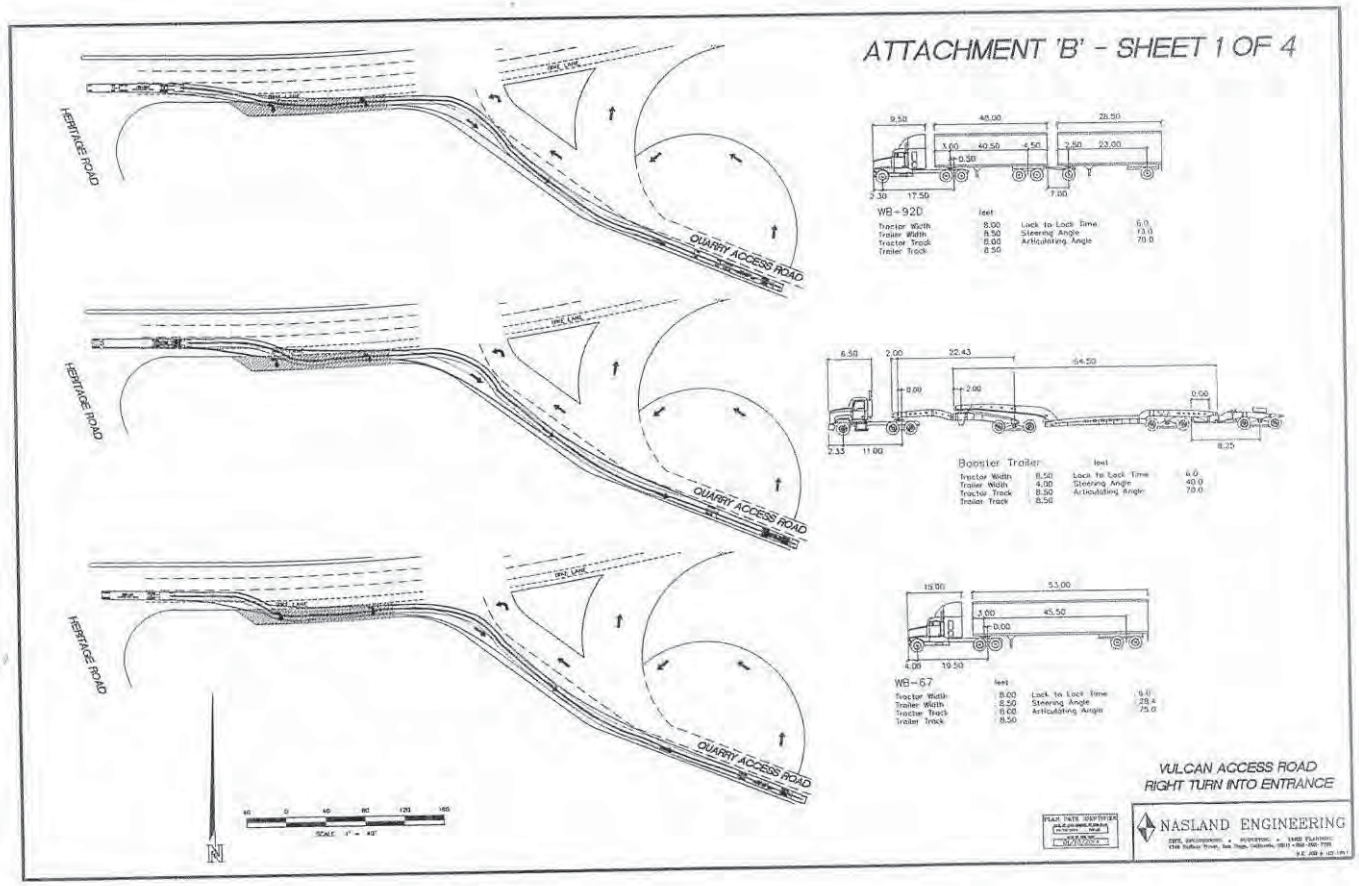
I hope the above information is helpful. Please contact me if I can be of further service or provide additional information regarding this project.

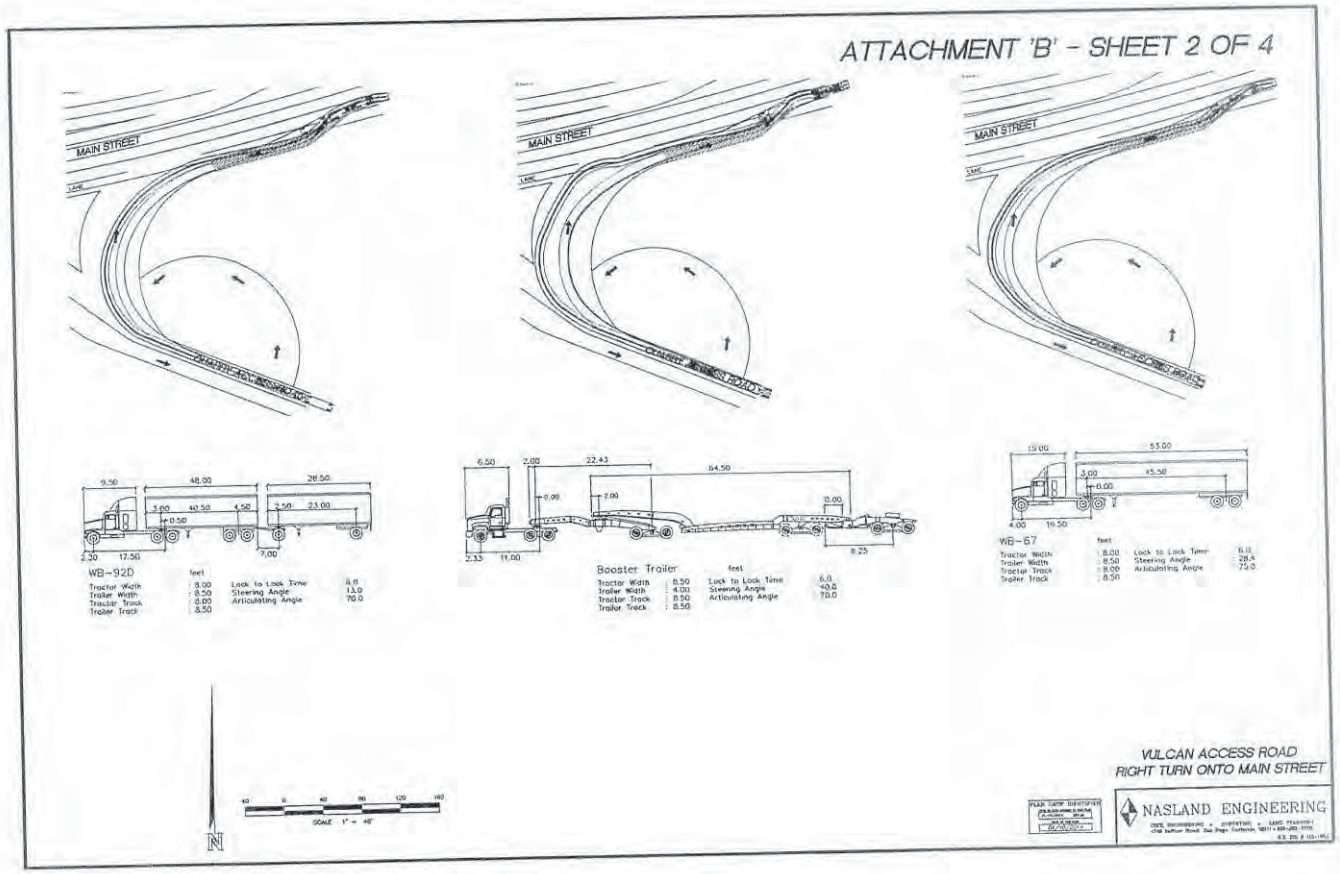
Sincerely,

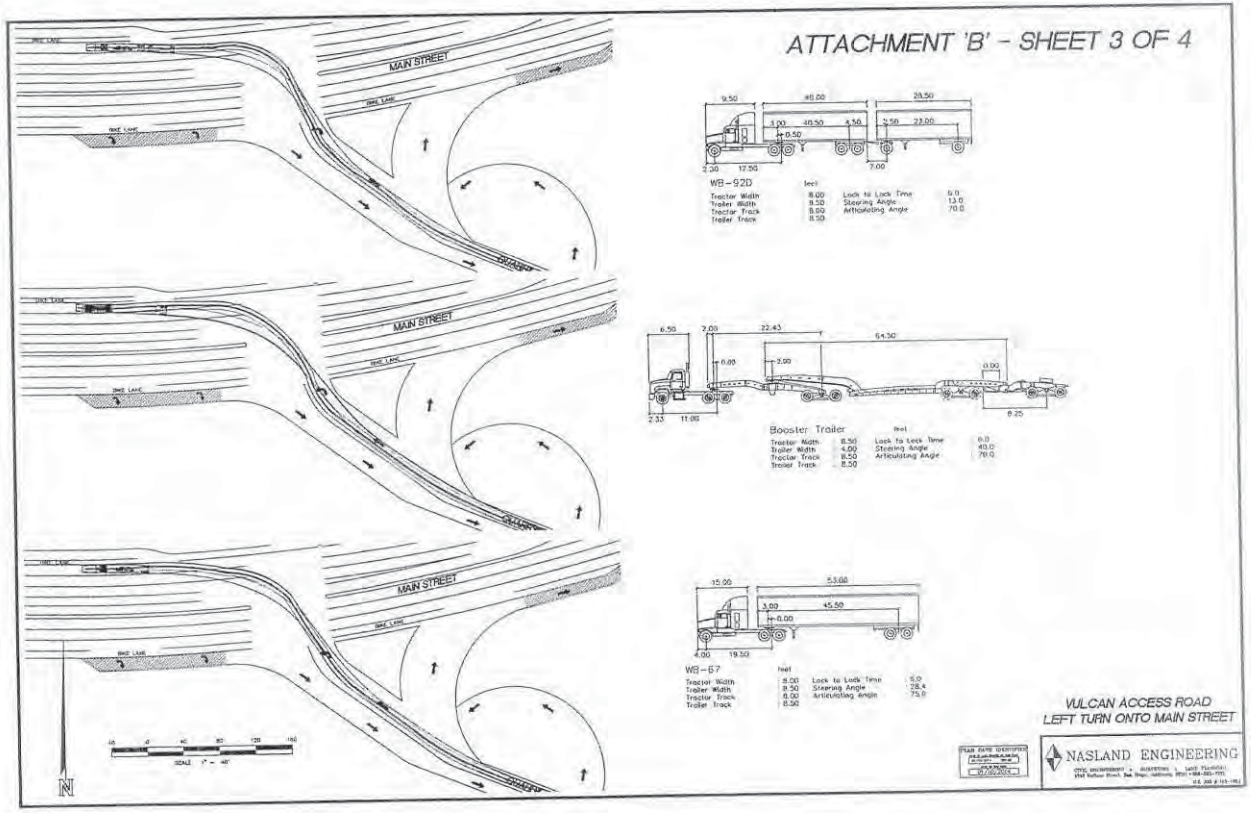
Cory Schrack, P.E.

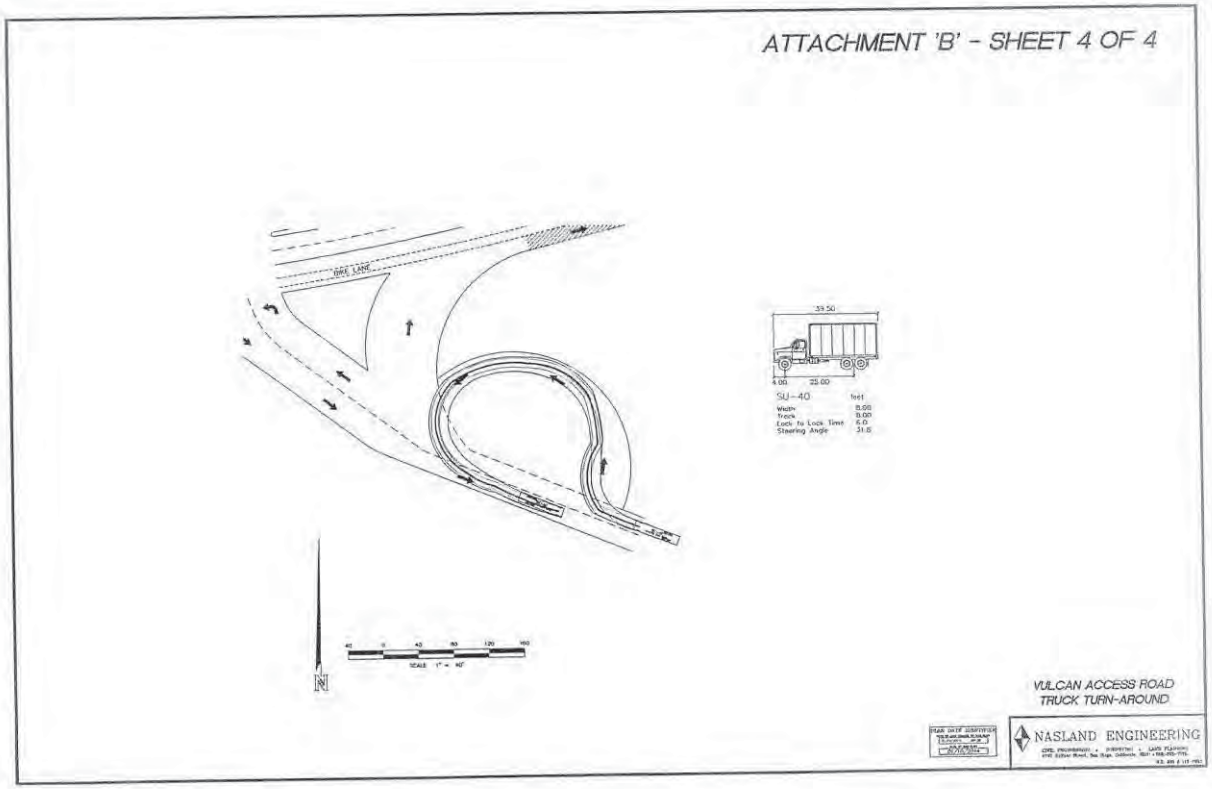
2

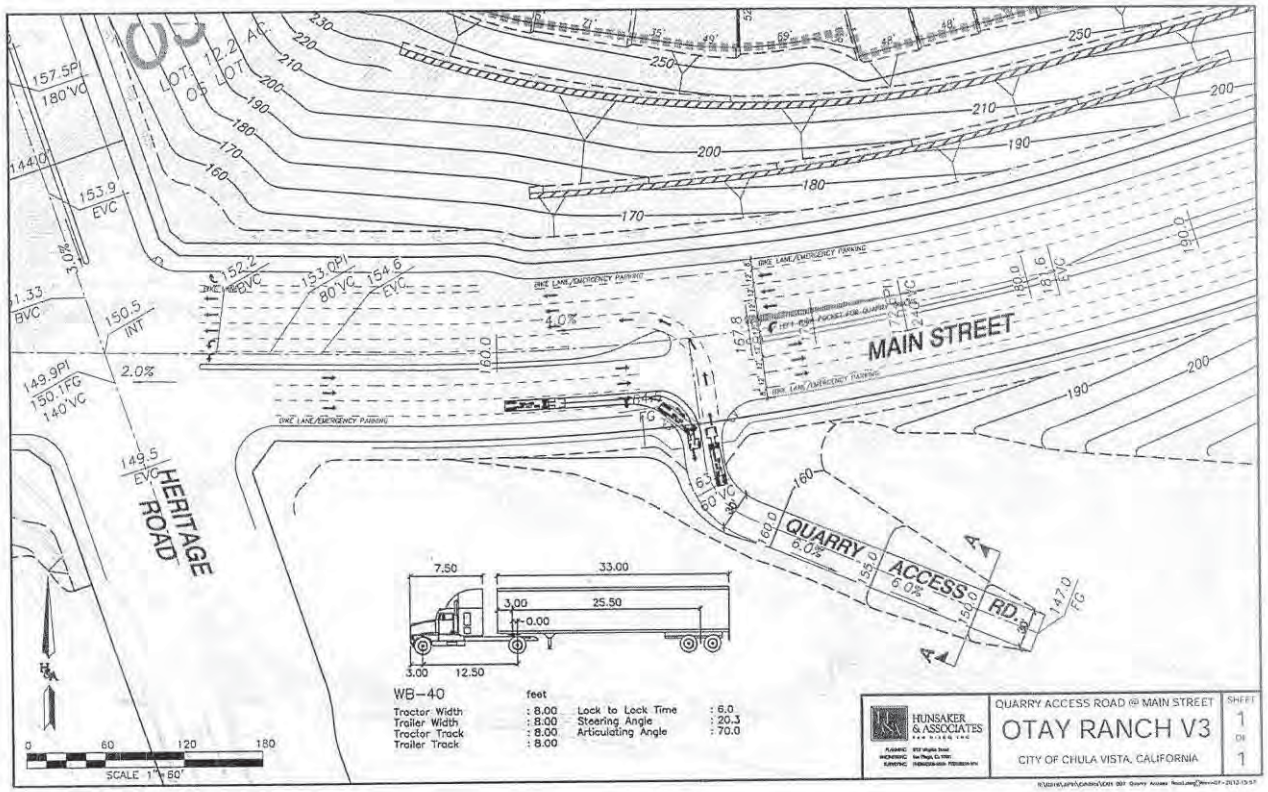

ATTACHMENT 'A'
BIKE LANE/EMERGENCY PARKING
BIKE LANE
PROPOSED
TRAFFIC SIGNAL
MAIN STREET
MINIMIZE MEDIAN
ACCELERATION LANE
BIKE LANE
RIGHT TURN LANE
HERITAGE ROAD
WATER TRUCK TURNAROUND
QUARRY ACCESS ROAD
VULCAN ACCESS ROAD
CONCEPTUAL DESIGN
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 1 OF 4
HERITAGE ROAD
QUARRY ACCESS ROAD
WB-92D
Booster Trailer
WB-67
VULCAN ACCESS ROAD
RIGHT TURN INTO ENTRANCE
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 2 OF 4
MAIN STREET
MAIN STREET
MAIN STREET
WB-92D
Booster Trailer
WB-67
VULCAN ACCESS ROAD
RIGHT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 3 OF 4
MAIN STREET
MAIN STREET
MAIN STREET
WB-92D
Booster Trailer
WB-67
VULCAN ACCESS ROAD
LEFT TURN ONTO MAIN STREET
NASLAND ENGINEERING


ATTACHMENT 'B' - SHEET 4 OF 4
ONE LANE
39.50
4.00
25.00
SU-40
feet
Width 8.00
Track 8.00
Lock to Lock Time 6.0
Steering Angle 31.0
N
VULCAN ACCESS ROAD
TRUCK TURN-AROUND
NASLAND ENGINEERING


MAIN STREET
HERITAGE ROAD
QUARRY ACCESS RD.
BIKE LANE/EMERGENCY PARKING
WB-40
Tractor Width : 8.00
Trailer Width : 8.00
Tractor Track : 8.00
Trailer Track : 8.00
Lock to Lock Time : 6.0
Steering Angle : 20.3
Articulating Angle : 70.0
SCALE 1" = 60'
HUNSAKER & ASSOCIATES
QUARRY ACCESS ROAD @ MAIN STREET
OTAY RANCH V3
CITY OF CHULA VISTA, CALIFORNIA
SHEET 1 OF 1

INTENTIONALLY LEFT BLANK

Response to Comment Letter I

TC Construction Company, Inc.
Austin Cameron, President
September 17, 2014

I-1 Please refer to responses D-1 through D-21 above for Comment Letter D.

INTENTIONALLY LEFT BLANK

Comment Letter J

DEPARTMENT OF TRANSPORTATION
DISTRICT 11, DIVISION OF PLANNING
4050 TAYLOR ST, M.S. 240
SAN DIEGO, CA 92110
PHONE (619) 688-6960
FAX (619) 688-4299
TTY 711
www.dot.ca.gov

September 17, 2014

11-SD-125
PM 4.961
DEIR Village 3, 4, 8E, 10

Ms. Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Dear Ms. Borg:

The California Department of Transportation (Caltrans) has reviewed the Draft Environmental Impact Report (DEIR) for the Otay Village 3, 4, 8 East, and 10, projects near State Route 125 (SR-125). Caltrans has the following comments: J-1

1. The ramp metering analysis summary on page 240 is incomplete and needs to be revised. J-2
2. Per tables 3.5, 6.5, 7.5, 8.5, and 9.5 in the report, the ramp meter demand is shown as follows: J-3
   a. I-805 NB ramps and Olympic Parkway
      i. Existing: 741 Caltrans is: 2,016
      ii. 2015: 520
      iii. 2020: 576
      iv. 2025: 589
      v. 2030: 861
   b. I-805 NB ramps and Main Street
      i. Existing: 292 Caltrans is: 789
      ii. 2015: 408
      iii. 2020: 589
      iv. 2025: 491
      v. 2030: 641

However, the AM peak hour intersection volumes from figures 3-2A, 6-2A, 7-2A, 8-2A, 9-2A for these ramps is as follows:

4. I-805 NB ramps and Olympic Parkway

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Ms. Marni Borg
September 17, 2014
Page 2

vi. Existing: 1,853
vii. 2015: 1,305
viii. 2020: 1,444
ix. 2025: 1,478
x. 2030: 2,157

b. I-805 NB ramps and Main Street
xi. Existing: 753
xii. 2015: 1,025
xiii. 2020: 1,476
xiv. 2025: 1,233
xv. 2030: 1,608

J-3 Cont.

The traffic study at the NB on ramps for I-805 and Olympic Parkway and I-805 and Main Street is flawed and needs to be revised and justified. The ramp meter analysis numbers do not match the intersection peak hour numbers. Additionally, the volumes are less than the existing at Olympic Parkway for the 2015, 2020, and 2025 years. Justification as to why the volumes are decreasing needs to be provided. Also the existing volumes do not match Caltrans existing volumes of 2,016 for the NB ramps at I-805 and Olympic Parkway and 789 for the NB ramps at I-805 and Main Street.

3. Page 246 of the Traffic Impact Study indicates a mitigation measure to adjust the meter rate for the NB on ramps at I-805 and Main Street. Adjusting the meter rate requires approval of the Caltrans District 11 ramp metering division. An alternative mitigation shall be provided if the ramp meter adjustments are not approved by the Caltrans ramp metering division. If ramp metering adjustment is not approved then mitigation should include an additional metered on ramp lane for a total of 4 lanes which includes 3 SOV lanes and 1 HOV lane. J-4

4. The Village 3 North trip distribution is flawed. Figure 4-1B.1 for 2015 shows 79% and 21% leaving the village, but figure 4-1C.1 for 2020 shows only 75% and 19% leaving the village. This shows that 6% of the trips are unaccounted for. The 2015 distribution also shows only 10% of trips traveling to the northeast of Village 3 North. However, the 2025 distribution shows about 35% of trips traveling northeast of Village 3 North and the 2030 distribution shows 40% of trips traveling northeast of Village 3 North. What is the new demand that is created to the northeast of Village 3 North that causes such a dramatic shift in the project trips? The I-805 and Main Street interchange should still be analyzed with the 2015 distribution. J-5

5. Currently there are no funding mechanisms or environmental approvals for the interchanges at SR-125 and Main Street and SR-125 and Otay Valley Road. However, it is understood the city is updating their Development Impact Fee (DIF) Program to include the freeway ramps. J-6

6. Caltrans has previously reviewed the traffic impact studies for Otay Ranch Village 2, Otay Ranch Village 8 west, and Otay Ranch Village 9. Every previous traffic impact study and the current Otay Ranch Village 3 north, 4, 8 east, and 10 traffic impact study indicate a J-7

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability."

Ms. Merri Borg
September 17, 2014
Page 3

significant impact at the I-805 and Olympic Parkway Interchange. However, every traffic impact study offers no mitigation.

The traffic volumes for each traffic study for the existing (ground) conditions with the project build-out conditions peak hour are listed below. These volumes are listed because the California Environmental Quality Act (CEQA) mandates the assessment of existing (ground) conditions with project build-out conditions. The existing traffic volumes and the total of all the Otay Ranch Villages' volumes are also listed below.

a. Existing
   i. Entering volume of 3384 for the AM southbound ramps
   ii. Entering volume of 4538 for the PM southbound ramps
   iii. Entering volume of 4840 for the AM northbound ramps
   iv. Entering volume of 4840 for the PM northbound ramps
b. Otay Ranch Village 8 west
   i. Entering volume of 509 for the AM southbound ramps
   ii. Entering volume of 665 for the PM southbound ramps
   iii. Entering volume of 798 for the AM northbound ramps
   iv. Entering volume of 985 for the PM northbound ramps
c. Otay Ranch Village 9
   i. Entering volume of 400 for the AM southbound ramps
   ii. Entering volume of 445 for the PM southbound ramps
   iii. Entering volume of 651 for the AM northbound ramps
   iv. Entering volume of 722 for the PM northbound ramps
d. Otay Ranch Village 2
   i. Entering volume of 370 for the AM southbound ramps
   ii. Entering volume of 228 for the PM southbound ramps
   iii. Entering volume of 642 for the AM northbound ramps
   iv. Entering volume of 409 for the PM northbound ramps
e. Otay Ranch Village 3 north, 4, 8 east, 10
   i. Entering volume of 329 for the AM southbound ramps
   ii. Entering volume of 537 for the PM southbound ramps
   iii. Entering volume of 612 for the AM northbound ramps
   iv. Entering volume of 777 for the PM northbound ramps
f. Sum of volumes from Otay Ranch Villages 3 north, 4, 8 east, 10, 8 west, 9, and 2

J-7 Cont.

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability."

Ms. Marni Borg
September 17, 2014
Page 4

i. Entering volume of 1608 for the AM southbound ramps, this is an increase of 47.5% from the existing volume.

ii. Entering volume of 1875 for the PM southbound ramps, this is an increase of 41.3% from the existing volume.

iii. Entering volume of 2703 for the AM northbound ramps, this is an increase of 55.8% from the existing volume.

iv. Entering volume of 2893 for the PM northbound ramps, this is an increase of 59.8% from the existing volume.

J-7 Cont.

The increases in volume above range from 41.3% to 59.8%. These significant increases in volume warrant improvements at the I-805 and Olympic Parkway interchange. The Otay Ranch Village community needs to be treated as a single entity and provide mitigation at the I-805 and Olympic Parkway interchange. The mitigation may require widening of the Olympic Parkway bridge, additional lanes at the northbound off ramp, northbound on ramp, southbound off ramp, and on Olympic Parkway west of I-805.

7. Page 88 of the traffic impact analysis states mitigation measures: "Construction of an additional left-turn lane at the I-805 southbound off-ramp, as well as a 3rd through lane along the Olympic Parkway eastbound approach. The recommended improvements would require widening of Orange Avenue/Olympic Parkway; however, there are right-of-way constraints that would make such improvements infeasible. An engineering right-of-way assessment was conducted and included in Appendix H. Therefore, the impact will remain significant and unavoidable at this location." Pages 141-142 and 212 of the traffic impact analysis also describe how the impact at this location will remain significant and unavoidable, and "There are no other feasible physical improvements that would reduce the remaining cumulative impact to less than significant." Caltrans disagrees and recommends the following improvements:

J-8

a. Widen the Olympic Parkway bridge east of the SB on and off ramps.

b. Widen I-805 northbound off-ramp to Olympic Parkway to provide for an additional exclusive northbound right turn lane. This widening might require a retaining wall or concrete barrier on I-805 northbound off-ramp. The proposed lane configuration for this approach is an exclusive northbound left turn lane, a shared thru and left, and 2 exclusive northbound right turn lanes.

c. Widen westbound Olympic Parkway at I-805 northbound on-ramp to provide for an additional exclusive westbound right turn lane. Retaining wall might be needed for this modification. This proposed improvement will result in two westbound thru lanes, and 2 exclusive westbound right turn lanes.

d. Olympic Parkway and Oleander Avenue
   - Remove the traffic signal
   - Remove eastbound and westbound left turn lanes
   - Modify the raised median to prohibit vehicles from making a left turn from Oleander Avenue to Olympic Parkway. The intersection will be a right in / right out only from Oleander Avenue
   - Add an eastbound and westbound through lanes on Olympic Parkway

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Ms. Marni Borg
September 17, 2014
Page 5

Note: Mitigation improvements may also need to consider Caltrans intersection control evaluation policy (ICE) for the impacts to I-805 and Olympic Parkway and I-805 and Main Street. J-8 Cont.

Comments on Section 5.3 of the EIR: Transportation Circulation Access:

1. Table 5.3-20 shows I-805 SB Ramps/ Main Street operating at over capacity during the PM peak hour. Please include it with the list on page 5.3-52. J-9
2. Table 5.3-26, on page 5.3-74, shows the "with project" demand on I-805 NB On-Ramp at Olympic Parkway is less than the "without project" demand. Please clarify. J-10
3. Table 5.3-30 shows the following intersections operating at over capacity: J-11
   a. I-805 SB Ramps/ Olympic Pkwy operate at over capacity during the AM peak hour.
   b. I-805 SB Ramps/ Main Street operate at over capacity during the AM peak hour.
   c. I-805 NB Ramps/ Main Street operate at over capacity during the PM peak hour.

   Please include the above intersections with the list on page 5.3-87.
4. Table 5.3-31, page 5.3-93, shows the "with project" demand on I-805 NB On-Ramp at Olympic Parkway is less than the "without project" demand. Please clarify. J-12
5. Table 5.3-35 shows I-805 NB Ramps/ Olympic Parkway operates at over capacity during the AM and PM peak hours. Please include it with the list on page 5.3-106. J-13
6. Table 5.3-36, on page 5.3-111, shows the "with project demand on I-805 NB On-Ramp at Olympic Pkwy is less than the "without project" demand. Please clarify. J-14
7. Table 5.3-41 shows I-805 SB Ramps/ Main Street operates at over capacity during the AM peak hours. Please include it with the list on page 5.3-128. J-15

General Comments:

Caltrans is currently in the process of developing a Project Study Report (PSR) for the Main Street, Rock Mountain and Otay Valley Road interchanges. It is recommended as part of the EIR that the City coordinate with Caltrans to incorporate information from the PSR where applicable. J-16

Any work performed within Caltrans right-of-way (R/W) will require discretionary review and approval by Caltrans and an encroachment permit will be required for any work within the Caltrans R/W prior to construction. Current policy allows Highway Improvement Projects costing $1 million or less to follow the Caltrans Encroachment Permit process. Highway Improvement Projects costing greater than $1 million but less than $3 million would be allowed to follow a streamlined project development process similar to the Caltrans Encroachment Permit process. In order to determine the appropriate permit processing of projects funded by others, it is recommended the concept and project approval for work to be done on the State Highway System be evaluated through the completion of a Permit Engineering Evaluation Report (PEER). A PEER should always be prepared, regardless of the cost of improvements, when new operating improvements are constructed by the permittee that become part of the State Highway System. These include but are not limited to, signalization, channelization, turn pockets, widening. J-17

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Ms. Marni Borg
September 17, 2014
Page 6

realignment, public road connections, and bike paths and lanes. After approval of the PEER and necessary application and supporting documentation an encroachment permit can be issued. J-17 Cont.

As part of the encroachment permit process, the applicant must provide an approved final environmental document including the California Environmental Quality Act (CEQA) determination addressing any environmental impacts within the Caltrans' R/W, and any corresponding technical studies. If these materials are not included with the encroachment permit application, the applicant will be required to acquire and provide these to Caltrans before the permit application will be accepted. Identification of avoidance and/or mitigation measures will be a condition of the encroachment permit approval as well as procurement of any necessary regulatory and resource agency permits. Encroachment permit submittals that are incomplete can result in significant delays in permit approval. J-18

Additional information regarding encroachment permits may be obtained by contacting the Caltrans Permits Office at (619) 688-6158. Early coordination with Caltrans is strongly advised for all encroachment permits. J-19

If you have any questions, please contact Roger Sanchez of the Development Review branch at (619) 688-6494.

Sincerely,

JACOB ARMSTRONG, Branch Chief
Development Review Branch

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Response to Comment Letter J

Caltrans, District 11
Jacob Armstrong, Branch Chief
September 17, 2014

J-1 This comment does not address the adequacy or accuracy of the information provided in the Draft EIR. No further response is necessary.

J-2 This comment is general in nature and does not identify any specific ways in which analysis is incomplete or inadequate; nevertheless, the following explanation is provided regarding the ramp metering analysis.

The ramp metering analysis on Page 203 of the University Villages Traffic Impact Analysis for Villages 3 North, 8 East and 10 (Page 207 of the revised TIA) shows the ramp metering analysis for the two existing ramp meters at I-805. In order to provide clarification, Table 9.5 on Page 204 of the TIA (Page 208 of the revised TIA) has been revised to show the full peak hour volume. This is a complete analysis of all ramps meter in the project study area as required by the City of Chula Vista.

The ramp metering analysis summary (Table 10.4), beginning on Page 241 of the revised TIA, provides the ramp metering analysis for all required ramps under each study scenario (Existing, Existing + Project, 2015, 2020, 2025, and 2030 Buildout) for both AM and PM Peak Hour. Table 10.4 reflects the conclusions of Section 5 – 9 of the TIA, is accurate based on traffic counts (for the "Existing" scenario) and the Series 11 Year 2015 SANDAG Transportation Model, "Southbay 2, University Villages" model (for all other scenarios) and complete based on the City of Chula Vista requirements establishing the project study area; therefore, no revisions are required.

In addition, please see response to comments J-3 and J-4 below in regard to the ramp metering rate adjustment for further details regarding the ramp metering analysis performed in the project traffic study.

J-3 The ramp meter demands (Dvol) displayed in tables 3.5, 6.5, 7.5, 8.5, and 9.5 in the TIA represent peak hour demand per lane and calculated using the following formula, which is a traffic engineering standard practice:

$$D_{vol} = \frac{(P_{vol} - H_{vol})}{N}$$

- Dvol (Demand Volume per hour per Lane): total peak hour demand expected to use the on-ramp (non-HOV lane only);
- Pvol (Peak Hour Ramp Volume): sum of all peak hour volumes using the on-ramp;
- Hvol (HOV lane volume): based on field observation, approximately 20% of the Pvol utilized the HOV lane; and
- N: number of non-HOV lanes at the on-ramp.

Figures 3-2A, 6-2A, 7-2A, 8-2A, and 9-2A represent the total peak hour volumes (i.e. – the sum of all lanes) on the subject on-ramp, identified as Pvol in the above formula.

For clarity, these tables have been updated to include the total on-ramp volumes in addition to the current per-lane volumes for reference such that they reflect the volumes in figures 3-2A, 6-2A, 7-2A, 8-2A, and 9-2A. These changes are only editorial and do not affect the results of the analysis. As shown in the expanded tables 3.5, 6.5, 7.5, 8.5, and 9.5 both the information presented in the tables and figures are accurate based on the above equation, which as referenced, is a traffic engineering standard practice. Therefore, the ramp metering analysis is correct, not flawed, and no further response is required.

Traffic volumes forecast for the years 2015, 2020, and 2025 scenarios were developed using the Series 11 Year 2015 SANDAG Transportation Model, "Southbay 2, University Villages" model. A copy of the model output is provided in Appendix A of the University Villages TIA. The Southbay 2 model has also been used as the base model by the Village 8 West, Village 9 and Village 2 traffic reports.

As shown in Appendix A (and replicated below), the year 2015, 2020, and 2025 conditions, traffic volumes shifted from Olympic Parkway, decreasing from 48,508 under the Existing Condition to 42,800 under the 2030 buildout condition. This result appeared counter-intuitive (i.e. – as development occurs and additional trips are generated and added to the circulation network it was expected that traffic would increase on local major arterials, not decrease), so prior to completing the TIA the City required the traffic engineer to perform a screenline analysis to confirm the validity of the model. The results of the screen line analysis is shown below:

Roadway	Existing	2015	2020	2025	2030
East H Street	72,700*	66,100	66,900	69,000	65,800
Telegraph Canyon Road	59,100*	61,500	63,200	64,500	61,000

E Palomar Street	7,200*	26,100	30,500	32,000	29,900
Olympic Parkway	48,508	42,600	44,200	47,600	42,800
Main Street	31,341	38,200	46,200	49,100	61,800
TOTAL	218,849	234,500	251,000	262,200	261,300

* 2010 ADT obtained from SANDAG

As shown in the table, the total screenline ADTs for the east-west traveling roadways show gradual increases over each of the analysis years into the future, beginning with approximately 219,000 ADT under the Existing condition and increasing by roughly 42,500 ADT to a total of 261,300 under 2030 buildout. The decreased traffic volumes along Olympic Parkway were due to the forecasted travel pattern shift to other east-west roadways, in particular Main Street and E. Palomar, and shifts to SR-125, which effectively takes trips off the east-west roadways.

The existing traffic count for the University Villages TIA was conducted by NDS on May 18, 2011. Count worksheets are provided in Appendix B of the University Villages TIA. Due to fluctuations in traffic volume on a day-to-day basis, it is unreasonable to expect the volumes utilized in the University Villages TIA to match Caltrans traffic volumes.

J-4 The City acknowledges that adjusting the ramp metering requires Caltrans approval. TCA-14 is a mitigation measure required prior to the buildout condition, which is 2030. The measure has been clarified to require that the applicant "work with Caltrans," and that Caltrans "can and should" adjust the meter rate so that it reflects the buildout traffic volumes. This is consistent with PRC 21081(a)(2) – changes that could mitigate or avoid significant impacts "are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency." Based on the following analysis, this is a feasible, reasonable mitigation measure that is proportional to the impact (CEQA Guidelines 15126.4).

Based on the ramp metering rates provided by Caltrans, the Main Street on-ramp rate is approximately half of the rates at adjacent interchanges of I-805/Telegraph Canyon Road and I-805/Olympic Parkway. The table below shows a comparison between the I-805 main line ADT and the existing ramp metering rates along I-805 in the vicinity of the project site.

Freeway Segment	2030 ADT	Intersection / On-Ramp	# of Lanes	Existing Ramp Metering Rate (min – max) / lane / hour
I-805 from East H Street	174,100	I-805 NB Ramps @	2 SOV + 1	636 – 804

to Telegraph Canyon Road		Telegraph Canyon Road	HOV	
I-805 from Telegraph Canyon Road to East Palomar Street	153,200			
I-805 from East Palomar Street to Olympic Parkway	153,200	I-805 NB Ramps @ Olympic Parkway	2 SOV + 1 HOV	778 – 996
I-805 from Olympic Parkway to Main Street	121,500			
I-805 from Main Street to Palm Avenue	116,300	I-805 NB Ramps @ Main Street	2 SOV + 1 HOV	346 - 480

As shown in the table above, the I-805 mainline volumes vary between 116,300 ADT and 174,100 ADT between Palm Avenue and Telegraph Canyon Road, and the associated ramp metering rate at each of the NB On-Ramps varying between 346 vehicles per hour per lane to 996 vehicles per hour per lane. The following factors indicate that the Main Street on-ramp metering rate is underutilized (likely due to low demand under the existing condition), and that the ramp metering rate can be adjusted to meet future demand as the demand increases:

- The purpose of ramp metering is to regulate the flow on the main line (i.e. the freeway/highway) by reducing the disruption of traffic from too many vehicles entering the main line at the same time;
- The section of I-805, between Olympic Parkway and Palm Avenue (south of Main Street), is projected to have significantly lower traffic volumes when comparing the mainline flow at nearby interchanges, indicating that the main line volume near the Main Street on-ramp can accommodate additional volume from the Main Street on-ramp (if needed);
- The Main Street on-ramp metering rate is set based on existing traffic volume, which is significantly lower than the demand at nearby on-ramp (Olympic Avenue and Telegraph Canyon Road) with similar number of lanes.

Therefore it can be concluded that the ramp metering rate at the Main Street on-ramp can be adjusted to accommodate the additional traffic volume, and that Caltrans has the discretion to change this meter rate.

The alternative mitigation measure proposed by the comment would not effectively mitigate the impact because strictly adding an additional SOV lane without any adjustment to the meter rate; would not allow for any additional vehicles to enter the freeway and thus reduce the identified impact. In addition

to not mitigating the impact, the improvement suggested would result in far greater impacts due to any widening associated with adding a fourth lane. Not only would these additional physical impacts occur, but the improvements would be within Caltrans ROW and there is no assurance that the improvements would be approved.

Based on this observation, it is reasonable, feasible (based on other ramp rates), and logical (the least environmentally impactful measure compared to building additional ramp lanes, etc.) to increase meter rates at the Main Street on-ramp, especially given that Caltrans can and should adjust the meter rate per PRC 21081(a)(2).

J-5 The City of Chula Vista worked closely with SANDAG in developing the South Bay Subarea model used in assessing future traffic volumes and trip distribution patterns in 5 year increments for the University Villages project. The distribution of the external project trips was based upon a computer generated "Select Zone" analysis utilizing the Series 11 Year 2015 SANDAG Transportation Model, "Southbay 2, University Villages". The select zone model run is included as Appendix A of the University Villages TIA.

As shown in Appendix A, under the Year 2020 conditions, 6% of the project trips travel to land uses along Main Street, between Brandywine Avenue and Heritage Road. These percentages were not shown in Figure 4-1C of the TIA; however, the University Villages TIA has been updated to provide the information. In addition, all project distribution figures (4-1A.1, 4-1A.2, 4-1A.3, 4-1A.4, 4-1B.1, 4-1C.1, 4-1C.2, 4-1C.3, 4-1D.1, 4-1D.2, 4-1D.3, 4-1D.4, 4-1E.1, 4-1E.2, 4-1E.3, and 4-1E.4) were updated to display project traffic depicted in other neighborhoods of Otay Ranch. These graphical changes are informational only for clarification purposes and do not affect the results of the analysis.

As shown in Appendix A of the University Villages TIA, the Year 2025 and Year 2030 models included additional land uses from other projects within the Otay Ranch Development area, including the following:

Village 2 (Residential, Light Industrial, & Commercial land uses),

- Village 8 West (Residential & Commercial land uses),
- Village Eight East (Residential & Mixed-use Commercial land uses),
- Village 9 (Residential & Commercial land uses),
- Village Ten (Residential & Mixed-use Commercial land uses) and

- University & Regional Technology Center (Education & Light-Industrial land uses).
- Other land uses assumed by City staff to be constructed by the Year 2025 and Year 2030 scenarios.

These additional land uses predominately to the north and east of the University Villages project areas, along with the circulation network changes (in particular the connection of Main Street to the east from Heritage Road), resulted in additional trips traveling within the Otay Ranch area instead of getting on the freeways because many of these are new destinations within eastern Chula Vista and would replace trips otherwise required to use freeways. It is very important to note that the project trip distribution is based on the SANDAG's select zone assignments.

As described above, the 2015 distribution is per the Southbay model results. The changes in the trip distribution patter are due to new land uses and circulation network changes which occur after 2015 to the north and east of the University Villages project areas. It would be inaccurate to model these future years based on the 2015 distribution. Therefore, the Village 3 North trip distribution for the various study timeframes is not flawed and the analysis is accurate as included in the TIA. No revisions to the TIA or EIR are warranted.

J-6 Comment noted. The City of Chula Vista is currently updating its Transportation Development Impact Fee (TDIF) Program. As the comment notes, the SR-125 and Main Street as well as the SR-125 and Otay Valley Road interchanges are included in the City's updated TDIF program. In addition, those portions of these improvements which are within the project boundaries are included within this EIR for certain "on the ground" impacts including impacts to biology, paleontological resources and cultural resources. It is reasonable to expect that these improvements will be implemented, and the mitigation is consistent with CEQA standards for enforceability.

J-7 Each of the projects listed in the comment are separate project under CEQA. Specific to the University Villages (Village 3 North, 4, 8 East and 10 as referenced in the comment) project, the 2030 analysis was a "cumulative" analysis in that it did include projected ADT from each of the other listed Otay Ranch projects (as well as buildout of other land uses in the City of Chula Vista). The University Villages EIR identifies a cumulative impact at the I-805 and Olympic Parkway interchange.

The Existing Plus Project (University Villages) scenario was conducted and included in Chapter 5 and the TIA.

No scenario was modeled which considered Existing Plus Otay Ranch projects. This is not required by CEQA or the City of Chula Vista. However, as mentioned above, Chapter 9 does consider buildout of the City of Chula Vista which includes the other Otay Ranch Projects.

As concluded in Chapter 9 of the TIA, the University Villages project has a cumulative impact at the I-805 and Olympic Parkway interchange. As documented on Page 215 of the University Villages TIA and Section 5.3 of the EIR, there is currently no approved plan or program in place into which the project applicant could pay its fair share toward such improvement identified by Caltrans in this comment. Therefore, mitigation is infeasible and the impact will remain cumulatively significant and unavoidable at the I-805 / Olympic Parkway interchange.

Additionally, it should be noted that the widening of Olympic Parkway bridge is not identified in the City of Chula Vista's CIP or supported by other funding sources; therefore, it is not reasonable to assume that this could be a feasible mitigation.

Nevertheless, contribution to the City's Transportation Development Impact Fees (TDIF) program is required for the proposed project to address the project's potential cumulative impacts to transportation facilities serving project development. The TDIF program collects a project's fair share fee contributions based on the project's traffic impacts and utilizes those funds to mitigate impacts to City roadway facilities. There are a number of improvements in the surrounding areas that are within the TDIF program, such as the construction of Heritage Road from Main Street to Olympic Parkway, extension of Main Street, and the Palomar Street DAR, which would reduce the traffic volumes through the Olympic Parkway/I-805 interchange.

Additionally, the City of Chula Vista has historically used TDIF funding to contribute toward numerous Caltrans interchange projects along the I-805 corridor. The TDIF program was used to construct I-805/Olympic Parkway interchange, I-805/Telegraph Canyon interchange and I-805/H 8th Street interchange. Over more than two decades, the City has contributed toward interchange improvements along State facilities. As such, the TDIF fees collected for the proposed project may be used to make improvements to freeway interchanges, as recommended by the commenter.

The EIR has clearly stated project impacts related to State facilities and has provided adequate mitigation measures within the City's or Applicant's control, or

has identified significant unavoidable impacts where appropriate. No revision to the Draft EIR is necessary as a result of this comment.

J-8 Page 88 of the TIA is providing the results of the Existing Plus Project scenario and what would be required to mitigate the impact. However, mitigation is not based on Existing Plus Project because it results in unrealistic mitigation measures such as the one described in the comment (i.e. – triple left turns). The University Villages project would contribute to a cumulative impact to this location.

The potential mitigation measures recommended by Caltrans in comments 7a, 7b, and 7c, are not identified in the City of Chula Vista's CIP or supported by other funding sources. In addition, there is currently no approved plan or program in place into which the project applicant could pay its fair share toward such improvements, therefore it is not reasonable to assume that this could be a feasible mitigation.

With respect to Item 7d, Oleander Avenue provides important connections north and south of Olympic Parkway. By converting this intersection to right-in / right-out only would prohibit vehicles from making left-turns and going through on Oleander. The City of Chula Vista has no plan to close the median at Oleander Avenue. In addition, by only allowing right-in / right-out at this intersection would force traffic to either make U-turns at adjacent intersections or divert onto different routes, this could results in potential traffic impacts at other locations.

The University Villages project is not proposing any intersection traffic control changes or other physical improvements at the ramp intersections of I-805/Olympic Parkway and I-805/Main Street; hence, Intersection Control Evaluation (ICE) was not conducted for this project.

J-9 Comment noted. Table 5.3-20 is correct and identifies all ramps operating "over" capacity; however, the results were transposed incorrectly in the subsequent list. Both the TIA (Page 107) and EIR (Page 5.3-56) have been corrected to include this intersection. These changes are only editorial and do not affect the results of the analysis.

J-10 Comment noted. Table 5.3-26 is correct and identifies all ramps operating "over" capacity; however, the results were transposed incorrectly in the subsequent list. This was a typographical error during the production process. The TIA (Page 112) and EIR (Page 5.3-76) have been corrected to reflect the correct "without project" demand. However, this error would not affect the results of the analysis.

J-11 Comment noted. Table 5.3-20 is correct and identifies all intersections operating at "over" capacity; however the results were transposed incorrectly in the subsequent list. Both the TIA (Page 133) and EIR (Page 5.3-56) have been corrected to include this intersection. These changes are only editorial and do not affect the results of the analysis.

J-12 Comment noted. This was a typographical error during production process. The TIA (Page 140) and EIR (Page 5.3-95) have been corrected to reflect the correct "without project" demand. However, this error would not affect the results of the analysis.

J-13 Comment noted. Both the TIA (Page 173) and EIR (Page 5.3-109) have been corrected to include this intersection. These changes are only editorial and do not affect the results of the analysis.

J-14 Comment noted, this was a typographical error during production process. The TIA (Page 174) and EIR (Page 5.3-114) have been corrected to reflect the correct "without project" demand. However, this error would not affect the results of the analysis.

J-15 Comment noted. Table 5.3-41 is correct and identifies all ramps that are operating "over" capacity; however, the results were transposed incorrectly in the subsequent list. Both the TIA (Page 204) and EIR (Page 5.3-132) have been corrected to include this intersection. These changes are only editorial and do not affect the results of the analysis.

J-16 This comment requests that the City incorporate the Caltrans Project Study Report (PSR) for the Main Street, Rock Mountain and Otay Valley Road interchanges into the Draft EIR. As stated by the commenter, this report is currently being prepared and therefore was not available for incorporation into the Draft EIR traffic analysis. As of publication of the Final EIR, the PSR has not yet been received by the City of Chula Vista. No revision to the Draft EIR is required in response to this comment. This comment does not address the adequacy or accuracy of the information provided in the Draft EIR. No further response is necessary.

J-17 Refer to response to comment J-16. This comment does not address the adequacy or accuracy of the information provided in the Draft EIR. No further response is necessary.

J-18 This comment does not address the adequacy or accuracy of the information provided in the Draft EIR. No further response is necessary.

J-19 This comment does not address the adequacy or accuracy of the information provided in the Draft EIR. No further response is necessary.

INTENTIONALLY LEFT BLANK

Comment Letter K

September 18, 2014

Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

RE: EIR 13-01; SCH 2013071077

Having reviewed the Otay Ranch University Villages SPA Plan Draft EIR I have the following comments/concerns. The design planning for Villages 3 North, Village 8 East, and Village 10 will define the northern edge of the Otay Valley Regional Park (OVRP), and even provide development of an active recreation area within the OVRP as a community park. Therefore, attention to all details of the proposed development project should include how implementation will impact the adjacent regional park. Some of those details are included in the following concerns: K-1

1. Assure that trails from Village Three be provided access to the east/west OVRP trail system (Wylie Rd), including a transition that will enable crossing beneath a reconstructed Heritage Road Bridge. K-2

2. Assure that a staging area with access to the OVRP trail system be provided within the proposed community park in Village 8 East. K-3

3. The Chula Vista Greenbelt Master Plan provides for a trail along the west side of Salt Creek, connecting to the east/west OVRP trail system to the south. While the trail is continued through Village 10, it unfortunately changes from a "Regional Trail" design to ultimately a narrower on-sidewalk design. It is unfortunate, and a lost opportunity, that the trail design does not have consistency of materials and widths with the trail constructed north of Village 10. While consistency of design is a lost opportunity and a difficult design change, a connection to the OVRP is welcomed and consistent with the Greenbelt Master Plan. K-4

4. Do not preclude the opportunity for equestrian usage with the OVRP multi-use trail system (Wylie Rd), including the provision of a twelve-foot (12') minimum height under a re-constructed Heritage Bridge. K-5

As a former city planner (now retired) with the City of Chula Vista that was involved in the preparation of the General Plan, the Otay Ranch General Development Plan and Greenbelt Master Plan I am very familiar with the content of those documents. I am also involved as a member of the OVRP Citizen Advisory Committee and a long-time Chula Vista resident. Please consider the concerns above in the preparation of the Final EIR and implementation documents. K-6

Sincerely,

Duane E. Bazzel
1110 Magellan Way
Chula Vista, CA 91910

INTENTIONALLY LEFT BLANK

Response to Comment Letter K

Duane E. Bazzel
September 18, 2014

K-1 The Village Design Plans for Village 3 North, 8 East and 10, address the OVRP Standards and Guidelines, Section 5, Private Development Guidelines on a village-by-village basis through grading design, retaining wall and fencing location, materials and design, landscape buffers, landscape palettes, and lighting placement and design.

Village 3 North Design Plan, Page 28 states: The OVRP Standards and Guidelines, Section 5, Private Development Guidelines include principles for private development adjacent to the OVRP. Consistent with these principles, manufactured perimeter slopes adjacent to the OVRP complement and do not negatively impact the park by utilizing the following techniques:

- Perimeter slopes follow the existing topography, blending the site into natural topography and preserving natural drainages between Village 10 and the Otay River Valley.
- Landscape buffers are planted with native plant materials, consistent with the Village 8 East Fire Protection Plan and Preserve Edge Plan.
- Retaining walls are planted and irrigated to avoid large expanses of blank walls and blending the retaining walls into the natural setting, making them virtually undetectable with full landscape cover. Wherever possible plantable retaining walls are split into two sections, providing opportunities to screen the walls with native landscaping in front of the wall and reduce single wall heights.
- Non-residential fencing at the perimeter is typically post & rail, permitting views to and from the park.
- Residential fencing at the perimeter is typically, 2’ of block with 4’ of view fencing, permitting views to and from the park.
- Lighting at the perimeter must be directed away from the Preserve/OVRP by placing light fixtures in appropriate locations and shielding lamps.

Village 8 East Village Design Plan, Page 16 states: The OVRP Standards and Guidelines, Section 5, Private Development Guidelines include principles for private development adjacent to the OVRP. Consistent with these principles, manufactured perimeter slopes adjacent to the OVRP complement and do not negatively impact the park by utilizing the following techniques:

- Perimeter slopes follow the existing topography, blending the site into natural topography and preserving natural drainages between Village 8 East and the Otay River Valley.
- Landscape buffers are planted with native plant materials, consistent with the Village 8 East Fire Protection Plan and Preserve Edge Plan.
- Retaining walls are planted and irrigated to avoid large expanses of blank walls and blending the retaining walls into the natural setting, making them virtually undetectable with full landscape cover. Wherever possible plantable retaining walls are split into two sections, providing opportunities to screen the walls with native landscaping in front of the wall and reduce single wall heights.
- Non-residential fencing at the perimeter is typically post & rail, permitting views to and from the park.
- Residential fencing at the perimeter is typically, 2' of block with 4' of view fencing, permitting views to and from the park.
- Lighting at the perimeter must be directed away from the Preserve/OVRP by placing light fixtures in appropriate locations and shielding lamps.

The Village 10 Design Plan, Page 17 states: The OVRP Standards and Guidelines, Section 5, Private Development Guidelines include principles for private development adjacent to the OVRP. Consistent with these principles, manufactured perimeter slopes adjacent to the OVRP complement and do not negatively impact the park by utilizing the following techniques:

- Perimeter slopes follow the existing topography, blending the site into natural topography and preserving natural drainages between Village 10 and the Otay River Valley.
- Landscape buffers are planted with native plant materials, consistent with the Village 8 East Fire Protection Plan and Preserve Edge Plan.
- Retaining walls are planted and irrigated to avoid large expanses of blank walls and blending the retaining walls into the natural setting, making them virtually undetectable with full landscape cover. Wherever possible plantable retaining walls are split into two sections, providing opportunities to screen the walls with native landscaping in front of the wall and reduce single wall heights.
- Non-residential fencing at the perimeter is typically post & rail, permitting views to and from the park.

- Residential fencing at the perimeter is typically, 2' of block with 4' of view fencing, permitting views to and from the park.
- Lighting at the perimeter must be directed away from the Preserve/OVRP by placing light fixtures in appropriate locations and shielding lamps.

These techniques are intended to soften the development edges adjacent to the Otay Valley Regional Park, provide vistas from development areas to the OVRP and buffer development from the regional park.

K-2 As shown in Figure 4-8, trails from Village Three will be provided access to the east / west OVRP trail system (Wiley Road). There will be a Village Trail located in the southeastern portion of Village 3 that will provide access to the Regional Trail along Main Street. Pedestrians will be able to access the future Greenbelt trail via a connection in the southeast quadrant of future Heritage Road and Main Street. All trails within the Preserve must be designed to minimize and avoid impacts as required by the MSCP SAP. As such, alignments have been focused on existing disturbed roads, predominately the Salt Creek sewer maintenance road/Wiley Road.

Improvements to Heritage Road south of Main Street, including the Heritage Road bridge, is included in the Chula Vista adopted FY 2012-13 through FY 2016-17 Capital Improvement Program (CIP) (STM364-Heritage Road Bridge Replacement) and therefore is a separate project. No further response is required.

K-3 As stated in Section 5.8 Biological Resources Page 5.8-99, the Village Eight East Community Park (P-2) is located on the site designated in the OVRP Concept Plan as Active Recreation 11 (AR-11). The Village Eight East SPA Plan, Community Park (P-2) Concept Plan, Exhibit 36, includes active and passive park uses, including a "Trail Staging Area for Chula Vista Greenbelt/OVRP Trail." The final design of the Community Park will be determined through the Chula Vista Park Master Plan process, with input from the OVRP Citizen's Advisory Committee and OVRP Policy Committee. The trail staging area and trail connections from the Community Park to the OVRP/Chula Vista Greenbelt Trail are intended to be part of the final Community Park design, consistent with the OVRP Concept Plan and Trail Guidelines; however, they must also meet MSCP SAP requirements to minimize impacts to the Preserve. . Proposed connections from the Community Park to the Greenbelt Trail (OVRP) are depicted in Figure 5.12-11of the EIR.

K-4 As shown in Figure 4-18 of the EIR, and the Village Ten SPA Plan, Trails Plan, Exhibit 22, a network of trails provide pedestrian connections through Village 10 and include a connection to the Chula Vista Greenbelt. Specific trail dimensions and materials are presented in the Village 10 SPA Plan, Exhibits 23 through 28.

The Regional Trail located along Hunte Parkway, north of Village Ten, connects to Village Ten via the 10' wide Village Pathway along Discovery Falls Road. An additional north/south connection is provided along University Drive. The final design of this trail connection will be determined through the University SPA Planning effort.

The Village Pathway continues through the Village Ten core area between Discovery Falls Road and Otay Valley Road. In keeping with the residential character of the single family neighborhoods, the trail transitions to the 6' wide Promenade Trail. The Promenade Trail extends to a Private Recreation Facility (CPF-3) that includes the 20' wide combined Village Trail/Maintenance Access Road (providing access to the City of San Diego waterline facilities) that connects along the Village Ten perimeter slope to the Rural Trail that traverses the adjacent Preserve areas to connect to the Chula Vista Greenbelt Trail.

Due to topographic constraints and the MSCP requirement to minimize impacts and use existing dirt roads as trail connections, the rural trail will be an 8-foot wide trail that will be improved consistent with the Greenbelt Master Plan Rural Trail Standards. The widths and materials planned for each discrete trail segment are compatible with the adjacent land uses.

K-5 As stated in Section 5.8 Biological Resources Page 5.8-102, all Greenbelt trail segments will be multi-use trails which provide a variety of uses including, hiking, biking and equestrian use, where identified. The trails and trail alignments have been developed to minimize impacts as required by the MSCP SAP. As stated in Section 5.8 Biological Resources, Page 5.8-102, equestrian usage on the OVRP/Chula Vista Greenbelt Trail located within the existing Wiley Road/Salt Creek Sewer Easement, is not precluded. See response A-1 above regarding the multi-use Chula Vista Greenbelt/OVRP Trail.

Improvements to Heritage Road south of Main Street, including the Heritage Road bridge, is included in the Chula Vista adopted FY 2012-13 through FY 2016-17 Capital Improvement Program (CIP) (STM364-Heritage Road Bridge Replacement) and therefore is a separate project. No further response is required.

K-6 This comment does not address the adequacy or accuracy of information provided in the Draft EIR. No response is required.

Comment Letter L

County of San Diego

MARK WARDLAW
(DIRECTOR)
PHONE (858) 694-2962
FAX (858) 694-2555

PLANNING & DEVELOPMENT SERVICES
5510 OVERLAND AVENUE, SUITE 310, SAN DIEGO, CA 92123
www.sandiegocounty.gov

DARREN GRETLER
ASSISTANT DIRECTOR
PHONE (858) 694-2962
FAX (858) 694-2555

September 18, 2014

Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Via email to mborg@chulavistaca.gov

COMMENTS ON THE UNIVERSITY VILLAGES SECTIONAL PLANNING AREA PLAN AND TENTATIVE MAP DRAFT ENVIRONMENTAL IMPACT REPORT (EIR 13-01; SCH 2013071077)

Dear Ms. Borg,

The County of San Diego has received and reviewed the Draft Environmental Impact Report for the Otay Ranch University Villages project, dated August 5, 2014, and appreciates this opportunity to comment. The County Planning & Development Services (PDS) and Department of Public Works (DPW) have completed their review and have the following comments regarding the content of the above documents. L-1

General Comments

1. The Water Quality and Hydrology Technical Reports notes that the Otay River is exempt from Hydromodification under the March 2011 Final HMP. However, under R9-2013-0001 this exemption will no longer be available unless a study is submitted with the Watershed Management Area Analysis and Water Quality Improvement Plan for the San Diego Bay Watershed to the San Diego Regional Water Quality Board for review and concurrence. If the Otay Ranch project does not get prior lawful approval before new development regulations go into effect under R9-2013-0001 the project may need to be redesigned and the Water Quality Technical Report may need to be revised. L-2

2. The Traffic Impact Analysis forecasts 2,500 average daily trips (ADT) at Project Buildout onto County roadways (e.g. Figure 4-2E.1, 2030 SANDAG Series 11 - Select Zone Run). The project should consider a contribution to the County's Transportation Impact Fee (TIF) program to mitigate the project's cumulative traffic impacts to County roadways. L-3

The County of San Diego appreciates the opportunity to participate in the environmental review process for this project. If you have any questions regarding these comments, please contact Sheri McPherson, Land Use/Environmental Planner at (858) 694-3064 or email sheri.mcpherson@sdcounty.ca.gov L-4

Sincerely,

Darren Gretler, Assistant Director
Planning & Development Services

e-mail cc:
Michael De La Rosa, Policy Advisor, Board of Supervisors, District 1
Conor McGee, CAO Staff Officer, LUEG
Richard Chin, Associate Transportation Specialist, Department of Public Works
Rebecca Lafreniere, Chief, Department of Environmental Health
Sheri McPherson, Land Use/Environmental Planner, Planning & Development Services

Response to Comment Letter L

County of San Diego, Planning and Development Services
Darren Gretler, Assistant Director
September 18, 2014

L-1 This comment does not address the adequacy or accuracy of information provided in the Draft EIR. No response is required.

L-2 The analysis in Section 5.10 recognizes that the city will have to comply with water quality and hydromodification management plans as applicable. MM HYD-6 on Page 5.10-65 requires that the proposed project comply with city hydromodification criteria (Municipal Permit Order R9-2007-0001 Section D.1.g) or the hydrograph modification management plan, as applicable. Recognizing that permit requirements get amended, the mitigation measure has been revised as follows:

- **MM HYD-6** *Hydromodification Criteria*. The Project Applicant shall comply, to the satisfaction of the City Engineer, with city hydromodification criteria (Muncipal Permit Order R9-2007-001, <u>as may be amended</u>) or hydrograph modification management plan, as applicable, addressed regionally at the SPA Plan level concurrent with grading and improvement plans for each village.

L-3 Trips generated from the proposed project were modeled using the "Southbay 2 University Villages" traffic model. The distribution includes trips on to County roadways to the south of the project site. In accordance with the City's traffic impact analysis guidelines, the study area included some locations in the County. None of the County intersections were significantly impacted by project traffic. The project is not subject to the County's TIF program. No further response is required.

L-4 This comment does not address the adequacy or accuracy of information provided in the Draft EIR. No response is required.

INTENTIONALLY LEFT BLANK

Comment Letter M

County of San Diego

ELIZABETH A. POZZEBON
DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
SOLID WASTE LOCAL ENFORCEMENT AGENCY
5500 OVERLAND AVENUE, SUITE 170, SAN DIEGO, CA 92123
Phone: (858) 694-2888 Fax: (858) 495-5704
www.sdcdeh.org

AMY HARBERT
ASSISTANT DIRECTOR

September 18, 2014

City of Chula Vista
Attn: Ms. Marni Borg
276 Fourth Avenue
Chula Vista, CA 91910

COUNTY OF SAN DIEGO SOLID WASTE LOCAL ENFORCEMENT AGENCY COMMENTS ON UNIVERSITY VILLAGES SECTIONAL PLANNING AREA AND TENTATIVE MAP DRAFT ENVIRONMENTAL IMPACT REPORT – EIR 13-01

Dear Ms. Borg:

The County of San Diego Department of Environmental Health Solid Waste Local Enforcement Agency (LEA) appreciates the opportunity to review and comment on the draft Environmental Impact Report (DEIR) for the above project. M-1

The LEA would like to reiterate our long standing position that open space, commercial or industrial land uses are in alignment with nearby (less than 1,000 feet away) active landfill activities. While a health risk assessment conducted for the project determined that potential health impacts to residents would likely be less than significant, the development of residential land uses within 1,000 feet of an active landfill may, based on experience, result in nuisance impacts to those residents from odors, dust, noise, landfill gas and/or vectors. M-2

The LEA prefers the "Nuisance Easement" alternative described in the Draft EIR which will develop industrial land uses in the Village Three North area adjacent to the Otay landfill. Per the Draft EIR, this alternative is consistent with the City of Chula Vista's General Plan Policy E 6.4 which avoids placement of sensitive receptors (residential properties, schools, etc.) within 1,000 feet of a "toxic emitter" and the landfill is identified as a "major toxic emitter" in the Draft EIR. M-3

Should you have any questions, please do not hesitate to call either KanLyn Merlos, LEA Supervisor at (858) 495-5799 or myself at (858) 694-2801.

Sincerely,

MELISSA PORTER, Environmental Health Specialist
Local Enforcement Agency

cc: Rodney Lorang, County Counsel
Neil Mohr, Republic Services
Megan Fischer, CalRecycle
LEA file

INTENTIONALLY LEFT BLANK

Response to Comment Letter M

County of San Diego, Department of Environmental Health
Melissa Porter, Environmental Health Specialist
September 18, 2014

M-1 This comment does not address the adequacy or accuracy of information provided in the Draft EIR. No response is required.

M-2 The City of Chula Vista entered into an agreement with the Otay Landfill operator that clearly identified the limits of the "active" portion of the landfill from which the 1,000 feet is measured. See EIR Page 5.1-27 for a complete description of the Amended and Restated Otay Landfill Expansion Agreement. MM LU-4 restricts any residential uses unless, and until, the landfill moves further away from the proposed R-1 neighborhood such that no residential use (i.e. – new homes) is constructed within the 1,000' setback from the active portion of the landfill.

A Nuisance Study was conducted for the proposed project and included as Appendix D Part II in the Draft EIR. This study reviewed the potential for nuisance odor, vectors, stormwater and noise. Odor complaint data was included as an appendix to the Nuisance Study. The use of past odor complaints as a gauge of potential nuisance is standard practice in CEQA analyses. In fact, the nuisance study went beyond the typical qualitative analysis and quantified the future potential. The study was looking at any odor complaints that were verified as causing a nuisance by air agency. The Nuisance Study did not identify any potentially significant nuisance impacts

Additionally, as stated in Section 5.1, Land Use Page 5.1-23 of the Draft EIR, odor control practices are in place at all landfills, and odor control is under the purview of the SDAPCD. Landfill odor control practices include application of odor absorbing materials or collecting and treating gases from the landfill before they are released into the surrounding community. No revisions to the Draft EIR are necessary as a result of this comment.

M-3 The General Plan does preclude residential development within 1,000 feet of a major toxic emitter, including the Otay Landfill; however, the landfill recently went forward with an agreement with the City that clearly identified the limits of the "active" portion of the landfill from which the 1,000 feet is measured. This is consistent with the City's policy regarding Electrical Generating Facilities, which clearly measures from the source of the emissions, not the property line. See EIR Page 5.1-27 for a complete description of the Amended and Restated Otay Landfill Expansion

Agreement. The landfill expansion agreement is a public document that was approved by the City Council on August 12, 2014.

As stated in MM LU-4, prior to approval of each residential building permit in Village Three North and a Portion of Village Four, the applicant shall provide evidence satisfactory to the Development Services Director (or their designee) that each proposed residential unit to be constructed shall be located at least 1,000 feet away from the then active solid waste disposal areas of the Otay Landfill as required by General Plan Policy E 6.4 (as corrected) and by Section 2.5 of the Amended and Restated Otay Landfill Expansion Agreement.

Notwithstanding the typically ministerial nature of building permit approvals, the City shall have and retain discretion here to deny any building permit application regarding any residential lot or parcel that does not comply with this Mitigation Measure.

Therefore, the project would comply with General Plan E 6.4 (as corrected) and no further response is required.

Comment Letter N

Allen Matkins

Allen Matkins Leck Gamble Mallory & Natsis LLP
Attorneys at Law
501 West Broadway, 15th Floor | San Diego, CA 92101-3541
Telephone: 619.233.1155 | Facsimile: 619.233.1158
www.allenmatkins.com

Jeffrey A. Chine
E-mail: jchine@allenmatkins.com
Direct Dial: 619.235.1525 File Number: 256583-00002/SD822564.01

Via Email/U.S. Mail

September 24, 2014

Marni Borg
City of Chula Vista
Development Services Department
276 Fourth Avenue
Chula Vista, CA 91910

Re: Comments on the University Villages Sectional Planning Area and Tentative Map Draft Environmental Impact Report (EIR 13-01; SCH 2013071077)

Dear Ms. Borg:

On behalf of our client, Otay Land Company, LLC ("OLC"), we appreciate the opportunity to submit these comments to the City of Chula Vista ("City") on the Draft Environmental Impact Report ("DEIR") for the University Villages Sectional Planning Area (SPA) Plan and conceptual Tentative Map (TM) (collectively, the "Project"). As you know, OLC has major land holdings within Otay Ranch immediately adjacent to the proposed Project.

OLC provides these comments in the spirit of promoting the seamless integration of the Project into the recently approved OLC Villages 8 West and 9, and the future University. OLC supports the merits of the Project, as well as the University as the heart and economic engine that will ensure the long-term success of Otay Ranch, and appreciates the importance of the Project to the realization of the University. As you know, the ultimate ownership of the Project site has become increasingly uncertain and there is a possibility that the Project may be broken up into several parcels held by different owners. Given these uncertainties, OLC submits these comments in the best interest of all concerned, including the City, OLC, and the future owner(s) of the Project. We believe that by addressing the issues outlined herein, the City will help ensure the cohesive future development of Otay Ranch and avoid planning, environmental, and practical difficulties inherent in the "checkerboard" ownership of land within the master-planned community. Simply deferring the resolution of important concerns discussed in this comment letter ultimately delays the realization of our shared vision for the future development of Otay Ranch.

N-1

The Project proposes 6,897 residential dwelling units and 40,000 square feet of mixed-use commercial/retail square footage within Village Three North and a portion of Village Four, Village

Eight East and Village Ten. In addition, the Project would set aside 28.6 acres for industrial uses and 5.2 acres for office uses in Village Three/Portion of Village Four, together with a variety of other land uses (parks, schools, community purpose facilities, open space, preserve, etc.) across the Project site. The Project site currently is vacant and generally is composed of gently sloping terrain covered with primarily non-native grasslands crossed by dirt roads and old cattle trails. Approximately 476 of the 1,375-acre site is designated as Farmland of Local Importance. Historically, the Project site was used for dry farming, and cattle and sheep grazing.

As detailed below, we have concluded that while aspects of the DEIR satisfy the requirements of the California Environmental Quality Act ("CEQA"), there are numerous areas where the document as presently drafted falls short of the minimum informational requirements of the law, uses inappropriate standards, contains deficient analysis, or fails to mitigate identified impacts. OLC believes that these deficiencies can be remedied, resulting in an adequate environmental document that serves to inform the public and educate the decisionmakers regarding the environmental consequences of the proposed Project.

N-1 Cont.

I. CEQA OVERVIEW

The goal of CEQA is clear – to protect the environment. (Public Resources Code § 21000.) This overarching goal has four basic purposes:

1. Inform governmental decisionmakers and the public about the potential, significant environmental effects of proposed activities;

2. Identify ways that environmental damage can be avoided or significantly reduced;

3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and

4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved. (CEQA Guidelines § 15002(a).)[1]

Two years after CEQA was enacted, the California Supreme Court declared that CEQA must be interpreted liberally "to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247, 259.)

N-2

[1] The CEQA Guidelines are found at 14 Cal Code Regs. §§ 15000, *et seq*.

To ensure that the goal and purposes of CEQA can be met, CEQA requires the preparation of an informational document, often in the form of an EIR, to provide public agencies and the public in general with detailed information about the effect a proposed project may have on the environment, to list ways in which the significant effects of such a project might be minimized, and to indicate alternatives to such a project. (Public Resources Code § 21061.) The courts have held that the "EIR is the heart of CEQA;" it acts "as an environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." (*County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810; *see also*, CEQA Guidelines § 15003(a).) The EIR demonstrates "to an apprehensive citizenry that the agency has in fact analyzed and considered the ecological implications of its action." (*No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 86; *see also*, CEQA Guidelines § 15003(d).)

An EIR "must contain facts and analysis, not just the agency's bare conclusions or opinions. An EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." (*Laurel Heights Improvement Association v. Regents of University of California* (1988) 47 Cal.3d 376, 404-405; *citations omitted*.)

Ultimately, a "failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process" and resulting in a "prejudicial abuse of discretion." (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 712.)

N-2 Cont.

II. TRANSPORTATION, CIRCULATION AND ACCESS ANALYSIS

The DEIR traffic analysis contains a number of questionable or incorrect assumptions, deficient impact analysis, and inappropriate or unsupported mitigation, as discussed below.

A. Direct Impacts

The traffic analysis determined that the Project would result in the following direct impacts:

- Heritage Road and Olympic Parkway intersection;
- La Media Road and Olympic Parkway intersection;
- Olympic Parkway between Heritage Road and Santa Venetia Street; and
- Heritage Road between East Palomar Street and Olympic Parkway.

The DEIR concludes that these potentially significant direct impacts can be mitigated by Mitigation Measure TCA-12, which requires the Project applicant to pay Transportation

N-3

Development Impact Fees for the construction of Main Street between Heritage Road and La Media Road, as a Six-Lane Prime Arterial, including the construction of Main Street bridge, the signalization of Quarry Driveway / Main Street (Int #65), and the signalization of Village Three North R-20 Driveway / Main Street (Int #66).

The impacts identified above are direct in nature, rather than cumulative impacts. While the payment of impact fees is recognized as mitigation for cumulative impacts under certain circumstances, the payment of fees is not effective to mitigate direct impacts. (See *Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, 1187-1189.) Consequently, the direct impacts referenced above remain significant and unmitigated. The DEIR should be revised accordingly and recirculated to disclose these impacts. N-3 Cont.

B. Freeway Ramp Meters

The DEIR determined that the Project would result in a cumulative traffic impact on the I-805 northbound on ramp at Main Street. Ramp meters are within the jurisdiction of the California Department of Transportation ("Caltrans"), not the City. As a result, Mitigation Measure TCA-14 directs that prior to Project buildout, the Project applicant must work with Caltrans to adjust the ramp meter rate at this location "such that the ramp meter reflects the additional vehicles attributable to the project." Based on this mitigation, the DEIR concludes that the impact has been mitigated below a level of significance. However, there is no indication or evidence that Caltrans will change ramp meter timing as recommended by the DEIR. Indeed, Caltrans is resistant to adjusting meter timing and typically prefers congestion on local roadways rather than Caltrans' facilities. Consequently, the mitigation measure is speculative and there is no reason to believe that it will be effective or enforceable in reducing the relevant impact to below a level of significance. The impact thus remains significant and unmitigated. The DEIR should be revised and the DEIR recirculated to disclose this impact. N-4

C. Fehr & Peers Memorandum

OLC requested that the traffic engineers at Fehr & Peers review and comment on the Project's traffic analysis. Attached to this comment letter is their memorandum raising a number of questions and comments. We ask that the City respond to the points raised therein. N-5

III. LAND USE, PLANNING AND ZONING ANALYSIS

CEQA mandates that an EIR examine the consistency of a proposed project with applicable land use plans. The DEIR analysis of Land Use, Planning, and Zoning impacts must be revised for the reasons discussed below. N-6

A. General Plan and General Development Plan

DEIR Appendix B includes numerous tables addressing the Project's consistency with the General Plan and the General Development Plan. For instance, Appendix B concludes that the proposed Project's land uses are compatible with existing and planned land uses. This conclusion is reached despite the proposed reduction of land designated as Limited Industrial by 136.7 acres and the increase of land designated as residential by 129.1 acres in Village Three North/Portion of Village Four, as well as the replacement of the University designation with residential and recreation uses in Village Ten. As a result, the Project surpasses the current General Plan and General Development Plan population and housing estimates. Contrary to the conclusion reached by the DEIR, by replacing job-creating land uses with additional housing, the Project is inconsistent with the General Plan's Economic Development Element, and more specifically, the important balance that is needed between jobs and housing, which the City vigorously has protected.

Figure 6-1 of the current General Plan clearly shows Village Three North/Portion of Village Four as Employment Land Areas, which areas are "essential to the City's job creation goals." Rather than acknowledging the inconsistency between the Project and the Economic Development Element as a significant land use impact, the DEIR dismisses the issue, citing an Employment Lands Analysis ("ELA") and Fiscal Impact Analysis. Neither of those documents is included in the DEIR nor its appendices. The DEIR should be recirculated together with both of those documents to allow the decisionmakers and the public an opportunity to review the studies that form the basis of the DEIR's conclusions.

As currently drafted, the DEIR contains inadequate analysis of the Project's direct and cumulative Land Use, Planning, and Zoning and Housing and Population impacts. It includes the bare conclusion that the City will have sufficient lands for future industrial development despite the acreage reductions described above. Insofar as the General Plan already designates Village Three North/Portion of Village Four, the Regional Technology Park ("RTP") and the University all as Employment Land Areas, the assertion that approximately 2.25 million square feet of eliminated industrial capacity will be accommodated on the RTP or University sites is not supported, either by evidence or common sense. The DEIR likewise strains credulity by concluding that despite such a significant loss in industrial acreage, the proposed land uses in Village Three North/Portion of Village Four will create capacity for an estimated 460 additional jobs over previous employment estimates. Even if that were the case, the commercial-retail and office jobs that will replace the industrial jobs planned for in the General Plan and General Development Plan would not be of the same caliber.

For these reasons, we believe that the DEIR should be revised and recirculated together with the documents upon which it relies to reach the conclusion that the significant loss of employment generating lands is consistent with the General Plan and the General Development Plan and that the Project will not be detrimental to the future economic vitality and quality of life for City residents.

N-6
Cont.

B. Surrounding Land Uses

The DEIR states that by reducing the industrial acreage in Village Three North/Portion of Village Four, the Project is "more compatible with the adjacent residential land use south of Heritage Road." In doing so, the DEIR fails to acknowledge the primary reason that Village Three North/Portion of Village Four is designated as industrial: the immediate adjacency to the Otay Landfill, as well as the property's adjacency to industrially zoned lands to the northeast in Village Two, and to existing industrial uses to the west of Village Three North. N-7

1. Otay Landfill

By redesignating employment generating industrial land for additional housing, the Project proposes to place residences within 1,000 feet of the landfill. According to the DEIR, residential units will be placed 450 feet from the Otay Landfill property line and 700 feet from the "waste containing portion of the landfill (i.e. – the portion of the landfill eligible to accept waste)." The Project is thus inconsistent with General Plan Environmental Policy 6.4, which prohibits the siting of sensitive receptors, *i.e.*, homes, schools, and park facilities, within 1,000 feet of a toxic emitter like the Otay Landfill. The DEIR fails to adequately address this inconsistency.

The DEIR would require that, prior to approval of each residential building permit in Village Three North/Portion of Village Four, the Project applicant provide evidence to the Development Services Director that each proposed residential unit "shall be located at least 1,000 feet away from the then active solid waste disposal areas of the Otay Landfill as required by General Plan Policy E 6.4 (as will be corrected) and by Section 2.5 of the Amended and Restated Otay Landfill Expansion Agreement." Mitigation Measure LU-4 states that the City "shall have and retain discretion here to deny any building permit application regarding any residential lot or parcel that does not comply with this Mitigation Measure." N-8

However, the General Plan policy in question directs the City not to site "sensitive receptors within 1,000 feet" of major toxic air emitters.[2] The distinction sought to be created by the DEIR between the "then active solid waste disposal areas" of the landfill and the landfill itself is not found in the General Plan policy. Indeed, the DEIR discloses that residential units will be located 700 feet from the "waste containing portion of the landfill (i.e. – the portion of the landfill eligible to accept waste)." There is no legal or regulatory basis for the "active" landfill description upon which the proposed mitigation is founded. The "active" landfill strategy employed by the DEIR contravenes the plain language and meaning of General Plan Environmental Policy 6.4. The proposed mitigation does not render the Project consistent with the Policy. As a result, the DEIR should

[2] As explained in the DEIR, General Plan Environmental Policy 6.4 is being amended in the very near future to confirm and clarify that the policy is applicable "to other forms or types of possible toxic air emitters."

conclude that the Project is inconsistent with the Policy and disclose a significant and unmitigated impact. N-8 Cont.

Further, Mitigation Measure LU-4 cites to Section 2.5 of the Amended and Restated Otay Landfill Expansion Agreement. As with the ELA referenced above, this Agreement is not included in the DEIR or its appendices. The DEIR should be revised to disclose the General Plan inconsistency and recirculated together with the Agreement upon which it relies. N-9

Moreover, when the 2005 General Plan/General Development Plan Amendment EIR was approved, Mitigation Measure 5.11-2 stated that no residential uses shall be permitted within 1,000 feet of the Otay Landfill unless a project specific analysis is completed to demonstrate that odor effects fall below odor thresholds for common compounds. The DEIR references a Village Three North Nuisance Study, but that study was not included in the DEIR or its appendices. The DEIR attempts to summarize the study, but that summary, and in particular Figure 5.1-2, are inadequate.

In addition, although the DEIR relies on the uncirculated Nuisance Study to support its odor analysis, it is unclear whether odors are in fact controlled or can be controlled when houses are placed in Village Three North/Portion of Village Four. The DEIR Nuisance Study apparently is based on a model that took into account prior complaints about the landfill smell. No information is provided as to the timing or source of those complaints. That missing information is critical to a full review of the issue because the Noise section of the DEIR discloses that "there were some 'Area of Concern' notes regarding proper waste coverage" made by the County of San Diego Local Enforcement Agency ("LEA"). If waste is not being properly covered, then odors (and vectors) will increase. These facts make full disclosure of the Nuisance Study all the more critical. The public should have been given access to the actual Nuisance Study in an appendix, as with the other technical reports upon which the DEIR relies.

2. Other Uses

There are other surrounding land uses that may be impacted by the Project's redesignation of industrial land as residential. For instance, the DEIR states that auto dismantlers and an operations center for the landfill are located 150 feet away from proposed residential units. The DEIR fails to adequately address these potential conflicts. The DEIR also fails to consider the Project's compatibility with nearby correctional facilities. The City should revise the DEIR to take into account the Project's impact on these existing uses. N-10

3. Off-Site Improvements

The DEIR includes a long list of Off-Site Improvements that are needed for the Project. However, the DEIR fails to disclose the location, purpose, or ownership of Off-Site Improvement Areas 11 and 20. The DEIR should be revised to provide that information to the decisionmakers and the public. N-11

C. San Diego Association of Governments and Smart Growth

When the proposed Project's new (and unaccounted for) housing units are built in Village Three North/Portion of Village Four, the DEIR claims that these units will help the City meet the San Diego Association of Government's ("SANDAG") growth forecasts. This determination is inconsistent with the Housing and Population section of the DEIR, which states that the Project "conflict[s] with current adopted growth forecasts developed by SANDAG." Ultimately, the information provided to the decisionmakers and the public in the DEIR should be internally consistent and accurate. Inconsistent or inaccurate analysis in the Land Use, Planning, and Zoning and Housing and Population sections of the DEIR should be corrected. N-12

Similar to the jobs/housing balance discussion above, the DEIR contains an inadequate analysis of the Project's consistency with SANDAG's Regional Comprehensive Plan ("RCP") Smart Growth Principles and the 2050 Regional Transportation Plan ("RTP")/SCS Policy Objectives. Because it redesignates vast expanses of industrial land for additional residential development, the Project appears inconsistent with the Jobs/Housing Mix principle of the RCP or the Mobility and Social Equity objectives of the RTP. As you know, these issues have been closely monitored by the California Attorney General and thus, additional care should be paid to ensure the Project's compliance with the RCP and RTP. N-13

IV. LANDFORM ALTERATION/AESTHETICS ANALYSIS

The DEIR includes Existing Key View 5, but neglects to provide Proposed Key View 5 in the Landform Alteration/Aesthetics section of the DEIR. That oversight prevents the public and decisionmakers from understanding the Project's potential significant aesthetic impacts. N-14

In addition, the shadow analysis mitigation recommended for the proposed Project differs from the measures imposed by the City for OLC's Village 8 West. Specifically, the City required OLC to conduct a shadow analysis for any structure above three stories. The DEIR recommends a shadow study for any structure above four stories. No explanation for this change in City policy is provided. This inconsistency undermines the credibility of the DEIR and should be corrected. N-15

V. HEALTH RISK ASSESSMENT ANALYSIS

The DEIR includes a Health Risk Assessment ("HRA") that considered whether the immediately adjacent Otay Landfill would have a potential health impact on future residential uses within 1,000 feet of the landfill. The HRA acknowledges that the landfill's source locations were approximated since "site-specific data was not available for many parameters." Nevertheless, the DEIR determines that the calculated cancer risk for residential receptors, commercial and industrial receptors does not exceed the referenced threshold. This conclusion is undermined by the recognition that the analysis is based on "guesswork" and not site-specific details. N-16

Further, the DEIR defines the applicable cancer risk threshold as 1.0 in 1 million for areas proposed for residential development. Both the DEIR and the HRA state that an "area beyond the Landfill's property boundary exceeds the referenced threshold [*i.e.*, 1.0 in 1 million], but that location is proposed for industrial use; thus the residential receptor threshold is not applicable." Both the DEIR and the HRA then state – in the very next sentence – that "carcinogenic risks to commercial and industrial receptors do not exceed the conservative 1.0 in 1 million risk threshold at any location outside the Landfill's property boundary." The DEIR and the HRA are internally inconsistent – either the 1.0 in 1 million threshold is exceeded outside of the landfill's boundary in the industrially designated areas or it is not. The ambiguity caused by this disconnect renders the Air Quality and Hazards and Risk of Upset analysis of little value. N-16 Cont.

As drafted, the DEIR relies on an HRA with unreliable conclusions due to the lack of site-specific data and internal inconsistencies. Consequently, the DEIR fails to inform the decisionmakers and public about this critical health risk issue.

VI. NOISE ANALYSIS

The DEIR states that the Otay Landfill produces noise-generating activities, such as horns, amplified sound or explosive-noise devices, to deter avian vectors. Although these activities are considered part of the ambient noise environment, the DEIR nevertheless acknowledges that the LEA has some "Area of Concern" notes with regard to the landfill's efforts to keep waste covered. Keeping waste covered is the primary control mechanism for vectors. If the Otay Landfill does not maintain sufficient waste coverage, the landfill operator will be forced to increase its noise-generating activities to keep vectors away from the landfill. The DEIR does not consider the impact an increase in noise-generating activities will have on the Village Three North/Portion of Village Four residential units, school, and park facilities. The DEIR must be revised and recirculated after that analysis has been completed so that the decisionmakers and public can understand this potential significant impact. N-17

Further, the DEIR recommends noise impact mitigation for residential units, non-residential commercial/mixed-use commercial, industrial facilities, and schools. However, the DEIR fails to recommend mitigation for other noise sensitive land uses including parks, outdoor use areas, and community facilities. When it approved the Village 8 West project, the City imposed noise mitigation to address those specific uses. Again, this lack of mitigation and inconsistent application of City standards undermines the validity of the DEIR. N-18

VII. CUMULATIVE PALEONTOLOGICAL ANALYSIS

The DEIR determines that although the extent of potential paleontological resources in the area is unknown, the Project would have a less than significant cumulative impact on paleontological resources with the implementation of recommended mitigation measures. As with the other impact areas discussed in this comment letter, that conclusion is contrary to the one N-19

\

reached in the Village 8 West EIR. It is not clear from the information provided to the decisionmaker and the public how or why a different conclusion was reached months after the City approved Village 8 West. Again, the credibility of the DEIR is undermined by this inconsistency. N-19 Cont.

VIII. WATER SUPPLY ANALYSIS

The DEIR states that "there are sufficient existing and planned water supplies to meet projected water demands of the proposed project and other existing and planned development projects within the [Otay Water District ("OWD")] service area over the next 20-year planning horizon in normal and in single and multiple dry years." In addition, the DEIR indicates that "adequate long-term water supply will be available to the proposed project and other existing and reasonably foreseeable planned development in the OWD service area." Therefore, the DEIR concludes that the Project will have a less than significant impact on both short- and long-term water supplies, and that the Project will not result in a cumulatively considerable water supply impact. When the City recently approved Villages 8 West and 9, the EIRs concluded that those projects would result in significant water supply impacts. N-20

Similarly, the City previously required OLC to mitigate the Villages 8 West and 9 potential impacts on recycled water facilities. In contrast, the DEIR concludes that the proposed Project will not result in a significant impact on recycled water facilities, and as a result, no mitigation is proposed. The conflicting water supply and recycled water positions taken with regard to the projects within Otay Ranch should be explained and reconciled. N-21

IX. SIGNIFICANT AND UNAVOIDABLE IMPACTS SUMMARY

The DEIR summary in Chapter 8, Significant and Unavoidable Impacts, omits the cumulative Cultural Resources impact, the cumulative Agricultural Resources impact, and the direct Global Climate Change impact caused by the Project. The summary should be revised accordingly. N-22

X. CITY OF SAN DIEGO LAND OWNERSHIP

The City of San Diego ("San Diego") owns fee title to land in Villages Eight East and Ten that is included in the proposed Project. The land has been used in connection with San Diego's potable water storage and transmission. To our knowledge, San Diego has not consented to the Project, nor signed any of the pending Project applications. This raises a variety of concerns.

Both the California Subdivision Map Act ("SMA") and the City's regulations require that *all* owners of land must sign applications for the subdivision of such land. This is a condition precedent for the processing of subdivision applications. Aside from the subdivision applications, it is inappropriate for the City to process any private land use or development applications without the consent of affected landowners. The DEIR acknowledges that San Diego owns land within the Project. The DEIR acknowledges that the Project design is incompatible with San Diego's N-23

ownership in that extensive grading and private improvements are proposed within San Diego's property. However, the DEIR mistakenly treats San Diego's fee ownership as a utility easement and proposes mitigation requiring the relocation of the utility easements. This mitigation is inadequate and inappropriate to address the fundamental problem outlined above. Absent the written consent of San Diego, no further processing of the Project applications, including the DEIR, should occur. Further, no public hearings regarding land owned by San Diego may be held. To do so would violate the SMA, City regulations, and the due process rights of San Diego. N-23 Cont.

XI. OTAY LAND COMPANY LAND OWNERSHIP

The Project proposes to revise the boundaries between Villages 9 and Ten to incorporate a portion of existing Village 9 into Village Ten. The DEIR fails to disclose that the redesignated portion of Village 9 is owned by OLC and that OLC recently obtained entitlements for that property. The DEIR contains no analysis of this proposed change, or the potential effects of that change, on the remainder of Village 9. N-24

XII. CONCLUSION

Thank you for the opportunity to comment on the DEIR. We are available to discuss these comments with you or to answer any questions about the concerns raised herein.

Very truly yours,

Jeffrey A. Chine

cc: Paul Borden

FEHR & PEERS

To: Jeff O'Connor, Otay Land Company

Jeff Chine, Allen Makins

From: Dawn Wilson, PE, TE

Date: September 24, 2014

Subject: Peer Review of University Villages TIA (prepared by Chen Ryan Associates, July 31, 2014)

Per your request, Fehr & Peers has conducted a peer review of the traffic impact analysis report for the University Villages project, which includes Village 3, Village 4, Village 8E and Village 10. Please consider the following comments:

Roadway Network Assumptions

The following key roadway network issues were identified as part of this analysis.

- Village 10 extends a new roadway south of Main Street and east of Eastlake at Discovery Falls. This new road wraps through the University and ties into Village 9 and Eastlake Parkway. In addition, Eastlake Parkway is proposed to be renamed between Discovery Falls and Otay Valley Road as "University Drive" B. The road classifications shown on Figure 1-6 of the TIA illustrate the choppy street designations through Village 10. **Explain how roadway classifications will transition through the Village and demonstrate that there will be no queuing or operational impacts where road classifications change. Demonstrate that the capacity reduction on Eastlake Parkway will not negatively impact traffic on Street B in Village 9.** N-25

- Methodology for assuming new roadways: In Village 8W and Village 9, Otay Land Company was required to show a need for new roadways before they were included in the roadway network. For example, an intersection or a roadway segment would need to fail in a study scenario (2015, 2020, 2025) before a new road could be integrated into the roadway network for the next study year scenarios (if it failed in 2015, then new roadway would be added to the network that would offset the impact in 2020). This methodology was followed in the University Villages TIA through year 2025. However, as described below, the 2030 analysis includes new roadways not justified by the results of the 2025 analysis. **The TIA should demonstrate the need for the new roads "constructed by others" prior to including them in the TIA. Analysis of 2030 conditions should be conducted without these improvements to demonstrate they are necessary prior to inclusion in the analysis.** N-26

- 2030 Roadway Network Assumptions: In 2030, both the bridge and interchange were included in the analysis. The TIA states the following roadways will be "Constructed by Others" and are assumed to be completed by 2030:

  - Construction of Main Street from SR-125 to Eastlake Parkway
  - Construction of the Main Street Interchange
  - Construction of Otay Valley Road between "subdivision boundary" and Village 9 Street "B" including an overpass at SR-125
  - Heritage Road/Energy Way is signalized

  There is no direct correlation between the need for these roadways and the results of the 2025 analysis. The roadways are consistent with the 2030 Circulation Element classifications and the buildout out of the circulation system. **Analysis should be revised to evaluate potential project impacts without these planned, but unfunded improvements to determine potential project impacts without the new linkages. Then mitigation measures, including adding these roadways, should be identified to offset project related impacts.** N-27

Technical Analysis

- Existing Conditions Analysis: In the Village 8W and Village 9 TIA's the NB on ramps at I-805/Main Street operated at LOS F in the a.m. peak. In the University Villages TIA, this intersection operates at LOS D with an average intersection delay of 43.2 seconds. The ramp meter analysis also shows that there are no queues on Main Street approaching I-805. This appears inconsistent with field observations of morning peak commuter patterns near the I-805 freeway. **The TIA should include a summary of field inspected queues along Olympic Parkway and Main Street to justify the findings of the operational analysis.** N-28

- Existing Conditions Analysis: The traffic count data for this project is dated 2011. The TIA is dated 2014. The standard length of time traffic counts are considered "current" is 12 to 18 months. Therefore, the data used in this analysis is no longer current. Information on current conditions should be provided to demonstrate no change in conditions has occurred since the TIA was initiated. **The TIA should demonstrate that traffic patterns in the study area have not changed since 2011 considering the reduction in Tolls on SR-125 that occurred during the time period between when data was collected and the TIA was provided for review.** N-29

- Trip Distribution: One unusual pattern was identified for the near-term Village 3 distribution. For the 2015 conditions distribution, there is a 20% drop in traffic at Brandywine. If 20% of the trips use Brandywine, it is not clear why this roadway was not included in the roadway segment analysis. **Trip distribution figures should be revised to clarify the 20% drop in traffic along Main Street.** N-30

Additional analysis of Brandywine Road may be necessary should the trip threshold for inclusion in the TIA be reached or exceeded.

- Year 2015 Analysis: The project will construct Heritage Road by 2015 for access to the project site. According to the analysis, Heritage Road will be constructed as a 6-lane prime to Main Street. This results in a STOP controlled intersection at Main Street/Heritage. It is unreasonable to assume that a 6-lane by 4-lane road would be All-Way STOP controlled. More reasonable intersection geometry or traffic control should have been assumed in this analysis. The AWS is assumed through 2020. **The project should either reduce the number of lanes through the intersection and revise the analysis accordingly or analyze as a signalized intersection. The proposed geometry and traffic control is not reasonable.** N-31

- 2020 Analysis: The TIA states the project will construct Main Street from Heritage Road to SR-125 to provide access to Village 8E. There is no mention in the text that Main Street will be constructed as a 4-lane couplet. However, the intersection analysis does consider the intersection configuration illustrated in Village 8W & Village 9 TIA's. **The TIA should be revised such that the PFFP and descriptions of Main Street through Village 8W should clearly indicate the construction of the four-lane couplet at La Media Road.** N-32

- 2020 Analysis: 36% of trips use Magdalena from Village 8E. Magdalena is not a circulation element road. The remaining trips from Village 8E pass through the La Media/Main Street Couplet. The TIA assumes that the couplet is All Way STOP (AWS) control for all four intersections in 2020. The project identifies the AWS as failing and the mitigation is to install traffic signals. **When fully constructed, the couplet at La Media Road/Main Street will be signalized. Interim All-Way Stop condition evaluated in the TIA is infeasible. The TIA should be revised to reflect the buildout of the couplet as discussed in the Village 8W TIA.** N-33

I-805/SR-125 Discussion

- I-805/SR-125 discussion: The TIA includes a statement regarding the assumptions in the traffic model used and the change in funding for the I-805 Phase 2 project. The TIA states that the model included assumptions consistent with the analysis conducted in Village 8W and Village 9 (I-805 improved to include Phase 2 widening and additional toll lanes and SR-125 is a toll facility). However, the technical analysis throughout the study includes only the Phase I improvements (currently under construction – 2 HOV lanes and Palomar DAR) and assumes SR-125 is a toll facility. The project therefore results in significant/unavoidable impacts through year 2030 on I-805. The University Villages then cite the SANDAG study that concludes that if SR-125 tolls are reduced, both freeways will operate at acceptable LOS. The impacts on I-805 are therefore unmitigated (based on the analysis) and no mitigation measures are identified. N-34

Mitigation

- 2020 Mitigation: The mitigation for direct impacts in 2020 is the construction of Heritage Road. Heritage is planned and is indicated to be constructed as a 6-lane roadway. The mitigated condition analysis considers the benefits of the Heritage to Olympic Parkway, but does not consider the shift in traffic to Main Street. Heritage Road is forecast to reduce the ADT on Olympic Parkway by more than 20,000 vpd, but it unclear where the trips go. **Additional analysis is necessary to determine if there are residual impacts associated with this shift in traffic.** N-35

- 2025 Mitigation: The project has a Direct Impact to Heritage Road & Olympic Parkway. The recommended mitigation is the payment of TDIF fees to construct Main Street. The text states that Phase I of the Main Street project is included in the 2013-2016 CIP Program. It is also stated in the text that the City will be responsible for evaluating the environmental impacts of this road project. **Project specific mitigation measures should be identified and evaluated in the TIA to offset the impacts in 2025. This may include the construction of Main Street or other measures to reduce the project impact to less than significant. Payment of TDIF fees is adequate for cumulative, but not direct impacts under CEQA.** N-36

- 2025 Mitigation: There is also a direct impact at La Media / Olympic Parkway with TDIF as the recommended mitigation measure. Similar discussion to the Heritage & Olympic intersection is provided. **Project specific mitigation measures should be identified and evaluated in the TIA to offset the impacts in 2025. This may include the construction of Main Street or other measures to reduce the project impact to less than significant. Payment of TDIF fees is adequate for cumulative, but not direct impacts under CEQA.** N-37

Conclusion

In addition to the issues and questions raised above, key issues that require additional or revised analysis include:

- Near Term analysis of Brandywine to address the drop in trip distribution on Main Street (Village 3) N-38
- Analysis of potential impacts associated with the extension of Heritage from Olympic to Main Street not considered N-39
- Analysis of potential project mitigation measures to offset the direct impacts in 2025 in lieu of payment of TDIF fees N-40

INTENTIONALLY LEFT BLANK

Response to Comment Letter N

Allen Matkins Leck Gamble Mallory &Natsis LLP
Jeffery A. Chine, Attorney at Law
September 24, 2014

N-1 This comment does not address the adequacy or accuracy of information provided in the Draft EIR. No response is required.

N-2 This comment does not address the adequacy or accuracy of information provided in the Draft EIR and no response is necessary.

N-3 MM TCA-12 on Page 5.3-166 in the Draft EIR has been revised in the Final EIR to ensure that the "direct impact" in question, which results in the mitigation measure of constructing the Main Street Bridge, never actually occur because the mitigation measure pre-empts the impact. The EDU threshold up through which the project is required to pay TDIF prior to needing the Main Street Bridge crossing is 4,737 EDU. The mitigation measure has been revised to state that no additional building permits will be issued past the 4,736th EDU unless the City has constructed the improvement. In addition, the caveat language has been added providing for (1) the developer can construct the improvement (Main Street crossing Wolf Canyon), (2) the developer can construct alternative improvements which reduce the need for the crossing, and (3) the developer can perform a traffic study to demonstrate the improvement is not needed and push out the trigger further. The revised MM TCA-12 is provided below:

- **MM TCA-12 Intersections**: Heritage Road / Olympic Parkway (CV) and La Media Road / Olympic Parkway (CV); **Roadways**: Olympic Parkway, between Heritage Road and Santa Venetia Street (CV); and Heritage Road, between East Palomar Street and Olympic Parkway (CV) –Prior to the issuance of each building permit, the Project Applicant shall pay the appropriate Transportation Development Impact Fees (TDIF) for the construction of Main Street, between Heritage Road and La Media Road, as a Six-Lane Prime Arterial, including the construction of Main Street bridge, the signalization of Quarry Driveway / Main Street (Int #65), and the signalization of Village Three North R-20 Driveway / Main Street (Int #66). The project will signalize the intersection of Village Three North R-20 Driveway / Main Street (Int #66) in conjunction with the construction of Main Street, while the TDIF program will signalize the intersection of Quarry Driveway / Main Street (Int #65). The analysis shows the need for Main Street from the Heritage Road to La Media Road

is triggered by the 4,737th EDU. If the project equivalent dwelling unit limit of 4,736 EDU is reached prior to this roadway segment being constructed and open to traffic , then one of the following steps shall be taken as determined by the City Engineer:

i. Development in Villages 3, 8E and 10 shall stop until the future roadway is constructed by the City; or

ii. City and the Applicant shall meet to determine the need for the incomplete roadway segments. Because a number of factors, including changes to the tolling structure at SR-125, may affect future traffic patterns in Otay Ranch, additional traffic analysis of the roadway network and levels of service assessment may be necessary at that time to determine: (i) if such improvements are in fact necessary; and (ii) the scope and timing of additional circulation improvements, if any; or

iii. Applicant shall construct the missing roadway link and receive a transportation development impact fee credit for the improvements as applicable; or

iv. An alternative measure is selected by the City in accordance with the City of Chula Vista Growth Management Ordinance.

v. All to the satisfaction of the City Engineer.

The revisions made to MM TCA-12 do not result in new or additional impacts. No further response is required.

N-4 Please see response to comment J-3.

N-5 The City has reviewed the Fehr & Peers memorandum and responses to their comments are provided below (N-25 through N-40).

N-6 The project includes a General Plan Amendment which proposes to amend the City's General Plan to allow for the reduction in Industrial lands in Village Three North and the corresponding increase in residential density. The GPA is supported by several documents including the General Plan Amendment Report, General Plan Consistency Analysis, General Plan Amended Pages, and an Employment Lands Analysis.

The ELA was prepared at the direction of the City and funded by both the project applicant and Otay Land Company, on whose behalf this comment letter is written. The ELA incorporates the anticipated land uses within Villages Three North, Eight West, Eight East, Nine, Ten in an effort to provide a complete view of the future

availability of employment lands in Chula Vista. This was specifically directed by the City because it was recognized that while the project included increases in residential densities, it was the adjacent land uses that were planned for higher density employment opportunities. These employment opportunities include the Village Eight West and Nine town centers which are anticipated to accommodate up to 1.8 million square feet of office/commercial/retail uses.

As stated further in the comment but dismissed, the ELA documents that even with the proposed GPA and the loss of industrial lands, the city will maintain sufficient Employment Lands based on current and planned uses, including the above referenced Villages 8 West and Village 9 Town Centers, and the Eastern Urban Center, as well as other industrial land uses currently under-developed due to lack of market demand. In fact, even with the slow down caused by the recent recession and the resulting stop Page of any new additional industrial acreage, the ELA concludes there are still several years of inventory within the Chula Vista submarket.

The FIA and ELA are primarily finance-based documents that were not distributed as part of the public review record, which is standard City practice, because they are not environmental documents; however, as they were "City-prepared" documents, they are considered public and would have been made available upon request.

In regards to the projects consistency with the Economic Development Element policies, while the project specifically proposes a reduction in industrial lands, the overall intent of maintaining the jobs/housing balanced is achieved. The provision of housing by the proposed project in close proximity to the planned town centers and RTP only increase the feasibility and demand for these employment uses.

Regarding the assertion that the retail jobs are not of the same caliber as the industrial jobs, the only policy in the Economic Development Element that addresses this issue is ED 2.6. However, ED 2.6 is a policy regarding leveraging incentives to create high quality jobs. This project is not inconsistent with this policy because it is not interfering with the City's ability to leverage any incentive programs.

N-7 The DEIR clearly shows the landfill as an adjacent land use, calls out this fact in the Environmental Setting, states that the current General Plan Land Use is for Industrial, and discloses the General Plan Policy E 6.4 regarding land uses adjacent to what the City defines as a "toxic emitter". The DEIR goes on to analyze how the proposed GPA would allow for residential uses by converting industrial land to Mixed Use Residential, Medium and Low Medium density residential. The General Plan Consistency Analysis concludes this is consistent with the General Plan, including

Policy E 6.4 (as further discussed in response N-8). The DEIR also analyzes the proximity to the landfill in the Land Use, Hazards and Air Quality sections.

Additional surrounding land uses that could conflict with the project site were analyzed in the DEIR, specifically, in the Land Use Section, Page 5.1-28. These industrial uses are buffered from the project by Heritage Road and landscaped slopes. Noise from the current operations was included in the noise measurements taken in Village Three North and analyzed in Section 5.5, Noise of this EIR. The correctional uses were even further away from the project site, on the south side of the Otay River Valley over 0.5 miles away.

N-8 The General Plan does preclude residential development within 1,000 feet of a major toxic emitter, including the Otay Landfill; however, the landfill recently went forward with an agreement with the City that clearly identified the limits of the active portion of the landfill from which the 1,000 feet is measured. This is consistent with the City's policy regarding setbacks from other emitters such as Electrical Generating Facilities, which clearly measures from the source of the emissions, not the property line. The City and landfill acknowledged this exact practice when drawing the landfill buffer as it is not 1,000 feet from the property line in the northeastern edge of the landfill. See EIR Page 5.1-27 for a complete description of the Amended and Restated Otay Landfill Expansion Agreement. MM LU-4 restricts any residential uses unless, and until, the landfill moves further away from the proposed R-1 neighborhood such that no residential use (i.e. new homes) is constructed within the 1,000' setback from the active portion of the landfill. The landfill expansion agreement is a public document that was approved by the City Council on August 12, 2014.

The EIR does conclude that there is a potential inconsistency with General Plan Policy E 6.4, which is the reason for MM LU-4 being required. This mitigation will ensure that no residential land uses are developed within 1,000 feet of the active landfill. The Amended and Restated Landfill Expansion Agreement ensures that the active portion of the landfill will not move closer to the project site. Thus, the project is consistent with General Plan Policy E 6.4.

N-9 The Nuisance Study was included in Appendix D as Part II and the odor complaint data was included as an appendix to the Nuisance Study.

The use of historical odor complaints is standard practice in CEQA analyses. The date and complaint number of each complaint is included in Appendix B of the Nuisance Study. Those dates and numbers are:

- APCD2006-CMP-0181 – complaint received 10/23/06

- APCD2004-CMP-0202 – complaint received 11/05/04
- APCD2002-CMP-0336 – complaint received 11/27/02
- APCD2002-CMP-0321 – complaint received 11/21/02
- APCD2002-CMP-0320 – complaint received 11/20/02

The exact location is not available from the San Diego Air Pollution Control District (SDAPCD) for each complaint due to privacy concerns, but the approximate location of each complaint is shown in Figure 3 of the Nuisance Study. Furthermore, the use of modeling to address potential odor issues goes well beyond the typical level of odor evaluation required by CEQA. Odor is typically addressed through a qualitative evaluation for CEQA purposes; however, the Nuisance Study includes quantitative evaluation of odor emissions and impacts from the Otay Landfill.

Issues related to the LEA "Areas of Concern" have been fully disclosed in Appendix D of the Nuisance Study, which includes the monthly LEA site inspection reports for the Otay Landfill from October 2012 through February 2014, 17 reports in all. Furthermore, each of these reports is publicly available on the CalRecycle website.

During a site visit on August 8, 2013, the LEA observed that alternative daily cover (ADC) was not being covered within 21 days of placement, as required by the Solid Waste Facility (SWF) permit for the Otay Landfill. In the August 8, 2013 site visit report, the LEA required the site operator to develop a protocol where the date of the placement of the ADC would be recorded and tracked to ensure that it was not left exposed for more than 21 days. The six subsequent site inspection reports included in Appendix D of the Nuisance Report do not indicate that ADC is an area of concern. Additional LEA site visits since February 2014 have not noted that ADC is an "Area of Concern." These subsequent reports indicate that Otay Landfill has implemented the procedures required by the LEA and that the "Area of Concern" has been addressed.

N-10 These uses were analyzed in the EIR, specifically in the Land Use Section, Page 5.1-28. They are buffered from the project by Heritage Road and landscaped slopes. Noise from the current operations was included in the noise measurements taken in Village Three North and analyzed in Section 5.5, Noise of this EIR. The correctional uses were even further away from the project site, on the south side of the Otay River Valley over 0.5 mile away. It should be noted that neither the Village 8 West nor Village 9 EIRs considered potential compatibility with these facilities. No further response is required.

N-11 The footnote on page 4-55 of the EIR states that although Off-Site Improvement Areas 11 and 20 are located on site (i.e., - within the SPA Plan boundaries), they are under a different ownership and are therefore not included. The footnote has been revised to clarify why there were excluded and that impacts from these areas have been included as part of the analysis of the EIR. No potential impacts were missed by not including these areas. No further response is required.

N-12 SANDAG's projections acknowledge they are not a controlling document; rather, they are predictive in nature. The EIR acknowledges that the project is not consistent with the current SANDAG projections; (See Page 5.16-9) however, in general, it is true that the City of Chula Vista and greater San Diego region are growing and will require additional housing units to accommodate anticipated population growth and this project will help meet those projections. In recognition of this, SANDAG is in the process of updating regional growth forecasts and has included the proposed project within their estimates, which are anticipated to be adopted in 2015. The proposed project would pay its fair share for impacts cause by the addition increase in population included the public facilities development impact fee and the transportation development impact fee. The project will provide for housing to support the planned town centers/urban centers in Villages Eight East, Nine and the Eastern Urban Center. With adopted of the proposed GPA and GDPA, the project would be consistent with the City's General Plan and the Otay Ranch General Development Plan. Therefore, the issue raised in this comment has already been incorporated into the Draft EIR, and no revisions to the Draft EIR are necessary as a result of this comment.

N-13 The EIR includes a consistency analysis for the RCP Jobs/Housing Mix principles in the Land Use section (Page 5.1-37 approx.) and the RTP/SCS Policy Objectives (Page 5.1-39 approx.).

The proposed project is consistent with RCP Jobs/Housing Mix principle because it provides a variety of housing choices within proximity of existing and planned employment centers, including the Eastern Urban Center, the Otay Ranch Town Center, and the Village Eight West and Village Nine Town Centers and the Village Three North Business Park. In addition, the proposed project results in job-producing land uses (Industrial, and Mixed Use Retail/Office) in proximity to residential land uses. The proposed project is consistent with the RTP/SCS Mobility and Social Equity objectives because the project is designed to facilitate connections between people and jobs and other activities, by providing both residential and job-producing land uses, including industrial and office uses. Additionally, the proposed project would include transit stops that will ultimately connect with the future University/

RTP site which will provide employment opportunities. The proposed project is also designed to encourage alternative transportation modes such as walking and biking. Although transit is not currently running through the project area, the villages are designed to accommodate transit in the future. Transit stops will also be provided within one-quarter mile of residential areas. Therefore, this comment has already been incorporated into the Draft EIR, and no revisions to the Draft EIR are necessary as a result of this comment.

N-14 Page 5.2-33 of the Draft EIR explains why no simulation was done for KVP5. The KVP5 view is of the area proposed for a park, and since the plans for the park are not available, it would be speculative to create a photosimulation at this time. The text on Page 5.2-33 explains what would likely be visible from this location in the future. No further response is required.

N-15 Village 8 West had a lower standard (three stories instead of four) because of the more dense character of the Town Center compared to the traditional multi-family housing proposed by the project. In order to be consistent, the proposed mitigation measure has been revised to match the Village Eight West EIR.

N-16 Site specific data were used where available (e.g. historical waste placement data); however, not all data are available (e.g. speciated chemical concentrations). When site-specific data are not available, default parameters from regulatory and technical documents are used. These defaults are conservative in nature while being representative of landfills in general. The sources used to obtain default parameters (e.g. Waste Industry Air Coalition [WIAC] Comparison of Recent Landfill Gas Analyses with Historic AP-42 Values) have been used in landfill permitting, HRAs, and CEQA analyses and accepted by state and local regulatory agencies. The default values have undergone considerable review and evaluation both in their development and their use; consequently, they should not be characterized as "guesswork" but as the "best available data." The defaults provide reasonable estimated values for use when site specific values are not available. Finally, the methodologies used to develop the defaults are conservative in nature will tend to overestimate health risk.

Consistent with United States Environmental Protection Agency (EPA) and California guidance, the HRA Report uses separate exposure parameters for residential and commercial/industrial receptors, and risks for each receptor type are calculated independently using the Hotspots Analysis and Reporting Program (HARP) software. Two different cancer risk values were calculated, one for each type of receptor (i.e. residential risk and commercial/industrial worker risk). As noted in the HRA Report, residential receptors have the highest level of exposure and represent the most conservative receptor scenario.

The HRA Report is unambiguous that the cancer risk threshold of one (1) in a million (1x10-6) is not exceeded for either residential or commercial/industrial receptors at a location where that specific type of receptor would be located. The DEIR correctly notes that the cancer risk isopleths for residential receptors extends outside the Otay Landfill property line, but that residential cancer risk isopleth does not extend to residential areas of the proposed Project; therefore, the cancer risk for residential receptors does not exceed 1x10-6.

The risk to a residential receptor is irrelevant to commercial/industrial receptors because those receptors would occupy the receptor location much less than a residential receptor, and only the cancer risk calculated for a commercial/industrial receptor should be used to evaluate the cancer risk at locations designated for commercial/industrial use. That cancer risk to a commercial/industrial receptor does not exceed 1.0x10-6 at any location outside the Otay Landfill property. Therefore, it can reliably be stated the cancer risk is not exceeded for either residential or commercial/industrial receptors.

N-17 The noise measurements that were taken in Village Three North would have included any noise generated by the Otay Landfill. While the LEA has noted areas of concern in the past, the landfill operator has remedied those concerns. The request from the comment is to consider not only potential impacts of the environment on the project (*Ballona Wetlands Trust v. City of Los Angeles* (2011) 201 Cal.App.4th 455), but also would require the project to anticipate future potential changes that may or may not occur on the landfill site and how the landfill operator would choose to respond to such changes. If the landfill was required in the future to perform any of the referenced noise-generating activities, the landfill would have to analyze how those activities may impact surrounding land uses. No further response is required.

N-18 The Draft EIR determined that there were no impacts to the listed uses; however, there is a mitigation measure for parks (MM NOI-6) to limit noise from parks until 10:00 PM to conform with the City's noise standards and to minimize noise impacts adjacent to the Preserve (MM BIO-17). Therefore, the issue raised in this comment has already been incorporated into the Draft EIR, and no revisions to the Draft EIR are necessary as a result of this comment.

N-19 This comment is incorrect. Page 6-13 of the Village 8 West EIR indicates the same conclusion. The analysis contained in the University Village EIR is accurate and consistent with the analyses contained in other recent City-prepared EIRs. No revisions to the Draft EIR are necessary as a result of this comment.

N-20 As indicated in Section 5.13 of the EIR, based on the WSAV for the proposed project, and the UWMPs of MWD, SDCWA, and OWD, there are sufficient existing and planned water supplies to meet projected water demands of the proposed project and other existing and planned development projects within the OWD service area over the next 20-year planning horizon in normal and in single and multiple dry years. Accordingly, despite ever-present water supply challenges including the current Drought State of Emergency, OWD and the regional water agencies (MWD and SDCWA) have determined that sufficient water supplies are, or will be, available to serve the proposed project, in combination with existing and other planned development within the OWD service area. Based on the water agency documentation, project impacts on water supplies — both short and long term — are considered less than significant.

The commenter notes that the Village 8 West and Village 9 EIRs concluded that impacts related to water supply would be significant and unavoidable. However, it is important to note that those EIRs tiered off of a supplemental EIR to the General Plan Update EIR (SEIR 09-01) and did not change the significance finding from either of those program-level EIRs, while the University Villages EIR has sufficient evidence to indicate that project-related impacts would be less than significant and therefore makes the appropriate significance determination.

N-21 Refer to response to comment N-20. Furthermore, as indicated in Section 5.13 of the EIR, the proposed project includes construction of potable and recycled water facilities, as recommended in the Overview of Water Service for Otay Ranch University Villages.

N-22 Chapter 8 Page 8-3 has been revised to include these impacts, which were clearly disclosed in Chapter 5 of the EIR. No further response is required.

N-23 Both Villages Eight West and Village Nine included the same situation where the City of San Diego owned fee title over their waterlines. Similar to those projects, the project includes mitigation measures to ensure the water lines would be moved prior to any impact/conflict occurring (MM LU-1 through MM LU-3). This would ensure that while the project is planning development over the waterlines, no actual development could occur until such time as the City of San Diego consented. This is a reasonable exercise of the City of Chula Vista's land use authority.

The City of San Diego is processing a Waterline Participation Agreement, which includes the Applicant and Otay Land Company, to relocate the water lines as shown on the TMs. The City of San Diego is fully aware of the proposed project, how the waterline and the City's ownership is being portrayed on the project

Tentative Maps, and has inserted language in the participation agreement providing that the City does not need to sign the TM to allow the project to continue processing. Thus, the project does not treat the ownership as an easement, rather, the project is complying with the City of San Diego's request. Therefore, this comment has already been incorporated into the Draft EIR, and no revisions to the Draft EIR are necessary as a result of this comment.

N-24 The boundary between Villages Nine, Ten and the University site were negotiated at great length between the applicant, the City and Otay Land Company. The ultimate configuration was based on a proposal made by, and agreed to, by Otay Land Company. This configuration included Otay Land Company allowed the Village Ten SPA Plan Area to overlap Village Nine and was subject to a future land swap whereby Otay Land Company would benefit by receiving a corresponding acreage for development further to the north, at the intersection of Hunte Parkway and Eastlake Parkway. The attorney who signed the comment letter drafted the first iteration of the land swap agreement.

Chapter 3, Project Description, does include reference to amending the Village 9 SPA Plan in several locations (Pages 4-2, 4-151, and 4-154). The EIR also includes General Plan and Otay Ranch GDP consistency analyses, as well as GPA and GDPA showing the proposed change from Mixed Use (MU) to Median Residential (M). Therefore, the issue raised in this comment has already been incorporated into the Draft EIR, and no revisions to the Draft EIR are necessary as a result of this comment.

N-25 The University Villages project proposed a General Plan Amendment (GPA) to provide an efficient and comprehensive roadway network that provides connectivity among the various land uses near Villages 9 and 10, including connections to the planned University Campus and the Research Technology Park (RTP) site.

Cross-sections for Discovery Falls Drive and University Drive were developed with Chula Vista Planning and Public Works staff, including the City's traffic engineer. The intention is to provide an efficient and sustainable roadway network that can accommodate the forecasted traffic volumes and at the same time provide a friendly environment for pedestrians and bicyclists. In addition to the cross-sections, the proposed roadway classifications were developed in coordination with city staff based on a potential layout for the University and RTP site. It should be noted that the proposed circulation network was the result of extensive discussions between the applicant, the City and Otay Land Company, on whose behalf the subject comment letter was submitted.

Because the University and RTP site are still in the beginning planning stages, the final configuration of those uses was not available for analysis; however, the City provided direction on how certain land uses and vehicles trips would "load" on to the future circulation network. The City based its assumptions on the best available information at the time and reasonable projections for the University and RTP site. Please see **Attachment A** which shows the assumptions provided by the City to perform the traffic impact analysis, including the cross-section/classification development process, and the project Average Daily Traffic (ADT). This was an iterative process with the City whereby the applicant demonstrated that based on the direction from Chula Vista staff, the proposed classifications and sections would adequately accommodate the planned traffic volumes. Only once the City reviewed the analysis and agreed with the conclusions did the traffic study move forward.

As it relates to how roadway classifications will transition through the Village, Attachment A shows that both Discovery Falls and University Drive/EastLake Parkway are required to be four lanes south of Hunte Park until each reaches the first intersection. South of these points, both Discovery Falls and University Drive/EastLake Parkway can transition from four lane roads to two lane collectors. This is because many of the trips on these roads are heading to the University and RTP as final trip destinations, not through these land uses to other destinations. Thus, the project proposes for University Drive and Discovery Falls to be two lanes south of the first intersection south of Hunte Parkway. However, the exact locations of these intersections are not known at this time.

While Eastlake Parkway/University Drive is proposed to be reduced from a four lane road to a two lane road, an additional parallel road (Discovery Falls) is proposed to be added to the Circulation Network, thus, overall capacity is not compromised. As shown in Attachment A, all roadway segments along Discovery Falls Drive and University Drive are projected to operate at acceptable LOS A. Additionally, as shown on Page 190 of the University Villages TIA, the following four (4) intersections are projected to operate at acceptable LOS C or better during the peak hours under the Year 2030 condition, including the intersection of Village 9 Street "B" / Discovery Falls Drive, which is the primary connection between Village 10 and Village 9.

75. Village 9 Street "B" / Discovery Falls Drive – LOS A during both the AM and PM peak hours;
76. Santa Julliard / Discovery Falls Drive – LOS A during both the AM and PM peak hours;

77. University Drive / Discovery Falls Drive –LOS C during both the AM and PM peak hours; and
78. Santa Davis / Discovery Falls Drive – LOS A during both the AM and PM peak hours.

As discussed above, all roadway segments along Discovery Falls Drive and University Drive are projected to operate at LOS A with their respective roadway cross section, and all associated intersections (#75 - #78) are projected to operate at LOS C or better. Therefore, the proposed roadway cross section are sufficient to accommodate the projected traffic, not overly constructed, and does not negatively impact Street B in Village 9.

It should be noted that the University Villages project is currently in the Tentative Map stage; therefore, intersection design, including pocket length, signing, and striping for the four intersections listed above are not ready. Turning pocket length will be designed based on the projected 95th percentile queue length shown below. Queuing analysis worksheet are provided in **Attachment B**.

Intersection	Turning Movement	AM	PM
75. Village 9 Street "B" / Discovery Falls Drive	WBL	69	88
	SBL	65	123
76. Santa Julliard / Discovery Falls Drive	WBL	41	37
77. University Drive / Discovery Falls Drive	EBL	91	74
	WBL	57	123
78. Santa Davis / Discovery Falls Drive	WBL	45	99

Source: Chen Ryan Associates, October 2014

N-26 Village 8 West and Village 9 assumed a variety of circulatory roadway and intersection improvements would be performed by others as expressed by the caveat statements shown in both Village 8 West and Village 9 TIA (Page 50-51 of the Village 8 West TIA and Pages 38-39 of the Village 9 TIA, as shown in **Attachment C**). The caveat stated that if the roadway improvements that were assumed to be made by the Village 8 West and Village 9 TIA were not constructed when scheduled, then either development in Village 8 West / Village 9 would stop, or the city and the applicant would meet to determine the need for that incomplete roadway infrastructure or the applicant would construct the missing roadway infrastructure. The University Villages TIA implemented the same caveat approach.

As shown on Page 217 of the University Villages TIA, the same caveat statements are provided for assumed circulatory roadway infrastructure and require the University

Villages applicant to follow the same stipulations as those required for Village 8 West and Village 9.

Regarding the 2030 analysis, standard industry practice is to include buildout of the Circulation Element for the horizon year scenario, which in this case is 2030. This is a reasonable and prudent approach because one purpose of the General Plan Circulation Element is to identify not only existing roadways, but also roadway improvements that are expected to be completed during the life of the General Plan. For those reasons, all Circulation Element roadways were included in the analysis to provide the reader with an understanding of how the circulation system functioned at buildout of the City. The University Villages TIA identifies "triggers" by which these improvements are required in order to avoid potential impacts and includes the standard caveat language for the Circulation Element roadways, including the 2030 improvements (as shown on Page 217 of the University Villages TIA), that if these facilities are not constructed prior to the specific triggers, the applicant would be required to halt construction, perform the improvement, perform an alternative improvements that would have a similar effect on level of service, or perform an additional traffic study demonstrating sufficient capacity exists and designating a new trigger. This approach ensures that traffic conditions will not exceed those disclosed in the TIA, either because the improvements are not actually necessary at that time, construction halts, or the applicant performs the improvement or an alternative improvement.

N-27 See response to comment N-26 above regarding treatment of Circulation Element roadways in the 2030 Analysis.

Additionally, the first three improvements listed are funded by the updated City of Chula Vista TDIF Program (scheduled for approval in November 2014); therefore, it is reasonable to assume that these facilities will be constructed by the horizon year.

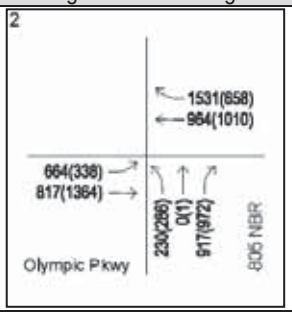
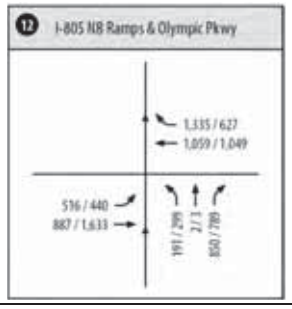
- Construction of Main Street from SR-125 to Eastlake Parkway;
- Construction of the Main Street interchange; and
- Construction of Otay Valley Road between "subdivision boundary" and Village 9 Street "B" including an overpass at SR-125.

With respect to the Heritage Road / Energy Way signalization, it has been revised in the TIA from "constructed by others" to "constructed by the project" and will be a design feature of the project. This change will not affect the results of the findings in the TIA; therefore, no additional analysis is required nor is recirculation triggered.

N-28 It should be noted that the commenter mentioned the I-805/Main Street interchange; however, Page 13 of the Village 8 West TIA showed that the I-805 NB Ramps / Olympic Parkway intersection is operating at LOS F and not the I-805 NB Ramps / Main Street, which is shown as operating at LOS C or better during the peak hours.

Based upon a comparison between the Village 8 West / Village 9 TIA and the University Villages TIA, it has been determined that the AM peak hour LOS for the I-805 NB Ramps / Olympic Parkway intersection is different for the following reasons:

- The Village 8 West and Village 9 TIA peak hour intersection count collected by RBF for this intersection (as shown in Exhibit 6 of both the Village 8 West and Village 9 TIAs) is different than those collected for the University Villages TIA. The figure below provides a comparison between the Village 8 West / Village 9 traffic count vs. the University Villages TIA Traffic Count.

Village 8 West / Village 9	University Villages
	
Count Date: 5/4/2010	Count Date: 5/19/2011

As shown, data collected for the University Villages TIA is a newer and more accurate count. Because the counts were taken over a year apart, and because traffic is never the same on any two days, it makes sense that the I-805 NB Ramps at Olympic Parkway would have different LOS among the different TIA.

- The Village 8 West and Village 9 TIA was conducted using Traffix (intersection analysis software) and the Highway Capacity Manual (HCM) 2000 methodology (an older methodology). The University Villages TIA use the Synchro analysis software and the HCM 2010 methodology (the most up to date methodology).
- The Village 8 West and Village 9 TIA use the Traffix software standard peak hour factor (PHF) of .92 for all turning movements, whereas the University Villages TIA use actual PHF from the existing count. Peak Hour Factor is the peak 15-minute flow rate, which play a significant role in determining an

intersection impact. Since the University Villages TIA use the actual PHF instead of the default PHF, it can be concluded that the University Villages TIA reflect the existing condition more accurately than the Village 8 West / Village 9 TIA.

Per the commenter's request, a field review using a video recording device was conducted on 10/2/2014 to determine the AM peak hour operating conditions for both the I-805 / Olympic Parkway and I-805 / Main Street interchanges. The field review results indicated that the peak hour intersection LOS, as well as the ramp metering analysis for both interchange, are accurate and reflect the existing field conditions. Please see **Attachment D** for screen shots of the existing AM peak hour operation condition for both the I-805 / Olympic Parkway and I-805 / Main Street interchanges.

N-29 The University Villages TIA was initiated in 2011. The May 2011 counts utilized in this TIA remain valid for establishing the baseline conditions because the City has not experienced significant growth since that time. Due to the ongoing effects of the recession, Chula Vista generally, and the project vicinity more specifically, saw very little new construction during this time. Without new growth to cause new traffic, there was no reason to update the traffic counts. As a comparison with the Village 8 West and Village 9 TIAs, the counts in those TIAs ranged between 2006 and 2011 and those projects were approved in late 2013 and 2014, respectively, without updating the traffic counts.

There was no accurate, verifiable model available at the time of the Notice of Preparation that included any way to account for the reduced tolls on SR-125. Specific to the question of SR-125, please see response to comment N-34 below.

Therefore, the issue raised in this comment has already been incorporated into the TIA and Draft EIR, and no revisions to the Draft EIR are necessary as a result of this comment.

N-30 The distribution of the external project trips was based upon a computer generated "Select Zone" analysis utilizing the Series 11 Year 2015 SANDAG Transportation Model, "Southbay 2, University Villages". The select zone model run is included as Appendix A of the University Villages TIA.

As shown in Appendix A, under the Year 2015 condition, 7% of the project trips would travel to land uses along Main Street between Brandywine Avenue and Heritage Road The remaining 13% of the project trips would utilize Brandywine.

Under the Year 2015 scenario, the project would generate 6,110 external ADT (as shown in Table 4.3 of the University Villages TIA), resulting in 794 ADT (13% x 6,110) on Brandywine, which is less than 800 daily trips using. Thus, this roadway was not required to be analyzed per the City of Chula Vista Traffic Impact Study Guidelines. All Circulation Element roadways where the project contributes 800 or more ADT were included as a part of the project study area.

N-31 This comment is incorrect that the analysis assumed that the Heritage Road / Main Street intersection would operate as a STOP controlled 6-lane by 4-lane road. While the proposed project will construct Heritage Road to its full Circulation Element classification width as a 6-lane prime arterial. However, the project would stripe Heritage Road as a 4-lane roadway until a 6-lane roadway is needed, similar to the current treatment of Heritage Road and Olympic Parkway.

As mentioned in the responses to comment #2 above, the project is required to demonstrate the need for a facility (including intersection control), before it is included in the interim years roadway network. Therefore, the intersection of Heritage Road / Main Street was analyzed as an All-way STOP controlled intersection to show the need for a signalized intersection. Additionally, as shown in Figure 6-1A and Figure 7-1A of the University Villages TIA, the intersection of Heritage Road / Main Street was analyzed as a 4-lane by 4-lane All-Way STOP controlled intersection (with 1 exclusive SB right-turn lane). This intersection geometry and traffic control is reasonable and feasible. The comment suggests that either lanes should be reduced and the analysis revised, or it should be analyzed as a signalized intersection. Consistent with the comment, the intersection was analyzed with reduced lanes.

Additionally, as documented in Chapter 13 of the University Villages TIA, an analysis was conducted to determine the appropriate trigger for the signalization of the Heritage Road / Main Street intersection, including a signal warrant analysis. Please see Chapter 13 of the University Villages TIA for more detail.

N-32 The Village 8 West TIA was “DRAFT” while the University Village TIA was being prepared and not available for review. Therefore, without knowing what the Village 8 West study assumed from a network perspective in the La Media Road / Main Street area, the University Villages TIA assumed the couplet configuration based on the available information from the General Plan Circulation Element Map. This is consistent with the City’s preference to assume full construction of a facility rather than partial improvements. However, this assumption was overly conservative as the University Villages project does not need the entire couplet system to serve as access or circulation by the Year 2020.

However, in response to this comment, an analysis for the La Media Road and Main Street area using the same geometric configuration as the Village 8 West TIA was prepared. This analysis has been provided as **Attachment E**, demonstrating the level of service based on the revised configuration. The comment is attempting to commit the University Villages applicant to perform off-site improvements on the commenters Village 8 West property which would be the result of the University Villages project taking a conservative approach in the analysis. As shown in Attachment E, the full couplet is not required to accommodate project traffic. The City of Chula Vista would not require an off-site property owner to "overbuild" such a facility. The PFFP does not need to be revised and the analysis contained in the TIA and EIR are accurate.

N-33 The distribution of the external project trips was based upon a computer generated "Select Zone" analysis utilizing the Series 11 Year 2020 SANDAG Transportation Model, "Southbay 2, University Villages". Even though Magdalena is not a Circulation Element road, it was studied in this TIA to capture any potential traffic impact. As shown on Page 129 of the TIA, Magdalena would operate at acceptable LOS A with the addition of project traffic.

Please see response to comment N-32 above for more information regarding the La Media Road / Main Street couplet. As mentioned in the responses to comment N-26 above, the project is required to demonstrate the need for a facility (including intersection control), before it is included in the interim years roadway network. Therefore, the intersections in the Village Eight West couplet were analyzed as All-way STOP controlled intersections to show the need for a signalized intersection.

N-34 Comment noted. It should be reiterated that the project traffic study was initiated in 2011. Traffic modeling was conducted on December 1, 2011 and the SANDAG Board action which eliminated the Phase 2 project took place AFTER the modeling was performed for the proposed project. No model was available at that time or up through the beginning of the EIR public review period which would enable the traffic study to determine the price sensitivity of the reduced tolls on SR-125.

N-35 A Year 2020 scenario with Heritage Road connection was conducted using the Series 11 Year 2020 SANDAG Transportation Model, provided in Appendix A of the University Villages TIA. Please see **Attachment F** for a screen shot of the Series 11 Year 2020 SANDAG Transportation Model, which shows the effect of the completion of the Heritage Road connection (including manual adjustments due to traffic generated by the additional approximately 1,600 units from the Village 2 SPA). As shown in Attachment F, the highest projected volume with the Heritage Road connection is 48,600 ADT, resulting in Main Street operating at LOS C under

the Year 2020 with Heritage Road connection scenario. In addition, Heritage Road south of Main Street is projected to operate at LOS A under the Year 2020 scenario (as shown in Table 7.2 of the University Villages TIA). Therefore, potential impacts were thoroughly assessed and no additional analysis is required.

N-36 The connection of Main Street from Heritage Road to La Media Road is a City CIP Project (STM357). According to the City's CIP, the estimated cost of this improvement is at least $73 million. In addition, while the General Plan establishes a general alignment for Main Street, there are several factors which preclude determining the exact alignment at this time. These included biological resources and the potential for those resources to change over 10 years within Wolf Canyon and the development plans of the Village Four property owner. Thus, it is not financially feasible for the proposed project to fund the entire construction of a regional facility, nor was it feasible to reasonably predict the precise alignment for study with this project.

In recognition that no single project could feasibly fund the construction of this improvement and that future environmental, technical and engineering analyses is required to determine the precise alignment and impacts, the City of Chula Vista included the Main Street crossing in both the Eastern TDIF Program, as well as the City's Capital Improvement Plan (CIP) Program. This ensures all projects contribute to the construction of the crossing, as all projects will benefit from this improvement. The City has committed to building the improvement through the CIP Program. It is already part of the 2013-2016 CIP budget.

However, to ensure that this critical improvement is made to avoid traffic impacts, Mitigation Measure MM-TCA-12 has been revised such that the City will not issue building permits beyond 4,736 EDU unless the improvement has been constructed. Also refer to response to comment N-3.

N-37 See response to comment N-36. No new impacts occur as a result of this comment and no further response is necessary.

N-38 Please see response to comment N-30 above. As documented in the response to comment above, this roadway segment does not meet the City's threshold to be included as a part of the project study area. Thus, no additional analysis is required.

N-39 Please see response to comment N-35 above. As shown, the opening of the Heritage Road connection would not result in any additional impacts and was thoroughly studied in the TIA, thus no additional analysis is required.

N-40 The Main Street bridge is a CIP project. Please see response to comment N-36. No additional analysis is required. Also refer to response to comment N-3.

Comment Letter O

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

September 19, 2014

Marni Borg
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Subject: Otay Ranch University Villages Project
SCH#: 2013071077

Dear Marni Borg:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on September 18, 2014, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

O-1

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH#	2013071077
Project Title	Otay Ranch University Villages Project
Lead Agency	Chula Vista, City of
Type	EIR Draft EIR
Description	This project proposes 6,897 homes and associated village land uses on ~755 acres and includes roughly 620 acres of Open Space Preserve for a total Project area of ~1,357 acres. Implementation of the Project requires Chula Vista General Plan Amendments, a Chula Vista Multiple Species Conservation Program Boundary Adjustment, Otay Ranch General Development Plan Amendments, and Otay Ranch Resource Management Plan Boundary Adjustment. This application also proposes an amendment to the Sectional Planning Area (SPA) Plan for Otay Ranch Villages 2, 3, and a portion of 4 adopted by the Chula Vista City Council on June 4, 2006, as amended.

Lead Agency Contact

Name	Marni Borg		
Agency	City of Chula Vista		
Phone	(619) 409-5913	*Fax*	
email			
Address	276 Fourth Avenue		
City	Chula Vista	*State* CA	*Zip* 91910

Project Location

County	San Diego		
City	Chula Vista		
Region			
Lat / Long	32° 36' 0" N / 116° 57' 54" W		
Cross Streets	Main St/Heritage Rd; southwest of Main St/SR 125; south of Hunte Pkwy/Eastlake Plwy		
Parcel No.	Various		
Township	*Range*	*Section*	*Base*

Proximity to:

Highways	SR 125
Airports	Brown Field
Railways	
Waterways	
Schools	Olympian HS, High Tech HS
Land Use	Residential, Commercial, Retail, and Business Park Development with supporting civic and public uses such as libraries, parks, schools, as well as an ~11,375 acre open space preserve system. Z: Planned Community Zone (P-C), Sectional Planning Area (SPA) Plan.
Project Issues	Air Quality; Water Quality; Other Issues; Aesthetic/Visual; Agricultural Land; Forest Land/Fire Hazard; Biological Resources; Archaeologic-Historic; Geologic/Seismic; Toxic/Hazardous; Minerals; Noise; Population/Housing Balance; Public Services; Traffic/Circulation; Drainage/Absorption; Flood Plain/Flooding; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Vegetation; Wetland/Riparian; Water Supply; Wildlife; Growth Inducing; Landuse; Cumulative Effects
Reviewing Agencies	Resources Agency; Department of Conservation; Department of Fish and Wildlife, Region 5; Cal Fire; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Services, California; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 12; Department of Housing and Community Development; Air Resources Board; Regional Water Quality Control Board, Region 9; Native American Heritage Commission

O-1 Cont.

Document Details Report
State Clearinghouse Data Base

Date Received 08/05/2014 *Start of Review* 08/05/2014 *End of Review* 09/18/2014

O-1
Cont.

INTENTIONALLY LEFT BLANK

Response to Comment Letter O

State of California, Governor's Office of Planning and Research (State Clearinghouse) Scott Morgan, Director September 19, 2014

O-1 This comment does not address the adequacy of the environmental analysis in the EIR. No response is required.

INTENTIONALLY LEFT BLANK

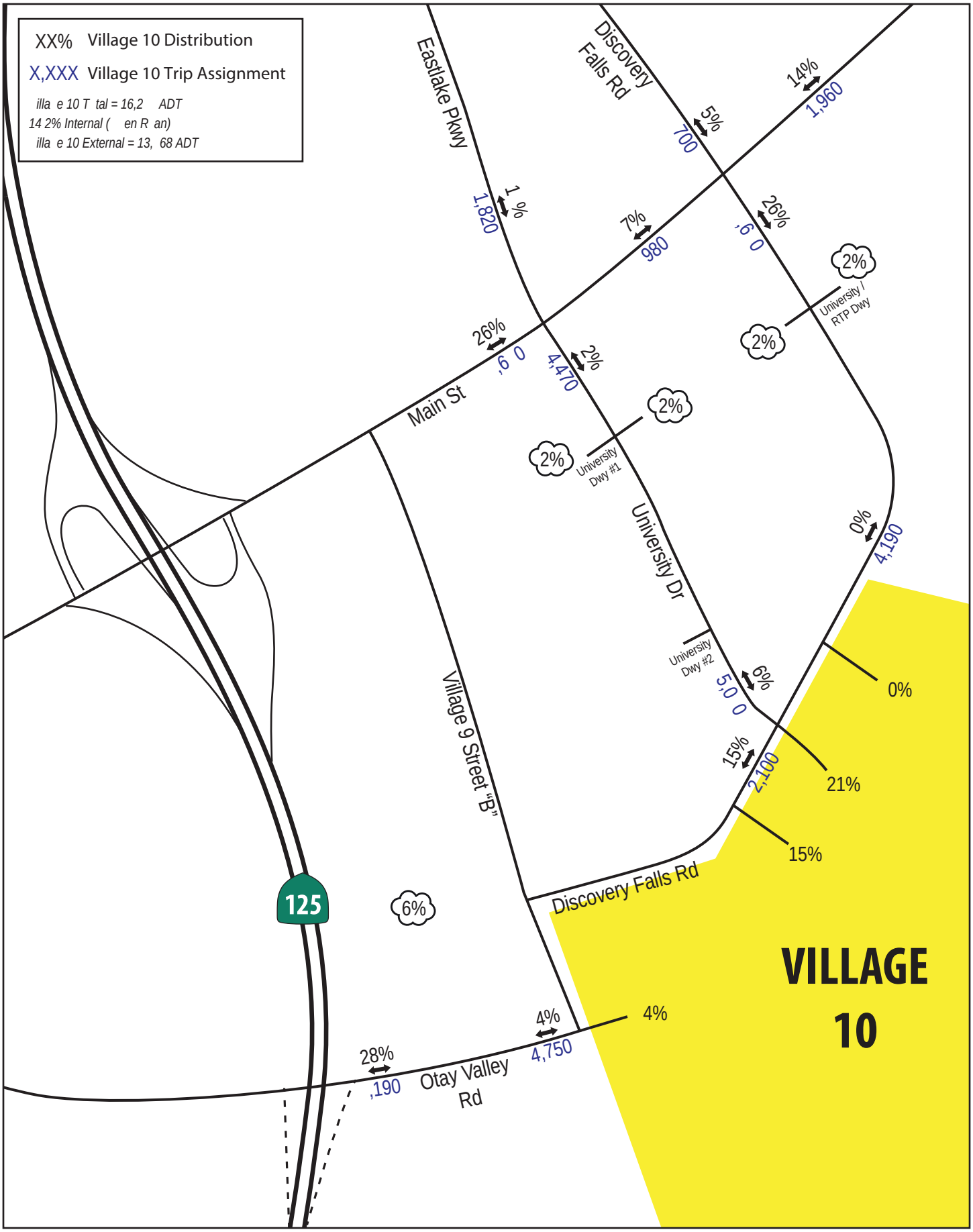
ATTACHMENT A

Discovery Falls Drive and University Drive Cross Section Development

ATTACHMENT A

DISCOVERY FALLS DRIVE AND UNIVERSITY DRIVE CROSS SECTION DEVELOPMENT

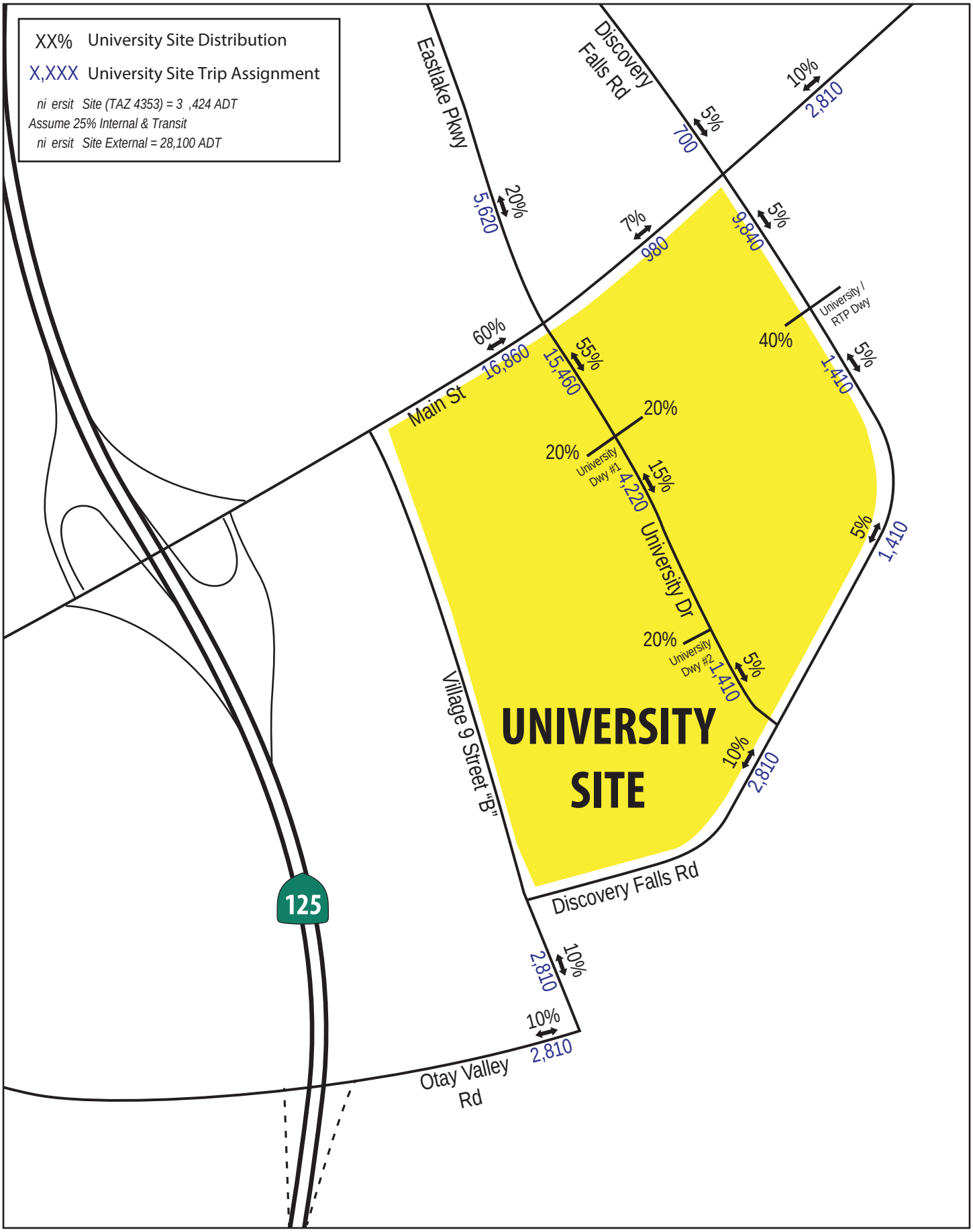
The following attachment document the trip distribution that was used to develop the cross section for both the University Drive and Discovery Falls Drive (East Lake Parkway).



Discovery Falls Drive & University Drive
Cross-Section Development

CHEN RYAN

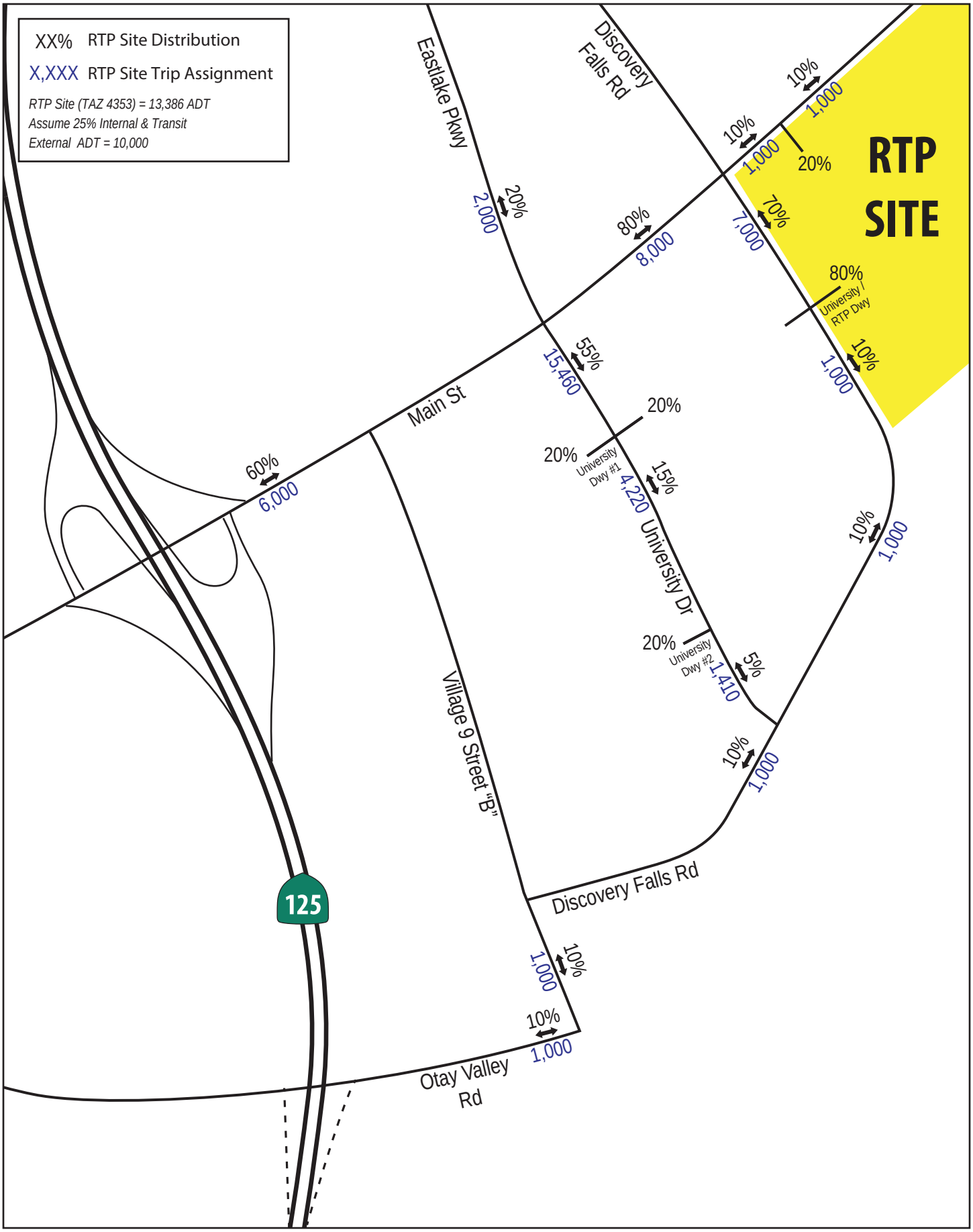
Figure 1
Village 10 Distribution and Volumes



Discovery Falls Drive & University Drive
Cross-Section Development

CHEN RYAN

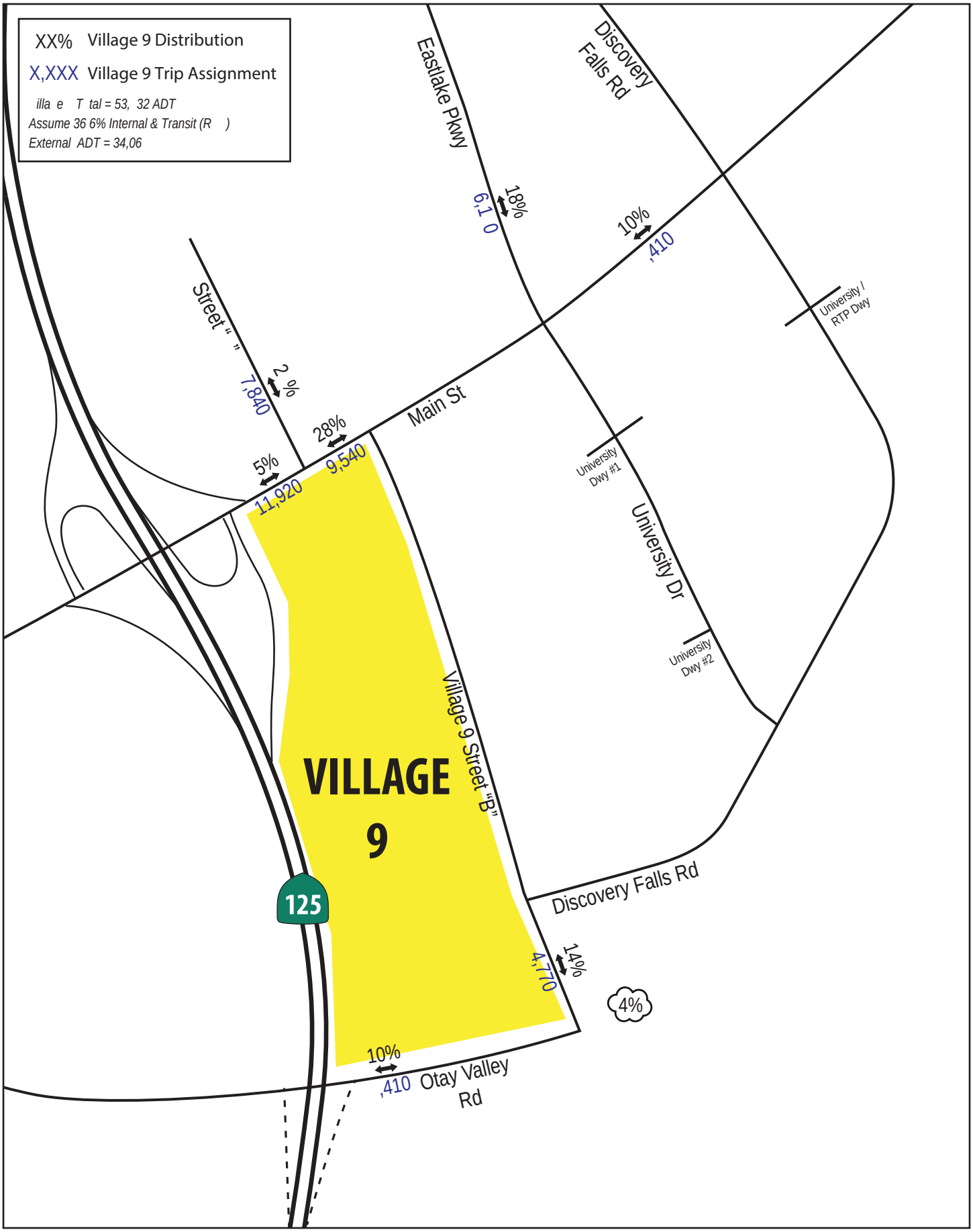
Figure 2
University Site Distribution and Volumes



Discovery Falls Drive & University Drive Cross-Section Development

CHEN RYAN

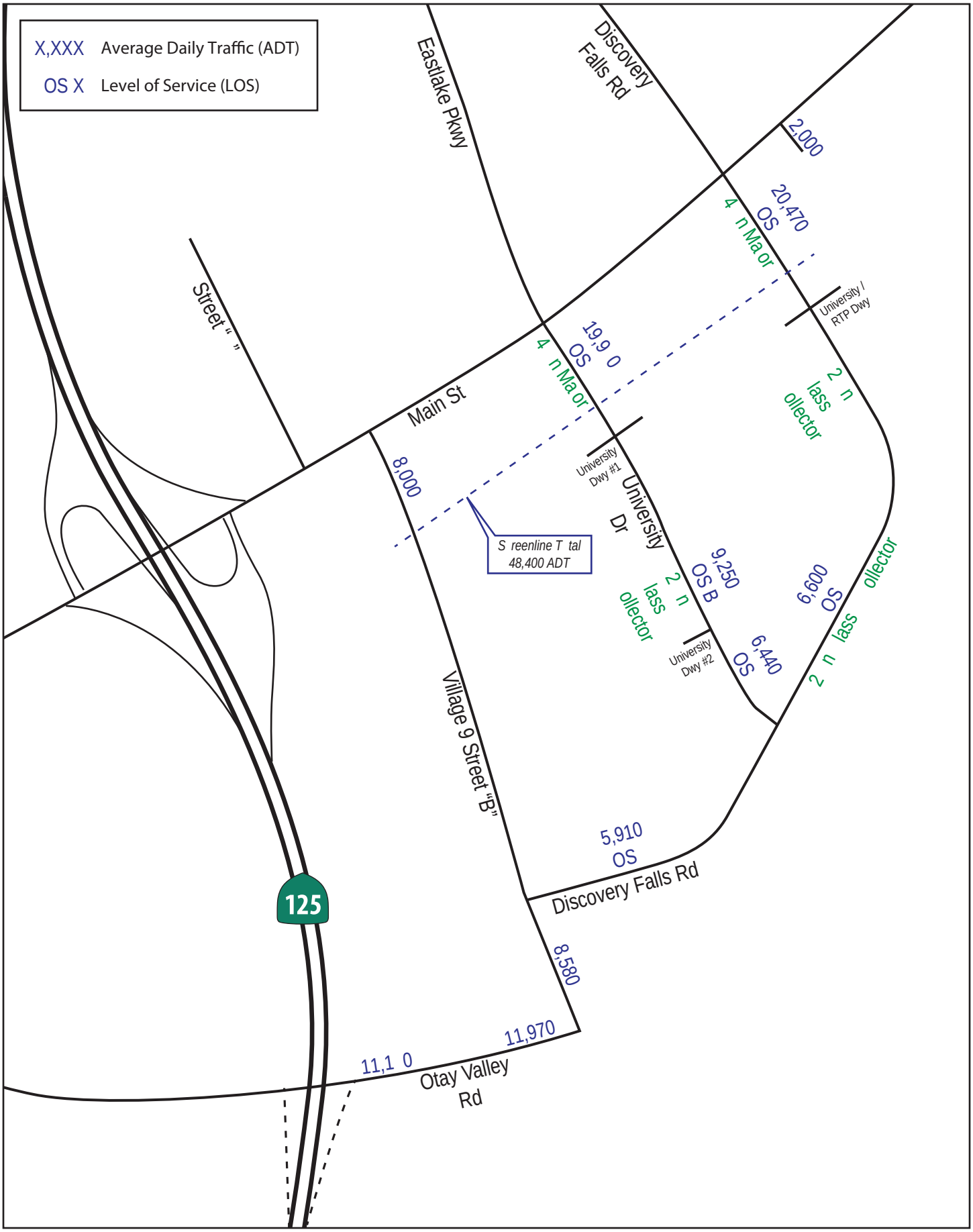
Figure 3
RTP Site Distribution and Volumes



Discovery Falls Drive & University Drive Cross-Section Development

CHEN RYAN

Figure 4
Village 9 Distribution and Volumes



Discovery Falls Drive & University Drive Cross-Section Development

CHEN RYAN

Figure 5

Total ADT (Village 9, Village 10, University & RTP)

ATTACHMENT B

Intersection Queuing Analysis – Year 2030 Base Plus Project Scenario

ATTACHMENT B

INTERSECTION QUEUING ANALYSIS – YEAR 2030 BASE PLUS PROJECT SCENARIO

The following attachment show the queuing analysis results for all major intersections near Village 9.

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	100	100	158	21	247	79	231
v/c Ratio	0.34	0.34	0.41	0.15	0.30	0.37	0.24
Control Delay	21.4	24.1	9.5	28.4	15.8	29.5	11.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.4	24.1	9.5	28.4	15.8	29.5	11.6
Queue Length 50th (ft)	24	29	5	7	57	24	36
Queue Length 95th (ft)	63	69	47	26	130	65	115
Internal Link Dist (ft)	770		1455		192		542
Turn Bay Length (ft)							
Base Capacity (vph)	588	578	622	144	816	216	955
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.17	0.25	0.15	0.30	0.37	0.24

Intersection Summary

Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	174	53	242	142
v/c Ratio	0.32	0.30	0.36	0.17
Control Delay	16.4	25.7	13.7	2.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	16.4	25.7	13.7	2.8
Queue Length 50th (ft)	30	15	50	2
Queue Length 95th (ft)	88	41	96	23
Internal Link Dist (ft)	1455		399	200
Turn Bay Length (ft)				
Base Capacity (vph)	537	177	670	847
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.32	0.30	0.36	0.17

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	89	179	42	211	26	326	35	137
v/c Ratio	0.41	0.18	0.35	0.24	0.27	0.77	0.37	0.29
Control Delay	40.0	11.2	47.9	16.7	47.8	35.5	51.9	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.0	11.2	47.9	16.7	47.8	35.5	51.9	13.2
Queue Length 50th (ft)	45	44	22	66	14	130	18	20
Queue Length 95th (ft)	91	92	57	138	41	223	#57	68
Internal Link Dist (ft)		399		337		373		1423
Turn Bay Length (ft)								
Base Capacity (vph)	382	1008	119	874	95	599	95	614
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.18	0.35	0.24	0.27	0.54	0.37	0.22

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	350	44	226	142
v/c Ratio	0.27	0.23	0.15	0.51
Control Delay	7.0	31.0	2.5	15.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	7.0	31.0	2.5	15.4
Queue Length 50th (ft)	59	18	15	11
Queue Length 95th (ft)	133	45	43	55
Internal Link Dist (ft)	337		108	324
Turn Bay Length (ft)				
Base Capacity (vph)	1304	189	1519	1207
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.27	0.23	0.15	0.12

Intersection Summary

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	131	89	143	42	363	132	274
v/c Ratio	0.51	0.41	0.48	0.30	0.45	0.53	0.28
Control Delay	33.6	38.0	16.6	41.8	18.2	40.1	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.6	38.0	16.6	41.8	18.2	40.1	13.6
Queue Length 50th (ft)	49	40	14	20	107	60	75
Queue Length 95th (ft)	105	88	67	55	227	123	156
Internal Link Dist (ft)	927		383		361		1020
Turn Bay Length (ft)							
Base Capacity (vph)	399	388	447	145	813	315	983
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.23	0.32	0.29	0.45	0.42	0.28

Intersection Summary

Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	331	151	221	85
v/c Ratio	0.30	0.48	0.14	0.33
Control Delay	9.9	24.6	2.3	11.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	9.9	24.6	2.3	11.4
Queue Length 50th (ft)	58	45	14	3
Queue Length 95th (ft)	138	84	37	34
Internal Link Dist (ft)	364		432	186
Turn Bay Length (ft)				
Base Capacity (vph)	1109	353	1551	527
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.30	0.43	0.14	0.16

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	84	279	171	242	16	126	84	273
v/c Ratio	0.35	0.44	0.51	0.30	0.12	0.36	0.35	0.53
Control Delay	30.2	20.2	28.6	15.1	31.5	16.4	30.2	16.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.2	20.2	28.6	15.1	31.5	16.4	30.2	16.7
Queue Length 50th (ft)	28	77	56	61	6	21	28	50
Queue Length 95th (ft)	74	172	123	134	24	63	74	132
Internal Link Dist (ft)		432		246		494		1525
Turn Bay Length (ft)								
Base Capacity (vph)	274	641	446	846	137	577	274	721
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.44	0.38	0.29	0.12	0.22	0.31	0.38

Intersection Summary

Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	362	145	379	116
v/c Ratio	0.33	0.49	0.26	0.42
Control Delay	9.7	28.6	3.0	15.6
Queue Delay	0.3	0.0	0.0	0.0
Total Delay	10.0	28.6	3.0	15.6
Queue Length 50th (ft)	64	47	29	11
Queue Length 95th (ft)	143	99	66	52
Internal Link Dist (ft)	246		244	197
Turn Bay Length (ft)				
Base Capacity (vph)	1092	399	1519	356
Starvation Cap Reductn	274	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.44	0.36	0.25	0.33

Intersection Summary

ATTACHMENT C

Except of Caveat Statements

ATTACHMENT C

Except of caveat statements from:

- Otay Ranch Village 8 West Traffic Impact Analysis; and
- Otay Ranch Village 9 Traffic Impact Analysis.

PAGES 50 – 51 OF THE OTAY RANCH VILLAGE 8 WEST TIA

2030 CONDITIONS

In addition to the developments assumed through 2025, this scenario assumes buildout of Village 8 West to include the construction of a middle school, an additional 60,000 square feet of commercial retail, and 9.4 acres of park space. This scenario assumes the 2025 mitigated street network. **Table 23** summarizes the forecasted Village 8 West 2030 project trip generation.

Table 23
2030 Project Trip Generation

Land Use	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	Inbound	Outbound	Total	Inbound	Outbound
Park (Active Recreation)	17.4 acres	870	35	17	17	70	35	35
Urban & Neighborhood Park	10.6 acres	53	2	1	1	4	2	2
Single Family Residential	621 DU	6,210	497	149	348	621	435	186
Multi-Family Residential	1,429 DU	11,432	915	183	732	1,143	800	343
Elementary School	11.4 acres	1,140	365	219	146	103	41	62
Jr. High/Middle School	21.0 acres	2,205	706	423	282	198	79	119
Office (<100 KSF)	50 KSF	1,000	140	129	14	130	26	104
Commercial Retail	250 KSF	20,000	800	480	320	2,000	1,000	1,000
SUBTOTAL		**43,084**	**3,467**	**1,604**	**1,864**	**4,283**	**2,425**	**1,858**
Internal Capture[1]		*-14,826*	*-632*	*-316*	*-316*	*-1,300*	*-650*	*-650*
Transit Reduction[2]		*-2,154*	*-173*	*-80*	*-93*	*-214*	*-121*	*-93*
TOTAL		**26,104**	**2,662**	**1,208**	**1,455**	**2,769**	**1,654**	**1,115**
Total EDU's		**2,610**						

Note: based on *SANDAG, Not So Brief Guide, April 2002*
[1] Internal Capture Rates provided from *ITE Trip Generation Handbook.* Internal capture rates vary by each combination of land uses.
[2] Transit Reduction Rates provided from SANDAG; a transit reduction of 5% is assumed by project buildout.

The 2030 scenario includes analysis of the forecasted traffic volumes from the SANDAG model run for year 2030, including anticipated land uses and traffic associated with projects expected to be constructed by 2030.

The traffic analysis assumes the 2025 mitigated network plus the following:

- Street "A" will be constructed from Main Street to Otay Valley Road as a two-lane Collector
- Construction of Main Street from Heritage Road to La Media Road (constructed by others)

The 2025 mitigated roadway network is required to be constructed prior to the construction of the first EDU following the 2025 development phase (2,234 EDUs). Any additional development cannot occur until the 2025 mitigated roadway network is in place. If the project equivalent dwelling unit exceeds the 2025 development phase (2,234 EDUs) prior to the completion of all of the above-listed assumed and planned off-site and on-site improvements being constructed and open to traffic, then one of the following steps shall be taken as determined by the City Engineer:

1. Development in Village 8 West will stop until those assumed future roadways are constructed by others; or

2. City and OLC shall meet to determine the need for the incomplete roadway segments. A number of factors, including changes to the tolling structure at SR-125, may affect the traffic patterns in the Otay Ranch. Additional traffic analysis of the roadway network and levels of service assessment may be necessary to determine if such improvements are necessary and the scope and timing of additional circulation improvements; or

3. Developer shall construct the missing roadway links and receive TDIF credit for those improvements as applicable; or

4. An alternative measure is selected by the city in accordance with the city of Chula Vista Growth Management Ordinance.

5. All to the satisfaction of the City Engineer.

The roadway network used in evaluating the 2030 conditions is illustrated in **Exhibit 35**. The 2030 roadway network does not represent the City's ultimate Circulation Element network. The 2030 roadway network lacks a few components of the ultimate infrastructure that is planned in the study area, and it has been determined that these remaining components of the ultimate roadway network are not necessary to mitigate the project's impacts.

Access to Village 8 West will be provided along Main Street, La Media Road, Otay Valley Road, Street "A" and Magdalena Avenue. Street "A" is not included in the roadway segment analysis as it is a local street not subject to LOS requirements. Operating conditions of Street "A" and the associated internal intersections are discussed in the On-Site Street Improvements Phase and Operational Analysis section provided later in this report.

PAGES 38-39 OF THE OTAY RANCH VILLAGE 9 TIA

2030 CONDITIONS

In addition to the developments assumed through 2025, this scenario assumes buildout of Village 9 to include the construction of an elementary school, 21 additional single family dwelling units, 223 additional high density multi family dwelling units, an additional 625,000 square feet of office, and 5 acres of community purpose facilities. This scenario assumes the 2025 mitigated street network. **Table 19** summarizes the forecasted Village 9 2030 project trip generation.

Table 19
2030 Project Trip Generation Table

Land Use	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	Inbound	Outbound	Total	Inbound	Outbound
Urban & Neighborhood Park	27.5 acres	138	6	3	3	11	6	5
Single Family Residential	266 DU	2,660	213	64	149	266	186	80
High Density Multi-Family Residential	3,734 DU	22,404	1,792	358	1,434	2,016	1,411	605
Elementary School	19.8 acres	1,980	633	379	254	178	71	107
Office (>400 KSF)	1,200 KSF	14,400	1,872	1,685	187	1,872	374	1,498
Commercial Retail	300 KSF	12,000	480	288	192	1,200	600	600
Community Purpose Facility	5 acres	150	8	5	3	12	6	6
SUBTOTAL		**53,732**	**5,003**	**2,781**	**2,222**	**5,555**	**2,654**	**2,901**
Internal Capture[1]		-11,606	-469	-234	-234	-1,214	-607	-607
Transit Reduction[2]		-8,059	-750	-417	-333	-833	-398	-435
TOTAL		**34,067**	**3,784**	**2,130**	**1,655**	**3,509**	**1,649**	**1,859**
TOTAL EDU		**3,407**						

Note: based on *SANDAG, Not So Brief Guide, April 2002*
[1] Internal Capture Rates provided from *ITE Trip Generation Handbook.* Internal capture rates vary by each combination of land uses.
[2] Transit Reduction Rates provided from SANDAG; a transit reduction of 15% is assumed by project buildout.

The 2030 scenario includes analysis of the forecasted traffic volumes from the SANDAG model run for year 2030, including anticipated land uses and traffic associated with projects expected to be constructed by 2030.

The traffic analysis assumes the 2025 mitigated network plus the following off-site roadway improvement:

- Construction of Main Street from Heritage Road to La Media Road (constructed by others)
- Construction of "Village Path" pedestrian/bicycle bridge over SR-125 to provide non-motorized access between Village 9 and Village 8 East (constructed by others)

The 2030 analysis includes the 2025 on-site roadway network plus the following on-site roadway improvements that will be constructed by the project by 2030, as stated in the PFFP analysis presented later in the report:

- Construction of Street "A" from Village 9 northern boundary to Main Street
- Construction of Street "B" from Village 9 northern boundary to Campus Boulevard
- Installation of traffic signal at Main Street / Street "B"

The 2025 mitigated roadway network is required to be constructed prior to the construction of the first EDU following the 2025 development phase (3,074 EDUs). Any additional development cannot occur until the 2025 mitigated roadway network is in place. If the project equivalent dwelling unit limit for 2025 (3,074 EDU as shown in Tables 15 and 18) is reached prior to all of the above-listed off-site and roadway improvements are constructed and open to traffic, then one of the following steps shall be taken as determined by the City Engineer:

1. Development in Village 9 will stop until those assumed future roadways are constructed by others; or

2. City and OLC shall meet to determine the need for the incomplete roadway segments. A number of factors, including changes to the tolling structure at SR-125, may affect the traffic patterns in the Otay Ranch. Additional traffic analysis of the roadway network and levels of service assessment may be necessary to determine if such improvements are necessary and the scope and timing of additional circulation improvements; or

3. Developer shall construct the missing roadway links and receive TDIF credit for those improvements as applicable; or

4. An alternative measure is selected by the City in accordance with the City of Chula Vista Growth Management Ordinance; or

5. All to the satisfaction of the City Engineer.

All on-site improvements will be constructed in accordance with the PFFP. The roadway network used in evaluating the 2030 conditions is illustrated in **Exhibit 29**. The 2030 roadway network does not include all future roadways included in the City's Circulation Element. The analysis conducted in this report demonstrates that the remaining future planned roadways (Eastlake Parkway from Main Street to Otay Valley Road and the Otay Valley Road/SR-125 interchange) are not necessary to mitigate the project's impacts.

ATTACHMENT D

AM Peak Hour Field Review

ATTACHMENT D

AM PEAK HOUR FIELD REVIEW

I-805 NB RAMPS / MAIN STREET

I-805 NB RAMPS / OLYMPIC PARKWAY

The following are screen capture of the field review video for the I-805 NB Ramps / Main Street and I-805 NB Ramps / Olympic Parkway intersection, including the On-Ramp condition.

INTERSECTION: MAIN STREET / I-805 NB RAMP

TIME: 7:35 AM

As shown in the images above, the I-805 NB Ramps / Main Street interchange is currently not experiencing any significant delay or queuing.

INTERSECTION: OLYMPIC PARKWAY / I-805 NB RAMPS

TIME: 7:44 AM

As shown in the images above, the I-805 NB Ramps / Olympic Parkway interchange is currently not experiencing any significant delay or queuing.

ATTACHMENT E

La Media Road/Main Street – V8W Geometrics Analysis Memo

ATTACHMENT E - La Media Road / Main Street – V8W Geometrics Analysis Memo

CHEN RYAN

MEMORANDUM

TO: Mr. Sean Kilkenny

FROM: Monique Chen, PE
Phuong Nguyen, PE

DATE: October 10, 2014

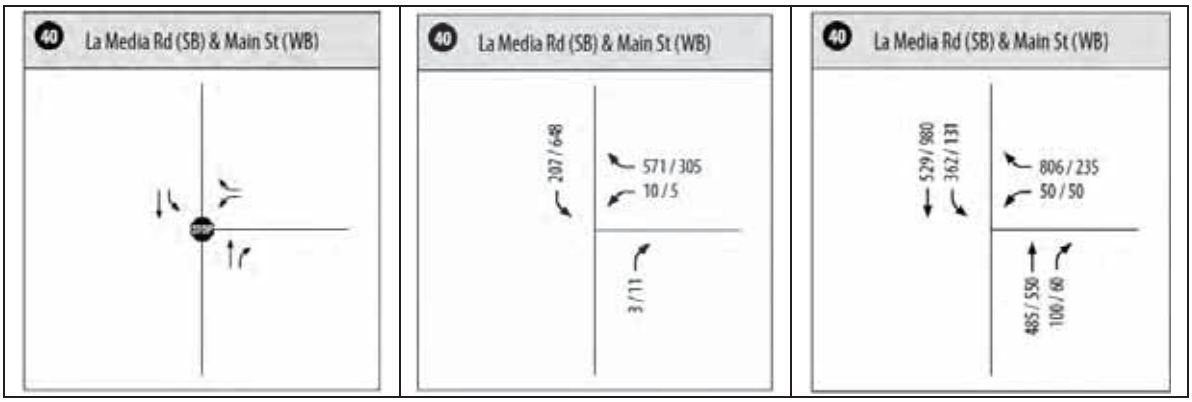
RE: **La Media Road / Main Street Couplet (Year 2020) Analysis**

This memorandum provides an analysis of the La Media Road / Main Street couplet in Year 2020 conditions for the University Villages project using the same assumptions that were used by the Villages 8 West TIA. The Village 8 West TIA's assumption of the La Media Road / Main Street couplet in Year 2020 is different than those assumed in the University Villages TIA. The La Media Road / Main Street couplet is within the Village 8 West project area, and was proposed by the project applicant as part of the Village 8 West Town Center. The Village 8 West TIA was "DRAFT" while the University Villages TIA was being prepared and not available for review. Therefore, without knowing what the Village 8 West study assumed from a network perspective in the La Media Road / Main Street area, the University Villages TIA assumed the couplet configuration based on the available information from the General Plan Circulation Element Map. This is consistent with the City's preference to assume full construction of a facility rather than partial improvements. However, this assumption was overly conservative as the University Villages project does not generate the demand for, or result in impacts which require mitigation that would be required to construct the entire couplet by the Year 2020. Therefore, the following additional analysis was conducted to determine if the couplet assumption by the Village 8 West TIA, when analyzed using the traffic volume in the University Villages TIA, would result in additional or different impacts.

The analysis for the La Media Road/Main Street area has been re-evaluated using the same geometric configuration as those shown on Exhibit 5C of the Village 8 West TIA. **Figure 1** displays the assumed intersection configuration, project trip distribution, and peak hour traffic volumes used in this analysis. It should be noted that the Village 8 West TIA assumed that the intersection of La Media Road (SB) / Main Street (WB) would be constructed as a three-way signalized intersection. However, in order to demonstrate the need for a facility (including intersection control), before it is included in the interim years roadway network, the intersection of La Media Road (SB) / Main Street (WB) was analyzed as a three-way stop controlled intersection.

FIGURE 1
LA MEDIA ROAD (SB) / MAIN STREET (WB)
INTERSECTION GEOMETRICS AND PEAK HOUR VOLUMES
YEAR 2020 CONDITION

Intersection Geometrics	Project Trip Assignment	Year 2020 Peak Hour Volumes



Source: Chen Ryan Associates, October 2014

Table 1 below provides the intersection delays and LOS for the La Media Road (SB) / Main Street (WB) intersection under the Year 2020 conditions with the University Villages projected 2020 land uses. As shown in the table, the intersection of La Media Road (SB) / Main Street (WB) would operate at unacceptable LOS F during both the AM and PM peak hours. Since the percent of entering volume at this intersection from the project is greater than 5% of the overall intersection volume (33.8% and 43.9% during the AM and PM peak, respectively), the project would have a direct impact to the intersection of La Media Road (SB) / Main Street (WB). Signalization would mitigate this traffic impact (consistent with the mitigation assumption in the University Villages TIA). Mitigated intersection result is also shown in Table 1. Intersection analysis worksheet are provided in **Attachment 1**.

INTERSECTION LEVEL OF SERVICE
LA MEDIA ROAD (SB) / MAIN STREET (WB)
YEAR 2020 CONDITIONS

Intersection	Before Mitigation				After Mitigation			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Avg. Delay (Sec.)	LOS	Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS
40. La Media Road (SB) / Main Street (WB)	61.3	F	67.3	F	28.4	C	28.8	C

Source: Chen Ryan Associates, October 2014

As shown, the intersection of La Media Road / Main Street would operate at acceptable LOS C or better under the mitigated conditions. This finding is consistent with the result shown in Chapter 7 of the University Villages TIA that Year 2020 traffic impacts at La Media Road/Main Street can be mitigated with intersection signalization. However, because the TIA used the conservative assumption that the entire couplet would be constructed by 2020, the analysis in the University Villages TIA results in four impacts (one at each intersection in the couplet) and four mitigation measures (to signalize each of the intersections). Therefore, the University Villages project would not have any additional impacts outside one of those already documented in the TIA and in fact would have three fewer impacts if analyzed under the same assumptions as the Village 8 West TIA. No additional analysis is required.

ATTACHMENT A - La Media Road / Main Street – V8W Geometrics Analysis

PEAK HOUR INTERSECTION ANALYSIS – YEAR 2020 SCENARIO

LA MEDIA ROAD / MAIN STREET

YEAR 2020 SCENARIO

Intersection	
Intersection Delay, s/veh	61.3
Intersection LOS	F

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Vol, veh/h	0	50	806	0	485	100	0	362	529
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	53	848	0	511	105	0	381	557
Number of Lanes	0	1	1	0	1	1	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	64.2	60.3	59.3
HCM LOS	F	F	F

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	0%	0%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	485	100	50	806	362	529
LT Vol	485	0	0	0	0	529
Through Vol	0	100	0	806	0	0
RT Vol	0	0	50	0	362	0
Lane Flow Rate	511	105	53	848	381	557
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	1	0.21	0.123	1	0.865	1
Departure Headway (Hd)	7.873	7.174	8.428	7.229	8.176	7.676
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	459	500	424	501	446	473
Service Time	5.625	4.926	6.217	5.019	5.912	5.413
HCM Lane V/C Ratio	1.113	0.21	0.125	1.693	0.854	1.178
HCM Control Delay	70.3	11.8	12.4	67.4	44.7	69.3
HCM Lane LOS	F	B	B	F	E	F
HCM 95th-tile Q	13.1	0.8	0.4	13.6	8.8	13.2

Intersection	
Intersection Delay, s/veh	67.3
Intersection LOS	F

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Vol, veh/h	0	50	540	0	550	60	0	568	980
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	53	568	0	579	63	0	598	1032
Number of Lanes	0	1	1	0	1	1	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	62.6	64.7	70.1
HCM LOS	F	F	F

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	0%	0%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	550	60	50	540	568	980
LT Vol	550	0	0	0	0	980
Through Vol	0	60	0	540	0	0
RT Vol	0	0	50	0	568	0
Lane Flow Rate	579	63	53	568	598	1032
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	1	0.127	0.124	1	1	1
Departure Headway (Hd)	7.965	7.266	8.455	7.256	8.177	7.678
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	457	496	425	500	448	485
Service Time	5.676	4.976	6.179	4.98	5.886	5.387
HCM Lane V/C Ratio	1.267	0.127	0.125	1.136	1.335	2.128
HCM Control Delay	70.6	11	12.4	67.2	71.6	69.2
HCM Lane LOS	F	B	B	F	F	F
HCM 95th-tile Q	13	0.4	0.4	13.6	12.8	13.3

YEAR 2020 (MITIGATED) SCENARIO

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	50	806	485	100	362	529
Number	5	12	4	14	3	8
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	53	374	511	105	381	557
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	477	425	568	483	426	1131
Arrive On Green	0.27	0.27	0.30	0.30	0.24	0.61
Sat Flow, veh/h	1774	1583	1863	1583	1774	1863
Grp Volume(v), veh/h	53	374	511	105	381	557
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1583	1774	1863
Q Serve(g_s), s	1.4	14.6	16.9	3.2	13.4	10.8
Cycle Q Clear(g_c), s	1.4	14.6	16.9	3.2	13.4	10.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	477	425	568	483	426	1131
V/C Ratio(X)	0.11	0.88	0.90	0.22	0.89	0.49
Avail Cap(c_a), veh/h	606	541	579	492	441	1158
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.7	22.5	21.4	16.7	23.7	7.1
Incr Delay (d2), s/veh	0.1	12.9	16.9	0.2	19.9	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	7.9	11.3	1.4	8.9	5.5
LnGrp Delay(d),s/veh	17.8	35.4	38.3	16.9	43.6	7.4
LnGrp LOS	B	D	D	B	D	A
Approach Vol, veh/h	427		616			938
Approach Delay, s/veh	33.2		34.7			22.1
Approach LOS	C		C			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		21.3	19.5	23.6				43.1
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		22.0	16.0	20.0				40.0
Max Q Clear Time (g_c+I1), s		16.6	15.4	18.9				12.8
Green Ext Time (p_c), s		0.7	0.1	0.7				7.4

Intersection Summary	
HCM 2010 Ctrl Delay	28.4
HCM 2010 LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	50	540	550	60	568	980
Number	7	14	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	53	200	579	63	598	1032
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	265	236	660	561	630	1409
Arrive On Green	0.15	0.15	0.35	0.35	0.35	0.76
Sat Flow, veh/h	1774	1583	1863	1583	1774	1863
Grp Volume(v), veh/h	53	200	579	63	598	1032
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1583	1774	1863
Q Serve(g_s), s	2.2	10.4	24.7	2.3	27.9	25.7
Cycle Q Clear(g_c), s	2.2	10.4	24.7	2.3	27.9	25.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	265	236	660	561	630	1409
V/C Ratio(X)	0.20	0.85	0.88	0.11	0.95	0.73
Avail Cap(c_a), veh/h	334	298	680	578	648	1448
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.7	35.2	25.7	18.4	26.7	5.6
Incr Delay (d2), s/veh	0.4	16.4	12.2	0.1	23.3	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	5.6	14.9	1.0	17.7	13.6
LnGrp Delay(d),s/veh	32.1	51.6	37.9	18.5	50.0	7.5
LnGrp LOS	C	D	D	B	D	A
Approach Vol, veh/h	253		642			1630
Approach Delay, s/veh	47.5		36.0			23.1
Approach LOS	D		D			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	34.1	34.1		16.7		68.3		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	31.0	31.0		16.0		66.0		
Max Q Clear Time (g_c+I1), s	29.9	26.7		12.4		27.7		
Green Ext Time (p_c), s	0.3	3.4		0.3		16.1		

Intersection Summary	
HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C

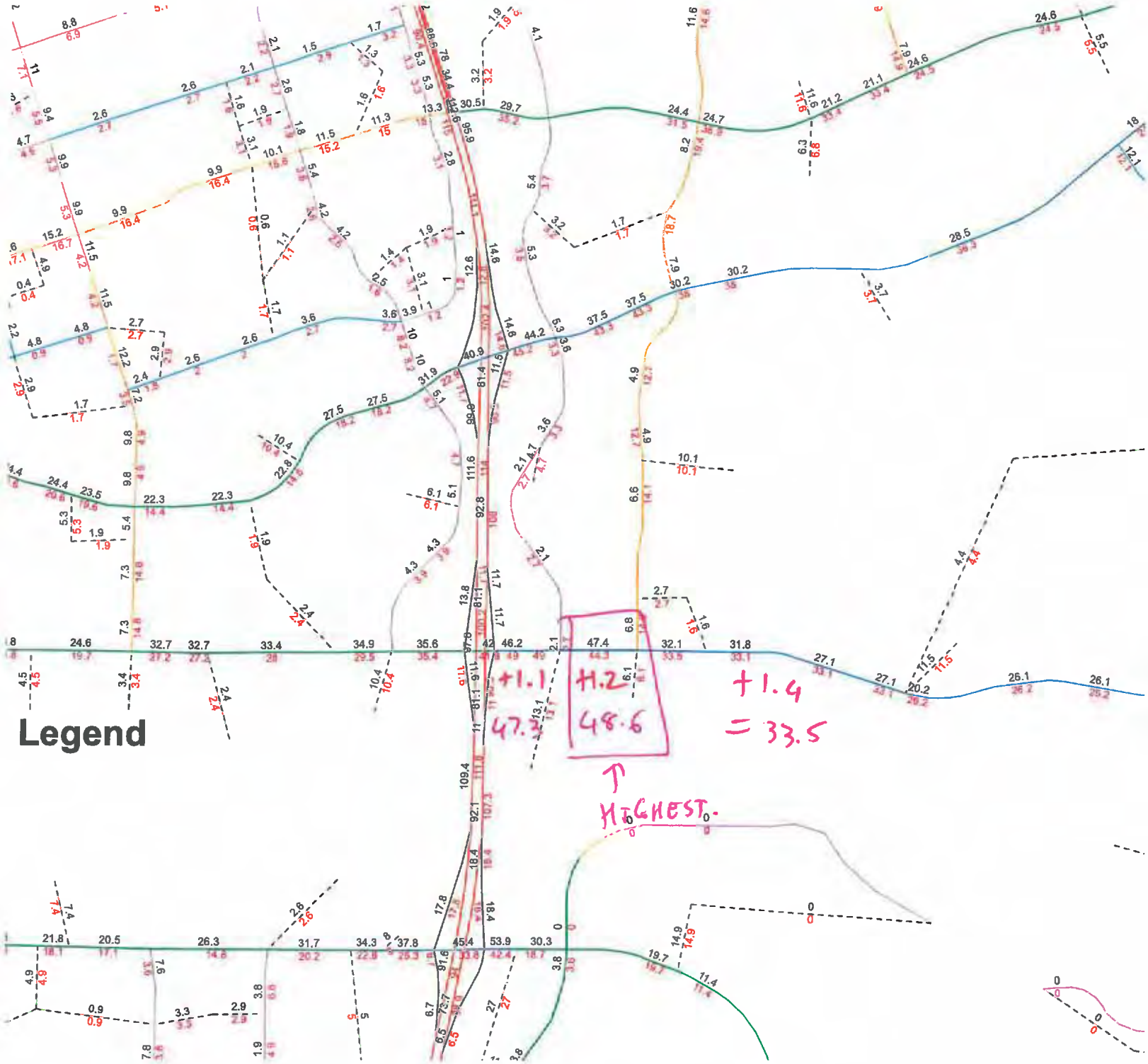
ATTACHMENT F

Year 2020 Base Plus Project Model with Manual Increase of Village 2 SPA Traffic

ATTACHMENT F

YEAR 2020 BASE PLUS PROJECT MODEL W/ MANUAL INCREASE OF VILLAGE 2 SPA TRAFFIC.

YEAR
SAN C



CHAPTER 1
EXECUTIVE SUMMARY

This Environmental Impact Report (EIR) is an informational document intended for the use by the City of Chula Vista, other public agencies, and members of the general public in evaluating the potential environmental effects of the proposed University Villages Project, hereafter referred to as the proposed project. The proposed project encompasses Village Three North and a Portion of Village Four, Village Eight East, and Village Ten. Implementation of the proposed project requires Chula Vista General Plan Amendments (GPAs), Chula Vista Multiple Species Conservation Plan Boundary Adjustments (MSCPBAs), Otay Ranch General Development Plan Amendments (GDPAs), and Resource Management Plan Boundary Adjustments (RMPBAs). The project also proposes amendments to three approved SPA Plans; Otay Ranch Villages Two, Three, and a Portion of Village Four SPA Plan; Otay Ranch Village Seven SPA Plan; and the Otay Ranch Village Nine SPA Plan.

Three SPA plans are proposed: (a) Otay Ranch Village Three North and a Portion of Village Four SPA Plan, (b) Otay Ranch Villages Eight East SPA Plan, and (c) Otay Ranch Village Ten SPA Plan. Three Tentative Maps (TMs) are also proposed: (a) Village Three North and a Portion of Village Four, (b) Village Eight East, and (c) Village Ten.

CEQA statute Section 21002 requires that an EIR identify the significant effects of a project on the environment and provide measures or alternatives that can mitigate or avoid these effects. This EIR evaluates the environmental effects associated with development of the project and discusses the manner in which the project's significant effects can be reduced or avoided through the implementation of mitigation measures or feasible alternatives to the proposed project. In accordance with Section 15130 of the CEQA Guidelines, this EIR also includes an examination of the effects of cumulative development.

This EIR tiers from the 1993 Otay Ranch GDP Program EIR, and the 2005 GPU/GDPA Program EIR in accordance with CEQA Guidelines Section 15152. Additionally, the cumulative analysis in this EIR tiers from the 2013 GPA/GDPA Supplemental EIR also in accordance with CEQA Guidelines Section 15152. The 2006 Otay Ranch Village Two, Three, and Portion of Village Four SPA Plan Final Second Tier EIR (Second Tier EIR), the Otay Ranch Resource Management Plan (RMP), and the City of Chula Vista MSCP Subarea Plan have been incorporated by reference throughout the analysis provided in this EIR in accordance with Public Resources Code Section 21083 and CEQA Guidelines Section 15150.

This summary provides a brief synopsis of: 1) the proposed project, 2) results of the environmental analysis contained within this environmental document, 3) alternatives to the proposed project that were considered, and 4) major areas of controversy and issues to be resolved by decision-makers. This summary does not contain the extensive background and

analysis found throughout the individual chapters within the EIR. Therefore, the reader should review the entire document to fully understand the project and its environmental consequences.

1.1 PROJECT LOCATION AND SETTING

The proposed project is located within the City of Chula Vista in southwestern San Diego County, approximately 3.5 miles east of downtown Chula Vista and 13 miles southeast of downtown San Diego (Figure 4-1). The proposed project area occupies approximately 1,375 acres[1] composed of Village Three North, a portion of Village Four, Village Eight East, and Village Ten within the Otay Valley Parcel of the adopted Otay Ranch GDP (Figure 4-2). In addition, the proposed project includes necessary off-site improvements totaling approximately 160 acres.

Otay Ranch lies within the East Planning Area of the City of Chula Vista, as identified in the City's General Plan. The proposed project is a component of the Otay Ranch General Development Plan (Otay Ranch GDP), which organizes the Otay Ranch into 20 villages or planning areas.

Historically, the Otay Valley Parcel, including the project area, has been used for ranching, grazing, dry farming, and truck farming activities. The project area is currently vacant and is generally comprised of gently sloping terrain covered with primarily non-native grasslands crossed by dirt roads and old cattle trails.

The boundaries of the villages included in the proposed project differ from those identified in the Otay Ranch GDP due to ownership patterns that do not match the Otay Ranch GDP village boundaries. Village Three North encompasses a portion of Village Three as identified in the Otay Ranch GDP, as well as the open space area west of Village Three. The portion of Village Four included in the project area is within the Otay Ranch GDP boundaries of Village Four; however, it is limited to a strip of land extending southwest toward Village Three. Village Eight East encompasses the eastern part of Village Eight as identified in the Otay Ranch GDP, adjacent to State Route 125 (SR-125), as well as a portion of Village Seven. Village Ten includes the eastern portion of Village Nine and most of Village Ten.

1.2 PROJECT DESCRIPTION

Three SPA plans are proposed: (a) Otay Ranch Village Three North and a Portion of Village Four SPA Plan, (b) Otay Ranch Villages Eight East SPA Plan, and (c) Otay Ranch Village Ten SPA

[1] The current ownership is 1,363 acres; however, approximately 12 acres of land currently within the SR-125 right-of-way adjacent to Village Eight East will be decertified and exchanged with CalTrans, resulting in a project total of 1,375 acres.

Plan. Three Tentative Maps (TMs) are also proposed: (a) Village Three North and a Portion of Village Four, (b) Village Eight East, and (c) Village Ten.

The development program for the proposed project is based on the Chula Vista General Plan and the approved Otay Ranch planning documents (Otay Ranch GDP, Overall Design Plan, and other SPA plans for Otay Ranch), which describe the land use plans and general design characteristics of the Otay Ranch Villages. The village design is intended to provide balanced and diverse land uses, focus on transit and pedestrian orientation, and create a sense of place for village residents. The specific development program for each village is described in detail in Sections 4.2.2.1 through 4.2.2.3, and the proposed land uses are provided in Table 1-1. For a complete project description please see Section 4.0.

The proposed project is consistent with the Land Offer Agreement between the Applicant and the City, which consists of up to 6,897 homes and associated village land uses within the project site. Implementation of the proposed project requires Chula Vista GPAs, MSCPBAs, Otay Ranch GDPAs, and RMPBAs. The project also proposes amendments to three approved SPA Plans; Otay Ranch Villages Two, Three, and a Portion of Village Four SPA Plan; Otay Ranch Village Seven SPA Plan; and the Otay Ranch Village Nine SPA Plan.

Table 1-1
Proposed Land Uses

Land Use	Gross Acres	Commercial Square Footage	Residential Dwelling Units	Population
Village Three North/Portion of Village Four				
Single-Family Residential	115.2		1,002	3,247
Multi-Family Residential	10.8		515	1,667
Mixed-Use	8.2	20,000	80	259
Industrial	28.6			
Office	5.2			
Parks	25.7			
School	8.3			
Community-Purpose Facilities	4.2			
Private Open Space	2.4			
Open Space	35.4			
Preserve	158.1[b]			
Circulation	33.9			
Subtotal	*436*	*20,000*	*1,597*	*5,174*
Village Eight East				
Single-Family Residential	117.1		943	3,055
Multi-Family Residential	46.2		2,177	7,053
Mixed Use	9.5	20,000	440	1,426
Parks [c]	58.8			
School	10.8			
Community-Purpose Facilities	4.2			
Open Space [d]	33.8			

Table 1-1 (Continued)
Proposed Land Uses

Land Use	Gross Acres	Commercial Square Footage	Residential Dwelling Units	Population[a]
Preserve	253.6			
Circulation	29.6			
Other (Future Development Areas)	8.1			
Other (SR-125 ROW, Lot 4)	3.6			
Subtotal	*575.3*	*20,000*	*3,560*	*11,534*
Village Ten				
Single-Family Residential	74.8		695	2,252
Multi-Family Residential	21.5		1,045	3,386
Parks	7.6			
School	9.2			
Community-Purpose Facilities	4.3			
Open Space (OS-2)	16.5			
Private Open Space	0.7			
Preserve	212.7			
Circulation	16.1			
Subtotal	*363.4*		*1,740*	*5,638*
Total	**1,374.7**	**40,000**	**6,897**	**22,346**

ROW = right-of-way
[a] Population estimates based on 3.24 persons per residential dwelling unit.
[b] Includes 2.9 acres of roadway, which is located within the Preserve and is an allowable use in the Preserve. This acreage is not accounted for in the Circulation acreage.
[c] Includes 51.5 acres of Village Eight East Community Park (P-2) and 7.3 acres of Neighborhood Park.
[d] Includes 22.6 acres of Active Recreation Area (AR-11) and 11.2 acres of Open Space

1.2.1 Project Objectives

Section 15124(b) of the CEQA Guidelines requires an EIR to include a statement of objectives for the proposed project that outlines the underlying purpose of the project and assist in the development of project alternatives. In addition to more specific objectives for each of the project's components set forth later in this section, the SPA plan identifies the following general objectives of the proposed project:

- Implement the goals, objectives, and policies of the Chula Vista General Plan, the MSCP, the Otay Ranch GDP, the Otay Ranch Phase 1 and Phase 2 RMP, the Otay Ranch Facility Implementation Plan, the Otay Ranch Village Phasing Plan, and the Otay Ranch Service/Revenue Plan.
- Provide a wide variety of housing options, including affordable housing, to City residents, future students, and faculty of the planned 4-year university and employees of the Regional Technology Park, Village Eight West and Village Nine Town Centers and the EUC.
- Implement the City of Chula Vista Growth Management Ordinance to ensure that public facilities are provided in a timely manner and financed by the parties creating the demand for, and benefiting from, the improvements.
- Foster development patterns that promote orderly growth and prevent urban sprawl by comprehensively planning Villages Three North and a Portion of Village Four, Eight East, and Ten simultaneously.
- Add to the creation of a unique Otay Ranch image that differentiates Otay Ranch from other communities.
- Accentuate the relationship of the land use plan with its natural setting and the physical character of the region and promote effective management of natural resources by concentrating development in less sensitive areas while preserving large, contiguous open space areas with sensitive resources.
- Establish multi-use trail linkages to the Chula Vista Greenbelt, consistent with the Chula Vista Greenbelt Master Plan.
- Wisely manage limited natural resources.
- Implement the Otay Valley Regional Park (OVRP) Concept Plan within the SPA boundaries through the planning and provision of portions of connections to the City's Greenbelt trail network.
- Establish land use and facility plans that assures the economic viability of the SPA Plan Areas in consideration of existing and anticipated economic conditions.

1.2.2 Discretionary Actions

A discretionary action is an action taken by an agency that calls for the exercise of judgment in deciding whether to approve or how to carry out a project. The following discretionary actions are associated with the proposed project and will be considered by the Chula Vista Planning Commission and City Council:

- Certification of a Final EIR, adoption of the Mitigation Monitoring and Reporting Program pursuant to CEQA, and approval of the CEQA Findings and Statement of Overriding Considerations
- Approval of the Chula Vista General Plan Amendments (please see discussion in Section 4.2.8)
- Approval of the Otay Ranch GDP Amendments (please see discussion in Section 4.2.8)
- Approval of the Otay Ranch RMP Boundary Adjustment
- Approval of amendments to the Villages Two, Three, and a portion of Four SPA Plan; Village Seven SPA Plan and Village Nine SPA Plan
- Adoption of the Village Three North and a Portion of Village Four SPA Plan (please see discussion in Section 4.2.9)
- Adoption of the Village Eight East SPA Plan (please see discussion in Section 4.2.9)
- Adoption of the Village Ten SPA Plan (please see discussion in Section 4.2.9)
- Approval of three TMs; Village Three North and a Portion of Four, Village Eight East, and Village Ten (please see discussion in Section 4.2.6)
- Approval of the Chula Vista MSCP Subarea Plan Boundary Adjustment (please see discussion in Section 4.2.8)
- Approval of Grading Plans (please see discussion in Section 4.2.5)
- Habitat Loss and Incidental Take (HLIT) Ordinance Permit
- Amend the Development Agreement in accordance with the Land Offer Agreement provisions.

Additionally, implementation of the project may require that the Applicant obtain approval, permits, licenses, certifications, or entitlements from various federal, state, and other local agencies, including but not limited to those listed in Table 1-2.

Table 1-2
Future Discretionary Approvals and Permits

Discretionary Approval/Permit	Agency Description	Agency Status	Notes/Explanation
Final "A" Map(s)/Financial Parcel Map(s)	City of Chula Vista	Lead Agency	Mapping to facilitate project financing.
Final "B" Map(s)	City of Chula Vista	Lead Agency	Final Mapping to facilitate development.
Construction and Encroachment Permit(s)	City of Chula Vista	Lead Agency	Construction and encroachment permits are required for work performed within the City's road right-of-way.
License, Easement, Entry Permit, Encroachment Permit, Land Sale, Land Exchange, or Other Similar Action	City of San Diego	Responsible Agency	Approval to relocate City of San Diego waterlines through Villages Eight East and Ten from existing alignment into future alignment of Otay Valley Road/La Media Road.
Construction and Encroachment Permit(s)	Caltrans	Responsible Agency	Construction and encroachment permits are required for work performed within Caltrans road right-of-way (SR-125).
Site Plans	City of Chula Vista	Lead Agency	Site plans for single-family residential, mixed-use sites, and park developments.
Village Core Master Precise Plans	City of Chula Vista	Lead Agency	Each SPA Plan includes a requirement to prepare a subsequent Master Precise Plan to better define the village core uses, character and site plan.
Section 401 Water Quality Certification	RWQCB	Responsible Agency	Action required for development projects affecting waters of the United States.
Section 404 Permit – Clean Water Act	ACOE	Responsible Agency	Action required for development projects affecting waters of the United States.
Streambed Alteration Agreement/Memorandum of Understanding	CDFW	Responsible Agency/Trustee Agency	Action required for development projects affecting jurisdictional streams/waters.
Air Quality Permit	SDAPCD	Responsible Agency	Action required for construction and development projects using certain machinery, such as backup or emergency generators.
NPDES Permit; General Construction Activity Storm Water Permit, including the Storm Water Pollution Prevention Plan	RWQCB	Responsible Agency	Action required for development projects.
NPDES General Groundwater Extraction Waste Discharge Permit	RWQCB	Responsible Agency	Permit would be applicable if groundwater disposal is proposed during construction.
General Construction Storm Water Permit	RWQCB	Responsible Agency	Action required for development projects.
Subarea Master Plan	OWD	Responsible Agency	Reporting approval required from OWD for overall water availability, service connection, etc.

Caltrans = California Department of Transportation; RWQCD = Regional Water Quality Control District; ACOE = U.S. Army Corps of Engineers; CDFW = California Department of Fish and Wildlife; SDAPCD = San Diego Air Pollution Control District; NPDES = National Pollutant Discharge Elimination System; OWD = Otay Water District

1.3 AREAS OF CONTROVERSY

The Notice of Preparation (NOP) was distributed on July 22, 2013 to interested agencies, organizations, and parties for a 30-day public scoping period that ended on August 21, 2013. Additionally, a public scoping meeting was held on August 7, 2013, from 3:00 p.m. to 5:00 p.m., at 276 Fourth Avenue (Building C, Room B129), Chula Vista, California, 91910, to gather additional public input. Comments received during the NOP public scoping period were considered during the preparation of this EIR. The NOP and comments are included in Appendix A to this EIR Comments covered a variety of topics, including increases in traffic within Chula Vista and surrounding jurisdictions, potential hazardous materials/air toxics and nuisance impacts due to proximity to the Otay Landfill, impacts to the OVRP, impacts to biological resources and the MSCP Preserve, stormwater runoff, and loss of industrial land. These issues are analyzed in this EIR.

1.4 ISSUES TO BE RESOLVED BY THE CITY COUNCIL

The issues to be resolved by the decision-making body are whether to adopt the proposed project and how to mitigate significant effects created by its implementation. The City will decide if benefits of the project outweigh any significant unmitigable impacts associated with visual character (change from rural, open land to urban uses), traffic (level of service standards and congestion management), air quality (consistency with regional air quality plans, air quality standards, operational emissions), agricultural resources (incremental loss of agricultural land), sewer treatment (potential need for additional sewage treatment capacity), energy (guarantee of future energy resources), and global warming (consistency with regional air quality plans, operational emissions).

The City will also decide if the significant impacts associated with the environmental issues of land use, landforms and aesthetics, transportation and traffic, air quality, noise, cultural resources, paleontological resources, biological resources, agricultural resources, water quality and hydrology, geology and soils, public services, utilities, climate change, hazards and risk of upset, population and housing, and mineral resources have been fully mitigated below a level of significance. Lastly, the City would determine whether any alternative might meet the key objectives of the project while reducing its environmental impact.

1.5 PROJECT ALTERNATIVES

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, EIRs are required to “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives” (14 CCR 15126.6(a)). This EIR “must consider a reasonable range

of potentially feasible alternatives that will foster informed decision making and public participation" (14 CCR 15126.6(a)). The alternatives discussion is required even if these alternatives "would impede to some degree the attainment of the project objectives, or would be more costly" (14 CCR 15126.6(b)).

1.5.1 No Project Alternative

CEQA Guidelines Section 15126.6 requires the inclusion of a No Project Alternative to be analyzed. Per CEQA, a No Project Alternative would entail analysis of no build and no development would occur on Village Three North and a Portion of Village Four, Village Eight East, or Village Ten. Accordingly, the site characteristics of this alternative would be equivalent to the existing conditions for each category analyzed in Section 5.0 of this EIR. Although no development would occur, surrounding land uses and villages would continue to be built-out.

1.5.2 Existing GP and GDP Alternative

Under the Existing GP and GDP Alternative, the villages would develop consistent with the existing General Plan and Otay Ranch GDP. The adopted Otay Ranch GDP land uses village boundaries are different than those in the proposed project. Village Three North is within Village Three as shown in the Otay Ranch GDP and planned as an "Industrial" village. The Portion of Village Four is the same as the proposed project, with a portion designated as "Open Space," and a portion designated for "Community Park." No residential units were allocated to Village Three North or the Portion of Village Four by the Otay Ranch GDP. As discussed in Section 2.0, Introduction, and Section 3.0, Environmental Setting, the General Plan and Otay Ranch GDP designate Village Three North for Limited Industrial land uses in a business park setting that reflects the unique characteristics of the landform and surrounding development. A 1,000 foot nuisance easement area surrounds the Otay Landfill and extends into the northern portion of Village Three. General Plan Policy E 6.4 does not allow the placement of sensitive receptors, such as a residential land use, within 1,000 feet of a major toxic emitter. In the case of proposed Village Three North land uses, planned residential land uses are considered sensitive receptors and the landfill to the north of Village Three is considered a toxic emitter. Further, Village Three North was a part of the previously approved Village Two, Village Three and Portion of Village Four Sectional Planning Area (SPA) Plan which identified Village Three North for Industrial and CPF development.

The General Plan designates Village Eight East for residential uses including Residential Mixed Use, Residential Medium–High, Residential Low–Medium, Public and Quasi Public, Parks and Recreation, and Open Space. The Otay Ranch GDP designates Village Eight East as an urban village with single-family and multi-family residential, and a mixed-use village core. Under the Otay Ranch GDP, a portion of what is proposed as Village Eight East is within the Village Seven

SPA Plan boundary. This portion of Village Seven is designated as Open Space. The Otay Ranch GDP allocates Village Eight East a total of 928 residential units.

The General Plan designates Village Ten as part of the University Study Area. The village is designated Public and Quasi Public uses. The Otay Ranch GDP has two land uses identified for Village Ten. The primary land use designates Village Ten as Public and Quasi-Public for a university campus site; the secondary land use designates Village Ten as an urban village with single-family and multifamily residential, a mixed-use village core, and a community park. The Otay Ranch GDP allocates the secondary land use designation for Village Ten a total of 642 residential units.

This alternative includes generally the same development area as the proposed project (Figure 10-1); however, the land uses are reconfigured per the Otay Ranch GDP and no Give/Take is proposed to convert Preserve areas to development nor any development areas to Preserve. This alternative would not require an MSCP Preserve Boundary Adjustment or GDPA related to increased densities, circulation element modifications, and the allowance of residential land uses within the landfill nuisance easement area; however, as described further below in Land Use, a GPA would be required for residential land uses in Village Ten to be consistent with the Otay Ranch GDP land use.

A total of 1,570 residential units would be built under the Existing GP and GDP Alternative. Using a household coefficient of 3.24 persons per household, this alternative would increase the population by 5,087 people. Overall, this alternative would not provide enough housing for the projected growth anticipated in the region; therefore, this alternative would not meet the project objective of providing a wide variety of residential units to accommodate future growth.

1.5.3 Reduced Density Alternative

The Reduced Density Alternative would follow the same land use pattern as the proposed project, with the exception of having reduced maximum dwelling units for multi-family and mixed-use land uses. Instead of the proposed 45.0+ du/ac for multi-family land uses, the Reduced Density Alternative would assume the Otay Ranch GDP's maximum density of 18.0 du/ac for multi-family land uses; and instead of the proposed 44.4 du/ac for mixed-use land uses, the Reduced Density Alternative would assume the Otay Ranch GDP's maximum density of 27.0 du/ac for mixed-use land uses. Similar to the proposed project, the Reduced Density Alternative would also require a General Plan amendment, an Otay Ranch GDP amendment, and a MSCP Subarea Plan Boundary Adjustment as detailed below.

This alternative would include the same development area as the proposed project. The proposed project would result in 2,640 single-family dwelling units, 3,737 multi-family dwelling units, and 520 mixed-use dwelling units, for a total of 6,897 dwelling units. The Reduced Density Alternative would retain the 2,640 single-family dwelling units, but reduce the number of multi-family units to 1,413 multi-family dwelling units and would not provide any mixed-use dwelling units. Therefore,

the Reduced Density Alternative would have a decrease of 2,324 multi-family dwelling units, and a decrease of 520 mixed-use dwelling units, for a total reduction in dwelling units of 2,844 compared to the proposed project. Overall, the Reduced Density Alternative would have a 41% decrease in dwelling units and a 41% decrease in population compared to the proposed project. Further, because of the decrease in dwelling units and population, the Reduced Density Alternative would reduce the amount of park demand such that the Village Eight East Community Park (P-2) would not be developed, thus, this alternative would not be compliant with project objectives.

1.5.4 Nuisance Easement Alternative

General Plan Policy E 6.4 does not allow the placement of sensitive receptors within 1,000 feet of a major toxic emitter. In the case of proposed Village Three North land uses, planned residential land uses are considered sensitive receptors and the landfill to the north of Village Three is considered a toxic emitter. The landfill property's southern boundary is within approximately 450 feet of planned residential land uses within Village Three North and the active landfill[2] is approximately 700 feet away from planned residential land uses.

The Nuisance Easement Alternative would remove residential land uses within 1,000 feet from the active portion of the Otay Landfill. This Nuisance Easement Alternative has been developed to comply with the City of Chula Vista General Plan Policy E 6.4, which does not allow sensitive receptors within 1,000 feet of a "toxic emitter." Per direction from City staff, this alternative has been evaluated at the project level to provide an actionable item for the decision making body, should this become the preferred plan.

The Nuisance Easement Alternative would only affect Village Three North and there would be no changes to the Portion of Village Four, Village Eight East, or Village Ten. Therefore, all discretionary actions, impacts and conclusions, and mitigation measures related to these villages as discussed in Section 4.0 and Section 5.0 are identical to the proposed project. In Village Three North this alternative plan includes the same number of overall units as the proposed Village Three North project and the development area is identical to the proposed project (i.e., no additional grading areas), the following differences exist between the proposed project and this alternative land plan for Village Three North:

- The single-family neighborhoods north of Tributary Street and between Santa Maya and Santa Picacho (proposed project neighborhoods R-1, R-4 and R-5) would be replaced by MF-18, Mixed Use Residential/Commercial neighborhood MU-1 and Neighborhood Park P-1. As shown in Figure 10-3, the 1,000-foot setback from the active portion of the landfill bisects the mixed use pad (MU-1). The Nuisance Easement Alternative would

[2] The "active portion" of the landfill is defined as cells which have accepted waste but have not undergone final closure. This represents portions of the landfill which could become the "working face," or the area being filled with waste.

designate non-residential commercial and park uses on the north side of this line, and multi-family residential uses on the south side of this line.

- The single family neighborhoods Tributary Street "C" and west of Santa Maya (proposed project neighborhoods R-2, R-3 and R-6) would be converted to Multi-Family neighborhood R-17 and Open Space (O-4).
- The former MU-2a – 2f (Mixed Use Commercial/Office) and CPF-1 site north of Tributary Street between Santa Picacho and Santa Macheto would be revised to MU-2/CPF-1 and MU-3, which would allow for Mixed Use with non-residential uses north of the 1,000' setback and multi-family residential uses on the south side of the setback.
- The School site would move to the proposed project's P-1 Neighborhood Park site. The proposed project's S-1 Elementary School site would be converted to neighborhood R-10 and lotted as single family homes.
- The proposed project's O-1 Office site would be converted to a Commercial site (C-1) and would be slightly increased to coincide with the 1,000-foot setback. As a result of this increase the proposed project's R-21a – c multi-family site would be reduced and become neighborhood R-16 under the Nuisance Easement Alternative.

The Nuisance Easement Alternative would meet all the project objectives. This alternative is superior to the proposed project because it would not result in the development of residential units within the nuisance easement area of the Otay Landfill. Therefore, fewer sensitive receptors would be exposed to landfill odors.

1.5.5 Otay SRP Alternative

The Otay Subregional Plan (SRP) Alternative depicts the County of San Diego's primary land uses for Villages Three North, the Portion of Four, Eight East and Ten (Figure 10-4). The Otay SRP Alternative is consistent with the land uses and village boundaries that currently exist in the Otay Ranch GDP with the exception of Village Three. The Otay Ranch GDP designates industrial land uses in Village Three and does not designate any residential land uses. Conversely, the Otay SRP does designates industrial land uses in Village Three North (as part of Planning Area 18-B) and also include residential land uses. The land uses designated, as well as the number of dwelling units allocated, in a Portion of Village Four, Village Eight East, and Village Ten are the same under the Otay SRP as they are in the Otay Ranch GDP. Therefore, this analysis will focus on the difference between the Otay Ranch GDP and Otay SRP for the Village Three North area.

The General Plan designates industrial land uses within Village Three and does not designate any residential land uses, similar to the Otay Ranch GDP. Under the County Otay SRP, Village Three is allocated 613 single-family dwelling units and 128 multi-family dwelling units, for a

total of 741 dwelling units. Using a household coefficient of 3.24 persons per household, this alternative would result in approximately 2,401 people in Village Three. In comparison to the proposed project, the Otay SRP Alternative would result in a decrease 4,586 dwelling units, which would result in the reduction of the population by 14,858 people. The Otay SRP Alternative would also implement Planning Area 18-B (which was incorporated as part of Village Three in the Otay Ranch GDP) which calls for 69.7 acres of Industrial uses west of Heritage Road.

1.5.6 Environmentally Superior Alternative

The No Project Alternative would result in the least environmental impacts and would be the environmentally superior alternative. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. In this case, the environmentally superior alternative is the Nuisance Easement Alternative. The Nuisance Easement Alternative meets all of the projects goals and objectives and eliminates potential hazards associated with the Otay Landfill by not developing any residential units within ~~the~~ 1,000 feet of the active portion of the Otay Landfill~~nuisance easement area~~.

1.6 SUMMARY TABLES

Table 1-3
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
5.1 Land Use			
Would the project physically divide an established community of be incompatible with adjacent and surrounding uses?	The proposed project could result in a potentially significant land use compatibility impact if the on-site City of San Diego waterlines would not be relocated before development of Village Eight East and Village Ten.	MM LU-1 Prior to approval of the mass grading permit for Village Eight East and Village Ten, the mass grading plans shall include the relocation of the City of San Diego waterlines to the satisfaction of the City of San Diego and the City of Chula Vista. MM LU-2 Prior to approval of the first Final Map in Village Eight East ~~and in Village Ten~~, the Applicant shall provide evidence satisfactory to the Development Services Director (or their designee) that the: 1. Applicant has entered into an agreement with the City of San Diego to relocate the City of San Diego waterlines within Villages Eight East within the right-of-way of future Otay Valley Road, as approved by both the City of San Diego and the City of Chula Vista. The pipeline relocation work contemplated by said agreement shall be secured with the City of Chula Vista listed as a third party beneficiary of the bonds. 2. The City of San Diego has abandoned, or is required to abandon, any water main easements not needed as a consequence of the relocation of the City of San Diego waterlines within Village Eight East and entered into a Joint Use agreement for the new location of the facility within the City of Chula Vista right of way of future Otay Valley Road. Prior to the Final Map approving the 1,200th Residential Dwelling Unit (Single Family and/or Multi-Family Residential) for Village Eight East, the new water line shall be constructed. MM LU-3 Prior to approval of the first Final Map in Village Ten, the Applicant shall provide evidence satisfactory to the Development Services Director (or their designee) that the: 1. Applicant has entered into an agreement with the City of San Diego to relocate the City of San Diego waterlines within Village Ten within the right-of-way of future Otay	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		Valley Road, as approved by both the City of San Diego and the City of Chula Vista. The pipeline relocation work contemplated by said agreement shall be secured with the City of Chula Vista listed as a third party beneficiary of the bonds. 2. The City of San Diego has abandoned, or is required to abandon, any water main easements not needed as a consequence of the relocation of the City of San Diego waterlines within Village Ten and entered into a Joint Use agreement for the new location of the facility within the City of Chula Vista right of way of future Otay Valley Road. Prior to the Final Map approving the 580th Residential Dwelling Unit (Single Family and/or Multi-Family Residential) for Village Ten, the new water line shall be constructed.	
Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	The project would conflict with the land use designations in the City's adopted General Plan and Otay Ranch GDP. Upon adoption of the proposed amendments to the General Plan and GDP, impacts would be considered less than significant. The project is also consistent with the Parks and Recreation Master Plan, OVRP Concept Plan, Greenbelt Master Plan, and ALUCP. the proposed project would not be consistent with the intent under General Plan Policy E 6.4 (as will be corrected) to avoid siting or approving residential land uses within 1,000 of a major toxic air emitter. Therefore, a potentially significant impact related to consistency with the General Plan would occur.	MM LU-4 Prior to approval of each residential building permit in Village Three North and a Portion of Village Four, the applicant shall provide evidence satisfactory to the Development Services Director (or their designee) that each proposed residential unit to be constructed shall be located at least 1,000 feet away from the then active solid waste disposal areas of the Otay Landfill as required by General Plan Policy E 6.4 (as ~~will be~~ corrected) and by Section 2.5 of the Amended and Restated Otay Landfill Expansion Agreement. Notwithstanding the typically ministerial nature of building permit approvals, the City shall have and retain discretion here to deny any building permit application regarding any residential lot or parcel that does not comply with this Mitigation Measure.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Would the project conflict with any applicable habitat conservation plan or natural community habitat conservation plan?	No significant impacts related to Habitat Conservation Plans or Natural Community Conservation Plans have been identified for implementation of the proposed project.	No mitigation required.	No Impact.
5.2 Landform and Aesthetics			
Would the project have a substantial adverse effect on a scenic vista?	The proposed project would not have a substantial adverse effect on a scenic vista. Impacts would be less than significant.	No mitigation required.	Less than significant.
Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No significant impacts to scenic resources within a state scenic highway have been identified; impacts would be less than significant.	No mitigation required.	Less than significant.
Would the project substantially degrade the existing visual character or quality of the site and its surroundings?	The project would permanently alter the character of the project site from open, rolling topography to urban development. This impact would be potentially significant prior to mitigation.	MM AES-1 Prior to issuance of the first Final Maps for Village Three North, Village Eight East, and Village Ten, the Applicant shall prepare to the satisfaction of the Development Services Director (or their designee), a Landscape Master Plan. The Landscape Master Plan shall demonstrate compliance with Otay Ranch GDP Policies pertaining to softening manufactured slopes, particularly on visible manufactured slopes greater than 25 feet in height, through plant selection, placement, and density, etc. The Landscape Master Plan shall also demonstrate compliance with Otay Ranch GDP Policies pertaining to blending development harmoniously with natural features of the land including the OVRP and its major canyons.	Significant and unavoidable
Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	New lighting installed at parks, mixed-use residential and commercial buildings, multi-family residential, and CPF uses may be incompatible with surrounding development and inconsistent with applicable regulations. Future lighting and shade and shadow impacts cannot be determined at this time because the	MM AES-2 Concurrent with the preparation of site-specific plan(s) for park sites and prior to issuance of a building permit for any park, the Applicant shall prepare, or in the case of the City being the lead on the preparation of the site specific plan, the Applicant shall fund the preparation of a lighting plan and photometric analysis. The plan shall be prepared to the satisfaction of the Development Services Director (or their designee) and evaluate the proposed height, location, and intensity of all exterior lighting	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
	location, size, and orientation of future buildings are not yet known. Therefore, these impacts are considered potentially significant prior to mitigation.	for compliance with the City's performance standards for light, and glare (Chula Vista Municipal Code19.66.100). MM AES-3 Concurrent with design review and prior to the issuance of building permits for mixed-use residential, commercial, Community Purpose Facility and multi-family residential, the Applicant shall prepare a lighting plan and photometric analysis. The plan shall be prepared to the satisfaction of the Development Services Director (or their designee) and evaluate the proposed height, location, and intensity of all exterior lighting for compliance with the City's performance standards for light, and glare (Chula Vista Municipal Code19 19.66.100). MM AES-4 Prior to design review approval for any structure ~~four~~ three stories and above, the Applicant shall prepare to the satisfaction of the Development Services Director (or their designee), a shadow analysis demonstrating that adjacent shadow-sensitive uses are not permanently shadowed, and/or any other approved city-standard in place at the time the shadow analysis is performed.	
Would the project alter areas of sensitive landforms and grade steep slopes that may be visible from future development and roadways that negatively detract from aesthetic character of the site or surrounding area?	The project would not significantly impact steep slopes; however, landform alterations and the visibility of these alterations from future development and roadways are considered potentially significant prior to mitigation.	See mitigation measure MM AES-1.	Less than significant.
Would the project be inconsistent with General Plan, Otay Ranch GDP or other objectives and policies regarding visual character thereby resulting in a significant physical impact?	The project would be consistent with all applicable visual character policies. Impacts would be less than significant.	No mitigation required	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
5.3 Transportation, Circulation, and Access			
Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersection)?	The project would result in direct impacts related to access and frontage, and circulation system assumptions in Year 2015, Year 2020, Year 2025, and Year 2030 conditions. The project would result in direct and cumulative impacts to intersections, roadway segments, freeway/state highways in Year 2020, Year 2025, and Year 2030 conditions. The project would result in significant and unavoidable cumulative impacts in Year 2020, Year 2025, and Year 2030 conditions. Mitigation measures are included to reduce direct and cumulative impacts, but they would not be mitigated to a level below significance. Some impacts remain significant due to infeasible mitigation (see Section 5.3.6 and/or Section 8.0). In the event that the proposed project is not phased in accordance with the assumed phasing schedule as identified in Table 4.3, potentially significant impacts could occur.	**MM TCA-1** Prior to the issuance of the building permit for the 2,463rd DU for development east of I-805 commencing from April 4, 2011, the Applicant may: a. Prepare a traffic study that demonstrates, to the satisfaction of the City Engineer, that the circulation system has additional capacity without exceeding the GMO traffic threshold standards. b. Demonstrate that other improvements are constructed which provide the additional necessary capacity to comply with the GMO (Chapter 19.09 of the Chula Vista Municipal Code) traffic threshold to the satisfaction of the City Engineer. c. Agree to the City Engineer's selection of an alternative method of maintaining GMO traffic threshold compliance. d. Enter into agreement, approved by the City, with other Otay Ranch developers that alleviates congestion and achieves GMO traffic threshold compliance for Olympic Parkway. The agreement will identify the deficiencies in transportation infrastructure that will need to be constructed, the parties that will construct said needed infrastructure, and a timeline for such construction, as well as providing assurances for construction, in accordance with the City's customary requirements, for said infrastructure. If GMO compliance cannot be achieved through 1a, 1b, 1c, or 1d, then the City may, in its sole discretion, stop issuing new building permits within the project area, after building permits for 2,463 DU have been issued for any development east of I-805 after April 4, 2011, until such time that GMO traffic threshold standard compliance can be assured to the satisfaction of the City Manager.	Significant and unavoidable.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		These measures shall constitute full compliance with growth management objectives and policies in accordance with the requirements of the General Plan, Chapter 10, and with regard to traffic thresholds set forth in the GMO. MM TCA-2 Project Applicant shall construct the access and frontage improvements consistent with the triggers identified in Table 5.3-56 to the satisfaction of the Development Services Director and the City Engineer. MM TCA-3 The year 2015 scenario assumes the following intersection and roadway improvements are in place: • Phase 1 of the I-805 South Project, including improvements to I-805 between Home Avenue and East Palomar Street • Heritage Road, south of Main Street to the Chula Vista city limit as a 4-lane Major Road If the project equivalent dwelling unit limit of 611th EDU is exceeded prior to these improvements being constructed and open to traffic, then one of the following steps shall be taken, each to the satisfaction of the City Engineer: i. Development in Village Three and the Portion of Village ii. Four shall stop until those assumed future roadways are constructed by others as presently planned; or iii. City and the Applicant shall meet to determine the need for the incomplete roadway segments. Because a number of factors, including changes to the tolling structure at SR-125, may affect future traffic patterns in Otay Ranch, additional traffic analysis of the roadway network and levels of service assessment may be necessary at that time to determine: (i) if such improvements are in fact necessary; and (ii) the scope and timing of additional circulation improvements, if any; or iv. Applicant shall construct the missing roadway links and	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		receive a transportation development impact fee credit for those improvements as applicable; or v. An alternative measure is selected by the City in accordance with the City of Chula Vista Growth Management Ordinance (GMO) (Chapter 19.09 of the Chula Vista Municipal Code). Direct Impact Mitigation **MM TCA-4 Intersections**: I-805 SB Ramps / Olympic Parkway (CV), I-805 NB Ramps / Olympic Parkway (CV), and Brandywine Avenue / Olympic Parkway (CV); **Roadways**: Olympic Parkway, between I-805 SB Ramps and I-805 NB Ramps (CV); Olympic Parkway, between I-805 NB Ramps and Oleander Avenue (CV); Olympic Parkway, between Oleander Avenue Brandywine Avenue (CV); and Olympic Parkway, between Brandywine Avenue and Heritage Road (CV) – Prior to issuance of the Final Map that contains the 956th equivalent dwelling unit (EDU) in Village Three North, the Project Applicant shall construct Heritage Road, between Olympic Parkway and Main Street, as a Six-Lane Prime Arterial. I-805 NB Ramps / Olympic Parkway, and Brandywine Avenue / Olympic Parkway would be reduced to less than significant by this mitigation measure. Additionally, the impacts identified on Olympic Parkway between the I-805 SB Ramps and I-805 NB Ramps; Olympic Parkway between the I-805 NB Ramps and Oleander Avenue; Olympic Parkway between Oleander Avenue and Brandywine Avenue; and, Olympic Parkway between Brandywine Avenue and Heritage Road also would be reduced to less than significant with implementation of this mitigation measure. The impact at the intersection of I-805 SB Ramps / Olympic Parkway (CV) will remain significant and unavoidable at this location.	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		Impacts identified at the intersections of I-805 NB Ramps / Olympic Parkway (CV), and Brandywine Avenue / Olympic Parkway (CV) would be reduced to less than significant. Impacts identified on the roadways listed above would all be reduced to less than significant with implementation of this mitigation measure. MM TCA-5 Heritage Road / Main Street (all-way stop controlled) (CV) – Prior to issuance of the Final Map that contains the 751st EDU in Village Three North, the Project Applicant shall signalize Heritage Road / Main Street intersection. MM TCA-6 La Media Road (SB) / Main Street (WB) (all-way stop controlled) (CV) – Prior to issuance of the Final Map that contains the 880th EDU in Village Eight East, the Project Applicant shall signalize the La Media Road (SB) /Main Street (WB) intersection. MM TCA-7 La Media Road (NB) / Main Street (WB) (all-way stop controlled) (CV) – Prior to issuance of the Final Map that contains the 880th EDU in Village Eight East, the Project Applicant shall signalize the La Media Road (NB) /Main Street (WB) intersection MM TCA-8 La Media Road (SB) / Main Street (EB) (all-way stop controlled) (CV) – Prior to issuance of the Final Map that contains the 880th EDU in Village Eight East, the Project Applicant shall signalize the La Media Road (SB) /Main Street (EB) intersection. MM TCA-9 La Media Road (NB) / Main Street (EB) (all-way stop controlled) (CV) – Prior to issuance of the Final Map that contains the 880th EDU in Village Eight East, the Project Applicant shall signalize the La Media Road (NB) / Main Street (EB) intersection.	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		MM TCA-10 Magdalena Avenue / Main Street (one-way stop controlled) (CV) – Prior to issuance of the Final Map that contains the 1,693rd EDU in Village Eight East, the Project Applicant shall signalize the Magdalena Avenue / Main Street intersection. Cumulative Impact Mitigation Orange Avenue, between Melrose Avenue and I-805 SB Ramps - Due to right-of-way constraints there are no feasible mitigation measures to reduce the cumulative impact at Orange Avenue, between Melrose Avenue and I-805 SB Ramps. The impact will remain cumulatively significant and unavoidable at this location. . MM TCA-11 The year 2020 scenario assumes the following intersection and roadway improvements are in place: • Heritage Road, south of Main Street to the Chula Vista city limit as a 6-lane Prime Arterial • Otay Lakes Road between H Street and Telegraph Canyon Road as a 6-lane Prime Arterial • Quarry Driveway (Int #65) @ Main Street as an all-way stop controlled intersection If the first Final Map containing the 4,070th EDU is submitted for approval prior to these improvements being constructed and open to traffic, then one of the following steps shall be taken each to the satisfaction of the City Engineer: i. Development in Village Three and the Portion of Village Four and Village Eight East shall stop until those assumed future roadways are constructed by others as presently planned; or ii. City and the Applicant shall meet to determine the need for the incomplete roadway segments. Because a number of factors, including changes to the tolling structure at SR-125, may affect	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		future traffic patterns in Otay Ranch, additional traffic analysis of the roadway network and levels of service assessment may be necessary at that time to determine: (i) if such improvements are in fact necessary; and (ii) the scope and timing of additional circulation improvements, if any; or iii. Applicant shall construct the missing roadway links and receive a transportation development impact fee credit for those improvements as applicable; or iv. An alternative measure is selected by the City in accordance with the City of Chula Vista Growth Management Ordinance (GMO) (Chapter 19.09 of the Chula Vista Municipal Code). Direct Impact Mitigation **MM TCA-12 Intersections**: Heritage Road / Olympic Parkway (CV) and La Media Road / Olympic Parkway (CV); **Roadways**: Olympic Parkway, between Heritage Road and Santa Venetia Street (CV); and Heritage Road, between East Palomar Street and Olympic Parkway (CV) – Prior to the issuance of each building permit, the Project Applicant shall pay the appropriate Transportation Development Impact Fees (TDIF) for the construction of Main Street, between Heritage Road and La Media Road, as a Six-Lane Prime Arterial, including the construction of Main Street bridge, the signalization of Quarry Driveway / Main Street (Int #65), and the signalization of Village Three North R-20 Driveway / Main Street (Int #66). The project will signalize the intersection of Village Three North R-20 Driveway / Main Street (Int #66) in conjunction with the construction of Main Street, while the TDIF program will signalize the intersection of Quarry Driveway / Main Street (Int #65). The analysis shows the need for Main Street from the Heritage Road to La Media Road is triggered by the 4,737th EDU. If the project equivalent dwelling unit limit of 4,736 EDU is reached prior to this roadway segment being constructed and open to traffic, then one	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		of the following steps shall be taken as determined by the City Engineer: i. Development in Villages Three North, Eight East, and Ten shall stop until the future roadway is constructed by the City; or ii. City and the Applicant shall meet to determine the need for the incomplete roadway segments. Because a number of factors, including changes to the tolling structure at SR-125, may affect future traffic patterns in Otay Ranch, additional traffic analysis of the roadway network and levels of service assessment may be necessary at that time to determine: (i) if such improvements are in fact necessary; and (ii) the scope and timing of additional circulation improvements, if any; or iii. Applicant shall construct the missing roadway link and receive a transportation development impact fee credit for the improvements as applicable; or iv. An alternative measure is selected by the City in accordance with the City of Chula Vista Growth Management Ordinance. v. All to the satisfaction of the City Engineer. ~~Prior to the Final Map containing the 4,737th EDU, the Project Applicant shall pay the appropriate Transportation Development Impact Fees (TDIF) for the construction of Main Street, between Heritage Road and La Media Road, as a Six-Lane Prime Arterial, including the construction of Main Street bridge, , the signalization of Quarry Driveway / Main Street (Int #65), and the signalization of Village Three North R-20 Driveway / Main Street (Int #66). The project will signalize the intersection of Village Three North R-20 Driveway / Main Street (Int #66) in conjunction with the construction of Main Street, while the TDIF program will signalize the intersection of Quarry Driveway / Main Street (Int #65).~~ The segment of Main Street between Heritage Road and La Media Road will provide an important direct east-west linkage and reduce traffic along Heritage Road – Olympic Parkway – La Media Road, thereby improving operations at the Heritage Road / Olympic Parkway	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		intersection to acceptable levels and reducing the identified impact to less than significant. Cumulative Impact Mitigation I-805 SB Ramps / Olympic Parkway (CV) –mitigation is infeasible and the impact at this location will remain cumulatively significant and unavoidable at this location. Orange Avenue, between Melrose Avenue and I-805 SB Ramps (CV) –mitigation is infeasible and the impact will remain cumulatively significant and unavoidable at this location. Direct Impact Mitigation **MM TCA-13 Intersection**: Discovery Falls Drive / Hunte Parkway (CV) – Prior to issuance of the 1,295th EDU of Village Ten, the Project Applicant shall construct a dedicated right-turn lane at the northbound Discovery Falls Drive approach to the Discovery Falls Drive/Hunte Parkway intersection. Cumulative Impact Mitigation I-805 SB Ramps / Olympic Parkway (CV) –mitigation is infeasible and the impact will remain cumulatively significant and unavoidable at this location. Orange Avenue, between Melrose Avenue and I-805 SB Ramps (CV)– mitigation is infeasible and the impact will remain cumulatively significant and unavoidable at this location. **MM TCA-14** I-805 Northbound On-Ramp at Main Street - Prior to project buildout, the Project Applicant shall work with Caltrans to, and Caltrans can and should, adjust the ramp meter rate at the I-805 northbound on ramp at Main Street such that the ramp meter reflects the additional vehicle traffic attributable to the project.	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		MM TCA-15 The Project Applicant shall incorporate the following measures as part of the project design and development, consistent with the identified triggers, to the satisfaction of the Development Services Director: • Implement pedestrian circulation improvements to improve the internal pedestrian circulation and encourage the usage of public transportation (concurrent with the approval of improvement plans for each village). • Implement bicycle circulation improvements to improve internal bicycle circulation and encourage the usage of bicycles (concurrent with the approval of improvement plans for each village). • Participate in car sharing and bike sharing programs through HOA noticing, should such programs become available. • Promote Carpool/Vanpool programs by providing preferential parking for carpools and vanpools (concurrent with the approval of site plans for each village core). • Promote available websites providing transportation options for residents and businesses (concurrent with issuance of certificate of occupancy). • Create and distribute a “new resident” information packet addressing alternative modes of transportation (concurrent with issuance of certificate of occupancy). • Promote programs to encourage workplace peak hour trip reduction, including staggered work hours, regional ride-matching services, and telecommuting (concurrent with issuance of certificate of occupancy). • Orient buildings to the main street or activity area, such that they are not separated from the street by vast parking areas or fences, thereby encouraging pedestrian traffic (concurrent with the approval of site plans for each village core). • Where transit is available on-site, participate in providing the necessary transit facilities, such as bus pads, shelters, signs,	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		lighting, and trash receptacles (concurrent with the approval of improvement plans for each village). • Coordinate with the MPO as to the future siting of transit stops/stations within the project site (concurrent with the approval of improvement plans, and/or site plans, for each village). MM TCA-16 The year 2030 scenario assumes the following intersection and roadway improvements are in place: • Main Street between SR-125 right-of-way (western boundary) and Eastlake Parkway/University Drive; is constructed as a 6-lanes Gateway Street (6,432nd EDU) • SR-125 / Main Street interchange constructed (6,432 EDU) • Otay Valley Road constructed between SR-125 right-of-way (western boundary) and Village Nine Street "B" (Int #74), including an overpass at SR-125 (7,767th EDU). If the project equivalent dwelling unit limit of EDUs identified above is submitted for approval prior to the respective improvements being constructed and open to traffic, then one of the following steps shall be taken each to the satisfaction of the City Engineer: i. Development in Village Three and Portion of Village Four, Village Eight East, and Village Ten shall stop until those assumed future roadways are constructed by others as presently planned; or ii. City and the Applicant shall meet to determine the need for the incomplete roadway segments. Because a number of factors, including changes to the tolling structure at SR-125, may affect future traffic patterns in Otay Ranch, additional traffic analysis of the roadway network and levels of service assessment may be necessary at that time to determine: (i) if such improvements are in fact necessary; and (ii) the scope and timing of additional circulation improvements, if any; or iii. Applicant shall construct the missing roadway links an receive	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		a transportation development impact fee credit for those improvements as applicable; or iv. An alternative measure is selected by the City in accordance with the City of Chula Vista Growth Management Ordinance (GMO) (Chapter 19.09 of the Chula Vista Municipal Code). MM TCA-17 The proposed project shall be implemented, or phased, consistent with the development timeframe set forth in Project Description Table 4-3. In the event that project development substantially deviates from the phasing set forth in Table 4-3 (e.g., Village Three being built first, followed by Village Eight East and then Village Ten), the Applicant, or its designee, shall conduct additional environmental analysis consistent with the requirements of CEQA and as approved by the Development Services Director, or designee. Additional analysis may include a supplemental traffic study that analyzes the potential traffic circulation impacts associated with the phasing deviation, and identifies new circulation improvements or other mitigation measure(s), if needed.	
Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	See response to first Traffic, Circulation, and Access threshold standard.	See response to first Traffic, Circulation, and Access threshold standard.	Significant and unavoidable.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	The project would not significantly impact air traffic patterns.	No mitigation required.	Less than significant.
Would the project substantially increase hazards due to a design feature or incompatible uses?	The proposed circulation network would be consistent with the City's Street Design Standards, therefore the proposed project would not increase hazards due to a design feature or incompatible uses.	No mitigation required.	Less than significant.
Would the project result in inadequate emergency access?	The internal roadways, along with access points, would be designed per City standards, which would ensure design consideration for emergency vehicles. Compliance with street design standards, along with six Village access points and proximity of Fire Station No. 7 would result in less than significant impacts.	No mitigation required.	Less than significant.
Would the project be inconsistent with the General Plan, Otay Ranch GDP, ordinances or policies establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non –motorized travel and relevant components of the circulation system including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	The project would not conflict with any applicable General Plan or Otay Ranch GDP policies.	No mitigation required.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
5.4 Air Quality			
Would the project conflict with or obstruct implementation of the applicable air quality plan or General Plan policies?	The proposed project would result in an increase in land use intensity and associated increase in vehicle trips that have not been anticipated in the applicable air quality plans. Therefore, the proposed project would be not be consistent with the SIP and RAQS, and impacts would be significant and unavoidable.	No feasible mitigation.	Significant and unavoidable.
Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Daily construction emissions for CO and SO_x, would not exceed the City's significance thresholds. However, the VOC, NO_x, PM_{10} and $PM_{2.5}$ emissions associated with project construction would exceed the City of Chula Vista's emission threshold and impacts would be significant and unavoidable. Daily operational emissions for SO_x would not exceed the City's significance thresholds. However, the VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$ emissions associated with operation of the project would exceed the City of Chula Vista's significance thresholds. This impact, therefore, is considered significant and unavoidable.	MM AQ-1 Prior to approval of any grading permits, the Project Applicant or its designee shall place the following on all grading plans to the satisfaction of the Development Services Director and City Engineer, and these requirements shall be implemented during grading of each phase of the project to minimize NO_x emissions: • Minimize simultaneous operation of multiple construction equipment units. During construction, vehicles in loading and unloading queues shall turn their engines off when not in use to reduce vehicle emissions; • All construction equipment shall be outfitted with best available control technology (BACT) devices certified • by CARB. A copy of each unit's BACT documentation shall be provided at the time of mobilization of each applicable unit of equipment; • All construction equipment shall be properly tuned and maintained in accordance with manufacturer's specifications; • All diesel-fueled, on-road construction vehicles shall meet the emission standards applicable to the most current year to the greatest extent possible. To achieve this standard, new vehicles shall be used, or older vehicles shall use post-combustion controls that reduce pollutant emissions to the greatest extent feasible;	Significant and unavoidable.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		• The effectiveness of the latest diesel emission controls is highly dependent on the sulfur content of the fuel. Therefore, diesel fuel used by on- and off-road construction equipment shall be low sulfur (less than 15 ppm) or other alternative, low-polluting diesel fuel formulation; • The use of electrical construction equipment shall be employed where feasible; • The use of catalytic reduction for gasoline-powered equipment shall be employed where feasible; • The use of injection timing retard for diesel-powered equipment shall be employed where feasible. MM AQ-2 Prior to approval of any grading permits, the Project Applicant or its designee shall place the following Standard Construction Best Management Practices (BMPs) on all grading plans to the satisfaction of the Development Services Director and City Engineer and shall implement these BMPs during project construction to minimize PM_{10} and $PM_{2.5}$ emissions, including: • Water, or utilize another acceptable SDAPCD dust control agent on, the grading areas at least twice daily to minimize fugitive dust; • Stabilize grading areas as quickly as possible to minimize fugitive dust; • Apply chemical stabilizer or pave the last 100 feet of internal travel path within the construction site prior to public road entry; • Install wheel washers adjacent to a paved apron prior to vehicle entry on public roads; • Remove any visible track-out into traveled public streets within 30 minutes of occurrence; • Wet wash the construction access point at the end of the workday if any vehicle travel on unpaved surfaces has occurred;	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		• Provide sufficient perimeter erosion control to prevent washout of silty material onto public roads; • Cover haul trucks or maintain at least 12 inches of freeboard to reduce blow-off during hauling; • Suspend all soil disturbance and travel on unpaved surfaces if winds exceed 25 miles per hour (mph); • Cover/water on-site stockpiles of excavated material; • Enforce a 20 mph speed limit on unpaved surfaces; • Pave permanent roads as quickly as possible to minimize dust; • During construction, site grading activities within 500 feet of a school in operation shall be discontinued or all exposed surfaces shall be discontinued or all exposed surfaces shall be watered to minimize dust transport off site to the maximum degree feasible, when the wind velocity is greater than 15mph in the direction of the school; • During blasting, utilize control measures to minimize fugitive dust. Control measures may include, but are not limited to, blast enclosures, vacuum blasters, drapes, water curtains or wet blasting.	
Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	The project's contribution to cumulative construction and operational emissions of VOC, NO_x, PM_{10} and $PM_{2.5}$ and would be significant and unavoidable even with implementation of MM AQ-3.	No feasible mitigation.	Significant and unavoidable.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Would the project expose sensitive receptors to substantial pollutant concentrations?	Impacts specific to TACs, including diesel particulate matter generated from traffic volumes on SR-125, would be less than significant. With respect to the development of on-site land uses, impacts arising from the emission of TACs would be potentially significant if the site is developed to accommodate any light industrial uses, gas stations, or dry cleaning facilities in close proximity to sensitive receptors. Neither the state 1-hour standard nor the 8-hour standard would be equaled or exceeded at any of the intersections studied; potential CO hotspot impacts would be less than significant.	MM AQ-3 Prior to approval of the building permit for any uses that are regulated for TACs by the SDAPCD, the Project Applicant shall demonstrate to the satisfaction of the Development Services Director (or their designee) that the use complies with established criteria (such as those established by SDAPCD Rule 1200 and CARB). Also, gas stations shall not be located within 50 feet of a sensitive receptor, in accordance with CARB's siting recommendations.	Less than significant.
Would the project create objectionable odors affecting a substantial number of people?	The proposed project would not create significant odors during construction and operations. Impacts would be less than significant.	No mitigation required.	Less than significant.
5.5 Noise			
Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the Chula Vista General Plan or noise ordinance, or applicable standards of other agencies?	The project would result in potentially significant impacts due to the exposure of sensitive receptors to noise levels in excess of established thresholds.	Also see mitigation measures MM BIO-17 and MM BIO-18. MM NOI-1 Site-Specific Acoustical Analysis – Single- and Multi-Family Residential Development - Exterior. Prior to the approval of rough grading permits for residential development adjacent to Main Street and Heritage Road (Village Three), Otay Valley Road, SR-125 and Main Street (Village Eight), and Discovery Falls Drive and University Drive (Village Ten), the Project Applicant or its designee shall: (i) prepare a site-specific acoustical study based on the Final Map design; (ii) construct noise barriers as specified below; and (iii) implement any additional noise control measures recommended as a result of the analysis necessary to achieve compliance with the City's Land Use/Noise Compatibility Guidelines and the City's	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		Noise Ordinance (Municipal Code Section 19.68) for exterior noise sensitive land uses. Implementation of all recommended measures shall be to the satisfaction of the Development Services Director (or their designee) and all required noise control measures shall be made conditions of grading permit issuance. The acoustical study shall include, but not be limited to the following: 1. Specification of the location, height, and building material to be used for the noise barriers to be constructed in accordance with Figures 12, 13 and 14 (Approximate Sound Wall Locations), contained in the Noise Assessment Technical Report for the Otay Ranch University Villages Project (Dudek 2014). The sound wall noise barriers shall be a minimum of six feet in height, must have a surface density of at least four pounds per square foot, and be free of openings and cracks (with the exception of expansion joints gaps and other construction techniques, which could create an opening or crack). The wall may be constructed of acrylic glass, masonry material, earthen berm, or a combination of these materials. Heights are provided relative to final pad elevation. Required heights may be achieved through construction of walls, berms or a wall/berm combination; 2. A detailed analysis that demonstrates that barriers and/or setbacks have been incorporated into the project design, such that noise exposure to residential receivers placed in all useable outdoor areas, including multi-family residential patios and balconies, are at or below 65 dBA CNEL. Measures to reduce noise levels may include, but are not limited to, setback of structures from the roadway, installing acoustic barriers, or orienting outdoor activity areas away from roadways so that surrounding structures provide noise attenuation; and	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		3. Should pad grade elevations, lot configuration/site design, and/or traffic assumptions change during the processing of any Final Maps, the barriers shall be refined to reflect those modifications. MM NOI-2 Site-Specific Acoustical Analysis – Single-Family Residences - Interior. Concurrent with design review and prior to the approval of building permits for single-family residential development where the exterior noise level exceeds 60 dBA CNEL as indicated in the Noise Assessment Technical Report for the Otay Ranch University Villages Project (Dudek 2014), the Applicant or its designee shall: (i) prepare a site-specific acoustical analysis identifying those noise control measures necessary to ensure that interior noise levels due to exterior noise sources will be at or below 45 dBA CNEL; and (ii) implement all measures recommended as a result of the analysis necessary to achieve compliance with the City's Land Use/Noise Compatibility Guidelines and the City's Noise Ordinance (Municipal Code Section 19.68) for single-family residential interior uses. This mitigation measure shall apply to neighborhoods R-1, R-2, R-9, R-11 and R-20 in Village Three North; and neighborhoods R-11a and R-13 in Village Eight East where exterior noise levels exceed 60 dBA CNEL. Measures to reduce noise levels may include, but are not limited to, setback of structures from the roadway, installing acoustic barriers, or orienting outdoor activity areas away from roadways so that surrounding structures provide noise attenuation. The analysis shall also demonstrate that barriers or setbacks have been incorporated into the project design, such that, when considered with proposed construction specifications, ground level and upper story interior noise levels shall not exceed 45 dBA CNEL. Roof-ceiling assemblies making up the building envelope shall have a sound transmission class value of at least 50, and exterior	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		windows shall have a minimum sound transmission class of 30 in compliance with the California Green Building standards code. Design-level architectural plans shall be used to assess the exterior-to-interior transmissions loss for habitable rooms. Contingent upon the results of the interior acoustical analysis, the units may need to include an air conditioning system to provide a habitable interior environment with the windows closed while meeting the interior standard of 45 dBA CNEL. The acoustical analysis shall be prepared to the satisfaction of the Development Services Director (or their designee), and all required noise control measures identified in the acoustical analysis shall be made conditions of building permit issuance. MM NOI-3 Site-Specific Acoustical Analysis – Multi-Family Residences - Interior. Concurrent with design review and prior to the approval of building permits for multi-family areas where first and/or second floor exterior noise levels exceed 60 dBA CNEL and/or where required outdoor area (patios or balconies) noise levels exceed 65 dBA CNEL as indicated in the Noise Assessment Technical Report for the Otay Ranch University Villages Project (Dudek 2014), the Applicant or its designee shall: (i) prepare a site-specific acoustical analysis identifying those noise control measures necessary to achieve compliance with California's Title 24 Interior Noise Standards (i.e., 45 dBA CNEL) and the City's Exterior Land Use/Noise Compatibility Guidelines for outdoor use areas (i.e., 65 dBA CNEL); and (ii) implement those measures necessary to achieve compliance with all applicable noise standards. This mitigation measure shall apply to neighborhoods R-14a, R-15a, R-16, R-17 and R-18d in Village Eight East; and neighborhoods R-5, R-6, R-7, R-8, R-9, R-10, R-17a, R-17b, R-17c, R-18a, R-18b, R-19a, R-19b, and R-19c in Village Ten, where exterior noise levels exceed 60 dBA CNEL.	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		Measures to reduce noise levels may include, but would not be limited to, setback of structures from the roadway, installing acoustic barriers, or orienting outdoor activity areas away from roadways so that surrounding structures provide noise attenuation. The analysis shall also demonstrate that barriers or setbacks have been incorporated into the project design, such that, when considered with proposed construction specifications, ground level and upper story interior noise levels shall not exceed 45 dBA CNEL. Roof-ceiling assemblies making up the building envelope shall have a sound transmission class value of at least 50, and exterior windows shall have a minimum sound transmission class of 30 in compliance with the California Green Building standards code. Design-level architectural plans will be available during design review and will permit the accurate calculation of transmissions loss for habitable rooms. For these areas, it may be necessary for the windows to be able to remain closed to ensure that interior noise levels meet the interior standard of 45 dBA CNEL. Consequently, the design for buildings in these areas may need to include a ventilation or air conditioning system to provide a habitable interior environment with the windows closed based on the result on the interior acoustical analysis. The acoustical analysis shall be prepared to the satisfaction of the Development Services Director (or their designee), and all required noise control measures identified in the acoustical analysis shall be made conditions of building permit issuance. MM NOI-4 Site-Specific Acoustic Analysis – Non-Residential Commercial and/or Mixed-Use Residential – Exterior. Concurrent with design review and prior to the approval of building permits for non-residential commercial and/or mixed use residential area where exterior noise levels exceed 65 dBA	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		CNEL as indicated in the Noise Assessment Technical Report for the Otay Ranch University Villages Project (Dudek 2014), the Applicant or its designee shall: (i) prepare a site-specific acoustical analysis identifying those noise control measures necessary to ensure that exterior noise levels at the boundary of the proposed noise sensitive land use will be below 65 dBA CNEL; and (ii) implementation of any measures recommended as a result of the analysis. Measures to reduce noise levels may include, but would not be limited to, setback of structures from the roadway, installing acoustic barriers, or orienting outdoor activity areas away from roadways so that surrounding structures provide noise attenuation. The analysis shall also demonstrate that barriers or setbacks have been incorporated into the project design, such that, when considered with proposed construction specifications, ground level and upper story interior noise levels shall not exceed 45 dBA CNEL. Roof-ceiling assemblies making up the building envelope shall have a sound transmission class value of at least 50, and exterior windows shall have a minimum sound transmission class of 30 in compliance with the California Green Building standards code. The acoustical analysis shall be prepared to the satisfaction of the Development Services Director (or their designee), and all required noise control measures identified in the acoustical analysis shall be made conditions of building permit issuance. **MM NOI-5** Site-Specific Acoustical Analysis – Industrial Zone. As part of the site plan/development plan review process conducted in connection with future industrial development applications submitted to the City, the Applicant or its designee shall prepare a site-specific acoustical analysis to identify those noise control measures necessary to ensure noise levels generated by the proposed use will comply with the City's General Plan noise	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		standards for residential property boundaries proximate to the industrial zone (maximum exterior noise levels of 65 CNEL). The acoustical analysis shall be prepared to the satisfaction of the Development Services Director (or their designee). All required noise control measures identified in the acoustical analysis shall be made conditions of development approval. MM NOI-6 As a condition of approval of the proposed project, the City shall limit the active programming operational hours for neighborhood park sites to 7:00 am–10:00 pm, 7 days a week. MM NOI-7 Concurrent with design review and prior to the approval of building permits for the elementary schools: an acoustical analysis shall be prepared identifying the noise control measures necessary to ensure that noise levels at exterior use areas (i.e., playground, sports fields, athletic courts, etc.) will be below 65 dBA CNEL and requiring implementation of any measures recommended as a result of the analysis. Measures to reduce noise levels may include, but would not be limited to, setback of structures from the roadway, installing acoustic barriers, or orienting outdoor activity areas away from roadways so that surrounding structures provide noise attenuation. The acoustical analysis shall also address control measures for outdoor school activity noise and its effect upon immediately adjacent residential land uses, to ensure school activity related noise levels do not exceed 65 dB CNEL at exterior use areas of adjacent residential properties. The analysis shall also demonstrate that barriers or setbacks have been incorporated into the project design, such that, when considered with proposed construction specifications, ground level and upper story interior noise levels shall not exceed 45 dBA CNEL. Roof-ceiling assemblies making up the building	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		envelope shall have a sound transmission class value of at least 50, and exterior windows shall have a minimum sound transmission class of 30 in compliance with the California Green Building standards code. The acoustical analysis shall be prepared consistent with all applicable requirements to the satisfaction of the school district, and all required noise control measures identified in the acoustical analysis shall be made conditions of development approval. Mitigation measure NOI-7 is consistent with the *School Site Selection and Approval Guide* prepared by the California Department of Education, which provides that if a school district is considering a potential school site near a freeway or other source of noise, it should hire an acoustical engineer to determine the level of sound that location is subject to and assist in designing the school site that should be chosen. The *Guide* provides further that the American Speech-Language-Hearing Association guidelines recommend that in classrooms sounds dissipate in 0.4 seconds or less (and not reverberate) and that background noise not rise above 30 decibels.	
Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Project generated construction noise would pose a potentially significant impact on noise-sensitive receptors if construction hour limitations are not imposed. However, with adherence to a restricted construction schedule dictating project-related site preparation and construction activities limited to the hours between 7:00 am–6:00 pm, Monday–Friday and between the hours of 8:00 am–6:00 pm Saturday, significant construction-related noise impacts could be avoided.	**MM NOI-8** The Project Applicant or its designee shall limit all project-related site preparation and construction activities to the hours between 7:00 am–6:00 pm, Monday–Friday, and between 8:00 am–6:00 pm Saturday. No construction activities shall occur on Federal holidays (e.g., Thanksgiving, July 4th, Labor Day, etc.). All maintenance of construction equipment shall be limited to the same hours. This language shall be added to the project grading plans. Minor construction (i.e., minor household do-it-yourself type projects) and non-noise-generating construction activities such as interior painting are not subject to these restrictions.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	The proposed project's contribution to cumulative traffic noise levels would be limited, a 1 dB increase at most, which by itself is not a discernible increase. Additionally, the proposed project would not contribute any increase in noise levels at those locations equal to or exceeding the City's 65 dB CNEL noise standard for residential land use under Without Project conditions. Impacts would be less than significant.	No mitigation required.	Less than significant.
Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Blasting may be required in the Village Four Community Park (P-2) area. Although this would not exceed any City thresholds, blasting, if determined to be necessary, is considered to have a potentially significant impact unless mitigated.	**MM NOI-9** Prior to the issuance of a grading permit, and in the event that blasting is proposed in Village Four, the Project Applicant or its designee shall prepare a blasting plan to ensure that exterior noise levels at noise sensitive land uses are in compliance with the City of Chula Vista General Plan Exterior Land Use / Noise Compatibility Guidelines and the City's Noise Ordinance Exterior Noise Limits. The plan shall be prepared by a licensed blasting engineer and identify when such blasting events would occur, the approximate amount of explosives to be used (which amount shall be limited to the extent practicable so as to minimize resulting noise), and the location and proximity of the blasting event relative to sensitive receptors. If deemed beneficial for noise reduction purposes, the plan shall include a requirement that blasting mats be used. The blasting plan shall also detail the surrounding zone in which noise-sensitive land uses would be notified of planned blasting activities, and of the nature of audible warning signals to be used just prior to blasting. The blasting plan shall be prepared to the satisfaction of the Development Services Director (or their designee), and all noise control measures identified in the blasting plan shall be made conditions of grading permit issuance.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Would the project be located within an airport land use plan (ALUP) or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels?	The 2005 ALUCP indicates that the project site (i.e., Villages 3 North, 4, 8 East, and 10) is north and outside of the 60 and 65 dB CNEL noise contours for Brown Field. According to existing data for Brown Field, the project site would not be exposed to noise levels from aircraft operations that exceed 60–65 dB CNEL. In that 65 dB CNEL is an acceptable exterior noise exposure level for all of the land uses proposed within the project, airport noise exposure levels would remain below significant levels.	No mitigation required.	Less than significant.
Would project be within the vicinity of a private airstrip, which would expose people residing or working in the project area to excessive noise levels?	The graphics in the 2005 ALUCP indicate that the project site (i.e., Villages 3 North, 4, 8 East, and 10) is north and outside of the 60 and 65 dB CNEL noise contours for Brown Field. According to existing data for Brown Field, the project site would not be exposed to noise levels from aircraft operations that exceed 60–65 dB CNEL. In that 65 dB CNEL is an acceptable exterior noise exposure level for all of the land uses proposed within the project, airport noise exposure levels would remain below significant levels.	No mitigation required.	Less than significant.
Would the project be inconsistent with the Chula Vista General Plan, Otay Ranch General Development Plan or other objectives and policies regarding noise thereby resulting in a significant physical impact?	The proposed project would not conflict with the General Plan and Otay Ranch GDP and impacts would be less than significant.	No mitigation required.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
5.7 Cultural Resources			
Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?	Construction and operation of the proposed project would not cause a substantial change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5, and less than significant impacts would occur.	No mitigation required.	Less than significant.
Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5?	Development of Village Three North and a Portion of Village Four, Village Eight East, Village Ten, and Off-Site Improvement Areas could cause a substantial change in the significance of identified archaeological resource as defined in CEQA Guidelines Section 15064.5 impacts to these sites would be potentially significant.	MM CUL-1 Prior to issuance of land development permits, including clearing or grubbing and grading permits, the Applicant shall provide written confirmation and incorporate into grading plans, to the satisfaction of the Development Services Director or their designee, that a principal investigator (PI) meeting the criteria listed in the Secretary of the Interior guidelines (36 CFR 61) has been retained in an oversight capacity to ensure that an archaeological monitor(s) will be present during all cutting of previously undisturbed soil. If these cutting activities occur in more than one location, multiple monitors shall be provided to monitor these areas, as determined necessary by the PI. MM CUL-2 During the initial grading of previously undisturbed soils within the SPA Plan areas) and off-site improvement areas, prehistoric and historic resources may be encountered. In the event that the archaeological monitor identifies a potentially significant site, the monitor shall secure the discovery site from further impacts by delineating the site with staking and flagging, and by diverting grading equipment away from the archaeological site. Following notification to the City, the archaeological monitor shall conduct investigations as necessary to determine if the discovery is significant under the criteria listed in CEQA and the environmental guidelines of the City. If the discovery is determined to be not significant, grading operations may resume and the archaeological monitor shall summarize the findings in a letter report submitted to the City following the completion of mass grading activities. The letter report shall describe the results of the on-site archaeological	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		monitoring, each archaeological site observed, the scope of testing conducted, results of laboratory analysis (if applicable), and conclusions. The letter report shall be completed to the satisfaction of the City of Chula Vista's Development Services Director or their designee prior to the release of grading bonds. Any artifacts recovered during the evaluation of resources shall be curated at a facility approved by the City. MM CUL-3 For the cultural prehistoric/historic resources that are determined to be significant, alternate means of achieving mitigation shall be pursued. In general, these forms of mitigation include: 1. site avoidance by preservation of archaeological site in a natural state in open space, or in specific open space easements, 2. site avoidance by preservation through capping the site and placing landscaping on top of the fill, 3. data recovery through implementation of an excavation and analysis program, 4. a combination of one or more of the above measures. See Chapter 9.0 in the *Cultural Resources Study for the University Villages Project at Otay Ranch* (Appendix F of this EIR) for the detailed mitigation and monitoring program for each of the identified significant sites that would be impacted. MM CUL-4 For those sites that are found to contain significant resources and for which avoidance and preservation is not feasible or appropriate, the Applicant shall prepare a Data Recovery Plan. The plan will, at a minimum, include the following: 1. a statement of why data recovery is appropriate as a mitigation measure, 2. a research plan that explicitly provides the research questions that can reasonably be expected to be	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		addressed by excavation and analysis of the site, 3. a statement of the types and kinds of data that can reasonably be expected to exist at the site and how these data will be used to answer important research questions, 4. a step-by-step discussion of field and laboratory methods to be employed, 5. provisions for curation and storage of the artifacts, notes, and photographs will be stated. Grading operations within the affected area may resume once the site has been fully evaluated and mitigated to the satisfaction of the Development Services Director or their designee. All significant artifacts collected during the implementation of the Data Recovery Plan shall be curated at a facility approved by the City. MM CUL-5 Following the completion of mass grading operations, the Applicant shall prepare a plan that addresses the temporary on-site presentation and interpretation of the results of the archaeological studies for the proposed project. This could be accomplished through exhibition within a future community center, civic building and/or multi-purpose building. Any artifacts used for public displays shall be selected from the curated collections originating from the project. This exhibition will only be for temporary ~~curation~~ display of artifacts ~~those materials being actively used~~ for public interpretation and display purposes. ~~, and that permanent curation of artifacts and data will be at a regional repository that meets the standards of the State Historical Resource Commission's *Guidelines for the Curation of Archaeological Collections,* dated May 7, 1993, when one is established. All significant artifacts collected during the implementation of the Data Recovery Plan shall be permanently curated at a facility approved by the City.~~ Artifacts selected for the exhibit shall be withdrawn on loan from the curation facility and will subsequently returned to that facility upon the close of the	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		exhibition. The applicant will be responsible for the artifacts during the display period and for the return of the artifacts at the close of the exhibition. The consulting archaeologist shall act on the applicant's behalf to coordinate the curation of all collections and the subsequent use of selected artifacts for the public display.	
Would the project disturb any human remains, including those interred outside of formal cemeteries?	Any disturbance of human remains that may occur during project grading or construction would be significant. Therefore, impacts would be potentially significant and mitigation would be required to reduce potential impacts.	**MM CUL-6** If human remains are discovered during grading or site preparation activities within the SPA Plan area(s) and off-site improvement areas, the archaeological monitor shall secure the discovery site from any further disturbance. State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the San Diego County Coroner has made the necessary findings as to the origin and disposition of the remains pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will then identify the person(s) thought to be the Most likely Descendent (MLD) of the deceased Native American. The MLD will assist the City in determining what course of action shall be taken to deal with the remains. Grading operations within the affected area may resume once the site has been fully evaluated and mitigated to the satisfaction of the Development Services Director or their designee. The Archaeological Monitor shall summarize the findings in a letter report to the City following the completion of mass grading activities.	Less than significant
Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Geologic formations with high and moderate potential for paleontological resources occur on site. Based upon the recognized potential to encounter fossils in these formations, impacts are considered potentially significant, and mitigation measures would be required.	**MM PAL-1** Prior to the issuance of grading permits for the proposed project, including the Off-site Improvement Areas, the Applicant shall confirm to the Development Services Director, or their designee, that a qualified paleontologist (QP) has been retained to carry out an appropriate mitigation program. A QP is defined as an individual with a doctorate or a master's degree in paleontology or geology, who is familiar with paleontological procedures and techniques. A pre-grade meeting shall be held between the paleontologist and the grading and excavation contractors.	Less than significant

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
5.7 Paleontological Resources			
		MM PAL-2 A paleontological monitor shall be on site at all times during the original cutting of previously undisturbed sediments of highly sensitive geologic formations (i.e., San Diego, Otay, and Sweetwater formations) to inspect cuts for contained fossils. (A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.) The paleontological monitor shall work under the direction of a qualified paleontologist. The monitor shall be on site on at least a half-time basis during the original cutting of previously undisturbed sediments of moderately sensitive geologic formations (i.e., unnamed river terrace deposits of the Mission Valley Formation) to inspect cuts for contained fossils. A. The monitor shall be on site on at least a quarter-tie basis during the original cutting of previously undisturbed sediments of low sensitivity geologic formations (i.e., Lindavista Formation and Santiago Peak Volcanics [metasedimentary portion only] to inspect cuts for contained fossils. He or she shall periodically (every several weeks) inspect original cuts in deposits with an unknown resource sensitivity (i.e., Quaternary alluvium). B. In the event that fossils are discovered in unknown, low, or moderately sensitive formations, the Applicant shall increase the per-day field monitoring time. Conversely, if fossils are not discovered, the monitoring, at the discretion of the Planning Department, shall be reduced. A paleontological monitor is not needed during grading of rocks with no resource sensitivity (i.e., Santiago Peak Volcanics, metavolcanic portion).	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		MM PAL-3 When fossils are discovered, the paleontologist (or paleontological monitor) shall recover them. In most cases, this fossil salvage can be completed in a short period of time. However, some fossil specimens (such as a complete whale skeleton) may require an extended salvage time. In these instances, the paleontologist (or paleontological monitor) shall be allowed to temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner. Because of the potential for the recovery of small fossil remains such as isolated mammal teeth, it may be necessary in certain instances and at the discretion of the paleontological monitor to set up a screen-washing operation on the site. MM PAL-4 Prepared fossils along with copies of all pertinent field notes, photos, and maps shall be deposited in a scientific institution with paleontological collections such as the San Diego Natural History Museum. A final summary report shall be completed. This report shall include discussions of the methods used, stratigraphy exposed, fossils collected, and significance of recovered fossils.	
Would the project be inconsistent with General Plan paleontological policies thereby resulting in a significant physical impact?	The proposed project would be consistent with all General Plan goals, objectives, and policies related to paleontological resources, impacts would be less than significant.	No mitigation required.	Less than significant.
5.8 Biological Resources			
Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S.	Prior to mitigation implementation of the proposed project would result in significant direct and indirect impacts to "covered" sensitive plant species include the following: Otay tarplant, variegated dudleya, and San Diego barrel cactus. Otay tarplant and variegated dudleya are identified in the MSCP Subarea Plan as	Also see mitigation measures MM AQ-1 through AQ-3 and MM HYD-1 through HYD-5. MM BIO-1 Prior to the approval of the first Final Map for the project, the Project Applicant shall coordinate with the City of Chula Vista (City) Engineer and annex the project area within the Otay Ranch Preserve Community Facilities District No. 97-2.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Wildlife Service?	narrow endemics. Significant impacts to non-covered species include California adolphia, south coast saltscale, San Diego marsh-elder, singlewhorl burrobush, and Robinson's pepper grass. Implementation of the proposed project would result in the direct loss of habitat for all of the special-status animals and is considered significant prior to mitigation. Long-term indirect impacts to special-status wildlife species would also occur as a result of the proposed project. Impacts would consist of lighting, human activity in the Preserve, noise, and domestic animal predation. Indirect impacts to special-status wildlife species are considered significant prior to mitigation.	Prior to the recordation of each Final Map, the Applicant shall convey land within the Otay Ranch Preserve to the Otay Ranch Preserve Owner/Manager (POM) or its designee at a ratio of 1.188 acres for each acre of "Developable Area" as defined by the RMP. Access for maintenance purposes shall also be conveyed to the satisfaction of the POM. Each tentative map shall be subject to a condition that the Applicant shall execute a maintenance agreement with the POM stating that it is the responsibility of the Applicant to maintain the conveyed parcel until the Preserve CFD has generated sufficient revenues to enable the POM to assume maintenance responsibilities. The Applicant shall maintain and manage the offered conveyance property consistent with the RMP Phase 2 until the Preserve CFD has generated sufficient revenues to enable the POM to assume maintenance and management responsibilities. Prior to the POM's formal acceptance of the conveyed land in fee title, the Project Applicant shall prepare, to the satisfaction of the POM, Area Specific Management Directives (ASMDs) for the associated conveyance areas. The ASMDs shall incorporate the guidelines and specific requirements of the Otay Ranch RMP plans and programs, management requirements of Table 3-5 of the MSCP Subregional Plan, and information and recommendations from any relevant special studies. Guidelines and requirements from these documents shall be evaluated in relationship to the Preserve configuration and specific habitats and species found within the associated conveyance areas and incorporated into the ASMDs to the satisfaction of the POM. MM BIO-2 Prior to the issuance of any land development permits that impact maritime succulent scrub, including clearing and grubbing or grading permits, the Project Applicant shall prepare a restoration plan to restore impacts to maritime succulent scrub at	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		a 1:1 ratio pursuant to the Otay Ranch RMP. A total of 5.5 acres will require restoration. The maritime succulent scrub restoration shall be prepared by a City-approved biologist and to the satisfaction of the Development Services Director (or their designee) pursuant to the Otay Ranch RMP restoration requirements. The restoration plan shall include, at a minimum, an implementation strategy; species salvage and relocation; appropriate seed mixtures and planting method; irrigation; quantitative and qualitative success criteria; maintenance, monitoring, and reporting program; estimated completion time; and contingency measures. The Project Applicant shall also be required to implement the revegetation plan subject to the oversight and approval of the Development Services Director (or their designee). MM BIO-3 Prior to issuance of land development permits, including clearing, grubbing, grading and construction permits for the Future and Planned Facilities associated with Village Ten, the Project Applicant shall provide a revegetation plan for temporary impacts to 0.3 acres of coastal sage scrub habitat. The revegetation plan must be prepared by a qualified City-approved biologist familiar with the City's MSCP Subarea Plan and must include, but not be limited to, an implementation plan; appropriate seed mixtures and planting method; irrigation method; quantitative and qualitative success criteria; maintenance, monitoring, and reporting program; estimated completion time; and contingency measures. The Project Applicant shall be required to prepare and implement the revegetation plan subject to the oversight and approval of the Development Services Director (or their designee). MM BIO-4 Prior to issuance of land development permits, including clearing, grubbing, grading, and/or construction permits for any areas adjacent to the preserve and the off-site facilities	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		located within the preserve, the Project Applicant shall provide written confirmation that a City-approved biological monitor has been retained and shall be on site during clearing, grubbing, and/or grading activities. The biological monitor shall attend all pre-construction meetings and be present during the removal of any vegetation to ensure that the approved limits of disturbance are not exceeded and provide periodic monitoring of the impact area including, but not limited to, trenches, stockpiles, storage areas and protective fencing. The biological monitor shall be authorized to halt all associated project activities that may be in violation of the City's MSCP Subarea Plan and/or permits issued by any other agencies having jurisdictional authority over the project. Before construction activities occur in areas containing sensitive biological resources within the off-site facilities area, all workers shall be educated by a City-approved biologist to recognize and avoid those areas that have been marked as sensitive biological resources. MM BIO-12 Prior to the issuance of land development permits, including clearing or grubbing and grading permits, for areas with salvageable sensitive biological resources, including Otay tarplant, variegated dudleya, San Diego barrel cactus, San Diego bur-sage, singlewhorl burrobush, south coast saltscale, San Diego marsh-elder, and Robinson's pepper grass (including plant materials and soils/seed bank), the Project Applicant shall prepare a Resource Salvage Plan. The Resource Salvage Plan shall be prepared by a City-approved biologist to the satisfaction of the Development Services Director (or their designee). The Resource Salvage Plan shall, at a minimum, evaluate options for plant salvage and relocation, including individual cactus salvage, native plant mulching, selective soil salvaging, application of plant materials on manufactured slopes, and application/relocation of resources within the Preserve. The	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		Resource Salvage Plan shall include incorporation of relocation efforts for non-covered species, including singlewhorl burrobush, south coast saltscale, San Diego marsh-elder, and Robinson's pepper grass, species that are all considered special-status by the CEQA and that would be impacted with project implementation. Relocation efforts may include seed collection and/or transplantation to a suitable receptor site and will be based on the most reliable methods of successful relocation. The program shall also contain a recommendation for method of salvage and relocation/application based on feasibility of implementation and likelihood of success. The program shall include, at a minimum, an implementation plan, maintenance and monitoring program, estimated completion time, and any relevant contingency measures. The program shall also be subject to the oversight of the Development Services Director (or their designee). MM BIO-13 To avoid any direct impacts to raptors and/or any migratory birds protected under the MBTA, removal of habitat that supports active nests on the proposed area of disturbance should occur outside of the breeding season for these species. The breeding season is defined as February 15 to August 15 for coastal California gnatcatcher and other non-raptor birds and January 15 to August 31 for raptor species. If removal of habitat on the proposed area of disturbance must occur during the breeding season, the Project Applicant shall retain a City-approved biologist to conduct a pre-construction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction, and the results must be submitted to the City for review and approval prior to initiating any construction activities. If nesting birds are detected, a letter report or mitigation plan, as deemed appropriate by the City, shall be prepared and include proposed measures to be implemented to ensure that	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		disturbance of breeding activities are avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's Mitigation Monitor shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction. MM BIO-14 Prior to issuance of any land development permits, including clearing, grubbing, and grading permits, the Project Applicant shall retain a City-approved biologist to conduct focused surveys for northern harrier to determine the presence or absence of this species within 900-feet of the construction area. The pre-construction survey must be conducted within10 calendar days prior to the start of construction. The results of the survey must be submitted to the City for review and approval. If active nests are detected by the City-approved biologist, a bio-monitor shall be on site during construction to minimize construction impacts and ensure that no nests are removed or disturbed until all young have fledged. MM BIO-14 Prior to issuance of any land development permits, including clearing, grubbing, and grading permits, the Project Applicant shall retain a City-approved biologist to conduct focused surveys for northern harrier to determine the presence or absence of this species within 900-feet of the construction area. The pre-construction survey must be conducted within10 calendar days prior to the start of construction. The results of the survey must be submitted to the City for review and approval. . If active nests are detected by the City-approved biologist, a bio-monitor shall be on site during construction to minimize construction impacts and ensure that no nests are removed or disturbed until all young have fledged.	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		MM BIO-15 Prior to issuance of any land development permits (including clearing, grubbing, and grading permits), the Project Applicant shall retain a City-approved biologist to conduct focused pre-construction surveys for burrowing owls. The surveys shall be performed no earlier than 30 days prior to the commencement of any clearing, grubbing, or grading activities. If occupied burrows are detected, the City-approved biologist shall prepare a passive relocation mitigation plan subject to the review and approval by the Wildlife agencies and City, including any subsequent burrowing owl relocation plans to avoid impacts from construction-related activities. MM BIO-16 Prior to issuance of grading permits, the Project Applicant shall submit evidence to the satisfaction of the Development Services Director (or their designee), showing that the following features of the Preserve Edge Plans (Otay Ranch Company 2013a through 2013c) have been incorporated into grading and landscaping plans: • Provide post and fencing and signage for sensitive habitat adjacent to trails. Prior to the issuance of land development permits, including clearing or grubbing and grading and/or construction permits, for the project, the project owner shall submit wall and fence plans depicting appropriate barriers to prevent unauthorized access to the Preserve. The wall and fence plans shall, at a minimum, illustrate the locations and cross-sections of proposed walls, fences, informational and directional signage, access controls, and/or boundary markers along the Preserve boundary and off-site pedestrian trails as conceptually described in the Edge Plans. The required wall and fence plan shall be subject to the approval of the Development Services Director (or their designee). • Install canyon subdrains to prevent erosion of drainage and wetlands within the Preserve.	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		• Prevent release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem within the Preserve. • Implement all necessary requirements for water quality as specified by the State and local agencies_Phase out agricultural uses adjacent to the Preserve to remove pollutants from the project site. • No invasive non-native plant species shall be introduced into areas immediately adjacent to, or within, the Preserve. All slopes immediately adjacent, or within, to the Preserve shall be planted with native species that reflect the adjacent native habitat, per the Edge Plan. Prior to the issuance of land development permits, including clearing or grubbing and grading and/or construction permits, for 1) areas within the 100-foot Preserve edge, and 2) infrastructure (e.g., roads, trails, utilities, etc.) sited within the Preserve, the Project Applicant shall prepare and submit to the satisfaction of the Development Services Director (or their designee) landscape plans to ensure that the proposed plant palette is consistent with the plant list contained in the Preserve Edge Plans for each village. The landscape plan shall also incorporate a manual weeding program for areas adjacent to the Preserve. The manual weeding program shall describe, at a minimum, the entity responsible for controlling invasive species, the maintenance activities and methods required to control invasive species, and a maintenance/monitoring schedule. All fuel modification shall be incorporated into development plans and shall not include any areas within the Preserve. MM BIO-17: In accordance with the City's Adjacency Management Guidelines, the following mitigation measures	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		shall be implemented to further reduce indirect impacts (from lighting, noise, invasive species, toxic substances, and public access) to sensitive biological resources located in the adjacent Preserve areas: • Lighting. In compliance with the Chula Vista MSCP Subarea Plan, all lighting shall be shielded and directed away from the Preserve. Concurrent with design review and prior to issuance of a building permit for any development located adjacent to the Preserve, the Applicant shall prepare a lighting plan and photometric analysis to the satisfaction of the Development Services Director (or their designee), for review and approval. The lighting plan shall illustrate the location of the proposed lighting standards and type of shielding measures. Low-pressure sodium lighting shall be used, if feasible, and shall be subject to the approval of the Development Services Director (or their designee). • Noise**.** Noise impacts adjacent to the Preserve lands shall be minimized. Berms or walls shall be constructed adjacent to commercial areas and any other use that may introduce noises that could impact or interfere with wildlife utilization of the Preserve. A 100-foot buffer around community park areas, specifically Community Parks (P-2) south of Village Eight East and in Portion of Village Four, should be installed in sections adjacent to Preserve habitat occupied by sensitive species such as the coastal cactus wren. Potential noise generating uses, such as baseball diamonds and soccer fields, should be oriented away from sensitive species habitat in these areas. Construction activities shall include noise reduction measures or be conducted outside the breeding season of sensitive bird species. • Noise, California Gnatcatcher. For any work proposed between February 15 and August 15, prior to issuance of	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		any land development permits, including clearing, grubbing, grading, and construction permits, associated with the off-site facilities located within the Preserve, the Project Applicant shall retain a City-approved biologist to conduct a pre-construction survey for the coastal California gnatcatcher to reaffirm the presence and extent of occupied habitat. The pre-construction survey area for the coastal California gnatcatcher shall encompass all habitats within the project work zone, as well as within a 300-foot buffer. The survey shall be performed to the satisfaction of the Development Services Director (or their designee) by a qualified biologist familiar with the City's MSCP Subarea Plan. The results of the pre-construction survey must be submitted in a report to the Development Services Director (or their designee) for review and approval prior to the issuance of any land development permits and prior to initiating any construction activities. If the coastal California gnatcatcher is detected, a minimum 300-foot buffer delineated by orange biological fencing shall be established around the detected species to ensure that no work shall occur within the occupied habitat from February 15 through August 15 and on-site noise reduction techniques shall be implemented to ensure that construction noise levels do not exceed 60 dB(A) Leq-h at the location of any occupied sensitive habitat areas. The Development Services Director (or their designee) shall have the discretion to modify the buffer width depending on-site-specific conditions. If the results of the pre-construction survey determine that the survey area is unoccupied, the work may commence at the discretion of the Development Services Director (or their designee) following the review and approval of the pre-construction report.	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		• Invasive Species. Prior to issuance of land development permits, including clearing or grubbing and grading and/or construction permits for 1) areas within the 100-foot Preserve edge, and 2) infrastructure (e.g., roads, trails, utilities, etc.) sited within the Preserve, the Project Applicant shall prepare and submit to the satisfaction of the Development Services Director (or their designee), landscape plans to ensure that the proposed plant palette is consistent with the plant list contained in the Preserve Edge Plan. The landscape plan shall also incorporate a manual weeding program for areas adjacent to the preserve. The manual weeding program that shall describe at a minimum, the entity responsible for controlling invasive species, the maintenance activities and methods required to control invasives, and a maintenance/monitoring schedule. • Toxic Substances. See MMS BIO-4, BIO-6, BIO-8, BIO-16 • Public Access. Prior to issuance of grading permits, the Project Applicant shall submit wall and fence plans depicting appropriate barriers to prevent unauthorized access into the Preserve. The wall and fence plans shall illustrate the locations and cross-sections of proposed walls and fences along the Preserve boundary, subject to the approval the City's Development Services Director (or their designee). MM BIO-18 In accordance with the City's Adjacency Management Guidelines, the following mitigation measures shall be implemented to further reduce indirect impacts from noise to sensitive biological resources located in the adjacent Preserve areas emanating from the community parks: Concurrent with the preparation of site-specific plan(s), and prior to the approval of a precise grading plan, the Project Applicant shall prepare, or in the case of the City being the lead on the	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		preparation of the site specific plan, the Project Applicant shall fund the preparation of an acoustical analysis to ensure that noise impacts to surrounding Preserve areas have been minimized. The park design shall include measures to minimize noise impacts adjacent to the Preserve. Features that may be included in the park design may include, but are not limited to: • berms or walls; • inclusion of a minimum of 100 feet between the Preserve boundary and park uses where adjacent to habitat occupied by sensitive species such as coastal California gnatcatcher and coastal cactus wren; • allow uses within the 100-foot buffer adjacent to the Preserve that may include access roads, parking, picnic areas, walking paths, and graded slopes; • orient potential noise generating uses such as soccer fields and baseball diamonds away from occupied coastal California gnatcatcher and coastal cactus wren habitat.	
Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?	Prior to mitigation, sensitive vegetation communities to be permanently impacted include non-native grassland, freshwater marsh, cismontane alkali marsh, disturbed cismontane alkali marsh, coastal sage scrub, disturbed coastal sage scrub, broom baccharis scrub, maritime succulent scrub, disturbed maritime succulent scrub, mulefat scrub, southern mixed chaparral, tamarisk scrub, and southern willow scrub. Impacts to sensitive vegetation communities would be significant prior to mitigation.	**MM BIO-5** Prior to issuance of grading permits in portions of the SPA Plan areas that are adjacent to the Preserve, the Project Applicant shall install fencing. Prior to issuance of land development permits, including clearing, grubbing, grading and/or construction permits, the Project Applicant shall install fencing in accordance with Chula Vista Municipal Code (CVMC) 17.35.030. Prominently colored, well-installed fencing and signage shall be in place wherever the limits of grading are adjacent to sensitive vegetation communities or other biological resources, as identified by the qualified monitoring biologist. Fencing shall remain in place during all construction activities. All temporary fencing shall be shown on grading plans for areas adjacent to the preserve and for all off-site facilities constructed within the preserve. Prior to release of grading and/or improvement bonds, a qualified biologist shall provide evidence that work was conducted as authorized under the approved land development permit and associated plans.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		MM BIO-6 Prior to issuance of land development permits, including clearing, grubbing, grading, and construction permits, the following notes shall be included on the applicable construction plans to the satisfaction of the Development Services Director (or their designee): • A qualified biologist shall be on site to monitor all vegetation clearing and periodically thereafter to ensure implementation of appropriate resource protection measures. • Dewatering shall be conducted in accordance with standard regulations of the RWQCB. A permit to discharge water from dewatering activities will be required. This will minimize erosion, siltation, and pollution within sensitive communities. • During construction, material stockpiles shall be placed such that they cause minimal interference with on-site drainage patterns. This will protect sensitive vegetation from being inundated with sediment-laden runoff. • Material stockpiles shall be covered when not in use. This will prevent fly-off that could damage nearby sensitive vegetation communities. • Graded area shall be periodically watered to minimize dust that may affect adjacent vegetation.	
Would the project have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Impacts to jurisdictional waters and wetlands would occur as a result of the proposed project. Impacts to jurisdictional waters total 0.56 acre and are all permanent. Impacts to jurisdictional wetlands total 1.03 acres.	MM BIO-8 Prior to issuance of grading permits in portions of the SPA Plan areas that are adjacent to the Preserve, the Project Applicant shall develop a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall be developed, approved, and implemented during construction to control storm water runoff such that erosion, sedimentation, pollution, and other adverse effects are minimized. The following performance measures contained in the Edge Plans shall be implemented to avoid the release of toxic substances associated with urban runoff: • Sediment shall be retained on-site by a system of sediment	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		basins, traps, or other appropriate measures. • Where deemed necessary, storm drains shall be equipped with silt and oil traps to remove oils, debris, and other pollutants. Storm drain inlets shall be labeled "No Dumping–Drains to Ocean." Storm drains shall be regularly maintained to ensure their effectiveness. • The parking lots shall be designed to allow storm water runoff to be directed to vegetative filter strips and/or oil-water separators to control sediment, oil, and other contaminants. • Permanent energy dissipaters shall be included for drainage outlets. • The BMPs contained in the SWPPP shall include, but are not limited to, silt fences, fiber rolls, gravel bags, and soil stabilization measures such as erosion control mats and hydro-seeding. • The project area drainage basins will be designed to provide effective water quality control measures, as outlined in the Water Quality Technical Report. Design and operational features of the drainage basins will include design features to provide maximum infiltration, maximum detention time for settling of fine particles; maximize the distance between basin inlets and outlets to reduce velocities; and establish maintenance schedules for periodic removal of sedimentation, excessive vegetation and debris.	
Would the project have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	0.05 acre of which includes a compatible use while the remaining acres are permanently impacted. A total of 1.35 acres of jurisdictional areas under the ACOE, RWQCB, and CDFW would be impacted. Impacts to jurisdictional areas under CDFW only are 0.23 acre. Impacts to ephemeral and intermittent unvegetated	MM BIO-9 The City requires that impacts to wetlands be avoided to the maximum extent possible and where impacts are unavoidable, compensatory mitigation within the Chula Vista Subarea or Chula Vista Planning Area shall be required resulting in no overall net loss of wetlands. A total of up to 1.03 acres of wetland and 0.56 acre of waters of the U.S./State within the project may be impacted within the Development Area. Off-site areas may impact a total of up to 0.98 acre of wetlands and 0.38	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
	waters and jurisdictional wetlands are considered significant prior to mitigation.	acre of waters (0.24 acre of waters of the U.S. and 0.14 acre of water of the State). Prior to issuance of land development permits, including clearing, grubbing, and grading permits that impact jurisdictional waters, the Project Applicant shall prepare a Wetlands Mitigation and Monitoring Plan to the satisfaction of the City, ACOE, and CDFW. This plan shall include, at a minimum, an implementation plan, maintenance and monitoring program, estimated completion time, and any relevant contingency measures. Areas under the jurisdictional authority of ACOE and CDFW shall be delineated on all grading plans. Mitigation areas shall occur within the Otay River watershed in accordance with the Wetlands Mitigation and Monitoring Plan to the satisfaction of the City, ACOE, and CDFW. The Project Applicant shall also be required to implement the Wetlands Mitigation and Monitoring Plan subject to the oversight of the City, ACOE, and CDFW. MM BIO-10 Prior to issuance of land development permits, including clearing, grubbing, and grading permits for areas that impact jurisdictional waters, the Project Applicant shall provide evidence that all required regulatory permits, such as those required under Section 404 of the federal Clean Water Act, Section 1600 of the California Fish and Game Code, and the Porter Cologne Water Quality Act have been obtained. MM BIO-11 The Project Applicant shall implement one of the following prior to the issuance of grading permits for areas impacting vernal pools within Village Three North: 1. The Project Applicant shall restore 240 square feet of vernal pools within the Village Thirteen (resort) planning area. The restoration would involve reconfiguration and reconstruction of the mima mounds and basins, removal of weedy vegetation, revegetation of the mounds with upland sage scrub species and inoculation of the pools with vernal pool species. The property owner has prepared a Conceptual Vernal Pool Mitigation Plan	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		(Dudek 2008). The Plan includes, but is not limited to an implementation plan, maintenance and monitoring program, estimated completion time, and relevant contingency measures. 2. The Project Applicant shall restore 240 square feet of vernal pools somewhere other than the Village Thirteen (resort) planning area. The restoration would still involve reconfiguration and reconstruction of the mima mounds and basins, removal of weedy vegetation, revegetation of the mounds with upland sage scrub species and inoculation of the pools with vernal pool species. 3. The Project Applicant shall buy into a mitigation bank in an amount that would mitigate for impacts to 120 square feet of vernal pool.	
~~Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?~~	~~Direct and indirect impacts to wildlife corridors would be potentially significant absent mitigation.~~	~~Less than significant.~~	~~Less than significant.~~
Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	The project would coordinate with the County for those areas located outside of Otay Ranch and within the County's jurisdiction. However, since impacts to native upland vegetation communities and wetland habitats are considered significant under the City's HLIT Ordinance, impacts would be potentially significant and mitigation would be required.	MM BIO-7 Prior to issuance of any land development permits, including clearing or grubbing and grading and/or construction permits, the project will be required to obtain a HILT Permit pursuant to Section 17.35 of the Chula Vista Municipal Code for impacts to Chula Vista MSCP Tier I, II, and II vegetation communities as shown below in Tables 5.8-24 and 5.8-25 and in accordance with Table 5-3 of the City of Chula Vista MSCP Subarea Plan. These impacts are due to the proposed development and are not associated with Planned or Future Facilities. Mitigation for off-site impacts outside of Otay Ranch will be in accordance with the City of Chula Vista MSCP Subarea Plan and the City's Habitat Loss and Incident Take (HLIT) ordinance and	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		as provided in the HLIT Findings. Mitigation for impacts associated with the landfill (off-site Area 5) is not required. Prior to issuance of any land development permits, the Applicant shall mitigate for direct impacts pursuant to Section 5.2.2 of the City's MSCP Subarea Plan. In compliance with the City's MSCP Subarea Plan, the Applicant shall secure mitigation credits within a City/Wildlife Agency-approved Conservation Bank or other approved location offering such credits consistent with the ratios specified in Tables 5.8-24 and 5.8-25. The Applicant shall be required to provide verification of purchase to the City, prior to issuance of any land development permits. In the event that a Project Applicant is unable to secure mitigation through an established mitigation bank approved by the City and Wildlife Agencies, the Project Applicant shall secure the required mitigation through the conservation of an area containing in-kind habitat within the City's MSCP Subarea Plan or MSCP Planning Area in accordance with the mitigation ratios contained in Table 5-3 of the City's MSCP Subarea Plan and subject to Wildlife Agency concurrence. Prior to issuance of any land development permit, and to the satisfaction and oversight of the City's Development Services Director (or their designee), the Applicant shall secure the parcel(s) that will be permanently preserved for in-kind habitat impact mitigation, prepare a long-term Management and Monitoring Plan (MMP) for the mitigation area, secure an appropriate management entity to ensure long-term biological resource management and monitoring of the mitigation area is implemented in perpetuity, and establish a long-term funding mechanism for the management and monitoring of the mitigation area in perpetuity.	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		The long-term MMP shall provide management measures to be implemented to sustain the viability of the preserved habitat and identify timing for implementing the measures prescribed in the MMP. The mitigation parcel shall be restricted from future development and permanently preserved through the recordation of a conservation easement or other mechanism approved by the Wildlife Agencies as being sufficient to insure that the lands are protected in perpetuity. The conservation easement or other mechanism approved by the Wildlife Agencies shall be recorded prior to issuance of any land development permits. The Project Applicant shall be responsible for maintaining the biological integrity of the mitigation area and shall abide by all management and monitoring measures identified in the MMP until such time as the established long-term funding mechanism has generated sufficient revenues to enable a City-approved management entity to assume the long-term maintenance and management responsibilities.	
Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	The proposed Preserve boundary adjustment meets the requirements of the MSCP Subregional Plan for adjustments to the boundary of the Preserve under the "like or equivalent" exchange concept and the direct and permanent impacts to the Preserve would be less than significant.	No mitigation measures are required. ~~MM BIO-16~~	Less than significant.
Would the project be inconsistent with General Plan biological resource policies thereby resulting in a significant physical impact?	The proposed project would be consistent with General Plan and Otay Ranch GDP goals associated with biological resources and impacts would be less than significant.	No mitigation measures required ~~MM BIO-17~~ ~~MM BIO-18~~	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Direct and indirect impacts to wildlife corridors would be potentially significant absent mitigation.	See MM BIO-7 and BIO-16 through MM BIO-18 identified above.	Less than significant.
5.9 Agricultural Resources			
Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, to non-agricultural use?	The incremental loss of Farmland of Local Importance as a result of the proposed project would be a significant impact.	No feasible mitigation.	Significant and unavoidable.
Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?	The proposed project would not affect Williamson Act contract land or conflict with existing on-site zoning for an agricultural use, and there would be no impact.	No mitigation required.	No impact.
Would the project be inconsistent with General Plan agricultural resource policies thereby resulting in a significant physical impact?	The proposed project is consistent with the applicable General Plan and Otay Ranch GDP objectives and policies related to agricultural resources. Therefore, the proposed project would result in no impact due to inconsistency with General Plan agricultural resources policies.	No mitigation required.	No impact.
Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code	The project area does not contain any forest land, land suitable for timber production, or any parcels of real property zoned for timberland production pursuant to the California Timberland Productivity	No mitigation required.	No impact.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	Act of 1982 (Chapter 6.7 (commencing with Government Code Section 51100) of Part 1 of Division 1 of Title 5). Therefore, the proposed project would not affect such lands, and there would be no impact.		
Would the project result in the loss of forest land or conversion of forest land to non-forest use?	The project area does not include any forest land. Therefore, the proposed project would not result in the loss of forest land or the conversion of forest land to non-forest use and there would be no impact.	No mitigation required.	No impact.
Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	Since there is no forest land within the project area, there would be no impact associated with the conversion of forest land to non-forest use.	No mitigation required.	No impact.
5.10 Water Quality and Hydrology			
Would the project violate any water quality standards or waste discharge requirements, including City of Chula Vista Engineering Standards for storm water flows and volumes?	Although construction of the proposed project has the potential to violate water quality standards, compliance with the CBC, the Chula Vista Storm Water Management and Discharge Control Ordinance No 2854, the City of Chula Vista Subdivision Manual, Design and Construction Standards of the City of Chula Vista, San Diego Area Regional Standard Drawings, and Standard Specifications for Public Works Construction, as well as the preparation of site-specific SWPPPs, mitigation would further reduce potential impacts. Even with	MM HYD-1 *Erosion Control.* The developer shall monitor any erosion at the project's outfalls at the Otay River and, prior to the last building permit for the project, obtain approval for and complete any reconstructive work necessary to eliminate any existing erosion and prevent future erosion from occurring, all to the satisfaction of the Development Services Director. MM HYD-2 *Storm Water Pollution Prevention Plan.* Prior to issuance of each grading permit for each village or any land development permit, including clearing and grading, the Project Applicant shall submit a notice of intent and obtain coverage under the NPDES permit for construction activity from the SWRCB. Adherence to all conditions of the General Permit for Construction Activity is required. The Applicant shall be required	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
	implementation of BMPs, development would still have the potential to violate water quality standards or waste discharge requirements. This impact would be significant prior to mitigation.	under the SWRCB General Construction Permit to develop a SWPPP and monitoring plan that shall be submitted to the City Engineer and the Director of Public Works. The SWPPP shall be incorporated into the grading and drainage plans and shall specify both construction and post-construction structural and non-structural BMPs on site to reduce the amount of sediments and pollutants in construction and post-construction surface runoff before it is discharged into off-site storm water facilities. Section 7 of the City's Storm Water Manual outlines construction site BMP requirements. The SWPPP shall also address operation and maintenance of post-construction pollution prevention measures, including short-term and long-term funding sources and the party or parties that will be responsible for said measures. The grading plans shall note the condition requiring a SWPPP and monitoring plans. MM HYD-3 *Supplemental Water Quality Report.* Prior to issuance of each grading permit, the Applicant shall submit supplemental reports to the Otay Ranch Villages Three North and Portion of Village Four, Village Eight East, and Village Ten Tentative Map Water Quality Technical Reports, respectively, prepared by Hunsaker and Associates San Diego, Inc. (2014) that identifies which on-site storm water management measures from the Water Quality Technical Report have been incorporated into the project to the satisfaction of the City Engineer. If a storm water management option is chosen by the Applicant that is not shown in the water quality technical report, a project-specific water quality technical report shall be prepared for the parcel, referencing the Otay Ranch Villages Three North and Portion of Village Four, Village Eight East, or Village Ten Tentative Map Water Quality Technical Reports, prepared by Hunsaker and Associates and dated March 2014, for information relevant to regional design concepts (e.g., downstream conditions of concern) to the satisfaction of the City Engineer.	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		MM HYD-4 *Post-Construction/Permanent BMPs*. Prior to issuance of each grading permit, the City Engineer shall verify that parcel owners have incorporated and will implement post-construction BMPs in accordance with current regulations. In particular, Applicants are required to comply with the requirements of Section 2c of the City of Chula Vista's Standard Urban Storm Water Management Plan (SUSMP), the Chula Vista Development Storm Water Manual, and the Otay Ranch Villages Three North and Portion of Village Four, Village Eight East, and Village Ten Tentative Map Water Quality Technical Report, respectively, or any supplements thereto to the satisfaction of the City Engineer. Specifically, the Applicant shall implement low impact development BMPs in the preparation of all site plans and, the Applicant shall incorporate structural on-site design features into the project design to address site design and treatment control BMPs as well as requirements of the hydromodification management plan. The Applicant shall monitor and mitigate any erosion in downstream locations that may occur as a result of on-site development. MM HYD-5 *Limitation of Grading*. The Project Applicant shall comply with the Chula Vista Development Storm Water Manual limitation of grading requirements, which limit disturbed soil area to 100 acres, unless expansion of a disturbed area is specifically approved by the Director of Public Works. With any phasing resulting from this limitation, if required, the Project Applicant shall provide, to the satisfaction of the City Engineer, erosion and sediment control BMPs in areas that may not be completed, before grading of additional area begins.~~MM HYD-MM HYD-7~~	
Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a	The project would not significantly impact groundwater recharge or supplies.	No mitigation required.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			
Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	The net increase in runoff discharged to the Otay River would be a result of an alteration in the existing drainage pattern, which could consequently result in substantial erosion or siltation on- or off-site.	MM HYD-6 *Hydromodification Criteria.* The Project Applicant shall comply, to the satisfaction of the City Engineer, with city hydromodification criteria (Municipal Permit Order R9-2007-0001 Section D.1.g) or the hydrograph modification management plan, as applicable, addressed regionally at the SPA Plan level concurrent with grading and improvement plans for each village. ~~See MM HYD-1 and MM HYD-2 above.~~	Less than significant.
Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	The proposed project would not substantially alter the existing drainage pattern of the project area in a manner which would result in flooding on or off site.	No mitigation required.	Less than significant.
Would the project create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	The net increase in runoff discharged to the Otay River would be a substantial contribution to existing conditions. Additionally, the proposed project could create additional sources of polluted runoff; impacts would be potentially significant and mitigation measures would be required.	See MM HYD-1 through MM HYD-6~~7~~ above.	Less than significant.
Would the project otherwise, substantially degrade water quality?	The combination of the proposed construction and permanent BMPs, for the proposed project would reduce, to the	See MM HYD-1 through MM HYD-6~~7~~ above.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
	maximum extent practicable, the expected pollutants and would not adversely impact the beneficial uses of the receiving waters. However, BMPs would not adequately reduce potential impacts to a level below significance. Impacts would be potentially significant and mitigation would be required.		
Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	The project would not place housing within a 100-year flood zone.	No mitigation required.	No impact.
Would the project place structures within a 100-year flood hazard area which would impede or redirect flood flows?	The proposed project would place drainage structures within a 100-year flood hazard area. In the event of a 100-year flood, the drainage structures would not impede or redirect flows in the project area. However, do to the fact that these structures would be placed within a 100-year flood hazard area impacts could be potentially significant and mitigation would be required.	MM HYD-7 *Scour Analysis.* Concurrent with all grading plan submittals, the Applicant shall prepare a scour analysis for all structures within the 100-year flood hazard area. Additionally, all said structures shall be monitored until the last building permit for the project has been issued. ~~See MM HYD-1 through MM HYD-7 above.~~	No impact.
Would the project be inconsistent with General Plan, Otay Ranch GDP or other objectives and policies regarding water quality thereby resulting in a significant physical impact?	The project would be consistent with applicable General Plan and Otay Ranch GDP policies related to water quality.	No mitigation required.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	The potential for the Savage dam to fail is considered minimal and impacts in the event of dam failure would be reduced by not placing residential, commercial, or industrial development within the inundation zone. The proposed project locates non-residential uses in the southern portions of Village Three and Portion of Village Four, Village Eight East, and Village Ten that are within the dam inundation zone (Community Park (P-2), open space Preserve). Therefore, impacts would be considered less than significant.	No mitigation required.	Less than significant.
Would the project expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	The project would not be located in an area where inundation by seiche, tsunami, or mudflow would likely occur.	No mitigation required.	Less than significant.
Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	The proposed project involves the construction of new stormwater drainage facilities as analyzed throughout this EIR, and mitigation measures are required as outlined in this table and in Section 5.0.	See MM HYD-1 through MM HYD-6 identified above. ~~No additional mitigation required.~~	Less than significant.
5.11 Geology and Soils			
Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for	Components of the proposed project would be constructed in accordance with the City's Grading Ordinance, current seismic design specifications, current CBC standards, and other regulatory requirements, which would reduce the potential for risks related to seismic events. Therefore, since development would be in	No mitigation required.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)? Strong seismic ground shaking? Seismic-related ground failure, including liquefaction? Landslides?	compliance with applicable regulatory requirements, impacts associated with the rupture of a known earthquake fault, seismic-related ground failure, liquefaction, or landslides would be less than significant.		
Would the project result in substantial soil erosion or the loss of topsoil?	Implementation of Best Management Practices and compliance with applicable RWQCB orders and City standard would result in less than significant impacts.	No mitigation required.	Less than significant.
Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Compliance with the City's Grading Ordinance, current seismic design specifications, current CBC standards, and other regulatory requirements, in addition to implementation of project design features and BMPs, would ensure that the proposed project would have less than significant impacts associated with geologic hazards.	No mitigation required.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	The exterior concrete flatwork has a potential to experience some uplift due to expansive soil beneath grade. Therefore, impacts associated with expansive soil are considered to be potentially significant.	MM GEO-1 Prior to the issuance of each grading permit for Village Three North and Portion of Village Four, Village Eight East, and Village Ten, the Applicant shall verify that the applicable recommendations in the Geotechnical Investigation prepared by Geocon, dated May 23, 2013; November 21, 2012; and November 20, 2012, respectively, have been incorporated into the final project design and construction documents to the satisfaction of the City Engineer. These recommendations address issues including but not limited to site grading, retaining walls, seismic design, slope stability, backdrain systems, undercuts, excavation and fill, monitoring, and soil testing. Geotechnical review of grading plans shall include a review of all proposed storm drain facilities to ensure the storm water runoff would not interfere with the proposed geotechnical recommendations. MM GEO-2 All graded slopes shall have a minimum factor of safety of 1.5. Strategies to increase stability may include, but are not limited to, a stability buttress or shear pins. All slope stability strategies shall be to the satisfaction of the City Engineer.	Less than significant.
Be inconsistent with General Plan geotechnical policies thereby resulting in a significant physical impact?	The project would be consistent with geotechnical policies found in the General Plan and Otay Ranch GDP.	No mitigation required.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
5.12 Public Services			
Fire Protection			
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection and emergency services?	In the event that the Village Eight West or EUC stations identified in the FFMP are not built before the first building permit is issued in Village Ten, construction of a temporary station would be required. Because the location has been analyzed throughout this EIR as being developed, the construction of a temporary fire station has been covered by this analysis. While the use would be different, no new physical impacts would occur. Therefore, impacts would be less than significant.	No mitigation required.	Less than significant.
Would the project reduce the ability of properly equipped and staffed fire and medical units to respond to calls throughout the City within 7 minutes in 80% of the cases?	Payment of PFDIF fees, implementation of the FPPs, compliance with existing city codes, policies and regulations, and implementation of mitigation measures would ensure that the growth management ordinance threshold standard is achieved. This impact would be potentially significant if these mechanisms are not enforced. Therefore, impacts would be potentially significant and mitigation is required.	**MM PUB-1** Prior to the issuance of each building permit for any residential dwelling units, the Applicant(s) shall pay a Public Facilities Development Impact Fee (PFDIF) in accordance with the fees in effect at the time of building permit issuance and phasing approved in the Public Facilities Finance Plan, unless stated otherwise in a separate development agreement. **MM PUB-2** Prior to issuance of the first building permit for Village Ten, the Applicant(s) will be required to build a temporary fire station in the currently designated Community Purpose Facilities (CPF) site if a fire station has not yet been built in Village Eight West or the EUC as identified in the Fire Facility Equipment and Deployment Master Plan (FFMP).	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Would the project be inconsistent with General Plan, Otay Ranch GDP, and other objectives and policies regarding fire protection and emergency medical services thereby resulting in a significant physical impact?	The Otay Ranch GDP objectives and policies related to fire protection and emergency medical services are consistent with those in the City's General Plan. Impacts associated with the proposed project would be less than significant.	No mitigation required.	Less than significant.
Police Protection			
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services?	Increased demand for police protection resulting from development of the proposed project would not necessitate the construction of any new police facilities (or the expansion of any existing police facilities) that could entail changes in the physical environment. Therefore, impacts would be considered less than significant.	No mitigation required.	Less than significant.
Would the project: • Exceed the City's threshold standards to respond to Priority One emergency calls throughout the City (within 7 minutes in 81% of the cases and an average response time to all Priority One calls of 5.5 minutes or less)? • Exceed the City's threshold standards to respond to Priority Two urgent calls throughout the City (within 7 minutes in 57% of cases and an average response	Payment of PFDIF fees, implementation of the CPTED strategies and design objectives, and compliance with existing city policies and mechanisms would ensure that the growth management ordinance threshold standard is achieved. This impact would be potentially significant if these mechanisms are not enforced. Therefore, impacts would be potentially significant and mitigation is required.	**MM PUB-3** Prior to the issuance of each building permit for any residential dwelling units, the Applicant(s) shall pay the City's Public Facilities Development Impact Fee (PFDIF) in accordance with the fees in effect at the time of building permit issuance and phasing approved in the Public Facilities Finance Plan, unless stated otherwise in a separate development agreement. **MM PUB-4** The City of Chula Vista will continue to monitor the Chula Vista Police Department responses to emergency calls and report the results to the Growth Management Oversight Commission on an annual basis.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
time to all Priority Two calls of 7.5 minutes or less)?		MM PUB-5 Prior to issuance of each building permit, site plans shall be reviewed by the Chula Vista Police Department or its designee to ensure the incorporation of Crime Prevention through Environmental Design Features (CPTED) features and other recommendations of the Chula Vista Police Department, including but not limited to, controlled access points to parking lots and buildings, maximizing visibility along building fronts, sidewalks and public parks, and providing adequate street, parking lot and parking structure visibility and lighting.	
Would the project be inconsistent with General Plan objectives and policies regarding police protection thereby resulting in a significant physical impact?	The proposed project would be consistent with all applicable General Plan police protection policies. The Otay Ranch GDP objectives and policies related to police protection are consistent with those in the City's General Plan (see Appendix B). Therefore, the proposed project would also be consistent with the Otay Ranch GDP. Impacts associated with project implementation would be less than significant.	No mitigation required.	Less than significant.
Schools			
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for educational facilities services?	If the proposed project does not pay the State mandated fees or enter into a school mitigation agreement, which would guarantee construction of the needed school facilities, there would be a potentially significant impact to elementary, middle, and high schools.	MM PUB-6 Prior to the issuance of each building permit for any residential dwelling units, the Applicant(s) shall provide evidence or certification by the Chula Vista Elementary School District (CVSD) that any fee charge, dedication or other requirement levied by the school district has been complied with or that the district has determined the fee, charge, dedication or other requirements do not apply to the construction or that the Applicant has entered into a school mitigation agreement. School Facility Mitigation Fees shall be in accordance with the fees in effect at the time of building permit issuance.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		MM PUB-7 Prior to approval of a Final Map for private development on parcels S-1 in Village Three North, Village Eight East, and Village Ten, designated for future schools, the Applicant shall provide evidence from the CVESD that the site has been determined by the district to not be needed for future use as a school site.	
Would the project locate schools at inappropriate sites?	The project would not locate schools at inappropriate sites. Impacts would be less than significant.	No mitigation required.	Less than significant.
Would the project be inconsistent with General Plan, Otay Ranch GDP, and other objectives and policies regarding school services thereby resulting in a significant physical impact?	The project would be consistent with school services policies found in the General Plan and Otay Ranch GDP.	No mitigation required.	Less than significant.
Parks, Recreation, and Open Space			
Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Compliance with the PLDO and Otay Ranch GDP would ensure that impacts associated with parks and recreational facilities as a result of project implementation would be reduced. However, the proposed project would increase the use of existing neighborhood parks and recreational facilities; therefore, impacts would be potentially significant.	MM PUB-8 Prior to the approval of each Final Map for the project, or, for any residential development within the project that does not require a Final Map, prior to building permit approval, the Applicant shall either dedicate parkland and/or pay applicable Park Acquisition and Development in-lieu fees in accordance with the phasing indicated in the project's approved SPA Plan, the PFFP, and a park agreement, if any, subject to approval of the Development Services Director or their designee. In-lieu fees shall be based on the Park Acquisition and Development fees in effect at the time of issuance of building permits, unless stated otherwise in a parks or development agreement. MM PUB-9 Prior to the issuance of each building permit for any residential dwelling units, the Applicant shall pay recreation facility development impact fees (part of the Public Facilities Development Impact Fee) in accordance with the fees in effect at the time of building permit issuance and phasing approved in the	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		Public Facilities Finance Plan, subject to approval of the Development Services Director or their designee. MM PUB-10 Prior to the approval of the first Final Map for each village (Village Three North, Village Eight East, and Village Ten) the Applicant shall enter into an agreement with the City that provide the following: phased dedication of public park sites, payment of Park Improvement Fees, schedule for completion of improvements, including utilities to streets adjacent to the park sites, all to the satisfaction of the Development Services Director or their designee. Under the current method for delivery of new parks the City will award a design-build contract for the project's neighborhood park. The agreement will include provisions that in the event the City chooses not to go forward with a design-build contract, the Applicant will be obligated to fully comply with the Parkland Ordinance and park threshold standards by constructing the parks in accordance with all City standards and under a time schedule as specified in the agreement. MM PUB-11 Prior to approval of the first Final Map for each Village, the Applicant shall offer for dedication all public parkland identified in the Project's approved SPA Plan, or as approved by the Development Services Director or their designee. Park facilities required to meet the overall park obligation shall be identified on the first Final Map and shall be publically accessible. MM PUB-12 The Applicant shall comply with the Threshold Compliance and Recommendations contained within the PFFPs for Village Three North and Portion of Village Four, Village Eight East and Village Ten. MM PUB-13 Prior to the Final Map containing the 1,313th EDU in Village Eight East, the Applicant shall secure and agree to	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		construct the Village 8 East Community Park (P-2) Access Road from Otay Valley Road to the Community Park (P-2). Prior to the issuance of the Final Map containing for the 1,313th EDU, the Applicant shall submit to the City and obtain approval for improvement plans for the Community Park (P-2) access road to the satisfaction of the Development Services Director (or their designee). The Community Park (P-2) Access Road shall be completed prior to the issuance of the Final Map Containing the 1,929th EDU in Village Eight East.	
Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Payment of the recreation portion of the DIF would be used for the development of major recreational facilities, including community centers, and aquatic facilities. Mitigation measures provided through Chapter 5 of this EIR would reduce potential impacts associated with the construction of recreational facilities to a less than significant level.	No additional mitigation required.	Less than significant.
Would the project fail to meet the City's threshold standard of three acres of neighborhood and community parkland per 1,000 residents?	The proposed project would be in compliance with all applicable rules and regulations regarding parks and recreational facilities and impacts would be less than significant.	No mitigation required.	Less than significant.
Would the project be inconsistent with General Plan, Otay Ranch GDP or other relevant objectives and policies regarding parks thereby resulting in a significant physical impact?	the proposed project would be consistent with the applicable policies related to parks, recreation, and open space found in the General Plan, Otay Ranch GDP, Chula Vista Greenbelt Master Plan, and the Chula Vista Parks and Recreation Master Plan. Therefore, impacts associated with the proposed project would be less than significant.	No mitigation required.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Library			
Would the project result in substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for library services?	The addition of 30,000 gross square of additional library space approved in the EUC, would accommodate the increased population resulting from development of the proposed project and maintain acceptable service ratios. Impacts as a result of the proposed project would be less than significant.	No mitigation required.	Less than significant.
Would the project fail to meet the City's threshold standard of 500 gross square feet of library space, adequately equipped and staffed, per 1,000 population?	Funding for required facilities would be necessary to reduce impacts on operations and maintenance of library facilities to less than significant. Future library facilities would be funded in part by payment of the PFDIF. Therefore, prior to payment of the PFDIF, impacts to library facilities would be potentially significant and mitigation would be required.	MM PUB-14 Prior to the issuance of each building permit for any residential dwelling units, the Applicant shall pay the required Public Facilities Development Impact Fee in accordance with the fees in effect at the time of building permit issuance and phasing approved in the Public Facilities Finance Plan. MM PUB-15 The City of Chula Vista shall continue to monitor library facilities and services and report the results to the Grown Management Oversight Commission on an annual basis.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Would the project be inconsistent with General Plan, Otay Ranch GDP or other objectives and policies regarding library services thereby resulting in a significant physical impact?	The project would be consistent with library policies found in the General Plan and Otay Ranch GDP.	No mitigation required.	Less than significant.
5.13 Utilities			
Water			
Would the project require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	No significant impacts related to new water treatment facilities have been identified with respect to implementation of the proposed project.	No mitigation required.	Less than significant.
Would the project have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements?	Based on the WSAV for the proposed project, and the UWMP data provided by the water agencies, the proposed project's increase in water demand is accounted for by the water agencies; and, therefore, impacts to long-term water supplies/entitlements are considered less than significant. The transfer of density between planning areas could have a significant impact to on-site infrastructure.	No mitigation required.	Less than significant.
Would the project exceed City threshold standards which seeks to ensure availability of adequate supplies of quality water, appropriate for intended uses. The standards require the Applicant to request and deliver to the City service availability letters from the appropriate water district for each project; to submit a	Until service availability letters and approval of SAMP(s) from OWD, the project would not be in compliance with the city threshold standards. Impacts would be potentially significant.	MM UTL-1 Prior to issuance of each Final Map for each village, the permit Applicant/developer shall deliver to the City service availability letters from the appropriate water district. MM UTL-2 Prior to approval of the first Final Map for each village, the Applicant shall provide a Subarea Master Plan to the Otay Water District. Water facilities improvements shall be financed or installed on-site and off-site in accordance with the fees and phasing pursuant to the approved Public Facilities Financing	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Water Conservation Plan along with the SPA Plan application; and such project plans must ensure an adequate supply of water on a long-term basis prior to the development of each Otay Ranch SPA Plan?		Plan(s) and Subarea Master Plan(s). The Subarea Master Plan shall include, but shall not be limited to: a) Existing pipeline locations, size, and capacity b) The proposed points of connection and system c) The estimated water demands and/or sewer flow calculations d) Governing fire department's flow requirements (flow rate, duration, hydrant spacing, etc.) e) Agency Master Plan f) Agency's planning criteria (see Sections 4.1 through 4.3 of the Water Agencies Standards) g) Water quality maintenance h) Size of the system and number of lots to be served. MM UTL-3 Prior to approval of the first Final Map, the Applicant shall obtain the Otay Water District's approval of the Subarea Master Plan(s) for both potable and recycled water. Any on-site and off-site facilities identified in the Subarea Master Plan required to serve a Final Mapped area, including but not limited to water facilities within the SR-125 overcrossing at Otay Valley Road, shall be secured or constructed by the Applicant prior to approval of the Final Map and in accordance with the phasing in the public facilities finance plans. MM UTL-4 Prior to design review approval in accordance with the Density Transfer provision in the Village Three and Portion of Village Four, Village Eight East and Village Ten SPA Plans, the Applicant/developer shall provide an update to the Overview of Water Service for Otay Ranch University Villages (Dexter Wilson 2014a) with each proposed project requesting a density transfer. The density transfer technical study shall demonstrate to the satisfaction of the City Engineer that adequate on-site water infrastructure will be available to support the transfer. The	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		transfer of residential density shall be limited by the ability of the on-site water supply infrastructure to accommodate flows.	
Would the project be inconsistent with General Plan, Otay Ranch GDP or other relevant objectives and policies regarding water supply thereby resulting in a significant physical impact?	No significant impacts related to consistency with water supply policies have been identified with respect to implementation of the proposed project.	No mitigation required.	Less than significant.
Recycled Water			
Would the project require or result in the construction of new recycled water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?	No significant impacts related to new or expanded recycled water treatment facilities have been identified with respect to implementation of the proposed project.	No new mitigation required.	Less than significant.
Would the project be inconsistent with General Plan, Otay Ranch GDP or other relevant objectives and policies regarding recycled water thereby resulting in a significant physical impact?	No significant impacts related to consistency with applicable recycled water policies have been identified with respect to implementation of the proposed project.	No mitigation required.	Less than significant.
Sewer			
Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	The proposed project could have a significant impact with respect to capacity to serve the proposed project and the project in conjunction with other existing commitments if treatment capacity is not provided commensurate with demand.	MM UTL-5 The Applicant shall finance or install all on-site and off-site sewer facilities required to serve development in each village in accordance with the fees and phasing in the approved Public Facilities Finance Plan to the satisfaction of the City Engineer. MM UTL-6 Prior to issuance of each building permit, the Applicant shall pay the Salt Creek Development Impact Fee at the rate in effect at the time of building permit issuance and	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		corresponding to the sewer basin that the building will permanently sewer to, unless stated otherwise in a development agreement that has been approved by the City Council. MM UTL-7 Prior to design review approval in accordance with the Density Transfer provision in the Village Three North and Portion of Village Four, Village Eight East and Village Ten SPA Plans, the Applicant shall provide an update to the Overview of Sewer Service for Otay Ranch University Villages (Dexter Wilson 2014c) with each proposed project requesting a density transfer. The technical study shall demonstrate to the satisfaction of the City Engineer that adequate on-site wastewater infrastructure will be available to support the transfer. The transfer of residential density shall be limited by the ability of the on-site sewerage facilities to accommodate flows.	
Would the project require the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?	As the location and scope of construction of any newly developed treatment facility is unknown, the development of treatment capacity beyond the City's existing and allocated capacity may result in a potentially significant environmental impact, even though such a project would likely be subject to its own environmental review in compliance with CEQA.	No feasible mitigation	Significant and unavoidable.
Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	If new wastewater treatment plant facilities are required, wastewater disposal from those facilities would be required to comply with all wastewater treatment requirements of the San Diego Regional Water Quality Control Board; therefore, the project would not exceed wastewater treatment requirements.	No mitigation required.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Would the project generate sewage flows and volumes that exceed City Engineering Standards as set forth in the Subdivision Manual adopted by City Council Resolution Number 11175 on February 12, 1983, as amended in 2012?	No impact related to consistency with City engineering standards has been identified should the proposed project be implemented.	No mitigation required.	Less than significant.
Would the project be inconsistent with General Plan, Otay Ranch GDP or other relevant objectives and policies regarding wastewater thereby resulting in a significant physical impact?	No impact related to consistency with City wastewater policies has been identified should the proposed project be implemented.	No mitigation required.	Less than significant.
Solid Waste Disposal			
Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?	Under the current franchise agreement between the City of Chula Vista and Republic Services, solid waste would be disposed of at the Sycamore Landfill once the Otay Landfill meets its permitted capacity and terminates solid waste services (City of Chula Vista 2012). As such, solid waste service would continue following closure of the Otay Landfill and permitted capacity would be available to accommodate the proposed project. Impacts would be less than significant.	No mitigation required.	Less than significant.
Would the project not comply with federal, state, and local statutes and regulations relating to solid waste?	Waste collection for the proposed land uses would be provided by the City of Chula Vista under its contract agreement with Republic Services. The waste collection procedures and programs would be required to comply with the municipal requirements for	No mitigation required.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
	recycling and collection of solid waste, including provision for litter control for public events. Therefore, the project would be consistent with all applicable statutes and regulations, and would have a less than significant impact with respect to solid waste collection and management.		
Would the project be inconsistent with General Plan, Otay Ranch GDP, or other relevant objectives and policies regarding solid waste thereby resulting in a significant physical impact?	The proposed project would be consistent with applicable General Plan policies, and impacts would be less than significant.	No mitigation required.	Less than significant.
Energy			
Would the project increase the demand of energy resources to exceed the City's available supply or cause a need for new and expanded facilities the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives?	Because no assurance can be made that long-term energy will be supplied to the site at full buildout and beyond, impacts would be considered potentially significant because the proposed project could increase the demand for energy resources that exceed the City's available supply.	With preparation of the project's Energy Conservation Plan, the project complies with mitigation measure 5.3.5-1 from the Supplemental Environmental Impact Report for Amendments to the City of Chula Vista General Plan (GPA-09-01) and Otay Ranch General Development Plan (PCM-09-11). However, there is no assurance that long-term energy resources would be supplied to the project site following full project buildout and no feasible project specific mitigation measures are available to address the regional supply of energy.	Significant and unavoidable
Would the project result in the wasteful, inefficient, or unnecessary use of energy?	Compliance with policies and the energy conservation plan would ensure that average energy consumed by future occupants would not be wasteful, inefficient, or unnecessary, and would in fact be less than the regional average and less than statewide business-as-usual projections. Therefore, this impact would be less than significant.	No mitigation required.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Would the project be inconsistent with General Plan, Otay Ranch GDP, or other relevant objectives and policies regarding energy thereby resulting in a significant physical impact?	The proposed project would be consistent with General Plan and Otay Ranch GDP policies that pertain to energy. Therefore, energy impacts would be less than significant related to consistency with existing policies pertaining to energy.	No mitigation required.	Less than significant.
5.14 Climate Change			
Would the project conflict with or obstruct goals or strategies of the California Global Warming Solutions Act of 2006 (AB32) or related Executive Orders?	The proposed project would therefore be consistent with the goals of AB 32 and the City's requirements, and would not result in a significant impact on Global Climate Change. The project includes project design features to reduce impacts to Global Climate Change.	No mitigation required.	Less than significant.
Would the project result in substantially increased exposure of the project from potential adverse effects of global warming identified in the California Global Warming Solutions Act of 2006 (AB32)?	The increase in land use intensity and associated increase in vehicle trips has not been anticipated in local air quality plans; therefore, the proposed project would be inconsistent at a regional level with the underlying growth forecasts in the RAQS. Furthermore, as discussed in Section 5.4, the emissions VOCs and NO_x (precursors of O_3), as well as those of PM_{10} and $PM_{2.5}$, would exceed operational significance thresholds. Even with implementation of Mm AQ-1 and MM AQ-2, operation of the proposed project would result in significant impacts to air quality.	No feasible mitigation.	Significant and unavoidable.
Section 5.15 Hazards and Risk of Upset			
Would the project create a significant hazard to the public or environment through the routine	While the proposed project would result in the increase in routine transport, use and disposal of hazardous materials and/or wastes generated by future	No mitigation required.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
transport, use or disposal of hazardous materials?	growth, all hazardous materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials.		
Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Accidental spills or unauthorized releases of hazardous materials during construction, including ground clearing, access road construction and foundation excavation could potentially result in soil contamination, which would be a potentially significant impact. In order to reduce this potential impact, mitigation is provided.	MM HAZ-1 Prior to issuance of a mass grading permit for each village, the Applicant shall prepare a soils assessment to the satisfaction of the City Engineer to determine if residual pesticides, herbicides, and/or arsenic are present on site. The assessment shall be prepared by a Registered Environmental Assessor in accordance with Department of Toxic Substances Control guidance document. The assessment shall include analysis for organochlorine pesticides that include compounds such as toxaphene, dichlorodiphenyldichloroethane (DDD), dichlorodiphenyltrichloroethane (DDT), and dichlorodiphenyldichloroethylene (DDE), which have been historically identified at properties in the site vicinity. The concentrations of the contaminants shall be compared to regulatory agency soil screening levels for residential land use (e.g. U.S. EPA Region IX Soil Screening Levels). If levels of contamination exceeding the soil screening levels are found on site, a Soil Reuse Plan shall be prepared prior to construction on site. The Soil Reuse Plan shall include a determination of the suitability of the soils for on-site or off-site reuse, any special handling provisions that shall be incorporated as part of the site grading activities, and the procedure for the proper remediation and disposal of the contaminated soils, either on site or off site. The results of the limited soil assessment and the Soil Reuse Plan shall be submitted to the County of San Diego Department of Environmental Health, the Development Services Director (or their designee), and/or the Regional Water Quality Control Board for review and approval, prior to implementation.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Due to the proximity of the project area to schools and potential for hazardous impacts due to the Otay Landfill, former Brown Field Bombing Range, and potentially contaminated soils, impacts to schools could be potentially significant.	See MM HAZ-1 identified above. ~~MM HAZ-2A~~ ~~MM HAZ-2B~~	Less than significant
Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, a significant hazard to the public or the environment is created?	~~Based on the fact that all calculated carcinogenic (cancerous) and non-carcinogenic (non-cancerous) risks are below the identified SDAPCD CEQA thresholds for each respective receptor within the development, LFG monitoring reports indicate compliance with methane gas concentrations, and the fact that no stormwater violations have occurred, impacts are not considered significant. Furthermore, based on the regulations and the periodic monitoring conducted to ensure continued compliance, it has been determined that impacts due to implementation of the proposed project would be less than significant.~~ Due to the determinations found during the risk assessment, although unlikely, the presence of munitions and explosives of concern, along with munitions debris, have the potential for harm to human health, if there is contact to still functioning munitions on the FUDS site in Village Ten. Parsons recommended a remedial investigation and feasibility study with surface water and sediment sampling as	MM HAZ-2A Prior to approval of the Village Ten Final Map, the Applicant shall retain a Unexploded Ordnance (UXO) specialist to prepare a Safety Plan for the approximately 154 acres of the Village Ten Sectional Planning Area (SPA) Plan area that is within the boundaries of the Formerly Used Defense Site (FUDS)-eligible property as defined in the *Final Site Inspection Report for the Former Brown Field Bombing Range* (hereinafter referred to as the Site Inspection Report) prepared by Parsons for the UD Army Corps of Engineers (ACOE) dated December 2007. The Safety Plan shall be prepared to the satisfaction of the Director of Development Services or their designee. The Safety Plan shall include, but not be limited to, the following: • Findings based on a current visual inspection of the approximately 154-acre SPA Plan area within the FUDS-eligible property including a description of evidence of current activity and uses. • A discussion on the prior use of the site and the types of munitions used, dates of use, etc. • Review of prior US Army Corps of Engineers Site Inspection Reports and historical data and summaries of those reports' conclusions. • Review of current site inspection data to determine trail access to and through the FUDS area. • A detailed characterization of the site and its risk profile, based on a combination of the reports to date, the types of munitions	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
	the next step in ACOE's phased cleanup process. Impacts would be potentially significant and mitigation would be required.	uses and found in the prior investigation and current site inspection. • Hazard mitigation measures, such as fencing and signage, appropriate for this site given its risk profile and planned land use in accordance with applicable Federal, State and local requirements and best practices. As part of implementation of the Safety Plan, specifically the installation of fencing and/or signage determined to be appropriate for the site, or the dedication of any trails, the following shall be performed: • A surface visual survey (SVS) of future dedication trails within the approximately 154-acre Village Ten SPA Plan Area within the FUDS-eligible property boundaries shall be conducted. • UXO anomaly avoidance - performed by a UXO technician using a handheld detector at each point where intrusive activities will be performed for the installation of a fence/sign post. If subsurface metal is indicated at the desired installation point, the fence/sign post will be moved slightly to avoid the subsurface metal. If multiple fencing/signage teams are fielded, it is recommended that a UXO Technician accompany each team to provide UXO anomaly avoidance during intrusive activities such as fence and sign post installation. MM HAZ-2B Prior to the approval of a grading permit for the OVRP/Greenbelt trail (approximately 1.3 acres), water quality basins (approximately 1.8 acres) and any associated access roads (approximately 0.8 acre) that are within the Village Ten SPA Plan boundary and FUDS-eligible property boundaries (hereinafter referred to as the "Cleanup area"), the applicant shall develop and implement a Village Ten FUDS Cleanup Plan in cooperation with the appropriate agencies, including but not limited to the Army Corps of Engineers (ACOE) and Department	

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
		of Toxic Substances Control (DTSC), as applicable. The purpose of the Village 10 FUDS Cleanup Plan is to identify and clean up any risks of munitions or other FUDS associated risks within the Cleanup area in order to render the area suitable for the intended uses. The Village Ten FUDS Cleanup Plan shall include a risk assessment that identifies the nature and extent of munitions, explosives, munitions debris or other FUDS associated risks within the Cleanup area. Enough data shall be gathered to assess the threat to human health, safety and the environment, as well as to support the detailed cleanup program for any portion of the site anticipated to be impacted by grading activity, signage and fence installation, future trail users and/or future maintenance activities for the basins. The Village Ten FUDS Cleanup Plan shall be developed in cooperation with the appropriate agencies and shall be implemented by a qualified UXO specialist prior to issuance of the grading permit for the Cleanup area. Upon completion of the Cleanup Plan, and prior to issuance of construction permits for construction within the Cleanup area, the applicant shall provide verification by the appropriate agency that the site is suitable for the intended uses to the satisfaction of the Development Services Director (or their designee). ~~No mitigation required.~~	
Would the project be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport and would result in a safety hazard for people residing or working in the project area?	Although the project does not propose any buildings that create a hazard for aircrafts, the proposed project would be required to show compliance with FAA regulations. In order to show compliance, the Applicant must prepare and file Form 7460-1, Notice of Proposed Construction or Alteration;	**MM HAZ-3** Prior to issuance of a building permit for the first structure and/or dwelling unit within the Airport Influence Area of Brown Field, the Applicant shall prepare and file a Form 7460-1, Notice of Proposed Construction or Alteration, with the Federal Aviation Administration to ensure that no objects related to development would present a hazard to air navigation.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
	obtain and provide proof of FAA clearance; and record the Airport Overflight Agreement with the County Recorder's office.	MM HAZ-4 Prior to the issuance of a building permit for the first structure and/or dwelling unit within the Airport Influence Area of Brown Field, the Applicant shall obtain and provide proof of Federal Aviation Administration clearance to the satisfaction of the Development Services Director (or their designee). MM HAZ-5 Prior to approval of the first Final Map for those areas within the overflight notification area for Brown Field, the Applicant shall record the Airport Overflight Agreement with the County Recorder's office, and provide a signed copy of the recorded Airport Overflight Agreement to the City's Development Service Director (or their designee).	
Would the project impair implementation of or physically interferes with an adopted emergency response plan or emergency evacuation plan?	The proposed roadways in the project area would increase regional connectivity and provide new potential emergency evacuation routes. Therefore, the proposed project would not interfere with an adopted emergency response or emergency evacuation plan; impacts would be less than significant.	No mitigation required.	Less than significant.
Would the project expose people or structures to a significant risk or loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	FPPs have been prepared for the University Villages project, as required by Article 86 of the California Fire Code. The FPPs address the risk analysis and code compliance components that are common to all three proposed villages, as well as village-specific fire protection features. Implementation of the FPPs would reduce wildland fire risk to a less than significant level.	No mitigation required.	Less than significant.
Would the project be inconsistent with General Plan, Otay Ranch GDP, and other objectives and policies regarding hazards thereby	A General Plan Amendment is proposed to allow residential land uses within the Otay Landfill nuisance easement area. With the adoption of the General Plan Amendment,	No mitigation required.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
resulting in a significant physical impact?	the proposed project will be consistent with the General Plan and impacts would be less than significant. The HRA that was prepared for Village Eight East due to its proximity to I-125 concluded, that due to the relatively low cancer risk associated with a 9-year exposure scenario, impacts would be considered less than significant and no mitigation would be required.		
Would the project increase in urbanization increase the uses, transport, storage, and disposal of hazardous waste materials and an associated increase in the risk of an upset condition in the area?	All hazardous materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. Therefore, although the proposed project would increase the transport, use, and disposal of hazardous materials, impacts would be less than significant.	No mitigation required.	Less than significant.
Would the historic use of pesticides result in soil contamination and health effects?	The site history is similar to the history of other Otay Ranch Villages which have undergone assessment for organochlorine pesticides, organophosphorous pesticides, organochlorine herbicides, and metals including arsenic and lead associated with former agricultural use. Considering the potential consequences of encountering contaminated soils, impacts would be potentially significant.	See MM HAZ-1 above.	Less than significant.
5.16 Housing and Population			
Would the project induce substantial population growth in an area, either directly (i.e., by proposing new homes and businesses) or indirectly	Although the proposed project would result in substantial population growth, the General Plan and Otay Ranch GDP amendments, compliance with the GMOC and related thresholds, preparation of a PFFP, payment	No mitigation required.	Less than significant.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
(i.e., through extension of roads or other infrastructure)?	of DIFs and TDIFs, as well as the updated 2050 SANDAG Regional Growth Forecast, would ensure that the proposed project would have less than significant impacts associated with population growth.		
Would the project displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?	The proposed project would have no impacts associated with displacement of households or people.	No mitigation required.	No impact.
Would the project be inconsistent with General Plan, Otay Ranch GDP, and other objectives and policies regarding housing and population thereby resulting in a significant physical impact?	The proposed project would be consistent with the goals included in the General Plan and Otay Ranch GDP and impacts would be less than significant.	No mitigation required.	Less than significant.
5.17 Mineral Resources			
Would the project result in the loss of availability of a valuable mineral resource that would be of value to the region and the residents of the state?	Construction and operation of the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. As such, impacts would be less than significant.	No mitigation required.	Less than significant.
Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	The Chula Vista General Plan does not identify any mineral resource recovery sites within the City. Therefore, construction and operation of the proposed project would not result in the loss off availability of a locally important mineral resources recovery site, and there would be no impact.	No mitigation required.	No impact.

Table 1-3 (Continued)
Summary of Significant Environmental Analysis Results

Environmental Issue	Result of Impact Analysis	Mitigation	Impact Level After Mitigation
Would the project be inconsistent with General Plan, Otay Ranch GDP, and other objectives and policies regarding mineral resources thereby resulting in a significant physical impact?	The proposed project does not involve the extraction of any mineral resources, no impacts to mineral resources would occur and no mitigation measures are required to reduce or avoid impacts. Since the project would be consistent with the General Plan and Otay Ranch GDP policies regarding mineral resources, potential impacts would be less than significant with respect to this threshold.	No mitigation required.	Less than significant.

Table 1-4
Summary of Cumulative Impacts

Environmental Issue	Result of Impact Analysis	Significant Cumulative Impact?	Project Contribution
5.1 Land Use			
Physical Division of an Established Community and Conflicts with Land Use Plans, Policies, and Regulations	Analysis of individual projects as they are submitted to the City will ensure compatibility with applicable plans and policies. Since all current and future projects would be analyzed for compatibility and compliance with land use regulations, the proposed project would not result in a cumulatively considerable impact.	No	Not cumulatively considerable.
Conflicts with HCPs or NCCPs	The Chula Vista MSCP Subarea Plan and the Otay Ranch RMP are the applicable natural resource plans for the project and cumulative projects. The cumulative projects, including the University Villages project, would be required to demonstrate compliance with the MSCP Subarea Plan and the RMP as part of project approval. Therefore, cumulative land use impacts associated with potential conflicts with HCPs or NCCPs would be less than significant.	No	Not cumulatively considerable.
5.2 Landforms and Aesthetics			
Visual Character and Visual Quality	Development of the project site would change the undeveloped, open and natural character of the on-site rolling hills to one of high-density urbanized uses. This alteration in the visual character and quality of the site, combined with cumulative project development, is considered cumulatively considerable. Grading and development of the project site's vacant land with 6,897 residential units, 40,000 square feet of commercial land use, 28.6 acres of industrial land use, parks, and schools would incrementally contribute to the cumulative loss of open, rolling topography.	Yes	Cumulatively considerable and unavoidable.
Scenic Vistas and Scenic Resources	Due to the cumulative permanent conversion of the existing rural setting that characterizes Otay Ranch to an urban/built up setting, the project, in combination with planning future development, would result in a cumulatively considerable contribution to a significant and unavoidable cumulative impact.	Yes	Cumulatively considerable and unavoidable.
Landform Alteration	Cumulative development, including the proposed project, would be required to adhere to such standards, which would reduce potentially cumulative impacts to landform alteration less than significant.	No	Not cumulatively considerable.
Lighting and Glare	Development of the proposed project would contribute new sources of light to the surrounding area. The SPA Plan includes lighting performance standards to minimize the proposed projects contribution to nighttime lighting and light sources. Lighting would be consistent with lighting standards prevalent in urbanized and rural areas of San Diego County and lighting would adhere to all applicable City and County ordinances and	No	Not cumulatively considerable.

Table 1-4 (Continued)
Summary of Cumulative Impacts

Environmental Issue	Result of Impact Analysis	Significant Cumulative Impact?	Project Contribution
	standards. All other cumulative projects in the surrounding area would be required to comply with similar standards in order to reduce the cumulative effects of lighting and glare.		
5.3 Transportation, Circulation, and Access			
Traffic and Level of Service Standards and Congestion Management	The cumulative project trip generation would total 162,825. Due to the increase in vehicle trips generated as a result of the cumulative project condition in 2030, impacts would be considered cumulatively considerable.	Yes	Cumulatively considerable and unavoidable.
5.4 Air Quality			
Air Quality Violations	Mitigation measures have been provided to reduce impacts but not to below the significance thresholds. Other projects would likely be required to also have construction mitigation measures as well; however, impacts would still be significant. Additionally, daily operational emissions for VOCs, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ would be significant due to the absence of feasible mitigation measures.	Yes	Cumulatively considerable and unavoidable.
Sensitive Receptors	Impacts related to siting new sensitive receptors near sources of TACs would generally be site specific. Similar to the proposed project, new emitters of TACs would need to comply with the San Diego Air Pollution Control District criteria, such as Rule 1200. The HRA prepared for Village Eight East analyzed TACs from traffic on SR-125 and determined that impacts would be less than significant. Additionally an odor analysis prepared for Village Three North due to proximity to the landfill determined that impacts would also be less than significant.	No	Not cumulatively considerable.
Objectionable Odors	Impacts relative to objectionable odors are generally limited to the area in close vicinity to the source and are not cumulative in nature.	No	Not cumulatively considerable.
Air Quality Plans	The project as proposed is not accounted for in the current SIP emissions budget. Consequently, the proposed project is not consistent with Chula Vista's General Plan and is not considered consistent with the growth assumptions in the RAQS and SIP. As such, impacts would be considered cumulatively considerable and unavoidable	Yes	Cumulatively considerable and unavoidable.
5.5 Noise			
Excessive Noise Levels	With the build-out of Otay Ranch the noise levels in the currently undeveloped area would continue to increase exponentially. The proposed project would have mitigation measures that would ensure operational noise levels comply with City standards. Cumulative projects would also be required to demonstrate compliance with City noise standards. Therefore, a cumulative operational noise impact would not be significant.	No	Not cumulatively considerable.

Table 1-4 (Continued)
Summary of Cumulative Impacts

Environmental Issue	Result of Impact Analysis	Significant Cumulative Impact?	Project Contribution
Excessive Groundborne Vibration	The highest vibration levels during construction typically occur during pile-driving, blasting or demolition activities. Neither pile driving or demolition activities are anticipated as part of this project. The proposed project as well as cumulative projects would be developed with new buildings constructed in accordance with all building codes and would not be susceptible to vibration damage. Therefore, groundborne vibration impacts would be less than significant and cumulatively considerable impacts would not result.	No	Not cumulatively considerable.
Permanent Increase in Ambient Noise Levels	Long-term on-site activities associated with the project would not have a regional effect upon community noise levels, and therefore need not be considered in combination with approved or proposed projects in the region. Therefore, the project's contribution to increased noise levels would not be cumulatively considerable and cumulative impacts would be less than significant.	No	Not cumulatively considerable.
Temporary Increase in Ambient Noise Levels	Compliance with the Chula Vista ordinance would reduce impacts to a less than significant level. The project would comply with the Chula Vista construction limits and would not result in a cumulatively considerable contribution to construction noise.	No	Not cumulatively considerable.
Excessive Noise Exposure from a Public or Private Airport	Village Two lies outside the 60-65 dB CNEL noise contours. All cumulative projects would be required to comply to similar measures associated with Brown Field and would therefore not result in cumulatively considerable impacts.	No	No cumulative impact.
5.6 Cultural Resources			
Loss of Historic or Archaeological Resources	While any individual project may avoid or mitigate the direct loss of a specific resource, the effect is considerable when considered cumulatively. Although the actions of the proposed project would be mitigated through data recovery, curation, and reporting, the proposed project's contribution to a cumulatively considerable impact would not be reduced to a less than significant level.	Yes	Cumulatively considerable and unavoidable.
5.7 Paleontological Resources			
Loss of Paleontological Resources	Cumulative projects in the surrounding area are likely to have similar paleontological resources as the project, and may contain the Sweetwater Formation, the upper sandstone-mudstone member of the Otay Formation and San Diego Formation, the Lindavista Formation, and Quaternary terrace deposits. However, implementation of proposed mitigation measures would reduce the proposed project's potentially cumulative impact on paleontological resources and impacts would be less than significant and not cumulatively considerable.	No	Not cumulatively considerable.

Table 1-4 (Continued)
Summary of Cumulative Impacts

Environmental Issue	Result of Impact Analysis	Significant Cumulative Impact?	Project Contribution
5.8 Biological Resources			
Sensitive Plant and Wildlife Species, Riparian Habitat and Other Sensitive Natural Communities, Federally Protected Wetlands, and Wildlife Movement Corridors and Nursery Sites	Cumulative projects would all be developed in compliance with the MSCP Subarea Plan and Otay Ranch RMP, which would reduce impacts associated with development of these villages. Therefore, the project in combination with the other development projects proposed would not result in a cumulatively considerable contribution to biological impacts.	No	Not cumulatively considerable.
Local Policies, Ordinances, HCP, and NCCP	Significant cumulative impacts related compliance with local plans or ordinances would be avoided through implementation of a Boundary Modification to the RMP and Boundary Adjustment to the MSCP Subarea Plan.	No	No cumulative impact.
5.9 Agricultural Resources			
Loss of Agricultural Resources	The project, when combined with many of the cumulatively considerable projects would contribute to a significant, unmitigable cumulative impact to agricultural resources.	Yes	Cumulatively considerable and unavoidable.
5.10 Water Quality and Hydrology			
Water Quality Standards and Degradation of Water Quality	Because all of the cumulative projects are regulated under the same City and Regional Water Quality Control Board standards, they too would be required to attenuate all drainage on site (to maintain pre development flow quantities) and incorporate water quality design features to prevent cumulative impacts to local drainage systems or water quality. Therefore, the proposed project would not contribute to a cumulatively considerable impact related to water quality.	No	Not cumulatively considerable.
Erosion or Siltation, Surface Runoff, and Exceed Drainage Capacity	Cumulative projects would be required to take into consideration similar grading modifications in order to reduce stormwater runoff and erosion as the proposed project, and comply with standard mitigation measures for water quality and drainage features (See Section 5.10); therefore, impacts would not be cumulatively considerable.	No	Not cumulatively considerable.
5.11 Geology and Soils			
Exposure to Seismic Related Hazards, Soil Stability, and Expansive Soils	Since geologic hazards are site-specific and not cumulative in nature, the proposed project would not have a cumulatively considerable impact.	No	Not cumulatively considerable.

Table 1-4 (Continued)
Summary of Cumulative Impacts

Environmental Issue	Result of Impact Analysis	Significant Cumulative Impact?	Project Contribution
Soil Erosion or Topsoil Loss	Earth-disturbing activities associated with construction would be temporary and compliance with the General Construction Permit and BMPs outlined in the SWPPP, cumulative impacts related to soil erosion and the loss of topsoil would be less than significant. Furthermore, implementation of BMPs and proposed drainage facilities would ensure cumulative impacts related to soil erosion and the loss of topsoil would be less than significant.	No	Not cumulatively considerable.
5.12 Public Services			
Fire Protection and Emergency Services; Police Services; Libraries	Required by CVMC Section 19.09, the construction of new fire stations, and other public facilities, would be supported on a fair share basis through payment of the City's PFDIF. Cumulative projects, as well as the proposed project, would be required to pay the City's PFDIF in order to ensure fire protection and emergency medical facilities, and police services and facilities are constructed concurrently with demand. The PFDIF addresses the project's proportional impact on capital facilities, such as structures and equipment, associated with police protection. It does not address the impact associated with operations and maintenance for those facilities. Public funds such as property taxes, sales taxes, and fees generated by the project would be used to cover the incremental costs associated with providing police services. Therefore, impacts related to public services would not be cumulatively considerable.	No	No cumulative impact.
Schools	Similarly, Section 19.09 (Growth Management) provides policies and programs that tie the pace of development to the provision of public facilities and improvements. Section 19.09.040.C requires that the City annually provide the two local school districts with a 12- to 18-month development forecast and requests an evaluation from the districts of their ability to accommodate the forecast and continuing growth. The PFFP is required to ensure funding for any needed expansion of services, and ensure that schools will be provided commensurate with development and demand. Therefore, impacts would not be cumulatively considerable. from the districts of their ability to accommodate the forecast and continuing growth. The PFFP is required to ensure funding for any needed expansion of services, and ensure that schools will be provided commensurate with development and demand. Therefore, impacts would not be cumulatively considerable.	No	No cumulative impact.

Table 1-4 (Continued)
Summary of Cumulative Impacts

Environmental Issue	Result of Impact Analysis	Significant Cumulative Impact?	Project Contribution
Parks, Recreation, and Open Space	All cumulative projects, including the proposed project is required to comply with the parkland requirements in the CVMC. Compliance would ensure that cumulatively considerable impacts would not occur.	No	No cumulative impact.
5.13 Utilities			
Water	Cumulative developments would be required to provide documentation of adequate long-term water supply similar to the proposed project. Therefore, cumulative impacts associated with adequate water supply would not result in a cumulatively considerable impact.	No	Not cumulatively considerable.
Sewer	The City of Chula Vista would need to acquire capacity rights for an additional 5.4 mgd to accommodate year 2030 flows. The Salt Creek Interceptor Technical Sewer Study for South Otay Ranch addresses the City's current projections regarding the need to acquire additional treatment capacity. The City may acquire rights for this additional capacity in the Metro system through negotiations with the City of San Diego. In addition, the City of Chula Vista is evaluating construction of a new wastewater treatment plant and other alternatives to meet its future treatment capacity and disposal requirements. The cumulative projects will be timed to proceed with the City's acquisition of additional treatment capacity. Building permits will be issued only if the City Engineer has determined that adequate sewer capacity exists. Furthermore, all developments are required to prepare a PFFP that articulates needed facilities and funding mechanisms. The proposed project includes a PFFP and requires new and expanded sewer facilities to serve the proposed development. Implementation of existing policies and expanded sewer facilities would therefore avoid significant cumulative impacts associated with inadequate treatment capacity. Mitigation measures are also provided to ensure that adequate wastewater facilities are provided concurrently with demand. ~~The project, in combination with other cumulative development within the City, may require sewerage treatment that exceeds the City's existing wastewater treatment capacity. Therefore, additional capacity may need to be acquired from the San Diego Metropolitan Sewer Authority or other sources to support treatment needs through the Year 2030. The means by which additional treatment capacity would be acquired by the City is unknown and could include the acquisition of available sewerage treatment capacity from another participating agency, including the City of San Diego, or the construction of a new treatment facility. As the location and scope of construction for any~~	No	Not cumulatively considerable.

Table 1-4 (Continued)
Summary of Cumulative Impacts

Environmental Issue	Result of Impact Analysis	Significant Cumulative Impact?	Project Contribution
Solid Waste Disposal	The Otay Landfill is scheduled to close in 2028. Solid waste service would continue at Sycarmore Landfill following closure of the Otay Landfill and permitted capacity would be available to accommodate the proposed project and cumulative projects. All planned and proposed projects would be required to be consistent with all applicable statutes and regulations, and would therefore not have cumulatively considerable impacts with respect to solid waste collection and management.	No	Not cumulatively considerable.
Energy	Because no assurance can be made that long-term energy will be supplied to the site, and other planned sites, at full buildout and beyond, impacts would be considered cumulatively considerable.	Yes	Cumulatively considerable and unavoidable.
5.14 Climate Change			
Compliance with AB 32	Since the proposed project is not anticipated to result in a significant increase in greenhouse gas emissions, it would not be a significant cumulative impact.	No	Not cumulatively considerable.
Potential Effects of Global Climate Change	Since the proposed project is not anticipated to result in a significant increase in greenhouse gas emissions, it would not result in cumulative impacts increasing the potential effects of global climate change.	No	Not cumulatively considerable.
5.15 Hazards and Risk of Upset			
Expose People to Hazardous Conditions	Potential soil contamination from past pesticide use on the project site as well as the cumulative project sites could create a hazard to public health during grading and excavation. The cumulative projects would also be required to further analyze soils and mitigate any potentially significant hazards. Therefore, with additional testing and compliance with applicable mitigation measures the proposed project would not result in a cumulatively considerable impact associated with contaminated soils. The cumulative projects are also in the same general area as the proposed project and would be similarly vulnerable to wildfires. Preparation of FPPs, which is required for all the cumulative projects, would further reduce cumulative project impacts related to wildland fires. The HRA prepared for Village Eight East analyzed TACs from traffic on SR-125 and determined that impacts would be less than significant. Additionally an HRA and	No	Not cumulatively considerable.

Table 1-4 (Continued)
Summary of Cumulative Impacts

Environmental Issue	Result of Impact Analysis	Significant Cumulative Impact?	Project Contribution
	odor analysis were prepared for Village Three North due to proximity to the landfill that determined that impacts would also be less than significant. A mitigation measure is required for future development on Village Ten, the former Brownfield Bombing Range, which could potentially contain contaminated soils as well as Munitions and Explosives of Concern (MEC).		
5.16 Housing and Population			
Population Growth	When combined with the list of cumulative projects, which are primarily residential developments, there would be an exponential increase in population and housing and would, therefore, contribute to a cumulatively considerable impact.	No	Not cumulatively considerable.
5.17 Mineral Resources			
Loss of Mineral resources	Cumulative projects would be expected to result in a less than significant impact on mineral resources and the proposed project's potential impact on mineral resources would not be cumulatively considerable.	No	Not cumulatively considerable.

Table 1-5
Alternatives Impact Summary

Environmental Issue	Proposed Project Impacts Prior to Mitigation	Proposed Project Impacts with Mitigation	Existing GP and GDP Alternative	Reduced Density Alternative	Nuisance Easement Alternative	Otay SRP Alternative	No Build Alternative
Land Use	S	LTS	▬	▬	▼	▬	Δ
Landform and Aesthetics	SU	SU	▬	▬	▬	▼	▼
Transportation and Circulation	SU	SU	▼	▼	▬	▼	Δ
Air Quality	SU	SU	▼	▼	▼	▼	▼
Noise	S	LTS	▬	▬	▬	▬	▼
Cultural Resources	S	LTS	▬	▬	▬	▬	▼
Paleontological Resources	S	LTS	▬	▬	▬	▬	▼
Biological Resources	S	LTS	▬	▬	▬	▬	▼
Agricultural Resources	SU	SU	▬	▬	▬	▬	▼
Water Quality and Hydrology	S	LTS	▬	▬	▬	▬	▼
Geology and Soils	S	LTS	▼	▼	▬	▼	▼
Public Services	S	LTS	▼	Δ	▬	▼	▼
Utilities	SU	SU	▼	▼	Δ	▼	▼
Climate Change	SU	SU	▼	▼	▬	▼	▼
Hazards and Risk of Upset	S	LTS	▼	▼	▼	▼	▼
Housing and Population	LTS	LTS	Δ	▼	▬	Δ	Δ
Mineral Resources	LTS	LTS	▬	▬	▬	▬	▼
Meet Project Objectives	Yes	Yes	No	Partial	~~Partial~~Yes	No	No

Δ Alternative is likely to result in greater impacts to issue when compared to proposed project.
▬ Alternative is likely to result in similar impacts to issue when compared to proposed project.
▼ Alternative is likely to result in reduced impacts to issue when compared to proposed project.
LTS = Less than significant impact.
S = Significant impact.
SU= Significant and Unavoidable

CHAPTER 2
INTRODUCTION

This chapter of the Environmental Impact Report (EIR) describes the purpose, scope and legislative authority of the EIR, the intent of the California Environmental Quality Act (CEQA) and other pertinent environmental rules and regulations, and the environmental review process. The section also includes the structure, required contents, and relationship of the EIR to other potential responsible or trustee agencies.

2.1 PROJECT PURPOSE AND BACKGROUND

This EIR addresses the environmental effects associated with the proposed University Villages Project (proposed project), which encompasses Village Three North and a Portion of Village Four, Village Eight East, and Village Ten. Implementation of the proposed project requires Chula Vista General Plan Amendments (GPAs), Chula Vista Multiple Species Conservation Plan Boundary Adjustments (MSCPBAs), Otay Ranch General Development Plan Amendments (GDPAs), and Resource Management Plan Boundary Adjustments (RMPBAs). The project also proposes amendments to three approved Sectional Planning Area (SPA) Plans: Otay Ranch Villages Two, Three, and a Portion of Village Four SPA Plan, adopted by the Chula Vista City Council on June 4, 2006; Otay Ranch Village Seven SPA Plan, adopted by the Chula Vista City Council on October 4, 2004; and the Otay Ranch Village Nine SPA Plan, adopted by the Chula Vista City Council on June 3, 2014.

Three SPA plans are proposed: (a) an Otay Ranch Village Three North and a Portion of Village Four SPA Plan, (b) Otay Ranch Village Eight East SPA Plan, and (c) Otay Ranch Village Ten SPA Plan. Three Tentative Maps (TMs) are also proposed: (a) Village Three North and a Portion of Village Four, (b) Village Eight East, and (c) Village Ten.

This EIR was prepared in accordance with CEQA (Public Resources Code, Section 21000 et seq.), the CEQA Guidelines (14 California Code of Regulations (CCR) Section 15000 et seq.), and the City's Environmental Review Procedures. The City is the lead agency for the EIR and processing of the proposed project.

This EIR provides decision makers, public agencies, and the public with detailed information about the potential for significant adverse environmental impacts to occur as a result of the proposed project. As determined in the case *Ballona Wetlands Trust v. City of Los Angeles* (2011) 201 Cal.App.4th 455, "An EIR must identify and analyze the significant environmental impacts that may result from the project (PRC Section § 21100(a)(b); Guidelines,§§ 15126.2(a), 15143). It must include facts and analysis sufficient to allow the decision makers and the public to understand the environmental consequences of the project. The analysis need not be exhaustive, but it must be reasonably complete and reflect a good faith effort at full disclosure

(*Ballona Wetlands Trust v. City of Los Angeles* (2011) 201 Cal.App.4th 455, 473-474)." The purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project.

Responsible agencies will use this EIR to fulfill their legal authority associated with permits issued for the proposed project. The analysis and findings in this document reflect the independent judgment of the City.

2.2 HIERARCHY OF OTAY RANCH PLANNING DOCUMENTS

Due to the size and complexity of Otay Ranch, both the planning and environmental documentation for the specific planning areas or villages within the Otay Ranch have been tiered, in accordance with CEQA Statute Section 21093 and CEQA Guidelines Section 15152. As specific villages and planning areas are proposed for development, second-tier documentation is required for more precise or project-level planning and project-specific environmental documentation. This EIR relies upon several previously certified EIRs, as discussed below.

2.2.1 City of Chula Vista General Plan/Otay Ranch General Development Plan

California law requires that each county and city adopt a General Plan "for the physical development of the County or City, and of any land outside its boundaries which…bears relation to its planning" (CCR Section 65300). Each General Plan must be internally consistent and all discretionary land use plans and projects must also be consistent with the General Plan. The Chula Vista General Plan outlines goals, policies and objectives for land uses within Chula Vista in response to the community's vision for the City. The General Plan includes specific requirements in the Land Use and Transportation Element for master planned communities and resource management plans for water, air quality, recycling, solid waste management, and energy. A comprehensive General Plan Update was adopted in 2005 and is discussed in detail below. The latest update to the General Plan and Otay Ranch GDP was in February 2013.

In 1993, the City of Chula Vista and County of San Diego jointly processed the Otay Ranch GDP/Otay Subregional Plan (SRP). Otay Ranch is an approximately 23,000-acre master planned community in southern San Diego County, partly within the limits of the City. The Otay Ranch GDP includes plans for multiple urban villages and town centers, resort village, university site, regional technology park, regional open space preserve, freeway commercial area, the Eastern Urban Center, industrial areas, and two rural estate planning areas. Otay Ranch includes the Otay Ranch Preserve, a hard-line preserve encompassing approximately 11,375 acres set aside, or to be set aside, as mitigation for impacts to sensitive biota resources and associated species resulting from Otay Ranch development occurring within both the City and County.

The Otay Ranch GDP groups residential areas into "Villages." The heart of the village is the "village core." Pursuant to the guidelines in the Otay Ranch GDP, village cores are strategically located within each village. These are mixed-use areas designed to contain essential facilities and services such as elementary schools, shops, civic facilities, childcare centers, local parks, and higher-density housing.

2.2.1.1 1993 Otay Ranch General Development Plan and Program EIR

The Otay Ranch GDP/SRP was originally adopted by the Chula Vista City Council and the San Diego County Board of Supervisors on October 28, 1993, and was accompanied by certification of the Final Program EIR and related technical addendum (SCH No. 89010154). In addition to establishing community-wide land use policies, the Otay Ranch GDP includes an Overall Design Plan, which presents a design context for Otay Ranch that serves as a basis for individual SPA Plans. The Otay Ranch GDP groups residential areas into "Villages." Village cores are strategically located, mixed-use areas designed to contain essential facilities and services.

The 1993 Otay Ranch GDP was amended in 1996 as part of the approval of the first SPA plan in Otay Ranch (SPA One) and again in conjunction with the General Plan Update process in 2005, and was recently updated in February 2013, as described below. The 2013 General Plan Amendment included the existing land uses, which are the 2001 Otay Ranch GDP uses.

The analysis within this EIR tiers from the 1993 Otay Ranch GDP Program EIR because the proposed project implements land uses (although at a different intensity), a circulation network, and village design policies that were analyzed in the Otay Ranch GDP, and because the certified Program EIR assessed the significant environmental effects associated with development of the entire Otay Ranch area at a programmatic level, including the proposed project site. Therefore, the analysis herein will be "tiered" from the certified 1993 Program EIR in accordance with Public Resources Code Section 21093(a) and CEQA Guidelines Section 15168(c). Public Resources Code Section 21093 encourages a lead agency to tier from a previously certified program EIR, whenever feasible.

2.2.1.2 Otay Ranch SPA One EIR

The Second Tier EIR for Otay Ranch SPA One and Annexation (SCH # 94101046 – "SPA One EIR") was adopted by the Chula Vista City Council in April of 1996. The SPA One EIR analyzed the potential impacts associated with implementation of the first SPA Plan in Otay Ranch. As required by the Otay Ranch GDP and Program EIR, the SPA One EIR included the preparation and consideration of the Phase 2 Resource Management Plan (Phase 2 RMP) which implemented a series of tasks such as preparing Ranch-wide studies, establishing the Preserve conveyance plan, creating the preserve financing mechanism, and setting requirements for the Otay Ranch Preserve Owner/Manager. The Phase 2 RMP conveyance requirement established

the mechanism for land to be dedicated to the Otay Ranch Preserve which allowed for the assemblage of a connected, integrated, managed, fully-funded Preserve to mitigate biological impacts within the developed portions of Otay Ranch and became a major component of the Chula Vista MSCP Subarea Plan.

2.2.1.3 2005 Chula Vista General Plan Update/Otay Ranch General Development Plan Amendment and Program EIR

In 2005, the City of Chula Vista completed a comprehensive update of its General Plan, which included an amendment to the GDP (hereinafter referred to as the 2005 GPU/GDPA). The 2005 GPU/GDPA Program EIR (EIR 05-01) was certified on December 13, 2005.

The analysis within this EIR also tiers from the 2005 GPU/GDPA Program EIR, because existing conditions for the entire Otay Ranch area were assessed as part of the 2005 GPU/GDPA. The 2005 GPU/GDPA analyzed the environmental impacts associated with the adopted General Plan Preferred Alternative (as well as three other project level alternatives). However, not all of the components proposed as part of the Preferred Alternative were adopted. The rejected components of the Preferred Alternative were designated as Deferral Areas[1], and included Villages Eight East and Ten. The following provides a description of the components that were adopted and those that were designated as "Deferral Areas," as they pertain to the University Villages Project (proposed project):

Adopted Components

Village Three - The 2005 GPU/GDPA included amendments to the GDP, which eliminated the secondary residential urban village scenario that the County identified as its primary land use, in the County SRP, and the City of Chula Vista identified as an alternative land use to Industrial. The land was annexed to the City in 1995 and the County no longer had jurisdiction over the property. The land use designations for Village Three remained the same as the land uses adopted as part of the original 1993 Otay Ranch GDP.

Village Four - The 2005 GPU/GDPA removed 84 acres of land in Village Four and incorporated it with Village Eight. This component was adopted, but amendments to land uses within the 84 acres were not (see below). Another adopted component of the 2005 GPU/GDPA was the designation of 82 gross-acres in the northern portion of Village Four as a major Community Park.

[1] Deferral Areas – Portions of the Central and Eastern University Districts where land use and policy changes analyzed in the 2005 GPU/GDPA were not approved as described in Resolution 2005-424 and GDP Resolution 2004-427.

Deferral Areas

Village Eight - The 2005 GPU/GDPA Preferred Alternative included, but was not limited to, designating the Regional Technology Park (RTP) in the eastern portion of Village Eight on 200 acres. However, none of the land use or policy changes analyzed in the 2005 GPU/GDPA were approved and all of Village Eight became part of the Deferral Area.

Village Ten - The 2005 GPU/GDPA Preferred Alternative included, but was not limited to, removing the urban village alternative from the GDP as an option for Village Ten, designating 530 acres for a university campus, and replacing the GDP designation with "University Campus." However, none of the land use or policy changes analyzed in the 2005 GPU/GDPA were approved and all of Village Ten became part of the Deferral Area.

As part of the 2005 GPU/GDPA, the Chula Vista City Council deferred taking action on land use designations for Village Eight and Village Ten. Because the land uses within the Deferral Areas were not adopted as part of the 2005 GPU/GDPA land uses reverted back to the 2001 Otay Ranch GDP land uses for Villages Eight and Village Ten.

2.2.1.4 2006 Otay Ranch Villages Two, Three, and a Portion of Village Four SPA Plan and Final Second Tier EIR

The 2006 Otay Ranch Village Two, Three, and Portion of Village Four SPA Plan Final Second Tier EIR (Second Tier EIR), tiers from the 1993 Otay Ranch GDP Program EIR. The 2006 Second Tier EIR evaluated the environmental effects associated with development of the Village Two, Three, and a Portion of Village Four SPA Plan, which were not evaluated at a project-level in the 1993 Otay Ranch GDP Program EIR. The Second Tier EIR required Amendments to be made to the General Plan, Otay Ranch GDP, Phase 1 and Phase 2 RMPs, and the County of San Diego Otay Subregional Plan, Volume 2.

The Second Tier EIR, which amended the Otay Ranch GDP, designated only Industrial uses within 1,000 feet of the Otay Landfill in Village Three. Chapter 10, Alternatives, of this EIR analyzes an "Otay Ranch GDP Alternative" and an "Otay SRP Alternative," which designate only Industrial uses within 1,000 feet of the Otay Landfill in Village Three. Therefore, the Villages Two, Three, and a Portion of Village Four SPA Plan Second Tier EIR has been "incorporated by reference" in this EIR in accordance with Public Resources Code Section 21083 and CEQA Guidelines Section 15150.

The incorporated part of the referenced document will be briefly summarized where possible or briefly described if the data or information cannot be summarized. The relationship between the incorporated part of the referenced document and the analysis provided herein will be described.

The proposed project includes an amendment to the existing Villages Two, Three, and a Portion of Village Four SPA Plan. The amendment to the Village Two, Three and a Portion of Village Four SPA Plan is to remove the Village Three North area from that SPA Plan to allow for the area to be planned as part of a separate SPA Plan (the Village Three North SPA Plan). See also Section 4.3 Discretionary Actions.

2.2.1.5 2013 City of Chula Vista General Plan Amendment/Otay Ranch General Development Plan Amendment and SEIR

In 2013, a Supplemental EIR (SEIR 09-01) was certified for a General Plan Amendment and General Development Plan Amendment (hereinafter referred to as the 2013 GPA/GDPA), in accordance with CEQA and the guidelines of the City of Chula Vista. As it pertains to the proposed project, the 2013 GPA/GDPA separated Village Eight into Village Eight West and Village Eight East based on separate ownerships; relocated the RTP out of Village Eight East to combine with the University site; and re-designated Village Eight East and Village Ten to their previously adopted uses as identified in the 1993 Otay Ranch GDP.

A previous version of the proposed project was included in the cumulative analysis in the SEIR for the 2013 GPA/GDPA as a "foreseeable" project. The cumulative analysis in the SEIR for the 2013 GPA/GDPA analyzed Village Eight East and Village Ten with 5,756 multi-family dwelling units and park (45.1 acres), school (20.0 acres), and community purpose facility (8 acres) land use designations. These uses were generally consistent with the Land Offer Agreement in place at the time the SEIR was prepared. These uses were consistent with the approved Village 2, 3 and Portion of Village 4 SPA Plan and Final Second Tier EIR referenced above.

2.2.2 Otay Ranch Resource Management Plan and Multiple Species Conservation Program

The Otay Ranch Resource Management Plan (RMP) and the City of Chula Vista Multiple Species Conservation Program (MSCP) Subarea Plan have been "incorporated by reference" throughout the analysis provided in Section 5.8, Biological Resources in this EIR in accordance with Public Resources Code Section 21083 and CEQA Guidelines Section 15150. The incorporated part of the referenced document will be briefly summarized where applicable or briefly described if the data or information cannot be summarized. The relationship between the incorporated part of the referenced document and the analysis provided herein will be described.

For development projects located within Otay Ranch, the City's MSCP Subarea Plan relies on the Preserve design and policies contained in the Otay Ranch RMP, as may be amended from time to time, as the framework for conservation and management of biological resources within the Otay Ranch Preserve (City of Chula Vista 2003a; City of Chula Vista and County of San Diego 1993, 1996). The RMP comprises two separate documents, the Phase 1 RMP and Phase 2 RMP. The

Phase 1 RMP was approved concurrently with the Otay Ranch GDP by the County of San Diego and the City in October 1993. The Phase 2 RMP was approved concurrently with SPA One by the City in June 1996. Both the Phase 1 and Phase 2 RMPs were amended in 2002 and 2005.

The Phase 1 RMP identifies Preserve areas within Otay Ranch and contains policies regarding species and habitat conservation and long-term management of the Preserve. The Phase 2 RMP includes ranch-wide studies conducted pursuant to the Phase 1 RMP and provides additional detail on Preserve land conveyance, management, and funding (City of Chula Vista and County of San Diego 1993, 2002).

The municipalities of southern San Diego County collaborated in producing the MSCP Subarea Plan. The MSCP Subarea Plan is implemented through individual Subarea Plans adopted by each jurisdiction receiving "take" authorization for covered species. The Chula Vista MSCP Subarea Plan provides for conservation of upland habitats and species through preserve design, regulation of impacts and uses, and management of the Preserve (City of Chula Vista 2003).

2.2.3 Sectional Planning Area Plans

The Otay Ranch GDP is implemented through more detailed plans called "Sectional Planning Areas" (or SPA) plans. A SPA plan implements the plans, policies, and objectives of the Otay Ranch GDP by further defining land uses, development standards, and zoning for a particular portion of the Otay Ranch. SPA plans also establish design criteria and define the type and amount of development permitted.

Section E.1.a of the Otay Ranch GDP specifies the contents of a SPA Plan. The proposed project includes the adoption of three new SPA plans: (a) Village Three North and a Portion of Village Four, (b) Village Eight East, and (c) Village Ten. In addition, as described above, the project proposes amendments to three approved SPA Plans: the Village Three North and Portion of Village Four SPA Plan includes approximately 253 acres within the area identified as "Village Three" in the Village Two, Three and Portion of Village Four SPA Plan Area, adopted in 2006; the Village Eight East SPA Plan includes approximately 6.5 acres within the Village Seven SPA Plan Area, adopted in 2004; and the Village Ten SPA Plan Area includes approximately 16.1 acres currently within the Village Nine SPA Plan Area, adopted in 2014. The proposed project would amend the Village Two, Three and Portion of Four SPA Plan, the Village Seven SPA Plan, and the Village Nine SPA Plan such that no SPA Plan would include overlapping property, consistent with the requirements of the Otay Ranch GDP. The amendment to the Village Two, Three and a Portion of Village Four SPA Plan is to remove the Village Three North area from that SPA Plan to allow for the area to be planned as part of a separate SPA Plan (the Village Three North SPA Plan).

2.2.4 Subdivisions and Building Permits

Upon approval of SPA plans, property may be subdivided in accordance with the California Subdivision Map Act and the applicable Subdivision Ordinances. Thereafter, building permits may be issued. The proposed project includes TMs for development of Village Three North and a Portion of Village Four, Village Eight East, and Village Ten.

2.3 SCOPE OF THE ENVIRONMENTAL IMPACT REPORT

Pursuant to Section 15161 of the CEQA Guidelines, this document has been prepared as a "Project EIR" and is "focused primarily on the changes in the environment that would result from the development" (i.e., the build out of the proposed University Villages Project). Where environmental impacts have been determined to be potentially significant, this EIR presents mitigation measures directed at reducing those adverse environmental effects. The development of mitigation measures provides the lead agency with ways to substantially lessen or avoid the significant effects of the project on the environment, to the degree feasible. Alternatives to the proposed project are presented to evaluate whether there are alternative development scenarios that can further minimize or avoid significant impacts associated with the project.

In addition, and as discussed in Section 2.2, because the proposed project implements a part of the Otay Ranch GDP, and because the certified Otay Ranch Final Program EIR assessed the significant environmental effects associated with development of the entire Otay Ranch area, this EIR "tiers" from the certified Otay Ranch Final Program EIR in accordance with Public Resources Code Section 21093(a) and CEQA Guidelines Section 15168(c). This EIR also tiers from the 2005 GPU/GDPA Program EIR, because existing conditions for the entire Otay Ranch area were assessed as part of the 2005 GPU/GDPA Program EIR. Public Resources Code Section 21093 encourages a lead agency to tier from a previously certified program EIR, whenever feasible. In this way, the EIR can focus on site-specific issues relating to the proposed project and allows the City, as the lead agency, to concentrate on issues, which are ripe for decision and exclude from consideration issues already decided or not ripe for decision under CEQA Guidelines Sections 15168(c), 15385.

Table 2-1 lists the environmental topics included in this EIR and the environmental document from which the analysis was tiered.

Table 2-1
Tiered Analysis by Environmental Issue

Environmental Topic	Documents Utilized in Tiered Analysis	
	Existing Conditions	*Potential Impacts*
Land Use and Planning	1993 Otay Ranch GDP Program EIR and 2005 GPU/GDPA Program EIR	1993 Otay Ranch GDP Program EIR
Landform Alteration / Aesthetics	2005 GPU/GDPA Program EIR	1993 Otay Ranch GDP Program EIR
Transportation and Traffic	2005 GPU/GDPA Program EIR	1993 Otay Ranch GDP Program EIR
Air Quality	2005 GPU/GDPA Program EIR	2005 GPU/GDPA Program EIR
Noise	2005 GPU/GDPA Program EIR	1993 Otay Ranch GDP Program EIR
Cultural Resources	1993 Otay Ranch GDP Program EIR and 2005 GPU/GDPA Program EIR	1993 Otay Ranch GDP Program EIR and 2005 GPU/GDPA Program EIR
Paleontological Resources	1993 Otay Ranch GDP Program EIR and 2005 GPU/GDPA Program EIR	1993 Otay Ranch GDP Program EIR and 2005 GPU/GDPA Program EIR
Biological Resources	1993 Otay Ranch GDP Program EIR and 2005 GPU/GDPA Program EIR	1993 Otay Ranch GDP Program EIR and 2005 GPU/GDPA Program EIR
Agricultural Resources	1993 Otay Ranch GDP Program EIR and 2005 GPU/GDPA Program EIR	1993 Otay Ranch GDP Program EIR and 2005 GPU/GDPA Program EIR
Water Quality and Hydrology	1993 Otay Ranch GDP Program EIR and 2005 GPU/GDPA Program EIR	1993 Otay Ranch GDP Program EIR and 2005 GPU/GDPA Program EIR
Geology and Soils	1993 Otay Ranch GDP Program EIR	1993 Otay Ranch GDP Program EIR
Public Services	2005 GPU/GDPA Program EIR	2005 GPU/GDPA Program EIR
Utilities	2005 GPU/GDPA Program EIR	2005 GPU/GDPA Program EIR
Climate Change	2013 GPA/GDPA SEIR	2013 GPA/GDPA SEIR
Hazards and Risk of Upset	2005 GPU/GDPA Program EIR	2005 GPU/GDPA Program EIR
Housing and Population	2005 GPU/GDPA Program EIR	1993 Otay Ranch GDP Program EIR and 2005 GPU/GDPA Program EIR
Mineral Resources	1993 Otay Ranch GDP Program EIR and 2005 GPU/GDPA Program EIR	1993 Otay Ranch GDP Program EIR and 2005 GPU/GDPA Program EIR
Cumulative Impacts	2013 GPA/GDPA SEIR	2013 GPA/GDPA SEIR

2.4 ENVIRONMENTAL PROCEDURES

2.4.1 California Environmental Quality Act Compliance

The California Public Resources Code (Section 21000 et seq.) requires the preparation and certification of an EIR for any project that a lead agency determines may have a significant effect on the environment. This EIR has been prepared in compliance with all criteria, standards, and procedures of the CEQA Guidelines (14 CCR Section 15000 et seq.).

2.4.2 Notice of Preparation and Scoping

CEQA establishes mechanisms whereby the public and decision makers can be informed about the nature of a proposed project and the extent and types of impacts that the project and its alternatives would have on the environment, should the project or alternatives be implemented. Pursuant to Section 15082 of the CEQA Guidelines, the City circulated a Notice of Preparation (NOP) dated July 22, 2013, to interested agencies, organizations, and parties. The NOP was also sent to the State Clearinghouse at the California Office of Planning and Research. The State Clearinghouse assigned a state identification number (SCH No. 2013071077) to this EIR.

The NOP is intended to encourage interagency communication regarding the proposed action so that agencies, organizations, and individuals are afforded an opportunity to respond with specific comments and/or questions regarding the scope and content of the EIR. A public scoping meeting was held on August 7, 2013, from 3:00 p.m. to 5:00 p.m., at 276 Fourth Avenue (Building C, Room B129), Chula Vista, California, 91910, to gather additional public input. The 30-day public scoping period ended on August 21, 2013.

Comments received during the NOP public scoping period were considered during the preparation of this EIR. The NOP and comments are included in Appendix A to this EIR. Twelve comment letters were received in response to the NOP and public scoping meeting. Comments covered a variety of topics, including increases in traffic within Chula Vista and surrounding jurisdictions, potential hazardous materials/air toxics impacts due to proximity to the Otay Landfill, impacts to the Otay Valley Regional Park, impacts to biological resources and the MSCP Preserve, stormwater runoff, and loss of industrial land.

Based on the scope of the proposed project as described in the NOP, the following issues were determined to be potentially significant and are addressed in Chapter 5, Environmental Impact Analysis, of this EIR:

- Land Use, Planning, and Zoning
- Landform Alteration/Aesthetics
- Transportation, Circulation, and Access
- Air Quality
- Noise
- Cultural Resources
- Paleontological Resources
- Biological Resources
- Agricultural Resources
- Water Quality and Hydrology
- Geology and Soils
- Public Services and Utilities
- Climate Change
- Hazards
- Housing and Population
- Mineral Resources
- Cumulative Impacts
- Growth Inducement.

2.4.3 Overview of the EIR Process

This EIR will be made available to members of the public, agencies, and interested parties for a 45-day public comment period in accordance with Section 15105 of the CEQA Guidelines. Public comment of the EIR is intended to focus "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (14 CCR 15204). The Notice of Completion of the EIR will be filed with the State Clearinghouse as required by Section 15085 of the CEQA Guidelines. In addition, the Notice of Availability of the EIR will be distributed pursuant to Section 15087 of the CEQA Guidelines. Interested parties may provide comments on the EIR in written form. This EIR and all related technical appendices are available for review upon request during the 45-day public comment period at the following locations:

- The offices of the City of Chula Vista, Development Services Department, located at 276 Fourth Avenue, Chula Vista, California 91910
- The Chula Vista Public Library, 365 F Street, Chula Vista, California 91910.

Once the 45-day public comment period has concluded, the City will review all public comments on the EIR, provide written responses to comments, and authorize revisions to the EIR text, if necessary. The final Mitigation Monitoring and Reporting Program (MMRP) will be incorporated into the Final EIR. Mitigation measures contained in the EIR consider future monitoring requirements and are written in sufficient detail to address impacts of the proposed project, referencing the appropriate implementing permits and plans. If one or more significant environmental impacts are determined, written findings for each of those significant effects, accompanied by an overriding justification and rationale for each finding in the form of a statement of overriding considerations will also be included in the Final EIR, if necessary. The Final EIR includes all comment letters received, final written response to comments, a Final EIR preface, if applicable, edits made to the EIR as a result of public review/comment, and findings of fact and statement of overriding considerations, if necessary.

2.5 INTENDED USES OF THE EIR

According to Section 21002.1(a) of the Public Resources Code (CEQA), "[t]he purpose of an environmental impact report is to identify the significant effects of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided." This EIR provides relevant information concerning the potential environmental effects associated with construction and operation of the proposed project and identifies and evaluates potentially significant effects that may result from implementation of the proposed project. It is intended for use by decision makers and the public.

As the designated lead agency, the City has assumed responsibility for preparing this EIR. When deciding whether to approve the proposed project, the City will use the information provided in this EIR to consider potential impacts to the physical environment associated with the proposed project. The City will consider all written comments received on the EIR during the 45-day public comment period in making its decision to certify the EIR as complete and in compliance with CEQA and in making its determination whether to approve or deny the project. In the final review of the document, environmental considerations, and economic and social factors will be weighed to determine the most appropriate course of action.

After certification of the Final EIR, agencies with permitting authority over all or portions of the project will use the Final EIR as the basis for their evaluation of environmental effects related to the project and approval or denial of other applicable permits or authorizations.

2.6 ORGANIZATION AND CONTENT OF THE EIR

This EIR is organized to provide a tiered project-level analysis of the potentially significant environmental impacts, mitigation measures, and alternatives for the proposed project. In order to describe the direct, indirect, and cumulative impacts, mitigation measures, and alternatives for the proposed project, this EIR is organized as follows:

- Chapter 1, Executive Summary, outlines the conclusions of the environmental analysis and a summary of the project as compared to the alternatives analyzed in the EIR. This section also includes a table summarizing all environmental impacts identified in this EIR along with the associated mitigation measures proposed to reduce or avoid each impact.
- Chapter 2, Introduction, serves as a foreword to this EIR, introducing the project background, applicable environmental review procedures, and format of the EIR.
- Chapter 3, Environmental Setting, describes the project location and physical environmental setting.
- Chapter 4, Project Description, provides a thorough description of the proposed project and required discretionary approvals.
- Chapter 5, Environmental Impact Analysis, provides an analysis of the potentially significant environmental impacts identified, and proposed mitigation measures to reduce or avoid any potentially significant impacts.
- Chapter 6, Cumulative Impacts, provides an analysis of the cumulative effects of the proposed project.
- Chapter 7, Growth Inducement, discusses the project's potential growth-inducing impact.

- Chapter 8, Significant and Unavoidable Environmental Impacts, addresses impacts that have been identified as significant and unavoidable.
- Chapter 9, Significant Irreversible Environmental Changes, addresses impacts that have been identified as significant and irreversible.
- Chapter 10, Alternatives, analyzes a range of reasonable alternatives to the proposed project that would lessen or avoid significant environmental effects of the proposed project.
- Chapter 11, References, provides a compiled list of references cited in each section of the EIR.
- Chapter 12, List of Preparers/Organizations Consulted, provides a list of persons, organizations, and agencies consulted during the preparation of this EIR.
- Appendices include various technical studies and correspondence prepared for the project, as listed in the table of contents.

2.7 MITIGATION MONITORING AND REPORTING PROGRAM

The City will prepare an MMRP prior to project approval. The MMRP will include all mitigation measures outlined in the EIR, the responsible entity for implementation, implementation timing (prior to construction, during construction, post-construction), and any follow-up reporting requirements (such as submittal of materials to regulatory agencies). The City, as the designated lead agency, is responsible for enforcing and verifying that each mitigation measure is implemented as required.

INTENTIONALLY LEFT BLANK

CHAPTER 3
ENVIRONMENTAL SETTING

This section provides a description of the existing site conditions, surrounding land uses, and land use planning context relevant to the proposed project. This section also provides an overview of the environmental resources present on and around the project area.

3.1 EXISTING SITE CONDITIONS

Otay Ranch lies within the East Planning Area of the City, as identified in the City's General Plan. The proposed project is a component of the Otay Ranch GDP, which organizes the Otay Ranch into 20 villages and planning areas. The 1,375-acre[1] project area is located within the Otay Valley Parcel of the Otay Ranch. The project area is comprised of Village Three North, a portion of Village Four, Village Eight East, and Village Ten. In addition, the proposed project includes necessary off-site improvements totaling approximately 160 acres.

Historically, the Otay Valley Parcel, including the project area, has been used for ranching, grazing, dry farming, and truck farming activities. The project area is currently vacant and is generally comprised of gently sloping terrain covered with primarily non-native grasslands crossed by dirt roads and old cattle trails. Additional information regarding biological resources on the site is provided in Subsection 3.1.2.

The boundaries of the villages included in the proposed project differ from those identified in the Otay Ranch GDP due to ownership patterns that do not match the Otay Ranch GDP village boundaries. Village Three North encompasses a portion of Village Three as identified in the Otay Ranch GDP, as well as the open space area west of Village Three. The portion of Village Four included in the project area is within the Otay Ranch GDP boundaries of Village Four; however, it is limited to a strip of land extending southwest toward Village Three. Village Eight East encompasses the eastern part of Village Eight as identified in the Otay Ranch GDP, adjacent to State Route 125 (SR-125), as well as a portion of Village Seven. Village Ten includes the eastern portion of Village Nine and most of Village Ten.

Village Three North

Village Three North is located at the southwest edge of the Otay Valley Parcel of Otay Ranch, just north of the Otay Valley Regional Park (OVRP), north and south of the future extension of Main Street and east of existing industrial development. Village Three North is visible from the OVRP and the Chula Vista Greenbelt trail systems.

[1] The current ownership is 1,363 acres; however, as part of the proposed project, approximately 12 acres of land currently within the SR-125 ROW will be "decertified" (removed from the ROW) and exchanged with Caltrans, resulting in a project total of 1,375 acres.

Portion of Village Four

The portion of Village Four is located west of the southern terminus of La Media Road, east of Wolf Canyon and north of the Otay Valley rock quarry. This portion of Village Four is visible from the southern edge of Village Two and from the eastern portion of Village Three North.

Village Eight East

Village Eight East is located at the southern edge of the Otay Valley Parcel of Otay Ranch, just north of the Otay River Valley, south of Main Street, and west of SR-125. Situated above the bottom of the river valley, Village Eight East is visible from the OVRP and Chula Vista Greenbelt trail systems.

Village Ten

Village Ten is located south of Hunte Parkway and the future University, west of Salt Creek Canyon and north of the Otay River Valley. Village Ten is visible from the OVRP and Chula Vista Greenbelt trail systems, as well as the County of San Diego Lower Otay Regional Park.

3.1.1 Surrounding Land Uses

The project area is surrounded by other Otay Ranch villages and a variety of land uses and natural features, as described below.

Village Three North

Village Three North is located south of Otay Ranch Village Two and the Otay Landfill, west of Wolf Canyon and the Otay Valley rock quarry, north of the OVRP, and east of various auto recycling facilities. The portion of Village Two adjacent to the project area is currently undeveloped. The Otay Landfill is an active solid waste facility that is currently at 47% capacity and has an expected closure date of February 2028 (Solid Waste Facility Permit No. 37-AA-0010, August 14, 2012). The Otay Valley rock quarry is currently an active aggregate mining operation. Mining operations are expected to continue for approximately 80 years, until 2089.

Portion of Village Four

The portion of Village Four, included in the proposed project, is located south of Village Two and the northern reach of Wolf Canyon, west of Village Seven and a portion of Village Four, north of the remainder of Village Four, and east of Wolf Canyon open space. The areas adjacent to this portion of Village Four are currently undeveloped. The dominant landform within Village Four is Rock Mountain, which is located south of the portion included in the proposed project.

Village Eight East

Village Eight East is located in the central portion of the southern third of the Otay Valley Parcel. Immediately surrounding Village Eight East are existing and planned development areas and Otay Ranch Preserve areas. Existing development includes Otay Ranch Village Seven and Olympian High School to the north, and SR-125 immediately east of the village. Planned development includes Village Eight West to the west of Village Eight East and Village Nine which lies east of SR-125. The OVRP and Otay Ranch Preserve are south of Village Eight East.

Village Eight West includes a Town Center planned for up to 2,050 residential units and up to 300,000 square feet of office and commercial/retail. To the east of Village Eight East, Village Nine and the University and Regional Technology Park are planned. Village Nine is planned for 4,000 residential units and up to 1,500,000 square feet of office and commercial/retail. Expected buildout of these villages and planning areas is forecasted for 2030 (City of Chula Vista 2012b).

Village Ten

Village Ten is surrounded by existing and planned development areas. Village Ten is located east of Village Nine, south of the University/Regional Technology Park site, west of Salt Creek Canyon, and north of the OVRP. The existing Otay Ranch Village Eleven (Village of Winding Walk) is located to the north of the University Planning Area. The University Planning Area is defined in the Otay Ranch GDP and consists of a planned University and a Regional Technology Park (RTP) comprising approximately 345 acres. High Tech High School is located northeast of Village Ten. These villages/planning areas are expected to be built out by 2030.

3.1.2 Natural Resources in Project Area

Based on species composition and general physiognomy, nine native or naturalized plant communities, including disturbed forms, were identified within Villages Three North/Portion of Village Four, Village Eight East, and Village Ten: broom baccharis scrub, cismontane alkali marsh (including disturbed), coastal sage scrub (including disturbed), maritime succulent scrub (including disturbed), mulefat scrub (including disturbed), non-native grassland, southern mixed chaparral, and southern willow scrub. Four non-native or disturbed land covers also occur on site: agriculture, developed, disturbed habitat, and tamarisk scrub.

A total of 71 species of birds were observed on the project site, in the Preserve, or immediately off site during biological surveys conducted on the site from 2002 to 2011, including: California gnatcatcher (*Polioptila californica*), rufous-crowned sparrow (*Aimophila ruficeps*), California quail (*Callipepla californica*), Anna's hummingbird (*Calypte anna*), western scrub-jay (*Aphelocoma californica*), California towhee (*Melozone crissalis*), house finch (*Carpodacus mexicanus*), red-tailed hawk (*Buteo jamaicensis*), and northern mockingbird (*Mimus polyglottos*).

Five species of reptiles were observed on the project site or within the Preserve during the surveys: western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta* ssp.), Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*), gopher snake (*Pituophis catenifer*), and southern alligator lizard (*Elgaria multicarinata*). Based on habitat present and knowledge of the area, it is presumed that several other reptile and amphibian species occur on the project site. Some of these include: coastal whiptail (*Aspidoscelis tigris stejnegeri*), western skink (*Eumeces skiltonianus*), red-diamond rattlesnake (*Crotalus ruber*), western rattlesnake (*Crotalus oreganus*), Blainville's horned lizard (*Phrynosoma blainvillii*), western toad (*Anaxyrus boreas halophilus*), and Baja California treefrog (*Pseudacris hypochondriaca hypochondriaca*).

Ten species of mammals were detected on site or within the Preserve by direct observation or sign; they are black-tailed jackrabbit (*Lepus californicus*), brush rabbit (*Sylvilagus bachmani*), desert cottontail (*Sylvilagus audubonii*), wood rat (*Neotoma* ssp.), Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), striped skunk (*Mephitis mephitis*), coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), and bobcat (*Lynx rufus*). Other mammal species that likely use the site include Dulzura kangaroo rat (*Dipodomys simulans*) and common raccoon (*Procyon lotor*).

Twenty eight species of invertebrates, all butterflies, were identified on site or in the Preserve by direct observation. Common species on site include Behr's metalmark (*Apodemia virgulti*), California ringlet (*Coenonympha tullia california*), Sara's orangetip (*Anthocharis sara sara*), and common white (*Pieris rapae*). A detailed analysis of the existing on- and off-site habitats, and plant and animal species is provided in Section 5.8, Biological Resources.

3.1.3 Existing Topography and Soils

The project site is topographically diverse. In Village Three North/Portion of Village Four, elevations range from approximately 150 feet above mean sea level along the south/southwestern boundary of the site to 470 feet to the north. In Village Eight East, elevations range from approximately 190 feet in the south/southwest portion of the site to 600 feet in the northern/north-central portion of the site. In Village Ten, elevations range from approximately 280 feet in the very south to 500 feet along the northern boundary of the site.

In Village Three North/Portion of Village Four, numerous drainages trend north–south and drain into the Otay River, which is located immediately south of Main Street. Additionally, there are several north–south running drainages within Villages Eight East and Ten that drain south into the Otay River.

Soils on site consist of Diablo clays, Diablo-Olivenhain complex, gravel pits, Huerhuero loam, Linne clay loam, Olivenhain cobbly loams, riverwash, Salinas clay loam, Stockpen gravelly clay loam, and terrace escarpments. Village Three North and Portion of Village Four soils are

dominated by the Diablo clays with smaller areas of Olivenhain and Linne clay loam. Geotechnical surveys confirmed some unconsolidated fill in the western portion of the site with the soil characterized as sandy clay to clayey sand with gravel and cobble. Village Eight East soils are also dominated by the Diablo and Olivenhain soils with Huerhuero and Salinas soils as well as small amounts of other soil types. Geotechnical surveys confirmed some unconsolidated fill in the western portion of the site with sandy clay to clayey sand that is expansive and compressible. Village Ten soils are dominated by Olivenhain soils with small amounts of Diablo and Linne soils. Geotechnical surveys confirmed soils similar in condition to those for Village Eight East. A detailed analysis of on-site geotechnical features is provided in Section 5.11, Geology and Soils.

3.1.4 Climate

The climate in the project area is dominated by a semi-permanent high-pressure cell located over the Pacific Ocean. This cell influences the direction of prevailing winds (westerly to northwesterly) and maintains clear skies for much of the year. The nearest climatological monitoring station that records precipitation data is located at the lower Otay Reservoir, approximately 1.5 miles east of the project site. The normal precipitation in the lower Otay Reservoir area is 11 inches annually, occurring primarily from December through March (WRCC 2013a). Temperature is recorded at the monitoring station located in the community of Bonita, north of the Otay Ranch area. According to the Western Regional Climate Center, in summer (August) the normal daily maximum temperature in Bonita is 81 degrees Fahrenheit (°F), and in winter (January) the normal daily minimum temperature is 40°F (WRCC 2013b). Additional information pertaining to climate as it relates to air quality is provided in Section 5.4, Air Quality and Section 5.14, Climate Change.

3.1.5 Access

Village Three North

Regional access to Village Three North is currently provided from Interstate 805 (I-805) via Main Street which turns south becoming Heritage Road at the southwestern corner of the village. As part of the project, Heritage Road would be extended northward to provide three access points along the western boundary of the site. Main Street, which currently terminates at the intersection of Heritage Road, would be constructed through Village Three North from Heritage Road to Wolf Canyon to provide east-west access and frontage improvements.

Portion of Village Four

Regional access to Village Four is currently provided from I-805 via Olympic Parkway and La Media Road. La Media Road currently terminates at Santa Luna Street east of the portion of

Village Four. As part of the project, Santa Luna would be extended west into the Village Four Community Park providing access to the portion of Village Four.

Village Eight East

Regional access to Village Eight East is currently provided by SR-125, which is adjacent to the eastern boundary of Village Eight East. Additional north–south access is provided from I-805 and I-5, located approximately four miles west and seven miles west, respectively, of Village Eight East. SR-54 and SR-905 provide regional east–west circulation, approximately seven miles north and three miles south, respectively, of the project area. As part of the proposed project, La Media Road will be extended south to Main Street, Main Street will be constructed east from La Media along the northern frontage of Village Eight East, and Otay Valley Road will be constructed south from La Media Road through Village Eight West. The La Media Road and Otay Valley Road extensions are planned for development as part of the Village Eight West SPA Plan and TM; however, in the event that these extensions are not provided prior to Village Eight East developing, the proposed project would construct the improvements. Three access points are provided to Main Street and two access points are provided to Otay Valley Road.

Village Ten

Regional access to Village Ten is currently provided from SR-125 via Birch Road and EastLake Parkway. EastLake Parkway currently terminates at Hunte Parkway north of Village Ten. As part of the proposed project, Discovery Falls and EastLake Parkway would be extended by the project south of Hunte Parkway to provide north–south access to Village Ten. Three access points are provided from Discovery Falls. Otay Valley Road would be extended southeast from the current termination of La Media Road, over SR-125 to provide the main east–west access.

3.2 EXISTING LAND USE DESIGNATIONS

Land uses within the project area are designated in both the City of Chula Vista General Plan and the Otay Ranch GDP. Zoning within the project area is designated by the City of Chula Vista Zoning Map, which specifies the zoning for the entire Otay Ranch as Planned Community (PC) zoned, as defined in Chapter 19.48 of the Chula Vista Municipal Code (City of Chula Vista 2012a). The land use designations are described for each village below.

Village Three North

The General Plan designates Village Three North as Limited Industrial land uses in a business park setting that reflects the unique characteristics of the landform and surrounding development. The Otay Ranch GDP also designates Village Three North for Research and Limited Industrial land uses. Further, Village Three North was a part of the previously

approved Village Two, Village Three and Portion of Village Four Sectional Planning Area (SPA) Plan which identified Village Three North for Industrial and Community Purpose development. A nuisance easement area surrounds the Otay Landfill and extends 1,000 feet from the landfill property line into the northern portion of Village Three North. General Plan Policy E 6.4 calls for the avoidance of placing sensitive receivers within 1,000 feet of a major toxic emitter. Due to the proximity to the landfill and existing uses, Village Three North was identified as an Industrial village in the Otay Ranch GDP and was approved for business park uses as part of the Village 2, 3 and portion of 4 SPA Plan.

Portion of Village Four

The General Plan designates the portion of Village Four within the project area Parks and Recreation, Open Space, and Open Space Preserve. The Otay Ranch GDP designates the portion of Village Four as a Community Park and Open Space. The portion of Village Four north of the project site was approved for Community Park uses as part of the Village Two, Village Three and Portion of Village Four SPA Plan in 2006.

Village Eight East

The General Plan designates Village Eight East for residential uses including Residential Mixed Use, Residential Medium–High, Residential Low–Medium, Public and Quasi Public, Parks and Recreation, and Open Space. The Otay Ranch GDP designates Village Eight East as an urban village with single-family and multi-family residential, and a mixed-use village core.

Village Ten

The General Plan designates Village Ten as part of the University Study Area. The village is designated Public and Quasi Public uses. The Otay Ranch GDP has two land uses identified for Village Ten. The primary land use designates Village Ten as Public and Quasi-Public for a university campus site; the secondary land use designates Village Ten as an urban village with single-family and multifamily residential, a mixed-use village core, and a community park. The proposed Village Ten generally covers the area shown as the eastern third of Village Nine and southern edge of Village Ten on the adopted Otay Ranch GDP Villages Nine and Ten Secondary Land Use Map. However, due to the ownership fragmentation, the western two thirds of Village Nine were SPA planned as the Village Nine SPA Plan, leaving the remaining portions of Village Nine and Village Ten as the University Planning Area. Through refined site planning, the Project proposed to establish new boundaries for Village Ten and the remaining University Planning Area.

INTENTIONALLY LEFT BLANK

CHAPTER 4
PROJECT DESCRIPTION

This chapter provides a description of the University Villages project (proposed project). As required by Section 15124 of the CEQA Guidelines (14 CCR 15000 et seq.), this section includes the precise location and boundaries of the project, a statement of project objectives, a general description of project characteristics, and a statement briefly describing the intended uses of the Draft EIR.

4.1 PROJECT LOCATION

The proposed project is located within the City in southwestern San Diego County (County), approximately 3.5 miles east of downtown Chula Vista and 13 miles southeast of downtown San Diego (Figure 4-1). The proposed project area occupies approximately 1,375 acres[1] composed of Village Three North, a portion of Village Four, Village Eight East, and Village Ten within the Otay Valley Parcel of the adopted Otay Ranch General Development Plan (Otay Ranch GDP) (Figure 4-2). The location of each village is described in greater detail in the following subsections and shown on Figure 4-3. In addition, the proposed project includes several off-site improvement areas including utility and roadway corridors, described in Section 4.2.3 and totaling approximately 160.0 acres.

As described in Chapter 3, Environmental Setting, the boundaries of these villages differ from those identified in the Otay Ranch GDP due to ownership patterns that do not match the Otay Ranch GDP village boundaries and Otay Ranch GDP amendments approved in 2013. The Village Three North component of the proposed project encompasses a portion of Village Three as identified in the Otay Ranch GDP. The portion of Village Four included in the proposed project area is within the Otay Ranch GDP boundaries of Village Four; however, it is limited to 29.7 acres. Village Eight East encompasses the eastern part of Village Eight, adjacent to SR-125, as identified in the Otay Ranch GDP, as well as a portion of Village Seven. The Village Ten component of the proposed project includes the eastern portion of Village Nine and the southern portion of Village Ten as identified in the Otay Ranch GDP.

4.1.1 Village Three North and a Portion of Village Four

Approximately 436.0 acres of the proposed project area is composed of Village Three North and a Portion of Village Four, in the southwest corner of the Otay Valley Parcel. The Village Three North site and the Portion of Village Four site are large, flat mesas, with slopes adjacent to Wolf

[1] The current ownership is 1,363 acres; however, approximately 12 acres of land currently within the SR-125 right-of-way adjacent to Village Eight East will be decertified and exchanged with CalTrans, resulting in a project total of 1,375 acres.

Canyon and the Otay Valley Regional Park (OVRP). Village Three North is situated between Wolf Canyon to the east, the OVRP to the south, the Otay Landfill to the north, and existing industrial uses to the west. The Portion of Village Four included in the proposed project is located on the northeastern edge of Wolf Canyon, north of the Otay River Valley and the Otay Valley rock quarry, south of Otay Ranch Village Two, and west of La Media Road and the future Village Eight West development area.

4.1.2 Village Eight East

The Village Eight East site is composed of approximately 575.3 acres located in the southern portion of the Otay Valley Parcel, west of SR-125 and north of the Otay River Valley. The site is characterized by a broad mesa with slopes leading down to the Otay River Valley along the southern boundary. Village Eight East is surrounded by the remainder of Village Eight (Village Eight West) to the west, Village Seven to the north, SR-125 and Village Nine to the east, and the OVRP to the south.

4.1.3 Village Ten

Village Ten is composed of approximately 363.4 acres located in the south eastern portion of the Otay Valley Parcel, between the University and the Otay River Valley. The site is characterized by a broad mesa with slopes leading down to the Otay River Valley along the southern boundary. Village Ten is adjacent to Village Nine to the west, the proposed University and Research Technology Park site to the north and east, and the OVRP to the south.

4.2 PROJECT DESCRIPTION

The proposed project is consistent with the Land Offer Agreement between the Applicant and the City, which consists of up to 6,897 homes and associated village land uses within the Otay Valley Parcel of the Otay Ranch GDP. Implementation of the proposed project requires Chula Vista General Plan Amendments, a Chula Vista Multiple Species Conservation Program (MSCP) Boundary Adjustment, Otay Ranch GDP Amendments, and Otay Ranch Resource Management Plan (RMP) Boundary Modifications. The project also proposes amendments to three SPA Plans: Otay Ranch Village Two, Village Three, and a Portion of Village Four SPA Plan, adopted by the Chula Vista City Council on June 4, 2006; Otay Ranch Village Seven SPA Plan, adopted by the Chula Vista City Council on October 4, 2004; and the Otay Ranch Village Nine SPA Plan, adopted by the Chula Vista City Council on June 3, 2014.

Z:\Projects\j700000\MAPDOC\MAPS\EIR

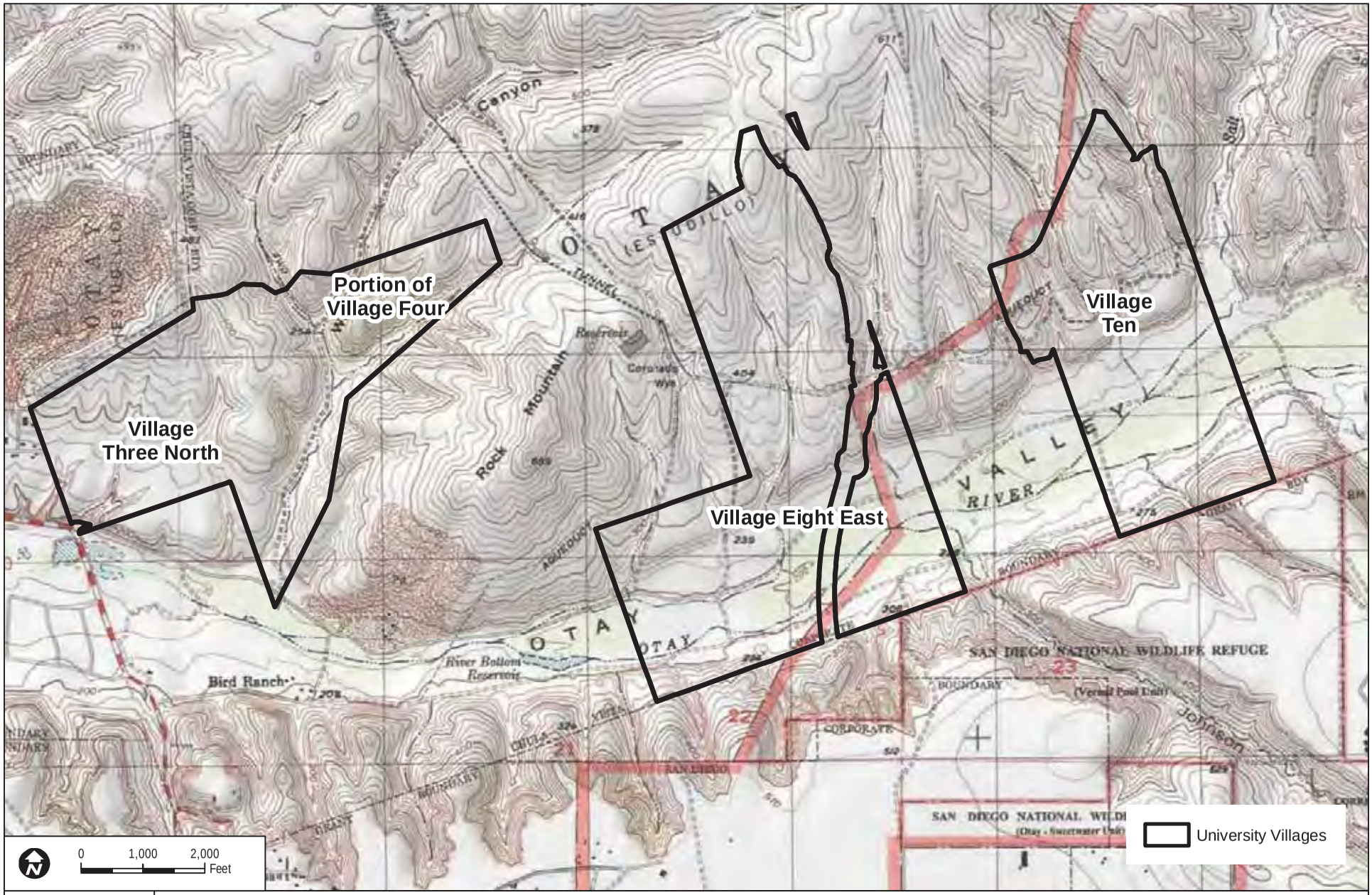
7000

FIGURE 4-1

Regional Map

UNIVERSITY VILLAGES PROJECT EIR

INTENTIONALLY LEFT BLANK



AERIAL SOURCE: USGS 7.5 MINUTE SERIES QUADRANGLE

FIGURE 4-2

Vicinity Map

7000

UNIVERSITY VILLAGES PROJECT EIR

INTENTIONALLY LEFT BLANK

AERIAL SOURCE: BING MAPPING SERVICE

FIGURE 4-

Pro ect rea

7000

UNIVERSITY VILLAGES PROJECT EIR

INTENTIONALLY LEFT BLANK

Three SPA plans are proposed: (1) an Otay Ranch Village Three North and a Portion of Village Four SPA Plan, (2) an Otay Ranch Village Eight East SPA Plan, and (3) an Otay Ranch Village Ten SPA Plan. Tentative Maps (TMs) are also proposed for (1) Village Three North and a Portion of Village Four, (2) Village Eight East, and (3) Village Ten. The SPA plan components are described in Section 4.2.9.

4.2.1 Overall Project Objectives

Section 15124(b) of the CEQA Guidelines requires an EIR to include a statement of objectives for the proposed project that outlines the underlying purpose of the project and assist in the development of project alternatives. In addition to more specific objectives for each of the project's components set forth later in this section, the SPA plan identifies the following general objectives of the proposed project:

- Implement the goals, objectives, and policies of the Chula Vista General Plan, the MSCP Subarea Plan, the Otay Ranch GDP, the Otay Ranch Phase 1 and Phase 2 RMP, the Otay Ranch Facility Implementation Plan, the Otay Ranch Village Phasing Plan, and the Otay Ranch Service/Revenue Plan.
- Provide a wide variety of housing options, including affordable housing, to City residents, future students, and faculty of the planned 4-year university and employees of the Regional Technology Park, Village Eight West and Village Nine Town Centers and the EUC.
- Implement the City of Chula Vista Growth Management Ordinance to ensure that public facilities are provided in a timely manner and financed by the parties creating the demand for, and benefiting from, the improvements.
- Foster development patterns that promote orderly growth and prevent urban sprawl by comprehensively planning Villages Three North and a Portion of Village Four, Eight East, and Ten simultaneously.
- Add to the creation of a unique Otay Ranch image that differentiates Otay Ranch from other communities.
- Accentuate the relationship of the land use plan with its natural setting and the physical character of the region and promote effective management of natural resources by concentrating development in less sensitive areas while preserving large, contiguous open space areas with sensitive resources.
- Establish multi-use trail linkages to the Chula Vista Greenbelt, consistent with the Chula Vista Greenbelt Master Plan.
- Wisely manage limited natural resources.

- Implement the OVRP Concept Plan within the SPA boundaries through the planning and provision of portions of and connections to the City's Greenbelt trail network.
- Establish land use and facility plans that assure the economic viability of the SPA Plan Areas in consideration of existing and anticipated economic conditions.

4.2.2 Development Program

The development program for the proposed project is based on the Chula Vista General Plan and the approved Otay Ranch planning documents (Otay Ranch GDP, Overall Design Plan, and other SPA plans for Otay Ranch), which describe the land use plans and general design characteristics of the Otay Ranch Villages. The village design is intended to provide balanced and diverse land uses, focus on transit and pedestrian orientation, and create a sense of place for village residents. The specific development program for each village is described in detail in Sections 4.2.2.1 through 4.2.2.3, and the proposed land uses are provided in Table 4-1.

Table 4-1
Proposed Land Uses

Land Use	Gross Acres	Commercial Square Footage	Residential Dwelling Units	Population[a]
Village Three North/Portion of Village Four				
Single-Family Residential	115.2		1,002	3,247
Multi-Family Residential	10.8		515	1,667
Mixed-Use	8.2	20,000	80	259
Industrial	28.6			
Office	5.2			
Parks	25.7			
School	8.3			
Community-Purpose Facilities	4.2			
Private Open Space	2.4			
Open Space	35.4			
Preserve	158.1[b]			
Circulation	33.9			
Subtotal	*436*	*20,000*	*1,597*	*5,174*
Village Eight East				
Single-Family Residential	117.1		943	3,055
Multi-Family Residential	46.2		2,177	7,053
Mixed Use	9.5	20,000	440	1,426
Parks [c]	58.8			
School	10.8			
Community-Purpose Facilities	4.2			
Open Space [d]	33.8			

Table 4-1 (Continued)
Proposed Land Uses

Land Use	Gross Acres	Commercial Square Footage	Residential Dwelling Units	Population [a]
Preserve	253.6			
Circulation	29.6			
Other (Future Development Areas)	8.1			
Other (SR-125 ROW, Lot 4)	3.6			
Subtotal	*575.3*	*20,000*	*3,560*	*11,534*
Village Ten				
Single-Family Residential	74.8		695	2,252
Multi-Family Residential	21.5		1,045	3,386
Parks	7.6			
School	9.2			
Community-Purpose Facilities	4.3			
Open Space (OS-2)	16.5			
Private Open Space	0.7			
Preserve	212.7			
Circulation	16.1			
Subtotal	*363.4*		*1,740*	*5,638*
Total	**1,374.7**	**40,000**	**6,897**	**22,346**

ROW = right-of-way
[a] Population estimates based on 3.24 persons per residential dwelling unit.
[b] Includes 2.9 acres of roadway, which is located within the Preserve and is an allowable use in the Preserve. This acreage is not accounted for in the Circulation acreage.
[c] Includes 51.5 acres of Village Eight East Community Park (P-2) and 7.3 acres of Neighborhood Park.
[d] Includes 22.6 acres of Active Recreation Area (AR-11) and 11.2 acres of Open Space

4.2.2.1 Village Three North and a Portion of Village Four

Project Objectives

The objectives of the SPA Plan for Village Three North and a Portion of Village Four are as follows:

- Develop a business park that provides a strong employment base for Village Three North residents and the City of Chula Vista and supports the economic development goals of the Chula Vista General Plan.
- Develop Mixed-Use Office/Commercial uses within the Village core area that provide a strong employment base for Village Three North residents and the City of Chula Vista and meet the commercial/retail needs of the village and surrounding villages.
- Establish a pedestrian-oriented urban village with a village core designed to reduce reliance on the automobile and promote multimodal transportation, including walking and the use of bicycles, buses, and regional transit.

- Promote synergistic uses between Village Three North and the adjacent Village Two by providing pedestrian/trail connections and complementary land uses to balance housing, activities, services, and facilities.

Land Use

The proposed Village Three North Site Utilization Plan, shown on Figure 4-4, creates a pedestrian-oriented urban village containing 1,597 homes. Village Three North contains a mixed-use village core with approximately 20,000 square feet of commercial/retail uses surrounded by multi-family attached and detached neighborhoods. A total of 1,002 single-family and 595 multi-family dwelling units are provided in Village Three North, for a total projected population of 5,174 persons. Village Three North also includes elementary school and neighborhood park sites. Small recreation sites (Private Open Space (P-OS) and Community-Purpose Facility (CPF)) extend recreational opportunities into residential neighborhoods, enhancing the walkability of the village.

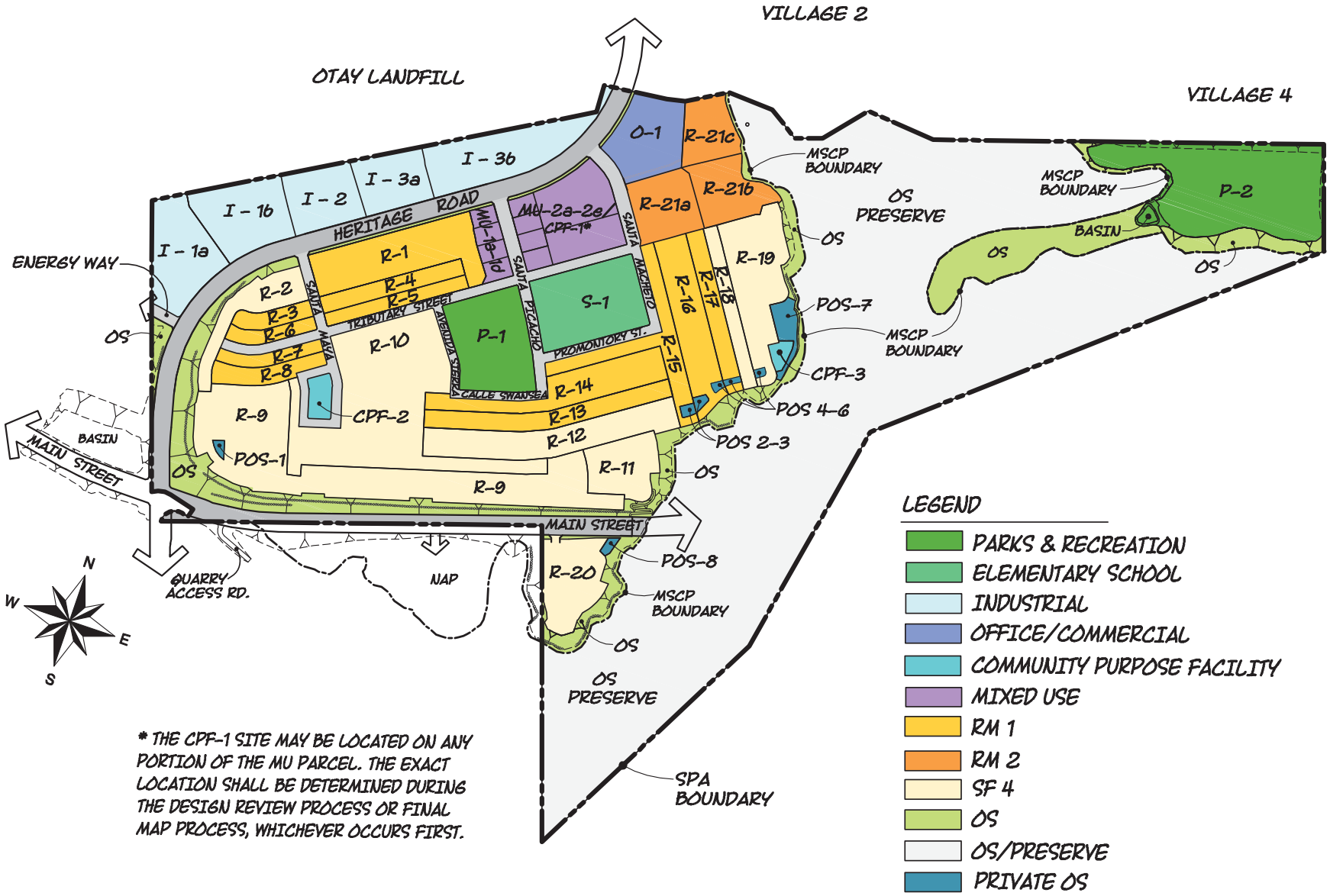
Approximately 28.6 acres immediately south of the Otay Landfill remain Limited Industrial. Just east of Heritage Road are 5.2 acres of Office uses. Village Three North also includes 8.2 acres of Mixed-Use, including 2.1 acres of Mixed Use Residential/Commercial and 6.1 acres of Mixed Use Office/Commercial, which would provide job-producing uses near the Village Three North neighborhoods. In addition, 2.6 acres of CPF uses are included within the Mixed-Use Office/Commercial site for a nonprofit or other community-serving use pursuant to the City's CPF Ordinance.

The proposed mix of residential land use designations for Village Three North includes small lot single family (SF-4 and RM-1), and multi-family attached (RM-2). Non-residential land use designations include Parks and Recreation (P), Open Space (OS), Private Open Space (P-OS), Open Space Preserve (OS/Preserve), Office (O), School (S), and Light Industrial (I). The location designated for a future school site (S-1) has underlying zoning. In the event that the school district does not want or need the designated site, then residential land uses will be put in place.

The Portion of Village Four included in the project includes 29.7 acres, of which 17.8 acres are currently designated, and will remain Community Park (P-2), 8.6 acres will remain designated OS, and 3.3 acres previously identified in the General Plan as OS will be re-designated OS/P. Overall, Village Three North and a Portion of Village Four include 158.1 acres designated OS/P.

The proposed Village Three North and a Portion of Village Four TM establishes the subdivision, street standards, and infrastructure requirements.

A portion of the proposed development in Village Three North would occur within an existing 1,000-foot nuisance easement area around the Otay Landfill. The 1,000-foot nuisance easement was recorded in1996 over the area along the south and southeast property boundary of the Otay Landfill extending into the northern portion of Village Three North. The Otay Ranch GDP currently designates industrial land uses within the 1,000-foot nuisance easement area. The proposed project would designate industrial, office, mixed-use and residential land uses within the 1,000-foot nuisance easement area.



* THE CPF–1 SITE MAY BE LOCATED ON ANY PORTION OF THE MU PARCEL. THE EXACT LOCATION SHALL BE DETERMINED DURING THE DESIGN REVIEW PROCESS OR FINAL MAP PROCESS, WHICHEVER OCCURS FIRST.

SOUR E OT R E OMES 2014

FIGURE 4-4

Village Three North and a Portion of Village Four Site Utilization Plan

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK

Access, Internal Circulation, and Trip Generation

Regional access to Village Three North and a Portion of Village Four is provided by SR-125, located approximately 2.5 miles to the east, and via I-805, located approximately 1.75 miles to the west. Additional north–south access is available from I-5, approximately 6 miles west of Village Three North and a Portion of Village Four. SR-54 and SR-905 (approximately 6.5 miles north and 3 miles south, respectively, of Village Three North and a Portion of Village Four) provide regional east–west circulation. Access to Village Three North will be provided by the extension of Heritage Road north from Main Street. This will either be constructed by adjacent development (Village Two) or by the proposed project. Access to the Portion of Village Four is proposed via existing La Media Road at the intersection with Santa Luna Street.

The Circulation Plan is shown on Figure 4-5. The internal circulation streets include Secondary Village Entry, Residential Streets (Promenade), and Parkway Residential Streets, all specifically designed to enhance the mixed-use village core area. Traffic calming features such as curb extensions, raised and narrowed intersections, and landscaped pop-outs may also be located in the internal circulation network at appropriate locations. The circulation plan encourages pedestrian activity and the use of bicycles through the provision of the Village Pathway, an off-street paved path, and bike lanes. The design of all village streets includes sidewalks and landscaped parkways to promote pedestrian circulation throughout the Village Three North area.

The Otay Ranch GDP provides for the expansion of the regional transit-way system into Otay Ranch. A transit stop/station is planned within the mixed-use village core area of Village Three North should transit service be extended to the village. Additional transit stops/stations are located at the intersection of Main Street and Heritage Road. Circulation within the villages also includes an extensive network of bicycle routes and pedestrian trails, as described below.

Village Streets

The village streets are designed to promote pedestrian and bicycle travel. The preferred design for all village streets provides for minimum 5-foot-wide sidewalks separated from the roadway by landscaped parkways. In the village core commercial areas, wider sidewalks are provided to allow for window shopping and pedestrian amenities such as seating and outdoor dining. The Modified Residential Promenade Street includes a wider sidewalk (Promenade Trail) on one side flanked by a double row of street trees and special pedestrian lighting. The Promenade Trail links the residential neighborhoods to the village activity core and pedestrian network.

Village Three North generates a total of 24,720 average daily trips (ADT), of which 20,786 ADT are trips external to the village. The community park in the Portion of Village Four included as part of the project generates 890 daily trips, for a total of 25,610 ADT for Village Three North and a Portion of Village Four. A detailed discussion of traffic and circulation is provided in Section 5.3, Transportation, Circulation, and Access.

Parks, Recreation, and Open Space

The Village Three North and Portion of Village Four Parks, Recreation, and Open Space Plan is shown on Figure 4-6. The amenities include a community park (P-2), neighborhood park (P-1), pedestrian and bicycle facilities, private recreation sites (CPF), and Private Open Space (P-OS).

Community Park

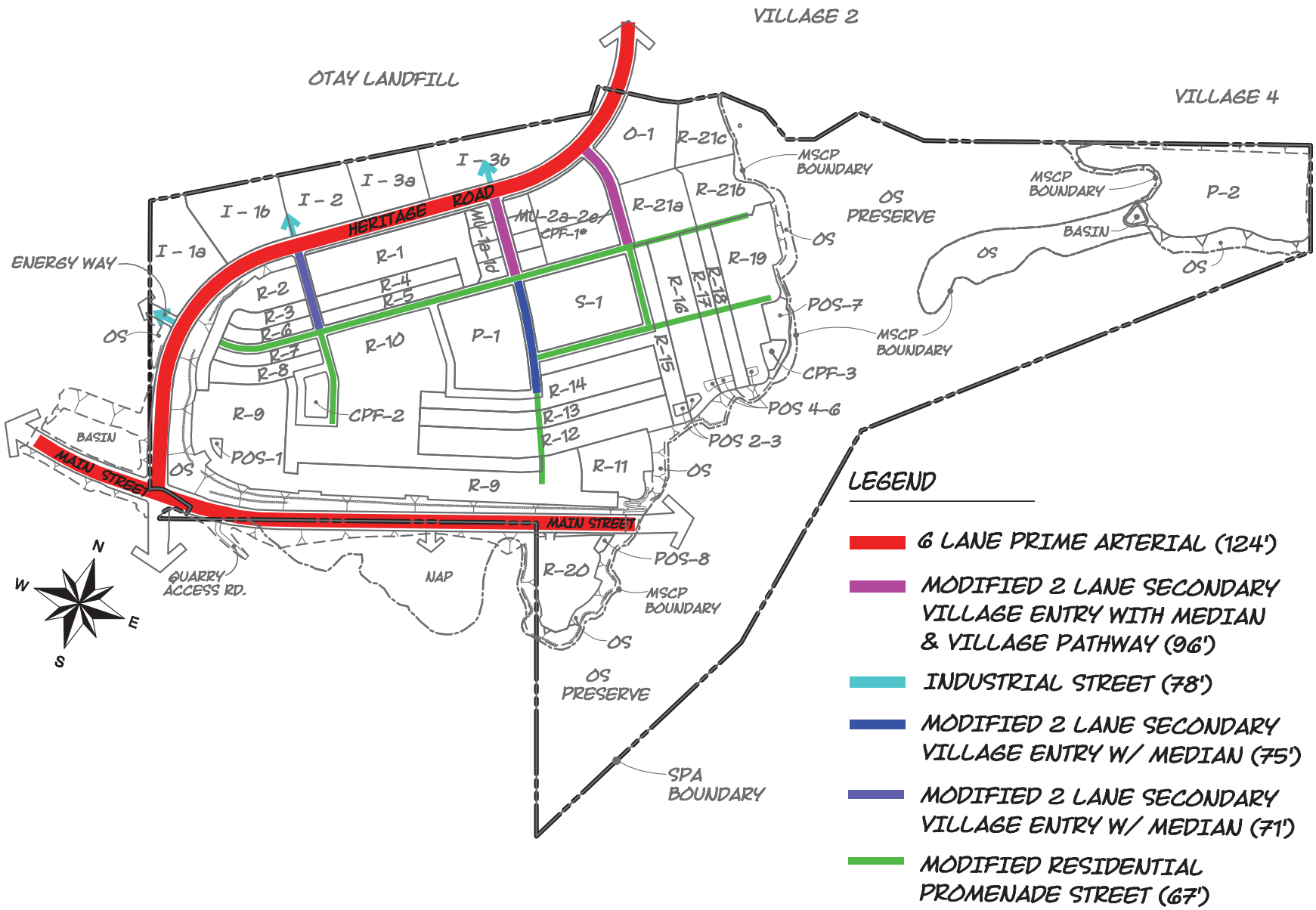
The Portion of Village Four includes 17.8-acres of the planned 70-acre Village Four Community Park site. Recreational facilities in the community park (P-2) may include lighted ball fields and courts, recreation complexes (buildings and swimming pools), security lighting, parking, and areas for children's play, informal play, and picnicking. Park amenities will be in conformance with the City of Chula Vista Parks Master Plan.

Neighborhood Park

A 7.9-acre neighborhood park (P-1) is located in the village core of Village Three North, within walking distance of the most densely populated portion of the village and the elementary school to provide opportunities for shared facilities and programs. Amenities may include multipurpose open lawn areas, ball fields, lighted sports courts, picnic shelters, tot lots, parking, and restroom and maintenance buildings.

Pedestrian and Bicycle Facilities

Village Three North is designed to accommodate the trails program described in the Otay Ranch Overall Design Plan, the City's Greenbelt Master Plan, and the OVRP Concept Plan. Regional Trails located adjacent to roadways provide alternative circulation routes for pedestrians and bicycles separate from roadways. Village Pathways are inter-village, multipurpose paths that link all of the Otay Valley Parcel villages and provide access to the regional transit-way stations. The Village Three North and a Portion of Village Four Trails Plan and Bicycle Circulation Plan are shown on Figures 4-7 and 4-8.



SOUR E OT R E OMES 2014

FIGURE 4-5

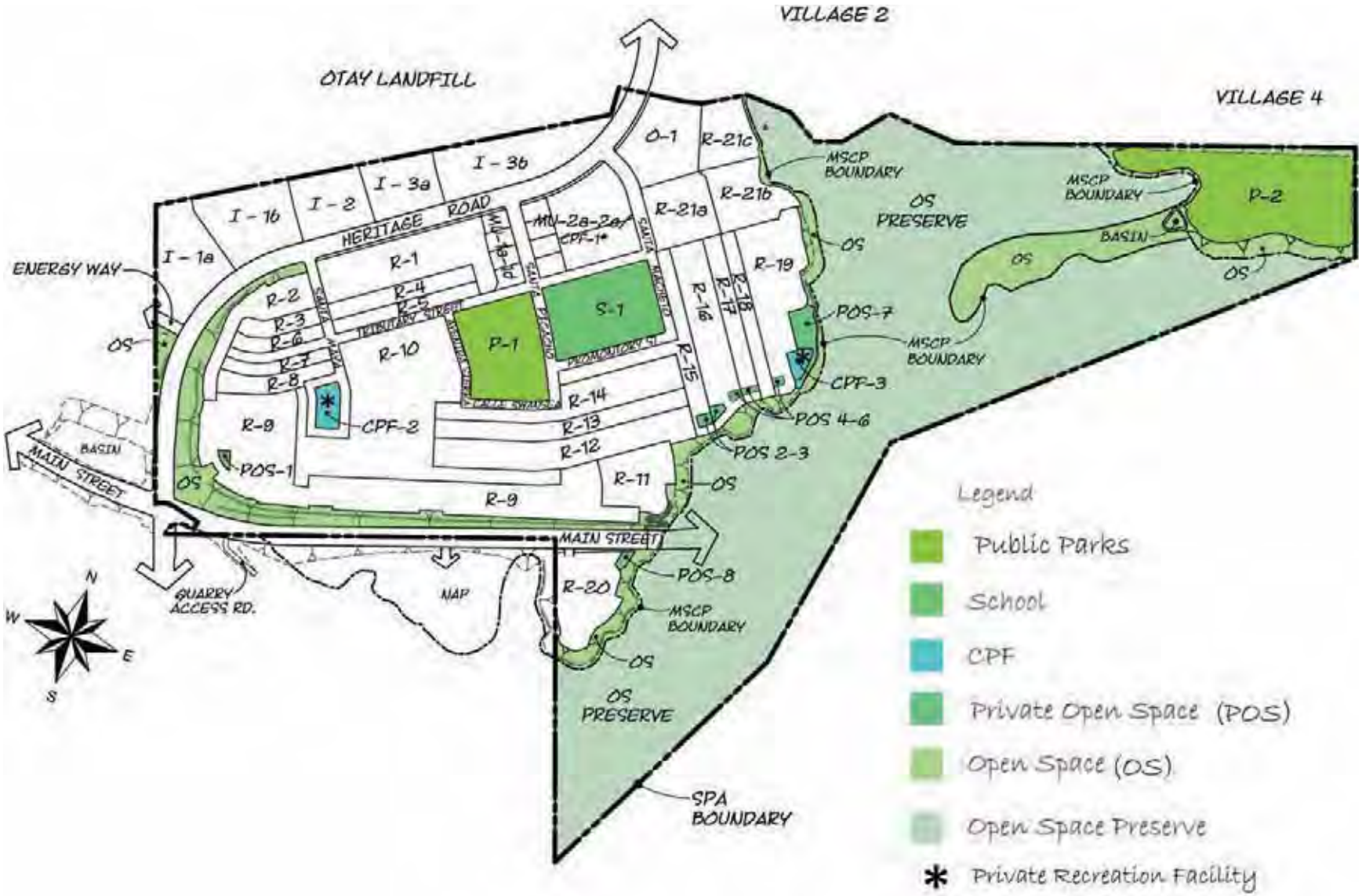
Village Three North and Portion of Village Four Circulation Plan

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK



SOURCE: OTAY RANCH NEW HOMES 2014

FIGURE 4-6

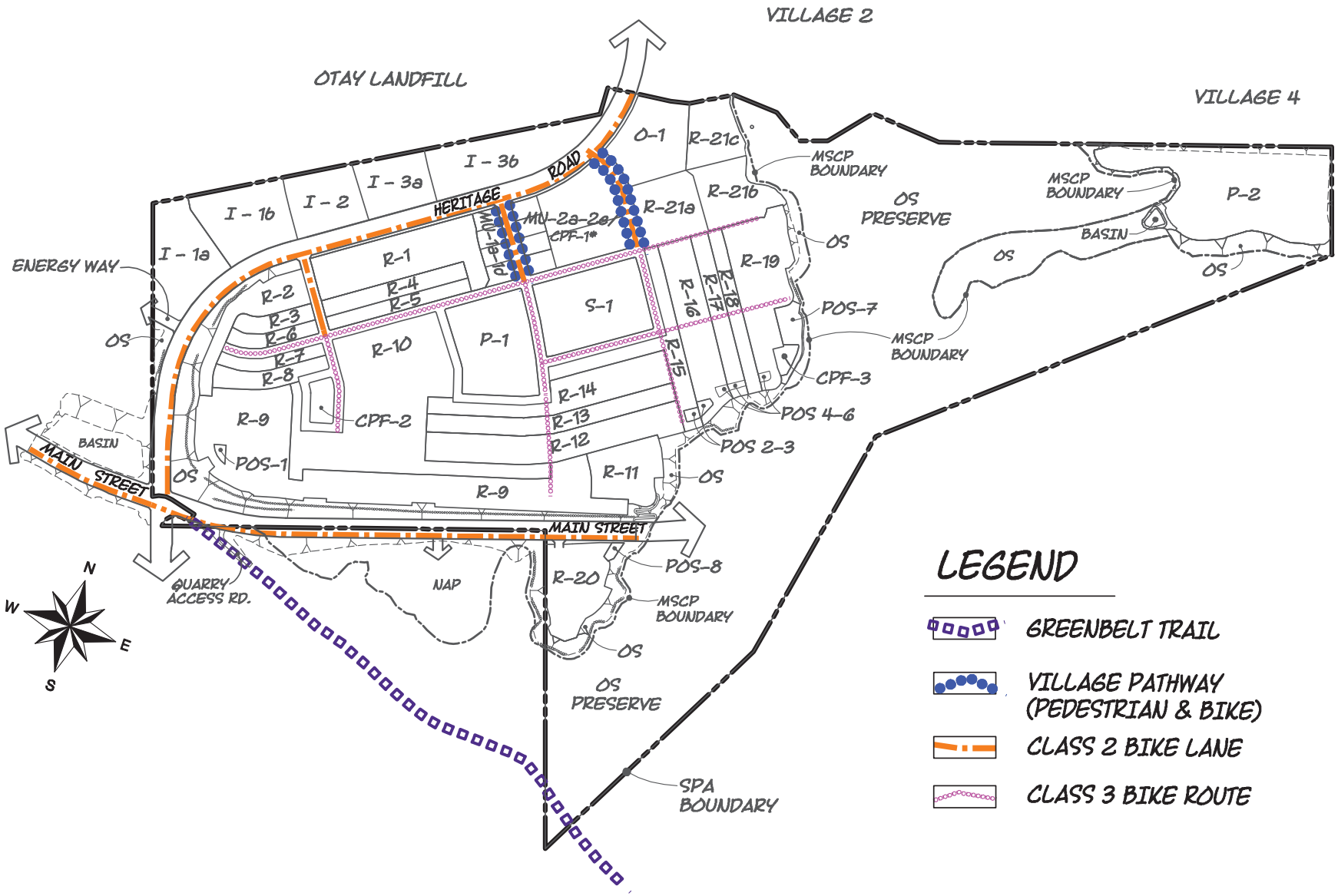
Parks and Open Space for Village Three North and Portion of Village Four

7000

UNIVERSITY VILLAGES PROJECT EIR

Z:\Projects\j700000\MAPDOC\MAPS\EIR\Section 4

INTENTIONALLY LEFT BLANK



SOUR E OT R E OMES 2014

FIGURE 4-7

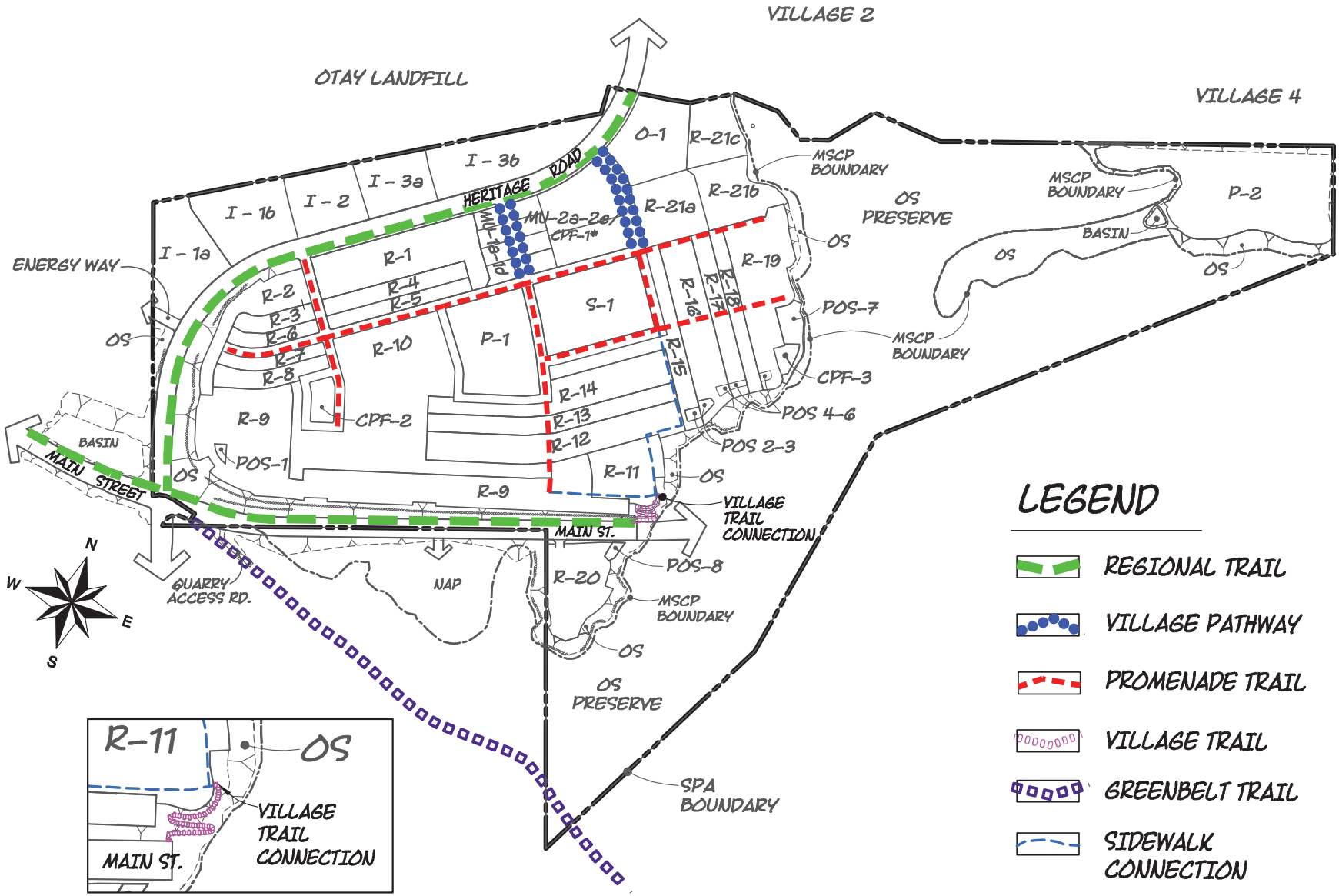
Bicycle Circulation Plan for Village Three North and Portion of Village Four

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK



TRAIL CONNECTION DETAIL

SOUR E OT R E OMES 2014

FIGURE 4-8

Pedestrian Circulation Plan for Village Three North and Portion of Village Four

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK

Community-Purpose Facilities

Village Three North provides a total of 4.2 acres of CPF designated sites. A 2.6-acre CPF site is located in the MU-2 Office/Commercial site in the village core and is anticipated to house a nonprofit or other qualifying use. Smaller private recreation facilities (CPFs) are distributed throughout the village to provide recreation opportunities within walking distances of homes. Amenities in these private recreation facilities may include open lawn areas, ball fields and sports courts, tot lots/play areas, picnic areas, swimming pools, and meeting rooms.

Private Open Space

P-OS areas totaling 2.4 acres are located throughout Village Three North. These areas are intended to serve residents within single-family neighborhoods. Facilities may include open lawn areas, ball fields and sports courts, tot lots/play areas, picnic areas, and swimming pools.

4.2.2.2 Village Eight East

Project Objectives

The objectives of the SPA Plan for Village Eight East are as follows:

- Establish a pedestrian-oriented urban village with a village core designed to reduce reliance on the automobile and promote multimodal transportation, including walking and the use of bicycles, buses, and regional transit.
- Promote synergistic uses between Village Eight East and Village Eight West, the Eastern Urban Center, and the University/Regional Technology Park to balance activities, services, and facilities with employment, housing, transit, and commercial opportunities.
- Develop, maintain, and enhance a sense of community identity that complements the future Village Eight West Town Center and surrounding land uses.
- Designate a portion of Active Recreation Area (AR-11) as a 51.5-acre Community Park (a portion of the park may function as a staging area within the OVRP).
- Establish a community park with amenities such as multipurpose open lawn areas, lighted ball fields, lighted sports courts, lighted picnic shelters, play areas, a community center building, lighted parking areas, and restroom and maintenance buildings.

Land Use

The proposed Village Eight East Site Utilization Plan, shown on Figure 4-9, creates a pedestrian-oriented urban village containing 3,560 homes on approximately 575 acres. A total of 943 single-family dwelling units, 2,117 multi-family dwelling units, and 440 Mixed-Use Residential units are included in Village Eight East, generating a total population of approximately 11,534. The activity center for Village Eight East is the centrally located village core, which contains a 9.5-

acre mixed-use residential component with approximately 20,000 square feet of commercial/ retail uses, a 2.6-acre CPF site, a 10.8-acre elementary school site (S), and a 7.3-acre neighborhood park (P-1). A 51.5-acre Community Park (P-2) site and a 22.6 acre Active Recreation Area (AR-11) site are located south of the village, within the Otay River Valley.

The proposed mix of residential land use designations for Village Eight East includes small lot single family (SF-4 and RM-1) and multifamily attached (RM-2). Consistent with the village planning concept, higher-density residential development is located in the village core, with decreasing densities and single-family detached homes toward the perimeter of the village. The proposed Village Eight East TM establishes the subdivision, street standards, and infrastructure requirements.

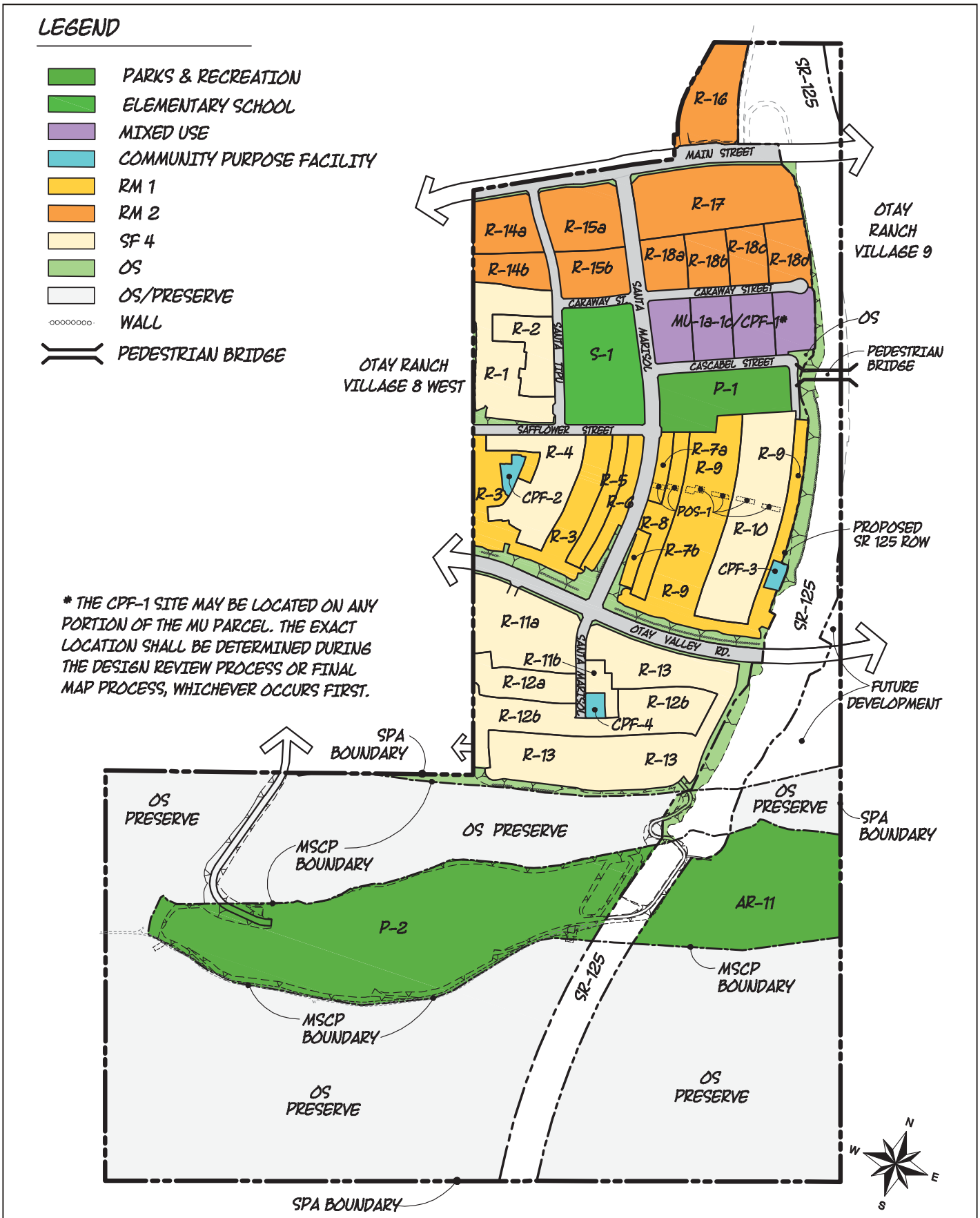
Non-residential land use designations include Parks and Recreation (P), School (S), OS, and OS/Preserve. Small private recreation sites (CPF and P-OS) extend recreational opportunities into residential neighborhoods and provide focal points outside the village core. The location designated for a future school site (S-1) has underlying zoning. In the event that the school district does not want or need the designated site, then residential land uses will be put in place.

Alternative Development Scenario

Village Eight East includes a Land Use Alternative to provide greater flexibility to respond to the possibility of changing market conditions through the buildout of the village. The Land Use Alternative allows for the flexibility to build either single-family or multi-family units without requiring a subsequent SPA Plan Amendment within two neighborhoods; R-11a and R-12a. These neighborhoods may be developed with either 103 single-family units or up to 449 multi-family units. The overall unit count in the village will not exceed 3,560 units because under the multi-family scenario, up to 365 units would be transferred from other multi-family sites within the village to the combined R-11a and R-12a neighborhoods. Table 4-2 compares the proposed development to the Land Use Alternative for Village Eight East.

Table 4-2
Proposed Development vs. Land Use Alternative for Village Eight East

Land Use	Acres	Commercial Square Footage	Residential Dwelling Units	Population
Proposed Development				
Single-Family Residential	117.1		943	3,055
Multi-Family Residential	46.3		2,177	7,053
Mixed Use	9.5	20,000	440	1,426
Total	**172.9**	**20,000**	**3,560**	**11,534**
Alternative Development Scenario				
Single-Family Residential	105.8		840	2,722
Multi-Family Residential	59.4		2,280	7,387
Mixed Use	9.6	20,000	440	1,426
Total	**174.8**	**20,000**	**3,560**	**11,535**



SOUR E OT R E OMES 2014

FIGURE 4-9

Village Eight East Site Utilization

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK

Access, Internal Circulation, and Trip Generation

Regional access to Village Eight East is currently provided by SR-125, which is adjacent to the eastern boundary of Village Eight East. Additional north–south access is provided from I-805 and I-5, located approximately four miles west and seven miles west, respectively, of Village Eight East. SR-54 and SR-905 provide regional east–west circulation, approximately seven miles north and three miles south, respectively, of the project area. Access will be provided by the extension of La Media Road to Main Street, the extension of Main Street east from La Media along the frontage of Village Eight East, and the extension of Otay Valley Road south from La Media Road through Village Eight West. The La Media Road southern extension is planned as part of the Village Eight West SPA Plan and TM and are assumed as part of the roadway network in year 2025; however, in the event that these extensions are not provided prior to Village Eight East being developed, the proposed project would construct the improvements. Site access is proposed via five points: three accessing Main Street; two accessing Otay Valley Road, The proposed Village Eight East community park (P-2) will take access at a separate roadway which connects to Otay Valley Road through the Village Eight West project site.

The Village Eight East Circulation Plan is shown on Figure 4-10. The primary entry into Village Eight East is from Main Street, with an additional entry into the southern portion of the village from Otay Valley Road. The internal circulation streets include Secondary Village Entry, Residential Streets (Promenade), and Parkway Residential Streets, all specifically designed to enhance the village core. Traffic calming features such as curb extensions, raised and narrowed intersections, and landscaped pop-outs may also be located in the internal circulation network at appropriate locations. The circulation plan encourages pedestrian activity and the use of bicycles through the provision of the Village Pathway, an off-street paved path, and bike lanes. Additionally, multiuse trail linkages will be established to improve connectivity to the Chula Vista Greenbelt and Greenbelt trails within project boundaries. These multiuse trails will be consistent with the Chula Vista Greenbelt Master Plan and OVRP Concept Plan. The design of all village streets includes sidewalks and landscaping to promote pedestrian circulation throughout the Village Eight East area.

The Chula Vista General Plan and Otay Ranch GDP identify a planned pedestrian bridge over SR-125 to link Village Eight East to Village Nine and the University Site. The project proposes to reserve land area for the western connection to this future bridge. Otay Valley Road, a Four-Lane Major Road, will provide a strong vehicular linkage from Village Eight West to Village Eight East, through Village Nine, and east to Village Ten.

The Otay Ranch GDP provides for the expansion of the regional transit-way system into Otay Ranch. An east–west bus rapid transit commuter service line is planned to be located along Main Street. A potential local bus stop is conceptually planned within and/or adjacent to Village Eight

East. Circulation within the villages also includes an extensive network of bicycle routes and pedestrian trails, as described further under Pedestrian and Bicycle Facilities in this section.

Village Eight East generates a total of 35,776 ADT, of which 30,727 ADT are trips external to the village. A detailed discussion of traffic and circulation is provided in Section 5.3, Transportation, Circulation, and Access.

Village Streets

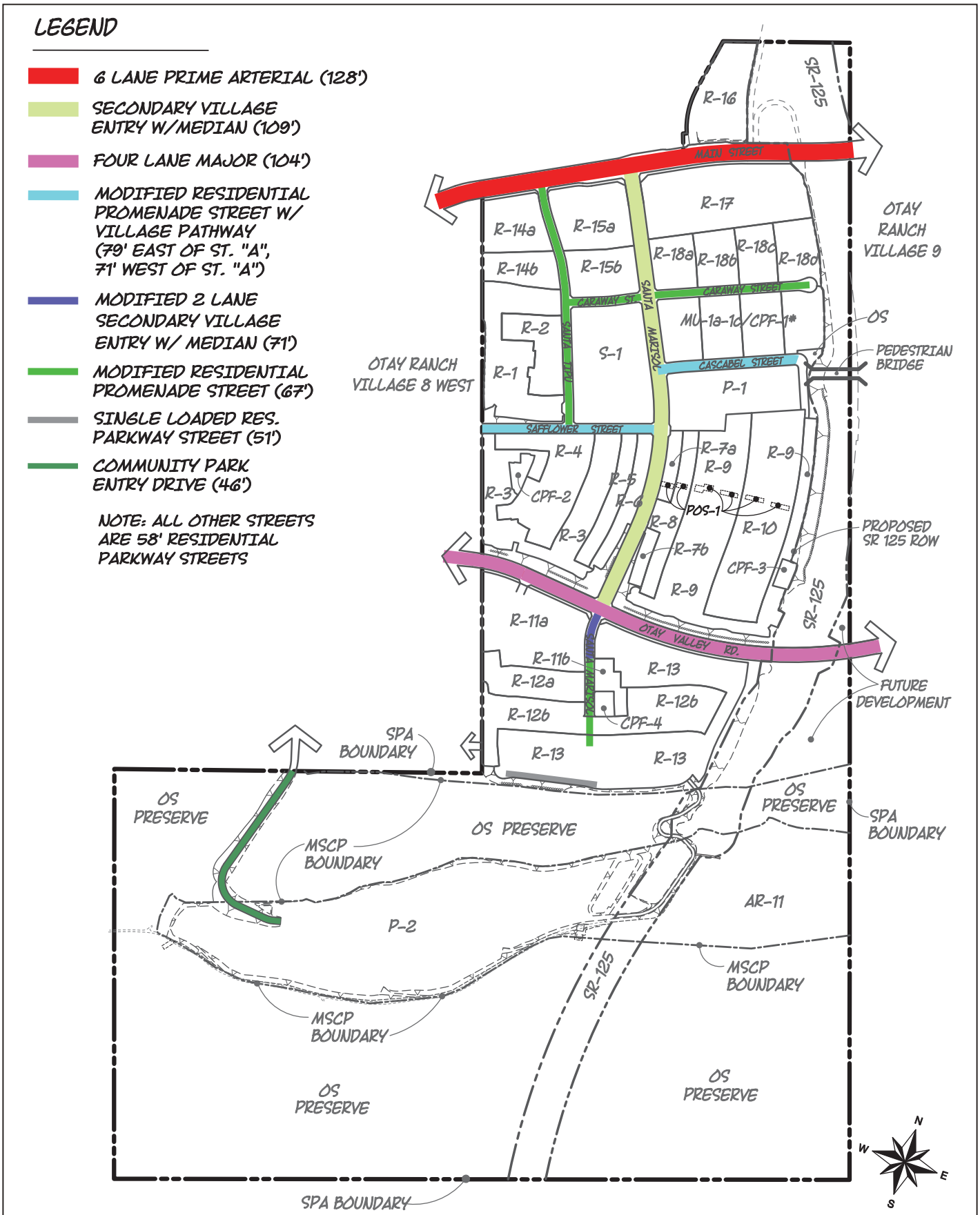
The village streets are designed to promote pedestrian and bicycle travel. The preferred design for all village streets provides for minimum 5-foot-wide sidewalks separated from the roadway by landscaped parkways. In the village core commercial areas, wider sidewalks are provided to allow for window shopping and pedestrian amenities such as seating and outdoor dining.

Parks, Recreation, and Open Space

The Parks, Recreation, and Open Space Plan for Village Eight East is shown on Figure 4-11. The amenities include a Community Park (P-2), neighborhood park (P-1), pedestrian and bicycle facilities, and private recreation sites (CPF). As described below in Section 4.2.3, Off-Site Area 9 would provide for vehicular access to the Community Park (P-2) south of Village Eight East. This access route through Village Eight West is necessary to provide a direct connection from a Circulation Element roadway (Otay Valley Road) to the Community Park (P-2) without requiring travel through a residential neighborhood. As further discussed and analyzed in Section 5.8, Biological Resources, this access road is consistent with a Planned Facility (La Media Road) per the MSCP Subarea Plan.

Active Recreation/Community Park

In the southern portion of Village Eight East, 74.1 acres are identified in the OVRP Concept Plan as Active Recreation Area (AR-11) and are subject to the policies contained in the Chula Vista MSCP Subarea Plan and Otay Ranch RMP. SR-125 traverses the Active Recreation Area (AR-11) and divides the area in two. The portion of the Active Recreation Area (AR-11) on the east side of SR-125 (22.6 acres) will remain designated Active Recreation Area (AR-11), is not proposed for improvements as part of the proposed project, and will remain available for future development under jurisdiction of the City. The portion of the Active Recreation Area (AR-11) area west of SR-125 (51.5 acres) would be designated Community Park (P-2) and will be dedicated to the city as a developable park site.



SOUR E OT R E OMES 2014

FIGURE 4-10

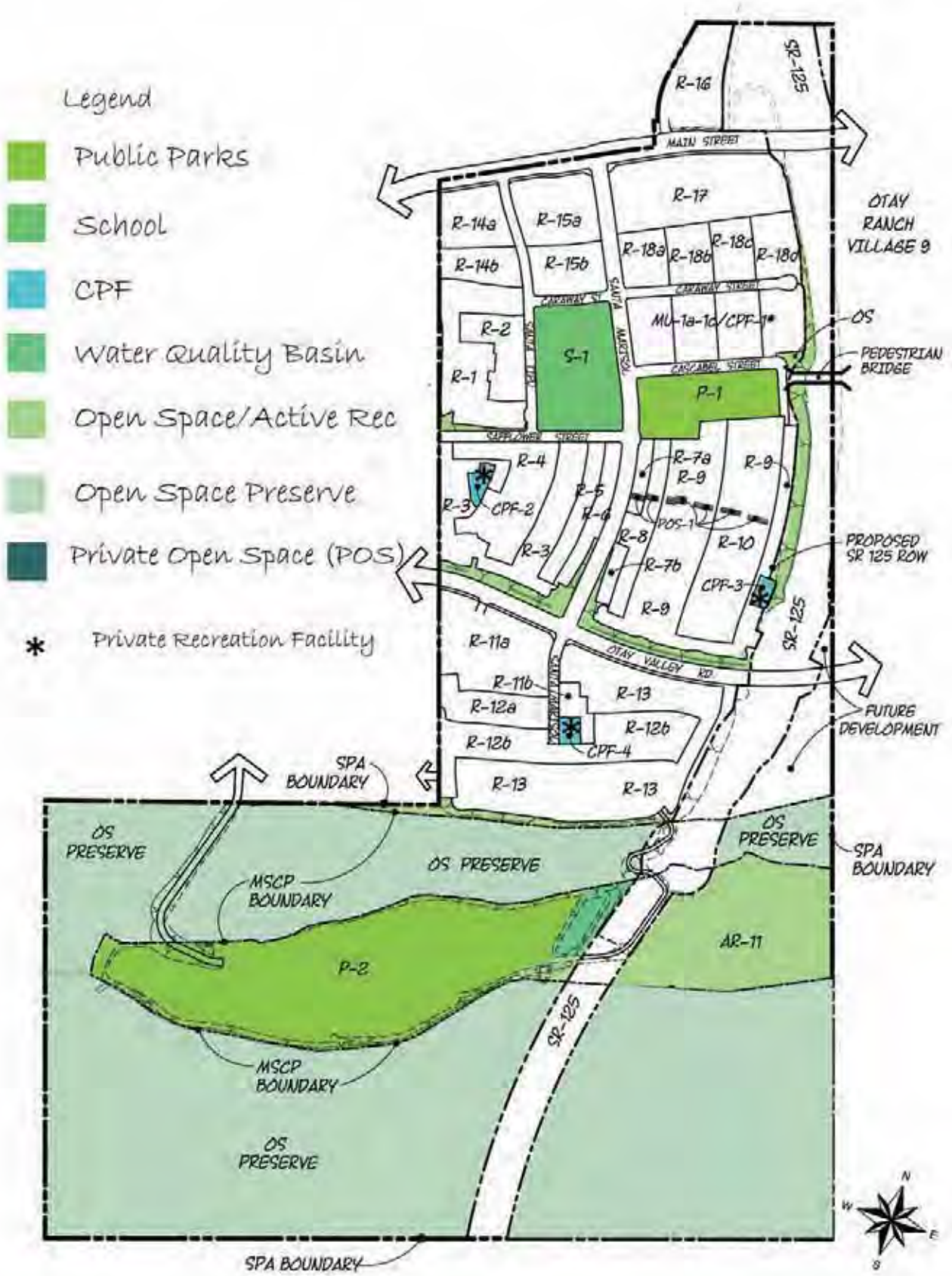
Village Eight East Circulation Plan

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK



SOUR E OT R E OMES 2014

FIGURE 4-

Par s an pen pace Plan for Village Eight East

7000

UNIVER IT VI GE PR E T EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK

The MSCP Subarea Plan identifies P-2 as "Active Recreation," and not part of the Preserve. Figure 1-2 of the MSCP Subarea Plan further identifies this area as "Planned Active Recreation Area – Subject to RMP Policies and OVRP Planning." The Phase 2 RMP provides siting criteria for active recreation areas and emphasizes providing the majority of the active recreation in the Otay Valley.

The OVRP Concept Plan states, "Recreation Areas are areas that may be suitable for a variety of active or passive recreational uses. They may be vacant or have existing recreational uses, are relatively flat, have been previously disturbed or lack sensitive biological resources and have the potential for access from regional or local circulation roads. They are intended to provide land suitable for development of recreational facilities that are regional in scope and may also serve community and neighborhood needs. They may also provide Staging Areas and Viewpoint and Overlook Areas, as appropriate" (OVRP 1997).

Community Park (P-2) amenities may include multipurpose open lawn areas, lighted ball fields, lighted sports courts, lighted picnic shelters, play areas, a community center building, lighted parking areas, and restroom and maintenance buildings. A portion of the park may also function as a staging area within the OVRP.

Internal trail connections provide linkages between villages, consistent to the Greenbelt Master Plan. The Village Eight East trail connection is provided along the Community Park Entry Drive and Community Park Paseo located south of Village Eight East. In addition, three direct trail connections to the Chula Vista Greenbelt Trail and the Community Park (P-2) are provided along the southern edge of the Community Park (P-2). As discussed in Section 5.8, Biological Resources, the main access to the Community Park (P-2) is consistent with the MSCP Subarea Plan for the alignment of a planned facility (La Media Road). Further, Section 5.8 also discusses the trail connections under the Future Facilities requirements of the MSCP Subarea Plan.

The Village Pathways link the villages to adjacent villages along a 10-foot wide concrete path. The proposed project would help establish a greenbelt system that would visually reinforce the character of the community, to ensure public access through an active and passive recreation park system with trails connecting each segment, to accommodate a wide range and number of users including disabled access, to offer a variety of active and passive recreation experiences, and to provide other amenities that enhance the greenbelt system. In addition, a future pedestrian bridge is planned over SR-125 that would provide pedestrian and bicycles lanes connecting Villages Eight to Village Nine and the future University and RTP.

Neighborhood Park

A 7.3-acre neighborhood park (P-1) is located in the village core within walking distance of the most densely populated portion of the village and adjacent to the elementary school in order to provide opportunities for shared facilities and programs. This park connection is located to provide access to the planned neighborhood park in Village Nine via a planned pedestrian bridge

over SR-125. Amenities may include multipurpose open lawn areas, ball fields, lighted sports courts, picnic shelters, and tot lots as well as restroom, parking, and maintenance buildings.

Pedestrian and Bicycle Facilities

Village Eight East is designed to accommodate the trails program described in the Otay Ranch Overall Design Plan, the City's Greenbelt Master Plan, and the OVRP Concept Plan. Regional Trails are located within open space areas adjacent to Circulation Element roadways, providing circulation routes for pedestrians and bicycles separate from roadways. The Village Pathway is an inter-village, multipurpose path that links all of the Otay Valley Parcel villages and provides access to the regional transit-way stations. Multiuse trail linkages will be established to improve connectivity to the Chula Vista Greenbelt and Greenbelt trails within Village Eight East.

The Modified Residential Promenade Street includes a wider tree-shaded sidewalk on one side and a standard sidewalk with a landscaped parkway on the other side. The Promenade Trail links the residential neighborhoods to the village activity core and pedestrian network. The Village Eight East Trails Plan and Bicycle Circulation Plan are shown on Figures 4-12 and 4-13. As shown on Figure 4-13 the Village Pathway bridge will provide pedestrian and bicycle lanes over the SR-125 toll way.

Community-Purpose Facilities

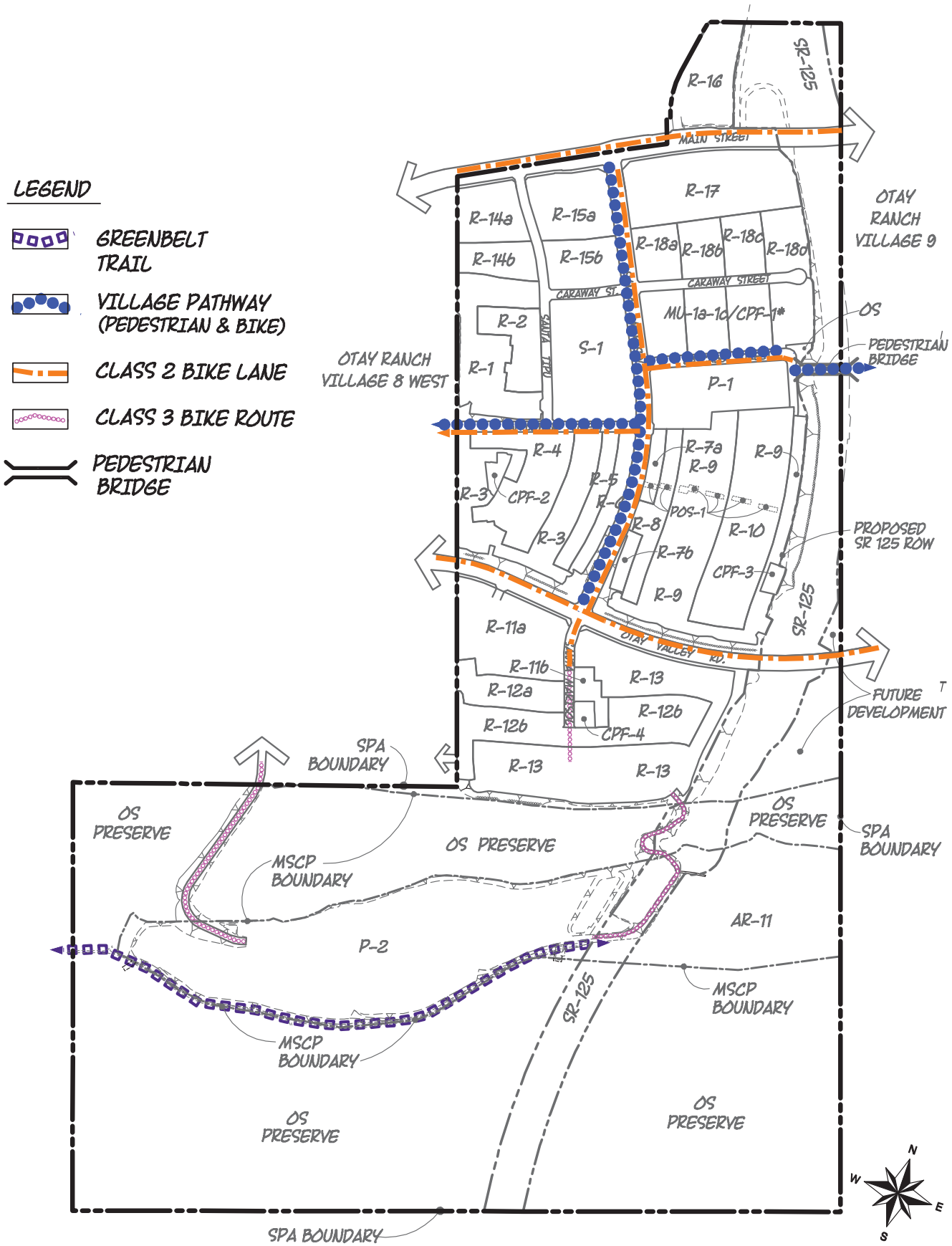
Four CPF sites totaling 4.2 acres are located throughout Village Eight East and range in size from .5 to 2.6 acres. This 2.6 acre site is anticipated as a site for a nonprofit or other qualifying community-purpose use as identified by Chula Vista Municipal Code Section 19.48.025. CPF-2, CPF-3 and CPF-4 are private recreation facilities that extend recreational opportunities into neighborhoods. Amenities in the CPF-2, CPF-3 and CPF-4 sites may include tot lots, sport courts, picnic areas, swimming pools, and meeting rooms.

4.2.2.3 Village Ten

Project Objectives

The objectives of the SPA Plan for Village Ten are as follows:

- Establish a pedestrian-oriented urban village within the University Planning Area designed to complement and support the University land uses, reduce reliance on the automobile, and promote multimodal transportation, including walking and the use of bicycles, buses, and regional transit.
- Promote synergistic uses between Village Ten and Village Nine and the University to balance employment, retail, and educational activities, as well as services, housing, and public facilities.
- Develop, maintain, and enhance a sense of community identity that complements the University and Village Nine Town Center.



SOUR E OT R E OMES 2014

FIGURE 4-12

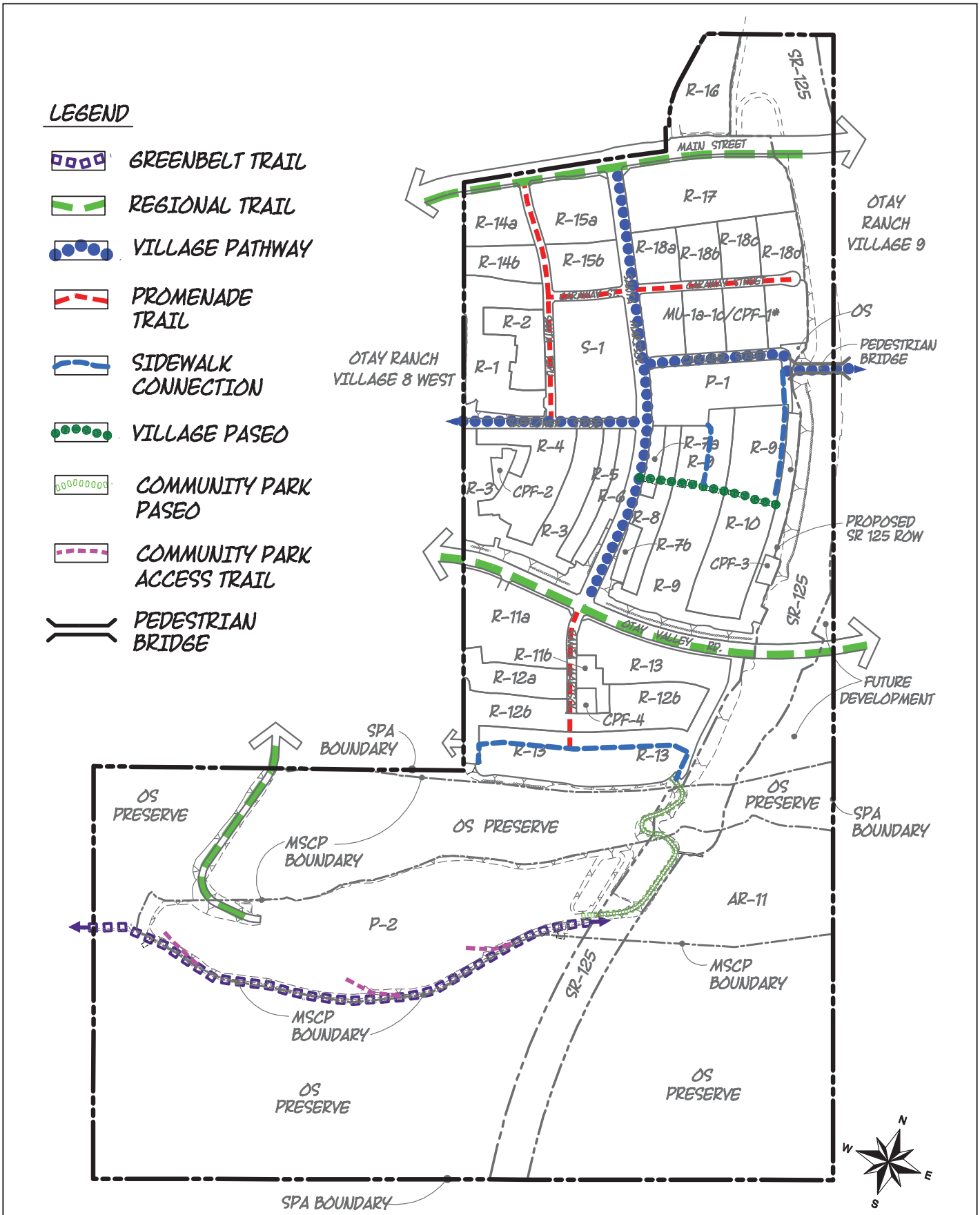
Bicycle Circulation Plan for Village Eight East

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK



SOUR E OT R E OMES 2014

FIGURE 4-13

Pedestrian Circulation Plan for Village Eight East

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK

Land Use

The proposed Village Ten Site Utilization Plan, shown on Figure 4-14, creates a pedestrian-oriented urban village containing 1,740 homes and other village-associated land uses on approximately 363.4 acres. Village Ten is a complementary village to the planned Village Nine Town Center and future University and Regional Technology Park site. The village core area contains higher-density, multi-family homes, an elementary school site, a 2.6-acre CPF site, and a 7.6-acre neighborhood park (P-1) located along the northern village edge. It provides a transition area between future University land uses and the lower-density residential land uses to the south.

A total of 1,045 multi-family units are located in a linear village core. The lower-density residential areas south of the village core provide a total of 695 single-family units. The total population of Village Ten is approximately 5,638. The proposed mix of residential land use designations for Village Ten includes small lot single family (SF-4 and RM-1) and attached multifamily (RM-2). Village Ten also includes 212.7 acres of designated OS/P.

Private recreational sites (CPF and P-OS) are distributed throughout the residential neighborhoods to the south of the village core and connected to the core along a network of Promenade Streets. The proposed Village Ten TM establishes subdivision, street standards, and infrastructure requirements. Other non-residential land uses included Parks and Recreation (P), School (S), OS, and OS/Preserve. The location designated for a future school site (S-1) has underlying zoning. In the event that the school district does not want or need the designated site, then residential land uses will be put in place.

Access, Internal Circulation, and Trip Generation

Regional access to Village Ten is currently provided by SR-125, located approximately 1.5 miles west of the project area. I-805 and I-5, approximately 5.5 miles west and 8 miles west of Village Ten, respectively, provide additional north–south access. SR-54 and SR-905 provide regional east–west circulation, both approximately 6.5 miles northwest of the project area.

The proposed Village Ten Site Circulation Plan is shown on Figure 4-15. Village Ten access is proposed via four points including three accessing Discovery Falls Drive and one accessing Otay Valley Road. Access will be provided by the extension of University Drive (EastLake Parkway) south of Hunte Parkway to Discovery Falls/Village Ten. Discovery Falls will be extended south from Hunte Parkway and turn southwest, connecting to the extension of University Drive and ultimately connecting to Village Nine Street B. Otay Valley Road will be extended south and east from La Media Road, through Villages Eight West, Eight East and Nine, over SR-125 into Village Ten. The improvements through Villages Eight West and Nine are assumed to be constructed as part of those projects; however, in the event that these extensions are not provided prior to Village Eight East being developed, the proposed project would construct the

improvements. The internal circulation network includes Secondary Village Entry, Residential Streets (Promenade), and Parkway Residential streets, all specifically designed to promote walkability within Village Ten. Traffic calming features such as curb extensions, raised and narrowed intersections, and landscaped pop-outs may also be located in the internal circulation network at appropriate locations. The circulation plan encourages pedestrian activity and the use of bicycles through the provision of the Village Pathway, an off-street paved path, and bike lanes. The design of all village streets includes sidewalks and landscaped parkways to promote pedestrian circulation throughout the Village Ten area.

The Otay Ranch GDP provides for the expansion of the regional transit-way system into Otay Ranch. An east–west Rapid Bus commuter service line is planned along Main Street. A north–south bus rapid transit route is planned through the Eastern Urban Center, connecting to Village Nine adjacent to Village Ten. Local bus lines are planned to provide public transit service to the villages, including Village Ten. Circulation within the villages also includes an extensive network of bicycle routes and pedestrian trails, as described under Pedestrian and Bicycle Facilities in this section.

Village Streets

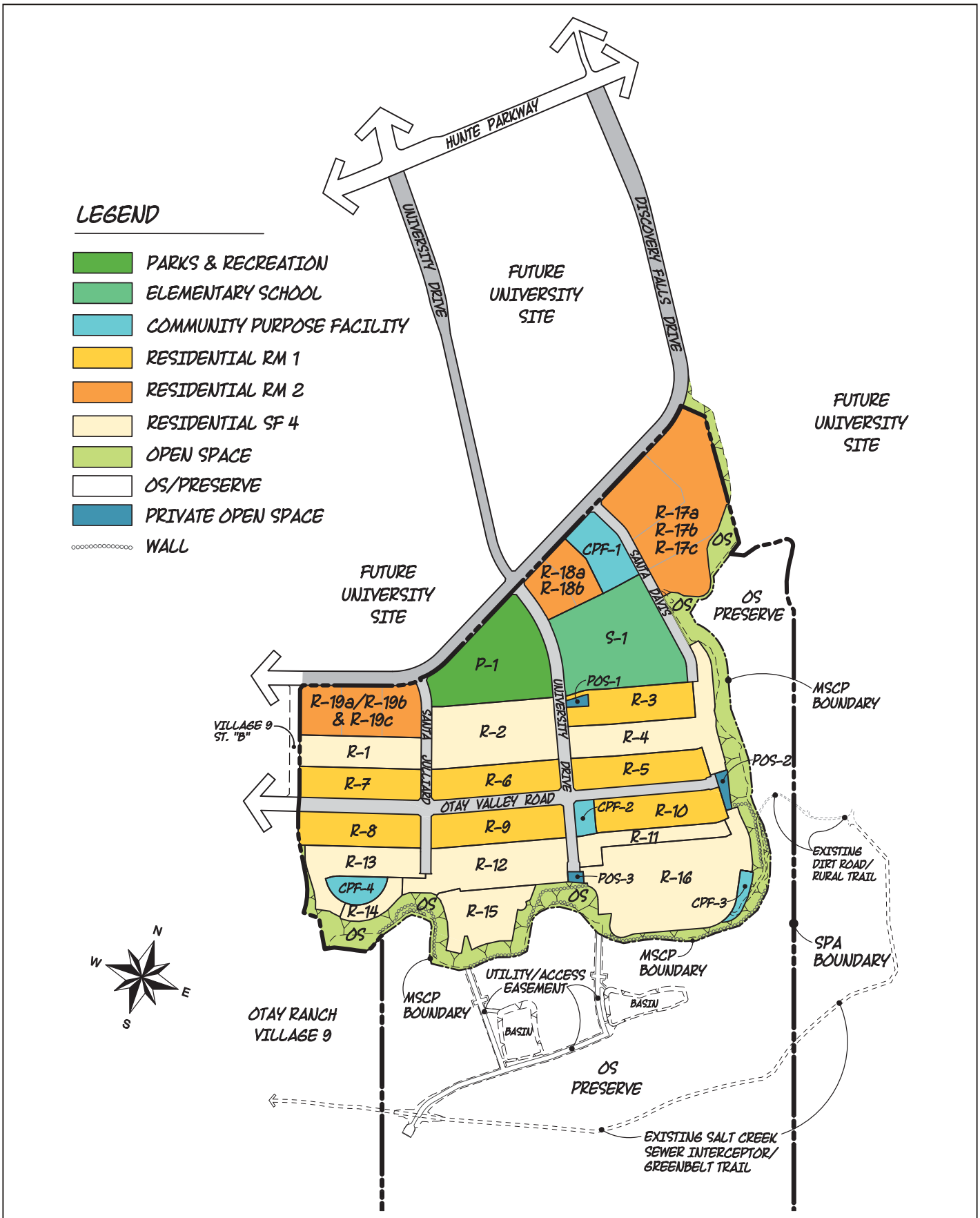
The village streets are designed to promote pedestrian and bicycle travel. The planned design for all village streets provides for minimum 5-foot-wide sidewalks separated from the roadway by landscaped parkways. In the village core, wider sidewalks are provided.

University Drive is the central north–south spine road through Village Ten, connecting the village core to residential neighborhoods to the south. Otay Valley Road provides secondary access to Village Ten as it transitions from a Four-Lane Major Road to a Secondary Village Entry as it enters Village Ten from the west. This community structure establishes key pedestrian connections along University Drive and Otay Valley Road between village-serving land uses in the core and the surrounding residential neighborhoods. Multiple points of vehicular and pedestrian connectivity between Village Ten and the University/Research Technology Park site are provided along the northern village edge.

Village Ten generates a total of 16,277 ADT, of which 13,968 ADT are trips external to the village. A detailed discussion of traffic and circulation is provided in Section 5.3, Transportation, Circulation, and Access, of the EIR.

Parks, Recreation, and Open Space

The Village Ten Parks, Recreation, and Open Space Plan is shown on Figure 4-16. The amenities include a neighborhood park (P-1), pedestrian and bicycle facilities, private recreation sites (CPF), and P-OS.



SOUR E OT R E OMES 2014

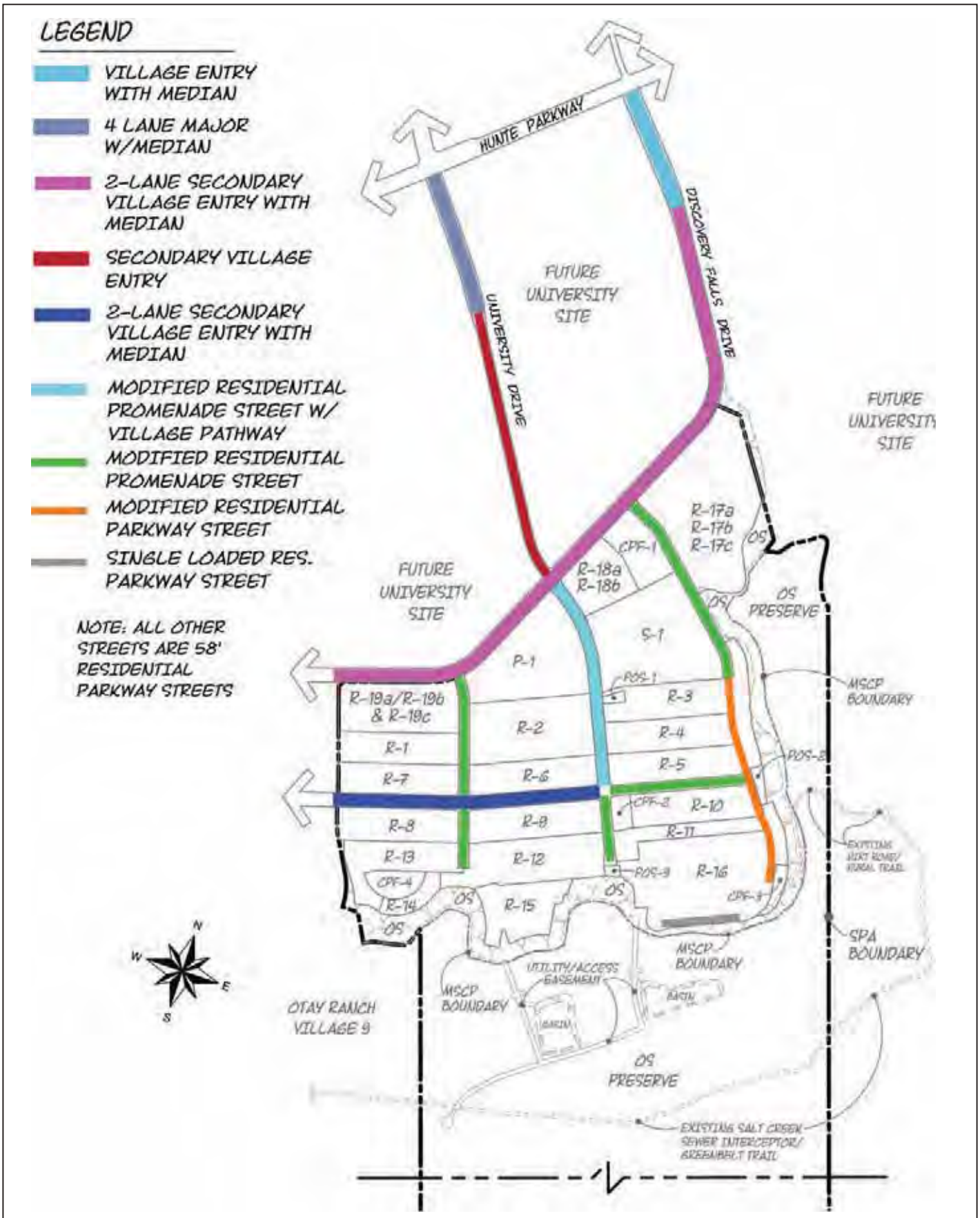
FIGURE 4-14
Village Ten Site Utilization

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK



SOUR E OT R E OMES 2014

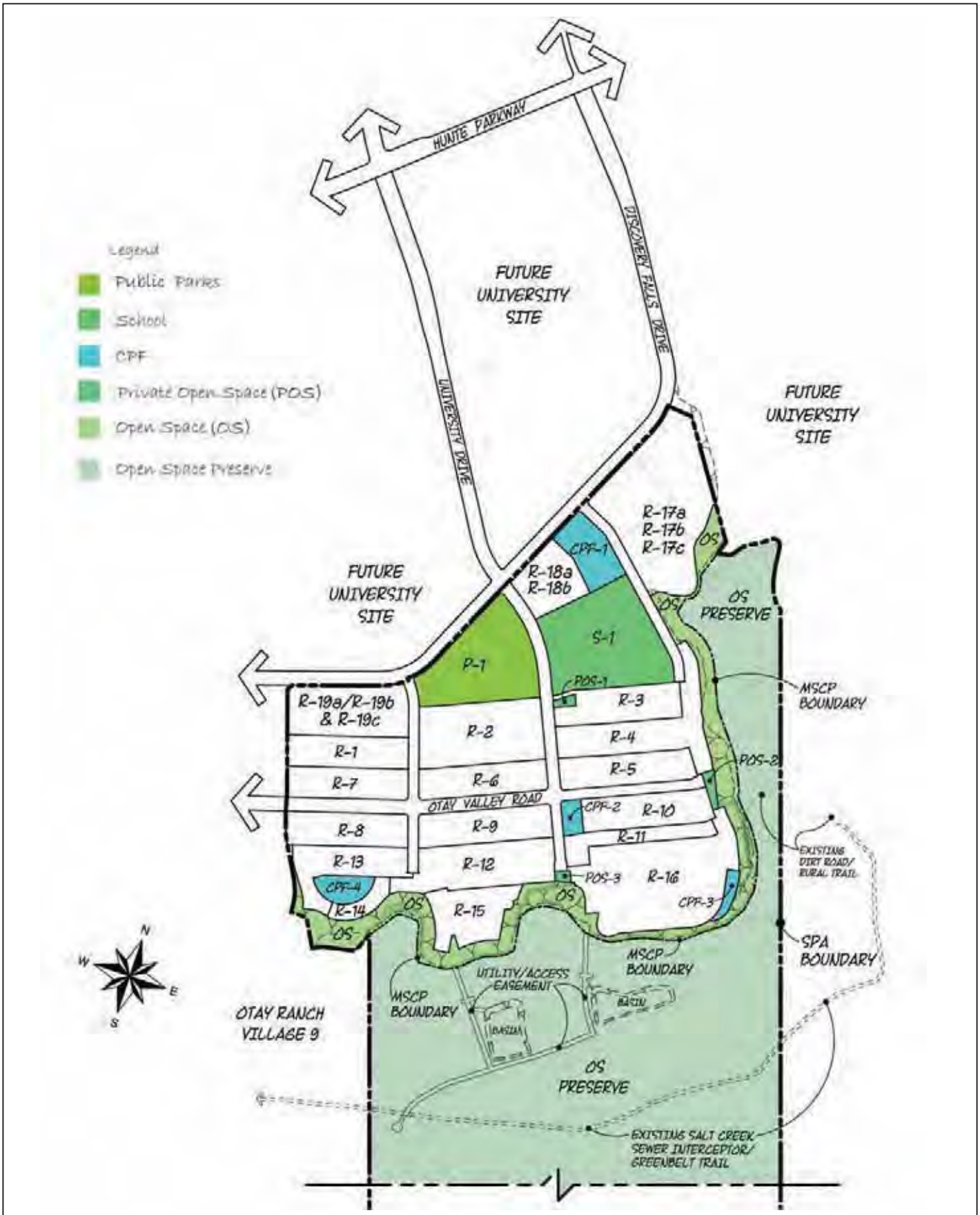
FIGURE 4-
Village Ten irculation Plan

7000

UNIVER IT VI GE PR E T EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK



SOUR E OT R E OMES 2014

FIGURE 4-

Par s an pen pace for Village Ten

7000

UNIVER IT VI GE PR E T EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK

Neighborhood Park

A 7.6-acre neighborhood park (P-1) is located in the Village Ten core along the Village Pathway. This location, within walking distance of the most densely populated portion of the village and near the elementary school, provides opportunities for shared facilities and programs. Amenities may include multipurpose open lawn areas, ball fields, lighted sports courts, picnic shelters, tot lots, parking, and restroom and maintenance buildings.

Pedestrian and Bicycle Facilities

Village Ten has been designed to accommodate the trails program described in the Otay Ranch Overall Design Plan, the City's Greenbelt Master Plan, and the OVRP Concept Plan. Regional Trails located adjacent to Circulation Element roadways provide circulation routes for pedestrians and bicycles separate from roadways. Village Pathways are intervillage, multipurpose paths that link all of the Otay Valley Parcel villages and provide access to the regional transit-way stations. Multiuse trail linkages will be established to improve connectivity to the Chula Vista Greenbelt and Greenbelt trails within Village Ten along Wiley Road.

The Modified Residential Promenade Street includes a wider tree-shaded sidewalk on one side of the street. The Promenade Trail links the residential neighborhoods to the village activity core and pedestrian network. The Village Ten Trails Plan and Bicycle Circulation Plan are shown on Figures 4-17 and 4-18.

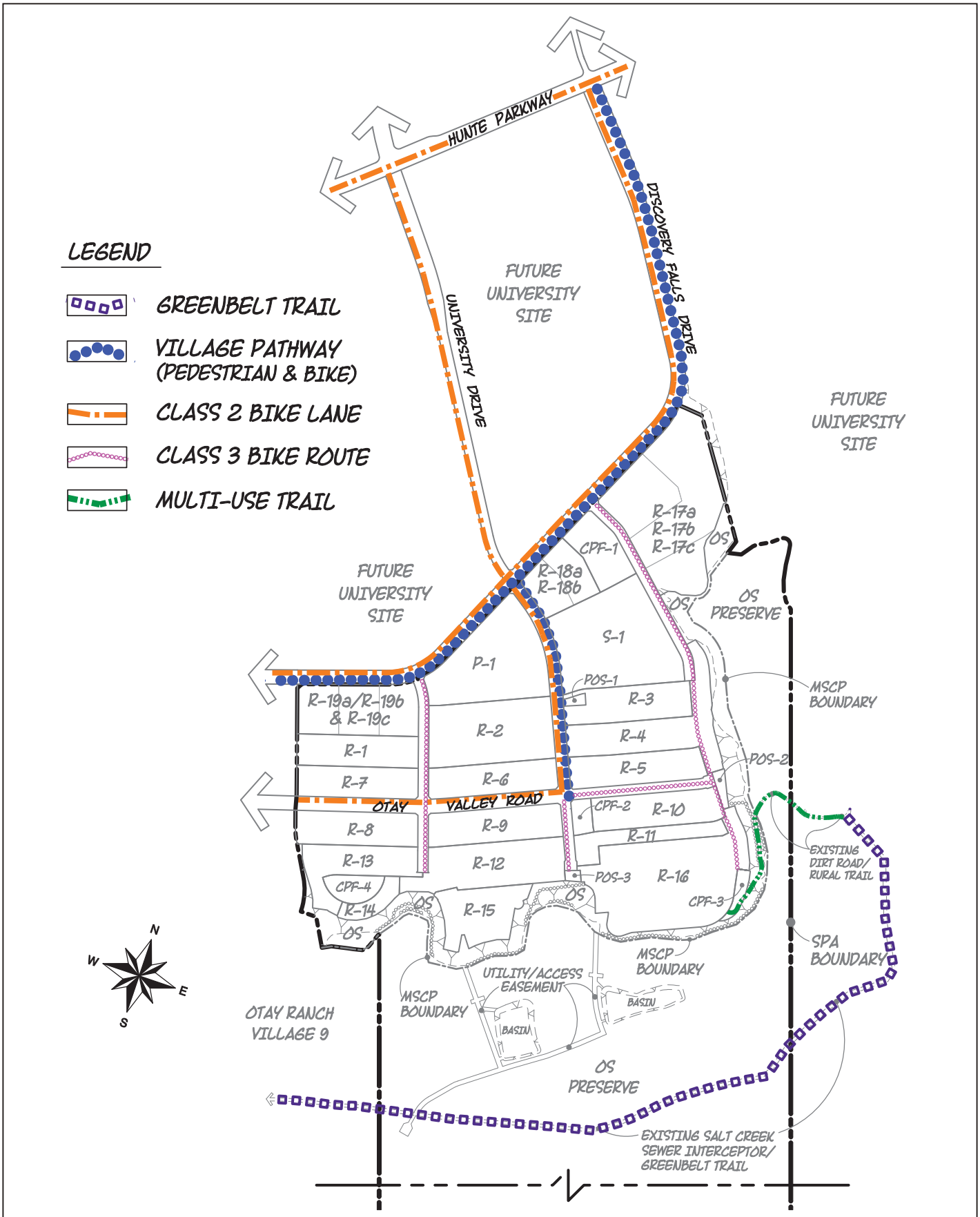
Community-Purpose Facilities

In addition to the 2.6-acre CPF site in the village core, there are three private recreation facilities, ranging in size from 0.5 to 0.8 acre and totaling 1.7 acres, in Village Ten. Amenities may include picnic and play areas, tot lots, sports courts, and passive recreation uses.

Private Open Space

Village Ten includes two P-OS areas totaling 0.7 acre. These areas serve residents within single-family neighborhoods and may include open lawn areas, ball fields and sports courts, tot lots/play areas, picnic areas, and swimming pools.

INTENTIONALLY LEFT BLANK



SOUR E OT R E OMES 2014

FIGURE 4-17

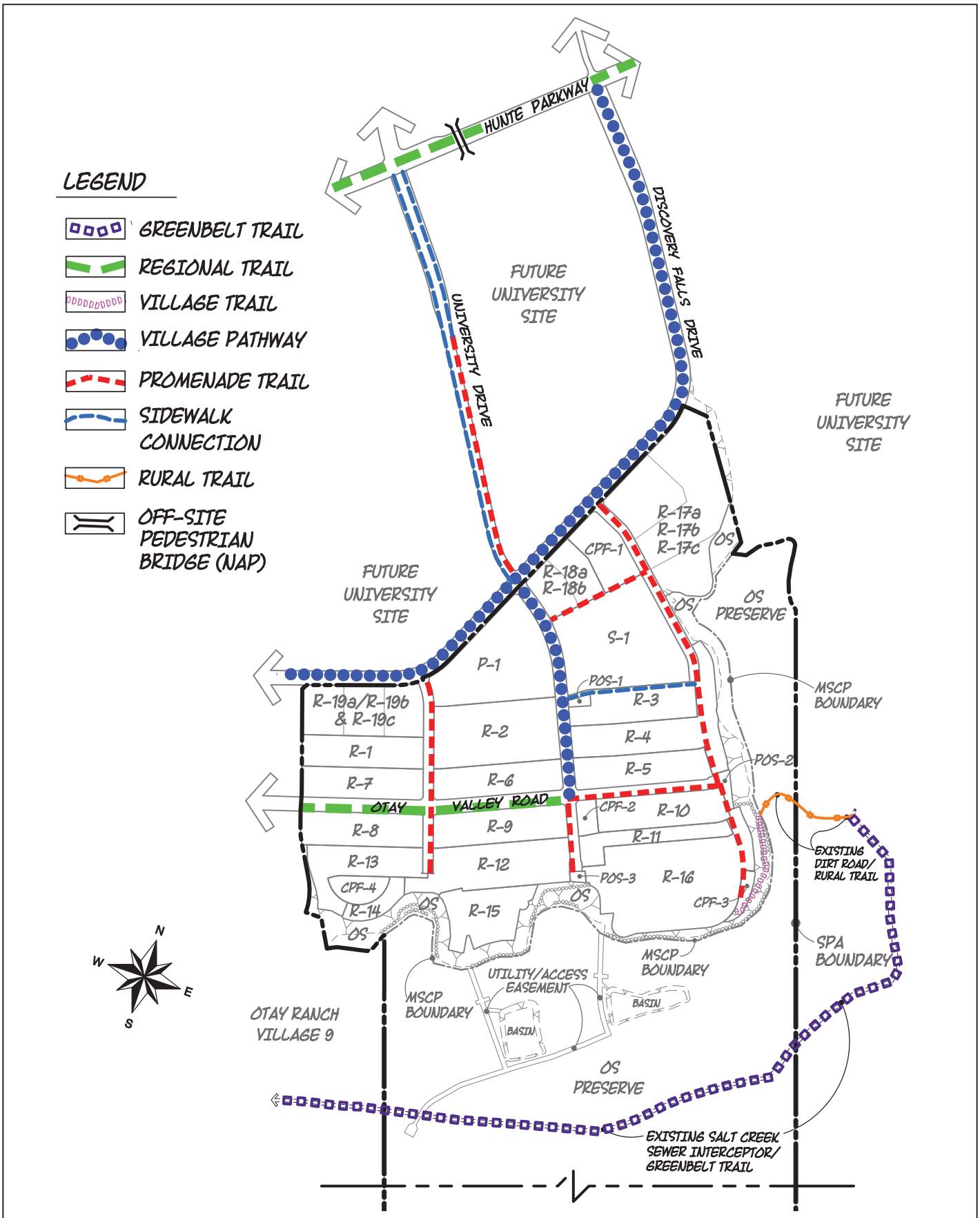
Bicycle Circulation Plan for Village Ten

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK



SOUR E OT R E OMES 2014

FIGURE 4-18

Pedestrian Circulation Plan for Village Ten

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK

4.2.3 Off-Site Improvements[2]

The proposed project includes several off-site improvements required to provide adequate circulation and public utilities to the project site. The off-site improvements, which are described in this section and shown on Figure 4-19, total approximately 160 acres.

1. **Main Street Widening and Detention Basin.** The proposed project would implement the City of Chula Vista's Circulation Element by connecting Heritage Road south to Main Street. Off-Site Area 1 would be required to accommodate grading associated with the widening of Main Street. Off-Site Area 1 is also proposed for a detention basin to treat water quality from Village Three North. The basin would be approximately 7 acres and is designed to treat stormwater runoff before it discharges into the Otay River Valley.
2. **Heritage Road.** Off-Site Area 2 would be required to accommodate grading associated with Heritage Road. Specifically, Heritage Road has been designed to create a more cohesive land plan for Village Three North and to align with the planned replacement of the off-site Heritage Road Bridge crossing the Otay River Valley.
3. **Main Street Widening.** Off-Site Area 3 would be required to accommodate grading associated with the widening of Main Street. Specifically, Main Street would be widened to its full improved width as a Six-Lane Prime Arterial.
4. **Main Street Extension.** The proposed project would implement the City of Chula Vista Circulation Element by constructing Main Street along the Village Three North frontage. Off-Site Area 4 would be required to accommodate grading and the improvements to Main Street east of Heritage Road. Off-Site Area 4a is an edge condition where grading would be required to match the existing off-site grades for neighborhood R-20.
5. **Heritage Road.** Off-Site Area 5 would be required to accommodate grading associated with the alignment of Heritage Road. Specifically, Heritage Road has been designed to create a more cohesive land plan for Village Three North and to align with the planned replacement of the Heritage Road Bridge crossing the Otay River Valley.
6. **Heritage Road.** Off-Site Area 6 would be required to accommodate grading associated with the alignment of Heritage Road. Specifically, Heritage Road has been designed to create a more cohesive land plan for Village Three North and to align with the planned replacement of the Heritage Road Bridge crossing the Otay River Valley.
7. **Main Street/La Media/Otay Valley Road Connection.** Off-Site Areas 7 and 7a would be required for the grading and construction of Main Street and La Media Road to

[2] Off-Site Improvement Area 11 and Off-Site Improvement Area 20 are located on-site (i.e., – within the SPA Plan boundaries) but under different ownership and are therefore not reflected in this list. Off-Site Improvement Area 13 was an assumed improvement that is not required for this project and thus not reflected in this list.

provide secondary access to the Village Eight East site. In addition, utility lines would be constructed within the Main Street and La Media Road right-of-way. La Media Road/ Otay Valley Road includes the realignment of a portion of a 54-inch City of San Diego water line. Improvements in Main Street include dry utilities and storm drains.

8. **Off-Site Grading.** Off-Site Area 8 is an edge condition where grading would be required to match proposed grading plans with existing grades. In the event that Village Eight West develops prior to/concurrent with development of Village Eight East, off-site grading may not be required.

9. **Village Eight East Community Park (P-2) Access/Otay Valley Road.** Off-Site Area 9 would provide for vehicular access to the Community Park (P-2) south of Village Eight East. This access route through Village Eight West is necessary to provide a direct connection from a Circulation Element roadway (Otay Valley Road) to the Community Park (P-2) without requiring travel through a residential neighborhood. The access road would also provide sewer and storm drain facilities serving Village Eight West. A portion of Area 9 would provide for secondary access to Village Eight East via Otay Valley Road.

10. **Off-Site Grading.** Off-Site Area 10 is an edge condition where grading would be required to match proposed grading plans with existing grades. In the event that Village Eight West develops prior to/concurrent with development of Village Eight East, such off-site grading may not be required.

12. **Off-Site Grading/SR-125 Right-of-Way.** The project proposes grading within the SR-125 right-of-way owned by Caltrans. This off-site grading is anticipated to occur in portions of the SR-125 right-of-way that were condemned by Caltrans and are no longer necessary due to the final configuration of the toll way (Off-Site Area 12). Portions of the SR-125 right-of-way are being acquired for the expanded residential neighborhood associated with proposed project, including the graded slopes (Off-Site Area 12a).

14. **Off-Site Grading.** Off-Site Areas 14, 14a, and 14b would be needed to balance grading between Village Nine and Village Ten. Area 14b would provide a grading haul route between Areas 14 and 14a. A portion of Area 14 would be required to match proposed grades with existing Village Nine grades.

15. **EastLake Parkway.** Off-Site Areas 15 and 15a would be required for the grading and construction of University Drive south of Hunte Parkway to provide primary access to the Village Ten site.

16. **Off-Site Grading/Discovery Falls.** Off-Site Area 16 would be necessary to connect Discovery Falls Drive to Village Nine Street "B." Discovery Falls provides secondary access to Village Ten. It is anticipated that Village Ten would develop prior to development of the University site such that off-site grading would be required.

17. **Off-Site Borrow Site.** Off-Site Area 17 is a "borrow" grading site required for the grading and construction of Discovery Falls Drive and University Drive within the future University/Regional Technology Park. All grading within the future University/Regional Technology Park properties would balance on site.
18. **Discovery Falls Extension.** Off-Site Areas 18 and 18a would be required for the grading and construction of Discovery Falls south of Hunte Parkway to provide secondary access to the Village Ten site.
19. **Off-Site Grading.** Off-Site Area 19 is an edge condition where grading would be required to match proposed grading plans with existing grades. It is anticipated that Village Ten would develop prior to development of the University site such that off-site grading would be required.
21. **Off-Site Trail.** Off-Site Area 21 is a trail that connects Village Ten to the Salt Creek Sewer Maintenance Road and the OVRP Greenbelt Trail/Chula Vista Greenbelt Trail. This trail connection is on land owned by the City of Chula Vista and partly over land owned by the City of San Diego containing a water line. No grading is proposed. Proposed improvements include fencing, signage, trail grooming, and erosion control.

In addition to the above off-site improvements, two existing City of San Diego waterlines currently traverse through Villages Eight East and Ten in an east-west direction. As part of the proposed project, these waterlines will be re-located from their existing alignment and placed within the right of way of the future Otay Valley Road.

4.2.4 Public Services and Utilities

This section provides a summary of the public services and utilities relevant to the proposed project. The analysis of the proposed project's impacts on these public services and utilities is provided in Sections 5.12 and 5.13 of this EIR.

Water Service

The proposed project would receive water service by expanding the existing Otay Water District (OWD) water system. A subarea master plan will be prepared prior to approval of the first final map for the project. The subarea master plan identifies existing on- and off-site pipeline locations, size, capacity, and the City of Chula Vista's fire flow requirements (e.g., flow rate, duration, hydrant spacing) to ensure that adequate infrastructure is developed to serve the project's water needs. The project would be phased and would ensure that the OWD criteria are met during all phases of development. The project would also be served by expanding the existing recycled water system. Recycled water may be used to irrigate open space, parks, and common areas of school, multi-family residential, industrial, office, and commercial sites. In

conformance with the Otay Ranch GDP and the Chula Vista Growth Management Program, Water Conservation Plans are included with each SPA Plan in the proposed project.

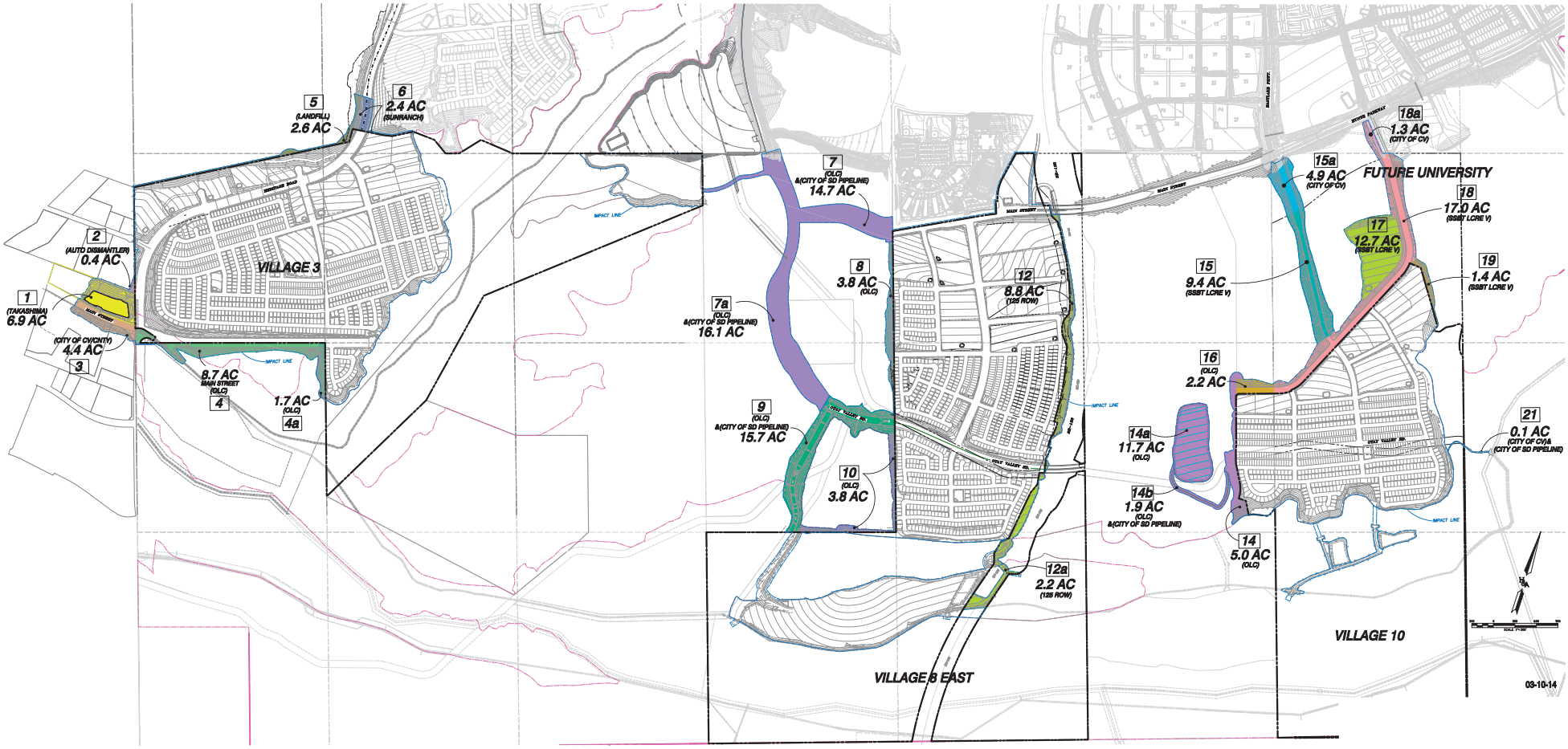
An Overview of Water Service for the Otay Ranch University Villages, prepared by Dexter Wilson (2014; Appendix N) calculates the expected potable and recycled water demand created by the proposed project and identifies the necessary infrastructure improvements required to serve the project site. The projected average water demand is 555,723 gallons per day (gpd) for Village Three North and a Portion of Village Four, 1,048,824 gpd for Village Eight East, and 516,929 gpd for Village Ten, for a total of 2,121,476 gpd or 2,334 acre-feet/year for the proposed project. Figures 4-20 through 4-22 depict the proposed potable water systems for Village Three North and a Portion of Village Four, Village Eight East, and Village Ten.

The proposed project includes Water Conservation Plans for each SPA Plan Area, which propose implementation strategies to reduce potable water demand. These strategies include use of recycled water and water efficiency treatments. Figures 4-23 through 4-25 depict the proposed recycled water systems for Village Three North and a Portion of Village Four, Village Eight East, and Village Ten. As further detailed in Section 5.13 of the EIR, these water conservation features would combine to reduce the amount of potable water required for the proposed project by approximately 29.1%.

OWD prepared and approved a Water Supply Assessment and Verification Report in compliance with Senate Bills 610 and 221 demonstrating that adequate water supplies are anticipated to serve buildout of the proposed project in normal, single dry, and multiple dry years in conjunction with other existing and planned development within the OWD service area. The Overview of Water Service for the Otay Ranch University Villages and the OWD Water Supply Assessment and Verification Report are included in Appendix N of this EIR. Water supply and service is assessed in more detail in Section 5.13 of the EIR.

Sewer Service

Sewer service for the proposed project would be provided by constructing gravity sewer lines to connect with the existing Salt Creek Interceptor. A single point of connection from each of the four village development areas is proposed. The Salt Creek Interceptor was constructed and sized to serve regional development in the area, including the proposed project area. The proposed project would be required to pay a development impact fee to connect to the Salt Creek Interceptor.



SOUR E nsaker ssociates, Marc 2014

FIGURE 4-

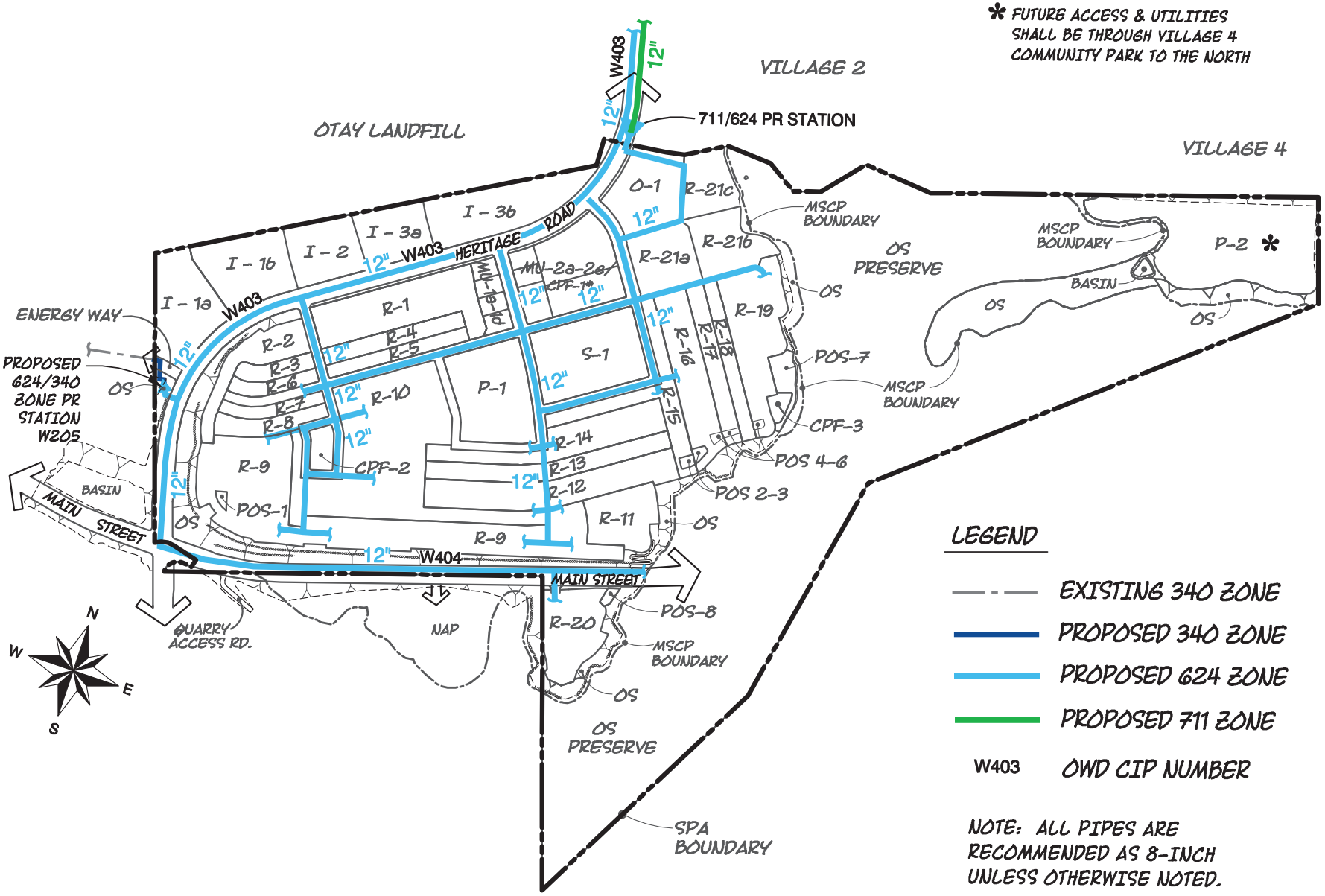
ff- ite l pro e ent reas

7000

UNIVER IT VI GE PR E T EIR

Pro ects 700000 M PDO M PS OP

INTENTIONALLY LEFT BLANK



SOUR E DEXTER SO E EER , 2014

FIGURE 4-20

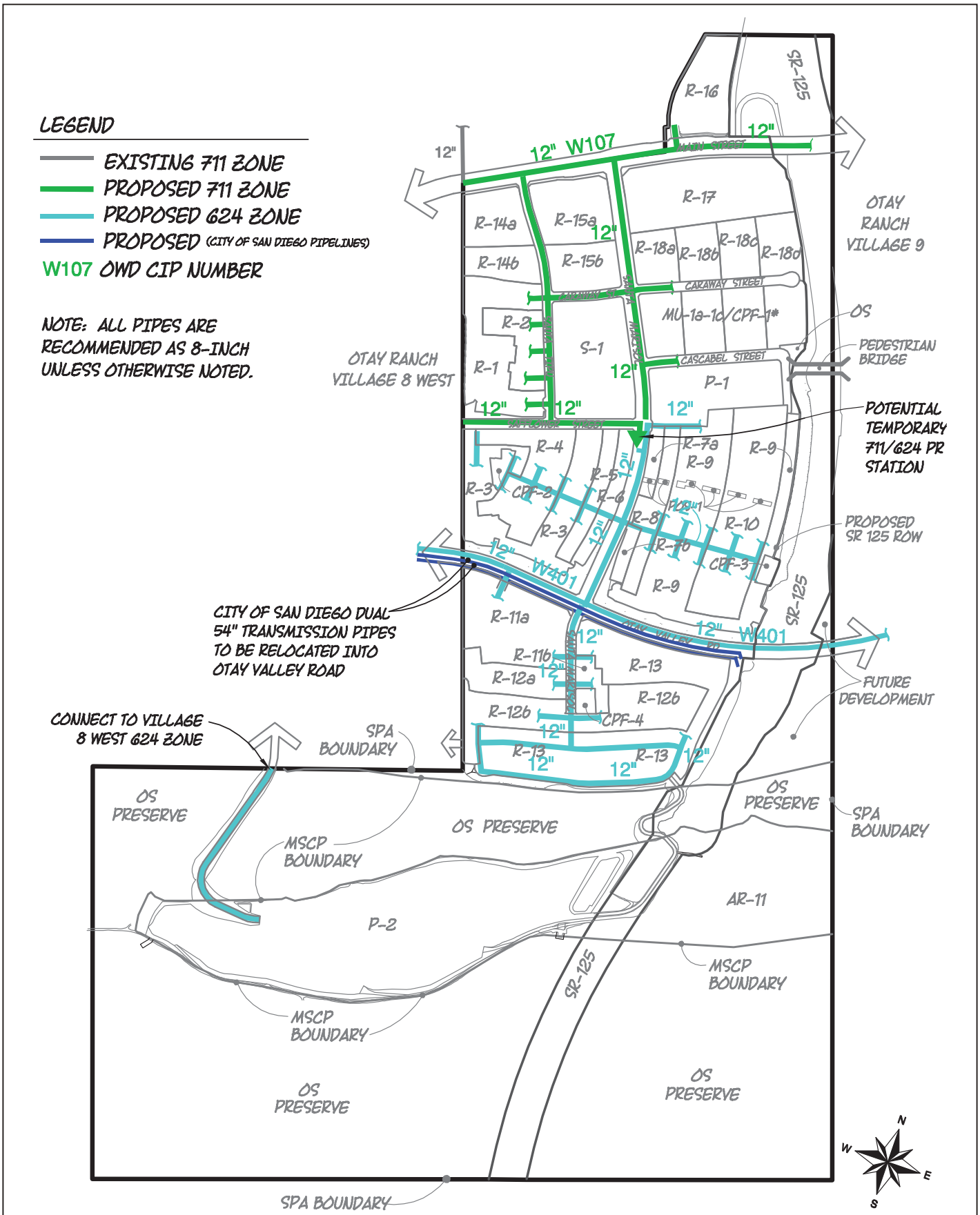
Potable Water Plan for Village Three North and Portion of Village Four

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK



SOUR E DEXTER SO E EER , 2014

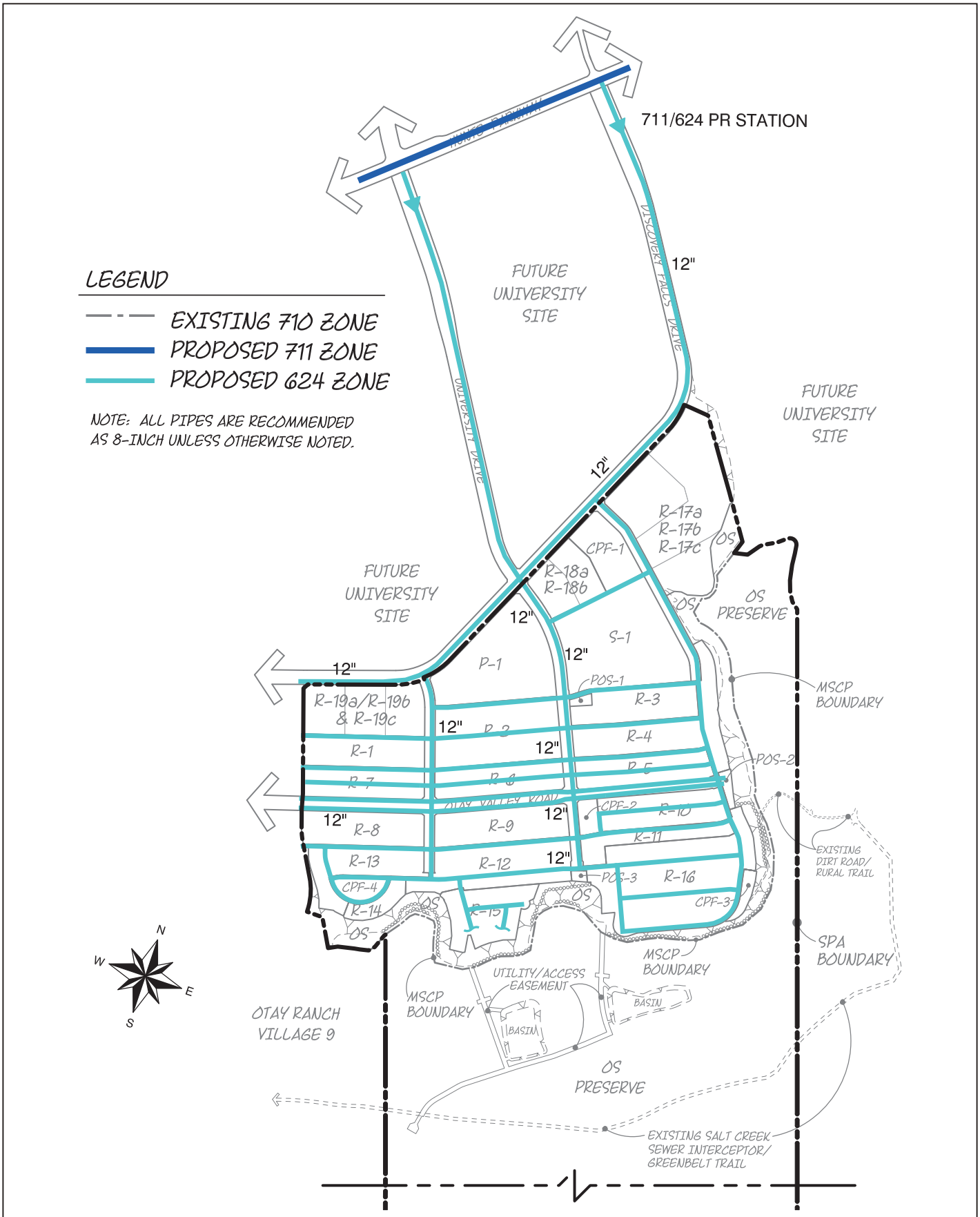
FIGURE 4-21

Potable Water Plan for Village Eight East

7000

UNIVERSITY VILLAGES PROJECT EIR

INTENTIONALLY LEFT BLANK



SOUR E DEXTER SO E EER , 2014

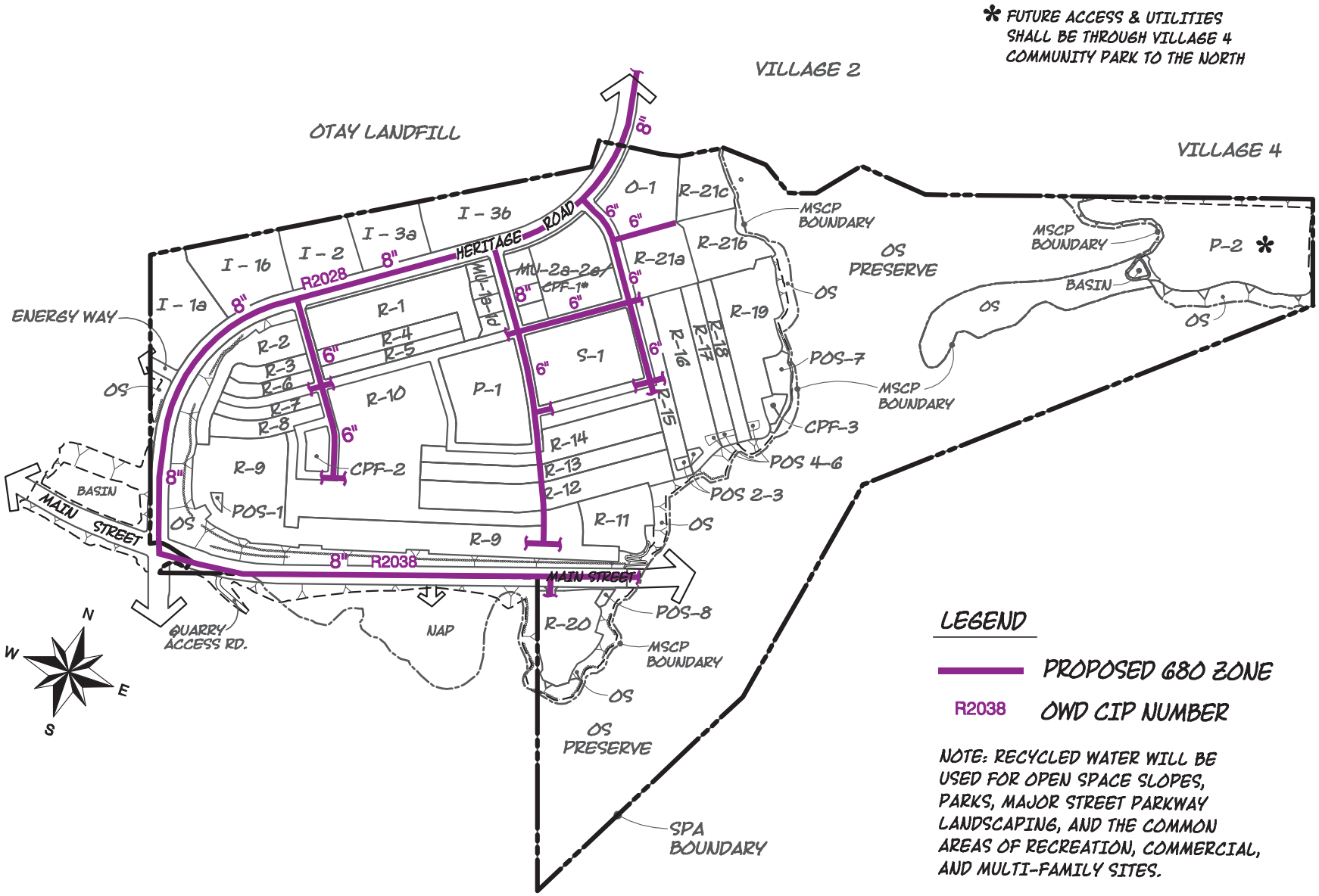
FIGURE 4-22

Potable Water Plan for Village Ten

7000

UNIVERSITY VILLAGES PROJECT EIR

INTENTIONALLY LEFT BLANK



SOUR E OT R E OMES 2014

FIGURE 4-23

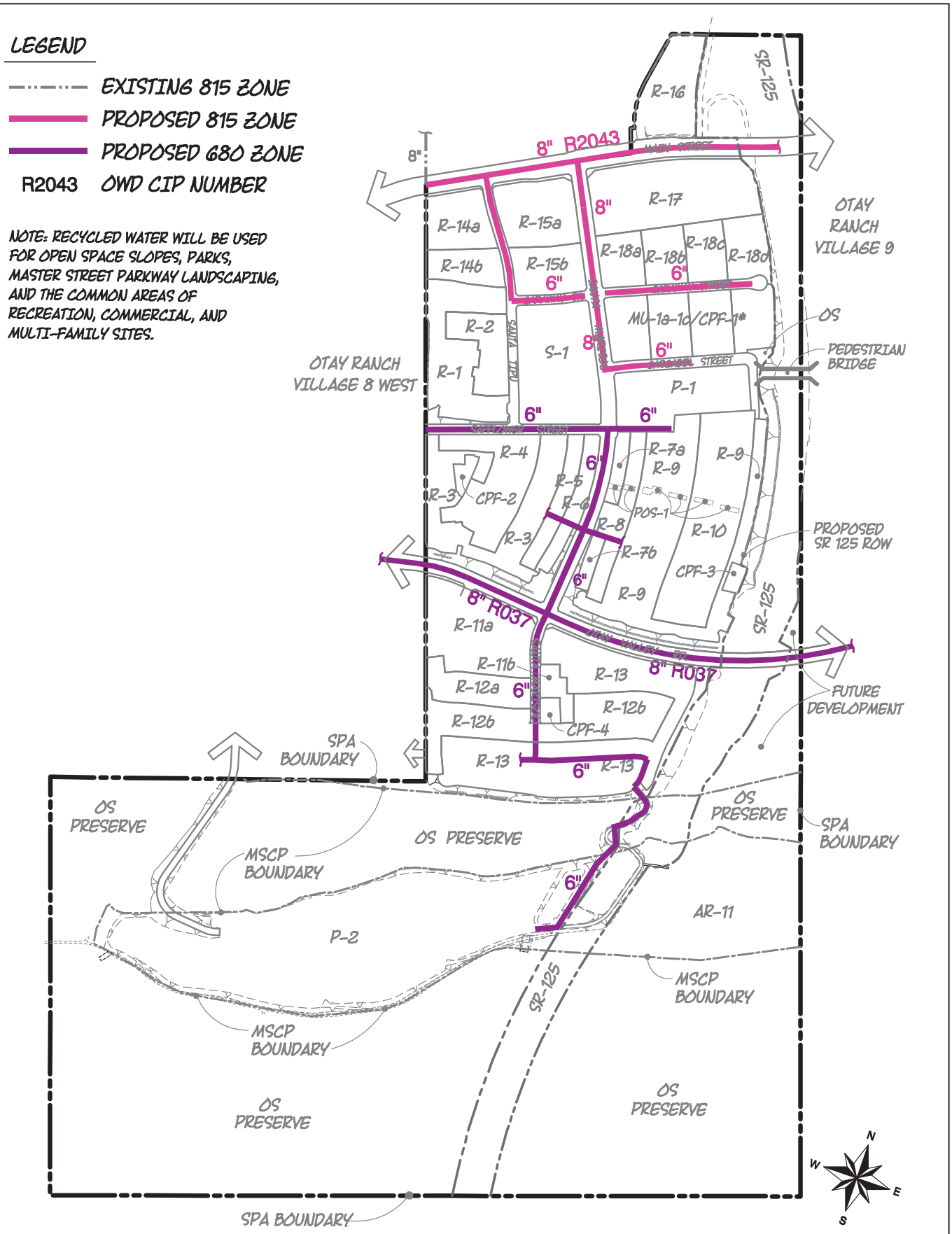
Recycled Water Plan for Village Three North and Portion of Village Four

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK



SOUR E OT R E OMES 2014

FIGURE 4-24

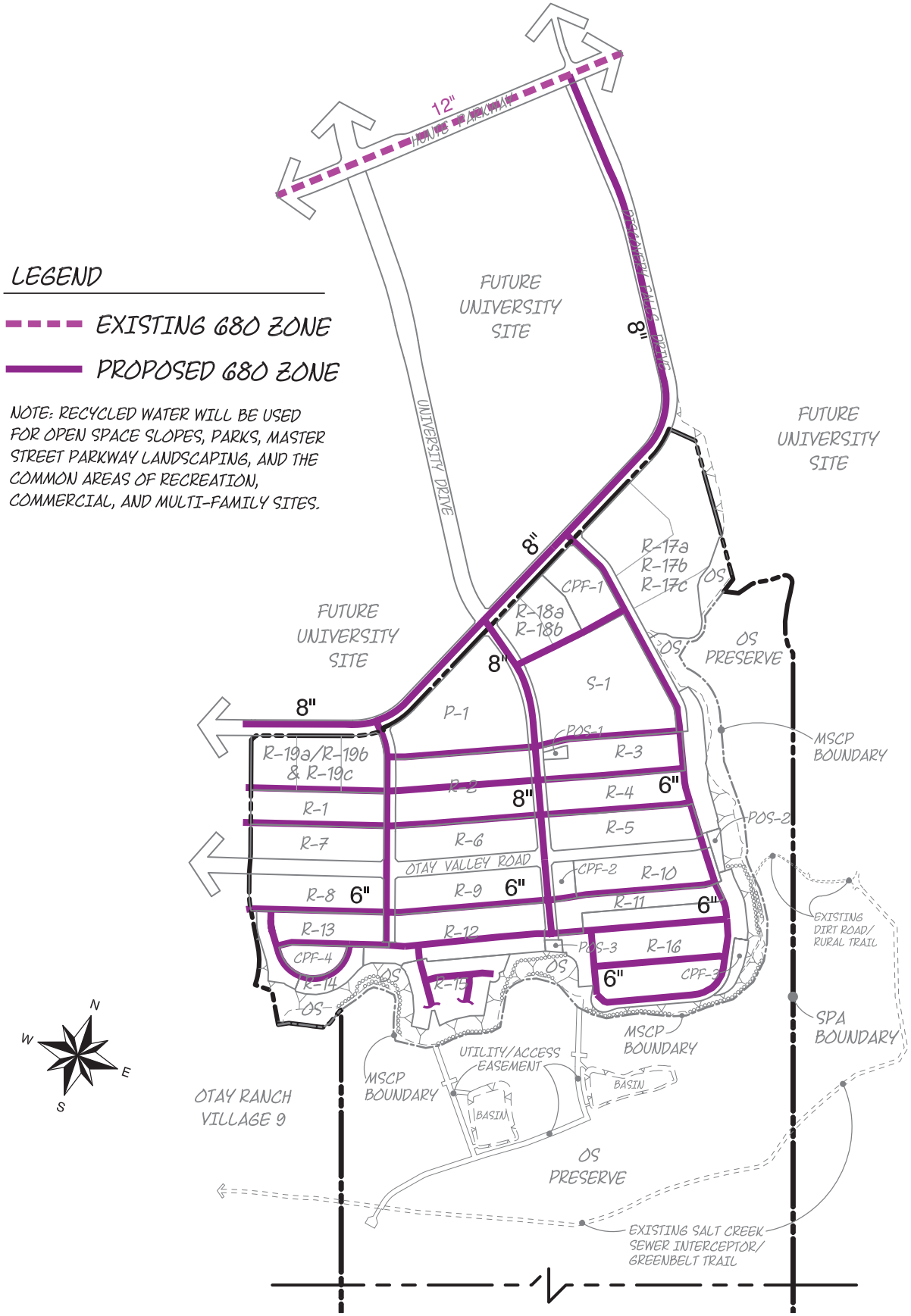
Recycled Water Plan for Village Eight East

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK



SOUR E OT R E OMES 2014

FIGURE 4-25

Recycled Water Plan for Village Ten

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK

The Overview of Sewer Service for the Otay Ranch University Villages (Appendix O) calculates the expected demand for sewage transportation and treatment. The projected average sewer flow is 526,355 gpd for Village Three North and Portion of Village Four, 849,589 gpd for Village Eight East, and 416,769 gpd for Village Ten. The total projected average sewerage flow is approximately 1.79 million gallons per day (mgd). This would result in a projected peak sewage flow of 3.15 mgd for the proposed project. The Salt Creek Interceptor was sized to accommodate flows from the buildout of the eastern portion of the City of Chula Vista including the proposed project area. No additional upsizing of the Salt Creek Interceptor would be necessary downstream of the proposed project. Figures 4-26 through 4-28 depict the proposed sewer systems for Village Three North and a Portion of Village Four, Village Eight East, and Village Ten.

All sewage from the City of Chula Vista is collected and conveyed to the City of San Diego Metro Sewer System for treatment and disposal. The City currently has capacity rights of 20.864 mgd[3] of flow in the Metro Sewer System and existing average flows in the City are approximately 16.2 mgd. Anticipated sewage generation, conveyance, and treatment are discussed in detail in Section 5.13 of the EIR.

Drainage and Stormwater Facilities

Drainage and stormwater facilities for the proposed project are analyzed in master drainage studies and water quality technical reports for all three SPA Plan areas. All pre- and post-development runoff from the project area is within the OVRP watershed and runoff from the developed portion of the project area would discharge directly to the Otay River via internal storm drain systems, with the exception of the Portion of Village Four, which would discharge into a tributary drainage. No detention basins would be required for the proposed project because development of the villages would not increase the 100-year frequency peak flows in the Otay River. Figures 4-29 through 4-31 depict the proposed drainage and water quality systems for Village Three North and a Portion of Village Four, Village Eight East, and Village Ten.

Development of the proposed project would meet the requirements of the City's Standard Urban Storm Water Mitigation Plan, the Jurisdictional Urban Runoff Management Plan, and the Storm Water Management and Discharge Ordinance (as specified in the City of Chula Vista Development and Redevelopment Storm Water Management Standards/Requirements Manual). The conceptual grading and stormwater control plans for the proposed project provide for water quality control facilities to ensure protection for the Otay River. Proposed stormwater conveyance and treatment infrastructure specific to each village is discussed in Section 5.10 of the EIR.

[3] Regional Wastewater Disposal Agreement between the City of San Diego and the Participating Agencies in the Metropolitan Sewerage System, adopted May 18, 1998 (City of San Diego Ordinance Number 00-18517).

Schools

The project area is located within the service areas of the Chula Vista Elementary School District and the Sweetwater Union High School District.

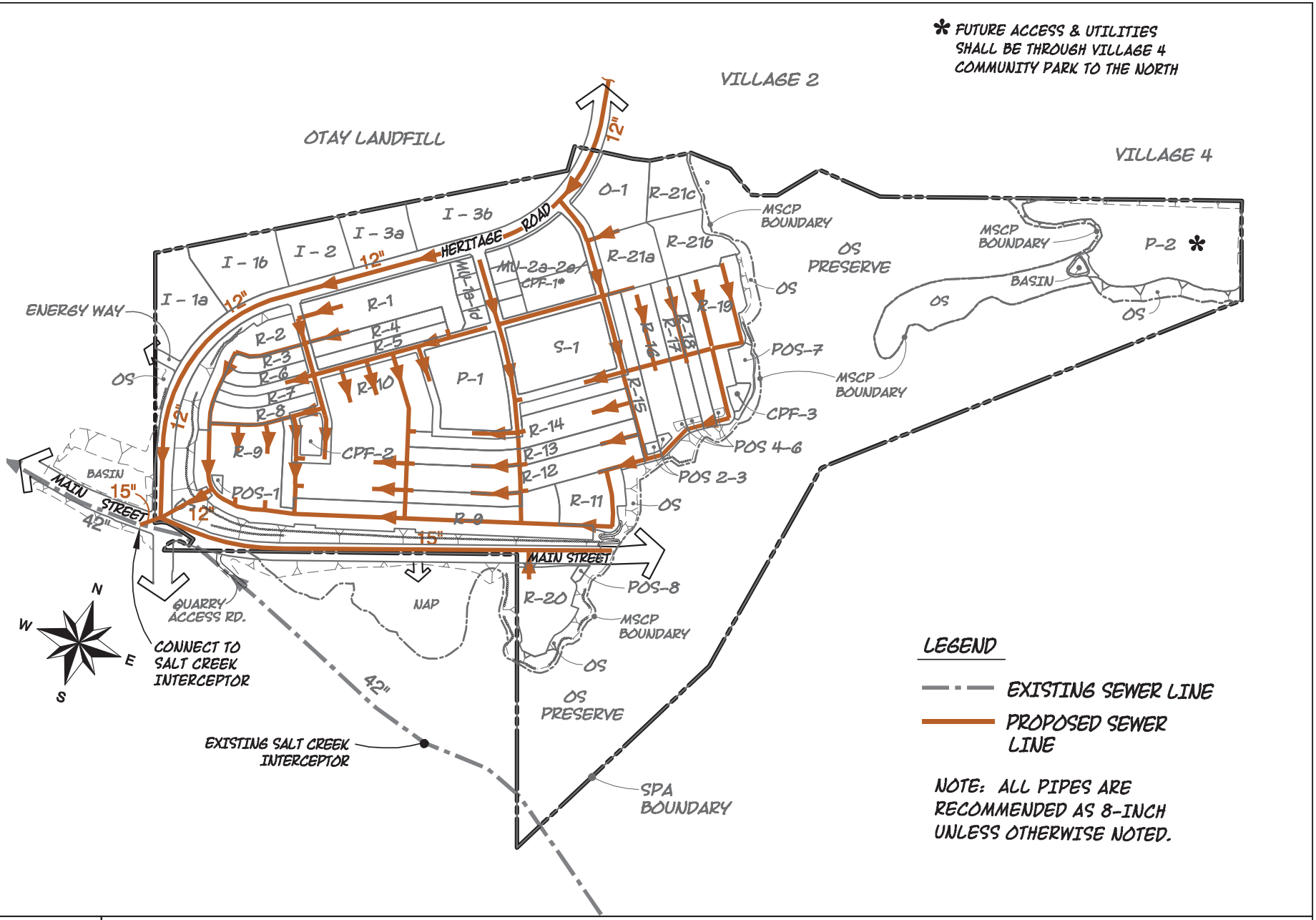
The proposed project includes elementary school sites within the village cores of each SPA Plan area. Village Three North and a Portion of Village Four includes an 8.3-acre school site in the center of the village; Village Eight East includes a 10.8-acre site in the northern portion of the village, and Village Ten includes a 9.2-acre site in the northeast portion of the village, as depicted in Figures 4-4, 4-9, and 4-14, respectively. The Chula Vista Elementary School District has reviewed the locations of the proposed elementary schools and provided conceptual approval. These sites would be reserved for acquisition or conveyance to the Chula Vista Elementary School District. The construction schedule for the school would be determined by the school district. Students in the project area would be accommodated in neighboring Chula Vista Elementary School District elementary schools at the discretion of the school district until the new schools are constructed.

Middle school and high school requirements would be met by the existing schools within the Sweetwater Union High School District. In addition to nearby public schools (EastLake Middle School, Rancho del Rey Middle School, Otay Ranch High School, EastLake High School, and Olympian High School), two private schools are located near the project area: High Tech High School and Mater Dei High School. Further, a joint high/middle school is planned in the nearby Village Eleven and a middle school is planned in Village Eight West.

Demand for adult school facilities would be satisfied through existing facilities in the Sweetwater Union School District until a new facility can be constructed in the Otay Ranch Eastern Urban Center on a site reserved according to the Otay Ranch GDP. Student generation and school capacity information is provided in Section 5.12 of the EIR.

Police, Fire, and Emergency Medical Services

The Chula Vista Police Department currently provides police services within the City of Chula Vista. The development of project area would increase the demand for police services. In order to meet Growth Management Ordinance service thresholds, additional personnel and facilities may be required at buildout of the proposed project; however, no police substations would be required. The existing police facilities have the capacity to accommodate any potential additional law enforcement services generated by the proposed project. It should be noted that should a station or storefront be desired by the City in the future, such a use would be compatible with the Mixed-Use Commercial/Office District or Mixed-Use Commercial Districts in Villages Three North and Eight East.



SOUR E DEXTER SO E EER , 2014

FIGURE 4-26

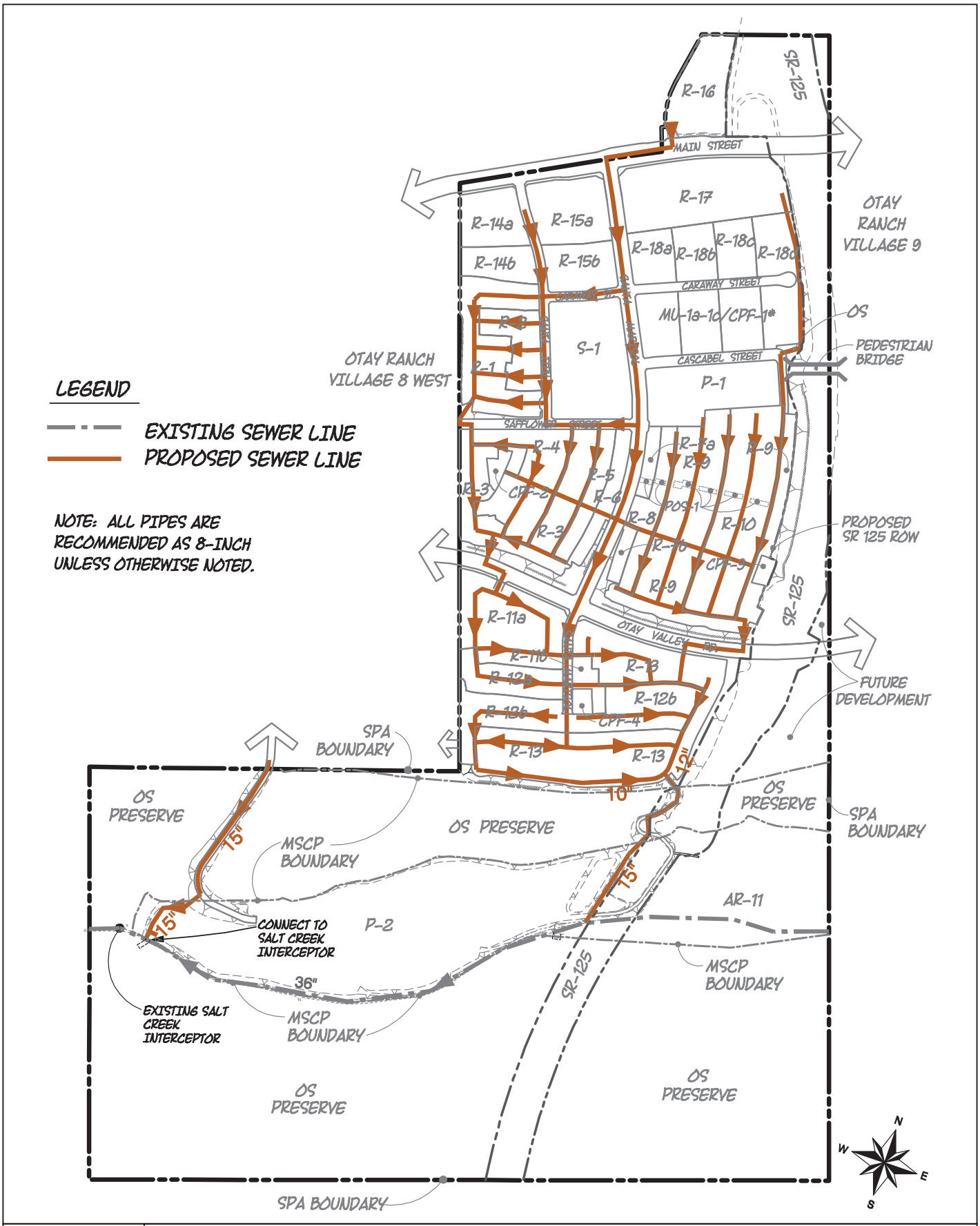
Sewer Plan for Village Three North and Portion of Village Four

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK



SOUR E DEXTER SO E EER , 2014

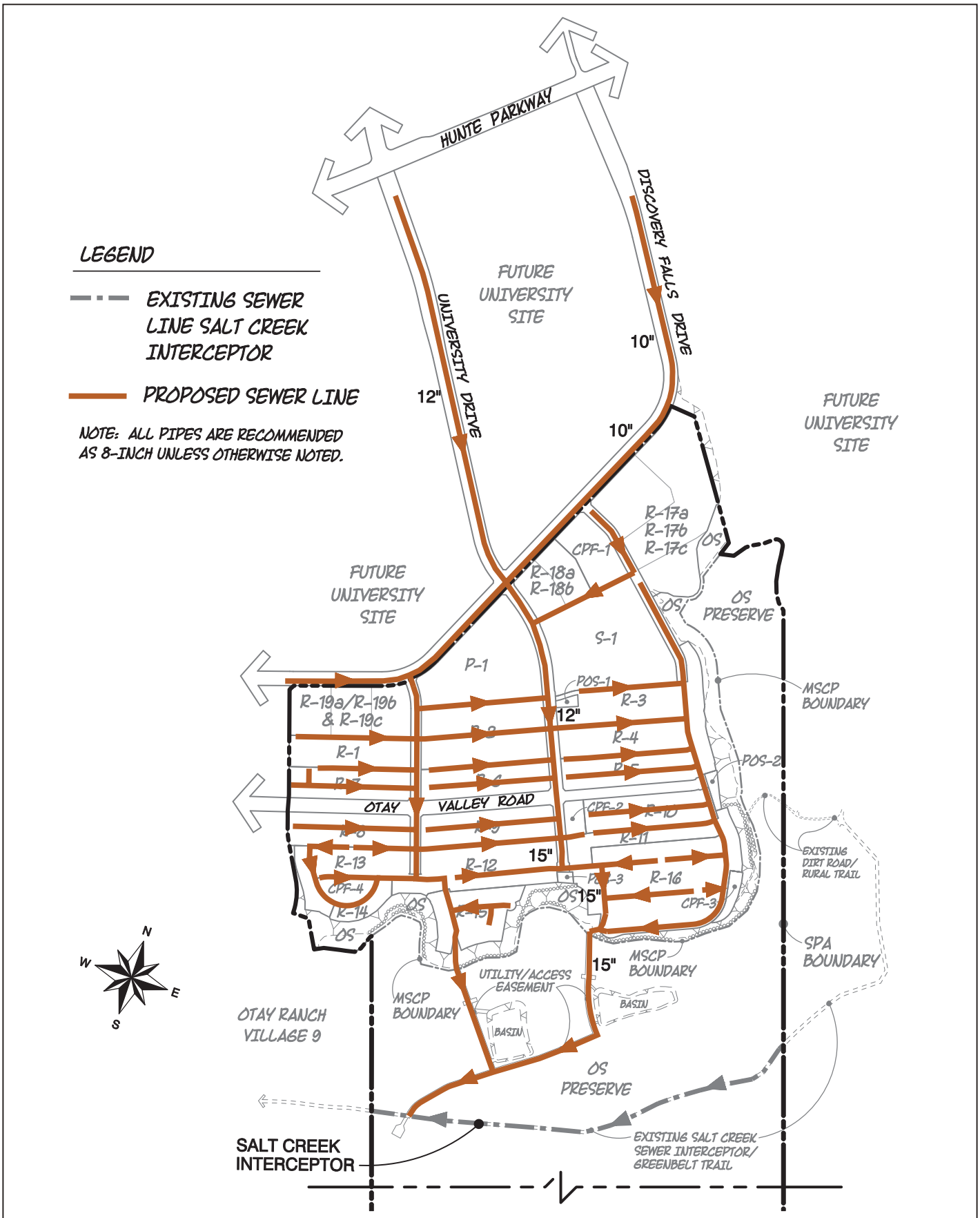
FIGURE 4-27

Sewer Plan for Village Eight East

7000

UNIVERSITY VILLAGES PROJECT EIR

INTENTIONALLY LEFT BLANK



SOUR E OT R E OMES 2014

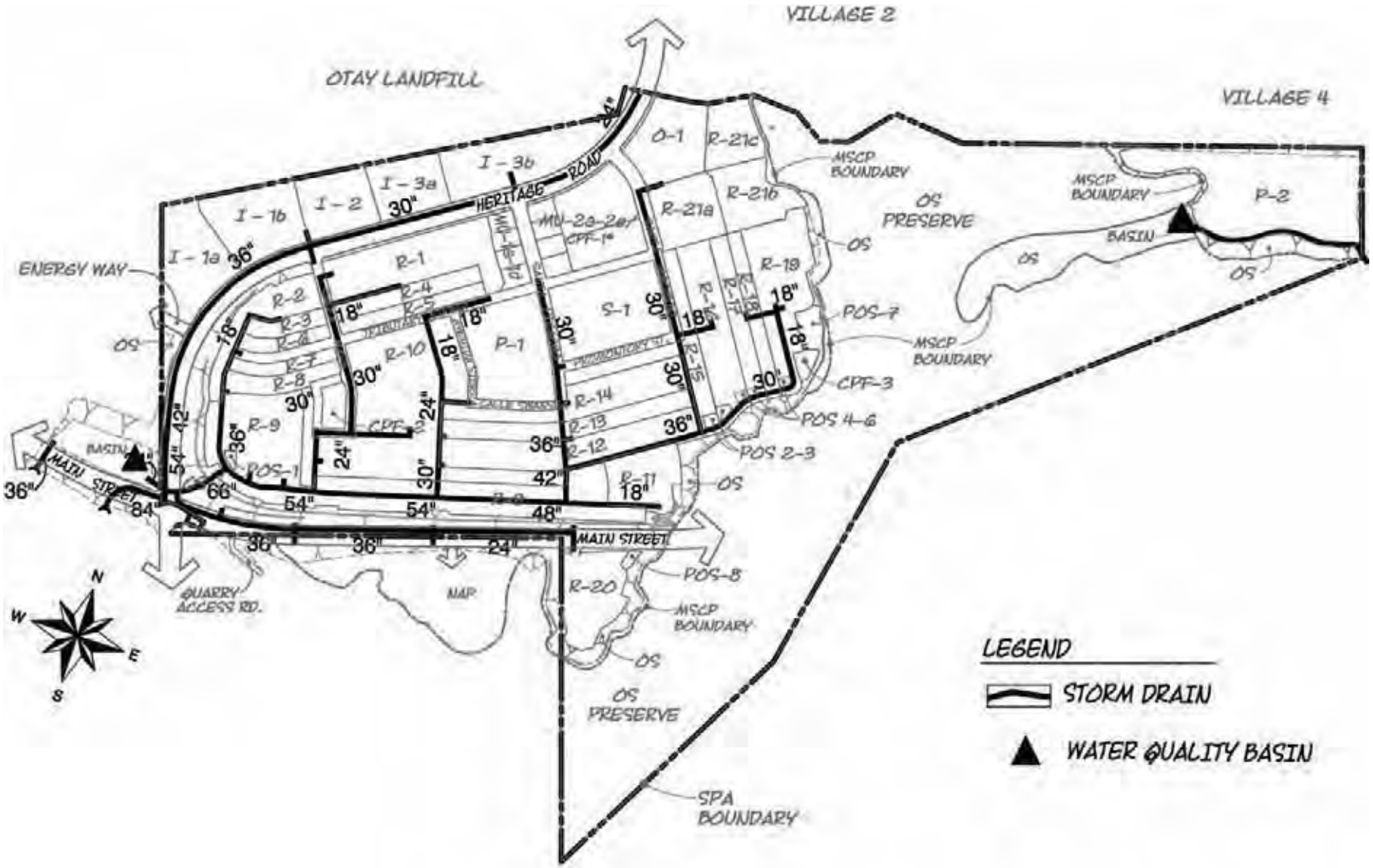
FIGURE 4-28
Sewer Plan for Village Ten

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK



SOUR E OT R E OMES 2014

FIGURE 4-2

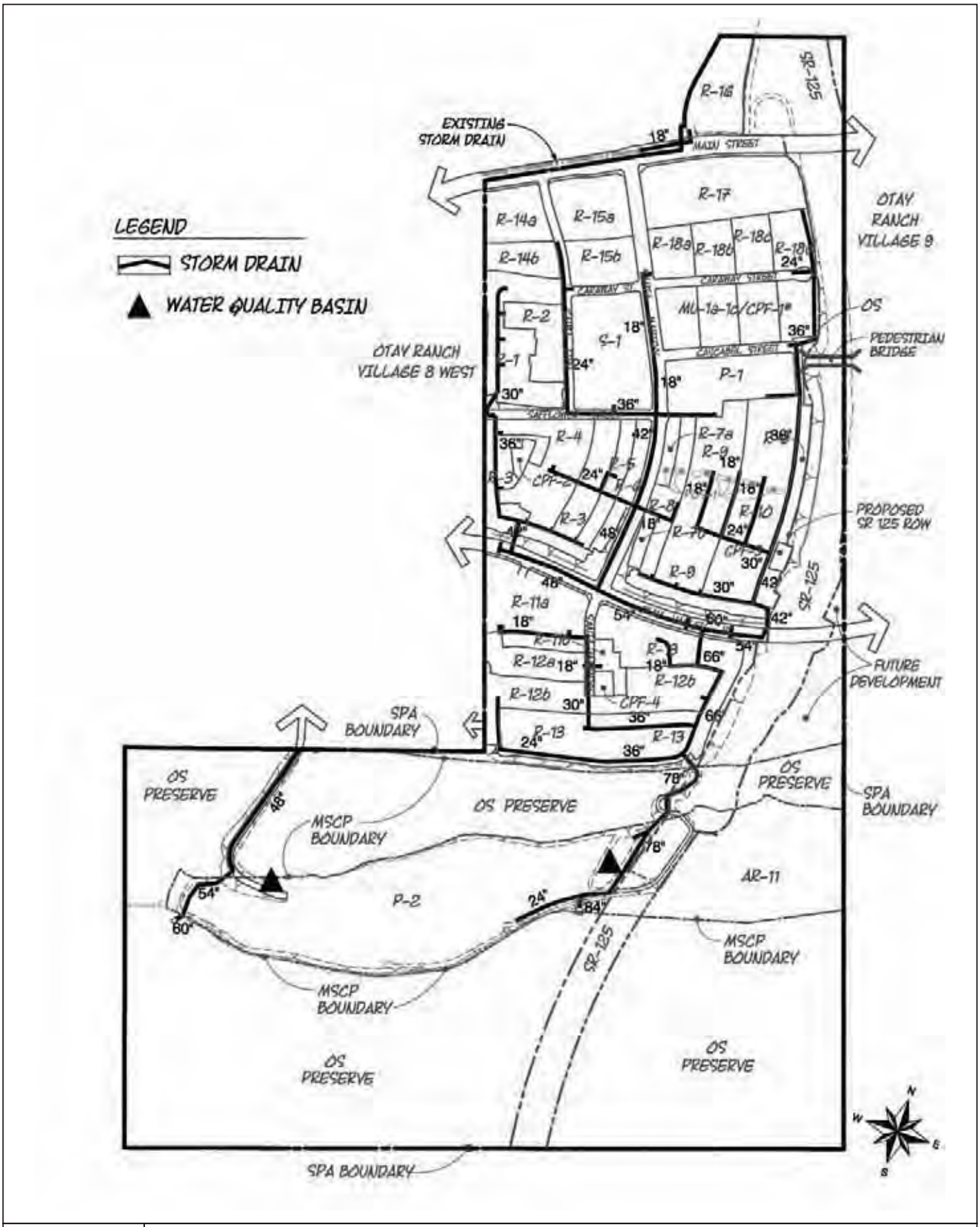
y rologic asin an rainage yste for Village Three North an Portion of Village Four

UNIVER IT VI GE PR E T EIR

7000

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK



SOUR E OT R E OMES 2014

FIGURE 4- 0

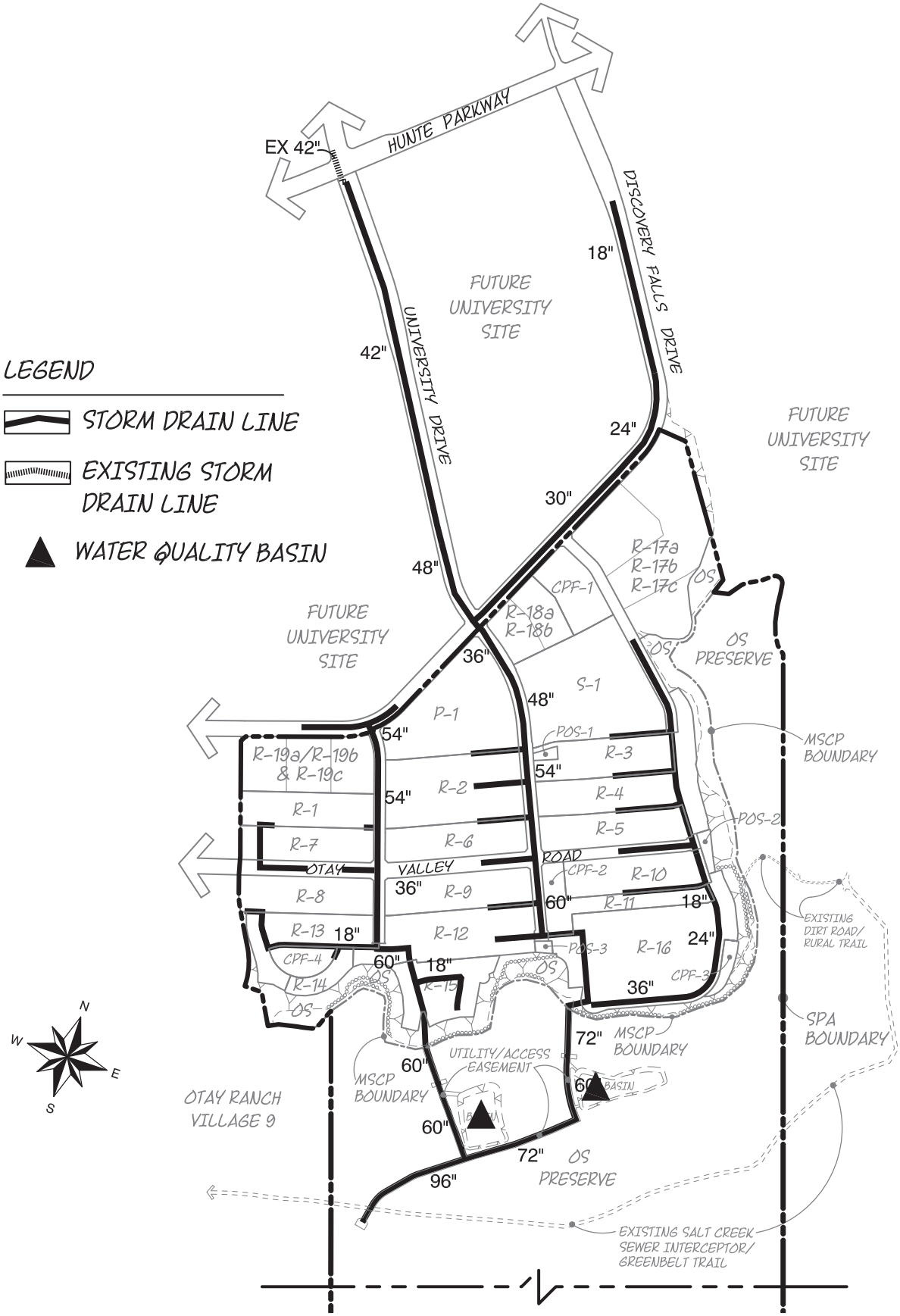
y rologic asin an rainage yste for Village Eight East

7000

UNIVER IT VI GE PR E T EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK



SOUR E OT R E OMES 2014

FIGURE 4-31

Hydrologic Basin and Drainage System for Village Ten

7000

UNIVERSITY VILLAGES PROJECT EIR

Pro ects 700000 M PDO M PS E R Section 4

INTENTIONALLY LEFT BLANK