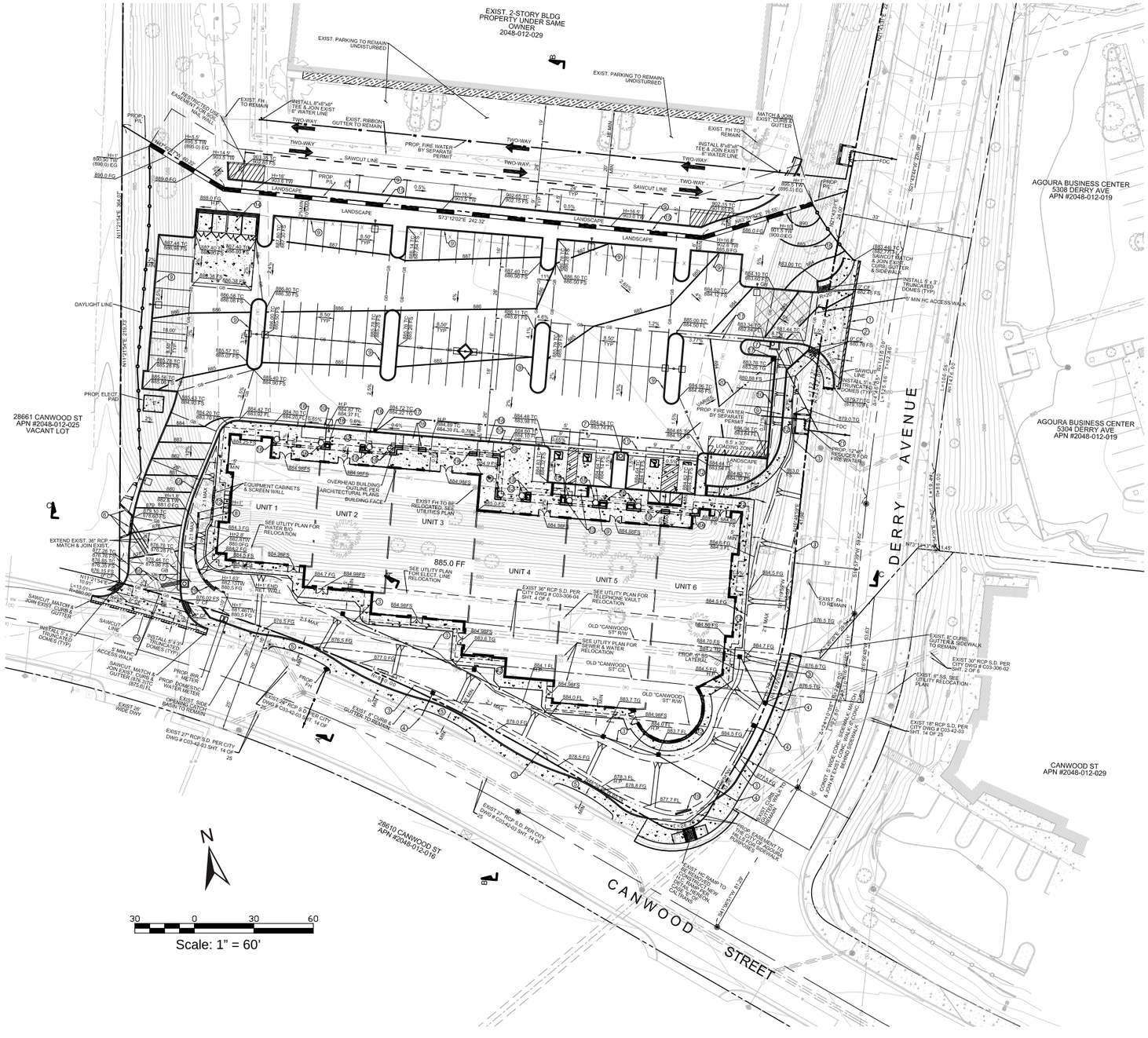


LEGEND:

(W) (W)	EXIST. WATER LINE.
(S) (S)	EXIST SEWER LINE
E E	EXIST. ELECT. LINE
T	EXIST. TELEPHONE LINE
G	EXIST GAS LINE
SD SD	EXIST STORM DRAIN
RW	EXIST. RECLAIMED WATER LINE
D	PROP. DRAINAGE LINE
S S	PROP. SEWER LINE, MIN 1% SLOPE
W	PROP. WATER LINE & SERVISE
FW FW	PROP. FIRE WATER LINE
DW	PROP DOMESTIC WATER LINE
E E	PROP. ELECT. LINE
T TCOM T	PROP. COMMUNICATION LINE (TELEPHONE, CABLE TV)
RW	PROP. RECLAIMED WATER LINE
— —	PROPERTY LINE
(00.00)TC	EXIST ELEVATION
C.O	PROP. SEWER CLEAN OUT.
SMH	PROP. SEWER MANHOLE
SMH.	EXIST. SEWER MANHOLE
C/L	CENTERLINE
☐-○-☐ ○-☐	PROP. PARKING LIGHTS BY OTHERS

NOTE:

1. SEE UTILITY RELOCATION PLAN FOR ABANDOMENT OF CONFLICTING PUBLIC UTILITIES
2. NO OAK TREES ON CONSTRUCTION SITE.

LIGHTING:

☐-○-☐ ○-☐	PROP. PARKING LIGHTS BY OTHERS

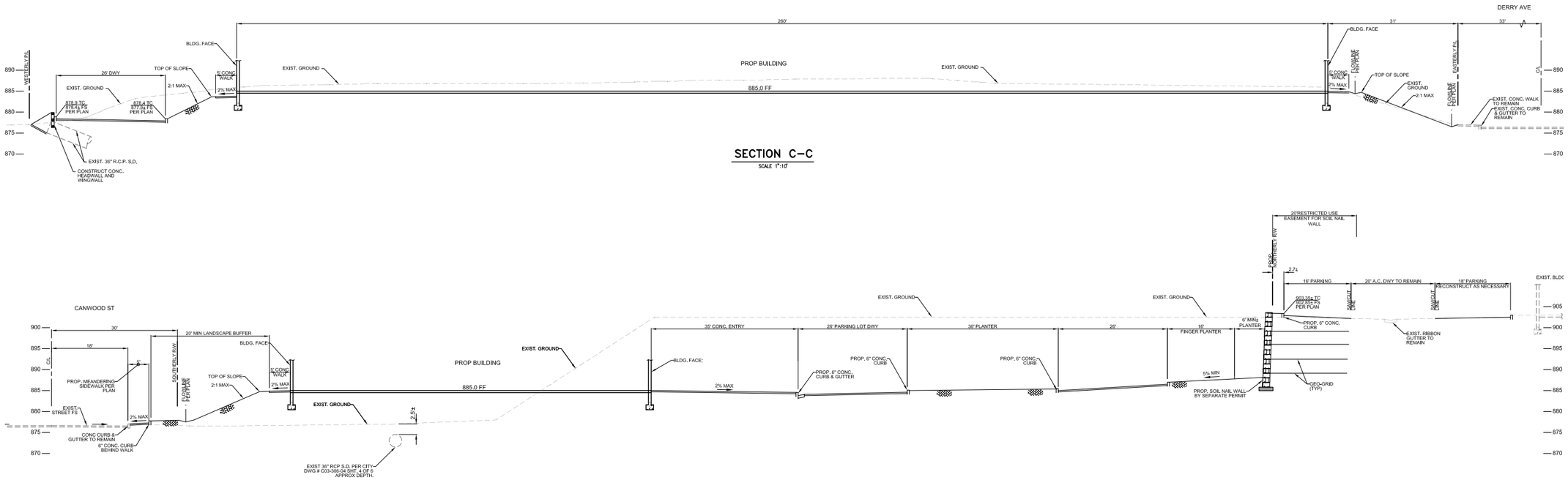
ABBREVIATIONS:

CONC.	CONCRETE
Cb	CURB
D	DRAIN PIPE
EG	EXISTING GROUND
ES	EXISTING SURFACE
FL	FLOW LINE
FG	FINISH GRADE
FS	FINISH SURFACE
GB	GRADE BREAK
H=	HEIGHT OF RETAINING
HP	HIGH POINT
INV	INVERT
LIP	CONC. GUTTER LIP
L.P.	LOW POINT
P/L	PROPERTY LINE
PP	POWER POLE
PVMT	PAVEMENT
R/W	RIGHT OF WAY
TC	TOP OF CURB

Preliminary Grading Plan

Figure 5

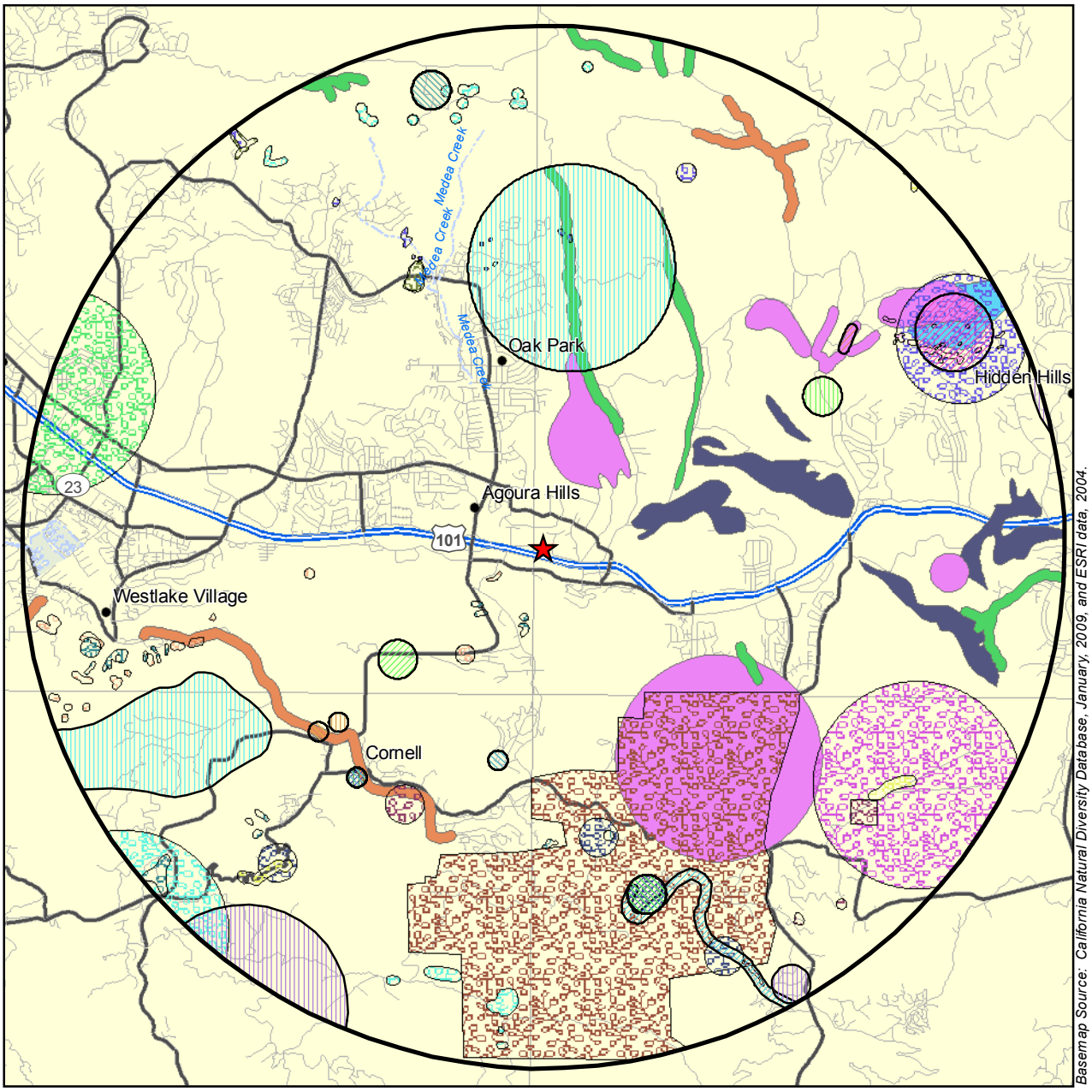
Drawing Source: Westland Civil, Inc., October 2008.



Proposed
Building Elevations

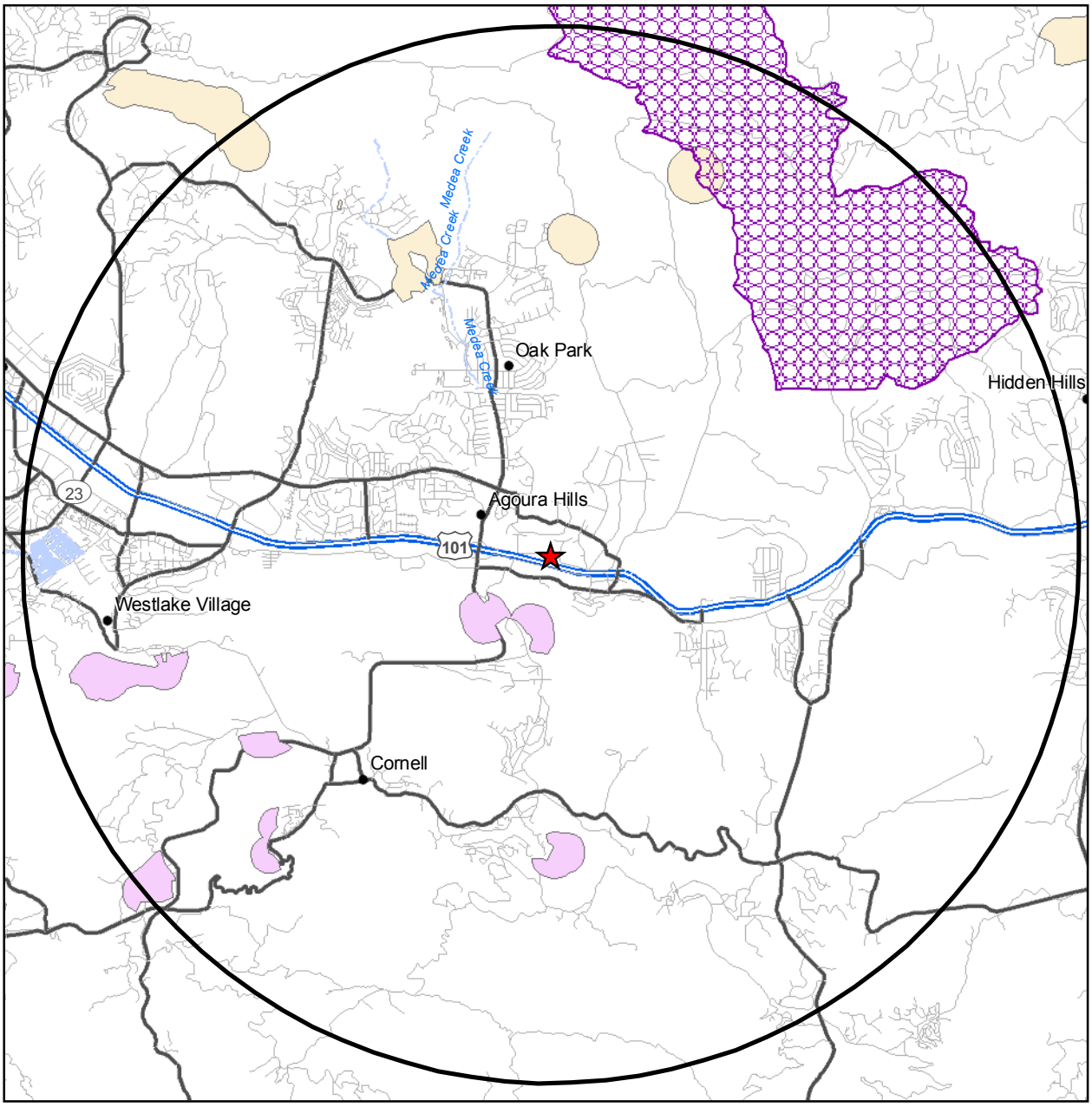
Figure 6

Drawing Source: Ware Malcomb, August, 2008.



Special-Status Elements Tracked by CNDDB
in the Vicinity of the Project Site

Figure 7



Basemap Source: U.S. Fish and Wildlife Service, October 2008 and ESRI data, 2004. Critical habitat shown is that most recently available from U.S. FWS. Check with U.S. FWS or Federal Register to confirm. Note - Map to be printed in color, due to subtleties in symbology noticeable only on color version.

Project Location
5-Mile Radius
Critical Habitat
CA Red-legged Frog PCH
Braunton's Milk Vetch FCH
Lyon's Pentachaeta FCH

N
0 0.5 1 2 Miles

Critical Habitat

Figure 8

Appendix A

Air Quality Modeling Results and Calculations

3/13/2009 4:08:22 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: L:\ESP\LA Co\Agoura Hills\08-63260 Agoura Bus Ctr West ISMND\Other\Air Quality\Air Quality without mitigation.urb924

Project Name: Bus Ctr W.

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

3/13/2009 4:08:22 PM

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2010 TOTALS (lbs/day unmitigated)	3.91	35.88	17.91	0.01	120.45	1.71	122.17	25.16	1.57	26.74	3,816.57
2011 TOTALS (lbs/day unmitigated)	24.57	8.79	6.19	0.00	0.01	0.56	0.57	0.00	0.51	0.51	1,099.89

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.25	0.22	1.72	0.00	0.01	0.01	242.23

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	5.78	8.72	76.12	0.09	14.20	2.76	8,418.77

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	6.03	8.94	77.84	0.09	14.21	2.77	8,661.00

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

3/13/2009 4:08:22 PM

Time Slice 5/20/2010-6/18/2010 Active Days: 22	3.91	35.88	17.91	0.01	120.45	1.71	122.17	25.16	1.57	26.74	3,816.57
Mass Grading 05/20/2010-06/20/2010	3.91	35.88	17.91	0.01	120.45	1.71	122.17	25.16	1.57	26.74	3,816.57
Mass Grading Dust	0.00	0.00	0.00	0.00	120.40	0.00	120.40	25.14	0.00	25.14	0.00
Mass Grading Off Road Diesel	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Mass Grading On Road Diesel	0.87	10.83	4.37	0.01	0.05	0.46	0.51	0.02	0.42	0.44	1,444.91
Mass Grading Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34
Time Slice 6/23/2010-7/30/2010 Active Days: 28	3.04	25.05	13.55	0.00	4.81	1.25	6.06	1.00	1.15	2.16	2,371.66
Fine Grading 06/23/2010-08/01/2010	3.04	25.05	13.55	0.00	4.81	1.25	6.06	1.00	1.15	2.16	2,371.66
Fine Grading Dust	0.00	0.00	0.00	0.00	4.80	0.00	4.80	1.00	0.00	1.00	0.00
Fine Grading Off Road Diesel	3.00	24.99	12.46	0.00	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34
Time Slice 8/4/2010-8/13/2010 Active Days: 8	2.09	17.75	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching 08/04/2010-08/15/2010	2.09	17.75	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	17.69	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34
Time Slice 8/18/2010-8/27/2010 Active Days: 8	2.12	12.35	9.02	0.00	0.01	1.05	1.06	0.00	0.96	0.97	1,242.47
Asphalt 08/18/2010-08/29/2010	2.12	12.35	9.02	0.00	0.01	1.05	1.06	0.00	0.96	0.97	1,242.47
Paving Off-Gas	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.95	11.89	6.98	0.00	0.00	1.03	1.03	0.00	0.94	0.94	979.23
Paving On Road Diesel	0.03	0.34	0.14	0.00	0.00	0.01	0.02	0.00	0.01	0.01	45.64
Paving Worker Trips	0.06	0.11	1.90	0.00	0.01	0.01	0.02	0.00	0.00	0.01	217.60

Time Slice 9/1/2010-12/31/2010 Active Days: 88	1.27	9.48	6.44	0.00	0.01	0.59	0.60	0.00	0.54	0.55	1,099.92
Building 09/01/2010-04/24/2011	1.27	9.48	6.44	0.00	0.01	0.59	0.60	0.00	0.54	0.55	1,099.92
Building Off Road Diesel	1.21	9.16	4.81	0.00	0.00	0.58	0.58	0.00	0.53	0.53	893.39
Building Vendor Trips	0.02	0.23	0.19	0.00	0.00	0.01	0.01	0.00	0.01	0.01	42.28
Building Worker Trips	0.05	0.09	1.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	164.25
Time Slice 1/3/2011-4/22/2011 Active Days: 80	1.17	8.79	6.19	0.00	0.01	0.56	0.57	0.00	0.51	0.51	1,099.89
Building 09/01/2010-04/24/2011	1.17	8.79	6.19	0.00	0.01	0.56	0.57	0.00	0.51	0.51	1,099.89
Building Off Road Diesel	1.11	8.51	4.68	0.00	0.00	0.54	0.54	0.00	0.50	0.50	893.39
Building Vendor Trips	0.02	0.20	0.18	0.00	0.00	0.01	0.01	0.00	0.01	0.01	42.28
Building Worker Trips	0.04	0.08	1.34	0.00	0.01	0.00	0.01	0.00	0.00	0.01	164.22
Time Slice 4/27/2011-5/20/2011 Active Days: 18	**24.57**	0.02	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.64
Coating 04/27/2011-05/22/2011	24.57	0.02	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.64
Architectural Coating	24.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.02	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.64

Phase Assumptions

Phase: Fine Grading 6/23/2010 - 8/1/2010 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed: 0.95

Maximum Daily Acreage Disturbed: 0.24

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 5/20/2010 - 6/20/2010 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 1.93

Maximum Daily Acreage Disturbed: 0.24

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill: 1000 cubic yards/day; Offsite Cut/Fill: 0 cubic yards/day

On Road Truck Travel (VMT): 340.91

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 8/4/2010 - 8/15/2010 - Default Trenching Description

Off-Road Equipment:

2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 8/18/2010 - 8/29/2010 - Default Paving Description

Acres to be Paved: 0.24

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 9/1/2010 - 4/24/2011 - Default Building Construction Description

3/13/2009 4:08:22 PM

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 4/27/2011 - 5/22/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.01	0.20	0.17	0.00	0.00	0.00	239.42
Hearth - No Summer Emissions							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	0.12						
TOTALS (lbs/day, unmitigated)	0.25	0.22	1.72	0.00	0.01	0.01	242.23

Area Source Changes to Defaults

3/13/2009 4:08:22 PM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Strip mall	5.78	8.72	76.12	0.09	14.20	2.76	8,418.77
TOTALS (lbs/day, unmitigated)	5.78	8.72	76.12	0.09	14.20	2.76	8,418.77

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Strip mall		44.38	1000 sq ft	20.64	916.00	8,219.30
					916.00	8,219.30

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.5	0.7	99.1	0.2
Light Truck < 3750 lbs	6.8	2.9	94.2	2.9
Light Truck 3751-5750 lbs	22.9	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.0	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	86.7	13.3
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.3	65.2	34.8	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	0.0	87.5	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0

Greenhouse Gas Emission Worksheet

Operational Emissions Agoura Business Center West

Electricity Generation *	**(kWH)**		**Project units**	**Project Usage**
Commercial Consumption	16,750	per KSF	20.64	345,720
Residential Consumption	7,000	per unit	0	0
			Total	**345,720**

* Generation Factor Source: CAPCOA, January 2008. CEQA and Climate Change.

Total Project Annual KWh:	**345,720**	kWH/year
Project Annual MWh:	**346**	MWH/year

Emission Factors:

CO2 *	804.54	lbs/MWh/year
CH4 **	0.0067	lbs/MWh/year
N2O **	0.0037	lbs/MWh/year

Total Annual Operational Emissions (metric tons) = (Electricity Use (kWh) x EF)/ 2,204.62 lbs/metric ton

Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)

CH4	21	GWP
N2O	310	GWP

1 ton (short, US) = 0.90718474 metric ton.

Annual Operational Emissions:

	Total Emissions		**Total CO2e Units**	
CO2 emissions, electricity:	139.0728	tons	**126.2**	metric tons CO2e
CO2 emissions***:	904.0700	tons	**39.6**	metric tons CO2e
CH4 emissions:	0.0011	metric tons	**0.0**	metric tons CO2e
N2O emissions:	0.0006	metric tons	**0.2**	metric tons CO2e
		Project Total	***166***	***metric tons CO2e***

References

* Table C.1: EPA eGRID CO2 Electricity Emission Factors by Subregion (Year 2000)

** Table C.2: Methane and Nitrous Oxide Electricity Emission Factors by State and Region (Average years 2001-1003)

*** URBEMIS Annual Emissions output for Area Source emissions; includes natural gas combustion for heating.

Sources: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 2.2, March 2007. Third Assessment Report, 2001, U.S. Environmental Protection Agency, U.S. Greeenhouse Gas Emissions and Sinks, 1990-2000 (April 2002).

Greenhouse Gas Emission Worksheet

Mobile Emissions 8497 Sunset

From URBEMIS 2007 Vehicle Fleet Mix Output:

Daily Vehicle Miles Traveled (VMT): 8,219 (Net: Proposed - Existing)

Annual VMT: 2,999,935

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)
Light Auto	53.6%	0.4	0.2144	0.4	0.2144
Light Truck < 3750 lbs	6.8%	0.5	0.034	0.6	0.0408
Light Truck 3751-5750 lbs	22.8%	0.5	0.114	0.6	0.1368
Med Truck 5751-8500 lbs	10.0%	0.5	0.05	0.6	0.06
Lite-Heavy Truck 8501-10,000 lbs	1.5%	0.12	0.0018	0.2	0.003
Lite-Heavy Truck 10,001-14,000 lbs	0.5%	0.12	0.0006	0.2	0.001
Med-Heavy Truck 14,001-33,000 lbs	0.9%	0.12	0.00108	0.2	0.0018
Heavy-Heavy Truck 33,001-60,000 lbs	0.5%	0.12	0.0006	0.2	0.001
Other Bus	0.1%	0.5	0.0005	0.6	0.0006
Urban Bus	0.1%	0.5	0.0005	0.6	0.0006
Motorcycle	2.3%	0.09	0.00207	0.01	0.00023
School Bus	0.1%	0.5	0.0005	0.6	0.0006
Motor Home	0.8%	0.12	0.00096	0.2	0.0016
Total			0.42101		0.46243

* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).
Assume Model year 2000-present, gasoline fueled.
Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 2.2, March 2007.

Total Emissions (metric tons) =
Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g

Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)

CH4 23 GWP

N2O 296 GWP

1 ton (short, US) = 0.90718474 metric ton.

Annual Mobile Emissions:

	Total Emissions		Total CO2e units	
CO2 Emissions* :	**4169.6**	tons CO2	**235**	metric tons CO2e
CH4 Emissions:	**1.3**	metric tons CH4	**27**	metric tons CO2e
N20 Emissions:	**1.4**	metric tons N2O	**430**	metric tons CO2e
		Project Total:	*692*	*metric tons CO2e*

* From URBEMIS 2007 results for mobile sources

Appendix B

Traffic Study

CITY OF AGOURA HILLS

DERRY AVENUE/CANWOOD STREET RETAIL PROJECT

TRAFFIC IMPACT ANALYSIS (REVISED)

Prepared by:

Frank Lee, EIT,
Carl Ballard, and
William Kunzman, P.E.

William Kunzman

November 12, 2008

KUNZMAN ASSOCIATES
1111 Town & Country Road, Suite 34
Orange, CA 92868-4667
Phone: (714) 973-8383
Fax: (714) 973-8821
Email: mail@traffic-engineer.com
Web: www.traffic-engineer.com

3902c

Table of Contents

APPENDICES

Appendix A – Glossary of Transportation Terms

Appendix B – Traffic Count Worksheets

Appendix C – Explanation and Calculation of Intersection Capacity Utilization/Delay

List of Figures