Appendix A:
Agricultural Land Evaluation and Site Assessment Model

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Land Capability Classification (LCC) and Storie Index Scores

Soil Map Unit	Project Acres	Proportion of Project Area	LCC	LCC Rating	LCC Score	Storie Index	Storie Index Score
DaC	6.36	1	III s	60	60	49	49
					0		0
					0		0
					0		0
					0		0
					0		0
							0
TOTAL	6.36	1		60	60	49	49

12.72

Total Acres

Total Class I	Total Class II	Total Class III	Total Class IV	Total Class V
0	0		1	

Project Size Score

LCC Class I-II	LCC Class III	LCC Class IV-VIII

Table 3-Proj. Size Scoring

LCC Class I-II		LCC Class III		LCC Class IV-VIII	
Acres	Score	Acres	Score	Acres	Score
80 +	100	160 +	100	320 +	100
60-79	90	120-159	90	240-319	80
40-59	80	80-119	80	160-239	60
20-39	50	60-79	70	100-159	40
10-19.	30	40-59	60	40-99	20
fewer than 10	0	20-39	30	fewer than 40	0
		10-19.	10		
		fewer than 10	0		

Total Acres	0	6.36	0
Project Size Scores			

Highest Project Size Score

Total Acres

Total Class I	Total Class II	Total Class III	Total Class IV	Total Class V
		6.36	0	

Total Acres	0	6.36	0
Score	0	0	0

TOTAL PROJECT SIZE RATING= **0**

Project Portion		Water Source	Proportion	Water Availability Score	Weighted Availability Score (C x D)
	1	Irrigation District Water Only			0
	2	Groundwater only			0
	3	Both irrigation and ground	100%	85	85
	4	Not irrigated at all			0
		Total	1	**Total water resource score**	**85**

Table 5. Water Resource Availability Scoring

Option	Non-Drought Years			Drought Years			WATER RESOURCE SCORE
	RESTRICTIONS			RESTRICTIONS			
	Irrigated Production Feasible?	Physical Restrictions ?	Economic Restrictions ?	Irrigated Production Feasible?	Physical Restrictions ?	Economic Restrictions ?	
1	YES	NO	NO	YES	NO	NO	100
2	YES	NO	NO	YES	NO	YES	95
3	YES	NO	YES	YES	NO	YES	90
4	YES	NO	NO	YES	YES	NO	85
5	YES	NO	NO	YES	YES	YES	80
6	YES	YES	NO	YES	YES	NO	75
7	YES	YES	YES	YES	YES	YES	65
8	YES	NO	NO	NO	--	--	50
9	YES	NO	YES	NO	--	--	45
10	YES	YES	NO	NO	--	--	35
11	YES	YES	YES	NO	--	--	30
12	Irrigated production not feasible, but rainfall adequate for dryland production in both drought and non-drought years						25
13	Irrigated production not feasible, but rainfall adequate for dryland production in non-drought years (but not in drought years)						20
14	Neither irrigated nor dryland production feasible						0

Table 6: Surrounding Ag Land Rating

Percent of Project's Zone of Influence	Surround Ag Land Score
90-100%	100 points
80-89	90
75-79	80
70-74	70
65-69	60
60-64	50
55-59	40
50-54	30
45-49	20
40-44	10
<40	0

Table 7: Surrounding Protected Resource Land Score

Percent of Project's Zone of Influence	Surround Ag Land Score
90-100%	100 points
80-89	90
75-79	80
70-74	70
65-69	60
60-64	50
55-59	40
50-54	30
45-49	20
40-44	10
<40	**0**

0

Section III. Weighting of Factors and Final LESA Scoring

The California LESA Model is weighted so that 50 percent of the total LESA score of a given project is derived from the Land Evaluation factors, and 50 percent from the Site Assessment factors. Individual factor weights are listed below, with the sum of the factor weights required to equal 100 percent.

Land Evaluation Factors

Land Capability Classification	25%
Storie Index Rating	25%
Land Evaluation Subtotal	**50%**

Site Assessment Factors

Project Size	15%
Water Resource Availability	15%
Surrounding Agricultural Lands	15%
Surrounding Protected Resource Lands	5%
Site Assessment Subtotal	**50%**
Total LESA Factor Weighting	**100%**

Each factor is measured separately (each on 100 point scale) and entered in the appropriate line in **Column B** of the **Final LESA Scoresheet** (Table 8). Each factor's score is then multiplied by its respective factor weight, resulting in a weighted factor score in **Column D** as indicated in Table 8. The weighted factor scores are summed, yielding a Total LESA Score (100 points maximum) for a given project, which is entered in **Line 7** of **Column D**.

Factor Name	Factor Rating (0-100 points)	X	Factor Weighting (Total=1.0)	=	Weighted Factor Rating
Land Evaluation					
1. Land Capability Classification	60		0.25		15
2. Storie Index Rating	49		0.25		12.25
Site Assessment					
1. Project Size	0		0.15		0
2. Water Resource Availability	85		0.15		12.75
3. Surrounding Agricultural Lands	0		0.15		0
4. Protected Resource Lands	0		0.05		0
				TOTAL	**40**

Table 9. California LESA Model Scoring Thresholds

Total LESA Score	Scoring Decision
0 to 39 Points	Not Considered Significant
40 to 59 Points	Considered Significant only if LE and SA subscores are each greater than or equal to 20 points
60 to 79 Points	Considered Significant unless either LE or SA subscore is less than 20 points
80 to 100 Points	Considered Significant

Source: ESRI Aerial Imagery. CA Department of Conservation Contra Costa County FMMP, 2016.

FIRSTCARBON SOLUTIONS™

500 250 0 500
Feet

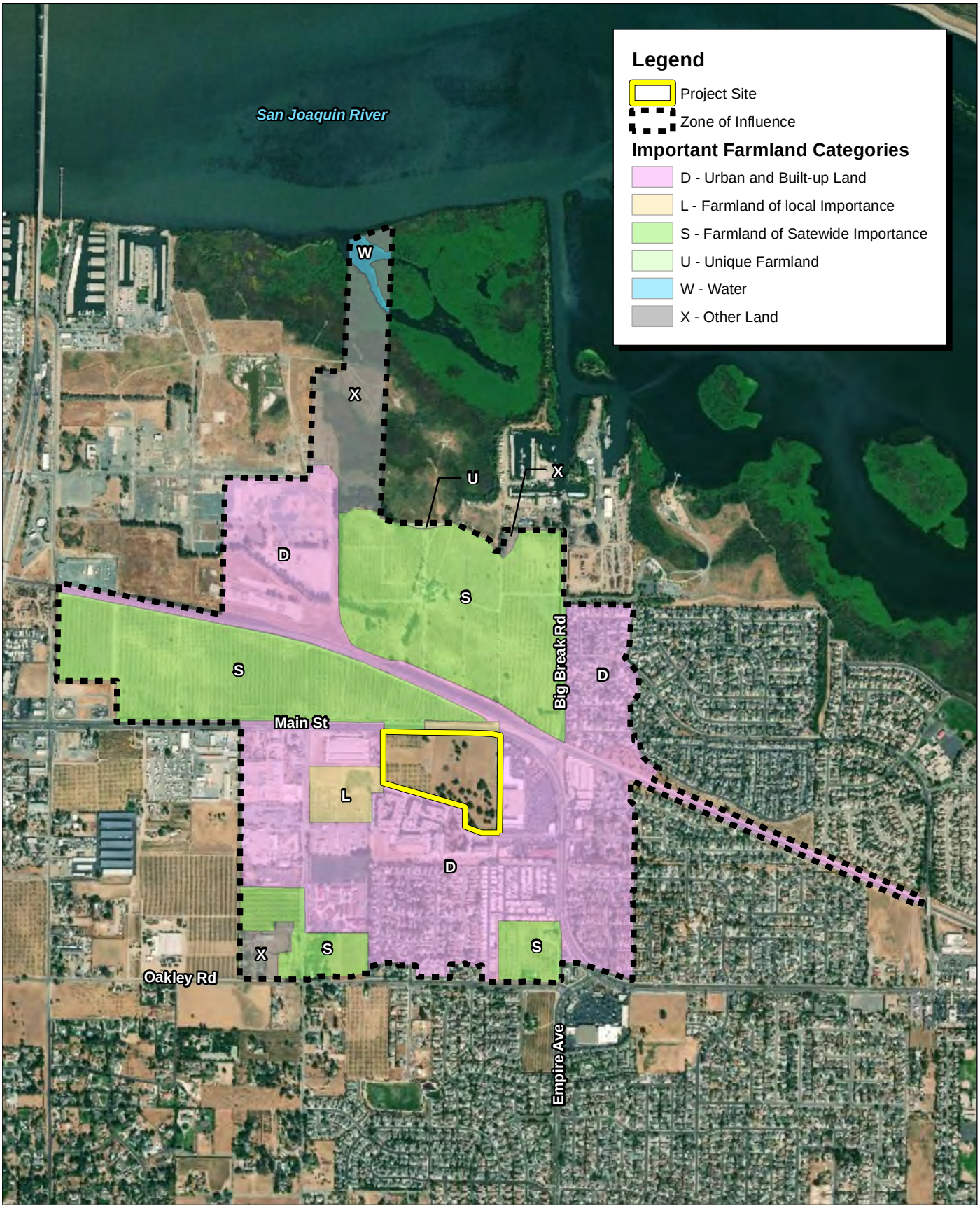
Exhibit 1
Important Farmland Map

Source: ESRI Aerial Imagery. USDA Soils Data, Contra Costa County.

FIRSTCARBON SOLUTIONS™

500 250 0 500
Feet

Exhibit 2
Soils Map



Source: ESRI Aerial Imagery. CA Department of Conservation Contra Costa County FMMP, 2016.

FIRSTCARBON SOLUTIONS™

1,400 700 0 1,400 Feet

Exhibit 3
Zone of Influence Map

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Appendix B:
Air Quality and Greenhouse Gas Emissions Supporting Information

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The Village at Main Street Project Construction Assumptions, CalEEMod Output, Construction Health Risk Assessment Calculations, and AERMOD Modeling Output

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AERMOD Modeling Output **A-149**

The Village at Main Street Project Construction Assumptions

Conceptual Construction Schedule

Construction Activity	Start Date	End Date	Working Days per Week	Total Working Days
Site Preparation	7/1/2019	7/12/2019	5	10
Grading	7/13/2019	8/30/2019	5	35
Paving	8/31/2019	9/27/2019	5	20
Building Construction	9/28/2019	6/30/2020	5	197
Architectural Coating	6/3/2020	6/30/2020	5	20

OffRoad Equipment

Construction Activity	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37
Grading	Excavators	2	8	158	0.38
Grading	Graders	1	8	187	0.41
Grading	Rubber Tired Dozers	1	8	247	0.40
Grading	Scrapers	2	8	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8	97	0.37
Paving	Pavers	2	8	130	0.42
Paving	Paving Equipment	2	8	132	0.36
Paving	Rollers	2	8	80	0.38
Building Construction	Cranes	1	7	231	0.29
Building Construction	Forklifts	3	8	89	0.20
Building Construction	Generator Sets	1	8	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37
Building Construction	Welders	1	8	46	0.45
Architectural Coating	Air Compressors	1	6	78	0.48

Construction Trips

Construction Activity	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length
Site Preparation	18	0	10	10.8	7.3	20
Grading	20	0	11	10.8	7.3	20
Paving	15	0	15	10.8	7.3	20
Building Construction	223	82	12	10.8	7.3	20
Architectural Coating	45	0	2	10.8	7.3	20

MLC Oakley - Contra Costa County, Annual

MLC Oakley Construction and Operations

Contra Costa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	357.00	1000sqft	8.20	357,002.00	0
Other Non-Asphalt Surfaces	42.51	1000sqft	0.98	0.00	0
City Park	0.95	Acre	0.95	41,382.00	0
Single Family Housing	154.00	Dwelling Unit	11.18	331,712.00	440

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	331	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 Intensity Factor adjusted to reflect Marin Clean Energy's GHG Emissions Factors (PG&E selected because Marin Clean Energy is not a selection in CalEEMod)

Land Use - Based on site plan
Open Space/Park includes Parcels A, C, D, E
Bioretention represented by other non-asphalt surfaces

Construction Phase - Anticipated construction schedule

Trips and VMT - Hauling trips added to account for transport of equipment

Demolition - No demolition

Vehicle Trips - Consistent with the Village at Main Traffic Impact Analysis, trip generation rates were obtained from the ITE Trip Generation Manual, 10th Edition for ITE land use code 210.

Woodstoves - No woodburning

Water And Wastewater - Project specific water demand

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Mobile Land Use Mitigation - The project will connect internally to adjacent land uses and is located <0.1 mile from the nearest existing bus stop.

Waste Mitigation - Statewide diversion/recycling mandate (21% percent reduction)

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	370.00	197.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	66.22	0.00
tblLandUse	LandUseSquareFeet	357,000.00	357,002.00
tblLandUse	LandUseSquareFeet	42,510.00	0.00
tblLandUse	LandUseSquareFeet	277,200.00	331,712.00
tblLandUse	LotAcreage	50.00	11.18
tblProjectCharacteristics	CO2IntensityFactor	641.35	331
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	HaulingTripNumber	0.00	11.00
tblTripsAndVMT	HaulingTripNumber	0.00	15.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	9.52	9.44
tblWater	IndoorWaterUseRate	10,033,719.95	57,753.92
tblWater	OutdoorWaterUseRate	6,325,606.05	36,410.08
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.2525	2.4184	1.7348	3.8200e-003	0.3245	0.1081	0.4326	0.1349	0.1005	0.2354	0.0000	345.3284	345.3284	0.0674	0.0000	347.0135
2020	2.6213	1.9131	1.6463	4.3900e-003	0.1537	0.0776	0.2313	0.0417	0.0731	0.1148	0.0000	396.4961	396.4961	0.0463	0.0000	397.6539
Maximum	**2.6213**	**2.4184**	**1.7348**	**4.3900e-003**	**0.3245**	**0.1081**	**0.4326**	**0.1349**	**0.1005**	**0.2354**	**0.0000**	**396.4961**	**396.4961**	**0.0674**	**0.0000**	**397.6539**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.2525	2.4184	1.7348	3.8200e-003	0.1913	0.1081	0.2995	0.0730	0.1005	0.1735	0.0000	345.3282	345.3282	0.0674	0.0000	347.0132
2020	2.6213	1.9131	1.6463	4.3900e-003	0.1537	0.0776	0.2313	0.0417	0.0731	0.1148	0.0000	396.4959	396.4959	0.0463	0.0000	397.6538
Maximum	**2.6213**	**2.4184**	**1.7348**	**4.3900e-003**	**0.1913**	**0.1081**	**0.2995**	**0.0730**	**0.1005**	**0.1735**	**0.0000**	**396.4959**	**396.4959**	**0.0674**	**0.0000**	**397.6538**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**27.85**	**0.00**	**20.06**	**35.06**	**0.00**	**17.69**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2019	9-30-2019	1.4759	1.4759
2	10-1-2019	12-31-2019	1.1791	1.1791
3	1-1-2020	3-31-2020	1.0556	1.0556
4	4-1-2020	6-30-2020	3.4793	3.4793
		Highest	3.4793	3.4793

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.5957	0.0175	1.1527	9.0000e-005		6.6600e-003	6.6600e-003		6.6600e-003	6.6600e-003	0.0000	6.6813	6.6813	1.9300e-003	9.0000e-005	6.7559
Energy	0.0241	0.2063	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	425.9231	425.9231	0.0210	7.7700e-003	428.7628
Mobile	0.4184	1.8795	4.7633	0.0150	1.2391	0.0148	1.2539	0.3325	0.0139	0.3464	0.0000	1,366.7818	1,366.7818	0.0529	0.0000	1,368.1033
Waste						0.0000	0.0000		0.0000	0.0000	37.5290	0.0000	37.5290	2.2179	0.0000	92.9764
Water						0.0000	0.0000		0.0000	0.0000	0.0183	0.6609	0.6792	1.9400e-003	6.0000e-005	0.7445
Total	**2.0382**	**2.1032**	**6.0038**	**0.0164**	**1.2391**	**0.0382**	**1.2773**	**0.3325**	**0.0373**	**0.3698**	**37.5473**	**1,800.0471**	**1,837.5944**	**2.2956**	**7.9200e-003**	**1,897.3428**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.5957	0.0175	1.1527	9.0000e-005		6.6600e-003	6.6600e-003		6.6600e-003	6.6600e-003	0.0000	6.6813	6.6813	1.9300e-003	9.0000e-005	6.7559
Energy	0.0241	0.2063	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	425.9231	425.9231	0.0210	7.7700e-003	428.7628
Mobile	0.4086	1.8057	4.5264	0.0140	1.1536	0.0139	1.1675	0.3096	0.0131	0.3226	0.0000	1,279.1496	1,279.1496	0.0504	0.0000	1,280.4100
Waste						0.0000	0.0000		0.0000	0.0000	29.6479	0.0000	29.6479	1.7521	0.0000	73.4514
Water						0.0000	0.0000		0.0000	0.0000	0.0183	0.6609	0.6792	1.9400e-003	6.0000e-005	0.7445
Total	**2.0285**	**2.0294**	**5.7669**	**0.0154**	**1.1536**	**0.0373**	**1.1909**	**0.3096**	**0.0364**	**0.3460**	**29.6662**	**1,712.4149**	**1,742.0811**	**1.8274**	**7.9200e-003**	**1,790.1245**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.48**	**3.51**	**3.95**	**5.87**	**6.90**	**2.36**	**6.76**	**6.90**	**2.28**	**6.43**	**20.99**	**4.87**	**5.20**	**20.40**	**0.00**	**5.65**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/12/2019	5	10	
2	Grading	Grading	7/13/2019	8/30/2019	5	35	
3	Paving	Paving	8/31/2019	9/27/2019	5	20	
4	Building Construction	Building Construction	9/28/2019	6/30/2020	5	197	
5	Architectural Coating	Architectural Coating	6/3/2020	6/30/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 9.18

Residential Indoor: 671,717; Residential Outdoor: 223,906; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	10.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	11.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	15.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	223.00	82.00	12.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	45.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.5600e-003	2.9000e-004	0.0000	8.0000e-005	1.0000e-005	9.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.3829	0.3829	2.0000e-005	0.0000	0.3834
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.5000e-004	2.5300e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6468	0.6468	2.0000e-005	0.0000	0.6472
Total	**3.8000e-004**	**1.8100e-003**	**2.8200e-003**	**1.0000e-005**	**7.9000e-004**	**1.0000e-005**	**8.1000e-004**	**2.1000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**1.0297**	**1.0297**	**4.0000e-005**	**0.0000**	**1.0306**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0407**	**0.0120**	**0.0526**	**0.0223**	**0.0110**	**0.0333**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.5600e-003	2.9000e-004	0.0000	8.0000e-005	1.0000e-005	9.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.3829	0.3829	2.0000e-005	0.0000	0.3834
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.5000e-004	2.5300e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6468	0.6468	2.0000e-005	0.0000	0.6472
Total	**3.8000e-004**	**1.8100e-003**	**2.8200e-003**	**1.0000e-005**	**7.9000e-004**	**1.0000e-005**	**8.1000e-004**	**2.1000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**1.0297**	**1.0297**	**4.0000e-005**	**0.0000**	**1.0306**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0829	0.9541	0.5841	1.0900e-003		0.0417	0.0417		0.0384	0.0384	0.0000	97.4773	97.4773	0.0308	0.0000	98.2483
Total	**0.0829**	**0.9541**	**0.5841**	**1.0900e-003**	**0.1518**	**0.0417**	**0.1935**	**0.0629**	**0.0384**	**0.1013**	**0.0000**	**97.4773**	**97.4773**	**0.0308**	**0.0000**	**98.2483**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.7100e-003	3.1000e-004	0.0000	9.0000e-005	1.0000e-005	1.0000e-004	3.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.4212	0.4212	2.0000e-005	0.0000	0.4217
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2900e-003	9.6000e-004	9.8400e-003	3.0000e-005	2.7800e-003	2.0000e-005	2.7900e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.5153	2.5153	7.0000e-005	0.0000	2.5170
Total	**1.3400e-003**	**2.6700e-003**	**0.0102**	**3.0000e-005**	**2.8700e-003**	**3.0000e-005**	**2.8900e-003**	**7.7000e-004**	**3.0000e-005**	**7.9000e-004**	**0.0000**	**2.9365**	**2.9365**	**9.0000e-005**	**0.0000**	**2.9387**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0683	0.0000	0.0683	0.0283	0.0000	0.0283	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0829	0.9541	0.5841	1.0900e-003		0.0417	0.0417		0.0384	0.0384	0.0000	97.4772	97.4772	0.0308	0.0000	98.2482
Total	**0.0829**	**0.9541**	**0.5841**	**1.0900e-003**	**0.0683**	**0.0417**	**0.1100**	**0.0283**	**0.0384**	**0.0667**	**0.0000**	**97.4772**	**97.4772**	**0.0308**	**0.0000**	**98.2482**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.7100e-003	3.1000e-004	0.0000	9.0000e-005	1.0000e-005	1.0000e-004	3.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.4212	0.4212	2.0000e-005	0.0000	0.4217
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2900e-003	9.6000e-004	9.8400e-003	3.0000e-005	2.7800e-003	2.0000e-005	2.7900e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.5153	2.5153	7.0000e-005	0.0000	2.5170
Total	**1.3400e-003**	**2.6700e-003**	**0.0102**	**3.0000e-005**	**2.8700e-003**	**3.0000e-005**	**2.8900e-003**	**7.7000e-004**	**3.0000e-005**	**7.9000e-004**	**0.0000**	**2.9365**	**2.9365**	**9.0000e-005**	**0.0000**	**2.9387**

3.4 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0107					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0253**	**0.1524**	**0.1467**	**2.3000e-004**		**8.2500e-003**	**8.2500e-003**		**7.5900e-003**	**7.5900e-003**	**0.0000**	**20.4752**	**20.4752**	**6.4800e-003**	**0.0000**	**20.6371**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	2.3300e-003	4.3000e-004	1.0000e-005	1.3000e-004	1.0000e-005	1.4000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.5744	0.5744	3.0000e-005	0.0000	0.5751
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	4.1000e-004	4.2200e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0780	1.0780	3.0000e-005	0.0000	1.0787
Total	**6.2000e-004**	**2.7400e-003**	**4.6500e-003**	**2.0000e-005**	**1.3200e-003**	**2.0000e-005**	**1.3400e-003**	**3.5000e-004**	**2.0000e-005**	**3.6000e-004**	**0.0000**	**1.6524**	**1.6524**	**6.0000e-005**	**0.0000**	**1.6538**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0107					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0253**	**0.1524**	**0.1467**	**2.3000e-004**		**8.2500e-003**	**8.2500e-003**		**7.5900e-003**	**7.5900e-003**	**0.0000**	**20.4752**	**20.4752**	**6.4800e-003**	**0.0000**	**20.6371**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	2.3300e-003	4.3000e-004	1.0000e-005	1.3000e-004	1.0000e-005	1.4000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.5744	0.5744	3.0000e-005	0.0000	0.5751
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	4.1000e-004	4.2200e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0780	1.0780	3.0000e-005	0.0000	1.0787
Total	**6.2000e-004**	**2.7400e-003**	**4.6500e-003**	**2.0000e-005**	**1.3200e-003**	**2.0000e-005**	**1.3400e-003**	**3.5000e-004**	**2.0000e-005**	**3.6000e-004**	**0.0000**	**1.6524**	**1.6524**	**6.0000e-005**	**0.0000**	**1.6538**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0791	0.7061	0.5750	9.0000e-004		0.0432	0.0432		0.0406	0.0406	0.0000	78.7599	78.7599	0.0192	0.0000	79.2396
Total	**0.0791**	**0.7061**	**0.5750**	**9.0000e-004**		**0.0432**	**0.0432**		**0.0406**	**0.0406**	**0.0000**	**78.7599**	**78.7599**	**0.0192**	**0.0000**	**79.2396**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.4000e-004	1.2000e-004	0.0000	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1563	0.1563	1.0000e-005	0.0000	0.1565
Vendor	0.0136	0.3494	0.0911	7.5000e-004	0.0181	2.5700e-003	0.0206	5.2200e-003	2.4600e-003	7.6800e-003	0.0000	72.0704	72.0704	3.8400e-003	0.0000	72.1664
Worker	0.0275	0.0206	0.2099	5.9000e-004	0.0593	4.0000e-004	0.0597	0.0158	3.7000e-004	0.0161	0.0000	53.6864	53.6864	1.4600e-003	0.0000	53.7230
Total	**0.0411**	**0.3706**	**0.3012**	**1.3400e-003**	**0.0774**	**2.9700e-003**	**0.0804**	**0.0210**	**2.8300e-003**	**0.0238**	**0.0000**	**125.9131**	**125.9131**	**5.3100e-003**	**0.0000**	**126.0459**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0791	0.7061	0.5750	9.0000e-004		0.0432	0.0432		0.0406	0.0406	0.0000	78.7598	78.7598	0.0192	0.0000	79.2395
Total	**0.0791**	**0.7061**	**0.5750**	**9.0000e-004**		**0.0432**	**0.0432**		**0.0406**	**0.0406**	**0.0000**	**78.7598**	**78.7598**	**0.0192**	**0.0000**	**79.2395**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.4000e-004	1.2000e-004	0.0000	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1563	0.1563	1.0000e-005	0.0000	0.1565
Vendor	0.0136	0.3494	0.0911	7.5000e-004	0.0181	2.5700e-003	0.0206	5.2200e-003	2.4600e-003	7.6800e-003	0.0000	72.0704	72.0704	3.8400e-003	0.0000	72.1664
Worker	0.0275	0.0206	0.2099	5.9000e-004	0.0593	4.0000e-004	0.0597	0.0158	3.7000e-004	0.0161	0.0000	53.6864	53.6864	1.4600e-003	0.0000	53.7230
Total	**0.0411**	**0.3706**	**0.3012**	**1.3400e-003**	**0.0774**	**2.9700e-003**	**0.0804**	**0.0210**	**2.8300e-003**	**0.0238**	**0.0000**	**125.9131**	**125.9131**	**5.3100e-003**	**0.0000**	**126.0459**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1378	1.2471	1.0952	1.7500e-003		0.0726	0.0726		0.0683	0.0683	0.0000	150.5465	150.5465	0.0367	0.0000	151.4647
Total	**0.1378**	**1.2471**	**1.0952**	**1.7500e-003**		**0.0726**	**0.0726**		**0.0683**	**0.0683**	**0.0000**	**150.5465**	**150.5465**	**0.0367**	**0.0000**	**151.4647**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.1500e-003	2.2000e-004	0.0000	9.0000e-005	0.0000	1.0000e-004	2.0000e-005	0.0000	3.0000e-005	0.0000	0.3002	0.3002	1.0000e-005	0.0000	0.3006
Vendor	0.0214	0.6114	0.1571	1.4500e-003	0.0351	3.1200e-003	0.0382	0.0101	2.9900e-003	0.0131	0.0000	139.0343	139.0343	6.8200e-003	0.0000	139.2047
Worker	0.0486	0.0352	0.3641	1.1200e-003	0.1150	7.7000e-004	0.1157	0.0306	7.1000e-004	0.0313	0.0000	100.8549	100.8549	2.4800e-003	0.0000	100.9168
Total	**0.0700**	**0.6477**	**0.5215**	**2.5700e-003**	**0.1501**	**3.8900e-003**	**0.1540**	**0.0407**	**3.7000e-003**	**0.0444**	**0.0000**	**240.1895**	**240.1895**	**9.3100e-003**	**0.0000**	**240.4222**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1378	1.2471	1.0952	1.7500e-003		0.0726	0.0726		0.0683	0.0683	0.0000	150.5463	150.5463	0.0367	0.0000	151.4645
Total	**0.1378**	**1.2471**	**1.0952**	**1.7500e-003**		**0.0726**	**0.0726**		**0.0683**	**0.0683**	**0.0000**	**150.5463**	**150.5463**	**0.0367**	**0.0000**	**151.4645**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.1500e-003	2.2000e-004	0.0000	9.0000e-005	0.0000	1.0000e-004	2.0000e-005	0.0000	3.0000e-005	0.0000	0.3002	0.3002	1.0000e-005	0.0000	0.3006
Vendor	0.0214	0.6114	0.1571	1.4500e-003	0.0351	3.1200e-003	0.0382	0.0101	2.9900e-003	0.0131	0.0000	139.0343	139.0343	6.8200e-003	0.0000	139.2047
Worker	0.0486	0.0352	0.3641	1.1200e-003	0.1150	7.7000e-004	0.1157	0.0306	7.1000e-004	0.0313	0.0000	100.8549	100.8549	2.4800e-003	0.0000	100.9168
Total	**0.0700**	**0.6477**	**0.5215**	**2.5700e-003**	**0.1501**	**3.8900e-003**	**0.1540**	**0.0407**	**3.7000e-003**	**0.0444**	**0.0000**	**240.1895**	**240.1895**	**9.3100e-003**	**0.0000**	**240.4222**

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.4095					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**2.4119**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	2.9000e-004	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0758	0.0758	0.0000	0.0000	0.0759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5100e-003	1.0900e-003	0.0113	3.0000e-005	3.5700e-003	2.0000e-005	3.5900e-003	9.5000e-004	2.0000e-005	9.7000e-004	0.0000	3.1311	3.1311	8.0000e-005	0.0000	3.1330
Total	**1.5200e-003**	**1.3800e-003**	**0.0114**	**3.0000e-005**	**3.5900e-003**	**2.0000e-005**	**3.6100e-003**	**9.5000e-004**	**2.0000e-005**	**9.8000e-004**	**0.0000**	**3.2069**	**3.2069**	**8.0000e-005**	**0.0000**	**3.2089**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.4095					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**2.4119**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	2.9000e-004	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0758	0.0758	0.0000	0.0000	0.0759
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5100e-003	1.0900e-003	0.0113	3.0000e-005	3.5700e-003	2.0000e-005	3.5900e-003	9.5000e-004	2.0000e-005	9.7000e-004	0.0000	3.1311	3.1311	8.0000e-005	0.0000	3.1330
Total	**1.5200e-003**	**1.3800e-003**	**0.0114**	**3.0000e-005**	**3.5900e-003**	**2.0000e-005**	**3.6100e-003**	**9.5000e-004**	**2.0000e-005**	**9.8000e-004**	**0.0000**	**3.2069**	**3.2069**	**8.0000e-005**	**0.0000**	**3.2089**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4086	1.8057	4.5264	0.0140	1.1536	0.0139	1.1675	0.3096	0.0131	0.3226	0.0000	1,279.1496	1,279.1496	0.0504	0.0000	1,280.4100
Unmitigated	0.4184	1.8795	4.7633	0.0150	1.2391	0.0148	1.2539	0.3325	0.0139	0.3464	0.0000	1,366.7818	1,366.7818	0.0529	0.0000	1,368.1033

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,453.76	1,469.16	1316.70	3,317,474	3,088,568
Total	1,453.76	1,469.16	1,316.70	3,317,474	3,088,568

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-...	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910
City Park	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910
Other Asphalt Surfaces	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910
Single Family Housing	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	187.0655	187.0655	0.0164	3.3900e-003	188.4857
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	187.0655	187.0655	0.0164	3.3900e-003	188.4857
NaturalGas Mitigated	0.0241	0.2063	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.8577	238.8577	4.5800e-003	4.3800e-003	240.2771
NaturalGas Unmitigated	0.0241	0.2063	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.8577	238.8577	4.5800e-003	4.3800e-003	240.2771

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	4.47602e+006	0.0241	0.2063	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.8577	238.8577	4.5800e-003	4.3800e-003	240.2771
Total		**0.0241**	**0.2063**	**0.0878**	**1.3200e-003**		**0.0167**	**0.0167**		**0.0167**	**0.0167**	**0.0000**	**238.8577**	**238.8577**	**4.5800e-003**	**4.3800e-003**	**240.2771**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	4.47602e+006	0.0241	0.2063	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.8577	238.8577	4.5800e-003	4.3800e-003	240.2771
Total		**0.0241**	**0.2063**	**0.0878**	**1.3200e-003**		**0.0167**	**0.0167**		**0.0167**	**0.0167**	**0.0000**	**238.8577**	**238.8577**	**4.5800e-003**	**4.3800e-003**	**240.2771**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.24595e+006	187.0655	0.0164	3.3900e-003	188.4857
Total		**187.0655**	**0.0164**	**3.3900e-003**	**188.4857**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.24595e+006	187.0655	0.0164	3.3900e-003	188.4857
Total		**187.0655**	**0.0164**	**3.3900e-003**	**188.4857**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5957	0.0175	1.1527	9.0000e-005		6.6600e-003	6.6600e-003		6.6600e-003	6.6600e-003	0.0000	6.6813	6.6813	1.9300e-003	9.0000e-005	6.7559
Unmitigated	1.5957	0.0175	1.1527	9.0000e-005		6.6600e-003	6.6600e-003		6.6600e-003	6.6600e-003	0.0000	6.6813	6.6813	1.9300e-003	9.0000e-005	6.7559

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2410					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3190					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	4.9000e-004	4.1500e-003	1.7700e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.8063	4.8063	9.0000e-005	9.0000e-005	4.8349
Landscaping	0.0353	0.0133	1.1510	6.0000e-005		6.3200e-003	6.3200e-003		6.3200e-003	6.3200e-003	0.0000	1.8750	1.8750	1.8400e-003	0.0000	1.9210
Total	**1.5957**	**0.0175**	**1.1527**	**9.0000e-005**		**6.6600e-003**	**6.6600e-003**		**6.6600e-003**	**6.6600e-003**	**0.0000**	**6.6813**	**6.6813**	**1.9300e-003**	**9.0000e-005**	**6.7559**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2410					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3190					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	4.9000e-004	4.1500e-003	1.7700e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.8063	4.8063	9.0000e-005	9.0000e-005	4.8349
Landscaping	0.0353	0.0133	1.1510	6.0000e-005		6.3200e-003	6.3200e-003		6.3200e-003	6.3200e-003	0.0000	1.8750	1.8750	1.8400e-003	0.0000	1.9210
Total	**1.5957**	**0.0175**	**1.1527**	**9.0000e-005**		**6.6600e-003**	**6.6600e-003**		**6.6600e-003**	**6.6600e-003**	**0.0000**	**6.6813**	**6.6813**	**1.9300e-003**	**9.0000e-005**	**6.7559**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.6792	1.9400e-003	6.0000e-005	0.7445
Unmitigated	0.6792	1.9400e-003	6.0000e-005	0.7445

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.13191	0.5948	5.0000e-005	1.0000e-005	0.5993
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.0577539 /	0.0844	1.8900e-003	5.0000e-005	0.1452
Total		**0.6792**	**1.9400e-003**	**6.0000e-005**	**0.7445**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.13191	0.5948	5.0000e-005	1.0000e-005	0.5993
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.0577539 /	0.0844	1.8900e-003	5.0000e-005	0.1452
Total		**0.6792**	**1.9400e-003**	**6.0000e-005**	**0.7445**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	29.6479	1.7521	0.0000	73.4514
Unmitigated	37.5290	2.2179	0.0000	92.9764

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.08	0.0162	9.6000e-004	0.0000	0.0402
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	184.8	37.5127	2.2169	0.0000	92.9362
Total		**37.5290**	**2.2179**	**0.0000**	**92.9764**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.0632	0.0128	7.6000e-004	0.0000	0.0318
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	145.992	29.6351	1.7514	0.0000	73.4196
Total		**29.6479**	**1.7521**	**0.0000**	**73.4514**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

MLC Oakley Construction and Operations

Contra Costa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	357.00	1000sqft	8.20	357,002.00	0
Other Non-Asphalt Surfaces	42.51	1000sqft	0.98	0.00	0
City Park	0.95	Acre	0.95	41,382.00	0
Single Family Housing	154.00	Dwelling Unit	11.18	331,712.00	440

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	331	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 Intensity Factor adjusted to reflect Marin Clean Energy's GHG Emissions Factors (PG&E selected because Marin Clean Energy is not a selection in CalEEMod)

Land Use - Based on site plan
Open Space/Park includes Parcels A, C, D, E
Bioretention represented by other non-asphalt surfaces

Construction Phase - Anticipated construction schedule

Trips and VMT - Hauling trips added to account for transport of equipment

Demolition - No demolition

Vehicle Trips - Consistent with the Village at Main Traffic Impact Analysis, trip generation rates were obtained from the ITE Trip Generation Manual, 10th Edition for ITE land use code 210.

Woodstoves - No woodburning

Water And Wastewater - Project specific water demand

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Mobile Land Use Mitigation - The project will connect internally to adjacent land uses and is located <0.1 mile from the nearest existing bus stop.

Waste Mitigation - Statewide diversion/recycling mandate (21% percent reduction)

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	370.00	197.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	66.22	0.00
tblLandUse	LandUseSquareFeet	357,000.00	357,002.00
tblLandUse	LandUseSquareFeet	42,510.00	0.00
tblLandUse	LandUseSquareFeet	277,200.00	331,712.00
tblLandUse	LotAcreage	50.00	11.18
tblProjectCharacteristics	CO2IntensityFactor	641.35	331
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	HaulingTripNumber	0.00	11.00
tblTripsAndVMT	HaulingTripNumber	0.00	15.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	9.52	9.44
tblWater	IndoorWaterUseRate	10,033,719.95	57,753.92
tblWater	OutdoorWaterUseRate	6,325,606.05	36,410.08
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.8215	54.6653	34.0205	0.0690	18.2316	2.3926	20.6241	9.9747	2.2012	12.1759	0.0000	6,919.1057	6,919.1057	1.9485	0.0000	6,939.2367
2020	244.6127	30.7904	28.4834	0.0751	2.7598	1.2901	4.0499	0.7446	1.2202	1.9648	0.0000	7,472.1804	7,472.1804	0.8112	0.0000	7,492.4610
Maximum	**244.6127**	**54.6653**	**34.0205**	**0.0751**	**18.2316**	**2.3926**	**20.6241**	**9.9747**	**2.2012**	**12.1759**	**0.0000**	**7,472.1804**	**7,472.1804**	**1.9485**	**0.0000**	**7,492.4610**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.8215	54.6653	34.0205	0.0690	8.2952	2.3926	10.6877	4.5128	2.2012	6.7140	0.0000	6,919.1057	6,919.1057	1.9485	0.0000	6,939.2367
2020	244.6127	30.7904	28.4834	0.0751	2.7598	1.2901	4.0499	0.7446	1.2202	1.9648	0.0000	7,472.1804	7,472.1804	0.8112	0.0000	7,492.4609
Maximum	**244.6127**	**54.6653**	**34.0205**	**0.0751**	**8.2952**	**2.3926**	**10.6877**	**4.5128**	**2.2012**	**6.7140**	**0.0000**	**7,472.1804**	**7,472.1804**	**1.9485**	**0.0000**	**7,492.4609**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**47.34**	**0.00**	**40.27**	**50.95**	**0.00**	**38.63**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.0267	0.8929	13.1056	5.4300e-003		0.1305	0.1305		0.1305	0.1305	0.0000	974.1412	974.1412	0.0408	0.0174	980.3571
Energy	0.1323	1.1301	0.4809	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.7152	1,442.7152	0.0277	0.0265	1,451.2885
Mobile	2.7896	10.2171	28.2734	0.0901	7.2084	0.0831	7.2915	1.9289	0.0780	2.0068		9,074.3988	9,074.3988	0.3322		9,082.7030
Total	**11.9486**	**12.2401**	**41.8600**	**0.1027**	**7.2084**	**0.3050**	**7.5134**	**1.9289**	**0.2998**	**2.2287**	**0.0000**	**11,491.2552**	**11,491.2552**	**0.4006**	**0.0439**	**11,514.3486**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.0267	0.8929	13.1056	5.4300e-003		0.1305	0.1305		0.1305	0.1305	0.0000	974.1412	974.1412	0.0408	0.0174	980.3571
Energy	0.1323	1.1301	0.4809	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.7152	1,442.7152	0.0277	0.0265	1,451.2885
Mobile	2.7328	9.8257	26.7271	0.0843	6.7110	0.0780	6.7891	1.7958	0.0732	1.8690		8,491.1678	8,491.1678	0.3160		8,499.0670
Total	**11.8918**	**11.8487**	**40.3136**	**0.0969**	**6.7110**	**0.2999**	**7.0109**	**1.7958**	**0.2951**	**2.0908**	**0.0000**	**10,908.0242**	**10,908.0242**	**0.3844**	**0.0439**	**10,930.7126**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.48**	**3.20**	**3.69**	**5.65**	**6.90**	**1.67**	**6.69**	**6.90**	**1.59**	**6.19**	**0.00**	**5.08**	**5.08**	**4.04**	**0.00**	**5.07**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/12/2019	5	10	
2	Grading	Grading	7/13/2019	8/30/2019	5	35	
3	Paving	Paving	8/31/2019	9/27/2019	5	20	
4	Building Construction	Building Construction	9/28/2019	6/30/2020	5	197	
5	Architectural Coating	Architectural Coating	6/3/2020	6/30/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 9.18

Residential Indoor: 671,717; Residential Outdoor: 223,906; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	10.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	11.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	15.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	223.00	82.00	12.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	45.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.9600e-003	0.3051	0.0550	8.0000e-004	0.0175	1.2100e-003	0.0187	4.7900e-003	1.1600e-003	5.9500e-003		85.0217	85.0217	3.7800e-003		85.1163
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0718	0.0443	0.5638	1.5600e-003	0.1479	9.7000e-004	0.1488	0.0392	9.0000e-004	0.0401		155.4314	155.4314	4.2100e-003		155.5367
Total	**0.0808**	**0.3494**	**0.6188**	**2.3600e-003**	**0.1653**	**2.1800e-003**	**0.1675**	**0.0440**	**2.0600e-003**	**0.0461**		**240.4531**	**240.4531**	**7.9900e-003**		**240.6529**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**8.1298**	**2.3904**	**10.5202**	**4.4688**	**2.1991**	**6.6679**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.9600e-003	0.3051	0.0550	8.0000e-004	0.0175	1.2100e-003	0.0187	4.7900e-003	1.1600e-003	5.9500e-003		85.0217	85.0217	3.7800e-003		85.1163
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0718	0.0443	0.5638	1.5600e-003	0.1479	9.7000e-004	0.1488	0.0392	9.0000e-004	0.0401		155.4314	155.4314	4.2100e-003		155.5367
Total	**0.0808**	**0.3494**	**0.6188**	**2.3600e-003**	**0.1653**	**2.1800e-003**	**0.1675**	**0.0440**	**2.0600e-003**	**0.0461**		**240.4531**	**240.4531**	**7.9900e-003**		**240.6529**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**8.6733**	**2.3827**	**11.0560**	**3.5965**	**2.1920**	**5.7885**		**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.8200e-003	0.0959	0.0173	2.5000e-004	5.4900e-003	3.8000e-004	5.8700e-003	1.5000e-003	3.7000e-004	1.8700e-003		26.7211	26.7211	1.1900e-003		26.7508
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0798	0.0492	0.6265	1.7300e-003	0.1643	1.0800e-003	0.1654	0.0436	1.0000e-003	0.0446		172.7015	172.7015	4.6800e-003		172.8185
Total	**0.0826**	**0.1451**	**0.6438**	**1.9800e-003**	**0.1698**	**1.4600e-003**	**0.1713**	**0.0451**	**1.3700e-003**	**0.0465**		**199.4226**	**199.4226**	**5.8700e-003**		**199.5694**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9030	0.0000	3.9030	1.6184	0.0000	1.6184			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**3.9030**	**2.3827**	**6.2857**	**1.6184**	**2.1920**	**3.8105**	**0.0000**	**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.8200e-003	0.0959	0.0173	2.5000e-004	5.4900e-003	3.8000e-004	5.8700e-003	1.5000e-003	3.7000e-004	1.8700e-003		26.7211	26.7211	1.1900e-003		26.7508
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0798	0.0492	0.6265	1.7300e-003	0.1643	1.0800e-003	0.1654	0.0436	1.0000e-003	0.0446		172.7015	172.7015	4.6800e-003		172.8185
Total	**0.0826**	**0.1451**	**0.6438**	**1.9800e-003**	**0.1698**	**1.4600e-003**	**0.1713**	**0.0451**	**1.3700e-003**	**0.0465**		**199.4226**	**199.4226**	**5.8700e-003**		**199.5694**

3.4 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	1.0742					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.5286**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**		**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.7200e-003	0.2288	0.0412	6.0000e-004	0.0131	9.1000e-004	0.0140	3.5900e-003	8.7000e-004	4.4600e-003		63.7663	63.7663	2.8400e-003		63.8372
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0599	0.0369	0.4699	1.3000e-003	0.1232	8.1000e-004	0.1240	0.0327	7.5000e-004	0.0334		129.5261	129.5261	3.5100e-003		129.6139
Total	**0.0666**	**0.2657**	**0.5111**	**1.9000e-003**	**0.1363**	**1.7200e-003**	**0.1380**	**0.0363**	**1.6200e-003**	**0.0379**		**193.2924**	**193.2924**	**6.3500e-003**		**193.4511**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	1.0742					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.5286**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**0.0000**	**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.7200e-003	0.2288	0.0412	6.0000e-004	0.0131	9.1000e-004	0.0140	3.5900e-003	8.7000e-004	4.4600e-003		63.7663	63.7663	2.8400e-003		63.8372
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0599	0.0369	0.4699	1.3000e-003	0.1232	8.1000e-004	0.1240	0.0327	7.5000e-004	0.0334		129.5261	129.5261	3.5100e-003		129.6139
Total	**0.0666**	**0.2657**	**0.5111**	**1.9000e-003**	**0.1363**	**1.7200e-003**	**0.1380**	**0.0363**	**1.6200e-003**	**0.0379**		**193.2924**	**193.2924**	**6.3500e-003**		**193.4511**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.5000e-004	0.0186	3.3500e-003	5.0000e-005	2.6300e-003	7.0000e-005	2.7000e-003	6.8000e-004	7.0000e-005	7.5000e-004		5.1790	5.1790	2.3000e-004		5.1848
Vendor	0.3999	10.2866	2.5519	0.0228	0.5550	0.0764	0.6313	0.1598	0.0730	0.2328		2,396.7246	2,396.7246	0.1215		2,399.7618
Worker	0.8899	0.5489	6.9853	0.0193	1.8319	0.0121	1.8440	0.4859	0.0111	0.4970		1,925.6219	1,925.6219	0.0522		1,926.9266
Total	**1.2903**	**10.8541**	**9.5406**	**0.0421**	**2.3895**	**0.0885**	**2.4780**	**0.6463**	**0.0842**	**0.7306**		**4,327.5255**	**4,327.5255**	**0.1739**		**4,331.8732**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.5000e-004	0.0186	3.3500e-003	5.0000e-005	2.6300e-003	7.0000e-005	2.7000e-003	6.8000e-004	7.0000e-005	7.5000e-004		5.1790	5.1790	2.3000e-004		5.1848
Vendor	0.3999	10.2866	2.5519	0.0228	0.5550	0.0764	0.6313	0.1598	0.0730	0.2328		2,396.7246	2,396.7246	0.1215		2,399.7618
Worker	0.8899	0.5489	6.9853	0.0193	1.8319	0.0121	1.8440	0.4859	0.0111	0.4970		1,925.6219	1,925.6219	0.0522		1,926.9266
Total	**1.2903**	**10.8541**	**9.5406**	**0.0421**	**2.3895**	**0.0885**	**2.4780**	**0.6463**	**0.0842**	**0.7306**		**4,327.5255**	**4,327.5255**	**0.1739**		**4,331.8732**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.0000e-004	0.0173	3.2200e-003	5.0000e-005	1.4800e-003	6.0000e-005	1.5400e-003	3.9000e-004	6.0000e-005	4.5000e-004		5.1284	5.1284	2.2000e-004		5.1339
Vendor	0.3225	9.2927	2.2632	0.0226	0.5550	0.0478	0.6027	0.1598	0.0457	0.2054		2,383.4041	2,383.4041	0.1111		2,386.1825
Worker	0.8112	0.4843	6.2672	0.0187	1.8319	0.0118	1.8437	0.4859	0.0109	0.4968		1,864.4778	1,864.4778	0.0457		1,865.6189
Total	**1.1343**	**9.7943**	**8.5336**	**0.0414**	**2.3884**	**0.0596**	**2.4480**	**0.6461**	**0.0566**	**0.7027**		**4,253.0103**	**4,253.0103**	**0.1570**		**4,256.9353**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.0000e-004	0.0173	3.2200e-003	5.0000e-005	1.4800e-003	6.0000e-005	1.5400e-003	3.9000e-004	6.0000e-005	4.5000e-004		5.1284	5.1284	2.2000e-004		5.1339
Vendor	0.3225	9.2927	2.2632	0.0226	0.5550	0.0478	0.6027	0.1598	0.0457	0.2054		2,383.4041	2,383.4041	0.1111		2,386.1825
Worker	0.8112	0.4843	6.2672	0.0187	1.8319	0.0118	1.8437	0.4859	0.0109	0.4968		1,864.4778	1,864.4778	0.0457		1,865.6189
Total	**1.1343**	**9.7943**	**8.5336**	**0.0414**	**2.3884**	**0.0596**	**2.4480**	**0.6461**	**0.0566**	**0.7027**		**4,253.0103**	**4,253.0103**	**0.1570**		**4,256.9353**

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	240.9519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**241.1941**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.2000e-004	0.0285	5.2800e-003	8.0000e-005	1.7500e-003	9.0000e-005	1.8400e-003	4.8000e-004	9.0000e-005	5.7000e-004		8.4191	8.4191	3.6000e-004		8.4281
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1637	0.0977	1.2647	3.7800e-003	0.3697	2.3800e-003	0.3721	0.0981	2.2000e-003	0.1003		376.2399	376.2399	9.2100e-003		376.4702
Total	**0.1645**	**0.1262**	**1.2700**	**3.8600e-003**	**0.3714**	**2.4700e-003**	**0.3739**	**0.0985**	**2.2900e-003**	**0.1008**		**384.6590**	**384.6590**	**9.5700e-003**		**384.8983**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	240.9519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**241.1941**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.2000e-004	0.0285	5.2800e-003	8.0000e-005	1.7500e-003	9.0000e-005	1.8400e-003	4.8000e-004	9.0000e-005	5.7000e-004		8.4191	8.4191	3.6000e-004		8.4281
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1637	0.0977	1.2647	3.7800e-003	0.3697	2.3800e-003	0.3721	0.0981	2.2000e-003	0.1003		376.2399	376.2399	9.2100e-003		376.4702
Total	**0.1645**	**0.1262**	**1.2700**	**3.8600e-003**	**0.3714**	**2.4700e-003**	**0.3739**	**0.0985**	**2.2900e-003**	**0.1008**		**384.6590**	**384.6590**	**9.5700e-003**		**384.8983**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7328	9.8257	26.7271	0.0843	6.7110	0.0780	6.7891	1.7958	0.0732	1.8690		8,491.1678	8,491.1678	0.3160		8,499.0670
Unmitigated	2.7896	10.2171	28.2734	0.0901	7.2084	0.0831	7.2915	1.9289	0.0780	2.0068		9,074.3988	9,074.3988	0.3322		9,082.7030

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,453.76	1,469.16	1316.70	3,317,474	3,088,568
Total	1,453.76	1,469.16	1,316.70	3,317,474	3,088,568

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910
City Park	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910
Other Asphalt Surfaces	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910
Single Family Housing	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1323	1.1301	0.4809	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.7152	1,442.7152	0.0277	0.0265	1,451.2885
NaturalGas Unmitigated	0.1323	1.1301	0.4809	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.7152	1,442.7152	0.0277	0.0265	1,451.2885

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	12263.1	0.1323	1.1301	0.4809	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.7152	1,442.7152	0.0277	0.0265	1,451.2885
Total		**0.1323**	**1.1301**	**0.4809**	**7.2100e-003**		**0.0914**	**0.0914**		**0.0914**	**0.0914**		**1,442.7152**	**1,442.7152**	**0.0277**	**0.0265**	**1,451.2885**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	12.2631	0.1323	1.1301	0.4809	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.7152	1,442.7152	0.0277	0.0265	1,451.2885
Total		**0.1323**	**1.1301**	**0.4809**	**7.2100e-003**		**0.0914**	**0.0914**		**0.0914**	**0.0914**		**1,442.7152**	**1,442.7152**	**0.0277**	**0.0265**	**1,451.2885**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.0267	0.8929	13.1056	5.4300e-003		0.1305	0.1305		0.1305	0.1305	0.0000	974.1412	974.1412	0.0408	0.0174	980.3571
Unmitigated	9.0267	0.8929	13.1056	5.4300e-003		0.1305	0.1305		0.1305	0.1305	0.0000	974.1412	974.1412	0.0408	0.0174	980.3571

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0872	0.7451	0.3171	4.7600e-003		0.0602	0.0602		0.0602	0.0602	0.0000	951.1765	951.1765	0.0182	0.0174	956.8288
Landscaping	0.3920	0.1478	12.7886	6.7000e-004		0.0702	0.0702		0.0702	0.0702		22.9647	22.9647	0.0225		23.5283
Total	**9.0267**	**0.8929**	**13.1056**	**5.4300e-003**		**0.1305**	**0.1305**		**0.1305**	**0.1305**	**0.0000**	**974.1412**	**974.1412**	**0.0408**	**0.0174**	**980.3571**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0872	0.7451	0.3171	4.7600e-003		0.0602	0.0602		0.0602	0.0602	0.0000	951.1765	951.1765	0.0182	0.0174	956.8288
Landscaping	0.3920	0.1478	12.7886	6.7000e-004		0.0702	0.0702		0.0702	0.0702		22.9647	22.9647	0.0225		23.5283
Total	**9.0267**	**0.8929**	**13.1056**	**5.4300e-003**		**0.1305**	**0.1305**		**0.1305**	**0.1305**	**0.0000**	**974.1412**	**974.1412**	**0.0408**	**0.0174**	**980.3571**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

MLC Oakley - Contra Costa County, Winter

MLC Oakley Construction and Operations

Contra Costa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	357.00	1000sqft	8.20	357,002.00	0
Other Non-Asphalt Surfaces	42.51	1000sqft	0.98	0.00	0
City Park	0.95	Acre	0.95	41,382.00	0
Single Family Housing	154.00	Dwelling Unit	11.18	331,712.00	440

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	331	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 Intensity Factor adjusted to reflect Marin Clean Energy's GHG Emissions Factors (PG&E selected because Marin Clean Energy is not a selection in CalEEMod)

Land Use - Based on site plan
Open Space/Park includes Parcels A, C, D, E
Bioretention represented by other non-asphalt surfaces

Construction Phase - Anticipated construction schedule

Trips and VMT - Hauling trips added to account for transport of equipment

Demolition - No demolition

Vehicle Trips - Consistent with the Village at Main Traffic Impact Analysis, trip generation rates were obtained from the ITE Trip Generation Manual, 10th Edition for ITE land use code 210.

Woodstoves - No woodburning

Water And Wastewater - Project specific water demand

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Mobile Land Use Mitigation - The project will connect internally to adjacent land uses and is located <0.1 mile from the nearest existing bus stop.

Waste Mitigation - Statewide diversion/recycling mandate (21% percent reduction)

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	370.00	197.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	66.22	0.00
tblLandUse	LandUseSquareFeet	357,000.00	357,002.00
tblLandUse	LandUseSquareFeet	42,510.00	0.00
tblLandUse	LandUseSquareFeet	277,200.00	331,712.00
tblLandUse	LotAcreage	50.00	11.18
tblProjectCharacteristics	CO2IntensityFactor	641.35	331
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	HaulingTripNumber	0.00	11.00
tblTripsAndVMT	HaulingTripNumber	0.00	15.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	9.52	9.44
tblWater	IndoorWaterUseRate	10,033,719.95	57,753.92
tblWater	OutdoorWaterUseRate	6,325,606.05	36,410.08
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.8227	54.6792	33.9733	0.0667	18.2316	2.3926	20.6242	9.9747	2.2012	12.1759	0.0000	6,678.0293	6,678.0293	1.9483	0.0000	6,698.3412
2020	244.6428	31.0313	28.1927	0.0724	2.7598	1.2908	4.0506	0.7446	1.2209	1.9655	0.0000	7,200.5043	7,200.5043	0.8170	0.0000	7,220.9287
Maximum	**244.6428**	**54.6792**	**33.9733**	**0.0724**	**18.2316**	**2.3926**	**20.6242**	**9.9747**	**2.2012**	**12.1759**	**0.0000**	**7,200.5043**	**7,200.5043**	**1.9483**	**0.0000**	**7,220.9287**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.8227	54.6792	33.9733	0.0667	8.2952	2.3926	10.6877	4.5128	2.2012	6.7140	0.0000	6,678.0293	6,678.0293	1.9483	0.0000	6,698.3412
2020	244.6428	31.0313	28.1927	0.0724	2.7598	1.2908	4.0506	0.7446	1.2209	1.9655	0.0000	7,200.5043	7,200.5043	0.8170	0.0000	7,220.9287
Maximum	**244.6428**	**54.6792**	**33.9733**	**0.0724**	**8.2952**	**2.3926**	**10.6877**	**4.5128**	**2.2012**	**6.7140**	**0.0000**	**7,200.5043**	**7,200.5043**	**1.9483**	**0.0000**	**7,220.9287**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**47.34**	**0.00**	**40.27**	**50.95**	**0.00**	**38.62**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.0267	0.8929	13.1056	5.4300e-003		0.1305	0.1305		0.1305	0.1305	0.0000	974.1412	974.1412	0.0408	0.0174	980.3571
Energy	0.1323	1.1301	0.4809	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.7152	1,442.7152	0.0277	0.0265	1,451.2885
Mobile	2.3098	10.8069	28.1890	0.0831	7.2084	0.0838	7.2922	1.9289	0.0786	2.0075		8,368.2992	8,368.2992	0.3368		8,376.7194
Total	**11.4688**	**12.8299**	**41.7755**	**0.0957**	**7.2084**	**0.3056**	**7.5140**	**1.9289**	**0.3005**	**2.2293**	**0.0000**	**10,785.1556**	**10,785.1556**	**0.4052**	**0.0439**	**10,808.3651**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.0267	0.8929	13.1056	5.4300e-003		0.1305	0.1305		0.1305	0.1305	0.0000	974.1412	974.1412	0.0408	0.0174	980.3571
Energy	0.1323	1.1301	0.4809	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.7152	1,442.7152	0.0277	0.0265	1,451.2885
Mobile	2.2545	10.3735	26.8546	0.0777	6.7110	0.0787	6.7897	1.7958	0.0738	1.8696		7,830.2233	7,830.2233	0.3217		7,838.2668
Total	**11.4135**	**12.3966**	**40.4411**	**0.0904**	**6.7110**	**0.3005**	**7.0116**	**1.7958**	**0.2957**	**2.0914**	**0.0000**	**10,247.0796**	**10,247.0796**	**0.3902**	**0.0439**	**10,269.9124**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.48**	**3.38**	**3.19**	**5.58**	**6.90**	**1.67**	**6.69**	**6.90**	**1.59**	**6.18**	**0.00**	**4.99**	**4.99**	**3.72**	**0.00**	**4.98**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/12/2019	5	10	
2	Grading	Grading	7/13/2019	8/30/2019	5	35	
3	Paving	Paving	8/31/2019	9/27/2019	5	20	
4	Building Construction	Building Construction	9/28/2019	6/30/2020	5	197	
5	Architectural Coating	Architectural Coating	6/3/2020	6/30/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 9.18

Residential Indoor: 671,717; Residential Outdoor: 223,906; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	10.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	11.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	15.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	223.00	82.00	12.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	45.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	9.2200e-003	0.3125	0.0599	7.9000e-004	0.0175	1.2400e-003	0.0187	4.7900e-003	1.1900e-003	5.9700e-003		83.6003	83.6003	4.0300e-003		83.7011
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0547	0.5199	1.4100e-003	0.1479	9.7000e-004	0.1488	0.0392	9.0000e-004	0.0401		140.8314	140.8314	3.9000e-003		140.9290
Total	**0.0821**	**0.3672**	**0.5798**	**2.2000e-003**	**0.1653**	**2.2100e-003**	**0.1675**	**0.0440**	**2.0900e-003**	**0.0461**		**224.4318**	**224.4318**	**7.9300e-003**		**224.6300**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**8.1298**	**2.3904**	**10.5202**	**4.4688**	**2.1991**	**6.6679**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	9.2200e-003	0.3125	0.0599	7.9000e-004	0.0175	1.2400e-003	0.0187	4.7900e-003	1.1900e-003	5.9700e-003		83.6003	83.6003	4.0300e-003		83.7011
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0547	0.5199	1.4100e-003	0.1479	9.7000e-004	0.1488	0.0392	9.0000e-004	0.0401		140.8314	140.8314	3.9000e-003		140.9290
Total	**0.0821**	**0.3672**	**0.5798**	**2.2000e-003**	**0.1653**	**2.2100e-003**	**0.1675**	**0.0440**	**2.0900e-003**	**0.0461**		**224.4318**	**224.4318**	**7.9300e-003**		**224.6300**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**8.6733**	**2.3827**	**11.0560**	**3.5965**	**2.1920**	**5.7885**		**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.9000e-003	0.0982	0.0188	2.5000e-004	5.4900e-003	3.9000e-004	5.8800e-003	1.5000e-003	3.7000e-004	1.8800e-003		26.2744	26.2744	1.2700e-003		26.3061
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0809	0.0608	0.5776	1.5700e-003	0.1643	1.0800e-003	0.1654	0.0436	1.0000e-003	0.0446		156.4794	156.4794	4.3400e-003		156.5877
Total	**0.0838**	**0.1590**	**0.5965**	**1.8200e-003**	**0.1698**	**1.4700e-003**	**0.1713**	**0.0451**	**1.3700e-003**	**0.0465**		**182.7537**	**182.7537**	**5.6100e-003**		**182.8938**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9030	0.0000	3.9030	1.6184	0.0000	1.6184			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**3.9030**	**2.3827**	**6.2857**	**1.6184**	**2.1920**	**3.8105**	**0.0000**	**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.9000e-003	0.0982	0.0188	2.5000e-004	5.4900e-003	3.9000e-004	5.8800e-003	1.5000e-003	3.7000e-004	1.8800e-003		26.2744	26.2744	1.2700e-003		26.3061
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0809	0.0608	0.5776	1.5700e-003	0.1643	1.0800e-003	0.1654	0.0436	1.0000e-003	0.0446		156.4794	156.4794	4.3400e-003		156.5877
Total	**0.0838**	**0.1590**	**0.5965**	**1.8200e-003**	**0.1698**	**1.4700e-003**	**0.1713**	**0.0451**	**1.3700e-003**	**0.0465**		**182.7537**	**182.7537**	**5.6100e-003**		**182.8938**

3.4 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	1.0742					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.5286**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**		**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.9200e-003	0.2344	0.0450	5.9000e-004	0.0131	9.3000e-004	0.0140	3.5900e-003	8.9000e-004	4.4800e-003		62.7003	62.7003	3.0200e-003		62.7758
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0456	0.4332	1.1800e-003	0.1232	8.1000e-004	0.1240	0.0327	7.5000e-004	0.0334		117.3595	117.3595	3.2500e-003		117.4408
Total	**0.0676**	**0.2799**	**0.4782**	**1.7700e-003**	**0.1363**	**1.7400e-003**	**0.1381**	**0.0363**	**1.6400e-003**	**0.0379**		**180.0598**	**180.0598**	**6.2700e-003**		**180.2166**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	1.0742					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.5286**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**0.0000**	**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.9200e-003	0.2344	0.0450	5.9000e-004	0.0131	9.3000e-004	0.0140	3.5900e-003	8.9000e-004	4.4800e-003		62.7003	62.7003	3.0200e-003		62.7758
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0456	0.4332	1.1800e-003	0.1232	8.1000e-004	0.1240	0.0327	7.5000e-004	0.0334		117.3595	117.3595	3.2500e-003		117.4408
Total	**0.0676**	**0.2799**	**0.4782**	**1.7700e-003**	**0.1363**	**1.7400e-003**	**0.1381**	**0.0363**	**1.6400e-003**	**0.0379**		**180.0598**	**180.0598**	**6.2700e-003**		**180.2166**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.6000e-004	0.0190	3.6500e-003	5.0000e-005	2.6300e-003	8.0000e-005	2.7000e-003	6.8000e-004	7.0000e-005	7.5000e-004		5.0924	5.0924	2.5000e-004		5.0985
Vendor	0.4188	10.4282	2.9218	0.0222	0.5550	0.0775	0.6325	0.1598	0.0742	0.2339		2,336.6120	2,336.6120	0.1326		2,339.9261
Worker	0.9022	0.6775	6.4407	0.0175	1.8319	0.0121	1.8440	0.4859	0.0111	0.4970		1,744.7447	1,744.7447	0.0483		1,745.9531
Total	**1.3216**	**11.1247**	**9.3662**	**0.0398**	**2.3895**	**0.0897**	**2.4792**	**0.6463**	**0.0854**	**0.7317**		**4,086.4491**	**4,086.4491**	**0.1812**		**4,090.9777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.6000e-004	0.0190	3.6500e-003	5.0000e-005	2.6300e-003	8.0000e-005	2.7000e-003	6.8000e-004	7.0000e-005	7.5000e-004		5.0924	5.0924	2.5000e-004		5.0985
Vendor	0.4188	10.4282	2.9218	0.0222	0.5550	0.0775	0.6325	0.1598	0.0742	0.2339		2,336.6120	2,336.6120	0.1326		2,339.9261
Worker	0.9022	0.6775	6.4407	0.0175	1.8319	0.0121	1.8440	0.4859	0.0111	0.4970		1,744.7447	1,744.7447	0.0483		1,745.9531
Total	**1.3216**	**11.1247**	**9.3662**	**0.0398**	**2.3895**	**0.0897**	**2.4792**	**0.6463**	**0.0854**	**0.7317**		**4,086.4491**	**4,086.4491**	**0.1812**		**4,090.9777**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.1000e-004	0.0177	3.4900e-003	5.0000e-005	1.4800e-003	6.0000e-005	1.5400e-003	3.9000e-004	6.0000e-005	4.5000e-004		5.0407	5.0407	2.3000e-004		5.0465
Vendor	0.3396	9.3967	2.6003	0.0220	0.5550	0.0485	0.6035	0.1598	0.0464	0.2062		2,322.5525	2,322.5525	0.1213		2,325.5843
Worker	0.8220	0.5974	5.7441	0.0170	1.8319	0.0118	1.8437	0.4859	0.0109	0.4968		1,689.2459	1,689.2459	0.0420		1,690.2950
Total	**1.1622**	**10.0118**	**8.3479**	**0.0390**	**2.3884**	**0.0604**	**2.4487**	**0.6461**	**0.0573**	**0.7034**		**4,016.8390**	**4,016.8390**	**0.1635**		**4,020.9258**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.1000e-004	0.0177	3.4900e-003	5.0000e-005	1.4800e-003	6.0000e-005	1.5400e-003	3.9000e-004	6.0000e-005	4.5000e-004		5.0407	5.0407	2.3000e-004		5.0465
Vendor	0.3396	9.3967	2.6003	0.0220	0.5550	0.0485	0.6035	0.1598	0.0464	0.2062		2,322.5525	2,322.5525	0.1213		2,325.5843
Worker	0.8220	0.5974	5.7441	0.0170	1.8319	0.0118	1.8437	0.4859	0.0109	0.4968		1,689.2459	1,689.2459	0.0420		1,690.2950
Total	**1.1622**	**10.0118**	**8.3479**	**0.0390**	**2.3884**	**0.0604**	**2.4487**	**0.6461**	**0.0573**	**0.7034**		**4,016.8390**	**4,016.8390**	**0.1635**		**4,020.9258**

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	240.9519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**241.1941**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.4000e-004	0.0291	5.7200e-003	8.0000e-005	1.7500e-003	1.0000e-004	1.8400e-003	4.8000e-004	9.0000e-005	5.7000e-004		8.2751	8.2751	3.8000e-004		8.2847
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1659	0.1205	1.1591	3.4200e-003	0.3697	2.3800e-003	0.3721	0.0981	2.2000e-003	0.1003		340.8792	340.8792	8.4700e-003		341.0909
Total	**0.1667**	**0.1497**	**1.1649**	**3.5000e-003**	**0.3714**	**2.4800e-003**	**0.3739**	**0.0985**	**2.2900e-003**	**0.1008**		**349.1543**	**349.1543**	**8.8500e-003**		**349.3756**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	240.9519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**241.1941**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.4000e-004	0.0291	5.7200e-003	8.0000e-005	1.7500e-003	1.0000e-004	1.8400e-003	4.8000e-004	9.0000e-005	5.7000e-004		8.2751	8.2751	3.8000e-004		8.2847
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1659	0.1205	1.1591	3.4200e-003	0.3697	2.3800e-003	0.3721	0.0981	2.2000e-003	0.1003		340.8792	340.8792	8.4700e-003		341.0909
Total	**0.1667**	**0.1497**	**1.1649**	**3.5000e-003**	**0.3714**	**2.4800e-003**	**0.3739**	**0.0985**	**2.2900e-003**	**0.1008**		**349.1543**	**349.1543**	**8.8500e-003**		**349.3756**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2545	10.3735	26.8546	0.0777	6.7110	0.0787	6.7897	1.7958	0.0738	1.8696		7,830.2233	7,830.2233	0.3217		7,838.2668
Unmitigated	2.3098	10.8069	28.1890	0.0831	7.2084	0.0838	7.2922	1.9289	0.0786	2.0075		8,368.2992	8,368.2992	0.3368		8,376.7194

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,453.76	1,469.16	1316.70	3,317,474	3,088,568
Total	1,453.76	1,469.16	1,316.70	3,317,474	3,088,568

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910
City Park	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910
Other Asphalt Surfaces	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910
Single Family Housing	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1323	1.1301	0.4809	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.7152	1,442.7152	0.0277	0.0265	1,451.2885
NaturalGas Unmitigated	0.1323	1.1301	0.4809	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.7152	1,442.7152	0.0277	0.0265	1,451.2885

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	12263.1	0.1323	1.1301	0.4809	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.7152	1,442.7152	0.0277	0.0265	1,451.2885
Total		**0.1323**	**1.1301**	**0.4809**	**7.2100e-003**		**0.0914**	**0.0914**		**0.0914**	**0.0914**		**1,442.7152**	**1,442.7152**	**0.0277**	**0.0265**	**1,451.2885**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	12.2631	0.1323	1.1301	0.4809	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.7152	1,442.7152	0.0277	0.0265	1,451.2885
Total		**0.1323**	**1.1301**	**0.4809**	**7.2100e-003**		**0.0914**	**0.0914**		**0.0914**	**0.0914**		**1,442.7152**	**1,442.7152**	**0.0277**	**0.0265**	**1,451.2885**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.0267	0.8929	13.1056	5.4300e-003		0.1305	0.1305		0.1305	0.1305	0.0000	974.1412	974.1412	0.0408	0.0174	980.3571
Unmitigated	9.0267	0.8929	13.1056	5.4300e-003		0.1305	0.1305		0.1305	0.1305	0.0000	974.1412	974.1412	0.0408	0.0174	980.3571

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0872	0.7451	0.3171	4.7600e-003		0.0602	0.0602		0.0602	0.0602	0.0000	951.1765	951.1765	0.0182	0.0174	956.8288
Landscaping	0.3920	0.1478	12.7886	6.7000e-004		0.0702	0.0702		0.0702	0.0702		22.9647	22.9647	0.0225		23.5283
Total	**9.0267**	**0.8929**	**13.1056**	**5.4300e-003**		**0.1305**	**0.1305**		**0.1305**	**0.1305**	**0.0000**	**974.1412**	**974.1412**	**0.0408**	**0.0174**	**980.3571**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0872	0.7451	0.3171	4.7600e-003		0.0602	0.0602		0.0602	0.0602	0.0000	951.1765	951.1765	0.0182	0.0174	956.8288
Landscaping	0.3920	0.1478	12.7886	6.7000e-004		0.0702	0.0702		0.0702	0.0702		22.9647	22.9647	0.0225		23.5283
Total	**9.0267**	**0.8929**	**13.1056**	**5.4300e-003**		**0.1305**	**0.1305**		**0.1305**	**0.1305**	**0.0000**	**974.1412**	**974.1412**	**0.0408**	**0.0174**	**980.3571**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

MLC Oakley - Contra Costa County, Annual

MLC Oakley—2030 Operations

Contra Costa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	357.00	1000sqft	8.20	357,002.00	0
Other Non-Asphalt Surfaces	42.51	1000sqft	0.98	0.00	0
City Park	0.95	Acre	0.95	41,382.00	0
Single Family Housing	154.00	Dwelling Unit	11.18	331,712.00	440

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	331	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 Intensity Factor adjusted to reflect Marin Clean Energy's GHG Emissions Factors (PG&E selected because Marin Clean Energy is not a selection in CalEEMod)
Meets 50% Renewable

Land Use - Based on site plan
Open Space/Park includes Parcels A, C, D, E
Bioretention represented by other non-asphalt surfaces
Construction Phase - Operational run only

Trips and VMT - Operational run only

Demolition - No demolition

Vehicle Trips - Consistent with the Village at Main Traffic Impact Analysis, trip generation rates were obtained from the ITE Trip Generation Manual, 10th Edition for ITE land use code 210.

Woodstoves - No woodburning

Water And Wastewater - Project specific water demand

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Mobile Land Use Mitigation - The project will connect internally to adjacent land uses and is located <0.1 mile from the nearest existing bus stop.

Waste Mitigation - Statewide diversion/recycling mandate (21% percent reduction)

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	1.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	66.22	0.00
tblLandUse	LandUseSquareFeet	357,000.00	357,002.00
tblLandUse	LandUseSquareFeet	42,510.00	0.00
tblLandUse	LandUseSquareFeet	277,200.00	331,712.00
tblLandUse	LotAcreage	50.00	11.18
tblProjectCharacteristics	CO2IntensityFactor	641.35	331
tblTripsAndVMT	WorkerTripNumber	45.00	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	9.52	9.44
tblWater	IndoorWaterUseRate	10,033,719.95	57,753.92
tblWater	OutdoorWaterUseRate	6,325,606.05	36,410.08
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.5949	0.0173	1.1459	9.0000e-005		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003	0.0000	6.6813	6.6813	1.8900e-003	9.0000e-005	6.7548
Energy	0.0241	0.2063	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	425.9231	425.9231	0.0210	7.7700e-003	428.7628
Mobile	0.2244	1.0513	2.5055	0.0111	1.2380	7.2500e-003	1.2452	0.3320	6.7400e-003	0.3387	0.0000	1,021.3078	1,021.3078	0.0308	0.0000	1,022.0780
Waste						0.0000	0.0000		0.0000	0.0000	37.5290	0.0000	37.5290	2.2179	0.0000	92.9764
Water						0.0000	0.0000		0.0000	0.0000	0.0183	0.6609	0.6792	1.9400e-003	6.0000e-005	0.7445
Total	**1.8434**	**1.2749**	**3.7391**	**0.0125**	**1.2380**	**0.0306**	**1.2686**	**0.3320**	**0.0301**	**0.3621**	**37.5473**	**1,454.5730**	**1,492.1203**	**2.2735**	**7.9200e-003**	**1,551.3164**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.5949	0.0173	1.1459	9.0000e-005		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003	0.0000	6.6813	6.6813	1.8900e-003	9.0000e-005	6.7548
Energy	0.0241	0.2063	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	425.9231	425.9231	0.0210	7.7700e-003	428.7628
Mobile	0.2188	1.0224	2.3752	0.0104	1.1525	6.8300e-003	1.1594	0.3091	6.3500e-003	0.3154	0.0000	956.6546	956.6546	0.0293	0.0000	957.3875
Waste						0.0000	0.0000		0.0000	0.0000	29.6479	0.0000	29.6479	1.7521	0.0000	73.4514
Water						0.0000	0.0000		0.0000	0.0000	0.0183	0.6609	0.6792	1.9400e-003	6.0000e-005	0.7445
Total	**1.8378**	**1.2459**	**3.6088**	**0.0118**	**1.1525**	**0.0302**	**1.1827**	**0.3091**	**0.0297**	**0.3388**	**29.6662**	**1,389.9199**	**1,419.5861**	**1.8063**	**7.9200e-003**	**1,467.1009**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.30**	**2.27**	**3.48**	**5.60**	**6.90**	**1.37**	**6.77**	**6.90**	**1.30**	**6.43**	**20.99**	**4.44**	**4.86**	**20.55**	**0.00**	**5.43**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2188	1.0224	2.3752	0.0104	1.1525	6.8300e-003	1.1594	0.3091	6.3500e-003	0.3154	0.0000	956.6546	956.6546	0.0293	0.0000	957.3875
Unmitigated	0.2244	1.0513	2.5055	0.0111	1.2380	7.2500e-003	1.2452	0.3320	6.7400e-003	0.3387	0.0000	1,021.3078	1,021.3078	0.0308	0.0000	1,022.0780

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,453.76	1,469.16	1316.70	3,317,474	3,088,568
Total	1,453.76	1,469.16	1,316.70	3,317,474	3,088,568

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.606524	0.034895	0.184335	0.108602	0.012129	0.004836	0.010863	0.026200	0.001662	0.001538	0.005105	0.002652	0.000659
Other Asphalt Surfaces	0.606524	0.034895	0.184335	0.108602	0.012129	0.004836	0.010863	0.026200	0.001662	0.001538	0.005105	0.002652	0.000659
Other Non-Asphalt Surfaces	0.606524	0.034895	0.184335	0.108602	0.012129	0.004836	0.010863	0.026200	0.001662	0.001538	0.005105	0.002652	0.000659
Single Family Housing	0.606524	0.034895	0.184335	0.108602	0.012129	0.004836	0.010863	0.026200	0.001662	0.001538	0.005105	0.002652	0.000659

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	187.0655	187.0655	0.0164	3.3900e-003	188.4857
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	187.0655	187.0655	0.0164	3.3900e-003	188.4857
NaturalGas Mitigated	0.0241	0.2063	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.8577	238.8577	4.5800e-003	4.3800e-003	240.2771
NaturalGas Unmitigated	0.0241	0.2063	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.8577	238.8577	4.5800e-003	4.3800e-003	240.2771

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	4.47602e+006	0.0241	0.2063	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.8577	238.8577	4.5800e-003	4.3800e-003	240.2771
Total		**0.0241**	**0.2063**	**0.0878**	**1.3200e-003**		**0.0167**	**0.0167**		**0.0167**	**0.0167**	**0.0000**	**238.8577**	**238.8577**	**4.5800e-003**	**4.3800e-003**	**240.2771**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	4.47602e+006	0.0241	0.2063	0.0878	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.8577	238.8577	4.5800e-003	4.3800e-003	240.2771
Total		**0.0241**	**0.2063**	**0.0878**	**1.3200e-003**		**0.0167**	**0.0167**		**0.0167**	**0.0167**	**0.0000**	**238.8577**	**238.8577**	**4.5800e-003**	**4.3800e-003**	**240.2771**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.24595e+006	187.0655	0.0164	3.3900e-003	188.4857
Total		**187.0655**	**0.0164**	**3.3900e-003**	**188.4857**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.24595e+006	187.0655	0.0164	3.3900e-003	188.4857
Total		**187.0655**	**0.0164**	**3.3900e-003**	**188.4857**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5949	0.0173	1.1459	9.0000e-005		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003	0.0000	6.6813	6.6813	1.8900e-003	9.0000e-005	6.7548
Unmitigated	1.5949	0.0173	1.1459	9.0000e-005		6.6900e-003	6.6900e-003		6.6900e-003	6.6900e-003	0.0000	6.6813	6.6813	1.8900e-003	9.0000e-005	6.7548

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2410					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3190					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	4.9000e-004	4.1500e-003	1.7700e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.8063	4.8063	9.0000e-005	9.0000e-005	4.8349
Landscaping	0.0345	0.0132	1.1441	6.0000e-005		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	1.8750	1.8750	1.8000e-003	0.0000	1.9199
Total	**1.5949**	**0.0173**	**1.1459**	**9.0000e-005**		**6.6900e-003**	**6.6900e-003**		**6.6900e-003**	**6.6900e-003**	**0.0000**	**6.6813**	**6.6813**	**1.8900e-003**	**9.0000e-005**	**6.7548**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2410					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3190					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	4.9000e-004	4.1500e-003	1.7700e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.8063	4.8063	9.0000e-005	9.0000e-005	4.8349
Landscaping	0.0345	0.0132	1.1441	6.0000e-005		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	1.8750	1.8750	1.8000e-003	0.0000	1.9199
Total	**1.5949**	**0.0173**	**1.1459**	**9.0000e-005**		**6.6900e-003**	**6.6900e-003**		**6.6900e-003**	**6.6900e-003**	**0.0000**	**6.6813**	**6.6813**	**1.8900e-003**	**9.0000e-005**	**6.7548**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.6792	1.9400e-003	6.0000e-005	0.7445
Unmitigated	0.6792	1.9400e-003	6.0000e-005	0.7445

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.13191	0.5948	5.0000e-005	1.0000e-005	0.5993
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.0577539 /	0.0844	1.8900e-003	5.0000e-005	0.1452
Total		**0.6792**	**1.9400e-003**	**6.0000e-005**	**0.7445**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.13191	0.5948	5.0000e-005	1.0000e-005	0.5993
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.0577539 /	0.0844	1.8900e-003	5.0000e-005	0.1452
Total		**0.6792**	**1.9400e-003**	**6.0000e-005**	**0.7445**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	29.6479	1.7521	0.0000	73.4514
Unmitigated	37.5290	2.2179	0.0000	92.9764

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.08	0.0162	9.6000e-004	0.0000	0.0402
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	184.8	37.5127	2.2169	0.0000	92.9362
Total		**37.5290**	**2.2179**	**0.0000**	**92.9764**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.0632	0.0128	7.6000e-004	0.0000	0.0318
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	145.992	29.6351	1.7514	0.0000	73.4196
Total		**29.6479**	**1.7521**	**0.0000**	**73.4514**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

MLC Oakley - Current General Plan Designation for VMT

Contra Costa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	510.31	1000sqft	11.71	510,305.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - MLC Oakley - Current General Plan Designation for VMT

Construction Phase - Run for VMT during operations only

Vehicle Trips - Trip generation rates from the ITE Trip Generation Manual, 10th Ed for ITE Land Use 820 (Shopping Center)

Mobile Land Use Mitigation - Buildout according to the current general plan designation would connect internally, would connect to adjacent land uses, and would be located <0.1 mile from the nearest existing bus stop.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	10/9/2020	9/14/2020
tblVehicleTrips	ST_TR	49.97	46.12
tblVehicleTrips	SU_TR	25.24	21.10
tblVehicleTrips	WD_TR	42.70	37.75

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2595	4.0000e-005	4.7200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.1200e-003	9.1200e-003	2.0000e-005	0.0000	9.7300e-003
Energy	6.5200e-003	0.0593	0.0498	3.6000e-004		4.5100e-003	4.5100e-003		4.5100e-003	4.5100e-003	0.0000	1,651.5081	1,651.5081	0.0730	0.0160	1,658.1099
Mobile	4.9929	21.0679	51.1376	0.1507	12.2201	0.1515	12.3716	3.2794	0.1421	3.4215	0.0000	13,782.1241	13,782.1241	0.5759	0.0000	13,796.5218
Waste						0.0000	0.0000		0.0000	0.0000	108.7687	0.0000	108.7687	6.4280	0.0000	269.4697
Water						0.0000	0.0000		0.0000	0.0000	11.9922	83.0909	95.0830	1.2355	0.0299	134.8683
Total	**7.2590**	**21.1272**	**51.1921**	**0.1511**	**12.2201**	**0.1560**	**12.3762**	**3.2794**	**0.1466**	**3.4261**	**120.7608**	**15,516.7322**	**15,637.4930**	**8.3124**	**0.0459**	**15,858.9793**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2595	4.0000e-005	4.7200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.1200e-003	9.1200e-003	2.0000e-005	0.0000	9.7300e-003
Energy	6.5200e-003	0.0593	0.0498	3.6000e-004		4.5100e-003	4.5100e-003		4.5100e-003	4.5100e-003	0.0000	1,651.5081	1,651.5081	0.0730	0.0160	1,658.1099
Mobile	4.8967	20.3395	48.8013	0.1413	11.3770	0.1426	11.5195	3.0531	0.1337	3.1869	0.0000	12,917.8835	12,917.8835	0.5518	0.0000	12,931.6789
Waste						0.0000	0.0000		0.0000	0.0000	108.7687	0.0000	108.7687	6.4280	0.0000	269.4697
Water						0.0000	0.0000		0.0000	0.0000	11.9922	83.0909	95.0830	1.2355	0.0299	134.8683
Total	**7.1628**	**20.3988**	**48.8558**	**0.1416**	**11.3770**	**0.1471**	**11.5241**	**3.0531**	**0.1383**	**3.1914**	**120.7608**	**14,652.4916**	**14,773.2525**	**8.2883**	**0.0459**	**14,994.1365**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.33**	**3.45**	**4.56**	**6.26**	**6.90**	**5.72**	**6.89**	**6.90**	**5.72**	**6.85**	**0.00**	**5.57**	**5.53**	**0.29**	**0.00**	**5.45**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.8967	20.3395	48.8013	0.1413	11.3770	0.1426	11.5195	3.0531	0.1337	3.1869	0.0000	12,917.8835	12,917.8835	0.5518	0.0000	12,931.6789
Unmitigated	4.9929	21.0679	51.1376	0.1507	12.2201	0.1515	12.3716	3.2794	0.1421	3.4215	0.0000	13,782.1241	13,782.1241	0.5759	0.0000	13,796.5218

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	19,264.01	23,535.27	10767.44	32,717,362	30,459,864
Total	19,264.01	23,535.27	10,767.44	32,717,362	30,459,864

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910

Oakley Main Street Project

Unmitigated

Construction Annual DPM Emissions (as PM2.5 Exhaust)

Construction Schedule	**2019**	
	8 hours/day	
	5 days/week	
	26.4 weeks/year	starting 7/1/2019 (132 working days in 2019)
	1056 hours/year	

Onsite Construction Area Source Size (m2): 86,874.0 from AERMOD

Onsite Construction PM2.5 Emissions

2019	**Construction Activity**	**Onsite Annual DPM Exhaust Emissions (tons/year)**	**Onsite Annual DPM Exhaust Emissions (g/sec)**	**Onsite DPM Source Exhaust Emissions (g/m2-sec)**
	Site Preparation	1.100E-02	2.627E-03	3.024E-08
	Grading	3.840E-02	9.172E-03	1.056E-07
	Paving	7.590E-03	1.813E-03	2.087E-08
	Building Construction—2019	4.060E-02	9.697E-03	1.116E-07
	Total	**9.759E-02**	**2.331E-02**	**2.683E-07**

Offsite Construction Vehicle PM2.5 Emissions

2019	**Construction Activity**	**Offsite Hauling Annual DPM Exhaust Emissions (tons/year)**	**Offsite Vendor Annual DPM Exhaust Emissions (tons/year)**	**Offsite Workers Annual DPM Exhaust Emissions (tons/year)**	
	Site Preparation	1.000E-05	0.000E+00	0.000E+00	
	Grading	3.000E-05	0.000E+00	7.600E-04	
	Paving	4.000E-05	0.000E+00	3.200E-04	
	Building Construction—2019	2.000E-05	7.680E-03	1.610E-02	
	Total (tons/year)	**1.000E-04**	**7.680E-03**	**1.718E-02**	**2.496E-02**
	Trip Distance assumed in CalEEMod (mi)	20.0	7.3	10.8	
	Offsite Project Trip Distance Along Roadway Segment				
	Road Segment 1 (mi)	0.98	0.98	0.98	
	Offsite Project Emissions Along Roadway Segment				
	Road Segment 1 (mi)	4.908E-06	1.033E-03	1.561E-03	
	Total Offsite Emissions Along Segments (tons/year)	**4.908E-06**	**1.033E-03**	**1.561E-03**	**2.599E-03**

Offsite Emissions Along Roadway Segments Analyzed	
Total Offsite Project Exhaust Emissions (tons/year)	**2.599E-03**
Total Offsite Project Exhaust Emissions (grams/sec)	**6.208E-04**

Onsite Exhaust Emissions (tons/year)	**9.759E-02**
Onsite Exhaust Emissions (g/m2-sec)	**2.683E-07**

Total PM@2.5 Exhaust (tons/year)	**1.002E-01**

Oakley Main Street Project

Unmitigated

Construction Annual DPM Emissions (as PM2.5 Exhaust)

Construction Schedule	**2020**	
	8 hours/day	
	5 days/week	
	26 weeks/year	ending 6/30/2020 (130 working days in 2020)
	1040 hours/year	
Onsite Construction Area Source Size (m2):	86,874.0	from AERMOD

Onsite Construction PM2.5 Emissions

2020		**Onsite**	**Onsite**	**Onsite DPM**
	Construction Activity	**Annual DPM Exhaust Emissions (tons/year)**	**Annual DPM Exhaust Emissions (g/sec)**	**Source Exhaust Emissions (g/m2-sec)**
	Building Construction—2020	6.830E-02	1.656E-02	1.907E-07
	Architectural Coating	1.110E-03	2.692E-04	3.099E-09
	Total	**6.941E-02**	**1.683E-02**	**1.938E-07**

Offsite Construction Vehicle PM2.5 Emissions

2020		**Offsite Hauling**	**Offsite Vendor**	**Offsite Workers**	
	Construction Activity	**Annual DPM Exhaust Emissions (tons/year)**	**Annual DPM Exhaust Emissions (tons/year)**	**Annual DPM Exhaust Emissions (tons/year)**	
	Building Construction—2020	0.000E+00	2.990E-03	7.100E-04	
	Architectural Coating	0.000E+00	0.000E+00	2.000E-05	
	Total (tons/year)	**0.000E+00**	**2.990E-03**	**7.300E-04**	**3.720E-03**
	Trip Distance assumed in CalEEMod (mi)	20.0	7.3	10.8	
	Offsite Project Trip Distance Along Roadway Segment				
	Road Segment 1 (mi)	0.98	0.98	0.98	
	Offsite Project Emissions Along Roadway Segment				
	Road Segment 1 (mi)	0.000E+00	4.021E-04	6.635E-05	
	Total Offsite Emissions Along Segments (tons/year)	**0.000E+00**	**4.021E-04**	**6.635E-05**	

Offsite Emissions Along Roadway Segment Analyzed	
Total Offsite Project Exhaust Emissions (tons/year)	**4.684E-04**
Total Offsite Project Exhaust Emissions (grams/sec)	**1.136E-04**

Onsite Exhaust Emissions (tons/year)	**6.941E-02**
Onsite Exhaust Emissions (g/m2-sec)	**1.938E-07**

Total PM@2.5 Exhaust (tons/year)	**6.988E-02**

Oakley Main Street Project

2019 **No Mitigation at Sensitive Receptors**

Construction Annual DPM Emissions (as PM2.5 Exhaust)

Annual Average Onsite DPM Exhaust Emission Rate (grams/m2/sec): 2.68309E-07
Annual Average Offsite DPM Exhaust Emission Rate (grams/m2/sec): 6.20778E-04

X (m)	Y (m)	Onsite Annual DPM Exhaust w/Unit Emissions (ug/m3)	Onsite Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite Annual DPM Exhaust w/Unit Emissions (ug/m3)	Offsite Annual DPM Exhaust w/Actual Emissions (ug/m3)	Total DPM (ug/m3)
611337.43	4207107.53	72119.46582	0.01935	0.09584	5.94954E-05	0.01941
611316.93	4207114.47	80434.6896	0.02158	0.10716	6.65226E-05	0.02165
611309.05	4207127.4	84198.24038	0.02259	0.11921	7.40030E-05	0.02267
611308.42	4207149.48	84151.52971	0.02258	0.13557	8.41589E-05	0.02266
611309.05	4207170.29	82363.93169	0.02210	0.15063	9.35079E-05	0.02219
611311.88	4207184.48	79762.20343	0.02140	0.15901	9.87100E-05	0.02150
611315.04	4207203.09	76090.87091	0.02042	0.16951	1.05228E-04	0.02052
611359.51	4207125.19	66113.83776	0.01774	0.09827	6.10039E-05	0.01780
611364.56	4207101.22	62614.05743	0.01680	0.08486	5.26793E-05	0.01685
611377.49	4207091.76	57824.16232	0.01551	0.07759	4.81662E-05	0.01556
611401.77	4207088.6	51215.15528	0.01374	0.07136	4.42987E-05	0.01379
611416.28	4207100.59	49206.03068	0.01320	0.07292	4.52672E-05	0.01325
611421.64	4207123.93	50081.60566	0.01344	0.08051	4.99789E-05	0.01349
611438.99	4207115.41	45863.43441	0.01231	0.07354	4.56520E-05	0.01235
611456.97	4207120.14	42901.06702	0.01151	0.07121	4.42056E-05	0.01155
611355.09	4207167.14	68071.92153	0.01826	0.12324	7.65047E-05	0.01834
611375.59	4207165.56	62593.65391	0.01679	0.11348	7.04459E-05	0.01686
611396.09	4207163.35	57585.73578	0.01545	0.10464	6.49583E-05	0.01552
611411.55	4207163.35	54123.73286	0.01452	0.09940	6.17054E-05	0.01458
611426.06	4207165.56	51155.75486	0.01373	0.09576	5.94457E-05	0.01378
611452.55	4207164.3	46139.22934	0.01238	0.08779	5.44981E-05	0.01243
611311.25	4207222.96	73427.73522	0.01970	0.18507	1.14887E-04	0.01982
611312.2	4207239.05	69843.12849	0.01874	0.19343	1.20077E-04	0.01886
611355.41	4207245.99	60529.21529	0.01624	0.16488	1.02354E-04	0.01634
611377.8	4207244.72	56860.81071	0.01526	0.15072	9.35637E-05	0.01535
611390.73	4207246.62	54531.0168	0.01463	0.14441	8.96466E-05	0.01472
611410.92	4207249.14	51159.54159	0.01373	0.13524	8.39541E-05	0.01381
611433.31	4207250.09	47826.3732	0.01283	0.12551	7.79139E-05	0.01291
611447.82	4207253.24	45645.84688	0.01225	0.12062	7.48783E-05	0.01232
611469.58	4207243.15	43220.59543	0.01160	0.10933	6.78697E-05	0.01166
611477.47	4207217.28	42718.06116	0.01146	0.09859	6.12025E-05	0.01152
611357.62	4207196.47	65814.7404	0.01766	0.13846	8.59530E-05	0.01774
611374.96	4207196.78	61712.80195	0.01656	0.12973	8.05336E-05	0.01664
611394.83	4207198.68	57302.68844	0.01537	0.12149	7.54184E-05	0.01545
611412.5	4207197.1	53803.70249	0.01444	0.11351	7.04646E-05	0.01451
611433.63	4207195.52	49887.66738	0.01339	0.10512	6.52562E-05	0.01345
611452.87	4207194.58	46579.80481	0.01250	0.09849	6.11405E-05	0.01256
611471.47	4207199.62	43647.42156	0.01171	0.09466	5.87629E-05	0.01177
611466.43	4207168.08	43892.42118	0.01178	0.08554	5.31014E-05	0.01183
611488.19	4207163.04	40289.95544	0.01081	0.07883	4.89360E-05	0.01086
611506.8	4207160.2	37495.87893	0.01006	0.07413	4.60183E-05	0.01011
611505.54	4207184.17	38522.79851	0.01034	0.08120	5.04072E-05	0.01039
611509.32	4207196.47	38292.76597	0.01027	0.08383	5.20399E-05	0.01033
611505.22	4207219.81	39020.02492	0.01047	0.09149	5.67950E-05	0.01053
611510.27	4207235.89	38316.2533	0.01028	0.09463	5.87443E-05	0.01034
611495.76	4207248.82	39797.95732	0.01068	0.10248	6.36174E-05	0.01074
611311.25	4207260.81	65081.41104	0.01746	0.20466	1.27049E-04	0.01759
611314.41	4207277.84	60664.83783	0.01628	0.20837	1.29352E-04	0.01641
611358.56	4207260.49	57824.01483	0.01551	0.16899	1.04905E-04	0.01562
611368.02	4207274.69	54310.91493	0.01457	0.16825	1.04446E-04	0.01468
611389.16	4207283.52	50418.04539	0.01353	0.15861	9.84617E-05	0.01363
611400.19	4207295.19	47681.55677	0.01279	0.15600	9.68414E-05	0.01289
611412.5	4207316	43925.39399	0.01179	0.15480	9.60965E-05	0.01188
611435.52	4207292.03	44241.19439	0.01187	0.13771	8.54874E-05	0.01196
611451.6	4207278.47	43565.05229	0.01169	0.12691	7.87830E-05	0.01177
611474.63	4207278.79	40978.58298	0.01099	0.11804	7.32767E-05	0.01107
611485.35	4207263.33	40528.52006	0.01087	0.10994	6.82484E-05	0.01094
611328.6	4207291.72	55958.79829	0.01501	0.20113	1.24857E-04	0.01514
611312.83	4207306.23	54191.72496	0.01454	0.21681	1.34591E-04	0.01467
611302.11	4207319.47	51784.0774	0.01389	0.22713	1.40997E-04	0.01404
611310.62	4207336.5	47430.82189	0.01273	0.22125	1.37347E-04	0.01286
611321.66	4207346.6	44840.2894	0.01203	0.21346	1.32511E-04	0.01216
611339.01	4207346.91	44069.14332	0.01182	0.20196	1.25372E-04	0.01195
611357.62	4207322.94	47372.35517	0.01271	0.18750	1.16396E-04	0.01283
611371.49	4207335.87	44247.07907	0.01187	0.18095	1.12330E-04	0.01198
611372.76	4207355.11	41101.92016	0.01103	0.18222	1.13118E-04	0.01114
611421.64	4207330.2	41480.70181	0.01113	0.15321	9.51095E-05	0.01122
611423.22	4207349.12	39129.97165	0.01050	0.15562	9.66055E-05	0.01060
611449.08	4207328.93	39507.70382	0.01060	0.14048	8.72070E-05	0.01069
611438.36	4207309.06	42349.0106	0.01136	0.14083	8.74242E-05	0.01145
611468.95	4207336.5	37320.38289	0.01001	0.13374	8.30229E-05	0.01010
611483.46	4207328.62	36858.19499	0.00989	0.12663	7.86092E-05	0.00997
611504.27	4207316.95	35973.66006	0.00965	0.11680	7.25069E-05	0.00972
611518.78	4207305.59	35348.57019	0.00948	0.10957	6.80187E-05	0.00955
611531.08	4207292.98	34788.97542	0.00933	0.10301	6.39464E-05	0.00940
611540.23	4207275.63	34445.95169	0.00924	0.09642	5.98555E-05	0.00930
611310.9	4207395.01	35664.88394	0.00957	0.21468	1.33269E-04	0.00970
611307.77	4207409.9	33067.75747	0.00887	0.21287	1.32145E-04	0.00900
611306.78	4207428.47	30059.43768	0.00807	0.20826	1.29283E-04	0.00819
611310.76	4207450.93	26865.88973	0.00721	0.19995	1.24125E-04	0.00733
611307.77	4207464.05	25070.49247	0.00673	0.19688	1.22219E-04	0.00685
611355.09	4207392.69	35682.85316	0.00957	0.19159	1.18935E-04	0.00969
611398.22	4207398.65	33924.09741	0.00910	0.17071	1.05973E-04	0.00921
611386.69	4207411.77	32428.47637	0.00870	0.17541	1.08891E-04	0.00881
611357.67	4207410.98	32881.621	0.00882	0.18857	1.17060E-04	0.00894
611353.89	4207429.07	30315.29853	0.00813	0.18770	1.16520E-04	0.00825
611362.24	4207449.15	27682.30087	0.00743	0.18089	1.12293E-04	0.00754
611385.9	4207431.06	29940.18195	0.00803	0.17420	1.08140E-04	0.00814
611420.29	4207390.9	34239.32065	0.00919	0.16083	9.98398E-05	0.00929
611436.99	4207401.83	32429.8506	0.00870	0.15430	9.57861E-05	0.00880
611444.34	4207420.32	30236.05899	0.00811	0.15186	9.42714E-05	0.00821
611441.16	4207444.37	27807.86125	0.00746	0.15264	9.47556E-05	0.00756
611446.33	4207459.28	26258.31545	0.00705	0.15019	9.32347E-05	0.00714
611459.25	4207384.54	33396.93724	0.00896	0.14434	8.96032E-05	0.00905
611466.61	4207407.4	30881.4118	0.00829	0.14322	8.89079E-05	0.00837
611472.97	4207420.72	29426.85431	0.00790	0.14156	8.78774E-05	0.00798
611470.58	4207443.78	27357.30316	0.00734	0.14273	8.86037E-05	0.00743
611470.58	4207461.87	25719.96862	0.00690	0.14241	8.84051E-05	0.00699
611351.29	4207475.53	24401.16236	0.00655	0.17915	1.11212E-04	0.00666
611374.78	4207476.37	24554.14957	0.00659	0.17141	1.06408E-04	0.00669
611395.9	4207472.82	25058.82692	0.00672	0.16522	1.02565E-04	0.00683

611389.14	4207448.15	27835.71233	0.00747	0.17100	1.06153E-04	0.00757
611439.49	4207477.38	24567.96365	0.00659	0.15100	9.37375E-05	0.00669
611467.04	4207481.61	24018.25582	0.00644	0.14252	8.84733E-05	0.00653
611302.63	4207484.99	22411.01806	0.00601	0.19147	1.18860E-04	0.00613
611303.64	4207503.41	20420.69727	0.00548	0.18481	1.14726E-04	0.00559
611310.74	4207524.36	18535.39723	0.00497	0.17599	1.09251E-04	0.00508
611334.05	4207523.85	19091.98347	0.00512	0.17084	1.06054E-04	0.00523
611356.02	4207522.5	19631.15723	0.00527	0.16603	1.03068E-04	0.00537
611371.73	4207521.49	19977.44198	0.00536	0.16248	1.00864E-04	0.00546
611394.04	4207526.89	19798.82285	0.00531	0.15591	9.67856E-05	0.00541
611406.88	4207522.5	20321.79038	0.00545	0.15366	9.53888E-05	0.00555
611430.71	4207520.47	20682.51458	0.00555	0.14812	9.19497E-05	0.00564
611444.56	4207523.01	20541.5198	0.00551	0.14435	8.96094E-05	0.00560
611466.19	4207524.87	20454.4323	0.00549	0.13890	8.62261E-05	0.00557
611485.45	4207527.74	20244.44344	0.00543	0.13406	8.32216E-05	0.00551
611511.14	4207529.43	20069.20289	0.00538	0.12802	7.94721E-05	0.00546
611524.65	4207513.21	21109.91493	0.00566	0.12581	7.81001E-05	0.00574
611552.87	4207524.02	20157.16927	0.00541	0.11897	7.38540E-05	0.00548
611553.21	4207500.7	21620.47773	0.00580	0.11937	7.41023E-05	0.00588
611524.32	4207495.8	22327.72292	0.00599	0.12649	7.85223E-05	0.00607
611523.13	4207474.34	23884.62491	0.00641	0.12708	7.88885E-05	0.00649
611552.03	4207482.79	22789.46248	0.00611	0.11966	7.42823E-05	0.00619
611519.59	4207462.51	24820.91038	0.00666	0.12799	7.94534E-05	0.00674
611554.73	4207464.37	23921.35583	0.00642	0.11860	7.36243E-05	0.00649
611524.99	4207440.55	26310.74252	0.00706	0.12584	7.81188E-05	0.00714
611555.24	4207445.11	25138.00661	0.00674	0.11765	7.30346E-05	0.00682
611555.58	4207427.03	26262.72164	0.00705	0.11639	7.22524E-05	0.00712
611557.94	4207398.3	27891.41807	0.00748	0.11306	7.01852E-05	0.00755
611522.63	4207422.64	27693.08983	0.00743	0.12555	7.79387E-05	0.00751
611522.63	4207401.35	29233.03027	0.00784	0.12381	7.68586E-05	0.00792
611542.4	4207388.34	29204.1871	0.00784	0.11639	7.22524E-05	0.00791
611511.98	4207382.93	31050.49001	0.00833	0.12524	7.77463E-05	0.00841
611508.43	4207369.24	32232.61583	0.00865	0.12465	7.73800E-05	0.00873
611535.81	4207363.5	31050.01438	0.00833	0.11503	7.14081E-05	0.00840
611548.65	4207344.4	31277.09208	0.00839	0.10813	6.71248E-05	0.00846
611559.8	4207244.2	32921.01129	0.00883	0.08422	5.22820E-05	0.00889
611558.62	4207227.64	32974.88161	0.00885	0.08065	5.00658E-05	0.00890
611555.24	4207203.99	32985.54274	0.00885	0.07579	4.70488E-05	0.00890
611557.27	4207183.2	32198.37203	0.00864	0.07051	4.37711E-05	0.00868
611554.23	4207164.62	31818.90119	0.00854	0.06668	4.13935E-05	0.00858
611557.77	4207142.31	30325.85955	0.00814	0.06101	3.78737E-05	0.00817
611547.97	4207121.19	30095.51021	0.00807	0.05736	3.56079E-05	0.00811
611546.96	4207102.77	28792.74694	0.00773	0.05291	3.28454E-05	0.00776
611551.18	4207088.92	27188.19377	0.00729	0.04934	3.06292E-05	0.00733
611555.91	4207066.78	24736.55188	0.00664	0.04433	2.75191E-05	0.00666
611476.99	4207114.19	39032.5099	0.01047	0.06563	4.07417E-05	0.01051
611498.11	4207124.33	36633.73816	0.00983	0.06521	4.04810E-05	0.00987
611517.37	4207121.63	33792.74611	0.00907	0.06142	3.81282E-05	0.00911
611516.7	4207103.71	32417.07425	0.00870	0.05665	3.51671E-05	0.00873
611397.15	4207001.31	38398.34777	0.01030	0.04726	2.93380E-05	0.01033
611405.21	4206965.9	30504.07654	0.00818	0.04043	2.50981E-05	0.00821
611417.66	4206992.52	33221.65735	0.00891	0.04372	2.71404E-05	0.00894
611434.86	4206992.14	30559.37492	0.00820	0.04223	2.62155E-05	0.00823
611454.74	4206982.79	26575.40804	0.00713	0.03925	2.43656E-05	0.00715
611462.1	4206968.28	23744.41903	0.00637	0.03674	2.28074E-05	0.00639
611453.75	4206949.79	22065.52684	0.00592	0.03499	2.17210E-05	0.00594
611447.79	4206931.5	20148.71213	0.00541	0.03335	2.07030E-05	0.00543
611475.02	4206936.87	18595.81883	0.00499	0.03239	2.01070E-05	0.00501
611496.69	4206939.06	17280.63297	0.00464	0.03147	1.95359E-05	0.00466
611513	4206936.67	15990.11019	0.00429	0.03044	1.88965E-05	0.00431
611530.89	4206938.86	15159.80647	0.00407	0.02980	1.84992E-05	0.00409
611546.99	4206935.68	14038.2171	0.00377	0.02881	1.78846E-05	0.00378
611404.05	4206946.01	27128.95817	0.00728	0.03779	2.34592E-05	0.00730
611405.64	4206926.73	23642.49099	0.00634	0.03540	2.19756E-05	0.00637
611403.65	4206905.06	20382.68166	0.00547	0.03332	2.06843E-05	0.00549
611410.81	4206890.15	17590.55265	0.00472	0.03158	1.96042E-05	0.00474
611437.25	4206884.98	15103.9464	0.00405	0.02977	1.84806E-05	0.00407
611453.35	4206887.96	14481.35066	0.00389	0.02921	1.81329E-05	0.00390
611472.24	4206888.75	13545.56397	0.00363	0.02840	1.76301E-05	0.00365
611492.32	4206887.16	12440.36964	0.00334	0.02741	1.70155E-05	0.00335
611509.62	4206887.76	11754.23398	0.00315	0.02674	1.65996E-05	0.00317
611527.31	4206889.15	11173.87578	0.00300	0.02613	1.62209E-05	0.00301
611546.6	4206887.56	10380.06767	0.00279	0.02531	1.57119E-05	0.00280
611377.6	4206837.66	13044.97607	0.00350	0.02950	1.83130E-05	0.00352
611377.41	4206826.33	11799.11762	0.00317	0.02879	1.78722E-05	0.00318
611377.6	4206816.19	10779.62814	0.00289	0.02818	1.74935E-05	0.00291
611407.63	4206828.51	10720.84885	0.00288	0.02743	1.70280E-05	0.00289
611437.05	4206820.96	9102.97431	0.00244	0.02571	1.59602E-05	0.00246
611474.23	4206850.98	10158.46116	0.00273	0.02585	1.60471E-05	0.00274
611478.2	4206824.54	8218.87414	0.00221	0.02428	1.50725E-05	0.00222
611495.9	4206825.93	7876.49136	0.00211	0.02371	1.47187E-05	0.00213
611509.22	4206853.17	9215.88107	0.00247	0.02464	1.52960E-05	0.00249
611526.32	4206824.34	7143.67045	0.00192	0.02261	1.40358E-05	0.00193
611558.33	4206844.02	7485.47824	0.00201	0.02252	1.39799E-05	0.00202
611554.15	4206823.34	6586.44537	0.00177	0.02170	1.34709E-05	0.00178
611558.53	4206886.77	9943.822	0.00267	0.02483	1.54139E-05	0.00268
611375.81	4206780.4	8029.73547	0.00215	0.02636	1.63637E-05	0.00217
611387.74	4206763.9	6837.39178	0.00183	0.02506	1.55567E-05	0.00185
611411.4	4206781.59	7256.45615	0.00195	0.02486	1.54326E-05	0.00196
611412.6	4206752.37	5893.29104	0.00158	0.02357	1.46317E-05	0.00160
611440.43	4206779.41	6569.50182	0.00176	0.02362	1.46628E-05	0.00178
611471.44	4206781.39	6126.17427	0.00164	0.02259	1.40234E-05	0.00166
611469.26	4206740.64	4753.89884	0.00128	0.02116	1.31357E-05	0.00129
611499.68	4206782.19	5730.22735	0.00154	0.02169	1.34647E-05	0.00155
611536.85	4206780.8	5192.88254	0.00139	0.02053	1.27446E-05	0.00141
611523.14	4206742.03	4243.76327	0.00114	0.01962	1.21797E-05	0.00115
611556.54	4206774.04	4761.78268	0.00128	0.01975	1.22604E-05	0.00129
611323.92	4206674.63	5133.50789	0.00138	0.02395	1.48676E-05	0.00139
611335.65	4206699.68	5478.2258	0.00147	0.02449	1.52029E-05	0.00149
611362.49	4206701.67	5107.14885	0.00137	0.02351	1.45945E-05	0.00138
611381.38	4206700.48	4819.54834	0.00129	0.02277	1.41351E-05	0.00131
611398.08	4206697.1	4540.55002	0.00122	0.02206	1.36944E-05	0.00123
611417.17	4206699.88	4377.02011	0.00117	0.02151	1.33529E-05	0.00119
611433.87	4206699.09	4184.85382	0.00112	0.02094	1.29991E-05	0.00114
611454.55	4206702.27	4040.22588	0.00108	0.02040	1.26639E-05	0.00110
611471.44	4206700.08	3848.66244	0.00103	0.01984	1.23162E-05	0.00104
611490.53	4206698.29	3660.18666	0.00098	0.01925	1.19500E-05	0.00099
611510.61	4206699.68	3527.77031	0.00095	0.01875	1.16396E-05	0.00096
611531.49	4206698.09	3356.03436	0.00090	0.01818	1.12858E-05	0.00091
611545.01	4206701.47	3315.51733	0.00089	0.01794	1.11368E-05	0.00090
611559.92	4206697.3	3162.83824	0.00085	0.01749	1.08574E-05	0.00086
611335.26	4206651.57	4581.34302	0.00123	0.02267	1.40730E-05	0.00124
611359.11	4206645.41	4187.27663	0.00112	0.02163	1.34274E-05	0.00114

611376.21	4206651.17	4061.69618	0.00109	0.02126	1.31977E-05	0.00110
611398.68	4206649.98	3809.37681	0.00102	0.02053	1.27446E-05	0.00103
611414.58	4206650.18	3658.59131	0.00098	0.02006	1.24528E-05	0.00099
611432.87	4206648.59	3478.53373	0.00093	0.01950	1.21052E-05	0.00095
611471.64	4206649.78	3186.63172	0.00086	0.01849	1.14782E-05	0.00087
611491.92	4206651.57	3063.12969	0.00082	0.01803	1.11926E-05	0.00083
611511.41	4206651.77	2939.5978	0.00079	0.01756	1.09009E-05	0.00080
611527.51	4206650.77	2833.85214	0.00076	0.01717	1.06588E-05	0.00077
611546.99	4206651.97	2735.70659	0.00073	0.01676	1.04042E-05	0.00074
611325.51	4206617.57	4277.55289	0.00115	0.02185	1.35640E-05	0.00116
611344.2	4206617.57	4041.94815	0.00108	0.02123	1.31791E-05	0.00110
611357.52	4206616.78	3880.62049	0.00104	0.02078	1.28998E-05	0.00105
611368.66	4206620.55	3798.56837	0.00102	0.02056	1.27632E-05	0.00103
611381.98	4206618.76	3645.20953	0.00098	0.02011	1.24839E-05	0.00099
611395.9	4206619.76	3521.90159	0.00094	0.01974	1.22542E-05	0.00096
611407.82	4206620.75	3423.49214	0.00092	0.01944	1.20679E-05	0.00093
611421.14	4206619.96	3296.40976	0.00088	0.01903	1.18134E-05	0.00090
611435.46	4206618.76	3176.31481	0.00085	0.01864	1.15713E-05	0.00086
611472.44	4206621.55	2934.67193	0.00079	0.01780	1.10499E-05	0.00080
611485.36	4206619.96	2838.61315	0.00076	0.01746	1.08388E-05	0.00077
611496.5	4206622.94	2790.90055	0.00075	0.01727	1.07208E-05	0.00076
611508.82	4206622.14	2705.8663	0.00073	0.01696	1.05284E-05	0.00074
611522.14	4206620.55	2617.10981	0.00070	0.01663	1.03235E-05	0.00071
611532.88	4206620.95	2562.14411	0.00069	0.01641	1.01870E-05	0.00070
611546	4206621.94	2501.58055	0.00067	0.01615	1.00256E-05	0.00068
611557.13	4206620.16	2434.95424	0.00065	0.01589	9.86417E-06	0.00066
611327.7	4206564.89	3669.91368	0.00098	0.02004	1.24404E-05	0.00100
611341.02	4206566.28	3576.96587	0.00096	0.01980	1.22914E-05	0.00097
611355.14	4206572.84	3498.37695	0.00094	0.01959	1.21610E-05	0.00095
611369.25	4206575.02	3384.17083	0.00091	0.01925	1.19500E-05	0.00092
611384.16	4206573.04	3232.2952	0.00087	0.01878	1.16582E-05	0.00088
611395.1	4206574.63	3149.7263	0.00085	0.01852	1.14968E-05	0.00086
611407.23	4206574.43	3049.49731	0.00082	0.01819	1.12920E-05	0.00083
611420.15	4206574.03	2947.56239	0.00079	0.01785	1.10809E-05	0.00080
611431.88	4206569.86	2844.22841	0.00076	0.01749	1.08574E-05	0.00077
611473.63	4206575.22	2627.03326	0.00070	0.01675	1.03980E-05	0.00072
611487.55	4206572.24	2531.16644	0.00068	0.01640	1.01808E-05	0.00069
611500.27	4206575.22	2469.5192	0.00066	0.01617	1.00380E-05	0.00067
611512.6	4206575.82	2401.87833	0.00064	0.01592	9.88279E-06	0.00065
611524.73	4206574.43	2333.87307	0.00063	0.01565	9.71518E-06	0.00064
611537.85	4206576.22	2278.99409	0.00061	0.01543	9.57861E-06	0.00062
611548.59	4206575.22	2224.9353	0.00060	0.01522	9.44825E-06	0.00061
611558.72	4206577.01	2187.72942	0.00059	0.01506	9.34892E-06	0.00060
611331.88	4206537.85	3403.10693	0.00091	0.01920	1.19189E-05	0.00093
611332.67	4206513.19	3211.84843	0.00086	0.01857	1.15279E-05	0.00087
611355.54	4206518.56	3063.52536	0.00082	0.01813	1.12547E-05	0.00083
611357.72	4206542.42	3208.80576	0.00086	0.01862	1.15589E-05	0.00087
611371.84	4206555.94	3184.71916	0.00085	0.01856	1.15216E-05	0.00087
611370.05	4206542.02	3105.05194	0.00083	0.01829	1.13540E-05	0.00084
611383.57	4206548.58	3039.3221	0.00082	0.01808	1.12237E-05	0.00083
611397.09	4206548.58	2937.35204	0.00079	0.01773	1.10064E-05	0.00080
611409.22	4206546.79	2844.59032	0.00076	0.01741	1.08078E-05	0.00077
611419.95	4206547.59	2778.56114	0.00075	0.01719	1.06712E-05	0.00076
611432.28	4206550.37	2718.53941	0.00073	0.01700	1.05532E-05	0.00074
611349.17	4206492.32	2947.04668	0.00079	0.01771	1.09940E-05	0.00080
611363.69	4206486.95	2816.01278	0.00076	0.01728	1.07271E-05	0.00077
611375.81	4206491.32	2757.42226	0.00074	0.01708	1.06029E-05	0.00075
611387.94	4206500.67	2728.38198	0.00073	0.01698	1.05408E-05	0.00074
611399.08	4206500.87	2659.80556	0.00071	0.01673	1.03856E-05	0.00072
611409.61	4206504.25	2616.95821	0.00070	0.01657	1.02863E-05	0.00071
611422.54	4206503.25	2539.94762	0.00068	0.01629	1.01125E-05	0.00069
611437.65	4206504.45	2471.81251	0.00066	0.01604	9.95729E-06	0.00067
611374.82	4206454.74	2554.01163	0.00069	0.01633	1.01373E-05	0.00070
611385.76	4206467.07	2555.86995	0.00069	0.01634	1.01435E-05	0.00070
611397.68	4206472.44	2518.10323	0.00068	0.01620	1.00566E-05	0.00069
611411.2	4206477.21	2471.07009	0.00066	0.01602	9.94487E-06	0.00067
611424.33	4206476.41	2401.79372	0.00064	0.01575	9.77726E-06	0.00065
611437.25	4206478	2349.44001	0.00063	0.01554	9.64690E-06	0.00064
611425.52	4206431.08	2195.53642	0.00059	0.01494	9.27443E-06	0.00060
611476.42	4206548.78	2473.35231	0.00066	0.01615	1.00256E-05	0.00067
611488.54	4206547.99	2405.83009	0.00065	0.01589	9.86417E-06	0.00066
611501.27	4206548.38	2336.72448	0.00063	0.01563	9.70277E-06	0.00064
611512	4206545.8	2269.33598	0.00061	0.01536	9.53516E-06	0.00062
611524.33	4206546.4	2213.08427	0.00059	0.01515	9.40479E-06	0.00060
611536.06	4206546.79	2161.51505	0.00058	0.01494	9.27443E-06	0.00059
611548.98	4206548.98	2113.20383	0.00057	0.01475	9.15648E-06	0.00058
611559.92	4206549.18	2067.80812	0.00055	0.01457	9.04474E-06	0.00056
611477.81	4206502.66	2273.90142	0.00061	0.01529	9.49170E-06	0.00062
611479.99	4206477.61	2167.35409	0.00058	0.01482	9.19994E-06	0.00059
611491.13	4206505.84	2223.90959	0.00060	0.01510	9.37375E-06	0.00061
611502.46	4206505.04	2169.11837	0.00058	0.01488	9.23718E-06	0.00059
611491.72	4206477.8	2118.46526	0.00057	0.01462	9.07578E-06	0.00058
611503.06	4206479	2074.62842	0.00056	0.01444	8.96404E-06	0.00057
611514.39	4206503.05	2110.03348	0.00057	0.01464	9.08820E-06	0.00058
611515.98	4206477.8	2017.42001	0.00054	0.01420	8.81505E-06	0.00055
611528.31	4206505.84	2057.17616	0.00055	0.01443	8.95783E-06	0.00056
611528.9	4206476.41	1962.5712	0.00053	0.01397	8.67227E-06	0.00054
611540.63	4206508.22	2012.25202	0.00054	0.01426	8.85230E-06	0.00055
611538.25	4206476.41	1927.18002	0.00052	0.01382	8.57916E-06	0.00053
611552.56	4206505.84	1957.79609	0.00053	0.01403	8.70952E-06	0.00053
611550.77	4206475.02	1877.86532	0.00050	0.01361	8.44879E-06	0.00051
611479.99	4206431.88	1993.49319	0.00053	0.01405	8.72194E-06	0.00054
611493.12	4206432.08	1949.33077	0.00052	0.01385	8.59778E-06	0.00053
611504.65	4206432.67	1912.82927	0.00051	0.01369	8.49846E-06	0.00052
611518.56	4206430.88	1862.32235	0.00050	0.01346	8.35568E-06	0.00051
611529.5	4206430.29	1826.1449	0.00049	0.01330	8.25635E-06	0.00050
611542.42	4206435.46	1799.99423	0.00048	0.01318	8.18186E-06	0.00049
611552.76	4206433.07	1761.9934	0.00047	0.01301	8.07633E-06	0.00048
611479.8	4206406.03	1905.90829	0.00051	0.01368	8.49225E-06	0.00052
611494.51	4206406.43	1861.85271	0.00050	0.01347	8.36189E-06	0.00051
611506.24	4206406.83	1828.01052	0.00049	0.01330	8.25635E-06	0.00050
611518.56	4206405.44	1788.03183	0.00048	0.01311	8.13841E-06	0.00049
611530.89	4206404.64	1750.8584	0.00047	0.01294	8.03287E-06	0.00048
611542.62	4206407.03	1724.52624	0.00046	0.01281	7.95217E-06	0.00047
611555.15	4206405.44	1686.11026	0.00045	0.01263	7.84043E-06	0.00046
611529.9	4206362.49	1639.27939	0.00044	0.01242	7.71007E-06	0.00045
611544.81	4206364.08	1608.58148	0.00043	0.01225	7.60454E-06	0.00044
611558.72	4206362.89	1573.89775	0.00042	0.01207	7.49280E-06	0.00043
610703.71	4206675.32	43030.36721	0.01155	0.10253	6.36484E-05	0.01161
610721.12	4206689.86	47266.16959	0.01268	0.10486	6.50948E-05	0.01275
610736.84	4206686.65	48078.49626	0.01290	0.10109	6.27545E-05	0.01296
610754.25	4206685.46	49295.73242	0.01323	0.09772	6.06625E-05	0.01329
610771.15	4206685.12	50506.8341	0.01355	0.09465	5.87567E-05	0.01361

610789.74	4206688.5	52596.42869	0.01411	0.09240	5.73599E-05	0.01417
610807.15	4206686.31	53115.93294	0.01425	0.08852	5.49513E-05	0.01431
610700.5	4206658.42	40082.60921	0.01075	0.09747	6.05073E-05	0.01082
610703.54	4206637.12	37223.80363	0.00999	0.09070	5.63046E-05	0.01004
610702.86	4206621.23	35066.21535	0.00941	0.08649	5.36911E-05	0.00946
610746.81	4206643.04	40750.49325	0.01093	0.08617	5.34925E-05	0.01099
610777.57	4206642.19	42091.77501	0.01129	0.08128	5.04569E-05	0.01134
610792.28	4206642.53	42715.42297	0.01146	0.07908	4.90912E-05	0.01151
610749.18	4206621.57	37457.44852	0.01005	0.08035	4.98795E-05	0.01010
610749.85	4206602.98	34798.62786	0.00934	0.07598	4.71667E-05	0.00938
610784.16	4206612.28	37202.69684	0.00998	0.07337	4.55465E-05	0.01003
610793.29	4206597.74	35131.11052	0.00943	0.06915	4.29268E-05	0.00947
610810.19	4206587.6	33776.1834	0.00906	0.06505	4.03816E-05	0.00910
610820	4206591.66	34406.17921	0.00923	0.06449	4.00340E-05	0.00927
610837.24	4206594.36	34761.38354	0.00933	0.06268	3.89104E-05	0.00937
610839.6	4206619.21	39067.0039	0.01048	0.06684	4.14928E-05	0.01052
610834.02	4206641.52	43492.53642	0.01167	0.07224	4.48450E-05	0.01171
610850.25	4206642.36	43790.24536	0.01175	0.06982	4.33427E-05	0.01179
610877.29	4206642.87	43727.49021	0.01173	0.06559	4.07169E-05	0.01177
610878.14	4206626.14	39966.11395	0.01072	0.06241	3.87428E-05	0.01076
610876.79	4206607.54	36326.53172	0.00975	0.05948	3.69239E-05	0.00978
610878.31	4206588.95	33054.6512	0.00887	0.05643	3.50305E-05	0.00890
610762.87	4206569.18	30761.47556	0.00825	0.06758	4.19522E-05	0.00830
610782.13	4206564.1	30412.47013	0.00816	0.06440	3.99781E-05	0.00820
610796.84	4206560.56	30070.4038	0.00807	0.06208	3.85379E-05	0.00811
610815.77	4206555.48	29403.75244	0.00789	0.05904	3.66508E-05	0.00793
610832.16	4206557.01	29470.30812	0.00791	0.05744	3.56575E-05	0.00794
610851.43	4206553.96	28751.16902	0.00771	0.05478	3.40062E-05	0.00775
610880.67	4206553.63	27883.03797	0.00748	0.05141	3.19142E-05	0.00751
610878.31	4206570.7	30265.4028	0.00812	0.05386	3.34351E-05	0.00815
610826.68	4206687.13	54367.43798	0.01459	0.08515	5.28593E-05	0.01464
610844.57	4206686.3	54896.27181	0.01473	0.08147	5.05748E-05	0.01478
610865.21	4206687.68	56053.23738	0.01504	0.07792	4.83711E-05	0.01509
610880.9	4206686.3	56042.84051	0.01504	0.07464	4.63349E-05	0.01508
610899.62	4206692.91	58745.69975	0.01576	0.07275	4.51616E-05	0.01581
610919.16	4206680.8	54223.38352	0.01455	0.06649	4.12756E-05	0.01459
610925.76	4206661.81	47570.76252	0.01276	0.06169	3.82958E-05	0.01280
610927.41	4206642.54	41981.31342	0.01126	0.05812	3.60796E-05	0.01130
610925.49	4206624.93	37861.53892	0.01016	0.05566	3.45525E-05	0.01019
610924.94	4206606.21	34053.66645	0.00914	0.05306	3.29385E-05	0.00917
610922.73	4206591.08	31483.95573	0.00845	0.05130	3.18459E-05	0.00848
610923.56	4206571.81	28462.30973	0.00764	0.04884	3.03188E-05	0.00767
610925.21	4206554.47	26021.75028	0.00698	0.04662	2.89407E-05	0.00701
610956.31	4206695.94	58822.83114	0.01578	0.06271	3.89290E-05	0.01582
611019.34	4206696.76	48100.5473	0.01291	0.05150	3.19701E-05	0.01294
610959.06	4206679.15	51337.24586	0.01377	0.05923	3.67687E-05	0.01381
610962.92	4206664.84	45780.00227	0.01228	0.05627	3.49312E-05	0.01232
610963.47	4206649.42	41025.02309	0.01101	0.05389	3.34537E-05	0.01104
610965.12	4206634.29	36954.55772	0.00992	0.05158	3.20198E-05	0.00995
610958.24	4206619.42	34291.60374	0.00920	0.05056	3.13866E-05	0.00923
610960.44	4206603.74	31072.41235	0.00834	0.04833	3.00022E-05	0.00837
610962.64	4206588.32	28320.98529	0.00760	0.04628	2.87296E-05	0.00763
610968.15	4206560.25	24102.17663	0.00647	0.04283	2.65879E-05	0.00649
610949.71	4206557.5	24975.96654	0.00670	0.04439	2.75564E-05	0.00673
611017.96	4206681.9	42582.15639	0.01143	0.04978	3.09024E-05	0.01146
611021.54	4206668.69	37566.13954	0.01008	0.04762	2.95615E-05	0.01011
611017.69	4206653.83	34394.28659	0.00923	0.04648	2.88538E-05	0.00926
611013.83	4206638.97	31694.34276	0.00850	0.04538	2.81709E-05	0.00853
611013.01	4206623.83	28900.6545	0.00775	0.04391	2.72584E-05	0.00778
611009.98	4206609.24	26871.59244	0.00721	0.04285	2.66004E-05	0.00724
611008.05	4206597.68	25389.50684	0.00681	0.04199	2.60665E-05	0.00684
611001.72	4206570.71	22619.35628	0.00607	0.04028	2.50050E-05	0.00609
611017.41	4206575.11	21624.86172	0.00580	0.03901	2.42166E-05	0.00583
611033.38	4206575.66	20075.97497	0.00539	0.03742	2.32295E-05	0.00541
611050.71	4206697.86	38778.57723	0.01040	0.04666	2.89655E-05	0.01043
611054.84	4206681.9	32967.84087	0.00885	0.04433	2.75191E-05	0.00887
611052.92	4206671.17	30966.35843	0.00831	0.04349	2.69977E-05	0.00834
611054.84	4206650.8	26645.12487	0.00715	0.04130	2.56381E-05	0.00717
611055.39	4206637.59	24494.19038	0.00657	0.04006	2.48684E-05	0.00660
611053.47	4206624.65	23047.28217	0.00618	0.03918	2.43221E-05	0.00621
611054.84	4206605.02	20570.82989	0.00552	0.03748	2.32668E-05	0.00554
611055.39	4206591.81	19195.55292	0.00515	0.03644	2.26212E-05	0.00517
611053.47	4206578.87	18260.3659	0.00490	0.03570	2.21618E-05	0.00492
611057.6	4206560.98	16329.90839	0.00438	0.03389	2.10382E-05	0.00440
611058.15	4206547.77	15394.52564	0.00413	0.03301	2.04919E-05	0.00415
611056.22	4206534.84	14763.2683	0.00396	0.03239	2.01070E-05	0.00398
611021.82	4206533.19	17386.88933	0.00467	0.03532	2.19259E-05	0.00469
611022.37	4206519.98	16389.64749	0.00440	0.03436	2.13299E-05	0.00442
611020.44	4206507.04	15670.68359	0.00420	0.03368	2.09078E-05	0.00423
611028.7	4206492.18	14272.53142	0.00383	0.03208	1.99146E-05	0.00385
611029.25	4206478.97	13538.407	0.00363	0.03124	1.93931E-05	0.00365
611027.32	4206466.03	13009.59242	0.00349	0.03061	1.90020E-05	0.00351
611022.09	4206449.79	12554.74612	0.00337	0.03014	1.87103E-05	0.00339
611030.62	4206435.76	11591.03645	0.00311	0.02888	1.79281E-05	0.00313
611028.7	4206422.82	11202.94734	0.00301	0.02840	1.76301E-05	0.00302
611057.32	4206514.2	13551.88641	0.00364	0.03113	1.93248E-05	0.00366
611057.87	4206500.99	12876.33954	0.00345	0.03039	1.88655E-05	0.00347
611055.94	4206488.05	12404.36614	0.00333	0.02982	1.85116E-05	0.00335
611057.32	4206473.74	11709.9801	0.00314	0.02895	1.79715E-05	0.00316
611057.87	4206460.53	11170.45267	0.00300	0.02825	1.75370E-05	0.00301
611055.94	4206447.59	10814.52514	0.00290	0.02780	1.72576E-05	0.00292
611056.49	4206431.35	10254.9905	0.00275	0.02705	1.67921E-05	0.00277
611057.04	4206418.14	9821.82103	0.00264	0.02642	1.64010E-05	0.00265
611055.12	4206405.21	9528.63674	0.00256	0.02599	1.61340E-05	0.00257
611056.49	4206387.04	8994.97791	0.00241	0.02520	1.56436E-05	0.00243
611057.04	4206373.83	8653.06264	0.00232	0.02467	1.53146E-05	0.00234
611055.12	4206360.9	8413.25521	0.00226	0.02428	1.50725E-05	0.00227
611021.82	4206405.3	10879.40919	0.00292	0.02804	1.74066E-05	0.00294
611031.45	4206391.54	10062.72703	0.00270	0.02682	1.66493E-05	0.00272
611035.85	4206363.74	9121.85554	0.00245	0.02538	1.57554E-05	0.00246
611085.12	4206364.57	7505.74257	0.00201	0.02301	1.42841E-05	0.00203
611087.59	4206415.48	8470.93614	0.00227	0.02466	1.53084E-05	0.00229
611084.02	4206444.38	9349.95129	0.00251	0.02596	1.61154E-05	0.00252
611084.84	4206458.69	9707.06212	0.00260	0.02649	1.64444E-05	0.00262
611083.19	4206470.8	10164.06918	0.00273	0.02712	1.68355E-05	0.00274
611082.64	4206503.28	11354.57135	0.00305	0.02875	1.78474E-05	0.00306
611082.37	4206515.94	11869.0734	0.00318	0.02938	1.82385E-05	0.00320
611082.92	4206532.18	12522.60556	0.00336	0.03016	1.87227E-05	0.00338
611082.64	4206545.66	13176.04522	0.00354	0.03089	1.91758E-05	0.00355
611105.48	4206544.56	11293.66231	0.00303	0.02917	1.81081E-05	0.00305
611103.83	4206534.65	11052.02087	0.00297	0.02880	1.78784E-05	0.00298
611079.89	4206585.02	15827.51696	0.00425	0.03364	2.08830E-05	0.00427
611081.54	4206569.88	14695.15262	0.00394	0.03257	2.02188E-05	0.00396

611081.82	4206624.84	18765.37318	0.00503	0.03622	2.24846E-05	0.00506
611082.37	4206611.63	17546.92229	0.00471	0.03524	2.18762E-05	0.00473
611080.44	4206598.69	16777.68316	0.00450	0.03454	2.14417E-05	0.00452
611104.66	4206591.53	13550.83331	0.00364	0.03194	1.98277E-05	0.00366
611105.48	4206580.53	12905.09375	0.00346	0.03122	1.93807E-05	0.00348
611103.56	4206567.59	12487.33523	0.00335	0.03066	1.90331E-05	0.00337
611103.83	4206624.29	15643.91191	0.00420	0.03413	2.11872E-05	0.00422
611102.73	4206612.45	15019.33813	0.00403	0.03346	2.07712E-05	0.00405
611104.11	4206601.99	14210.36064	0.00381	0.03265	2.02684E-05	0.00383
611079.89	4206667.5	23999.3731	0.00644	0.03981	2.47132E-05	0.00646
611080.44	4206654.29	22130.93919	0.00594	0.03864	2.39869E-05	0.00596
611078.51	4206641.35	20963.87112	0.00562	0.03781	2.34716E-05	0.00565
611100.53	4206702.18	23872.71511	0.00641	0.04048	2.51291E-05	0.00643
611079.61	4206696.95	29111.63718	0.00781	0.04255	2.64141E-05	0.00784
611077.69	4206684.01	27179.4212	0.00729	0.04156	2.57996E-05	0.00732
611102.46	4206679.15	20541.92063	0.00551	0.03828	2.37634E-05	0.00554
611101.91	4206689.61	21865.27988	0.00587	0.03922	2.43469E-05	0.00589
611103.83	4206657.41	18168.44554	0.00487	0.03645	2.26274E-05	0.00490
611103.28	4206667.86	19224.07892	0.00516	0.03730	2.31550E-05	0.00518
611104.11	4206634.56	16317.55526	0.00438	0.03479	2.15969E-05	0.00440
611103.56	4206645.02	17186.37854	0.00461	0.03557	2.20811E-05	0.00463
611128.88	4206688.23	16323.43473	0.00438	0.03636	2.25715E-05	0.00440
611128.33	4206698.69	17210.25239	0.00462	0.03722	2.31054E-05	0.00464
611128.88	4206664.29	14748.1293	0.00396	0.03462	2.14913E-05	0.00398
611128.33	4206674.74	15484.93498	0.00415	0.03541	2.19818E-05	0.00418
611130.81	4206643.09	13334.15606	0.00358	0.03306	2.05229E-05	0.00360
611130.25	4206653.55	13950.01104	0.00374	0.03378	2.09699E-05	0.00376
611130.25	4206618.32	12238.4759	0.00328	0.03160	1.96166E-05	0.00330
611129.7	4206628.78	12767.43322	0.00343	0.03226	2.00263E-05	0.00345
611147.87	4206682.18	13261.52384	0.00356	0.03425	2.12617E-05	0.00358
611147.32	4206692.63	13896.7327	0.00373	0.03503	2.17459E-05	0.00375
611148.7	4206659.88	12110.69507	0.00325	0.03271	2.03057E-05	0.00327
611148.14	4206670.34	12645.3411	0.00339	0.03343	2.07526E-05	0.00341
611149.25	4206637.31	11147.62961	0.00299	0.03130	1.94304E-05	0.00301
611148.7	4206647.77	11604.66033	0.00311	0.03196	1.98401E-05	0.00313
611149.25	4206613.37	10313.88938	0.00277	0.02997	1.86047E-05	0.00279
611148.7	4206623.83	10712.0523	0.00287	0.03058	1.89834E-05	0.00289
611175.39	4206687.68	10800.2715	0.00290	0.03248	2.01629E-05	0.00292
611174.84	4206698.14	11299.87058	0.00303	0.03320	2.06098E-05	0.00305
611195.21	4206682.45	9248.92955	0.00248	0.03080	1.91200E-05	0.00250
611194.66	4206692.91	9658.47036	0.00259	0.03146	1.95297E-05	0.00261
611175.39	4206664.01	9921.11404	0.00266	0.03104	1.92690E-05	0.00268
611174.84	4206674.47	10329.36739	0.00277	0.03169	1.96725E-05	0.00279
611194.93	4206660.98	8596.54806	0.00231	0.02961	1.83812E-05	0.00232
611194.38	4206671.44	8938.36847	0.00240	0.03022	1.87599E-05	0.00242
611174.29	4206641.44	9292.40254	0.00249	0.02984	1.85240E-05	0.00251
611173.74	4206651.9	9646.78602	0.00259	0.03045	1.89027E-05	0.00261
611195.21	4206638.14	7981.73413	0.00214	0.02841	1.76363E-05	0.00216
611194.66	4206648.6	8273.66175	0.00222	0.02897	1.79840E-05	0.00224
611176.49	4206618.6	8537.23296	0.00229	0.02852	1.77046E-05	0.00231
611175.94	4206629.06	8840.00462	0.00237	0.02908	1.80522E-05	0.00239
611195.48	4206613.64	7417.72661	0.00199	0.02721	1.68914E-05	0.00201
611194.93	4206624.1	7668.94527	0.00206	0.02773	1.72142E-05	0.00207
610704.74	4206583.83	30671.62614	0.00823	0.07717	4.79055E-05	0.00828
610703.54	4206601.74	32679.46503	0.00877	0.08147	5.05748E-05	0.00882
610705.38	4206547.72	26937.05895	0.00723	0.06954	4.31689E-05	0.00727
610704.19	4206565.63	28740.48264	0.00771	0.07343	4.55838E-05	0.00776
610705.71	4206512.75	23912.66462	0.00642	0.06356	3.94567E-05	0.00646
610704.51	4206530.66	25381.85963	0.00681	0.06662	4.13563E-05	0.00685
610707	4206477.13	21302.59168	0.00572	0.05832	3.62038E-05	0.00575
610705.8	4206495.04	22541.80472	0.00605	0.06085	3.77744E-05	0.00609
610707.65	4206443.46	19109.05832	0.00513	0.05388	3.34475E-05	0.00516
610706.45	4206461.36	20247.20744	0.00543	0.05631	3.49560E-05	0.00547
610707.65	4206407.84	17093.8706	0.00459	0.04981	3.09210E-05	0.00462
610706.45	4206425.74	18055.38493	0.00484	0.05186	3.21936E-05	0.00488
610703.12	4206366.39	15132.69992	0.00406	0.04615	2.86489E-05	0.00409
610703.86	4206388.18	16117.99599	0.00432	0.04813	2.98781E-05	0.00435
610754.28	4206417.88	17790.02285	0.00477	0.04760	2.95491E-05	0.00480
610746.28	4206438.7	19059.26618	0.00511	0.05046	3.13245E-05	0.00515
610765.61	4206379.99	15701.58657	0.00421	0.04314	2.67804E-05	0.00424
610764.41	4206397.9	16642.64447	0.00447	0.04489	2.78667E-05	0.00449
610803.82	4206388.73	15906.68489	0.00427	0.04141	2.57064E-05	0.00429
610802.62	4206406.64	16900.78067	0.00453	0.04307	2.67369E-05	0.00456
610755.3	4206360.77	14851.69821	0.00398	0.04224	2.62217E-05	0.00401
610768.58	4206436.87	18957.03571	0.00509	0.04861	3.01760E-05	0.00512
610791.24	4206432.98	18593.68009	0.00499	0.04643	2.88227E-05	0.00502
610806.14	4206426.83	18066.00074	0.00485	0.04466	2.77240E-05	0.00487
610805.81	4206369.51	14930.83551	0.00401	0.03973	2.46635E-05	0.00403
610804.52	4206353.65	14229.13689	0.00382	0.03866	2.39993E-05	0.00384
610847.59	4206432.33	17791.23814	0.00477	0.04195	2.60417E-05	0.00480
610865.4	4206429.74	17251.84456	0.00463	0.04036	2.50546E-05	0.00465
610882.56	4206432.66	17011.63989	0.00456	0.03931	2.44028E-05	0.00459
610902.31	4206429.42	16261.86369	0.00436	0.03757	2.33226E-05	0.00439
610924.98	4206459.53	17361.25502	0.00466	0.03804	2.36144E-05	0.00468
610924.33	4206496.45	20121.18355	0.00540	0.04105	2.54830E-05	0.00542
610925.3	4206509.08	21181.51376	0.00568	0.04210	2.61348E-05	0.00571
610748.5	4206527.86	25942.00336	0.00696	0.06171	3.83082E-05	0.00700
610766.31	4206522.35	25592.99357	0.00687	0.05907	3.66694E-05	0.00690
610782.5	4206515.88	25071.87112	0.00673	0.05663	3.51547E-05	0.00676
610798.04	4206512.32	24737.06254	0.00664	0.05471	3.39628E-05	0.00667
610819.74	4206511.02	24480.7105	0.00657	0.05254	3.26157E-05	0.00660
610836.25	4206510.7	24215.02943	0.00650	0.05089	3.15914E-05	0.00653
610856.33	4206507.46	23477.99535	0.00630	0.04853	3.01264E-05	0.00633
610879.97	4206511.99	23243.25844	0.00624	0.04671	2.89966E-05	0.00627
610880.94	4206492.56	21424.49094	0.00575	0.04465	2.77178E-05	0.00578
610879.32	4206474.75	20010.39643	0.00537	0.04312	2.67680E-05	0.00540
610855.36	4206477.67	20874.98631	0.00560	0.04550	2.82454E-05	0.00563
610836.25	4206476.37	21141.57507	0.00567	0.04699	2.91704E-05	0.00570
610782.34	4206485.12	22357.17282	0.00600	0.05268	3.27026E-05	0.00603
610763.88	4206489.33	22667.16729	0.00608	0.05480	3.40187E-05	0.00612
610817.96	4206481.23	21806.38009	0.00585	0.04911	3.04864E-05	0.00588
610798.85	4206479.93	21871.62291	0.00587	0.05063	3.14300E-05	0.00590
610748.5	4206494.51	23003.93099	0.00617	0.05687	3.53037E-05	0.00621
610921.74	4206437.52	16113.56678	0.00432	0.03670	2.27826E-05	0.00435
610845.31	4206376.74	14741.49129	0.00396	0.03765	2.33723E-05	0.00398
610861.92	4206386.8	14938.93871	0.00401	0.03729	2.31488E-05	0.00403
610870.34	4206398.97	15390.47193	0.00413	0.03761	2.33475E-05	0.00415
610902.16	4206393.59	14376.3715	0.00386	0.03514	2.18142E-05	0.00388
610920.18	4206388.2	13641.50561	0.00366	0.03361	2.08644E-05	0.00368
610921.11	4206378.14	13178.27362	0.00354	0.03296	2.04609E-05	0.00356
610917.84	4206361.53	12585.0059	0.00338	0.03222	2.00015E-05	0.00340
610845.78	4206356.85	13850.68352	0.00372	0.03634	2.25591E-05	0.00374
610867.77	4206365.04	13826.50015	0.00371	0.03550	2.20376E-05	0.00373

610886.72	4206365.28	13462.38958	0.00361	0.03436	2.13299E-05	0.00363
610903.57	4206363.4	13004.28368	0.00349	0.03320	2.06098E-05	0.00351
610950.59	4206356.39	11534.62521	0.00309	0.02998	1.86109E-05	0.00311
610965.33	4206355.45	11083.50768	0.00297	0.02905	1.80336E-05	0.00299
610995.74	4206351.01	10034.05866	0.00269	0.02703	1.67796E-05	0.00271
610987.56	4206368.32	10836.7017	0.00291	0.02833	1.75867E-05	0.00293
610970.95	4206394.76	12350.88022	0.00331	0.03070	1.90579E-05	0.00333
610968.61	4206411.13	13114.90247	0.00352	0.03173	1.96973E-05	0.00354
610949.42	4206401.77	13362.19168	0.00359	0.03248	2.01629E-05	0.00361
610960.42	4206425.64	14086.66587	0.00378	0.03312	2.05602E-05	0.00380
610944.04	4206426.34	14721.19258	0.00395	0.03432	2.13051E-05	0.00397
610966.5	4206439.67	14554.40893	0.00391	0.03352	2.08085E-05	0.00393
610964.39	4206457.22	15604.77679	0.00419	0.03478	2.15907E-05	0.00421
610948.24	4206509.73	20131.31432	0.00540	0.04010	2.48932E-05	0.00543
610965.72	4206510.7	19278.74692	0.00517	0.03863	2.39807E-05	0.00520
610983.53	4206509.08	18128.43848	0.00486	0.03696	2.29440E-05	0.00489
610970.26	4206484.15	17039.35682	0.00457	0.03622	2.24846E-05	0.00459
610963.46	4206468.93	16354.70504	0.00439	0.03564	2.21245E-05	0.00441
611085.12	4206428.94	8898.46279	0.00239	0.02530	1.57057E-05	0.00240
611083.18	4206485.29	10658.65635	0.00286	0.02783	1.72763E-05	0.00288
611221.38	4206686.44	8079.97453	0.00217	0.02942	1.82633E-05	0.00219
611220.83	4206696.9	8445.90623	0.00227	0.03003	1.86420E-05	0.00228
611221.77	4206676.32	7767.38607	0.00208	0.02885	1.79095E-05	0.00210
611240.27	4206683.06	7270.61065	0.00195	0.02818	1.74935E-05	0.00197
611239.72	4206693.52	7594.43941	0.00204	0.02875	1.78474E-05	0.00206
611240.67	4206672.94	6993.02691	0.00188	0.02765	1.71645E-05	0.00189
611222.17	4206653.03	7162.19627	0.00192	0.02766	1.71707E-05	0.00194
611221.62	4206663.49	7434.22334	0.00199	0.02820	1.75060E-05	0.00201
611222.17	4206640.92	6894.75361	0.00185	0.02708	1.68107E-05	0.00187
611241.86	4206650.05	6441.13617	0.00173	0.02652	1.64630E-05	0.00174
611241.31	4206660.5	6680.6455	0.00179	0.02702	1.67734E-05	0.00181
611241.86	4206637.94	6202.91428	0.00166	0.02598	1.61278E-05	0.00168
611266.92	4206689.62	6652.70379	0.00178	0.02712	1.68355E-05	0.00180
611266.37	4206700.08	6966.52103	0.00187	0.02766	1.71707E-05	0.00189
611267.32	4206679.9	6396.46694	0.00172	0.02664	1.65375E-05	0.00173
611268.31	4206659.19	5924.69993	0.00159	0.02567	1.59354E-05	0.00161
611267.76	4206669.65	6152.73903	0.00165	0.02616	1.62396E-05	0.00167
611268.31	4206647.08	5698.67901	0.00153	0.02516	1.56188E-05	0.00154
611221.89	4206630.7	6694.73814	0.00180	0.02663	1.65313E-05	0.00181
611241.58	4206627.72	6023.76667	0.00162	0.02555	1.58609E-05	0.00163
611268.53	4206635.97	5502.84984	0.00148	0.02469	1.53270E-05	0.00149
611269.52	4206627.02	5338.01335	0.00143	0.02430	1.50849E-05	0.00145
611269.32	4206615.69	5171.78822	0.00139	0.02387	1.48180E-05	0.00140
611235.12	4206603.35	5795.9609	0.00156	0.02484	1.54201E-05	0.00157
611125.73	4206584.46	11202.28902	0.00301	0.02992	1.85737E-05	0.00302
611137.26	4206585.26	10323.11577	0.00277	0.02924	1.81516E-05	0.00279
611149	4206584.06	9449.50924	0.00254	0.02849	1.76860E-05	0.00255
611160.43	4206587.05	8758.09951	0.00235	0.02794	1.73445E-05	0.00237
611172.17	4206585.85	8026.94082	0.00215	0.02721	1.68914E-05	0.00217
611185.49	4206588.64	7388.84606	0.00198	0.02661	1.65189E-05	0.00200
611197.23	4206587.44	6836.07478	0.00183	0.02596	1.61154E-05	0.00185
611128.02	4206567.75	10441.47495	0.00280	0.02893	1.79591E-05	0.00282
611139.75	4206566.56	9582.33013	0.00257	0.02818	1.74935E-05	0.00259
611150.09	4206568.95	8972.64726	0.00241	0.02771	1.72018E-05	0.00242
611161.83	4206567.75	8220.86094	0.00221	0.02697	1.67424E-05	0.00222
611171.17	4206569.15	7731.42255	0.00207	0.02652	1.64630E-05	0.00209
611182.91	4206567.95	7123.82914	0.00191	0.02586	1.60533E-05	0.00193
611194.44	4206567.75	6616.24147	0.00178	0.02528	1.56933E-05	0.00179
611206.18	4206566.56	6148.71018	0.00165	0.02469	1.53270E-05	0.00167
611216.92	4206568.35	5813.89479	0.00156	0.02428	1.50725E-05	0.00157
611228.65	4206567.16	5450.81181	0.00146	0.02373	1.47311E-05	0.00148
611204.89	4206588.04	6538.86643	0.00175	0.02561	1.58981E-05	0.00177
611238.7	4206569.35	5216.94937	0.00140	0.02340	1.45262E-05	0.00141
611266.54	4206574.12	4679.57012	0.00126	0.02250	1.39675E-05	0.00127
611265.15	4206558.8	4530.06256	0.00122	0.02204	1.36820E-05	0.00123
611262.16	4206541.9	4405.30372	0.00118	0.02161	1.34150E-05	0.00120
611129.21	4206540.11	9455.59241	0.00254	0.02743	1.70280E-05	0.00255
611140.94	4206538.92	8692.76582	0.00233	0.02671	1.65810E-05	0.00235
611155.66	4206540.91	7910.76213	0.00212	0.02602	1.61527E-05	0.00214
611167.4	4206539.71	7291.64898	0.00196	0.02538	1.57554E-05	0.00197
611181.32	4206541.7	6713.53164	0.00180	0.02483	1.54139E-05	0.00182
611193.05	4206540.51	6242.97296	0.00168	0.02428	1.50725E-05	0.00169
611205.78	4206542.1	5816.99245	0.00156	0.02379	1.47683E-05	0.00158
611219.3	4206542.89	5403.66789	0.00145	0.02325	1.44331E-05	0.00146
611232.23	4206542.7	5052.02318	0.00136	0.02273	1.41103E-05	0.00137
611243.97	4206541.5	4762.60753	0.00128	0.02224	1.38061E-05	0.00129
611204.79	4206362.96	4077.86391	0.00109	0.01845	1.14534E-05	0.00111
611349.5	4206372.82	2323.17244	0.00062	0.01531	9.50412E-06	0.00063
611313.91	4206380.65	2628.75743	0.00071	0.01620	1.00566E-05	0.00072
611310.48	4206419.52	2852.95672	0.00077	0.01708	1.06029E-05	0.00078
611267.05	4206500.67	3932.82017	0.00106	0.02022	1.25521E-05	0.00107
611497.56	4206304.83	1558.2644	0.00042	0.01214	7.53625E-06	0.00043
611419.07	4206310.55	1784.09213	0.00048	0.01322	8.20669E-06	0.00049
611041.07	4206301.25	7613.1557	0.00204	0.02298	1.42655E-05	0.00206
611069.15	4206301.53	6884.87243	0.00185	0.02177	1.35143E-05	0.00186
611083.74	4206300.98	6498.245	0.00174	0.02116	1.31357E-05	0.00176
611100.26	4206300.7	6066.67724	0.00163	0.02051	1.27322E-05	0.00164
611111.82	4206300.15	5762.79019	0.00155	0.02005	1.24466E-05	0.00156
611123.93	4206299.33	5448.59957	0.00146	0.01958	1.21548E-05	0.00147
611137.15	4206300.43	5143.64031	0.00138	0.01917	1.19003E-05	0.00139
611150.91	4206299.88	4821.35059	0.00129	0.01873	1.16272E-05	0.00131
611164.12	4206300.7	4530.19754	0.00122	0.01833	1.13789E-05	0.00123
610871.77	4206303.18	11415.50487	0.00306	0.03169	1.96725E-05	0.00308
610919.67	4206299.6	10442.61995	0.00280	0.02899	1.79964E-05	0.00282
610946.1	4206301.25	9937.67366	0.00267	0.02770	1.71956E-05	0.00268
610968.4	4206299.6	9379.18111	0.00252	0.02644	1.64134E-05	0.00253
610997.85	4206300.15	8683.07105	0.00233	0.02497	1.55008E-05	0.00235
610800.68	4206302.27	12258.77529	0.00329	0.03546	2.20128E-05	0.00331
610345.98	4206368.37	10059.08123	0.00270	0.06420	3.98540E-05	0.00274
610371.57	4206456.46	12233.30687	0.00328	0.07752	4.81227E-05	0.00333
610277.64	4206458.4	9878.35063	0.00265	0.08130	5.04693E-05	0.00270
610294.49	4206372.25	9272.85385	0.00249	0.06703	4.16108E-05	0.00253
610341.12	4206437.68	11065.89657	0.00297	0.07503	4.65770E-05	0.00302
610508	4206352.9	12511.62996	0.00336	0.05508	3.41925E-05	0.00339
610536.83	4206358.41	13056.76671	0.00350	0.05389	3.34537E-05	0.00354
610518.69	4206394.68	13855.6608	0.00372	0.05939	3.68680E-05	0.00375
610506.38	4206428.37	14617.89702	0.00392	0.06459	4.00961E-05	0.00396
610407.88	4206300.63	9913.94492	0.00266	0.05376	3.33730E-05	0.00269
610413.21	4206694.6	17522.76097	0.00470	0.14058	8.72690E-05	0.00479
610451.93	4206697.23	20354.15801	0.00546	0.13937	8.65179E-05	0.00555
610448.83	4206717.31	20459.7314	0.00549	0.14922	9.26326E-05	0.00558
610438.65	4207091.1	9402.84612	0.00252	1.78562	1.10847E-03	0.00363
610449.61	4207060.72	11256.00003	0.00302	1.07703	6.68597E-04	0.00369

610454.96	4207045.53	12322.56933	0.00331	0.89094	5.53076E-04	0.00386
610451.02	4207000.82	14391.93124	0.00386	0.57871	3.59251E-04	0.00422
610446.24	4206963.41	15896.45106	0.00427	0.44186	2.74297E-04	0.00454
610457.21	4206987.6	15590.27335	0.00418	0.52213	3.24127E-04	0.00451
610421.77	4207012.91	11927.24101	0.00320	0.64193	3.98496E-04	0.00360
610421.49	4207040.47	10746.51686	0.00288	0.84116	5.22174E-04	0.00341
610362.43	4207105.72	6643.78968	0.00178	2.52879	1.56982E-03	0.00335
610378.74	4207077.32	7823.12025	0.00210	1.37515	8.53663E-04	0.00295
610364.4	4207040.75	8479.04684	0.00228	0.84341	5.23571E-04	0.00280
610319.96	4207038.22	7275.76429	0.00195	0.82185	5.10187E-04	0.00246
610334.3	4207091.94	6357.68994	0.00171	1.81298	1.12546E-03	0.00283
610329.8	4207109.1	5903.89611	0.00158	2.78443	1.72851E-03	0.00331
610350.94	4206635.65	13554.28791	0.00364	0.12108	7.51639E-05	0.00371
610530.61	4206613.88	22829.66895	0.00613	0.10230	6.35056E-05	0.00619
610531.61	4206594.02	21962.0131	0.00589	0.09664	5.99920E-05	0.00595
610537.23	4206566.38	21002.84514	0.00564	0.08927	5.54169E-05	0.00569
610565.36	4206541.23	21060.25934	0.00565	0.08135	5.05003E-05	0.00570
610627.57	4206493.91	20761.83381	0.00557	0.06744	4.18653E-05	0.00561
610633.2	4206515.75	22273.16141	0.00598	0.07067	4.38704E-05	0.00602
610666.29	4206515.75	23225.47223	0.00623	0.06772	4.20391E-05	0.00627
610646.1	4206559.1	25850.80471	0.00694	0.07786	4.83338E-05	0.00698
610646.77	4206594.51	28885.72232	0.00775	0.08584	5.32876E-05	0.00780
610578.59	4206617.02	26124.41176	0.00701	0.09879	6.13267E-05	0.00707
610620.29	4206619.66	29174.34639	0.00783	0.09560	5.93464E-05	0.00789
610608.05	4206563.07	24229.78425	0.00650	0.08236	5.11273E-05	0.00655
610608.05	4206545.2	23158.49518	0.00621	0.07936	4.92650E-05	0.00626
610623.6	4206564.4	25082.37179	0.00673	0.08150	5.05934E-05	0.00678
610623.6	4206546.53	23847.43895	0.00640	0.07774	4.82593E-05	0.00645
610563.04	4206597.82	23971.60258	0.00643	0.09491	5.89181E-05	0.00649
610587.86	4206596.83	25374.37818	0.00681	0.09231	5.73041E-05	0.00687
610564.7	4206580.61	23102.57739	0.00620	0.09032	5.60687E-05	0.00625
610589.52	4206581.61	24489.33116	0.00657	0.08831	5.48209E-05	0.00663
610734.02	4206917.57	200977.4594	0.05392	0.29497	1.83111E-04	0.05411
610754.27	4206913.28	214033.8922	0.05743	0.28039	1.74060E-04	0.05760
610779.19	4206906.67	221919.6793	0.05954	0.25962	1.61166E-04	0.05970
610824.35	4206899.66	245250.8952	0.06580	0.22811	1.41606E-04	0.06594
610820.85	4206880.97	193566.8159	0.05194	0.20512	1.27334E-04	0.05206
610811.11	4206855.27	147225.3402	0.03950	0.18137	1.12591E-04	0.03961
610717.67	4206895.37	143900.0578	0.03861	0.26302	1.63277E-04	0.03877
610731.69	4206880.97	137948.3885	0.03701	0.23855	1.48087E-04	0.03716
610715.72	4206858	107536.2567	0.02885	0.21528	1.33641E-04	0.02899
610721.17	4206833.47	94587.46409	0.02538	0.18928	1.17501E-04	0.02550
610758.94	4206842.03	114635.2732	0.03076	0.18673	1.15918E-04	0.03087
610767.51	4206870.84	147058.9532	0.03946	0.21432	1.33045E-04	0.03959
610865.01	4206886.37	240455.1931	0.06452	0.18907	1.17371E-04	0.06463
610909.74	4206874.67	241458.0362	0.06479	0.15210	9.44204E-05	0.06488
610860.95	4206838.53	144482.5254	0.03877	0.14672	9.10806E-05	0.03886
610888.6	4206829.18	142836.5405	0.03832	0.12891	8.00245E-05	0.03840
610790.87	4206784.8	86629.7035	0.02324	0.13449	8.34885E-05	0.02333
610816.95	4206785.58	91413.12259	0.02453	0.12762	7.92237E-05	0.02461
610850.44	4206785.19	96808.38093	0.02597	0.11750	7.29415E-05	0.02605
610898.33	4206797.26	116300.2954	0.03120	0.10805	6.70751E-05	0.03127
610894.83	4206755.59	87642.90467	0.02352	0.09214	5.71985E-05	0.02357
610897.55	4206780.9	104082.6361	0.02793	0.10111	6.27669E-05	0.02799
610886.81	4206880.99	242047.3387	0.06494	0.17098	1.06141E-04	0.06505
611023.86	4206760.97	101250.1885	0.02717	0.06073	3.76999E-05	0.02720
611041.14	4206759.94	87295.06282	0.02342	0.05684	3.52850E-05	0.02346
611061.35	4206762.7	71959.76634	0.01931	0.05329	3.30813E-05	0.01934
610754.89	4206782.37	78838.02197	0.02115	0.14226	8.83119E-05	0.02124
610844.56	4206719.24	65508.14968	0.01758	0.09154	5.68261E-05	0.01763
610513.96	4206710.62	25833.20947	0.00693	0.14021	8.70393E-05	0.00702
610591.87	4206713.73	35488.0171	0.00952	0.13349	8.28677E-05	0.00960
610668.23	4206716.46	46000.52778	0.01234	0.12416	7.70758E-05	0.01242
610545.12	4206684.51	28038.25143	0.00752	0.12540	7.78456E-05	0.00760
610637.84	4206683.34	37639.51428	0.01010	0.11481	7.12716E-05	0.01017
610512.01	4206642.44	22895.3248	0.00614	0.11318	7.02597E-05	0.00621
610584.86	4206649.06	29272.52979	0.00785	0.10832	6.72427E-05	0.00792
610665.5	4206649.06	36017.19136	0.00966	0.09930	6.16433E-05	0.00973
609975.26	4207082.82	2715.13954	0.00073	2.09483	1.30043E-03	0.00203
609945.83	4207083.32	2570.12741	0.00069	2.17245	1.34861E-03	0.00204
609822.62	4207152.66	1807.41888	0.00048	3.10285	1.92618E-03	0.00241
609804.66	4207094.79	1980.62612	0.00053	3.50258	2.17433E-03	0.00271
609772.24	4207094.79	1885.09059	0.00051	3.62627	2.25111E-03	0.00276
609700.41	4207156.65	1510.14548	0.00041	2.34552	1.45605E-03	0.00186
609633.07	4207074.84	1528.93082	0.00041	1.93448	1.20088E-03	0.00161
609555.75	4207074.84	1393.77314	0.00037	2.23890	1.38986E-03	0.00176
609620.1	4207148.17	1261.97639	0.00034	2.54726	1.58128E-03	0.00192
609556.25	4207145.67	1184.92479	0.00032	2.52249	1.56591E-03	0.00188
609502.88	4207137.69	1144.31453	0.00031	2.82097	1.75120E-03	0.00206
610698.46	4207080.47	129212.2053	0.03467	1.42255	8.83088E-04	0.03555
610693.24	4207063.42	132350.0499	0.03551	1.08921	6.76158E-04	0.03619
610706.16	4207019.7	208570.1515	0.05596	0.65339	4.05610E-04	0.05637
610680.04	4207080.09	82257.23261	0.02207	1.41486	8.78315E-04	0.02295
610682.42	4207046.11	114707.2231	0.03078	0.87226	5.41480E-04	0.03132
CONCUNIT ug/	m^3					
DEPUNIT g/m^	2					

Oakley Main Street Project

2020 No Mitigation at Sensitive Receptors

Construction Annual DPM Emissions (as PM2.5 Exhaust)

Annual Average Onsite DPM Exhaust Emission Rate (grams/m2/sec): 1.93768E-07
Annual Average Offsite DPM Exhaust Emission Rate (grams/m2/sec): 1.13597E-04

X (m)	Y (m)	Onsite Annual DPM Exhaust w/Unit Emissions (ug/m3)	Onsite Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite Annual DPM Exhaust w/Unit Emissions (ug/m3)	Offsite Annual DPM Exhaust w/Actual Emissions (ug/m3)	Total DPM (ug/m3)
611337.43	4207107.53	72119.46582	0.01397	0.09584	1.08871E-05	0.01399
611316.93	4207114.47	80434.6896	0.01559	0.10716	1.21730E-05	0.01560
611309.05	4207127.4	84198.24038	0.01631	0.11921	1.35419E-05	0.01633
611308.42	4207149.48	84151.52971	0.01631	0.13557	1.54003E-05	0.01632
611309.05	4207170.29	82363.93169	0.01596	0.15063	1.71111E-05	0.01598
611311.88	4207184.48	79762.20343	0.01546	0.15901	1.80630E-05	0.01547
611315.04	4207203.09	76090.87091	0.01474	0.16951	1.92558E-05	0.01476
611359.51	4207125.19	66113.83776	0.01281	0.09827	1.11632E-05	0.01282
611364.56	4207101.22	62614.05743	0.01213	0.08486	9.63983E-06	0.01214
611377.49	4207091.76	57824.16232	0.01120	0.07759	8.81398E-06	0.01121
611401.77	4207088.6	51215.15528	0.00992	0.07136	8.10627E-06	0.00993
611416.28	4207100.59	49206.03068	0.00953	0.07292	8.28349E-06	0.00954
611421.64	4207123.93	50081.60566	0.00970	0.08051	9.14569E-06	0.00971
611438.99	4207115.41	45863.43441	0.00889	0.07354	8.35392E-06	0.00890
611456.97	4207120.14	42901.06702	0.00831	0.07121	8.08924E-06	0.00832
611355.09	4207167.14	68071.92153	0.01319	0.12324	1.39997E-05	0.01320
611375.59	4207165.56	62593.65391	0.01213	0.11348	1.28910E-05	0.01214
611396.09	4207163.35	57585.73578	0.01116	0.10464	1.18868E-05	0.01117
611411.55	4207163.35	54123.73286	0.01049	0.09940	1.12915E-05	0.01050
611426.06	4207165.56	51155.75486	0.00991	0.09576	1.08780E-05	0.00992
611452.55	4207164.3	46139.22934	0.00894	0.08779	9.97267E-06	0.00895
611311.25	4207222.96	73427.73522	0.01423	0.18507	2.10234E-05	0.01425
611312.2	4207239.05	69843.12849	0.01353	0.19343	2.19730E-05	0.01356
611355.41	4207245.99	60529.21529	0.01173	0.16488	1.87299E-05	0.01175
611377.8	4207244.72	56860.81071	0.01102	0.15072	1.71213E-05	0.01103
611390.73	4207246.62	54531.0168	0.01057	0.14441	1.64045E-05	0.01058
611410.92	4207249.14	51159.54159	0.00991	0.13524	1.53628E-05	0.00993
611433.31	4207250.09	47826.3732	0.00927	0.12551	1.42575E-05	0.00928
611447.82	4207253.24	45645.84688	0.00884	0.12062	1.37021E-05	0.00886
611469.58	4207243.15	43220.59543	0.00837	0.10933	1.24195E-05	0.00839
611477.47	4207217.28	42718.06116	0.00828	0.09859	1.11995E-05	0.00829
611357.62	4207196.47	65814.7404	0.01275	0.13846	1.57286E-05	0.01277
611374.96	4207196.78	61712.80195	0.01196	0.12973	1.47369E-05	0.01197
611394.83	4207198.68	57302.68844	0.01110	0.12149	1.38009E-05	0.01112
611412.5	4207197.1	53803.70249	0.01043	0.11351	1.28944E-05	0.01044
611433.63	4207195.52	49887.66738	0.00967	0.10512	1.19413E-05	0.00968
611452.87	4207194.58	46579.80481	0.00903	0.09849	1.11882E-05	0.00904
611471.47	4207199.62	43647.42156	0.00846	0.09466	1.07531E-05	0.00847
611466.43	4207168.08	43892.42118	0.00850	0.08554	9.71708E-06	0.00851
611488.19	4207163.04	40289.95544	0.00781	0.07883	8.95484E-06	0.00782
611506.8	4207160.2	37495.87893	0.00727	0.07413	8.42094E-06	0.00727
611505.54	4207184.17	38522.79851	0.00746	0.08120	9.22407E-06	0.00747
611509.32	4207196.47	38292.76597	0.00742	0.08383	9.52283E-06	0.00743
611505.22	4207219.81	39020.02492	0.00756	0.09149	1.03930E-05	0.00757
611510.27	4207235.89	38316.2533	0.00742	0.09463	1.07497E-05	0.00744
611495.76	4207248.82	39797.95732	0.00771	0.10248	1.16414E-05	0.00772
611311.25	4207260.81	65081.41104	0.01261	0.20466	2.32487E-05	0.01263
611314.41	4207277.84	60664.83783	0.01175	0.20837	2.36702E-05	0.01178
611358.56	4207260.49	57824.01483	0.01120	0.16899	1.91967E-05	0.01122
611368.02	4207274.69	54310.91493	0.01052	0.16825	1.91127E-05	0.01054
611389.16	4207283.52	50418.04539	0.00977	0.15861	1.80176E-05	0.00979
611400.19	4207295.19	47681.55677	0.00924	0.15600	1.77211E-05	0.00926
611412.5	4207316	43925.39399	0.00851	0.15480	1.75848E-05	0.00853
611435.52	4207292.03	44241.19439	0.00857	0.13771	1.56434E-05	0.00859
611451.6	4207278.47	43565.05229	0.00844	0.12691	1.44166E-05	0.00846
611474.63	4207278.79	40978.58298	0.00794	0.11804	1.34090E-05	0.00795
611485.35	4207263.33	40528.52006	0.00785	0.10994	1.24888E-05	0.00787
611328.6	4207291.72	55958.79829	0.01084	0.20113	2.28477E-05	0.01087
611312.83	4207306.23	54191.72496	0.01050	0.21681	2.46289E-05	0.01053
611302.11	4207319.47	51784.0774	0.01003	0.22713	2.58013E-05	0.01006
611310.62	4207336.5	47430.82189	0.00919	0.22125	2.51333E-05	0.00922
611321.66	4207346.6	44840.2894	0.00869	0.21346	2.42484E-05	0.00871
611339.01	4207346.91	44069.14332	0.00854	0.20196	2.29420E-05	0.00856
611357.62	4207322.94	47372.35517	0.00918	0.18750	2.12994E-05	0.00920
611371.49	4207335.87	44247.07907	0.00857	0.18095	2.05554E-05	0.00859
611372.76	4207355.11	41101.92016	0.00796	0.18222	2.06996E-05	0.00798
611421.64	4207330.2	41480.70181	0.00804	0.15321	1.74042E-05	0.00806
611423.22	4207349.12	39129.97165	0.00758	0.15562	1.76779E-05	0.00760
611449.08	4207328.93	39507.70382	0.00766	0.14048	1.59581E-05	0.00767
611438.36	4207309.06	42349.0106	0.00821	0.14083	1.59979E-05	0.00822
611468.95	4207336.5	37320.38289	0.00723	0.13374	1.51924E-05	0.00725
611483.46	4207328.62	36858.19499	0.00714	0.12663	1.43848E-05	0.00716
611504.27	4207316.95	35973.66006	0.00697	0.11680	1.32681E-05	0.00698
611518.78	4207305.59	35348.57019	0.00685	0.10957	1.24468E-05	0.00686
611531.08	4207292.98	34788.97542	0.00674	0.10301	1.17016E-05	0.00675
611540.23	4207275.63	34445.95169	0.00667	0.09642	1.09530E-05	0.00669
611310.9	4207395.01	35664.88394	0.00691	0.21468	2.43870E-05	0.00694
611307.77	4207409.9	33067.75747	0.00641	0.21287	2.41814E-05	0.00643
611306.78	4207428.47	30059.43768	0.00582	0.20826	2.36577E-05	0.00585
611310.76	4207450.93	26865.88973	0.00521	0.19995	2.27137E-05	0.00523
611307.77	4207464.05	25070.49247	0.00486	0.19688	2.23650E-05	0.00488
611355.09	4207392.69	35682.85316	0.00691	0.19159	2.17640E-05	0.00694
611398.22	4207398.65	33924.09741	0.00657	0.17071	1.93921E-05	0.00659
611386.69	4207411.77	32428.47637	0.00628	0.17541	1.99260E-05	0.00630
611357.67	4207410.98	32881.621	0.00637	0.18857	2.14210E-05	0.00639
611353.89	4207429.07	30315.29853	0.00587	0.18770	2.13221E-05	0.00590
611362.24	4207449.15	27682.30087	0.00536	0.18089	2.05485E-05	0.00538
611385.9	4207431.06	29940.18195	0.00580	0.17420	1.97886E-05	0.00582
611420.29	4207390.9	34239.32065	0.00663	0.16083	1.82698E-05	0.00665
611436.99	4207401.83	32429.8506	0.00628	0.15430	1.75280E-05	0.00630
611444.34	4207420.32	30236.05899	0.00586	0.15186	1.72508E-05	0.00588
611441.16	4207444.37	27807.86125	0.00539	0.15264	1.73394E-05	0.00541
611446.33	4207459.28	26258.31545	0.00509	0.15019	1.70611E-05	0.00511
611459.25	4207384.54	33396.93724	0.00647	0.14434	1.63966E-05	0.00649
611466.61	4207407.4	30881.4118	0.00598	0.14322	1.62693E-05	0.00600
611472.97	4207420.72	29426.85431	0.00570	0.14156	1.60808E-05	0.00572
611470.58	4207443.78	27357.30316	0.00530	0.14273	1.62137E-05	0.00532
611470.58	4207461.87	25719.96862	0.00498	0.14241	1.61773E-05	0.00500
611351.29	4207475.53	24401.16236	0.00473	0.17915	2.03509E-05	0.00475
611374.78	4207476.37	24554.14957	0.00476	0.17141	1.94716E-05	0.00478
611395.9	4207472.82	25058.82692	0.00486	0.16522	1.87685E-05	0.00487
611389.14	4207448.15	27835.71233	0.00539	0.17100	1.94251E-05	0.00541
611439.49	4207477.38	24567.96365	0.00476	0.15100	1.71531E-05	0.00478
611467.04	4207481.61	24018.25582	0.00465	0.14252	1.61898E-05	0.00467
611302.63	4207484.99	22411.01806	0.00434	0.19147	2.17504E-05	0.00436
611303.64	4207503.41	20420.69727	0.00396	0.18481	2.09938E-05	0.00398
611310.74	4207524.36	18535.39723	0.00359	0.17599	1.99919E-05	0.00361
611334.05	4207523.85	19091.98347	0.00370	0.17084	1.94069E-05	0.00372
611356.02	4207522.5	19631.15723	0.00380	0.16603	1.88605E-05	0.00382
611371.73	4207521.49	19977.44198	0.00387	0.16248	1.84572E-05	0.00389
611394.04	4207526.89	19798.82285	0.00384	0.15591	1.77109E-05	0.00385
611406.88	4207522.5	20321.79038	0.00394	0.15366	1.74553E-05	0.00396
611430.71	4207520.47	20682.51458	0.00401	0.14812	1.68260E-05	0.00402
611444.56	4207523.01	20541.5198	0.00398	0.14435	1.63977E-05	0.00400
611466.19	4207524.87	20454.4323	0.00396	0.13890	1.57786E-05	0.00398
611485.45	4207527.74	20244.44344	0.00392	0.13406	1.52288E-05	0.00394

611511.14	4207529.43	20069.20289	0.00389	0.12802	1.45427E-05	0.00390
611524.65	4207513.21	21109.91493	0.00409	0.12581	1.42916E-05	0.00410
611552.87	4207524.02	20157.16927	0.00391	0.11897	1.35146E-05	0.00392
611553.21	4207500.7	21620.47773	0.00419	0.11937	1.35601E-05	0.00420
611524.32	4207495.8	22327.72292	0.00433	0.12649	1.43689E-05	0.00434
611523.13	4207474.34	23884.62491	0.00463	0.12708	1.44359E-05	0.00464
611552.03	4207482.79	22789.46248	0.00442	0.11966	1.35930E-05	0.00443
611519.59	4207462.51	24820.91038	0.00481	0.12799	1.45393E-05	0.00482
611554.73	4207464.37	23921.35583	0.00464	0.11860	1.34726E-05	0.00465
611524.99	4207440.55	26310.74252	0.00510	0.12584	1.42950E-05	0.00511
611555.24	4207445.11	25138.00661	0.00487	0.11765	1.33647E-05	0.00488
611555.58	4207427.03	26262.72164	0.00509	0.11639	1.32215E-05	0.00510
611557.94	4207398.3	27891.41807	0.00540	0.11306	1.28433E-05	0.00542
611522.63	4207422.64	27693.08983	0.00537	0.12555	1.42621E-05	0.00538
611522.63	4207401.35	29233.03027	0.00566	0.12381	1.40644E-05	0.00568
611542.4	4207388.34	29204.1871	0.00566	0.11639	1.32215E-05	0.00567
611511.98	4207382.93	31050.49001	0.00602	0.12524	1.42269E-05	0.00603
611508.43	4207369.24	32232.61583	0.00625	0.12465	1.41599E-05	0.00626
611535.81	4207363.5	31050.01438	0.00602	0.11503	1.30671E-05	0.00603
611548.65	4207344.4	31277.09208	0.00606	0.10813	1.22832E-05	0.00607
611559.8	4207244.2	32921.01129	0.00638	0.08422	9.56713E-06	0.00639
611558.62	4207227.64	32974.88161	0.00639	0.08065	9.16159E-06	0.00640
611555.24	4207203.99	32985.54274	0.00639	0.07579	8.60951E-06	0.00640
611557.27	4207183.2	32198.37203	0.00624	0.07051	8.00972E-06	0.00625
611554.23	4207164.62	31818.90119	0.00617	0.06668	7.57464E-06	0.00617
611557.77	4207142.31	30325.85955	0.00588	0.06101	6.93055E-06	0.00588
611547.97	4207121.19	30095.51021	0.00583	0.05736	6.51592E-06	0.00584
611546.96	4207102.77	28792.74694	0.00558	0.05291	6.01041E-06	0.00559
611551.18	4207088.92	27188.19377	0.00527	0.04934	5.60487E-06	0.00527
611555.91	4207066.78	24736.55188	0.00479	0.04433	5.03575E-06	0.00480
611476.99	4207114.19	39032.5099	0.00756	0.06563	7.45536E-06	0.00757
611498.11	4207124.33	36633.73816	0.00710	0.06521	7.40765E-06	0.00711
611517.37	4207121.63	33792.74611	0.00655	0.06142	6.97712E-06	0.00655
611516.7	4207103.71	32417.07425	0.00628	0.05665	6.43526E-06	0.00629
611397.15	4207001.31	38398.34777	0.00744	0.04726	5.36859E-06	0.00745
611405.21	4206965.9	30504.07654	0.00591	0.04043	4.59272E-06	0.00592
611417.66	4206992.52	33221.65735	0.00644	0.04372	4.96646E-06	0.00644
611434.86	4206992.14	30559.37492	0.00592	0.04223	4.79720E-06	0.00593
611454.74	4206982.79	26575.40804	0.00515	0.03925	4.45868E-06	0.00515
611462.1	4206968.28	23744.41903	0.00460	0.03674	4.17355E-06	0.00461
611453.75	4206949.79	22065.52684	0.00428	0.03499	3.97476E-06	0.00428
611447.79	4206931.5	20148.71213	0.00390	0.03335	3.78846E-06	0.00391
611475.02	4206936.87	18595.81883	0.00360	0.03239	3.67940E-06	0.00361
611496.69	4206939.06	17280.63297	0.00335	0.03147	3.57489E-06	0.00335
611513	4206936.67	15990.11019	0.00310	0.03044	3.45789E-06	0.00310
611530.89	4206938.86	15159.80647	0.00294	0.02980	3.38519E-06	0.00294
611546.99	4206935.68	14038.2171	0.00272	0.02881	3.27273E-06	0.00272
611404.05	4206946.01	27128.95817	0.00526	0.03779	4.29283E-06	0.00526
611405.64	4206926.73	23642.49099	0.00458	0.03540	4.02133E-06	0.00459
611403.65	4206905.06	20382.68166	0.00395	0.03332	3.78505E-06	0.00395
611410.81	4206890.15	17590.55265	0.00341	0.03158	3.58739E-06	0.00341
611437.25	4206884.98	15103.9464	0.00293	0.02977	3.38178E-06	0.00293
611453.35	4206887.96	14481.35066	0.00281	0.02921	3.31817E-06	0.00281
611472.24	4206888.75	13545.56397	0.00262	0.02840	3.22615E-06	0.00263
611492.32	4206887.16	12440.36964	0.00241	0.02741	3.11369E-06	0.00241
611509.62	4206887.76	11754.23398	0.00228	0.02674	3.03758E-06	0.00228
611527.31	4206889.15	11173.87578	0.00217	0.02613	2.96829E-06	0.00217
611546.6	4206887.56	10380.06767	0.00201	0.02531	2.87514E-06	0.00201
611377.6	4206837.66	13044.97607	0.00253	0.02950	3.35111E-06	0.00253
611377.41	4206826.33	11799.11762	0.00229	0.02879	3.27045E-06	0.00229
611377.6	4206816.19	10779.62814	0.00209	0.02818	3.20116E-06	0.00209
611407.63	4206828.51	10720.84885	0.00208	0.02743	3.11596E-06	0.00208
611437.05	4206820.96	9102.97431	0.00176	0.02571	2.92058E-06	0.00177
611474.23	4206850.98	10158.46116	0.00197	0.02585	2.93648E-06	0.00197
611478.2	4206824.54	8218.87414	0.00159	0.02428	2.75813E-06	0.00160
611495.9	4206825.93	7876.49136	0.00153	0.02371	2.69338E-06	0.00153
611509.22	4206853.17	9215.88107	0.00179	0.02464	2.79903E-06	0.00179
611526.32	4206824.34	7143.67045	0.00138	0.02261	2.56843E-06	0.00139
611558.33	4206844.02	7485.47824	0.00145	0.02252	2.55820E-06	0.00145
611554.15	4206823.34	6586.44537	0.00128	0.02170	2.46505E-06	0.00128
611558.53	4206886.77	9943.822	0.00193	0.02483	2.82061E-06	0.00193
611375.81	4206780.4	8029.73547	0.00156	0.02636	2.99441E-06	0.00156
611387.74	4206763.9	6837.39178	0.00132	0.02506	2.84674E-06	0.00133
611411.4	4206781.59	7256.45615	0.00141	0.02486	2.82402E-06	0.00141
611412.6	4206752.37	5893.29104	0.00114	0.02357	2.67748E-06	0.00114
611440.43	4206779.41	6569.50182	0.00127	0.02362	2.68316E-06	0.00128
611471.44	4206781.39	6126.17427	0.00119	0.02259	2.56615E-06	0.00119
611469.26	4206740.64	4753.89884	0.00092	0.02116	2.40371E-06	0.00092
611499.68	4206782.19	5730.22735	0.00111	0.02169	2.46392E-06	0.00111
611536.85	4206780.8	5192.88254	0.00101	0.02053	2.33214E-06	0.00101
611523.14	4206742.03	4243.76327	0.00082	0.01962	2.22877E-06	0.00082
611556.54	4206774.04	4761.78268	0.00092	0.01975	2.24354E-06	0.00092
611323.92	4206674.63	5133.50789	0.00099	0.02395	2.72065E-06	0.00100
611335.65	4206699.68	5478.2258	0.00106	0.02449	2.78199E-06	0.00106
611362.49	4206701.67	5107.14885	0.00099	0.02351	2.67066E-06	0.00099
611381.38	4206700.48	4819.54834	0.00093	0.02277	2.58660E-06	0.00094
611398.08	4206697.1	4540.55002	0.00088	0.02206	2.50595E-06	0.00088
611417.17	4206699.88	4377.02011	0.00085	0.02151	2.44347E-06	0.00085
611433.87	4206699.09	4184.85382	0.00081	0.02094	2.37872E-06	0.00081
611454.55	4206702.27	4040.22588	0.00078	0.02040	2.31738E-06	0.00079
611471.44	4206700.08	3848.66244	0.00075	0.01984	2.25376E-06	0.00075
611490.53	4206698.29	3660.18666	0.00071	0.01925	2.18674E-06	0.00071
611510.61	4206699.68	3527.77031	0.00068	0.01875	2.12994E-06	0.00069
611531.49	4206698.09	3356.03436	0.00065	0.01818	2.06519E-06	0.00065
611545.01	4206701.47	3315.51733	0.00064	0.01794	2.03793E-06	0.00064
611559.92	4206697.3	3162.83824	0.00061	0.01749	1.98681E-06	0.00061
611335.26	4206651.57	4581.34302	0.00089	0.02267	2.57524E-06	0.00089
611359.11	4206645.41	4187.27663	0.00081	0.02163	2.45710E-06	0.00081
611376.21	4206651.17	4061.69618	0.00079	0.02126	2.41507E-06	0.00079
611398.68	4206649.98	3809.37681	0.00074	0.02053	2.33214E-06	0.00074
611414.58	4206650.18	3658.59131	0.00071	0.02006	2.27875E-06	0.00071
611432.87	4206648.59	3478.53373	0.00067	0.01950	2.21514E-06	0.00068
611471.64	4206649.78	3186.63172	0.00062	0.01849	2.10041E-06	0.00062
611491.92	4206651.57	3063.12969	0.00059	0.01803	2.04815E-06	0.00060
611511.41	4206651.77	2939.5978	0.00057	0.01756	1.99476E-06	0.00057
611527.51	4206650.77	2833.85214	0.00055	0.01717	1.95046E-06	0.00055
611546.99	4206651.97	2735.70659	0.00053	0.01676	1.90388E-06	0.00053
611325.51	4206617.57	4277.55289	0.00083	0.02185	2.48209E-06	0.00083
611344.2	4206617.57	4041.94815	0.00078	0.02123	2.41166E-06	0.00079
611357.52	4206616.78	3880.62049	0.00075	0.02078	2.36054E-06	0.00075
611368.66	4206620.55	3798.56837	0.00074	0.02056	2.33555E-06	0.00074
611381.98	4206618.76	3645.20953	0.00071	0.02011	2.28443E-06	0.00071
611395.9	4206619.76	3521.90159	0.00068	0.01974	2.24240E-06	0.00068
611407.82	4206620.75	3423.49214	0.00066	0.01944	2.20832E-06	0.00067
611421.14	4206619.96	3296.40976	0.00064	0.01903	2.16175E-06	0.00064
611435.46	4206618.76	3176.31481	0.00062	0.01864	2.11745E-06	0.00062
611472.44	4206621.55	2934.67193	0.00057	0.01780	2.02202E-06	0.00057
611485.36	4206619.96	2838.61315	0.00055	0.01746	1.98340E-06	0.00055
611496.5	4206622.94	2790.90055	0.00054	0.01727	1.96182E-06	0.00054
611508.82	4206622.14	2705.8663	0.00052	0.01696	1.92660E-06	0.00053
611522.14	4206620.55	2617.10981	0.00051	0.01663	1.88912E-06	0.00051
611532.88	4206620.95	2562.14411	0.00050	0.01641	1.86413E-06	0.00050
611546	4206621.94	2501.58055	0.00048	0.01615	1.83459E-06	0.00049
611557.13	4206620.16	2434.95424	0.00047	0.01589	1.80505E-06	0.00047
611327.7	4206564.89	3669.91368	0.00071	0.02004	2.27648E-06	0.00071
611341.02	4206566.28	3576.96587	0.00069	0.01980	2.24922E-06	0.00070
611355.14	4206572.84	3498.37695	0.00068	0.01959	2.22536E-06	0.00068
611369.25	4206575.02	3384.17083	0.00066	0.01925	2.18674E-06	0.00066
611384.16	4206573.04	3232.2952	0.00063	0.01878	2.13335E-06	0.00063

611395.1	4206574.63	3149.7263	0.00061	0.01852	2.10381E-06	0.00061
611407.23	4206574.43	3049.49731	0.00059	0.01819	2.06633E-06	0.00059
611420.15	4206574.03	2947.56239	0.00057	0.01785	2.02770E-06	0.00057
611431.88	4206569.86	2844.22841	0.00055	0.01749	1.98681E-06	0.00055
611473.63	4206575.22	2627.03326	0.00051	0.01675	1.90275E-06	0.00051
611487.55	4206572.24	2531.16644	0.00049	0.01640	1.86299E-06	0.00049
611500.27	4206575.22	2469.5192	0.00048	0.01617	1.83686E-06	0.00048
611512.6	4206575.82	2401.87833	0.00047	0.01592	1.80846E-06	0.00047
611524.73	4206574.43	2333.87307	0.00045	0.01565	1.77779E-06	0.00045
611537.85	4206576.22	2278.99409	0.00044	0.01543	1.75280E-06	0.00044
611548.59	4206575.22	2224.9353	0.00043	0.01522	1.72894E-06	0.00043
611558.72	4206577.01	2187.72942	0.00042	0.01506	1.71077E-06	0.00043
611331.88	4206537.85	3403.10693	0.00066	0.01920	2.18106E-06	0.00066
611332.67	4206513.19	3211.84843	0.00062	0.01857	2.10949E-06	0.00062
611355.54	4206518.56	3063.52536	0.00059	0.01813	2.05951E-06	0.00060
611357.72	4206542.42	3208.80576	0.00062	0.01862	2.11517E-06	0.00062
611371.84	4206555.94	3184.71916	0.00062	0.01856	2.10836E-06	0.00062
611370.05	4206542.02	3105.05194	0.00060	0.01829	2.07769E-06	0.00060
611383.57	4206548.58	3039.3221	0.00059	0.01808	2.05383E-06	0.00059
611397.09	4206548.58	2937.35204	0.00057	0.01773	2.01407E-06	0.00057
611409.22	4206546.79	2844.59032	0.00055	0.01741	1.97772E-06	0.00055
611419.95	4206547.59	2778.56114	0.00054	0.01719	1.95273E-06	0.00054
611432.28	4206550.37	2718.53941	0.00053	0.01700	1.93115E-06	0.00053
611349.17	4206492.32	2947.04668	0.00057	0.01771	2.01180E-06	0.00057
611363.69	4206486.95	2816.01278	0.00055	0.01728	1.96295E-06	0.00055
611375.81	4206491.32	2757.42226	0.00053	0.01708	1.94023E-06	0.00054
611387.94	4206500.67	2728.38198	0.00053	0.01698	1.92888E-06	0.00053
611399.08	4206500.87	2659.80556	0.00052	0.01673	1.90048E-06	0.00052
611409.61	4206504.25	2616.95821	0.00051	0.01657	1.88230E-06	0.00051
611422.54	4206503.25	2539.94762	0.00049	0.01629	1.85049E-06	0.00049
611437.65	4206504.45	2471.81251	0.00048	0.01604	1.82209E-06	0.00048
611374.82	4206454.74	2554.01163	0.00049	0.01633	1.85504E-06	0.00050
611385.76	4206467.07	2555.86995	0.00050	0.01634	1.85617E-06	0.00050
611397.68	4206472.44	2518.10323	0.00049	0.01620	1.84027E-06	0.00049
611411.2	4206477.21	2471.07009	0.00048	0.01602	1.81982E-06	0.00048
611424.33	4206476.41	2401.79372	0.00047	0.01575	1.78915E-06	0.00047
611437.25	4206478	2349.44001	0.00046	0.01554	1.76530E-06	0.00046
611425.52	4206431.08	2195.53642	0.00043	0.01494	1.69714E-06	0.00043
611476.42	4206548.78	2473.35231	0.00048	0.01615	1.83459E-06	0.00048
611488.54	4206547.99	2405.83009	0.00047	0.01589	1.80505E-06	0.00047
611501.27	4206548.38	2336.72448	0.00045	0.01563	1.77552E-06	0.00045
611512	4206545.8	2269.33598	0.00044	0.01536	1.74485E-06	0.00044
611524.33	4206546.4	2213.08427	0.00043	0.01515	1.72099E-06	0.00043
611536.06	4206546.79	2161.51505	0.00042	0.01494	1.69714E-06	0.00042
611548.98	4206548.98	2113.20383	0.00041	0.01475	1.67555E-06	0.00041
611559.92	4206549.18	2067.80812	0.00040	0.01457	1.65511E-06	0.00040
611477.81	4206502.66	2273.90142	0.00044	0.01529	1.73690E-06	0.00044
611479.99	4206477.61	2167.35409	0.00042	0.01482	1.68351E-06	0.00042
611491.13	4206505.84	2223.90959	0.00043	0.01510	1.71531E-06	0.00043
611502.46	4206505.04	2169.11837	0.00042	0.01488	1.69032E-06	0.00042
611491.72	4206477.8	2118.46526	0.00041	0.01462	1.66079E-06	0.00041
611503.06	4206479	2074.62842	0.00040	0.01444	1.64034E-06	0.00040
611514.39	4206503.05	2110.03348	0.00041	0.01464	1.66306E-06	0.00041
611515.98	4206477.8	2017.42001	0.00039	0.01420	1.61308E-06	0.00039
611528.31	4206505.84	2057.17616	0.00040	0.01443	1.63920E-06	0.00040
611528.9	4206476.41	1962.5712	0.00038	0.01397	1.58695E-06	0.00038
611540.63	4206508.22	2012.25202	0.00039	0.01426	1.61989E-06	0.00039
611538.25	4206476.41	1927.18002	0.00037	0.01382	1.56991E-06	0.00037
611552.56	4206505.84	1957.79609	0.00038	0.01403	1.59376E-06	0.00038
611550.77	4206475.02	1877.86532	0.00036	0.01361	1.54605E-06	0.00037
611479.99	4206431.88	1993.49319	0.00039	0.01405	1.59604E-06	0.00039
611493.12	4206432.08	1949.33077	0.00038	0.01385	1.57332E-06	0.00038
611504.65	4206432.67	1912.82927	0.00037	0.01369	1.55514E-06	0.00037
611518.56	4206430.88	1862.32235	0.00036	0.01346	1.52901E-06	0.00036
611529.5	4206430.29	1826.1449	0.00035	0.01330	1.51084E-06	0.00036
611542.42	4206435.46	1799.99423	0.00035	0.01318	1.49721E-06	0.00035
611552.76	4206433.07	1761.9934	0.00034	0.01301	1.47790E-06	0.00034
611479.8	4206406.03	1905.90829	0.00037	0.01368	1.55401E-06	0.00037
611494.51	4206406.43	1861.85271	0.00036	0.01347	1.53015E-06	0.00036
611506.24	4206406.83	1828.01052	0.00035	0.01330	1.51084E-06	0.00036
611518.56	4206405.44	1788.03183	0.00035	0.01311	1.48926E-06	0.00035
611530.89	4206404.64	1750.8584	0.00034	0.01294	1.46994E-06	0.00034
611542.62	4206407.03	1724.52624	0.00033	0.01281	1.45518E-06	0.00034
611555.15	4206405.44	1686.11026	0.00033	0.01263	1.43473E-06	0.00033
611529.9	4206362.49	1639.27939	0.00032	0.01242	1.41087E-06	0.00032
611544.81	4206364.08	1608.58148	0.00031	0.01225	1.39156E-06	0.00031
611558.72	4206362.89	1573.89775	0.00030	0.01207	1.37111E-06	0.00031
610703.71	4206675.32	43030.36721	0.00834	0.10253	1.16471E-05	0.00835
610721.12	4206689.86	47266.16959	0.00916	0.10486	1.19118E-05	0.00917
610736.84	4206686.65	48078.49626	0.00932	0.10109	1.14835E-05	0.00933
610754.25	4206685.46	49295.73242	0.00955	0.09772	1.11007E-05	0.00956
610771.15	4206685.12	50506.8341	0.00979	0.09465	1.07519E-05	0.00980
610789.74	4206688.5	52596.42869	0.01019	0.09240	1.04964E-05	0.01020
610807.15	4206686.31	53115.93294	0.01029	0.08852	1.00556E-05	0.01030
610700.5	4206658.42	40082.60921	0.00777	0.09747	1.10723E-05	0.00778
610703.54	4206637.12	37223.80363	0.00721	0.09070	1.03032E-05	0.00722
610702.86	4206621.23	35066.21535	0.00679	0.08649	9.82500E-06	0.00680
610746.81	4206643.04	40750.49325	0.00790	0.08617	9.78864E-06	0.00791
610777.57	4206642.19	42091.77501	0.00816	0.08128	9.23316E-06	0.00817
610792.28	4206642.53	42715.42297	0.00828	0.07908	8.98324E-06	0.00829
610749.18	4206621.57	37457.44852	0.00726	0.08035	9.12751E-06	0.00727
610749.85	4206602.98	34798.62786	0.00674	0.07598	8.63109E-06	0.00675
610784.16	4206612.28	37202.69684	0.00721	0.07337	8.33460E-06	0.00722
610793.29	4206597.74	35131.11052	0.00681	0.06915	7.85523E-06	0.00682
610810.19	4206587.6	33776.1834	0.00654	0.06505	7.38948E-06	0.00655
610820	4206591.66	34406.17921	0.00667	0.06449	7.32586E-06	0.00667
610837.24	4206594.36	34761.38354	0.00674	0.06268	7.12025E-06	0.00674
610839.6	4206619.21	39067.0039	0.00757	0.06684	7.59282E-06	0.00758
610834.02	4206641.52	43492.53642	0.00843	0.07224	8.20624E-06	0.00844
610850.25	4206642.36	43790.24536	0.00849	0.06982	7.93134E-06	0.00849
610877.29	4206642.87	43727.49021	0.00847	0.06559	7.45082E-06	0.00848
610878.14	4206626.14	39966.11395	0.00774	0.06241	7.08958E-06	0.00775
610876.79	4206607.54	36326.53172	0.00704	0.05948	6.75674E-06	0.00705
610878.31	4206588.95	33054.6512	0.00640	0.05643	6.41027E-06	0.00641
610762.87	4206569.18	30761.47556	0.00596	0.06758	7.67688E-06	0.00597
610782.13	4206564.1	30412.47013	0.00589	0.06440	7.31564E-06	0.00590
610796.84	4206560.56	30070.4038	0.00583	0.06208	7.05210E-06	0.00583
610815.77	4206555.48	29403.75244	0.00570	0.05904	6.70676E-06	0.00570
610832.16	4206557.01	29470.30812	0.00571	0.05744	6.52501E-06	0.00572
610851.43	4206553.96	28751.16902	0.00557	0.05478	6.22284E-06	0.00558
610880.67	4206553.63	27883.03797	0.00540	0.05141	5.84002E-06	0.00541
610878.31	4206570.7	30265.4028	0.00586	0.05386	6.11833E-06	0.00587
610826.68	4206687.13	54367.43798	0.01053	0.08515	9.67278E-06	0.01054
610844.57	4206686.3	54896.27181	0.01064	0.08147	9.25474E-06	0.01065
610865.21	4206687.68	56053.23738	0.01086	0.07792	8.85147E-06	0.01087
610880.9	4206686.3	56042.84051	0.01086	0.07464	8.47887E-06	0.01087
610899.62	4206692.91	58745.69975	0.01138	0.07275	8.26417E-06	0.01139
610919.16	4206680.8	54223.38352	0.01051	0.06649	7.55306E-06	0.01051
610925.76	4206661.81	47570.76252	0.00922	0.06169	7.00779E-06	0.00922
610927.41	4206642.54	41981.31342	0.00813	0.05812	6.60225E-06	0.00814
610925.49	4206624.93	37861.53892	0.00734	0.05566	6.32280E-06	0.00734
610924.94	4206606.21	34053.66645	0.00660	0.05306	6.02745E-06	0.00660
610922.73	4206591.08	31483.95573	0.00610	0.05130	5.82752E-06	0.00611
610923.56	4206571.81	28462.30973	0.00552	0.04884	5.54807E-06	0.00552
610925.21	4206554.47	26021.75028	0.00504	0.04662	5.29589E-06	0.00505
610956.31	4206695.94	58822.83114	0.01140	0.06271	7.12366E-06	0.01141
611019.34	4206696.76	48100.5473	0.00932	0.05150	5.85024E-06	0.00933
610959.06	4206679.15	51337.24586	0.00995	0.05923	6.72834E-06	0.00995
610962.92	4206664.84	45780.00227	0.00887	0.05627	6.39210E-06	0.00888

610963.47	4206649.42	41025.02309	0.00795	0.05389	6.12174E-06	0.00796
610965.12	4206634.29	36954.55772	0.00716	0.05158	5.85933E-06	0.00717
610958.24	4206619.42	34291.60374	0.00664	0.05056	5.74346E-06	0.00665
610960.44	4206603.74	31072.41235	0.00602	0.04833	5.49014E-06	0.00603
610962.64	4206588.32	28320.98529	0.00549	0.04628	5.25726E-06	0.00549
610968.15	4206560.25	24102.17663	0.00467	0.04283	4.86536E-06	0.00468
610949.71	4206557.5	24975.96654	0.00484	0.04439	5.04257E-06	0.00484
611017.96	4206681.9	42582.15639	0.00825	0.04978	5.65485E-06	0.00826
611021.54	4206668.69	37566.13954	0.00728	0.04762	5.40948E-06	0.00728
611017.69	4206653.83	34394.28659	0.00666	0.04648	5.27998E-06	0.00667
611013.83	4206638.97	31694.34276	0.00614	0.04538	5.15503E-06	0.00615
611013.01	4206623.83	28900.6545	0.00560	0.04391	4.98804E-06	0.00561
611009.98	4206609.24	26871.59244	0.00521	0.04285	4.86763E-06	0.00521
611008.05	4206597.68	25389.50684	0.00492	0.04199	4.76993E-06	0.00492
611001.72	4206570.71	22619.35628	0.00438	0.04028	4.57568E-06	0.00439
611017.41	4206575.11	21624.86172	0.00419	0.03901	4.43141E-06	0.00419
611033.38	4206575.66	20075.97497	0.00389	0.03742	4.25080E-06	0.00389
611050.71	4206697.86	38778.57723	0.00751	0.04666	5.30043E-06	0.00752
611054.84	4206681.9	32967.84087	0.00639	0.04433	5.03575E-06	0.00639
611052.92	4206671.17	30966.35843	0.00600	0.04349	4.94033E-06	0.00601
611054.84	4206650.8	26645.12487	0.00516	0.04130	4.69155E-06	0.00517
611055.39	4206637.59	24494.19038	0.00475	0.04006	4.55069E-06	0.00475
611053.47	4206624.65	23047.28217	0.00447	0.03918	4.45073E-06	0.00447
611054.84	4206605.02	20570.82989	0.00399	0.03748	4.25761E-06	0.00399
611055.39	4206591.81	19195.55292	0.00372	0.03644	4.13947E-06	0.00372
611053.47	4206578.87	18260.3659	0.00354	0.03570	4.05541E-06	0.00354
611057.6	4206560.98	16329.90839	0.00316	0.03389	3.84980E-06	0.00317
611058.15	4206547.77	15394.52564	0.00298	0.03301	3.74983E-06	0.00299
611056.22	4206534.84	14763.2683	0.00286	0.03239	3.67940E-06	0.00286
611021.82	4206533.19	17386.88933	0.00337	0.03532	4.01224E-06	0.00337
611022.37	4206519.98	16389.64749	0.00318	0.03436	3.90319E-06	0.00318
611020.44	4206507.04	15670.68359	0.00304	0.03368	3.82594E-06	0.00304
611028.7	4206492.18	14272.53142	0.00277	0.03208	3.64419E-06	0.00277
611029.25	4206478.97	13538.407	0.00262	0.03124	3.54877E-06	0.00263
611027.32	4206466.03	13009.59242	0.00252	0.03061	3.47720E-06	0.00252
611022.09	4206449.79	12554.74612	0.00243	0.03014	3.42381E-06	0.00244
611030.62	4206435.76	11591.03645	0.00225	0.02888	3.28068E-06	0.00225
611028.7	4206422.82	11202.94734	0.00217	0.02840	3.22615E-06	0.00217
611057.32	4206514.2	13551.88641	0.00263	0.03113	3.53627E-06	0.00263
611057.87	4206500.99	12876.33954	0.00250	0.03039	3.45221E-06	0.00250
611055.94	4206488.05	12404.36614	0.00240	0.02982	3.38746E-06	0.00241
611057.32	4206473.74	11709.9801	0.00227	0.02895	3.28863E-06	0.00227
611057.87	4206460.53	11170.45267	0.00216	0.02825	3.20911E-06	0.00217
611055.94	4206447.59	10814.52514	0.00210	0.02780	3.15799E-06	0.00210
611056.49	4206431.35	10254.9905	0.00199	0.02705	3.07280E-06	0.00199
611057.04	4206418.14	9821.82103	0.00190	0.02642	3.00123E-06	0.00191
611055.12	4206405.21	9528.63674	0.00185	0.02599	2.95238E-06	0.00185
611056.49	4206387.04	8994.97791	0.00174	0.02520	2.86264E-06	0.00175
611057.04	4206373.83	8653.06264	0.00168	0.02467	2.80244E-06	0.00168
611055.12	4206360.9	8413.25521	0.00163	0.02428	2.75813E-06	0.00163
611021.82	4206405.3	10879.40919	0.00211	0.02804	3.18526E-06	0.00211
611031.45	4206391.54	10062.72703	0.00195	0.02682	3.04667E-06	0.00195
611035.85	4206363.74	9121.85554	0.00177	0.02538	2.88309E-06	0.00177
611085.12	4206364.57	7505.74257	0.00145	0.02301	2.61386E-06	0.00146
611087.59	4206415.48	8470.93614	0.00164	0.02466	2.80130E-06	0.00164
611084.02	4206444.38	9349.95129	0.00181	0.02596	2.94898E-06	0.00181
611084.84	4206458.69	9707.06212	0.00188	0.02649	3.00918E-06	0.00188
611083.19	4206470.8	10164.06918	0.00197	0.02712	3.08075E-06	0.00197
611082.64	4206503.28	11354.57135	0.00220	0.02875	3.26591E-06	0.00220
611082.37	4206515.94	11869.0734	0.00230	0.02938	3.33748E-06	0.00230
611082.92	4206532.18	12522.60556	0.00243	0.03016	3.42608E-06	0.00243
611082.64	4206545.66	13176.04522	0.00255	0.03089	3.50901E-06	0.00256
611105.48	4206544.56	11293.66231	0.00219	0.02917	3.31362E-06	0.00219
611103.83	4206534.65	11052.02087	0.00214	0.02880	3.27159E-06	0.00214
611079.89	4206585.02	15827.51696	0.00307	0.03364	3.82140E-06	0.00307
611081.54	4206569.88	14695.15262	0.00285	0.03257	3.69985E-06	0.00285
611081.82	4206624.84	18765.37318	0.00364	0.03622	4.11448E-06	0.00364
611082.37	4206611.63	17546.92229	0.00340	0.03524	4.00315E-06	0.00340
611080.44	4206598.69	16777.68316	0.00325	0.03454	3.92364E-06	0.00325
611104.66	4206591.53	13550.83331	0.00263	0.03194	3.62828E-06	0.00263
611105.48	4206580.53	12905.09375	0.00250	0.03122	3.54650E-06	0.00250
611103.56	4206567.59	12487.33523	0.00242	0.03066	3.48288E-06	0.00242
611103.83	4206624.29	15643.91191	0.00303	0.03413	3.87706E-06	0.00304
611102.73	4206612.45	15019.33813	0.00291	0.03346	3.80095E-06	0.00291
611104.11	4206601.99	14210.36064	0.00275	0.03265	3.70894E-06	0.00276
611079.89	4206667.5	23999.3731	0.00465	0.03981	4.52229E-06	0.00465
611080.44	4206654.29	22130.93919	0.00429	0.03864	4.38938E-06	0.00429
611078.51	4206641.35	20963.87112	0.00406	0.03781	4.29510E-06	0.00407
611100.53	4206702.18	23872.71511	0.00463	0.04048	4.59840E-06	0.00463
611079.61	4206696.95	29111.63718	0.00564	0.04255	4.83355E-06	0.00565
611077.69	4206684.01	27179.4212	0.00527	0.04156	4.72109E-06	0.00527
611102.46	4206679.15	20541.92063	0.00398	0.03828	4.34849E-06	0.00398
611101.91	4206689.61	21865.27988	0.00424	0.03922	4.45527E-06	0.00424
611103.83	4206657.41	18168.44554	0.00352	0.03645	4.14061E-06	0.00352
611103.28	4206667.86	19224.07892	0.00373	0.03730	4.23716E-06	0.00373
611104.11	4206634.56	16317.55526	0.00316	0.03479	3.95204E-06	0.00317
611103.56	4206645.02	17186.37854	0.00333	0.03557	4.04064E-06	0.00333
611128.88	4206688.23	16323.43473	0.00316	0.03636	4.13038E-06	0.00317
611128.33	4206698.69	17210.25239	0.00333	0.03722	4.22808E-06	0.00334
611128.88	4206664.29	14748.1293	0.00286	0.03462	3.93272E-06	0.00286
611128.33	4206674.74	15484.93498	0.00300	0.03541	4.02247E-06	0.00300
611130.81	4206643.09	13334.15606	0.00258	0.03306	3.75551E-06	0.00259
611130.25	4206653.55	13950.01104	0.00270	0.03378	3.83730E-06	0.00271
611130.25	4206618.32	12238.4759	0.00237	0.03160	3.58966E-06	0.00238
611129.7	4206628.78	12767.43322	0.00247	0.03226	3.66464E-06	0.00248
611147.87	4206682.18	13261.52384	0.00257	0.03425	3.89069E-06	0.00257
611147.32	4206692.63	13896.7327	0.00269	0.03503	3.97930E-06	0.00270
611148.7	4206659.88	12110.69507	0.00235	0.03271	3.71575E-06	0.00235
611148.14	4206670.34	12645.3411	0.00245	0.03343	3.79754E-06	0.00245
611149.25	4206637.31	11147.62961	0.00216	0.03130	3.55558E-06	0.00216
611148.7	4206647.77	11604.66033	0.00225	0.03196	3.63056E-06	0.00225
611149.25	4206613.37	10313.88938	0.00200	0.02997	3.40450E-06	0.00200
611148.7	4206623.83	10712.0523	0.00208	0.03058	3.47379E-06	0.00208
611175.39	4206687.68	10800.2715	0.00209	0.03248	3.68963E-06	0.00210
611174.84	4206698.14	11299.87058	0.00219	0.03320	3.77142E-06	0.00219
611195.21	4206682.45	9248.92955	0.00179	0.03080	3.49878E-06	0.00180
611194.66	4206692.91	9658.47036	0.00187	0.03146	3.57376E-06	0.00188
611175.39	4206664.01	9921.11404	0.00192	0.03104	3.52605E-06	0.00193
611174.84	4206674.47	10329.36739	0.00200	0.03169	3.59989E-06	0.00201
611194.93	4206660.98	8596.54806	0.00167	0.02961	3.36360E-06	0.00167
611194.38	4206671.44	8938.36847	0.00173	0.03022	3.43290E-06	0.00174
611174.29	4206641.44	9292.40254	0.00180	0.02984	3.38973E-06	0.00180
611173.74	4206651.9	9646.78602	0.00187	0.03045	3.45903E-06	0.00187
611195.21	4206638.14	7981.73413	0.00155	0.02841	3.22729E-06	0.00155
611194.66	4206648.6	8273.66175	0.00160	0.02897	3.29090E-06	0.00161
611176.49	4206618.6	8537.23296	0.00165	0.02852	3.23978E-06	0.00166
611175.94	4206629.06	8840.00462	0.00171	0.02908	3.30340E-06	0.00172
611195.48	4206613.64	7417.72661	0.00144	0.02721	3.09097E-06	0.00144
611194.93	4206624.1	7668.94527	0.00149	0.02773	3.15004E-06	0.00149
610704.74	4206583.83	30671.62614	0.00594	0.07717	8.76627E-06	0.00595
610703.54	4206601.74	32679.46503	0.00633	0.08147	9.25474E-06	0.00634
610705.38	4206547.72	26937.05895	0.00522	0.06954	7.89953E-06	0.00523
610704.19	4206565.63	28740.48264	0.00557	0.07343	8.34142E-06	0.00558
610705.71	4206512.75	23912.66462	0.00463	0.06356	7.22022E-06	0.00464
610704.51	4206530.66	25381.85963	0.00492	0.06662	7.56783E-06	0.00493
610707	4206477.13	21302.59168	0.00413	0.05832	6.62497E-06	0.00413
610705.8	4206495.04	22541.80472	0.00437	0.06085	6.91237E-06	0.00437
610707.65	4206443.46	19109.05832	0.00370	0.05388	6.12060E-06	0.00371
610706.45	4206461.36	20247.20744	0.00392	0.05631	6.39664E-06	0.00393

610707.65	4206407.84	17093.8706	0.00331	0.04981	5.65826E-06	0.00332
610706.45	4206425.74	18055.38493	0.00350	0.05186	5.89114E-06	0.00350
610703.12	4206366.39	15132.69992	0.00293	0.04615	5.24250E-06	0.00294
610703.86	4206388.18	16117.99599	0.00312	0.04813	5.46742E-06	0.00313
610754.28	4206417.88	17790.02285	0.00345	0.04760	5.40721E-06	0.00345
610746.28	4206438.7	19059.26618	0.00369	0.05046	5.73210E-06	0.00370
610765.61	4206379.99	15701.58657	0.00304	0.04314	4.90057E-06	0.00305
610764.41	4206397.9	16642.64447	0.00322	0.04489	5.09936E-06	0.00323
610803.82	4206388.73	15906.68489	0.00308	0.04141	4.70405E-06	0.00309
610802.62	4206406.64	16900.78067	0.00327	0.04307	4.89262E-06	0.00328
610755.3	4206360.77	14851.69821	0.00288	0.04224	4.79833E-06	0.00288
610768.58	4206436.87	18957.03571	0.00367	0.04861	5.52195E-06	0.00368
610791.24	4206432.98	18593.68009	0.00360	0.04643	5.27430E-06	0.00361
610806.14	4206426.83	18066.00074	0.00350	0.04466	5.07324E-06	0.00351
610805.81	4206369.51	14930.83551	0.00289	0.03973	4.51320E-06	0.00290
610804.52	4206353.65	14229.13689	0.00276	0.03866	4.39166E-06	0.00276
610847.59	4206432.33	17791.23814	0.00345	0.04195	4.76539E-06	0.00345
610865.4	4206429.74	17251.84456	0.00334	0.04036	4.58477E-06	0.00335
610882.56	4206432.66	17011.63989	0.00330	0.03931	4.46549E-06	0.00330
610902.31	4206429.42	16261.86369	0.00315	0.03757	4.26784E-06	0.00316
610924.98	4206459.53	17361.25502	0.00336	0.03804	4.32123E-06	0.00337
610924.33	4206496.45	20121.18355	0.00390	0.04105	4.66315E-06	0.00390
610925.3	4206509.08	21181.51376	0.00410	0.04210	4.78243E-06	0.00411
610748.5	4206527.86	25942.00336	0.00503	0.06171	7.01006E-06	0.00503
610766.31	4206522.35	25592.99357	0.00496	0.05907	6.71017E-06	0.00497
610782.5	4206515.88	25071.87112	0.00486	0.05663	6.43299E-06	0.00486
610798.04	4206512.32	24737.06254	0.00479	0.05471	6.21489E-06	0.00480
610819.74	4206511.02	24480.7105	0.00474	0.05254	5.96838E-06	0.00475
610836.25	4206510.7	24215.02943	0.00469	0.05089	5.78095E-06	0.00470
610856.33	4206507.46	23477.99535	0.00455	0.04853	5.51286E-06	0.00455
610879.97	4206511.99	23243.25844	0.00450	0.04671	5.30611E-06	0.00451
610880.94	4206492.56	21424.49094	0.00415	0.04465	5.07210E-06	0.00416
610879.32	4206474.75	20010.39643	0.00388	0.04312	4.89830E-06	0.00388
610855.36	4206477.67	20874.98631	0.00404	0.04550	5.16866E-06	0.00405
610836.25	4206476.37	21141.57507	0.00410	0.04699	5.33792E-06	0.00410
610782.34	4206485.12	22357.17282	0.00433	0.05268	5.98428E-06	0.00434
610763.88	4206489.33	22667.16729	0.00439	0.05480	6.22511E-06	0.00440
610817.96	4206481.23	21806.38009	0.00423	0.04911	5.57874E-06	0.00423
610798.85	4206479.93	21871.62291	0.00424	0.05063	5.75141E-06	0.00424
610748.5	4206494.51	23003.93099	0.00446	0.05687	6.46026E-06	0.00446
610921.74	4206437.52	16113.56678	0.00312	0.03670	4.16901E-06	0.00313
610845.31	4206376.74	14741.49129	0.00286	0.03765	4.27692E-06	0.00286
610861.92	4206386.8	14938.93871	0.00289	0.03729	4.23603E-06	0.00290
610870.34	4206398.97	15390.47193	0.00298	0.03761	4.27238E-06	0.00299
610902.16	4206393.59	14376.3715	0.00279	0.03514	3.99179E-06	0.00279
610920.18	4206388.2	13641.50561	0.00264	0.03361	3.81799E-06	0.00265
610921.11	4206378.14	13178.27362	0.00255	0.03296	3.74415E-06	0.00256
610917.84	4206361.53	12585.0059	0.00244	0.03222	3.66009E-06	0.00244
610845.78	4206356.85	13850.68352	0.00268	0.03634	4.12811E-06	0.00269
610867.77	4206365.04	13826.50015	0.00268	0.03550	4.03269E-06	0.00268
610886.72	4206365.28	13462.38958	0.00261	0.03436	3.90319E-06	0.00261
610903.57	4206363.4	13004.28368	0.00252	0.03320	3.77142E-06	0.00252
610950.59	4206356.39	11534.62521	0.00224	0.02998	3.40563E-06	0.00224
610965.33	4206355.45	11083.50768	0.00215	0.02905	3.29999E-06	0.00215
610995.74	4206351.01	10034.05866	0.00194	0.02703	3.07052E-06	0.00195
610987.56	4206368.32	10836.7017	0.00210	0.02833	3.21820E-06	0.00210
610970.95	4206394.76	12350.88022	0.00239	0.03070	3.48742E-06	0.00240
610968.61	4206411.13	13114.90247	0.00254	0.03173	3.60443E-06	0.00254
610949.42	4206401.77	13362.19168	0.00259	0.03248	3.68963E-06	0.00259
610960.42	4206425.64	14086.66587	0.00273	0.03312	3.76233E-06	0.00273
610944.04	4206426.34	14721.19258	0.00285	0.03432	3.89865E-06	0.00286
610966.5	4206439.67	14554.40893	0.00282	0.03352	3.80777E-06	0.00282
610964.39	4206457.22	15604.77679	0.00302	0.03478	3.95090E-06	0.00303
610948.24	4206509.73	20131.31432	0.00390	0.04010	4.55524E-06	0.00391
610965.72	4206510.7	19278.74692	0.00374	0.03863	4.38825E-06	0.00374
610983.53	4206509.08	18128.43848	0.00351	0.03696	4.19854E-06	0.00352
610970.26	4206484.15	17039.35682	0.00330	0.03622	4.11448E-06	0.00331
610963.46	4206468.93	16354.70504	0.00317	0.03564	4.04859E-06	0.00317
611085.12	4206428.94	8898.46279	0.00172	0.02530	2.87400E-06	0.00173
611083.18	4206485.29	10658.65635	0.00207	0.02783	3.16140E-06	0.00207
611221.38	4206686.44	8079.97453	0.00157	0.02942	3.34202E-06	0.00157
611220.83	4206696.9	8445.90623	0.00164	0.03003	3.41131E-06	0.00164
611221.77	4206676.32	7767.38607	0.00151	0.02885	3.27727E-06	0.00151
611240.27	4206683.06	7270.61065	0.00141	0.02818	3.20116E-06	0.00141
611239.72	4206693.52	7594.43941	0.00147	0.02875	3.26591E-06	0.00147
611240.67	4206672.94	6993.02691	0.00136	0.02765	3.14095E-06	0.00136
611222.17	4206653.03	7162.19627	0.00139	0.02766	3.14209E-06	0.00139
611221.62	4206663.49	7434.22334	0.00144	0.02820	3.20343E-06	0.00144
611222.17	4206640.92	6894.75361	0.00134	0.02708	3.07620E-06	0.00134
611241.86	4206650.05	6441.13617	0.00125	0.02652	3.01259E-06	0.00125
611241.31	4206660.5	6680.6455	0.00129	0.02702	3.06939E-06	0.00130
611241.86	4206637.94	6202.91428	0.00120	0.02598	2.95125E-06	0.00120
611266.92	4206689.62	6652.70379	0.00129	0.02712	3.08075E-06	0.00129
611266.37	4206700.08	6966.52103	0.00135	0.02766	3.14209E-06	0.00135
611267.32	4206679.9	6396.46694	0.00124	0.02664	3.02622E-06	0.00124
611268.31	4206659.19	5924.69993	0.00115	0.02567	2.91603E-06	0.00115
611267.76	4206669.65	6152.73903	0.00119	0.02616	2.97169E-06	0.00120
611268.31	4206647.08	5698.67901	0.00110	0.02516	2.85810E-06	0.00111
611221.89	4206630.7	6694.73814	0.00130	0.02663	3.02509E-06	0.00130
611241.58	4206627.72	6023.76667	0.00117	0.02555	2.90240E-06	0.00117
611268.53	4206635.97	5502.84984	0.00107	0.02469	2.80471E-06	0.00107
611269.52	4206627.02	5338.01335	0.00103	0.02430	2.76040E-06	0.00104
611269.32	4206615.69	5171.78822	0.00100	0.02387	2.71156E-06	0.00100
611235.12	4206603.35	5795.9609	0.00112	0.02484	2.82175E-06	0.00113
611125.73	4206584.46	11202.28902	0.00217	0.02992	3.39882E-06	0.00217
611137.26	4206585.26	10323.11577	0.00200	0.02924	3.32157E-06	0.00200
611149	4206584.06	9449.50924	0.00183	0.02849	3.23638E-06	0.00183
611160.43	4206587.05	8758.09951	0.00170	0.02794	3.17390E-06	0.00170
611172.17	4206585.85	8026.94082	0.00156	0.02721	3.09097E-06	0.00156
611185.49	4206588.64	7388.84606	0.00143	0.02661	3.02281E-06	0.00143
611197.23	4206587.44	6836.07478	0.00132	0.02596	2.94898E-06	0.00133
611128.02	4206567.75	10441.47495	0.00202	0.02893	3.28636E-06	0.00203
611139.75	4206566.56	9582.33013	0.00186	0.02818	3.20116E-06	0.00186
611150.09	4206568.95	8972.64726	0.00174	0.02771	3.14777E-06	0.00174
611161.83	4206567.75	8220.86094	0.00159	0.02697	3.06371E-06	0.00160
611171.17	4206569.15	7731.42255	0.00150	0.02652	3.01259E-06	0.00150
611182.91	4206567.95	7123.82914	0.00138	0.02586	2.93762E-06	0.00138
611194.44	4206567.75	6616.24147	0.00128	0.02528	2.87173E-06	0.00128
611206.18	4206566.56	6148.71018	0.00119	0.02469	2.80471E-06	0.00119
611216.92	4206568.35	5813.89479	0.00113	0.02428	2.75813E-06	0.00113
611228.65	4206567.16	5450.81181	0.00106	0.02373	2.69565E-06	0.00106
611204.89	4206588.04	6538.86643	0.00127	0.02561	2.90922E-06	0.00127
611238.7	4206569.35	5216.94937	0.00101	0.02340	2.65817E-06	0.00101
611266.54	4206574.12	4679.57012	0.00091	0.02250	2.55593E-06	0.00091
611265.15	4206558.8	4530.06256	0.00088	0.02204	2.50368E-06	0.00088
611262.16	4206541.9	4405.30372	0.00085	0.02161	2.45483E-06	0.00086
611129.21	4206540.11	9455.59241	0.00183	0.02743	3.11596E-06	0.00184
611140.94	4206538.92	8692.76582	0.00168	0.02671	3.03417E-06	0.00169
611155.66	4206540.91	7910.76213	0.00153	0.02602	2.95579E-06	0.00154
611167.4	4206539.71	7291.64898	0.00141	0.02538	2.88309E-06	0.00142
611181.32	4206541.7	6713.53164	0.00130	0.02483	2.82061E-06	0.00130
611193.05	4206540.51	6242.97296	0.00121	0.02428	2.75813E-06	0.00121
611205.78	4206542.1	5816.99245	0.00113	0.02379	2.70247E-06	0.00113
611219.3	4206542.89	5403.66789	0.00105	0.02325	2.64113E-06	0.00105
611232.23	4206542.7	5052.02318	0.00098	0.02273	2.58206E-06	0.00098
611243.97	4206541.5	4762.60753	0.00092	0.02224	2.52639E-06	0.00093
611204.79	4206362.96	4077.86391	0.00079	0.01845	2.09586E-06	0.00079
611349.5	4206372.82	2323.17244	0.00045	0.01531	1.73917E-06	0.00045
611313.91	4206380.65	2628.75743	0.00051	0.01620	1.84027E-06	0.00051

611310.48	4206419.52	2852.95672	0.00055	0.01708	1.94023E-06	0.00055
611267.05	4206500.67	3932.82017	0.00076	0.02022	2.29693E-06	0.00076
611497.56	4206304.83	1558.2644	0.00030	0.01214	1.37907E-06	0.00030
611419.07	4206310.55	1784.09213	0.00035	0.01322	1.50175E-06	0.00035
611041.07	4206301.25	7613.1557	0.00148	0.02298	2.61046E-06	0.00148
611069.15	4206301.53	6884.87243	0.00133	0.02177	2.47300E-06	0.00134
611083.74	4206300.98	6498.245	0.00126	0.02116	2.40371E-06	0.00126
611100.26	4206300.7	6066.67724	0.00118	0.02051	2.32987E-06	0.00118
611111.82	4206300.15	5762.79019	0.00112	0.02005	2.27762E-06	0.00112
611123.93	4206299.33	5448.59957	0.00106	0.01958	2.22423E-06	0.00106
611137.15	4206300.43	5143.64031	0.00100	0.01917	2.17765E-06	0.00100
611150.91	4206299.88	4821.35059	0.00093	0.01873	2.12767E-06	0.00094
611164.12	4206300.7	4530.19754	0.00088	0.01833	2.08223E-06	0.00088
610871.77	4206303.18	11415.50487	0.00221	0.03169	3.59989E-06	0.00222
610919.67	4206299.6	10442.61995	0.00202	0.02899	3.29317E-06	0.00203
610946.1	4206301.25	9937.67366	0.00193	0.02770	3.14663E-06	0.00193
610968.4	4206299.6	9379.18111	0.00182	0.02644	3.00350E-06	0.00182
610997.85	4206300.15	8683.07105	0.00168	0.02497	2.83651E-06	0.00169
610800.68	4206302.27	12258.77529	0.00238	0.03546	4.02815E-06	0.00238
610345.98	4206368.37	10059.08123	0.00195	0.06420	7.29292E-06	0.00196
610371.57	4206456.46	12233.30687	0.00237	0.07752	8.80603E-06	0.00238
610277.64	4206458.4	9878.35063	0.00191	0.08130	9.23543E-06	0.00192
610294.49	4206372.25	9272.85385	0.00180	0.06703	7.61440E-06	0.00180
610341.12	4206437.68	11065.89657	0.00214	0.07503	8.52318E-06	0.00215
610508	4206352.9	12511.62996	0.00242	0.05508	6.25692E-06	0.00243
610536.83	4206358.41	13056.76671	0.00253	0.05389	6.12174E-06	0.00254
610518.69	4206394.68	13855.6608	0.00268	0.05939	6.74652E-06	0.00269
610506.38	4206428.37	14617.89702	0.00283	0.06459	7.33722E-06	0.00284
610407.88	4206300.63	9913.94492	0.00192	0.05376	6.10697E-06	0.00193
610413.21	4206694.6	17522.76097	0.00340	0.14058	1.59695E-05	0.00341
610451.93	4206697.23	20354.15801	0.00394	0.13937	1.58320E-05	0.00396
610448.83	4206717.31	20459.7314	0.00396	0.14922	1.69509E-05	0.00398
610438.65	4207091.1	9402.84612	0.00182	1.78562	2.02841E-04	0.00202
610449.61	4207060.72	11256.00003	0.00218	1.07703	1.22347E-04	0.00230
610454.96	4207045.53	12322.56933	0.00239	0.89094	1.01208E-04	0.00249
610451.02	4207000.82	14391.93124	0.00279	0.57871	6.57397E-05	0.00285
610446.24	4206963.41	15896.45106	0.00308	0.44186	5.01939E-05	0.00313
610457.21	4206987.6	15590.27335	0.00302	0.52213	5.93123E-05	0.00308
610421.77	4207012.91	11927.24101	0.00231	0.64193	7.29213E-05	0.00238
610421.49	4207040.47	10746.51686	0.00208	0.84116	9.55532E-05	0.00218
610362.43	4207105.72	6643.78968	0.00129	2.52879	2.87263E-04	0.00157
610378.74	4207077.32	7823.12025	0.00152	1.37515	1.56213E-04	0.00167
610364.4	4207040.75	8479.04684	0.00164	0.84341	9.58088E-05	0.00174
610319.96	4207038.22	7275.76429	0.00141	0.82185	9.33596E-05	0.00150
610334.3	4207091.94	6357.68994	0.00123	1.81298	2.05949E-04	0.00144
610329.8	4207109.1	5903.89611	0.00114	2.78443	3.16303E-04	0.00146
610350.94	4206635.65	13554.28791	0.00263	0.12108	1.37543E-05	0.00264
610530.61	4206613.88	22829.66895	0.00442	0.10230	1.16210E-05	0.00444
610531.61	4206594.02	21962.0131	0.00426	0.09664	1.09780E-05	0.00427
610537.23	4206566.38	21002.84514	0.00407	0.08927	1.01408E-05	0.00408
610565.36	4206541.23	21060.25934	0.00408	0.08135	9.24111E-06	0.00409
610627.57	4206493.91	20761.83381	0.00402	0.06744	7.66097E-06	0.00403
610633.2	4206515.75	22273.16141	0.00432	0.07067	8.02789E-06	0.00432
610666.29	4206515.75	23225.47223	0.00450	0.06772	7.69278E-06	0.00451
610646.1	4206559.1	25850.80471	0.00501	0.07786	8.84465E-06	0.00502
610646.77	4206594.51	28885.72232	0.00560	0.08584	9.75116E-06	0.00561
610578.59	4206617.02	26124.41176	0.00506	0.09879	1.12222E-05	0.00507
610620.29	4206619.66	29174.34639	0.00565	0.09560	1.08599E-05	0.00566
610608.05	4206563.07	24229.78425	0.00469	0.08236	9.35584E-06	0.00470
610608.05	4206545.2	23158.49518	0.00449	0.07936	9.01505E-06	0.00450
610623.6	4206564.4	25082.37179	0.00486	0.08150	9.25815E-06	0.00487
610623.6	4206546.53	23847.43895	0.00462	0.07774	8.83102E-06	0.00463
610563.04	4206597.82	23971.60258	0.00464	0.09491	1.07815E-05	0.00466
610587.86	4206596.83	25374.37818	0.00492	0.09231	1.04861E-05	0.00493
610564.7	4206580.61	23102.57739	0.00448	0.09032	1.02601E-05	0.00449
610589.52	4206581.61	24489.33116	0.00475	0.08831	1.00317E-05	0.00476
610734.02	4206917.57	200977.4594	0.03894	0.29497	3.35077E-05	0.03898
610754.27	4206913.28	214033.8922	0.04147	0.28039	3.18514E-05	0.04150
610779.19	4206906.67	221919.6793	0.04300	0.25962	2.94920E-05	0.04303
610824.35	4206899.66	245250.8952	0.04752	0.22811	2.59126E-05	0.04755
610820.85	4206880.97	193566.8159	0.03751	0.20512	2.33010E-05	0.03753
610811.11	4206855.27	147225.3402	0.02853	0.18137	2.06031E-05	0.02855
610717.67	4206895.37	143900.0578	0.02788	0.26302	2.98783E-05	0.02791
610731.69	4206880.97	137948.3885	0.02673	0.23855	2.70985E-05	0.02676
610715.72	4206858	107536.2567	0.02084	0.21528	2.44551E-05	0.02086
610721.17	4206833.47	94587.46409	0.01833	0.18928	2.15016E-05	0.01835
610758.94	4206842.03	114635.2732	0.02221	0.18673	2.12119E-05	0.02223
610767.51	4206870.84	147058.9532	0.02850	0.21432	2.43461E-05	0.02852
610865.01	4206886.37	240455.1931	0.04659	0.18907	2.14778E-05	0.04661
610909.74	4206874.67	241458.0362	0.04679	0.15210	1.72781E-05	0.04680
610860.95	4206838.53	144482.5254	0.02800	0.14672	1.66669E-05	0.02801
610888.6	4206829.18	142836.5405	0.02768	0.12891	1.46438E-05	0.02769
610790.87	4206784.8	86629.7035	0.01679	0.13449	1.52776E-05	0.01680
610816.95	4206785.58	91413.12259	0.01771	0.12762	1.44972E-05	0.01773
610850.44	4206785.19	96808.38093	0.01876	0.11750	1.33476E-05	0.01877
610898.33	4206797.26	116300.2954	0.02254	0.10805	1.22741E-05	0.02255
610894.83	4206755.59	87642.90467	0.01698	0.09214	1.04668E-05	0.01699
610897.55	4206780.9	104082.6361	0.02017	0.10111	1.14858E-05	0.02018
610886.81	4206880.99	242047.3387	0.04690	0.17098	1.94228E-05	0.04692
611023.86	4206760.97	101250.1885	0.01962	0.06073	6.89874E-06	0.01963
611041.14	4206759.94	87295.06282	0.01692	0.05684	6.45685E-06	0.01692
611061.35	4206762.7	71959.76634	0.01394	0.05329	6.05358E-06	0.01395
610754.89	4206782.37	78838.02197	0.01528	0.14226	1.61603E-05	0.01529
610844.56	4206719.24	65508.14968	0.01269	0.09154	1.03987E-05	0.01270
610513.96	4206710.62	25833.20947	0.00501	0.14021	1.59274E-05	0.00502
610591.87	4206713.73	35488.0171	0.00688	0.13349	1.51640E-05	0.00689
610668.23	4206716.46	46000.52778	0.00891	0.12416	1.41042E-05	0.00893
610545.12	4206684.51	28038.25143	0.00543	0.12540	1.42451E-05	0.00545
610637.84	4206683.34	37639.51428	0.00729	0.11481	1.30421E-05	0.00731
610512.01	4206642.44	22895.3248	0.00444	0.11318	1.28569E-05	0.00445
610584.86	4206649.06	29272.52979	0.00567	0.10832	1.23048E-05	0.00568
610665.5	4206649.06	36017.19136	0.00698	0.09930	1.12802E-05	0.00699
609975.26	4207082.82	2715.13954	0.00053	2.09483	2.37966E-04	0.00076
609945.83	4207083.32	2570.12741	0.00050	2.17245	2.46784E-04	0.00074
609822.62	4207152.66	1807.41888	0.00035	3.10285	3.52474E-04	0.00070
609804.66	4207094.79	1980.62612	0.00038	3.50258	3.97882E-04	0.00078
609772.24	4207094.79	1885.09059	0.00037	3.62627	4.11933E-04	0.00078
609700.41	4207156.65	1510.14548	0.00029	2.34552	2.66444E-04	0.00056
609633.07	4207074.84	1528.93082	0.00030	1.93448	2.19751E-04	0.00052
609555.75	4207074.84	1393.77314	0.00027	2.23890	2.54332E-04	0.00052
609620.1	4207148.17	1261.97639	0.00024	2.54726	2.89361E-04	0.00053
609556.25	4207145.67	1184.92479	0.00023	2.52249	2.86547E-04	0.00052
609502.88	4207137.69	1144.31453	0.00022	2.82097	3.20453E-04	0.00054
610698.46	4207080.47	129212.2053	0.02504	1.42255	1.61597E-04	0.02520
610693.24	4207063.42	132350.0499	0.02565	1.08921	1.23731E-04	0.02577
610706.16	4207019.7	208570.1515	0.04041	0.65339	7.42231E-05	0.04049
610680.04	4207080.09	82257.23261	0.01594	1.41486	1.60724E-04	0.01610
610682.42	4207046.11	114707.2231	0.02223	0.87226	9.90860E-05	0.02233
CONCUNIT ug/	m^3					
DEPUNIT g/m^	2					

Oakley Main Street Project

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Infant

Cancer Potency Factor:	1.1	$(mg/kg\text{-}day)^{-1}$
Exposure Frequency	350	days/year
Averaging Period	25550	days

Year Construction	Year	Unit DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
Scenario 1 (construction beginning at the start of the 3rd trimester)							
2019	3rd Trimester	1	10	361	0.85	0.25	11.6
2019	1	1	10	1090	0.85	0.25	35.5
2020	1	1	10	1090	0.85	0.50	69.4
Scenario 2 (construction beginning at zero days old)							
2019	1	1	10	1090	0.85	0.50	70.4
2020	1	1	10	1090	0.85	0.50	69.4

BAAQMD 2016. Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines.

Oakley Main Street Project **No Mitigation at Sensitive Receptors**

Estimated Cancer Risks from Construction DPM - Infant Receptors

		Scenario 1 (construction beginning at the start of the 3rd trimester)				Scenario 2 (construction beginning at zero days old)			
X	Y	Infant Cancer Risk (3rd Trimester) 2019	Infant Cancer Risk (year 1) 2019	Infant Cancer Risk (year 1) 2020	Total Cancer Risk	Infant Cancer Risk (year 1) 2019	Infant Cancer Risk (year 1) 2020	Total Cancer Risk	
(m)	(m)	(/million)	(/million)	(/million)	(/million)	(/million)	(/million)	(/million)	
611337.43	4207107.53	0.224	0.689	0.971	1.88386	1.366	0.971	2.33694	**Scenario 1**
611316.93	4207114.47	0.250	0.768	1.083	2.10107	1.524	1.083	2.60640	**Maximum Cancer Risk**
611309.05	4207127.4	0.262	0.804	1.134	2.19965	1.595	1.134	2.72872	6.40
611308.42	4207149.48	0.262	0.804	1.133	2.19903	1.595	1.133	2.72805	**BAAQMD threshold of significance**
611309.05	4207170.29	0.257	0.787	1.109	2.15299	1.562	1.109	2.67102	10
611311.88	4207184.48	0.249	0.763	1.074	2.08546	1.513	1.074	2.58733	**Exceed thresholds?**
611315.04	4207203.09	0.237	0.728	1.025	1.99013	1.444	1.025	2.46916	No
611359.51	4207125.19	0.206	0.631	0.890	1.72737	1.253	0.890	2.14287	**Scenario 2**
611364.56	4207101.22	0.195	0.598	0.843	1.63563	1.186	0.843	2.02902	**Maximum Cancer Risk**
611377.49	4207091.76	0.180	0.552	0.778	1.51047	1.095	0.778	1.87376	7.94
611401.77	4207088.6	0.159	0.489	0.690	1.33793	0.970	0.690	1.65973	**BAAQMD threshold of significance**
611416.28	4207100.59	0.153	0.470	0.662	1.28561	0.932	0.662	1.59485	10
611421.64	4207123.93	0.156	0.478	0.674	1.30872	0.949	0.674	1.62355	**Exceed thresholds?**
611438.99	4207115.41	0.143	0.438	0.618	1.19848	0.869	0.618	1.48680	No
611456.97	4207120.14	0.134	0.410	0.578	1.12116	0.813	0.578	1.39089	
611355.09	4207167.14	0.212	0.651	0.917	1.77935	1.291	0.917	2.20748	
611375.59	4207165.56	0.195	0.598	0.843	1.63616	1.187	0.843	2.02983	
611396.09	4207163.35	0.179	0.550	0.775	1.50526	1.092	0.775	1.86744	
611411.55	4207163.35	0.169	0.517	0.729	1.41481	1.026	0.729	1.75523	
611426.06	4207165.56	0.159	0.489	0.689	1.33729	0.970	0.689	1.65907	
611452.55	4207164.3	0.144	0.441	0.621	1.20620	0.875	0.621	1.49645	
611311.25	4207222.96	0.229	0.703	0.989	1.92128	1.395	0.989	2.38385	
611312.2	4207239.05	0.218	0.669	0.941	1.82813	1.327	0.941	2.26837	
611355.41	4207245.99	0.189	0.580	0.816	1.58424	1.150	0.816	1.96573	
611377.8	4207244.72	0.177	0.545	0.766	1.48807	1.080	0.766	1.84638	
611390.73	4207246.62	0.170	0.522	0.735	1.42709	1.036	0.735	1.77072	
611410.92	4207249.14	0.160	0.490	0.689	1.33885	0.972	0.689	1.66123	
611433.31	4207250.09	0.149	0.458	0.644	1.25159	0.909	0.644	1.55295	
611447.82	4207253.24	0.142	0.437	0.615	1.19456	0.867	0.615	1.48219	
611469.58	4207243.15	0.135	0.414	0.582	1.13091	0.821	0.582	1.40319	
611477.47	4207217.28	0.133	0.409	0.575	1.11741	0.811	0.575	1.38638	
611357.62	4207196.47	0.205	0.630	0.886	1.72106	1.249	0.886	2.13528	
611374.96	4207196.78	0.192	0.590	0.831	1.61379	1.171	0.831	2.00219	
611394.83	4207198.68	0.179	0.548	0.772	1.49851	1.087	0.772	1.85916	
611412.5	4207197.1	0.168	0.515	0.725	1.40698	1.021	0.725	1.74561	
611433.63	4207195.52	0.155	0.477	0.672	1.30457	0.947	0.672	1.61855	
611452.87	4207194.58	0.145	0.446	0.627	1.21809	0.884	0.627	1.51125	
611471.47	4207199.62	0.136	0.418	0.588	1.14149	0.828	0.588	1.41623	
611466.43	4207168.08	0.137	0.420	0.591	1.14754	0.833	0.591	1.42368	
611488.19	4207163.04	0.126	0.385	0.543	1.05337	0.764	0.543	1.30685	
611506.8	4207160.2	0.117	0.359	0.505	0.98035	0.711	0.505	1.21626	
611505.54	4207184.17	0.120	0.368	0.519	1.00738	0.731	0.519	1.24983	
611509.32	4207196.47	0.119	0.366	0.516	1.00148	0.727	0.516	1.24253	
611505.22	4207219.81	0.122	0.373	0.526	1.02073	0.741	0.526	1.26644	
611510.27	4207235.89	0.120	0.367	0.516	1.00249	0.728	0.516	1.24385	
611495.76	4207248.82	0.124	0.381	0.536	1.04142	0.756	0.536	1.29216	
611311.25	4207260.81	0.203	0.624	0.877	1.70440	1.238	0.877	2.11498	
611314.41	4207277.84	0.190	0.582	0.818	1.58939	1.155	0.818	1.97236	
611358.56	4207260.49	0.181	0.554	0.779	1.51386	1.099	0.779	1.87847	
611368.02	4207274.69	0.170	0.521	0.732	1.42224	1.033	0.732	1.76483	
611389.16	4207283.52	0.158	0.483	0.679	1.32039	0.959	0.679	1.63846	
611400.19	4207295.19	0.149	0.457	0.643	1.24894	0.907	0.643	1.54984	
611412.5	4207316	0.137	0.422	0.592	1.15097	0.836	0.592	1.42832	
611435.52	4207292.03	0.138	0.424	0.596	1.15857	0.841	0.596	1.43765	
611451.6	4207278.47	0.136	0.417	0.587	1.14054	0.828	0.587	1.41523	
611474.63	4207278.79	0.128	0.393	0.552	1.07277	0.779	0.552	1.33114	
611485.35	4207263.33	0.126	0.388	0.546	1.06074	0.770	0.546	1.31617	
611328.6	4207291.72	0.175	0.537	0.754	1.46642	1.065	0.754	1.81981	
611312.83	4207306.23	0.170	0.521	0.731	1.42093	1.033	0.731	1.76348	
611302.11	4207319.47	0.162	0.498	0.698	1.35854	0.988	0.698	1.68616	
611310.62	4207336.5	0.149	0.456	0.640	1.24483	0.905	0.640	1.54510	
611321.66	4207346.6	0.141	0.432	0.605	1.17700	0.856	0.605	1.46093	
611339.01	4207346.91	0.138	0.424	0.594	1.15646	0.841	0.594	1.43540	
611357.62	4207322.94	0.148	0.455	0.639	1.24205	0.903	0.639	1.54147	
611371.49	4207335.87	0.139	0.425	0.597	1.16032	0.843	0.597	1.44007	
611372.76	4207355.11	0.129	0.395	0.554	1.07837	0.784	0.554	1.33844	
611421.64	4207330.2	0.130	0.398	0.559	1.08717	0.790	0.559	1.34919	
611423.22	4207349.12	0.122	0.376	0.528	1.02597	0.746	0.528	1.27330	
611449.08	4207328.93	0.124	0.379	0.533	1.03526	0.752	0.533	1.28474	
611438.36	4207309.06	0.132	0.406	0.571	1.10935	0.806	0.571	1.37663	
611468.95	4207336.5	0.117	0.358	0.503	0.97798	0.711	0.503	1.21366	
611483.46	4207328.62	0.115	0.354	0.497	0.96567	0.702	0.497	1.19835	
611504.27	4207316.95	0.112	0.345	0.485	0.94224	0.684	0.485	1.16924	
611518.78	4207305.59	0.110	0.339	0.476	0.92567	0.672	0.476	1.14865	
611531.08	4207292.98	0.109	0.333	0.469	0.91084	0.661	0.469	1.13022	
611540.23	4207275.63	0.108	0.330	0.464	0.90165	0.655	0.464	1.11879	
611310.9	4207395.01	0.112	0.344	0.481	0.93782	0.683	0.481	1.16430	
611307.77	4207409.9	0.104	0.319	0.447	0.87004	0.634	0.447	1.08023	
611306.78	4207428.47	0.095	0.291	0.406	0.79144	0.577	0.406	0.98272	
611310.76	4207450.93	0.085	0.260	0.363	0.70787	0.516	0.363	0.87903	
611307.77	4207464.05	0.079	0.243	0.339	0.66094	0.482	0.339	0.82081	
611355.09	4207392.69	0.112	0.344	0.482	0.93743	0.682	0.482	1.16369	
611398.22	4207398.65	0.106	0.327	0.458	0.89080	0.648	0.458	1.10575	
611386.69	4207411.77	0.102	0.313	0.438	0.85198	0.620	0.438	1.05763	
611357.67	4207410.98	0.103	0.317	0.444	0.86429	0.629	0.444	1.07296	
611353.89	4207429.07	0.095	0.293	0.409	0.79734	0.581	0.409	0.98993	
611362.24	4207449.15	0.087	0.267	0.374	0.72844	0.531	0.374	0.90444	
611385.9	4207431.06	0.094	0.289	0.404	0.78706	0.573	0.404	0.97711	
611420.29	4207390.9	0.107	0.329	0.462	0.89866	0.654	0.462	1.11543	
611436.99	4207401.83	0.102	0.312	0.437	0.85124	0.619	0.437	1.05658	
611444.34	4207420.32	0.095	0.291	0.408	0.79395	0.578	0.408	0.98552	
611441.16	4207444.37	0.087	0.268	0.375	0.73067	0.532	0.375	0.90705	
611446.33	4207459.28	0.083	0.253	0.354	0.69018	0.502	0.354	0.85681	
611459.25	4207384.54	0.105	0.321	0.450	0.87608	0.637	0.450	1.08734	
611466.61	4207407.4	0.097	0.297	0.417	0.81045	0.589	0.417	1.00594	
611472.97	4207420.72	0.092	0.283	0.397	0.77247	0.562	0.397	0.95882	
611470.58	4207443.78	0.086	0.264	0.369	0.71856	0.523	0.369	0.89197	
611470.58	4207461.87	0.081	0.248	0.347	0.67585	0.492	0.347	0.83901	
611351.29	4207475.53	0.077	0.236	0.330	0.64283	0.469	0.330	0.79826	
611374.78	4207476.37	0.077	0.237	0.332	0.64653	0.471	0.332	0.80280	
611395.9	4207472.82	0.079	0.242	0.338	0.65946	0.480	0.338	0.81880	
611389.14	4207448.15	0.088	0.269	0.376	0.73208	0.533	0.376	0.90889	
611439.49	4207477.38	0.077	0.237	0.332	0.64614	0.471	0.332	0.80220	
611467.04	4207481.61	0.076	0.232	0.324	0.63149	0.460	0.324	0.78399	
611302.63	4207484.99	0.071	0.218	0.303	0.59140	0.432	0.303	0.73454	
611303.64	4207503.41	0.065	0.198	0.276	0.53926	0.394	0.276	0.66984	
611310.74	4207524.36	0.059	0.180	0.251	0.48978	0.358	0.251	0.60842	
611334.05	4207523.85	0.060	0.185	0.258	0.50410	0.368	0.258	0.62615	
611356.02	4207522.5	0.062	0.191	0.265	0.51798	0.378	0.265	0.64334	
611371.73	4207521.49	0.063	0.194	0.270	0.52688	0.384	0.270	0.65436	
611394.04	4207526.89	0.063	0.192	0.268	0.52198	0.381	0.268	0.64824	
611406.88	4207522.5	0.064	0.197	0.275	0.53553	0.390	0.275	0.66503	
611430.71	4207520.47	0.065	0.200	0.279	0.54473	0.397	0.279	0.67641	
611444.56	4207523.01	0.065	0.199	0.277	0.54091	0.394	0.277	0.67166	
611466.19	4207524.87	0.064	0.198	0.276	0.53844	0.392	0.276	0.66856	
611485.45	4207527.74	0.064	0.196	0.273	0.53279	0.388	0.273	0.66152	
611511.14	4207529.43	0.063	0.194	0.271	0.52799	0.385	0.271	0.65554	
611524.65	4207513.21	0.066	0.204	0.285	0.55505	0.404	0.285	0.68908	
611552.87	4207524.02	0.063	0.194	0.272	0.52995	0.386	0.272	0.65792	

611553.21	4207500.7	0.068	0.208	0.292	0.56812	0.413	0.292	0.70526
611524.32	4207495.8	0.070	0.215	0.301	0.58682	0.427	0.301	0.72850
611523.13	4207474.34	0.075	0.230	0.322	0.62743	0.457	0.322	0.77887
611552.03	4207482.79	0.072	0.220	0.308	0.59861	0.436	0.308	0.74307
611519.59	4207462.51	0.078	0.239	0.335	0.65188	0.474	0.335	0.80919
611554.73	4207464.37	0.075	0.230	0.323	0.62808	0.457	0.323	0.77962
611524.99	4207440.55	0.083	0.253	0.355	0.69064	0.502	0.355	0.85725
611555.24	4207445.11	0.079	0.242	0.339	0.65976	0.480	0.339	0.81891
611555.58	4207427.03	0.082	0.253	0.354	0.68904	0.501	0.354	0.85521
611557.94	4207398.3	0.087	0.268	0.376	0.73138	0.532	0.376	0.90771
611522.63	4207422.64	0.087	0.266	0.374	0.72667	0.528	0.374	0.90194
611522.63	4207401.35	0.092	0.281	0.394	0.76676	0.557	0.394	0.95164
611542.4	4207388.34	0.091	0.281	0.394	0.76573	0.557	0.394	0.95033
611511.98	4207382.93	0.097	0.298	0.419	0.81420	0.592	0.419	1.01048
611508.43	4207369.24	0.101	0.310	0.435	0.84499	0.614	0.435	1.04868
611535.81	4207363.5	0.097	0.298	0.419	0.81380	0.591	0.419	1.00994
611548.65	4207344.4	0.098	0.300	0.422	0.81947	0.595	0.422	1.01693
611559.8	4207244.2	0.103	0.315	0.444	0.86144	0.625	0.444	1.06885
611558.62	4207227.64	0.103	0.316	0.444	0.86272	0.626	0.444	1.07041
611555.24	4207203.99	0.103	0.316	0.444	0.86281	0.626	0.444	1.07050
611557.27	4207183.2	0.100	0.308	0.434	0.84209	0.611	0.434	1.04478
611554.23	4207164.62	0.099	0.304	0.429	0.83206	0.604	0.429	1.03231
611557.77	4207142.31	0.094	0.290	0.408	0.79292	0.575	0.408	0.98374
611547.97	4207121.19	0.094	0.288	0.405	0.78678	0.571	0.405	0.97610
611546.96	4207102.77	0.090	0.275	0.388	0.75265	0.546	0.388	0.93375
611551.18	4207088.92	0.085	0.260	0.366	0.71068	0.516	0.366	0.88168
611555.91	4207066.78	0.077	0.236	0.333	0.64658	0.469	0.333	0.80215
611476.99	4207114.19	0.122	0.373	0.526	1.02009	0.740	0.526	1.26551
611498.11	4207124.33	0.114	0.350	0.493	0.95754	0.695	0.493	1.18792
611517.37	4207121.63	0.105	0.323	0.455	0.88333	0.641	0.455	1.09586
611516.7	4207103.71	0.101	0.310	0.437	0.84728	0.615	0.437	1.05113
611397.15	4207001.31	0.119	0.367	0.517	1.00288	0.727	0.517	1.24406
611405.21	4206965.9	0.095	0.291	0.411	0.79680	0.578	0.411	0.98844
611417.66	4206992.52	0.103	0.317	0.447	0.86778	0.629	0.447	1.07648
611434.86	4206992.14	0.095	0.292	0.411	0.79831	0.579	0.411	0.99032
611454.74	4206982.79	0.083	0.254	0.358	0.69433	0.504	0.358	0.86135
611462.1	4206968.28	0.074	0.227	0.320	0.62043	0.450	0.320	0.76968
611453.75	4206949.79	0.069	0.211	0.297	0.57659	0.418	0.297	0.71530
611447.79	4206931.5	0.063	0.193	0.271	0.52656	0.382	0.271	0.65323
611475.02	4206936.87	0.058	0.178	0.250	0.48603	0.353	0.250	0.60297
611496.69	4206939.06	0.054	0.165	0.233	0.45171	0.328	0.233	0.56040
611513	4206936.67	0.050	0.153	0.215	0.41802	0.303	0.215	0.51861
611530.89	4206938.86	0.047	0.145	0.204	0.39635	0.288	0.204	0.49173
611546.99	4206935.68	0.044	0.134	0.189	0.36707	0.266	0.189	0.45541
611404.05	4206946.01	0.084	0.259	0.365	0.70871	0.514	0.365	0.87917
611405.64	4206926.73	0.074	0.226	0.318	0.61772	0.448	0.318	0.76631
611403.65	4206905.06	0.063	0.195	0.274	0.53265	0.386	0.274	0.66080
611410.81	4206890.15	0.055	0.168	0.237	0.45979	0.334	0.237	0.57042
611437.25	4206884.98	0.047	0.144	0.203	0.39490	0.287	0.203	0.48992
611453.35	4206887.96	0.045	0.138	0.195	0.37864	0.275	0.195	0.46976
611472.24	4206888.75	0.042	0.130	0.182	0.35421	0.257	0.182	0.43946
611492.32	4206887.16	0.039	0.119	0.168	0.32536	0.236	0.168	0.40368
611509.62	4206887.76	0.037	0.112	0.158	0.30745	0.223	0.158	0.38145
611527.31	4206889.15	0.035	0.107	0.151	0.29230	0.212	0.151	0.36266
611546.6	4206887.56	0.032	0.099	0.140	0.27157	0.197	0.140	0.33695
611377.6	4206837.66	0.041	0.125	0.176	0.34120	0.248	0.176	0.42333
611377.41	4206826.33	0.037	0.113	0.159	0.30870	0.224	0.159	0.38301
611377.6	4206816.19	0.034	0.103	0.145	0.28209	0.205	0.145	0.35002
611407.63	4206828.51	0.033	0.103	0.144	0.28053	0.204	0.144	0.34808
611437.05	4206820.96	0.028	0.087	0.123	0.23829	0.173	0.123	0.29567
611474.23	4206850.98	0.032	0.097	0.137	0.26581	0.193	0.137	0.32981
611478.2	4206824.54	0.026	0.079	0.111	0.21518	0.156	0.111	0.26701
611495.9	4206825.93	0.025	0.075	0.106	0.20624	0.150	0.106	0.25591
611509.22	4206853.17	0.029	0.088	0.124	0.24119	0.175	0.124	0.29927
611526.32	4206824.34	0.022	0.068	0.096	0.18709	0.136	0.096	0.23216
611558.33	4206844.02	0.023	0.072	0.101	0.19600	0.142	0.101	0.24321
611554.15	4206823.34	0.021	0.063	0.089	0.17253	0.125	0.089	0.21409
611558.53	4206886.77	0.031	0.095	0.134	0.26018	0.189	0.134	0.32282
611375.81	4206780.4	0.025	0.077	0.108	0.21033	0.153	0.108	0.26100
611387.74	4206763.9	0.021	0.066	0.092	0.17919	0.130	0.092	0.22238
611411.4	4206781.59	0.023	0.070	0.098	0.19011	0.138	0.098	0.23592
611412.6	4206752.37	0.018	0.057	0.079	0.15452	0.112	0.079	0.19178
611440.43	4206779.41	0.021	0.063	0.089	0.17216	0.125	0.089	0.21364
611471.44	4206781.39	0.019	0.059	0.083	0.16056	0.117	0.083	0.19926
611469.26	4206740.64	0.015	0.046	0.064	0.12473	0.091	0.064	0.15481
611499.68	4206782.19	0.018	0.055	0.077	0.15020	0.109	0.077	0.18641
611536.85	4206780.8	0.016	0.050	0.070	0.13615	0.099	0.070	0.16897
611523.14	4206742.03	0.013	0.041	0.057	0.11137	0.081	0.057	0.13823
611556.54	4206774.04	0.015	0.046	0.064	0.12488	0.091	0.064	0.15499
611323.92	4206674.63	0.016	0.049	0.069	0.13473	0.098	0.069	0.16723
611335.65	4206699.68	0.017	0.053	0.074	0.14374	0.105	0.074	0.17840
611362.49	4206701.67	0.016	0.049	0.069	0.13403	0.097	0.069	0.16635
611381.38	4206700.48	0.015	0.046	0.065	0.12650	0.092	0.065	0.15702
611398.08	4206697.1	0.014	0.044	0.061	0.11920	0.087	0.061	0.14796
611417.17	4206699.88	0.014	0.042	0.059	0.11492	0.084	0.059	0.14264
611433.87	4206699.09	0.013	0.040	0.056	0.10988	0.080	0.056	0.13640
611454.55	4206702.27	0.013	0.039	0.055	0.10609	0.077	0.055	0.13169
611471.44	4206700.08	0.012	0.037	0.052	0.10108	0.074	0.052	0.12547
611490.53	4206698.29	0.011	0.035	0.049	0.09614	0.070	0.049	0.11935
611510.61	4206699.68	0.011	0.034	0.048	0.09267	0.067	0.048	0.11504
611531.49	4206698.09	0.011	0.032	0.045	0.08817	0.064	0.045	0.10946
611545.01	4206701.47	0.010	0.032	0.045	0.08711	0.063	0.045	0.10813
611559.92	4206697.3	0.010	0.030	0.043	0.08311	0.060	0.043	0.10317
611335.26	4206651.57	0.014	0.044	0.062	0.12029	0.088	0.062	0.14931
611359.11	4206645.41	0.013	0.040	0.056	0.10997	0.080	0.056	0.13651
611376.21	4206651.17	0.013	0.039	0.055	0.10669	0.078	0.055	0.13243
611398.68	4206649.98	0.012	0.037	0.051	0.10008	0.073	0.051	0.12424
611414.58	4206650.18	0.011	0.035	0.049	0.09613	0.070	0.049	0.11934
611432.87	4206648.59	0.011	0.034	0.047	0.09142	0.067	0.047	0.11348
611471.64	4206649.78	0.010	0.031	0.043	0.08377	0.061	0.043	0.10399
611491.92	4206651.57	0.010	0.030	0.041	0.08053	0.059	0.041	0.09998
611511.41	4206651.77	0.009	0.028	0.040	0.07729	0.056	0.040	0.09596
611527.51	4206650.77	0.009	0.027	0.038	0.07452	0.054	0.038	0.09252
611546.99	4206651.97	0.009	0.026	0.037	0.07195	0.052	0.037	0.08932
611325.51	4206617.57	0.013	0.041	0.058	0.11234	0.082	0.058	0.13944
611344.2	4206617.57	0.013	0.039	0.055	0.10617	0.077	0.055	0.13179
611357.52	4206616.78	0.012	0.037	0.052	0.10195	0.074	0.052	0.12655
611368.66	4206620.55	0.012	0.037	0.051	0.09980	0.073	0.051	0.12389
611381.98	4206618.76	0.011	0.035	0.049	0.09578	0.070	0.049	0.11891
611395.9	4206619.76	0.011	0.034	0.048	0.09256	0.067	0.048	0.11490
611407.82	4206620.75	0.011	0.033	0.046	0.08998	0.065	0.046	0.11170
611421.14	4206619.96	0.010	0.032	0.044	0.08665	0.063	0.044	0.10757
611435.46	4206618.76	0.010	0.031	0.043	0.08350	0.061	0.043	0.10367
611472.44	4206621.55	0.009	0.028	0.040	0.07717	0.056	0.040	0.09581
611485.36	4206619.96	0.009	0.027	0.038	0.07466	0.054	0.038	0.09269
611496.5	4206622.94	0.009	0.027	0.038	0.07341	0.053	0.038	0.09114
611508.82	4206622.14	0.009	0.026	0.037	0.07118	0.052	0.037	0.08837
611522.14	4206620.55	0.008	0.025	0.035	0.06885	0.050	0.035	0.08548
611532.88	4206620.95	0.008	0.025	0.035	0.06741	0.049	0.035	0.08369
611546	4206621.94	0.008	0.024	0.034	0.06582	0.048	0.034	0.08172
611557.13	4206620.16	0.008	0.024	0.033	0.06407	0.047	0.033	0.07955
611327.7	4206564.89	0.012	0.035	0.050	0.09643	0.070	0.050	0.11970
611341.02	4206566.28	0.011	0.034	0.048	0.09399	0.068	0.048	0.11668
611355.14	4206572.84	0.011	0.034	0.047	0.09194	0.067	0.047	0.11413
611369.25	4206575.02	0.011	0.033	0.046	0.08895	0.065	0.046	0.11042
611384.16	4206573.04	0.010	0.031	0.044	0.08497	0.062	0.044	0.10549
611395.1	4206574.63	0.010	0.030	0.043	0.08281	0.060	0.043	0.10280
611407.23	4206574.43	0.010	0.029	0.041	0.08018	0.058	0.041	0.09954
611420.15	4206574.03	0.009	0.028	0.040	0.07751	0.056	0.040	0.09623

611431.88	4206569.86	0.009	0.027	0.038	0.07480	0.054	0.038	0.09287
611473.63	4206575.22	0.008	0.025	0.035	0.06911	0.050	0.035	0.08581
611487.55	4206572.24	0.008	0.024	0.034	0.06660	0.049	0.034	0.08269
611500.27	4206575.22	0.008	0.024	0.033	0.06499	0.047	0.033	0.08069
611512.6	4206575.82	0.008	0.023	0.032	0.06321	0.046	0.032	0.07849
611524.73	4206574.43	0.007	0.023	0.032	0.06143	0.045	0.032	0.07627
611537.85	4206576.22	0.007	0.022	0.031	0.05999	0.044	0.031	0.07449
611548.59	4206575.22	0.007	0.022	0.030	0.05857	0.043	0.030	0.07273
611558.72	4206577.01	0.007	0.021	0.030	0.05760	0.042	0.030	0.07152
611331.88	4206537.85	0.011	0.033	0.046	0.08944	0.065	0.046	0.11103
611332.67	4206513.19	0.010	0.031	0.043	0.08443	0.061	0.043	0.10481
611355.54	4206518.56	0.010	0.030	0.041	0.08054	0.059	0.041	0.09999
611357.72	4206542.42	0.010	0.031	0.043	0.08435	0.061	0.043	0.10472
611371.84	4206555.94	0.010	0.031	0.043	0.08372	0.061	0.043	0.10394
611370.05	4206542.02	0.010	0.030	0.042	0.08163	0.059	0.042	0.10135
611383.57	4206548.58	0.010	0.029	0.041	0.07991	0.058	0.041	0.09921
611397.09	4206548.58	0.009	0.028	0.040	0.07724	0.056	0.040	0.09589
611409.22	4206546.79	0.009	0.027	0.038	0.07481	0.054	0.038	0.09288
611419.95	4206547.59	0.009	0.027	0.038	0.07308	0.053	0.038	0.09073
611432.28	4206550.37	0.009	0.026	0.037	0.07151	0.052	0.037	0.08878
611349.17	4206492.32	0.009	0.028	0.040	0.07749	0.056	0.040	0.09621
611363.69	4206486.95	0.009	0.027	0.038	0.07406	0.054	0.038	0.09195
611375.81	4206491.32	0.009	0.027	0.037	0.07253	0.053	0.037	0.09004
611387.94	4206500.67	0.009	0.026	0.037	0.07176	0.052	0.037	0.08910
611399.08	4206500.87	0.008	0.026	0.036	0.06997	0.051	0.036	0.08687
611409.61	4206504.25	0.008	0.025	0.035	0.06884	0.050	0.035	0.08547
611422.54	4206503.25	0.008	0.025	0.034	0.06683	0.049	0.034	0.08297
611437.65	4206504.45	0.008	0.024	0.033	0.06504	0.047	0.033	0.08075
611374.82	4206454.74	0.008	0.025	0.034	0.06719	0.049	0.034	0.08343
611385.76	4206467.07	0.008	0.025	0.035	0.06724	0.049	0.035	0.08349
611397.68	4206472.44	0.008	0.024	0.034	0.06625	0.048	0.034	0.08226
611411.2	4206477.21	0.008	0.024	0.033	0.06502	0.047	0.033	0.08073
611424.33	4206476.41	0.008	0.023	0.032	0.06320	0.046	0.032	0.07847
611437.25	4206478	0.007	0.023	0.032	0.06183	0.045	0.032	0.07677
611425.52	4206431.08	0.007	0.021	0.030	0.05780	0.042	0.030	0.07176
611476.42	4206548.78	0.008	0.024	0.033	0.06508	0.047	0.033	0.08081
611488.54	4206547.99	0.008	0.023	0.032	0.06331	0.046	0.032	0.07861
611501.27	4206548.38	0.007	0.023	0.032	0.06150	0.045	0.032	0.07636
611512	4206545.8	0.007	0.022	0.031	0.05974	0.044	0.031	0.07417
611524.33	4206546.4	0.007	0.021	0.030	0.05826	0.042	0.030	0.07234
611536.06	4206546.79	0.007	0.021	0.029	0.05691	0.041	0.029	0.07066
611548.98	4206548.98	0.007	0.020	0.029	0.05564	0.041	0.029	0.06909
611559.92	4206549.18	0.007	0.020	0.028	0.05445	0.040	0.028	0.06761
611477.81	4206502.66	0.007	0.022	0.031	0.05985	0.044	0.031	0.07432
611479.99	4206477.61	0.007	0.021	0.029	0.05706	0.042	0.029	0.07085
611491.13	4206505.84	0.007	0.022	0.030	0.05854	0.043	0.030	0.07269
611502.46	4206505.04	0.007	0.021	0.029	0.05711	0.042	0.029	0.07091
611491.72	4206477.8	0.007	0.020	0.029	0.05578	0.041	0.029	0.06926
611503.06	4206479	0.007	0.020	0.028	0.05463	0.040	0.028	0.06783
611514.39	4206503.05	0.007	0.020	0.028	0.05556	0.040	0.028	0.06898
611515.98	4206477.8	0.006	0.020	0.027	0.05312	0.039	0.027	0.06597
611528.31	4206505.84	0.006	0.020	0.028	0.05417	0.039	0.028	0.06726
611528.9	4206476.41	0.006	0.019	0.027	0.05169	0.038	0.027	0.06418
611540.63	4206508.22	0.006	0.019	0.027	0.05299	0.039	0.027	0.06580
611538.25	4206476.41	0.006	0.019	0.026	0.05076	0.037	0.026	0.06303
611552.56	4206505.84	0.006	0.019	0.026	0.05156	0.038	0.026	0.06403
611550.77	4206475.02	0.006	0.018	0.025	0.04946	0.036	0.025	0.06142
611479.99	4206431.88	0.006	0.019	0.027	0.05250	0.038	0.027	0.06518
611493.12	4206432.08	0.006	0.019	0.026	0.05134	0.037	0.026	0.06375
611504.65	4206432.67	0.006	0.019	0.026	0.05038	0.037	0.026	0.06256
611518.56	4206430.88	0.006	0.018	0.025	0.04905	0.036	0.025	0.06091
611529.5	4206430.29	0.006	0.018	0.025	0.04810	0.035	0.025	0.05973
611542.42	4206435.46	0.006	0.017	0.024	0.04742	0.035	0.024	0.05888
611552.76	4206433.07	0.006	0.017	0.024	0.04642	0.034	0.024	0.05765
611479.8	4206406.03	0.006	0.018	0.026	0.05020	0.037	0.026	0.06233
611494.51	4206406.43	0.006	0.018	0.025	0.04904	0.036	0.025	0.06090
611506.24	4206406.83	0.006	0.018	0.025	0.04815	0.035	0.025	0.05980
611518.56	4206405.44	0.006	0.017	0.024	0.04710	0.034	0.024	0.05849
611530.89	4206404.64	0.006	0.017	0.024	0.04613	0.034	0.024	0.05728
611542.62	4206407.03	0.005	0.017	0.023	0.04544	0.033	0.023	0.05642
611555.15	4206405.44	0.005	0.016	0.023	0.04443	0.032	0.023	0.05517
611529.9	4206362.49	0.005	0.016	0.022	0.04320	0.031	0.022	0.05365
611544.81	4206364.08	0.005	0.016	0.022	0.04239	0.031	0.022	0.05265
611558.72	4206362.89	0.005	0.015	0.021	0.04148	0.030	0.021	0.05151
610703.71	4206675.32	0.134	0.412	0.580	1.12569	0.817	0.580	1.39668
610721.12	4206689.86	0.147	0.452	0.637	1.23622	0.897	0.637	1.53377
610736.84	4206686.65	0.150	0.460	0.648	1.25726	0.912	0.648	1.55984
610754.25	4206685.46	0.154	0.471	0.664	1.28887	0.935	0.664	1.59903
610771.15	4206685.12	0.157	0.483	0.680	1.32033	0.958	0.680	1.63803
610789.74	4206688.5	0.164	0.503	0.708	1.37473	0.997	0.708	1.70548
610807.15	4206686.31	0.165	0.508	0.715	1.38813	1.007	0.715	1.72208
610700.5	4206658.42	0.125	0.384	0.540	1.04865	0.761	0.540	1.30111
610703.54	4206637.12	0.116	0.356	0.501	0.97387	0.707	0.501	1.20832
610702.86	4206621.23	0.109	0.336	0.472	0.91746	0.666	0.472	1.13833
610746.81	4206643.04	0.127	0.390	0.549	1.06565	0.773	0.549	1.32212
610777.57	4206642.19	0.131	0.402	0.567	1.10043	0.798	0.567	1.36524
610792.28	4206642.53	0.133	0.408	0.575	1.11661	0.810	0.575	1.38529
610749.18	4206621.57	0.117	0.358	0.505	0.97957	0.711	0.505	1.21534
610749.85	4206602.98	0.108	0.333	0.469	0.91009	0.660	0.469	1.12914
610784.16	4206612.28	0.116	0.356	0.501	0.97267	0.706	0.501	1.20674
610793.29	4206597.74	0.109	0.336	0.473	0.91851	0.666	0.473	1.13954
610810.19	4206587.6	0.105	0.323	0.455	0.88303	0.641	0.455	1.09552
610820	4206591.66	0.107	0.329	0.463	0.89943	0.653	0.463	1.11586
610837.24	4206594.36	0.108	0.332	0.468	0.90863	0.659	0.468	1.12725
610839.6	4206619.21	0.122	0.373	0.526	1.02104	0.741	0.526	1.26669
610834.02	4206641.52	0.135	0.416	0.586	1.13662	0.824	0.586	1.41007
610850.25	4206642.36	0.136	0.418	0.590	1.14429	0.830	0.590	1.41957
610877.29	4206642.87	0.136	0.418	0.589	1.14250	0.829	0.589	1.41732
610878.14	4206626.14	0.124	0.382	0.538	1.04431	0.757	0.538	1.29553
610876.79	4206607.54	0.113	0.347	0.489	0.94931	0.689	0.489	1.17769
610878.31	4206588.95	0.103	0.316	0.445	0.86390	0.627	0.445	1.07174
610762.87	4206569.18	0.096	0.294	0.414	0.80452	0.584	0.414	0.99816
610782.13	4206564.1	0.095	0.291	0.410	0.79530	0.577	0.410	0.98672
610796.84	4206560.56	0.094	0.288	0.405	0.78630	0.571	0.405	0.97553
610815.77	4206555.48	0.092	0.281	0.396	0.76881	0.558	0.396	0.95382
610832.16	4206557.01	0.092	0.282	0.397	0.77048	0.559	0.397	0.95589
610851.43	4206553.96	0.090	0.275	0.387	0.75163	0.545	0.387	0.93250
610880.67	4206553.63	0.087	0.267	0.375	0.72888	0.529	0.375	0.90426
610878.31	4206570.7	0.094	0.289	0.408	0.79108	0.574	0.408	0.98142
610826.68	4206687.13	0.169	0.519	0.732	1.42063	1.030	0.732	1.76237
610844.57	4206686.3	0.171	0.524	0.739	1.43428	1.040	0.739	1.77928
610865.21	4206687.68	0.174	0.535	0.755	1.46431	1.062	0.755	1.81651
610880.9	4206686.3	0.174	0.535	0.754	1.46392	1.062	0.754	1.81601
610899.62	4206692.91	0.183	0.561	0.791	1.53432	1.112	0.791	1.90331
610919.16	4206680.8	0.169	0.518	0.730	1.41618	1.027	0.730	1.75675
610925.76	4206661.81	0.148	0.454	0.640	1.24256	0.901	0.640	1.54139
610927.41	4206642.54	0.131	0.401	0.565	1.09670	0.795	0.565	1.36047
610925.49	4206624.93	0.118	0.362	0.510	0.98919	0.717	0.510	1.22713
610924.94	4206606.21	0.106	0.325	0.459	0.88982	0.645	0.459	1.10387
610922.73	4206591.08	0.098	0.301	0.424	0.82276	0.597	0.424	1.02069
610923.56	4206571.81	0.089	0.272	0.383	0.74388	0.540	0.383	0.92285
610925.21	4206554.47	0.081	0.249	0.350	0.68017	0.493	0.350	0.84382
610956.31	4206695.94	0.183	0.561	0.792	1.53596	1.114	0.792	1.90528
611019.34	4206696.76	0.150	0.459	0.647	1.25599	0.911	0.647	1.55800
610959.06	4206679.15	0.160	0.490	0.691	1.34067	0.972	0.691	1.66306
610962.92	4206664.84	0.142	0.437	0.616	1.19567	0.867	0.616	1.48321
610963.47	4206649.42	0.128	0.392	0.552	1.07161	0.777	0.552	1.32933
610965.12	4206634.29	0.115	0.353	0.498	0.96540	0.700	0.498	1.19759
610958.24	4206619.42	0.107	0.328	0.462	0.89593	0.650	0.462	1.11143

610960.44	4206603.74	0.097	0.297	0.418	0.81192	0.589	0.418	1.00723
610962.64	4206588.32	0.088	0.271	0.381	0.74010	0.537	0.381	0.91815
610968.15	4206560.25	0.075	0.230	0.325	0.62998	0.457	0.325	0.78156
610949.71	4206557.5	0.078	0.239	0.336	0.65282	0.474	0.336	0.80989
611017.96	4206681.9	0.132	0.406	0.573	1.11205	0.806	0.573	1.37947
611021.54	4206668.69	0.117	0.359	0.506	0.98119	0.711	0.506	1.21717
611017.69	4206653.83	0.107	0.328	0.463	0.89845	0.652	0.463	1.11454
611013.83	4206638.97	0.099	0.303	0.427	0.82802	0.600	0.427	1.02718
611013.01	4206623.83	0.090	0.276	0.389	0.75513	0.548	0.389	0.93677
611009.98	4206609.24	0.084	0.257	0.362	0.70219	0.509	0.362	0.87111
611008.05	4206597.68	0.079	0.243	0.342	0.66351	0.481	0.342	0.82314
611001.72	4206570.71	0.070	0.216	0.305	0.59123	0.429	0.305	0.73348
611017.41	4206575.11	0.067	0.207	0.291	0.56525	0.410	0.291	0.70126
611033.38	4206575.66	0.063	0.192	0.270	0.52481	0.381	0.270	0.65109
611050.71	4206697.86	0.121	0.370	0.522	1.01277	0.734	0.522	1.25632
611054.84	4206681.9	0.103	0.315	0.444	0.86118	0.624	0.444	1.06831
611052.92	4206671.17	0.096	0.296	0.417	0.80897	0.587	0.417	1.00355
611054.84	4206650.8	0.083	0.255	0.359	0.69623	0.505	0.359	0.86371
611055.39	4206637.59	0.076	0.234	0.330	0.64010	0.464	0.330	0.79409
611053.47	4206624.65	0.072	0.220	0.310	0.60234	0.437	0.310	0.74726
611054.84	4206605.02	0.064	0.197	0.277	0.53771	0.390	0.277	0.66710
611055.39	4206591.81	0.060	0.184	0.259	0.50182	0.364	0.259	0.62257
611053.47	4206578.87	0.057	0.175	0.246	0.47741	0.346	0.246	0.59229
611057.6	4206560.98	0.051	0.156	0.220	0.42701	0.310	0.220	0.52978
611058.15	4206547.77	0.048	0.147	0.207	0.40259	0.292	0.207	0.49949
611056.22	4206534.84	0.046	0.141	0.199	0.38611	0.280	0.199	0.47904
611021.82	4206533.19	0.054	0.166	0.234	0.45462	0.330	0.234	0.56403
611022.37	4206519.98	0.051	0.157	0.221	0.42859	0.311	0.221	0.53174
611020.44	4206507.04	0.049	0.150	0.211	0.40982	0.297	0.211	0.50845
611028.7	4206492.18	0.044	0.137	0.192	0.37330	0.271	0.192	0.46316
611029.25	4206478.97	0.042	0.130	0.182	0.35413	0.257	0.182	0.43938
611027.32	4206466.03	0.041	0.125	0.175	0.34032	0.247	0.175	0.42225
611022.09	4206449.79	0.039	0.120	0.169	0.32845	0.238	0.169	0.40751
611030.62	4206435.76	0.036	0.111	0.156	0.30327	0.220	0.156	0.37629
611028.7	4206422.82	0.035	0.107	0.151	0.29314	0.213	0.151	0.36371
611057.32	4206514.2	0.042	0.130	0.183	0.35448	0.257	0.183	0.43981
611057.87	4206500.99	0.040	0.123	0.173	0.33684	0.244	0.173	0.41793
611055.94	4206488.05	0.039	0.119	0.167	0.32451	0.236	0.167	0.40264
611057.32	4206473.74	0.037	0.112	0.158	0.30638	0.222	0.158	0.38014
611057.87	4206460.53	0.035	0.107	0.150	0.29228	0.212	0.150	0.36266
611055.94	4206447.59	0.034	0.104	0.146	0.28299	0.205	0.146	0.35112
611056.49	4206431.35	0.032	0.098	0.138	0.26837	0.195	0.138	0.33299
611057.04	4206418.14	0.031	0.094	0.132	0.25706	0.187	0.132	0.31895
611055.12	4206405.21	0.030	0.091	0.128	0.24940	0.181	0.128	0.30945
611056.49	4206387.04	0.028	0.086	0.121	0.23545	0.171	0.121	0.29215
611057.04	4206373.83	0.027	0.083	0.117	0.22652	0.164	0.117	0.28107
611055.12	4206360.9	0.026	0.081	0.113	0.22025	0.160	0.113	0.27330
611021.82	4206405.3	0.034	0.104	0.147	0.28469	0.207	0.147	0.35323
611031.45	4206391.54	0.031	0.096	0.136	0.26335	0.191	0.136	0.32676
611035.85	4206363.74	0.028	0.087	0.123	0.23877	0.173	0.123	0.29627
611085.12	4206364.57	0.023	0.072	0.101	0.19654	0.143	0.101	0.24389
611087.59	4206415.48	0.026	0.081	0.114	0.22177	0.161	0.114	0.27518
611084.02	4206444.38	0.029	0.090	0.126	0.24474	0.178	0.126	0.30367
611084.84	4206458.69	0.030	0.093	0.131	0.25407	0.184	0.131	0.31525
611083.19	4206470.8	0.032	0.097	0.137	0.26600	0.193	0.137	0.33006
611082.64	4206503.28	0.035	0.109	0.153	0.29710	0.216	0.153	0.36864
611082.37	4206515.94	0.037	0.114	0.160	0.31054	0.225	0.160	0.38530
611082.92	4206532.18	0.039	0.120	0.169	0.32761	0.238	0.169	0.40648
611082.64	4206545.66	0.041	0.126	0.177	0.34467	0.250	0.177	0.42764
611105.48	4206544.56	0.035	0.108	0.152	0.29553	0.215	0.152	0.36669
611103.83	4206534.65	0.034	0.106	0.149	0.28922	0.210	0.149	0.35885
611079.89	4206585.02	0.049	0.151	0.213	0.41390	0.300	0.213	0.51352
611081.54	4206569.88	0.046	0.141	0.198	0.38434	0.279	0.198	0.47685
611081.82	4206624.84	0.058	0.179	0.253	0.49060	0.356	0.253	0.60865
611082.37	4206611.63	0.055	0.168	0.236	0.45879	0.333	0.236	0.56920
611080.44	4206598.69	0.052	0.160	0.226	0.43871	0.318	0.226	0.54429
611104.66	4206591.53	0.042	0.130	0.183	0.35448	0.257	0.183	0.43982
611105.48	4206580.53	0.040	0.124	0.174	0.33762	0.245	0.174	0.41890
611103.56	4206567.59	0.039	0.120	0.168	0.32671	0.237	0.168	0.40536
611103.83	4206624.29	0.049	0.150	0.211	0.40914	0.297	0.211	0.50761
611102.73	4206612.45	0.047	0.144	0.202	0.39283	0.285	0.202	0.48738
611104.11	4206601.99	0.044	0.136	0.191	0.37170	0.270	0.191	0.46118
611079.89	4206667.5	0.075	0.229	0.323	0.62719	0.455	0.323	0.77808
611080.44	4206654.29	0.069	0.212	0.298	0.57843	0.420	0.298	0.71760
611078.51	4206641.35	0.065	0.200	0.282	0.54797	0.398	0.282	0.67982
611100.53	4206702.18	0.074	0.228	0.321	0.62391	0.453	0.321	0.77402
611079.61	4206696.95	0.091	0.278	0.392	0.76058	0.552	0.392	0.94353
611077.69	4206684.01	0.085	0.260	0.366	0.71017	0.515	0.366	0.88100
611102.46	4206679.15	0.064	0.196	0.277	0.53699	0.390	0.277	0.66620
611101.91	4206689.61	0.068	0.209	0.294	0.57153	0.415	0.294	0.70904
611103.83	4206657.41	0.057	0.174	0.245	0.47504	0.345	0.245	0.58936
611103.28	4206667.86	0.060	0.184	0.259	0.50260	0.365	0.259	0.62354
611104.11	4206634.56	0.051	0.156	0.220	0.42672	0.310	0.220	0.52943
611103.56	4206645.02	0.054	0.164	0.231	0.44940	0.326	0.231	0.55756
611128.88	4206688.23	0.051	0.156	0.220	0.42693	0.310	0.220	0.52970
611128.33	4206698.69	0.054	0.165	0.232	0.45009	0.327	0.232	0.55842
611128.88	4206664.29	0.046	0.141	0.199	0.38580	0.280	0.199	0.47867
611128.33	4206674.74	0.048	0.148	0.209	0.40504	0.294	0.209	0.50254
611130.81	4206643.09	0.042	0.128	0.180	0.34888	0.253	0.180	0.43287
611130.25	4206653.55	0.044	0.134	0.188	0.36496	0.265	0.188	0.45282
611130.25	4206618.32	0.038	0.117	0.165	0.32025	0.232	0.165	0.39736
611129.7	4206628.78	0.040	0.122	0.172	0.33407	0.242	0.172	0.41450
611147.87	4206682.18	0.041	0.127	0.179	0.34703	0.252	0.179	0.43058
611147.32	4206692.63	0.043	0.133	0.187	0.36362	0.264	0.187	0.45116
611148.7	4206659.88	0.038	0.116	0.163	0.31696	0.230	0.163	0.39329
611148.14	4206670.34	0.039	0.121	0.170	0.33093	0.240	0.170	0.41061
611149.25	4206637.31	0.035	0.107	0.150	0.29180	0.212	0.150	0.36208
611148.7	4206647.77	0.036	0.111	0.156	0.30374	0.221	0.156	0.37689
611149.25	4206613.37	0.032	0.099	0.139	0.27002	0.196	0.139	0.33505
611148.7	4206623.83	0.033	0.103	0.144	0.28042	0.204	0.144	0.34795
611175.39	4206687.68	0.034	0.104	0.146	0.28279	0.205	0.146	0.35090
611174.84	4206698.14	0.035	0.108	0.152	0.29584	0.215	0.152	0.36710
611195.21	4206682.45	0.029	0.089	0.125	0.24228	0.176	0.125	0.30065
611194.66	4206692.91	0.030	0.093	0.130	0.25298	0.184	0.130	0.31393
611175.39	4206664.01	0.031	0.095	0.134	0.25982	0.189	0.134	0.32240
611174.84	4206674.47	0.032	0.099	0.139	0.27048	0.196	0.139	0.33564
611194.93	4206660.98	0.027	0.082	0.116	0.22523	0.164	0.116	0.27950
611194.38	4206671.44	0.028	0.086	0.120	0.23416	0.170	0.120	0.29058
611174.29	4206641.44	0.029	0.089	0.125	0.24338	0.177	0.125	0.30201
611173.74	4206651.9	0.030	0.092	0.130	0.25264	0.183	0.130	0.31350
611195.21	4206638.14	0.025	0.077	0.108	0.20915	0.152	0.108	0.25956
611194.66	4206648.6	0.026	0.079	0.112	0.21679	0.157	0.112	0.26902
611176.49	4206618.6	0.027	0.082	0.115	0.22364	0.162	0.115	0.27752
611175.94	4206629.06	0.028	0.085	0.119	0.23156	0.168	0.119	0.28734
611195.48	4206613.64	0.023	0.071	0.100	0.19440	0.141	0.100	0.24126
611194.93	4206624.1	0.024	0.074	0.103	0.20097	0.146	0.103	0.24941
610704.74	4206583.83	0.096	0.294	0.413	0.80254	0.583	0.413	0.99575
610703.54	4206601.74	0.102	0.313	0.440	0.85504	0.621	0.440	1.06090
610705.38	4206547.72	0.084	0.258	0.363	0.70488	0.512	0.363	0.87460
610704.19	4206565.63	0.090	0.275	0.387	0.75205	0.546	0.387	0.93312
610705.71	4206512.75	0.075	0.229	0.322	0.62581	0.454	0.322	0.77650
610704.51	4206530.66	0.079	0.243	0.342	0.66423	0.482	0.342	0.82416
610707	4206477.13	0.066	0.204	0.287	0.55757	0.405	0.287	0.69183
610705.8	4206495.04	0.070	0.216	0.304	0.58997	0.428	0.304	0.73203
610707.65	4206443.46	0.060	0.183	0.257	0.50021	0.363	0.257	0.62067
610706.45	4206461.36	0.063	0.194	0.273	0.52998	0.385	0.273	0.65760
610707.65	4206407.84	0.053	0.164	0.230	0.44752	0.325	0.230	0.55530
610706.45	4206425.74	0.056	0.173	0.243	0.47266	0.343	0.243	0.58650
610703.12	4206366.39	0.047	0.145	0.204	0.39625	0.288	0.204	0.49170

610703.86	4206388.18	0.050	0.154	0.217	0.42201	0.306	0.217	0.52366
610754.28	4206417.88	0.056	0.170	0.240	0.46559	0.338	0.240	0.57770
610746.28	4206438.7	0.059	0.183	0.257	0.49879	0.362	0.257	0.61889
610765.61	4206379.99	0.049	0.150	0.212	0.41097	0.298	0.212	0.50994
610764.41	4206397.9	0.052	0.159	0.224	0.43557	0.316	0.224	0.54046
610803.82	4206388.73	0.050	0.152	0.214	0.41626	0.302	0.214	0.51648
610802.62	4206406.64	0.053	0.162	0.228	0.44224	0.321	0.228	0.54871
610755.3	4206360.77	0.046	0.142	0.200	0.38878	0.282	0.200	0.48241
610768.58	4206436.87	0.059	0.182	0.255	0.49605	0.360	0.255	0.61549
610791.24	4206432.98	0.058	0.178	0.250	0.48650	0.353	0.250	0.60363
610806.14	4206426.83	0.056	0.173	0.243	0.47267	0.343	0.243	0.58647
610805.81	4206369.51	0.047	0.143	0.201	0.39075	0.284	0.201	0.48484
610804.52	4206353.65	0.044	0.136	0.192	0.37242	0.270	0.192	0.46210
610847.59	4206432.33	0.055	0.170	0.240	0.46541	0.338	0.240	0.57745
610865.4	4206429.74	0.054	0.165	0.232	0.45129	0.328	0.232	0.55992
610882.56	4206432.66	0.053	0.163	0.229	0.44499	0.323	0.229	0.55210
610902.31	4206429.42	0.051	0.156	0.219	0.42537	0.309	0.219	0.52777
610924.98	4206459.53	0.054	0.166	0.234	0.45405	0.329	0.234	0.56334
610924.33	4206496.45	0.063	0.192	0.271	0.52612	0.382	0.271	0.65274
610925.3	4206509.08	0.066	0.203	0.285	0.55381	0.402	0.285	0.68708
610748.5	4206527.86	0.081	0.248	0.349	0.67865	0.493	0.349	0.84202
610766.31	4206522.35	0.080	0.245	0.345	0.66945	0.486	0.345	0.83060
610782.5	4206515.88	0.078	0.240	0.338	0.65578	0.476	0.338	0.81363
610798.04	4206512.32	0.077	0.237	0.333	0.64698	0.470	0.333	0.80270
610819.74	4206511.02	0.076	0.234	0.330	0.64021	0.465	0.330	0.79430
610836.25	4206510.7	0.075	0.232	0.326	0.63322	0.459	0.326	0.78562
610856.33	4206507.46	0.073	0.225	0.316	0.61392	0.445	0.316	0.76167
610879.97	4206511.99	0.072	0.222	0.313	0.60773	0.441	0.313	0.75398
610880.94	4206492.56	0.067	0.205	0.289	0.56024	0.407	0.289	0.69507
610879.32	4206474.75	0.062	0.191	0.270	0.52331	0.380	0.270	0.64926
610855.36	4206477.67	0.065	0.200	0.281	0.54594	0.396	0.281	0.67734
610836.25	4206476.37	0.066	0.202	0.285	0.55295	0.401	0.285	0.68604
610782.34	4206485.12	0.070	0.214	0.301	0.58485	0.424	0.301	0.72564
610763.88	4206489.33	0.071	0.217	0.305	0.59301	0.430	0.305	0.73577
610817.96	4206481.23	0.068	0.209	0.294	0.57036	0.414	0.294	0.70765
610798.85	4206479.93	0.068	0.209	0.295	0.57212	0.415	0.295	0.70984
610748.5	4206494.51	0.072	0.220	0.310	0.60187	0.437	0.310	0.74677
610921.74	4206437.52	0.050	0.154	0.217	0.42148	0.306	0.217	0.52293
610845.31	4206376.74	0.046	0.141	0.199	0.38574	0.280	0.199	0.47861
610861.92	4206386.8	0.047	0.143	0.201	0.39087	0.284	0.201	0.48498
610870.34	4206398.97	0.048	0.147	0.207	0.40266	0.292	0.207	0.49959
610902.16	4206393.59	0.045	0.138	0.194	0.37613	0.273	0.194	0.46668
610920.18	4206388.2	0.043	0.131	0.184	0.35691	0.259	0.184	0.44283
610921.11	4206378.14	0.041	0.126	0.178	0.34481	0.250	0.178	0.42782
610917.84	4206361.53	0.039	0.121	0.170	0.32931	0.239	0.170	0.40860
610845.78	4206356.85	0.043	0.133	0.187	0.36246	0.263	0.187	0.44974
610867.77	4206365.04	0.043	0.132	0.186	0.36180	0.263	0.186	0.44891
610886.72	4206365.28	0.042	0.129	0.181	0.35227	0.256	0.181	0.43708
610903.57	4206363.4	0.041	0.125	0.175	0.34028	0.247	0.175	0.42221
610950.59	4206356.39	0.036	0.110	0.155	0.30184	0.219	0.155	0.37452
610965.33	4206355.45	0.035	0.106	0.149	0.29005	0.211	0.149	0.35989
610995.74	4206351.01	0.031	0.096	0.135	0.26261	0.191	0.135	0.32585
610987.56	4206368.32	0.034	0.104	0.146	0.28359	0.206	0.146	0.35187
610970.95	4206394.76	0.039	0.118	0.166	0.32315	0.235	0.166	0.40095
610968.61	4206411.13	0.041	0.126	0.177	0.34311	0.249	0.177	0.42571
610949.42	4206401.77	0.042	0.128	0.180	0.34958	0.254	0.180	0.43374
610960.42	4206425.64	0.044	0.135	0.190	0.36850	0.267	0.190	0.45720
610944.04	4206426.34	0.046	0.141	0.198	0.38509	0.279	0.198	0.47778
610966.5	4206439.67	0.045	0.139	0.196	0.38071	0.276	0.196	0.47235
610964.39	4206457.22	0.049	0.149	0.210	0.40814	0.296	0.210	0.50638
610948.24	4206509.73	0.063	0.193	0.271	0.52635	0.382	0.271	0.65302
610965.72	4206510.7	0.060	0.184	0.260	0.50407	0.366	0.260	0.62537
610983.53	4206509.08	0.056	0.173	0.244	0.47402	0.344	0.244	0.58809
610970.26	4206484.15	0.053	0.163	0.229	0.44559	0.323	0.229	0.55284
610963.46	4206468.93	0.051	0.156	0.220	0.42772	0.310	0.220	0.53067
611085.12	4206428.94	0.028	0.085	0.120	0.23294	0.169	0.120	0.28904
611083.18	4206485.29	0.033	0.102	0.144	0.27893	0.202	0.144	0.34609
611221.38	4206686.44	0.025	0.078	0.109	0.21175	0.154	0.109	0.26279
611220.83	4206696.9	0.026	0.081	0.114	0.22132	0.161	0.114	0.27465
611221.77	4206676.32	0.024	0.075	0.105	0.20358	0.148	0.105	0.25265
611240.27	4206683.06	0.023	0.070	0.098	0.19061	0.139	0.098	0.23655
611239.72	4206693.52	0.024	0.073	0.102	0.19907	0.145	0.102	0.24705
611240.67	4206672.94	0.022	0.067	0.094	0.18335	0.133	0.094	0.22755
611222.17	4206653.03	0.022	0.069	0.097	0.18776	0.136	0.097	0.23302
611221.62	4206663.49	0.023	0.071	0.100	0.19487	0.142	0.100	0.24184
611222.17	4206640.92	0.022	0.066	0.093	0.18076	0.131	0.093	0.22434
611241.86	4206650.05	0.020	0.062	0.087	0.16892	0.123	0.087	0.20964
611241.31	4206660.5	0.021	0.064	0.090	0.17518	0.127	0.090	0.21741
611241.86	4206637.94	0.019	0.060	0.084	0.16269	0.118	0.084	0.20191
611266.92	4206689.62	0.021	0.064	0.090	0.17446	0.127	0.090	0.21652
611266.37	4206700.08	0.022	0.067	0.094	0.18266	0.133	0.094	0.22669
611267.32	4206679.9	0.020	0.061	0.086	0.16776	0.122	0.086	0.20821
611268.31	4206659.19	0.019	0.057	0.080	0.15542	0.113	0.080	0.19290
611267.76	4206669.65	0.019	0.059	0.083	0.16138	0.117	0.083	0.20030
611268.31	4206647.08	0.018	0.055	0.077	0.14951	0.109	0.077	0.18557
611221.89	4206630.7	0.021	0.064	0.090	0.17553	0.128	0.090	0.21785
611241.58	4206627.72	0.019	0.058	0.081	0.15800	0.115	0.081	0.19610
611268.53	4206635.97	0.017	0.053	0.074	0.14439	0.105	0.074	0.17921
611269.52	4206627.02	0.017	0.051	0.072	0.14007	0.102	0.072	0.17386
611269.32	4206615.69	0.016	0.050	0.070	0.13572	0.099	0.070	0.16846
611235.12	4206603.35	0.018	0.056	0.078	0.15203	0.111	0.078	0.18869
611125.73	4206584.46	0.035	0.107	0.151	0.29318	0.213	0.151	0.36377
611137.26	4206585.26	0.032	0.099	0.139	0.27023	0.196	0.139	0.33531
611149	4206584.06	0.030	0.091	0.127	0.24743	0.180	0.127	0.30702
611160.43	4206587.05	0.027	0.084	0.118	0.22938	0.167	0.118	0.28464
611172.17	4206585.85	0.025	0.077	0.108	0.21029	0.153	0.108	0.26096
611185.49	4206588.64	0.023	0.071	0.100	0.19363	0.141	0.100	0.24029
611197.23	4206587.44	0.021	0.066	0.092	0.17919	0.130	0.092	0.22238
611128.02	4206567.75	0.033	0.100	0.141	0.27330	0.198	0.141	0.33912
611139.75	4206566.56	0.030	0.092	0.129	0.25088	0.182	0.129	0.31130
611150.09	4206568.95	0.028	0.086	0.121	0.23496	0.171	0.121	0.29156
611161.83	4206567.75	0.026	0.079	0.111	0.21534	0.156	0.111	0.26721
611171.17	4206569.15	0.024	0.074	0.104	0.20256	0.147	0.104	0.25137
611182.91	4206567.95	0.022	0.068	0.096	0.18669	0.136	0.096	0.23168
611194.44	4206567.75	0.021	0.064	0.089	0.17344	0.126	0.089	0.21524
611206.18	4206566.56	0.019	0.059	0.083	0.16123	0.117	0.083	0.20009
611216.92	4206568.35	0.018	0.056	0.078	0.15248	0.111	0.078	0.18925
611228.65	4206567.16	0.017	0.052	0.074	0.14299	0.104	0.074	0.17748
611204.89	4206588.04	0.020	0.063	0.088	0.17143	0.125	0.088	0.21276
611238.7	4206569.35	0.016	0.050	0.070	0.13688	0.100	0.070	0.16990
611266.54	4206574.12	0.015	0.045	0.063	0.12284	0.089	0.063	0.15248
611265.15	4206558.8	0.014	0.044	0.061	0.11893	0.087	0.061	0.14762
611262.16	4206541.9	0.014	0.042	0.059	0.11566	0.084	0.059	0.14356
611129.21	4206540.11	0.030	0.091	0.127	0.24754	0.180	0.127	0.30716
611140.94	4206538.92	0.027	0.083	0.117	0.22763	0.165	0.117	0.28246
611155.66	4206540.91	0.025	0.076	0.107	0.20722	0.151	0.107	0.25714
611167.4	4206539.71	0.023	0.070	0.098	0.19105	0.139	0.098	0.23709
611181.32	4206541.7	0.021	0.064	0.091	0.17596	0.128	0.091	0.21836
611193.05	4206540.51	0.020	0.060	0.084	0.16367	0.119	0.084	0.20312
611205.78	4206542.1	0.018	0.056	0.078	0.15254	0.111	0.078	0.18932
611219.3	4206542.89	0.017	0.052	0.073	0.14175	0.103	0.073	0.17593
611232.23	4206542.7	0.016	0.049	0.068	0.13256	0.096	0.068	0.16453
611243.97	4206541.5	0.015	0.046	0.064	0.12500	0.091	0.064	0.15515
611204.79	4206362.96	0.013	0.039	0.055	0.10700	0.078	0.055	0.13281
611349.5	4206372.82	0.007	0.022	0.031	0.06114	0.045	0.031	0.07591
611313.91	4206380.65	0.008	0.025	0.035	0.06914	0.050	0.035	0.08584
611310.48	4206419.52	0.009	0.028	0.039	0.07502	0.055	0.039	0.09313
611267.05	4206500.67	0.012	0.038	0.053	0.10329	0.075	0.053	0.12821
611497.56	4206304.83	0.005	0.015	0.021	0.04108	0.030	0.021	0.05101

611419.07	4206310.55	0.006	0.017	0.024	0.04701	0.034	0.024	0.05837
611041.07	4206301.25	0.024	0.073	0.103	0.19934	0.145	0.103	0.24736
611069.15	4206301.53	0.022	0.066	0.093	0.18031	0.131	0.093	0.22375
611083.74	4206300.98	0.020	0.062	0.088	0.17021	0.124	0.088	0.21121
611100.26	4206300.7	0.019	0.058	0.082	0.15893	0.115	0.082	0.19723
611111.82	4206300.15	0.018	0.055	0.078	0.15099	0.110	0.078	0.18738
611123.93	4206299.33	0.017	0.052	0.073	0.14278	0.104	0.073	0.17719
611137.15	4206300.43	0.016	0.049	0.069	0.13482	0.098	0.069	0.16731
611150.91	4206299.88	0.015	0.046	0.065	0.12640	0.092	0.065	0.15687
611164.12	4206300.7	0.014	0.044	0.061	0.11879	0.086	0.061	0.14743
610871.77	4206303.18	0.036	0.109	0.154	0.29880	0.217	0.154	0.37076
610919.67	4206299.6	0.033	0.100	0.141	0.27334	0.198	0.141	0.33916
610946.1	4206301.25	0.031	0.095	0.134	0.26012	0.189	0.134	0.32277
610968.4	4206299.6	0.029	0.090	0.126	0.24552	0.178	0.126	0.30464
610997.85	4206300.15	0.027	0.083	0.117	0.22731	0.165	0.117	0.28206
610800.68	4206302.27	0.038	0.117	0.165	0.32093	0.233	0.165	0.39822
610345.98	4206368.37	0.032	0.097	0.136	0.26464	0.193	0.136	0.32857
610371.57	4206456.46	0.038	0.118	0.165	0.32182	0.234	0.165	0.39956
610277.64	4206458.4	0.031	0.096	0.134	0.26056	0.190	0.134	0.32361
610294.49	4206372.25	0.029	0.090	0.125	0.24425	0.178	0.125	0.30330
610341.12	4206437.68	0.035	0.107	0.149	0.29129	0.212	0.149	0.36169
610508	4206352.9	0.039	0.120	0.169	0.32825	0.239	0.169	0.40741
610536.83	4206358.41	0.041	0.125	0.176	0.34242	0.249	0.176	0.42497
610518.69	4206394.68	0.043	0.133	0.187	0.36345	0.264	0.187	0.45109
610506.38	4206428.37	0.046	0.141	0.197	0.38351	0.279	0.197	0.47600
610407.88	4206300.63	0.031	0.096	0.134	0.26047	0.190	0.134	0.32334
610413.21	4206694.6	0.055	0.170	0.237	0.46207	0.337	0.237	0.57385
610451.93	4206697.23	0.064	0.197	0.275	0.53584	0.390	0.275	0.66534
610448.83	4206717.31	0.065	0.198	0.276	0.53896	0.393	0.276	0.66927
610438.65	4207091.1	0.042	0.129	0.141	0.31137	0.256	0.141	0.39614
610449.61	4207060.72	0.043	0.131	0.160	0.33341	0.260	0.160	0.41951
610454.96	4207045.53	0.045	0.137	0.173	0.35432	0.272	0.173	0.44440
610451.02	4207000.82	0.049	0.150	0.198	0.39669	0.297	0.198	0.49521
610446.24	4206963.41	0.052	0.161	0.217	0.43084	0.319	0.217	0.53680
610457.21	4206987.6	0.052	0.160	0.214	0.42583	0.317	0.214	0.53104
610421.77	4207012.91	0.042	0.128	0.166	0.33477	0.253	0.166	0.41878
610421.49	4207040.47	0.039	0.121	0.151	0.31138	0.240	0.151	0.39087
610362.43	4207105.72	0.039	0.119	0.109	0.26700	0.236	0.109	0.34525
610378.74	4207077.32	0.034	0.105	0.116	0.25496	0.208	0.116	0.32389
610364.4	4207040.75	0.032	0.099	0.121	0.25234	0.197	0.121	0.31767
610319.96	4207038.22	0.028	0.087	0.104	0.22017	0.173	0.104	0.27765
610334.3	4207091.94	0.033	0.100	0.100	0.23299	0.199	0.100	0.29908
610329.8	4207109.1	0.038	0.118	0.101	0.25719	0.233	0.101	0.33451
610350.94	4206635.65	0.043	0.132	0.183	0.35788	0.261	0.183	0.44453
610530.61	4206613.88	0.072	0.220	0.308	0.59901	0.436	0.308	0.74348
610531.61	4206594.02	0.069	0.211	0.296	0.57618	0.419	0.296	0.71513
610537.23	4206566.38	0.066	0.202	0.283	0.55090	0.401	0.283	0.68374
610565.36	4206541.23	0.066	0.202	0.284	0.55210	0.401	0.284	0.68518
610627.57	4206493.91	0.065	0.199	0.280	0.54381	0.395	0.280	0.67482
610633.2	4206515.75	0.070	0.214	0.300	0.58333	0.424	0.300	0.72385
610666.29	4206515.75	0.073	0.223	0.313	0.60805	0.442	0.313	0.75449
610646.1	4206559.1	0.081	0.248	0.348	0.67687	0.492	0.348	0.83991
610646.77	4206594.51	0.090	0.277	0.389	0.75629	0.549	0.389	0.93845
610578.59	4206617.02	0.082	0.251	0.352	0.68478	0.498	0.352	0.84983
610620.29	4206619.66	0.091	0.280	0.393	0.76418	0.555	0.393	0.94829
610608.05	4206563.07	0.076	0.232	0.327	0.63478	0.461	0.327	0.78772
610608.05	4206545.2	0.072	0.222	0.312	0.60673	0.441	0.312	0.75293
610623.6	4206564.4	0.078	0.241	0.338	0.65697	0.477	0.338	0.81525
610623.6	4206546.53	0.075	0.229	0.321	0.62464	0.454	0.321	0.77512
610563.04	4206597.82	0.075	0.230	0.323	0.62851	0.457	0.323	0.78002
610587.86	4206596.83	0.079	0.244	0.342	0.66499	0.483	0.342	0.82525
610564.7	4206580.61	0.072	0.222	0.311	0.60568	0.440	0.311	0.75169
610589.52	4206581.61	0.077	0.235	0.330	0.64176	0.466	0.330	0.79642
610734.02	4206917.57	0.625	1.920	2.706	5.25084	3.808	2.706	6.51386
610754.27	4206913.28	0.666	2.043	2.881	5.59071	4.054	2.881	6.93529
610779.19	4206906.67	0.690	2.118	2.987	5.79554	4.202	2.987	7.18921
610824.35	4206899.66	0.762	2.339	3.301	6.40266	4.641	3.301	7.94201
610820.85	4206880.97	0.602	1.847	2.605	5.05430	3.664	2.605	6.26960
610811.11	4206855.27	0.458	1.405	1.982	3.84520	2.788	1.982	4.76992
610717.67	4206895.37	0.448	1.376	1.938	3.76153	2.729	1.938	4.66661
610731.69	4206880.97	0.430	1.318	1.858	3.60545	2.615	1.858	4.47289
610715.72	4206858	0.335	1.028	1.448	2.81168	2.040	1.448	3.48831
610721.17	4206833.47	0.295	0.905	1.274	2.47311	1.794	1.274	3.06827
610758.94	4206842.03	0.357	1.095	1.544	2.99571	2.173	1.544	3.71639
610767.51	4206870.84	0.458	1.405	1.980	3.84208	2.786	1.980	4.76624
610865.01	4206886.37	0.747	2.293	3.236	6.27618	4.549	3.236	7.78492
610909.74	4206874.67	0.750	2.302	3.249	6.30096	4.566	3.249	7.81544
610860.95	4206838.53	0.449	1.378	1.945	3.77240	2.735	1.945	4.67944
610888.6	4206829.18	0.444	1.362	1.922	3.72883	2.703	1.922	4.62530
610790.87	4206784.8	0.270	0.828	1.166	2.26361	1.642	1.166	2.80813
610816.95	4206785.58	0.284	0.873	1.231	2.38806	1.732	1.231	2.96245
610850.44	4206785.19	0.301	0.924	1.303	2.52835	1.833	1.303	3.13638
610898.33	4206797.26	0.361	1.109	1.565	3.03620	2.201	1.565	3.76617
610894.83	4206755.59	0.272	0.836	1.180	2.28845	1.659	1.180	2.83870
610897.55	4206780.9	0.324	0.993	1.401	2.71740	1.970	1.401	3.37075
610886.81	4206880.99	0.752	2.308	3.257	6.31702	4.578	3.257	7.83547
611023.86	4206760.97	0.314	0.965	1.362	2.64206	1.915	1.362	3.27708
611041.14	4206759.94	0.271	0.832	1.175	2.27807	1.651	1.175	2.82564
611061.35	4206762.7	0.224	0.686	0.968	1.87812	1.361	0.968	2.32958
610754.89	4206782.37	0.246	0.754	1.062	2.06075	1.495	1.062	2.55658
610844.56	4206719.24	0.204	0.626	0.882	1.71133	1.241	0.882	2.12294
610513.96	4206710.62	0.081	0.249	0.349	0.67873	0.494	0.349	0.84255
610591.87	4206713.73	0.111	0.341	0.478	0.93020	0.676	0.478	1.15440
610668.23	4206716.46	0.144	0.441	0.620	1.20393	0.874	0.620	1.49384
610545.12	4206684.51	0.088	0.270	0.378	0.73567	0.535	0.378	0.91309
610637.84	4206683.34	0.118	0.361	0.507	0.98560	0.716	0.507	1.22300
610512.01	4206642.44	0.072	0.220	0.309	0.60113	0.437	0.309	0.74616
610584.86	4206649.06	0.092	0.281	0.395	0.76721	0.557	0.395	0.95212
610665.5	4206649.06	0.112	0.345	0.485	0.94273	0.684	0.485	1.16975
609975.26	4207082.82	0.023	0.072	0.053	0.14848	0.143	0.053	0.19584
609945.83	4207083.32	0.024	0.072	0.052	0.14757	0.143	0.052	0.19515
609822.62	4207152.66	0.028	0.086	0.049	0.16219	0.170	0.049	0.21848
609804.66	4207094.79	0.031	0.096	0.054	0.18153	0.190	0.054	0.24469
609772.24	4207094.79	0.032	0.098	0.054	0.18363	0.194	0.054	0.24798
609700.41	4207156.65	0.022	0.066	0.039	0.12636	0.131	0.039	0.16980
609633.07	4207074.84	0.019	0.057	0.036	0.11160	0.113	0.036	0.14921
609555.75	4207074.84	0.020	0.063	0.036	0.11937	0.124	0.036	0.16054
609620.1	4207148.17	0.022	0.068	0.037	0.12737	0.135	0.037	0.17218
609556.25	4207145.67	0.022	0.067	0.036	0.12444	0.133	0.036	0.16841
609502.88	4207137.69	0.024	0.073	0.038	0.13445	0.145	0.038	0.18250
610698.46	4207080.47	0.411	1.261	1.749	3.42159	2.502	1.749	4.25147
610693.24	4207063.42	0.418	1.284	1.789	3.49104	2.547	1.789	4.33574
610706.16	4207019.7	0.652	2.000	2.811	5.46209	3.967	2.811	6.77786
610680.04	4207080.09	0.265	0.814	1.118	2.19709	1.615	1.118	2.73278
610682.42	4207046.11	0.362	1.111	1.550	3.02300	2.204	1.550	3.75407
CONCUNIT ug/	m^3							
DEPUNIT g/m^	2							

Oakley Main Street Project

Unmitigated

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Child

Cancer Potency Factor:	1.1	$(mg/kg\text{-}day)^{-1}$
Exposure Frequency	350	days/year
Averaging Period	25550	days

Construction Year	Year	DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
2019	1	1	3	572	0.72	0.50410959	9.4
2020	2	1	3	572	0.72	0.49726776	9.3

BAAQMD 2016. Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines.

Oakley Main Street Project **No Mitigation at Sensitive Receptors**

Estimated Cancer Risks from Construction DPM - Child Receptors

X (m)	Y (m)	Child Cancer Risk (year 1) 2019 (/million)	Child Cancer Risk (year 2) 2020 (/million)	Total Cancer Risk (/million)
611337.43	4207107.53	0.18217	0.12947	0.31164
611316.93	4207114.47	0.20317	0.14440	0.34757
611309.05	4207127.4	0.21272	0.15117	0.36388
611308.42	4207149.48	0.21270	0.15110	0.36380
611309.05	4207170.29	0.20828	0.14791	0.35619
611311.88	4207184.48	0.20178	0.14325	0.34503
611315.04	4207203.09	0.19259	0.13668	0.32927
611359.51	4207125.19	0.16706	0.11870	0.28576
611364.56	4207101.22	0.15817	0.11241	0.27058
611377.49	4207091.76	0.14606	0.10381	0.24987
611401.77	4207088.6	0.12938	0.09195	0.22133
611416.28	4207100.59	0.12433	0.08835	0.21268
611421.64	4207123.93	0.12658	0.08992	0.21651
611438.99	4207115.41	0.11592	0.08235	0.19827
611456.97	4207120.14	0.10845	0.07703	0.18548
611355.09	4207167.14	0.17213	0.12224	0.29437
611375.59	4207165.56	0.15828	0.11240	0.27069
611396.09	4207163.35	0.14562	0.10341	0.24903
611411.55	4207163.35	0.13687	0.09720	0.23407
611426.06	4207165.56	0.12938	0.09187	0.22124
611452.55	4207164.3	0.11670	0.08286	0.19956
611311.25	4207222.96	0.18598	0.13191	0.31789
611312.2	4207239.05	0.17700	0.12549	0.30249
611355.41	4207245.99	0.15338	0.10876	0.26214
611377.8	4207244.72	0.14406	0.10216	0.24622
611390.73	4207246.62	0.13816	0.09797	0.23613
611410.92	4207249.14	0.12961	0.09192	0.22153
611433.31	4207250.09	0.12116	0.08593	0.20709
611447.82	4207253.24	0.11565	0.08201	0.19766
611469.58	4207243.15	0.10947	0.07765	0.18712
611477.47	4207217.28	0.10814	0.07673	0.18488
611357.62	4207196.47	0.16654	0.11821	0.28475
611374.96	4207196.78	0.15616	0.11084	0.26700
611394.83	4207198.68	0.14500	0.10292	0.24793
611412.5	4207197.1	0.13615	0.09664	0.23278
611433.63	4207195.52	0.12624	0.08960	0.21584
611452.87	4207194.58	0.11787	0.08366	0.20153
611471.47	4207199.62	0.11046	0.07840	0.18886
611466.43	4207168.08	0.11103	0.07883	0.18985
611488.19	4207163.04	0.10191	0.07236	0.17427
611506.8	4207160.2	0.09485	0.06734	0.16219
611505.54	4207184.17	0.09748	0.06919	0.16667
611509.32	4207196.47	0.09691	0.06878	0.16570
611505.22	4207219.81	0.09879	0.07009	0.16888
611510.27	4207235.89	0.09704	0.06883	0.16587
611495.76	4207248.82	0.10081	0.07150	0.17231
611311.25	4207260.81	0.16508	0.11696	0.28204
611314.41	4207277.84	0.15398	0.10904	0.26302
611358.56	4207260.49	0.14659	0.10391	0.25050
611368.02	4207274.69	0.13774	0.09760	0.23535
611389.16	4207283.52	0.12788	0.09061	0.21849
611400.19	4207295.19	0.12098	0.08570	0.20668
611412.5	4207316	0.11151	0.07896	0.19047
611435.52	4207292.03	0.11221	0.07951	0.19172
611451.6	4207278.47	0.11044	0.07828	0.18873
611474.63	4207278.79	0.10388	0.07363	0.17751
611485.35	4207263.33	0.10270	0.07282	0.17552
611328.6	4207291.72	0.14208	0.10059	0.24268
611312.83	4207306.23	0.13773	0.09744	0.23517
611302.11	4207319.47	0.13172	0.09313	0.22486
611310.62	4207336.5	0.12073	0.08532	0.20604
611321.66	4207346.6	0.11416	0.08066	0.19482
611339.01	4207346.91	0.11215	0.07927	0.19142
611357.62	4207322.94	0.12038	0.08518	0.20556
611371.49	4207335.87	0.11247	0.07956	0.19204
611372.76	4207355.11	0.10456	0.07392	0.17849
611421.64	4207330.2	0.10535	0.07457	0.17992
611423.22	4207349.12	0.09944	0.07036	0.16980
611449.08	4207328.93	0.10030	0.07102	0.17132
611438.36	4207309.06	0.10746	0.07612	0.18358
611468.95	4207336.5	0.09476	0.06709	0.16185
611483.46	4207328.62	0.09355	0.06625	0.15980
611504.27	4207316.95	0.09127	0.06466	0.15592
611518.78	4207305.59	0.08965	0.06353	0.15318
611531.08	4207292.98	0.08820	0.06252	0.15072
611540.23	4207275.63	0.08730	0.06189	0.14919
611310.9	4207395.01	0.09106	0.06420	0.15526

Maximum Cancer Risk
1.059
BAAQMD threshold of significance
10
Exceed thresholds?
No

611307.77	4207409.9	0.08451	0.05954	0.14405
611306.78	4207428.47	0.07691	0.05414	0.13105
611310.76	4207450.93	0.06882	0.04840	0.11722
611307.77	4207464.05	0.06428	0.04518	0.10946
611355.09	4207392.69	0.09097	0.06421	0.15518
611398.22	4207398.65	0.08642	0.06104	0.14746
611386.69	4207411.77	0.08268	0.05836	0.14104
611357.67	4207410.98	0.08390	0.05918	0.14308
611353.89	4207429.07	0.07743	0.05458	0.13201
611362.24	4207449.15	0.07076	0.04985	0.12061
611385.9	4207431.06	0.07641	0.05389	0.13030
611420.29	4207390.9	0.08716	0.06159	0.14875
611436.99	4207401.83	0.08256	0.05834	0.14090
611444.34	4207420.32	0.07702	0.05440	0.13142
611441.16	4207444.37	0.07091	0.05004	0.12096
611446.33	4207459.28	0.06700	0.04726	0.11426
611459.25	4207384.54	0.08494	0.06006	0.14500
611466.61	4207407.4	0.07860	0.05555	0.13415
611472.97	4207420.72	0.07493	0.05294	0.12786
611470.58	4207443.78	0.06972	0.04923	0.11895
611470.58	4207461.87	0.06560	0.04629	0.11188
611351.29	4207475.53	0.06249	0.04396	0.10645
611374.78	4207476.37	0.06283	0.04423	0.10706
611395.9	4207472.82	0.06406	0.04513	0.10919
611389.14	4207448.15	0.07109	0.05011	0.12120
611439.49	4207477.38	0.06275	0.04423	0.10698
611467.04	4207481.61	0.06131	0.04324	0.10455
611302.63	4207484.99	0.05755	0.04040	0.09795
611303.64	4207503.41	0.05250	0.03683	0.08933
611310.74	4207524.36	0.04770	0.03344	0.08114
611334.05	4207523.85	0.04907	0.03443	0.08350
611356.02	4207522.5	0.05040	0.03539	0.08579
611371.73	4207521.49	0.05125	0.03601	0.08726
611394.04	4207526.89	0.05076	0.03568	0.08645
611406.88	4207522.5	0.05207	0.03662	0.08868
611430.71	4207520.47	0.05294	0.03726	0.09020
611444.56	4207523.01	0.05257	0.03700	0.08957
611466.19	4207524.87	0.05232	0.03684	0.08916
611485.45	4207527.74	0.05176	0.03646	0.08822
611511.14	4207529.43	0.05128	0.03614	0.08742
611524.65	4207513.21	0.05389	0.03800	0.09189
611552.87	4207524.02	0.05145	0.03628	0.08774
611553.21	4207500.7	0.05514	0.03891	0.09405
611524.32	4207495.8	0.05696	0.04019	0.09715
611523.13	4207474.34	0.06089	0.04298	0.10386
611552.03	4207482.79	0.05808	0.04101	0.09909
611519.59	4207462.51	0.06325	0.04466	0.10791
611554.73	4207464.37	0.06093	0.04304	0.10396
611524.99	4207440.55	0.06699	0.04733	0.11432
611555.24	4207445.11	0.06399	0.04522	0.10920
611555.58	4207427.03	0.06681	0.04723	0.11405
611557.94	4207398.3	0.07089	0.05015	0.12105
611522.63	4207422.64	0.07047	0.04981	0.12028
611522.63	4207401.35	0.07433	0.05257	0.12690
611542.4	4207388.34	0.07422	0.05251	0.12673
611511.98	4207382.93	0.07892	0.05583	0.13475
611508.43	4207369.24	0.08189	0.05795	0.13984
611535.81	4207363.5	0.07886	0.05582	0.13468
611548.65	4207344.4	0.07939	0.05622	0.13561
611559.8	4207244.2	0.08339	0.05914	0.14254
611558.62	4207227.64	0.08351	0.05924	0.14274
611555.24	4207203.99	0.08350	0.05925	0.14276
611557.27	4207183.2	0.08149	0.05783	0.13932
611554.23	4207164.62	0.08051	0.05715	0.13766
611557.77	4207142.31	0.07672	0.05446	0.13119
611547.97	4207121.19	0.07612	0.05405	0.13017
611546.96	4207102.77	0.07281	0.05171	0.12452
611551.18	4207088.92	0.06875	0.04882	0.11758
611555.91	4207066.78	0.06255	0.04442	0.10697
611476.99	4207114.19	0.09867	0.07009	0.16876
611498.11	4207124.33	0.09263	0.06578	0.15841
611517.37	4207121.63	0.08545	0.06068	0.14614
611516.7	4207103.71	0.08196	0.05821	0.14017
611397.15	4207001.31	0.09697	0.06893	0.16590
611405.21	4206965.9	0.07705	0.05476	0.13181
611417.66	4206992.52	0.08391	0.05964	0.14355
611434.86	4206992.14	0.07720	0.05486	0.13206
611454.74	4206982.79	0.06715	0.04771	0.11486
611462.1	4206968.28	0.06001	0.04263	0.10264
611453.75	4206949.79	0.05577	0.03962	0.09539
611447.79	4206931.5	0.05093	0.03618	0.08711
611475.02	4206936.87	0.04702	0.03339	0.08041
611496.69	4206939.06	0.04370	0.03103	0.07473
611513	4206936.67	0.04044	0.02872	0.06916
611530.89	4206938.86	0.03835	0.02723	0.06557
611546.99	4206935.68	0.03552	0.02521	0.06073

611404.05	4206946.01	0.06853	0.04871	0.11724
611405.64	4206926.73	0.05974	0.04245	0.10219
611403.65	4206905.06	0.05152	0.03660	0.08812
611410.81	4206890.15	0.04448	0.03159	0.07607
611437.25	4206884.98	0.03821	0.02713	0.06533
611453.35	4206887.96	0.03664	0.02601	0.06264
611472.24	4206888.75	0.03428	0.02433	0.05860
611492.32	4206887.16	0.03149	0.02235	0.05383
611509.62	4206887.76	0.02975	0.02111	0.05087
611527.31	4206889.15	0.02829	0.02007	0.04836
611546.6	4206887.56	0.02629	0.01865	0.04493
611377.6	4206837.66	0.03302	0.02343	0.05645
611377.41	4206826.33	0.02988	0.02120	0.05108
611377.6	4206816.19	0.02731	0.01937	0.04668
611407.63	4206828.51	0.02716	0.01926	0.04642
611437.05	4206820.96	0.02307	0.01636	0.03943
611474.23	4206850.98	0.02573	0.01825	0.04398
611478.2	4206824.54	0.02084	0.01477	0.03561
611495.9	4206825.93	0.01997	0.01415	0.03413
611509.22	4206853.17	0.02335	0.01656	0.03991
611526.32	4206824.34	0.01812	0.01284	0.03096
611558.33	4206844.02	0.01898	0.01345	0.03243
611554.15	4206823.34	0.01671	0.01184	0.02855
611558.53	4206886.77	0.02518	0.01786	0.04305
611375.81	4206780.4	0.02037	0.01443	0.03481
611387.74	4206763.9	0.01736	0.01229	0.02966
611411.4	4206781.59	0.01842	0.01304	0.03146
611412.6	4206752.37	0.01498	0.01060	0.02557
611440.43	4206779.41	0.01668	0.01181	0.02849
611471.44	4206781.39	0.01556	0.01101	0.02657
611469.26	4206740.64	0.01209	0.00855	0.02064
611499.68	4206782.19	0.01456	0.01030	0.02486
611536.85	4206780.8	0.01320	0.00934	0.02253
611523.14	4206742.03	0.01080	0.00763	0.01843
611556.54	4206774.04	0.01211	0.00856	0.02067
611323.92	4206674.63	0.01307	0.00923	0.02230
611335.65	4206699.68	0.01394	0.00985	0.02379
611362.49	4206701.67	0.01300	0.00919	0.02218
611381.38	4206700.48	0.01227	0.00867	0.02094
611398.08	4206697.1	0.01156	0.00817	0.01973
611417.17	4206699.88	0.01115	0.00787	0.01902
611433.87	4206699.09	0.01066	0.00753	0.01819
611454.55	4206702.27	0.01029	0.00727	0.01756
611471.44	4206700.08	0.00981	0.00692	0.01673
611490.53	4206698.29	0.00933	0.00659	0.01592
611510.61	4206699.68	0.00899	0.00635	0.01534
611531.49	4206698.09	0.00856	0.00604	0.01460
611545.01	4206701.47	0.00845	0.00597	0.01442
611559.92	4206697.3	0.00807	0.00569	0.01376
611335.26	4206651.57	0.01167	0.00824	0.01991
611359.11	4206645.41	0.01067	0.00753	0.01820
611376.21	4206651.17	0.01035	0.00731	0.01766
611398.68	4206649.98	0.00971	0.00686	0.01657
611414.58	4206650.18	0.00933	0.00658	0.01591
611432.87	4206648.59	0.00887	0.00626	0.01513
611471.64	4206649.78	0.00813	0.00574	0.01387
611491.92	4206651.57	0.00782	0.00551	0.01333
611511.41	4206651.77	0.00750	0.00529	0.01280
611527.51	4206650.77	0.00724	0.00510	0.01234
611546.99	4206651.97	0.00699	0.00493	0.01191
611325.51	4206617.57	0.01090	0.00770	0.01860
611344.2	4206617.57	0.01030	0.00727	0.01757
611357.52	4206616.78	0.00989	0.00698	0.01688
611368.66	4206620.55	0.00969	0.00684	0.01652
611381.98	4206618.76	0.00930	0.00656	0.01586
611395.9	4206619.76	0.00898	0.00634	0.01532
611407.82	4206620.75	0.00873	0.00616	0.01490
611421.14	4206619.96	0.00841	0.00593	0.01435
611435.46	4206618.76	0.00811	0.00572	0.01382
611472.44	4206621.55	0.00749	0.00528	0.01278
611485.36	4206619.96	0.00725	0.00511	0.01236
611496.5	4206622.94	0.00713	0.00502	0.01215
611508.82	4206622.14	0.00691	0.00487	0.01178
611522.14	4206620.55	0.00669	0.00471	0.01140
611532.88	4206620.95	0.00655	0.00461	0.01116
611546	4206621.94	0.00639	0.00450	0.01090
611557.13	4206620.16	0.00622	0.00438	0.01061
611327.7	4206564.89	0.00936	0.00660	0.01596
611341.02	4206566.28	0.00912	0.00644	0.01556
611355.14	4206572.84	0.00892	0.00630	0.01522
611369.25	4206575.02	0.00863	0.00609	0.01472
611384.16	4206573.04	0.00825	0.00582	0.01407
611395.1	4206574.63	0.00804	0.00567	0.01371
611407.23	4206574.43	0.00779	0.00549	0.01327
611420.15	4206574.03	0.00753	0.00531	0.01283
611431.88	4206569.86	0.00726	0.00512	0.01238

611473.63	4206575.22	0.00671	0.00473	0.01144
611487.55	4206572.24	0.00647	0.00456	0.01103
611500.27	4206575.22	0.00631	0.00445	0.01076
611512.6	4206575.82	0.00614	0.00433	0.01047
611524.73	4206574.43	0.00597	0.00420	0.01017
611537.85	4206576.22	0.00583	0.00410	0.00993
611548.59	4206575.22	0.00569	0.00401	0.00970
611558.72	4206577.01	0.00560	0.00394	0.00954
611331.88	4206537.85	0.00868	0.00612	0.01481
611332.67	4206513.19	0.00820	0.00578	0.01398
611355.54	4206518.56	0.00782	0.00551	0.01333
611357.72	4206542.42	0.00819	0.00578	0.01396
611371.84	4206555.94	0.00813	0.00573	0.01386
611370.05	4206542.02	0.00793	0.00559	0.01351
611383.57	4206548.58	0.00776	0.00547	0.01323
611397.09	4206548.58	0.00750	0.00529	0.01279
611409.22	4206546.79	0.00726	0.00512	0.01239
611419.95	4206547.59	0.00710	0.00500	0.01210
611432.28	4206550.37	0.00694	0.00489	0.01184
611349.17	4206492.32	0.00752	0.00531	0.01283
611363.69	4206486.95	0.00719	0.00507	0.01226
611375.81	4206491.32	0.00704	0.00496	0.01201
611387.94	4206500.67	0.00697	0.00491	0.01188
611399.08	4206500.87	0.00680	0.00479	0.01158
611409.61	4206504.25	0.00669	0.00471	0.01140
611422.54	4206503.25	0.00649	0.00457	0.01106
611437.65	4206504.45	0.00632	0.00445	0.01077
611374.82	4206454.74	0.00653	0.00460	0.01113
611385.76	4206467.07	0.00653	0.00460	0.01113
611397.68	4206472.44	0.00644	0.00453	0.01097
611411.2	4206477.21	0.00632	0.00445	0.01077
611424.33	4206476.41	0.00614	0.00433	0.01046
611437.25	4206478	0.00601	0.00423	0.01024
611425.52	4206431.08	0.00562	0.00395	0.00957
611476.42	4206548.78	0.00632	0.00445	0.01078
611488.54	4206547.99	0.00615	0.00433	0.01048
611501.27	4206548.38	0.00598	0.00421	0.01018
611512	4206545.8	0.00580	0.00409	0.00989
611524.33	4206546.4	0.00566	0.00399	0.00965
611536.06	4206546.79	0.00553	0.00389	0.00942
611548.98	4206548.98	0.00541	0.00381	0.00921
611559.92	4206549.18	0.00529	0.00372	0.00902
611477.81	4206502.66	0.00582	0.00410	0.00991
611479.99	4206477.61	0.00554	0.00390	0.00945
611491.13	4206505.84	0.00569	0.00401	0.00969
611502.46	4206505.04	0.00555	0.00391	0.00946
611491.72	4206477.8	0.00542	0.00382	0.00924
611503.06	4206479	0.00531	0.00374	0.00905
611514.39	4206503.05	0.00540	0.00380	0.00920
611515.98	4206477.8	0.00516	0.00363	0.00880
611528.31	4206505.84	0.00526	0.00371	0.00897
611528.9	4206476.41	0.00502	0.00354	0.00856
611540.63	4206508.22	0.00515	0.00362	0.00877
611538.25	4206476.41	0.00493	0.00347	0.00841
611552.56	4206505.84	0.00501	0.00353	0.00854
611550.77	4206475.02	0.00481	0.00338	0.00819
611479.99	4206431.88	0.00510	0.00359	0.00869
611493.12	4206432.08	0.00499	0.00351	0.00850
611504.65	4206432.67	0.00490	0.00345	0.00834
611518.56	4206430.88	0.00477	0.00335	0.00812
611529.5	4206430.29	0.00468	0.00329	0.00797
611542.42	4206435.46	0.00461	0.00324	0.00785
611552.76	4206433.07	0.00451	0.00317	0.00769
611479.8	4206406.03	0.00488	0.00343	0.00831
611494.51	4206406.43	0.00477	0.00335	0.00812
611506.24	4206406.83	0.00468	0.00329	0.00797
611518.56	4206405.44	0.00458	0.00322	0.00780
611530.89	4206404.64	0.00448	0.00315	0.00764
611542.62	4206407.03	0.00442	0.00311	0.00752
611555.15	4206405.44	0.00432	0.00304	0.00736
611529.9	4206362.49	0.00420	0.00295	0.00715
611544.81	4206364.08	0.00412	0.00290	0.00702
611558.72	4206362.89	0.00403	0.00284	0.00687
610703.71	4206675.32	0.10895	0.07730	0.18625
610721.12	4206689.86	0.11963	0.08490	0.20453
610736.84	4206686.65	0.12166	0.08635	0.20801
610754.25	4206685.46	0.12470	0.08853	0.21324
610771.15	4206685.12	0.12773	0.09070	0.21844
610789.74	4206688.5	0.13298	0.09445	0.22743
610807.15	4206686.31	0.13427	0.09538	0.22965
610700.5	4206658.42	0.10150	0.07201	0.17351
610703.54	4206637.12	0.09426	0.06687	0.16113
610702.86	4206621.23	0.08881	0.06300	0.15180
610746.81	4206643.04	0.10312	0.07319	0.17631
610777.57	4206642.19	0.10647	0.07559	0.18206
610792.28	4206642.53	0.10802	0.07671	0.18473

610749.18	4206621.57	0.09479	0.06728	0.16207
610749.85	4206602.98	0.08807	0.06250	0.15057
610784.16	4206612.28	0.09411	0.06681	0.16092
610793.29	4206597.74	0.08887	0.06309	0.15196
610810.19	4206587.6	0.08543	0.06066	0.14609
610820	4206591.66	0.08702	0.06179	0.14880
610837.24	4206594.36	0.08790	0.06242	0.15032
610839.6	4206619.21	0.09877	0.07015	0.16892
610834.02	4206641.52	0.10994	0.07810	0.18804
610850.25	4206642.36	0.11068	0.07863	0.18930
610877.29	4206642.87	0.11049	0.07851	0.18900
610878.14	4206626.14	0.10100	0.07176	0.17276
610876.79	4206607.54	0.09182	0.06523	0.15705
610878.31	4206588.95	0.08356	0.05936	0.14292
610762.87	4206569.18	0.07786	0.05525	0.13311
610782.13	4206564.1	0.07696	0.05462	0.13158
610796.84	4206560.56	0.07608	0.05401	0.13009
610815.77	4206555.48	0.07439	0.05281	0.12720
610832.16	4206557.01	0.07454	0.05293	0.12747
610851.43	4206553.96	0.07272	0.05163	0.12435
610880.67	4206553.63	0.07051	0.05007	0.12059
610878.31	4206570.7	0.07653	0.05435	0.13088
610826.68	4206687.13	0.13740	0.09762	0.23502
610844.57	4206686.3	0.13871	0.09856	0.23727
610865.21	4206687.68	0.14160	0.10063	0.24224
610880.9	4206686.3	0.14156	0.10061	0.24217
610899.62	4206692.91	0.14835	0.10546	0.25381
610919.16	4206680.8	0.13693	0.09734	0.23427
610925.76	4206661.81	0.12015	0.08540	0.20555
610927.41	4206642.54	0.10605	0.07537	0.18142
610925.49	4206624.93	0.09566	0.06798	0.16364
610924.94	4206606.21	0.08606	0.06114	0.14720
610922.73	4206591.08	0.07958	0.05653	0.13611
610923.56	4206571.81	0.07196	0.05111	0.12307
610925.21	4206554.47	0.06580	0.04673	0.11253
610956.31	4206695.94	0.14849	0.10559	0.25408
611019.34	4206696.76	0.12142	0.08634	0.20776
610959.06	4206679.15	0.12962	0.09215	0.22177
610962.92	4206664.84	0.11561	0.08218	0.19779
610963.47	4206649.42	0.10362	0.07365	0.17727
610965.12	4206634.29	0.09336	0.06635	0.15970
610958.24	4206619.42	0.08665	0.06157	0.14821
610960.44	4206603.74	0.07853	0.05579	0.13432
610962.64	4206588.32	0.07159	0.05085	0.12244
610968.15	4206560.25	0.06094	0.04328	0.10422
610949.71	4206557.5	0.06315	0.04485	0.10800
611017.96	4206681.9	0.10752	0.07644	0.18396
611021.54	4206668.69	0.09487	0.06744	0.16231
611017.69	4206653.83	0.08688	0.06175	0.14863
611013.83	4206638.97	0.08008	0.05690	0.13698
611013.01	4206623.83	0.07303	0.05189	0.12492
611009.98	4206609.24	0.06792	0.04825	0.11617
611008.05	4206597.68	0.06418	0.04559	0.10977
611001.72	4206570.71	0.05719	0.04062	0.09781
611017.41	4206575.11	0.05468	0.03883	0.09352
611033.38	4206575.66	0.05077	0.03605	0.08683
611050.71	4206697.86	0.09792	0.06961	0.16753
611054.84	4206681.9	0.08328	0.05919	0.14246
611052.92	4206671.17	0.07823	0.05560	0.13383
611054.84	4206650.8	0.06734	0.04784	0.11518
611055.39	4206637.59	0.06191	0.04398	0.10589
611053.47	4206624.65	0.05826	0.04139	0.09965
611054.84	4206605.02	0.05202	0.03694	0.08896
611055.39	4206591.81	0.04855	0.03447	0.08302
611053.47	4206578.87	0.04619	0.03279	0.07898
611057.6	4206560.98	0.04132	0.02933	0.07065
611058.15	4206547.77	0.03896	0.02765	0.06661
611056.22	4206534.84	0.03736	0.02652	0.06388
611021.82	4206533.19	0.04399	0.03123	0.07522
611022.37	4206519.98	0.04147	0.02944	0.07091
611020.44	4206507.04	0.03966	0.02815	0.06780
611028.7	4206492.18	0.03613	0.02564	0.06176
611029.25	4206478.97	0.03427	0.02432	0.05859
611027.32	4206466.03	0.03294	0.02337	0.05631
611022.09	4206449.79	0.03179	0.02255	0.05434
611030.62	4206435.76	0.02936	0.02082	0.05018
611028.7	4206422.82	0.02838	0.02013	0.04850
611057.32	4206514.2	0.03431	0.02434	0.05865
611057.87	4206500.99	0.03260	0.02313	0.05573
611055.94	4206488.05	0.03141	0.02228	0.05369
611057.32	4206473.74	0.02966	0.02104	0.05069
611057.87	4206460.53	0.02829	0.02007	0.04836
611055.94	4206447.59	0.02739	0.01943	0.04682
611056.49	4206431.35	0.02598	0.01842	0.04441
611057.04	4206418.14	0.02489	0.01765	0.04253
611055.12	4206405.21	0.02415	0.01712	0.04127

611056.49	4206387.04	0.02280	0.01616	0.03896
611057.04	4206373.83	0.02193	0.01555	0.03748
611055.12	4206360.9	0.02133	0.01512	0.03645
611021.82	4206405.3	0.02756	0.01955	0.04711
611031.45	4206391.54	0.02550	0.01808	0.04358
611035.85	4206363.74	0.02312	0.01639	0.03951
611085.12	4206364.57	0.01903	0.01349	0.03252
611087.59	4206415.48	0.02147	0.01522	0.03670
611084.02	4206444.38	0.02370	0.01680	0.04050
611084.84	4206458.69	0.02460	0.01744	0.04204
611083.19	4206470.8	0.02575	0.01826	0.04401
611082.64	4206503.28	0.02876	0.02040	0.04916
611082.37	4206515.94	0.03006	0.02132	0.05138
611082.92	4206532.18	0.03171	0.02250	0.05421
611082.64	4206545.66	0.03336	0.02367	0.05703
611105.48	4206544.56	0.02861	0.02029	0.04890
611103.83	4206534.65	0.02800	0.01986	0.04785
611079.89	4206585.02	0.04005	0.02843	0.06848
611081.54	4206569.88	0.03719	0.02640	0.06359
611081.82	4206624.84	0.04746	0.03370	0.08117
611082.37	4206611.63	0.04439	0.03151	0.07590
611080.44	4206598.69	0.04245	0.03013	0.07258
611104.66	4206591.53	0.03431	0.02434	0.05865
611105.48	4206580.53	0.03268	0.02318	0.05586
611103.56	4206567.59	0.03162	0.02243	0.05406
611103.83	4206624.29	0.03959	0.02810	0.06769
611102.73	4206612.45	0.03802	0.02698	0.06499
611104.11	4206601.99	0.03597	0.02553	0.06150
611079.89	4206667.5	0.06067	0.04309	0.10376
611080.44	4206654.29	0.05595	0.03974	0.09569
611078.51	4206641.35	0.05301	0.03765	0.09066
611100.53	4206702.18	0.06035	0.04287	0.10322
611079.61	4206696.95	0.07356	0.05227	0.12582
611077.69	4206684.01	0.06868	0.04880	0.11748
611102.46	4206679.15	0.05195	0.03689	0.08884
611101.91	4206689.61	0.05529	0.03926	0.09455
611103.83	4206657.41	0.04596	0.03263	0.07859
611103.28	4206667.86	0.04863	0.03452	0.08315
611104.11	4206634.56	0.04129	0.02931	0.07060
611103.56	4206645.02	0.04348	0.03087	0.07435
611128.88	4206688.23	0.04132	0.02932	0.07064
611128.33	4206698.69	0.04355	0.03091	0.07447
611128.88	4206664.29	0.03734	0.02649	0.06383
611128.33	4206674.74	0.03920	0.02782	0.06701
611130.81	4206643.09	0.03377	0.02395	0.05772
611130.25	4206653.55	0.03532	0.02506	0.06038
611130.25	4206618.32	0.03100	0.02199	0.05299
611129.7	4206628.78	0.03234	0.02294	0.05528
611147.87	4206682.18	0.03359	0.02383	0.05742
611147.32	4206692.63	0.03520	0.02497	0.06016
611148.7	4206659.88	0.03069	0.02176	0.05245
611148.14	4206670.34	0.03204	0.02272	0.05476
611149.25	4206637.31	0.02825	0.02003	0.04828
611148.7	4206647.77	0.02941	0.02085	0.05026
611149.25	4206613.37	0.02615	0.01853	0.04468
611148.7	4206623.83	0.02715	0.01925	0.04640
611175.39	4206687.68	0.02739	0.01941	0.04679
611174.84	4206698.14	0.02865	0.02031	0.04895
611195.21	4206682.45	0.02347	0.01662	0.04009
611194.66	4206692.91	0.02450	0.01736	0.04186
611175.39	4206664.01	0.02516	0.01783	0.04299
611174.84	4206674.47	0.02620	0.01856	0.04476
611194.93	4206660.98	0.02182	0.01545	0.03727
611194.38	4206671.44	0.02268	0.01607	0.03875
611174.29	4206641.44	0.02357	0.01670	0.04027
611173.74	4206651.9	0.02447	0.01734	0.04181
611195.21	4206638.14	0.02026	0.01435	0.03461
611194.66	4206648.6	0.02100	0.01487	0.03588
611176.49	4206618.6	0.02166	0.01534	0.03701
611175.94	4206629.06	0.02243	0.01589	0.03832
611195.48	4206613.64	0.01884	0.01334	0.03217
611194.93	4206624.1	0.01947	0.01379	0.03326
610704.74	4206583.83	0.07769	0.05510	0.13279
610703.54	4206601.74	0.08277	0.05871	0.14147
610705.38	4206547.72	0.06824	0.04839	0.11663
610704.19	4206565.63	0.07280	0.05163	0.12443
610705.71	4206512.75	0.06059	0.04296	0.10355
610704.51	4206530.66	0.06430	0.04560	0.10991
610707	4206477.13	0.05398	0.03828	0.09226
610705.8	4206495.04	0.05712	0.04050	0.09762
610707.65	4206443.46	0.04843	0.03434	0.08277
610706.45	4206461.36	0.05131	0.03638	0.08769
610707.65	4206407.84	0.04333	0.03072	0.07405
610706.45	4206425.74	0.04577	0.03244	0.07821
610703.12	4206366.39	0.03838	0.02719	0.06557
610703.86	4206388.18	0.04087	0.02896	0.06983

610754.28	4206417.88	0.04508	0.03196	0.07704
610746.28	4206438.7	0.04829	0.03424	0.08253
610765.61	4206379.99	0.03979	0.02821	0.06800
610764.41	4206397.9	0.04217	0.02990	0.07207
610803.82	4206388.73	0.04030	0.02858	0.06887
610802.62	4206406.64	0.04281	0.03036	0.07317
610755.3	4206360.77	0.03764	0.02669	0.06433
610768.58	4206436.87	0.04802	0.03406	0.08208
610791.24	4206432.98	0.04709	0.03340	0.08050
610806.14	4206426.83	0.04575	0.03246	0.07821
610805.81	4206369.51	0.03783	0.02683	0.06466
610804.52	4206353.65	0.03606	0.02557	0.06162
610847.59	4206432.33	0.04505	0.03196	0.07700
610865.4	4206429.74	0.04368	0.03099	0.07467
610882.56	4206432.66	0.04307	0.03056	0.07362
610902.31	4206429.42	0.04117	0.02921	0.07038
610924.98	4206459.53	0.04394	0.03118	0.07512
610924.33	4206496.45	0.05091	0.03614	0.08705
610925.3	4206509.08	0.05358	0.03804	0.09162
610748.5	4206527.86	0.06569	0.04660	0.11229
610766.31	4206522.35	0.06479	0.04597	0.11076
610782.5	4206515.88	0.06346	0.04504	0.10850
610798.04	4206512.32	0.06261	0.04443	0.10704
610819.74	4206511.02	0.06195	0.04397	0.10592
610836.25	4206510.7	0.06127	0.04349	0.10477
610856.33	4206507.46	0.05940	0.04217	0.10157
610879.97	4206511.99	0.05880	0.04174	0.10055
610880.94	4206492.56	0.05421	0.03848	0.09269
610879.32	4206474.75	0.05064	0.03594	0.08658
610855.36	4206477.67	0.05283	0.03749	0.09033
610836.25	4206476.37	0.05351	0.03797	0.09149
610782.34	4206485.12	0.05661	0.04016	0.09677
610763.88	4206489.33	0.05740	0.04072	0.09812
610817.96	4206481.23	0.05520	0.03917	0.09437
610798.85	4206479.93	0.05537	0.03929	0.09466
610748.5	4206494.51	0.05826	0.04133	0.09958
610921.74	4206437.52	0.04079	0.02894	0.06973
610845.31	4206376.74	0.03734	0.02648	0.06382
610861.92	4206386.8	0.03784	0.02684	0.06467
610870.34	4206398.97	0.03897	0.02765	0.06662
610902.16	4206393.59	0.03641	0.02583	0.06223
610920.18	4206388.2	0.03455	0.02451	0.05905
610921.11	4206378.14	0.03338	0.02367	0.05705
610917.84	4206361.53	0.03188	0.02261	0.05449
610845.78	4206356.85	0.03509	0.02488	0.05997
610867.77	4206365.04	0.03502	0.02484	0.05986
610886.72	4206365.28	0.03410	0.02419	0.05829
610903.57	4206363.4	0.03294	0.02336	0.05630
610950.59	4206356.39	0.02922	0.02072	0.04994
610965.33	4206355.45	0.02808	0.01991	0.04799
610995.74	4206351.01	0.02542	0.01803	0.04345
610987.56	4206368.32	0.02745	0.01947	0.04692
610970.95	4206394.76	0.03128	0.02219	0.05347
610968.61	4206411.13	0.03321	0.02356	0.05677
610949.42	4206401.77	0.03384	0.02400	0.05784
610960.42	4206425.64	0.03567	0.02530	0.06097
610944.04	4206426.34	0.03727	0.02644	0.06371
610966.5	4206439.67	0.03685	0.02614	0.06299
610964.39	4206457.22	0.03950	0.02803	0.06753
610948.24	4206509.73	0.05093	0.03616	0.08708
610965.72	4206510.7	0.04877	0.03462	0.08340
610983.53	4206509.08	0.04587	0.03256	0.07842
610970.26	4206484.15	0.04312	0.03060	0.07372
610963.46	4206468.93	0.04139	0.02938	0.07077
611085.12	4206428.94	0.02255	0.01599	0.03854
611083.18	4206485.29	0.02700	0.01915	0.04615
611221.38	4206686.44	0.02052	0.01453	0.03504
611220.83	4206696.9	0.02144	0.01518	0.03663
611221.77	4206676.32	0.01973	0.01396	0.03369
611240.27	4206683.06	0.01847	0.01307	0.03154
611239.72	4206693.52	0.01929	0.01365	0.03295
611240.67	4206672.94	0.01777	0.01257	0.03034
611222.17	4206653.03	0.01820	0.01288	0.03107
611221.62	4206663.49	0.01888	0.01337	0.03225
611222.17	4206640.92	0.01752	0.01240	0.02992
611241.86	4206650.05	0.01637	0.01158	0.02796
611241.31	4206660.5	0.01698	0.01201	0.02899
611241.86	4206637.94	0.01577	0.01115	0.02693
611266.92	4206689.62	0.01691	0.01196	0.02887
611266.37	4206700.08	0.01770	0.01253	0.03023
611267.32	4206679.9	0.01626	0.01150	0.02776
611268.31	4206659.19	0.01507	0.01066	0.02572
611267.76	4206669.65	0.01565	0.01106	0.02671
611268.31	4206647.08	0.01450	0.01025	0.02475
611221.89	4206630.7	0.01701	0.01204	0.02905
611241.58	4206627.72	0.01532	0.01083	0.02615

611268.53	4206635.97	0.01400	0.00990	0.02390
611269.52	4206627.02	0.01358	0.00960	0.02318
611269.32	4206615.69	0.01316	0.00930	0.02246
611235.12	4206603.35	0.01474	0.01042	0.02516
611125.73	4206584.46	0.02838	0.02013	0.04851
611137.26	4206585.26	0.02617	0.01855	0.04471
611149	4206584.06	0.02396	0.01698	0.04094
611160.43	4206587.05	0.02222	0.01574	0.03796
611172.17	4206585.85	0.02037	0.01443	0.03480
611185.49	4206588.64	0.01876	0.01328	0.03204
611197.23	4206587.44	0.01737	0.01229	0.02966
611128.02	4206567.75	0.02646	0.01876	0.04522
611139.75	4206566.56	0.02429	0.01722	0.04151
611150.09	4206568.95	0.02276	0.01612	0.03888
611161.83	4206567.75	0.02086	0.01478	0.03563
611171.17	4206569.15	0.01962	0.01390	0.03352
611182.91	4206567.95	0.01809	0.01281	0.03090
611194.44	4206567.75	0.01681	0.01190	0.02870
611206.18	4206566.56	0.01563	0.01106	0.02668
611216.92	4206568.35	0.01478	0.01045	0.02524
611228.65	4206567.16	0.01386	0.00980	0.02367
611204.89	4206588.04	0.01661	0.01176	0.02837
611238.7	4206569.35	0.01327	0.00938	0.02266
611266.54	4206574.12	0.01191	0.00842	0.02033
611265.15	4206558.8	0.01154	0.00815	0.01969
611262.16	4206541.9	0.01122	0.00793	0.01914
611129.21	4206540.11	0.02397	0.01699	0.04096
611140.94	4206538.92	0.02205	0.01562	0.03767
611155.66	4206540.91	0.02007	0.01422	0.03429
611167.4	4206539.71	0.01851	0.01311	0.03162
611181.32	4206541.7	0.01705	0.01207	0.02912
611193.05	4206540.51	0.01586	0.01122	0.02709
611205.78	4206542.1	0.01479	0.01046	0.02525
611219.3	4206542.89	0.01374	0.00972	0.02346
611232.23	4206542.7	0.01285	0.00909	0.02194
611243.97	4206541.5	0.01212	0.00857	0.02069
611204.79	4206362.96	0.01038	0.00733	0.01771
611349.5	4206372.82	0.00594	0.00418	0.01012
611313.91	4206380.65	0.00671	0.00473	0.01145
611310.48	4206419.52	0.00728	0.00514	0.01242
611267.05	4206500.67	0.01002	0.00708	0.01710
611497.56	4206304.83	0.00399	0.00281	0.00680
611419.07	4206310.55	0.00457	0.00321	0.00778
611041.07	4206301.25	0.01930	0.01368	0.03299
611069.15	4206301.53	0.01746	0.01237	0.02984
611083.74	4206300.98	0.01649	0.01168	0.02817
611100.26	4206300.7	0.01540	0.01090	0.02630
611111.82	4206300.15	0.01463	0.01036	0.02499
611123.93	4206299.33	0.01383	0.00979	0.02363
611137.15	4206300.43	0.01306	0.00925	0.02231
611150.91	4206299.88	0.01225	0.00867	0.02092
611164.12	4206300.7	0.01151	0.00815	0.01966
610871.77	4206303.18	0.02893	0.02051	0.04944
610919.67	4206299.6	0.02646	0.01876	0.04523
610946.1	4206301.25	0.02519	0.01786	0.04304
610968.4	4206299.6	0.02377	0.01685	0.04063
610997.85	4206300.15	0.02201	0.01560	0.03761
610800.68	4206302.27	0.03108	0.02203	0.05310
610345.98	4206368.37	0.02570	0.01811	0.04382
610371.57	4206456.46	0.03126	0.02203	0.05328
610277.64	4206458.4	0.02535	0.01781	0.04315
610294.49	4206372.25	0.02374	0.01670	0.04045
610341.12	4206437.68	0.02830	0.01993	0.04823
610508	4206352.9	0.03183	0.02250	0.05433
610536.83	4206358.41	0.03319	0.02348	0.05667
610518.69	4206394.68	0.03524	0.02492	0.06015
610506.38	4206428.37	0.03719	0.02629	0.06348
610407.88	4206300.63	0.02528	0.01784	0.04312
610413.21	4206694.6	0.04494	0.03158	0.07653
610451.93	4206697.23	0.05207	0.03666	0.08873
610448.83	4206717.31	0.05239	0.03686	0.08925
610438.65	4207091.1	0.03408	0.01875	0.05283
610449.61	4207060.72	0.03462	0.02132	0.05594
610454.96	4207045.53	0.03622	0.02304	0.05926
610451.02	4207000.82	0.03961	0.02643	0.06604
610446.24	4206963.41	0.04260	0.02898	0.07158
610457.21	4206987.6	0.04230	0.02852	0.07082
610421.77	4207012.91	0.03377	0.02207	0.05585
610421.49	4207040.47	0.03196	0.02016	0.05212
610362.43	4207105.72	0.03146	0.01458	0.04604
610378.74	4207077.32	0.02771	0.01548	0.04319
610364.4	4207040.75	0.02627	0.01610	0.04236
610319.96	4207038.22	0.02311	0.01392	0.03703
610334.3	4207091.94	0.02657	0.01331	0.03988
610329.8	4207109.1	0.03109	0.01352	0.04461
610350.94	4206635.65	0.03484	0.02444	0.05928

610530.61	4206613.88	0.05808	0.04106	0.09915
610531.61	4206594.02	0.05587	0.03950	0.09537
610537.23	4206566.38	0.05341	0.03777	0.09118
610565.36	4206541.23	0.05351	0.03787	0.09137
610627.57	4206493.91	0.05267	0.03732	0.08999
610633.2	4206515.75	0.05650	0.04003	0.09653
610666.29	4206515.75	0.05888	0.04173	0.10061
610646.1	4206559.1	0.06555	0.04646	0.11200
610646.77	4206594.51	0.07324	0.05191	0.12515
610578.59	4206617.02	0.06636	0.04697	0.11333
610620.29	4206619.66	0.07402	0.05244	0.12646
610608.05	4206563.07	0.06149	0.04355	0.10505
610608.05	4206545.2	0.05878	0.04163	0.10041
610623.6	4206564.4	0.06364	0.04508	0.10872
610623.6	4206546.53	0.06050	0.04286	0.10337
610563.04	4206597.82	0.06092	0.04310	0.10402
610587.86	4206596.83	0.06443	0.04562	0.11005
610564.7	4206580.61	0.05870	0.04154	0.10024
610589.52	4206581.61	0.06218	0.04402	0.10621
610734.02	4206917.57	0.50781	0.36084	0.86865
610754.27	4206913.28	0.54060	0.38425	0.92485
610779.19	4206906.67	0.56034	0.39837	0.95871
610824.35	4206899.66	0.61890	0.44019	1.05909
610820.85	4206880.97	0.48862	0.34745	0.83607
610811.11	4206855.27	0.37179	0.26429	0.63609
610717.67	4206895.37	0.36389	0.25842	0.62231
610731.69	4206880.97	0.34876	0.24771	0.59648
610715.72	4206858	0.27205	0.19313	0.46518
610721.17	4206833.47	0.23929	0.16988	0.40916
610758.94	4206842.03	0.28976	0.20584	0.49559
610767.51	4206870.84	0.37156	0.26403	0.63559
610865.01	4206886.37	0.60660	0.43155	1.03815
610909.74	4206874.67	0.60891	0.43331	1.04222
610860.95	4206838.53	0.36468	0.25934	0.62402
610888.6	4206829.18	0.36043	0.25637	0.61680
610790.87	4206784.8	0.21893	0.15554	0.37447
610816.95	4206785.58	0.23093	0.16412	0.39505
610850.44	4206785.19	0.24446	0.17379	0.41825
610898.33	4206797.26	0.29349	0.20874	0.50223
610894.83	4206755.59	0.22123	0.15732	0.37855
610897.55	4206780.9	0.26268	0.18682	0.44950
610886.81	4206880.99	0.61050	0.43438	1.04489
611023.86	4206760.97	0.25532	0.18169	0.43701
611041.14	4206759.94	0.22015	0.15666	0.37681
611061.35	4206762.7	0.18152	0.12914	0.31066
610754.89	4206782.37	0.19935	0.14158	0.34093
610844.56	4206719.24	0.16549	0.11761	0.28310
610513.96	4206710.62	0.06587	0.04649	0.11236
610591.87	4206713.73	0.09014	0.06380	0.15394
610668.23	4206716.46	0.11656	0.08265	0.19921
610545.12	4206684.51	0.07133	0.05043	0.12176
610637.84	4206683.34	0.09545	0.06764	0.16309
610512.01	4206642.44	0.05831	0.04119	0.09950
610584.86	4206649.06	0.07434	0.05263	0.12697
610665.5	4206649.06	0.09127	0.06471	0.15599
609975.26	4207082.82	0.01904	0.00707	0.02612
609945.83	4207083.32	0.01913	0.00690	0.02602
609822.62	4207152.66	0.02263	0.00651	0.02913
609804.66	4207094.79	0.02539	0.00724	0.03263
609772.24	4207094.79	0.02587	0.00720	0.03307
609700.41	4207156.65	0.01747	0.00518	0.02264
609633.07	4207074.84	0.01512	0.00478	0.01990
609555.75	4207074.84	0.01655	0.00485	0.02141
609620.1	4207148.17	0.01802	0.00494	0.02296
609556.25	4207145.67	0.01768	0.00478	0.02246
609502.88	4207137.69	0.01932	0.00502	0.02434
610698.46	4207080.47	0.33366	0.23329	0.56695
610693.24	4207063.42	0.33962	0.23856	0.57819
610706.16	4207019.7	0.52902	0.37484	0.90385
610680.04	4207080.09	0.21538	0.14905	0.36443
610682.42	4207046.11	0.29393	0.20669	0.50062
CONCUNIT ug/	m^3			
DEPUNIT g/m^	2			

Oakley Main Street Project

Unmitigated

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Adult

Cancer Potency Factor:	1.1	$(mg/kg\text{-}day)^{-1}$
Exposure Frequency	350	days/year
Averaging Period	25550	days

Construction Year	Year	DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
2019	1	1	1	261	0.73	0.50410959	1.4
2020	2	1	1	261	0.73	0.49726776	1.4

BAAQMD 2016. Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines.

Oakley Main Street Project **No Mitigation at Sensitive Receptors**

Estimated Cancer Risks from Construction DPM - Adult Receptors

X (m)	Y (m)	Adult Cancer Risk (year 1) 2019 (/million)	Adult Cancer Risk (year 2) 2020 (/million)	Total Cancer Risk (/million)
611337.43	4207107.53	0.028092	0.019966	0.04806
611316.93	4207114.47	0.031331	0.022268	0.05360
611309.05	4207127.4	0.032803	0.023311	0.05611
611308.42	4207149.48	0.032800	0.023301	0.05610
611309.05	4207170.29	0.032119	0.022809	0.05493
611311.88	4207184.48	0.031116	0.022091	0.05321
611315.04	4207203.09	0.029700	0.021077	0.05078
611359.51	4207125.19	0.025762	0.018305	0.04407
611364.56	4207101.22	0.024391	0.017335	0.04173
611377.49	4207091.76	0.022524	0.016009	0.03853
611401.77	4207088.6	0.019952	0.014179	0.03413
611416.28	4207100.59	0.019173	0.013624	0.03280
611421.64	4207123.93	0.019520	0.013867	0.03339
611438.99	4207115.41	0.017876	0.012699	0.03058
611456.97	4207120.14	0.016723	0.011879	0.02860
611355.09	4207167.14	0.026545	0.018851	0.04540
611375.59	4207165.56	0.024409	0.017334	0.04174
611396.09	4207163.35	0.022456	0.015947	0.03840
611411.55	4207163.35	0.021107	0.014989	0.03610
611426.06	4207165.56	0.019951	0.014167	0.03412
611452.55	4207164.3	0.017996	0.012778	0.03077
611311.25	4207222.96	0.028680	0.020343	0.04902
611312.2	4207239.05	0.027295	0.019352	0.04665
611355.41	4207245.99	0.023653	0.016771	0.04042
611377.8	4207244.72	0.022216	0.015754	0.03797
611390.73	4207246.62	0.021305	0.015109	0.03641
611410.92	4207249.14	0.019988	0.014174	0.03416
611433.31	4207250.09	0.018685	0.013251	0.03194
611447.82	4207253.24	0.017834	0.012647	0.03048
611469.58	4207243.15	0.016882	0.011974	0.02886
611477.47	4207217.28	0.016677	0.011833	0.02851
611357.62	4207196.47	0.025682	0.018229	0.04391
611374.96	4207196.78	0.024081	0.017093	0.04117
611394.83	4207198.68	0.022361	0.015872	0.03823
611412.5	4207197.1	0.020995	0.014902	0.03590
611433.63	4207195.52	0.019467	0.013818	0.03328
611452.87	4207194.58	0.018177	0.012902	0.03108
611471.47	4207199.62	0.017034	0.012090	0.02912
611466.43	4207168.08	0.017121	0.012156	0.02928
611488.19	4207163.04	0.015716	0.011158	0.02687
611506.8	4207160.2	0.014627	0.010385	0.02501
611505.54	4207184.17	0.015032	0.010670	0.02570
611509.32	4207196.47	0.014945	0.010607	0.02555
611505.22	4207219.81	0.015235	0.010809	0.02604
611510.27	4207235.89	0.014964	0.010615	0.02558
611495.76	4207248.82	0.015547	0.011026	0.02657
611311.25	4207260.81	0.025456	0.018037	0.04349
611314.41	4207277.84	0.023745	0.016816	0.04056
611358.56	4207260.49	0.022606	0.016024	0.03863
611368.02	4207274.69	0.021241	0.015052	0.03629
611389.16	4207283.52	0.019721	0.013973	0.03369
611400.19	4207295.19	0.018656	0.013216	0.03187
611412.5	4207316	0.017196	0.012176	0.02937
611435.52	4207292.03	0.017304	0.012261	0.02956
611451.6	4207278.47	0.017031	0.012072	0.02910
611474.63	4207278.79	0.016019	0.011355	0.02737
611485.35	4207263.33	0.015837	0.011229	0.02707
611328.6	4207291.72	0.021911	0.015513	0.03742
611312.83	4207306.23	0.021239	0.015026	0.03627
611302.11	4207319.47	0.020313	0.014362	0.03468
611310.62	4207336.5	0.018617	0.013157	0.03177
611321.66	4207346.6	0.017604	0.012439	0.03004
611339.01	4207346.91	0.017295	0.012224	0.02952
611357.62	4207322.94	0.018564	0.013135	0.03170
611371.49	4207335.87	0.017345	0.012270	0.02961
611372.76	4207355.11	0.016125	0.011400	0.02752
611421.64	4207330.2	0.016246	0.011500	0.02775
611423.22	4207349.12	0.015335	0.010850	0.02618
611449.08	4207328.93	0.015468	0.010952	0.02642
611438.36	4207309.06	0.016572	0.011738	0.02831
611468.95	4207336.5	0.014613	0.010346	0.02496
611483.46	4207328.62	0.014427	0.010217	0.02464
611504.27	4207316.95	0.014074	0.009970	0.02404
611518.78	4207305.59	0.013825	0.009796	0.02362
611531.08	4207292.98	0.013602	0.009641	0.02324
611540.23	4207275.63	0.013463	0.009545	0.02301
611310.9	4207395.01	0.014042	0.009901	0.02394
611307.77	4207409.9	0.013032	0.009182	0.02221

Maximum Cancer Risk
0.16
BAAQMD threshold of significance
10
Exceed thresholds?
No

611306.78	4207428.47	0.011860	0.008349	0.02021
611310.76	4207450.93	0.010612	0.007464	0.01808
611307.77	4207464.05	0.009912	0.006967	0.01688
611355.09	4207392.69	0.014029	0.009902	0.02393
611398.22	4207398.65	0.013327	0.009412	0.02274
611386.69	4207411.77	0.012750	0.008999	0.02175
611357.67	4207410.98	0.012938	0.009127	0.02206
611353.89	4207429.07	0.011941	0.008417	0.02036
611362.24	4207449.15	0.010912	0.007687	0.01860
611385.9	4207431.06	0.011783	0.008311	0.02009
611420.29	4207390.9	0.013440	0.009498	0.02294
611436.99	4207401.83	0.012732	0.008996	0.02173
611444.34	4207420.32	0.011878	0.008389	0.02027
611441.16	4207444.37	0.010936	0.007717	0.01865
611446.33	4207459.28	0.010332	0.007288	0.01762
611459.25	4207384.54	0.013098	0.009262	0.02236
611466.61	4207407.4	0.012121	0.008566	0.02069
611472.97	4207420.72	0.011554	0.008163	0.01972
611470.58	4207443.78	0.010752	0.007591	0.01834
611470.58	4207461.87	0.010116	0.007138	0.01725
611351.29	4207475.53	0.009636	0.006779	0.01642
611374.78	4207476.37	0.009689	0.006820	0.01651
611395.9	4207472.82	0.009879	0.006959	0.01684
611389.14	4207448.15	0.010963	0.007728	0.01869
611439.49	4207477.38	0.009676	0.006821	0.01650
611467.04	4207481.61	0.009455	0.006667	0.01612
611302.63	4207484.99	0.008875	0.006231	0.01511
611303.64	4207503.41	0.008096	0.005679	0.01377
611310.74	4207524.36	0.007356	0.005156	0.01251
611334.05	4207523.85	0.007567	0.005309	0.01288
611356.02	4207522.5	0.007772	0.005458	0.01323
611371.73	4207521.49	0.007904	0.005553	0.01346
611394.04	4207526.89	0.007828	0.005502	0.01333
611406.88	4207522.5	0.008029	0.005647	0.01368
611430.71	4207520.47	0.008165	0.005746	0.01391
611444.56	4207523.01	0.008106	0.005706	0.01381
611466.19	4207524.87	0.008068	0.005681	0.01375
611485.45	4207527.74	0.007982	0.005622	0.01360
611511.14	4207529.43	0.007908	0.005573	0.01348
611524.65	4207513.21	0.008311	0.005860	0.01417
611552.87	4207524.02	0.007934	0.005595	0.01353
611553.21	4207500.7	0.008503	0.006000	0.01450
611524.32	4207495.8	0.008784	0.006197	0.01498
611523.13	4207474.34	0.009389	0.006628	0.01602
611552.03	4207482.79	0.008957	0.006324	0.01528
611519.59	4207462.51	0.009754	0.006887	0.01664
611554.73	4207464.37	0.009396	0.006637	0.01603
611524.99	4207440.55	0.010330	0.007299	0.01763
611555.24	4207445.11	0.009867	0.006973	0.01684
611555.58	4207427.03	0.010303	0.007284	0.01759
611557.94	4207398.3	0.010932	0.007734	0.01867
611522.63	4207422.64	0.010867	0.007681	0.01855
611522.63	4207401.35	0.011463	0.008107	0.01957
611542.4	4207388.34	0.011445	0.008098	0.01954
611511.98	4207382.93	0.012170	0.008610	0.02078
611508.43	4207369.24	0.012629	0.008937	0.02157
611535.81	4207363.5	0.012161	0.008608	0.02077
611548.65	4207344.4	0.012243	0.008670	0.02091
611559.8	4207244.2	0.012860	0.009121	0.02198
611558.62	4207227.64	0.012877	0.009135	0.02201
611555.24	4207203.99	0.012877	0.009137	0.02201
611557.27	4207183.2	0.012567	0.008919	0.02149
611554.23	4207164.62	0.012416	0.008813	0.02123
611557.77	4207142.31	0.011831	0.008399	0.02023
611547.97	4207121.19	0.011738	0.008335	0.02007
611546.96	4207102.77	0.011228	0.007974	0.01920
611551.18	4207088.92	0.010602	0.007529	0.01813
611555.91	4207066.78	0.009646	0.006850	0.01650
611476.99	4207114.19	0.015216	0.010808	0.02602
611498.11	4207124.33	0.014284	0.010145	0.02443
611517.37	4207121.63	0.013178	0.009358	0.02254
611516.7	4207103.71	0.012639	0.008977	0.02162
611397.15	4207001.31	0.014953	0.010630	0.02558
611405.21	4206965.9	0.011882	0.008445	0.02033
611417.66	4206992.52	0.012940	0.009197	0.02214
611434.86	4206992.14	0.011905	0.008461	0.02037
611454.74	4206982.79	0.010355	0.007358	0.01771
611462.1	4206968.28	0.009254	0.006574	0.01583
611453.75	4206949.79	0.008600	0.006110	0.01471
611447.79	4206931.5	0.007854	0.005579	0.01343
611475.02	4206936.87	0.007250	0.005149	0.01240
611496.69	4206939.06	0.006739	0.004786	0.01152
611513	4206936.67	0.006237	0.004428	0.01067
611530.89	4206938.86	0.005914	0.004199	0.01011
611546.99	4206935.68	0.005477	0.003888	0.00937
611404.05	4206946.01	0.010569	0.007511	0.01808

611405.64	4206926.73	0.009213	0.006546	0.01576
611403.65	4206905.06	0.007945	0.005644	0.01359
611410.81	4206890.15	0.006859	0.004871	0.01173
611437.25	4206884.98	0.005892	0.004183	0.01008
611453.35	4206887.96	0.005650	0.004011	0.00966
611472.24	4206888.75	0.005286	0.003752	0.00904
611492.32	4206887.16	0.004856	0.003446	0.00830
611509.62	4206887.76	0.004588	0.003256	0.00784
611527.31	4206889.15	0.004363	0.003095	0.00746
611546.6	4206887.56	0.004054	0.002876	0.00693
611377.6	4206837.66	0.005092	0.003613	0.00871
611377.41	4206826.33	0.004608	0.003269	0.00788
611377.6	4206816.19	0.004211	0.002987	0.00720
611407.63	4206828.51	0.004188	0.002970	0.00716
611437.05	4206820.96	0.003558	0.002522	0.00608
611474.23	4206850.98	0.003968	0.002814	0.00678
611478.2	4206824.54	0.003213	0.002278	0.00549
611495.9	4206825.93	0.003080	0.002183	0.00526
611509.22	4206853.17	0.003601	0.002553	0.00615
611526.32	4206824.34	0.002794	0.001980	0.00477
611558.33	4206844.02	0.002927	0.002074	0.00500
611554.15	4206823.34	0.002577	0.001826	0.00440
611558.53	4206886.77	0.003884	0.002755	0.00664
611375.81	4206780.4	0.003142	0.002226	0.00537
611387.74	4206763.9	0.002678	0.001896	0.00457
611411.4	4206781.59	0.002840	0.002011	0.00485
611412.6	4206752.37	0.002310	0.001634	0.00394
611440.43	4206779.41	0.002572	0.001821	0.00439
611471.44	4206781.39	0.002399	0.001698	0.00410
611469.26	4206740.64	0.001865	0.001319	0.00318
611499.68	4206782.19	0.002245	0.001589	0.00383
611536.85	4206780.8	0.002035	0.001440	0.00347
611523.14	4206742.03	0.001666	0.001177	0.00284
611556.54	4206774.04	0.001867	0.001320	0.00319
611323.92	4206674.63	0.002015	0.001424	0.00344
611335.65	4206699.68	0.002149	0.001519	0.00367
611362.49	4206701.67	0.002004	0.001417	0.00342
611381.38	4206700.48	0.001892	0.001337	0.00323
611398.08	4206697.1	0.001783	0.001260	0.00304
611417.17	4206699.88	0.001719	0.001214	0.00293
611433.87	4206699.09	0.001644	0.001161	0.00280
611454.55	4206702.27	0.001587	0.001121	0.00271
611471.44	4206700.08	0.001512	0.001068	0.00258
611490.53	4206698.29	0.001439	0.001016	0.00245
611510.61	4206699.68	0.001387	0.000979	0.00237
611531.49	4206698.09	0.001320	0.000931	0.00225
611545.01	4206701.47	0.001304	0.000920	0.00222
611559.92	4206697.3	0.001244	0.000878	0.00212
611335.26	4206651.57	0.001799	0.001271	0.00307
611359.11	4206645.41	0.001645	0.001162	0.00281
611376.21	4206651.17	0.001596	0.001127	0.00272
611398.68	4206649.98	0.001498	0.001057	0.00255
611414.58	4206650.18	0.001439	0.001015	0.00245
611432.87	4206648.59	0.001368	0.000965	0.00233
611471.64	4206649.78	0.001254	0.000885	0.00214
611491.92	4206651.57	0.001206	0.000850	0.00206
611511.41	4206651.77	0.001157	0.000816	0.00197
611527.51	4206650.77	0.001116	0.000787	0.00190
611546.99	4206651.97	0.001077	0.000760	0.00184
611325.51	4206617.57	0.001681	0.001187	0.00287
611344.2	4206617.57	0.001589	0.001122	0.00271
611357.52	4206616.78	0.001526	0.001077	0.00260
611368.66	4206620.55	0.001494	0.001054	0.00255
611381.98	4206618.76	0.001434	0.001012	0.00245
611395.9	4206619.76	0.001385	0.000977	0.00236
611407.82	4206620.75	0.001347	0.000950	0.00230
611421.14	4206619.96	0.001297	0.000915	0.00221
611435.46	4206618.76	0.001250	0.000882	0.00213
611472.44	4206621.55	0.001156	0.000815	0.00197
611485.36	4206619.96	0.001118	0.000788	0.00191
611496.5	4206622.94	0.001099	0.000775	0.00187
611508.82	4206622.14	0.001066	0.000751	0.00182
611522.14	4206620.55	0.001031	0.000727	0.00176
611532.88	4206620.95	0.001010	0.000711	0.00172
611546	4206621.94	0.000986	0.000695	0.00168
611557.13	4206620.16	0.000960	0.000676	0.00164
611327.7	4206564.89	0.001443	0.001018	0.00246
611341.02	4206566.28	0.001407	0.000993	0.00240
611355.14	4206572.84	0.001376	0.000971	0.00235
611369.25	4206575.02	0.001331	0.000939	0.00227
611384.16	4206573.04	0.001272	0.000897	0.00217
611395.1	4206574.63	0.001240	0.000874	0.00211
611407.23	4206574.43	0.001201	0.000847	0.00205
611420.15	4206574.03	0.001161	0.000818	0.00198
611431.88	4206569.86	0.001120	0.000790	0.00191
611473.63	4206575.22	0.001035	0.000729	0.00176

611487.55	4206572.24	0.000998	0.000703	0.00170
611500.27	4206575.22	0.000973	0.000686	0.00166
611512.6	4206575.82	0.000947	0.000667	0.00161
611524.73	4206574.43	0.000920	0.000648	0.00157
611537.85	4206576.22	0.000899	0.000633	0.00153
611548.59	4206575.22	0.000878	0.000618	0.00150
611558.72	4206577.01	0.000863	0.000608	0.00147
611331.88	4206537.85	0.001339	0.000945	0.00228
611332.67	4206513.19	0.001264	0.000892	0.00216
611355.54	4206518.56	0.001206	0.000850	0.00206
611357.72	4206542.42	0.001263	0.000891	0.00215
611371.84	4206555.94	0.001253	0.000884	0.00214
611370.05	4206542.02	0.001222	0.000862	0.00208
611383.57	4206548.58	0.001196	0.000844	0.00204
611397.09	4206548.58	0.001157	0.000815	0.00197
611409.22	4206546.79	0.001120	0.000790	0.00191
611419.95	4206547.59	0.001094	0.000771	0.00187
611432.28	4206550.37	0.001071	0.000755	0.00183
611349.17	4206492.32	0.001160	0.000818	0.00198
611363.69	4206486.95	0.001109	0.000782	0.00189
611375.81	4206491.32	0.001086	0.000766	0.00185
611387.94	4206500.67	0.001075	0.000758	0.00183
611399.08	4206500.87	0.001048	0.000739	0.00179
611409.61	4206504.25	0.001031	0.000727	0.00176
611422.54	4206503.25	0.001001	0.000705	0.00171
611437.65	4206504.45	0.000974	0.000686	0.00166
611374.82	4206454.74	0.001006	0.000709	0.00172
611385.76	4206467.07	0.001007	0.000710	0.00172
611397.68	4206472.44	0.000992	0.000699	0.00169
611411.2	4206477.21	0.000974	0.000686	0.00166
611424.33	4206476.41	0.000947	0.000667	0.00161
611437.25	4206478	0.000926	0.000652	0.00158
611425.52	4206431.08	0.000866	0.000610	0.00148
611476.42	4206548.78	0.000975	0.000687	0.00166
611488.54	4206547.99	0.000949	0.000668	0.00162
611501.27	4206548.38	0.000921	0.000649	0.00157
611512	4206545.8	0.000895	0.000630	0.00153
611524.33	4206546.4	0.000873	0.000615	0.00149
611536.06	4206546.79	0.000853	0.000600	0.00145
611548.98	4206548.98	0.000834	0.000587	0.00142
611559.92	4206549.18	0.000816	0.000574	0.00139
611477.81	4206502.66	0.000897	0.000632	0.00153
611479.99	4206477.61	0.000855	0.000602	0.00146
611491.13	4206505.84	0.000877	0.000618	0.00149
611502.46	4206505.04	0.000856	0.000602	0.00146
611491.72	4206477.8	0.000836	0.000588	0.00142
611503.06	4206479	0.000819	0.000576	0.00139
611514.39	4206503.05	0.000833	0.000586	0.00142
611515.98	4206477.8	0.000796	0.000560	0.00136
611528.31	4206505.84	0.000812	0.000571	0.00138
611528.9	4206476.41	0.000775	0.000545	0.00132
611540.63	4206508.22	0.000794	0.000559	0.00135
611538.25	4206476.41	0.000761	0.000535	0.00130
611552.56	4206505.84	0.000773	0.000544	0.00132
611550.77	4206475.02	0.000741	0.000522	0.00126
611479.99	4206431.88	0.000787	0.000554	0.00134
611493.12	4206432.08	0.000769	0.000541	0.00131
611504.65	4206432.67	0.000755	0.000531	0.00129
611518.56	4206430.88	0.000735	0.000517	0.00125
611529.5	4206430.29	0.000721	0.000507	0.00123
611542.42	4206435.46	0.000711	0.000500	0.00121
611552.76	4206433.07	0.000696	0.000490	0.00119
611479.8	4206406.03	0.000752	0.000529	0.00128
611494.51	4206406.43	0.000735	0.000517	0.00125
611506.24	4206406.83	0.000722	0.000508	0.00123
611518.56	4206405.44	0.000706	0.000497	0.00120
611530.89	4206404.64	0.000692	0.000486	0.00118
611542.62	4206407.03	0.000681	0.000479	0.00116
611555.15	4206405.44	0.000666	0.000468	0.00113
611529.9	4206362.49	0.000648	0.000455	0.00110
611544.81	4206364.08	0.000636	0.000447	0.00108
611558.72	4206362.89	0.000622	0.000437	0.00106
610703.71	4206675.32	0.016802	0.011920	0.02872
610721.12	4206689.86	0.018449	0.013092	0.03154
610736.84	4206686.65	0.018761	0.013317	0.03208
610754.25	4206685.46	0.019230	0.013653	0.03288
610771.15	4206685.12	0.019698	0.013987	0.03369
610789.74	4206688.5	0.020507	0.014565	0.03507
610807.15	4206686.31	0.020706	0.014708	0.03541
610700.5	4206658.42	0.015653	0.011104	0.02676
610703.54	4206637.12	0.014536	0.010312	0.02485
610702.86	4206621.23	0.013695	0.009715	0.02341
610746.81	4206643.04	0.015902	0.011287	0.02719
610777.57	4206642.19	0.016418	0.011657	0.02808
610792.28	4206642.53	0.016658	0.011829	0.02849
610749.18	4206621.57	0.014618	0.010375	0.02499

610749.85	4206602.98	0.013581	0.009639	0.02322
610784.16	4206612.28	0.014513	0.010303	0.02482
610793.29	4206597.74	0.013704	0.009730	0.02343
610810.19	4206587.6	0.013175	0.009354	0.02253
610820	4206591.66	0.013419	0.009528	0.02295
610837.24	4206594.36	0.013555	0.009626	0.02318
610839.6	4206619.21	0.015231	0.010818	0.02605
610834.02	4206641.52	0.016954	0.012043	0.02900
610850.25	4206642.36	0.017067	0.012125	0.02919
610877.29	4206642.87	0.017039	0.012107	0.02915
610878.14	4206626.14	0.015576	0.011066	0.02664
610876.79	4206607.54	0.014160	0.010059	0.02422
610878.31	4206588.95	0.012887	0.009153	0.02204
610762.87	4206569.18	0.012006	0.008521	0.02053
610782.13	4206564.1	0.011868	0.008424	0.02029
610796.84	4206560.56	0.011733	0.008329	0.02006
610815.77	4206555.48	0.011471	0.008144	0.01961
610832.16	4206557.01	0.011496	0.008162	0.01966
610851.43	4206553.96	0.011214	0.007962	0.01918
610880.67	4206553.63	0.010874	0.007722	0.01860
610878.31	4206570.7	0.011801	0.008381	0.02018
610826.68	4206687.13	0.021189	0.015054	0.03624
610844.57	4206686.3	0.021391	0.015199	0.03659
610865.21	4206687.68	0.021837	0.015519	0.03736
610880.9	4206686.3	0.021830	0.015515	0.03735
610899.62	4206692.91	0.022878	0.016263	0.03914
610919.16	4206680.8	0.021116	0.015011	0.03613
610925.76	4206661.81	0.018528	0.013170	0.03170
610927.41	4206642.54	0.016355	0.011623	0.02798
610925.49	4206624.93	0.014753	0.010483	0.02524
610924.94	4206606.21	0.013271	0.009429	0.02270
610922.73	4206591.08	0.012272	0.008718	0.02099
610923.56	4206571.81	0.011096	0.007882	0.01898
610925.21	4206554.47	0.010147	0.007206	0.01735
610956.31	4206695.94	0.022899	0.016283	0.03918
611019.34	4206696.76	0.018725	0.013315	0.03204
610959.06	4206679.15	0.019989	0.014211	0.03420
610962.92	4206664.84	0.017828	0.012673	0.03050
610963.47	4206649.42	0.015979	0.011358	0.02734
610965.12	4206634.29	0.014397	0.010231	0.02463
610958.24	4206619.42	0.013362	0.009494	0.02286
610960.44	4206603.74	0.012110	0.008604	0.02071
610962.64	4206588.32	0.011039	0.007842	0.01888
610968.15	4206560.25	0.009398	0.006674	0.01607
610949.71	4206557.5	0.009739	0.006916	0.01666
611017.96	4206681.9	0.016580	0.011788	0.02837
611021.54	4206668.69	0.014631	0.010400	0.02503
611017.69	4206653.83	0.013398	0.009522	0.02292
611013.83	4206638.97	0.012348	0.008775	0.02112
611013.01	4206623.83	0.011262	0.008002	0.01926
611009.98	4206609.24	0.010473	0.007441	0.01791
611008.05	4206597.68	0.009897	0.007030	0.01693
611001.72	4206570.71	0.008820	0.006264	0.01508
611017.41	4206575.11	0.008432	0.005989	0.01442
611033.38	4206575.66	0.007830	0.005560	0.01339
611050.71	4206697.86	0.015101	0.010735	0.02584
611054.84	4206681.9	0.012842	0.009127	0.02197
611052.92	4206671.17	0.012064	0.008573	0.02064
611054.84	4206650.8	0.010384	0.007378	0.01776
611055.39	4206637.59	0.009548	0.006782	0.01633
611053.47	4206624.65	0.008985	0.006382	0.01537
611054.84	4206605.02	0.008022	0.005697	0.01372
611055.39	4206591.81	0.007487	0.005316	0.01280
611053.47	4206578.87	0.007123	0.005057	0.01218
611057.6	4206560.98	0.006372	0.004523	0.01089
611058.15	4206547.77	0.006008	0.004264	0.01027
611056.22	4206534.84	0.005762	0.004089	0.00985
611021.82	4206533.19	0.006783	0.004816	0.01160
611022.37	4206519.98	0.006395	0.004540	0.01093
611020.44	4206507.04	0.006116	0.004341	0.01046
611028.7	4206492.18	0.005571	0.003953	0.00952
611029.25	4206478.97	0.005285	0.003750	0.00904
611027.32	4206466.03	0.005079	0.003604	0.00868
611022.09	4206449.79	0.004902	0.003478	0.00838
611030.62	4206435.76	0.004527	0.003211	0.00774
611028.7	4206422.82	0.004376	0.003104	0.00748
611057.32	4206514.2	0.005290	0.003754	0.00904
611057.87	4206500.99	0.005027	0.003567	0.00859
611055.94	4206488.05	0.004844	0.003436	0.00828
611057.32	4206473.74	0.004573	0.003244	0.00782
611057.87	4206460.53	0.004363	0.003095	0.00746
611055.94	4206447.59	0.004225	0.002996	0.00722
611056.49	4206431.35	0.004007	0.002841	0.00685
611057.04	4206418.14	0.003838	0.002721	0.00656
611055.12	4206405.21	0.003724	0.002640	0.00636
611056.49	4206387.04	0.003516	0.002492	0.00601

611057.04	4206373.83	0.003382	0.002398	0.00578
611055.12	4206360.9	0.003289	0.002331	0.00562
611021.82	4206405.3	0.004250	0.003014	0.00726
611031.45	4206391.54	0.003932	0.002788	0.00672
611035.85	4206363.74	0.003565	0.002528	0.00609
611085.12	4206364.57	0.002935	0.002080	0.00502
611087.59	4206415.48	0.003312	0.002347	0.00566
611084.02	4206444.38	0.003654	0.002591	0.00624
611084.84	4206458.69	0.003793	0.002690	0.00648
611083.19	4206470.8	0.003971	0.002816	0.00679
611082.64	4206503.28	0.004435	0.003146	0.00758
611082.37	4206515.94	0.004635	0.003288	0.00792
611082.92	4206532.18	0.004890	0.003469	0.00836
611082.64	4206545.66	0.005144	0.003650	0.00879
611105.48	4206544.56	0.004412	0.003129	0.00754
611103.83	4206534.65	0.004318	0.003062	0.00738
611079.89	4206585.02	0.006176	0.004384	0.01056
611081.54	4206569.88	0.005736	0.004070	0.00981
611081.82	4206624.84	0.007320	0.005197	0.01252
611082.37	4206611.63	0.006846	0.004860	0.01171
611080.44	4206598.69	0.006546	0.004647	0.01119
611104.66	4206591.53	0.005291	0.003754	0.00904
611105.48	4206580.53	0.005039	0.003575	0.00861
611103.56	4206567.59	0.004877	0.003459	0.00834
611103.83	4206624.29	0.006106	0.004333	0.01044
611102.73	4206612.45	0.005862	0.004160	0.01002
611104.11	4206601.99	0.005548	0.003936	0.00948
611079.89	4206667.5	0.009355	0.006646	0.01600
611080.44	4206654.29	0.008629	0.006128	0.01476
611078.51	4206641.35	0.008175	0.005805	0.01398
611100.53	4206702.18	0.009307	0.006611	0.01592
611079.61	4206696.95	0.011343	0.008060	0.01940
611077.69	4206684.01	0.010592	0.007525	0.01812
611102.46	4206679.15	0.008011	0.005689	0.01370
611101.91	4206689.61	0.008526	0.006055	0.01458
611103.83	4206657.41	0.007088	0.005032	0.01212
611103.28	4206667.86	0.007499	0.005324	0.01282
611104.11	4206634.56	0.006368	0.004520	0.01089
611103.56	4206645.02	0.006706	0.004760	0.01147
611128.88	4206688.23	0.006371	0.004522	0.01089
611128.33	4206698.69	0.006717	0.004767	0.01148
611128.88	4206664.29	0.005758	0.004085	0.00984
611128.33	4206674.74	0.006045	0.004289	0.01033
611130.81	4206643.09	0.005208	0.003694	0.00890
611130.25	4206653.55	0.005447	0.003865	0.00931
611130.25	4206618.32	0.004781	0.003391	0.00817
611129.7	4206628.78	0.004987	0.003537	0.00852
611147.87	4206682.18	0.005181	0.003674	0.00885
611147.32	4206692.63	0.005428	0.003850	0.00928
611148.7	4206659.88	0.004732	0.003356	0.00809
611148.14	4206670.34	0.004941	0.003504	0.00844
611149.25	4206637.31	0.004357	0.003089	0.00745
611148.7	4206647.77	0.004535	0.003215	0.00775
611149.25	4206613.37	0.004032	0.002858	0.00689
611148.7	4206623.83	0.004187	0.002968	0.00716
611175.39	4206687.68	0.004223	0.002993	0.00722
611174.84	4206698.14	0.004418	0.003131	0.00755
611195.21	4206682.45	0.003619	0.002564	0.00618
611194.66	4206692.91	0.003779	0.002677	0.00646
611175.39	4206664.01	0.003880	0.002750	0.00663
611174.84	4206674.47	0.004040	0.002863	0.00690
611194.93	4206660.98	0.003365	0.002383	0.00575
611194.38	4206671.44	0.003498	0.002478	0.00598
611174.29	4206641.44	0.003635	0.002575	0.00621
611173.74	4206651.9	0.003773	0.002674	0.00645
611195.21	4206638.14	0.003125	0.002213	0.00534
611194.66	4206648.6	0.003239	0.002293	0.00553
611176.49	4206618.6	0.003341	0.002366	0.00571
611175.94	4206629.06	0.003459	0.002450	0.00591
611195.48	4206613.64	0.002905	0.002056	0.00496
611194.93	4206624.1	0.003003	0.002126	0.00513
610704.74	4206583.83	0.011980	0.008497	0.02048
610703.54	4206601.74	0.012763	0.009053	0.02182
610705.38	4206547.72	0.010523	0.007463	0.01799
610704.19	4206565.63	0.011227	0.007963	0.01919
610705.71	4206512.75	0.009343	0.006625	0.01597
610704.51	4206530.66	0.009916	0.007032	0.01695
610707	4206477.13	0.008325	0.005902	0.01423
610705.8	4206495.04	0.008808	0.006246	0.01505
610707.65	4206443.46	0.007469	0.005295	0.01276
610706.45	4206461.36	0.007913	0.005610	0.01352
610707.65	4206407.84	0.006683	0.004737	0.01142
610706.45	4206425.74	0.007058	0.005003	0.01206
610703.12	4206366.39	0.005918	0.004194	0.01011
610703.86	4206388.18	0.006302	0.004467	0.01077
610754.28	4206417.88	0.006951	0.004929	0.01188

610746.28	4206438.7	0.007446	0.005281	0.01273
610765.61	4206379.99	0.006136	0.004351	0.01049
610764.41	4206397.9	0.006503	0.004611	0.01111
610803.82	4206388.73	0.006214	0.004407	0.01062
610802.62	4206406.64	0.006602	0.004682	0.01128
610755.3	4206360.77	0.005805	0.004115	0.00992
610768.58	4206436.87	0.007405	0.005252	0.01266
610791.24	4206432.98	0.007262	0.005151	0.01241
610806.14	4206426.83	0.007056	0.005005	0.01206
610805.81	4206369.51	0.005834	0.004137	0.00997
610804.52	4206353.65	0.005560	0.003943	0.00950
610847.59	4206432.33	0.006946	0.004928	0.01187
610865.4	4206429.74	0.006736	0.004779	0.01151
610882.56	4206432.66	0.006641	0.004712	0.01135
610902.31	4206429.42	0.006349	0.004505	0.01085
610924.98	4206459.53	0.006776	0.004809	0.01158
610924.33	4206496.45	0.007850	0.005573	0.01342
610925.3	4206509.08	0.008263	0.005866	0.01413
610748.5	4206527.86	0.010129	0.007186	0.01732
610766.31	4206522.35	0.009991	0.007089	0.01708
610782.5	4206515.88	0.009787	0.006945	0.01673
610798.04	4206512.32	0.009655	0.006852	0.01651
610819.74	4206511.02	0.009554	0.006781	0.01633
610836.25	4206510.7	0.009449	0.006707	0.01616
610856.33	4206507.46	0.009161	0.006503	0.01566
610879.97	4206511.99	0.009068	0.006437	0.01551
610880.94	4206492.56	0.008360	0.005934	0.01429
610879.32	4206474.75	0.007809	0.005543	0.01335
610855.36	4206477.67	0.008147	0.005782	0.01393
610836.25	4206476.37	0.008252	0.005856	0.01411
610782.34	4206485.12	0.008729	0.006193	0.01492
610763.88	4206489.33	0.008851	0.006279	0.01513
610817.96	4206481.23	0.008512	0.006040	0.01455
610798.85	4206479.93	0.008539	0.006059	0.01460
610748.5	4206494.51	0.008984	0.006373	0.01536
610921.74	4206437.52	0.006290	0.004464	0.01075
610845.31	4206376.74	0.005758	0.004084	0.00984
610861.92	4206386.8	0.005835	0.004139	0.00997
610870.34	4206398.97	0.006010	0.004264	0.01027
610902.16	4206393.59	0.005614	0.003983	0.00960
610920.18	4206388.2	0.005328	0.003779	0.00911
610921.11	4206378.14	0.005147	0.003651	0.00880
610917.84	4206361.53	0.004916	0.003487	0.00840
610845.78	4206356.85	0.005411	0.003837	0.00925
610867.77	4206365.04	0.005401	0.003831	0.00923
610886.72	4206365.28	0.005259	0.003730	0.00899
610903.57	4206363.4	0.005080	0.003603	0.00868
610950.59	4206356.39	0.004506	0.003196	0.00770
610965.33	4206355.45	0.004330	0.003071	0.00740
610995.74	4206351.01	0.003921	0.002780	0.00670
610987.56	4206368.32	0.004234	0.003002	0.00724
610970.95	4206394.76	0.004824	0.003422	0.00825
610968.61	4206411.13	0.005121	0.003633	0.00875
610949.42	4206401.77	0.005218	0.003702	0.00892
610960.42	4206425.64	0.005500	0.003902	0.00940
610944.04	4206426.34	0.005747	0.004078	0.00983
610966.5	4206439.67	0.005682	0.004032	0.00971
610964.39	4206457.22	0.006091	0.004322	0.01041
610948.24	4206509.73	0.007853	0.005576	0.01343
610965.72	4206510.7	0.007521	0.005339	0.01286
610983.53	4206509.08	0.007073	0.005021	0.01209
610970.26	4206484.15	0.006649	0.004720	0.01137
610963.46	4206468.93	0.006383	0.004530	0.01091
611085.12	4206428.94	0.003478	0.002466	0.00594
611083.18	4206485.29	0.004164	0.002953	0.00712
611221.38	4206686.44	0.003164	0.002240	0.00540
611220.83	4206696.9	0.003307	0.002341	0.00565
611221.77	4206676.32	0.003042	0.002153	0.00520
611240.27	4206683.06	0.002849	0.002016	0.00486
611239.72	4206693.52	0.002975	0.002106	0.00508
611240.67	4206672.94	0.002740	0.001939	0.00468
611222.17	4206653.03	0.002806	0.001986	0.00479
611221.62	4206663.49	0.002912	0.002061	0.00497
611222.17	4206640.92	0.002702	0.001912	0.00461
611241.86	4206650.05	0.002525	0.001786	0.00431
611241.31	4206660.5	0.002619	0.001852	0.00447
611241.86	4206637.94	0.002432	0.001720	0.00415
611266.92	4206689.62	0.002608	0.001845	0.00445
611266.37	4206700.08	0.002730	0.001932	0.00466
611267.32	4206679.9	0.002508	0.001774	0.00428
611268.31	4206659.19	0.002324	0.001643	0.00397
611267.76	4206669.65	0.002413	0.001706	0.00412
611268.31	4206647.08	0.002236	0.001581	0.00382
611221.89	4206630.7	0.002624	0.001856	0.00448
611241.58	4206627.72	0.002362	0.001671	0.00403
611268.53	4206635.97	0.002159	0.001526	0.00369

611269.52	4206627.02	0.002095	0.001481	0.00358
611269.32	4206615.69	0.002030	0.001435	0.00346
611235.12	4206603.35	0.002273	0.001607	0.00388
611125.73	4206584.46	0.004377	0.003104	0.00748
611137.26	4206585.26	0.004035	0.002860	0.00690
611149	4206584.06	0.003695	0.002619	0.00631
611160.43	4206587.05	0.003426	0.002427	0.00585
611172.17	4206585.85	0.003141	0.002225	0.00537
611185.49	4206588.64	0.002893	0.002048	0.00494
611197.23	4206587.44	0.002678	0.001895	0.00457
611128.02	4206567.75	0.004081	0.002893	0.00697
611139.75	4206566.56	0.003746	0.002655	0.00640
611150.09	4206568.95	0.003509	0.002487	0.00600
611161.83	4206567.75	0.003217	0.002279	0.00550
611171.17	4206569.15	0.003026	0.002143	0.00517
611182.91	4206567.95	0.002790	0.001975	0.00476
611194.44	4206567.75	0.002592	0.001834	0.00443
611206.18	4206566.56	0.002410	0.001705	0.00411
611216.92	4206568.35	0.002279	0.001612	0.00389
611228.65	4206567.16	0.002138	0.001512	0.00365
611204.89	4206588.04	0.002562	0.001813	0.00438
611238.7	4206569.35	0.002047	0.001447	0.00349
611266.54	4206574.12	0.001837	0.001298	0.00314
611265.15	4206558.8	0.001779	0.001257	0.00304
611262.16	4206541.9	0.001730	0.001222	0.00295
611129.21	4206540.11	0.003696	0.002620	0.00632
611140.94	4206538.92	0.003400	0.002409	0.00581
611155.66	4206540.91	0.003095	0.002193	0.00529
611167.4	4206539.71	0.002854	0.002021	0.00488
611181.32	4206541.7	0.002629	0.001861	0.00449
611193.05	4206540.51	0.002446	0.001731	0.00418
611205.78	4206542.1	0.002280	0.001613	0.00389
611219.3	4206542.89	0.002119	0.001499	0.00362
611232.23	4206542.7	0.001982	0.001401	0.00338
611243.97	4206541.5	0.001869	0.001321	0.00319
611204.79	4206362.96	0.001600	0.001131	0.00273
611349.5	4206372.82	0.000916	0.000645	0.00156
611313.91	4206380.65	0.001035	0.000730	0.00177
611310.48	4206419.52	0.001123	0.000792	0.00192
611267.05	4206500.67	0.001545	0.001091	0.00264
611497.56	4206304.83	0.000616	0.000433	0.00105
611419.07	4206310.55	0.000705	0.000496	0.00120
611041.07	4206301.25	0.002977	0.002110	0.00509
611069.15	4206301.53	0.002693	0.001908	0.00460
611083.74	4206300.98	0.002542	0.001801	0.00434
611100.26	4206300.7	0.002374	0.001682	0.00406
611111.82	4206300.15	0.002256	0.001597	0.00385
611123.93	4206299.33	0.002133	0.001510	0.00364
611137.15	4206300.43	0.002015	0.001426	0.00344
611150.91	4206299.88	0.001889	0.001337	0.00323
611164.12	4206300.7	0.001776	0.001256	0.00303
610871.77	4206303.18	0.004461	0.003163	0.00762
610919.67	4206299.6	0.004081	0.002893	0.00697
610946.1	4206301.25	0.003884	0.002754	0.00664
610968.4	4206299.6	0.003666	0.002599	0.00626
610997.85	4206300.15	0.003394	0.002406	0.00580
610800.68	4206302.27	0.004792	0.003397	0.00819
610345.98	4206368.37	0.003964	0.002793	0.00676
610371.57	4206456.46	0.004820	0.003397	0.00822
610277.64	4206458.4	0.003909	0.002746	0.00665
610294.49	4206372.25	0.003661	0.002576	0.00624
610341.12	4206437.68	0.004365	0.003073	0.00744
610508	4206352.9	0.004908	0.003470	0.00838
610536.83	4206358.41	0.005119	0.003621	0.00874
610518.69	4206394.68	0.005434	0.003843	0.00928
610506.38	4206428.37	0.005734	0.004054	0.00979
610407.88	4206300.63	0.003898	0.002751	0.00665
610413.21	4206694.6	0.006931	0.004870	0.01180
610451.93	4206697.23	0.008029	0.005653	0.01368
610448.83	4206717.31	0.008079	0.005684	0.01376
610438.65	4207091.1	0.005256	0.002891	0.00815
610449.61	4207060.72	0.005339	0.003288	0.00863
610454.96	4207045.53	0.005586	0.003553	0.00914
610451.02	4207000.82	0.006109	0.004075	0.01018
610446.24	4206963.41	0.006570	0.004469	0.01104
610457.21	4206987.6	0.006523	0.004397	0.01092
610421.77	4207012.91	0.005208	0.003404	0.00861
610421.49	4207040.47	0.004929	0.003109	0.00804
610362.43	4207105.72	0.004852	0.002248	0.00710
610378.74	4207077.32	0.004273	0.002387	0.00666
610364.4	4207040.75	0.004050	0.002482	0.00653
610319.96	4207038.22	0.003564	0.002146	0.00571
610334.3	4207091.94	0.004098	0.002053	0.00615
610329.8	4207109.1	0.004794	0.002085	0.00688
610350.94	4206635.65	0.005372	0.003769	0.00914
610530.61	4206613.88	0.008957	0.006332	0.01529

610531.61	4206594.02	0.008615	0.006091	0.01471
610537.23	4206566.38	0.008236	0.005825	0.01406
610565.36	4206541.23	0.008251	0.005839	0.01409
610627.57	4206493.91	0.008123	0.005754	0.01388
610633.2	4206515.75	0.008713	0.006173	0.01489
610666.29	4206515.75	0.009080	0.006436	0.01552
610646.1	4206559.1	0.010108	0.007164	0.01727
610646.77	4206594.51	0.011294	0.008005	0.01930
610578.59	4206617.02	0.010233	0.007243	0.01748
610620.29	4206619.66	0.011415	0.008086	0.01950
610608.05	4206563.07	0.009483	0.006716	0.01620
610608.05	4206545.2	0.009064	0.006419	0.01548
610623.6	4206564.4	0.009813	0.006952	0.01677
610623.6	4206546.53	0.009330	0.006610	0.01594
610563.04	4206597.82	0.009394	0.006647	0.01604
610587.86	4206596.83	0.009936	0.007034	0.01697
610564.7	4206580.61	0.009052	0.006406	0.01546
610589.52	4206581.61	0.009589	0.006789	0.01638
610734.02	4206917.57	0.078309	0.055645	0.13395
610754.27	4206913.28	0.083366	0.059255	0.14262
610779.19	4206906.67	0.086410	0.061433	0.14784
610824.35	4206899.66	0.095442	0.067882	0.16332
610820.85	4206880.97	0.075351	0.053580	0.12893
610811.11	4206855.27	0.057334	0.040757	0.09809
610717.67	4206895.37	0.056116	0.039850	0.09597
610731.69	4206880.97	0.053783	0.038200	0.09198
610715.72	4206858	0.041952	0.029783	0.07174
610721.17	4206833.47	0.036901	0.026197	0.06310
610758.94	4206842.03	0.044683	0.031742	0.07643
610767.51	4206870.84	0.057299	0.040716	0.09802
610865.01	4206886.37	0.093544	0.066549	0.16009
610909.74	4206874.67	0.093900	0.066820	0.16072
610860.95	4206838.53	0.056238	0.039993	0.09623
610888.6	4206829.18	0.055583	0.039534	0.09512
610790.87	4206784.8	0.033761	0.023987	0.05775
610816.95	4206785.58	0.035612	0.025309	0.06092
610850.44	4206785.19	0.037698	0.026800	0.06450
610898.33	4206797.26	0.045259	0.032190	0.07745
610894.83	4206755.59	0.034117	0.024260	0.05838
610897.55	4206780.9	0.040509	0.028809	0.06932
610886.81	4206880.99	0.094146	0.066986	0.16113
611023.86	4206760.97	0.039372	0.028019	0.06739
611041.14	4206759.94	0.033950	0.024158	0.05811
611061.35	4206762.7	0.027992	0.019915	0.04791
610754.89	4206782.37	0.030742	0.021832	0.05257
610844.56	4206719.24	0.025521	0.018137	0.04366
610513.96	4206710.62	0.010158	0.007169	0.01733
610591.87	4206713.73	0.013901	0.009839	0.02374
610668.23	4206716.46	0.017975	0.012745	0.03072
610545.12	4206684.51	0.011001	0.007777	0.01878
610637.84	4206683.34	0.014719	0.010431	0.02515
610512.01	4206642.44	0.008992	0.006352	0.01534
610584.86	4206649.06	0.011465	0.008115	0.01958
610665.5	4206649.06	0.014076	0.009980	0.02406
609975.26	4207082.82	0.002936	0.001091	0.00403
609945.83	4207083.32	0.002950	0.001063	0.00401
609822.62	4207152.66	0.003490	0.001003	0.00449
609804.66	4207094.79	0.003916	0.001116	0.00503
609772.24	4207094.79	0.003990	0.001110	0.00510
609700.41	4207156.65	0.002694	0.000798	0.00349
609633.07	4207074.84	0.002332	0.000737	0.00307
609555.75	4207074.84	0.002553	0.000749	0.00330
609620.1	4207148.17	0.002779	0.000762	0.00354
609556.25	4207145.67	0.002726	0.000737	0.00346
609502.88	4207137.69	0.002979	0.000774	0.00375
610698.46	4207080.47	0.051454	0.035975	0.08743
610693.24	4207063.42	0.052373	0.036789	0.08916
610706.16	4207019.7	0.081580	0.057804	0.13938
610680.04	4207080.09	0.033214	0.022985	0.05620
610682.42	4207046.11	0.045327	0.031873	0.07720
CONCUNIT ug/	m^3			
DEPUNIT g/m^	2			

Oakley Main Street Project

Unmitigated
at Sensitive Receptors

Chronic Non-Cancer Hazard Index

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X	Y	2019 DPM	2020 DPM	Max DPM	
(m)	(m)	(ug/m3)	(ug/m3)	(ug/m3)	CNCHI
611337.43	4207107.53	0.019410	0.013985	0.019410	0.003882
611316.93	4207114.47	0.021648	0.015598	0.021648	0.004330
611309.05	4207127.4	0.022665	0.016328	0.022665	0.004533
611308.42	4207149.48	0.022663	0.016321	0.022663	0.004533
611309.05	4207170.29	0.022192	0.015977	0.022192	0.004438
611311.88	4207184.48	0.021500	0.015473	0.021500	0.004300
611315.04	4207203.09	0.020521	0.014763	0.020521	0.004104
611359.51	4207125.19	0.017800	0.012822	0.017800	0.003560
611364.56	4207101.22	0.016853	0.012142	0.016853	0.003371
611377.49	4207091.76	0.015563	0.011213	0.015563	0.003113
611401.77	4207088.6	0.013786	0.009932	0.013786	0.002757
611416.28	4207100.59	0.013248	0.009543	0.013248	0.002650
611421.64	4207123.93	0.013487	0.009713	0.013487	0.002697
611438.99	4207115.41	0.012351	0.008895	0.012351	0.002470
611456.97	4207120.14	0.011555	0.008321	0.011555	0.002311
611355.09	4207167.14	0.018341	0.013204	0.018341	0.003668
611375.59	4207165.56	0.016865	0.012142	0.016865	0.003373
611396.09	4207163.35	0.015516	0.011170	0.015516	0.003103
611411.55	4207163.35	0.014584	0.010499	0.014584	0.002917
611426.06	4207165.56	0.013785	0.009923	0.013785	0.002757
611452.55	4207164.3	0.012434	0.008950	0.012434	0.002487
611311.25	4207222.96	0.019816	0.014249	0.019816	0.003963
611312.2	4207239.05	0.018860	0.013555	0.018860	0.003772
611355.41	4207245.99	0.016343	0.011747	0.016343	0.003269
611377.8	4207244.72	0.015350	0.011035	0.015350	0.003070
611390.73	4207246.62	0.014721	0.010583	0.014721	0.002944
611410.92	4207249.14	0.013811	0.009928	0.013811	0.002762
611433.31	4207250.09	0.012910	0.009281	0.012910	0.002582
611447.82	4207253.24	0.012322	0.008858	0.012322	0.002464
611469.58	4207243.15	0.011664	0.008387	0.011664	0.002333
611477.47	4207217.28	0.011523	0.008289	0.011523	0.002305
611357.62	4207196.47	0.017745	0.012769	0.017745	0.003549
611374.96	4207196.78	0.016639	0.011973	0.016639	0.003328
611394.83	4207198.68	0.015450	0.011117	0.015450	0.003090
611412.5	4207197.1	0.014506	0.010438	0.014506	0.002901
611433.63	4207195.52	0.013451	0.009679	0.013451	0.002690
611452.87	4207194.58	0.012559	0.009037	0.012559	0.002512
611471.47	4207199.62	0.011770	0.008468	0.011770	0.002354
611466.43	4207168.08	0.011830	0.008515	0.011830	0.002366
611488.19	4207163.04	0.010859	0.007816	0.010859	0.002172
611506.8	4207160.2	0.010106	0.007274	0.010106	0.002021
611505.54	4207184.17	0.010386	0.007474	0.010386	0.002077
611509.32	4207196.47	0.010326	0.007429	0.010326	0.002065
611505.22	4207219.81	0.010526	0.007571	0.010526	0.002105
611510.27	4207235.89	0.010339	0.007435	0.010339	0.002068
611495.76	4207248.82	0.010742	0.007723	0.010742	0.002148
611311.25	4207260.81	0.017589	0.012634	0.017589	0.003518
611314.41	4207277.84	0.016406	0.011779	0.016406	0.003281
611358.56	4207260.49	0.015620	0.011224	0.015620	0.003124
611368.02	4207274.69	0.014677	0.010543	0.014677	0.002935
611389.16	4207283.52	0.013626	0.009787	0.013626	0.002725
611400.19	4207295.19	0.012890	0.009257	0.012890	0.002578
611412.5	4207316	0.011882	0.008529	0.011882	0.002376
611435.52	4207292.03	0.011956	0.008588	0.011956	0.002391
611451.6	4207278.47	0.011768	0.008456	0.011768	0.002354
611474.63	4207278.79	0.011068	0.007954	0.011068	0.002214
611485.35	4207263.33	0.010942	0.007866	0.010942	0.002188
611328.6	4207291.72	0.015139	0.010866	0.015139	0.003028
611312.83	4207306.23	0.014675	0.010525	0.014675	0.002935
611302.11	4207319.47	0.014035	0.010060	0.014035	0.002807
611310.62	4207336.5	0.012863	0.009216	0.012863	0.002573
611321.66	4207346.6	0.012164	0.008713	0.012164	0.002433
611339.01	4207346.91	0.011950	0.008562	0.011950	0.002390
611357.62	4207322.94	0.012827	0.009201	0.012827	0.002565
611371.49	4207335.87	0.011984	0.008594	0.011984	0.002397
611372.76	4207355.11	0.011141	0.007985	0.011141	0.002228
611421.64	4207330.2	0.011225	0.008055	0.011225	0.002245
611423.22	4207349.12	0.010596	0.007600	0.010596	0.002119
611449.08	4207328.93	0.010687	0.007671	0.010687	0.002137
611438.36	4207309.06	0.011450	0.008222	0.011450	0.002290
611468.95	4207336.5	0.010096	0.007247	0.010096	0.002019
611483.46	4207328.62	0.009968	0.007156	0.009968	0.001994
611504.27	4207316.95	0.009725	0.006984	0.009725	0.001945
611518.78	4207305.59	0.009552	0.006862	0.009552	0.001910
611531.08	4207292.98	0.009398	0.006753	0.009398	0.001880

Maximum
0.0132

BAAQMD threshold of significance
1

Exceed thresholds?
No

611540.23	4207275.63	0.009302	0.006685	0.009302	0.001860
611310.9	4207395.01	0.009702	0.006935	0.009702	0.001940
611307.77	4207409.9	0.009005	0.006432	0.009005	0.001801
611306.78	4207428.47	0.008194	0.005848	0.008194	0.001639
611310.76	4207450.93	0.007332	0.005228	0.007332	0.001466
611307.77	4207464.05	0.006849	0.004880	0.006849	0.001370
611355.09	4207392.69	0.009693	0.006936	0.009693	0.001939
611398.22	4207398.65	0.009208	0.006593	0.009208	0.001842
611386.69	4207411.77	0.008810	0.006304	0.008810	0.001762
611357.67	4207410.98	0.008939	0.006393	0.008939	0.001788
611353.89	4207429.07	0.008250	0.005895	0.008250	0.001650
611362.24	4207449.15	0.007540	0.005384	0.007540	0.001508
611385.9	4207431.06	0.008141	0.005821	0.008141	0.001628
611420.29	4207390.9	0.009287	0.006653	0.009287	0.001857
611436.99	4207401.83	0.008797	0.006301	0.008797	0.001759
611444.34	4207420.32	0.008207	0.005876	0.008207	0.001641
611441.16	4207444.37	0.007556	0.005406	0.007556	0.001511
611446.33	4207459.28	0.007139	0.005105	0.007139	0.001428
611459.25	4207384.54	0.009050	0.006488	0.009050	0.001810
611466.61	4207407.4	0.008375	0.006000	0.008375	0.001675
611472.97	4207420.72	0.007983	0.005718	0.007983	0.001597
611470.58	4207443.78	0.007429	0.005317	0.007429	0.001486
611470.58	4207461.87	0.006989	0.005000	0.006989	0.001398
611351.29	4207475.53	0.006658	0.004749	0.006658	0.001332
611374.78	4207476.37	0.006695	0.004777	0.006695	0.001339
611395.9	4207472.82	0.006826	0.004874	0.006826	0.001365
611389.14	4207448.15	0.007575	0.005413	0.007575	0.001515
611439.49	4207477.38	0.006686	0.004778	0.006686	0.001337
611467.04	4207481.61	0.006533	0.004670	0.006533	0.001307
611302.63	4207484.99	0.006132	0.004364	0.006132	0.001226
611303.64	4207503.41	0.005594	0.003978	0.005594	0.001119
611310.74	4207524.36	0.005082	0.003612	0.005082	0.001016
611334.05	4207523.85	0.005229	0.003719	0.005229	0.001046
611356.02	4207522.5	0.005370	0.003823	0.005370	0.001074
611371.73	4207521.49	0.005461	0.003889	0.005461	0.001092
611394.04	4207526.89	0.005409	0.003854	0.005409	0.001082
611406.88	4207522.5	0.005548	0.003955	0.005548	0.001110
611430.71	4207520.47	0.005641	0.004024	0.005641	0.001128
611444.56	4207523.01	0.005601	0.003997	0.005601	0.001120
611466.19	4207524.87	0.005574	0.003979	0.005574	0.001115
611485.45	4207527.74	0.005515	0.003938	0.005515	0.001103
611511.14	4207529.43	0.005464	0.003903	0.005464	0.001093
611524.65	4207513.21	0.005742	0.004105	0.005742	0.001148
611552.87	4207524.02	0.005482	0.003919	0.005482	0.001096
611553.21	4207500.7	0.005875	0.004203	0.005875	0.001175
611524.32	4207495.8	0.006069	0.004341	0.006069	0.001214
611523.13	4207474.34	0.006487	0.004643	0.006487	0.001297
611552.03	4207482.79	0.006189	0.004429	0.006189	0.001238
611519.59	4207462.51	0.006739	0.004824	0.006739	0.001348
611554.73	4207464.37	0.006492	0.004649	0.006492	0.001298
611524.99	4207440.55	0.007138	0.005112	0.007138	0.001428
611555.24	4207445.11	0.006818	0.004884	0.006818	0.001364
611555.58	4207427.03	0.007119	0.005102	0.007119	0.001424
611557.94	4207398.3	0.007554	0.005417	0.007554	0.001511
611522.63	4207422.64	0.007508	0.005380	0.007508	0.001502
611522.63	4207401.35	0.007920	0.005678	0.007920	0.001584
611542.4	4207388.34	0.007908	0.005672	0.007908	0.001582
611511.98	4207382.93	0.008409	0.006031	0.008409	0.001682
611508.43	4207369.24	0.008726	0.006260	0.008726	0.001745
611535.81	4207363.5	0.008402	0.006030	0.008402	0.001680
611548.65	4207344.4	0.008459	0.006073	0.008459	0.001692
611559.8	4207244.2	0.008885	0.006389	0.008885	0.001777
611558.62	4207227.64	0.008898	0.006399	0.008898	0.001780
611555.24	4207203.99	0.008897	0.006400	0.008897	0.001779
611557.27	4207183.2	0.008683	0.006247	0.008683	0.001737
611554.23	4207164.62	0.008579	0.006173	0.008579	0.001716
611557.77	4207142.31	0.008175	0.005883	0.008175	0.001635
611547.97	4207121.19	0.008111	0.005838	0.008111	0.001622
611546.96	4207102.77	0.007758	0.005585	0.007758	0.001552
611551.18	4207088.92	0.007325	0.005274	0.007325	0.001465
611555.91	4207066.78	0.006665	0.004798	0.006665	0.001333
611476.99	4207114.19	0.010514	0.007571	0.010514	0.002103
611498.11	4207124.33	0.009870	0.007106	0.009870	0.001974
611517.37	4207121.63	0.009105	0.006555	0.009105	0.001821
611516.7	4207103.71	0.008733	0.006288	0.008733	0.001747
611397.15	4207001.31	0.010332	0.007446	0.010332	0.002066
611405.21	4206965.9	0.008210	0.005915	0.008210	0.001642
611417.66	4206992.52	0.008941	0.006442	0.008941	0.001788
611434.86	4206992.14	0.008226	0.005926	0.008226	0.001645
611454.74	4206982.79	0.007155	0.005154	0.007155	0.001431
611462.1	4206968.28	0.006394	0.004605	0.006394	0.001279
611453.75	4206949.79	0.005942	0.004280	0.005942	0.001188
611447.79	4206931.5	0.005427	0.003908	0.005427	0.001085
611475.02	4206936.87	0.005010	0.003607	0.005010	0.001002
611496.69	4206939.06	0.004656	0.003352	0.004656	0.000931
611513	4206936.67	0.004309	0.003102	0.004309	0.000862

611530.89	4206938.86	0.004086	0.002941	0.004086	0.000817
611546.99	4206935.68	0.003784	0.002723	0.003784	0.000757
611404.05	4206946.01	0.007302	0.005261	0.007302	0.001460
611405.64	4206926.73	0.006365	0.004585	0.006365	0.001273
611403.65	4206905.06	0.005490	0.003953	0.005490	0.001098
611410.81	4206890.15	0.004739	0.003412	0.004739	0.000948
611437.25	4206884.98	0.004071	0.002930	0.004071	0.000814
611453.35	4206887.96	0.003904	0.002809	0.003904	0.000781
611472.24	4206888.75	0.003652	0.002628	0.003652	0.000730
611492.32	4206887.16	0.003355	0.002414	0.003355	0.000671
611509.62	4206887.76	0.003170	0.002281	0.003170	0.000634
611527.31	4206889.15	0.003014	0.002168	0.003014	0.000603
611546.6	4206887.56	0.002801	0.002014	0.002801	0.000560
611377.6	4206837.66	0.003518	0.002531	0.003518	0.000704
611377.41	4206826.33	0.003184	0.002290	0.003184	0.000637
611377.6	4206816.19	0.002910	0.002092	0.002910	0.000582
611407.63	4206828.51	0.002894	0.002080	0.002894	0.000579
611437.05	4206820.96	0.002458	0.001767	0.002458	0.000492
611474.23	4206850.98	0.002742	0.001971	0.002742	0.000548
611478.2	4206824.54	0.002220	0.001595	0.002220	0.000444
611495.9	4206825.93	0.002128	0.001529	0.002128	0.000426
611509.22	4206853.17	0.002488	0.001789	0.002488	0.000498
611526.32	4206824.34	0.001931	0.001387	0.001931	0.000386
611558.33	4206844.02	0.002022	0.001453	0.002022	0.000404
611554.15	4206823.34	0.001781	0.001279	0.001781	0.000356
611558.53	4206886.77	0.002683	0.001930	0.002683	0.000537
611375.81	4206780.4	0.002171	0.001559	0.002171	0.000434
611387.74	4206763.9	0.001850	0.001328	0.001850	0.000370
611411.4	4206781.59	0.001962	0.001409	0.001962	0.000392
611412.6	4206752.37	0.001596	0.001145	0.001596	0.000319
611440.43	4206779.41	0.001777	0.001276	0.001777	0.000355
611471.44	4206781.39	0.001658	0.001190	0.001658	0.000332
611469.26	4206740.64	0.001289	0.000924	0.001289	0.000258
611499.68	4206782.19	0.001551	0.001113	0.001551	0.000310
611536.85	4206780.8	0.001406	0.001009	0.001406	0.000281
611523.14	4206742.03	0.001151	0.000825	0.001151	0.000230
611556.54	4206774.04	0.001290	0.000925	0.001290	0.000258
611323.92	4206674.63	0.001392	0.000997	0.001392	0.000278
611335.65	4206699.68	0.001485	0.001064	0.001485	0.000297
611362.49	4206701.67	0.001385	0.000992	0.001385	0.000277
611381.38	4206700.48	0.001307	0.000936	0.001307	0.000261
611398.08	4206697.1	0.001232	0.000882	0.001232	0.000246
611417.17	4206699.88	0.001188	0.000851	0.001188	0.000238
611433.87	4206699.09	0.001136	0.000813	0.001136	0.000227
611454.55	4206702.27	0.001097	0.000785	0.001097	0.000219
611471.44	4206700.08	0.001045	0.000748	0.001045	0.000209
611490.53	4206698.29	0.000994	0.000711	0.000994	0.000199
611510.61	4206699.68	0.000958	0.000686	0.000958	0.000192
611531.49	4206698.09	0.000912	0.000652	0.000912	0.000182
611545.01	4206701.47	0.000901	0.000644	0.000901	0.000180
611559.92	4206697.3	0.000859	0.000615	0.000859	0.000172
611335.26	4206651.57	0.001243	0.000890	0.001243	0.000249
611359.11	4206645.41	0.001137	0.000814	0.001137	0.000227
611376.21	4206651.17	0.001103	0.000789	0.001103	0.000221
611398.68	4206649.98	0.001035	0.000740	0.001035	0.000207
611414.58	4206650.18	0.000994	0.000711	0.000994	0.000199
611432.87	4206648.59	0.000945	0.000676	0.000945	0.000189
611471.64	4206649.78	0.000866	0.000620	0.000866	0.000173
611491.92	4206651.57	0.000833	0.000596	0.000833	0.000167
611511.41	4206651.77	0.000800	0.000572	0.000800	0.000160
611527.51	4206650.77	0.000771	0.000551	0.000771	0.000154
611546.99	4206651.97	0.000744	0.000532	0.000744	0.000149
611325.51	4206617.57	0.001161	0.000831	0.001161	0.000232
611344.2	4206617.57	0.001098	0.000786	0.001098	0.000220
611357.52	4206616.78	0.001054	0.000754	0.001054	0.000211
611368.66	4206620.55	0.001032	0.000738	0.001032	0.000206
611381.98	4206618.76	0.000991	0.000709	0.000991	0.000198
611395.9	4206619.76	0.000957	0.000685	0.000957	0.000191
611407.82	4206620.75	0.000931	0.000666	0.000931	0.000186
611421.14	4206619.96	0.000896	0.000641	0.000896	0.000179
611435.46	4206618.76	0.000864	0.000618	0.000864	0.000173
611472.44	4206621.55	0.000798	0.000571	0.000798	0.000160
611485.36	4206619.96	0.000772	0.000552	0.000772	0.000154
611496.5	4206622.94	0.000760	0.000543	0.000760	0.000152
611508.82	4206622.14	0.000737	0.000526	0.000737	0.000147
611522.14	4206620.55	0.000713	0.000509	0.000713	0.000143
611532.88	4206620.95	0.000698	0.000498	0.000698	0.000140
611546	4206621.94	0.000681	0.000487	0.000681	0.000136
611557.13	4206620.16	0.000663	0.000474	0.000663	0.000133
611327.7	4206564.89	0.000997	0.000713	0.000997	0.000199
611341.02	4206566.28	0.000972	0.000695	0.000972	0.000194
611355.14	4206572.84	0.000951	0.000680	0.000951	0.000190
611369.25	4206575.02	0.000920	0.000658	0.000920	0.000184
611384.16	4206573.04	0.000879	0.000628	0.000879	0.000176
611395.1	4206574.63	0.000857	0.000612	0.000857	0.000171
611407.23	4206574.43	0.000829	0.000593	0.000829	0.000166

611420.15	4206574.03	0.000802	0.000573	0.000802	0.000160
611431.88	4206569.86	0.000774	0.000553	0.000774	0.000155
611473.63	4206575.22	0.000715	0.000511	0.000715	0.000143
611487.55	4206572.24	0.000689	0.000492	0.000689	0.000138
611500.27	4206575.22	0.000673	0.000480	0.000673	0.000135
611512.6	4206575.82	0.000654	0.000467	0.000654	0.000131
611524.73	4206574.43	0.000636	0.000454	0.000636	0.000127
611537.85	4206576.22	0.000621	0.000443	0.000621	0.000124
611548.59	4206575.22	0.000606	0.000433	0.000606	0.000121
611558.72	4206577.01	0.000596	0.000426	0.000596	0.000119
611331.88	4206537.85	0.000925	0.000662	0.000925	0.000185
611332.67	4206513.19	0.000873	0.000624	0.000873	0.000175
611355.54	4206518.56	0.000833	0.000596	0.000833	0.000167
611357.72	4206542.42	0.000873	0.000624	0.000873	0.000175
611371.84	4206555.94	0.000866	0.000619	0.000866	0.000173
611370.05	4206542.02	0.000844	0.000604	0.000844	0.000169
611383.57	4206548.58	0.000827	0.000591	0.000827	0.000165
611397.09	4206548.58	0.000799	0.000571	0.000799	0.000160
611409.22	4206546.79	0.000774	0.000553	0.000774	0.000155
611419.95	4206547.59	0.000756	0.000540	0.000756	0.000151
611432.28	4206550.37	0.000740	0.000529	0.000740	0.000148
611349.17	4206492.32	0.000802	0.000573	0.000802	0.000160
611363.69	4206486.95	0.000766	0.000548	0.000766	0.000153
611375.81	4206491.32	0.000750	0.000536	0.000750	0.000150
611387.94	4206500.67	0.000743	0.000531	0.000743	0.000149
611399.08	4206500.87	0.000724	0.000517	0.000724	0.000145
611409.61	4206504.25	0.000712	0.000509	0.000712	0.000142
611422.54	4206503.25	0.000692	0.000494	0.000692	0.000138
611437.65	4206504.45	0.000673	0.000481	0.000673	0.000135
611374.82	4206454.74	0.000695	0.000497	0.000695	0.000139
611385.76	4206467.07	0.000696	0.000497	0.000696	0.000139
611397.68	4206472.44	0.000686	0.000490	0.000686	0.000137
611411.2	4206477.21	0.000673	0.000481	0.000673	0.000135
611424.33	4206476.41	0.000654	0.000467	0.000654	0.000131
611437.25	4206478	0.000640	0.000457	0.000640	0.000128
611425.52	4206431.08	0.000598	0.000427	0.000598	0.000120
611476.42	4206548.78	0.000674	0.000481	0.000674	0.000135
611488.54	4206547.99	0.000655	0.000468	0.000655	0.000131
611501.27	4206548.38	0.000637	0.000455	0.000637	0.000127
611512	4206545.8	0.000618	0.000441	0.000618	0.000124
611524.33	4206546.4	0.000603	0.000431	0.000603	0.000121
611536.06	4206546.79	0.000589	0.000421	0.000589	0.000118
611548.98	4206548.98	0.000576	0.000411	0.000576	0.000115
611559.92	4206549.18	0.000564	0.000402	0.000564	0.000113
611477.81	4206502.66	0.000620	0.000442	0.000620	0.000124
611479.99	4206477.61	0.000591	0.000422	0.000591	0.000118
611491.13	4206505.84	0.000606	0.000433	0.000606	0.000121
611502.46	4206505.04	0.000591	0.000422	0.000591	0.000118
611491.72	4206477.8	0.000577	0.000412	0.000577	0.000115
611503.06	4206479	0.000566	0.000404	0.000566	0.000113
611514.39	4206503.05	0.000575	0.000411	0.000575	0.000115
611515.98	4206477.8	0.000550	0.000393	0.000550	0.000110
611528.31	4206505.84	0.000561	0.000400	0.000561	0.000112
611528.9	4206476.41	0.000535	0.000382	0.000535	0.000107
611540.63	4206508.22	0.000549	0.000392	0.000549	0.000110
611538.25	4206476.41	0.000526	0.000375	0.000526	0.000105
611552.56	4206505.84	0.000534	0.000381	0.000534	0.000107
611550.77	4206475.02	0.000512	0.000365	0.000512	0.000102
611479.99	4206431.88	0.000544	0.000388	0.000544	0.000109
611493.12	4206432.08	0.000532	0.000379	0.000532	0.000106
611504.65	4206432.67	0.000522	0.000372	0.000522	0.000104
611518.56	4206430.88	0.000508	0.000362	0.000508	0.000102
611529.5	4206430.29	0.000498	0.000355	0.000498	0.000100
611542.42	4206435.46	0.000491	0.000350	0.000491	0.000098
611552.76	4206433.07	0.000481	0.000343	0.000481	0.000096
611479.8	4206406.03	0.000520	0.000371	0.000520	0.000104
611494.51	4206406.43	0.000508	0.000362	0.000508	0.000102
611506.24	4206406.83	0.000499	0.000356	0.000499	0.000100
611518.56	4206405.44	0.000488	0.000348	0.000488	0.000098
611530.89	4206404.64	0.000478	0.000341	0.000478	0.000096
611542.62	4206407.03	0.000471	0.000336	0.000471	0.000094
611555.15	4206405.44	0.000460	0.000328	0.000460	0.000092
611529.9	4206362.49	0.000448	0.000319	0.000448	0.000090
611544.81	4206364.08	0.000439	0.000313	0.000439	0.000088
611558.72	4206362.89	0.000430	0.000306	0.000430	0.000086
610703.71	4206675.32	0.011609	0.008350	0.011609	0.002322
610721.12	4206689.86	0.012747	0.009171	0.012747	0.002549
610736.84	4206686.65	0.012963	0.009328	0.012963	0.002593
610754.25	4206685.46	0.013287	0.009563	0.013287	0.002657
610771.15	4206685.12	0.013610	0.009797	0.013610	0.002722
610789.74	4206688.5	0.014169	0.010202	0.014169	0.002834
610807.15	4206686.31	0.014306	0.010302	0.014306	0.002861
610700.5	4206658.42	0.010815	0.007778	0.010815	0.002163
610703.54	4206637.12	0.010044	0.007223	0.010044	0.002009
610702.86	4206621.23	0.009462	0.006805	0.009462	0.001892
610746.81	4206643.04	0.010987	0.007906	0.010987	0.002197

610777.57	4206642.19	0.011344	0.008165	0.011344	0.002269
610792.28	4206642.53	0.011510	0.008286	0.011510	0.002302
610749.18	4206621.57	0.010100	0.007267	0.010100	0.002020
610749.85	4206602.98	0.009384	0.006751	0.009384	0.001877
610784.16	4206612.28	0.010027	0.007217	0.010027	0.002005
610793.29	4206597.74	0.009469	0.006815	0.009469	0.001894
610810.19	4206587.6	0.009103	0.006552	0.009103	0.001821
610820	4206591.66	0.009272	0.006674	0.009272	0.001854
610837.24	4206594.36	0.009366	0.006743	0.009366	0.001873
610839.6	4206619.21	0.010524	0.007578	0.010524	0.002105
610834.02	4206641.52	0.011714	0.008436	0.011714	0.002343
610850.25	4206642.36	0.011793	0.008493	0.011793	0.002359
610877.29	4206642.87	0.011773	0.008480	0.011773	0.002355
610878.14	4206626.14	0.010762	0.007751	0.010762	0.002152
610876.79	4206607.54	0.009784	0.007046	0.009784	0.001957
610878.31	4206588.95	0.008904	0.006411	0.008904	0.001781
610762.87	4206569.18	0.008296	0.005968	0.008296	0.001659
610782.13	4206564.1	0.008200	0.005900	0.008200	0.001640
610796.84	4206560.56	0.008107	0.005834	0.008107	0.001621
610815.77	4206555.48	0.007926	0.005704	0.007926	0.001585
610832.16	4206557.01	0.007943	0.005717	0.007943	0.001589
610851.43	4206553.96	0.007748	0.005577	0.007748	0.001550
610880.67	4206553.63	0.007513	0.005409	0.007513	0.001503
610878.31	4206570.7	0.008154	0.005871	0.008154	0.001631
610826.68	4206687.13	0.014640	0.010544	0.014640	0.002928
610844.57	4206686.3	0.014780	0.010646	0.014780	0.002956
610865.21	4206687.68	0.015088	0.010870	0.015088	0.003018
610880.9	4206686.3	0.015083	0.010868	0.015083	0.003017
610899.62	4206692.91	0.015807	0.011391	0.015807	0.003161
610919.16	4206680.8	0.014590	0.010514	0.014590	0.002918
610925.76	4206661.81	0.012802	0.009225	0.012802	0.002560
610927.41	4206642.54	0.011300	0.008141	0.011300	0.002260
610925.49	4206624.93	0.010193	0.007343	0.010193	0.002039
610924.94	4206606.21	0.009170	0.006605	0.009170	0.001834
610922.73	4206591.08	0.008479	0.006106	0.008479	0.001696
610923.56	4206571.81	0.007667	0.005521	0.007667	0.001533
610925.21	4206554.47	0.007011	0.005047	0.007011	0.001402
610956.31	4206695.94	0.015822	0.011405	0.015822	0.003164
611019.34	4206696.76	0.012938	0.009326	0.012938	0.002588
610959.06	4206679.15	0.013811	0.009954	0.013811	0.002762
610962.92	4206664.84	0.012318	0.008877	0.012318	0.002464
610963.47	4206649.42	0.011041	0.007955	0.011041	0.002208
610965.12	4206634.29	0.009947	0.007166	0.009947	0.001989
610958.24	4206619.42	0.009232	0.006650	0.009232	0.001846
610960.44	4206603.74	0.008367	0.006026	0.008367	0.001673
610962.64	4206588.32	0.007628	0.005493	0.007628	0.001526
610968.15	4206560.25	0.006493	0.004675	0.006493	0.001299
610949.71	4206557.5	0.006729	0.004845	0.006729	0.001346
611017.96	4206681.9	0.011456	0.008257	0.011456	0.002291
611021.54	4206668.69	0.010109	0.007285	0.010109	0.002022
611017.69	4206653.83	0.009257	0.006670	0.009257	0.001851
611013.83	4206638.97	0.008532	0.006147	0.008532	0.001706
611013.01	4206623.83	0.007782	0.005605	0.007782	0.001556
611009.98	4206609.24	0.007236	0.005212	0.007236	0.001447
611008.05	4206597.68	0.006838	0.004924	0.006838	0.001368
611001.72	4206570.71	0.006094	0.004387	0.006094	0.001219
611017.41	4206575.11	0.005826	0.004195	0.005826	0.001165
611033.38	4206575.66	0.005410	0.003894	0.005410	0.001082
611050.71	4206697.86	0.010434	0.007519	0.010434	0.002087
611054.84	4206681.9	0.008873	0.006393	0.008873	0.001775
611052.92	4206671.17	0.008336	0.006005	0.008336	0.001667
611054.84	4206650.8	0.007175	0.005168	0.007175	0.001435
611055.39	4206637.59	0.006597	0.004751	0.006597	0.001319
611053.47	4206624.65	0.006208	0.004470	0.006208	0.001242
611054.84	4206605.02	0.005543	0.003990	0.005543	0.001109
611055.39	4206591.81	0.005173	0.003724	0.005173	0.001035
611053.47	4206578.87	0.004922	0.003542	0.004922	0.000984
611057.6	4206560.98	0.004402	0.003168	0.004402	0.000880
611058.15	4206547.77	0.004151	0.002987	0.004151	0.000830
611056.22	4206534.84	0.003981	0.002864	0.003981	0.000796
611021.82	4206533.19	0.004687	0.003373	0.004687	0.000937
611022.37	4206519.98	0.004419	0.003180	0.004419	0.000884
611020.44	4206507.04	0.004225	0.003040	0.004225	0.000845
611028.7	4206492.18	0.003849	0.002769	0.003849	0.000770
611029.25	4206478.97	0.003652	0.002627	0.003652	0.000730
611027.32	4206466.03	0.003510	0.002524	0.003510	0.000702
611022.09	4206449.79	0.003387	0.002436	0.003387	0.000677
611030.62	4206435.76	0.003128	0.002249	0.003128	0.000626
611028.7	4206422.82	0.003023	0.002174	0.003023	0.000605
611057.32	4206514.2	0.003655	0.002629	0.003655	0.000731
611057.87	4206500.99	0.003474	0.002498	0.003474	0.000695
611055.94	4206488.05	0.003347	0.002407	0.003347	0.000669
611057.32	4206473.74	0.003160	0.002272	0.003160	0.000632
611057.87	4206460.53	0.003015	0.002168	0.003015	0.000603
611055.94	4206447.59	0.002919	0.002099	0.002919	0.000584
611056.49	4206431.35	0.002768	0.001990	0.002768	0.000554

611057.04	4206418.14	0.002652	0.001906	0.002652	0.000530
611055.12	4206405.21	0.002573	0.001849	0.002573	0.000515
611056.49	4206387.04	0.002429	0.001746	0.002429	0.000486
611057.04	4206373.83	0.002337	0.001679	0.002337	0.000467
611055.12	4206360.9	0.002272	0.001633	0.002272	0.000454
611021.82	4206405.3	0.002936	0.002111	0.002936	0.000587
611031.45	4206391.54	0.002717	0.001953	0.002717	0.000543
611035.85	4206363.74	0.002463	0.001770	0.002463	0.000493
611085.12	4206364.57	0.002028	0.001457	0.002028	0.000406
611087.59	4206415.48	0.002288	0.001644	0.002288	0.000458
611084.02	4206444.38	0.002525	0.001815	0.002525	0.000505
611084.84	4206458.69	0.002621	0.001884	0.002621	0.000524
611083.19	4206470.8	0.002744	0.001973	0.002744	0.000549
611082.64	4206503.28	0.003064	0.002203	0.003064	0.000613
611082.37	4206515.94	0.003203	0.002303	0.003203	0.000641
611082.92	4206532.18	0.003379	0.002430	0.003379	0.000676
611082.64	4206545.66	0.003554	0.002557	0.003554	0.000711
611105.48	4206544.56	0.003048	0.002192	0.003048	0.000610
611103.83	4206534.65	0.002983	0.002145	0.002983	0.000597
611079.89	4206585.02	0.004268	0.003071	0.004268	0.000854
611081.54	4206569.88	0.003963	0.002851	0.003963	0.000793
611081.82	4206624.84	0.005057	0.003640	0.005057	0.001011
611082.37	4206611.63	0.004730	0.003404	0.004730	0.000946
611080.44	4206598.69	0.004523	0.003255	0.004523	0.000905
611104.66	4206591.53	0.003656	0.002629	0.003656	0.000731
611105.48	4206580.53	0.003482	0.002504	0.003482	0.000696
611103.56	4206567.59	0.003369	0.002423	0.003369	0.000674
611103.83	4206624.29	0.004219	0.003035	0.004219	0.000844
611102.73	4206612.45	0.004051	0.002914	0.004051	0.000810
611104.11	4206601.99	0.003833	0.002757	0.003833	0.000767
611079.89	4206667.5	0.006464	0.004655	0.006464	0.001293
611080.44	4206654.29	0.005962	0.004293	0.005962	0.001192
611078.51	4206641.35	0.005648	0.004066	0.005648	0.001130
611100.53	4206702.18	0.006430	0.004630	0.006430	0.001286
611079.61	4206696.95	0.007837	0.005646	0.007837	0.001567
611077.69	4206684.01	0.007318	0.005271	0.007318	0.001464
611102.46	4206679.15	0.005535	0.003985	0.005535	0.001107
611101.91	4206689.61	0.005891	0.004241	0.005891	0.001178
611103.83	4206657.41	0.004897	0.003525	0.004897	0.000979
611103.28	4206667.86	0.005181	0.003729	0.005181	0.001036
611104.11	4206634.56	0.004400	0.003166	0.004400	0.000880
611103.56	4206645.02	0.004633	0.003334	0.004633	0.000927
611128.88	4206688.23	0.004402	0.003167	0.004402	0.000880
611128.33	4206698.69	0.004641	0.003339	0.004641	0.000928
611128.88	4206664.29	0.003979	0.002862	0.003979	0.000796
611128.33	4206674.74	0.004177	0.003005	0.004177	0.000835
611130.81	4206643.09	0.003598	0.002587	0.003598	0.000720
611130.25	4206653.55	0.003764	0.002707	0.003764	0.000753
611130.25	4206618.32	0.003303	0.002375	0.003303	0.000661
611129.7	4206628.78	0.003446	0.002478	0.003446	0.000689
611147.87	4206682.18	0.003579	0.002574	0.003579	0.000716
611147.32	4206692.63	0.003750	0.002697	0.003750	0.000750
611148.7	4206659.88	0.003270	0.002350	0.003270	0.000654
611148.14	4206670.34	0.003414	0.002454	0.003414	0.000683
611149.25	4206637.31	0.003010	0.002164	0.003010	0.000602
611148.7	4206647.77	0.003133	0.002252	0.003133	0.000627
611149.25	4206613.37	0.002786	0.002002	0.002786	0.000557
611148.7	4206623.83	0.002893	0.002079	0.002893	0.000579
611175.39	4206687.68	0.002918	0.002096	0.002918	0.000584
611174.84	4206698.14	0.003052	0.002193	0.003052	0.000610
611195.21	4206682.45	0.002501	0.001796	0.002501	0.000500
611194.66	4206692.91	0.002611	0.001875	0.002611	0.000522
611175.39	4206664.01	0.002681	0.001926	0.002681	0.000536
611174.84	4206674.47	0.002791	0.002005	0.002791	0.000558
611194.93	4206660.98	0.002325	0.001669	0.002325	0.000465
611194.38	4206671.44	0.002417	0.001735	0.002417	0.000483
611174.29	4206641.44	0.002512	0.001804	0.002512	0.000502
611173.74	4206651.9	0.002607	0.001873	0.002607	0.000521
611195.21	4206638.14	0.002159	0.001550	0.002159	0.000432
611194.66	4206648.6	0.002238	0.001606	0.002238	0.000448
611176.49	4206618.6	0.002308	0.001657	0.002308	0.000462
611175.94	4206629.06	0.002390	0.001716	0.002390	0.000478
611195.48	4206613.64	0.002007	0.001440	0.002007	0.000401
611194.93	4206624.1	0.002075	0.001489	0.002075	0.000415
610704.74	4206583.83	0.008277	0.005952	0.008277	0.001655
610703.54	4206601.74	0.008819	0.006341	0.008819	0.001764
610705.38	4206547.72	0.007271	0.005227	0.007271	0.001454
610704.19	4206565.63	0.007757	0.005577	0.007757	0.001551
610705.71	4206512.75	0.006455	0.004641	0.006455	0.001291
610704.51	4206530.66	0.006852	0.004926	0.006852	0.001370
610707	4206477.13	0.005752	0.004134	0.005752	0.001150
610705.8	4206495.04	0.006086	0.004375	0.006086	0.001217
610707.65	4206443.46	0.005161	0.003709	0.005161	0.001032
610706.45	4206461.36	0.005467	0.003930	0.005467	0.001093
610707.65	4206407.84	0.004617	0.003318	0.004617	0.000923
610706.45	4206425.74	0.004877	0.003504	0.004877	0.000975

610703.12	4206366.39	0.004089	0.002937	0.004089	0.000818
610703.86	4206388.18	0.004354	0.003129	0.004354	0.000871
610754.28	4206417.88	0.004803	0.003453	0.004803	0.000961
610746.28	4206438.7	0.005145	0.003699	0.005145	0.001029
610765.61	4206379.99	0.004240	0.003047	0.004240	0.000848
610764.41	4206397.9	0.004493	0.003230	0.004493	0.000899
610803.82	4206388.73	0.004294	0.003087	0.004294	0.000859
610802.62	4206406.64	0.004561	0.003280	0.004561	0.000912
610755.3	4206360.77	0.004011	0.002883	0.004011	0.000802
610768.58	4206436.87	0.005117	0.003679	0.005117	0.001023
610791.24	4206432.98	0.005018	0.003608	0.005018	0.001004
610806.14	4206426.83	0.004875	0.003506	0.004875	0.000975
610805.81	4206369.51	0.004031	0.002898	0.004031	0.000806
610804.52	4206353.65	0.003842	0.002762	0.003842	0.000768
610847.59	4206432.33	0.004800	0.003452	0.004800	0.000960
610865.4	4206429.74	0.004654	0.003347	0.004654	0.000931
610882.56	4206432.66	0.004589	0.003301	0.004589	0.000918
610902.31	4206429.42	0.004387	0.003155	0.004387	0.000877
610924.98	4206459.53	0.004682	0.003368	0.004682	0.000936
610924.33	4206496.45	0.005424	0.003904	0.005424	0.001085
610925.3	4206509.08	0.005709	0.004109	0.005709	0.001142
610748.5	4206527.86	0.006999	0.005034	0.006999	0.001400
610766.31	4206522.35	0.006903	0.004966	0.006903	0.001381
610782.5	4206515.88	0.006762	0.004865	0.006762	0.001352
610798.04	4206512.32	0.006671	0.004799	0.006671	0.001334
610819.74	4206511.02	0.006601	0.004750	0.006601	0.001320
610836.25	4206510.7	0.006529	0.004698	0.006529	0.001306
610856.33	4206507.46	0.006329	0.004555	0.006329	0.001266
610879.97	4206511.99	0.006265	0.004509	0.006265	0.001253
610880.94	4206492.56	0.005776	0.004156	0.005776	0.001155
610879.32	4206474.75	0.005396	0.003882	0.005396	0.001079
610855.36	4206477.67	0.005629	0.004050	0.005629	0.001126
610836.25	4206476.37	0.005702	0.004102	0.005702	0.001140
610782.34	4206485.12	0.006031	0.004338	0.006031	0.001206
610763.88	4206489.33	0.006116	0.004398	0.006116	0.001223
610817.96	4206481.23	0.005881	0.004231	0.005881	0.001176
610798.85	4206479.93	0.005900	0.004244	0.005900	0.001180
610748.5	4206494.51	0.006207	0.004464	0.006207	0.001241
610921.74	4206437.52	0.004346	0.003126	0.004346	0.000869
610845.31	4206376.74	0.003979	0.002861	0.003979	0.000796
610861.92	4206386.8	0.004031	0.002899	0.004031	0.000806
610870.34	4206398.97	0.004153	0.002986	0.004153	0.000831
610902.16	4206393.59	0.003879	0.002790	0.003879	0.000776
610920.18	4206388.2	0.003681	0.002647	0.003681	0.000736
610921.11	4206378.14	0.003556	0.002557	0.003556	0.000711
610917.84	4206361.53	0.003397	0.002442	0.003397	0.000679
610845.78	4206356.85	0.003739	0.002688	0.003739	0.000748
610867.77	4206365.04	0.003732	0.002683	0.003732	0.000746
610886.72	4206365.28	0.003633	0.002612	0.003633	0.000727
610903.57	4206363.4	0.003510	0.002524	0.003510	0.000702
610950.59	4206356.39	0.003113	0.002238	0.003113	0.000623
610965.33	4206355.45	0.002992	0.002151	0.002992	0.000598
610995.74	4206351.01	0.002709	0.001947	0.002709	0.000542
610987.56	4206368.32	0.002925	0.002103	0.002925	0.000585
610970.95	4206394.76	0.003333	0.002397	0.003333	0.000667
610968.61	4206411.13	0.003539	0.002545	0.003539	0.000708
610949.42	4206401.77	0.003605	0.002593	0.003605	0.000721
610960.42	4206425.64	0.003800	0.002733	0.003800	0.000760
610944.04	4206426.34	0.003971	0.002856	0.003971	0.000794
610966.5	4206439.67	0.003926	0.002824	0.003926	0.000785
610964.39	4206457.22	0.004208	0.003028	0.004208	0.000842
610948.24	4206509.73	0.005426	0.003905	0.005426	0.001085
610965.72	4206510.7	0.005197	0.003740	0.005197	0.001039
610983.53	4206509.08	0.004887	0.003517	0.004887	0.000977
610970.26	4206484.15	0.004594	0.003306	0.004594	0.000919
610963.46	4206468.93	0.004410	0.003173	0.004410	0.000882
611085.12	4206428.94	0.002403	0.001727	0.002403	0.000481
611083.18	4206485.29	0.002877	0.002068	0.002877	0.000575
611221.38	4206686.44	0.002186	0.001569	0.002186	0.000437
611220.83	4206696.9	0.002285	0.001640	0.002285	0.000457
611221.77	4206676.32	0.002102	0.001508	0.002102	0.000420
611240.27	4206683.06	0.001968	0.001412	0.001968	0.000394
611239.72	4206693.52	0.002056	0.001475	0.002056	0.000411
611240.67	4206672.94	0.001893	0.001358	0.001893	0.000379
611222.17	4206653.03	0.001939	0.001391	0.001939	0.000388
611221.62	4206663.49	0.002012	0.001444	0.002012	0.000402
611222.17	4206640.92	0.001867	0.001339	0.001867	0.000373
611241.86	4206650.05	0.001745	0.001251	0.001745	0.000349
611241.31	4206660.5	0.001809	0.001298	0.001809	0.000362
611241.86	4206637.94	0.001680	0.001205	0.001680	0.000336
611266.92	4206689.62	0.001802	0.001292	0.001802	0.000360
611266.37	4206700.08	0.001886	0.001353	0.001886	0.000377
611267.32	4206679.9	0.001733	0.001242	0.001733	0.000347
611268.31	4206659.19	0.001606	0.001151	0.001606	0.000321
611267.76	4206669.65	0.001667	0.001195	0.001667	0.000333
611268.31	4206647.08	0.001545	0.001107	0.001545	0.000309

611221.89	4206630.7	0.001813	0.001300	0.001813	0.000363
611241.58	4206627.72	0.001632	0.001170	0.001632	0.000326
611268.53	4206635.97	0.001492	0.001069	0.001492	0.000298
611269.52	4206627.02	0.001447	0.001037	0.001447	0.000289
611269.32	4206615.69	0.001402	0.001005	0.001402	0.000280
611235.12	4206603.35	0.001571	0.001126	0.001571	0.000314
611125.73	4206584.46	0.003024	0.002174	0.003024	0.000605
611137.26	4206585.26	0.002788	0.002004	0.002788	0.000558
611149	4206584.06	0.002553	0.001834	0.002553	0.000511
611160.43	4206587.05	0.002367	0.001700	0.002367	0.000473
611172.17	4206585.85	0.002171	0.001558	0.002171	0.000434
611185.49	4206588.64	0.001999	0.001435	0.001999	0.000400
611197.23	4206587.44	0.001850	0.001328	0.001850	0.000370
611128.02	4206567.75	0.002819	0.002027	0.002819	0.000564
611139.75	4206566.56	0.002589	0.001860	0.002589	0.000518
611150.09	4206568.95	0.002425	0.001742	0.002425	0.000485
611161.83	4206567.75	0.002222	0.001596	0.002222	0.000444
611171.17	4206569.15	0.002091	0.001501	0.002091	0.000418
611182.91	4206567.95	0.001927	0.001383	0.001927	0.000385
611194.44	4206567.75	0.001791	0.001285	0.001791	0.000358
611206.18	4206566.56	0.001665	0.001194	0.001665	0.000333
611216.92	4206568.35	0.001575	0.001129	0.001575	0.000315
611228.65	4206567.16	0.001477	0.001059	0.001477	0.000295
611204.89	4206588.04	0.001770	0.001270	0.001770	0.000354
611238.7	4206569.35	0.001414	0.001014	0.001414	0.000283
611266.54	4206574.12	0.001270	0.000909	0.001270	0.000254
611265.15	4206558.8	0.001229	0.000880	0.001229	0.000246
611262.16	4206541.9	0.001195	0.000856	0.001195	0.000239
611129.21	4206540.11	0.002554	0.001835	0.002554	0.000511
611140.94	4206538.92	0.002349	0.001687	0.002349	0.000470
611155.66	4206540.91	0.002139	0.001536	0.002139	0.000428
611167.4	4206539.71	0.001972	0.001416	0.001972	0.000394
611181.32	4206541.7	0.001817	0.001304	0.001817	0.000363
611193.05	4206540.51	0.001690	0.001212	0.001690	0.000338
611205.78	4206542.1	0.001576	0.001130	0.001576	0.000315
611219.3	4206542.89	0.001464	0.001050	0.001464	0.000293
611232.23	4206542.7	0.001370	0.000982	0.001370	0.000274
611243.97	4206541.5	0.001292	0.000925	0.001292	0.000258
611204.79	4206362.96	0.001106	0.000792	0.001106	0.000221
611349.5	4206372.82	0.000633	0.000452	0.000633	0.000127
611313.91	4206380.65	0.000715	0.000511	0.000715	0.000143
611310.48	4206419.52	0.000776	0.000555	0.000776	0.000155
611267.05	4206500.67	0.001068	0.000764	0.001068	0.000214
611497.56	4206304.83	0.000426	0.000303	0.000426	0.000085
611419.07	4206310.55	0.000487	0.000347	0.000487	0.000097
611041.07	4206301.25	0.002057	0.001478	0.002057	0.000411
611069.15	4206301.53	0.001861	0.001337	0.001861	0.000372
611083.74	4206300.98	0.001757	0.001262	0.001757	0.000351
611100.26	4206300.7	0.001640	0.001178	0.001640	0.000328
611111.82	4206300.15	0.001559	0.001119	0.001559	0.000312
611123.93	4206299.33	0.001474	0.001058	0.001474	0.000295
611137.15	4206300.43	0.001392	0.000999	0.001392	0.000278
611150.91	4206299.88	0.001305	0.000936	0.001305	0.000261
611164.12	4206300.7	0.001227	0.000880	0.001227	0.000245
610871.77	4206303.18	0.003083	0.002216	0.003083	0.000617
610919.67	4206299.6	0.002820	0.002027	0.002820	0.000564
610946.1	4206301.25	0.002684	0.001929	0.002684	0.000537
610968.4	4206299.6	0.002533	0.001820	0.002533	0.000507
610997.85	4206300.15	0.002345	0.001685	0.002345	0.000469
610800.68	4206302.27	0.003311	0.002379	0.003311	0.000662
610345.98	4206368.37	0.002739	0.001956	0.002739	0.000548
610371.57	4206456.46	0.003330	0.002379	0.003330	0.000666
610277.64	4206458.4	0.002701	0.001923	0.002701	0.000540
610294.49	4206372.25	0.002530	0.001804	0.002530	0.000506
610341.12	4206437.68	0.003016	0.002153	0.003016	0.000603
610508	4206352.9	0.003391	0.002431	0.003391	0.000678
610536.83	4206358.41	0.003537	0.002536	0.003537	0.000707
610518.69	4206394.68	0.003754	0.002692	0.003754	0.000751
610506.38	4206428.37	0.003962	0.002840	0.003962	0.000792
610407.88	4206300.63	0.002693	0.001927	0.002693	0.000539
610413.21	4206694.6	0.004789	0.003411	0.004789	0.000958
610451.93	4206697.23	0.005548	0.003960	0.005548	0.001110
610448.83	4206717.31	0.005582	0.003981	0.005582	0.001116
610438.65	4207091.1	0.003631	0.002025	0.003631	0.000726
610449.61	4207060.72	0.003689	0.002303	0.003689	0.000738
610454.96	4207045.53	0.003859	0.002489	0.003859	0.000772
610451.02	4207000.82	0.004221	0.002854	0.004221	0.000844
610446.24	4206963.41	0.004539	0.003130	0.004539	0.000908
610457.21	4206987.6	0.004507	0.003080	0.004507	0.000901
610421.77	4207012.91	0.003599	0.002384	0.003599	0.000720
610421.49	4207040.47	0.003406	0.002178	0.003406	0.000681
610362.43	4207105.72	0.003352	0.001575	0.003352	0.000670
610378.74	4207077.32	0.002953	0.001672	0.002953	0.000591
610364.4	4207040.75	0.002799	0.001739	0.002799	0.000560
610319.96	4207038.22	0.002462	0.001503	0.002462	0.000492
610334.3	4207091.94	0.002831	0.001438	0.002831	0.000566

610329.8	4207109.1	0.003313	0.001460	0.003313	0.000663
610350.94	4206635.65	0.003712	0.002640	0.003712	0.000742
610530.61	4206613.88	0.006189	0.004435	0.006189	0.001238
610531.61	4206594.02	0.005953	0.004267	0.005953	0.001191
610537.23	4206566.38	0.005691	0.004080	0.005691	0.001138
610565.36	4206541.23	0.005701	0.004090	0.005701	0.001140
610627.57	4206493.91	0.005612	0.004031	0.005612	0.001122
610633.2	4206515.75	0.006020	0.004324	0.006020	0.001204
610666.29	4206515.75	0.006274	0.004508	0.006274	0.001255
610646.1	4206559.1	0.006984	0.005018	0.006984	0.001397
610646.77	4206594.51	0.007804	0.005607	0.007804	0.001561
610578.59	4206617.02	0.007071	0.005073	0.007071	0.001414
610620.29	4206619.66	0.007887	0.005664	0.007887	0.001577
610608.05	4206563.07	0.006552	0.004704	0.006552	0.001310
610608.05	4206545.2	0.006263	0.004496	0.006263	0.001253
610623.6	4206564.4	0.006780	0.004869	0.006780	0.001356
610623.6	4206546.53	0.006447	0.004630	0.006447	0.001289
610563.04	4206597.82	0.006491	0.004656	0.006491	0.001298
610587.86	4206596.83	0.006865	0.004927	0.006865	0.001373
610564.7	4206580.61	0.006255	0.004487	0.006255	0.001251
610589.52	4206581.61	0.006626	0.004755	0.006626	0.001325
610734.02	4206917.57	0.054107	0.038977	0.054107	0.010821
610754.27	4206913.28	0.057601	0.041505	0.057601	0.011520
610779.19	4206906.67	0.059704	0.043030	0.059704	0.011941
610824.35	4206899.66	0.065945	0.047548	0.065945	0.013189
610820.85	4206880.97	0.052063	0.037530	0.052063	0.010413
610811.11	4206855.27	0.039614	0.028548	0.039614	0.007923
610717.67	4206895.37	0.038773	0.027913	0.038773	0.007755
610731.69	4206880.97	0.037161	0.026757	0.037161	0.007432
610715.72	4206858	0.028987	0.020862	0.028987	0.005797
610721.17	4206833.47	0.025496	0.018350	0.025496	0.005099
610758.94	4206842.03	0.030874	0.022234	0.030874	0.006175
610767.51	4206870.84	0.039590	0.028520	0.039590	0.007918
610865.01	4206886.37	0.064634	0.046614	0.064634	0.012927
610909.74	4206874.67	0.064880	0.046804	0.064880	0.012976
610860.95	4206838.53	0.038857	0.028013	0.038857	0.007771
610888.6	4206829.18	0.038404	0.027692	0.038404	0.007681
610790.87	4206784.8	0.023327	0.016801	0.023327	0.004665
610816.95	4206785.58	0.024606	0.017727	0.024606	0.004921
610850.44	4206785.19	0.026047	0.018772	0.026047	0.005209
610898.33	4206797.26	0.031271	0.022548	0.031271	0.006254
610894.83	4206755.59	0.023573	0.016993	0.023573	0.004715
610897.55	4206780.9	0.027989	0.020179	0.027989	0.005598
610886.81	4206880.99	0.065050	0.046920	0.065050	0.013010
611023.86	4206760.97	0.027204	0.019626	0.027204	0.005441
611041.14	4206759.94	0.023457	0.016921	0.023457	0.004691
611061.35	4206762.7	0.019341	0.013950	0.019341	0.003868
610754.89	4206782.37	0.021241	0.015292	0.021241	0.004248
610844.56	4206719.24	0.017633	0.012704	0.017633	0.003527
610513.96	4206710.62	0.007018	0.005022	0.007018	0.001404
610591.87	4206713.73	0.009605	0.006892	0.009605	0.001921
610668.23	4206716.46	0.012419	0.008928	0.012419	0.002484
610545.12	4206684.51	0.007601	0.005447	0.007601	0.001520
610637.84	4206683.34	0.010170	0.007306	0.010170	0.002034
610512.01	4206642.44	0.006213	0.004449	0.006213	0.001243
610584.86	4206649.06	0.007921	0.005684	0.007921	0.001584
610665.5	4206649.06	0.009725	0.006990	0.009725	0.001945
609975.26	4207082.82	0.002029	0.000764	0.002029	0.000406
609945.83	4207083.32	0.002038	0.000745	0.002038	0.000408
609822.62	4207152.66	0.002411	0.000703	0.002411	0.000482
609804.66	4207094.79	0.002706	0.000782	0.002706	0.000541
609772.24	4207094.79	0.002757	0.000777	0.002757	0.000551
609700.41	4207156.65	0.001861	0.000559	0.001861	0.000372
609633.07	4207074.84	0.001611	0.000516	0.001611	0.000322
609555.75	4207074.84	0.001764	0.000524	0.001764	0.000353
609620.1	4207148.17	0.001920	0.000534	0.001920	0.000384
609556.25	4207145.67	0.001884	0.000516	0.001884	0.000377
609502.88	4207137.69	0.002058	0.000542	0.002058	0.000412
610698.46	4207080.47				
610693.24	4207063.42				

Oakley Main Street Project

Unmitigated

Construction Annual PM2.5 Total (Exhaust + Fugitive Dust)

Construction Schedule	**2019**	
	8 hours/day	
	5 days/week	
	26.4 weeks/year	starting 7/1/2019 (132 working days in 2019)
	1056 hours/year	

Onsite Construction Area Source Size (m2):	86,874.0	from AERMOD

Onsite Construction PM2.5 Emissions

2019		**Onsite**	**Onsite**	**Onsite DPM**
	Construction Activity	**Annual DPM Exhaust Emissions (tons/year)**	**Annual DPM Exhaust Emissions (g/sec)**	**Source Exhaust Emissions (g/m2-sec)**
	Site Preparation	3.330E-02	7.954E-03	9.155E-08
	Grading	6.670E-02	1.593E-02	1.834E-07
	Paving	7.590E-03	1.813E-03	2.087E-08
	Building Construction—2019	4.060E-02	9.697E-03	1.116E-07
	Total	**1.482E-01**	**3.539E-02**	**4.074E-07**

Offsite Construction Vehicle PM2.5 Emissions

2019		**Offsite Hauling**	**Offsite Vendor**	**Offsite Workers**	
		Annual DPM	**Annual DPM**	**Annual DPM**	
	Construction Activity	**Exhaust Emissions (tons/year)**	**Exhaust Emissions (tons/year)**	**Exhaust Emissions (tons/year)**	
	Site Preparation	3.000E-05	0.000E+00	1.900E-04	
	Grading	3.000E-05	0.000E+00	7.600E-04	
	Paving	4.000E-05	0.000E+00	3.200E-04	
	Building Construction—2019	2.000E-05	7.680E-03	1.610E-02	
	Total (tons/year)	**1.200E-04**	**7.680E-03**	**1.737E-02**	**2.517E-02**
	Trip Distance assumed in CalEEMod (mi)	20.0	7.3	10.8	
	Offsite Project Trip Distance Along Roadway Segment				
	Road Segment 1 (mi)	0.98	0.98	0.98	
	Offsite Project Emissions Along Roadway Segment				
	Road Segment 1 (mi)	5.890E-06	1.033E-03	1.579E-03	
	Total Offsite Emissions Along Segments (tons/year)	**5.890E-06**	**1.033E-03**	**1.579E-03**	**2.617E-03**

Offsite Emissions Along Roadway Segments Analyzed	
Total Offsite Project Exhaust Emissions (tons/year)	**2.617E-03**
Total Offsite Project Exhaust Emissions (grams/sec)	**6.251E-04**

Onsite Exhaust Emissions (tons/year)	**1.482E-01**
Onsite Exhaust Emissions (g/m2-sec)	**4.074E-07**

Total PM@2.5 Exhaust (tons/year)	**1.508E-01**

Oakley Main Street Project

Unmitigated

Construction Annual DPM Emissions (as PM2.5 Exhaust)

Construction Schedule	**2020**	
	8 hours/day	
	5 days/week	
	26 weeks/year	ending 6/30/2020 (130 working days in 2020)
	1040 hours/year	
Onsite Construction Area Source Size (m2):	86,874.0	from AERMOD

Onsite Construction PM2.5 Emissions

2020		**Onsite**	**Onsite**	**Onsite DPM**
	Construction Activity	**Annual DPM Exhaust Emissions (tons/year)**	**Annual DPM Exhaust Emissions (g/sec)**	**Source Exhaust Emissions (g/m2-sec)**
	Building Construction—2020	6.830E-02	1.656E-02	1.907E-07
	Architectural Coating	1.110E-03	2.692E-04	3.099E-09
	Total	**6.941E-02**	**1.683E-02**	**1.938E-07**

Offsite Construction Vehicle PM2.5 Emissions

2020		**Offsite Hauling**	**Offsite Vendor**	**Offsite Workers**	
		Annual DPM	**Annual DPM**	**Annual DPM**	
	Construction Activity	**Exhaust Emissions (tons/year)**	**Exhaust Emissions (tons/year)**	**Exhaust Emissions (tons/year)**	
	Building Construction—2020	3.000E-05	1.310E-02	3.130E-02	
	Architectural Coating	1.000E-05	0.000E+00	9.700E-04	
	Total (tons/year)	**4.000E-05**	**1.310E-02**	**3.227E-02**	**4.541E-02**
	Trip Distance assumed in CalEEMod (mi)	20.0	7.3	10.8	
	Offsite Project Trip Distance Along Roadway Segment				
	Road Segment 1 (mi)	0.98	0.98	0.98	
	Offsite Project Emissions Along Roadway Segment				
	Road Segment 1 (mi)	1.963E-06	1.761E-03	2.933E-03	
	Total Offsite Emissions Along Segments (tons/year)	**1.963E-06**	**1.761E-03**	**2.933E-03**	

Offsite Emissions Along Roadway Segment Analyzed	
Total Offsite Project Exhaust Emissions (tons/year)	**4.696E-03**
Total Offsite Project Exhaust Emissions (grams/sec)	**1.139E-03**

Onsite Exhaust Emissions (tons/year)	**6.941E-02**
Onsite Exhaust Emissions (g/m2-sec)	**1.938E-07**

Total PM@2.5 Exhaust (tons/year)	**7.411E-02**

Oakley Main Street Project

2019 No Mitigation at Sensitive Receptors

Construction Annual PM2.5 Total (Exhaust + Fugitive Dust)

Annual Average Onsite DPM Exhaust Emission Rate (grams/m2/sec): 4.07426E-07
Annual Average Offsite DPM Exhaust Emission Rate (grams/m2/sec): 6.25137E-04

X (m)	Y (m)	Onsite Annual DPM Exhaust w/Unit Emissions (ug/m3)	Onsite Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite Annual DPM Exhaust w/Unit Emissions (ug/m3)	Offsite Annual DPM Exhaust w/Actual Emissions (ug/m3)	Total DPM (ug/m3)
611337.43	4207107.53	72119.46582	0.02938	0.09584	5.99132E-05	0.02944
611316.93	4207114.47	80434.6896	0.03277	0.10716	6.69897E-05	0.03284
611309.05	4207127.4	84198.24038	0.03430	0.11921	7.45226E-05	0.03438
611308.42	4207149.48	84151.52971	0.03429	0.13557	8.47499E-05	0.03437
611309.05	4207170.29	82363.93169	0.03356	0.15063	9.41645E-05	0.03365
611311.88	4207184.48	79762.20343	0.03250	0.15901	9.94031E-05	0.03260
611315.04	4207203.09	76090.87091	0.03100	0.16951	1.05967E-04	0.03111
611359.51	4207125.19	66113.83776	0.02694	0.09827	6.14323E-05	0.02700
611364.56	4207101.22	62614.05743	0.02551	0.08486	5.30492E-05	0.02556
611377.49	4207091.76	57824.16232	0.02356	0.07759	4.85044E-05	0.02361
611401.77	4207088.6	51215.15528	0.02087	0.07136	4.46098E-05	0.02091
611416.28	4207100.59	49206.03068	0.02005	0.07292	4.55850E-05	0.02009
611421.64	4207123.93	50081.60566	0.02040	0.08051	5.03298E-05	0.02045
611438.99	4207115.41	45863.43441	0.01869	0.07354	4.59726E-05	0.01873
611456.97	4207120.14	42901.06702	0.01748	0.07121	4.45160E-05	0.01752
611355.09	4207167.14	68071.92153	0.02773	0.12324	7.70419E-05	0.02781
611375.59	4207165.56	62593.65391	0.02550	0.11348	7.09406E-05	0.02557
611396.09	4207163.35	57585.73578	0.02346	0.10464	6.54144E-05	0.02353
611411.55	4207163.35	54123.73286	0.02205	0.09940	6.21387E-05	0.02211
611426.06	4207165.56	51155.75486	0.02084	0.09576	5.98632E-05	0.02090
611452.55	4207164.3	46139.22934	0.01880	0.08779	5.48808E-05	0.01885
611311.25	4207222.96	73427.73522	0.02992	0.18507	1.15694E-04	0.03003
611312.2	4207239.05	69843.12849	0.02846	0.19343	1.20920E-04	0.02858
611355.41	4207245.99	60529.21529	0.02466	0.16488	1.03073E-04	0.02476
611377.8	4207244.72	56860.81071	0.02317	0.15072	9.42207E-05	0.02326
611390.73	4207246.62	54531.0168	0.02222	0.14441	9.02761E-05	0.02231
611410.92	4207249.14	51159.54159	0.02084	0.13524	8.45436E-05	0.02093
611433.31	4207250.09	47826.3732	0.01949	0.12551	7.84610E-05	0.01956
611447.82	4207253.24	45645.84688	0.01860	0.12062	7.54041E-05	0.01867
611469.58	4207243.15	43220.59543	0.01761	0.10933	6.83463E-05	0.01768
611477.47	4207217.28	42718.06116	0.01740	0.09859	6.16323E-05	0.01747
611357.62	4207196.47	65814.7404	0.02681	0.13846	8.65565E-05	0.02690
611374.96	4207196.78	61712.80195	0.02514	0.12973	8.10991E-05	0.02522
611394.83	4207198.68	57302.68844	0.02335	0.12149	7.59480E-05	0.02342
611412.5	4207197.1	53803.70249	0.02192	0.11351	7.09594E-05	0.02199
611433.63	4207195.52	49887.66738	0.02033	0.10512	6.57145E-05	0.02039
611452.87	4207194.58	46579.80481	0.01898	0.09849	6.15698E-05	0.01904
611471.47	4207199.62	43647.42156	0.01778	0.09466	5.91755E-05	0.01784
611466.43	4207168.08	43892.42118	0.01788	0.08554	5.34743E-05	0.01794
611488.19	4207163.04	40289.95544	0.01642	0.07883	4.92796E-05	0.01646
611506.8	4207160.2	37495.87893	0.01528	0.07413	4.63414E-05	0.01532
611505.54	4207184.17	38522.79851	0.01570	0.08120	5.07612E-05	0.01575
611509.32	4207196.47	38292.76597	0.01560	0.08383	5.24053E-05	0.01565
611505.22	4207219.81	39020.02492	0.01590	0.09149	5.71938E-05	0.01595
611510.27	4207235.89	38316.2533	0.01561	0.09463	5.91568E-05	0.01567
611495.76	4207248.82	39797.95732	0.01621	0.10248	6.40641E-05	0.01628
611311.25	4207260.81	65081.41104	0.02652	0.20466	1.27941E-04	0.02664
611314.41	4207277.84	60664.83783	0.02472	0.20837	1.30260E-04	0.02485
611358.56	4207260.49	57824.01483	0.02356	0.16899	1.05642E-04	0.02366
611368.02	4207274.69	54310.91493	0.02213	0.16825	1.05179E-04	0.02223
611389.16	4207283.52	50418.04539	0.02054	0.15861	9.91531E-05	0.02064
611400.19	4207295.19	47681.55677	0.01943	0.15600	9.75214E-05	0.01952
611412.5	4207316	43925.39399	0.01790	0.15480	9.67713E-05	0.01799
611435.52	4207292.03	44241.19439	0.01803	0.13771	8.60877E-05	0.01811
611451.6	4207278.47	43565.05229	0.01775	0.12691	7.93362E-05	0.01783
611474.63	4207278.79	40978.58298	0.01670	0.11804	7.37912E-05	0.01677
611485.35	4207263.33	40528.52006	0.01651	0.10994	6.87276E-05	0.01658
611328.6	4207291.72	55958.79829	0.02280	0.20113	1.25734E-04	0.02292
611312.83	4207306.23	54191.72496	0.02208	0.21681	1.35536E-04	0.02221
611302.11	4207319.47	51784.0774	0.02110	0.22713	1.41987E-04	0.02124
611310.62	4207336.5	47430.82189	0.01932	0.22125	1.38312E-04	0.01946
611321.66	4207346.6	44840.2894	0.01827	0.21346	1.33442E-04	0.01840
611339.01	4207346.91	44069.14332	0.01795	0.20196	1.26253E-04	0.01808
611357.62	4207322.94	47372.35517	0.01930	0.18750	1.17213E-04	0.01942
611371.49	4207335.87	44247.07907	0.01803	0.18095	1.13119E-04	0.01814
611372.76	4207355.11	41101.92016	0.01675	0.18222	1.13913E-04	0.01686
611421.64	4207330.2	41480.70181	0.01690	0.15321	9.57773E-05	0.01700
611423.22	4207349.12	39129.97165	0.01594	0.15562	9.72839E-05	0.01604
611449.08	4207328.93	39507.70382	0.01610	0.14048	8.78193E-05	0.01618
611438.36	4207309.06	42349.0106	0.01725	0.14083	8.80381E-05	0.01734
611468.95	4207336.5	37320.38289	0.01521	0.13374	8.36059E-05	0.01529
611483.46	4207328.62	36858.19499	0.01502	0.12663	7.91612E-05	0.01510
611504.27	4207316.95	35973.66006	0.01466	0.11680	7.30161E-05	0.01473
611518.78	4207305.59	35348.57019	0.01440	0.10957	6.84963E-05	0.01447
611531.08	4207292.98	34788.97542	0.01417	0.10301	6.43954E-05	0.01424
611540.23	4207275.63	34445.95169	0.01403	0.09642	6.02758E-05	0.01409
611310.9	4207395.01	35664.88394	0.01453	0.21468	1.34205E-04	0.01467
611307.77	4207409.9	33067.75747	0.01347	0.21287	1.33073E-04	0.01361
611306.78	4207428.47	30059.43768	0.01225	0.20826	1.30191E-04	0.01238
611310.76	4207450.93	26865.88973	0.01095	0.19995	1.24996E-04	0.01107
611307.77	4207464.05	25070.49247	0.01021	0.19688	1.23077E-04	0.01034
611355.09	4207392.69	35682.85316	0.01454	0.19159	1.19770E-04	0.01466
611398.22	4207398.65	33924.09741	0.01382	0.17071	1.06717E-04	0.01393
611386.69	4207411.77	32428.47637	0.01321	0.17541	1.09655E-04	0.01332
611357.67	4207410.98	32881.621	0.01340	0.18857	1.17882E-04	0.01351
611353.89	4207429.07	30315.29853	0.01235	0.18770	1.17338E-04	0.01247
611362.24	4207449.15	27682.30087	0.01128	0.18089	1.13081E-04	0.01139
611385.9	4207431.06	29940.18195	0.01220	0.17420	1.08899E-04	0.01231
611420.29	4207390.9	34239.32065	0.01395	0.16083	1.00541E-04	0.01405
611436.99	4207401.83	32429.8506	0.01321	0.15430	9.64587E-05	0.01331
611444.34	4207420.32	30236.05899	0.01232	0.15186	9.49334E-05	0.01241
611441.16	4207444.37	27807.86125	0.01133	0.15264	9.54210E-05	0.01143
611446.33	4207459.28	26258.31545	0.01070	0.15019	9.38894E-05	0.01079
611459.25	4207384.54	33396.93724	0.01361	0.14434	9.02323E-05	0.01370
611466.61	4207407.4	30881.4118	0.01258	0.14322	8.95322E-05	0.01267
611472.97	4207420.72	29426.85431	0.01199	0.14156	8.84945E-05	0.01208
611470.58	4207443.78	27357.30316	0.01115	0.14273	8.92259E-05	0.01124
611470.58	4207461.87	25719.96862	0.01048	0.14241	8.90258E-05	0.01057
611351.29	4207475.53	24401.16236	0.00994	0.17915	1.11993E-04	0.01005
611374.78	4207476.37	24554.14957	0.01000	0.17141	1.07155E-04	0.01011
611395.9	4207472.82	25058.82692	0.01021	0.16522	1.03285E-04	0.01031
611389.14	4207448.15	27835.71233	0.01134	0.17100	1.06899E-04	0.01145
611439.49	4207477.38	24567.96365	0.01001	0.15100	9.43958E-05	0.01010
611467.04	4207481.61	24018.25582	0.00979	0.14252	8.90946E-05	0.00987
611302.63	4207484.99	22411.01806	0.00913	0.19147	1.19695E-04	0.00925
611303.64	4207503.41	20420.69727	0.00832	0.18481	1.15532E-04	0.00844
611310.74	4207524.36	18535.39723	0.00755	0.17599	1.10018E-04	0.00766
611334.05	4207523.85	19091.98347	0.00778	0.17084	1.06798E-04	0.00789
611356.02	4207522.5	19631.15723	0.00800	0.16603	1.03792E-04	0.00810
611371.73	4207521.49	19977.44198	0.00814	0.16248	1.01572E-04	0.00824
611394.04	4207526.89	19798.82285	0.00807	0.15591	9.74652E-05	0.00816
611406.88	4207522.5	20321.79038	0.00828	0.15366	9.60586E-05	0.00838
611430.71	4207520.47	20682.51458	0.00843	0.14812	9.25954E-05	0.00852
611444.56	4207523.01	20541.5198	0.00837	0.14435	9.02386E-05	0.00846
611466.19	4207524.87	20454.4323	0.00833	0.13890	8.68316E-05	0.00842
611485.45	4207527.74	20244.44344	0.00825	0.13406	8.38059E-05	0.00833

611511.14	4207529.43	20069.20289	0.00818	0.12802	8.00301E-05	0.00826
611524.65	4207513.21	21109.91493	0.00860	0.12581	7.86485E-05	0.00868
611552.87	4207524.02	20157.16927	0.00821	0.11897	7.43726E-05	0.00829
611553.21	4207500.7	21620.47773	0.00881	0.11937	7.46227E-05	0.00888
611524.32	4207495.8	22327.72292	0.00910	0.12649	7.90736E-05	0.00918
611523.13	4207474.34	23884.62491	0.00973	0.12708	7.94425E-05	0.00981
611552.03	4207482.79	22789.46248	0.00929	0.11966	7.48040E-05	0.00936
611519.59	4207462.51	24820.91038	0.01011	0.12799	8.00113E-05	0.01019
611554.73	4207464.37	23921.35583	0.00975	0.11860	7.41413E-05	0.00982
611524.99	4207440.55	26310.74252	0.01072	0.12584	7.86673E-05	0.01080
611555.24	4207445.11	25138.00661	0.01024	0.11765	7.35474E-05	0.01032
611555.58	4207427.03	26262.72164	0.01070	0.11639	7.27598E-05	0.01077
611557.94	4207398.3	27891.41807	0.01136	0.11306	7.06780E-05	0.01143
611522.63	4207422.64	27693.08983	0.01128	0.12555	7.84860E-05	0.01136
611522.63	4207401.35	29233.03027	0.01191	0.12381	7.73983E-05	0.01199
611542.4	4207388.34	29204.1871	0.01190	0.11639	7.27598E-05	0.01197
611511.98	4207382.93	31050.49001	0.01265	0.12524	7.82922E-05	0.01273
611508.43	4207369.24	32232.61583	0.01313	0.12465	7.79234E-05	0.01321
611535.81	4207363.5	31050.01438	0.01265	0.11503	7.19096E-05	0.01272
611548.65	4207344.4	31277.09208	0.01274	0.10813	6.75961E-05	0.01281
611559.8	4207244.2	32921.01129	0.01341	0.08422	5.26491E-05	0.01347
611558.62	4207227.64	32974.88161	0.01343	0.08065	5.04173E-05	0.01349
611555.24	4207203.99	32985.54274	0.01344	0.07579	4.73792E-05	0.01349
611557.27	4207183.2	32198.37203	0.01312	0.07051	4.40784E-05	0.01316
611554.23	4207164.62	31818.90119	0.01296	0.06668	4.16842E-05	0.01301
611557.77	4207142.31	30325.85955	0.01236	0.06101	3.81396E-05	0.01239
611547.97	4207121.19	30095.51021	0.01226	0.05736	3.58579E-05	0.01230
611546.96	4207102.77	28792.74694	0.01173	0.05291	3.30760E-05	0.01176
611551.18	4207088.92	27188.19377	0.01108	0.04934	3.08443E-05	0.01111
611555.91	4207066.78	24736.55188	0.01008	0.04433	2.77123E-05	0.01011
611476.99	4207114.19	39032.5099	0.01590	0.06563	4.10278E-05	0.01594
611498.11	4207124.33	36633.73816	0.01493	0.06521	4.07652E-05	0.01497
611517.37	4207121.63	33792.74611	0.01377	0.06142	3.83959E-05	0.01381
611516.7	4207103.71	32417.07425	0.01321	0.05665	3.54140E-05	0.01324
611397.15	4207001.31	38398.34777	0.01564	0.04726	2.95440E-05	0.01567
611405.21	4206965.9	30504.07654	0.01243	0.04043	2.52743E-05	0.01245
611417.66	4206992.52	33221.65735	0.01354	0.04372	2.73310E-05	0.01356
611434.86	4206992.14	30559.37492	0.01245	0.04223	2.63996E-05	0.01248
611454.74	4206982.79	26575.40804	0.01083	0.03925	2.45366E-05	0.01085
611462.1	4206968.28	23744.41903	0.00967	0.03674	2.29676E-05	0.00970
611453.75	4206949.79	22065.52684	0.00899	0.03499	2.18736E-05	0.00901
611447.79	4206931.5	20148.71213	0.00821	0.03335	2.08483E-05	0.00823
611475.02	4206936.87	18595.81883	0.00758	0.03239	2.02482E-05	0.00760
611496.69	4206939.06	17280.63297	0.00704	0.03147	1.96731E-05	0.00706
611513	4206936.67	15990.11019	0.00651	0.03044	1.90292E-05	0.00653
611530.89	4206938.86	15159.80647	0.00618	0.02980	1.86291E-05	0.00620
611546.99	4206935.68	14038.2171	0.00572	0.02881	1.80102E-05	0.00574
611404.05	4206946.01	27128.95817	0.01105	0.03779	2.36239E-05	0.01108
611405.64	4206926.73	23642.49099	0.00963	0.03540	2.21299E-05	0.00965
611403.65	4206905.06	20382.68166	0.00830	0.03332	2.08296E-05	0.00833
611410.81	4206890.15	17590.55265	0.00717	0.03158	1.97418E-05	0.00719
611437.25	4206884.98	15103.9464	0.00615	0.02977	1.86103E-05	0.00617
611453.35	4206887.96	14481.35066	0.00590	0.02921	1.82603E-05	0.00592
611472.24	4206888.75	13545.56397	0.00552	0.02840	1.77539E-05	0.00554
611492.32	4206887.16	12440.36964	0.00507	0.02741	1.71350E-05	0.00509
611509.62	4206887.76	11754.23398	0.00479	0.02674	1.67162E-05	0.00481
611527.31	4206889.15	11173.87578	0.00455	0.02613	1.63348E-05	0.00457
611546.6	4206887.56	10380.06767	0.00423	0.02531	1.58222E-05	0.00424
611377.6	4206837.66	13044.97607	0.00531	0.02950	1.84416E-05	0.00533
611377.41	4206826.33	11799.11762	0.00481	0.02879	1.79977E-05	0.00483
611377.6	4206816.19	10779.62814	0.00439	0.02818	1.76164E-05	0.00441
611407.63	4206828.51	10720.84885	0.00437	0.02743	1.71475E-05	0.00439
611437.05	4206820.96	9102.97431	0.00371	0.02571	1.60723E-05	0.00372
611474.23	4206850.98	10158.46116	0.00414	0.02585	1.61598E-05	0.00415
611478.2	4206824.54	8218.87414	0.00335	0.02428	1.51783E-05	0.00336
611495.9	4206825.93	7876.49136	0.00321	0.02371	1.48220E-05	0.00322
611509.22	4206853.17	9215.88107	0.00375	0.02464	1.54034E-05	0.00377
611526.32	4206824.34	7143.67045	0.00291	0.02261	1.41344E-05	0.00292
611558.33	4206844.02	7485.47824	0.00305	0.02252	1.40781E-05	0.00306
611554.15	4206823.34	6586.44537	0.00268	0.02170	1.35655E-05	0.00270
611558.53	4206886.77	9943.822	0.00405	0.02483	1.55222E-05	0.00407
611375.81	4206780.4	8029.73547	0.00327	0.02636	1.64786E-05	0.00329
611387.74	4206763.9	6837.39178	0.00279	0.02506	1.56659E-05	0.00280
611411.4	4206781.59	7256.45615	0.00296	0.02486	1.55409E-05	0.00297
611412.6	4206752.37	5893.29104	0.00240	0.02357	1.47345E-05	0.00242
611440.43	4206779.41	6569.50182	0.00268	0.02362	1.47657E-05	0.00269
611471.44	4206781.39	6126.17427	0.00250	0.02259	1.41219E-05	0.00251
611469.26	4206740.64	4753.89884	0.00194	0.02116	1.32279E-05	0.00195
611499.68	4206782.19	5730.22735	0.00233	0.02169	1.35592E-05	0.00235
611536.85	4206780.8	5192.88254	0.00212	0.02053	1.28341E-05	0.00213
611523.14	4206742.03	4243.76327	0.00173	0.01962	1.22652E-05	0.00174
611556.54	4206774.04	4761.78268	0.00194	0.01975	1.23465E-05	0.00195
611323.92	4206674.63	5133.50789	0.00209	0.02395	1.49720E-05	0.00211
611335.65	4206699.68	5478.2258	0.00223	0.02449	1.53096E-05	0.00225
611362.49	4206701.67	5107.14885	0.00208	0.02351	1.46970E-05	0.00210
611381.38	4206700.48	4819.54834	0.00196	0.02277	1.42344E-05	0.00198
611398.08	4206697.1	4540.55002	0.00185	0.02206	1.37905E-05	0.00186
611417.17	4206699.88	4377.02011	0.00178	0.02151	1.34467E-05	0.00180
611433.87	4206699.09	4184.85382	0.00171	0.02094	1.30904E-05	0.00172
611454.55	4206702.27	4040.22588	0.00165	0.02040	1.27528E-05	0.00166
611471.44	4206700.08	3848.66244	0.00157	0.01984	1.24027E-05	0.00158
611490.53	4206698.29	3660.18666	0.00149	0.01925	1.20339E-05	0.00150
611510.61	4206699.68	3527.77031	0.00144	0.01875	1.17213E-05	0.00145
611531.49	4206698.09	3356.03436	0.00137	0.01818	1.13650E-05	0.00138
611545.01	4206701.47	3315.51733	0.00135	0.01794	1.12150E-05	0.00136
611559.92	4206697.3	3162.83824	0.00129	0.01749	1.09337E-05	0.00130
611335.26	4206651.57	4581.34302	0.00187	0.02267	1.41719E-05	0.00188
611359.11	4206645.41	4187.27663	0.00171	0.02163	1.35217E-05	0.00172
611376.21	4206651.17	4061.69618	0.00165	0.02126	1.32904E-05	0.00167
611398.68	4206649.98	3809.37681	0.00155	0.02053	1.28341E-05	0.00156
611414.58	4206650.18	3658.59131	0.00149	0.02006	1.25403E-05	0.00150
611432.87	4206648.59	3478.53373	0.00142	0.01950	1.21902E-05	0.00143
611471.64	4206649.78	3186.63172	0.00130	0.01849	1.15588E-05	0.00131
611491.92	4206651.57	3063.12969	0.00125	0.01803	1.12712E-05	0.00126
611511.41	4206651.77	2939.5978	0.00120	0.01756	1.09774E-05	0.00121
611527.51	4206650.77	2833.85214	0.00115	0.01717	1.07336E-05	0.00117
611546.99	4206651.97	2735.70659	0.00111	0.01676	1.04773E-05	0.00113
611325.51	4206617.57	4277.55289	0.00174	0.02185	1.36593E-05	0.00176
611344.2	4206617.57	4041.94815	0.00165	0.02123	1.32717E-05	0.00166
611357.52	4206616.78	3880.62049	0.00158	0.02078	1.29904E-05	0.00159
611368.66	4206620.55	3798.56837	0.00155	0.02056	1.28528E-05	0.00156
611381.98	4206618.76	3645.20953	0.00149	0.02011	1.25715E-05	0.00150
611395.9	4206619.76	3521.90159	0.00143	0.01974	1.23402E-05	0.00145
611407.82	4206620.75	3423.49214	0.00139	0.01944	1.21527E-05	0.00141
611421.14	4206619.96	3296.40976	0.00134	0.01903	1.18964E-05	0.00135
611435.46	4206618.76	3176.31481	0.00129	0.01864	1.16526E-05	0.00131
611472.44	4206621.55	2934.67193	0.00120	0.01780	1.11274E-05	0.00121
611485.36	4206619.96	2838.61315	0.00116	0.01746	1.09149E-05	0.00117
611496.5	4206622.94	2790.90055	0.00114	0.01727	1.07961E-05	0.00115
611508.82	4206622.14	2705.8663	0.00110	0.01696	1.06023E-05	0.00111
611522.14	4206620.55	2617.10981	0.00107	0.01663	1.03960E-05	0.00108
611532.88	4206620.95	2562.14411	0.00104	0.01641	1.02585E-05	0.00105
611546	4206621.94	2501.58055	0.00102	0.01615	1.00960E-05	0.00103
611557.13	4206620.16	2434.95424	0.00099	0.01589	9.93343E-06	0.00100
611327.7	4206564.89	3669.91368	0.00150	0.02004	1.25278E-05	0.00151
611341.02	4206566.28	3576.96587	0.00146	0.01980	1.23777E-05	0.00147
611355.14	4206572.84	3498.37695	0.00143	0.01959	1.22464E-05	0.00144
611369.25	4206575.02	3384.17083	0.00138	0.01925	1.20339E-05	0.00139
611384.16	4206573.04	3232.2952	0.00132	0.01878	1.17401E-05	0.00133

611395.1	4206574.63	3149.7263	0.00128	0.01852	1.15775E-05	0.00129
611407.23	4206574.43	3049.49731	0.00124	0.01819	1.13713E-05	0.00125
611420.15	4206574.03	2947.56239	0.00120	0.01785	1.11587E-05	0.00121
611431.88	4206569.86	2844.22841	0.00116	0.01749	1.09337E-05	0.00117
611473.63	4206575.22	2627.03326	0.00107	0.01675	1.04711E-05	0.00108
611487.55	4206572.24	2531.16644	0.00103	0.01640	1.02523E-05	0.00104
611500.27	4206575.22	2469.5192	0.00101	0.01617	1.01085E-05	0.00102
611512.6	4206575.82	2401.87833	0.00098	0.01592	9.95219E-06	0.00099
611524.73	4206574.43	2333.87307	0.00095	0.01565	9.78340E-06	0.00096
611537.85	4206576.22	2278.99409	0.00093	0.01543	9.64587E-06	0.00094
611548.59	4206575.22	2224.9353	0.00091	0.01522	9.51459E-06	0.00092
611558.72	4206577.01	2187.72942	0.00089	0.01506	9.41457E-06	0.00090
611331.88	4206537.85	3403.10693	0.00139	0.01920	1.20026E-05	0.00140
611332.67	4206513.19	3211.84843	0.00131	0.01857	1.16088E-05	0.00132
611355.54	4206518.56	3063.52536	0.00125	0.01813	1.13337E-05	0.00126
611357.72	4206542.42	3208.80576	0.00131	0.01862	1.16401E-05	0.00132
611371.84	4206555.94	3184.71916	0.00130	0.01856	1.16026E-05	0.00131
611370.05	4206542.02	3105.05194	0.00127	0.01829	1.14338E-05	0.00128
611383.57	4206548.58	3039.3221	0.00124	0.01808	1.13025E-05	0.00125
611397.09	4206548.58	2937.35204	0.00120	0.01773	1.10837E-05	0.00121
611409.22	4206546.79	2844.59032	0.00116	0.01741	1.08836E-05	0.00117
611419.95	4206547.59	2778.56114	0.00113	0.01719	1.07461E-05	0.00114
611432.28	4206550.37	2718.53941	0.00111	0.01700	1.06273E-05	0.00112
611349.17	4206492.32	2947.04668	0.00120	0.01771	1.10712E-05	0.00121
611363.69	4206486.95	2816.01278	0.00115	0.01728	1.08024E-05	0.00116
611375.81	4206491.32	2757.42226	0.00112	0.01708	1.06773E-05	0.00113
611387.94	4206500.67	2728.38198	0.00111	0.01698	1.06148E-05	0.00112
611399.08	4206500.87	2659.80556	0.00108	0.01673	1.04586E-05	0.00109
611409.61	4206504.25	2616.95821	0.00107	0.01657	1.03585E-05	0.00108
611422.54	4206503.25	2539.94762	0.00103	0.01629	1.01835E-05	0.00105
611437.65	4206504.45	2471.81251	0.00101	0.01604	1.00272E-05	0.00102
611374.82	4206454.74	2554.01163	0.00104	0.01633	1.02085E-05	0.00105
611385.76	4206467.07	2555.86995	0.00104	0.01634	1.02147E-05	0.00105
611397.68	4206472.44	2518.10323	0.00103	0.01620	1.01272E-05	0.00104
611411.2	4206477.21	2471.07009	0.00101	0.01602	1.00147E-05	0.00102
611424.33	4206476.41	2401.79372	0.00098	0.01575	9.84592E-06	0.00099
611437.25	4206478	2349.44001	0.00096	0.01554	9.71464E-06	0.00097
611425.52	4206431.08	2195.53642	0.00089	0.01494	9.33955E-06	0.00090
611476.42	4206548.78	2473.35231	0.00101	0.01615	1.00960E-05	0.00102
611488.54	4206547.99	2405.83009	0.00098	0.01589	9.93343E-06	0.00099
611501.27	4206548.38	2336.72448	0.00095	0.01563	9.77090E-06	0.00096
611512	4206545.8	2269.33598	0.00092	0.01536	9.60211E-06	0.00093
611524.33	4206546.4	2213.08427	0.00090	0.01515	9.47083E-06	0.00091
611536.06	4206546.79	2161.51505	0.00088	0.01494	9.33955E-06	0.00089
611548.98	4206548.98	2113.20383	0.00086	0.01475	9.22078E-06	0.00087
611559.92	4206549.18	2067.80812	0.00084	0.01457	9.10825E-06	0.00085
611477.81	4206502.66	2273.90142	0.00093	0.01529	9.55835E-06	0.00094
611479.99	4206477.61	2167.35409	0.00088	0.01482	9.26454E-06	0.00089
611491.13	4206505.84	2223.90959	0.00091	0.01510	9.43958E-06	0.00092
611502.46	4206505.04	2169.11837	0.00088	0.01488	9.30205E-06	0.00089
611491.72	4206477.8	2118.46526	0.00086	0.01462	9.13951E-06	0.00087
611503.06	4206479	2074.62842	0.00085	0.01444	9.02699E-06	0.00085
611514.39	4206503.05	2110.03348	0.00086	0.01464	9.15201E-06	0.00087
611515.98	4206477.8	2017.42001	0.00082	0.01420	8.87695E-06	0.00083
611528.31	4206505.84	2057.17616	0.00084	0.01443	9.02073E-06	0.00085
611528.9	4206476.41	1962.5712	0.00080	0.01397	8.73317E-06	0.00081
611540.63	4206508.22	2012.25202	0.00082	0.01426	8.91446E-06	0.00083
611538.25	4206476.41	1927.18002	0.00079	0.01382	8.63940E-06	0.00079
611552.56	4206505.84	1957.79609	0.00080	0.01403	8.77068E-06	0.00081
611550.77	4206475.02	1877.86532	0.00077	0.01361	8.50812E-06	0.00077
611479.99	4206431.88	1993.49319	0.00081	0.01405	8.78318E-06	0.00082
611493.12	4206432.08	1949.33077	0.00079	0.01385	8.65815E-06	0.00080
611504.65	4206432.67	1912.82927	0.00078	0.01369	8.55813E-06	0.00079
611518.56	4206430.88	1862.32235	0.00076	0.01346	8.41435E-06	0.00077
611529.5	4206430.29	1826.1449	0.00074	0.01330	8.31433E-06	0.00075
611542.42	4206435.46	1799.99423	0.00073	0.01318	8.23931E-06	0.00074
611552.76	4206433.07	1761.9934	0.00072	0.01301	8.13304E-06	0.00073
611479.8	4206406.03	1905.90829	0.00078	0.01368	8.55188E-06	0.00079
611494.51	4206406.43	1861.85271	0.00076	0.01347	8.42060E-06	0.00077
611506.24	4206406.83	1828.01052	0.00074	0.01330	8.31433E-06	0.00075
611518.56	4206405.44	1788.03183	0.00073	0.01311	8.19555E-06	0.00074
611530.89	4206404.64	1750.8584	0.00071	0.01294	8.08928E-06	0.00072
611542.62	4206407.03	1724.52624	0.00070	0.01281	8.00801E-06	0.00071
611555.15	4206405.44	1686.11026	0.00069	0.01263	7.89549E-06	0.00069
611529.9	4206362.49	1639.27939	0.00067	0.01242	7.76421E-06	0.00068
611544.81	4206364.08	1608.58148	0.00066	0.01225	7.65793E-06	0.00066
611558.72	4206362.89	1573.89775	0.00064	0.01207	7.54541E-06	0.00065
610703.71	4206675.32	43030.36721	0.01753	0.10253	6.40953E-05	0.01760
610721.12	4206689.86	47266.16959	0.01926	0.10486	6.55519E-05	0.01932
610736.84	4206686.65	48078.49626	0.01959	0.10109	6.31951E-05	0.01965
610754.25	4206685.46	49295.73242	0.02008	0.09772	6.10884E-05	0.02015
610771.15	4206685.12	50506.8341	0.02058	0.09465	5.91693E-05	0.02064
610789.74	4206688.5	52596.42869	0.02143	0.09240	5.77627E-05	0.02149
610807.15	4206686.31	53115.93294	0.02164	0.08852	5.53372E-05	0.02170
610700.5	4206658.42	40082.60921	0.01633	0.09747	6.09321E-05	0.01639
610703.54	4206637.12	37223.80363	0.01517	0.09070	5.67000E-05	0.01522
610702.86	4206621.23	35066.21535	0.01429	0.08649	5.40681E-05	0.01434
610746.81	4206643.04	40750.49325	0.01660	0.08617	5.38681E-05	0.01666
610777.57	4206642.19	42091.77501	0.01715	0.08128	5.08112E-05	0.01720
610792.28	4206642.53	42715.42297	0.01740	0.07908	4.94359E-05	0.01745
610749.18	4206621.57	37457.44852	0.01526	0.08035	5.02298E-05	0.01531
610749.85	4206602.98	34798.62786	0.01418	0.07598	4.74979E-05	0.01423
610784.16	4206612.28	37202.69684	0.01516	0.07337	4.58663E-05	0.01520
610793.29	4206597.74	35131.11052	0.01431	0.06915	4.32283E-05	0.01436
610810.19	4206587.6	33776.1834	0.01376	0.06505	4.06652E-05	0.01380
610820	4206591.66	34406.17921	0.01402	0.06449	4.03151E-05	0.01406
610837.24	4206594.36	34761.38354	0.01416	0.06268	3.91836E-05	0.01420
610839.6	4206619.21	39067.0039	0.01592	0.06684	4.17842E-05	0.01596
610834.02	4206641.52	43492.53642	0.01772	0.07224	4.51599E-05	0.01777
610850.25	4206642.36	43790.24536	0.01784	0.06982	4.36471E-05	0.01788
610877.29	4206642.87	43727.49021	0.01782	0.06559	4.10028E-05	0.01786
610878.14	4206626.14	39966.11395	0.01628	0.06241	3.90148E-05	0.01632
610876.79	4206607.54	36326.53172	0.01480	0.05948	3.71832E-05	0.01484
610878.31	4206588.95	33054.6512	0.01347	0.05643	3.52765E-05	0.01350
610762.87	4206569.18	30761.47556	0.01253	0.06758	4.22468E-05	0.01258
610782.13	4206564.1	30412.47013	0.01239	0.06440	4.02589E-05	0.01243
610796.84	4206560.56	30070.4038	0.01225	0.06208	3.88085E-05	0.01229
610815.77	4206555.48	29403.75244	0.01198	0.05904	3.69081E-05	0.01202
610832.16	4206557.01	29470.30812	0.01201	0.05744	3.59079E-05	0.01204
610851.43	4206553.96	28751.16902	0.01171	0.05478	3.42450E-05	0.01175
610880.67	4206553.63	27883.03797	0.01136	0.05141	3.21383E-05	0.01139
610878.31	4206570.7	30265.4028	0.01233	0.05386	3.36699E-05	0.01236
610826.68	4206687.13	54367.43798	0.02215	0.08515	5.32305E-05	0.02220
610844.57	4206686.3	54896.27181	0.02237	0.08147	5.09300E-05	0.02242
610865.21	4206687.68	56053.23738	0.02284	0.07792	4.87107E-05	0.02289
610880.9	4206686.3	56042.84051	0.02283	0.07464	4.66603E-05	0.02288
610899.62	4206692.91	58745.69975	0.02393	0.07275	4.54788E-05	0.02398
610919.16	4206680.8	54223.38352	0.02209	0.06649	4.15654E-05	0.02213
610925.76	4206661.81	47570.76252	0.01938	0.06169	3.85647E-05	0.01942
610927.41	4206642.54	41981.31342	0.01710	0.05812	3.63330E-05	0.01714
610925.49	4206624.93	37861.53892	0.01543	0.05566	3.47952E-05	0.01546
610924.94	4206606.21	34053.66645	0.01387	0.05306	3.31698E-05	0.01391
610922.73	4206591.08	31483.95573	0.01283	0.05130	3.20696E-05	0.01286
610923.56	4206571.81	28462.30973	0.01160	0.04884	3.05317E-05	0.01163
610925.21	4206554.47	26021.75028	0.01060	0.04662	2.91439E-05	0.01063
610956.31	4206695.94	58822.83114	0.02397	0.06271	3.92024E-05	0.02401
611019.34	4206696.76	48100.5473	0.01960	0.05150	3.21946E-05	0.01963
610959.06	4206679.15	51337.24586	0.02092	0.05923	3.70269E-05	0.02095
610962.92	4206664.84	45780.00227	0.01865	0.05627	3.51765E-05	0.01869

610963.47	4206649.42	41025.02309	0.01671	0.05389	3.36887E-05	0.01675
610965.12	4206634.29	36954.55772	0.01506	0.05158	3.22446E-05	0.01509
610958.24	4206619.42	34291.60374	0.01397	0.05056	3.16070E-05	0.01400
610960.44	4206603.74	31072.41235	0.01266	0.04833	3.02129E-05	0.01269
610962.64	4206588.32	28320.98529	0.01154	0.04628	2.89314E-05	0.01157
610968.15	4206560.25	24102.17663	0.00982	0.04283	2.67746E-05	0.00985
610949.71	4206557.5	24975.96654	0.01018	0.04439	2.77499E-05	0.01020
611017.96	4206681.9	42582.15639	0.01735	0.04978	3.11193E-05	0.01738
611021.54	4206668.69	37566.13954	0.01531	0.04762	2.97690E-05	0.01534
611017.69	4206653.83	34394.28659	0.01401	0.04648	2.90564E-05	0.01404
611013.83	4206638.97	31694.34276	0.01291	0.04538	2.83687E-05	0.01294
611013.01	4206623.83	28900.6545	0.01177	0.04391	2.74498E-05	0.01180
611009.98	4206609.24	26871.59244	0.01095	0.04285	2.67871E-05	0.01097
611008.05	4206597.68	25389.50684	0.01034	0.04199	2.62495E-05	0.01037
611001.72	4206570.71	22619.35628	0.00922	0.04028	2.51805E-05	0.00924
611017.41	4206575.11	21624.86172	0.00881	0.03901	2.43866E-05	0.00883
611033.38	4206575.66	20075.97497	0.00818	0.03742	2.33926E-05	0.00820
611050.71	4206697.86	38778.57723	0.01580	0.04666	2.91689E-05	0.01583
611054.84	4206681.9	32967.84087	0.01343	0.04433	2.77123E-05	0.01346
611052.92	4206671.17	30966.35843	0.01262	0.04349	2.71872E-05	0.01264
611054.84	4206650.8	26645.12487	0.01086	0.04130	2.58182E-05	0.01088
611055.39	4206637.59	24494.19038	0.00998	0.04006	2.50430E-05	0.01000
611053.47	4206624.65	23047.28217	0.00939	0.03918	2.44929E-05	0.00941
611054.84	4206605.02	20570.82989	0.00838	0.03748	2.34302E-05	0.00840
611055.39	4206591.81	19195.55292	0.00782	0.03644	2.27800E-05	0.00784
611053.47	4206578.87	18260.3659	0.00744	0.03570	2.23174E-05	0.00746
611057.6	4206560.98	16329.90839	0.00665	0.03389	2.11859E-05	0.00667
611058.15	4206547.77	15394.52564	0.00627	0.03301	2.06358E-05	0.00629
611056.22	4206534.84	14763.2683	0.00601	0.03239	2.02482E-05	0.00604
611021.82	4206533.19	17386.88933	0.00708	0.03532	2.20799E-05	0.00711
611022.37	4206519.98	16389.64749	0.00668	0.03436	2.14797E-05	0.00670
611020.44	4206507.04	15670.68359	0.00638	0.03368	2.10546E-05	0.00641
611028.7	4206492.18	14272.53142	0.00581	0.03208	2.00544E-05	0.00584
611029.25	4206478.97	13538.407	0.00552	0.03124	1.95293E-05	0.00554
611027.32	4206466.03	13009.59242	0.00530	0.03061	1.91355E-05	0.00532
611022.09	4206449.79	12554.74612	0.00512	0.03014	1.88416E-05	0.00513
611030.62	4206435.76	11591.03645	0.00472	0.02888	1.80540E-05	0.00474
611028.7	4206422.82	11202.94734	0.00456	0.02840	1.77539E-05	0.00458
611057.32	4206514.2	13551.88641	0.00552	0.03113	1.94605E-05	0.00554
611057.87	4206500.99	12876.33954	0.00525	0.03039	1.89979E-05	0.00527
611055.94	4206488.05	12404.36614	0.00505	0.02982	1.86416E-05	0.00507
611057.32	4206473.74	11709.9801	0.00477	0.02895	1.80977E-05	0.00479
611057.87	4206460.53	11170.45267	0.00455	0.02825	1.76601E-05	0.00457
611055.94	4206447.59	10814.52514	0.00441	0.02780	1.73788E-05	0.00442
611056.49	4206431.35	10254.9905	0.00418	0.02705	1.69100E-05	0.00420
611057.04	4206418.14	9821.82103	0.00400	0.02642	1.65161E-05	0.00402
611055.12	4206405.21	9528.63674	0.00388	0.02599	1.62473E-05	0.00390
611056.49	4206387.04	8994.97791	0.00366	0.02520	1.57535E-05	0.00368
611057.04	4206373.83	8653.06264	0.00353	0.02467	1.54221E-05	0.00354
611055.12	4206360.9	8413.25521	0.00343	0.02428	1.51783E-05	0.00344
611021.82	4206405.3	10879.40919	0.00443	0.02804	1.75289E-05	0.00445
611031.45	4206391.54	10062.72703	0.00410	0.02682	1.67662E-05	0.00412
611035.85	4206363.74	9121.85554	0.00372	0.02538	1.58660E-05	0.00373
611085.12	4206364.57	7505.74257	0.00306	0.02301	1.43844E-05	0.00307
611087.59	4206415.48	8470.93614	0.00345	0.02466	1.54159E-05	0.00347
611084.02	4206444.38	9349.95129	0.00381	0.02596	1.62286E-05	0.00383
611084.84	4206458.69	9707.06212	0.00395	0.02649	1.65599E-05	0.00397
611083.19	4206470.8	10164.06918	0.00414	0.02712	1.69537E-05	0.00416
611082.64	4206503.28	11354.57135	0.00463	0.02875	1.79727E-05	0.00464
611082.37	4206515.94	11869.0734	0.00484	0.02938	1.83665E-05	0.00485
611082.92	4206532.18	12522.60556	0.00510	0.03016	1.88541E-05	0.00512
611082.64	4206545.66	13176.04522	0.00537	0.03089	1.93105E-05	0.00539
611105.48	4206544.56	11293.66231	0.00460	0.02917	1.82353E-05	0.00462
611103.83	4206534.65	11052.02087	0.00450	0.02880	1.80040E-05	0.00452
611079.89	4206585.02	15827.51696	0.00645	0.03364	2.10296E-05	0.00647
611081.54	4206569.88	14695.15262	0.00599	0.03257	2.03607E-05	0.00601
611081.82	4206624.84	18765.37318	0.00765	0.03622	2.26425E-05	0.00767
611082.37	4206611.63	17546.92229	0.00715	0.03524	2.20298E-05	0.00717
611080.44	4206598.69	16777.68316	0.00684	0.03454	2.15922E-05	0.00686
611104.66	4206591.53	13550.83331	0.00552	0.03194	1.99669E-05	0.00554
611105.48	4206580.53	12905.09375	0.00526	0.03122	1.95168E-05	0.00528
611103.56	4206567.59	12487.33523	0.00509	0.03066	1.91667E-05	0.00511
611103.83	4206624.29	15643.91191	0.00637	0.03413	2.13359E-05	0.00640
611102.73	4206612.45	15019.33813	0.00612	0.03346	2.09171E-05	0.00614
611104.11	4206601.99	14210.36064	0.00579	0.03265	2.04107E-05	0.00581
611079.89	4206667.5	23999.3731	0.00978	0.03981	2.48867E-05	0.00980
611080.44	4206654.29	22130.93919	0.00902	0.03864	2.41553E-05	0.00904
611078.51	4206641.35	20963.87112	0.00854	0.03781	2.36364E-05	0.00856
611100.53	4206702.18	23872.71511	0.00973	0.04048	2.53056E-05	0.00975
611079.61	4206696.95	29111.63718	0.01186	0.04255	2.65996E-05	0.01189
611077.69	4206684.01	27179.4212	0.01107	0.04156	2.59807E-05	0.01110
611102.46	4206679.15	20541.92063	0.00837	0.03828	2.39303E-05	0.00839
611101.91	4206689.61	21865.27988	0.00891	0.03922	2.45179E-05	0.00893
611103.83	4206657.41	18168.44554	0.00740	0.03645	2.27863E-05	0.00743
611103.28	4206667.86	19224.07892	0.00783	0.03730	2.33176E-05	0.00786
611104.11	4206634.56	16317.55526	0.00665	0.03479	2.17485E-05	0.00667
611103.56	4206645.02	17186.37854	0.00700	0.03557	2.22361E-05	0.00702
611128.88	4206688.23	16323.43473	0.00665	0.03636	2.27300E-05	0.00667
611128.33	4206698.69	17210.25239	0.00701	0.03722	2.32676E-05	0.00704
611128.88	4206664.29	14748.1293	0.00601	0.03462	2.16423E-05	0.00603
611128.33	4206674.74	15484.93498	0.00631	0.03541	2.21361E-05	0.00633
611130.81	4206643.09	13334.15606	0.00543	0.03306	2.06670E-05	0.00545
611130.25	4206653.55	13950.01104	0.00568	0.03378	2.11171E-05	0.00570
611130.25	4206618.32	12238.4759	0.00499	0.03160	1.97543E-05	0.00501
611129.7	4206628.78	12767.43322	0.00520	0.03226	2.01669E-05	0.00522
611147.87	4206682.18	13261.52384	0.00540	0.03425	2.14110E-05	0.00542
611147.32	4206692.63	13896.7327	0.00566	0.03503	2.18986E-05	0.00568
611148.7	4206659.88	12110.69507	0.00493	0.03271	2.04482E-05	0.00495
611148.14	4206670.34	12645.3411	0.00515	0.03343	2.08983E-05	0.00517
611149.25	4206637.31	11147.62961	0.00454	0.03130	1.95668E-05	0.00456
611148.7	4206647.77	11604.66033	0.00473	0.03196	1.99794E-05	0.00475
611149.25	4206613.37	10313.88938	0.00420	0.02997	1.87354E-05	0.00422
611148.7	4206623.83	10712.0523	0.00436	0.03058	1.91167E-05	0.00438
611175.39	4206687.68	10800.2715	0.00440	0.03248	2.03045E-05	0.00442
611174.84	4206698.14	11299.87058	0.00460	0.03320	2.07546E-05	0.00462
611195.21	4206682.45	9248.92955	0.00377	0.03080	1.92542E-05	0.00379
611194.66	4206692.91	9658.47036	0.00394	0.03146	1.96668E-05	0.00395
611175.39	4206664.01	9921.11404	0.00404	0.03104	1.94043E-05	0.00406
611174.84	4206674.47	10329.36739	0.00421	0.03169	1.98106E-05	0.00423
611194.93	4206660.98	8596.54806	0.00350	0.02961	1.85103E-05	0.00352
611194.38	4206671.44	8938.36847	0.00364	0.03022	1.88917E-05	0.00366
611174.29	4206641.44	9292.40254	0.00379	0.02984	1.86541E-05	0.00380
611173.74	4206651.9	9646.78602	0.00393	0.03045	1.90354E-05	0.00395
611195.21	4206638.14	7981.73413	0.00325	0.02841	1.77602E-05	0.00327
611194.66	4206648.6	8273.66175	0.00337	0.02897	1.81102E-05	0.00339
611176.49	4206618.6	8537.23296	0.00348	0.02852	1.78289E-05	0.00350
611175.94	4206629.06	8840.00462	0.00360	0.02908	1.81790E-05	0.00362
611195.48	4206613.64	7417.72661	0.00302	0.02721	1.70100E-05	0.00304
611194.93	4206624.1	7668.94527	0.00312	0.02773	1.73351E-05	0.00314
610704.74	4206583.83	30671.62614	0.01250	0.07717	4.82419E-05	0.01254
610703.54	4206601.74	32679.46503	0.01331	0.08147	5.09300E-05	0.01337
610705.38	4206547.72	26937.05895	0.01097	0.06954	4.34721E-05	0.01102
610704.19	4206565.63	28740.48264	0.01171	0.07343	4.59038E-05	0.01176
610705.71	4206512.75	23912.66462	0.00974	0.06356	3.97337E-05	0.00978
610704.51	4206530.66	25381.85963	0.01034	0.06662	4.16467E-05	0.01038
610707	4206477.13	21302.59168	0.00868	0.05832	3.64580E-05	0.00872
610705.8	4206495.04	22541.80472	0.00918	0.06085	3.80396E-05	0.00922
610707.65	4206443.46	19109.05832	0.00779	0.05388	3.36824E-05	0.00782
610706.45	4206461.36	20247.20744	0.00825	0.05631	3.52015E-05	0.00828

610707.65	4206407.84	17093.8706	0.00696	0.04981	3.11381E-05	0.00700
610706.45	4206425.74	18055.38493	0.00736	0.05186	3.24196E-05	0.00739
610703.12	4206366.39	15132.69992	0.00617	0.04615	2.88501E-05	0.00619
610703.86	4206388.18	16117.99599	0.00657	0.04813	3.00879E-05	0.00660
610754.28	4206417.88	17790.02285	0.00725	0.04760	2.97565E-05	0.00728
610746.28	4206438.7	19059.26618	0.00777	0.05046	3.15444E-05	0.00780
610765.61	4206379.99	15701.58657	0.00640	0.04314	2.69684E-05	0.00642
610764.41	4206397.9	16642.64447	0.00678	0.04489	2.80624E-05	0.00681
610803.82	4206388.73	15906.68489	0.00648	0.04141	2.58869E-05	0.00651
610802.62	4206406.64	16900.78067	0.00689	0.04307	2.69247E-05	0.00691
610755.3	4206360.77	14851.69821	0.00605	0.04224	2.64058E-05	0.00608
610768.58	4206436.87	18957.03571	0.00772	0.04861	3.03879E-05	0.00775
610791.24	4206432.98	18593.68009	0.00758	0.04643	2.90251E-05	0.00760
610806.14	4206426.83	18066.00074	0.00736	0.04466	2.79186E-05	0.00739
610805.81	4206369.51	14930.83551	0.00608	0.03973	2.48367E-05	0.00611
610804.52	4206353.65	14229.13689	0.00580	0.03866	2.41678E-05	0.00582
610847.59	4206432.33	17791.23814	0.00725	0.04195	2.62245E-05	0.00727
610865.4	4206429.74	17251.84456	0.00703	0.04036	2.52305E-05	0.00705
610882.56	4206432.66	17011.63989	0.00693	0.03931	2.45742E-05	0.00696
610902.31	4206429.42	16261.86369	0.00663	0.03757	2.34864E-05	0.00665
610924.98	4206459.53	17361.25502	0.00707	0.03804	2.37802E-05	0.00710
610924.33	4206496.45	20121.18355	0.00820	0.04105	2.56619E-05	0.00822
610925.3	4206509.08	21181.51376	0.00863	0.04210	2.63183E-05	0.00866
610748.5	4206527.86	25942.00336	0.01057	0.06171	3.85772E-05	0.01061
610766.31	4206522.35	25592.99357	0.01043	0.05907	3.69269E-05	0.01046
610782.5	4206515.88	25071.87112	0.01021	0.05663	3.54015E-05	0.01025
610798.04	4206512.32	24737.06254	0.01008	0.05471	3.42013E-05	0.01011
610819.74	4206511.02	24480.7105	0.00997	0.05254	3.28447E-05	0.01001
610836.25	4206510.7	24215.02943	0.00987	0.05089	3.18132E-05	0.00990
610856.33	4206507.46	23477.99535	0.00957	0.04853	3.03379E-05	0.00960
610879.97	4206511.99	23243.25844	0.00947	0.04671	2.92002E-05	0.00950
610880.94	4206492.56	21424.49094	0.00873	0.04465	2.79124E-05	0.00876
610879.32	4206474.75	20010.39643	0.00815	0.04312	2.69559E-05	0.00818
610855.36	4206477.67	20874.98631	0.00851	0.04550	2.84438E-05	0.00853
610836.25	4206476.37	21141.57507	0.00861	0.04699	2.93752E-05	0.00864
610782.34	4206485.12	22357.17282	0.00911	0.05268	3.29322E-05	0.00914
610763.88	4206489.33	22667.16729	0.00924	0.05480	3.42575E-05	0.00927
610817.96	4206481.23	21806.38009	0.00888	0.04911	3.07005E-05	0.00892
610798.85	4206479.93	21871.62291	0.00891	0.05063	3.16507E-05	0.00894
610748.5	4206494.51	23003.93099	0.00937	0.05687	3.55516E-05	0.00941
610921.74	4206437.52	16113.56678	0.00657	0.03670	2.29425E-05	0.00659
610845.31	4206376.74	14741.49129	0.00601	0.03765	2.35364E-05	0.00603
610861.92	4206386.8	14938.93871	0.00609	0.03729	2.33114E-05	0.00611
610870.34	4206398.97	15390.47193	0.00627	0.03761	2.35114E-05	0.00629
610902.16	4206393.59	14376.3715	0.00586	0.03514	2.19673E-05	0.00588
610920.18	4206388.2	13641.50561	0.00556	0.03361	2.10109E-05	0.00558
610921.11	4206378.14	13178.27362	0.00537	0.03296	2.06045E-05	0.00539
610917.84	4206361.53	12585.0059	0.00513	0.03222	2.01419E-05	0.00515
610845.78	4206356.85	13850.68352	0.00564	0.03634	2.27175E-05	0.00567
610867.77	4206365.04	13826.50015	0.00563	0.03550	2.21924E-05	0.00566
610886.72	4206365.28	13462.38958	0.00548	0.03436	2.14797E-05	0.00551
610903.57	4206363.4	13004.28368	0.00530	0.03320	2.07546E-05	0.00532
610950.59	4206356.39	11534.62521	0.00470	0.02998	1.87416E-05	0.00472
610965.33	4206355.45	11083.50768	0.00452	0.02905	1.81602E-05	0.00453
610995.74	4206351.01	10034.05866	0.00409	0.02703	1.68975E-05	0.00411
610987.56	4206368.32	10836.7017	0.00442	0.02833	1.77101E-05	0.00443
610970.95	4206394.76	12350.88022	0.00503	0.03070	1.91917E-05	0.00505
610968.61	4206411.13	13114.90247	0.00534	0.03173	1.98356E-05	0.00536
610949.42	4206401.77	13362.19168	0.00544	0.03248	2.03045E-05	0.00546
610960.42	4206425.64	14086.66587	0.00574	0.03312	2.07046E-05	0.00576
610944.04	4206426.34	14721.19258	0.00600	0.03432	2.14547E-05	0.00602
610966.5	4206439.67	14554.40893	0.00593	0.03352	2.09546E-05	0.00595
610964.39	4206457.22	15604.77679	0.00636	0.03478	2.17423E-05	0.00638
610948.24	4206509.73	20131.31432	0.00820	0.04010	2.50680E-05	0.00823
610965.72	4206510.7	19278.74692	0.00785	0.03863	2.41491E-05	0.00788
610983.53	4206509.08	18128.43848	0.00739	0.03696	2.31051E-05	0.00741
610970.26	4206484.15	17039.35682	0.00694	0.03622	2.26425E-05	0.00696
610963.46	4206468.93	16354.70504	0.00666	0.03564	2.22799E-05	0.00669
611085.12	4206428.94	8898.46279	0.00363	0.02530	1.58160E-05	0.00364
611083.18	4206485.29	10658.65635	0.00434	0.02783	1.73976E-05	0.00436
611221.38	4206686.44	8079.97453	0.00329	0.02942	1.83915E-05	0.00331
611220.83	4206696.9	8445.90623	0.00344	0.03003	1.87729E-05	0.00346
611221.77	4206676.32	7767.38607	0.00316	0.02885	1.80352E-05	0.00318
611240.27	4206683.06	7270.61065	0.00296	0.02818	1.76164E-05	0.00298
611239.72	4206693.52	7594.43941	0.00309	0.02875	1.79727E-05	0.00311
611240.67	4206672.94	6993.02691	0.00285	0.02765	1.72851E-05	0.00287
611222.17	4206653.03	7162.19627	0.00292	0.02766	1.72913E-05	0.00294
611221.62	4206663.49	7434.22334	0.00303	0.02820	1.76289E-05	0.00305
611222.17	4206640.92	6894.75361	0.00281	0.02708	1.69287E-05	0.00283
611241.86	4206650.05	6441.13617	0.00262	0.02652	1.65786E-05	0.00264
611241.31	4206660.5	6680.6455	0.00272	0.02702	1.68912E-05	0.00274
611241.86	4206637.94	6202.91428	0.00253	0.02598	1.62411E-05	0.00254
611266.92	4206689.62	6652.70379	0.00271	0.02712	1.69537E-05	0.00273
611266.37	4206700.08	6966.52103	0.00284	0.02766	1.72913E-05	0.00286
611267.32	4206679.9	6396.46694	0.00261	0.02664	1.66537E-05	0.00262
611268.31	4206659.19	5924.69993	0.00241	0.02567	1.60473E-05	0.00243
611267.76	4206669.65	6152.73903	0.00251	0.02616	1.63536E-05	0.00252
611268.31	4206647.08	5698.67901	0.00232	0.02516	1.57285E-05	0.00234
611221.89	4206630.7	6694.73814	0.00273	0.02663	1.66474E-05	0.00274
611241.58	4206627.72	6023.76667	0.00245	0.02555	1.59723E-05	0.00247
611268.53	4206635.97	5502.84984	0.00224	0.02469	1.54346E-05	0.00226
611269.52	4206627.02	5338.01335	0.00217	0.02430	1.51908E-05	0.00219
611269.32	4206615.69	5171.78822	0.00211	0.02387	1.49220E-05	0.00212
611235.12	4206603.35	5795.9609	0.00236	0.02484	1.55284E-05	0.00238
611125.73	4206584.46	11202.28902	0.00456	0.02992	1.87041E-05	0.00458
611137.26	4206585.26	10323.11577	0.00421	0.02924	1.82790E-05	0.00422
611149	4206584.06	9449.50924	0.00385	0.02849	1.78102E-05	0.00387
611160.43	4206587.05	8758.09951	0.00357	0.02794	1.74663E-05	0.00359
611172.17	4206585.85	8026.94082	0.00327	0.02721	1.70100E-05	0.00329
611185.49	4206588.64	7388.84606	0.00301	0.02661	1.66349E-05	0.00303
611197.23	4206587.44	6836.07478	0.00279	0.02596	1.62286E-05	0.00280
611128.02	4206567.75	10441.47495	0.00425	0.02893	1.80852E-05	0.00427
611139.75	4206566.56	9582.33013	0.00390	0.02818	1.76164E-05	0.00392
611150.09	4206568.95	8972.64726	0.00366	0.02771	1.73226E-05	0.00367
611161.83	4206567.75	8220.86094	0.00335	0.02697	1.68600E-05	0.00337
611171.17	4206569.15	7731.42255	0.00315	0.02652	1.65786E-05	0.00317
611182.91	4206567.95	7123.82914	0.00290	0.02586	1.61661E-05	0.00292
611194.44	4206567.75	6616.24147	0.00270	0.02528	1.58035E-05	0.00271
611206.18	4206566.56	6148.71018	0.00251	0.02469	1.54346E-05	0.00252
611216.92	4206568.35	5813.89479	0.00237	0.02428	1.51783E-05	0.00238
611228.65	4206567.16	5450.81181	0.00222	0.02373	1.48345E-05	0.00224
611204.89	4206588.04	6538.86643	0.00266	0.02561	1.60098E-05	0.00268
611238.7	4206569.35	5216.94937	0.00213	0.02340	1.46282E-05	0.00214
611266.54	4206574.12	4679.57012	0.00191	0.02250	1.40656E-05	0.00192
611265.15	4206558.8	4530.06256	0.00185	0.02204	1.37780E-05	0.00186
611262.16	4206541.9	4405.30372	0.00179	0.02161	1.35092E-05	0.00181
611129.21	4206540.11	9455.59241	0.00385	0.02743	1.71475E-05	0.00387
611140.94	4206538.92	8692.76582	0.00354	0.02671	1.66974E-05	0.00356
611155.66	4206540.91	7910.76213	0.00322	0.02602	1.62661E-05	0.00324
611167.4	4206539.71	7291.64898	0.00297	0.02538	1.58660E-05	0.00299
611181.32	4206541.7	6713.53164	0.00274	0.02483	1.55222E-05	0.00275
611193.05	4206540.51	6242.97296	0.00254	0.02428	1.51783E-05	0.00256
611205.78	4206542.1	5816.99245	0.00237	0.02379	1.48720E-05	0.00238
611219.3	4206542.89	5403.66789	0.00220	0.02325	1.45344E-05	0.00222
611232.23	4206542.7	5052.02318	0.00206	0.02273	1.42094E-05	0.00207
611243.97	4206541.5	4762.60753	0.00194	0.02224	1.39031E-05	0.00195
611204.79	4206362.96	4077.86391	0.00166	0.01845	1.15338E-05	0.00167
611349.5	4206372.82	2323.17244	0.00095	0.01531	9.57085E-06	0.00096
611313.91	4206380.65	2628.75743	0.00107	0.01620	1.01272E-05	0.00108

611310.48	4206419.52	2852.95672	0.00116	0.01708	1.06773E-05	0.00117
611267.05	4206500.67	3932.82017	0.00160	0.02022	1.26403E-05	0.00161
611497.56	4206304.83	1558.2644	0.00063	0.01214	7.58917E-06	0.00064
611419.07	4206310.55	1784.09213	0.00073	0.01322	8.26432E-06	0.00074
611041.07	4206301.25	7613.1557	0.00310	0.02298	1.43657E-05	0.00312
611069.15	4206301.53	6884.87243	0.00281	0.02177	1.36092E-05	0.00282
611083.74	4206300.98	6498.245	0.00265	0.02116	1.32279E-05	0.00266
611100.26	4206300.7	6066.67724	0.00247	0.02051	1.28216E-05	0.00248
611111.82	4206300.15	5762.79019	0.00235	0.02005	1.25340E-05	0.00236
611123.93	4206299.33	5448.59957	0.00222	0.01958	1.22402E-05	0.00223
611137.15	4206300.43	5143.64031	0.00210	0.01917	1.19839E-05	0.00211
611150.91	4206299.88	4821.35059	0.00196	0.01873	1.17088E-05	0.00198
611164.12	4206300.7	4530.19754	0.00185	0.01833	1.14588E-05	0.00186
610871.77	4206303.18	11415.50487	0.00465	0.03169	1.98106E-05	0.00467
610919.67	4206299.6	10442.61995	0.00425	0.02899	1.81227E-05	0.00427
610946.1	4206301.25	9937.67366	0.00405	0.02770	1.73163E-05	0.00407
610968.4	4206299.6	9379.18111	0.00382	0.02644	1.65286E-05	0.00384
610997.85	4206300.15	8683.07105	0.00354	0.02497	1.56097E-05	0.00355
610800.68	4206302.27	12258.77529	0.00499	0.03546	2.21674E-05	0.00502
610345.98	4206368.37	10059.08123	0.00410	0.06420	4.01338E-05	0.00414
610371.57	4206456.46	12233.30687	0.00498	0.07752	4.84607E-05	0.00503
610277.64	4206458.4	9878.35063	0.00402	0.08130	5.08237E-05	0.00408
610294.49	4206372.25	9272.85385	0.00378	0.06703	4.19030E-05	0.00382
610341.12	4206437.68	11065.89657	0.00451	0.07503	4.69041E-05	0.00456
610508	4206352.9	12511.62996	0.00510	0.05508	3.44326E-05	0.00513
610536.83	4206358.41	13056.76671	0.00532	0.05389	3.36887E-05	0.00535
610518.69	4206394.68	13855.6608	0.00565	0.05939	3.71269E-05	0.00568
610506.38	4206428.37	14617.89702	0.00596	0.06459	4.03776E-05	0.00600
610407.88	4206300.63	9913.94492	0.00404	0.05376	3.36074E-05	0.00407
610413.21	4206694.6	17522.76097	0.00714	0.14058	8.78818E-05	0.00723
610451.93	4206697.23	20354.15801	0.00829	0.13937	8.71254E-05	0.00838
610448.83	4206717.31	20459.7314	0.00834	0.14922	9.32830E-05	0.00843
610438.65	4207091.1	9402.84612	0.00383	1.78562	1.11626E-03	0.00495
610449.61	4207060.72	11256.00003	0.00459	1.07703	6.73292E-04	0.00526
610454.96	4207045.53	12322.56933	0.00502	0.89094	5.56960E-04	0.00558
610451.02	4207000.82	14391.93124	0.00586	0.57871	3.61773E-04	0.00623
610446.24	4206963.41	15896.45106	0.00648	0.44186	2.76223E-04	0.00675
610457.21	4206987.6	15590.27335	0.00635	0.52213	3.26403E-04	0.00668
610421.77	4207012.91	11927.24101	0.00486	0.64193	4.01295E-04	0.00526
610421.49	4207040.47	10746.51686	0.00438	0.84116	5.25841E-04	0.00490
610362.43	4207105.72	6643.78968	0.00271	2.52879	1.58084E-03	0.00429
610378.74	4207077.32	7823.12025	0.00319	1.37515	8.59658E-04	0.00405
610364.4	4207040.75	8479.04684	0.00345	0.84341	5.27247E-04	0.00398
610319.96	4207038.22	7275.76429	0.00296	0.82185	5.13769E-04	0.00348
610334.3	4207091.94	6357.68994	0.00259	1.81298	1.13336E-03	0.00372
610329.8	4207109.1	5903.89611	0.00241	2.78443	1.74065E-03	0.00415
610350.94	4206635.65	13554.28791	0.00552	0.12108	7.56916E-05	0.00560
610530.61	4206613.88	22829.66895	0.00930	0.10230	6.39516E-05	0.00937
610531.61	4206594.02	21962.0131	0.00895	0.09664	6.04133E-05	0.00901
610537.23	4206566.38	21002.84514	0.00856	0.08927	5.58060E-05	0.00861
610565.36	4206541.23	21060.25934	0.00858	0.08135	5.08549E-05	0.00863
610627.57	4206493.91	20761.83381	0.00846	0.06744	4.21593E-05	0.00850
610633.2	4206515.75	22273.16141	0.00907	0.07067	4.41785E-05	0.00912
610666.29	4206515.75	23225.47223	0.00946	0.06772	4.23343E-05	0.00950
610646.1	4206559.1	25850.80471	0.01053	0.07786	4.86732E-05	0.01058
610646.77	4206594.51	28885.72232	0.01177	0.08584	5.36618E-05	0.01182
610578.59	4206617.02	26124.41176	0.01064	0.09879	6.17573E-05	0.01071
610620.29	4206619.66	29174.34639	0.01189	0.09560	5.97631E-05	0.01195
610608.05	4206563.07	24229.78425	0.00987	0.08236	5.14863E-05	0.00992
610608.05	4206545.2	23158.49518	0.00944	0.07936	4.96109E-05	0.00948
610623.6	4206564.4	25082.37179	0.01022	0.08150	5.09487E-05	0.01027
610623.6	4206546.53	23847.43895	0.00972	0.07774	4.85982E-05	0.00976
610563.04	4206597.82	23971.60258	0.00977	0.09491	5.93318E-05	0.00983
610587.86	4206596.83	25374.37818	0.01034	0.09231	5.77064E-05	0.01040
610564.7	4206580.61	23102.57739	0.00941	0.09032	5.64624E-05	0.00947
610589.52	4206581.61	24489.33116	0.00998	0.08831	5.52059E-05	0.01003
610734.02	4206917.57	200977.4594	0.08188	0.29497	1.84397E-04	0.08207
610754.27	4206913.28	214033.8922	0.08720	0.28039	1.75282E-04	0.08738
610779.19	4206906.67	221919.6793	0.09042	0.25962	1.62298E-04	0.09058
610824.35	4206899.66	245250.8952	0.09992	0.22811	1.42600E-04	0.10006
610820.85	4206880.97	193566.8159	0.07886	0.20512	1.28228E-04	0.07899
610811.11	4206855.27	147225.3402	0.05998	0.18137	1.13381E-04	0.06010
610717.67	4206895.37	143900.0578	0.05863	0.26302	1.64424E-04	0.05879
610731.69	4206880.97	137948.3885	0.05620	0.23855	1.49127E-04	0.05635
610715.72	4206858	107536.2567	0.04381	0.21528	1.34580E-04	0.04395
610721.17	4206833.47	94587.46409	0.03854	0.18928	1.18326E-04	0.03866
610758.94	4206842.03	114635.2732	0.04671	0.18673	1.16732E-04	0.04682
610767.51	4206870.84	147058.9532	0.05992	0.21432	1.33979E-04	0.06005
610865.01	4206886.37	240455.1931	0.09797	0.18907	1.18195E-04	0.09809
610909.74	4206874.67	241458.0362	0.09838	0.15210	9.50834E-05	0.09847
610860.95	4206838.53	144482.5254	0.05887	0.14672	9.17202E-05	0.05896
610888.6	4206829.18	142836.5405	0.05820	0.12891	8.05865E-05	0.05828
610790.87	4206784.8	86629.7035	0.03530	0.13449	8.40747E-05	0.03538
610816.95	4206785.58	91413.12259	0.03724	0.12762	7.97800E-05	0.03732
610850.44	4206785.19	96808.38093	0.03944	0.11750	7.34537E-05	0.03952
610898.33	4206797.26	116300.2954	0.04738	0.10805	6.75461E-05	0.04745
610894.83	4206755.59	87642.90467	0.03571	0.09214	5.76002E-05	0.03577
610897.55	4206780.9	104082.6361	0.04241	0.10111	6.32077E-05	0.04247
610886.81	4206880.99	242047.3387	0.09862	0.17098	1.06886E-04	0.09872
611023.86	4206760.97	101250.1885	0.04125	0.06073	3.79646E-05	0.04129
611041.14	4206759.94	87295.06282	0.03557	0.05684	3.55328E-05	0.03560
611061.35	4206762.7	71959.76634	0.02932	0.05329	3.33136E-05	0.02935
610754.89	4206782.37	78838.02197	0.03212	0.14226	8.89321E-05	0.03221
610844.56	4206719.24	65508.14968	0.02669	0.09154	5.72251E-05	0.02675
610513.96	4206710.62	25833.20947	0.01053	0.14021	8.76505E-05	0.01061
610591.87	4206713.73	35488.0171	0.01446	0.13349	8.34496E-05	0.01454
610668.23	4206716.46	46000.52778	0.01874	0.12416	7.76171E-05	0.01882
610545.12	4206684.51	28038.25143	0.01142	0.12540	7.83922E-05	0.01150
610637.84	4206683.34	37639.51428	0.01534	0.11481	7.17720E-05	0.01541
610512.01	4206642.44	22895.3248	0.00933	0.11318	7.07531E-05	0.00940
610584.86	4206649.06	29272.52979	0.01193	0.10832	6.77149E-05	0.01199
610665.5	4206649.06	36017.19136	0.01467	0.09930	6.20762E-05	0.01474
609975.26	4207082.82	2715.13954	0.00111	2.09483	1.30956E-03	0.00242
609945.83	4207083.32	2570.12741	0.00105	2.17245	1.35808E-03	0.00241
609822.62	4207152.66	1807.41888	0.00074	3.10285	1.93971E-03	0.00268
609804.66	4207094.79	1980.62612	0.00081	3.50258	2.18959E-03	0.00300
609772.24	4207094.79	1885.09059	0.00077	3.62627	2.26692E-03	0.00303
609700.41	4207156.65	1510.14548	0.00062	2.34552	1.46627E-03	0.00208
609633.07	4207074.84	1528.93082	0.00062	1.93448	1.20932E-03	0.00183
609555.75	4207074.84	1393.77314	0.00057	2.23890	1.39962E-03	0.00197
609620.1	4207148.17	1261.97639	0.00051	2.54726	1.59239E-03	0.00211
609556.25	4207145.67	1184.92479	0.00048	2.52249	1.57690E-03	0.00206
609502.88	4207137.69	1144.31453	0.00047	2.82097	1.76349E-03	0.00223
610698.46	4207080.47	129212.2053	0.05264	1.42255	8.89289E-04	0.05353
610693.24	4207063.42	132350.0499	0.05392	1.08921	6.80906E-04	0.05460
610706.16	4207019.7	208570.1515	0.08498	0.65339	4.08459E-04	0.08539
610680.04	4207080.09	82257.23261	0.03351	1.41486	8.84482E-04	0.03440
610682.42	4207046.11	114707.2231	0.04673	0.87226	5.45282E-04	0.04728
CONCUNIT ug/	m^3					
DEPUNIT g/m^	2					

Oakley Main Street Project

2020 **No Mitigation at Sensitive Receptors**

Construction Annual PM2.5 Total (Exhaust + Fugitive Dust)

Annual Average Onsite DPM Exhaust Emission Rate (grams/m2/sec): 1.93768E-07
Annual Average Offsite DPM Exhaust Emission Rate (grams/m2/sec): 1.13898E-03

X (m)	Y (m)	Onsite Annual DPM Exhaust w/Unit Emissions (ug/m3)	Onsite Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite Annual DPM Exhaust w/Unit Emissions (ug/m3)	Offsite Annual DPM Exhaust w/Actual Emissions (ug/m3)	Total DPM (ug/m3)
611337.43	4207107.53	72119.46582	0.01397	0.09584	1.09160E-04	0.01408
611316.93	4207114.47	80434.6896	0.01559	0.10716	1.22054E-04	0.01571
611309.05	4207127.4	84198.24038	0.01631	0.11921	1.35778E-04	0.01645
611308.42	4207149.48	84151.52971	0.01631	0.13557	1.54412E-04	0.01646
611309.05	4207170.29	82363.93169	0.01596	0.15063	1.71565E-04	0.01613
611311.88	4207184.48	79762.20343	0.01546	0.15901	1.81110E-04	0.01564
611315.04	4207203.09	76090.87091	0.01474	0.16951	1.93069E-04	0.01494
611359.51	4207125.19	66113.83776	0.01281	0.09827	1.11928E-04	0.01292
611364.56	4207101.22	62614.05743	0.01213	0.08486	9.66542E-05	0.01223
611377.49	4207091.76	57824.16232	0.01120	0.07759	8.83738E-05	0.01129
611401.77	4207088.6	51215.15528	0.00992	0.07136	8.12779E-05	0.01001
611416.28	4207100.59	49206.03068	0.00953	0.07292	8.30547E-05	0.00962
611421.64	4207123.93	50081.60566	0.00970	0.08051	9.16996E-05	0.00980
611438.99	4207115.41	45863.43441	0.00889	0.07354	8.37609E-05	0.00897
611456.97	4207120.14	42901.06702	0.00831	0.07121	8.11071E-05	0.00839
611355.09	4207167.14	68071.92153	0.01319	0.12324	1.40368E-04	0.01333
611375.59	4207165.56	62593.65391	0.01213	0.11348	1.29252E-04	0.01226
611396.09	4207163.35	57585.73578	0.01116	0.10464	1.19183E-04	0.01128
611411.55	4207163.35	54123.73286	0.01049	0.09940	1.13215E-04	0.01060
611426.06	4207165.56	51155.75486	0.00991	0.09576	1.09069E-04	0.01002
611452.55	4207164.3	46139.22934	0.00894	0.08779	9.99914E-05	0.00904
611311.25	4207222.96	73427.73522	0.01423	0.18507	2.10792E-04	0.01444
611312.2	4207239.05	69843.12849	0.01353	0.19343	2.20314E-04	0.01375
611355.41	4207245.99	60529.21529	0.01173	0.16488	1.87796E-04	0.01192
611377.8	4207244.72	56860.81071	0.01102	0.15072	1.71668E-04	0.01119
611390.73	4207246.62	54531.0168	0.01057	0.14441	1.64481E-04	0.01073
611410.92	4207249.14	51159.54159	0.00991	0.13524	1.54036E-04	0.01007
611433.31	4207250.09	47826.3732	0.00927	0.12551	1.42954E-04	0.00941
611447.82	4207253.24	45645.84688	0.00884	0.12062	1.37384E-04	0.00898
611469.58	4207243.15	43220.59543	0.00837	0.10933	1.24525E-04	0.00850
611477.47	4207217.28	42718.06116	0.00828	0.09859	1.12292E-04	0.00839
611357.62	4207196.47	65814.7404	0.01275	0.13846	1.57704E-04	0.01291
611374.96	4207196.78	61712.80195	0.01196	0.12973	1.47760E-04	0.01211
611394.83	4207198.68	57302.68844	0.01110	0.12149	1.38375E-04	0.01124
611412.5	4207197.1	53803.70249	0.01043	0.11351	1.29286E-04	0.01055
611433.63	4207195.52	49887.66738	0.00967	0.10512	1.19730E-04	0.00979
611452.87	4207194.58	46579.80481	0.00903	0.09849	1.12179E-04	0.00914
611471.47	4207199.62	43647.42156	0.00846	0.09466	1.07816E-04	0.00857
611466.43	4207168.08	43892.42118	0.00850	0.08554	9.74287E-05	0.00860
611488.19	4207163.04	40289.95544	0.00781	0.07883	8.97861E-05	0.00790
611506.8	4207160.2	37495.87893	0.00727	0.07413	8.44329E-05	0.00735
611505.54	4207184.17	38522.79851	0.00746	0.08120	9.24855E-05	0.00756
611509.32	4207196.47	38292.76597	0.00742	0.08383	9.54811E-05	0.00752
611505.22	4207219.81	39020.02492	0.00756	0.09149	1.04206E-04	0.00767
611510.27	4207235.89	38316.2533	0.00742	0.09463	1.07782E-04	0.00753
611495.76	4207248.82	39797.95732	0.00771	0.10248	1.16723E-04	0.00783
611311.25	4207260.81	65081.41104	0.01261	0.20466	2.33105E-04	0.01284
611314.41	4207277.84	60664.83783	0.01175	0.20837	2.37330E-04	0.01199
611358.56	4207260.49	57824.01483	0.01120	0.16899	1.92477E-04	0.01140
611368.02	4207274.69	54310.91493	0.01052	0.16825	1.91634E-04	0.01072
611389.16	4207283.52	50418.04539	0.00977	0.15861	1.80654E-04	0.00995
611400.19	4207295.19	47681.55677	0.00924	0.15600	1.77682E-04	0.00942
611412.5	4207316	43925.39399	0.00851	0.15480	1.76315E-04	0.00869
611435.52	4207292.03	44241.19439	0.00857	0.13771	1.56850E-04	0.00873
611451.6	4207278.47	43565.05229	0.00844	0.12691	1.44549E-04	0.00859
611474.63	4207278.79	40978.58298	0.00794	0.11804	1.34446E-04	0.00807
611485.35	4207263.33	40528.52006	0.00785	0.10994	1.25220E-04	0.00798
611328.6	4207291.72	55958.79829	0.01084	0.20113	2.29084E-04	0.01107
611312.83	4207306.23	54191.72496	0.01050	0.21681	2.46943E-04	0.01075
611302.11	4207319.47	51784.0774	0.01003	0.22713	2.58698E-04	0.01029
611310.62	4207336.5	47430.82189	0.00919	0.22125	2.52000E-04	0.00944
611321.66	4207346.6	44840.2894	0.00869	0.21346	2.43128E-04	0.00893
611339.01	4207346.91	44069.14332	0.00854	0.20196	2.30029E-04	0.00877
611357.62	4207322.94	47372.35517	0.00918	0.18750	2.13560E-04	0.00939
611371.49	4207335.87	44247.07907	0.00857	0.18095	2.06099E-04	0.00878
611372.76	4207355.11	41101.92016	0.00796	0.18222	2.07546E-04	0.00817
611421.64	4207330.2	41480.70181	0.00804	0.15321	1.74504E-04	0.00821
611423.22	4207349.12	39129.97165	0.00758	0.15562	1.77249E-04	0.00776
611449.08	4207328.93	39507.70382	0.00766	0.14048	1.60005E-04	0.00782
611438.36	4207309.06	42349.0106	0.00821	0.14083	1.60403E-04	0.00837
611468.95	4207336.5	37320.38289	0.00723	0.13374	1.52328E-04	0.00738
611483.46	4207328.62	36858.19499	0.00714	0.12663	1.44230E-04	0.00729
611504.27	4207316.95	35973.66006	0.00697	0.11680	1.33033E-04	0.00710
611518.78	4207305.59	35348.57019	0.00685	0.10957	1.24799E-04	0.00697
611531.08	4207292.98	34788.97542	0.00674	0.10301	1.17327E-04	0.00686
611540.23	4207275.63	34445.95169	0.00667	0.09642	1.09821E-04	0.00678
611310.9	4207395.01	35664.88394	0.00691	0.21468	2.44517E-04	0.00716
611307.77	4207409.9	33067.75747	0.00641	0.21287	2.42456E-04	0.00665
611306.78	4207428.47	30059.43768	0.00582	0.20826	2.37205E-04	0.00606
611310.76	4207450.93	26865.88973	0.00521	0.19995	2.27740E-04	0.00543
611307.77	4207464.05	25070.49247	0.00486	0.19688	2.24243E-04	0.00508
611355.09	4207392.69	35682.85316	0.00691	0.19159	2.18218E-04	0.00713
611398.22	4207398.65	33924.09741	0.00657	0.17071	1.94436E-04	0.00677
611386.69	4207411.77	32428.47637	0.00628	0.17541	1.99789E-04	0.00648
611357.67	4207410.98	32881.621	0.00637	0.18857	2.14778E-04	0.00659
611353.89	4207429.07	30315.29853	0.00587	0.18770	2.13787E-04	0.00609
611362.24	4207449.15	27682.30087	0.00536	0.18089	2.06031E-04	0.00557
611385.9	4207431.06	29940.18195	0.00580	0.17420	1.98411E-04	0.00600
611420.29	4207390.9	34239.32065	0.00663	0.16083	1.83183E-04	0.00682
611436.99	4207401.83	32429.8506	0.00628	0.15430	1.75745E-04	0.00646
611444.34	4207420.32	30236.05899	0.00586	0.15186	1.72966E-04	0.00603
611441.16	4207444.37	27807.86125	0.00539	0.15264	1.73855E-04	0.00556
611446.33	4207459.28	26258.31545	0.00509	0.15019	1.71064E-04	0.00526
611459.25	4207384.54	33396.93724	0.00647	0.14434	1.64401E-04	0.00664
611466.61	4207407.4	30881.4118	0.00598	0.14322	1.63125E-04	0.00615
611472.97	4207420.72	29426.85431	0.00570	0.14156	1.61235E-04	0.00586
611470.58	4207443.78	27357.30316	0.00530	0.14273	1.62567E-04	0.00546
611470.58	4207461.87	25719.96862	0.00498	0.14241	1.62203E-04	0.00515
611351.29	4207475.53	24401.16236	0.00473	0.17915	2.04049E-04	0.00493
611374.78	4207476.37	24554.14957	0.00476	0.17141	1.95233E-04	0.00495
611395.9	4207472.82	25058.82692	0.00486	0.16522	1.88183E-04	0.00504
611389.14	4207448.15	27835.71233	0.00539	0.17100	1.94766E-04	0.00559
611439.49	4207477.38	24567.96365	0.00476	0.15100	1.71987E-04	0.00493
611467.04	4207481.61	24018.25582	0.00465	0.14252	1.62328E-04	0.00482
611302.63	4207484.99	22411.01806	0.00434	0.19147	2.18081E-04	0.00456
611303.64	4207503.41	20420.69727	0.00396	0.18481	2.10496E-04	0.00417
611310.74	4207524.36	18535.39723	0.00359	0.17599	2.00450E-04	0.00379
611334.05	4207523.85	19091.98347	0.00370	0.17084	1.94584E-04	0.00389
611356.02	4207522.5	19631.15723	0.00380	0.16603	1.89106E-04	0.00399
611371.73	4207521.49	19977.44198	0.00387	0.16248	1.85062E-04	0.00406
611394.04	4207526.89	19798.82285	0.00384	0.15591	1.77579E-04	0.00401
611406.88	4207522.5	20321.79038	0.00394	0.15366	1.75016E-04	0.00411
611430.71	4207520.47	20682.51458	0.00401	0.14812	1.68706E-04	0.00418
611444.56	4207523.01	20541.5198	0.00398	0.14435	1.64412E-04	0.00414
611466.19	4207524.87	20454.4323	0.00396	0.13890	1.58205E-04	0.00412
611485.45	4207527.74	20244.44344	0.00392	0.13406	1.52692E-04	0.00408

611511.14	4207529.43	20069.20289	0.00389	0.12802	1.45813E-04	0.00403
611524.65	4207513.21	21109.91493	0.00409	0.12581	1.43296E-04	0.00423
611552.87	4207524.02	20157.16927	0.00391	0.11897	1.35505E-04	0.00404
611553.21	4207500.7	21620.47773	0.00419	0.11937	1.35961E-04	0.00433
611524.32	4207495.8	22327.72292	0.00433	0.12649	1.44070E-04	0.00447
611523.13	4207474.34	23884.62491	0.00463	0.12708	1.44742E-04	0.00477
611552.03	4207482.79	22789.46248	0.00442	0.11966	1.36291E-04	0.00455
611519.59	4207462.51	24820.91038	0.00481	0.12799	1.45779E-04	0.00496
611554.73	4207464.37	23921.35583	0.00464	0.11860	1.35084E-04	0.00477
611524.99	4207440.55	26310.74252	0.00510	0.12584	1.43330E-04	0.00524
611555.24	4207445.11	25138.00661	0.00487	0.11765	1.34002E-04	0.00500
611555.58	4207427.03	26262.72164	0.00509	0.11639	1.32566E-04	0.00522
611557.94	4207398.3	27891.41807	0.00540	0.11306	1.28774E-04	0.00553
611522.63	4207422.64	27693.08983	0.00537	0.12555	1.43000E-04	0.00551
611522.63	4207401.35	29233.03027	0.00566	0.12381	1.41018E-04	0.00581
611542.4	4207388.34	29204.1871	0.00566	0.11639	1.32566E-04	0.00579
611511.98	4207382.93	31050.49001	0.00602	0.12524	1.42646E-04	0.00616
611508.43	4207369.24	32232.61583	0.00625	0.12465	1.41974E-04	0.00639
611535.81	4207363.5	31050.01438	0.00602	0.11503	1.31017E-04	0.00615
611548.65	4207344.4	31277.09208	0.00606	0.10813	1.23158E-04	0.00618
611559.8	4207244.2	32921.01129	0.00638	0.08422	9.59253E-05	0.00647
611558.62	4207227.64	32974.88161	0.00639	0.08065	9.18591E-05	0.00648
611555.24	4207203.99	32985.54274	0.00639	0.07579	8.63236E-05	0.00648
611557.27	4207183.2	32198.37203	0.00624	0.07051	8.03098E-05	0.00632
611554.23	4207164.62	31818.90119	0.00617	0.06668	7.59475E-05	0.00624
611557.77	4207142.31	30325.85955	0.00588	0.06101	6.94894E-05	0.00595
611547.97	4207121.19	30095.51021	0.00583	0.05736	6.53322E-05	0.00590
611546.96	4207102.77	28792.74694	0.00558	0.05291	6.02637E-05	0.00564
611551.18	4207088.92	27188.19377	0.00527	0.04934	5.61975E-05	0.00532
611555.91	4207066.78	24736.55188	0.00479	0.04433	5.04912E-05	0.00484
611476.99	4207114.19	39032.5099	0.00756	0.06563	7.47516E-05	0.00764
611498.11	4207124.33	36633.73816	0.00710	0.06521	7.42732E-05	0.00717
611517.37	4207121.63	33792.74611	0.00655	0.06142	6.99564E-05	0.00662
611516.7	4207103.71	32417.07425	0.00628	0.05665	6.45235E-05	0.00635
611397.15	4207001.31	38398.34777	0.00744	0.04726	5.38284E-05	0.00749
611405.21	4206965.9	30504.07654	0.00591	0.04043	4.60491E-05	0.00596
611417.66	4206992.52	33221.65735	0.00644	0.04372	4.97964E-05	0.00649
611434.86	4206992.14	30559.37492	0.00592	0.04223	4.80993E-05	0.00597
611454.74	4206982.79	26575.40804	0.00515	0.03925	4.47051E-05	0.00519
611462.1	4206968.28	23744.41903	0.00460	0.03674	4.18463E-05	0.00464
611453.75	4206949.79	22065.52684	0.00428	0.03499	3.98531E-05	0.00432
611447.79	4206931.5	20148.71213	0.00390	0.03335	3.79851E-05	0.00394
611475.02	4206936.87	18595.81883	0.00360	0.03239	3.68917E-05	0.00364
611496.69	4206939.06	17280.63297	0.00335	0.03147	3.58438E-05	0.00338
611513	4206936.67	15990.11019	0.00310	0.03044	3.46707E-05	0.00313
611530.89	4206938.86	15159.80647	0.00294	0.02980	3.39417E-05	0.00297
611546.99	4206935.68	14038.2171	0.00272	0.02881	3.28141E-05	0.00275
611404.05	4206946.01	27128.95817	0.00526	0.03779	4.30422E-05	0.00530
611405.64	4206926.73	23642.49099	0.00458	0.03540	4.03201E-05	0.00462
611403.65	4206905.06	20382.68166	0.00395	0.03332	3.79510E-05	0.00399
611410.81	4206890.15	17590.55265	0.00341	0.03158	3.59691E-05	0.00344
611437.25	4206884.98	15103.9464	0.00293	0.02977	3.39076E-05	0.00296
611453.35	4206887.96	14481.35066	0.00281	0.02921	3.32697E-05	0.00284
611472.24	4206888.75	13545.56397	0.00262	0.02840	3.23472E-05	0.00266
611492.32	4206887.16	12440.36964	0.00241	0.02741	3.12196E-05	0.00244
611509.62	4206887.76	11754.23398	0.00228	0.02674	3.04564E-05	0.00231
611527.31	4206889.15	11173.87578	0.00217	0.02613	2.97617E-05	0.00219
611546.6	4206887.56	10380.06767	0.00201	0.02531	2.88277E-05	0.00204
611377.6	4206837.66	13044.97607	0.00253	0.02950	3.36000E-05	0.00256
611377.41	4206826.33	11799.11762	0.00229	0.02879	3.27914E-05	0.00232
611377.6	4206816.19	10779.62814	0.00209	0.02818	3.20966E-05	0.00212
611407.63	4206828.51	10720.84885	0.00208	0.02743	3.12423E-05	0.00211
611437.05	4206820.96	9102.97431	0.00176	0.02571	2.92833E-05	0.00179
611474.23	4206850.98	10158.46116	0.00197	0.02585	2.94427E-05	0.00200
611478.2	4206824.54	8218.87414	0.00159	0.02428	2.76545E-05	0.00162
611495.9	4206825.93	7876.49136	0.00153	0.02371	2.70053E-05	0.00155
611509.22	4206853.17	9215.88107	0.00179	0.02464	2.80646E-05	0.00181
611526.32	4206824.34	7143.67045	0.00138	0.02261	2.57524E-05	0.00141
611558.33	4206844.02	7485.47824	0.00145	0.02252	2.56499E-05	0.00148
611554.15	4206823.34	6586.44537	0.00128	0.02170	2.47160E-05	0.00130
611558.53	4206886.77	9943.822	0.00193	0.02483	2.82810E-05	0.00196
611375.81	4206780.4	8029.73547	0.00156	0.02636	3.00236E-05	0.00159
611387.74	4206763.9	6837.39178	0.00132	0.02506	2.85430E-05	0.00135
611411.4	4206781.59	7256.45615	0.00141	0.02486	2.83152E-05	0.00143
611412.6	4206752.37	5893.29104	0.00114	0.02357	2.68459E-05	0.00117
611440.43	4206779.41	6569.50182	0.00127	0.02362	2.69028E-05	0.00130
611471.44	4206781.39	6126.17427	0.00119	0.02259	2.57297E-05	0.00121
611469.26	4206740.64	4753.89884	0.00092	0.02116	2.41009E-05	0.00095
611499.68	4206782.19	5730.22735	0.00111	0.02169	2.47046E-05	0.00114
611536.85	4206780.8	5192.88254	0.00101	0.02053	2.33834E-05	0.00103
611523.14	4206742.03	4243.76327	0.00082	0.01962	2.23469E-05	0.00084
611556.54	4206774.04	4761.78268	0.00092	0.01975	2.24949E-05	0.00095
611323.92	4206674.63	5133.50789	0.00099	0.02395	2.72787E-05	0.00102
611335.65	4206699.68	5478.2258	0.00106	0.02449	2.78937E-05	0.00109
611362.49	4206701.67	5107.14885	0.00099	0.02351	2.67775E-05	0.00102
611381.38	4206700.48	4819.54834	0.00093	0.02277	2.59347E-05	0.00096
611398.08	4206697.1	4540.55002	0.00088	0.02206	2.51260E-05	0.00090
611417.17	4206699.88	4377.02011	0.00085	0.02151	2.44996E-05	0.00087
611433.87	4206699.09	4184.85382	0.00081	0.02094	2.38503E-05	0.00083
611454.55	4206702.27	4040.22588	0.00078	0.02040	2.32353E-05	0.00081
611471.44	4206700.08	3848.66244	0.00075	0.01984	2.25975E-05	0.00077
611490.53	4206698.29	3660.18666	0.00071	0.01925	2.19255E-05	0.00073
611510.61	4206699.68	3527.77031	0.00068	0.01875	2.13560E-05	0.00070
611531.49	4206698.09	3356.03436	0.00065	0.01818	2.07067E-05	0.00067
611545.01	4206701.47	3315.51733	0.00064	0.01794	2.04334E-05	0.00066
611559.92	4206697.3	3162.83824	0.00061	0.01749	1.99208E-05	0.00063
611335.26	4206651.57	4581.34302	0.00089	0.02267	2.58208E-05	0.00091
611359.11	4206645.41	4187.27663	0.00081	0.02163	2.46362E-05	0.00084
611376.21	4206651.17	4061.69618	0.00079	0.02126	2.42148E-05	0.00081
611398.68	4206649.98	3809.37681	0.00074	0.02053	2.33834E-05	0.00076
611414.58	4206650.18	3658.59131	0.00071	0.02006	2.28480E-05	0.00073
611432.87	4206648.59	3478.53373	0.00067	0.01950	2.22102E-05	0.00070
611471.64	4206649.78	3186.63172	0.00062	0.01849	2.10598E-05	0.00064
611491.92	4206651.57	3063.12969	0.00059	0.01803	2.05359E-05	0.00061
611511.41	4206651.77	2939.5978	0.00057	0.01756	2.00006E-05	0.00059
611527.51	4206650.77	2833.85214	0.00055	0.01717	1.95564E-05	0.00057
611546.99	4206651.97	2735.70659	0.00053	0.01676	1.90894E-05	0.00055
611325.51	4206617.57	4277.55289	0.00083	0.02185	2.48868E-05	0.00085
611344.2	4206617.57	4041.94815	0.00078	0.02123	2.41806E-05	0.00081
611357.52	4206616.78	3880.62049	0.00075	0.02078	2.36681E-05	0.00078
611368.66	4206620.55	3798.56837	0.00074	0.02056	2.34175E-05	0.00076
611381.98	4206618.76	3645.20953	0.00071	0.02011	2.29050E-05	0.00073
611395.9	4206619.76	3521.90159	0.00068	0.01974	2.24836E-05	0.00070
611407.82	4206620.75	3423.49214	0.00066	0.01944	2.21419E-05	0.00069
611421.14	4206619.96	3296.40976	0.00064	0.01903	2.16749E-05	0.00066
611435.46	4206618.76	3176.31481	0.00062	0.01864	2.12307E-05	0.00064
611472.44	4206621.55	2934.67193	0.00057	0.01780	2.02739E-05	0.00059
611485.36	4206619.96	2838.61315	0.00055	0.01746	1.98867E-05	0.00057
611496.5	4206622.94	2790.90055	0.00054	0.01727	1.96703E-05	0.00056
611508.82	4206622.14	2705.8663	0.00052	0.01696	1.93172E-05	0.00054
611522.14	4206620.55	2617.10981	0.00051	0.01663	1.89413E-05	0.00053
611532.88	4206620.95	2562.14411	0.00050	0.01641	1.86907E-05	0.00052
611546	4206621.94	2501.58055	0.00048	0.01615	1.83946E-05	0.00050
611557.13	4206620.16	2434.95424	0.00047	0.01589	1.80985E-05	0.00049
611327.7	4206564.89	3669.91368	0.00071	0.02004	2.28252E-05	0.00073
611341.02	4206566.28	3576.96587	0.00069	0.01980	2.25519E-05	0.00072
611355.14	4206572.84	3498.37695	0.00068	0.01959	2.23127E-05	0.00070
611369.25	4206575.02	3384.17083	0.00066	0.01925	2.19255E-05	0.00068
611384.16	4206573.04	3232.2952	0.00063	0.01878	2.13901E-05	0.00065

611395.1	4206574.63	3149.7263	0.00061	0.01852	2.10940E-05	0.00063
611407.23	4206574.43	3049.49731	0.00059	0.01819	2.07181E-05	0.00061
611420.15	4206574.03	2947.56239	0.00057	0.01785	2.03309E-05	0.00059
611431.88	4206569.86	2844.22841	0.00055	0.01749	1.99208E-05	0.00057
611473.63	4206575.22	2627.03326	0.00051	0.01675	1.90780E-05	0.00053
611487.55	4206572.24	2531.16644	0.00049	0.01640	1.86793E-05	0.00051
611500.27	4206575.22	2469.5192	0.00048	0.01617	1.84174E-05	0.00050
611512.6	4206575.82	2401.87833	0.00047	0.01592	1.81326E-05	0.00048
611524.73	4206574.43	2333.87307	0.00045	0.01565	1.78251E-05	0.00047
611537.85	4206576.22	2278.99409	0.00044	0.01543	1.75745E-05	0.00046
611548.59	4206575.22	2224.9353	0.00043	0.01522	1.73353E-05	0.00045
611558.72	4206577.01	2187.72942	0.00042	0.01506	1.71531E-05	0.00044
611331.88	4206537.85	3403.10693	0.00066	0.01920	2.18685E-05	0.00068
611332.67	4206513.19	3211.84843	0.00062	0.01857	2.11509E-05	0.00064
611355.54	4206518.56	3063.52536	0.00059	0.01813	2.06498E-05	0.00061
611357.72	4206542.42	3208.80576	0.00062	0.01862	2.12079E-05	0.00064
611371.84	4206555.94	3184.71916	0.00062	0.01856	2.11396E-05	0.00064
611370.05	4206542.02	3105.05194	0.00060	0.01829	2.08320E-05	0.00062
611383.57	4206548.58	3039.3221	0.00059	0.01808	2.05928E-05	0.00061
611397.09	4206548.58	2937.35204	0.00057	0.01773	2.01942E-05	0.00059
611409.22	4206546.79	2844.59032	0.00055	0.01741	1.98297E-05	0.00057
611419.95	4206547.59	2778.56114	0.00054	0.01719	1.95791E-05	0.00056
611432.28	4206550.37	2718.53941	0.00053	0.01700	1.93627E-05	0.00055
611349.17	4206492.32	2947.04668	0.00057	0.01771	2.01714E-05	0.00059
611363.69	4206486.95	2816.01278	0.00055	0.01728	1.96817E-05	0.00057
611375.81	4206491.32	2757.42226	0.00053	0.01708	1.94539E-05	0.00055
611387.94	4206500.67	2728.38198	0.00053	0.01698	1.93400E-05	0.00055
611399.08	4206500.87	2659.80556	0.00052	0.01673	1.90552E-05	0.00053
611409.61	4206504.25	2616.95821	0.00051	0.01657	1.88730E-05	0.00053
611422.54	4206503.25	2539.94762	0.00049	0.01629	1.85541E-05	0.00051
611437.65	4206504.45	2471.81251	0.00048	0.01604	1.82693E-05	0.00050
611374.82	4206454.74	2554.01163	0.00049	0.01633	1.85996E-05	0.00051
611385.76	4206467.07	2555.86995	0.00050	0.01634	1.86110E-05	0.00051
611397.68	4206472.44	2518.10323	0.00049	0.01620	1.84515E-05	0.00051
611411.2	4206477.21	2471.07009	0.00048	0.01602	1.82465E-05	0.00050
611424.33	4206476.41	2401.79372	0.00047	0.01575	1.79390E-05	0.00048
611437.25	4206478	2349.44001	0.00046	0.01554	1.76998E-05	0.00047
611425.52	4206431.08	2195.53642	0.00043	0.01494	1.70164E-05	0.00044
611476.42	4206548.78	2473.35231	0.00048	0.01615	1.83946E-05	0.00050
611488.54	4206547.99	2405.83009	0.00047	0.01589	1.80985E-05	0.00048
611501.27	4206548.38	2336.72448	0.00045	0.01563	1.78023E-05	0.00047
611512	4206545.8	2269.33598	0.00044	0.01536	1.74948E-05	0.00046
611524.33	4206546.4	2213.08427	0.00043	0.01515	1.72556E-05	0.00045
611536.06	4206546.79	2161.51505	0.00042	0.01494	1.70164E-05	0.00044
611548.98	4206548.98	2113.20383	0.00041	0.01475	1.68000E-05	0.00043
611559.92	4206549.18	2067.80812	0.00040	0.01457	1.65950E-05	0.00042
611477.81	4206502.66	2273.90142	0.00044	0.01529	1.74151E-05	0.00046
611479.99	4206477.61	2167.35409	0.00042	0.01482	1.68798E-05	0.00044
611491.13	4206505.84	2223.90959	0.00043	0.01510	1.71987E-05	0.00045
611502.46	4206505.04	2169.11837	0.00042	0.01488	1.69481E-05	0.00044
611491.72	4206477.8	2118.46526	0.00041	0.01462	1.66520E-05	0.00043
611503.06	4206479	2074.62842	0.00040	0.01444	1.64469E-05	0.00042
611514.39	4206503.05	2110.03348	0.00041	0.01464	1.66747E-05	0.00043
611515.98	4206477.8	2017.42001	0.00039	0.01420	1.61736E-05	0.00041
611528.31	4206505.84	2057.17616	0.00040	0.01443	1.64355E-05	0.00042
611528.9	4206476.41	1962.5712	0.00038	0.01397	1.59116E-05	0.00040
611540.63	4206508.22	2012.25202	0.00039	0.01426	1.62419E-05	0.00041
611538.25	4206476.41	1927.18002	0.00037	0.01382	1.57408E-05	0.00039
611552.56	4206505.84	1957.79609	0.00038	0.01403	1.59800E-05	0.00040
611550.77	4206475.02	1877.86532	0.00036	0.01361	1.55016E-05	0.00038
611479.99	4206431.88	1993.49319	0.00039	0.01405	1.60027E-05	0.00040
611493.12	4206432.08	1949.33077	0.00038	0.01385	1.57749E-05	0.00039
611504.65	4206432.67	1912.82927	0.00037	0.01369	1.55927E-05	0.00039
611518.56	4206430.88	1862.32235	0.00036	0.01346	1.53307E-05	0.00038
611529.5	4206430.29	1826.1449	0.00035	0.01330	1.51485E-05	0.00037
611542.42	4206435.46	1799.99423	0.00035	0.01318	1.50118E-05	0.00036
611552.76	4206433.07	1761.9934	0.00034	0.01301	1.48182E-05	0.00036
611479.8	4206406.03	1905.90829	0.00037	0.01368	1.55813E-05	0.00038
611494.51	4206406.43	1861.85271	0.00036	0.01347	1.53421E-05	0.00038
611506.24	4206406.83	1828.01052	0.00035	0.01330	1.51485E-05	0.00037
611518.56	4206405.44	1788.03183	0.00035	0.01311	1.49321E-05	0.00036
611530.89	4206404.64	1750.8584	0.00034	0.01294	1.47385E-05	0.00035
611542.62	4206407.03	1724.52624	0.00033	0.01281	1.45904E-05	0.00035
611555.15	4206405.44	1686.11026	0.00033	0.01263	1.43854E-05	0.00034
611529.9	4206362.49	1639.27939	0.00032	0.01242	1.41462E-05	0.00033
611544.81	4206364.08	1608.58148	0.00031	0.01225	1.39526E-05	0.00033
611558.72	4206362.89	1573.89775	0.00030	0.01207	1.37475E-05	0.00032
610703.71	4206675.32	43030.36721	0.00834	0.10253	1.16780E-04	0.00845
610721.12	4206689.86	47266.16959	0.00916	0.10486	1.19434E-04	0.00928
610736.84	4206686.65	48078.49626	0.00932	0.10109	1.15140E-04	0.00943
610754.25	4206685.46	49295.73242	0.00955	0.09772	1.11302E-04	0.00966
610771.15	4206685.12	50506.8341	0.00979	0.09465	1.07805E-04	0.00989
610789.74	4206688.5	52596.42869	0.01019	0.09240	1.05242E-04	0.01030
610807.15	4206686.31	53115.93294	0.01029	0.08852	1.00823E-04	0.01039
610700.5	4206658.42	40082.60921	0.00777	0.09747	1.11017E-04	0.00788
610703.54	4206637.12	37223.80363	0.00721	0.09070	1.03306E-04	0.00732
610702.86	4206621.23	35066.21535	0.00679	0.08649	9.85108E-05	0.00689
610746.81	4206643.04	40750.49325	0.00790	0.08617	9.81463E-05	0.00799
610777.57	4206642.19	42091.77501	0.00816	0.08128	9.25767E-05	0.00825
610792.28	4206642.53	42715.42297	0.00828	0.07908	9.00709E-05	0.00837
610749.18	4206621.57	37457.44852	0.00726	0.08035	9.15174E-05	0.00735
610749.85	4206602.98	34798.62786	0.00674	0.07598	8.65400E-05	0.00683
610784.16	4206612.28	37202.69684	0.00721	0.07337	8.35673E-05	0.00729
610793.29	4206597.74	35131.11052	0.00681	0.06915	7.87608E-05	0.00689
610810.19	4206587.6	33776.1834	0.00654	0.06505	7.40909E-05	0.00662
610820	4206591.66	34406.17921	0.00667	0.06449	7.34531E-05	0.00674
610837.24	4206594.36	34761.38354	0.00674	0.06268	7.13915E-05	0.00681
610839.6	4206619.21	39067.0039	0.00757	0.06684	7.61297E-05	0.00765
610834.02	4206641.52	43492.53642	0.00843	0.07224	8.22802E-05	0.00851
610850.25	4206642.36	43790.24536	0.00849	0.06982	7.95239E-05	0.00856
610877.29	4206642.87	43727.49021	0.00847	0.06559	7.47060E-05	0.00855
610878.14	4206626.14	39966.11395	0.00774	0.06241	7.10840E-05	0.00782
610876.79	4206607.54	36326.53172	0.00704	0.05948	6.77468E-05	0.00711
610878.31	4206588.95	33054.6512	0.00640	0.05643	6.42729E-05	0.00647
610762.87	4206569.18	30761.47556	0.00596	0.06758	7.69726E-05	0.00604
610782.13	4206564.1	30412.47013	0.00589	0.06440	7.33506E-05	0.00597
610796.84	4206560.56	30070.4038	0.00583	0.06208	7.07082E-05	0.00590
610815.77	4206555.48	29403.75244	0.00570	0.05904	6.72456E-05	0.00576
610832.16	4206557.01	29470.30812	0.00571	0.05744	6.54233E-05	0.00578
610851.43	4206553.96	28751.16902	0.00557	0.05478	6.23936E-05	0.00563
610880.67	4206553.63	27883.03797	0.00540	0.05141	5.85552E-05	0.00546
610878.31	4206570.7	30265.4028	0.00586	0.05386	6.13457E-05	0.00593
610826.68	4206687.13	54367.43798	0.01053	0.08515	9.69845E-05	0.01063
610844.57	4206686.3	54896.27181	0.01064	0.08147	9.27931E-05	0.01073
610865.21	4206687.68	56053.23738	0.01086	0.07792	8.87497E-05	0.01095
610880.9	4206686.3	56042.84051	0.01086	0.07464	8.50138E-05	0.01094
610899.62	4206692.91	58745.69975	0.01138	0.07275	8.28611E-05	0.01147
610919.16	4206680.8	54223.38352	0.01051	0.06649	7.57311E-05	0.01058
610925.76	4206661.81	47570.76252	0.00922	0.06169	7.02640E-05	0.00929
610927.41	4206642.54	41981.31342	0.00813	0.05812	6.61978E-05	0.00820
610925.49	4206624.93	37861.53892	0.00734	0.05566	6.33959E-05	0.00740
610924.94	4206606.21	34053.66645	0.00660	0.05306	6.04345E-05	0.00666
610922.73	4206591.08	31483.95573	0.00610	0.05130	5.84299E-05	0.00616
610923.56	4206571.81	28462.30973	0.00552	0.04884	5.56280E-05	0.00557
610925.21	4206554.47	26021.75028	0.00504	0.04662	5.30995E-05	0.00510
610956.31	4206695.94	58822.83114	0.01140	0.06271	7.14257E-05	0.01147
611019.34	4206696.76	48100.5473	0.00932	0.05150	5.86577E-05	0.00938
610959.06	4206679.15	51337.24586	0.00995	0.05923	6.74621E-05	0.01001
610962.92	4206664.84	45780.00227	0.00887	0.05627	6.40907E-05	0.00893

610963.47	4206649.42	41025.02309	0.00795	0.05389	6.13799E-05	0.00801
610965.12	4206634.29	36954.55772	0.00716	0.05158	5.87488E-05	0.00722
610958.24	4206619.42	34291.60374	0.00664	0.05056	5.75871E-05	0.00670
610960.44	4206603.74	31072.41235	0.00602	0.04833	5.50471E-05	0.00608
610962.64	4206588.32	28320.98529	0.00549	0.04628	5.27122E-05	0.00554
610968.15	4206560.25	24102.17663	0.00467	0.04283	4.87827E-05	0.00472
610949.71	4206557.5	24975.96654	0.00484	0.04439	5.05595E-05	0.00489
611017.96	4206681.9	42582.15639	0.00825	0.04978	5.66986E-05	0.00831
611021.54	4206668.69	37566.13954	0.00728	0.04762	5.42384E-05	0.00733
611017.69	4206653.83	34394.28659	0.00666	0.04648	5.29400E-05	0.00672
611013.83	4206638.97	31694.34276	0.00614	0.04538	5.16871E-05	0.00619
611013.01	4206623.83	28900.6545	0.00560	0.04391	5.00128E-05	0.00565
611009.98	4206609.24	26871.59244	0.00521	0.04285	4.88055E-05	0.00526
611008.05	4206597.68	25389.50684	0.00492	0.04199	4.78260E-05	0.00497
611001.72	4206570.71	22619.35628	0.00438	0.04028	4.58783E-05	0.00443
611017.41	4206575.11	21624.86172	0.00419	0.03901	4.44318E-05	0.00423
611033.38	4206575.66	20075.97497	0.00389	0.03742	4.26208E-05	0.00393
611050.71	4206697.86	38778.57723	0.00751	0.04666	5.31450E-05	0.00757
611054.84	4206681.9	32967.84087	0.00639	0.04433	5.04912E-05	0.00644
611052.92	4206671.17	30966.35843	0.00600	0.04349	4.95344E-05	0.00605
611054.84	4206650.8	26645.12487	0.00516	0.04130	4.70401E-05	0.00521
611055.39	4206637.59	24494.19038	0.00475	0.04006	4.56277E-05	0.00479
611053.47	4206624.65	23047.28217	0.00447	0.03918	4.46254E-05	0.00451
611054.84	4206605.02	20570.82989	0.00399	0.03748	4.26891E-05	0.00403
611055.39	4206591.81	19195.55292	0.00372	0.03644	4.15046E-05	0.00376
611053.47	4206578.87	18260.3659	0.00354	0.03570	4.06617E-05	0.00358
611057.6	4206560.98	16329.90839	0.00316	0.03389	3.86002E-05	0.00320
611058.15	4206547.77	15394.52564	0.00298	0.03301	3.75979E-05	0.00302
611056.22	4206534.84	14763.2683	0.00286	0.03239	3.68917E-05	0.00290
611021.82	4206533.19	17386.88933	0.00337	0.03532	4.02289E-05	0.00341
611022.37	4206519.98	16389.64749	0.00318	0.03436	3.91355E-05	0.00321
611020.44	4206507.04	15670.68359	0.00304	0.03368	3.83610E-05	0.00307
611028.7	4206492.18	14272.53142	0.00277	0.03208	3.65386E-05	0.00280
611029.25	4206478.97	13538.407	0.00262	0.03124	3.55819E-05	0.00266
611027.32	4206466.03	13009.59242	0.00252	0.03061	3.48643E-05	0.00256
611022.09	4206449.79	12554.74612	0.00243	0.03014	3.43290E-05	0.00247
611030.62	4206435.76	11591.03645	0.00225	0.02888	3.28939E-05	0.00228
611028.7	4206422.82	11202.94734	0.00217	0.02840	3.23472E-05	0.00220
611057.32	4206514.2	13551.88641	0.00263	0.03113	3.54566E-05	0.00266
611057.87	4206500.99	12876.33954	0.00250	0.03039	3.46137E-05	0.00253
611055.94	4206488.05	12404.36614	0.00240	0.02982	3.39645E-05	0.00244
611057.32	4206473.74	11709.9801	0.00227	0.02895	3.29736E-05	0.00230
611057.87	4206460.53	11170.45267	0.00216	0.02825	3.21763E-05	0.00220
611055.94	4206447.59	10814.52514	0.00210	0.02780	3.16638E-05	0.00213
611056.49	4206431.35	10254.9905	0.00199	0.02705	3.08095E-05	0.00202
611057.04	4206418.14	9821.82103	0.00190	0.02642	3.00920E-05	0.00193
611055.12	4206405.21	9528.63674	0.00185	0.02599	2.96022E-05	0.00188
611056.49	4206387.04	8994.97791	0.00174	0.02520	2.87024E-05	0.00177
611057.04	4206373.83	8653.06264	0.00168	0.02467	2.80987E-05	0.00170
611055.12	4206360.9	8413.25521	0.00163	0.02428	2.76545E-05	0.00166
611021.82	4206405.3	10879.40919	0.00211	0.02804	3.19371E-05	0.00214
611031.45	4206391.54	10062.72703	0.00195	0.02682	3.05476E-05	0.00198
611035.85	4206363.74	9121.85554	0.00177	0.02538	2.89074E-05	0.00180
611085.12	4206364.57	7505.74257	0.00145	0.02301	2.62080E-05	0.00148
611087.59	4206415.48	8470.93614	0.00164	0.02466	2.80874E-05	0.00167
611084.02	4206444.38	9349.95129	0.00181	0.02596	2.95680E-05	0.00184
611084.84	4206458.69	9707.06212	0.00188	0.02649	3.01717E-05	0.00191
611083.19	4206470.8	10164.06918	0.00197	0.02712	3.08893E-05	0.00200
611082.64	4206503.28	11354.57135	0.00220	0.02875	3.27458E-05	0.00223
611082.37	4206515.94	11869.0734	0.00230	0.02938	3.34634E-05	0.00233
611082.92	4206532.18	12522.60556	0.00243	0.03016	3.43518E-05	0.00246
611082.64	4206545.66	13176.04522	0.00255	0.03089	3.51832E-05	0.00259
611105.48	4206544.56	11293.66231	0.00219	0.02917	3.32242E-05	0.00222
611103.83	4206534.65	11052.02087	0.00214	0.02880	3.28028E-05	0.00217
611079.89	4206585.02	15827.51696	0.00307	0.03364	3.83154E-05	0.00311
611081.54	4206569.88	14695.15262	0.00285	0.03257	3.70967E-05	0.00288
611081.82	4206624.84	18765.37318	0.00364	0.03622	4.12540E-05	0.00368
611082.37	4206611.63	17546.92229	0.00340	0.03524	4.01378E-05	0.00344
611080.44	4206598.69	16777.68316	0.00325	0.03454	3.93405E-05	0.00329
611104.66	4206591.53	13550.83331	0.00263	0.03194	3.63792E-05	0.00266
611105.48	4206580.53	12905.09375	0.00250	0.03122	3.55591E-05	0.00254
611103.56	4206567.59	12487.33523	0.00242	0.03066	3.49213E-05	0.00245
611103.83	4206624.29	15643.91191	0.00303	0.03413	3.88735E-05	0.00307
611102.73	4206612.45	15019.33813	0.00291	0.03346	3.81104E-05	0.00295
611104.11	4206601.99	14210.36064	0.00275	0.03265	3.71878E-05	0.00279
611079.89	4206667.5	23999.3731	0.00465	0.03981	4.53430E-05	0.00470
611080.44	4206654.29	22130.93919	0.00429	0.03864	4.40104E-05	0.00433
611078.51	4206641.35	20963.87112	0.00406	0.03781	4.30650E-05	0.00411
611100.53	4206702.18	23872.71511	0.00463	0.04048	4.61061E-05	0.00467
611079.61	4206696.95	29111.63718	0.00564	0.04255	4.84638E-05	0.00569
611077.69	4206684.01	27179.4212	0.00527	0.04156	4.73362E-05	0.00531
611102.46	4206679.15	20541.92063	0.00398	0.03828	4.36003E-05	0.00402
611101.91	4206689.61	21865.27988	0.00424	0.03922	4.46710E-05	0.00428
611103.83	4206657.41	18168.44554	0.00352	0.03645	4.15160E-05	0.00356
611103.28	4206667.86	19224.07892	0.00373	0.03730	4.24841E-05	0.00377
611104.11	4206634.56	16317.55526	0.00316	0.03479	3.96253E-05	0.00320
611103.56	4206645.02	17186.37854	0.00333	0.03557	4.05137E-05	0.00337
611128.88	4206688.23	16323.43473	0.00316	0.03636	4.14135E-05	0.00320
611128.33	4206698.69	17210.25239	0.00333	0.03722	4.23930E-05	0.00338
611128.88	4206664.29	14748.1293	0.00286	0.03462	3.94316E-05	0.00290
611128.33	4206674.74	15484.93498	0.00300	0.03541	4.03314E-05	0.00304
611130.81	4206643.09	13334.15606	0.00258	0.03306	3.76548E-05	0.00262
611130.25	4206653.55	13950.01104	0.00270	0.03378	3.84749E-05	0.00274
611130.25	4206618.32	12238.4759	0.00237	0.03160	3.59919E-05	0.00241
611129.7	4206628.78	12767.43322	0.00247	0.03226	3.67436E-05	0.00251
611147.87	4206682.18	13261.52384	0.00257	0.03425	3.90102E-05	0.00261
611147.32	4206692.63	13896.7327	0.00269	0.03503	3.98986E-05	0.00273
611148.7	4206659.88	12110.69507	0.00235	0.03271	3.72562E-05	0.00238
611148.14	4206670.34	12645.3411	0.00245	0.03343	3.80763E-05	0.00249
611149.25	4206637.31	11147.62961	0.00216	0.03130	3.56502E-05	0.00220
611148.7	4206647.77	11604.66033	0.00225	0.03196	3.64019E-05	0.00229
611149.25	4206613.37	10313.88938	0.00200	0.02997	3.41354E-05	0.00203
611148.7	4206623.83	10712.0523	0.00208	0.03058	3.48301E-05	0.00211
611175.39	4206687.68	10800.2715	0.00209	0.03248	3.69942E-05	0.00213
611174.84	4206698.14	11299.87058	0.00219	0.03320	3.78143E-05	0.00223
611195.21	4206682.45	9248.92955	0.00179	0.03080	3.50807E-05	0.00183
611194.66	4206692.91	9658.47036	0.00187	0.03146	3.58325E-05	0.00191
611175.39	4206664.01	9921.11404	0.00192	0.03104	3.53541E-05	0.00196
611174.84	4206674.47	10329.36739	0.00200	0.03169	3.60944E-05	0.00204
611194.93	4206660.98	8596.54806	0.00167	0.02961	3.37253E-05	0.00170
611194.38	4206671.44	8938.36847	0.00173	0.03022	3.44201E-05	0.00177
611174.29	4206641.44	9292.40254	0.00180	0.02984	3.39873E-05	0.00183
611173.74	4206651.9	9646.78602	0.00187	0.03045	3.46821E-05	0.00190
611195.21	4206638.14	7981.73413	0.00155	0.02841	3.23585E-05	0.00158
611194.66	4206648.6	8273.66175	0.00160	0.02897	3.29964E-05	0.00164
611176.49	4206618.6	8537.23296	0.00165	0.02852	3.24838E-05	0.00169
611175.94	4206629.06	8840.00462	0.00171	0.02908	3.31217E-05	0.00175
611195.48	4206613.64	7417.72661	0.00144	0.02721	3.09918E-05	0.00147
611194.93	4206624.1	7668.94527	0.00149	0.02773	3.15840E-05	0.00152
610704.74	4206583.83	30671.62614	0.00594	0.07717	8.78954E-05	0.00603
610703.54	4206601.74	32679.46503	0.00633	0.08147	9.27931E-05	0.00643
610705.38	4206547.72	26937.05895	0.00522	0.06954	7.92050E-05	0.00530
610704.19	4206565.63	28740.48264	0.00557	0.07343	8.36356E-05	0.00565
610705.71	4206512.75	23912.66462	0.00463	0.06356	7.23939E-05	0.00471
610704.51	4206530.66	25381.85963	0.00492	0.06662	7.58791E-05	0.00499
610707	4206477.13	21302.59168	0.00413	0.05832	6.64256E-05	0.00419
610705.8	4206495.04	22541.80472	0.00437	0.06085	6.93072E-05	0.00444
610707.65	4206443.46	19109.05832	0.00370	0.05388	6.13685E-05	0.00376
610706.45	4206461.36	20247.20744	0.00392	0.05631	6.41362E-05	0.00399

610707.65	4206407.84	17093.8706	0.00331	0.04981	5.67328E-05	0.00337
610706.45	4206425.74	18055.38493	0.00350	0.05186	5.90677E-05	0.00356
610703.12	4206366.39	15132.69992	0.00293	0.04615	5.25641E-05	0.00298
610703.86	4206388.18	16117.99599	0.00312	0.04813	5.48193E-05	0.00318
610754.28	4206417.88	17790.02285	0.00345	0.04760	5.42157E-05	0.00350
610746.28	4206438.7	19059.26618	0.00369	0.05046	5.74732E-05	0.00375
610765.61	4206379.99	15701.58657	0.00304	0.04314	4.91358E-05	0.00309
610764.41	4206397.9	16642.64447	0.00322	0.04489	5.11290E-05	0.00328
610803.82	4206388.73	15906.68489	0.00308	0.04141	4.71653E-05	0.00313
610802.62	4206406.64	16900.78067	0.00327	0.04307	4.90561E-05	0.00332
610755.3	4206360.77	14851.69821	0.00288	0.04224	4.81107E-05	0.00293
610768.58	4206436.87	18957.03571	0.00367	0.04861	5.53660E-05	0.00373
610791.24	4206432.98	18593.68009	0.00360	0.04643	5.28830E-05	0.00366
610806.14	4206426.83	18066.00074	0.00350	0.04466	5.08670E-05	0.00355
610805.81	4206369.51	14930.83551	0.00289	0.03973	4.52519E-05	0.00294
610804.52	4206353.65	14229.13689	0.00276	0.03866	4.40331E-05	0.00280
610847.59	4206432.33	17791.23814	0.00345	0.04195	4.77804E-05	0.00350
610865.4	4206429.74	17251.84456	0.00334	0.04036	4.59694E-05	0.00339
610882.56	4206432.66	17011.63989	0.00330	0.03931	4.47735E-05	0.00334
610902.31	4206429.42	16261.86369	0.00315	0.03757	4.27916E-05	0.00319
610924.98	4206459.53	17361.25502	0.00336	0.03804	4.33270E-05	0.00341
610924.33	4206496.45	20121.18355	0.00390	0.04105	4.67553E-05	0.00395
610925.3	4206509.08	21181.51376	0.00410	0.04210	4.79512E-05	0.00415
610748.5	4206527.86	25942.00336	0.00503	0.06171	7.02867E-05	0.00510
610766.31	4206522.35	25592.99357	0.00496	0.05907	6.72798E-05	0.00503
610782.5	4206515.88	25071.87112	0.00486	0.05663	6.45007E-05	0.00492
610798.04	4206512.32	24737.06254	0.00479	0.05471	6.23138E-05	0.00486
610819.74	4206511.02	24480.7105	0.00474	0.05254	5.98422E-05	0.00480
610836.25	4206510.7	24215.02943	0.00469	0.05089	5.79629E-05	0.00475
610856.33	4206507.46	23477.99535	0.00455	0.04853	5.52749E-05	0.00460
610879.97	4206511.99	23243.25844	0.00450	0.04671	5.32020E-05	0.00456
610880.94	4206492.56	21424.49094	0.00415	0.04465	5.08557E-05	0.00420
610879.32	4206474.75	20010.39643	0.00388	0.04312	4.91130E-05	0.00393
610855.36	4206477.67	20874.98631	0.00404	0.04550	5.18238E-05	0.00410
610836.25	4206476.37	21141.57507	0.00410	0.04699	5.35209E-05	0.00415
610782.34	4206485.12	22357.17282	0.00433	0.05268	6.00017E-05	0.00439
610763.88	4206489.33	22667.16729	0.00439	0.05480	6.24164E-05	0.00445
610817.96	4206481.23	21806.38009	0.00423	0.04911	5.59355E-05	0.00428
610798.85	4206479.93	21871.62291	0.00424	0.05063	5.76668E-05	0.00430
610748.5	4206494.51	23003.93099	0.00446	0.05687	6.47740E-05	0.00452
610921.74	4206437.52	16113.56678	0.00312	0.03670	4.18007E-05	0.00316
610845.31	4206376.74	14741.49129	0.00286	0.03765	4.28828E-05	0.00290
610861.92	4206386.8	14938.93871	0.00289	0.03729	4.24727E-05	0.00294
610870.34	4206398.97	15390.47193	0.00298	0.03761	4.28372E-05	0.00303
610902.16	4206393.59	14376.3715	0.00279	0.03514	4.00239E-05	0.00283
610920.18	4206388.2	13641.50561	0.00264	0.03361	3.82813E-05	0.00268
610921.11	4206378.14	13178.27362	0.00255	0.03296	3.75409E-05	0.00259
610917.84	4206361.53	12585.0059	0.00244	0.03222	3.66981E-05	0.00248
610845.78	4206356.85	13850.68352	0.00268	0.03634	4.13907E-05	0.00273
610867.77	4206365.04	13826.50015	0.00268	0.03550	4.04339E-05	0.00272
610886.72	4206365.28	13462.38958	0.00261	0.03436	3.91355E-05	0.00265
610903.57	4206363.4	13004.28368	0.00252	0.03320	3.78143E-05	0.00256
610950.59	4206356.39	11534.62521	0.00224	0.02998	3.41468E-05	0.00227
610965.33	4206355.45	11083.50768	0.00215	0.02905	3.30875E-05	0.00218
610995.74	4206351.01	10034.05866	0.00194	0.02703	3.07868E-05	0.00198
610987.56	4206368.32	10836.7017	0.00210	0.02833	3.22674E-05	0.00213
610970.95	4206394.76	12350.88022	0.00239	0.03070	3.49668E-05	0.00243
610968.61	4206411.13	13114.90247	0.00254	0.03173	3.61400E-05	0.00258
610949.42	4206401.77	13362.19168	0.00259	0.03248	3.69942E-05	0.00263
610960.42	4206425.64	14086.66587	0.00273	0.03312	3.77232E-05	0.00277
610944.04	4206426.34	14721.19258	0.00285	0.03432	3.90899E-05	0.00289
610966.5	4206439.67	14554.40893	0.00282	0.03352	3.81788E-05	0.00286
610964.39	4206457.22	15604.77679	0.00302	0.03478	3.96139E-05	0.00306
610948.24	4206509.73	20131.31432	0.00390	0.04010	4.56733E-05	0.00395
610965.72	4206510.7	19278.74692	0.00374	0.03863	4.39990E-05	0.00378
610983.53	4206509.08	18128.43848	0.00351	0.03696	4.20969E-05	0.00355
610970.26	4206484.15	17039.35682	0.00330	0.03622	4.12540E-05	0.00334
610963.46	4206468.93	16354.70504	0.00317	0.03564	4.05934E-05	0.00321
611085.12	4206428.94	8898.46279	0.00172	0.02530	2.88163E-05	0.00175
611083.18	4206485.29	10658.65635	0.00207	0.02783	3.16979E-05	0.00210
611221.38	4206686.44	8079.97453	0.00157	0.02942	3.35089E-05	0.00160
611220.83	4206696.9	8445.90623	0.00164	0.03003	3.42037E-05	0.00167
611221.77	4206676.32	7767.38607	0.00151	0.02885	3.28597E-05	0.00154
611240.27	4206683.06	7270.61065	0.00141	0.02818	3.20966E-05	0.00144
611239.72	4206693.52	7594.43941	0.00147	0.02875	3.27458E-05	0.00150
611240.67	4206672.94	6993.02691	0.00136	0.02765	3.14929E-05	0.00139
611222.17	4206653.03	7162.19627	0.00139	0.02766	3.15043E-05	0.00142
611221.62	4206663.49	7434.22334	0.00144	0.02820	3.21194E-05	0.00147
611222.17	4206640.92	6894.75361	0.00134	0.02708	3.08437E-05	0.00137
611241.86	4206650.05	6441.13617	0.00125	0.02652	3.02059E-05	0.00128
611241.31	4206660.5	6680.6455	0.00129	0.02702	3.07754E-05	0.00133
611241.86	4206637.94	6202.91428	0.00120	0.02598	2.95908E-05	0.00123
611266.92	4206689.62	6652.70379	0.00129	0.02712	3.08893E-05	0.00132
611266.37	4206700.08	6966.52103	0.00135	0.02766	3.15043E-05	0.00138
611267.32	4206679.9	6396.46694	0.00124	0.02664	3.03425E-05	0.00127
611268.31	4206659.19	5924.69993	0.00115	0.02567	2.92377E-05	0.00118
611267.76	4206669.65	6152.73903	0.00119	0.02616	2.97958E-05	0.00122
611268.31	4206647.08	5698.67901	0.00110	0.02516	2.86568E-05	0.00113
611221.89	4206630.7	6694.73814	0.00130	0.02663	3.03312E-05	0.00133
611241.58	4206627.72	6023.76667	0.00117	0.02555	2.91011E-05	0.00120
611268.53	4206635.97	5502.84984	0.00107	0.02469	2.81215E-05	0.00109
611269.52	4206627.02	5338.01335	0.00103	0.02430	2.76773E-05	0.00106
611269.32	4206615.69	5171.78822	0.00100	0.02387	2.71876E-05	0.00103
611235.12	4206603.35	5795.9609	0.00112	0.02484	2.82924E-05	0.00115
611125.73	4206584.46	11202.28902	0.00217	0.02992	3.40784E-05	0.00220
611137.26	4206585.26	10323.11577	0.00200	0.02924	3.33039E-05	0.00203
611149	4206584.06	9449.50924	0.00183	0.02849	3.24497E-05	0.00186
611160.43	4206587.05	8758.09951	0.00170	0.02794	3.18232E-05	0.00173
611172.17	4206585.85	8026.94082	0.00156	0.02721	3.09918E-05	0.00159
611185.49	4206588.64	7388.84606	0.00143	0.02661	3.03084E-05	0.00146
611197.23	4206587.44	6836.07478	0.00132	0.02596	2.95680E-05	0.00135
611128.02	4206567.75	10441.47495	0.00202	0.02893	3.29508E-05	0.00206
611139.75	4206566.56	9582.33013	0.00186	0.02818	3.20966E-05	0.00189
611150.09	4206568.95	8972.64726	0.00174	0.02771	3.15613E-05	0.00177
611161.83	4206567.75	8220.86094	0.00159	0.02697	3.07184E-05	0.00162
611171.17	4206569.15	7731.42255	0.00150	0.02652	3.02059E-05	0.00153
611182.91	4206567.95	7123.82914	0.00138	0.02586	2.94541E-05	0.00141
611194.44	4206567.75	6616.24147	0.00128	0.02528	2.87935E-05	0.00131
611206.18	4206566.56	6148.71018	0.00119	0.02469	2.81215E-05	0.00122
611216.92	4206568.35	5813.89479	0.00113	0.02428	2.76545E-05	0.00115
611228.65	4206567.16	5450.81181	0.00106	0.02373	2.70281E-05	0.00108
611204.89	4206588.04	6538.86643	0.00127	0.02561	2.91694E-05	0.00130
611238.7	4206569.35	5216.94937	0.00101	0.02340	2.66522E-05	0.00104
611266.54	4206574.12	4679.57012	0.00091	0.02250	2.56272E-05	0.00093
611265.15	4206558.8	4530.06256	0.00088	0.02204	2.51032E-05	0.00090
611262.16	4206541.9	4405.30372	0.00085	0.02161	2.46135E-05	0.00088
611129.21	4206540.11	9455.59241	0.00183	0.02743	3.12423E-05	0.00186
611140.94	4206538.92	8692.76582	0.00168	0.02671	3.04223E-05	0.00171
611155.66	4206540.91	7910.76213	0.00153	0.02602	2.96364E-05	0.00156
611167.4	4206539.71	7291.64898	0.00141	0.02538	2.89074E-05	0.00144
611181.32	4206541.7	6713.53164	0.00130	0.02483	2.82810E-05	0.00133
611193.05	4206540.51	6242.97296	0.00121	0.02428	2.76545E-05	0.00124
611205.78	4206542.1	5816.99245	0.00113	0.02379	2.70964E-05	0.00115
611219.3	4206542.89	5403.66789	0.00105	0.02325	2.64814E-05	0.00107
611232.23	4206542.7	5052.02318	0.00098	0.02273	2.58891E-05	0.00100
611243.97	4206541.5	4762.60753	0.00092	0.02224	2.53310E-05	0.00095
611204.79	4206362.96	4077.86391	0.00079	0.01845	2.10143E-05	0.00081
611349.5	4206372.82	2323.17244	0.00045	0.01531	1.74379E-05	0.00047
611313.91	4206380.65	2628.75743	0.00051	0.01620	1.84515E-05	0.00053

611310.48	4206419.52	2852.95672	0.00055	0.01708	1.94539E-05	0.00057
611267.05	4206500.67	3932.82017	0.00076	0.02022	2.30303E-05	0.00079
611497.56	4206304.83	1558.2644	0.00030	0.01214	1.38273E-05	0.00032
611419.07	4206310.55	1784.09213	0.00035	0.01322	1.50574E-05	0.00036
611041.07	4206301.25	7613.1557	0.00148	0.02298	2.61739E-05	0.00150
611069.15	4206301.53	6884.87243	0.00133	0.02177	2.47957E-05	0.00136
611083.74	4206300.98	6498.245	0.00126	0.02116	2.41009E-05	0.00128
611100.26	4206300.7	6066.67724	0.00118	0.02051	2.33606E-05	0.00120
611111.82	4206300.15	5762.79019	0.00112	0.02005	2.28366E-05	0.00114
611123.93	4206299.33	5448.59957	0.00106	0.01958	2.23013E-05	0.00108
611137.15	4206300.43	5143.64031	0.00100	0.01917	2.18343E-05	0.00102
611150.91	4206299.88	4821.35059	0.00093	0.01873	2.13332E-05	0.00096
611164.12	4206300.7	4530.19754	0.00088	0.01833	2.08776E-05	0.00090
610871.77	4206303.18	11415.50487	0.00221	0.03169	3.60944E-05	0.00225
610919.67	4206299.6	10442.61995	0.00202	0.02899	3.30192E-05	0.00206
610946.1	4206301.25	9937.67366	0.00193	0.02770	3.15499E-05	0.00196
610968.4	4206299.6	9379.18111	0.00182	0.02644	3.01147E-05	0.00185
610997.85	4206300.15	8683.07105	0.00168	0.02497	2.84404E-05	0.00171
610800.68	4206302.27	12258.77529	0.00238	0.03546	4.03884E-05	0.00242
610345.98	4206368.37	10059.08123	0.00195	0.06420	7.31228E-05	0.00202
610371.57	4206456.46	12233.30687	0.00237	0.07752	8.82941E-05	0.00246
610277.64	4206458.4	9878.35063	0.00191	0.08130	9.25994E-05	0.00201
610294.49	4206372.25	9272.85385	0.00180	0.06703	7.63461E-05	0.00187
610341.12	4206437.68	11065.89657	0.00214	0.07503	8.54580E-05	0.00223
610508	4206352.9	12511.62996	0.00242	0.05508	6.27353E-05	0.00249
610536.83	4206358.41	13056.76671	0.00253	0.05389	6.13799E-05	0.00259
610518.69	4206394.68	13855.6608	0.00268	0.05939	6.76443E-05	0.00275
610506.38	4206428.37	14617.89702	0.00283	0.06459	7.35670E-05	0.00291
610407.88	4206300.63	9913.94492	0.00192	0.05376	6.12318E-05	0.00198
610413.21	4206694.6	17522.76097	0.00340	0.14058	1.60118E-04	0.00356
610451.93	4206697.23	20354.15801	0.00394	0.13937	1.58740E-04	0.00410
610448.83	4206717.31	20459.7314	0.00396	0.14922	1.69959E-04	0.00413
610438.65	4207091.1	9402.84612	0.00182	1.78562	2.03379E-03	0.00386
610449.61	4207060.72	11256.00003	0.00218	1.07703	1.22672E-03	0.00341
610454.96	4207045.53	12322.56933	0.00239	0.89094	1.01477E-03	0.00340
610451.02	4207000.82	14391.93124	0.00279	0.57871	6.59142E-04	0.00345
610446.24	4206963.41	15896.45106	0.00308	0.44186	5.03272E-04	0.00358
610457.21	4206987.6	15590.27335	0.00302	0.52213	5.94698E-04	0.00362
610421.77	4207012.91	11927.24101	0.00231	0.64193	7.31148E-04	0.00304
610421.49	4207040.47	10746.51686	0.00208	0.84116	9.58068E-04	0.00304
610362.43	4207105.72	6643.78968	0.00129	2.52879	2.88025E-03	0.00417
610378.74	4207077.32	7823.12025	0.00152	1.37515	1.56627E-03	0.00308
610364.4	4207040.75	8479.04684	0.00164	0.84341	9.60631E-04	0.00260
610319.96	4207038.22	7275.76429	0.00141	0.82185	9.36074E-04	0.00235
610334.3	4207091.94	6357.68994	0.00123	1.81298	2.06496E-03	0.00330
610329.8	4207109.1	5903.89611	0.00114	2.78443	3.17142E-03	0.00432
610350.94	4206635.65	13554.28791	0.00263	0.12108	1.37908E-04	0.00276
610530.61	4206613.88	22829.66895	0.00442	0.10230	1.16518E-04	0.00454
610531.61	4206594.02	21962.0131	0.00426	0.09664	1.10071E-04	0.00437
610537.23	4206566.38	21002.84514	0.00407	0.08927	1.01677E-04	0.00417
610565.36	4206541.23	21060.25934	0.00408	0.08135	9.26564E-05	0.00417
610627.57	4206493.91	20761.83381	0.00402	0.06744	7.68131E-05	0.00410
610633.2	4206515.75	22273.16141	0.00432	0.07067	8.04920E-05	0.00440
610666.29	4206515.75	23225.47223	0.00450	0.06772	7.71320E-05	0.00458
610646.1	4206559.1	25850.80471	0.00501	0.07786	8.86813E-05	0.00510
610646.77	4206594.51	28885.72232	0.00560	0.08584	9.77704E-05	0.00569
610578.59	4206617.02	26124.41176	0.00506	0.09879	1.12520E-04	0.00517
610620.29	4206619.66	29174.34639	0.00565	0.09560	1.08887E-04	0.00576
610608.05	4206563.07	24229.78425	0.00469	0.08236	9.38068E-05	0.00479
610608.05	4206545.2	23158.49518	0.00449	0.07936	9.03898E-05	0.00458
610623.6	4206564.4	25082.37179	0.00486	0.08150	9.28272E-05	0.00495
610623.6	4206546.53	23847.43895	0.00462	0.07774	8.85447E-05	0.00471
610563.04	4206597.82	23971.60258	0.00464	0.09491	1.08101E-04	0.00475
610587.86	4206596.83	25374.37818	0.00492	0.09231	1.05140E-04	0.00502
610564.7	4206580.61	23102.57739	0.00448	0.09032	1.02873E-04	0.00458
610589.52	4206581.61	24489.33116	0.00475	0.08831	1.00584E-04	0.00485
610734.02	4206917.57	200977.4594	0.03894	0.29497	3.35966E-04	0.03928
610754.27	4206913.28	214033.8922	0.04147	0.28039	3.19360E-04	0.04179
610779.19	4206906.67	221919.6793	0.04300	0.25962	2.95703E-04	0.04330
610824.35	4206899.66	245250.8952	0.04752	0.22811	2.59814E-04	0.04778
610820.85	4206880.97	193566.8159	0.03751	0.20512	2.33628E-04	0.03774
610811.11	4206855.27	147225.3402	0.02853	0.18137	2.06578E-04	0.02873
610717.67	4206895.37	143900.0578	0.02788	0.26302	2.99576E-04	0.02818
610731.69	4206880.97	137948.3885	0.02673	0.23855	2.71705E-04	0.02700
610715.72	4206858	107536.2567	0.02084	0.21528	2.45201E-04	0.02108
610721.17	4206833.47	94587.46409	0.01833	0.18928	2.15587E-04	0.01854
610758.94	4206842.03	114635.2732	0.02221	0.18673	2.12683E-04	0.02243
610767.51	4206870.84	147058.9532	0.02850	0.21432	2.44107E-04	0.02874
610865.01	4206886.37	240455.1931	0.04659	0.18907	2.15348E-04	0.04681
610909.74	4206874.67	241458.0362	0.04679	0.15210	1.73240E-04	0.04696
610860.95	4206838.53	144482.5254	0.02800	0.14672	1.67112E-04	0.02816
610888.6	4206829.18	142836.5405	0.02768	0.12891	1.46826E-04	0.02782
610790.87	4206784.8	86629.7035	0.01679	0.13449	1.53182E-04	0.01694
610816.95	4206785.58	91413.12259	0.01771	0.12762	1.45357E-04	0.01786
610850.44	4206785.19	96808.38093	0.01876	0.11750	1.33831E-04	0.01889
610898.33	4206797.26	116300.2954	0.02254	0.10805	1.23067E-04	0.02266
610894.83	4206755.59	87642.90467	0.01698	0.09214	1.04946E-04	0.01709
610897.55	4206780.9	104082.6361	0.02017	0.10111	1.15163E-04	0.02028
610886.81	4206880.99	242047.3387	0.04690	0.17098	1.94744E-04	0.04710
611023.86	4206760.97	101250.1885	0.01962	0.06073	6.91705E-05	0.01969
611041.14	4206759.94	87295.06282	0.01692	0.05684	6.47399E-05	0.01698
611061.35	4206762.7	71959.76634	0.01394	0.05329	6.06965E-05	0.01400
610754.89	4206782.37	78838.02197	0.01528	0.14226	1.62032E-04	0.01544
610844.56	4206719.24	65508.14968	0.01269	0.09154	1.04263E-04	0.01280
610513.96	4206710.62	25833.20947	0.00501	0.14021	1.59697E-04	0.00517
610591.87	4206713.73	35488.0171	0.00688	0.13349	1.52043E-04	0.00703
610668.23	4206716.46	46000.52778	0.00891	0.12416	1.41416E-04	0.00905
610545.12	4206684.51	28038.25143	0.00543	0.12540	1.42829E-04	0.00558
610637.84	4206683.34	37639.51428	0.00729	0.11481	1.30767E-04	0.00742
610512.01	4206642.44	22895.3248	0.00444	0.11318	1.28910E-04	0.00457
610584.86	4206649.06	29272.52979	0.00567	0.10832	1.23375E-04	0.00580
610665.5	4206649.06	36017.19136	0.00698	0.09930	1.13101E-04	0.00709
609975.26	4207082.82	2715.13954	0.00053	2.09483	2.38598E-03	0.00291
609945.83	4207083.32	2570.12741	0.00050	2.17245	2.47439E-03	0.00297
609822.62	4207152.66	1807.41888	0.00035	3.10285	3.53410E-03	0.00388
609804.66	4207094.79	1980.62612	0.00038	3.50258	3.98938E-03	0.00437
609772.24	4207094.79	1885.09059	0.00037	3.62627	4.13027E-03	0.00450
609700.41	4207156.65	1510.14548	0.00029	2.34552	2.67151E-03	0.00296
609633.07	4207074.84	1528.93082	0.00030	1.93448	2.20334E-03	0.00250
609555.75	4207074.84	1393.77314	0.00027	2.23890	2.55007E-03	0.00282
609620.1	4207148.17	1261.97639	0.00024	2.54726	2.90129E-03	0.00315
609556.25	4207145.67	1184.92479	0.00023	2.52249	2.87308E-03	0.00310
609502.88	4207137.69	1144.31453	0.00022	2.82097	3.21304E-03	0.00343
610698.46	4207080.47	129212.2053	0.02504	1.42255	1.62026E-03	0.02666
610693.24	4207063.42	132350.0499	0.02565	1.08921	1.24059E-03	0.02689
610706.16	4207019.7	208570.1515	0.04041	0.65339	7.44201E-04	0.04116
610680.04	4207080.09	82257.23261	0.01594	1.41486	1.61150E-03	0.01755
610682.42	4207046.11	114707.2231	0.02223	0.87226	9.93491E-04	0.02322
CONCUNIT ug/	m^3					
DEPUNIT g/m^	2					

Oakley Main Street Project

Unmitigated
at Sensitive Receptors

Annual Average PM2.5

X (m)	Y (m)	2019 PM2.5 (ug/m3)	2020 PM2.5 (ug/m3)	Max PM2.5 (ug/m3)
611337.43	4207107.53	0.029443	0.014084	0.02944
611316.93	4207114.47	0.032838	0.015708	0.03284
611309.05	4207127.4	0.034379	0.016451	0.03438
611308.42	4207149.48	0.03437	0.01646	0.03437
611309.05	4207170.29	0.033651	0.016131	0.03365
611311.88	4207184.48	0.032597	0.015636	0.03260
611315.04	4207203.09	0.031107	0.014937	0.03111
611359.51	4207125.19	0.026998	0.012923	0.02700
611364.56	4207101.22	0.025564	0.012229	0.02556
611377.49	4207091.76	0.023608	0.011293	0.02361
611401.77	4207088.6	0.020911	0.010005	0.02091
611416.28	4207100.59	0.020093	0.009618	0.02009
611421.64	4207123.93	0.020455	0.009796	0.02045
611438.99	4207115.41	0.018732	0.008971	0.01873
611456.97	4207120.14	0.017524	0.008394	0.01752
611355.09	4207167.14	0.027811	0.013331	0.02781
611375.59	4207165.56	0.025573	0.012258	0.02557
611396.09	4207163.35	0.023527	0.011277	0.02353
611411.55	4207163.35	0.022114	0.010601	0.02211
611426.06	4207165.56	0.020902	0.010021	0.02090
611452.55	4207164.3	0.018853	0.00904	0.01885
611311.25	4207222.96	0.030032	0.014439	0.03003
611312.2	4207239.05	0.028577	0.013754	0.02858
611355.41	4207245.99	0.024764	0.011916	0.02476
611377.8	4207244.72	0.023261	0.011189	0.02326
611390.73	4207246.62	0.022308	0.010731	0.02231
611410.92	4207249.14	0.020928	0.010067	0.02093
611433.31	4207250.09	0.019564	0.00941	0.01956
611447.82	4207253.24	0.018673	0.008982	0.01867
611469.58	4207243.15	0.017678	0.008499	0.01768
611477.47	4207217.28	0.017466	0.00839	0.01747
611357.62	4207196.47	0.026901	0.012911	0.02690
611374.96	4207196.78	0.025224	0.012106	0.02522
611394.83	4207198.68	0.023423	0.011242	0.02342
611412.5	4207197.1	0.021992	0.010555	0.02199
611433.63	4207195.52	0.020391	0.009786	0.02039
611452.87	4207194.58	0.019039	0.009138	0.01904
611471.47	4207199.62	0.017842	0.008565	0.01784
611466.43	4207168.08	0.017936	0.008602	0.01794
611488.19	4207163.04	0.016464	0.007897	0.01646
611506.8	4207160.2	0.015323	0.00735	0.01532
611505.54	4207184.17	0.015746	0.007557	0.01575
611509.32	4207196.47	0.015654	0.007515	0.01565
611505.22	4207219.81	0.015955	0.007665	0.01595
611510.27	4207235.89	0.01567	0.007532	0.01567
611495.76	4207248.82	0.016279	0.007828	0.01628
611311.25	4207260.81	0.026644	0.012844	0.02664
611314.41	4207277.84	0.024847	0.011992	0.02485
611358.56	4207260.49	0.023665	0.011397	0.02366
611368.02	4207274.69	0.022233	0.010715	0.02223
611389.16	4207283.52	0.020641	0.00995	0.02064
611400.19	4207295.19	0.019524	0.009417	0.01952
611412.5	4207316	0.017993	0.008688	0.01799
611435.52	4207292.03	0.018111	0.008729	0.01811
611451.6	4207278.47	0.017829	0.008586	0.01783
611474.63	4207278.79	0.01677	0.008075	0.01677
611485.35	4207263.33	0.016581	0.007978	0.01658
611328.6	4207291.72	0.022925	0.011072	0.02292
611312.83	4207306.23	0.022215	0.010748	0.02221
611302.11	4207319.47	0.02124	0.010293	0.02124
611310.62	4207336.5	0.019463	0.009443	0.01946
611321.66	4207346.6	0.018403	0.008932	0.01840
611339.01	4207346.91	0.018081	0.008769	0.01808
611357.62	4207322.94	0.019418	0.009393	0.01942
611371.49	4207335.87	0.018141	0.00878	0.01814
611372.76	4207355.11	0.01686	0.008172	0.01686
611421.64	4207330.2	0.016996	0.008212	0.01700
611423.22	4207349.12	0.01604	0.007759	0.01604
611449.08	4207328.93	0.016184	0.007815	0.01618
611438.36	4207309.06	0.017342	0.008366	0.01734
611468.95	4207336.5	0.015289	0.007384	0.01529
611483.46	4207328.62	0.015096	0.007286	0.01510
611504.27	4207316.95	0.01473	0.007104	0.01473
611518.78	4207305.59	0.01447	0.006974	0.01447
611531.08	4207292.98	0.014238	0.006858	0.01424
611540.23	4207275.63	0.014094	0.006784	0.01409
611310.9	4207395.01	0.014665	0.007155	0.01467

Maximum
0.1001
BAAQMD threshold of significance
0.3
Exceed thresholds?
No

611307.77	4207409.9	0.013606	0.00665	0.01361
611306.78	4207428.47	0.012377	0.006062	0.01238
611310.76	4207450.93	0.011071	0.005433	0.01107
611307.77	4207464.05	0.010337	0.005082	0.01034
611355.09	4207392.69	0.014658	0.007132	0.01466
611398.22	4207398.65	0.013928	0.006768	0.01393
611386.69	4207411.77	0.013322	0.006483	0.01332
611357.67	4207410.98	0.013515	0.006586	0.01351
611353.89	4207429.07	0.012469	0.006088	0.01247
611362.24	4207449.15	0.011392	0.00557	0.01139
611385.9	4207431.06	0.012307	0.006	0.01231
611420.29	4207390.9	0.014051	0.006818	0.01405
611436.99	4207401.83	0.013309	0.00646	0.01331
611444.34	4207420.32	0.012414	0.006032	0.01241
611441.16	4207444.37	0.011425	0.005562	0.01143
611446.33	4207459.28	0.010792	0.005259	0.01079
611459.25	4207384.54	0.013697	0.006636	0.01370
611466.61	4207407.4	0.012671	0.006147	0.01267
611472.97	4207420.72	0.012078	0.005863	0.01208
611470.58	4207443.78	0.011235	0.005464	0.01124
611470.58	4207461.87	0.010568	0.005146	0.01057
611351.29	4207475.53	0.010054	0.004932	0.01005
611374.78	4207476.37	0.010111	0.004953	0.01011
611395.9	4207472.82	0.010313	0.005044	0.01031
611389.14	4207448.15	0.011448	0.005588	0.01145
611439.49	4207477.38	0.010104	0.004932	0.01010
611467.04	4207481.61	0.009875	0.004816	0.00987
611302.63	4207484.99	0.009251	0.004561	0.00925
611303.64	4207503.41	0.008435	0.004167	0.00844
611310.74	4207524.36	0.007662	0.003792	0.00766
611334.05	4207523.85	0.007885	0.003894	0.00789
611356.02	4207522.5	0.008102	0.003993	0.00810
611371.73	4207521.49	0.008241	0.004056	0.00824
611394.04	4207526.89	0.008164	0.004014	0.00816
611406.88	4207522.5	0.008376	0.004113	0.00838
611430.71	4207520.47	0.008519	0.004176	0.00852
611444.56	4207523.01	0.008459	0.004145	0.00846
611466.19	4207524.87	0.00842	0.004122	0.00842
611485.45	4207527.74	0.008332	0.004075	0.00833
611511.14	4207529.43	0.008257	0.004035	0.00826
611524.65	4207513.21	0.008679	0.004234	0.00868
611552.87	4207524.02	0.008287	0.004041	0.00829
611553.21	4207500.7	0.008883	0.004325	0.00888
611524.32	4207495.8	0.009176	0.00447	0.00918
611523.13	4207474.34	0.009811	0.004773	0.00981
611552.03	4207482.79	0.00936	0.004552	0.00936
611519.59	4207462.51	0.010193	0.004955	0.01019
611554.73	4207464.37	0.00982	0.00477	0.00982
611524.99	4207440.55	0.010798	0.005242	0.01080
611555.24	4207445.11	0.010315	0.005005	0.01032
611555.58	4207427.03	0.010773	0.005221	0.01077
611557.94	4207398.3	0.011434	0.005533	0.01143
611522.63	4207422.64	0.011361	0.005509	0.01136
611522.63	4207401.35	0.011988	0.005805	0.01199
611542.4	4207388.34	0.011971	0.005791	0.01197
611511.98	4207382.93	0.012729	0.006159	0.01273
611508.43	4207369.24	0.01321	0.006388	0.01321
611535.81	4207363.5	0.012722	0.006148	0.01272
611548.65	4207344.4	0.012811	0.006184	0.01281
611559.8	4207244.2	0.013466	0.006475	0.01347
611558.62	4207227.64	0.013485	0.006481	0.01349
611555.24	4207203.99	0.013487	0.006478	0.01349
611557.27	4207183.2	0.013163	0.006319	0.01316
611554.23	4207164.62	0.013006	0.006241	0.01301
611557.77	4207142.31	0.012394	0.005946	0.01239
611547.97	4207121.19	0.012298	0.005897	0.01230
611546.96	4207102.77	0.011764	0.005639	0.01176
611551.18	4207088.92	0.011108	0.005324	0.01111
611555.91	4207066.78	0.010106	0.004844	0.01011
611476.99	4207114.19	0.015944	0.007638	0.01594
611498.11	4207124.33	0.014966	0.007173	0.01497
611517.37	4207121.63	0.013806	0.006618	0.01381
611516.7	4207103.71	0.013243	0.006346	0.01324
611397.15	4207001.31	0.015674	0.007494	0.01567
611405.21	4206965.9	0.012453	0.005957	0.01245
611417.66	4206992.52	0.013563	0.006487	0.01356
611434.86	4206992.14	0.012477	0.00597	0.01248
611454.74	4206982.79	0.010852	0.005194	0.01085
611462.1	4206968.28	0.009697	0.004643	0.00970
611453.75	4206949.79	0.009012	0.004315	0.00901
611447.79	4206931.5	0.00823	0.003942	0.00823
611475.02	4206936.87	0.007597	0.00364	0.00760
611496.69	4206939.06	0.00706	0.003384	0.00706
611513	4206936.67	0.006534	0.003133	0.00653
611530.89	4206938.86	0.006195	0.002971	0.00620

611546.99	4206935.68	0.005738	0.002753	0.00574
611404.05	4206946.01	0.011077	0.0053	0.01108
611405.64	4206926.73	0.009655	0.004621	0.00965
611403.65	4206905.06	0.008325	0.003987	0.00833
611410.81	4206890.15	0.007187	0.003444	0.00719
611437.25	4206884.98	0.006172	0.002961	0.00617
611453.35	4206887.96	0.005918	0.002839	0.00592
611472.24	4206888.75	0.005537	0.002657	0.00554
611492.32	4206887.16	0.005086	0.002442	0.00509
611509.62	4206887.76	0.004806	0.002308	0.00481
611527.31	4206889.15	0.004569	0.002195	0.00457
611546.6	4206887.56	0.004245	0.00204	0.00424
611377.6	4206837.66	0.005333	0.002561	0.00533
611377.41	4206826.33	0.004825	0.002319	0.00483
611377.6	4206816.19	0.00441	0.002121	0.00441
611407.63	4206828.51	0.004385	0.002109	0.00439
611437.05	4206820.96	0.003725	0.001793	0.00372
611474.23	4206850.98	0.004155	0.001998	0.00415
611478.2	4206824.54	0.003364	0.00162	0.00336
611495.9	4206825.93	0.003224	0.001553	0.00322
611509.22	4206853.17	0.00377	0.001814	0.00377
611526.32	4206824.34	0.002925	0.00141	0.00292
611558.33	4206844.02	0.003064	0.001476	0.00306
611554.15	4206823.34	0.002697	0.001301	0.00270
611558.53	4206886.77	0.004067	0.001955	0.00407
611375.81	4206780.4	0.003288	0.001586	0.00329
611387.74	4206763.9	0.002801	0.001353	0.00280
611411.4	4206781.59	0.002972	0.001434	0.00297
611412.6	4206752.37	0.002416	0.001169	0.00242
611440.43	4206779.41	0.002691	0.0013	0.00269
611471.44	4206781.39	0.00251	0.001213	0.00251
611469.26	4206740.64	0.00195	0.000945	0.00195
611499.68	4206782.19	0.002348	0.001135	0.00235
611536.85	4206780.8	0.002129	0.00103	0.00213
611523.14	4206742.03	0.001741	0.000845	0.00174
611556.54	4206774.04	0.001952	0.000945	0.00195
611323.92	4206674.63	0.002106	0.001022	0.00211
611335.65	4206699.68	0.002247	0.001089	0.00225
611362.49	4206701.67	0.002095	0.001016	0.00210
611381.38	4206700.48	0.001978	0.00096	0.00198
611398.08	4206697.1	0.001864	0.000905	0.00186
611417.17	4206699.88	0.001797	0.000873	0.00180
611433.87	4206699.09	0.001718	0.000835	0.00172
611454.55	4206702.27	0.001659	0.000806	0.00166
611471.44	4206700.08	0.00158	0.000768	0.00158
611490.53	4206698.29	0.001503	0.000731	0.00150
611510.61	4206699.68	0.001449	0.000705	0.00145
611531.49	4206698.09	0.001379	0.000671	0.00138
611545.01	4206701.47	0.001362	0.000663	0.00136
611559.92	4206697.3	0.0013	0.000633	0.00130
611335.26	4206651.57	0.001881	0.000914	0.00188
611359.11	4206645.41	0.00172	0.000836	0.00172
611376.21	4206651.17	0.001668	0.000811	0.00167
611398.68	4206649.98	0.001565	0.000762	0.00156
611414.58	4206650.18	0.001503	0.000732	0.00150
611432.87	4206648.59	0.001429	0.000696	0.00143
611471.64	4206649.78	0.00131	0.000639	0.00131
611491.92	4206651.57	0.001259	0.000614	0.00126
611511.41	4206651.77	0.001209	0.00059	0.00121
611527.51	4206650.77	0.001165	0.000569	0.00117
611546.99	4206651.97	0.001125	0.000549	0.00113
611325.51	4206617.57	0.001756	0.000854	0.00176
611344.2	4206617.57	0.00166	0.000807	0.00166
611357.52	4206616.78	0.001594	0.000776	0.00159
611368.66	4206620.55	0.00156	0.000759	0.00156
611381.98	4206618.76	0.001498	0.000729	0.00150
611395.9	4206619.76	0.001447	0.000705	0.00145
611407.82	4206620.75	0.001407	0.000686	0.00141
611421.14	4206619.96	0.001355	0.00066	0.00135
611435.46	4206618.76	0.001306	0.000637	0.00131
611472.44	4206621.55	0.001207	0.000589	0.00121
611485.36	4206619.96	0.001167	0.00057	0.00117
611496.5	4206622.94	0.001148	0.00056	0.00115
611508.82	4206622.14	0.001113	0.000544	0.00111
611522.14	4206620.55	0.001077	0.000526	0.00108
611532.88	4206620.95	0.001054	0.000515	0.00105
611546	4206621.94	0.001029	0.000503	0.00103
611557.13	4206620.16	0.001002	0.00049	0.00100
611327.7	4206564.89	0.001508	0.000734	0.00151
611341.02	4206566.28	0.00147	0.000716	0.00147
611355.14	4206572.84	0.001438	0.0007	0.00144
611369.25	4206575.02	0.001391	0.000678	0.00139
611384.16	4206573.04	0.001329	0.000648	0.00133
611395.1	4206574.63	0.001295	0.000631	0.00129
611407.23	4206574.43	0.001254	0.000612	0.00125

611420.15	4206574.03	0.001212	0.000591	0.00121
611431.88	4206569.86	0.00117	0.000571	0.00117
611473.63	4206575.22	0.001081	0.000528	0.00108
611487.55	4206572.24	0.001042	0.000509	0.00104
611500.27	4206575.22	0.001016	0.000497	0.00102
611512.6	4206575.82	0.000989	0.000484	0.00099
611524.73	4206574.43	0.000961	0.00047	0.00096
611537.85	4206576.22	0.000938	0.000459	0.00094
611548.59	4206575.22	0.000916	0.000448	0.00092
611558.72	4206577.01	0.000901	0.000441	0.00090
611331.88	4206537.85	0.001399	0.000681	0.00140
611332.67	4206513.19	0.00132	0.000644	0.00132
611355.54	4206518.56	0.001259	0.000614	0.00126
611357.72	4206542.42	0.001319	0.000643	0.00132
611371.84	4206555.94	0.001309	0.000638	0.00131
611370.05	4206542.02	0.001277	0.000622	0.00128
611383.57	4206548.58	0.00125	0.00061	0.00125
611397.09	4206548.58	0.001208	0.000589	0.00121
611409.22	4206546.79	0.00117	0.000571	0.00117
611419.95	4206547.59	0.001143	0.000558	0.00114
611432.28	4206550.37	0.001118	0.000546	0.00112
611349.17	4206492.32	0.001212	0.000591	0.00121
611363.69	4206486.95	0.001158	0.000565	0.00116
611375.81	4206491.32	0.001134	0.000554	0.00113
611387.94	4206500.67	0.001122	0.000548	0.00112
611399.08	4206500.87	0.001094	0.000534	0.00109
611409.61	4206504.25	0.001077	0.000526	0.00108
611422.54	4206503.25	0.001045	0.000511	0.00105
611437.65	4206504.45	0.001017	0.000497	0.00102
611374.82	4206454.74	0.001051	0.000513	0.00105
611385.76	4206467.07	0.001052	0.000514	0.00105
611397.68	4206472.44	0.001036	0.000506	0.00104
611411.2	4206477.21	0.001017	0.000497	0.00102
611424.33	4206476.41	0.000988	0.000483	0.00099
611437.25	4206478	0.000967	0.000473	0.00097
611425.52	4206431.08	0.000904	0.000442	0.00090
611476.42	4206548.78	0.001018	0.000498	0.00102
611488.54	4206547.99	0.00099	0.000484	0.00099
611501.27	4206548.38	0.000962	0.000471	0.00096
611512	4206545.8	0.000934	0.000457	0.00093
611524.33	4206546.4	0.000911	0.000446	0.00091
611536.06	4206546.79	0.00089	0.000436	0.00089
611548.98	4206548.98	0.00087	0.000426	0.00087
611559.92	4206549.18	0.000852	0.000417	0.00085
611477.81	4206502.66	0.000936	0.000458	0.00094
611479.99	4206477.61	0.000892	0.000437	0.00089
611491.13	4206505.84	0.000916	0.000448	0.00092
611502.46	4206505.04	0.000893	0.000437	0.00089
611491.72	4206477.8	0.000872	0.000427	0.00087
611503.06	4206479	0.000854	0.000418	0.00085
611514.39	4206503.05	0.000869	0.000426	0.00087
611515.98	4206477.8	0.000831	0.000407	0.00083
611528.31	4206505.84	0.000847	0.000415	0.00085
611528.9	4206476.41	0.000808	0.000396	0.00081
611540.63	4206508.22	0.000829	0.000406	0.00083
611538.25	4206476.41	0.000794	0.000389	0.00079
611552.56	4206505.84	0.000806	0.000395	0.00081
611550.77	4206475.02	0.000774	0.000379	0.00077
611479.99	4206431.88	0.000821	0.000402	0.00082
611493.12	4206432.08	0.000803	0.000393	0.00080
611504.65	4206432.67	0.000788	0.000386	0.00079
611518.56	4206430.88	0.000767	0.000376	0.00077
611529.5	4206430.29	0.000752	0.000369	0.00075
611542.42	4206435.46	0.000742	0.000364	0.00074
611552.76	4206433.07	0.000726	0.000356	0.00073
611479.8	4206406.03	0.000785	0.000385	0.00079
611494.51	4206406.43	0.000767	0.000376	0.00077
611506.24	4206406.83	0.000753	0.000369	0.00075
611518.56	4206405.44	0.000737	0.000361	0.00074
611530.89	4206404.64	0.000721	0.000354	0.00072
611542.62	4206407.03	0.000711	0.000349	0.00071
611555.15	4206405.44	0.000695	0.000341	0.00069
611529.9	4206362.49	0.000676	0.000332	0.00068
611544.81	4206364.08	0.000663	0.000326	0.00066
611558.72	4206362.89	0.000649	0.000319	0.00065
610703.71	4206675.32	0.017596	0.008455	0.01760
610721.12	4206689.86	0.019323	0.009278	0.01932
610736.84	4206686.65	0.019652	0.009431	0.01965
610754.25	4206685.46	0.020145	0.009663	0.02015
610771.15	4206685.12	0.020637	0.009894	0.02064
610789.74	4206688.5	0.021487	0.010297	0.02149
610807.15	4206686.31	0.021696	0.010393	0.02170
610700.5	4206658.42	0.016392	0.007878	0.01639
610703.54	4206637.12	0.015223	0.007316	0.01522
610702.86	4206621.23	0.014341	0.006893	0.01434

610746.81	4206643.04	0.016657	0.007994	0.01666
610777.57	4206642.19	0.0172	0.008249	0.01720
610792.28	4206642.53	0.017453	0.008367	0.01745
610749.18	4206621.57	0.015311	0.00735	0.01531
610749.85	4206602.98	0.014225	0.006829	0.01423
610784.16	4206612.28	0.015203	0.007292	0.01520
610793.29	4206597.74	0.014357	0.006886	0.01436
610810.19	4206587.6	0.013802	0.006619	0.01380
610820	4206591.66	0.014058	0.00674	0.01406
610837.24	4206594.36	0.014202	0.006807	0.01420
610839.6	4206619.21	0.015959	0.007646	0.01596
610834.02	4206641.52	0.017765	0.00851	0.01777
610850.25	4206642.36	0.017885	0.008565	0.01788
610877.29	4206642.87	0.017857	0.008548	0.01786
610878.14	4206626.14	0.016322	0.007815	0.01632
610876.79	4206607.54	0.014838	0.007107	0.01484
610878.31	4206588.95	0.013503	0.006469	0.01350
610762.87	4206569.18	0.012575	0.006038	0.01258
610782.13	4206564.1	0.012431	0.005966	0.01243
610796.84	4206560.56	0.01229	0.005897	0.01229
610815.77	4206555.48	0.012017	0.005765	0.01202
610832.16	4206557.01	0.012043	0.005776	0.01204
610851.43	4206553.96	0.011748	0.005633	0.01175
610880.67	4206553.63	0.011392	0.005461	0.01139
610878.31	4206570.7	0.012365	0.005926	0.01236
610826.68	4206687.13	0.022204	0.010632	0.02220
610844.57	4206686.3	0.022417	0.01073	0.02242
610865.21	4206687.68	0.022886	0.01095	0.02289
610880.9	4206686.3	0.02288	0.010944	0.02288
610899.62	4206692.91	0.02398	0.011466	0.02398
610919.16	4206680.8	0.022134	0.010582	0.02213
610925.76	4206661.81	0.01942	0.009288	0.01942
610927.41	4206642.54	0.017141	0.008201	0.01714
610925.49	4206624.93	0.015461	0.0074	0.01546
610924.94	4206606.21	0.013908	0.006659	0.01391
610922.73	4206591.08	0.012859	0.006159	0.01286
610923.56	4206571.81	0.011627	0.005571	0.01163
610925.21	4206554.47	0.010631	0.005095	0.01063
610956.31	4206695.94	0.024005	0.011469	0.02401
611019.34	4206696.76	0.01963	0.009379	0.01963
610959.06	4206679.15	0.020953	0.010015	0.02095
610962.92	4206664.84	0.018687	0.008935	0.01869
610963.47	4206649.42	0.016748	0.008011	0.01675
610965.12	4206634.29	0.015088	0.007219	0.01509
610958.24	4206619.42	0.014003	0.006702	0.01400
610960.44	4206603.74	0.01269	0.006076	0.01269
610962.64	4206588.32	0.011568	0.00554	0.01157
610968.15	4206560.25	0.009847	0.004719	0.00985
610949.71	4206557.5	0.010204	0.00489	0.01020
611017.96	4206681.9	0.01738	0.008308	0.01738
611021.54	4206668.69	0.015335	0.007333	0.01534
611017.69	4206653.83	0.014042	0.006717	0.01404
611013.83	4206638.97	0.012941	0.006193	0.01294
611013.01	4206623.83	0.011802	0.00565	0.01180
611009.98	4206609.24	0.010975	0.005256	0.01097
611008.05	4206597.68	0.010371	0.004968	0.01037
611001.72	4206570.71	0.009241	0.004429	0.00924
611017.41	4206575.11	0.008835	0.004235	0.00883
611033.38	4206575.66	0.008203	0.003933	0.00820
611050.71	4206697.86	0.015829	0.007567	0.01583
611054.84	4206681.9	0.01346	0.006439	0.01346
611052.92	4206671.17	0.012644	0.00605	0.01264
611054.84	4206650.8	0.010882	0.00521	0.01088
611055.39	4206637.59	0.010005	0.004792	0.01000
611053.47	4206624.65	0.009415	0.00451	0.00941
611054.84	4206605.02	0.008405	0.004029	0.00840
611055.39	4206591.81	0.007844	0.003761	0.00784
611053.47	4206578.87	0.007462	0.003579	0.00746
611057.6	4206560.98	0.006674	0.003203	0.00667
611058.15	4206547.77	0.006293	0.003021	0.00629
611056.22	4206534.84	0.006035	0.002898	0.00604
611021.82	4206533.19	0.007106	0.003409	0.00711
611022.37	4206519.98	0.006699	0.003215	0.00670
611020.44	4206507.04	0.006406	0.003075	0.00641
611028.7	4206492.18	0.005835	0.002802	0.00584
611029.25	4206478.97	0.005535	0.002659	0.00554
611027.32	4206466.03	0.00532	0.002556	0.00532
611022.09	4206449.79	0.005134	0.002467	0.00513
611030.62	4206435.76	0.004741	0.002279	0.00474
611028.7	4206422.82	0.004582	0.002203	0.00458
611057.32	4206514.2	0.005541	0.002661	0.00554
611057.87	4206500.99	0.005265	0.00253	0.00527
611055.94	4206488.05	0.005073	0.002438	0.00507
611057.32	4206473.74	0.004789	0.002302	0.00479
611057.87	4206460.53	0.004569	0.002197	0.00457

611055.94	4206447.59	0.004423	0.002127	0.00442
611056.49	4206431.35	0.004195	0.002018	0.00420
611057.04	4206418.14	0.004018	0.001933	0.00402
611055.12	4206405.21	0.003898	0.001876	0.00390
611056.49	4206387.04	0.003681	0.001772	0.00368
611057.04	4206373.83	0.003541	0.001705	0.00354
611055.12	4206360.9	0.003443	0.001658	0.00344
611021.82	4206405.3	0.00445	0.00214	0.00445
611031.45	4206391.54	0.004117	0.00198	0.00412
611035.85	4206363.74	0.003732	0.001796	0.00373
611085.12	4206364.57	0.003072	0.001481	0.00307
611087.59	4206415.48	0.003467	0.001669	0.00347
611084.02	4206444.38	0.003826	0.001841	0.00383
611084.84	4206458.69	0.003971	0.001911	0.00397
611083.19	4206470.8	0.004158	0.002	0.00416
611082.64	4206503.28	0.004644	0.002233	0.00464
611082.37	4206515.94	0.004854	0.002333	0.00485
611082.92	4206532.18	0.005121	0.002461	0.00512
611082.64	4206545.66	0.005388	0.002588	0.00539
611105.48	4206544.56	0.00462	0.002222	0.00462
611103.83	4206534.65	0.004521	0.002174	0.00452
611079.89	4206585.02	0.00647	0.003105	0.00647
611081.54	4206569.88	0.006008	0.002885	0.00601
611081.82	4206624.84	0.007668	0.003677	0.00767
611082.37	4206611.63	0.007171	0.00344	0.00717
611080.44	4206598.69	0.006857	0.00329	0.00686
611104.66	4206591.53	0.005541	0.002662	0.00554
611105.48	4206580.53	0.005277	0.002536	0.00528
611103.56	4206567.59	0.005107	0.002455	0.00511
611103.83	4206624.29	0.006395	0.00307	0.00640
611102.73	4206612.45	0.00614	0.002948	0.00614
611104.11	4206601.99	0.00581	0.002791	0.00581
611079.89	4206667.5	0.009803	0.004696	0.00980
611080.44	4206654.29	0.009041	0.004332	0.00904
611078.51	4206641.35	0.008565	0.004105	0.00856
611100.53	4206702.18	0.009752	0.004672	0.00975
611079.61	4206696.95	0.011887	0.005689	0.01189
611077.69	4206684.01	0.0111	0.005314	0.01110
611102.46	4206679.15	0.008393	0.004024	0.00839
611101.91	4206689.61	0.008933	0.004281	0.00893
611103.83	4206657.41	0.007425	0.003562	0.00743
611103.28	4206667.86	0.007856	0.003767	0.00786
611104.11	4206634.56	0.00667	0.003201	0.00667
611103.56	4206645.02	0.007024	0.003371	0.00702
611128.88	4206688.23	0.006673	0.003204	0.00667
611128.33	4206698.69	0.007035	0.003377	0.00704
611128.88	4206664.29	0.00603	0.002897	0.00603
611128.33	4206674.74	0.006331	0.003041	0.00633
611130.81	4206643.09	0.005453	0.002621	0.00545
611130.25	4206653.55	0.005705	0.002742	0.00570
611130.25	4206618.32	0.005006	0.002407	0.00501
611129.7	4206628.78	0.005222	0.002511	0.00522
611147.87	4206682.18	0.005424	0.002609	0.00542
611147.32	4206692.63	0.005684	0.002733	0.00568
611148.7	4206659.88	0.004955	0.002384	0.00495
611148.14	4206670.34	0.005173	0.002488	0.00517
611149.25	4206637.31	0.004561	0.002196	0.00456
611148.7	4206647.77	0.004748	0.002285	0.00475
611149.25	4206613.37	0.004221	0.002033	0.00422
611148.7	4206623.83	0.004383	0.00211	0.00438
611175.39	4206687.68	0.004421	0.00213	0.00442
611174.84	4206698.14	0.004625	0.002227	0.00462
611195.21	4206682.45	0.003788	0.001827	0.00379
611194.66	4206692.91	0.003955	0.001907	0.00395
611175.39	4206664.01	0.004062	0.001958	0.00406
611174.84	4206674.47	0.004228	0.002038	0.00423
611194.93	4206660.98	0.003521	0.001699	0.00352
611194.38	4206671.44	0.003661	0.001766	0.00366
611174.29	4206641.44	0.003805	0.001835	0.00380
611173.74	4206651.9	0.003949	0.001904	0.00395
611195.21	4206638.14	0.00327	0.001579	0.00327
611194.66	4206648.6	0.003389	0.001636	0.00339
611176.49	4206618.6	0.003496	0.001687	0.00350
611175.94	4206629.06	0.00362	0.001746	0.00362
611195.48	4206613.64	0.003039	0.001468	0.00304
611194.93	4206624.1	0.003142	0.001518	0.00314
610704.74	4206583.83	0.012545	0.006031	0.01254
610703.54	4206601.74	0.013365	0.006425	0.01337
610705.38	4206547.72	0.011018	0.005299	0.01102
610704.19	4206565.63	0.011756	0.005653	0.01176
610705.71	4206512.75	0.009782	0.004706	0.00978
610704.51	4206530.66	0.010383	0.004994	0.01038
610707	4206477.13	0.008716	0.004194	0.00872
610705.8	4206495.04	0.009222	0.004437	0.00922
610707.65	4206443.46	0.007819	0.003764	0.00782

610706.45	4206461.36	0.008284	0.003987	0.00828
610707.65	4206407.84	0.006996	0.003369	0.00700
610706.45	4206425.74	0.007389	0.003558	0.00739
610703.12	4206366.39	0.006194	0.002985	0.00619
610703.86	4206388.18	0.006597	0.003178	0.00660
610754.28	4206417.88	0.007278	0.003501	0.00728
610746.28	4206438.7	0.007797	0.003751	0.00780
610765.61	4206379.99	0.006424	0.003092	0.00642
610764.41	4206397.9	0.006809	0.003276	0.00681
610803.82	4206388.73	0.006507	0.003129	0.00651
610802.62	4206406.64	0.006913	0.003324	0.00691
610755.3	4206360.77	0.006077	0.002926	0.00608
610768.58	4206436.87	0.007754	0.003729	0.00775
610791.24	4206432.98	0.007605	0.003656	0.00760
610806.14	4206426.83	0.007388	0.003551	0.00739
610805.81	4206369.51	0.006108	0.002938	0.00611
610804.52	4206353.65	0.005821	0.002801	0.00582
610847.59	4206432.33	0.007275	0.003495	0.00727
610865.4	4206429.74	0.007054	0.003389	0.00705
610882.56	4206432.66	0.006956	0.003341	0.00696
610902.31	4206429.42	0.006649	0.003194	0.00665
610924.98	4206459.53	0.007097	0.003407	0.00710
610924.33	4206496.45	0.008224	0.003946	0.00822
610925.3	4206509.08	0.008656	0.004152	0.00866
610748.5	4206527.86	0.010608	0.005097	0.01061
610766.31	4206522.35	0.010464	0.005026	0.01046
610782.5	4206515.88	0.01025	0.004923	0.01025
610798.04	4206512.32	0.010113	0.004856	0.01011
610819.74	4206511.02	0.010007	0.004803	0.01001
610836.25	4206510.7	0.009898	0.00475	0.00990
610856.33	4206507.46	0.009596	0.004605	0.00960
610879.97	4206511.99	0.009499	0.004557	0.00950
610880.94	4206492.56	0.008757	0.004202	0.00876
610879.32	4206474.75	0.00818	0.003926	0.00818
610855.36	4206477.67	0.008533	0.004097	0.00853
610836.25	4206476.37	0.008643	0.00415	0.00864
610782.34	4206485.12	0.009142	0.004392	0.00914
610763.88	4206489.33	0.009269	0.004455	0.00927
610817.96	4206481.23	0.008915	0.004281	0.00892
610798.85	4206479.93	0.008943	0.004296	0.00894
610748.5	4206494.51	0.009408	0.004522	0.00941
610921.74	4206437.52	0.006588	0.003164	0.00659
610845.31	4206376.74	0.00603	0.002899	0.00603
610861.92	4206386.8	0.00611	0.002937	0.00611
610870.34	4206398.97	0.006294	0.003025	0.00629
610902.16	4206393.59	0.005879	0.002826	0.00588
610920.18	4206388.2	0.005579	0.002682	0.00558
610921.11	4206378.14	0.00539	0.002591	0.00539
610917.84	4206361.53	0.005148	0.002475	0.00515
610845.78	4206356.85	0.005666	0.002725	0.00567
610867.77	4206365.04	0.005655	0.00272	0.00566
610886.72	4206365.28	0.005506	0.002648	0.00551
610903.57	4206363.4	0.005319	0.002558	0.00532
610950.59	4206356.39	0.004718	0.002269	0.00472
610965.33	4206355.45	0.004534	0.002181	0.00453
610995.74	4206351.01	0.004105	0.001975	0.00411
610987.56	4206368.32	0.004433	0.002132	0.00443
610970.95	4206394.76	0.005051	0.002428	0.00505
610968.61	4206411.13	0.005363	0.002577	0.00536
610949.42	4206401.77	0.005464	0.002626	0.00546
610960.42	4206425.64	0.00576	0.002767	0.00576
610944.04	4206426.34	0.006019	0.002892	0.00602
610966.5	4206439.67	0.005951	0.002858	0.00595
610964.39	4206457.22	0.00638	0.003063	0.00638
610948.24	4206509.73	0.008227	0.003946	0.00823
610965.72	4206510.7	0.007879	0.00378	0.00788
610983.53	4206509.08	0.007409	0.003555	0.00741
610970.26	4206484.15	0.006965	0.003343	0.00696
610963.46	4206468.93	0.006686	0.00321	0.00669
611085.12	4206428.94	0.003641	0.001753	0.00364
611083.18	4206485.29	0.00436	0.002097	0.00436
611221.38	4206686.44	0.00331	0.001599	0.00331
611220.83	4206696.9	0.00346	0.001671	0.00346
611221.77	4206676.32	0.003183	0.001538	0.00318
611240.27	4206683.06	0.00298	0.001441	0.00298
611239.72	4206693.52	0.003112	0.001504	0.00311
611240.67	4206672.94	0.002866	0.001387	0.00287
611222.17	4206653.03	0.002935	0.001419	0.00294
611221.62	4206663.49	0.003047	0.001473	0.00305
611222.17	4206640.92	0.002826	0.001367	0.00283
611241.86	4206650.05	0.002641	0.001278	0.00264
611241.31	4206660.5	0.002739	0.001325	0.00274
611241.86	4206637.94	0.002543	0.001232	0.00254
611266.92	4206689.62	0.002727	0.00132	0.00273
611266.37	4206700.08	0.002856	0.001381	0.00286

611267.32	4206679.9	0.002623	0.00127	0.00262
611268.31	4206659.19	0.00243	0.001177	0.00243
611267.76	4206669.65	0.002523	0.001222	0.00252
611268.31	4206647.08	0.002338	0.001133	0.00234
611221.89	4206630.7	0.002744	0.001328	0.00274
611241.58	4206627.72	0.00247	0.001196	0.00247
611268.53	4206635.97	0.002257	0.001094	0.00226
611269.52	4206627.02	0.00219	0.001062	0.00219
611269.32	4206615.69	0.002122	0.001029	0.00212
611235.12	4206603.35	0.002377	0.001151	0.00238
611125.73	4206584.46	0.004583	0.002205	0.00458
611137.26	4206585.26	0.004224	0.002034	0.00422
611149	4206584.06	0.003868	0.001863	0.00387
611160.43	4206587.05	0.003586	0.001729	0.00359
611172.17	4206585.85	0.003287	0.001586	0.00329
611185.49	4206588.64	0.003027	0.001462	0.00303
611197.23	4206587.44	0.002801	0.001354	0.00280
611128.02	4206567.75	0.004272	0.002056	0.00427
611139.75	4206566.56	0.003922	0.001889	0.00392
611150.09	4206568.95	0.003673	0.00177	0.00367
611161.83	4206567.75	0.003366	0.001624	0.00337
611171.17	4206569.15	0.003167	0.001528	0.00317
611182.91	4206567.95	0.002919	0.00141	0.00292
611194.44	4206567.75	0.002711	0.001311	0.00271
611206.18	4206566.56	0.002521	0.00122	0.00252
611216.92	4206568.35	0.002384	0.001154	0.00238
611228.65	4206567.16	0.002236	0.001083	0.00224
611204.89	4206588.04	0.00268	0.001296	0.00268
611238.7	4206569.35	0.00214	0.001038	0.00214
611266.54	4206574.12	0.001921	0.000932	0.00192
611265.15	4206558.8	0.001859	0.000903	0.00186
611262.16	4206541.9	0.001808	0.000878	0.00181
611129.21	4206540.11	0.00387	0.001863	0.00387
611140.94	4206538.92	0.003558	0.001715	0.00356
611155.66	4206540.91	0.003239	0.001562	0.00324
611167.4	4206539.71	0.002987	0.001442	0.00299
611181.32	4206541.7	0.002751	0.001329	0.00275
611193.05	4206540.51	0.002559	0.001237	0.00256
611205.78	4206542.1	0.002385	0.001154	0.00238
611219.3	4206542.89	0.002216	0.001074	0.00222
611232.23	4206542.7	0.002073	0.001005	0.00207
611243.97	4206541.5	0.001954	0.000948	0.00195
611204.79	4206362.96	0.001673	0.000811	0.00167
611349.5	4206372.82	0.000956	0.000468	0.00096
611313.91	4206380.65	0.001081	0.000528	0.00108
611310.48	4206419.52	0.001173	0.000572	0.00117
611267.05	4206500.67	0.001615	0.000785	0.00161
611497.56	4206304.83	0.000642	0.000316	0.00064
611419.07	4206310.55	0.000735	0.000361	0.00074
611041.07	4206301.25	0.003116	0.001501	0.00312
611069.15	4206301.53	0.002819	0.001359	0.00282
611083.74	4206300.98	0.002661	0.001283	0.00266
611100.26	4206300.7	0.002485	0.001199	0.00248
611111.82	4206300.15	0.00236	0.001139	0.00236
611123.93	4206299.33	0.002232	0.001078	0.00223
611137.15	4206300.43	0.002108	0.001019	0.00211
611150.91	4206299.88	0.001976	0.000956	0.00198
611164.12	4206300.7	0.001857	0.000899	0.00186
610871.77	4206303.18	0.004671	0.002248	0.00467
610919.67	4206299.6	0.004273	0.002056	0.00427
610946.1	4206301.25	0.004066	0.001957	0.00407
610968.4	4206299.6	0.003838	0.001848	0.00384
610997.85	4206300.15	0.003553	0.001711	0.00355
610800.68	4206302.27	0.005017	0.002416	0.00502
610345.98	4206368.37	0.004138	0.002022	0.00414
610371.57	4206456.46	0.005033	0.002459	0.00503
610277.64	4206458.4	0.004076	0.002007	0.00408
610294.49	4206372.25	0.00382	0.001873	0.00382
610341.12	4206437.68	0.004555	0.00223	0.00456
610508	4206352.9	0.005132	0.002487	0.00513
610536.83	4206358.41	0.005353	0.002591	0.00535
610518.69	4206394.68	0.005682	0.002752	0.00568
610506.38	4206428.37	0.005996	0.002906	0.00600
610407.88	4206300.63	0.004073	0.001982	0.00407
610413.21	4206694.6	0.007227	0.003555	0.00723
610451.93	4206697.23	0.00838	0.004103	0.00838
610448.83	4206717.31	0.008429	0.004134	0.00843
610438.65	4207091.1	0.004947	0.003856	0.00495
610449.61	4207060.72	0.005259	0.003408	0.00526
610454.96	4207045.53	0.005577	0.003402	0.00558
610451.02	4207000.82	0.006225	0.003448	0.00623
610446.24	4206963.41	0.006753	0.003583	0.00675
610457.21	4206987.6	0.006678	0.003616	0.00668
610421.77	4207012.91	0.005261	0.003042	0.00526
610421.49	4207040.47	0.004904	0.00304	0.00490

610362.43	4207105.72	0.004288	0.004168	0.00429
610378.74	4207077.32	0.004047	0.003082	0.00405
610364.4	4207040.75	0.003982	0.002604	0.00398
610319.96	4207038.22	0.003478	0.002346	0.00348
610334.3	4207091.94	0.003724	0.003297	0.00372
610329.8	4207109.1	0.004146	0.004315	0.00432
610350.94	4206635.65	0.005598	0.002764	0.00560
610530.61	4206613.88	0.009365	0.00454	0.00937
610531.61	4206594.02	0.009008	0.004366	0.00901
610537.23	4206566.38	0.008613	0.004171	0.00861
610565.36	4206541.23	0.008631	0.004173	0.00863
610627.57	4206493.91	0.008501	0.0041	0.00850
610633.2	4206515.75	0.009119	0.004396	0.00912
610666.29	4206515.75	0.009505	0.004577	0.00950
610646.1	4206559.1	0.010581	0.005098	0.01058
610646.77	4206594.51	0.011822	0.005695	0.01182
610578.59	4206617.02	0.010706	0.005175	0.01071
610620.29	4206619.66	0.011946	0.005762	0.01195
610608.05	4206563.07	0.009923	0.004789	0.00992
610608.05	4206545.2	0.009485	0.004578	0.00948
610623.6	4206564.4	0.01027	0.004953	0.01027
610623.6	4206546.53	0.009765	0.004709	0.00976
610563.04	4206597.82	0.009826	0.004753	0.00983
610587.86	4206596.83	0.010396	0.005022	0.01040
610564.7	4206580.61	0.009469	0.004579	0.00947
610589.52	4206581.61	0.010033	0.004846	0.01003
610734.02	4206917.57	0.082068	0.039279	0.08207
610754.27	4206913.28	0.087378	0.041792	0.08738
610779.19	4206906.67	0.090578	0.043297	0.09058
610824.35	4206899.66	0.100064	0.047782	0.10006
610820.85	4206880.97	0.078992	0.037741	0.07899
610811.11	4206855.27	0.060097	0.028734	0.06010
610717.67	4206895.37	0.058793	0.028183	0.05879
610731.69	4206880.97	0.056353	0.027002	0.05635
610715.72	4206858	0.043948	0.021082	0.04395
610721.17	4206833.47	0.038656	0.018544	0.03866
610758.94	4206842.03	0.046822	0.022425	0.04682
610767.51	4206870.84	0.06005	0.028739	0.06005
610865.01	4206886.37	0.098086	0.046808	0.09809
610909.74	4206874.67	0.098471	0.04696	0.09847
610860.95	4206838.53	0.058958	0.028163	0.05896
610888.6	4206829.18	0.058276	0.027824	0.05828
610790.87	4206784.8	0.035379	0.016939	0.03538
610816.95	4206785.58	0.037324	0.017858	0.03732
610850.44	4206785.19	0.039516	0.018892	0.03952
610898.33	4206797.26	0.047451	0.022658	0.04745
610894.83	4206755.59	0.035766	0.017087	0.03577
610897.55	4206780.9	0.042469	0.020283	0.04247
610886.81	4206880.99	0.098723	0.047096	0.09872
611023.86	4206760.97	0.04129	0.019688	0.04129
611041.14	4206759.94	0.035602	0.01698	0.03560
611061.35	4206762.7	0.029352	0.014004	0.02935
610754.89	4206782.37	0.03221	0.015438	0.03221
610844.56	4206719.24	0.026747	0.012798	0.02675
610513.96	4206710.62	0.010613	0.005165	0.01061
610591.87	4206713.73	0.014542	0.007028	0.01454
610668.23	4206716.46	0.018819	0.009055	0.01882
610545.12	4206684.51	0.011502	0.005576	0.01150
610637.84	4206683.34	0.015407	0.007424	0.01541
610512.01	4206642.44	0.009399	0.004565	0.00940
610584.86	4206649.06	0.011994	0.005795	0.01199
610665.5	4206649.06	0.014736	0.007092	0.01474
609975.26	4207082.82	0.002416	0.002912	0.00291
609945.83	4207083.32	0.002405	0.002972	0.00297
609822.62	4207152.66	0.002676	0.003884	0.00388
609804.66	4207094.79	0.002997	0.004373	0.00437
609772.24	4207094.79	0.003035	0.004496	0.00450
609700.41	4207156.65	0.002082	0.002964	0.00296
609633.07	4207074.84	0.001832	0.0025	0.00250
609555.75	4207074.84	0.001967	0.00282	0.00282
609620.1	4207148.17	0.002107	0.003146	0.00315
609556.25	4207145.67	0.00206	0.003103	0.00310
609502.88	4207137.69	0.00223	0.003435	0.00343
610698.46	4207080.47	0.053534	0.026657	0.05353
610693.24	4207063.42	0.054604	0.026886	0.05460
610706.16	4207019.7	0.085385	0.041158	0.08539
610680.04	4207080.09	0.034398	0.01755	0.03440
610682.42	4207046.11	0.04728	0.02322	0.04728
CONCUNIT ug/	m^3			
DEPUNIT g/m^	2			

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*  AERMOD ( 1808  1): C:\Users\kj     ohnson\Desktop\     49400007C onHRA\MLC  _Oakley\    MLC_Oakl ey.isc      1/2/2001  1/9/1900
*  AERMET ( 1413  4):                                                                                  14:40:03  0:00:00
*  MODELING OPTI ONS USED:  Reg  DFAULT  CONC  E    LEV  URBA  N
*  PLOT          FILE OF ANNUAL VALUES AVERAGED ACROSS    5 YEARS     FOR SOUR  CE GROUP  : AREA
*  FOR A         TOTAL OF  750  RECEPTORS.
*  FORMA         T: (3(1X,F13.5) ,3(1X,F8.2),2X,  A6,2X,A8,  2X,I8.8,2  X,A8)
*  X             Y              AVERAGE CONC      ZELEV      ZHILL       ZFLAG    AVE      GRP      NUM YRS  NET ID
*  ____________  _____________  ________________  _____  _____  _____  ____  ____  
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611523.13	4207474.34	23884.62491	3.05	3.05	0	ANNUAL	AREA	5		611523.13	4207474.34	0.12708	3.05	3.05	0	ANNUAL	LINE	5
611552.03	4207482.79	22789.46248	3.05	3.05	0	ANNUAL	AREA	5		611552.03	4207482.79	0.11966	3.05	3.05	0	ANNUAL	LINE	5
611519.59	4207462.51	24820.91038	3.05	3.05	0	ANNUAL	AREA	5		611519.59	4207462.51	0.12799	3.05	3.05	0	ANNUAL	LINE	5
611554.73	4207464.37	23921.35583	3.05	3.05	0	ANNUAL	AREA	5		611554.73	4207464.37	0.1186	3.05	3.05	0	ANNUAL	LINE	5
611524.99	4207440.55	26310.74252	3.05	3.05	0	ANNUAL	AREA	5		611524.99	4207440.55	0.12584	3.05	3.05	0	ANNUAL	LINE	5
611555.24	4207445.11	25138.00661	3.05	3.05	0	ANNUAL	AREA	5		611555.24	4207445.11	0.11765	3.05	3.05	0	ANNUAL	LINE	5
611555.58	4207427.03	26262.72164	3.05	3.05	0	ANNUAL	AREA	5		611555.58	4207427.03	0.11639	3.05	3.05	0	ANNUAL	LINE	5
611557.94	4207398.3	27891.41807	3.05	3.05	0	ANNUAL	AREA	5		611557.94	4207398.3	0.11306	3.05	3.05	0	ANNUAL	LINE	5
611522.63	4207422.64	27693.08983	3.05	3.05	0	ANNUAL	AREA	5		611522.63	4207422.64	0.12555	3.05	3.05	0	ANNUAL	LINE	5
611522.63	4207401.35	29233.03027	3.05	3.05	0	ANNUAL	AREA	5		611522.63	4207401.35	0.12381	3.05	3.05	0	ANNUAL	LINE	5
611542.4	4207388.34	29204.1871	3.05	3.05	0	ANNUAL	AREA	5		611542.4	4207388.34	0.11639	3.05	3.05	0	ANNUAL	LINE	5
611511.98	4207382.93	31050.49001	3.05	3.05	0	ANNUAL	AREA	5		611511.98	4207382.93	0.12524	3.05	3.05	0	ANNUAL	LINE	5
611508.43	4207369.24	32232.61583	3.05	3.05	0	ANNUAL	AREA	5		611508.43	4207369.24	0.12465	3.05	3.05	0	ANNUAL	LINE	5
611535.81	4207363.5	31050.01438	3.05	3.05	0	ANNUAL	AREA	5		611535.81	4207363.5	0.11503	3.05	3.05	0	ANNUAL	LINE	5
611548.65	4207344.4	31277.09208	3.05	3.05	0	ANNUAL	AREA	5		611548.65	4207344.4	0.10813	3.05	3.05	0	ANNUAL	LINE	5
611559.8	4207244.2	32921.01129	3.51	3.51	0	ANNUAL	AREA	5		611559.8	4207244.2	0.08422	3.51	3.51	0	ANNUAL	LINE	5
611558.62	4207227.64	32974.88161	3.97	3.97	0	ANNUAL	AREA	5		611558.62	4207227.64	0.08065	3.97	3.97	0	ANNUAL	LINE	5
611555.24	4207203.99	32985.54274	4.77	4.77	0	ANNUAL	AREA	5		611555.24	4207203.99	0.07579	4.77	4.77	0	ANNUAL	LINE	5
611557.27	4207183.2	32198.37203	5.29	5.29	0	ANNUAL	AREA	5		611557.27	4207183.2	0.07051	5.29	5.29	0	ANNUAL	LINE	5
611554.23	4207164.62	31818.90119	5.73	5.73	0	ANNUAL	AREA	5		611554.23	4207164.62	0.06668	5.73	5.73	0	ANNUAL	LINE	5
611557.77	4207142.31	30325.85955	6.16	6.16	0	ANNUAL	AREA	5		611557.77	4207142.31	0.06101	6.16	6.16	0	ANNUAL	LINE	5
611547.97	4207121.19	30095.51021	7.18	7.18	0	ANNUAL	AREA	5		611547.97	4207121.19	0.05736	7.18	7.18	0	ANNUAL	LINE	5
611546.96	4207102.77	28792.74694	8.45	8.45	0	ANNUAL	AREA	5		611546.96	4207102.77	0.05291	8.45	8.45	0	ANNUAL	LINE	5
611551.18	4207088.92	27188.19377	9.09	9.09	0	ANNUAL	AREA	5		611551.18	4207088.92	0.04934	9.09	9.09	0	ANNUAL	LINE	5
611555.91	4207066.78	24736.55188	10.22	10.22	0	ANNUAL	AREA	5		611555.91	4207066.78	0.04433	10.22	10.22	0	ANNUAL	LINE	5
611476.99	4207114.19	39032.5099	7.79	7.79	0	ANNUAL	AREA	5		611476.99	4207114.19	0.06563	7.79	7.79	0	ANNUAL	LINE	5
611498.11	4207124.33	36633.73816	7.53	7.53	0	ANNUAL	AREA	5		611498.11	4207124.33	0.06521	7.53	7.53	0	ANNUAL	LINE	5
611517.37	4207121.63	33792.74611	7.76	7.76	0	ANNUAL	AREA	5		611517.37	4207121.63	0.06142	7.76	7.76	0	ANNUAL	LINE	5
611516.7	4207103.71	32417.07425	8.72	8.72	0	ANNUAL	AREA	5		611516.7	4207103.71	0.05665	8.72	8.72	0	ANNUAL	LINE	5
611397.15	4207001.31	38398.34777	5.17	5.17	0	ANNUAL	AREA	5		611397.15	4207001.31	0.04726	5.17	5.17	0	ANNUAL	LINE	5
611405.21	4206965.9	30504.07654	4.72	4.72	0	ANNUAL	AREA	5		611405.21	4206965.9	0.04043	4.72	4.72	0	ANNUAL	LINE	5
611417.66	4206992.52	33221.65735	5.18	5.18	0	ANNUAL	AREA	5		611417.66	4206992.52	0.04372	5.18	5.18	0	ANNUAL	LINE	5
611434.86	4206992.14	30559.37492	5.32	5.32	0	ANNUAL	AREA	5		611434.86	4206992.14	0.04223	5.32	5.32	0	ANNUAL	LINE	5
611454.74	4206982.79	26575.40804	5.33	5.33	0	ANNUAL	AREA	5		611454.74	4206982.79	0.03925	5.33	5.33	0	ANNUAL	LINE	5
611462.1	4206968.28	23744.41903	5.12	5.12	0	ANNUAL	AREA	5		611462.1	4206968.28	0.03674	5.12	5.12	0	ANNUAL	LINE	5
611453.75	4206949.79	22065.52684	4.66	4.66	0	ANNUAL	AREA	5		611453.75	4206949.79	0.03499	4.66	4.66	0	ANNUAL	LINE	5
611447.79	4206931.5	20148.71213	4.54	4.54	0	ANNUAL	AREA	5		611447.79	4206931.5	0.03335	4.54	4.54	0	ANNUAL	LINE	5
611475.02	4206936.87	18595.81883	4.79	4.79	0	ANNUAL	AREA	5		611475.02	4206936.87	0.03239	4.79	4.79	0	ANNUAL	LINE	5
611496.69	4206939.06	17280.63297	5.01	5.01	0	ANNUAL	AREA	5		611496.69	4206939.06	0.03147	5.01	5.01	0	ANNUAL	LINE	5
611513	4206936.67	15990.11019	5.17	5.17	0	ANNUAL	AREA	5		611513	4206936.67	0.03044	5.17	5.17	0	ANNUAL	LINE	5
611530.89	4206938.86	15159.80647	5.35	5.35	0	ANNUAL	AREA	5		611530.89	4206938.86	0.0298	5.35	5.35	0	ANNUAL	LINE	5
611546.99	4206935.68	14038.2171	5.52	5.52	0	ANNUAL	AREA	5		611546.99	4206935.68	0.02881	5.52	5.52	0	ANNUAL	LINE	5
611404.05	4206946.01	27128.95817	4.38	4.38	0	ANNUAL	AREA	5		611404.05	4206946.01	0.03779	4.38	4.38	0	ANNUAL	LINE	5
611405.64	4206926.73	23642.49099	4.19	4.19	0	ANNUAL	AREA	5		611405.64	4206926.73	0.0354	4.19	4.19	0	ANNUAL	LINE	5
611403.65	4206905.06	20382.68166	4.06	4.06	0	ANNUAL	AREA	5		611403.65	4206905.06	0.03332	4.06	4.06	0	ANNUAL	LINE	5
611410.81	4206890.15	17590.55265	4.13	4.13	0	ANNUAL	AREA	5		611410.81	4206890.15	0.03158	4.13	4.13	0	ANNUAL	LINE	5
611437.25	4206884.98	15103.9464	4.41	4.41	0	ANNUAL	AREA	5		611437.25	4206884.98	0.02977	4.41	4.41	0	ANNUAL	LINE	5
611453.35	4206887.96	14481.35066	4.57	4.57	0	ANNUAL	AREA	5		611453.35	4206887.96	0.02921	4.57	4.57	0	ANNUAL	LINE	5
611472.24	4206888.75	13545.56397	4.93	4.93	0	ANNUAL	AREA	5		611472.24	4206888.75	0.0284	4.93	4.93	0	ANNUAL	LINE	5
611492.32	4206887.16	12440.36964	5.25	5.25	0	ANNUAL	AREA	5		611492.32	4206887.16	0.02741	5.25	5.25	0	ANNUAL	LINE	5
611509.62	4206887.76	11754.23398	5.42	5.42	0	ANNUAL	AREA	5		611509.62	4206887.76	0.02674	5.42	5.42	0	ANNUAL	LINE	5
611527.31	4206889.15	11173.87578	5.59	5.59	0	ANNUAL	AREA	5		611527.31	4206889.15	0.02613	5.59	5.59	0	ANNUAL	LINE	5
611546.6	4206887.56	10380.06767	5.77	5.77	0	ANNUAL	AREA	5		611546.6	4206887.56	0.02531	5.77	5.77	0	ANNUAL	LINE	5
611377.6	4206837.66	13044.97607	4.1	4.1	0	ANNUAL	AREA	5		611377.6	4206837.66	0.0295	4.1	4.1	0	ANNUAL	LINE	5
611377.41	4206826.33	11799.11762	4.1	4.1	0	ANNUAL	AREA	5		611377.41	4206826.33	0.02879	4.1	4.1	0	ANNUAL	LINE	5
611377.6	4206816.19	10779.62814	4.2	4.2	0	ANNUAL	AREA	5		611377.6	4206816.19	0.02818	4.2	4.2	0	ANNUAL	LINE	5
611407.63	4206828.51	10720.84885	4.41	4.41	0	ANNUAL	AREA	5		611407.63	4206828.51	0.02743	4.41	4.41	0	ANNUAL	LINE	5
611437.05	4206820.96	9102.97431	4.87	4.87	0	ANNUAL	AREA	5		611437.05	4206820.96	0.02571	4.87	4.87	0	ANNUAL	LINE	5
611474.23	4206850.98	10158.46116	5.13	5.13	0	ANNUAL	AREA	5		611474.23	4206850.98	0.02585	5.13	5.13	0	ANNUAL	LINE	5
611478.2	4206824.54	8218.87414	5.43	5.43	0	ANNUAL	AREA	5		611478.2	4206824.54	0.02428	5.43	5.43	0	ANNUAL	LINE	5
611495.9	4206825.93	7876.49136	5.61	5.61	0	ANNUAL	AREA	5		611495.9	4206825.93	0.02371	5.61	5.61	0	ANNUAL	LINE	5
611509.22	4206853.17	9215.88107	5.47	5.47	0	ANNUAL	AREA	5		611509.22	4206853.17	0.02464	5.47	5.47	0	ANNUAL	LINE	5
611526.32	4206824.34	7143.67045	5.92	5.92	0	ANNUAL	AREA	5		611526.32	4206824.34	0.02261	5.92	5.92	0	ANNUAL	LINE	5
611558.33	4206844.02	7485.47824	5.85	5.85	0	ANNUAL	AREA	5		611558.33	4206844.02	0.02252	5.85	5.85	0	ANNUAL	LINE	5
611554.15	4206823.34	6586.44537	6	6	0	ANNUAL	AREA	5		611554.15	4206823.34	0.0217	6	6	0	ANNUAL	LINE	5
611558.53	4206886.77	9943.822	5.79	5.79	0	ANNUAL	AREA	5		611558.53	4206886.77	0.02483	5.79	5.79	0	ANNUAL	LINE	5
611375.81	4206780.4	8029.73547	4.73	4.73	0	ANNUAL	AREA	5		611375.81	4206780.4	0.02636	4.73	4.73	0	ANNUAL	LINE	5
611387.74	4206763.9	6837.39178	4.99	4.99	0	ANNUAL	AREA	5		611387.74	4206763.9	0.02506	4.99	4.99	0	ANNUAL	LINE	5
611411.4	4206781.59	7256.45615	4.89	4.89	0	ANNUAL	AREA	5		611411.4	4206781.59	0.02486	4.89	4.89	0	ANNUAL	LINE	5
611412.6	4206752.37	5893.29104	5.22	5.22	0	ANNUAL	AREA	5		611412.6	4206752.37	0.02357	5.22	5.22	0	ANNUAL	LINE	5
611440.43	4206779.41	6569.50182	5.21	5.21	0	ANNUAL	AREA	5		611440.43	4206779.41	0.02362	5.21	5.21	0	ANNUAL	LINE	5
611471.44	4206781.39	6126.17427	5.51	5.51	0	ANNUAL	AREA	5		611471.44	4206781.39	0.02259	5.51	5.51	0	ANNUAL	LINE	5
611469.26	4206740.64	4753.89884	5.64	5.64	0	ANNUAL	AREA	5		611469.26	4206740.64	0.02116	5.64	5.64	0	ANNUAL	LINE	5
611499.68	4206782.19	5730.22735	5.78	5.78	0	ANNUAL	AREA	5		611499.68	4206782.19	0.02169	5.78	5.78	0	ANNUAL	LINE	5
611536.85	4206780.8	5192.88254	6.06	6.06	0	ANNUAL	AREA	5		611536.85	4206780.8	0.02053	6.06	6.06	0	ANNUAL	LINE	5
611523.14	4206742.03	4243.76327	6.1	6.1	0	ANNUAL	AREA	5		611523.14	4206742.03	0.01962	6.1	6.1	0	ANNUAL	LINE	5
611556.54	4206774.04	4761.78268	6.1	6.1	0	ANNUAL	AREA	5		611556.54	4206774.04	0.01975	6.1	6.1	0	ANNUAL	LINE	5
611323.92	4206674.63	5133.50789	6.1	6.1	0	ANNUAL	AREA	5		611323.92	4206674.63	0.02395	6.1	6.1	0	ANNUAL	LINE	5
611335.65	4206699.68	5478.2258	6.1	6.1	0	ANNUAL	AREA	5		611335.65	4206699.68	0.02449	6.1	6.1	0	ANNUAL	LINE	5
611362.49	4206701.67	5107.14885	6.1	6.1	0	ANNUAL	AREA	5		611362.49	4206701.67	0.02351	6.1	6.1	0	ANNUAL	LINE	5
611381.38	4206700.48	4819.54834	6.1	6.1	0	ANNUAL	AREA	5		611381.38	4206700.48	0.02277	6.1	6.1	0	ANNUAL	LINE	5
611398.08	4206697.1	4540.55002	6.1	6.1	0	ANNUAL	AREA	5		611398.08	4206697.1	0.02206	6.1	6.1	0	ANNUAL	LINE	5
611417.17	4206699.88	4377.02011	6.1	6.1	0	ANNUAL	AREA	5		611417.17	4206699.88	0.02151	6.1	6.1	0	ANNUAL	LINE	5
611433.87	4206699.09	4184.85382	6.02	6.02	0	ANNUAL	AREA	5		611433.87	4206699.09	0.02094	6.02	6.02	0	ANNUAL	LINE	5
611454.55	4206702.27	4040.22588	5.83	5.83	0	ANNUAL	AREA	5		611454.55	4206702.27	0.0204	5.83	5.83	0	ANNUAL	LINE	5
611471.44	4206700.08	3848.66244	5.99	5.99	0	ANNUAL	AREA	5		611471.44	4206700.08	0.01984	5.99	5.99	0	ANNUAL	LINE	5
611490.53	4206698.29	3660.18666	6.1	6.1	0	ANNUAL	AREA	5		611490.53	4206698.29	0.01925	6.1	6.1	0	ANNUAL	LINE	5
611510.61	4206699.68	3527.77031	6.1	6.1	0	ANNUAL	AREA	5		611510.61	4206699.68	0.01875	6.1	6.1	0	ANNUAL	LINE	5
611531.49	4206698.09	3356.03436	6.1	6.1	0	ANNUAL	AREA	5		611531.49	4206698.09	0.01818	6.1	6.1	0	ANNUAL	LINE	5
611545.01	4206701.47	3315.51733	6.1	6.1	0	ANNUAL	AREA	5		611545.01	4206701.47	0.01794	6.1	6.1	0	ANNUAL	LINE	5
611559.92	4206697.3	3162.83824	6.1	6.1	0	ANNUAL	AREA	5		611559.92	4206697.3	0.01749	6.1	6.1	0	ANNUAL	LINE	5
611335.26	4206651.57	4581.34302	6.1	6.1	0	ANNUAL	AREA	5		611335.26	4206651.57	0.02267	6.1	6.1	0	ANNUAL	LINE	5
611359.11	4206645.41	4187.27663	6.1	6.1	0	ANNUAL	AREA	5		611359.11	4206645.41	0.02163	6.1	6.1	0	ANNUAL	LINE	5
611376.21	4206651.17	4061.69618	6.1	6.1	0	ANNUAL	AREA	5		611376.21	4206651.17	0.02126	6.1	6.1	0	ANNUAL	LINE	5
611398.68	4206649.98	3809.37681	6.1	6.1	0	ANNUAL	AREA	5		611398.68	4206649.98	0.02053	6.1	6.1	0	ANNUAL	LINE	5
611414.58	4206650.18	3658.59131	6.1	6.1	0	ANNUAL	AREA	5		611414.58	4206650.18	0.02006	6.1	6.1	0	ANNUAL	LINE	5
611432.87	4206648.59	3478.53373	6.1	6.1	0	ANNUAL	AREA	5		611432.87	4206648.59	0.0195	6.1	6.1	0	ANNUAL	LINE	5
611471.64	4206649.78	3186.63172	6.25	6.25	0	ANNUAL	AREA	5		611471.64	4206649.78	0.01849	6.25	6.25	0	ANNUAL	LINE	5
611491.92	4206651.57	3063.12969	6.41	6.41	0	ANNUAL	AREA	5		611491.92	4206651.57	0.01803	6.41	6.41	0	ANNUAL	LINE	5
611511.41	4206651.77	2939.5978	6.56	6.56	0	ANNUAL	AREA	5		611511.41	4206651.77	0.01756	6.56	6.56	0	ANNUAL	LINE	5
611527.51	4206650.77	2833.85214	6.6	6.6	0	ANNUAL	AREA	5		611527.51	4206650.77	0.01717	6.6	6.6	0	ANNUAL	LINE	5
611546.99	4206651.97	2735.70659	6.58	6.58	0	ANNUAL	AREA	5		611546.99	4206651.97	0.01676	6.58	6.58	0	ANNUAL	LINE	5
611325.51	4206617.57	4277.55289	6.1	6.1	0	ANNUAL	AREA	5		611325.51	4206617.57	0.02185	6.1	6.1	0	ANNUAL	LINE	5
611344.2	4206617.57	4041.94815	6.1	6.1	0	ANNUAL	AREA	5		611344.2	4206617.57	0.02123	6.1	6.1	0	ANNUAL	LINE	5
611357.52	4206616.78	3880.62049	6.1	6.1	0	ANNUAL	AREA	5		611357.52	4206616.78	0.02078	6.1	6.1	0	ANNUAL	LINE	5
611368.66	4206620.55	3798.56837	6.14	6.14	0	ANNUAL	AREA	5		611368.66	4206620.55	0.02056	6.14	6.14	0	ANNUAL	LINE	5
611381.98	4206618.76	3645.20953	6.26	6.26	0	ANNUAL	AREA	5		611381.98	4206618.76	0.02011	6.26	6.26	0	ANNUAL	LINE	5
611395.9	4206619.76	3521.90159	6.4	6.4	0	ANNUAL	AREA	5		611395.9	4206619.76	0.01974	6.4	6.4	0	ANNUAL	LINE	5
611407.82	4206620.75	3423.49214	6.59	6.59	0	ANNUAL	AREA	5		611407.82	4206620.75	0.01944	6.59	6.59	0	ANNUAL	LINE	5
611421.14	4206619.96	3296.40976	6.83	6.83	0	ANNUAL	AREA	5		611421.14	4206619.96	0.01903	6.83	6.83	0	ANNUAL	LINE	5
611435.46	4206618.76	3176.31481	6.7	6.7	0	ANNUAL	AREA	5		611435.46	4206618.76	0.01864	6.7	6.7	0	ANNUAL	LINE	5
611472.44	4206621.55	2934.67193	6.38	6.38	0	ANNUAL	AREA	5		611472.44	4206621.55	0.0178	6.38	6.38	0	ANNUAL	LINE	5
611485.36	4206619.96	2838.61315	6.43	6.43	0	ANNUAL	AREA	5		611485.36	4206619.96	0.01746	6.43	6.43	0	ANNUAL	LINE	5
611496.5	4206622.94	2790.90055	6.63	6.63	0	ANNUAL	AREA	5		611496.5	4206622.94	0.01727	6.63	6.63	0	ANNUAL	LINE	5
611508.82	4206622.14	2705.8663	6.85	6.85	0	ANNUAL	AREA	5		611508.82	4206622.14	0.01696	6.85	6.85	0	ANNUAL	LINE	5
611522.14	4206620.55	2617.10981	6.96	6.96	0	ANNUAL	AREA	5		611522.14	4206620.55	0.01663	6.96	6.96	0	ANNUAL	LINE	5
611532.88	4206620.95	2562.14411	6.96	6.96	0	ANNUAL	AREA	5		611532.88	4206620.95	0.01641	6.96	6.96	0	ANNUAL	LINE	5
611546	4206621.94	2501.58055	6.95	6.95	0	ANNUAL	AREA	5		611546	4206621.94	0.01615	6.95	6.95	0	ANNUAL	LINE	5
611557.13	4206620.16	2434.95424	6.97	6.97	0	ANNUAL	AREA	5		611557.13	4206620.16	0.01589	6.97	6.97	0	ANNUAL	LINE	5
611327.7	4206564.89	3669.91368	8	8	0	ANNUAL	AREA	5		611327.7	4206564.89	0.02004	8	8	0	ANNUAL	LINE	5
611341.02	4206566.28	3576.96587	6.94	6.94	0	ANNUAL	AREA	5		611341.02	4206566.28	0.0198	6.94	6.94	0	ANNUAL	LINE	5
611355.14	4206572.84	3498.37695	6.79	6.79	0	ANNUAL	AREA	5		611355.14	4206572.84	0.01959	6.79	6.79	0	ANNUAL	LINE	5
611369.25	4206575.02	3384.17083	6.82	6.82	0	ANNUAL	AREA	5		611369.25	4206575.02	0.01925	6.82	6.82	0	ANNUAL	LINE	5
611384.16	4206573.04	3232.2952	7.12	7.12	0	ANNUAL	AREA	5		611384.16	4206573.04	0.01878	7.12	7.12	0	ANNUAL	LINE	5
611395.1	4206574.63	3149.7263	7.34	7.34	0	ANNUAL	AREA	5		611395.1	4206574.63	0.01852	7.34	7.34	0	ANNUAL	LINE	5
611407.23	4206574.43	3049.49731	7.59	7.59	0	ANNUAL	AREA	5		611407.23	4206574.43	0.01819	7.59	7.59	0	ANNUAL	LINE	5
611420.15	4206574.03	2947.56239	7.85	7.85	0	ANNUAL	AREA	5		611420.15	4206574.03	0.01785	7.85	7.85	0	ANNUAL	LINE	5
611431.88	4206569.86	2844.22841	7.68	7.68	0	ANNUAL	AREA	5		611431.88	4206569.86	0.01749	7.68	7.68	0	ANNUAL	LINE	5
611473.63	4206575.22	2627.03326	6.81	6.81	0	ANNUAL	AREA	5		611473.63	4206575.22	0.01675	6.81	6.81	0	ANNUAL	LINE	5

611487.55	4206572.24	2531.16644	6.82	6.82	0	ANNUAL	AREA	5	611487.55	4206572.24	0.0164	6.82	6.82	0	ANNUAL	LINE	5
611500.27	4206575.22	2469.5192	7.21	7.21	0	ANNUAL	AREA	5	611500.27	4206575.22	0.01617	7.21	7.21	0	ANNUAL	LINE	5
611512.6	4206575.82	2401.87833	7.58	7.58	0	ANNUAL	AREA	5	611512.6	4206575.82	0.01592	7.58	7.58	0	ANNUAL	LINE	5
611524.73	4206574.43	2333.87307	7.62	7.62	0	ANNUAL	AREA	5	611524.73	4206574.43	0.01565	7.62	7.62	0	ANNUAL	LINE	5
611537.85	4206576.22	2278.99409	7.62	7.62	0	ANNUAL	AREA	5	611537.85	4206576.22	0.01543	7.62	7.62	0	ANNUAL	LINE	5
611548.59	4206575.22	2224.9353	7.62	7.62	0	ANNUAL	AREA	5	611548.59	4206575.22	0.01522	7.62	7.62	0	ANNUAL	LINE	5
611558.72	4206577.01	2187.72942	7.62	7.62	0	ANNUAL	AREA	5	611558.72	4206577.01	0.01506	7.62	7.62	0	ANNUAL	LINE	5
611331.88	4206537.85	3403.10693	8	8	0	ANNUAL	AREA	5	611331.88	4206537.85	0.0192	8	8	0	ANNUAL	LINE	5
611332.67	4206513.19	3211.84843	7.98	7.98	0	ANNUAL	AREA	5	611332.67	4206513.19	0.01857	7.98	7.98	0	ANNUAL	LINE	5
611355.54	4206518.56	3063.52536	7.83	7.83	0	ANNUAL	AREA	5	611355.54	4206518.56	0.01813	7.83	7.83	0	ANNUAL	LINE	5
611357.72	4206542.42	3208.80576	8	8	0	ANNUAL	AREA	5	611357.72	4206542.42	0.01862	8	8	0	ANNUAL	LINE	5
611371.84	4206555.94	3184.71916	8.27	8.27	0	ANNUAL	AREA	5	611371.84	4206555.94	0.01856	8.27	8.27	0	ANNUAL	LINE	5
611370.05	4206542.02	3105.05194	8.11	8.11	0	ANNUAL	AREA	5	611370.05	4206542.02	0.01829	8.11	8.11	0	ANNUAL	LINE	5
611383.57	4206548.58	3039.3221	8.5	8.5	0	ANNUAL	AREA	5	611383.57	4206548.58	0.01808	8.5	8.5	0	ANNUAL	LINE	5
611397.09	4206548.58	2937.35204	8.76	8.76	0	ANNUAL	AREA	5	611397.09	4206548.58	0.01773	8.76	8.76	0	ANNUAL	LINE	5
611409.22	4206546.79	2844.59032	8.7	8.7	0	ANNUAL	AREA	5	611409.22	4206546.79	0.01741	8.7	8.7	0	ANNUAL	LINE	5
611419.95	4206547.59	2778.56114	8.73	8.73	0	ANNUAL	AREA	5	611419.95	4206547.59	0.01719	8.73	8.73	0	ANNUAL	LINE	5
611432.28	4206550.37	2718.53941	8.54	8.54	0	ANNUAL	AREA	5	611432.28	4206550.37	0.017	8.54	8.54	0	ANNUAL	LINE	5
611349.17	4206492.32	2947.04668	7.55	7.55	0	ANNUAL	AREA	5	611349.17	4206492.32	0.01771	7.55	7.55	0	ANNUAL	LINE	5
611363.69	4206486.95	2816.01278	7.29	7.29	0	ANNUAL	AREA	5	611363.69	4206486.95	0.01728	7.29	7.29	0	ANNUAL	LINE	5
611375.81	4206491.32	2757.42226	7.49	7.49	0	ANNUAL	AREA	5	611375.81	4206491.32	0.01708	7.49	7.49	0	ANNUAL	LINE	5
611387.94	4206500.67	2728.38198	7.84	7.84	0	ANNUAL	AREA	5	611387.94	4206500.67	0.01698	7.84	7.84	0	ANNUAL	LINE	5
611399.08	4206500.87	2659.80556	8	8	0	ANNUAL	AREA	5	611399.08	4206500.87	0.01673	8	8	0	ANNUAL	LINE	5
611409.61	4206504.25	2616.95821	8	8	0	ANNUAL	AREA	5	611409.61	4206504.25	0.01657	8	8	0	ANNUAL	LINE	5
611422.54	4206503.25	2539.94762	8	8	0	ANNUAL	AREA	5	611422.54	4206503.25	0.01629	8	8	0	ANNUAL	LINE	5
611437.65	4206504.45	2471.81251	7.54	7.54	0	ANNUAL	AREA	5	611437.65	4206504.45	0.01604	7.54	7.54	0	ANNUAL	LINE	5
611374.82	4206454.74	2554.01163	8	8	0	ANNUAL	AREA	5	611374.82	4206454.74	0.01633	8	8	0	ANNUAL	LINE	5
611385.76	4206467.07	2555.86995	7.99	7.99	0	ANNUAL	AREA	5	611385.76	4206467.07	0.01634	7.99	7.99	0	ANNUAL	LINE	5
611397.68	4206472.44	2518.10323	8	8	0	ANNUAL	AREA	5	611397.68	4206472.44	0.0162	8	8	0	ANNUAL	LINE	5
611411.2	4206477.21	2471.07009	8	8	0	ANNUAL	AREA	5	611411.2	4206477.21	0.01602	8	8	0	ANNUAL	LINE	5
611424.33	4206476.41	2401.79372	7.99	7.99	0	ANNUAL	AREA	5	611424.33	4206476.41	0.01575	7.99	7.99	0	ANNUAL	LINE	5
611437.25	4206478	2349.44001	7.82	7.82	0	ANNUAL	AREA	5	611437.25	4206478	0.01554	7.82	7.82	0	ANNUAL	LINE	5
611425.52	4206431.08	2195.53642	8	8	0	ANNUAL	AREA	5	611425.52	4206431.08	0.01494	8	8	0	ANNUAL	LINE	5
611476.42	4206548.78	2473.35231	7.19	7.19	0	ANNUAL	AREA	5	611476.42	4206548.78	0.01615	7.19	7.19	0	ANNUAL	LINE	5
611488.54	4206547.99	2405.83009	7.16	7.16	0	ANNUAL	AREA	5	611488.54	4206547.99	0.01589	7.16	7.16	0	ANNUAL	LINE	5
611501.27	4206548.38	2336.72448	7.58	7.58	0	ANNUAL	AREA	5	611501.27	4206548.38	0.01563	7.58	7.58	0	ANNUAL	LINE	5
611512	4206545.8	2269.33598	7.94	7.94	0	ANNUAL	AREA	5	611512	4206545.8	0.01536	7.94	7.94	0	ANNUAL	LINE	5
611524.33	4206546.4	2213.08427	8	8	0	ANNUAL	AREA	5	611524.33	4206546.4	0.01515	8	8	0	ANNUAL	LINE	5
611536.06	4206546.79	2161.51505	8	8	0	ANNUAL	AREA	5	611536.06	4206546.79	0.01494	8	8	0	ANNUAL	LINE	5
611548.98	4206548.98	2113.20383	8	8	0	ANNUAL	AREA	5	611548.98	4206548.98	0.01475	8	8	0	ANNUAL	LINE	5
611559.92	4206549.18	2067.80812	8	8	0	ANNUAL	AREA	5	611559.92	4206549.18	0.01457	8	8	0	ANNUAL	LINE	5
611477.81	4206502.66	2273.90142	7	7	0	ANNUAL	AREA	5	611477.81	4206502.66	0.01529	7	7	0	ANNUAL	LINE	5
611479.99	4206477.61	2167.35409	7.08	7.08	0	ANNUAL	AREA	5	611479.99	4206477.61	0.01482	7.08	7.08	0	ANNUAL	LINE	5
611491.13	4206505.84	2223.90959	7.08	7.08	0	ANNUAL	AREA	5	611491.13	4206505.84	0.0151	7.08	7.08	0	ANNUAL	LINE	5
611502.46	4206505.04	2169.11837	7.19	7.19	0	ANNUAL	AREA	5	611502.46	4206505.04	0.01488	7.19	7.19	0	ANNUAL	LINE	5
611491.72	4206477.8	2118.46526	7.16	7.16	0	ANNUAL	AREA	5	611491.72	4206477.8	0.01462	7.16	7.16	0	ANNUAL	LINE	5
611503.06	4206479	2074.62842	7.36	7.36	0	ANNUAL	AREA	5	611503.06	4206479	0.01444	7.36	7.36	0	ANNUAL	LINE	5
611514.39	4206503.05	2110.03348	7.26	7.26	0	ANNUAL	AREA	5	611514.39	4206503.05	0.01464	7.26	7.26	0	ANNUAL	LINE	5
611515.98	4206477.8	2017.42001	7.63	7.63	0	ANNUAL	AREA	5	611515.98	4206477.8	0.0142	7.63	7.63	0	ANNUAL	LINE	5
611528.31	4206505.84	2057.17616	7.66	7.66	0	ANNUAL	AREA	5	611528.31	4206505.84	0.01443	7.66	7.66	0	ANNUAL	LINE	5
611528.9	4206476.41	1962.5712	7.82	7.82	0	ANNUAL	AREA	5	611528.9	4206476.41	0.01397	7.82	7.82	0	ANNUAL	LINE	5
611540.63	4206508.22	2012.25202	7.94	7.94	0	ANNUAL	AREA	5	611540.63	4206508.22	0.01426	7.94	7.94	0	ANNUAL	LINE	5
611538.25	4206476.41	1927.18002	7.93	7.93	0	ANNUAL	AREA	5	611538.25	4206476.41	0.01382	7.93	7.93	0	ANNUAL	LINE	5
611552.56	4206505.84	1957.79609	8	8	0	ANNUAL	AREA	5	611552.56	4206505.84	0.01403	8	8	0	ANNUAL	LINE	5
611550.77	4206475.02	1877.86532	8	8	0	ANNUAL	AREA	5	611550.77	4206475.02	0.01361	8	8	0	ANNUAL	LINE	5
611479.99	4206431.88	1993.49319	8	8	0	ANNUAL	AREA	5	611479.99	4206431.88	0.01405	8	8	0	ANNUAL	LINE	5
611493.12	4206432.08	1949.33077	8	8	0	ANNUAL	AREA	5	611493.12	4206432.08	0.01385	8	8	0	ANNUAL	LINE	5
611504.65	4206432.67	1912.82927	8	8	0	ANNUAL	AREA	5	611504.65	4206432.67	0.01369	8	8	0	ANNUAL	LINE	5
611518.56	4206430.88	1862.32235	8	8	0	ANNUAL	AREA	5	611518.56	4206430.88	0.01346	8	8	0	ANNUAL	LINE	5
611529.5	4206430.29	1826.1449	8	8	0	ANNUAL	AREA	5	611529.5	4206430.29	0.0133	8	8	0	ANNUAL	LINE	5
611542.42	4206435.46	1799.99423	8	8	0	ANNUAL	AREA	5	611542.42	4206435.46	0.01318	8	8	0	ANNUAL	LINE	5
611552.76	4206433.07	1761.9934	8	8	0	ANNUAL	AREA	5	611552.76	4206433.07	0.01301	8	8	0	ANNUAL	LINE	5
611479.8	4206406.03	1905.90829	8	8	0	ANNUAL	AREA	5	611479.8	4206406.03	0.01368	8	8	0	ANNUAL	LINE	5
611494.51	4206406.43	1861.85271	8	8	0	ANNUAL	AREA	5	611494.51	4206406.43	0.01347	8	8	0	ANNUAL	LINE	5
611506.24	4206406.83	1828.01052	8	8	0	ANNUAL	AREA	5	611506.24	4206406.83	0.0133	8	8	0	ANNUAL	LINE	5
611518.56	4206405.44	1788.03183	8	8	0	ANNUAL	AREA	5	611518.56	4206405.44	0.01311	8	8	0	ANNUAL	LINE	5
611530.89	4206404.64	1750.8584	8	8	0	ANNUAL	AREA	5	611530.89	4206404.64	0.01294	8	8	0	ANNUAL	LINE	5
611542.62	4206407.03	1724.52624	8	8	0	ANNUAL	AREA	5	611542.62	4206407.03	0.01281	8	8	0	ANNUAL	LINE	5
611555.15	4206405.44	1686.11026	8	8	0	ANNUAL	AREA	5	611555.15	4206405.44	0.01263	8	8	0	ANNUAL	LINE	5
611529.9	4206362.49	1639.27939	8	8	0	ANNUAL	AREA	5	611529.9	4206362.49	0.01242	8	8	0	ANNUAL	LINE	5
611544.81	4206364.08	1608.58148	8	8	0	ANNUAL	AREA	5	611544.81	4206364.08	0.01225	8	8	0	ANNUAL	LINE	5
611558.72	4206362.89	1573.89775	8	8	0	ANNUAL	AREA	5	611558.72	4206362.89	0.01207	8	8	0	ANNUAL	LINE	5
610703.71	4206675.32	43030.36721	9.14	9.14	0	ANNUAL	AREA	5	610703.71	4206675.32	0.10253	9.14	9.14	0	ANNUAL	LINE	5
610721.12	4206689.86	47266.16959	9.14	9.14	0	ANNUAL	AREA	5	610721.12	4206689.86	0.10486	9.14	9.14	0	ANNUAL	LINE	5
610736.84	4206686.65	48078.49626	9.13	9.13	0	ANNUAL	AREA	5	610736.84	4206686.65	0.10109	9.13	9.13	0	ANNUAL	LINE	5
610754.25	4206685.46	49295.73242	9.08	9.08	0	ANNUAL	AREA	5	610754.25	4206685.46	0.09772	9.08	9.08	0	ANNUAL	LINE	5
610771.15	4206685.12	50506.8341	9.02	9.02	0	ANNUAL	AREA	5	610771.15	4206685.12	0.09465	9.02	9.02	0	ANNUAL	LINE	5
610789.74	4206688.5	52596.42869	8.9	8.9	0	ANNUAL	AREA	5	610789.74	4206688.5	0.0924	8.9	8.9	0	ANNUAL	LINE	5
610807.15	4206686.31	53115.93294	8.79	8.79	0	ANNUAL	AREA	5	610807.15	4206686.31	0.08852	8.79	8.79	0	ANNUAL	LINE	5
610700.5	4206658.42	40082.60921	9.14	9.14	0	ANNUAL	AREA	5	610700.5	4206658.42	0.09747	9.14	9.14	0	ANNUAL	LINE	5
610703.54	4206637.12	37223.80363	9.15	9.15	0	ANNUAL	AREA	5	610703.54	4206637.12	0.0907	9.15	9.15	0	ANNUAL	LINE	5
610702.86	4206621.23	35066.21535	9.16	9.16	0	ANNUAL	AREA	5	610702.86	4206621.23	0.08649	9.16	9.16	0	ANNUAL	LINE	5
610746.81	4206643.04	40750.49325	9.14	9.14	0	ANNUAL	AREA	5	610746.81	4206643.04	0.08617	9.14	9.14	0	ANNUAL	LINE	5
610777.57	4206642.19	42091.77501	9.14	9.14	0	ANNUAL	AREA	5	610777.57	4206642.19	0.08128	9.14	9.14	0	ANNUAL	LINE	5
610792.28	4206642.53	42715.42297	9.14	9.14	0	ANNUAL	AREA	5	610792.28	4206642.53	0.07908	9.14	9.14	0	ANNUAL	LINE	5
610749.18	4206621.57	37457.44852	9.14	9.14	0	ANNUAL	AREA	5	610749.18	4206621.57	0.08035	9.14	9.14	0	ANNUAL	LINE	5
610749.85	4206602.98	34798.62786	9.14	9.14	0	ANNUAL	AREA	5	610749.85	4206602.98	0.07598	9.14	9.14	0	ANNUAL	LINE	5
610784.16	4206612.28	37202.69684	9.14	9.14	0	ANNUAL	AREA	5	610784.16	4206612.28	0.07337	9.14	9.14	0	ANNUAL	LINE	5
610793.29	4206597.74	35131.11052	9.14	9.14	0	ANNUAL	AREA	5	610793.29	4206597.74	0.06915	9.14	9.14	0	ANNUAL	LINE	5
610810.19	4206587.6	33776.1834	9.14	9.14	0	ANNUAL	AREA	5	610810.19	4206587.6	0.06505	9.14	9.14	0	ANNUAL	LINE	5
610820	4206591.66	34406.17921	9.14	9.14	0	ANNUAL	AREA	5	610820	4206591.66	0.06449	9.14	9.14	0	ANNUAL	LINE	5
610837.24	4206594.36	34761.38354	9.14	9.14	0	ANNUAL	AREA	5	610837.24	4206594.36	0.06268	9.14	9.14	0	ANNUAL	LINE	5
610839.6	4206619.21	39067.0039	9.14	9.14	0	ANNUAL	AREA	5	610839.6	4206619.21	0.06684	9.14	9.14	0	ANNUAL	LINE	5
610834.02	4206641.52	43492.53642	9.14	9.14	0	ANNUAL	AREA	5	610834.02	4206641.52	0.07224	9.14	9.14	0	ANNUAL	LINE	5
610850.25	4206642.36	43790.24536	9.14	9.14	0	ANNUAL	AREA	5	610850.25	4206642.36	0.06982	9.14	9.14	0	ANNUAL	LINE	5
610877.29	4206642.87	43727.49021	9.14	9.14	0	ANNUAL	AREA	5	610877.29	4206642.87	0.06559	9.14	9.14	0	ANNUAL	LINE	5
610878.14	4206626.14	39966.11395	9.14	9.14	0	ANNUAL	AREA	5	610878.14	4206626.14	0.06241	9.14	9.14	0	ANNUAL	LINE	5
610876.79	4206607.54	36326.53172	9.14	9.14	0	ANNUAL	AREA	5	610876.79	4206607.54	0.05948	9.14	9.14	0	ANNUAL	LINE	5
610878.31	4206588.95	33054.6512	9.14	9.14	0	ANNUAL	AREA	5	610878.31	4206588.95	0.05643	9.14	9.14	0	ANNUAL	LINE	5
610762.87	4206569.18	30761.47556	9.14	11	0	ANNUAL	AREA	5	610762.87	4206569.18	0.06758	9.14	11	0	ANNUAL	LINE	5
610782.13	4206564.1	30412.47013	9.14	9.14	0	ANNUAL	AREA	5	610782.13	4206564.1	0.0644	9.14	9.14	0	ANNUAL	LINE	5
610796.84	4206560.56	30070.4038	9.14	10	0	ANNUAL	AREA	5	610796.84	4206560.56	0.06208	9.14	10	0	ANNUAL	LINE	5
610815.77	4206555.48	29403.75244	9.27	9.27	0	ANNUAL	AREA	5	610815.77	4206555.48	0.05904	9.27	9.27	0	ANNUAL	LINE	5
610832.16	4206557.01	29470.30812	9	9	0	ANNUAL	AREA	5	610832.16	4206557.01	0.05744	9	9	0	ANNUAL	LINE	5
610851.43	4206553.96	28751.16902	9	9	0	ANNUAL	AREA	5	610851.43	4206553.96	0.05478	9	9	0	ANNUAL	LINE	5
610880.67	4206553.63	27883.03797	9	9	0	ANNUAL	AREA	5	610880.67	4206553.63	0.05141	9	9	0	ANNUAL	LINE	5
610878.31	4206570.7	30265.4028	9.14	9.14	0	ANNUAL	AREA	5	610878.31	4206570.7	0.05386	9.14	9.14	0	ANNUAL	LINE	5
610826.68	4206687.13	54367.43798	8.61	8.61	0	ANNUAL	AREA	5	610826.68	4206687.13	0.08515	8.61	8.61	0	ANNUAL	LINE	5
610844.57	4206686.3	54896.27181	8.62	8.62	0	ANNUAL	AREA	5	610844.57	4206686.3	0.08147	8.62	8.62	0	ANNUAL	LINE	5
610865.21	4206687.68	56053.23738	8.41	8.41	0	ANNUAL	AREA	5	610865.21	4206687.68	0.07792	8.41	8.41	0	ANNUAL	LINE	5
610880.9	4206686.3	56042.84051	8.17	8.17	0	ANNUAL	AREA	5	610880.9	4206686.3	0.07464	8.17	8.17	0	ANNUAL	LINE	5
610899.62	4206692.91	58745.69975	7.64	7.64	0	ANNUAL	AREA	5	610899.62	4206692.91	0.07275	7.64	7.64	0	ANNUAL	LINE	5
610919.16	4206680.8	54223.38352	7.35	7.35	0	ANNUAL	AREA	5	610919.16	4206680.8	0.06649	7.35	7.35	0	ANNUAL	LINE	5
610925.76	4206661.81	47570.76252	7.48	7.48	0	ANNUAL	AREA	5	610925.76	4206661.81	0.06169	7.48	7.48	0	ANNUAL	LINE	5
610927.41	4206642.54	41981.31342	7.69	7.69	0	ANNUAL	AREA	5	610927.41	4206642.54	0.05812	7.69	7.69	0	ANNUAL	LINE	5
610925.49	4206624.93	37861.53892	7.84	7.84	0	ANNUAL	AREA	5	610925.49	4206624.93	0.05566	7.84	7.84	0	ANNUAL	LINE	5
610924.94	4206606.21	34053.66645	7.99	7.99	0	ANNUAL	AREA	5	610924.94	4206606.21	0.05306	7.99	7.99	0	ANNUAL	LINE	5
610922.73	4206591.08	31483.95573	8.21	8.21	0	ANNUAL	AREA	5	610922.73	4206591.08	0.0513	8.21	8.21	0	ANNUAL	LINE	5
610923.56	4206571.81	28462.30973	8.24	8.24	0	ANNUAL	AREA	5	610923.56	4206571.81	0.04884	8.24	8.24	0	ANNUAL	LINE	5
610925.21	4206554.47	26021.75028	8.62	8.62	0	ANNUAL	AREA	5	610925.21	4206554.47	0.04662	8.62	8.62	0	ANNUAL	LINE	5
610956.31	4206695.94	58822.83114	6.21	6.21	0	ANNUAL	AREA	5	610956.31	4206695.94	0.06271	6.21	6.21	0	ANNUAL	LINE	5
611019.34	4206696.76	48100.5473	6.1	6.1	0	ANNUAL	AREA	5	611019.34	4206696.76	0.0515	6.1	6.1	0	ANNUAL	LINE	5
610959.06	4206679.15	51337.24586	6.36	6.36	0	ANNUAL	AREA	5	610959.06	4206679.15	0.05923	6.36	6.36	0	ANNUAL	LINE	5
610962.92	4206664.84	45780.00227	6.36	6.36	0	ANNUAL	AREA	5	610962.92	4206664.84	0.05627	6.36	6.36	0	ANNUAL	LINE	5
610963.47	4206649.42	41025.02309	6.4	6.4	0	ANNUAL	AREA	5	610963.47	4206649.42	0.05389	6.4	6.4	0	ANNUAL	LINE	5
610965.12	4206634.29	36954.55772	6.48	6.48	0	ANNUAL	AREA	5	610965.12	4206634.29	0.05158	6.48	6.48	0	ANNUAL	LINE	5
610958.24	4206619.42	34291.60374	6.84	6.84	0	ANNUAL	AREA	5	610958.24	4206619.42	0.05056	6.84	6.84	0	ANNUAL	LINE	5
610960.44	4206603.74	31072.41235	7	7	0	ANNUAL	AREA	5	610960.44	4206603.74	0.04833	7	7	0	ANNUAL	LINE	5
610962.64	4206588.32	28320.98529	7.19	7.19	0	ANNUAL	AREA	5	610962.64	4206588.32	0.04628	7.19	7.19	0	ANNUAL	LINE	5

610968.15	4206560.25	24102.17663	7.13	8	0	ANNUAL	AREA	5	610968.15	4206560.25	0.04283	7.13	8	0	ANNUAL	LINE	5
610949.71	4206557.5	24975.96654	8	8	0	ANNUAL	AREA	5	610949.71	4206557.5	0.04439	8	8	0	ANNUAL	LINE	5
611017.96	4206681.9	42582.15639	6.1	6.1	0	ANNUAL	AREA	5	611017.96	4206681.9	0.04978	6.1	6.1	0	ANNUAL	LINE	5
611021.54	4206668.69	37566.13954	6.1	6.1	0	ANNUAL	AREA	5	611021.54	4206668.69	0.04762	6.1	6.1	0	ANNUAL	LINE	5
611017.69	4206653.83	34394.28659	6.1	6.1	0	ANNUAL	AREA	5	611017.69	4206653.83	0.04648	6.1	6.1	0	ANNUAL	LINE	5
611013.83	4206638.97	31694.34276	6.1	6.1	0	ANNUAL	AREA	5	611013.83	4206638.97	0.04538	6.1	6.1	0	ANNUAL	LINE	5
611013.01	4206623.83	28900.6545	6.1	6.1	0	ANNUAL	AREA	5	611013.01	4206623.83	0.04391	6.1	6.1	0	ANNUAL	LINE	5
611009.98	4206609.24	26871.59244	6.15	6.15	0	ANNUAL	AREA	5	611009.98	4206609.24	0.04285	6.15	6.15	0	ANNUAL	LINE	5
611008.05	4206597.68	25389.50684	6.25	6.25	0	ANNUAL	AREA	5	611008.05	4206597.68	0.04199	6.25	6.25	0	ANNUAL	LINE	5
611001.72	4206570.71	22619.35628	6.44	6.44	0	ANNUAL	AREA	5	611001.72	4206570.71	0.04028	6.44	6.44	0	ANNUAL	LINE	5
611017.41	4206575.11	21624.86172	6.26	6.26	0	ANNUAL	AREA	5	611017.41	4206575.11	0.03901	6.26	6.26	0	ANNUAL	LINE	5
611033.38	4206575.66	20075.97497	6.1	6.1	0	ANNUAL	AREA	5	611033.38	4206575.66	0.03742	6.1	6.1	0	ANNUAL	LINE	5
611050.71	4206697.86	38778.57723	6.1	6.1	0	ANNUAL	AREA	5	611050.71	4206697.86	0.04666	6.1	6.1	0	ANNUAL	LINE	5
611054.84	4206681.9	32967.84087	6.1	6.1	0	ANNUAL	AREA	5	611054.84	4206681.9	0.04433	6.1	6.1	0	ANNUAL	LINE	5
611052.92	4206671.17	30966.35843	6.1	6.1	0	ANNUAL	AREA	5	611052.92	4206671.17	0.04349	6.1	6.1	0	ANNUAL	LINE	5
611054.84	4206650.8	26645.12487	6.1	6.1	0	ANNUAL	AREA	5	611054.84	4206650.8	0.0413	6.1	6.1	0	ANNUAL	LINE	5
611055.39	4206637.59	24494.19038	6.1	6.1	0	ANNUAL	AREA	5	611055.39	4206637.59	0.04006	6.1	6.1	0	ANNUAL	LINE	5
611053.47	4206624.65	23047.28217	6.1	6.1	0	ANNUAL	AREA	5	611053.47	4206624.65	0.03918	6.1	6.1	0	ANNUAL	LINE	5
611054.84	4206605.02	20570.82989	6.25	6.25	0	ANNUAL	AREA	5	611054.84	4206605.02	0.03748	6.25	6.25	0	ANNUAL	LINE	5
611055.39	4206591.81	19195.55292	6.44	6.44	0	ANNUAL	AREA	5	611055.39	4206591.81	0.03644	6.44	6.44	0	ANNUAL	LINE	5
611053.47	4206578.87	18260.3659	6.5	6.5	0	ANNUAL	AREA	5	611053.47	4206578.87	0.0357	6.5	6.5	0	ANNUAL	LINE	5
611057.6	4206560.98	16329.90839	7.79	7.79	0	ANNUAL	AREA	5	611057.6	4206560.98	0.03389	7.79	7.79	0	ANNUAL	LINE	5
611058.15	4206547.77	15394.52564	7.86	7.86	0	ANNUAL	AREA	5	611058.15	4206547.77	0.03301	7.86	7.86	0	ANNUAL	LINE	5
611056.22	4206534.84	14763.2683	7.92	7.92	0	ANNUAL	AREA	5	611056.22	4206534.84	0.03239	7.92	7.92	0	ANNUAL	LINE	5
611021.82	4206533.19	17386.88933	7.45	7.45	0	ANNUAL	AREA	5	611021.82	4206533.19	0.03532	7.45	7.45	0	ANNUAL	LINE	5
611022.37	4206519.98	16389.64749	7.69	7.69	0	ANNUAL	AREA	5	611022.37	4206519.98	0.03436	7.69	7.69	0	ANNUAL	LINE	5
611020.44	4206507.04	15670.68359	7.83	7.83	0	ANNUAL	AREA	5	611020.44	4206507.04	0.03368	7.83	7.83	0	ANNUAL	LINE	5
611028.7	4206492.18	14272.53142	8.12	8.12	0	ANNUAL	AREA	5	611028.7	4206492.18	0.03208	8.12	8.12	0	ANNUAL	LINE	5
611029.25	4206478.97	13538.407	8.56	8.56	0	ANNUAL	AREA	5	611029.25	4206478.97	0.03124	8.56	8.56	0	ANNUAL	LINE	5
611027.32	4206466.03	13009.59242	8.99	8.99	0	ANNUAL	AREA	5	611027.32	4206466.03	0.03061	8.99	8.99	0	ANNUAL	LINE	5
611022.09	4206449.79	12554.74612	9	9	0	ANNUAL	AREA	5	611022.09	4206449.79	0.03014	9	9	0	ANNUAL	LINE	5
611030.62	4206435.76	11591.03645	9	9	0	ANNUAL	AREA	5	611030.62	4206435.76	0.02888	9	9	0	ANNUAL	LINE	5
611028.7	4206422.82	11202.94734	9	9	0	ANNUAL	AREA	5	611028.7	4206422.82	0.0284	9	9	0	ANNUAL	LINE	5
611057.32	4206514.2	13551.88641	8	8	0	ANNUAL	AREA	5	611057.32	4206514.2	0.03113	8	8	0	ANNUAL	LINE	5
611057.87	4206500.99	12876.33954	8	8	0	ANNUAL	AREA	5	611057.87	4206500.99	0.03039	8	8	0	ANNUAL	LINE	5
611055.94	4206488.05	12404.36614	8.26	8.26	0	ANNUAL	AREA	5	611055.94	4206488.05	0.02982	8.26	8.26	0	ANNUAL	LINE	5
611057.32	4206473.74	11709.9801	8.73	8.73	0	ANNUAL	AREA	5	611057.32	4206473.74	0.02895	8.73	8.73	0	ANNUAL	LINE	5
611057.87	4206460.53	11170.45267	9	9	0	ANNUAL	AREA	5	611057.87	4206460.53	0.02825	9	9	0	ANNUAL	LINE	5
611055.94	4206447.59	10814.52514	9	9	0	ANNUAL	AREA	5	611055.94	4206447.59	0.0278	9	9	0	ANNUAL	LINE	5
611056.49	4206431.35	10254.9905	9.11	9.11	0	ANNUAL	AREA	5	611056.49	4206431.35	0.02705	9.11	9.11	0	ANNUAL	LINE	5
611057.04	4206418.14	9821.82103	9.45	9.45	0	ANNUAL	AREA	5	611057.04	4206418.14	0.02642	9.45	9.45	0	ANNUAL	LINE	5
611055.12	4206405.21	9528.63674	9.71	9.71	0	ANNUAL	AREA	5	611055.12	4206405.21	0.02599	9.71	9.71	0	ANNUAL	LINE	5
611056.49	4206387.04	8994.97791	9.91	9.91	0	ANNUAL	AREA	5	611056.49	4206387.04	0.0252	9.91	9.91	0	ANNUAL	LINE	5
611057.04	4206373.83	8653.06264	10.06	10.06	0	ANNUAL	AREA	5	611057.04	4206373.83	0.02467	10.06	10.06	0	ANNUAL	LINE	5
611055.12	4206360.9	8413.25521	10.49	10.49	0	ANNUAL	AREA	5	611055.12	4206360.9	0.02428	10.49	10.49	0	ANNUAL	LINE	5
611021.82	4206405.3	10879.40919	9.01	9.01	0	ANNUAL	AREA	5	611021.82	4206405.3	0.02804	9.01	9.01	0	ANNUAL	LINE	5
611031.45	4206391.54	10062.72703	9.47	9.47	0	ANNUAL	AREA	5	611031.45	4206391.54	0.02682	9.47	9.47	0	ANNUAL	LINE	5
611035.85	4206363.74	9121.85554	10.4	10.4	0	ANNUAL	AREA	5	611035.85	4206363.74	0.02538	10.4	10.4	0	ANNUAL	LINE	5
611085.12	4206364.57	7505.74257	9.66	9.66	0	ANNUAL	AREA	5	611085.12	4206364.57	0.02301	9.66	9.66	0	ANNUAL	LINE	5
611087.59	4206415.48	8470.93614	9.14	9.14	0	ANNUAL	AREA	5	611087.59	4206415.48	0.02466	9.14	9.14	0	ANNUAL	LINE	5
611084.02	4206444.38	9349.95129	9	9	0	ANNUAL	AREA	5	611084.02	4206444.38	0.02596	9	9	0	ANNUAL	LINE	5
611084.84	4206458.69	9707.06212	9	9	0	ANNUAL	AREA	5	611084.84	4206458.69	0.02649	9	9	0	ANNUAL	LINE	5
611083.19	4206470.8	10164.06918	8.83	8.83	0	ANNUAL	AREA	5	611083.19	4206470.8	0.02712	8.83	8.83	0	ANNUAL	LINE	5
611082.64	4206503.28	11354.57135	8	8	0	ANNUAL	AREA	5	611082.64	4206503.28	0.02875	8	8	0	ANNUAL	LINE	5
611082.37	4206515.94	11869.0734	8	8	0	ANNUAL	AREA	5	611082.37	4206515.94	0.02938	8	8	0	ANNUAL	LINE	5
611082.92	4206532.18	12522.60556	8	8	0	ANNUAL	AREA	5	611082.92	4206532.18	0.03016	8	8	0	ANNUAL	LINE	5
611082.64	4206545.66	13176.04522	8	8	0	ANNUAL	AREA	5	611082.64	4206545.66	0.03089	8	8	0	ANNUAL	LINE	5
611105.48	4206544.56	11293.66231	8	8	0	ANNUAL	AREA	5	611105.48	4206544.56	0.02917	8	8	0	ANNUAL	LINE	5
611103.83	4206534.65	11052.02087	8	8	0	ANNUAL	AREA	5	611103.83	4206534.65	0.0288	8	8	0	ANNUAL	LINE	5
611079.89	4206585.02	15827.51696	6.87	6.87	0	ANNUAL	AREA	5	611079.89	4206585.02	0.03364	6.87	6.87	0	ANNUAL	LINE	5
611081.54	4206569.88	14695.15262	6.89	6.89	0	ANNUAL	AREA	5	611081.54	4206569.88	0.03257	6.89	6.89	0	ANNUAL	LINE	5
611081.82	4206624.84	18765.37318	6.22	6.22	0	ANNUAL	AREA	5	611081.82	4206624.84	0.03622	6.22	6.22	0	ANNUAL	LINE	5
611082.37	4206611.63	17546.92229	6.37	6.37	0	ANNUAL	AREA	5	611082.37	4206611.63	0.03524	6.37	6.37	0	ANNUAL	LINE	5
611080.44	4206598.69	16777.68316	6.61	6.61	0	ANNUAL	AREA	5	611080.44	4206598.69	0.03454	6.61	6.61	0	ANNUAL	LINE	5
611104.66	4206591.53	13550.83331	7	7	0	ANNUAL	AREA	5	611104.66	4206591.53	0.03194	7	7	0	ANNUAL	LINE	5
611105.48	4206580.53	12905.09375	7.13	7.13	0	ANNUAL	AREA	5	611105.48	4206580.53	0.03122	7.13	7.13	0	ANNUAL	LINE	5
611103.56	4206567.59	12487.33523	7.11	7.11	0	ANNUAL	AREA	5	611103.56	4206567.59	0.03066	7.11	7.11	0	ANNUAL	LINE	5
611103.83	4206624.29	15643.91191	6.39	6.39	0	ANNUAL	AREA	5	611103.83	4206624.29	0.03413	6.39	6.39	0	ANNUAL	LINE	5
611102.73	4206612.45	15019.33813	6.56	6.56	0	ANNUAL	AREA	5	611102.73	4206612.45	0.03346	6.56	6.56	0	ANNUAL	LINE	5
611104.11	4206601.99	14210.36064	6.78	6.78	0	ANNUAL	AREA	5	611104.11	4206601.99	0.03265	6.78	6.78	0	ANNUAL	LINE	5
611079.89	4206667.5	23999.3731	6.1	6.1	0	ANNUAL	AREA	5	611079.89	4206667.5	0.03981	6.1	6.1	0	ANNUAL	LINE	5
611080.44	4206654.29	22130.93919	6.1	6.1	0	ANNUAL	AREA	5	611080.44	4206654.29	0.03864	6.1	6.1	0	ANNUAL	LINE	5
611078.51	4206641.35	20963.87112	6.12	6.12	0	ANNUAL	AREA	5	611078.51	4206641.35	0.03781	6.12	6.12	0	ANNUAL	LINE	5
611100.53	4206702.18	23872.71511	6.04	6.04	0	ANNUAL	AREA	5	611100.53	4206702.18	0.04048	6.04	6.04	0	ANNUAL	LINE	5
611079.61	4206696.95	29111.63718	6.1	6.1	0	ANNUAL	AREA	5	611079.61	4206696.95	0.04255	6.1	6.1	0	ANNUAL	LINE	5
611077.69	4206684.01	27179.4212	6.1	6.1	0	ANNUAL	AREA	5	611077.69	4206684.01	0.04156	6.1	6.1	0	ANNUAL	LINE	5
611102.46	4206679.15	20541.92063	6.09	6.09	0	ANNUAL	AREA	5	611102.46	4206679.15	0.03828	6.09	6.09	0	ANNUAL	LINE	5
611101.91	4206689.61	21865.27988	6.06	6.06	0	ANNUAL	AREA	5	611101.91	4206689.61	0.03922	6.06	6.06	0	ANNUAL	LINE	5
611103.83	4206657.41	18168.44554	6.1	6.1	0	ANNUAL	AREA	5	611103.83	4206657.41	0.03645	6.1	6.1	0	ANNUAL	LINE	5
611103.28	4206667.86	19224.07892	6.1	6.1	0	ANNUAL	AREA	5	611103.28	4206667.86	0.0373	6.1	6.1	0	ANNUAL	LINE	5
611104.11	4206634.56	16317.55526	6.25	6.25	0	ANNUAL	AREA	5	611104.11	4206634.56	0.03479	6.25	6.25	0	ANNUAL	LINE	5
611103.56	4206645.02	17186.37854	6.11	6.11	0	ANNUAL	AREA	5	611103.56	4206645.02	0.03557	6.11	6.11	0	ANNUAL	LINE	5
611128.88	4206688.23	16323.43473	5.87	5.87	0	ANNUAL	AREA	5	611128.88	4206688.23	0.03636	5.87	5.87	0	ANNUAL	LINE	5
611128.33	4206698.69	17210.25239	5.77	5.77	0	ANNUAL	AREA	5	611128.33	4206698.69	0.03722	5.77	5.77	0	ANNUAL	LINE	5
611128.88	4206664.29	14748.1293	6.01	6.01	0	ANNUAL	AREA	5	611128.88	4206664.29	0.03462	6.01	6.01	0	ANNUAL	LINE	5
611128.33	4206674.74	15484.93498	6.01	6.01	0	ANNUAL	AREA	5	611128.33	4206674.74	0.03541	6.01	6.01	0	ANNUAL	LINE	5
611130.81	4206643.09	13334.15606	6.07	6.07	0	ANNUAL	AREA	5	611130.81	4206643.09	0.03306	6.07	6.07	0	ANNUAL	LINE	5
611130.25	4206653.55	13950.01104	6.01	6.01	0	ANNUAL	AREA	5	611130.25	4206653.55	0.03378	6.01	6.01	0	ANNUAL	LINE	5
611130.25	4206618.32	12238.4759	6.53	6.53	0	ANNUAL	AREA	5	611130.25	4206618.32	0.0316	6.53	6.53	0	ANNUAL	LINE	5
611129.7	4206628.78	12767.43322	6.35	6.35	0	ANNUAL	AREA	5	611129.7	4206628.78	0.03226	6.35	6.35	0	ANNUAL	LINE	5
611147.87	4206682.18	13261.52384	5.54	5.54	0	ANNUAL	AREA	5	611147.87	4206682.18	0.03425	5.54	5.54	0	ANNUAL	LINE	5
611147.32	4206692.63	13896.7327	5.45	5.45	0	ANNUAL	AREA	5	611147.32	4206692.63	0.03503	5.45	5.45	0	ANNUAL	LINE	5
611148.7	4206659.88	12110.69507	5.72	5.72	0	ANNUAL	AREA	5	611148.7	4206659.88	0.03271	5.72	5.72	0	ANNUAL	LINE	5
611148.14	4206670.34	12645.3411	5.65	5.65	0	ANNUAL	AREA	5	611148.14	4206670.34	0.03343	5.65	5.65	0	ANNUAL	LINE	5
611149.25	4206637.31	11147.62961	5.94	5.94	0	ANNUAL	AREA	5	611149.25	4206637.31	0.0313	5.94	5.94	0	ANNUAL	LINE	5
611148.7	4206647.77	11604.66033	5.83	5.83	0	ANNUAL	AREA	5	611148.7	4206647.77	0.03196	5.83	5.83	0	ANNUAL	LINE	5
611149.25	4206613.37	10313.88938	6.22	6.22	0	ANNUAL	AREA	5	611149.25	4206613.37	0.02997	6.22	6.22	0	ANNUAL	LINE	5
611148.7	4206623.83	10712.0523	6.1	6.1	0	ANNUAL	AREA	5	611148.7	4206623.83	0.03058	6.1	6.1	0	ANNUAL	LINE	5
611175.39	4206687.68	10800.2715	5.15	5.15	0	ANNUAL	AREA	5	611175.39	4206687.68	0.03248	5.15	5.15	0	ANNUAL	LINE	5
611174.84	4206698.14	11299.87058	5.04	5.04	0	ANNUAL	AREA	5	611174.84	4206698.14	0.0332	5.04	5.04	0	ANNUAL	LINE	5
611195.21	4206682.45	9248.92955	5.18	5.18	0	ANNUAL	AREA	5	611195.21	4206682.45	0.0308	5.18	5.18	0	ANNUAL	LINE	5
611194.66	4206692.91	9658.47036	4.99	4.99	0	ANNUAL	AREA	5	611194.66	4206692.91	0.03146	4.99	4.99	0	ANNUAL	LINE	5
611175.39	4206664.01	9921.11404	5.47	5.47	0	ANNUAL	AREA	5	611175.39	4206664.01	0.03104	5.47	5.47	0	ANNUAL	LINE	5
611174.84	4206674.47	10329.36739	5.29	5.29	0	ANNUAL	AREA	5	611174.84	4206674.47	0.03169	5.29	5.29	0	ANNUAL	LINE	5
611194.93	4206660.98	8596.54806	5.59	5.59	0	ANNUAL	AREA	5	611194.93	4206660.98	0.02961	5.59	5.59	0	ANNUAL	LINE	5
611194.38	4206671.44	8938.36847	5.38	5.38	0	ANNUAL	AREA	5	611194.38	4206671.44	0.03022	5.38	5.38	0	ANNUAL	LINE	5
611174.29	4206641.44	9292.40254	5.83	5.83	0	ANNUAL	AREA	5	611174.29	4206641.44	0.02984	5.83	5.83	0	ANNUAL	LINE	5
611173.74	4206651.9	9646.78602	5.69	5.69	0	ANNUAL	AREA	5	611173.74	4206651.9	0.03045	5.69	5.69	0	ANNUAL	LINE	5
611195.21	4206638.14	7981.73413	5.95	5.95	0	ANNUAL	AREA	5	611195.21	4206638.14	0.02841	5.95	5.95	0	ANNUAL	LINE	5
611194.66	4206648.6	8273.66175	5.84	5.84	0	ANNUAL	AREA	5	611194.66	4206648.6	0.02897	5.84	5.84	0	ANNUAL	LINE	5
611176.49	4206618.6	8537.23296	6.07	6.07	0	ANNUAL	AREA	5	611176.49	4206618.6	0.02852	6.07	6.07	0	ANNUAL	LINE	5
611175.94	4206629.06	8840.00462	5.96	5.96	0	ANNUAL	AREA	5	611175.94	4206629.06	0.02908	5.96	5.96	0	ANNUAL	LINE	5
611195.48	4206613.64	7417.72661	6.1	6.1	0	ANNUAL	AREA	5	611195.48	4206613.64	0.02721	6.1	6.1	0	ANNUAL	LINE	5
611194.93	4206624.1	7668.94527	6.04	6.04	0	ANNUAL	AREA	5	611194.93	4206624.1	0.02773	6.04	6.04	0	ANNUAL	LINE	5
610704.74	4206583.83	30671.62614	9.74	9.74	0	ANNUAL	AREA	5	610704.74	4206583.83	0.07717	9.74	9.74	0	ANNUAL	LINE	5
610703.54	4206601.74	32679.46503	9.43	9.43	0	ANNUAL	AREA	5	610703.54	4206601.74	0.08147	9.43	9.43	0	ANNUAL	LINE	5
610705.38	4206547.72	26937.05895	11	11	0	ANNUAL	AREA	5	610705.38	4206547.72	0.06954	11	11	0	ANNUAL	LINE	5
610704.19	4206565.63	28740.48264	9.75	11	0	ANNUAL	AREA	5	610704.19	4206565.63	0.07343	9.75	11	0	ANNUAL	LINE	5
610705.71	4206512.75	23912.66462	11	11	0	ANNUAL	AREA	5	610705.71	4206512.75	0.06356	11	11	0	ANNUAL	LINE	5
610704.51	4206530.66	25381.85963	11	11	0	ANNUAL	AREA	5	610704.51	4206530.66	0.06662	11	11	0	ANNUAL	LINE	5
610707	4206477.13	21302.59168	10.38	10.38	0	ANNUAL	AREA	5	610707	4206477.13	0.05832	10.38	10.38	0	ANNUAL	LINE	5
610705.8	4206495.04	22541.80472	10.98	10.98	0	ANNUAL	AREA	5	610705.8	4206495.04	0.06085	10.98	10.98	0	ANNUAL	LINE	5
610707.65	4206443.46	19109.05832	10.65	10.65	0	ANNUAL	AREA	5	610707.65	4206443.46	0.05388	10.65	10.65	0	ANNUAL	LINE	5
610706.45	4206461.36	20247.20744	10.13	10.13	0	ANNUAL	AREA	5	610706.45	4206461.36	0.05631	10.13	10.13	0	ANNUAL	LINE	5
610707.65	4206407.84	17093.8706	10.99	10.99	0	ANNUAL	AREA	5	610707.65	4206407.84	0.04981	10.99	10.99	0	ANNUAL	LINE	5
610706.45	4206425.74	18055.38493	10.94	10.94	0	ANNUAL	AREA	5	610706.45	4206425.74	0.05186	10.94	10.94	0	ANNUAL	LINE	5
610703.12	4206366.39	15132.69992	9.98	9.98	0	ANNUAL	AREA	5	610703.12	4206366.39	0.04615	9.98	9.98	0	ANNUAL	LINE	5
610703.86	4206388.18	16117.99599	10.42	10.42	0	ANNUAL	AREA	5	610703.86	4206388.18	0.04813	10.42	10.42	0	ANNUAL	LINE	5
610754.28	4206417.88	17790.02285	9.91	9.91	0	ANNUAL	AREA	5	610754.28	4206417.88	0.0476	9.91	9.91	0	ANNUAL	LINE	5

610746.28	4206438.7	19059.26618	9.63	9.63	0	ANNUAL	AREA	5	610746.28	4206438.7	0.05046	9.63	9.63	0	ANNUAL	LINE	5
610765.61	4206379.99	15701.58657	10.8	10.8	0	ANNUAL	AREA	5	610765.61	4206379.99	0.04314	10.8	10.8	0	ANNUAL	LINE	5
610764.41	4206397.9	16642.64447	10.24	10.24	0	ANNUAL	AREA	5	610764.41	4206397.9	0.04489	10.24	10.24	0	ANNUAL	LINE	5
610803.82	4206388.73	15906.68489	9.71	9.71	0	ANNUAL	AREA	5	610803.82	4206388.73	0.04141	9.71	9.71	0	ANNUAL	LINE	5
610802.62	4206406.64	16900.78067	9.28	9.28	0	ANNUAL	AREA	5	610802.62	4206406.64	0.04307	9.28	9.28	0	ANNUAL	LINE	5
610755.3	4206360.77	14851.69821	10.5	10.5	0	ANNUAL	AREA	5	610755.3	4206360.77	0.04224	10.5	10.5	0	ANNUAL	LINE	5
610768.58	4206436.87	18957.03571	9.04	9.04	0	ANNUAL	AREA	5	610768.58	4206436.87	0.04861	9.04	9.04	0	ANNUAL	LINE	5
610791.24	4206432.98	18593.68009	9.01	9.01	0	ANNUAL	AREA	5	610791.24	4206432.98	0.04643	9.01	9.01	0	ANNUAL	LINE	5
610806.14	4206426.83	18066.00074	9.12	9.12	0	ANNUAL	AREA	5	610806.14	4206426.83	0.04466	9.12	9.12	0	ANNUAL	LINE	5
610805.81	4206369.51	14930.83551	9.92	9.92	0	ANNUAL	AREA	5	610805.81	4206369.51	0.03973	9.92	9.92	0	ANNUAL	LINE	5
610804.52	4206353.65	14229.13689	9.74	9.74	0	ANNUAL	AREA	5	610804.52	4206353.65	0.03866	9.74	9.74	0	ANNUAL	LINE	5
610847.59	4206432.33	17791.23814	9.11	9.11	0	ANNUAL	AREA	5	610847.59	4206432.33	0.04195	9.11	9.11	0	ANNUAL	LINE	5
610865.4	4206429.74	17251.84456	9.12	9.12	0	ANNUAL	AREA	5	610865.4	4206429.74	0.04036	9.12	9.12	0	ANNUAL	LINE	5
610882.56	4206432.66	17011.63989	9	9	0	ANNUAL	AREA	5	610882.56	4206432.66	0.03931	9	9	0	ANNUAL	LINE	5
610902.31	4206429.42	16261.86369	9	9	0	ANNUAL	AREA	5	610902.31	4206429.42	0.03757	9	9	0	ANNUAL	LINE	5
610924.98	4206459.53	17361.25502	9	9	0	ANNUAL	AREA	5	610924.98	4206459.53	0.03804	9	9	0	ANNUAL	LINE	5
610924.33	4206496.45	20121.18355	8.99	8.99	0	ANNUAL	AREA	5	610924.33	4206496.45	0.04105	8.99	8.99	0	ANNUAL	LINE	5
610925.3	4206509.08	21181.51376	8.83	8.83	0	ANNUAL	AREA	5	610925.3	4206509.08	0.0421	8.83	8.83	0	ANNUAL	LINE	5
610748.5	4206527.86	25942.00336	11	11	0	ANNUAL	AREA	5	610748.5	4206527.86	0.06171	11	11	0	ANNUAL	LINE	5
610766.31	4206522.35	25592.99357	10.92	10.92	0	ANNUAL	AREA	5	610766.31	4206522.35	0.05907	10.92	10.92	0	ANNUAL	LINE	5
610782.5	4206515.88	25071.87112	10.38	10.38	0	ANNUAL	AREA	5	610782.5	4206515.88	0.05663	10.38	10.38	0	ANNUAL	LINE	5
610798.04	4206512.32	24737.06254	9.86	9.86	0	ANNUAL	AREA	5	610798.04	4206512.32	0.05471	9.86	9.86	0	ANNUAL	LINE	5
610819.74	4206511.02	24480.7105	9.14	9.14	0	ANNUAL	AREA	5	610819.74	4206511.02	0.05254	9.14	9.14	0	ANNUAL	LINE	5
610836.25	4206510.7	24215.02943	9	9	0	ANNUAL	AREA	5	610836.25	4206510.7	0.05089	9	9	0	ANNUAL	LINE	5
610856.33	4206507.46	23477.99535	9	9	0	ANNUAL	AREA	5	610856.33	4206507.46	0.04853	9	9	0	ANNUAL	LINE	5
610879.97	4206511.99	23243.25844	9	9	0	ANNUAL	AREA	5	610879.97	4206511.99	0.04671	9	9	0	ANNUAL	LINE	5
610880.94	4206492.56	21424.49094	9	9	0	ANNUAL	AREA	5	610880.94	4206492.56	0.04465	9	9	0	ANNUAL	LINE	5
610879.32	4206474.75	20010.39643	9	9	0	ANNUAL	AREA	5	610879.32	4206474.75	0.04312	9	9	0	ANNUAL	LINE	5
610855.36	4206477.67	20874.98631	9	9	0	ANNUAL	AREA	5	610855.36	4206477.67	0.0455	9	9	0	ANNUAL	LINE	5
610836.25	4206476.37	21141.57507	9.38	9.38	0	ANNUAL	AREA	5	610836.25	4206476.37	0.04699	9.38	9.38	0	ANNUAL	LINE	5
610782.34	4206485.12	22357.17282	10.25	10.25	0	ANNUAL	AREA	5	610782.34	4206485.12	0.05268	10.25	10.25	0	ANNUAL	LINE	5
610763.88	4206489.33	22667.16729	10.79	10.79	0	ANNUAL	AREA	5	610763.88	4206489.33	0.0548	10.79	10.79	0	ANNUAL	LINE	5
610817.96	4206481.23	21806.38009	9.58	9.58	0	ANNUAL	AREA	5	610817.96	4206481.23	0.04911	9.58	9.58	0	ANNUAL	LINE	5
610798.85	4206479.93	21871.62291	9.92	9.92	0	ANNUAL	AREA	5	610798.85	4206479.93	0.05063	9.92	9.92	0	ANNUAL	LINE	5
610748.5	4206494.51	23003.93099	10.96	10.96	0	ANNUAL	AREA	5	610748.5	4206494.51	0.05687	10.96	10.96	0	ANNUAL	LINE	5
610921.74	4206437.52	16113.56678	9	9	0	ANNUAL	AREA	5	610921.74	4206437.52	0.0367	9	9	0	ANNUAL	LINE	5
610845.31	4206376.74	14741.49129	10	10	0	ANNUAL	AREA	5	610845.31	4206376.74	0.03765	10	10	0	ANNUAL	LINE	5
610861.92	4206386.8	14938.93871	9.73	9.73	0	ANNUAL	AREA	5	610861.92	4206386.8	0.03729	9.73	9.73	0	ANNUAL	LINE	5
610870.34	4206398.97	15390.47193	9.45	9.45	0	ANNUAL	AREA	5	610870.34	4206398.97	0.03761	9.45	9.45	0	ANNUAL	LINE	5
610902.16	4206393.59	14376.3715	9	9	0	ANNUAL	AREA	5	610902.16	4206393.59	0.03514	9	9	0	ANNUAL	LINE	5
610920.18	4206388.2	13641.50561	9	9	0	ANNUAL	AREA	5	610920.18	4206388.2	0.03361	9	9	0	ANNUAL	LINE	5
610921.11	4206378.14	13178.27362	9	9	0	ANNUAL	AREA	5	610921.11	4206378.14	0.03296	9	9	0	ANNUAL	LINE	5
610917.84	4206361.53	12585.0059	9	9	0	ANNUAL	AREA	5	610917.84	4206361.53	0.03222	9	9	0	ANNUAL	LINE	5
610845.78	4206356.85	13850.68352	9.37	9.37	0	ANNUAL	AREA	5	610845.78	4206356.85	0.03634	9.37	9.37	0	ANNUAL	LINE	5
610867.77	4206365.04	13826.50015	9.35	9.35	0	ANNUAL	AREA	5	610867.77	4206365.04	0.0355	9.35	9.35	0	ANNUAL	LINE	5
610886.72	4206365.28	13462.38958	9	9	0	ANNUAL	AREA	5	610886.72	4206365.28	0.03436	9	9	0	ANNUAL	LINE	5
610903.57	4206363.4	13004.28368	9	9	0	ANNUAL	AREA	5	610903.57	4206363.4	0.0332	9	9	0	ANNUAL	LINE	5
610950.59	4206356.39	11534.62521	9.15	9.15	0	ANNUAL	AREA	5	610950.59	4206356.39	0.02998	9.15	9.15	0	ANNUAL	LINE	5
610965.33	4206355.45	11083.50768	9.48	9.48	0	ANNUAL	AREA	5	610965.33	4206355.45	0.02905	9.48	9.48	0	ANNUAL	LINE	5
610995.74	4206351.01	10034.05866	10.55	10.55	0	ANNUAL	AREA	5	610995.74	4206351.01	0.02703	10.55	10.55	0	ANNUAL	LINE	5
610987.56	4206368.32	10836.7017	9.7	9.7	0	ANNUAL	AREA	5	610987.56	4206368.32	0.02833	9.7	9.7	0	ANNUAL	LINE	5
610970.95	4206394.76	12350.88022	9	9	0	ANNUAL	AREA	5	610970.95	4206394.76	0.0307	9	9	0	ANNUAL	LINE	5
610968.61	4206411.13	13114.90247	9	9	0	ANNUAL	AREA	5	610968.61	4206411.13	0.03173	9	9	0	ANNUAL	LINE	5
610949.42	4206401.77	13362.19168	9	9	0	ANNUAL	AREA	5	610949.42	4206401.77	0.03248	9	9	0	ANNUAL	LINE	5
610960.42	4206425.64	14086.66587	9	9	0	ANNUAL	AREA	5	610960.42	4206425.64	0.03312	9	9	0	ANNUAL	LINE	5
610944.04	4206426.34	14721.19258	9	9	0	ANNUAL	AREA	5	610944.04	4206426.34	0.03432	9	9	0	ANNUAL	LINE	5
610966.5	4206439.67	14554.40893	9	9	0	ANNUAL	AREA	5	610966.5	4206439.67	0.03352	9	9	0	ANNUAL	LINE	5
610964.39	4206457.22	15604.77679	9	9	0	ANNUAL	AREA	5	610964.39	4206457.22	0.03478	9	9	0	ANNUAL	LINE	5
610948.24	4206509.73	20131.31432	8.45	8.45	0	ANNUAL	AREA	5	610948.24	4206509.73	0.0401	8.45	8.45	0	ANNUAL	LINE	5
610965.72	4206510.7	19278.74692	8.14	8.14	0	ANNUAL	AREA	5	610965.72	4206510.7	0.03863	8.14	8.14	0	ANNUAL	LINE	5
610983.53	4206509.08	18128.43848	7.86	7.86	0	ANNUAL	AREA	5	610983.53	4206509.08	0.03696	7.86	7.86	0	ANNUAL	LINE	5
610970.26	4206484.15	17039.35682	8.46	8.46	0	ANNUAL	AREA	5	610970.26	4206484.15	0.03622	8.46	8.46	0	ANNUAL	LINE	5
610963.46	4206468.93	16354.70504	8.93	8.93	0	ANNUAL	AREA	5	610963.46	4206468.93	0.03564	8.93	8.93	0	ANNUAL	LINE	5
611085.12	4206428.94	8898.46279	9.07	9.07	0	ANNUAL	AREA	5	611085.12	4206428.94	0.0253	9.07	9.07	0	ANNUAL	LINE	5
611083.18	4206485.29	10658.65635	8.35	8.35	0	ANNUAL	AREA	5	611083.18	4206485.29	0.02783	8.35	8.35	0	ANNUAL	LINE	5
611221.38	4206686.44	8079.97453	5.19	5.19	0	ANNUAL	AREA	5	611221.38	4206686.44	0.02942	5.19	5.19	0	ANNUAL	LINE	5
611220.83	4206696.9	8445.90623	4.89	4.89	0	ANNUAL	AREA	5	611220.83	4206696.9	0.03003	4.89	4.89	0	ANNUAL	LINE	5
611221.77	4206676.32	7767.38607	5.47	5.47	0	ANNUAL	AREA	5	611221.77	4206676.32	0.02885	5.47	5.47	0	ANNUAL	LINE	5
611240.27	4206683.06	7270.61065	5.33	5.33	0	ANNUAL	AREA	5	611240.27	4206683.06	0.02818	5.33	5.33	0	ANNUAL	LINE	5
611239.72	4206693.52	7594.43941	5.1	5.1	0	ANNUAL	AREA	5	611239.72	4206693.52	0.02875	5.1	5.1	0	ANNUAL	LINE	5
611240.67	4206672.94	6993.02691	5.54	5.54	0	ANNUAL	AREA	5	611240.67	4206672.94	0.02765	5.54	5.54	0	ANNUAL	LINE	5
611222.17	4206653.03	7162.19627	5.95	5.95	0	ANNUAL	AREA	5	611222.17	4206653.03	0.02766	5.95	5.95	0	ANNUAL	LINE	5
611221.62	4206663.49	7434.22334	5.73	5.73	0	ANNUAL	AREA	5	611221.62	4206663.49	0.0282	5.73	5.73	0	ANNUAL	LINE	5
611222.17	4206640.92	6894.75361	6.1	6.1	0	ANNUAL	AREA	5	611222.17	4206640.92	0.02708	6.1	6.1	0	ANNUAL	LINE	5
611241.86	4206650.05	6441.13617	6.01	6.01	0	ANNUAL	AREA	5	611241.86	4206650.05	0.02652	6.01	6.01	0	ANNUAL	LINE	5
611241.31	4206660.5	6680.6455	5.8	5.8	0	ANNUAL	AREA	5	611241.31	4206660.5	0.02702	5.8	5.8	0	ANNUAL	LINE	5
611241.86	4206637.94	6202.91428	6.1	6.1	0	ANNUAL	AREA	5	611241.86	4206637.94	0.02598	6.1	6.1	0	ANNUAL	LINE	5
611266.92	4206689.62	6652.70379	5.2	5.2	0	ANNUAL	AREA	5	611266.92	4206689.62	0.02712	5.2	5.2	0	ANNUAL	LINE	5
611266.37	4206700.08	6966.52103	4.99	4.99	0	ANNUAL	AREA	5	611266.37	4206700.08	0.02766	4.99	4.99	0	ANNUAL	LINE	5
611267.32	4206679.9	6396.46694	5.4	5.4	0	ANNUAL	AREA	5	611267.32	4206679.9	0.02664	5.4	5.4	0	ANNUAL	LINE	5
611268.31	4206659.19	5924.69993	5.82	5.82	0	ANNUAL	AREA	5	611268.31	4206659.19	0.02567	5.82	5.82	0	ANNUAL	LINE	5
611267.76	4206669.65	6152.73903	5.61	5.61	0	ANNUAL	AREA	5	611267.76	4206669.65	0.02616	5.61	5.61	0	ANNUAL	LINE	5
611268.31	4206647.08	5698.67901	6.07	6.07	0	ANNUAL	AREA	5	611268.31	4206647.08	0.02516	6.07	6.07	0	ANNUAL	LINE	5
611221.89	4206630.7	6694.73814	6.1	6.1	0	ANNUAL	AREA	5	611221.89	4206630.7	0.02663	6.1	6.1	0	ANNUAL	LINE	5
611241.58	4206627.72	6023.76667	6.1	6.1	0	ANNUAL	AREA	5	611241.58	4206627.72	0.02555	6.1	6.1	0	ANNUAL	LINE	5
611268.53	4206635.97	5502.84984	6.1	6.1	0	ANNUAL	AREA	5	611268.53	4206635.97	0.02469	6.1	6.1	0	ANNUAL	LINE	5
611269.52	4206627.02	5338.01335	6.1	6.1	0	ANNUAL	AREA	5	611269.52	4206627.02	0.0243	6.1	6.1	0	ANNUAL	LINE	5
611269.32	4206615.69	5171.78822	6.1	6.1	0	ANNUAL	AREA	5	611269.32	4206615.69	0.02387	6.1	6.1	0	ANNUAL	LINE	5
611235.12	4206603.35	5795.9609	6.01	6.01	0	ANNUAL	AREA	5	611235.12	4206603.35	0.02484	6.01	6.01	0	ANNUAL	LINE	5
611125.73	4206584.46	11202.28902	7.26	7.26	0	ANNUAL	AREA	5	611125.73	4206584.46	0.02992	7.26	7.26	0	ANNUAL	LINE	5
611137.26	4206585.26	10323.11577	6.91	6.91	0	ANNUAL	AREA	5	611137.26	4206585.26	0.02924	6.91	6.91	0	ANNUAL	LINE	5
611149	4206584.06	9449.50924	6.55	6.55	0	ANNUAL	AREA	5	611149	4206584.06	0.02849	6.55	6.55	0	ANNUAL	LINE	5
611160.43	4206587.05	8758.09951	6.32	6.32	0	ANNUAL	AREA	5	611160.43	4206587.05	0.02794	6.32	6.32	0	ANNUAL	LINE	5
611172.17	4206585.85	8026.94082	6.21	6.21	0	ANNUAL	AREA	5	611172.17	4206585.85	0.02721	6.21	6.21	0	ANNUAL	LINE	5
611185.49	4206588.64	7388.84606	6.1	6.1	0	ANNUAL	AREA	5	611185.49	4206588.64	0.02661	6.1	6.1	0	ANNUAL	LINE	5
611197.23	4206587.44	6836.07478	6.1	6.1	0	ANNUAL	AREA	5	611197.23	4206587.44	0.02596	6.1	6.1	0	ANNUAL	LINE	5
611128.02	4206567.75	10441.47495	7.19	7.19	0	ANNUAL	AREA	5	611128.02	4206567.75	0.02893	7.19	7.19	0	ANNUAL	LINE	5
611139.75	4206566.56	9582.33013	6.83	6.83	0	ANNUAL	AREA	5	611139.75	4206566.56	0.02818	6.83	6.83	0	ANNUAL	LINE	5
611150.09	4206568.95	8972.64726	6.51	6.51	0	ANNUAL	AREA	5	611150.09	4206568.95	0.02771	6.51	6.51	0	ANNUAL	LINE	5
611161.83	4206567.75	8220.86094	6.32	6.32	0	ANNUAL	AREA	5	611161.83	4206567.75	0.02697	6.32	6.32	0	ANNUAL	LINE	5
611171.17	4206569.15	7731.42255	6.22	6.22	0	ANNUAL	AREA	5	611171.17	4206569.15	0.02652	6.22	6.22	0	ANNUAL	LINE	5
611182.91	4206567.95	7123.82914	6.11	6.11	0	ANNUAL	AREA	5	611182.91	4206567.95	0.02586	6.11	6.11	0	ANNUAL	LINE	5
611194.44	4206567.75	6616.24147	6.1	6.1	0	ANNUAL	AREA	5	611194.44	4206567.75	0.02528	6.1	6.1	0	ANNUAL	LINE	5
611206.18	4206566.56	6148.71018	6.1	6.1	0	ANNUAL	AREA	5	611206.18	4206566.56	0.02469	6.1	6.1	0	ANNUAL	LINE	5
611216.92	4206568.35	5813.89479	6.06	6.06	0	ANNUAL	AREA	5	611216.92	4206568.35	0.02428	6.06	6.06	0	ANNUAL	LINE	5
611228.65	4206567.16	5450.81181	5.95	5.95	0	ANNUAL	AREA	5	611228.65	4206567.16	0.02373	5.95	5.95	0	ANNUAL	LINE	5
611204.89	4206588.04	6538.86643	6.1	6.1	0	ANNUAL	AREA	5	611204.89	4206588.04	0.02561	6.1	6.1	0	ANNUAL	LINE	5
611238.7	4206569.35	5216.94937	5.84	5.84	0	ANNUAL	AREA	5	611238.7	4206569.35	0.0234	5.84	5.84	0	ANNUAL	LINE	5
611266.54	4206574.12	4679.57012	5.79	5.79	0	ANNUAL	AREA	5	611266.54	4206574.12	0.0225	5.79	5.79	0	ANNUAL	LINE	5
611265.15	4206558.8	4530.06256	5.71	5.71	0	ANNUAL	AREA	5	611265.15	4206558.8	0.02204	5.71	5.71	0	ANNUAL	LINE	5
611262.16	4206541.9	4405.30372	5.79	5.79	0	ANNUAL	AREA	5	611262.16	4206541.9	0.02161	5.79	5.79	0	ANNUAL	LINE	5
611129.21	4206540.11	9455.59241	7.91	7.91	0	ANNUAL	AREA	5	611129.21	4206540.11	0.02743	7.91	7.91	0	ANNUAL	LINE	5
611140.94	4206538.92	8692.76582	7.75	7.75	0	ANNUAL	AREA	5	611140.94	4206538.92	0.02671	7.75	7.75	0	ANNUAL	LINE	5
611155.66	4206540.91	7910.76213	7.46	7.46	0	ANNUAL	AREA	5	611155.66	4206540.91	0.02602	7.46	7.46	0	ANNUAL	LINE	5
611167.4	4206539.71	7291.64898	7.32	7.32	0	ANNUAL	AREA	5	611167.4	4206539.71	0.02538	7.32	7.32	0	ANNUAL	LINE	5
611181.32	4206541.7	6713.53164	6.98	6.98	0	ANNUAL	AREA	5	611181.32	4206541.7	0.02483	6.98	6.98	0	ANNUAL	LINE	5
611193.05	4206540.51	6242.97296	6.71	6.71	0	ANNUAL	AREA	5	611193.05	4206540.51	0.02428	6.71	6.71	0	ANNUAL	LINE	5
611205.78	4206542.1	5816.99245	6.17	6.17	0	ANNUAL	AREA	5	611205.78	4206542.1	0.02379	6.17	6.17	0	ANNUAL	LINE	5
611219.3	4206542.89	5403.66789	5.78	5.78	0	ANNUAL	AREA	5	611219.3	4206542.89	0.02325	5.78	5.78	0	ANNUAL	LINE	5
611232.23	4206542.7	5052.02318	5.6	5.6	0	ANNUAL	AREA	5	611232.23	4206542.7	0.02273	5.6	5.6	0	ANNUAL	LINE	5
611243.97	4206541.5	4762.60753	5.48	5.48	0	ANNUAL	AREA	5	611243.97	4206541.5	0.02224	5.48	5.48	0	ANNUAL	LINE	5
611204.79	4206362.96	4077.86391	9	9	0	ANNUAL	AREA	5	611204.79	4206362.96	0.01845	9	9	0	ANNUAL	LINE	5
611349.5	4206372.82	2323.17244	8.57	8.57	0	ANNUAL	AREA	5	611349.5	4206372.82	0.01531	8.57	8.57	0	ANNUAL	LINE	5
611313.91	4206380.65	2628.75743	7.94	7.94	0	ANNUAL	AREA	5	611313.91	4206380.65	0.0162	7.94	7.94	0	ANNUAL	LINE	5
611310.48	4206419.52	2852.95672	7.42	7.42	0	ANNUAL	AREA	5	611310.48	4206419.52	0.01708	7.42	7.42	0	ANNUAL	LINE	5
611267.05	4206500.67	3932.82017	6.83	6.83	0	ANNUAL	AREA	5	611267.05	4206500.67	0.02022	6.83	6.83	0	ANNUAL	LINE	5
611497.56	4206304.83	1558.2644	8	8	0	ANNUAL	AREA	5	611497.56	4206304.83	0.01214	8	8	0	ANNUAL	LINE	5
611419.07	4206310.55	1784.09213	8.83	8.83	0	ANNUAL	AREA	5	611419.07	4206310.55	0.01322	8.83	8.83	0	ANNUAL	LINE	5
611041.07	4206301.25	7613.1557	10.52	10.52	0	ANNUAL	AREA	5	611041.07	4206301.25	0.02298	10.52	10.52	0	ANNUAL	LINE	5

611069.15	4206301.53	6884.87243	10.43	10.43	0	ANNUAL	AREA	5
611083.74	4206300.98	6498.245	10.17	10.17	0	ANNUAL	AREA	5
611100.26	4206300.7	6066.67724	10	10	0	ANNUAL	AREA	5
611111.82	4206300.15	5762.79019	10	10	0	ANNUAL	AREA	5
611123.93	4206299.33	5448.59957	10	10	0	ANNUAL	AREA	5
611137.15	4206300.43	5143.64031	9.56	9.56	0	ANNUAL	AREA	5
611150.91	4206299.88	4821.35059	9.1	9.1	0	ANNUAL	AREA	5
611164.12	4206300.7	4530.19754	9	9	0	ANNUAL	AREA	5
610871.77	4206303.18	11415.50487	9	9	0	ANNUAL	AREA	5
610919.67	4206299.6	10442.61995	9	9	0	ANNUAL	AREA	5
610946.1	4206301.25	9937.67366	9.08	9.08	0	ANNUAL	AREA	5
610968.4	4206299.6	9379.18111	9.82	9.82	0	ANNUAL	AREA	5
610997.85	4206300.15	8683.07105	10.39	10.39	0	ANNUAL	AREA	5
610800.68	4206302.27	12258.77529	9.43	9.43	0	ANNUAL	AREA	5
610345.98	4206368.37	10059.08123	14.89	14.89	0	ANNUAL	AREA	5
610371.57	4206456.46	12233.30687	10.33	10.33	0	ANNUAL	AREA	5
610277.64	4206458.4	9878.35063	12.24	12.24	0	ANNUAL	AREA	5
610294.49	4206372.25	9272.85385	14.24	14.24	0	ANNUAL	AREA	5
610341.12	4206437.68	11065.89657	11.96	11.96	0	ANNUAL	AREA	5
610508	4206352.9	12511.62996	13.11	13.11	0	ANNUAL	AREA	5
610536.83	4206358.41	13056.76671	13.67	13.67	0	ANNUAL	AREA	5
610518.69	4206394.68	13855.6608	13.3	13.3	0	ANNUAL	AREA	5
610506.38	4206428.37	14617.89702	13.44	13.44	0	ANNUAL	AREA	5
610407.88	4206300.63	9913.94492	14.87	14.87	0	ANNUAL	AREA	5
610413.21	4206694.6	17522.76097	10.81	10.81	0	ANNUAL	AREA	5
610451.93	4206697.23	20354.15801	10.05	10.05	0	ANNUAL	AREA	5
610448.83	4206717.31	20459.7314	9.42	9.42	0	ANNUAL	AREA	5
610438.65	4207091.1	9402.84612	8.57	8.57	0	ANNUAL	AREA	5
610449.61	4207060.72	11256.00003	8.71	8.71	0	ANNUAL	AREA	5
610454.96	4207045.53	12322.56933	8.77	8.77	0	ANNUAL	AREA	5
610451.02	4207000.82	14391.93124	9.14	9.14	0	ANNUAL	AREA	5
610446.24	4206963.41	15896.45106	9.14	9.14	0	ANNUAL	AREA	5
610457.21	4206987.6	15590.27335	9.14	9.14	0	ANNUAL	AREA	5
610421.77	4207012.91	11927.24101	9.07	9.07	0	ANNUAL	AREA	5
610421.49	4207040.47	10746.51686	8.84	8.84	0	ANNUAL	AREA	5
610362.43	4207105.72	6643.78968	8.32	8.32	0	ANNUAL	AREA	5
610378.74	4207077.32	7823.12025	8.72	8.72	0	ANNUAL	AREA	5
610364.4	4207040.75	8479.04684	8.82	8.82	0	ANNUAL	AREA	5
610319.96	4207038.22	7275.76429	8.81	8.81	0	ANNUAL	AREA	5
610334.3	4207091.94	6357.68994	8.27	8.27	0	ANNUAL	AREA	5
610329.8	4207109.1	5903.89611	8.03	8.03	0	ANNUAL	AREA	5
610350.94	4206635.65	13554.28791	12.19	12.19	0	ANNUAL	AREA	5
610530.61	4206613.88	22829.66895	12.19	12.19	0	ANNUAL	AREA	5
610531.61	4206594.02	21962.0131	12.19	12.19	0	ANNUAL	AREA	5
610537.23	4206566.38	21002.84514	12	12	0	ANNUAL	AREA	5
610565.36	4206541.23	21060.25934	12	12	0	ANNUAL	AREA	5
610627.57	4206493.91	20761.83381	10.94	10.94	0	ANNUAL	AREA	5
610633.2	4206515.75	22273.16141	11	11	0	ANNUAL	AREA	5
610666.29	4206515.75	23225.47223	11	11	0	ANNUAL	AREA	5
610646.1	4206559.1	25850.80471	10.9	10.9	0	ANNUAL	AREA	5
610646.77	4206594.51	28885.72232	10.79	10.79	0	ANNUAL	AREA	5
610578.59	4206617.02	26124.41176	12.13	12.13	0	ANNUAL	AREA	5
610620.29	4206619.66	29174.34639	11.77	11.77	0	ANNUAL	AREA	5
610608.05	4206563.07	24229.78425	11.95	11.95	0	ANNUAL	AREA	5
610608.05	4206545.2	23158.49518	11.19	11.19	0	ANNUAL	AREA	5
610623.6	4206564.4	25082.37179	11.59	11.59	0	ANNUAL	AREA	5
610623.6	4206546.53	23847.43895	11.47	11.47	0	ANNUAL	AREA	5
610563.04	4206597.82	23971.60258	12.19	12.19	0	ANNUAL	AREA	5
610587.86	4206596.83	25374.37818	12.17	12.17	0	ANNUAL	AREA	5
610564.7	4206580.61	23102.57739	12.16	12.16	0	ANNUAL	AREA	5
610589.52	4206581.61	24489.33116	12.13	12.13	0	ANNUAL	AREA	5
610734.02	4206917.57	200977.4594	7.29	7.29	0	ANNUAL	AREA	5
610754.27	4206913.28	214033.8922	7.13	7.13	0	ANNUAL	AREA	5
610779.19	4206906.67	221919.6793	6.95	6.95	0	ANNUAL	AREA	5
610824.35	4206899.66	245250.8952	6.56	6.56	0	ANNUAL	AREA	5
610820.85	4206880.97	193566.8159	6.74	6.74	0	ANNUAL	AREA	5
610811.11	4206855.27	147225.3402	6.83	6.83	0	ANNUAL	AREA	5
610717.67	4206895.37	143900.0578	7.57	7.57	0	ANNUAL	AREA	5
610731.69	4206880.97	137948.3885	7.62	7.62	0	ANNUAL	AREA	5
610715.72	4206858	107536.2567	7.79	7.79	0	ANNUAL	AREA	5
610721.17	4206833.47	94587.46409	7.75	7.75	0	ANNUAL	AREA	5
610758.94	4206842.03	114635.2732	7.36	7.36	0	ANNUAL	AREA	5
610767.51	4206870.84	147058.9532	7.28	7.28	0	ANNUAL	AREA	5
610865.01	4206886.37	240455.1931	6.28	6.28	0	ANNUAL	AREA	5
610909.74	4206874.67	241458.0362	6.1	6.1	0	ANNUAL	AREA	5
610860.95	4206838.53	144482.5254	6.33	6.33	0	ANNUAL	AREA	5
610888.6	4206829.18	142836.5405	6.1	6.1	0	ANNUAL	AREA	5
610790.87	4206784.8	86629.7035	7.46	7.46	0	ANNUAL	AREA	5
610816.95	4206785.58	91413.12259	7.26	7.26	0	ANNUAL	AREA	5
610850.44	4206785.19	96808.38093	6.95	6.95	0	ANNUAL	AREA	5
610898.33	4206797.26	116300.2954	6.25	6.25	0	ANNUAL	AREA	5
610894.83	4206755.59	87642.90467	6.82	6.82	0	ANNUAL	AREA	5
610897.55	4206780.9	104082.6361	6.42	6.42	0	ANNUAL	AREA	5
610886.81	4206880.99	242047.3387	6.1	6.1	0	ANNUAL	AREA	5
611023.86	4206760.97	101250.1885	6.1	6.1	0	ANNUAL	AREA	5
611041.14	4206759.94	87295.06282	6.1	6.1	0	ANNUAL	AREA	5
611061.35	4206762.7	71959.76634	6.1	6.1	0	ANNUAL	AREA	5
610754.89	4206782.37	78838.02197	7.85	7.85	0	ANNUAL	AREA	5
610844.56	4206719.24	65508.14968	8.09	8.09	0	ANNUAL	AREA	5
610513.96	4206710.62	25833.20947	11.64	11.64	0	ANNUAL	AREA	5
610591.87	4206713.73	35488.0171	9.38	9.38	0	ANNUAL	AREA	5
610668.23	4206716.46	46000.52778	9.14	9.14	0	ANNUAL	AREA	5
610545.12	4206684.51	28038.25143	10.74	10.74	0	ANNUAL	AREA	5
610637.84	4206683.34	37639.51428	9.28	9.28	0	ANNUAL	AREA	5
610512.01	4206642.44	22895.3248	11.86	11.86	0	ANNUAL	AREA	5
610584.86	4206649.06	29272.52979	10.53	10.53	0	ANNUAL	AREA	5
610665.5	4206649.06	36017.19136	9.22	9.22	0	ANNUAL	AREA	5
609975.26	4207082.82	2715.13954	7.23	7.23	0	ANNUAL	AREA	5
609945.83	4207083.32	2570.12741	7.09	7.09	0	ANNUAL	AREA	5
609822.62	4207152.66	1807.41888	6.83	6.83	0	ANNUAL	AREA	5
609804.66	4207094.79	1980.62612	7.61	7.61	0	ANNUAL	AREA	5
609772.24	4207094.79	1885.09059	7.98	7.98	0	ANNUAL	AREA	5
609700.41	4207156.65	1510.14548	8.04	19.51	0	ANNUAL	AREA	5
609633.07	4207074.84	1528.93082	19.72	19.72	0	ANNUAL	AREA	5
609555.75	4207074.84	1393.77314	19.7	19.7	0	ANNUAL	AREA	5
609620.1	4207148.17	1261.97639	17.68	17.68	0	ANNUAL	AREA	5
609556.25	4207145.67	1184.92479	17.53	17.53	0	ANNUAL	AREA	5
609502.88	4207137.69	1144.31453	17.11	17.11	0	ANNUAL	AREA	5
610698.46	4207080.47	129212.2053	6.61	6.61	0	ANNUAL	AREA	5
610693.24	4207063.42	132350.0499	6.84	6.84	0	ANNUAL	AREA	5
610706.16	4207019.7	208570.1515	6.99	6.99	0	ANNUAL	AREA	5
610680.04	4207080.09	82257.23261	6.8	6.8	0	ANNUAL	AREA	5
610682.42	4207046.11	114707.2231	7.12	7.12	0	ANNUAL	AREA	5

** CONCUNIT ug/ m^3
** DEPUNIT g/m^ 2

611069.15	4206301.53	0.02177	10.43	10.43	0	ANNUAL	LINE	5
611083.74	4206300.98	0.02116	10.17	10.17	0	ANNUAL	LINE	5
611100.26	4206300.7	0.02051	10	10	0	ANNUAL	LINE	5
611111.82	4206300.15	0.02005	10	10	0	ANNUAL	LINE	5
611123.93	4206299.33	0.01958	10	10	0	ANNUAL	LINE	5
611137.15	4206300.43	0.01917	9.56	9.56	0	ANNUAL	LINE	5
611150.91	4206299.88	0.01873	9.1	9.1	0	ANNUAL	LINE	5
611164.12	4206300.7	0.01833	9	9	0	ANNUAL	LINE	5
610871.77	4206303.18	0.03169	9	9	0	ANNUAL	LINE	5
610919.67	4206299.6	0.02899	9	9	0	ANNUAL	LINE	5
610946.1	4206301.25	0.0277	9.08	9.08	0	ANNUAL	LINE	5
610968.4	4206299.6	0.02644	9.82	9.82	0	ANNUAL	LINE	5
610997.85	4206300.15	0.02497	10.39	10.39	0	ANNUAL	LINE	5
610800.68	4206302.27	0.03546	9.43	9.43	0	ANNUAL	LINE	5
610345.98	4206368.37	0.0642	14.89	14.89	0	ANNUAL	LINE	5
610371.57	4206456.46	0.07752	10.33	10.33	0	ANNUAL	LINE	5
610277.64	4206458.4	0.0813	12.24	12.24	0	ANNUAL	LINE	5
610294.49	4206372.25	0.06703	14.24	14.24	0	ANNUAL	LINE	5
610341.12	4206437.68	0.07503	11.96	11.96	0	ANNUAL	LINE	5
610508	4206352.9	0.05508	13.11	13.11	0	ANNUAL	LINE	5
610536.83	4206358.41	0.05389	13.67	13.67	0	ANNUAL	LINE	5
610518.69	4206394.68	0.05939	13.3	13.3	0	ANNUAL	LINE	5
610506.38	4206428.37	0.06459	13.44	13.44	0	ANNUAL	LINE	5
610407.88	4206300.63	0.05376	14.87	14.87	0	ANNUAL	LINE	5
610413.21	4206694.6	0.14058	10.81	10.81	0	ANNUAL	LINE	5
610451.93	4206697.23	0.13937	10.05	10.05	0	ANNUAL	LINE	5
610448.83	4206717.31	0.14922	9.42	9.42	0	ANNUAL	LINE	5
610438.65	4207091.1	1.78562	8.57	8.57	0	ANNUAL	LINE	5
610449.61	4207060.72	1.07703	8.71	8.71	0	ANNUAL	LINE	5
610454.96	4207045.53	0.89094	8.77	8.77	0	ANNUAL	LINE	5
610451.02	4207000.82	0.57871	9.14	9.14	0	ANNUAL	LINE	5
610446.24	4206963.41	0.44186	9.14	9.14	0	ANNUAL	LINE	5
610457.21	4206987.6	0.52213	9.14	9.14	0	ANNUAL	LINE	5
610421.77	4207012.91	0.64193	9.07	9.07	0	ANNUAL	LINE	5
610421.49	4207040.47	0.84116	8.84	8.84	0	ANNUAL	LINE	5
610362.43	4207105.72	2.52879	8.32	8.32	0	ANNUAL	LINE	5
610378.74	4207077.32	1.37515	8.72	8.72	0	ANNUAL	LINE	5
610364.4	4207040.75	0.84341	8.82	8.82	0	ANNUAL	LINE	5
610319.96	4207038.22	0.82185	8.81	8.81	0	ANNUAL	LINE	5
610334.3	4207091.94	1.81298	8.27	8.27	0	ANNUAL	LINE	5
610329.8	4207109.1	2.78443	8.03	8.03	0	ANNUAL	LINE	5
610350.94	4206635.65	0.12108	12.19	12.19	0	ANNUAL	LINE	5
610530.61	4206613.88	0.1023	12.19	12.19	0	ANNUAL	LINE	5
610531.61	4206594.02	0.09664	12.19	12.19	0	ANNUAL	LINE	5
610537.23	4206566.38	0.08927	12	12	0	ANNUAL	LINE	5
610565.36	4206541.23	0.08135	12	12	0	ANNUAL	LINE	5
610627.57	4206493.91	0.06744	10.94	10.94	0	ANNUAL	LINE	5
610633.2	4206515.75	0.07067	11	11	0	ANNUAL	LINE	5
610666.29	4206515.75	0.06772	11	11	0	ANNUAL	LINE	5
610646.1	4206559.1	0.07786	10.9	10.9	0	ANNUAL	LINE	5
610646.77	4206594.51	0.08584	10.79	10.79	0	ANNUAL	LINE	5
610578.59	4206617.02	0.09879	12.13	12.13	0	ANNUAL	LINE	5
610620.29	4206619.66	0.0956	11.77	11.77	0	ANNUAL	LINE	5
610608.05	4206563.07	0.08236	11.95	11.95	0	ANNUAL	LINE	5
610608.05	4206545.2	0.07936	11.19	11.19	0	ANNUAL	LINE	5
610623.6	4206564.4	0.0815	11.59	11.59	0	ANNUAL	LINE	5
610623.6	4206546.53	0.07774	11.47	11.47	0	ANNUAL	LINE	5
610563.04	4206597.82	0.09491	12.19	12.19	0	ANNUAL	LINE	5
610587.86	4206596.83	0.09231	12.17	12.17	0	ANNUAL	LINE	5
610564.7	4206580.61	0.09032	12.16	12.16	0	ANNUAL	LINE	5
610589.52	4206581.61	0.08831	12.13	12.13	0	ANNUAL	LINE	5
610734.02	4206917.57	0.29497	7.29	7.29	0	ANNUAL	LINE	5
610754.27	4206913.28	0.28039	7.13	7.13	0	ANNUAL	LINE	5
610779.19	4206906.67	0.25962	6.95	6.95	0	ANNUAL	LINE	5
610824.35	4206899.66	0.22811	6.56	6.56	0	ANNUAL	LINE	5
610820.85	4206880.97	0.20512	6.74	6.74	0	ANNUAL	LINE	5
610811.11	4206855.27	0.18137	6.83	6.83	0	ANNUAL	LINE	5
610717.67	4206895.37	0.26302	7.57	7.57	0	ANNUAL	LINE	5
610731.69	4206880.97	0.23855	7.62	7.62	0	ANNUAL	LINE	5
610715.72	4206858	0.21528	7.79	7.79	0	ANNUAL	LINE	5
610721.17	4206833.47	0.18928	7.75	7.75	0	ANNUAL	LINE	5
610758.94	4206842.03	0.18673	7.36	7.36	0	ANNUAL	LINE	5
610767.51	4206870.84	0.21432	7.28	7.28	0	ANNUAL	LINE	5
610865.01	4206886.37	0.18907	6.28	6.28	0	ANNUAL	LINE	5
610909.74	4206874.67	0.1521	6.1	6.1	0	ANNUAL	LINE	5
610860.95	4206838.53	0.14672	6.33	6.33	0	ANNUAL	LINE	5
610888.6	4206829.18	0.12891	6.1	6.1	0	ANNUAL	LINE	5
610790.87	4206784.8	0.13449	7.46	7.46	0	ANNUAL	LINE	5
610816.95	4206785.58	0.12762	7.26	7.26	0	ANNUAL	LINE	5
610850.44	4206785.19	0.1175	6.95	6.95	0	ANNUAL	LINE	5
610898.33	4206797.26	0.10805	6.25	6.25	0	ANNUAL	LINE	5
610894.83	4206755.59	0.09214	6.82	6.82	0	ANNUAL	LINE	5
610897.55	4206780.9	0.10111	6.42	6.42	0	ANNUAL	LINE	5
610886.81	4206880.99	0.17098	6.1	6.1	0	ANNUAL	LINE	5
611023.86	4206760.97	0.06073	6.1	6.1	0	ANNUAL	LINE	5
611041.14	4206759.94	0.05684	6.1	6.1	0	ANNUAL	LINE	5
611061.35	4206762.7	0.05329	6.1	6.1	0	ANNUAL	LINE	5
610754.89	4206782.37	0.14226	7.85	7.85	0	ANNUAL	LINE	5
610844.56	4206719.24	0.09154	8.09	8.09	0	ANNUAL	LINE	5
610513.96	4206710.62	0.14021	11.64	11.64	0	ANNUAL	LINE	5
610591.87	4206713.73	0.13349	9.38	9.38	0	ANNUAL	LINE	5
610668.23	4206716.46	0.12416	9.14	9.14	0	ANNUAL	LINE	5
610545.12	4206684.51	0.1254	10.74	10.74	0	ANNUAL	LINE	5
610637.84	4206683.34	0.11481	9.28	9.28	0	ANNUAL	LINE	5
610512.01	4206642.44	0.11318	11.86	11.86	0	ANNUAL	LINE	5
610584.86	4206649.06	0.10832	10.53	10.53	0	ANNUAL	LINE	5
610665.5	4206649.06	0.0993	9.22	9.22	0	ANNUAL	LINE	5
609975.26	4207082.82	2.09483	7.23	7.23	0	ANNUAL	LINE	5
609945.83	4207083.32	2.17245	7.09	7.09	0	ANNUAL	LINE	5
609822.62	4207152.66	3.10285	6.83	6.83	0	ANNUAL	LINE	5
609804.66	4207094.79	3.50258	7.61	7.61	0	ANNUAL	LINE	5
609772.24	4207094.79	3.62627	7.98	7.98	0	ANNUAL	LINE	5
609700.41	4207156.65	2.34552	8.04	19.51	0	ANNUAL	LINE	5
609633.07	4207074.84	1.93448	19.72	19.72	0	ANNUAL	LINE	5
609555.75	4207074.84	2.2389	19.7	19.7	0	ANNUAL	LINE	5
609620.1	4207148.17	2.54726	17.68	17.68	0	ANNUAL	LINE	5
609556.25	4207145.67	2.52249	17.53	17.53	0	ANNUAL	LINE	5
609502.88	4207137.69	2.82097	17.11	17.11	0	ANNUAL	LINE	5
610698.46	4207080.47	1.42255	6.61	6.61	0	ANNUAL	LINE	5
610693.24	4207063.42	1.08921	6.84	6.84	0	ANNUAL	LINE	5
610706.16	4207019.7	0.65339	6.99	6.99	0	ANNUAL	LINE	5
610680.04	4207080.09	1.41486	6.8	6.8	0	ANNUAL	LINE	5
610682.42	4207046.11	0.87226	7.12	7.12	0	ANNUAL	LINE	5

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Appendix C:
Biological Resources Supporting Information

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C.1 - CNDDB and CNPS Inventory Results

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Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Jersey Island (3812116))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Antioch andrenid bee *Perdita scitula antiochensis*	IIHYM01031	None	None	G1T1	S1	
Antioch Dunes evening-primrose *Oenothera deltoides ssp. howellii*	PDONA0C0B4	Endangered	Endangered	G5T1	S1	1B.1
bank swallow *Riparia riparia*	ABPAU08010	None	Threatened	G5	S2	
Bolander's water-hemlock *Cicuta maculata var. bolanderi*	PDAPI0M051	None	None	G5T4	S2	2B.1
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S3	SSC
California black rail *Laterallus jamaicensis coturniculus*	ABNME03041	None	Threatened	G3G4T1	S1	FP
Coastal and Valley Freshwater Marsh *Coastal and Valley Freshwater Marsh*	CTT52410CA	None	None	G3	S2.1	
curved-foot hygrotus diving beetle *Hygrotus curvipes*	IICOL38030	None	None	G1	S1	
Delta mudwort *Limosella australis*	PDSCR10030	None	None	G4G5	S2	2B.1
Delta smelt *Hypomesus transpacificus*	AFCHB01040	Threatened	Endangered	G1	S1	
Delta tule pea *Lathyrus jepsonii var. jepsonii*	PDFAB250D2	None	None	G5T2	S2	1B.2
eel-grass pondweed *Potamogeton zosteriformis*	PMPOT03160	None	None	G5	S3	2B.2
giant gartersnake *Thamnophis gigas*	ARADB36150	Threatened	Threatened	G2	S2	
great blue heron *Ardea herodias*	ABNGA04010	None	None	G5	S4	
hoary bat *Lasiurus cinereus*	AMACC05030	None	None	G5	S4	
longfin smelt *Spirinchus thaleichthys*	AFCHB03010	Candidate	Threatened	G5	S1	SSC
Mason's lilaeopsis *Lilaeopsis masonii*	PDAPI19030	None	Rare	G2	S2	1B.1
northern California legless lizard *Anniella pulchra*	ARACC01020	None	None	G3	S3	SSC
soft salty bird's-beak *Chloropyron molle ssp. molle*	PDSCR0J0D2	Endangered	Rare	G2T1	S1	1B.2
song sparrow ("Modesto" population) *Melospiza melodia*	ABPBXA3010	None	None	G5	S3?	SSC

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
steelhead - Central Valley DPS *Oncorhynchus mykiss irideus pop. 11*	AFCHA0209K	Threatened	None	G5T2Q	S2	
Suisun Marsh aster *Symphyotrichum lentum*	PDASTE8470	None	None	G2	S2	1B.2
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S3	
western bumble bee *Bombus occidentalis*	IIHYM24250	None	None	G2G3	S1	
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC
western red bat *Lasiurus blossevillii*	AMACC05060	None	None	G5	S3	SSC
woolly rose-mallow *Hibiscus lasiocarpos var. occidentalis*	PDMAL0H0R3	None	None	G5T3	S3	1B.2

Record Count: 27

CNPS California Native Plant Society

Plant List

Inventory of Rare and Endangered Plants

5 matches found. *Click on scientific name for details*

Search Criteria

California Rare Plant Rank is one of [1B, 2B], FESA is one of [Endangered, Threatened], CESA is one of [Endangered, Threatened, Rare], Found in Quads 3812127, 3812126, 3812125, 3812117, 3812116, 3812115, 3712187 3712186 and 3712185;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Amsinckia grandiflora	large-flowered fiddleneck	Boraginaceae	annual herb	(Mar)Apr-May	1B.1	S1	G1
Chloropyron molle ssp. molle	soft bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Nov	1B.2	S1	G2T1
Erysimum capitatum var. angustatum	Contra Costa wallflower	Brassicaceae	perennial herb	Mar-Jul	1B.1	S1	G5T1
Neostapfia colusana	Colusa grass	Poaceae	annual herb	May-Aug	1B.1	S1	G1
Oenothera deltoides ssp. howellii	Antioch Dunes evening-primrose	Onagraceae	perennial herb	Mar-Sep	1B.1	S1	G5T1

Suggested Citation

California Native Plant Society, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 24 October 2018].

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Questions and Comments
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C.2 - Soil Map—Contra Costa County, California

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Map Scale: 1:2,760 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 40 80 160 240

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Contra Costa County, California
Survey Area Data: Version 15, Sep 14, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 2, 2015—Jun 3, 2015

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
DaC	Delhi sand, 2 to 9 percent slopes	21.3	100.0%
Totals for Area of Interest		**21.3**	**100.0%**

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C.3 - Tree Survey Report

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Tree Survey Report

MLC Holdings, Inc. Oakley Arborist Survey
OAKLEY, CONTRA COSTA COUNTY, CALIFORNIA

Prepared For:

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Date:
September 2018

WRA Project No:
26210-4

ENVIRONMENTAL CONSULTANTS

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1.0 INTRODUCTION

On July 16, 2018, WRA, Inc. (WRA) conducted a tree survey at 1731 Main Street, Oakley and the two adjoining parcels (APNs: 037-100-048-0 and 037-100-049-8) in Contra Costa County, California (Study Area). WRA's ISA-Certified Arborist, Gavin Albertoli (ISA #WE-12027A), conducted this survey for the purpose of identifying and documenting the presence of trees protected per the City of Oakley Heritage and Protected Trees Ordinance (Tree Ordinance).

1.1 Study Area Description

The Study Area is approximately 20.97 acres and includes 1731 Main Street, Oakley and the two adjoining parcels. The Study Area is located east of Highway 160, south of Main Street, north of Carol Lane and is approximately 0.97 Mile northwest of downtown Oakley. Developments adjacent to the Study Area include the Cypress Shopping Center to the west and The Oaks residential housing facility to the south. The majority of the Study Area is characterized by undeveloped non-native annual grasslands with portions of agricultural vineyards and scattered trees. Tree dominated portions of the site are primarily populated with native coast live oak (*Quercus agrifolia*).

1.2 Regulatory Background

City of Oakley Heritage and Protected Trees Ordinance

The City of Oakley Municipal Code Chapter 9.1.1112, "Heritage and Protected Trees", establishes regulations for the protection and preservation of native and non-native trees in the City of Oakley. The ordinance defines a "Heritage Tree" as any of the following:

1. A California Native Oak. (Valley oak – *Quercus lobata*; Leather Oak – *Quercus durata*; California Black Oak – *Quercus kelloggii;* Canyon Live Oak – *Quercus chrysolepis*; Interior Live Oak – *Quercus wislizenii*; Island Oak – *Quercus tomentella*; Engelmann Oak – *Quercus engelmannii*; Coast Live Oak – *Quercus agrifolia)* that measures at least 50 inches in circumference (15.6 inches diameter) at 4.5 feet above grade, regardless of location or health;

2. A tree of a species other than a California native oak that measures at least 50 inches in circumference (at 4.5 feet above grade) and is either on an undeveloped property, located on public property or within the right-of-way, or located on private property and is found to provide benefits to the subject property as well as neighboring properties, subject to determination by the Director.

The ordinance defines a "Protected Tree" as any of the following:

1. A heritage tree;

2. A tree adjacent to or part of a riparian habitat, foothill woodland or oak savanna area that measures 20 inches or larger in circumference (approximately 6.5 inches in diameter) as measured at 4.5 feet above grade, or a multi-stemmed tree with the sum of the circumferences measuring 40 inches or larger as measured 4.5 feet above grade, and is

included in the following list of indigenous trees: *Acer macrophyllum* (Big-leaf Maple), *Acer negundo* (Box Elder), *Aesculus californica* (California Buckeye), *Alnus Rhombifolia* (White Alder), *Arbutus menziesii* (Madrone), *Heteromeles arbutifolia* (Toyon), *Juglans hindsii* (California Black Walnut), *Juniperus californica* (California Juniper), *Lithocarpus densiflora* (Tanoak or Tanbark Oak), *Pinus attenuata* (Knobcone Pine), *Pinus sabiniana* (Digger Pine), *Platanus racemosa* (California Sycamore), *Populus fremontii* (Fremont Cottonwood), *Populus trichocarpa* (Black Cottonwood), *Quercus agrifolia* (California or Coast Live Oak), *Quercus chrysolepis* (Canyon Live Oak), *Quercus douglasii* (Blue Oak*), Quercus kelloggii* (California Black Oak), *Quercus lobata* (Valley Oak), *Quercus wislizenii*, (Interior Live Oak), *Umbellularia californica* (California Bay or Laurel);

3. Any tree shown to be preserved on an approved tentative map, or development or site plan or required to be retained as a condition of approval;

4. Any tree required to be planted as a replacement for an unlawfully removed tree.

A tree removal permit from the City of Oakley Community Development Department is required to remove, cut down, or destroy a protected or heritage tree. Additional tree protection and preservation measures for preserved trees during construction, and tree removal permit conditions of approval including but not limited to tree replacement or payment of in-lieu fees may apply as outlined in the Tree Ordinance.

2.0 METHODS

On July 16, 2018, the Study Area was traversed on foot to inventory all heritage trees as defined per the Tree Ordinance within the Study Area. WRA's ISA-Certified Arborist surveyed the area and recorded relevant tree information for each surveyed tree including species, DBH, estimated crown radius, estimated height, and health, condition and structure rankings.

2.1 Tree Inventory

All trees greater than or equal to 15.6 inches diameter at breast height ("DBH"; measured at 4.5 feet above grade) in the Study Area were inventoried. DBH was calculated for heritage trees by measuring the trunk diameter at 4.5 ft. above grade. DBH for multi-trunk trees was calculated by measuring each individual trunk and calculating the sum total of trunk diameters. In cases where an irregular buttress or bulge occurred at DBH, measurements were taken above or below the irregular feature in order to best represent the size of the tree. The location of each heritage tree surveyed within the Study Area were recorded using a GPS unit with sub-meter accuracy and each surveyed tree was given a unique, numbered aluminum tree tag.

2.2 Tree Assessment

General notes on the condition of trees were taken, including health, structure, and overall condition. Assessment of the health, structure, and overall condition of each tree was conducted according to the narratives listed in Table 1.

Table 1. Rating Narratives for Tree Assessment

Health	
Good	Tree is free from symptoms of disease and stress
Fair	Tree shows some symptoms of disease or stress including twig and small branch dieback, evidence of fungal / parasitic infection, thinning of crown, or poor leaf color
Poor	Tree shows symptoms of severe decline
Structure	
Good	Tree is free from major structural defects
Fair	Tree shows some structural defects in branches but overall structure is stable
Poor	Tree shows structural failure of a major branch or co-dominant trunk
General Condition	
Good	Tree shows condition of foliage, bark, and overall structure characteristic of the species and lacking obvious defect, or disease
Fair	Tree shows condition of foliage, bark, and overall structure characteristic of the species with some evidence of stress, defect, or disease
Poor	Tree shows condition of foliage, bark, and overall structure uncharacteristic of the species with obvious evidence of stress, defect, or disease.

3.0 RESULTS

3.1 Tree Inventory

A total of 53 trees representing six species were inventoried within the Study Area during this assessment. All but two species are considered native to the City of Oakley. Non-native species surveyed included Monterey pine (*Pinus radiata*), Peruvian pepper tree (*Schinus molle*), and American sweetgum (*Liquidambar styraciflua*). Native species surveyed included coast live oak, California sycamore, and northern California black walnut. Thirty-eight (38) of the trees surveyed are heritage trees, six are non-heritage trees, and the remaining nine are potential heritage trees.

As described above, the Tree Ordinance defines certain native trees as protected trees if they are part of or adjacent to riparian habitat, foothill woodland, or oak savanna, and measure 20 inches or larger in circumference. However, the Tree Ordinance, does not define riparian habitat, foothill woodland, or oak savanna, and does not provide guidance on determining whether these habitats are present. Although the Study Area contains mature coast live oak trees, historic aerial imagery (Google Earth 2018, NETR 2018) indicates that the entire Study Area supported high density, intensive agricultural (vineyard or orchard) production from at least 1939 to as recently as 1993.

Therefore, existing mature coast live oak trees on site do not constitute a natural foothill woodland or oak savanna habitat. There are a total of nine trees, which would not be considered heritage trees in the absence of riparian habitat, foothill woodland, or oak savanna. These nine trees should be considered non-heritage due to the absence of these habitats and these trees are shown with an asterisk (*) in Appendix A. However, that determination will ultimately be made by the City of Oakley during the tree removal permit process.

A complete list of surveyed trees is included in Appendix A. The GPS locations of surveyed trees are shown in Appendix B. The heritage trees range in size from 17.1 inches to 87.2 inches in diameter (measured at 4.5 feet above ground). The largest heritage tree surveyed was a 87.2-inch multi-trunk coast live oak (tree #932). The largest single-trunk heritage tree surveyed was a 56.1-inch coast live oak (tree #910). Approximate canopy radii averaged from 8 to 37 feet. Approximate height ranged from 25 to 40 feet.

3.2 Tree Assessment

The overall condition, health, and structure of trees inventoried within the Study Area during this assessment ranged from poor to good, with most trees ranking fair to good in all three categories. A total of 31 of the trees surveyed ranked good in general condition with most trees showing no visible damage or signs of growing disturbances. Ninety-two (92) percent of the trees ranked fair in health with the remaining 4 percent ranking good. Maladies commonly observed that affected the overall health ranking, included slight to moderate leaf necrosis, trunk and scaffold branch rot, and mild to moderate drought stress. The majority of coast live oak trees that were surveyed displayed slight leaf dieback with some trees showing more significant signs of leaf dieback and stress. The structural ranking of most trees was fair to good with 6 trees ranking as poor in structure. Trees that received a poor structure ranking displayed codominant trunks, narrow stem and branch connections with included bark, poor growth formation, or stem failure. Table 2 below summarizes the assessment results of all inventoried trees in the Study Area.

Table 2. Tree Assessment Results Summary

Criteria Assessed/Rating	Condition	Health	Structure
Good	31 (59%)	4 (8%)	22 (42%)
Fair	21 (40%)	49 (92%)	25 (47%)
Poor	1 (1%)	0 (0%)	6 (11%)

4.0 SUMMARY AND RECOMMENDATIONS

The Study Area contains 38 trees which are considered heritage trees per the City of Oakley Tree Ordinance, and 15 non-heritage trees. A total of 29 heritage coast live oak trees and 15 non-heritage trees will be removed. A tree removal permit shall be required for the removal of heritage trees.

A total of nine of the highest-quality mature heritage coast live oak trees will be preserved and incorporated into public parks within the development. The nine trees being preserved rank good to fair in condition, health, and structure and were identified as good candidates for retention based on conditions observed during the time of the site visit. Each preserved tree displayed minimal signs of stress and exhibited good structural form, health and vigor representative of the species. Representative photographs of six of the nine preserved trees are shown in Appendix C.

In addition to the nine preserved mature specimen coast live oak trees, the overall landscape plan for the Project (VTA 2018) includes approximately 272 tree plantings consisting of five species, two of which are native oak species, coast live oak and valley oak (*Quercus lobata*), and the rest are non-native ornamental species that are well-suited to residential developments.

Beyond the nine heritage coast live oak trees to be preserved, the planting plan includes 59 coast live oak, and 52 valley oak trees for a total of 111 native oak replacement trees, indicating a 3.8 to 1 ratio of native oak replacement trees to native oak heritage trees being removed. When taken altogether, the Project will be replacing trees removed at a greater than 6 to 1 ratio of replacement trees to trees removed, inclusive of heritage and non-heritage trees.

A complete list of all trees surveyed within the Study Area is presented in Appendix A. A figure displaying the locations of all surveyed trees is presented in Appendix B. Representative photographs are provided in Appendix C.

In order to avoid and minimize damage to existing trees which are not proposed for direct impact by project activities, the following measures should be implemented during construction:

- All construction activity (grading, filling, paving, landscaping etc.) shall respect the root protection zone (RPZ) around all trees within the vicinity of the project area that are to be preserved. The RPZ should be a distance of 1.0 times the dripline radius measured from the trunk of the tree. Exception to this standard could be considered on a case-by-case basis, provided that it is demonstrated that an encroachment into the RPZ will not affect the root system or the health of the tree, and is authorized by an ISA-Certified Arborist or comparable specialist.
- Temporary protective fencing shall be installed around the dripline of existing trees prior to commencement of any construction activity conducted within 25' of the tree canopy. The fence shall be clearly marked to prevent inadvertent encroachment by heavy machinery.
- Drainage will not be allowed to pond around the base of any tree.
- An ISA-Certified Arborist or tree specialist shall be retained to perform any necessary pruning of trees during construction activity.
- Should any utility lines encroach within the tree protection zone, a single, shared utility conduit shall be used where possible to avoid negative impact to trees.
- Roots exposed, as a result of construction activities shall be covered with wet burlap to avoid desiccation, and should be buried as soon as practicable.
- Construction materials or heavy equipment shall not be stored within the root protection zone of preserved trees.

- Only an ISA-Certified Arborist or comparable specialist will make specific recommendations as to where any existing trees can safely tolerate some level of fill within the drip line.
- Trenching within RPZ shall be done under the field supervision of an ISA-Certified Arborist and shall be hand dug as much as possible in addition to using auger or drill.
- Construction materials shall be properly stored away from existing trees to avoid spillage or damage to trees.

5.0 REFERENCES

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APPENDIX A

TREE SURVEY TABLE

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Appendix A. MLC Holdings, Inc. Oakley Tree Survey Table, July 2018

Tag ID	Species	Common Name	Multi-trunk	DBH 1	DBH 2	DBH 3	DBH 4	DBH 5	Total DBH (inches)	Ordinance Status	Retention Status	Dripline Radius (feet)	Height (feet)	Condition	Health	Structure
901	*Quercus agrifolia*	coast live oak	No	34.7	0.0	0.0	0.0	0.0	34.7	Heritage Tree	Remaining	25	35	Good	Fair	Good
902	*Quercus agrifolia*	coast live oak	Yes	10.0	13.8	14.8	0.0	0.0	38.6	Heritage Tree	Remaining	15	30	Fair	Fair	Good
903	*Quercus agrifolia*	coast live oak	Yes	11.9	13.8	14.5	16.3	0.0	56.5	Heritage Tree	Remaining	24	35	Fair	Fair	Good
904	*Quercus agrifolia*	coast live oak	Yes	19.1	11.4	17.9	0.0	0.0	48.4	Heritage Tree	Remaining	26	35	Good	Fair	Fair
905	*Quercus agrifolia*	coast live oak	No	21.2	0.0	0.0	0.0	0.0	21.2	Heritage Tree	Removal	23	37	Good	Fair	Good
906	*Quercus agrifolia*	coast live oak	No	22.9	0.0	0.0	0.0	0.0	22.9	Heritage Tree	Removal	20	35	Good	Fair	Good
907	*Quercus agrifolia*	coast live oak	Yes	17.9	15.6	0.0	0.0	0.0	33.5	Heritage Tree	Removal	18	32	Good	Fair	Fair
908	*Quercus agrifolia*	coast live oak	No	13.4	0.0	0.0	0.0	0.0	13.4	Non-Heritage Tree	Removal	15	30	Fair	Good	Good
909	*Quercus agrifolia*	coast live oak	Yes	10.7	15.0	21.1	0.0	0.0	46.8	Heritage Tree	Removal	22	35	Good	Fair	Good
910	*Quercus agrifolia*	coast live oak	No	56.1	0.0	0.0	0.0	0.0	56.1	Heritage Tree	Removal	36	30	Good	Fair	Fair
911	*Quercus agrifolia*	coast live oak	No	33.8	0.0	0.0	0.0	0.0	33.8	Heritage Tree	Remaining	28	40	Good	Fair	Good
912	*Quercus agrifolia*	coast live oak	Yes	14.9	12.2	17.8	0.0	0.0	44.9	Heritage Tree	Removal	22	30	Good	Fair	Fair
913	*Quercus agrifolia*	coast live oak	No	12.9	0.0	0.0	0.0	0.0	12.9	Non-Heritage Tree	Removal	17	25	Fair	Fair	Fair
914	*Quercus agrifolia*	coast live oak	No	22.3	0.0	0.0	0.0	0.0	22.3	Heritage Tree	Removal	23	30	Good	Fair	Good
915	*Quercus agrifolia*	coast live oak	Yes	10.9	18.5	14.5	12.9	0.0	56.8	Heritage Tree	Removal	30	25	Good	Fair	Fair
916	*Quercus agrifolia*	coast live oak	No	24.7	0.0	0.0	0.0	0.0	24.7	Heritage Tree	Removal	18	30	Good	Fair	Fair
917	*Quercus agrifolia*	coast live oak	No	21.5	0.0	0.0	0.0	0.0	21.5	Heritage Tree	Removal	14	30	Good	Fair	Good
918	*Quercus agrifolia*	coast live oak	No	27.2	0.0	0.0	0.0	0.0	27.2	Heritage Tree	Removal	20	25	Fair	Good	Good
919	*Quercus agrifolia*	coast live oak	No	21.8	0.0	0.0	0.0	0.0	21.8	Heritage Tree	Removal	18	30	Fair	Fair	Good
920	*Quercus agrifolia*	coast live oak	Yes	17.7	21.2	28.0	0.0	0.0	66.9	Heritage Tree	Removal	30	38	Good	Fair	Good
921	*Quercus agrifolia*	coast live oak	No	17.1	0.0	0.0	0.0	0.0	17.1	Heritage Tree	Removal	14	30	Fair	Fair	Fair
922	*Quercus agrifolia*	coast live oak	Yes	18.2	11.1	0.0	0.0	0.0	29.3	Heritage Tree	Removal	15	25	Good	Fair	Fair
923	*Quercus agrifolia*	coast live oak	Yes	10.7	13.3	14.5	13.4	13.6	65.5	Heritage Tree	Remaining	23	30	Good	Fair	Fair
924	*Quercus agrifolia*	coast live oak	Yes	23.1	25.8	0.0	0.0	0.0	48.9	Heritage Tree	Remaining	25	30	Good	Fair	Good
925	*Quercus agrifolia*	coast live oak	Yes	28.5	25.8	0.0	0.0	0.0	54.3	Heritage Tree	Remaining	28	40	Good	Fair	Good
926	*Quercus agrifolia*	coast live oak	Yes	13.1	18.8	0.0	0.0	0.0	31.9	Heritage Tree	Removal	17	30	Fair	Fair	Fair
927	*Quercus agrifolia*	coast live oak	Yes	26.7	21.5	0.0	0.0	0.0	48.2	Heritage Tree	Removal	28	30	Fair	Fair	Fair
928	*Quercus agrifolia*	coast live oak	No	17.3	0.0	0.0	0.0	0.0	17.3	Heritage Tree	Removal	14	25	Fair	Fair	Good
929	*Quercus agrifolia*	coast live oak	No	23.1	0.0	0.0	0.0	0.0	23.1	Heritage Tree	Removal	22	30	Good	Fair	Good
930	*Quercus agrifolia*	coast live oak	No	15.5	0.0	0.0	0.0	0.0	15.5	Non-Heritage Tree	Removal	13	20	Fair	Good	Fair
931	*Quercus agrifolia*	coast live oak	No	17.9	0.0	0.0	0.0	0.0	17.9	Heritage Tree	Removal	14	25	Good	Fair	Good
932	*Quercus agrifolia*	coast live oak	Yes	16.8	17.4	16.8	23.8	12.4	87.2	Heritage Tree	Remaining	29	40	Good	Fair	Fair
933	*Quercus agrifolia*	coast live oak	No	25.2	0.0	0.0	0.0	0.0	25.2	Heritage Tree	Removal	23	35	Good	Fair	Good
934	*Quercus agrifolia*	coast live oak	Yes	17.0	21.5	0.0	0.0	0.0	38.5	Heritage Tree	Removal	14	28	Good	Fair	Fair
935	*Quercus agrifolia*	coast live oak	Yes	18.6	27.8	0.0	0.0	0.0	46.4	Heritage Tree	Removal	32	38	Good	Fair	Fair
936	*Quercus agrifolia*	coast live oak	Yes	18.5	13.2	7.7	13.1	15.1	67.6	Heritage Tree	Removal	25	30	Fair	Fair	Poor
937	*Quercus agrifolia*	coast live oak	Yes	15.8	8.7	10.5	0.0	10.0	45.0	Heritage Tree	Removal	8	28	Fair	Fair	Fair
938	*Quercus agrifolia*	coast live oak	Yes	26.2	36.8	0.0	0.0	0.0	63.0	Heritage Tree	Removal	37	40	Good	Fair	Fair
939	*Quercus agrifolia*	coast live oak	Yes	16.0	21.5	0.0	0.0	0.0	37.5	Heritage Tree	Removal	18	27	Fair	Fair	Fair
940	*Quercus agrifolia*	coast live oak	No	28.7	0.0	0.0	0.0	0.0	28.7	Heritage Tree	Removal	24	35	Good	Fair	Good
941	*Liquidambar styraciflua*	American sweetgum	No	23.7	0.0	0.0	0.0	0.0	23.7	Non-Heritage Tree*	Removal	23	45	Good	Good	Good
942	*Liquidambar styraciflua*	American sweetgum	No	22.5	0.0	0.0	0.0	0.0	22.5	Non-Heritage Tree*	Removal	22	35	Good	Fair	Good
943	*Liquidambar styraciflua*	American sweetgum	Yes	17.7	15.6	0.0	0.0	0.0	33.3	Non-Heritage Tree*	Removal	25	40	Good	Fair	Fair
944	*Juglans hindsii*	northern California black walnut	Yes	17.8	12.8	0.0	0.0	0.0	30.6	Non-Heritage Tree*	Removal	18	30	Good	Fair	Fair
945	*Quercus agrifolia*	coast live oak	Yes	24.8	27.4	22.1	0.0	0.0	74.3	Heritage Tree	Removal	25	38	Good	Fair	Fair
946	*Pinus halapensis*	Aleppo pine	No	22.5	0.0	0.0	0.0	0.0	22.5	Non-Heritage Tree*	Removal	19	35	Fair	Fair	Fair
947	*Pinus halapensis*	Aleppo pine	No	12.0	0.0	0.0	0.0	0.0	12.0	Non-Heritage Tree	Removal	14	15	Fair	Fair	Poor
948	*Pinus halapensis*	Aleppo pine	No	23.2	0.0	0.0	0.0	0.0	23.2	Non-Heritage Tree*	Removal	15	20	Fair	Fair	Poor
949	*Pinus halapensis*	Aleppo pine	No	15.9	0.0	0.0	0.0	0.0	15.9	Non-Heritage Tree*	Removal	15	30	Fair	Fair	Poor
950	*Pinus halapensis*	Aleppo pine	No	27.1	0.0	0.0	0.0	0.0	27.1	Non-Heritage Tree*	Removal	31	38	Fair	Fair	Poor
951	*Schinus molle*	Peruvian pepper tree	No	62.1	0.0	0.0	0.0	0.0	62.1	Non-Heritage Tree*	Removal	16	20	Poor	Fair	Poor
952	*Quercus agrifolia*	coast live oak	No	12.1	0.0	0.0	0.0	0.0	12.1	Non-Heritage Tree	Removal	10	17	Fair	Fair	Fair
953	*Platanus racemosa*	California sycamore	No	13.3	0.0	0.0	0.0	0.0	13.3	Non-Heritage Tree	Removal	13	25	Fair	Fair	Fair

* This tree should not be considered heritage-status due to the absence of natural oak savanna and foothill woodland within the Study Area, as per the Tree Ordinance. Historic aerial imagery indicates that existing mature coast live oak trees on site are volunteers that colonized the site after agricultural production ceased, and they do not constitute a natural foothill woodland or oak savanna habitat.

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APPENDIX B

TREE SURVEY MAP

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Sources: 2016 DigitalGlobe Aerial, WRA | Prepared By: SGillespie, 9/19/2018

Figure 1. Tree Survey

MLC Tree Survey
Contra Costa County, California

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wra
ENVIRONMENTAL CONSULTANTS

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APPENDIX C

REPRESENTATIVE PHOTOGRAPHS

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Tree #901. A 34.7” DBH coast live oak (*Quercus agrifolia*) in good condition, in the southeastern portion of the Study Area. This tree will be preserved and incorporated into a public park within the development.

Tree # 932. An 87.2” DBH coast live oak (*Quercus agrifolia*) in good condition, in the southern portion of the Study Area. This tree will be preserved and incorporated into a public park within the development.

Tree #923. A mulit-trunk 65.5” DBH coast live oak(*Quercus agrifolia)* in good condition, in the southeastern portion of the Study Area. This tree will be preserved and incorporated into a public park within the development.

Tree #911. A 33.8” DBH coast live oak(*Quercus agrifolia*) in good condition, in the southeastern portion of the Study Area. This tree will be preserved and incorporated into a public park within the development.

Tree #925. A 54.3” DBH coast live oak(*Quercus agrifolia)* in the southeastern portion of the Study Area. This tree will be preserved and incorporated into a public park within the development.

Tree #924. A 48.9” DBH coast live oak(*Quercus agrifolia)* in the southeastern portion of the Study Area. This tree will be preserved and incorporated into a public park within the development.

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Appendix D:
Cultural Resources Supporting Information

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D.1 - Non Confidential Records Search

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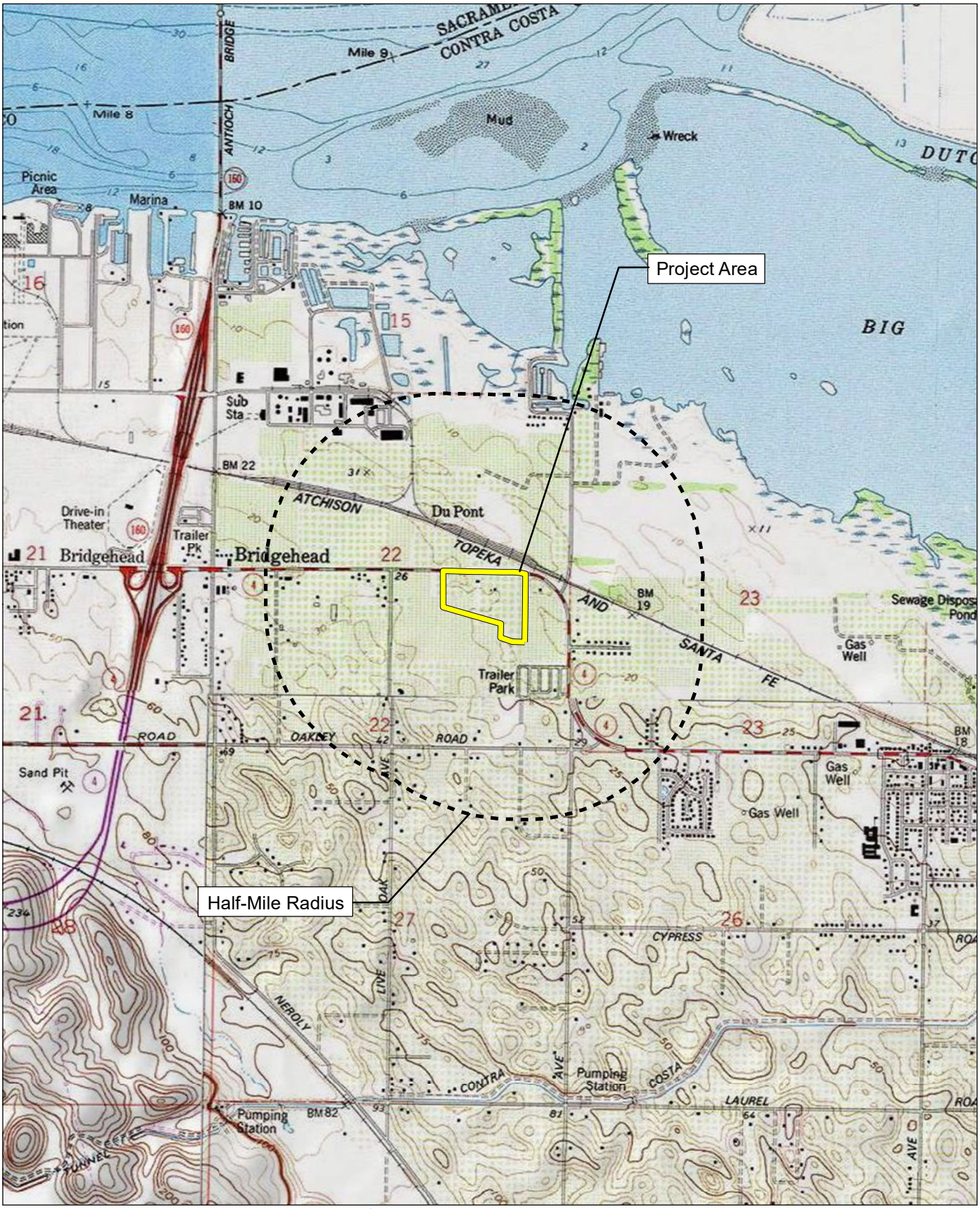

Source: USGS Jersey Island and Brentwood 7.5' Quadrangle / T2N,R2W,sec22

FIRSTCARBON SOLUTIONS™

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Record Search Map

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-003004		1982	David Chavez	Hofmann/Miller Property General Plan Amendment EIR (letter report).		
S-010040	Voided - S-13256	1988	Allan Bramlette, Mary Praetzellis, Adrian Praetzellis, and David A. Fredrickson	Archaeological and Historical Resources Within the Los Vaqueros/Kellogg Study Area, Contra Costa and Alameda Counties, California	Anthropological Studies Center, Sonoma State University	01-000218, 07-000090, 07-000212, 07-000219, 07-000227, 07-000314, 07-000315, 07-000317, 07-000324, 07-000325, 07-000326, 07-000327, 07-000328, 07-000329, 07-000330, 07-000331, 07-000332, 07-000333, 07-000334, 07-000335, 07-000336, 07-000337, 07-000338, 07-000339, 07-000385, 07-000386, 07-000387, 07-000388, 07-000389, 07-000390, 07-000391, 07-000392, 07-000393, 07-000394, 07-000395, 07-000396, 07-000397, 07-002914
S-010040a		1991	Allan G. Bramlette, Mary Praetzellis, Adrian Praetzellis, Katherine M. Dowdall, Patrick Brunmeier, and David A. Fredrickson	Archaeological Resources Inventory for Los Vaqueros Water Conveyance Alignments, Contra Costa County, California	Anthropological Studies Center, Sonoma State University	
S-011385		1990	Suzanne Baker and Michael Smith	Archaeological Reconnaissance of the Highway 4 Widening Project Near Oakley, Contra Costa County, California	Archaeological/Historical Consultants	
S-011826		1980	Dorothea J. Theodoratus, Mary Pyle Peters, Clinton M. Blount, Pamela J. McGuire, Richard D. Ambro, Michael Crist, Billy J. Peck, and Myrna Saxe	Montezuma I and II Cultural Resources	Theodoratus Cultural Research; Archaeological and Environmental Services	48-000041, 48-000042, 48-000123, 48-000124, 48-000125, 48-000126, 48-000127, 48-000128, 48-000129, 48-000130, 48-000131, 48-000132, 48-000133, 48-000134, 48-000135, 48-000136, 48-000137, 48-000138, 48-000139, 48-000140, 48-000141, 48-000142, 48-000199
S-018352		1976	Thomas Reid and Colin I. Busby	East/Central Contra Costa County Wastewater Management Plan, California: Cultural Resources Survey	Arthur D. Little, Inc.	07-000080, 07-000813
S-018352a		1976	Adam Cvijanovic and Larry Aull	Assessment of Historical and Architectural Resources	American Institute of Architects	
S-018352b		1976	Colin I. Busby	Assessment of Archaeological Resources: East/Central Contra Costa County Wastewater Management Plan	University of California, Berkeley, Department of Anthropology	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-018440		1996	G. James West and Patrick Welch	Class II Archaeological Survey of the Contra Costa Canal, Contra Costa County, California	U.S. Bureau of Reclamation, Mid-Pacific Region	07-002695
S-021708		1999	Miley Paul Holman	Archaeological Field Inspection of the Foundation Constructors Project Area, 81 Big Break Road, Oakley, Contra Costa County, California (letter report)	Holman & Associates	
S-022307		1999	Suzanne Baker	Archaeological Reconnaissance of the NWC Highway 4 Project, Oakley, California	Archaeological/Historical Consultants	
S-025542		2001	Colin Busby and Stuart Guedon	Cultural Resources and Paleontological Assessments, Big Break Regional Shoreline, City of Oakley and Unincorporated Area near Oakley, Contra Costa County (letter report)	Basin Research Associates, Inc.	07-000025, 07-000309
S-025542a		2001	Larry H. Fisk	Paleontological Resource Assessment of the Big Break Regional Shoreline	PaleoResource Consultants; F&F GeoResource Associates, Inc	
S-027929		2003	Kyle Brown, Eric Strother, and William Self	Cultural Resource Assessment Report, Cline Property Specific Plan, Oakley, Contra Costa County, California	William Self Associates, Inc.	07-002614
S-030387		2005	Bai "Tom" Tang, Michael Hogan, Josh Smallwood, and Terri Jacquemain	Historical Resources Compliance Report, Burlington Northern Santa Fe Railway Double Track Project (Segment 2), Oakley (MP 1146.1) to Port Chicago (MP 1164.4), In and Near the Cities of Oakley, Antioch, and Pittsburg, and the Port Chicago Naval Wapons Station, Contra Costa County, California	CRM TECH	07-000806, 07-000813
S-030387a		2005	Bai "Tom" Tang, Michael Hogan, Josh Smallwood, and Terri Jacquemain	Archaeological Survey Report/Historical Resource Evaluation	CRM Tech	
S-030624	Caltrans - 04-275-2A17000	2005	Barbra Siskin	Historical Resources Compliance Report, State Route 4/Main Street between SR 160 and Big Break Road in Oakley, 04-CC-4, KP 50.1/50.2, PM 31.1/32.3, 04-275-2A17000	Jones & Stokes	07-002697, 07-002698, 07-002699, 07-002700, 07-002701, 07-002702, 07-002703
S-030624a		2005	Madeline R. Bowen	Historical Resources Evaluation Report Main Street (State Route 4) Widening from State Route 160 to Big Break City of Oakley, California Caltrans District 4, Contra Costa County	Jones & Stokes	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-033821		2007		Cultural Resources Inventory Report for the Ironhouse Sanitary District Wastewater Treatment Plant Expansion, Contra Costa and Sacramento Counties, California	Jones & Stokes	07-000853
S-034083	Other - SF-17030B	2007	Scott Billat	New Tower ("NT") Submission Packet, FCC Form 620, Horizon Sand Blaster, SF-17030B	Earth Touch, Inc.	
S-034660		2007	Sarah Farley and Carolyn Losee	New Tower ("NT") Submission Packet, FCC Form 620, Horizon Tower, LLC, Oakley, CA-2009 / EBI #61071610	EBI Consulting; Archaeological Resources Technology	
S-034660a		2007	Carolyn Losee	Cultural Resources Analysis for Horizon Tower, LLC Site #CA-2009: Live Oak Avenue and Main Street, Oakley, CA (letter report)	Archaeological Resources Technology	
S-035861		2009	Bai "Tom" Tang	Historic Property Survey Report, proposed undertaking to upgrade the capacity of the Burlington Northern Santa Fe (BNSF) Railway's mainline from Mile Post (MP) 1146.1 to MP 1164.4, between the City of Oakley and the Port Chicago Naval Weapons Station in Contra Costa County	CRM TECH	07-000806
S-035861a		2009	Bai "Tom" Tang, Michael Hogan, Josh Smallwood, and Terri Jacquemain	Archaeological Survey Report/Historical Resource Evaluation Report, Burlington Northern Santa Fe Railway Double Track Project (Segment 2), In and near the Cities of Oakley, Antioch, and Pittsburg and the Port Chicago Naval Weapons Station, Contra Costa County, California	CRM TECH	
S-036213		2009	Carolyn Losee	Cultural Resources Investigation for AT&T Wireless Site #CN4777-B, "Oakley Road", 2535 Main Street, Oakley, Contra Costa County, California 94561	Archaeological Resources Technology	
S-045244		2014	Nikki Polson	A Cultural Resource Inventory for the Delta Feasibility Study, Contra Costa County, California	US Army Corps of Engineers, Sacramento District	07-004526, 07-004527
S-046889	OHP PRN - BUR_2014_0827_001	2011	Sean Dexter and Armando A Cuellar	Pacific Gas and Electric Lines 114 and 191 Replacement Project, Archaeological Survey Report, Contra Costa County, California	Condor Country Consulting, Inc.	07-000806, 07-000813, 07-002614, 07-002695, 07-002789, 07-002914
S-046889a		2014	Stephanie Cimino, Kim Carpenter, and Jack Meyer	Supplemental Cultural Resources Inventory, Pacific Gas & Electric Company, Line 114 and 191 Pipeline Replacement Project, Contra Costa County, California	PG&E	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-046889B		2014	Carol Roland-Nawi and Anastasia T. Leigh	BUR_2014_0827_001; PG&E Line 114 Safety Enhancement Project, Contra Costa County, CA (14-SCAO-189); PG&E Order #30897880	Office of Historic Preservation; Bureau of Reclamation	
S-048010		2004	Stephen Bryne	A Cultural Resources Inventory of the DuPont Bridgehead Road Specific Plan Site, City of Oakley, Contra Costa County, California	Garcia and Associates	
S-049306	OTIS Report Number - HUD_2016_0919_001	2016		Historic and Cultural Resources Evaluation-Historic Resources Evaluation for Section 106 Review, Oak Creek Apartments	AEM Consulting	
S-049306a		2016	Marisa D.C. Fogal and Julianne Polanco	HUD_2016_0919_001, Consturction of Multifamily Housing of 51 Carol Lane, Oakley	California Housing Finance Agency; Office of Historic Preservation	

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-07-000806	CA-CCO-000732H	Resource Name - Atchison, Topeka & Santa Fe Railroad; Other - ATSF-4; Other - ATSF-5; Other - ATSF-6; Other - ATSF-7; Other - C-Antioch North-1; Other - BEIR-2; Other - ATSF Railroad; OHP Property Number - 119709; OHP PRN - DOE-07-99-0002; OHP PRN - ADOE-07-97-004-00; OHP PRN - EPA981214A	Structure	Historic	AH07; HP39	1995 (Brian Hatoff, Woodward Clyde); 1995 (Brian Hatoff, Woodward Clyde); 1995 (Brian Hatoff, Woodward Clyde); 1995 (Brian Hatoff, Woodward Clyde); 1996 (Ward Hill, [none]); 1998 (S. Ashkar, Jones & Stokes Associates, Inc.); 1998 (Meta Bunse, JRP Historical Consulting); 1999 (S. Atchley, G. Roark, Jones & Stokes Associates, Inc.); 2004 (Josh Smallwood, CRM Tech); 2009 (J. Lang, GANDA); 2016 (Polly S. Allen, JPR Historical Consulting)	S-017993, S-020808, S-022929, S-030387, S-035861, S-043685, S-043849, S-046155, S-046889, S-046909
P-07-002614	CA-CCO-000764/H	Resource Name - Cline Property Site 1	Site	Prehistoric, Historic	AH04; AP02	2003 (Kyle Brown, William Self Associates, Inc.)	S-027929, S-046889
P-07-002697		Resource Name - 5471 Live Oak Avenue; Other - Map #7	Building	Historic	HP16	2004 (M. Bowen, Jones & Stokes)	S-030624
P-07-002698		Resource Name - 1403 Main Street; Other - Map #6	Building	Historic	HP13	2004 (M. Bowen, Jones & Stokes)	S-030624
P-07-002699		Resource Name - 1371 Main Street; Other - Map #5	Building	Historic	HP06	2004 (M. Bowen, Jones & Stokes)	S-030624
P-07-002700		Resource Name - 487 Sandy Lane; Other - Map #4	Building	Historic	HP02	2004 (M. Bowden, Jones & Stokes)	S-030624

D.2 - NAHC and Tribal Consultation

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Local Government Tribal Consultation List Request

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

Type of List Requested

☑ **CEQA Tribal Consultation List (AB 52)** – ***Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2***

☐ **General Plan (SB 18)** - ***Per Government Code § 65352.3.***

Local Action Type:

___ General Plan ___ General Plan Element ___ General Plan Amendment

___ Specific Plan ___ Specific Plan Amendment ___ Pre-planning Outreach Activity

Required Information

Project Title: 4940.0007 Oakley

Local Government/Lead Agency: City of Oakley

Contact Person: Dr. Dana DePietro

Street Address: 1350 Treat Boulevard, Ste. 380

City: Walnut Creek **Zip:** 94597

Phone: 530-219-1432 **Fax:**

Email: ddepietro@fcs-intl.com

Specific Area Subject to Proposed Action

County: Contra Costa **City/Community:** Oakley

Project Description:

The project consists of a residential subdivision consisting of 153 homes located on APN# 037-100-013, -019, -023, -048, and -049 in Oakley, California.

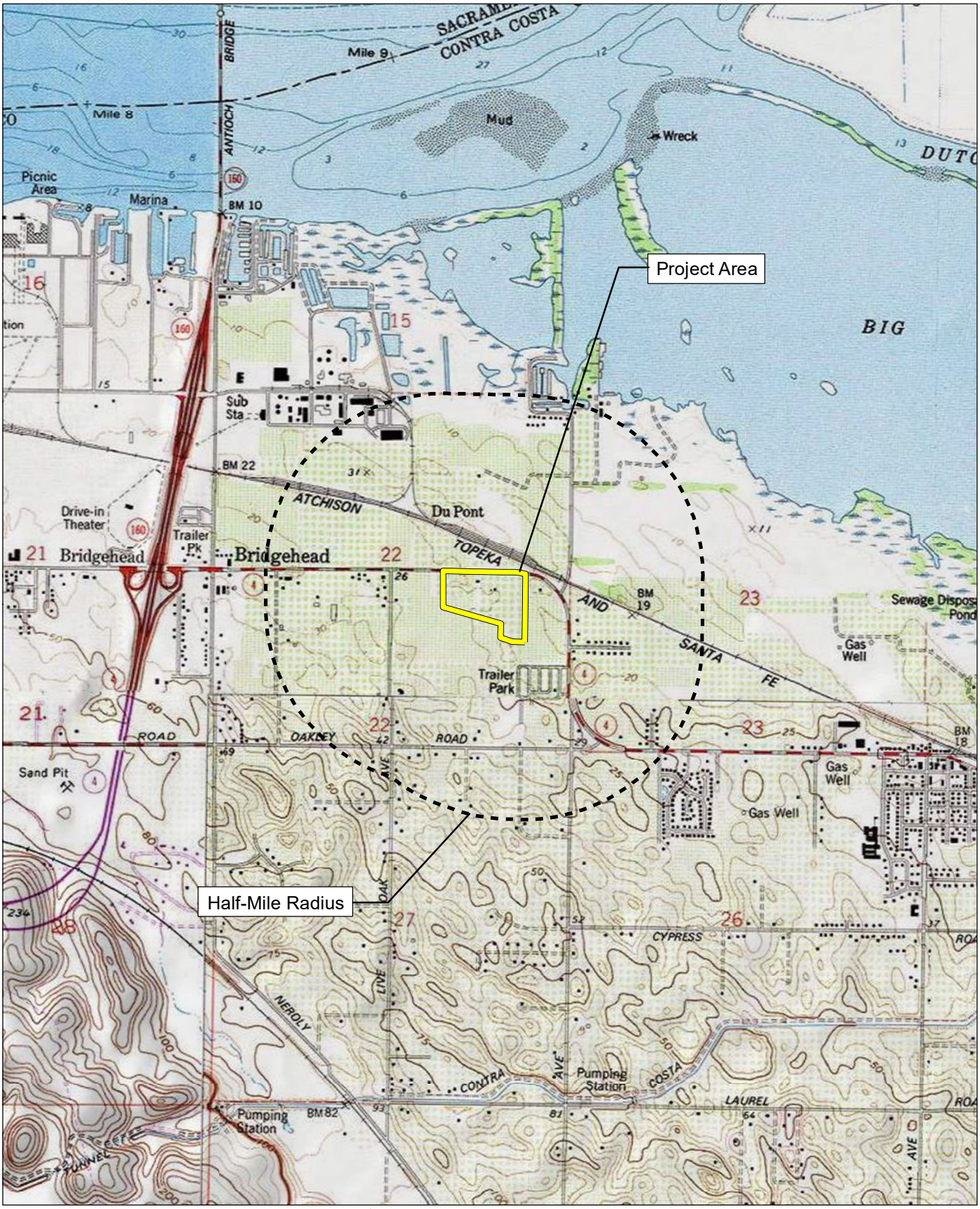
Additional Request

☑ **Sacred Lands File Search** - ***Required Information:***

USGS Quadrangle Name(s): Jersey Island and Brentwood

Township: 2N **Range:** 2W

Section(s): 22



Source: USGS Jersey Island and Brentwood 7.5' Quadrangle / T2N,R2W,sec22

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Record Search Map

NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710

November 27, 2018

Dana DePietro
FCS Intl

Sent by Email: ddepietro@fcs-int.com
Number of Pages: 2

RE: Oakley Subdivision #4940.0007, Jersey Island and Brentwood, Contra Costa County

Dear Mr. DePietro:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. **Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.**

I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. **By contacting all those on the list, your organization will be better able to respond to claims of failure to consult**. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: sharaya.souza@nahc.ca.gov .

Sincerely,

Sharaya Souza
Staff Services Analyst
(916) 573-0168

Native American Heritage Commission
Native American Contacts List
11/27/2018

Amah MutsunTribal Band of Mission San Juan Bautista
Irenne Zwierlein, Chairperson
789 Canada Road — Ohlone/Costanoan
Woodside ,CA 94062
amahmutsuntribal@gmail.com
(650) 851-7489 Cell
(650) 332-1526 Fax

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28 — Ohlone/Costanoan
Hollister ,CA 95024
ams@indiancanyon.org
(831) 637-4238

Muwekma Ohlone Indian Tribe of the SF Bay Area
Charlene Nijmeh, Chairperson
20885 Redwood Road, Suite 232 — Ohlone / Costanoan
Castro Valley ,CA 94546
cnihmeh@muwekma.org
(408) 464-2892
(408) 205-9714

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717 — Ohlone/Costanoan
Linden ,CA 95236 — Northern Valley Yokuts
canutes@verizon.net — Bay Miwok
(209) 887-3415

The Ohlone Indian Tribe
Andrew Galvan
P.O. Box 3388 — Ohlone/Costanoan
Fremont ,CA 94539 — Bay Miwok
chochenyo@AOL.com — Plains Miwok
(510) 882-0527 Cell — Patwin
(510) 687-9393 Fax

Wilton Rancheria
Raymond Hitchcock, Chairperson
9728 Kent Street — Miwok
Elk Grove ,CA 95624
rhitchcock@wiltonrancheria-nsn.gov
(916) 683-6000 Office
(916) 683-6015 Fax

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed:
Oakley Subdivision #4940.0007, Jersey Island and Brentwood, Contra Costa County.

FIRSTCARBON SOLUTIONS™

November 30, 2018

Amah Mutsun Tribal Band of Mission San Juan Bautista
Irenne Zwierlein
789 Canada Road
Woodside, CA 94062

Subject: Proposed Residential Project in the City of Oakley

Dear Irenne Zwierlein:

At the request of MLC Holdings, Inc., FirstCarbon Solutions (FCS) is conducting a cultural resources assessment for a residential development project.

The 20-acre project site is located in the City of Oakley, California. The proposed project would rezone and subdivide the site to develop 153 residential lots, a park, a bio-retention basin, and open space. A map identifying the project boundaries is enclosed.

To determine the presence or absence of cultural and historical resources within the proposed project area and a ½-mile radius, FCS will conduct a records search at the Northwest Information Center (NWIC) at Sonoma State University. To identify any historic properties or resources, the current inventories of the National Register of Historic Places (NR), the California Register of Historic Resources (CR), the California Historical Landmarks list (CHL), the California Points of Historical Interest (CPHI) list, and the California State Historic Resources Inventory (HRI) for Contra Costa County will be reviewed to determine the existence of previously documented local historical resources. An intensive pedestrian survey will also be conducted at the project locations.

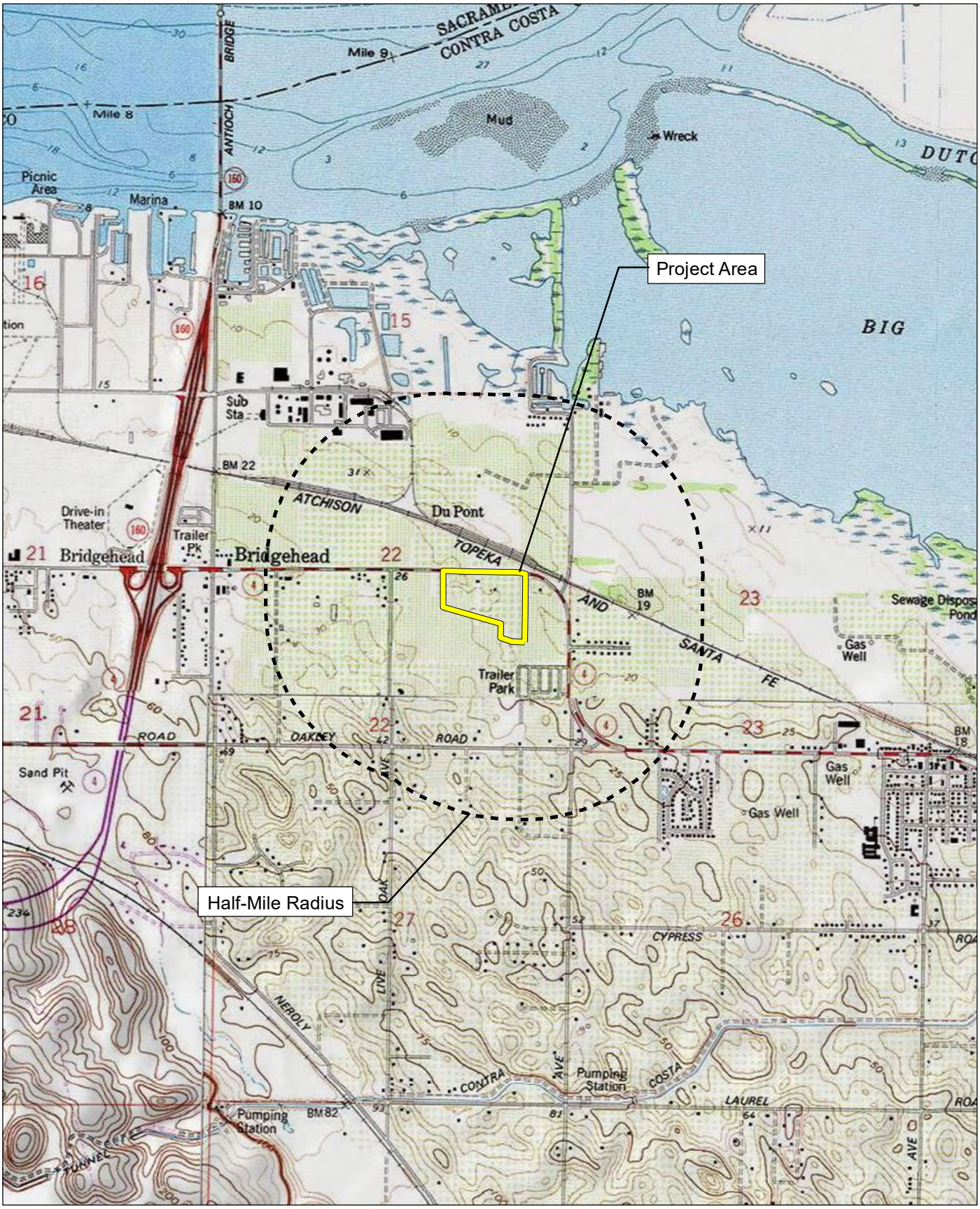
Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Project notification and consultation requirements are being handled by designated lead agencies under CEQA and NEPA.

If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input. Please feel free to contact me at 925.357.2562 or via email at ddepietro@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Records Search Map



Source: USGS Jersey Island and Brentwood 7.5' Quadrangle / T2N,R2W,sec22

FIRSTCARBON SOLUTIONS™

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Record Search Map

FIRSTCARBON SOLUTIONS™

November 30, 2018

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers
P.O. Box 28
Hollister, CA 95024

Subject: Proposed Residential Project in the City of Oakley

Dear Ann Marie Sayers:

At the request of MLC Holdings, Inc., FirstCarbon Solutions (FCS) is conducting a cultural resources assessment for a residential development project.

The 20-acre project site is located in the City of Oakley, California. The proposed project would rezone and subdivide the site to develop 153 residential lots, a park, a bio-retention basin, and open space. A map identifying the project boundaries is enclosed.

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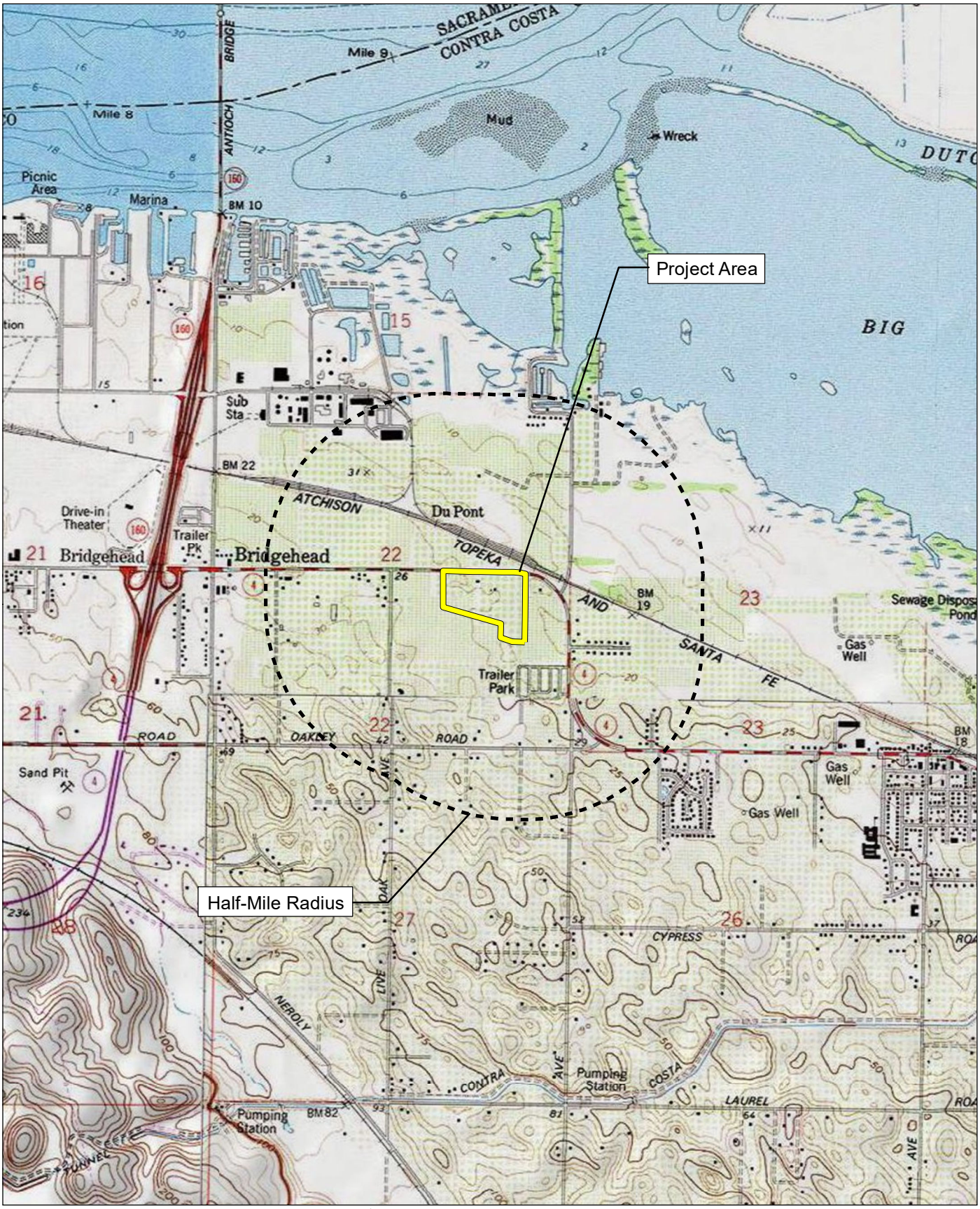
Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Records Search Map



Source: USGS Jersey Island and Brentwood 7.5' Quadrangle / T2N,R2W,sec22

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Record Search Map

FIRSTCARBON SOLUTIONS™

November 30, 2018

Muwekma Ohlone Indian Tribe of the SF Bay Area
Charlene Nijmeh
20885 Redwood Road, Suite 232
Castro Valley, CA 94546

Subject: Proposed Residential Project in the City of Oakley

Dear Charlene Nijmeh:

At the request of MLC Holdings, Inc., FirstCarbon Solutions (FCS) is conducting a cultural resources assessment for a residential development project.

The 20-acre project site is located in the City of Oakley, California. The proposed project would rezone and subdivide the site to develop 153 residential lots, a park, a bio-retention basin, and open space. A map identifying the project boundaries is enclosed.

To determine the presence or absence of cultural and historical resources within the proposed project area and a ½-mile radius, FCS will conduct a records search at the Northwest Information Center (NWIC) at Sonoma State University. To identify any historic properties or resources, the current inventories of the National Register of Historic Places (NR), the California Register of Historic Resources (CR), the California Historical Landmarks list (CHL), the California Points of Historical Interest (CPHI) list, and the California State Historic Resources Inventory (HRI) for Contra Costa County will be reviewed to determine the existence of previously documented local historical resources. An intensive pedestrian survey will also be conducted at the project locations.

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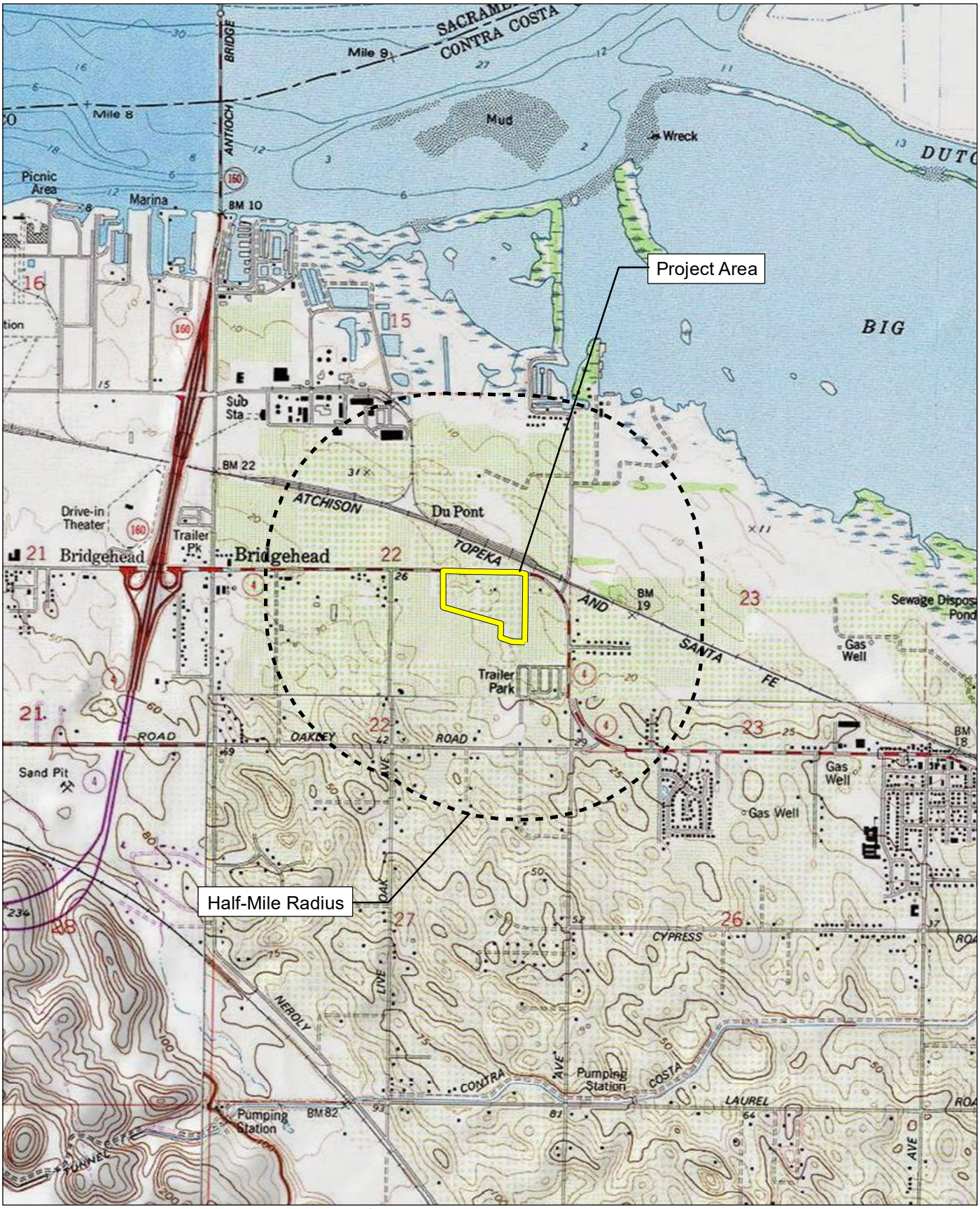
If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input. Please feel free to contact me at 925.357.2562 or via email at ddepietro@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Records Search Map



Source: USGS Jersey Island and Brentwood 7.5' Quadrangle / T2N,R2W,sec22

FIRSTCARBON SOLUTIONS™

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Record Search Map

FIRSTCARBON SOLUTIONS™

November 30, 2018

North Valley Yokuts Tribe
Katherine Erolinda Perez
P.O. Box 717
Linden, CA 95236

Subject: Proposed Residential Project in the City of Oakley

Dear Katherine Erolinda Perez:

At the request of MLC Holdings, Inc., FirstCarbon Solutions (FCS) is conducting a cultural resources assessment for a residential development project.

The 20-acre project site is located in the City of Oakley, California. The proposed project would rezone and subdivide the site to develop 153 residential lots, a park, a bio-retention basin, and open space. A map identifying the project boundaries is enclosed.

To determine the presence or absence of cultural and historical resources within the proposed project area and a ½-mile radius, FCS will conduct a records search at the Northwest Information Center (NWIC) at Sonoma State University. To identify any historic properties or resources, the current inventories of the National Register of Historic Places (NR), the California Register of Historic Resources (CR), the California Historical Landmarks list (CHL), the California Points of Historical Interest (CPHI) list, and the California State Historic Resources Inventory (HRI) for Contra Costa County will be reviewed to determine the existence of previously documented local historical resources. An intensive pedestrian survey will also be conducted at the project locations.

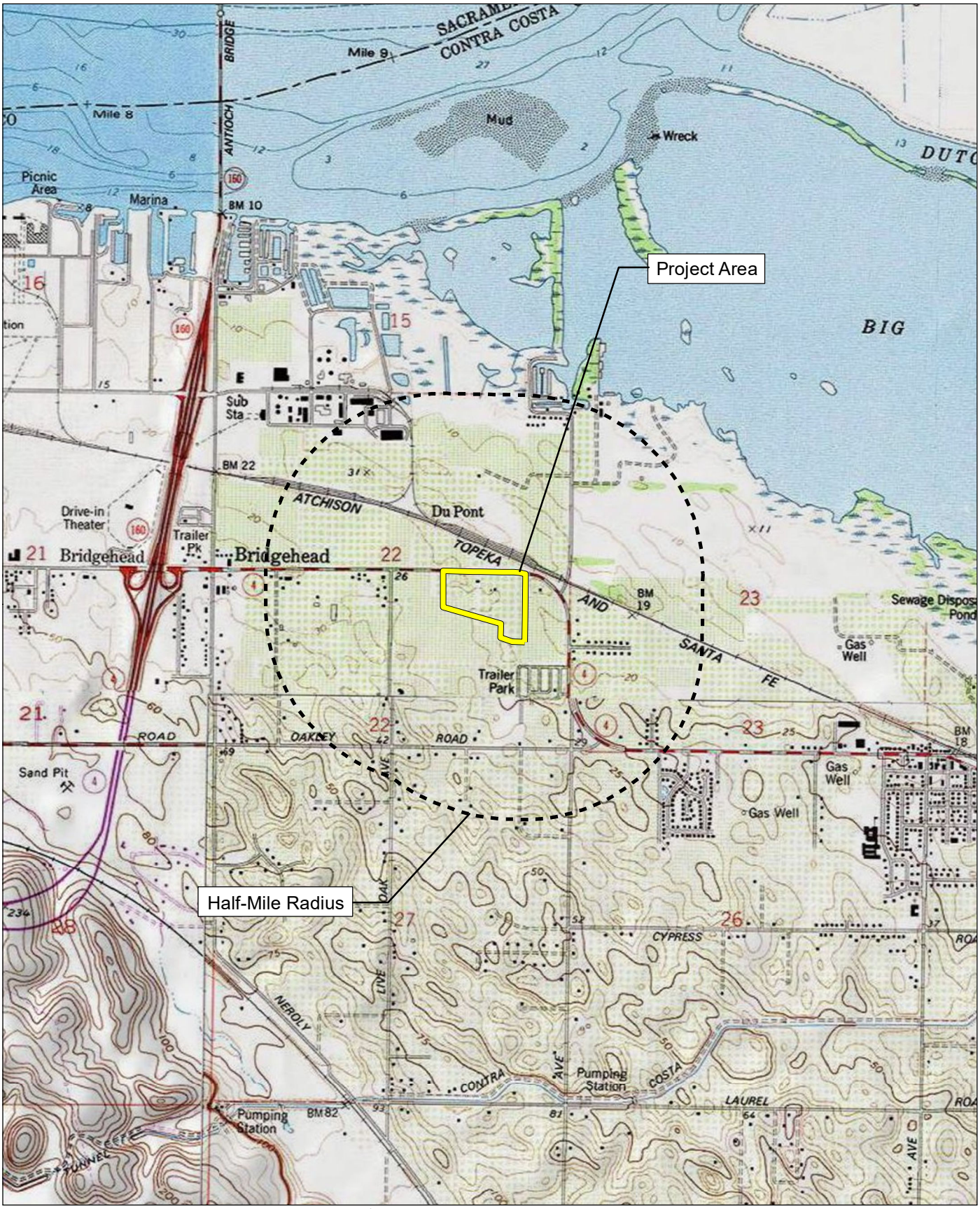
Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Project notification and consultation requirements are being handled by designated lead agencies under CEQA and NEPA.

If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input. Please feel free to contact me at 925.357.2562 or via email at ddepietro@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Records Search Map



Source: USGS Jersey Island and Brentwood 7.5' Quadrangle / T2N,R2W,sec22

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Record Search Map

FIRSTCARBON SOLUTIONS™

November 30, 2018

Ohlone Indian Tribe
Andrew Galvan
P.O. Box 3388
Fremont, CA 94539

Subject: Proposed Residential Project in the City of Oakley

Dear Andrew Galvan:

At the request of MLC Holdings, Inc., FirstCarbon Solutions (FCS) is conducting a cultural resources assessment for a residential development project.

The 20-acre project site is located in the City of Oakley, California. The proposed project would rezone and subdivide the site to develop 153 residential lots, a park, a bio-retention basin, and open space. A map identifying the project boundaries is enclosed.

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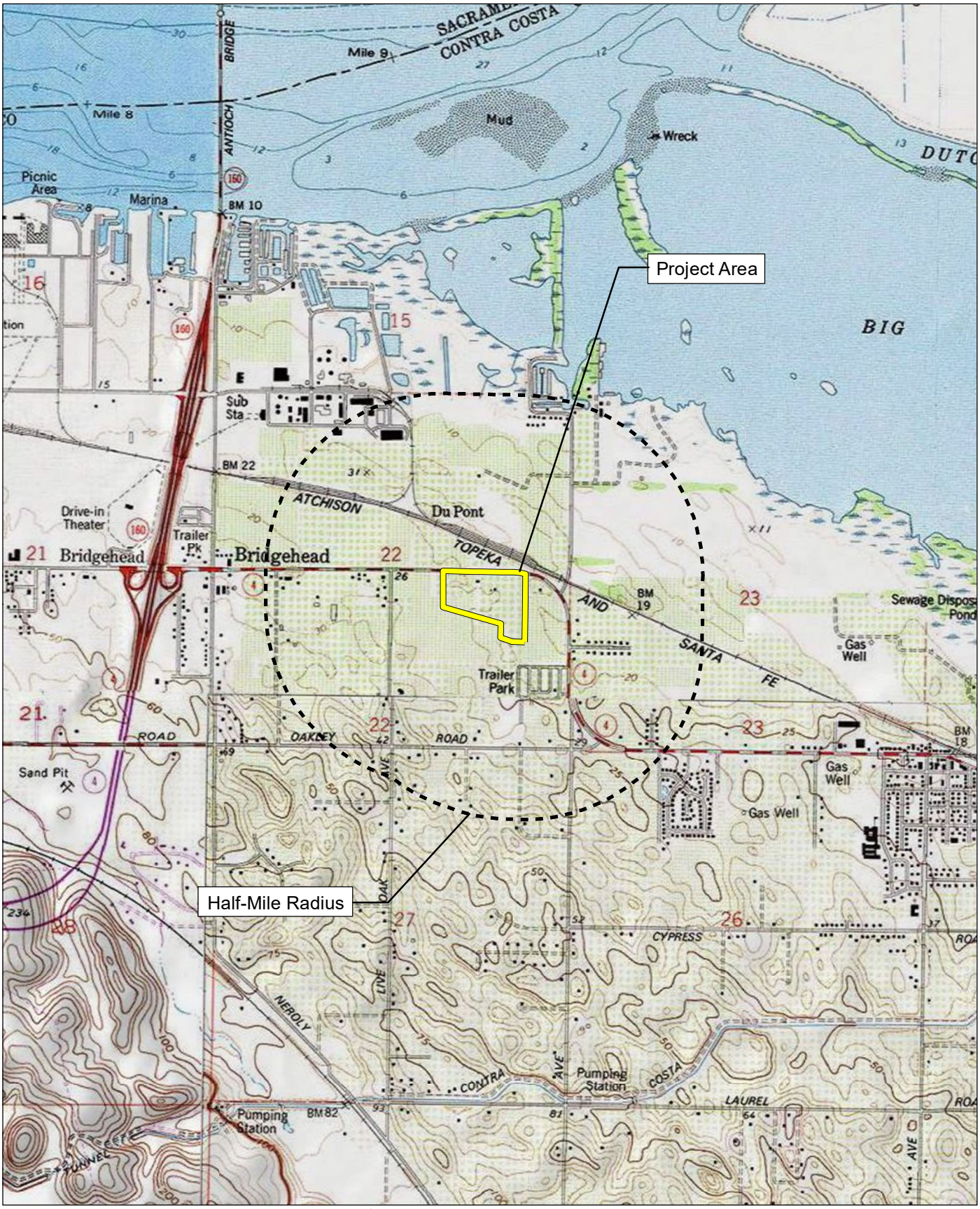
Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Records Search Map



Source: USGS Jersey Island and Brentwood 7.5' Quadrangle / T2N,R2W,sec22

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Record Search Map

FIRSTCARBON SOLUTIONS™

November 30, 2018

Wilton Rancheria
Raymond Hitchcock
9728 Kent Street
Elk Grove, CA 95624

Subject: Proposed Residential Project in the City of Oakley

Dear Raymond Hitchcock:

At the request of MLC Holdings, Inc., FirstCarbon Solutions (FCS) is conducting a cultural resources assessment for a residential development project.

The 20-acre project site is located in the City of Oakley, California. The proposed project would rezone and subdivide the site to develop 153 residential lots, a park, a bio-retention basin, and open space. A map identifying the project boundaries is enclosed.

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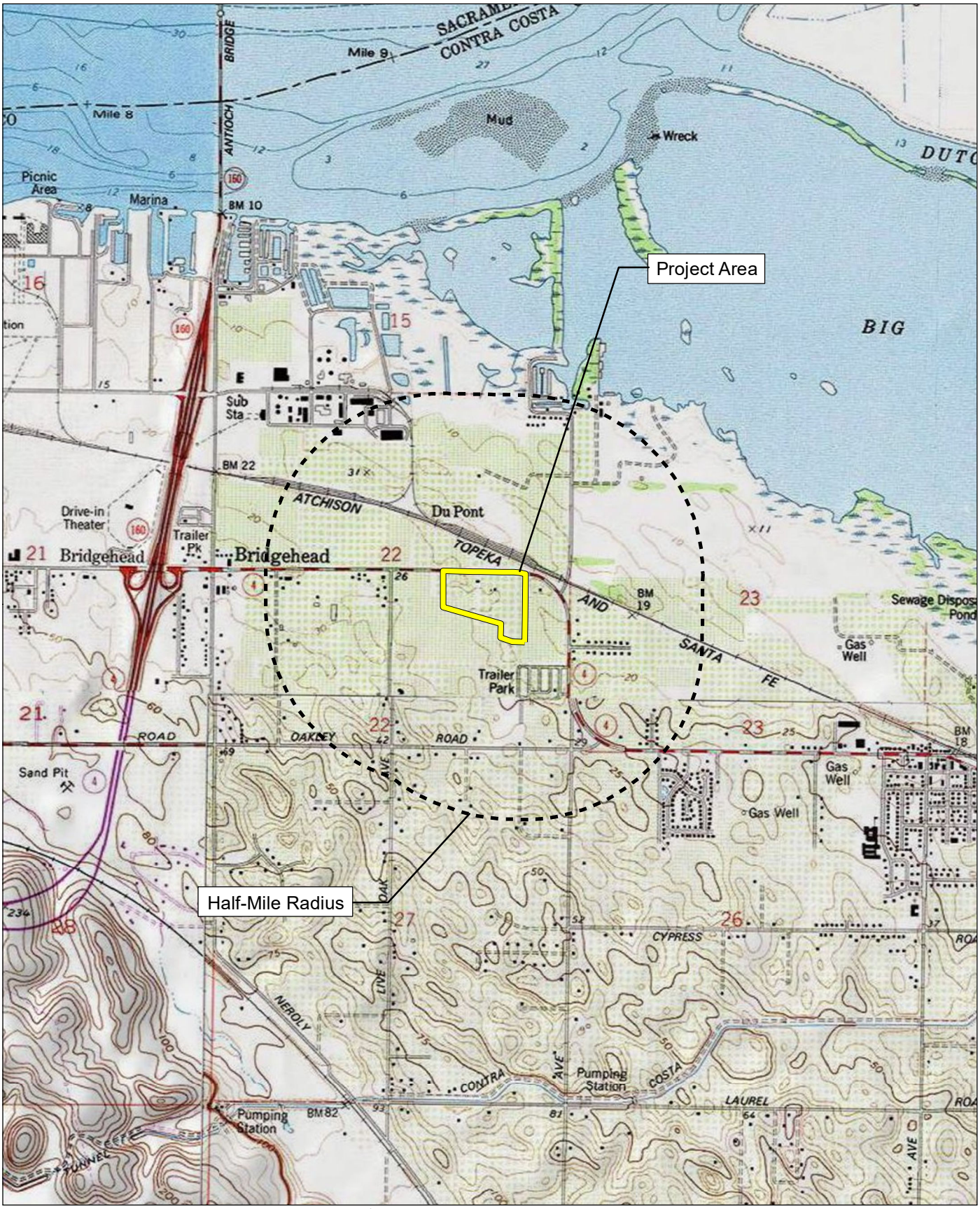
Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Records Search Map



Source: USGS Jersey Island and Brentwood 7.5' Quadrangle / T2N,R2W,sec22

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Record Search Map

D.3 - Site Survey Photographs

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Photograph 1: View of the project site from the northeast; facing southwest.

Photograph 2: View of the project site from the west; facing east.

Photograph 3: Detail view of ground visibility within project site.

Photograph 4: View of modern debris in project site underneath a tree; facing northeast.

Photograph 5: Overview of modern debris underneath a tree with the road in the background; facing northeast.

Photograph 6: View of agricultural debris in the southern portion of the project site; facing north.

Photograph 7: View of project site with road and commercial buildings in the background; south facing north.

Photograph 8: Southeast view of project site.

D.4 - UCMP Paleo Results

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Kenneth L. Finger, Ph.D.
Consulting Paleontologist

18208 Judy St., Castro Valley, CA 94546-2306 510.305.1080
klfpaleo@comcast.net

December 3, 2018

Dana DePietro
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Re: Paleontological Records Search: Oakley Project (4940.0007), Oakley, Contra Costa County

Dear Dr. DePietro:

As per your request, I have performed a records search on the University of California Museum of Paleontology (UCMP) database for the Oakley project. This site is bordered by Main Street to the north, Carol Lane to the west and south, and the Cypress Shopping Center to the east.. Its Public Land Survey (PLS) location is N½, Sec. 22, T2N, R2W, Jersey Island quadrangle (USGS 7.5-series topographic map). Google Earth imagery shows this flat terrain has been used for agriculture, and is therefore heavily disturbed.

Geologic Units

According to the part of the geologic map by Helley and Graymer (1997) shown here, the entire project site (red outline at center) and nearly all of the surrounding half-mile search area (dashed black outline) are located on Holocene–Pleistocene dune sand deposits (Qds). If Pleistocene, it has the potential of significant paleontological resources. The Peaty Muck deposits mapped along the northeastern perimeter of the search area are Holocene and therefore too young to be fossiliferous.

Key to mapped units

af	artificial fill
Qhpm	Peaty Muck deposits (Holocene)
Qds	Dune Sand deposits (Holocene & Pleistocene)

Paleontological Records Search

The paleontological record search for the Oakley project was performed on the UCMP (University of California Museum of Paleontology) database and focused on the Pleistocene of Contra Costa County. The results are 114 vertebrate specimens from the Riverbank Formation at 63 localities: 14 in the Montezuma Formation and one in the Rodeo Formation, while no geologic unit is indicated for the other 48; there are not no plant localities. The County's composite Pleistocene vertebrate assemblage of 9927 specimens represents the late Pleistocene Rancholabrean North American Land Mammal Stage (NALMS). The 95 species identified are on the attached list. To the northeast and slightly beyond the half-mile search perimeter is locality V87047 (Big Break), which yielded two specimens of *Antilocapra* (pronghorn), including the holotype of *A. pacifica* (Richards and McCrossin, 1991).

Remarks and Recommendations

The Oakley project site is mapped solely undifferentiated Quaternary (Holocene–Pleistocene) Dune Sand deposits. A paleontological walkover survey of the site is not recommended due to its heavily disturbed surface. I recommend paleontological monitoring of all excavations because there is a possibility that the Dune Sand deposits are of late Pleistocene age, and an extremely high number of vertebrate fossils of that age have been collected in Contra Costa County, and one of their localities is less than 200 feet from the half-mile search area. Should any significant fossils (i.e., bones, teeth, or unusually abundant and well-preserved invertebrates or plants) be unearthed, the construction crew should not attempt to remove them**,** as they could be extremely fragile and therefore prone to crumbling; instead, all work in the immediate vicinity of the discovery should be diverted at least 15 feet from the find until a paleontological monitor or professional paleontologist has assessed the find and, if deemed significant, salvaged it in a timely manner. Recovered fossils should be deposited in an appropriate repository, such as the UCMP, where they will be properly curated and made accessible for future study.

Sincerely

Ken Finger

References Cited

Helley, E.J., and Graymer, R.W., 1997, Quaternary geology of Contra Costa County and surrounding parts of Alameda, Marin, Sonoma, Sacramento, and San Joaquin counties, California derived from the digital database open-file 97-98. U.S. Geological Survey. Scale 1:100,000.

Richards, G.D., and McCrossin, M.L,. 1991, A new species of *Antilocapra* from the late Quaternary of California. Geobios 24(5): 623–635.

UCMP Late Pleistocene Vertebrates from Contra Costa County

Class Amphibia
- Order Anura
  - *Pseudoacris* (chorus frog)
- Order Caudata or Urodela
  - *Ambystoma* (mole salamander)
  - *Aneides lugubris* (arboreal salamander)
  - *Taricha* (newt)

Class Reptilia
- Order Sauria
  - *Elgaria* (alligator lizards)
  - *Gerrhonotus coeruleus* (northern alligator lizard)
  - *Scleoporus* (spiny lizards)
  - *Uta* (sideblotched lizard)
- Order Serpentes
  - *Crotalus* (rattlesnake)
- Order Testudines
  - *Clemmys marmorata* (western pond turtle)

Class Chondrichthyes (cartilaginous fish)
- Order Myliobatiformes
  - *Myliobatus* (bat ray)

Class Osteichthyes (bony fish)
- Order Cypriniformes
  - *Orthodon* (Sacramento blackfish)
- Order Gasterosteiformes
  - *Gasterosteus aculeatus* (three-spined stickleback)

Class Aves (birds)
- Order Anseriformes
  - *Anas acuta* (pintail duck)
  - *Melanitta* (scoter)
- Order Ciconiformes
  - ardeidid (heron)
- Order Culidae
  - *Geococcyx* (roadrunner)
- Order Galliformes
  - *Callipepia* (quail)
  - *Centrocercus* (sage grouse)
- Order Passeriformes
  - *Euphagus* (New World blackbirds)
  - *Turdus* (true thrushes)
- Order Piciformes
  - picidid (woodpecker)
- Order Podicipedformes
  - *Aechmophorus occidentalis* (western grebe)
- Order Strigiformes
  - *Asio flammeus* (short-eared owl)

Class Mammalia (mammals)
- Order Insectivora
  - *Scapanus latimanus* (broad-footed mole)
  - *Sorex ornatus* (ornate shrew)
- Order Xenartha
  - *Glossotherium harlani* (Harlan's ground sloth)
  - *Megalonyx jeffersoni* (Jefferson's flat-footed ground sloth)
- Order Lagomorpha
  - *Sylvilagus bachmani* (cottontail rabbit)
  - *Lepus* (jackrabbit)
- Order Rodentia
  - *Dipodomys* (kangaroo rat)
  - *Microtus californicus* (California meadow vole)
  - *Neotoma fuscipes* (dusky-footed wood rat)
  - *Perognathus* (pocket mouse)
  - *Peromyscus boylii* (brush mouse)
  - *Peromyscus californicus* (California deer mouse)
  - *Peromyscus maniculatus* (white-footed mouse)
  - *Peromyscus truei* (pinyon mouse)
  - *Reithrodontomys raviventris* (salt marsh harvest mouse)
  - *Sciurus* (squirrel)
  - *Tamias* (chipmunk)
  - *Otospermophilus beecheyi* (California ground squirrel)
  - *Thomomys bottae* (Botta's pocket gopher)
- Order Chiroptera
  - *Antrozous pallidus* (pallid bat)
  - *Eptesicus fuscus* (big brown bat)
  - *Lasiurus* (hairy-tailed bat)
- Order Carnivora
  - *Cynodesmus thooides* (extinct canid)
  - *Enhydra lutris* (sea otter)
  - *Procyon lotor* (racoon)
  - *Taxidea* (badger)
  - *Ursus americanus* (American black bear)
- Order Proboscidea
  - *Mammut americanum* (American mastodon)
  - *Mammuthus columbi* (Columbian mammoth)
- Order Perissodactyla
  - *Equus pacificus* (Pacific horse)
  - *Pliohippus interpolatus* (Pliocene horse)
  - *Tapirus merriami* (tapir)
- Order Artiodactyla
  - *Antilocapra pacifica* (Pacific pronghorn)
  - *Bison bison antiquus* (ancient bison)
  - *Bison latifrons* (long-horned bison)
  - *Camelops hesternus* (yesterday's camel)
  - *Capromeryx minor* (diminutive pronghorn)
  - *Cervus* (elk)
  - *Odocoileus* (mule deer)
  - *Sphenophalos* (pronghorn)

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Appendix E:
Noise Supporting Information

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Date	Time	LAeq	LApeak	LASmax	LASmin
10/12/2018	16:00:00	65.5	99.4	80.0	42.5
10/12/2018	17:00:00	65.1	93.5	77.5	49.1
10/12/2018	18:00:00	64.1	91.1	76.7	48.1
10/12/2018	19:00:00	64.4	101.8	80.3	47.1
10/12/2018	20:00:00	62.4	90.5	76.4	46.4
10/12/2018	21:00:00	61.4	93.3	76.2	42.3
10/12/2018	22:00:00	61.8	92.1	79.1	39.7
10/12/2018	23:00:00	69.3	110.8	97.0	36.4
11/12/2018	00:00:00	55.7	92.3	72.0	36.6
11/12/2018	01:00:00	55.2	86.5	76.3	35.8
11/12/2018	02:00:00	69.3	111.0	97.7	34.6
11/12/2018	03:00:00	68.6	110.2	96.7	37.6
11/12/2018	04:00:00	62.6	94.1	79.7	40.6
11/12/2018	05:00:00	70.2	112.4	97.7	46.3
11/12/2018	06:00:00	64.2	95.5	77.3	46.0
11/12/2018	07:00:00	70.2	110.8	95.8	50.8
11/12/2018	08:00:00	65.9	99.4	82.7	45.2
11/12/2018	09:00:00	63.9	93.0	78.6	44.0
11/12/2018	10:00:00	68.7	110.9	96.0	43.6
11/12/2018	11:00:00	63.9	105.1	77.6	40.5
11/12/2018	12:00:00	64.8	105.3	84.6	41.4
11/12/2018	13:00:00	66.2	105.7	88.3	41.1
11/12/2018	14:00:00	67.3	108.9	89.4	42.0
11/12/2018	15:00:00	65.1	104.6	82.5	41.4
11/12/2018	16:00:00	67.3	110.6	94.4	42.7
11/12/2018	17:00:00	70.5	111.0	97.1	46.4
11/12/2018	18:00:00	64.8	101.4	84.3	47.0
11/12/2018	19:00:00	64.7	98.5	86.2	46.5
11/12/2018	20:00:00	65.9	104.6	89.8	43.8
11/12/2018	21:00:00	64.1	107.6	87.4	43.5
11/12/2018	22:00:00	60.4	97.9	80.3	41.5
11/12/2018	23:00:00	58.3	91.7	77.8	39.8
12/12/2018	00:00:00	56.1	95.0	78.4	39.8
12/12/2018	01:00:00	54.2	102.4	74.6	39.5
12/12/2018	02:00:00	53.7	85.1	72.1	39.9
12/12/2018	03:00:00	56.3	87.6	72.8	41.0
12/12/2018	04:00:00	69.7	114.7	99.8	46.5
12/12/2018	05:00:00	68.5	110.3	95.8	49.8
12/12/2018	06:00:00	65.9	105.6	90.2	46.2
12/12/2018	07:00:00	68.9	110.8	95.5	45.1
12/12/2018	08:00:00	65.3	97.2	80.5	45.1
12/12/2018	09:00:00	64.0	93.3	76.7	45.6
12/12/2018	10:00:00	64.1	95.8	83.3	43.0
12/12/2018	11:00:00	65.2	104.2	92.5	42.0
12/12/2018	12:00:00	65.0	98.2	81.5	41.9
12/12/2018	13:00:00	68.8	112.0	96.6	41.6
12/12/2018	14:00:00	65.5	101.3	85.7	41.8
12/12/2018	15:00:00	66.7	108.2	93.0	40.2

Ldn Calculations					
	Time	Hourly Leq	Leq'	0.1*Leq	antiLog
	16:00:00	65.5	65.5	6.552339	3567296
	17:00:00	65.1	65.1	6.512663	3255836
	18:00:00	64.1	64.1	6.411308	2578146
	19:00:00	64.4	64.4	6.440884	2759838
	20:00:00	62.4	62.4	6.244353	1755309
	21:00:00	61.4	61.4	6.139147	1377676
	22:00:00	61.8	71.8	7.176329	15008228
	23:00:00	69.3	79.3	7.927431	84611759
	00:00:00	55.7	65.7	6.568493	3702481
	01:00:00	55.2	65.2	6.521177	3320294
	02:00:00	69.3	79.3	7.930717	85254381
	03:00:00	68.6	78.6	7.861695	72726904
	04:00:00	62.6	72.6	7.259172	18162351
	05:00:00	70.2	80.2	8.020376	1.05E+08
	06:00:00	64.2	74.2	7.415702	26043662
	07:00:00	70.2	70.2	7.017132	10402358
	08:00:00	65.9	65.9	6.59011	3891437
	09:00:00	63.9	63.9	6.388494	2446214
	10:00:00	68.7	68.7	6.874951	7498099
	11:00:00	63.9	63.9	6.394443	2479951
	12:00:00	64.8	64.8	6.482633	3038318
	13:00:00	66.2	66.2	6.6187	4156231
	14:00:00	67.3	67.3	6.728162	5347633
	15:00:00	65.1	65.1	6.508303	3223317
			Sum		4.71E+08
			Sum/24		19642135
			Log10(Sum/24)		7.293189
			10*Log10(Sum/24)		72.93189
			24 Hour Ldn		73

Ldn Calculations					
	Time	Hourly Leq	Leq'	0.1*Leq	antiLog
	16:00:00	67.3	67.3	6.727986	5345473
	17:00:00	70.5	70.5	7.051318	11254297
	18:00:00	64.8	64.8	6.482285	3035885
	19:00:00	64.7	64.7	6.472367	2967339
	20:00:00	65.9	65.9	6.589304	3884218
	21:00:00	64.1	64.1	6.412725	2586575
	22:00:00	60.4	70.4	7.042384	11025146
	23:00:00	58.3	68.3	6.825556	6692004
	00:00:00	56.1	66.1	6.60799	4054991
	01:00:00	54.2	64.2	6.422418	2644955
	02:00:00	53.7	63.7	6.36613	2323433
	03:00:00	56.3	66.3	6.634712	4312329
	04:00:00	69.7	79.7	7.974649	94329829
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	06:00:00	65.9	75.9	7.58997	38901863
	07:00:00	68.9	68.9	6.890859	7777844
	08:00:00	65.3	65.3	6.532298	3406415
	09:00:00	64.0	64.0	6.401861	2522672
	10:00:00	64.1	64.1	6.414556	2597503
	11:00:00	65.2	65.2	6.520757	3317090
	12:00:00	65.0	65.0	6.496995	3140471
	13:00:00	68.8	68.8	6.875267	7503554
	14:00:00	65.5	65.5	6.546781	3521934
	15:00:00	66.7	66.7	6.66731	4648465
			Sum		3.02E+08
			Sum/24		12576438
			Log10(Sum/24)		7.099558
			10*Log10(Sum/24)		70.99558
			24 Hour Ldn		71

TABLE Existing-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 12/13/2018
ROADWAY SEGMENT: Main Street - Neroly Road to Live Oak Avenue
NOTES: Oakley Main Street Project - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.31

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn			
70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	102.7	216.4	463.8

TABLE Existing-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 12/13/2018
ROADWAY SEGMENT: Main Street - Live Oak Avenue to project site
NOTES: Oakley Main Street Project - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.31

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	102.7	216.4	463.8

TABLE Existing-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 12/13/2018
ROADWAY SEGMENT: Main Street - project site to Big Break Road
NOTES: Oakley Main Street Project - Existing

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.00

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	98.2	206.4	442.3

TABLE Existing + Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 12/13/2018
ROADWAY SEGMENT: Main Street - Neroly Road to Live Oak Avenue
NOTES: Oakley Main Street Project - Existing + Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.51

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	105.6	222.9	477.9

TABLE Existing + Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 12/13/2018
ROADWAY SEGMENT: Main Street - Live Oak Avenue to project site
NOTES: Oakley Main Street Project - Existing + Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.58

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	106.7	225.3	483.1

TABLE Existing + Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 12/13/2018
ROADWAY SEGMENT: Main Street - project site to Big Break Road
NOTES: Oakley Main Street Project - Existing + Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.11

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	99.7	209.8	449.5

TABLE Background-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 12/13/2018
ROADWAY SEGMENT: Main Street - Neroly Road to Live Oak Avenue
NOTES: Oakley Main Street Project - Background

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 29100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.55

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn			
70 Ldn	65 Ldn	60 Ldn	55 Ldn
69.6	142.7	303.9	652.9

TABLE Background-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 12/13/2018
ROADWAY SEGMENT: Main Street - Live Oak Avenue to project site
NOTES: Oakley Main Street Project - Background

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 29000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.53

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
69.4	142.3	303.2	651.4

TABLE Background-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 12/13/2018
ROADWAY SEGMENT: Main Street - project site to Big Break Road
NOTES: Oakley Main Street Project - Background

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.35

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
67.7	138.5	294.8	633.4

TABLE Background + Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 12/13/2018
ROADWAY SEGMENT: Main Street - Neroly Road to Live Oak Avenue
NOTES: Oakley Main Street Project - Background + Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 29900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.67

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
70.7	145.2	309.4	664.8

TABLE Background + Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 12/13/2018
ROADWAY SEGMENT: Main Street - Live Oak Avenue to project site
NOTES: Oakley Main Street Project - Background + Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 30100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.69

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
71.0	145.8	310.7	667.8

TABLE Background + Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 12/13/2018
ROADWAY SEGMENT: Main Street - project site to Big Break Road
NOTES: Oakley Main Street Project - Background + Project

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 28200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS	88.08	9.34
M-TRUCKS	1.65	0.19
H-TRUCKS	0.66	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.41

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn

70 Ldn	65 Ldn	60 Ldn	55 Ldn
68.3	139.8	297.6	639.4

Appendix F:
Traffic Impact Analysis

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Administrative Draft Report

The Village at Main

Traffic Impact Analysis

Oakley, CA

December 2018

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1. INTRODUCTION

This report describes results of the Transportation Impact Assessment (TIA) for a proposed residential development (the "project") on Main Street in the City of Oakley in Contra Costa County.

Study Purpose

The purpose of the TIA is to evaluate potential transportation impacts that could result from the proposed project, identify short- and long-term multi-modal circulation needs where relevant to site access and/or project impacts, identify potential mitigation measures for any significant transportation impacts, and evaluate the adequacy of the proposed site plan for accommodating multi-modal site access.

Report Overview

This report is organized into the following chapters:

- **Chapter 1 Introduction** describes the study methodology, impact significance criteria and regulatory setting.
- **Chapter 2 Existing Conditions** describes existing transportation conditions in the study area.
- **Chapter 3 Project Conditions** provides a forecast of traffic volumes that would be generated by the proposed project, and assesses the significance of impacts to the transportation network resulting from the project under Existing plus Project conditions. In addition, Chapter 3 provides general recommendations concerning site ingress and egress provisions.
- **Chapter 4 Cumulative Impacts** provides an assessment of potential cumulative traffic impacts, based on forecasted traffic growth under Background Conditions (without the proposed project) and Background plus Project Conditions (with the addition of project-generated traffic).

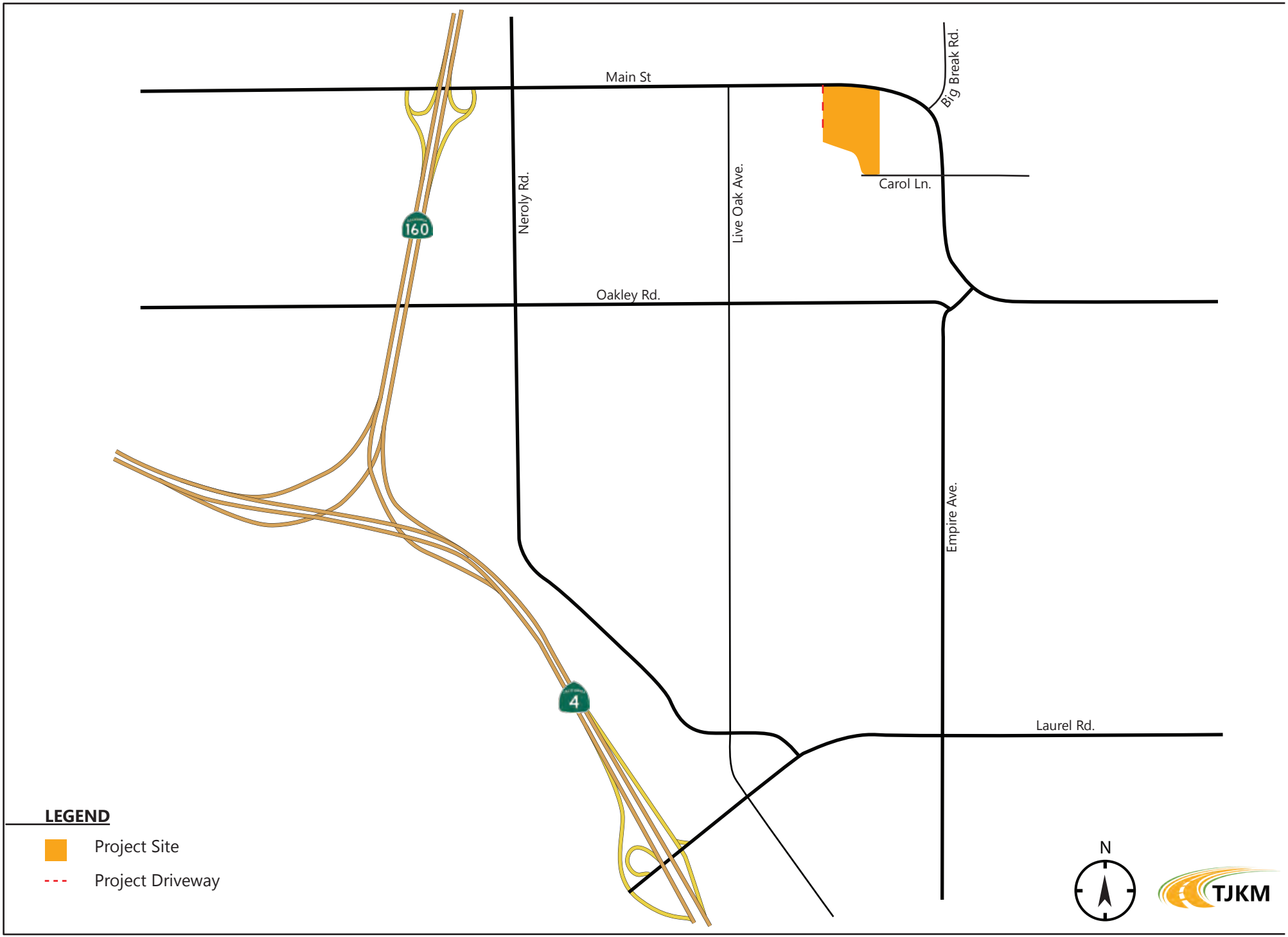
Project Location

The location of the project site is shown in **Figure 1**. The project site is located in northwest Oakley, on the south side of Main Street between Live Oak Avenue and Big Break Road, north of Carol Lane.

Proposed Project

The project would provide 154 single-family detached residential dwellings. The proposed site plan is illustrated in **Figure 2**. Direct access to the site to/from Main Street is proposed via two entrances, both of which would be gated. Sidewalks would be provided on both sides of each internal street, and along Main Street. As shown, the proposed site plan would not provide direct access to Carol Lane.

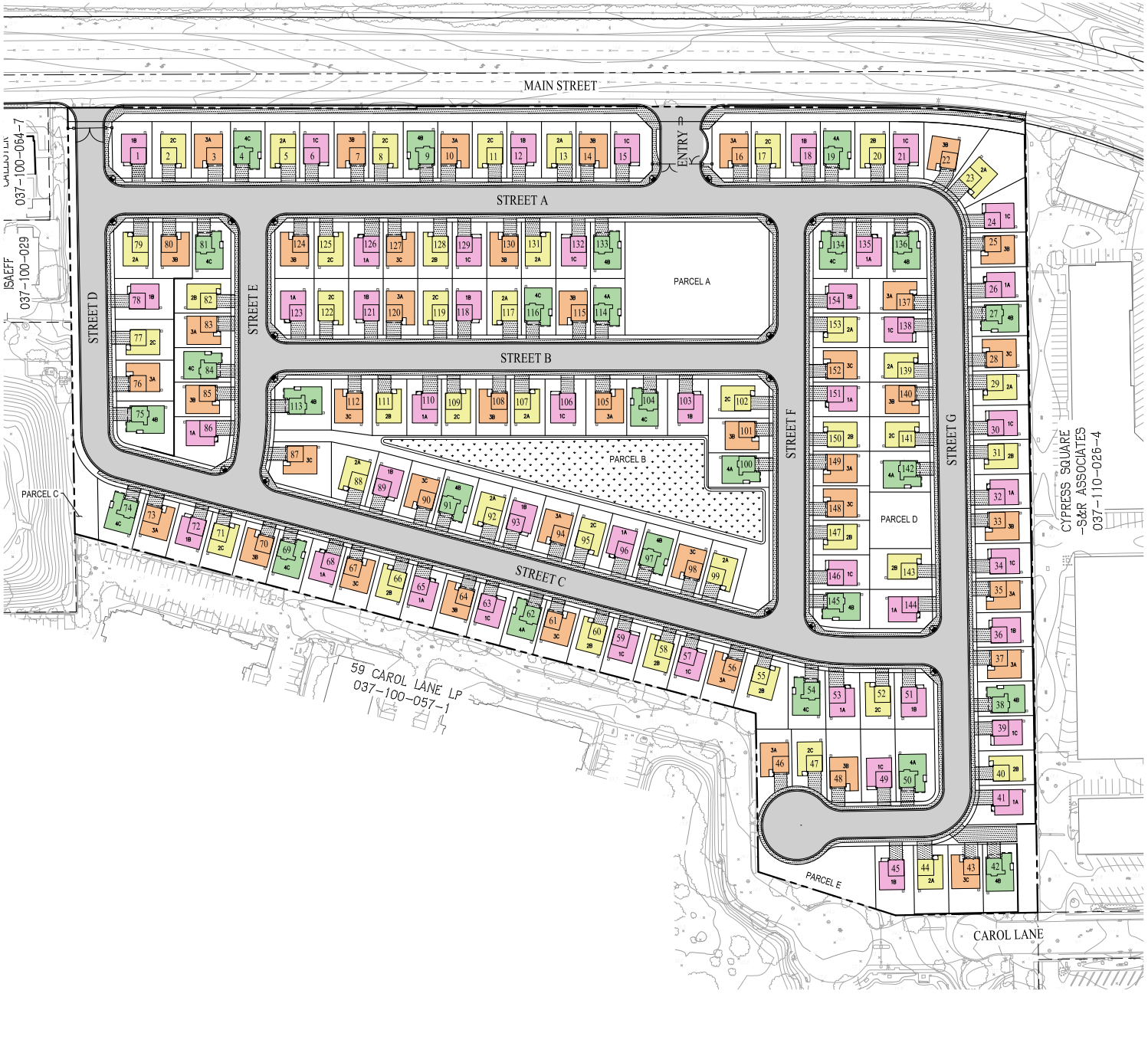
Study Area



270-024

Figure 1

Site Plan


MAIN STREET
ENTRY
STREET A
STREET B
STREET C
STREET D
STREET E
STREET F
STREET G
PARCEL A
PARCEL B
PARCEL C
PARCEL D
PARCEL E
CAROL LANE
59 CAROL LANE LP
037-100-057-1
ISAEFF
037-100-029
037-100-064-7
CYPRESS SQUARE
-S&R ASSOCIATES
037-110-026-4
N

Analysis Scenarios and Study Area

Potential transportation impacts were assessed based on the following scenarios addressed in this study:

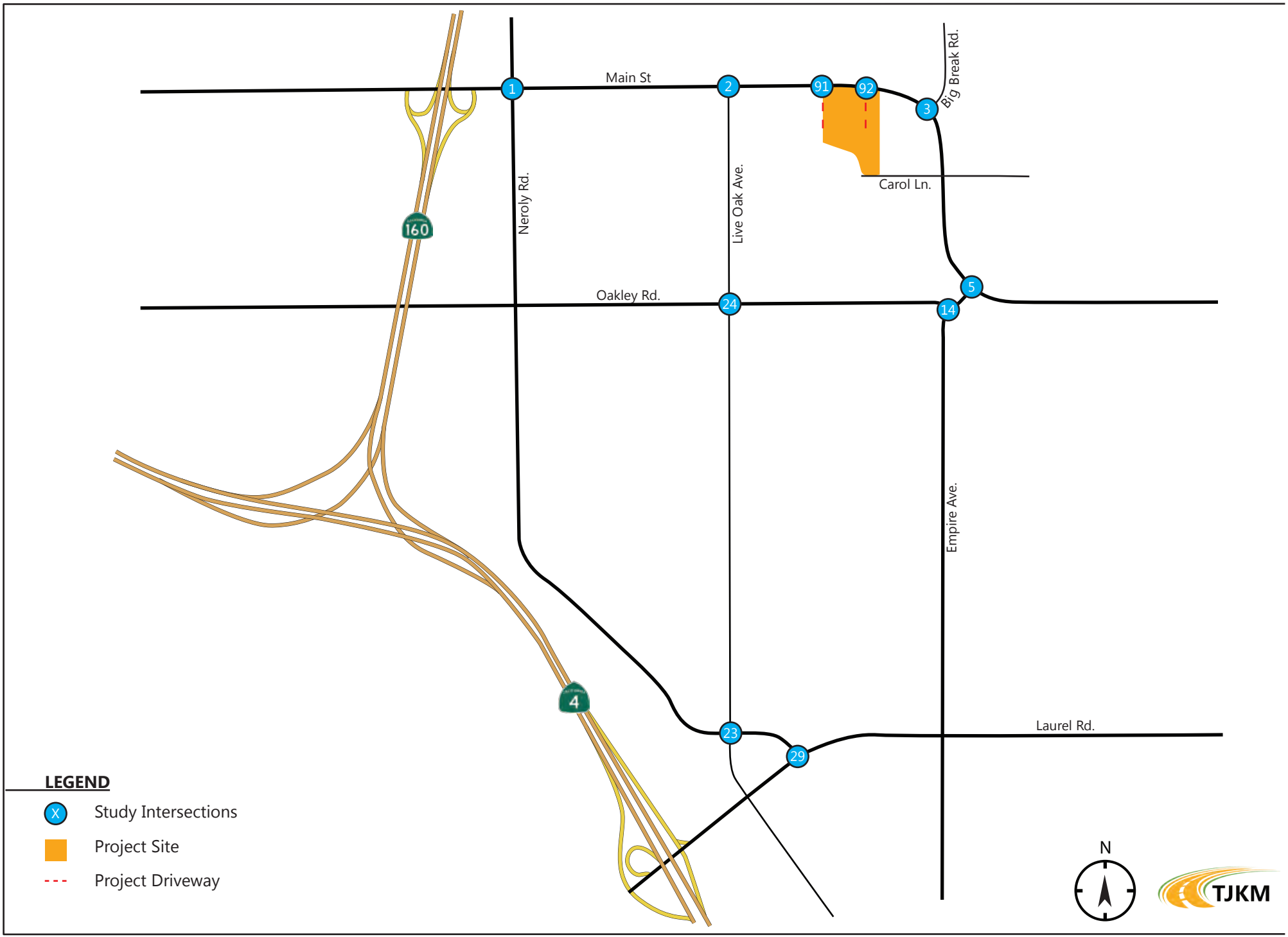
- ***Existing Conditions*** – This scenario describes existing transportation conditions in the study area based on the current roadway and sidewalk network characteristics, transit service, field observations and intersection counts conducted on October 4, 2016.
- ***Existing plus Project Conditions*** – This scenario is similar to Existing Conditions but with the proposed site modifications and net new trips that would generated by the project.
- ***Background Conditions*** –This scenario describes the projected peak hour traffic operations based on the net change to travel patterns anticipated from approved (but not yet constructed) or fully/partially occupied developments in the City at the time of the Existing Conditions assessment. This includes additional trips that would be generated if the proposed developments were to operate at full occupancy. The conditions in this scenario were developed using the Vistro Model.
- ***Background plus Project Conditions*** – This scenario is similar to Background Conditions but with the inclusion of vehicle trips that would be generated by the project. The Background plus Project Conditions analysis provides an assessment of project impacts that takes into account other projects that would be completed within a similar timeframe as the project.

Study Intersections

TJKM evaluated transportation conditions at nine existing study intersections, and one proposed new intersection that would serve the project site, during a.m. (7:00 a.m.-9:00 a.m.) and p.m. (4:00 p.m.-6:00 p.m.) peak periods for a typical weekday with clear weather. The following study intersections were selected in consultation with City staff based on the anticipated trip generation and travel pattern for project trips:

- Bridgehead Road-Neroly Road / Main Street
- Live Oak Road / Main Street
- Big Break Road / Main Street
- Empire Street / Main Street
- Empire Avenue / Oakley Road
- Neroly Road / Live Oak Avenue
- Live Oak Avenue / Oakley Road
- Neroly Road / Laurel Road
- Main Street / West Driveway (existing driveway proposed for reconfiguration to serve project)
- Main Street / East Driveway (Proposed)

Study Intersections



270-024

Figure 3

Level of Service Methodology

Level of service (LOS) is a qualitative index of the performance of an element of the transportation system. LOS is a rating scale running from A to F, with LOS A indicating no congestion, and LOS F indicating unacceptable congestion and delay. For this study, LOS describes the operating conditions for signalized and unsignalized intersections. The Highway Capacity Manual (HCM) is a standard reference published by the Transportation Research Board (TRB), and contains specific criteria and methods for assessing LOS. Synchro software is used to calculate LOS in this study. LOS definitions for signalized and unsignalized intersections are provided in **Table 1** and **Table 2**, respectively.

Table 1: Intersection Level of Service Definitions for Signalized Intersections

LOS	Description
A	Very low control delay, up to 10 seconds per vehicle. Progression is extremely favorable, and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.
B	Control delay greater than 10 and up to 20 seconds per vehicle. There is good progression or short cycle lengths or both. More vehicles stop causing higher levels of delay.
C	Control delay greater than 20 and up to 35 seconds per vehicle. Higher delays are caused by fair progression or longer cycle lengths or both. Individual cycle failures may begin to appear. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflow occurs. The number of vehicles stopping is significant, though many still pass through without stopping.
D	Control delay greater than 35 and up to 55 seconds per vehicle. The influence of congestions becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volumes. Many vehicles stop, the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	Control delay greater than 55 and up to 80 seconds per vehicle. The limit of acceptable delay. High delays usually indicate poor progression, long cycle lengths, and high volumes. Individual cycle failures are frequent.
F	Control delay in excess of 80 seconds per vehicle. Unacceptable to most drivers. Oversaturation, arrival flow rates exceed the capacity of the intersection. Many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to higher delay.

Source: HCM 2010

Table 2: Intersection Level of Service Definitions for Stop-sign Controlled Intersections

LOS	Description
A	Very low control delay less than 10 seconds per vehicle for each movement subject to delay.
B	Low control delay greater than 10 and up to 15 seconds per vehicle for each movement subject to delay.
C	Acceptable control delay greater than 15 and up to 25 seconds per vehicle for each movement subject to delay.
D	Tolerable control delay greater than 25 and up to 35 seconds per vehicle for each movement subject to delay.
E	Limit of tolerable control delay greater than 35 and up to 50 seconds per vehicle for each movement subject to delay.
F	Unacceptable control delay in excess of 50 seconds per vehicle for each movement subject to delay.

Source: HCM 2010

Regulatory Setting

All Contra Costa jurisdictions, including the City of Oakley, participate in the *Measure J – Growth Management Program*. The overall goal of this program is to achieve a cooperative process for Growth Management on a countywide basis, while maintaining local authority over land use decisions and the establishment of performance standards. Using a formula based on road miles and population, Contra Costa County Transportation Authority (CCTA) allocates 18 percent of sales tax revenues to local jurisdictions that comply with Growth Management requirements. Oakley participates in the Measure C program as a member of the TRANSPLAN subregional transportation planning committee, which consists of the Cities of Antioch, Oakley, and Pittsburg, and Contra Costa County.

The Contra Costa Transportation Authority (CCTA) serves as the Congestion Management Agency (CMA) for Contra Costa County. CCTA adopted the most recent Congestion Management Program (CMP) in 2015. The 2015 CMP requires an analysis of any project that is expected to generate more than 100 peak hour vehicle trips.

Significant Impact/Level of Service Standards

Per the City of Oakley General Plan, LOS D or a volume-to-capacity (V/C) ratio of 0.90 are the thresholds of acceptability for signalized intersections. Any signalized intersection operating worse than LOS D would be considered inconsistent with this standard. For this study, the study intersections were analyzed using HCM 2010 Methodology as per the City's guidance. Average control delay is reported in seconds per vehicle for signalized and all-way-stop-control intersections and critical delay for minor approaches is reported for two-way-stop-control intersections. Signalized intersections or unsignalized intersection operating worse than LOS D are considered inconsistent with the City's standard.

Appendix G of the State CEQA Guidelines includes significance criteria for potential transportation impacts. These include whether a project would result in one of the following:

- Conflict with an applicable plan, ordinance or policy 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, bicycle and pedestrian paths, and mass transit.
- Conflict with an applicable congestion management program, including, but not limited to LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- 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.
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

2. EXISTING CONDITIONS

Roadway Network

Key roadways and freeways in the vicinity are discussed below.

State Route (SR) 4 – SR 4 is a major east-west freeway that connects Oakley with adjacent cities and regional freeways. SR 4 serves as a major route connecting Oakley to the greater Bay Area and providing connection between Contra Costa County and San Joaquin County. SR 4 typically has two to three travel lanes in each direction with the posted speed limit of 65 miles per hour (mph).

State Route (SR) 160 – SR 160 is a north-south freeway that connects SR 4 with Main Street and other destinations. This roadway serves as a major route connecting Oakley with Sacramento County to the north, and with SR 4 to the west. SR 160 typically has two lanes in each direction, narrowing to one lane per direction north of the Antioch Bridge toll plaza.

Main Street – Main Street is a two to four lane major arterial roadway. Main Street is currently the major north-south transportation corridor in the City of Oakley. Mixed residential, commercial, and agricultural uses characterize the lands along both sides of Main Street between Rose Avenue and Laurel Avenue. Maximum speeds posted on Main Street are 35 miles per hour (mph) west of Rose Avenue, 45 mph between Rose Avenue and Bernard Road, and 40 mph south of Bernard Road.

Empire Avenue – Empire Avenue is a four-lane, north-south divided arterial roadway. Empire Avenue extends north of Oakley Street and travels beyond Shady Willow Lane to the south. It provides access to local residential and regional commercial areas. The posted speed limit is 40 mph in the southbound direction and 45 mph in the northbound direction.

E. Cypress Road – E. Cypress Road is a two to four east west, residential arterial roadway east of Main Street. E. Cypress Road extends from west of Main Street and terminates at the City limits in the east. This roadway provides local access to residential developments. The posted speed limit is 50 mph.

O'Hara Avenue – O'Hara Avenue is a north-south roadway connecting Oakley and the City of Brentwood. O'Hara Avenue extends from north of Main Street and terminates at Brentwood Boulevard to the south. This roadway provides local access to residential developments and to Downtown Oakley's commercial developments.

Laurel Road – Laurel Road, within the project vicinity, is a four-lane, east-west divided roadway. Laurel Road extends beyond Main Street to the east and terminates at SR 4 to the west. The posted speed limits on Laurel Road are 40 mph and 45 mph.

Oakley Road – Oakley Road is a two-lane, east-west minor arterial that connects the City of Oakley and the City of Antioch. It extends west of SR 160 in Antioch to its eastern terminus at Empire Avenue.

Neroly/Bridgehead Road – Neroly Road/Bridgehead Road is a two-lane, north-south roadway connecting Oakley and Brentwood. This roadway provides local access to residential developments.

Live Oak Avenue – Live Oak Avenue is a two-lane roadway extending from Main Street to the north to Neroly Road to the south. An extension of Live Oak Avenue, as a major arterial, is anticipated to be constructed by 2030 to proposed industrial areas in the north with grade-separated crossings at the railroad tracks.

Big Break Road – Big Break Road is a minor north-south roadway providing access to a large residential development and the Oakley Marina. There is an at-grade railroad crossing just north of Main Street.

W. Cypress Road – W. Cypress Road is a two-lane undivided roadway running in an east-west direction. W. Cypress Road extends from Empire Avenue to the west to Main Street to the east. This roadway provides local access to residential developments. The posted speed limit varies between 30 and 35 mph.

Seller Avenue – Seller Avenue is a two-lane, north-south rural road that extends north from Marsh Creek Road to terminate at East Cypress Avenue. It will extend northerly in the future.

Knightsen Avenue – Knightsen Avenue is a two-lane, north-south rural road that extends north from Eden Plains Road to terminate at East Cypress Road.

Delta Road – Delta Road is a two-lane, east-west rural road that extends east from Main Street providing connection to the north end of the planned Byron Highway.

Brown Road – Brown Road is a two-lane roadway that extends north from Neroly Road and terminates beyond Laurel Road. This roadway provides local access to residential developments and provides direct access to Freedom High School located at the intersection of Brown Road and Neroly Road. The posted speed limit is 35 mph.

Carpenter Road – Carpenter Road is a two-lane roadway that extends from Empire Avenue to O'Hara Avenue. This roadway provides local access to residential developments. The posted speed limit is 40 mph. An extension of Carpenter Road to Rose Avenue is anticipated in the near future.

Brownstone Road – Brownstone Road is a two-lane, east-west roadway that extends between Main Street and O'Hara Avenue. This roadway provides local access to residential developments. The posted speed limit is 40 mph.

Vintage Parkway – Vintage Parkway is a two-lane roadway providing access to a large residential development north of Main Street. Vintage Parkway also provides access to commercial developments in Downtown Oakley.

Rose Avenue – Rose Avenue is a two-lane undivided north-south roadway. Rose Avenue extends north from Main Street and terminates at Simoni Ranch Drive. This roadway provides local access to residential developments. The posted speed limits is 35 mph between Main Street and W. Cypress road and 40 mph between W. Cypress Road and Simoni Ranch Drive.

Pedestrian Facilities

Walkability is defined as the ability to travel easily and safely between various origins and destinations without having to rely on automobiles or other motorized travel. The ideal "walkable" community includes wide sidewalks, a mix of land uses providing residential, employment, and shopping opportunities, minimal conflict points with vehicle traffic, and access to transit facilities and services.

Pedestrian facilities are comprised of crosswalks, sidewalks, pedestrian signals, and off-street paths, which provide safe and convenient routes for pedestrians to access destinations such as institutions, businesses, public transportation, and recreation facilities.

Near the project site: intermittent sidewalks are provided on the south side of Main Street and on both sides of Carol Lane. Sidewalks are not yet provided on the project frontage bordering Main Street.

Bicycle Facilities

Bicycle facilities include the following:

Multi-Use Paths (Class I) – A path physically separated from motor vehicle traffic by an open space or barrier, and either within a highway or an independent right-of-way (ROW), used by bicyclists, pedestrians, joggers, skaters, and other non-motorized travelers. Class I paths are the most popular type of facility. Because the availability of uninterrupted ROW is limited, this type of facility may be difficult to locate and expensive to build, relative to other types of bicycle facilities, but inexpensive compared to new roadways. Ideal locations for bike paths are areas such as powerline easements, utility easements, canal banks, river levees, drainage easements, railroad or highway ROW, or regional community parks.

Bike Lanes (Class II) – A portion of a roadway designated by striping and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes are intended to promote an orderly flow of bicycle and vehicle traffic. This type of facility is established by using the appropriate striping, pavement legends, and signs.

Bike Routes (Class III) – Bike routes are shared facilities between bicycle and motor vehicle traffic. They provide for specific bicycle demand and may be used to connect discontinuous segments of bike lanes. In addition, bike routes are located on residential streets and rural roads. If the pavement width is sufficient, and traffic volume/speeds warrant, an edge line may be painted to further delineate the bike route. Bike routes are signed with the G-93 Bike Route marker but no striping or legends are required.

The City of Oakley General Plan (September 2002), City of Oakley Parks, Recreation, and Trails Master Plan (Summer 2007), and the Contra Costa County Bicycle and Pedestrian Plan (October 2009) propose that several new bicycle facilities be constructed in the future.

The existing striped shoulder on Main Street accommodates bicyclists under existing conditions.

Existing Transit Facilities

Tri-Delta Transit provides transit services in the City of Oakley, with three lines connecting Brentwood and the Pittsburg/Bay Point Bay Area Rapid Transit (BART) station.

- *Route 300*, the Pittsburg BART/Brentwood Park & Ride route, is a weekday express route connecting Brentwood to the Pittsburg/Bay Point BART station via Oakley and Antioch. This bus travels along Main Street, operating from 4:15 a.m. to approximately 10:00 p.m. with 15 to 30-minute headways.
- *Route 383*, the Oakley/Antioch/Freedom High School route, connects Oakley to Antioch and Freedom High School in Oakley. This route, in both clockwise and counterclockwise directions, provides only weekday service. The counterclockwise route runs with approximate one-hour headways, and the clockwise route runs twice during the a.m. peak hour period only.
- *Route 391*, the BART/Pittsburg/Antioch/Oakley/Brentwood route, provides weekday service to most East County Cities. The route operates from 4:00 a.m. to 1:15 a.m. with 30 to 60-minute headways.

- *Route 392*, the BART/Pittsburg/Antioch/Oakley/Brentwood route, provides weekend service to Route 391. The route operates from 5:20 a.m. to 2:00 a.m. with approximately 60-minute headways.

Table 3 summarizes the services and frequency during the weekday and on weekends for transit in the City of Oakley. **Figure 4** shows a map of transit routes operated by Tri-Delta Transit.

Near the project site, the nearest bus stops are located at the intersection of Main Street/Big Break Road, roughly one block east of the project site, with stops served by Route 300 in both directions.

Table 3: Existing Transit Facilities

Route	From	To	Weekdays		Saturday		Sunday	
			Hours	Headway (min)	Hours	Headway (min)	Hours	Headway (min)
300	Pittsburg/ Bay Point BART Station	Brentwood Park & Ride	6:25 a.m. - 10.00 p.m.	10-30	....	....	....	....
383	Antioch Park & Ride	Antioch Park & Ride 1	7:12 a.m. - 5:26 p.m.	60-120	....	....	....	....
391	Pittsburg/ Bay Point BART Station	Brentwood Park & Ride	4:03 a.m. - 1:14 a.m.	30-60	....	....	....	....
393	Pacifica & Mariners Cove	Brentwood Park & Ride	....	....	5:22 a.m. - 1:39 a.m.	60	6:24 a.m. - 1:49 a.m.	60

Source: www.trideltatransit.com

Figure 4: Transit Service Map

Existing Peak Hour Intersection Volumes

Turning movement volumes for vehicles, bicycles and pedestrians at most study intersections (with the exception of the two proposed project driveway intersections with Main Street) were provided by the City of Oakley Citywide Traffic Model for the a.m. and p.m. peak hours. To determine existing volumes at the proposed project driveway locations: new counts were conducted during the a.m. (7:00 a.m.-9:00 a.m.) and p.m. (4:00 p.m.-6:00 p.m.) peak period at the intersection of Main Street /West Driveway (study intersection #91) on Wednesday, December 5, 2018. Existing lane geometry and intersection controls are illustrated in **Figure 5.** Existing turning movement volumes at each existing study intersection are illustrated on **Figure 6**,

Existing Conditions Traffic Level of Service Analysis

Table 4 summarizes peak hour levels of service at the six study intersections under Existing Conditions. Detailed LOS worksheets for this scenario are provided in **Appendix B**. Each of the study intersections operate at an acceptable LOS under Existing Conditions.

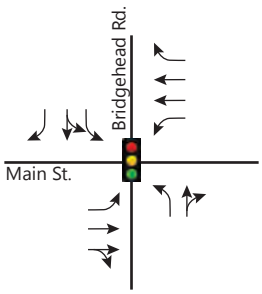
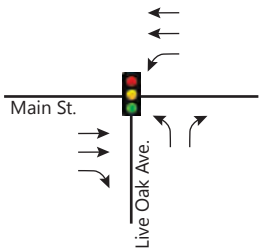
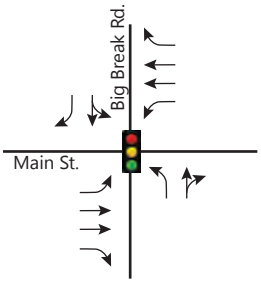
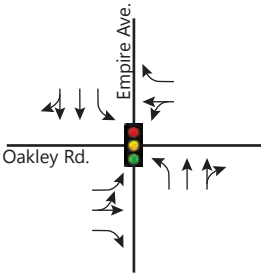
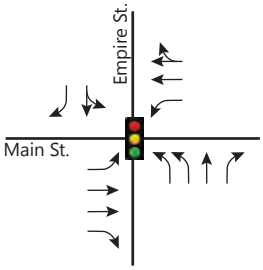
Table 4: Existing Conditions Traffic Level of Service Analysis Results

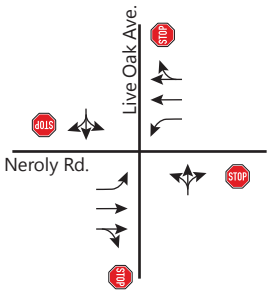
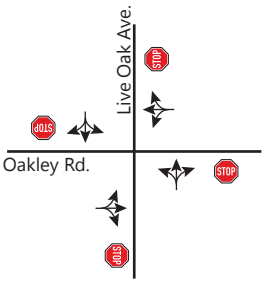
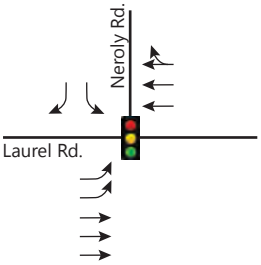
ID	Intersection	Control	Peak Hour	Existing Conditions	
				Average Delay[1]	LOS[2]
1	Bridgehead Road-Neroly Road / Main Street	Signalized	A.M.	21.4	C
			P.M.	23.2	C
2	Live Oak Road / Main Street	Signalized	A.M.	14.8	B
			P.M.	9.9	A
3	Big Break Road / Main Street	Signalized	A.M.	11.5	B
			P.M.	14.1	B
5	Empire Street / Main Street	Signalized	A.M.	19.0	B
			P.M.	19.4	B
14	Empire Avenue / Oakley Road	Signalized	A.M.	28.7	C
			P.M.	31.5	C
23	Neroly Road / Live Oak Avenue	All-way Stop	A.M.	23.5	C
			P.M.	13.8	B
24	Live Oak Avenue / Oakley Road	All-way Stop	A.M.	15.3	C
			P.M.	9.3	A
29	Neroly Road / Laurel Road	All-way Stop	A.M.	11.6	B
			P.M.	8.3	A
91	Main Street / West Driveway	Side-street Stop	A.M.	0.0	A
			P.M.	12.6	B

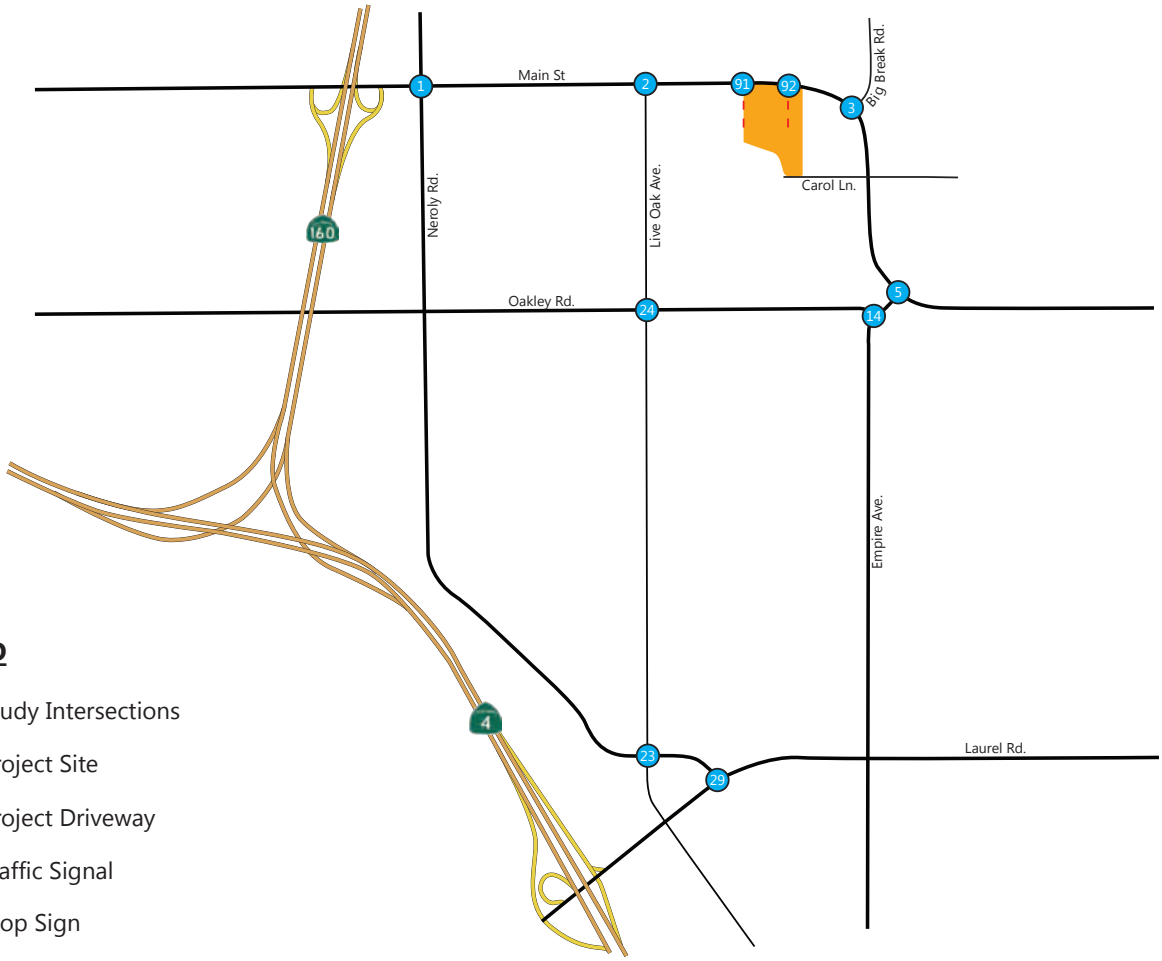
Notes: **Bold** text indicates unacceptable intersection operations.

[1]Delay: Average control delay in seconds per vehicle, reported values are overall for signalized and all-way-stop-control intersections; and critical minor approaches for two-way- stop-control intersections. [2]LOS: Level of Service.

Existing Lane Geometries & Traffic Control

Intersection #1 Bridgehead Rd. / Main St.	Intersection #2 Live Oak Ave. / Main St.	Intersection #3 Big Break Rd. / Main St.	Intersection #14 Empire Ave. / Oakley Rd.	Intersection #5 Main St. / Empire St.
				

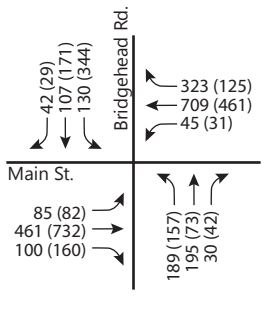
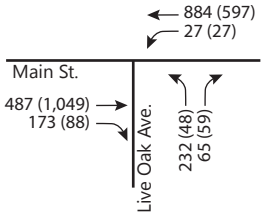
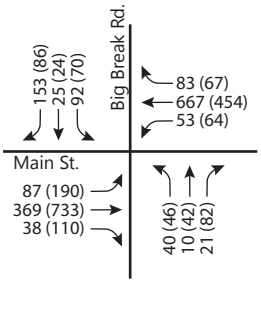
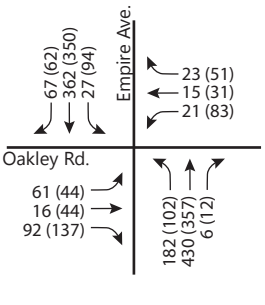
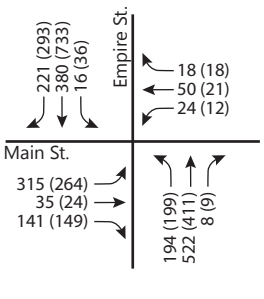
Intersection #23 Neroly Rd. / Live Oak Ave.	Intersection #24 Live Oak Ave. / Oakley Rd.	Intersection #29 Neroly Rd. / Laurel Rd.
		

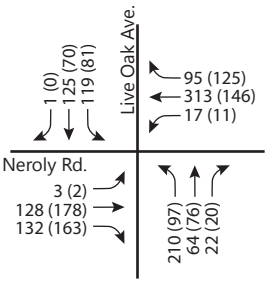
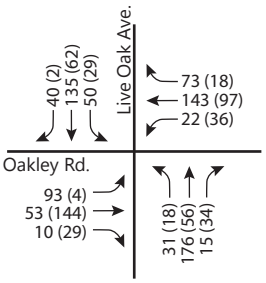
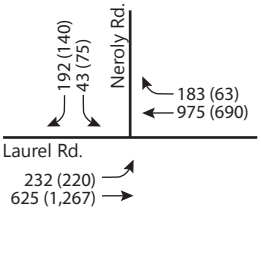
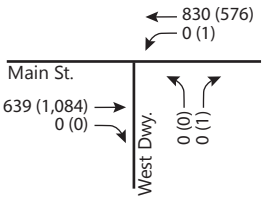
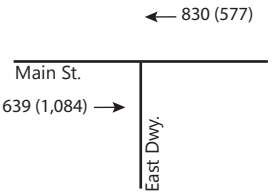


LEGEND

- Study Intersections
- Project Site
- Project Driveway
- Traffic Signal
- Stop Sign

Existing Traffic Volumes

Intersection #1 Bridgehead Rd. / Main St.	Intersection #2 Live Oak Ave. / Main St.	Intersection #3 Big Break Rd. / Main St.	Intersection #14 Empire Ave. / Oakley Rd.	Intersection #5 Main St. / Empire St.
				

Intersection #23 Neroly Rd. / Live Oak Ave.	Intersection #24 Live Oak Ave. / Oakley Rd.	Intersection #29 Neroly Rd. / Laurel Rd.	Intersection #91 Main St. / West Dwy.	Intersection #92 Main St. / East Dwy.
				

LEGEND

- X — Study Intersections
- Project Site
- Project Driveway
- XX — AM Peak Hour Volumes
- (XX) — PM Peak Hour Volumes

3. PROJECT CONDITIONS

Project Trip Generation

The project vehicle trip generation rates were obtained from the reference *Trip Generation, 10th Edition*, published by the Institute of Transportation Engineers (ITE). Based on the applicable rates single-family detached housing, the Project is forecasted to generate 1,454 daily vehicle trips, including 114 a.m. peak hour and 152 p.m. peak hour vehicle trips, as summarized in **Table 5**.

Table 5: Project Vehicle Trip Generation

Land Use (ITE Code)	Size	Daily Vehicle Trips		AM Peak Hour Vehicle Trips					PM Peak Hour Vehicle Trips				
		Rate	Trips	Rate	In %	In	Out	Total	Rate	In %	In	Out	Total
Single Family Detached Housing (ITE land use code 210)	154 du[1]	9.44	**1,454**	0.74	25%	29	85	**114**	0.99	63%	96	56	**152**
Total			**1,454**					**114**					**152**

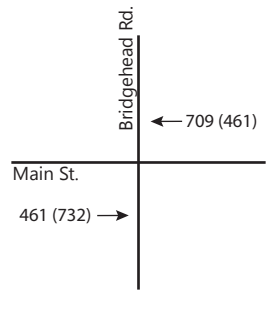
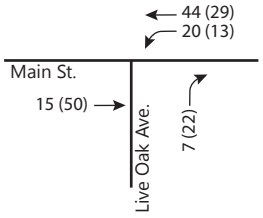
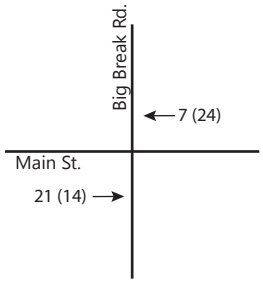
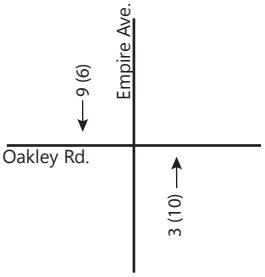
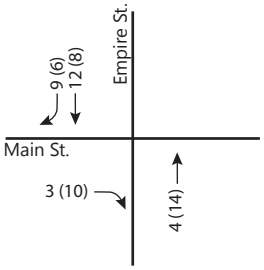
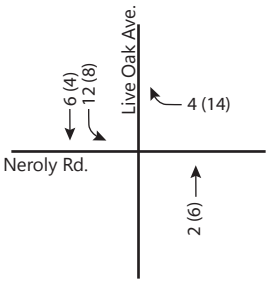
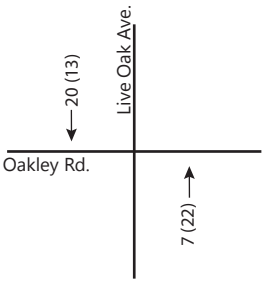
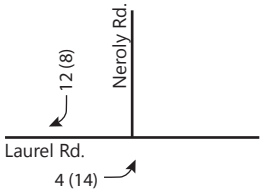
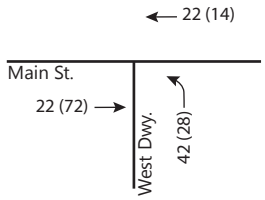
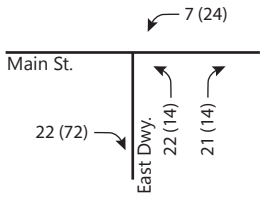
Note: [1] du= dwelling units.
Source: ITE *Trip Generation Manual*, 10th Edition

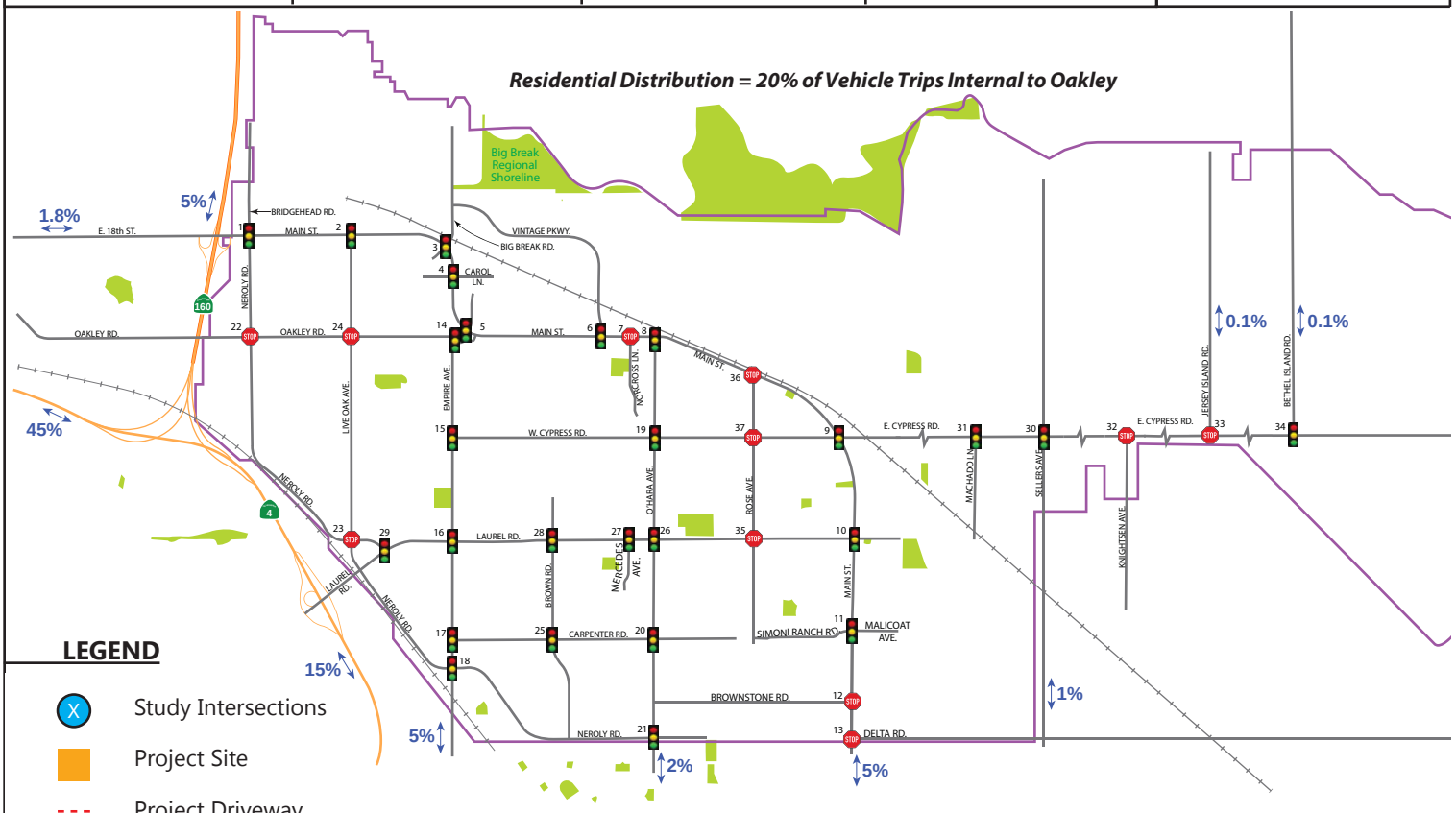
Vehicle Trip Distribution & Assignment

The distribution of peak-hour vehicle trips generated by the project was determined based on the methodology used for the Citywide Traffic Model. Based on that methodology: for residential developments, 45 percent of peak-hour trips are to/from origins and designations west of Oakley via SR 4; 15 percent are to/from originas and destinations south/east of Oakley via SR 4; 20 percent are to/from other destinations near Oakley via other routes; and 20 percent are internal to Oakley. Based on that distribution: peak-hour vehicle trips generated by the project were manually assigned to each study intersection.

Figure 7 illustrates the distribution of project trips to origins/destinations, and the assignment of project trips to study intersections based on the anticipated path(s) of travel.

Project Trips

Intersection #1 Bridgehead Rd. / Main St.	Intersection #2 Live Oak Ave. / Main St.	Intersection #3 Big Break Rd. / Main St.	Intersection #14 Empire Ave. / Oakley Rd.	Intersection #5 Main St. / Empire St.
				
Intersection #23 Neroly Rd. / Live Oak Ave.	**Intersection #24 Live Oak Ave. / Oakley Rd.**	**Intersection #29 Neroly Rd. / Laurel Rd.**	**Intersection #91 Main St. / West Dwy.**	**Intersection #92 Main St. / East Dwy.**
				



Existing plus Project Conditions Traffic Analysis

Table 6 summarizes peak hour levels of service at the study intersections under Existing plus Project Conditions, based on the addition of project trips to each study intersection. Detailed LOS worksheets for this scenario are provided in **Appendix C**. As shown, LOS…

Table 6: Existing plus Project Conditions Traffic Level of Service Analysis Results

ID	Intersection	Control	Peak Hour	Existing Conditions		Existing plus Project Conditions		
				Average Delay[1]	LOS[2]	Average Delay[1]	LOS[2]	Significant LOS Impact?
1	Bridgehead Road-Neroly Road / Main Street	Signalized	A.M.	21.4	C	21.7	C	No
			P.M.	23.2	C	24.1	C	No
2	Live Oak Road/ Main Street	Signalized	A.M.	14.8	B	15.5	B	No
			P.M.	9.9	A	10.7	B	No
3	Big Break Road / Main Street	Signalized	A.M.	11.5	B	11.5	B	No
			P.M.	14.1	B	14.1	B	No
5	Empire Avenue / Main Street	Signalized	A.M.	19.0	B	19.3	B	No
			P.M.	19.4	B	19.5	B	No
14	Empire Avenue / Oakley Road	Signalized	A.M.	28.7	C	28.6	C	No
			P.M.	31.5	C	31.4	C	No
23	Neroly Road/ Live Oak Avenue	All-way Stop	A.M.	23.5	C	26.2	D	No
			P.M.	13.8	B	14.4	B	No
24	Live Oak Avenue / Oakley Road	All-way Stop	A.M.	15.3	C	16.5	C	No
			P.M.	9.3	A	9.5	A	No
29	Neroly Road / Laurel Road	All-way Stop	A.M.	11.6	B	12.0	B	No
			P.M.	8.3	A	8.3	A	No
91	Main Street / West Driveway	Side-street Stop	A.M.	0.0	A	**39.4**	**E**	**No[3]**
			P.M.	12.6	B	46.7	**E**	**No[3]**
92	Main Street / East Driveway (proposed)	Side-street Stop	A.M.	n/a	----	24.0	C	No
			P.M.	n/a	----	44.0	**E**	**No[3]**

Notes: **Bold** text indicates unacceptable intersection operations.

[1]Delay: Average control delay in seconds per vehicle, reported values are overall for signalized and all-way-stop-control intersections; and critical minor approaches for two-way- stop-control intersections.

[2]LOS: Level of Service.

[3] LOS reflects delay to traffic exiting the project site and approaching the stop sign on Main Street, prior to turning on to Main Street. Impact is less than significant because the volume of traffic exiting the project site (less than 100 peak-hour vehicles exiting via two driveways) would not trigger a signal warrant at either driveway.

Existing plus Project Traffic Impact Findings

Based on the Existing plus Project LOS analysis described above**, *project impacts to level of service (LOS) under Existing plus Project conditions are less than significant and therefore no intersection or roadway capacity mitigations are required under Existing plus Project conditions.*** Nonetheless, as noted above: motorists exiting the project site during the a.m. and p.m. peak hours will experience lengthy delays when exiting via a left-turn, due to the high volume of peak-direction traffic on Main Street. Signalization of the project entrance driveways is not recommended because the relatively low volume of traffic exiting the project site would not warrant signalization. Although not required for CEQA mitigation purposes, the following recommendations are provided to reduce delays exiting the site:

- Design the project driveways to allow both right-turns and left-turns to occur simultaneously (i.e., to allow right-turning vehicles to by-pass delays to left-turning vehicles when exiting).
- **Consider modifying the project site to allow project traffic to exit via Carol Lane, which has an existing signalized intersection with Main Street.** Connecting with Carol lane would also enhance bicycle and pedestrian circulation to/from the project site (discussed further below) and could also be desirable for emergency access purposes.

Based on the project trip generation forecast, anticipated distribution of project trips, and LOS analysis, the project is not anticipated to:

- Conflict with an applicable plan, ordinance or policy 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, bicycle and pedestrian paths, and mass transit.
- Conflict with an applicable congestion management program, including, but not limited to LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- 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.

Site Design Impact Findings

Based on review of the site plan, impact findings relevant to the CEQA checklist are described below:

- *Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Project design is not anticipated to result in safety impacts.

- *Would the project result in inadequate emergency access?*

Subject to additional input from the City of Oakley and Fire Department: preliminary findings are that he project design is anticipated to provide adequate access for emergency vehicles. Nonetheless, **emergency vehicle access could be improved by providing a direct connection for emergency vehicles from Carol Lane.**

- *Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.*

The project would not conflict with an adopted bicycle or pedestrian plan, and would not impede transit service. Nonetheless: **pedestrian and bicycle circulation would be improved by providing a direct connection for pedestrians and bicyclists to/from Carol Lane.**

4. CUMULATIVE IMPACTS

This scenario evaluates the project's contribution to potential cumulative traffic impacts.

Cumulative Traffic Growth

Using the calibrated and validated Citywide Traffic Model, additional traffic projected to be generated from approved developments was forecasted for Background Conditions. The Background Conditions scenario includes additional traffic that would be generated by various specific plans and approved projects completed within the City of Oakley, totaling approximately 4,296 new residential single-family units, 195 multi-family units, and 465,000 square feet of new commercial and office space that could be built in the future. The anticipated development would generate approximately 3,869 additional a.m. peak hour vehicle trips and 5,482 additional p.m. peak hour vehicle trips that be distributed across various routes.

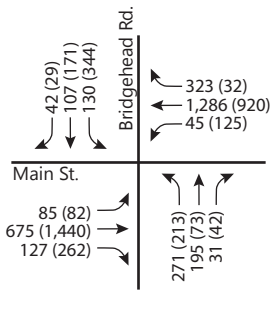
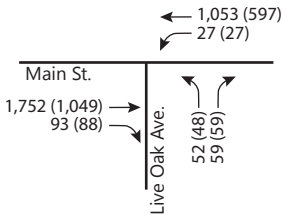
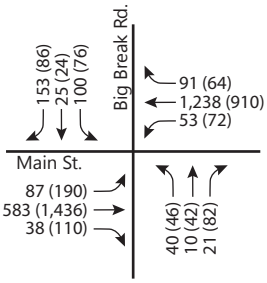
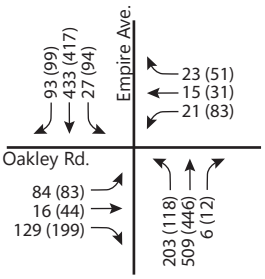
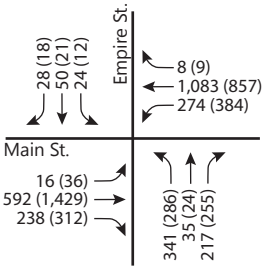
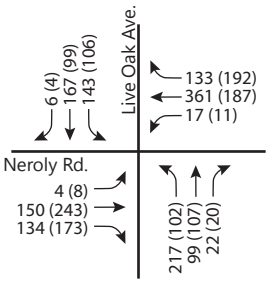
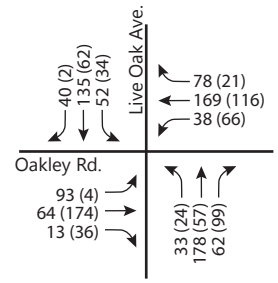
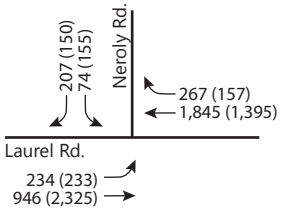
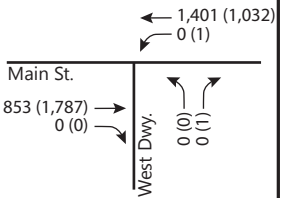
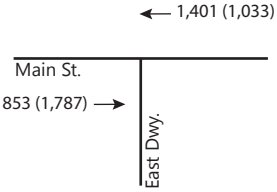
Figure 8 shows the forecasted volumes at each intersection under Background Conditions, not including vehicle trips that would be generated by the project) based on the Oakley Citywide Traffic Model.

Table 7 summarizes peak hour levels of service at the study intersections under Background Conditions, without h the proposed Project. Detailed LOS worksheets for this scenario are provided in **Appendix D**.

As shown, unacceptable LOS is anticipated at the following three study intersections under Background Conditions without the Project:

- Bridgehead Road-Neroly Road/Main Street is forecasted to operate at unacceptable LOS F during the p.m. peak hour under Background Conditions without the proposed project
- Empire Avenue/Main Street is forecasted to operate at unacceptable LOS E during the p.m. peak hour under Background Conditions without the proposed project
- The stop-sign controlled intersection of Neroly Road/Live Oak Avenue is forecasted to operate at LOS E during the a.m. peak hour under Background Conditions without the proposed project

Background Traffic Volumes

Intersection #1 Bridgehead Rd. / Main St.	Intersection #2 Live Oak Ave. / Main St.	Intersection #3 Big Break Rd. / Main St.	Intersection #14 Empire Ave. / Oakley Rd.	Intersection #5 Main St. / Empire St.
				
Intersection #23 Neroly Rd. / Live Oak Ave.	**Intersection #24 Live Oak Ave. / Oakley Rd.**	**Intersection #29 Neroly Rd. / Laurel Rd.**	**Intersection #91 Main St. / West Dwy.**	**Intersection #92 Main St. / East Dwy.**
				

LEGEND

- X — Study Intersections
- Project Site
- Project Driveway
- XX — AM Peak Hour Volumes
- (XX) — PM Peak Hour Volumes

Table 7: Cumulative Traffic Level of Service – Background Conditions without Project

ID	Intersection	Control	Peak Hour	Background Conditions	
				Average Delay[1]	LOS[2]
1	Bridgehead Road-Neroly Road / Main Street	Signalized	A.M.	39.6	D
			P.M.	**>80**	**F**
2	Live Oak Road/ Main Street	Signalized	A.M.	26.8	C
			P.M.	36.7	D
3	Big Break Road / Main Street	Signalized	A.M.	13.5	B
			P.M.	19.5	B
5	Empire Avenue / Main Street	Signalized	A.M.	31.9	C
			P.M.	**66.7**	**E**
14	Empire Avenue / Oakley Road	Signalized	A.M.	36.3	D
			P.M.	46.1	D
23	Neroly Road/ Live Oak Avenue	All-way Stop	A.M.	**45.0**	**E**
			P.M.	10.5	B
24	Live Oak Avenue / Oakley Road	All-way Stop	A.M.	21.2	C
			P.M.	10.8	B
29	Neroly Road / Laurel Road	All-way Stop	A.M.	21.7	C
			P.M.	10.5	B
91	Main Street / West Driveway	Side-street Stop	A.M.	0.0	A
			P.M.	18.2	C
92	Main Street / East Driveway (proposed)	Side-street Stop	A.M.	n/a	----
			P.M.	n/a	----

Notes:

[1]Delay: Average control delay in seconds per vehicle, reported values are overall for signalized and all-way-stop-control intersections; and critical minor approaches for two-way- stop-control intersections.

[2]LOS: Level of Service.

Bold text indicates unacceptable intersection operations.

Cumulative Level of Service with the Proposed Project

Table 8 summarizes peak hour levels of service at the study intersections under Background and Background plus Project Conditions, without and with the proposed Project. . Detailed LOS worksheets for both scenarios scenario are provided in **Appendix D and E**. As shown, the project would contribute to increased delay at three study intersections that would operate unacceptably without the proposed project.

Table 8: Cumulative Traffic Level of Service – Background plus Project Conditions

ID	Intersection	Control	Peak Hour	Background Conditions		Background plus Project Conditions		
				Average Delay[1]	LOS[2]	Average Delay[1]	LOS[2]	Potentially Significant Cumulative LOS Impact?
1	Bridgehead Road-Neroly Road / Main Street	Signalized	A.M.	39.6	D	43.3	D	No
			P.M.	**>80**	**F**	**>80**	**F**	**Yes[4]**
2	Live Oak Road/ Main Street	Signalized	A.M.	26.8	C	29.9	C	No
			P.M.	36.7	D	49.9	D	No
3	Big Break Road / Main Street	Signalized	A.M.	13.5	B	13.5	B	No
			P.M.	19.5	B	20.2	C	No
5	Empire Avenue / Main Street	Signalized	A.M.	31.9	C	36.1	D	No
			P.M.	**66.7**	**E**	**68.6**	**E**	**Yes[5]**
14	Empire Avenue / Oakley Road	Signalized	A.M.	36.3	D	36.1	D	No
			P.M.	46.1	D	45.8	D	No
23	Neroly Road/ Live Oak Avenue	All-way Stop	A.M.	**45.0**	**E**	**>50**	**F**	**Yes[6]**
			P.M.	10.5	B	22.0	C	No
24	Live Oak Avenue / Oakley Road	All-way Stop	A.M.	21.2	C	23.6	C	No
			P.M.	10.8	B	11.3	B	No
29	Neroly Road / Laurel Road	All-way Stop	A.M.	21.7	C	23.1	C	No
			P.M.	10.5	B	10.8	B	No
91	Main Street / West Driveway	Side-street Stop	A.M.	0.0	A	**>50**	**F**	**No[3]**
			P.M.	18.2	C	**>50**	**F**	**No[3]**
92	Main Street / East Driveway (proposed)	Side-street Stop	A.M.	n/a	----	**>50**	**F**	**No[3]**
			P.M.	n/a	----	**>50**	**F**	**No[3]**

Notes: **Bold** text indicates unacceptable intersection operations.

[1]Delay: Average control delay in seconds per vehicle. [2]LOS: Level of Service.

[3] LOS at both project driveways reflects peak-hour delay to traffic exiting the project approaching Main Street on a side-street stop-controlled approach. Impact is less than significant because the side-street approach volume would not warrant signalization.

[4]Recommended cumulative mitigation at the Bridgehead Road-Neroly road/Main Street intersection is for the project to contribute to cost the future installation of one additional eastbound through lane (thus providing three eastbound through lanes through the intersection before narrowing to two eastbound through lanes). With this mitigation: LOS under Background plus Project conditions would improve to acceptable LOS D (26 seconds average delay).

5Recommended cumulative mitigation at the Empire Avenue/Main Street intersection

[6]Recommended cumulative mitigation is for the project to contribute towards the cost of installing a future traffic signal at the Neroly Road/Live Oak Avenue intersection. With this mitigation, the intersection would operate at acceptable LOS D (39.2 seconds of average delay) under Background plus Project conditions (mitigated).

Cumulative Impact Findings

The project would result in increased delay at three study intersections forecasted to operate unacceptably due to cumulative traffic growth, with or without the proposed project***. The project contribution to cumulative impacts would be considered less than significant with mitigations, by contributing a "fair share" contribution towards the funding of future mitigations, based on the project share of forecasted traffic growth at each impacted intersection.*** The recommended cumulative mitigations are described below:

- Bridgehead Road-Neroly Road/Main Street (study intersection #1)t is forecasted to operate at unacceptable LOS F during the p.m. peak hour under Background Conditions without and with the proposed project. 4Recommended cumulative mitigation at the Bridgehead Road-Neroly road/Main Street intersection is for the project to contribute to cost the future installation of one additional eastbound through lane (thus providing three eastbound through lanes through the intersection before narrowing to two eastbound through lanes). With this mitigation: LOS under Background plus Project conditions would improve to acceptable LOS D (26 seconds average delay).
- Empire Avenue/Main Street (study intersection #5) is forecasted to operate at unacceptable LOS E during the p.m. peak hour under Background Conditions without and with the proposed project; The anticipated unacceptable delay is primarily due to anticipated increases in through movement volume on Main Street, highest in the eastbound direction during the p.m. peak hour, and an increase in left-turns from Main Street to Empire Street in both direction. The provision of one additional eastbound through lane would improve LOS C (33 seconds of average delay) under Background plus Project Conditions.
- The stop-sign controlled intersection of Neroly Road/Live Oak Avenue (study intersection #23) is forecasted to operate at LOS E during the a.m. peak hour under Background Conditions without and with the proposed project. The recommended cumulative mitigation is for the project to contribute towards the cost of installing a future traffic signal at the Neroly Road/Live Oak Avenue intersection. With this mitigation, the intersection would operate at acceptable LOS D (39.2 seconds of average delay) under Background plus Project conditions (mitigated).

Appendix A

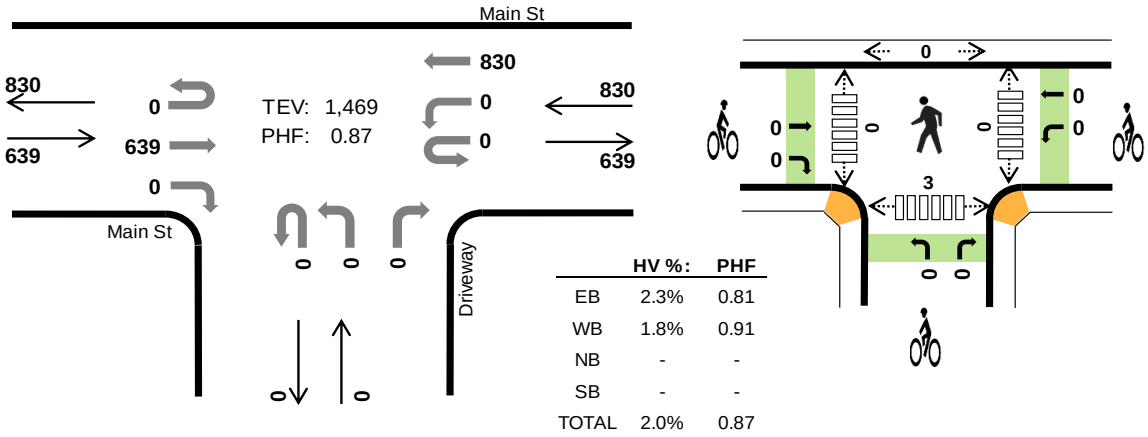
Intersection Count Sheets

-
Main St

N

Peak Hour

Date: 12-05-2018
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	2.3%	0.81
WB	1.8%	0.91
NB	-	-
SB	-	-
TOTAL	2.0%	0.87

Two-Hour Count Summaries

Interval Start		Main St Eastbound				Main St Westbound				Driveway Northbound				0 Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	73	0	0	0	147	0	0	0	0	0	0	0	0	0	220	0
7:15 AM		0	0	75	0	0	0	185	0	0	0	0	0	0	0	0	0	260	0
7:30 AM		**0**	**0**	**113**	**0**	**0**	**0**	**212**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**325**	0
7:45 AM		**0**	**0**	**191**	**0**	**0**	**0**	**229**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**420**	1,225
8:00 AM		**0**	**0**	**197**	**0**	**0**	**0**	**192**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**389**	1,394
8:15 AM		**0**	**0**	**138**	**0**	**0**	**0**	**197**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**335**	**1,469**
8:30 AM		0	0	121	0	0	0	187	0	0	0	0	0	0	0	0	0	308	1,452
8:45 AM		0	0	109	0	0	0	145	0	0	0	0	0	0	0	0	0	254	1,286
Count Total		0	0	1,017	0	0	0	1,494	0	0	0	0	0	0	0	0	0	2,511	0
Peak Hour	**All**	**0**	**0**	**639**	**0**	**0**	**0**	**830**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,469**	**0**
	HV	**0**	**0**	**15**	**0**	**0**	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**30**	**0**
	HV%	**-**	**-**	**2%**	**-**	**-**	**-**	**2%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	8	1	0	0	*9*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	7	3	0	0	*10*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**4**	**8**	**0**	**0**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**3**	**4**	**0**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	*2*
8:00 AM	**3**	**1**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**5**	**2**	**0**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
8:30 AM	6	8	0	0	*14*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	6	4	0	0	*10*	0	0	1	0	*1*	0	0	0	0	*0*
Count Total	42	31	0	0	*73*	0	0	1	0	*1*	0	0	0	3	*3*
Peak Hr	**15**	**15**	**0**	**0**	***30***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**3**	***3***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Main St Eastbound				Main St Westbound				Driveway Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	8	0	0	0	1	0	0	0	0	0	0	0	0	0	9	0
7:15 AM	0	0	7	0	0	0	3	0	0	0	0	0	0	0	0	0	10	0
7:30 AM	**0**	**0**	**4**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	0
7:45 AM	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	38
8:00 AM	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	33
8:15 AM	**0**	**0**	**5**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**30**
8:30 AM	0	0	6	0	0	0	8	0	0	0	0	0	0	0	0	0	14	32
8:45 AM	0	0	6	0	0	0	4	0	0	0	0	0	0	0	0	0	10	35
Count Total	0	0	42	0	0	0	31	0	0	0	0	0	0	0	0	0	73	0
Peak Hour	**0**	**0**	**15**	**0**	**0**	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**30**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Main St Eastbound			Main St Westbound			Driveway Northbound			0 Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	1	1
Count Total	0	0	0	0	0	0	1	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

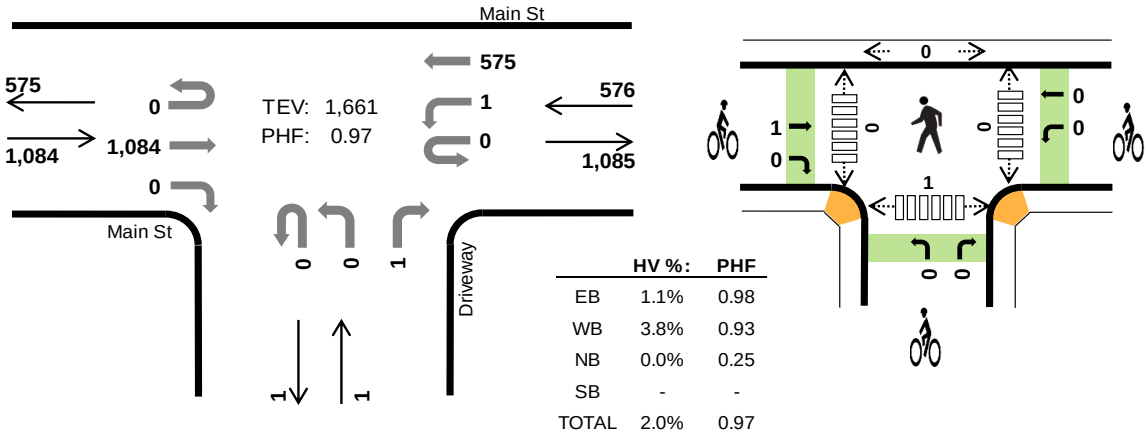
-

Main St

N

Peak Hour

Date: 12-05-2018
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	1.1%	0.98
WB	3.8%	0.93
NB	0.0%	0.25
SB	-	-
TOTAL	2.0%	0.97

Two-Hour Count Summaries

Interval Start		Main St Eastbound				Main St Westbound				Driveway Northbound				0 Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	257	0	0	0	152	0	0	0	0	0	0	0	0	0	409	0
4:15 PM		**0**	**0**	**276**	**0**	**0**	**1**	**140**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**418**	0
4:30 PM		**0**	**0**	**274**	**0**	**0**	**0**	**155**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**429**	0
4:45 PM		**0**	**0**	**268**	**0**	**0**	**0**	**136**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**404**	1,660
5:00 PM		**0**	**0**	**266**	**0**	**0**	**0**	**144**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**410**	**1,661**
5:15 PM		0	0	253	0	0	0	154	0	0	0	0	0	0	0	0	0	407	1,650
5:30 PM		0	0	275	0	0	0	141	0	0	0	0	0	0	0	0	0	416	1,637
5:45 PM		0	0	222	0	0	0	117	0	0	0	0	0	0	0	0	0	339	1,572
Count Total		0	0	2,091	0	0	1	1,139	0	0	0	0	1	0	0	0	0	3,232	0
Peak Hour	**All**	**0**	**0**	**1,084**	**0**	**0**	**1**	**575**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,661**	**0**
	HV	**0**	**0**	**12**	**0**	**0**	**0**	**22**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**34**	**0**
	HV%	**-**	**-**	**1%**	**-**	**-**	**0%**	**4%**	**-**	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	4	4	0	0	*8*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	**2**	**4**	**0**	**0**	***6***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	*1*
4:30 PM	**3**	**7**	**0**	**0**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**7**	**4**	**0**	**0**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**7**	**0**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:15 PM	5	5	0	0	*10*	0	0	0	0	*0*	0	0	0	2	*2*
5:30 PM	0	4	0	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	4	1	0	0	*5*	0	0	0	0	*0*	0	0	0	1	*1*
Count Total	25	36	0	0	*61*	1	0	0	0	*1*	0	0	0	4	*4*
Peak Hr	**12**	**22**	**0**	**0**	***34***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	***1***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Main St Eastbound				Main St Westbound				Driveway Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	8	0
4:15 PM	**0**	**0**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	0
4:30 PM	**0**	**0**	**3**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	0
4:45 PM	**0**	**0**	**7**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	35
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**34**
5:15 PM	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	10	38
5:30 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4	32
5:45 PM	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5	26
Count Total	0	0	25	0	0	0	36	0	0	0	0	0	0	0	0	0	61	0
Peak Hour	**0**	**0**	**12**	**0**	**0**	**0**	**22**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**34**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Main St Eastbound			Main St Westbound			Driveway Northbound			0 Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Appendix B

Existing Conditions LOS Analysis

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Village at Main TIS

Vistro File: J:\...\Oakley Citywide Model - Village at Main TIS Version.vistro
Scenario 1 Existing Conditions AM

Report File: J:\...\Existing AM.pdf
12/12/2018

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bridgehead Rd/Main St	Signalized	HCM 2010	WB Left	0.505	21.4	C
2	Live Oak Rd/Main St	Signalized	HCM 2010	WB Left	0.536	14.8	B
3	Big Break Rd/Main St	Signalized	HCM 2010	SEB Left	0.407	11.5	B
5	Main St/Empire Ave	Signalized	HCM 2010	SEB Left	0.474	19.0	B
14	Empire Ave/Oakley Rd	Signalized	HCM 2010	NEB Left	0.407	28.7	C
23	Neroly Rd/Live Oak Ave	All-way stop	HCM 2010	SB Thru	0.755	23.5	C
24	Live Oak Ave/Oakley Rd	All-way stop	HCM 2010	NB Thru	0.535	15.3	C
29	Neroly Rd/Laurel Rd	Signalized	HCM 2010	SEB Right	0.496	11.6	B
91	Main St & West Driveway	Two-way stop	HCM 2010	WB Thru	0.009	0.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Bridgehead Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	21.4
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.505

Intersection Setup

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	1	0	0	1	0	1
Pocket Length [ft]	250.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	100.00	235.00	100.00	495.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Base Volume Input [veh/h]	189	195	30	130	107	42	85	461	100	45	709	323
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	189	195	30	130	107	42	85	461	100	45	709	323
Peak Hour Factor	0.9200	0.9200	0.9200	0.8100	0.8100	0.8100	0.8000	0.8000	0.8000	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	53	8	40	33	13	27	144	31	12	193	88
Total Analysis Volume [veh/h]	205	212	33	160	132	52	106	576	125	49	771	351
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	1			0			0			4		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	7	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	21	0	0	35	0	11	30	0	11	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	4.5	0.0	3.0	4.5	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	0	0	0	12	0	0	12	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.5	0.0	2.0	4.5	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	20.0	0.0	0.0	0.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	61	61	61	61	61	61	61	61	61	61	61
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	6.50	6.50	4.00	6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	2.00	4.50	4.50
g_i, Effective Green Time [s]	11	11	7	7	7	5	22	22	2	19	19
g / C, Green / Cycle	0.18	0.18	0.12	0.12	0.12	0.08	0.36	0.36	0.04	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.12	0.14	0.08	0.08	0.03	0.06	0.20	0.20	0.03	0.22	0.23
s, saturation flow rate [veh/h]	1745	1788	1745	1822	1557	1745	1832	1720	1745	3489	1557
c, Capacity [veh/h]	321	329	205	214	183	137	657	617	65	1106	494
d1, Uniform Delay [s]	23.06	23.58	25.92	25.91	24.62	27.61	15.66	15.67	29.13	18.29	18.39
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.15	0.15	0.04	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.79	1.27	1.61	1.52	0.31	3.43	1.03	1.10	6.36	1.14	2.70
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.64	0.75	0.70	0.70	0.28	0.77	0.55	0.55	0.75	0.70	0.71
d, Delay for Lane Group [s/veh]	23.85	24.86	27.53	27.43	24.93	31.03	16.68	16.77	35.50	19.43	21.10
Lane Group LOS	C	C	C	C	C	C	B	B	D	B	C
Critical Lane Group	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.50	3.09	1.90	1.97	0.64	1.49	3.47	3.28	0.76	4.13	3.99
50th-Percentile Queue Length [ft/ln]	62.61	77.26	47.49	49.27	15.99	37.20	86.73	81.93	18.92	103.27	99.80
95th-Percentile Queue Length [veh/ln]	4.51	5.56	3.42	3.55	1.15	2.68	6.24	5.90	1.36	7.44	7.19
95th-Percentile Queue Length [ft/ln]	112.69	139.07	85.48	88.69	28.79	66.97	156.11	147.48	34.05	185.88	179.65

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	23.85	24.86	24.86	27.52	27.43	24.93	31.03	16.71	16.77	35.50	19.43	21.10
Movement LOS	C	C	C	C	C	C	C	B	B	D	B	C
d_A, Approach Delay [s/veh]	24.40			27.09			18.60			20.60		
Approach LOS	C			C			B			C		
d_I, Intersection Delay [s/veh]	21.44											
Intersection LOS	C											
Intersection V/C	0.505											

Sequence

Ring 1	1	2	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: Live Oak Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	14.8
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.536

Intersection Setup

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	160.00	255.00	100.00	100.00
Speed [mph]	40.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			No		

Volumes

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Base Volume Input [veh/h]	232	0	65	0	0	0	0	487	173	27	884	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.30	2.00	4.30	2.00	2.00	2.00	2.00	4.30	4.30	4.30	4.30	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	232	0	65	0	0	0	0	487	173	27	884	0
Peak Hour Factor	0.6800	1.0000	0.6800	1.0000	1.0000	1.0000	1.0000	0.7900	0.7900	0.8400	0.8400	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	85	0	24	0	0	0	0	154	55	8	263	0
Total Analysis Volume [veh/h]	341	0	96	0	0	0	0	616	219	32	1052	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	4	0	0	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	8	0	0	0	8	0	0	10	0	5	10	0
Maximum Green [s]	20	0	0	0	20	0	0	30	0	20	30	0
Amber [s]	4.7	0.0	0.0	0.0	4.7	0.0	0.0	5.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	0.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0	3.0	4.0	0.0
Walk [s]	7	0	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	23	0	0	0	23	0	0	23	0	0	0	0
Rest In Walk	No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.7	0.0	0.0	0.0	3.7	0.0	0.0	4.0	0.0	4.0	4.0	0.0
Minimum Recall	No				No			No		No	No	
Maximum Recall	No				No			No		No	No	
Pedestrian Recall	No				No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	L	C	R	L	C	C
C, Cycle Length [s]	49	49	49	49	49	49	49	49	49
L, Total Lost Time per Cycle [s]	5.70	5.70	0.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	3.70	3.70	0.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	16	16	0	13	13	13	2	21	21
g / C, Green / Cycle	0.33	0.33	0.00	0.28	0.28	0.28	0.04	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.25	0.06	0.00	0.00	0.18	0.14	0.02	0.29	0.29
s, saturation flow rate [veh/h]	1381	1548	0	534	3468	1548	1381	1822	1822
c, Capacity [veh/h]	544	503	74	152	959	428	149	794	794
d1, Uniform Delay [s]	16.49	11.89	0.00	0.00	15.59	14.93	24.48	10.95	10.95
k, delay calibration	0.16	0.15	0.15	0.50	0.15	0.15	0.11	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.77	0.26	0.00	0.00	1.03	1.35	0.71	1.36	1.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.63	0.19	0.00	0.00	0.64	0.51	0.21	0.66	0.66
d, Delay for Lane Group [s/veh]	18.26	12.15	0.00	0.00	16.62	16.28	25.20	12.31	12.31
Lane Group LOS	B	B	A	A	B	B	C	B	B
Critical Lane Group	Yes	No	No	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.13	0.63	0.00	0.00	2.49	1.77	0.36	3.35	3.35
50th-Percentile Queue Length [ft/ln]	78.29	15.79	0.00	0.00	62.35	44.14	8.94	83.82	83.82
95th-Percentile Queue Length [veh/ln]	5.64	1.14	0.00	0.00	4.49	3.18	0.64	6.04	6.04
95th-Percentile Queue Length [ft/ln]	140.92	28.42	0.00	0.00	112.24	79.44	16.10	150.88	150.88

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	18.26	0.00	12.15	0.00	0.00	0.00	0.00	16.62	16.28	25.20	12.31	12.31
Movement LOS	B		B	A	A	A	A	B	B	C	B	B
d_A, Approach Delay [s/veh]	16.92			0.00			16.53			12.69		
Approach LOS	B			A			B			B		
d_I, Intersection Delay [s/veh]	14.84											
Intersection LOS	B											
Intersection V/C	0.536											

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 3: Big Break Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	11.5
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.407

Intersection Setup

Name	Driveway			Big Break Rd			Main St			Main St		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	1	1	0	1
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00	230.00	100.00	135.00	240.00	100.00	205.00
Speed [mph]	25.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Big Break Rd			Main St			Main St		
Base Volume Input [veh/h]	40	10	21	92	25	153	53	667	83	87	369	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	10	21	92	25	153	53	667	83	87	369	38
Peak Hour Factor	0.8500	0.8500	0.8500	0.7900	0.7900	0.7900	0.9300	0.9300	0.9300	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	3	6	29	8	48	14	179	22	25	105	11
Total Analysis Volume [veh/h]	47	12	25	116	32	194	57	717	89	99	419	43
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			2			1		
Bicycle Volume [bicycles/h]	1			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	16	0	0	16	0	16	25	0	16	25	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	5.0	0.0	3.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	18	0	0	18	0	0	11	0	0	11	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	R	L	C	R
C, Cycle Length [s]	34	34	34	34	34	34	34	34	34	34
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	7	7	7	7	2	10	10	2	11	11
g / C, Green / Cycle	0.22	0.22	0.22	0.22	0.05	0.30	0.30	0.07	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.03	0.02	0.14	0.13	0.03	0.21	0.06	0.06	0.12	0.03
s, saturation flow rate [veh/h]	1346	1616	1028	1532	1742	3482	1554	1742	3482	1554
c, Capacity [veh/h]	216	351	414	333	86	1031	460	125	1110	496
d1, Uniform Delay [s]	16.88	10.58	12.96	11.84	15.79	10.53	8.87	15.43	8.90	8.06
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.19	0.05	0.19	0.60	3.30	0.32	0.08	4.21	0.08	0.03
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

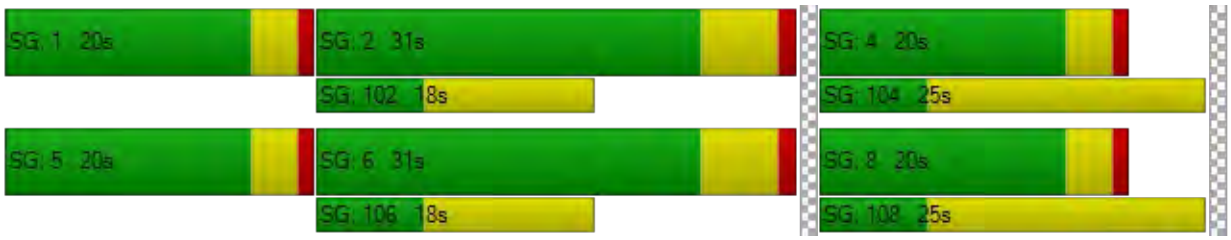
X, volume / capacity	0.22	0.11	0.36	0.58	0.67	0.70	0.19	0.79	0.38	0.09
d, Delay for Lane Group [s/veh]	17.07	10.63	13.15	12.44	19.08	10.85	8.95	19.63	8.98	8.08
Lane Group LOS	B	B	B	B	B	B	A	B	A	A
Critical Lane Group	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.34	0.18	0.85	1.05	0.40	1.43	0.30	0.69	0.69	0.13
50th-Percentile Queue Length [ft/ln]	8.44	4.55	21.29	26.14	9.88	35.65	7.46	17.20	17.24	3.24
95th-Percentile Queue Length [veh/ln]	0.61	0.33	1.53	1.88	0.71	2.57	0.54	1.24	1.24	0.23
95th-Percentile Queue Length [ft/ln]	15.20	8.19	38.32	47.04	17.78	64.16	13.42	30.96	31.04	5.83

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	17.07	10.63	10.63	13.15	13.15	12.44	19.08	10.85	8.95	19.63	8.98	8.08
Movement LOS	B	B	B	B	B	B	B	B	A	B	A	A
d_A, Approach Delay [s/veh]	14.24			12.75			11.20			10.79		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	11.50											
Intersection LOS	B											
Intersection V/C	0.407											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Main St/Empire Ave

Control Type:	Signalized	Delay (sec / veh):	19.0
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.474

Intersection Setup

Name	Main St			Empire Ave			Charles Way			Main St		
Approach	Westbound			Northeastbound			Southwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	100.00	120.00	100.00	100.00	100.00	100.00	80.00	190.00	100.00	250.00
Speed [mph]	30.00			40.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Main St			Empire Ave			Charles Way			Main St		
Base Volume Input [veh/h]	194	522	8	315	35	141	24	50	18	16	380	221
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	194	522	8	315	35	141	24	50	18	16	380	221
Peak Hour Factor	0.8000	0.8000	0.8000	0.7500	0.7500	0.7500	0.7900	0.7900	0.7900	0.8500	0.8500	0.8500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	163	3	105	12	47	8	16	6	5	112	65
Total Analysis Volume [veh/h]	243	653	10	420	47	188	30	63	23	19	447	260
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	54.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss
Signal group	1	6	0	0	3	0	0	4	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	4	10	0	0	4	0	0	4	0	4	10	0
Maximum Green [s]	13	34	0	0	21	0	0	25	0	11	33	0
Amber [s]	3.0	4.8	0.0	0.0	4.4	0.0	0.0	3.6	0.0	3.0	4.4	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	16	40	0	0	26	0	0	30	0	14	38	0
Vehicle Extension [s]	2.5	3.5	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.5	3.5	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	0	0	0	20	0	0	24	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	3.8	0.0	0.0	3.4	0.0	0.0	2.6	0.0	1.0	3.4	0.0
Minimum Recall	No	Yes			No			No		No	Yes	
Maximum Recall	No	No			No			No		No	No	
Pedestrian Recall	No	No			No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	C	R	L	C	R
C, Cycle Length [s]	52	52	52	52	52	52	52	52	52	52	52
L, Total Lost Time per Cycle [s]	3.00	5.80	5.80	5.40	5.40	5.40	4.60	4.60	3.00	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	3.80	3.80	3.40	3.40	3.40	2.60	2.60	1.00	3.40	3.40
g_i, Effective Green Time [s]	9	20	20	9	9	9	4	4	1	12	12
g / C, Green / Cycle	0.17	0.38	0.38	0.17	0.17	0.17	0.07	0.07	0.02	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.14	0.18	0.18	0.12	0.03	0.12	0.05	0.01	0.01	0.13	0.16
s, saturation flow rate [veh/h]	1774	1863	1853	3445	1863	1583	1833	1583	1774	3547	1583
c, Capacity [veh/h]	301	705	702	584	316	269	135	117	33	835	373
d1, Uniform Delay [s]	20.91	12.29	12.29	20.54	18.51	20.47	23.65	22.78	25.47	17.49	18.29
k, delay calibration	0.09	0.13	0.13	0.04	0.04	0.04	0.04	0.04	0.08	0.13	0.13
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.33	0.59	0.59	0.63	0.08	1.24	2.32	0.30	11.12	0.64	2.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

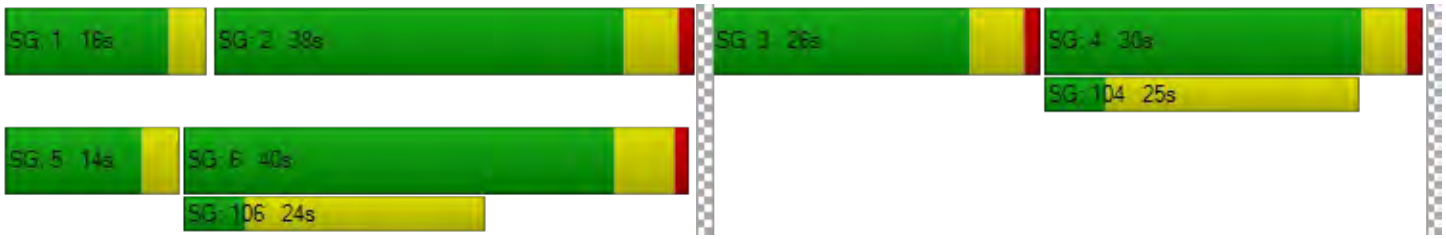
X, volume / capacity	0.81	0.47	0.47	0.72	0.15	0.70	0.69	0.20	0.57	0.54	0.70
d, Delay for Lane Group [s/veh]	25.24	12.88	12.89	21.17	18.59	21.71	25.97	23.08	36.59	18.14	21.13
Lane Group LOS	C	B	B	C	B	C	C	C	D	B	C
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.94	2.60	2.58	2.13	0.43	1.95	1.14	0.26	0.32	2.17	2.85
50th-Percentile Queue Length [ft/ln]	73.53	64.89	64.57	53.31	10.67	48.74	28.56	6.53	8.00	54.31	71.14
95th-Percentile Queue Length [veh/ln]	5.29	4.67	4.65	3.84	0.77	3.51	2.06	0.47	0.58	3.91	5.12
95th-Percentile Queue Length [ft/ln]	132.35	116.81	116.22	95.97	19.20	87.73	51.42	11.76	14.40	97.75	128.05

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	25.24	12.88	12.89	21.17	18.59	21.71	25.97	25.97	23.08	36.59	18.14	21.13
Movement LOS	C	B	B	C	B	C	C	C	C	D	B	C
d_A, Approach Delay [s/veh]	16.20			21.14			25.39			19.69		
Approach LOS	B			C			C			B		
d_I, Intersection Delay [s/veh]	19.05											
Intersection LOS	B											
Intersection V/C	0.474											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 14: Empire Ave/Oakley Rd

Control Type:	Signalized	Delay (sec / veh):	28.7
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.407

Intersection Setup

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Approach	Eastbound			Northeastbound			Southwestbound			Northwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	315.00	100.00	100.00	110.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			40.00			40.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Base Volume Input [veh/h]	61	16	92	182	430	6	27	362	67	21	15	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	16	92	182	430	6	27	362	67	21	15	23
Peak Hour Factor	0.8300	0.8300	0.8300	0.8000	0.8000	0.8000	0.6600	0.6600	0.6600	0.7000	0.7000	0.7000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	5	28	57	134	2	10	137	25	8	5	8
Total Analysis Volume [veh/h]	73	19	111	228	538	8	41	548	102	30	21	33
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			1			1			4		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	1.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split
Signal group	0	4	0	5	2	0	1	6	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	4	0	4	4	0	4	4	0	0	4	0
Maximum Green [s]	0	11	0	15	38	0	12	35	0	0	30	0
Amber [s]	0.0	4.1	0.0	3.0	4.4	0.0	3.0	4.4	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0	0.0	1.0	0.0
Split [s]	0	16	0	19	44	0	16	41	0	0	34	0
Vehicle Extension [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	4	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	23	0	0	26	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.1	0.0	2.0	4.4	0.0	2.0	4.4	0.0	0.0	2.0	0.0
Minimum Recall		No		No	No		No	No			No	
Maximum Recall		No		No	Yes		No	Yes			No	
Pedestrian Recall		No		No	No		No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	4.00	6.40	6.40	4.00	6.40	6.40	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	3.10	2.00	4.40	4.40	2.00	4.40	4.40	2.00	2.00
g_i, Effective Green Time [s]	10	10	10	15	73	73	3	61	61	5	5
g / C, Green / Cycle	0.09	0.09	0.09	0.14	0.66	0.66	0.03	0.55	0.55	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.03	0.03	0.07	0.13	0.15	0.15	0.02	0.18	0.18	0.03	0.02
s, saturation flow rate [veh/h]	1774	1809	1583	1774	1863	1853	1774	1863	1763	1810	1573
c, Capacity [veh/h]	155	158	138	242	1227	1220	53	1028	973	85	74
d1, Uniform Delay [s]	47.04	47.03	49.29	47.07	7.51	7.52	53.00	13.45	13.46	51.38	51.00
k, delay calibration	0.04	0.04	0.08	0.35	0.50	0.50	0.04	0.50	0.50	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.39	0.38	8.17	35.49	0.42	0.42	8.79	0.84	0.89	2.47	1.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

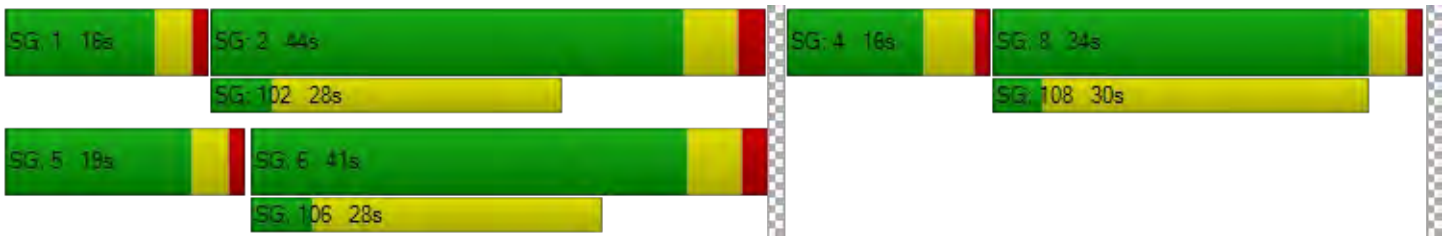
X, volume / capacity	0.30	0.29	0.80	0.94	0.22	0.22	0.78	0.32	0.33	0.60	0.44
d, Delay for Lane Group [s/veh]	47.43	47.41	57.46	82.57	7.94	7.94	61.79	14.28	14.35	53.84	52.54
Lane Group LOS	D	D	E	F	A	A	E	B	B	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.18	1.19	3.27	8.42	2.41	2.40	1.23	4.44	4.23	1.47	0.94
50th-Percentile Queue Length [ft/ln]	29.48	29.86	81.79	210.40	60.35	60.08	30.83	110.90	105.84	36.78	23.48
95th-Percentile Queue Length [veh/ln]	2.12	2.15	5.89	13.17	4.35	4.33	2.22	7.89	7.61	2.65	1.69
95th-Percentile Queue Length [ft/ln]	53.06	53.74	147.21	329.34	108.64	108.14	55.49	197.25	190.21	66.20	42.26

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	47.43	47.41	57.46	82.57	7.94	7.94	61.79	14.31	14.35	53.84	53.84	52.54
Movement LOS	D	D	E	F	A	A	E	B	B	D	D	D
d_A, Approach Delay [s/veh]	52.91			29.92			17.13			53.33		
Approach LOS	D			C			B			D		
d_I, Intersection Delay [s/veh]	28.66											
Intersection LOS	C											
Intersection V/C	0.407											

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 23: Neroly Rd/Live Oak Ave

Control Type:	All-way stop	Delay (sec / veh):	23.5
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.755

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	155.00	100.00	100.00
Speed [mph]	50.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Base Volume Input [veh/h]	210	64	22	119	125	1	3	128	132	17	313	95
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	210	64	22	119	125	1	3	128	132	17	313	95
Peak Hour Factor	0.8900	0.8900	0.8900	0.7100	0.7100	0.7100	0.8800	0.8800	0.8800	0.8600	0.8600	0.8600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	59	18	6	42	44	0	1	36	38	5	91	28
Total Analysis Volume [veh/h]	236	72	25	168	176	1	3	145	150	20	364	110
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	455	457	396	420	460	413	440	460
Degree of Utilization, x	0.73	0.75	0.01	0.35	0.33	0.05	0.54	0.52

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	5.91	6.35	0.02	1.51	1.40	0.15	3.11	2.89
95th-Percentile Queue Length [ft]	147.72	158.85	0.57	37.84	35.00	3.80	77.87	72.29
Approach Delay [s/veh]	29.65	31.33	14.94			18.98		
Approach LOS	D	D	B			C		
Intersection Delay [s/veh]	23.48							
Intersection LOS	C							

Intersection Level Of Service Report
Intersection 24: Live Oak Ave/Oakley Rd

Control Type:	All-way stop	Delay (sec / veh):	15.3
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.535

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Base Volume Input [veh/h]	31	176	15	50	135	40	93	53	10	22	143	73
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	176	15	50	135	40	93	53	10	22	143	73
Peak Hour Factor	0.7200	0.7200	0.7200	0.7600	0.7600	0.7600	0.6600	0.6600	0.6600	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	61	5	16	44	13	35	20	4	6	41	21
Total Analysis Volume [veh/h]	43	244	21	66	178	53	141	80	15	25	163	83
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	576	578	547	575
Degree of Utilization, x	0.53	0.51	0.43	0.47

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	3.15	2.93	2.16	2.51
95th-Percentile Queue Length [ft]	78.72	73.13	53.90	62.79
Approach Delay [s/veh]	16.19	15.62	14.48	14.73
Approach LOS	C	C	B	B
Intersection Delay [s/veh]	15.32			
Intersection LOS	C			

Intersection Level Of Service Report
Intersection 29: Neroly Rd/Laurel Rd

Control Type:	Signalized	Delay (sec / veh):	11.6
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.496

Intersection Setup

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	0	0	0
Pocket Length [ft]	230.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		No	

Volumes

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Base Volume Input [veh/h]	232	625	975	183	43	192
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.80	2.80	2.80	2.80	2.80	2.80
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	232	625	975	183	43	192
Peak Hour Factor	0.8900	0.8900	0.7800	0.7800	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	65	176	313	59	11	50
Total Analysis Volume [veh/h]	261	702	1250	235	45	200
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	2	2	2	0	2	0
Maximum Green [s]	20	40	40	0	20	0
Amber [s]	3.0	4.0	4.0	0.0	3.0	0.0
All red [s]	1.0	2.0	2.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	2.0	4.0	4.0	0.0	2.0	0.0
Walk [s]	0	0	7	0	0	0
Pedestrian Clearance [s]	0	0	35	0	0	0
Rest In Walk						
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	8
Pedestrian Walk [s]	7
Pedestrian Clearance [s]	30

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	51	51	51	51	51	51
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	6.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	4.00	4.00	4.00	2.00	2.00
g_i, Effective Green Time [s]	6	33	23	23	8	8
g / C, Green / Cycle	0.12	0.64	0.45	0.45	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.08	0.14	0.28	0.29	0.03	0.13
s, saturation flow rate [veh/h]	3418	5035	3519	1694	1760	1571
c, Capacity [veh/h]	397	3235	1578	760	286	255
d1, Uniform Delay [s]	21.69	3.81	10.85	11.02	18.46	20.61
k, delay calibration	0.04	0.15	0.15	0.15	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.70	0.05	0.59	1.35	0.09	2.01
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.22	0.63	0.65	0.16	0.78
d, Delay for Lane Group [s/veh]	22.38	3.85	11.44	12.37	18.55	22.62
Lane Group LOS	C	A	B	B	B	C
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	1.31	0.43	3.07	3.27	0.41	2.16
50th-Percentile Queue Length [ft/ln]	32.72	10.64	76.74	81.77	10.34	53.93
95th-Percentile Queue Length [veh/ln]	2.36	0.77	5.53	5.89	0.74	3.88
95th-Percentile Queue Length [ft/ln]	58.89	19.15	138.14	147.19	18.61	97.08

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	22.38	3.85	11.63	12.37	18.55	22.62
Movement LOS	C	A	B	B	B	C
d_A, Approach Delay [s/veh]	8.87		11.75		21.88	
Approach LOS	A		B		C	
d_I, Intersection Delay [s/veh]	11.64					
Intersection LOS	B					
Intersection V/C	0.496					

Sequence

Ring 1	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 91: Main St & West Driveway

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

Intersection Setup

Name			Main St			
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Main St			
Base Volume Input [veh/h]	0	0	639	0	0	830
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	639	0	0	830
Peak Hour Factor	1.0000	1.0000	0.8100	1.0000	1.0000	0.9100
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	197	0	0	228
Total Analysis Volume [veh/h]	0	0	789	0	0	912
Pedestrian Volume [ped/h]	3		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	26.84	11.00	0.00	0.00	9.38	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	18.92		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Village at Main TIS

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Scenario 1 Existing Conditions AM

Report File: J:\...\Existing AM.pdf
12/12/2018

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Bridgehead Rd/Main St	189	195	30	130	107	42	85	461	100	45	709	323	2416

ID	Intersection Name	Northbound		Southbound			Eastbound			Westbound			Total Volume
		Left	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Live Oak Rd/Main St	232	65	0	0	0	0	487	173	27	884	0	1868

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Big Break Rd/Main St	40	10	21	92	25	153	53	667	83	87	369	38	1638

ID	Intersection Name	Westbound			Northeastbound			Southwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Main St/Empire Ave	194	522	8	315	35	141	24	50	18	16	380	221	1924

ID	Intersection Name	Eastbound			Northeastbound			Southwestbound			Northwestbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	Empire Ave/Oakley Rd	61	16	92	182	430	6	27	362	67	21	15	23	1302

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
23	Neroly Rd/Live Oak Ave	210	64	22	119	125	1	3	128	132	17	313	95	1229

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
24	Live Oak Ave/Oakley Rd	31	176	15	50	135	40	93	53	10	22	143	73	841

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
29	Neroly Rd/Laurel Rd	232	625	975	183	43	192	2250

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
91	Main St & West Driveway	0	0	639	0	0	830	1469

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Village at Main TIS

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Scenario 6 Existing plus Project PM

Report File: J:\...\Existing plus Project PM.pdf
12/12/2018

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bridgehead Rd/Main St	Signalized	HCM 2010	WB Left	0.582	24.1	C
2	Live Oak Rd/Main St	Signalized	HCM 2010	WB Left	0.455	10.7	B
3	Big Break Rd/Main St	Signalized	HCM 2010	NWB Left	0.391	14.1	B
5	Main St/Empire Ave	Signalized	HCM 2010	SEB Left	0.491	19.5	B
14	Empire Ave/Oakley Rd	Signalized	HCM 2010	EB Right	0.362	31.4	C
23	Neroly Rd/Live Oak Ave	All-way stop	HCM 2010	NB Left	0.549	14.4	B
24	Live Oak Ave/Oakley Rd	All-way stop	HCM 2010	WB Thru	0.268	9.5	A
29	Neroly Rd/Laurel Rd	Signalized	HCM 2010	SEB Right	0.373	8.3	A
91	Main St & West Driveway	Two-way stop	HCM 2010	NB Left	0.248	46.7	E
92	Main St & West Driveway	Two-way stop	HCM 2010	NB Left	0.168	44.0	E

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Bridgehead Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	24.1
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.582

Intersection Setup

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	1	0	0	1	0	1
Pocket Length [ft]	250.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	100.00	235.00	100.00	495.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Base Volume Input [veh/h]	157	73	42	344	171	29	82	732	160	31	461	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	50	0	0	29	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	157	73	42	344	171	29	82	782	160	31	490	125
Peak Hour Factor	0.9400	0.9400	0.9400	0.9000	0.9000	0.9000	0.8700	0.8700	0.8700	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	19	11	96	48	8	24	225	46	9	136	35
Total Analysis Volume [veh/h]	167	78	45	382	190	32	94	899	184	34	544	139
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	2			0			0			0		
Bicycle Volume [bicycles/h]	1			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	7	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	21	0	0	35	0	11	30	0	11	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	4.5	0.0	3.0	4.5	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	0	0	0	12	0	0	12	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.5	0.0	2.0	4.5	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	20.0	0.0	0.0	0.0	0.0	20.0	20.0	0.0	20.0	20.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	66	66	66	66	66	66	66	66	66	66	66
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	6.50	6.50	4.00	6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	2.00	4.50	4.50
g_i, Effective Green Time [s]	8	8	13	13	13	5	25	25	2	22	22
g / C, Green / Cycle	0.13	0.13	0.20	0.20	0.20	0.07	0.37	0.37	0.03	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.10	0.07	0.16	0.16	0.02	0.05	0.30	0.31	0.02	0.11	0.09
s, saturation flow rate [veh/h]	1745	1711	1745	1801	1557	1745	1832	1724	1745	4991	1557
c, Capacity [veh/h]	223	219	341	352	304	122	679	638	50	1641	512
d1, Uniform Delay [s]	28.00	27.28	25.70	25.70	22.01	30.44	18.97	19.00	32.06	16.84	16.47
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.21	0.22	0.04	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.88	0.84	1.96	1.88	0.06	3.83	4.91	5.33	6.12	0.17	0.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.75	0.56	0.83	0.82	0.11	0.77	0.82	0.82	0.69	0.33	0.27
d, Delay for Lane Group [s/veh]	29.88	28.12	27.67	27.58	22.06	34.27	23.87	24.32	38.18	17.00	16.87
Lane Group LOS	C	C	C	C	C	C	C	C	D	B	B
Critical Lane Group	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.47	1.74	4.05	4.16	0.38	1.48	7.37	7.04	0.58	1.82	1.40
50th-Percentile Queue Length [ft/ln]	61.76	43.50	101.26	104.12	9.51	36.99	184.14	175.90	14.55	45.46	35.05
95th-Percentile Queue Length [veh/ln]	4.45	3.13	7.29	7.50	0.68	2.66	11.82	11.39	1.05	3.27	2.52
95th-Percentile Queue Length [ft/ln]	111.17	78.30	182.28	187.41	17.12	66.59	295.42	284.66	26.18	81.83	63.08

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	29.88	28.12	28.12	27.64	27.58	22.06	34.27	24.05	24.32	38.18	17.00	16.87
Movement LOS	C	C	C	C	C	C	C	C	C	D	B	B
d_A, Approach Delay [s/veh]	29.13			27.33			24.91			17.98		
Approach LOS	C			C			C			B		
d_I, Intersection Delay [s/veh]	24.09											
Intersection LOS	C											
Intersection V/C	0.582											

Sequence

Ring 1	1	2	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: Live Oak Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	10.7
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.455

Intersection Setup

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	160.00	255.00	100.00	100.00
Speed [mph]	40.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			No		

Volumes

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Base Volume Input [veh/h]	48	0	59	0	0	0	0	1049	88	27	597	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.30	2.00	4.30	2.00	2.00	2.00	2.00	4.30	4.30	4.30	4.30	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	22	0	0	0	0	50	0	13	29	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	48	0	81	0	0	0	0	1099	88	40	626	0
Peak Hour Factor	0.8100	1.0000	0.8100	1.0000	1.0000	1.0000	0.8800	0.8800	0.8800	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	0	25	0	0	0	0	312	25	11	165	0
Total Analysis Volume [veh/h]	59	0	100	0	0	0	0	1249	100	42	659	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	4	0	0	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	8	0	0	0	8	0	0	10	0	5	10	0
Maximum Green [s]	20	0	0	0	20	0	0	30	0	20	30	0
Amber [s]	4.7	0.0	0.0	0.0	4.7	0.0	0.0	5.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	0.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0	3.0	4.0	0.0
Walk [s]	7	0	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	23	0	0	0	23	0	0	23	0	0	0	0
Rest In Walk	No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.7	0.0	0.0	0.0	3.7	0.0	0.0	4.0	0.0	4.0	4.0	0.0
Minimum Recall	No				No			No		No	No	
Maximum Recall	No				No			No		No	No	
Pedestrian Recall	No				No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	L	C	R	L	C	C
C, Cycle Length [s]	52	52	52	52	52	52	52	52	52
L, Total Lost Time per Cycle [s]	5.70	5.70	0.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	3.70	3.70	0.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	7	7	0	24	24	24	2	33	33
g / C, Green / Cycle	0.14	0.14	0.00	0.47	0.47	0.47	0.04	0.63	0.63
(v / s)_i Volume / Saturation Flow Rate	0.04	0.06	0.00	0.00	0.36	0.07	0.03	0.18	0.18
s, saturation flow rate [veh/h]	1381	1548	0	772	3468	1516	1381	1822	1822
c, Capacity [veh/h]	281	216	70	415	1643	718	150	1156	1156
d1, Uniform Delay [s]	21.77	20.48	0.00	0.00	11.20	7.67	25.82	4.22	4.22
k, delay calibration	0.15	0.15	0.15	0.50	0.15	0.15	0.11	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.52	2.19	0.00	0.00	1.06	0.12	1.00	0.19	0.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.21	0.46	0.00	0.00	0.76	0.14	0.28	0.29	0.29
d, Delay for Lane Group [s/veh]	22.29	22.67	0.00	0.00	12.26	7.80	26.82	4.42	4.42
Lane Group LOS	C	C	A	A	B	A	C	A	A
Critical Lane Group	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.63	1.09	0.00	0.00	4.13	0.45	0.50	0.74	0.74
50th-Percentile Queue Length [ft/ln]	15.72	27.35	0.00	0.00	103.36	11.30	12.60	18.50	18.50
95th-Percentile Queue Length [veh/ln]	1.13	1.97	0.00	0.00	7.44	0.81	0.91	1.33	1.33
95th-Percentile Queue Length [ft/ln]	28.29	49.24	0.00	0.00	186.05	20.34	22.68	33.29	33.29

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	22.29	0.00	22.67	0.00	0.00	0.00	0.00	12.26	7.80	26.82	4.42	4.42
Movement LOS	C		C	A	A	A	A	B	A	C	A	A
d_A, Approach Delay [s/veh]	22.53			0.00			11.93			5.76		
Approach LOS	C			A			B			A		
d_I, Intersection Delay [s/veh]	10.73											
Intersection LOS	B											
Intersection V/C	0.455											

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 3: Big Break Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	14.1
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.391

Intersection Setup

Name	Driveway			Big Break Rd			Main St			Main St		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	1	1	0	1
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00	230.00	100.00	135.00	240.00	100.00	205.00
Speed [mph]	25.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Big Break Rd			Main St			Main St		
Base Volume Input [veh/h]	46	42	82	70	24	86	64	454	67	190	733	110
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	14	0	0	24	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	42	82	70	24	86	64	468	67	190	757	110
Peak Hour Factor	0.7700	0.7700	0.7700	0.8300	0.8300	0.8300	0.9500	0.9500	0.9500	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	14	27	21	7	26	17	123	18	49	195	28
Total Analysis Volume [veh/h]	60	55	106	84	29	104	67	493	71	196	780	113
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	1			0			5			1		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	16	0	0	16	0	16	25	0	16	25	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	5.0	0.0	3.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	18	0	0	18	0	0	11	0	0	11	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	R	L	C	R
C, Cycle Length [s]	42	42	42	42	42	42	42	42	42	42
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	12	12	12	12	2	10	10	6	14	14
g / C, Green / Cycle	0.29	0.29	0.29	0.29	0.05	0.24	0.24	0.14	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.04	0.10	0.13	0.07	0.04	0.14	0.05	0.11	0.22	0.07
s, saturation flow rate [veh/h]	1349	1632	879	1553	1742	3482	1554	1742	3482	1554
c, Capacity [veh/h]	279	472	402	449	91	820	366	253	1144	511
d1, Uniform Delay [s]	18.75	11.89	13.98	11.48	19.82	14.44	12.99	17.46	12.32	10.31
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.14	0.16	0.14	0.10	4.30	0.27	0.09	1.93	0.27	0.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

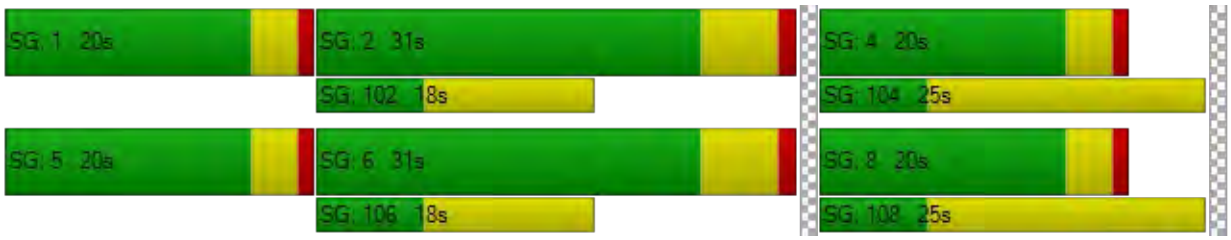
X, volume / capacity	0.22	0.34	0.28	0.23	0.74	0.60	0.19	0.77	0.68	0.22
d, Delay for Lane Group [s/veh]	18.90	12.05	14.12	11.58	24.12	14.71	13.09	19.39	12.59	10.39
Lane Group LOS	B	B	B	B	C	B	B	B	B	B
Critical Lane Group	No	No	Yes	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.52	1.04	0.83	0.62	0.64	1.59	0.41	1.57	2.22	0.54
50th-Percentile Queue Length [ft/ln]	13.08	25.98	20.80	15.56	15.92	39.66	10.32	39.25	55.51	13.48
95th-Percentile Queue Length [veh/ln]	0.94	1.87	1.50	1.12	1.15	2.86	0.74	2.83	4.00	0.97
95th-Percentile Queue Length [ft/ln]	23.55	46.77	37.44	28.01	28.66	71.39	18.58	70.66	99.92	24.27

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	18.90	12.05	12.05	14.12	14.12	11.58	24.12	14.71	13.09	19.39	12.59	10.39
Movement LOS	B	B	B	B	B	B	C	B	B	B	B	B
d_A, Approach Delay [s/veh]	13.91			12.91			15.53			13.59		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	14.12											
Intersection LOS	B											
Intersection V/C	0.391											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Main St/Empire Ave

Control Type:	Signalized	Delay (sec / veh):	19.5
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.491

Intersection Setup

Name	Main St			Empire Ave			Charles Way			Main St		
Approach	Westbound			Northeastbound			Southwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	100.00	120.00	100.00	100.00	100.00	100.00	80.00	190.00	100.00	250.00
Speed [mph]	30.00			40.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Main St			Empire Ave			Charles Way			Main St		
Base Volume Input [veh/h]	199	411	9	264	24	149	12	21	18	36	733	293
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	4	0	10	0	0	0	0	0	0	8	6
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	199	415	9	274	24	149	12	21	18	36	741	299
Peak Hour Factor	0.9800	0.9800	0.9800	0.7900	0.7900	0.7900	0.5500	0.5500	0.5500	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	106	2	87	8	47	5	10	8	10	199	80
Total Analysis Volume [veh/h]	203	423	9	347	30	189	22	38	33	39	797	322
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	54.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss
Signal group	1	6	0	0	3	0	0	4	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	4	10	0	0	4	0	0	4	0	4	10	0
Maximum Green [s]	17	37	0	0	17	0	0	25	0	12	33	0
Amber [s]	3.0	4.8	0.0	0.0	4.4	0.0	0.0	3.6	0.0	3.0	4.4	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	20	43	0	0	22	0	0	30	0	15	38	0
Vehicle Extension [s]	2.5	3.5	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.5	3.5	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	0	0	0	20	0	0	24	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	3.8	0.0	0.0	3.4	0.0	0.0	2.6	0.0	1.0	3.4	0.0
Minimum Recall	No	Yes			No			No		No	Yes	
Maximum Recall	No	No			No			No		No	No	
Pedestrian Recall	No	No			No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	C	R	L	C	R
C, Cycle Length [s]	56	56	56	56	56	56	56	56	56	56	56
L, Total Lost Time per Cycle [s]	3.00	5.80	5.80	5.40	5.40	5.40	4.60	4.60	3.00	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	3.80	3.80	3.40	3.40	3.40	2.60	2.60	1.00	3.40	3.40
g_i, Effective Green Time [s]	8	23	23	9	9	9	3	3	2	18	18
g / C, Green / Cycle	0.14	0.42	0.42	0.16	0.16	0.16	0.05	0.05	0.03	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.11	0.12	0.12	0.10	0.02	0.12	0.03	0.02	0.02	0.22	0.20
s, saturation flow rate [veh/h]	1774	1863	1849	3445	1863	1583	1829	1583	1774	3547	1583
c, Capacity [veh/h]	257	779	773	554	299	255	100	87	58	1111	496
d1, Uniform Delay [s]	23.27	10.79	10.79	22.06	20.16	22.52	26.02	25.70	26.94	17.13	16.67
k, delay calibration	0.08	0.13	0.13	0.04	0.04	0.04	0.04	0.04	0.08	0.13	0.13
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.09	0.23	0.23	0.44	0.05	1.61	2.13	1.02	9.58	1.06	1.73
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.28	0.28	0.63	0.10	0.74	0.60	0.38	0.67	0.72	0.65
d, Delay for Lane Group [s/veh]	27.35	11.03	11.03	22.49	20.21	24.14	28.15	26.72	36.53	18.20	18.41
Lane Group LOS	C	B	B	C	C	C	C	C	D	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.69	1.57	1.56	1.92	0.30	2.21	0.81	0.43	0.64	4.19	3.41
50th-Percentile Queue Length [ft/ln]	67.30	39.32	39.08	47.95	7.56	55.26	20.25	10.81	16.04	104.86	85.20
95th-Percentile Queue Length [veh/ln]	4.85	2.83	2.81	3.45	0.54	3.98	1.46	0.78	1.15	7.55	6.13
95th-Percentile Queue Length [ft/ln]	121.14	70.77	70.34	86.31	13.60	99.47	36.44	19.46	28.87	188.75	153.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	27.35	11.03	11.03	22.49	20.21	24.14	28.15	28.15	26.72	36.53	18.20	18.41
Movement LOS	C	B	B	C	C	C	C	C	C	D	B	B
d_A, Approach Delay [s/veh]	16.25			22.92			27.64			18.87		
Approach LOS	B			C			C			B		
d_I, Intersection Delay [s/veh]	19.46											
Intersection LOS	B											
Intersection V/C	0.491											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 14: Empire Ave/Oakley Rd

Control Type:	Signalized	Delay (sec / veh):	31.4
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.362

Intersection Setup

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Approach	Eastbound			Northeastbound			Southwestbound			Northwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	315.00	100.00	100.00	110.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			40.00			40.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Base Volume Input [veh/h]	44	44	137	102	357	12	94	350	62	83	31	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	10	0	0	6	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	44	44	137	102	367	12	94	356	62	83	31	51
Peak Hour Factor	0.8900	0.8900	0.8900	0.8600	0.8600	0.8600	0.9300	0.9300	0.9300	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	12	38	30	107	3	25	96	17	24	9	14
Total Analysis Volume [veh/h]	49	49	154	119	427	14	101	383	67	94	35	58
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	2			0			6			2		
Bicycle Volume [bicycles/h]	0			1			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	1.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split
Signal group	0	4	0	5	2	0	1	6	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	4	0	4	4	0	4	4	0	0	4	0
Maximum Green [s]	0	13	0	13	38	0	10	35	0	0	30	0
Amber [s]	0.0	4.1	0.0	3.0	4.4	0.0	3.0	4.4	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0	0.0	1.0	0.0
Split [s]	0	18	0	17	44	0	14	41	0	0	34	0
Vehicle Extension [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	4	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	23	0	0	26	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.1	0.0	2.0	4.4	0.0	2.0	4.4	0.0	0.0	2.0	0.0
Minimum Recall		No		No	No		No	No			No	
Maximum Recall		No		No	Yes		No	Yes			No	
Pedestrian Recall		No		No	No		No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	4.00	6.40	6.40	4.00	6.40	6.40	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	3.10	2.00	4.40	4.40	2.00	4.40	4.40	2.00	2.00
g_i, Effective Green Time [s]	13	13	13	9	59	59	8	57	57	12	12
g / C, Green / Cycle	0.11	0.11	0.11	0.08	0.53	0.53	0.07	0.52	0.52	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.03	0.03	0.10	0.07	0.12	0.12	0.06	0.12	0.13	0.07	0.04
s, saturation flow rate [veh/h]	1774	1861	1583	1774	1863	1839	1774	1863	1754	1797	1556
c, Capacity [veh/h]	202	212	180	146	991	978	126	970	913	191	165
d1, Uniform Delay [s]	44.40	44.39	47.85	49.64	13.68	13.69	50.32	14.42	14.46	47.36	45.66
k, delay calibration	0.04	0.04	0.19	0.04	0.50	0.50	0.06	0.50	0.50	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.22	0.21	17.72	4.12	0.52	0.53	6.45	0.58	0.63	1.57	0.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.24	0.24	0.85	0.81	0.22	0.22	0.80	0.24	0.24	0.68	0.35
d, Delay for Lane Group [s/veh]	44.62	44.60	65.57	53.76	14.20	14.22	56.77	15.00	15.09	48.93	46.13
Lane Group LOS	D	D	E	D	B	B	E	B	B	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.20	1.24	4.98	3.32	2.90	2.87	2.91	3.12	3.00	3.57	1.54
50th-Percentile Queue Length [ft/ln]	29.94	31.04	124.39	82.96	72.43	71.85	72.71	77.91	75.08	89.36	38.38
95th-Percentile Queue Length [veh/ln]	2.16	2.23	8.63	5.97	5.22	5.17	5.24	5.61	5.41	6.43	2.76
95th-Percentile Queue Length [ft/ln]	53.88	55.87	215.85	149.32	130.38	129.34	130.88	140.24	135.15	160.85	69.08

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.62	44.60	65.57	53.76	14.21	14.22	56.77	15.03	15.09	48.93	48.93	46.13
Movement LOS	D	D	E	D	B	B	E	B	B	D	D	D
d_A, Approach Delay [s/veh]	57.42			22.62			22.69			48.06		
Approach LOS	E			C			C			D		
d_I, Intersection Delay [s/veh]	31.37											
Intersection LOS	C											
Intersection V/C	0.362											

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 23: Neroly Rd/Live Oak Ave

Control Type:	All-way stop	Delay (sec / veh):	14.4
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.549

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	155.00	100.00	100.00
Speed [mph]	50.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Base Volume Input [veh/h]	97	76	20	81	70	0	2	178	163	11	146	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	6	0	8	4	0	0	0	0	0	0	14
Total Hourly Volume [veh/h]	97	82	20	89	74	0	2	178	163	11	146	139
Peak Hour Factor	0.7000	0.7000	0.7000	0.7900	0.7900	0.7900	0.8700	0.8700	0.8700	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	29	7	28	23	0	1	51	47	3	41	39
Total Analysis Volume [veh/h]	139	117	29	113	94	0	2	205	187	13	166	158
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	519	500	477	512	569	469	502	558
Degree of Utilization, x	0.55	0.41	0.00	0.38	0.34	0.03	0.32	0.29

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	3.28	2.01	0.01	1.78	1.53	0.09	1.38	1.20
95th-Percentile Queue Length [ft]	82.10	50.24	0.32	44.48	38.24	2.14	34.55	29.96
Approach Delay [s/veh]	18.06	15.19	13.16			12.43		
Approach LOS	C	C	B			B		
Intersection Delay [s/veh]	14.44							
Intersection LOS	B							

Intersection Level Of Service Report
Intersection 24: Live Oak Ave/Oakley Rd

Control Type:	All-way stop	Delay (sec / veh):	9.5
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.268

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Base Volume Input [veh/h]	18	56	34	29	62	2	4	144	29	36	97	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	22	0	0	13	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	78	34	29	75	2	4	144	29	36	97	18
Peak Hour Factor	0.8400	0.8400	0.8400	0.8000	0.8000	0.8000	0.8900	0.8900	0.8900	0.7900	0.7900	0.7900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	23	10	9	23	1	1	40	8	11	31	6
Total Analysis Volume [veh/h]	21	93	40	36	94	3	4	162	33	46	123	23
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	722	695	742	730
Degree of Utilization, x	0.21	0.19	0.27	0.26

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.80	0.70	1.08	1.05
95th-Percentile Queue Length [ft]	20.10	17.57	27.06	26.34
Approach Delay [s/veh]	9.33	9.40	9.62	9.68
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	9.53			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 29: Neroly Rd/Laurel Rd

Control Type:	Signalized	Delay (sec / veh):	8.3
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.373

Intersection Setup

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	0	0	0
Pocket Length [ft]	230.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		No	

Volumes

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Base Volume Input [veh/h]	220	1267	690	63	75	140
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.80	2.80	2.80	2.80	2.80	2.80
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	220	1267	690	63	75	140
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	58	333	182	17	23	42
Total Analysis Volume [veh/h]	232	1334	726	66	90	169
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	2	2	2	0	2	0
Maximum Green [s]	20	40	40	0	20	0
Amber [s]	3.0	4.0	4.0	0.0	3.0	0.0
All red [s]	1.0	2.0	2.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	2.0	4.0	4.0	0.0	2.0	0.0
Walk [s]	0	0	7	0	0	0
Pedestrian Clearance [s]	0	0	35	0	0	0
Rest In Walk						
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	8
Pedestrian Walk [s]	7
Pedestrian Clearance [s]	30

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	35	35	35	35	35	35
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	6.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	4.00	4.00	4.00	2.00	2.00
g_i, Effective Green Time [s]	4	19	11	11	5	5
g / C, Green / Cycle	0.12	0.56	0.32	0.32	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.07	0.26	0.15	0.15	0.05	0.11
s, saturation flow rate [veh/h]	3418	5035	3519	1764	1760	1571
c, Capacity [veh/h]	405	2798	1134	568	276	246
d1, Uniform Delay [s]	14.50	4.67	9.40	9.40	13.03	13.86
k, delay calibration	0.04	0.15	0.15	0.15	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.48	0.18	0.43	0.84	0.25	1.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.57	0.48	0.47	0.46	0.33	0.69
d, Delay for Lane Group [s/veh]	14.97	4.85	9.83	10.24	13.29	15.13
Lane Group LOS	B	A	A	B	B	B
Critical Lane Group	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.64	0.48	0.98	1.05	0.49	1.04
50th-Percentile Queue Length [ft/ln]	15.98	11.89	24.59	26.23	12.36	25.89
95th-Percentile Queue Length [veh/ln]	1.15	0.86	1.77	1.89	0.89	1.86
95th-Percentile Queue Length [ft/ln]	28.76	21.40	44.26	47.22	22.26	46.60

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.97	4.85	9.94	10.24	13.29	15.13
Movement LOS	B	A	A	B	B	B
d_A, Approach Delay [s/veh]	6.35		9.97		14.49	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	8.25					
Intersection LOS	A					
Intersection V/C	0.373					

Sequence

Ring 1	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 91: Main St & West Driveway

Control Type:	Two-way stop	Delay (sec / veh):	46.7
Analysis Method:	HCM 2010	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.248

Intersection Setup

Name			Main St			
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Main St			
Base Volume Input [veh/h]	0	1	1084	0	1	576
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	28	0	72	0	0	14
Total Hourly Volume [veh/h]	28	1	1156	0	1	590
Peak Hour Factor	1.0000	0.2500	0.9800	1.0000	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	1	295	0	0	159
Total Analysis Volume [veh/h]	28	4	1180	0	1	634
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.25	0.01	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	46.66	22.72	0.00	0.00	11.14	0.00
Movement LOS	E	C	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.96	0.96	0.00	0.00	0.01	0.00
95th-Percentile Queue Length [ft/ln]	23.98	23.98	0.00	0.00	0.13	0.00
d_A, Approach Delay [s/veh]	43.67		0.00		0.02	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	0.76					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 92: Main St & West Driveway

Control Type:	Two-way stop	Delay (sec / veh):	44.0
Analysis Method:	HCM 2010	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.168

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	1084	0	0	577
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	14	14	0	72	24	0
Total Hourly Volume [veh/h]	14	14	1084	72	24	577
Peak Hour Factor	0.8000	0.8000	0.9800	0.9800	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	4	277	18	6	155
Total Analysis Volume [veh/h]	18	18	1106	73	26	620
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.17	0.04	0.01	0.00	0.04	0.01
d_M, Delay for Movement [s/veh]	44.01	18.36	0.00	0.00	11.40	0.00
Movement LOS	E	C	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.75	0.75	0.00	0.00	0.14	0.00
95th-Percentile Queue Length [ft/ln]	18.87	18.87	0.00	0.00	3.46	0.00
d_A, Approach Delay [s/veh]	31.19		0.00		0.46	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.76					
Intersection LOS	E					

Village at Main TIS

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12/12/2018

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Bridgehead Rd/Main St	157	73	42	344	171	29	82	782	160	31	490	125	2486

ID	Intersection Name	Northbound		Southbound			Eastbound			Westbound			Total Volume
		Left	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Live Oak Rd/Main St	48	81	0	0	0	0	1099	88	40	626	0	1982

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Big Break Rd/Main St	46	42	82	70	24	86	64	468	67	190	757	110	2006

ID	Intersection Name	Westbound			Northeastbound			Southwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Main St/Empire Ave	199	415	9	274	24	149	12	21	18	36	741	299	2197

ID	Intersection Name	Eastbound			Northeastbound			Southwestbound			Northwestbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	Empire Ave/Oakley Rd	44	44	137	102	367	12	94	356	62	83	31	51	1383

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
23	Neroly Rd/Live Oak Ave	97	82	20	89	74	0	2	178	163	11	146	139	1001

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
24	Live Oak Ave/Oakley Rd	18	78	34	29	75	2	4	144	29	36	97	18	564

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
29	Neroly Rd/Laurel Rd	220	1267	690	63	75	140	2455

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
91	Main St & West Driveway	28	1	1156	0	1	590	1776

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
92	Main St & West Driveway	14	14	1084	72	24	577	1785

Village at Main TIS

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Scenario 6 Existing plus Project PM

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12/12/2018

Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Bridgehead Rd/Main St	Final Base	157	73	42	344	171	29	82	732	160	31	461	125	2407
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	50	0	0	29	0	79
		Future Total	**157**	**73**	**42**	**344**	**171**	**29**	**82**	**782**	**160**	**31**	**490**	**125**	**2486**

ID	Intersection Name	Volume Type	Northbound		Southbound			Eastbound			Westbound			Total Volume
			Left	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Live Oak Rd/Main St	Final Base	48	59	0	0	0	0	1049	88	27	597	0	1868
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	22	0	0	0	0	50	0	13	29	0	114
		Future Total	**48**	**81**	**0**	**0**	**0**	**0**	**1099**	**88**	**40**	**626**	**0**	**1982**

ID	Intersection Name	Volume Type	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Big Break Rd/Main St	Final Base	46	42	82	70	24	86	64	454	67	190	733	110	1968
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	14	0	0	24	0	38
		Future Total	**46**	**42**	**82**	**70**	**24**	**86**	**64**	**468**	**67**	**190**	**757**	**110**	**2006**

ID	Intersection Name	Volume Type	Westbound			Northeastbound			Southwestbound			Southeastbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Main St/Empire Ave	Final Base	199	411	9	264	24	149	12	21	18	36	733	293	2169
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	4	0	10	0	0	0	0	0	0	8	6	28
		Future Total	**199**	**415**	**9**	**274**	**24**	**149**	**12**	**21**	**18**	**36**	**741**	**299**	**2197**

ID	Intersection Name	Volume Type	Eastbound			Northeastbound			Southwestbound			Northwestbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	Empire Ave/Oakley Rd	Final Base	44	44	137	102	357	12	94	350	62	83	31	51	1367
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	10	0	0	6	0	0	0	0	16
		Future Total	**44**	**44**	**137**	**102**	**367**	**12**	**94**	**356**	**62**	**83**	**31**	**51**	**1383**

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
23	Neroly Rd/Live Oak Ave	Final Base	97	76	20	81	70	0	2	178	163	11	146	125	969
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	6	0	8	4	0	0	0	0	0	0	14	32
		Future Total	**97**	**82**	**20**	**89**	**74**	**0**	**2**	**178**	**163**	**11**	**146**	**139**	**1001**

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
24	Live Oak Ave/Oakley Rd	Final Base	18	56	34	29	62	2	4	144	29	36	97	18	529
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	22	0	0	13	0	0	0	0	0	0	0	35
		Future Total	**18**	**78**	**34**	**29**	**75**	**2**	**4**	**144**	**29**	**36**	**97**	**18**	**564**

ID	Intersection Name	Volume Type	Northeastbound		Southwestbound		Southeastbound		Total Volume
			Left	Thru	Thru	Right	Left	Right	
29	Neroly Rd/Laurel Rd	Final Base	220	1267	690	63	75	140	2455
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**220**	**1267**	**690**	**63**	**75**	**140**	**2455**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
91	Main St & West Driveway	Final Base	0	1	1084	0	1	576	1662
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	28	0	72	0	0	14	114
		Future Total	**28**	**1**	**1156**	**0**	**1**	**590**	**1776**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
92	Main St & West Driveway	Final Base	0	0	1084	0	0	577	1661
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	14	14	0	72	24	0	124
		Future Total	**14**	**14**	**1084**	**72**	**24**	**577**	**1785**

Appendix C

Existing plus Project Conditions LOS Analysis

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Village at Main TISI

Vistro File: J:\...\Oakley Citywide Model - Village at Main TIS Version.vistro
Scenario 5 5 Existing plus Project AM

Report File: J:\...\Existing plus Project AM.pdf
12/12/2018

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bridgehead Rd/Main St	Signalized	HCM 2010	WB Left	0.514	21.7	C
2	Live Oak Rd/Main St	Signalized	HCM 2010	WB Left	0.550	15.5	B
3	Big Break Rd/Main St	Signalized	HCM 2010	SEB Left	0.413	11.5	B
5	Main St/Empire Ave	Signalized	HCM 2010	SEB Left	0.482	19.3	B
14	Empire Ave/Oakley Rd	Signalized	HCM 2010	NEB Left	0.410	28.6	C
23	Neroly Rd/Live Oak Ave	All-way stop	HCM 2010	SB Left	0.821	26.2	D
24	Live Oak Ave/Oakley Rd	All-way stop	HCM 2010	SB Thru	0.573	16.5	C
29	Neroly Rd/Laurel Rd	Signalized	HCM 2010	SEB Right	0.505	12.0	B
91	Main St & West Driveway	Two-way stop	HCM 2010	NB Left	0.335	39.4	E
92	New Intersection	Two-way stop	HCM 2010	NB Left	0.130	24.0	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Bridgehead Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	21.7
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.514

Intersection Setup

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	1	0	0	1	0	1
Pocket Length [ft]	250.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	100.00	235.00	100.00	495.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Base Volume Input [veh/h]	189	195	30	130	107	42	85	461	100	45	709	323
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	15	0	0	44	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	189	195	30	130	107	42	85	476	100	45	753	323
Peak Hour Factor	0.9200	0.9200	0.9200	0.8100	0.8100	0.8100	0.8000	0.8000	0.8000	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	53	8	40	33	13	27	149	31	12	205	88
Total Analysis Volume [veh/h]	205	212	33	160	132	52	106	595	125	49	818	351
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	1			0			0			4		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	7	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	21	0	0	35	0	11	30	0	11	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	4.5	0.0	3.0	4.5	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	0	0	0	12	0	0	12	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.5	0.0	2.0	4.5	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	20.0	0.0	0.0	0.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	62	62	62	62	62	62	62	62	62	62	62
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	6.50	6.50	4.00	6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	2.00	4.50	4.50
g_i, Effective Green Time [s]	11	11	7	7	7	5	23	23	2	20	20
g / C, Green / Cycle	0.18	0.18	0.12	0.12	0.12	0.08	0.37	0.37	0.04	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.12	0.14	0.08	0.08	0.03	0.06	0.20	0.20	0.03	0.23	0.23
s, saturation flow rate [veh/h]	1745	1788	1745	1822	1557	1745	1832	1722	1745	3489	1557
c, Capacity [veh/h]	319	327	204	213	182	137	673	633	65	1136	507
d1, Uniform Delay [s]	23.64	24.17	26.55	26.54	25.22	28.23	15.68	15.69	29.81	18.56	18.35
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.15	0.15	0.04	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.81	1.31	1.65	1.57	0.32	3.44	1.01	1.07	6.62	1.24	2.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.64	0.75	0.70	0.70	0.29	0.77	0.55	0.55	0.76	0.72	0.69
d, Delay for Lane Group [s/veh]	24.45	25.48	28.20	28.11	25.53	31.67	16.69	16.76	36.43	19.81	20.76
Lane Group LOS	C	C	C	C	C	C	B	B	D	B	C
Critical Lane Group	No	Yes	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.58	3.19	1.96	2.03	0.66	1.53	3.62	3.43	0.78	4.53	4.01
50th-Percentile Queue Length [ft/ln]	64.55	79.67	48.91	50.75	16.47	38.21	90.58	85.64	19.48	113.20	100.35
95th-Percentile Queue Length [veh/ln]	4.65	5.74	3.52	3.65	1.19	2.75	6.52	6.17	1.40	8.02	7.23
95th-Percentile Queue Length [ft/ln]	116.19	143.40	88.04	91.34	29.65	68.79	163.04	154.15	35.06	200.44	180.63

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	24.45	25.48	25.48	28.20	28.11	25.53	31.67	16.72	16.76	36.43	19.81	20.76
Movement LOS	C	C	C	C	C	C	C	B	B	D	B	C
d_A, Approach Delay [s/veh]	25.01			27.76			18.64			20.75		
Approach LOS	C			C			B			C		
d_I, Intersection Delay [s/veh]	21.66											
Intersection LOS	C											
Intersection V/C	0.514											

Sequence

Ring 1	1	2	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: Live Oak Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	15.5
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.550

Intersection Setup

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	160.00	255.00	100.00	100.00
Speed [mph]	40.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			No		

Volumes

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Base Volume Input [veh/h]	232	0	65	0	0	0	0	487	173	27	884	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.30	2.00	4.30	2.00	2.00	2.00	2.00	4.30	4.30	4.30	4.30	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	7	0	0	0	0	15	0	20	44	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	232	0	72	0	0	0	0	502	173	47	928	0
Peak Hour Factor	0.6800	1.0000	0.6800	1.0000	1.0000	1.0000	1.0000	0.7900	0.7900	0.8400	0.8400	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	85	0	26	0	0	0	0	159	55	14	276	0
Total Analysis Volume [veh/h]	341	0	106	0	0	0	0	635	219	56	1105	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	4	0	0	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	8	0	0	0	8	0	0	10	0	5	10	0
Maximum Green [s]	20	0	0	0	20	0	0	30	0	20	30	0
Amber [s]	4.7	0.0	0.0	0.0	4.7	0.0	0.0	5.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	0.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0	3.0	4.0	0.0
Walk [s]	7	0	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	23	0	0	0	23	0	0	23	0	0	0	0
Rest In Walk	No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.7	0.0	0.0	0.0	3.7	0.0	0.0	4.0	0.0	4.0	4.0	0.0
Minimum Recall	No				No			No		No	No	
Maximum Recall	No				No			No		No	No	
Pedestrian Recall	No				No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	L	C	R	L	C	C
C, Cycle Length [s]	51	51	51	51	51	51	51	51	51
L, Total Lost Time per Cycle [s]	5.70	5.70	0.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	3.70	3.70	0.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	17	17	0	14	14	14	3	23	23
g / C, Green / Cycle	0.32	0.32	0.00	0.28	0.28	0.28	0.05	0.45	0.45
(v / s)_i Volume / Saturation Flow Rate	0.25	0.07	0.00	0.00	0.18	0.14	0.04	0.30	0.30
s, saturation flow rate [veh/h]	1381	1548	0	508	3468	1548	1381	1822	1822
c, Capacity [veh/h]	534	500	70	141	961	429	165	818	818
d1, Uniform Delay [s]	17.40	12.62	0.00	0.00	16.41	15.61	25.46	11.18	11.18
k, delay calibration	0.18	0.15	0.15	0.50	0.15	0.15	0.11	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.09	0.30	0.00	0.00	1.11	1.34	1.21	1.40	1.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.64	0.21	0.00	0.00	0.66	0.51	0.34	0.68	0.68
d, Delay for Lane Group [s/veh]	19.49	12.92	0.00	0.00	17.52	16.95	26.66	12.58	12.58
Lane Group LOS	B	B	A	A	B	B	C	B	B
Critical Lane Group	Yes	No	No	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.40	0.76	0.00	0.00	2.77	1.88	0.66	3.73	3.73
50th-Percentile Queue Length [ft/ln]	85.07	18.93	0.00	0.00	69.27	47.01	16.62	93.35	93.35
95th-Percentile Queue Length [veh/ln]	6.13	1.36	0.00	0.00	4.99	3.38	1.20	6.72	6.72
95th-Percentile Queue Length [ft/ln]	153.13	34.08	0.00	0.00	124.68	84.61	29.92	168.02	168.02

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.49	0.00	12.92	0.00	0.00	0.00	0.00	17.52	16.95	26.66	12.58	12.58
Movement LOS	B		B	A	A	A	A	B	B	C	B	B
d_A, Approach Delay [s/veh]	17.93			0.00			17.37			13.26		
Approach LOS	B			A			B			B		
d_I, Intersection Delay [s/veh]	15.54											
Intersection LOS	B											
Intersection V/C	0.550											

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 3: Big Break Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	11.5
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.413

Intersection Setup

Name	Driveway			Big Break Rd			Main St			Main St		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	1	1	0	1
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00	230.00	100.00	135.00	240.00	100.00	205.00
Speed [mph]	25.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Big Break Rd			Main St			Main St		
Base Volume Input [veh/h]	40	10	21	92	25	153	53	667	83	87	369	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	21	0	0	7	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	10	21	92	25	153	53	688	83	87	376	38
Peak Hour Factor	0.8500	0.8500	0.8500	0.7900	0.7900	0.7900	0.9300	0.9300	0.9300	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	3	6	29	8	48	14	185	22	25	107	11
Total Analysis Volume [veh/h]	47	12	25	116	32	194	57	740	89	99	427	43
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			2			1		
Bicycle Volume [bicycles/h]	1			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	16	0	0	16	0	16	25	0	16	25	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	5.0	0.0	3.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	18	0	0	18	0	0	11	0	0	11	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	R	L	C	R
C, Cycle Length [s]	34	34	34	34	34	34	34	34	34	34
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	7	7	7	7	2	10	10	2	11	11
g / C, Green / Cycle	0.22	0.22	0.22	0.22	0.05	0.30	0.30	0.07	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.03	0.02	0.14	0.13	0.03	0.21	0.06	0.06	0.12	0.03
s, saturation flow rate [veh/h]	1346	1616	1029	1532	1742	3482	1554	1742	3482	1554
c, Capacity [veh/h]	216	351	414	333	86	1032	461	125	1111	496
d1, Uniform Delay [s]	16.88	10.59	12.96	11.85	15.78	10.62	8.87	15.42	8.92	8.05
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.19	0.05	0.19	0.60	3.29	0.35	0.08	4.19	0.08	0.03
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

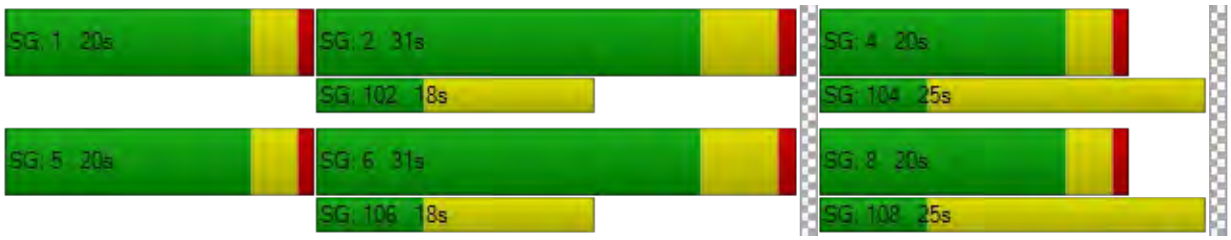
X, volume / capacity	0.22	0.11	0.36	0.58	0.67	0.72	0.19	0.79	0.38	0.09
d, Delay for Lane Group [s/veh]	17.07	10.64	13.16	12.45	19.07	10.97	8.94	19.61	9.01	8.08
Lane Group LOS	B	B	B	B	B	B	A	B	A	A
Critical Lane Group	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.34	0.18	0.85	1.05	0.39	1.49	0.30	0.69	0.70	0.13
50th-Percentile Queue Length [ft/ln]	8.44	4.55	21.28	26.14	9.87	37.16	7.45	17.18	17.61	3.24
95th-Percentile Queue Length [veh/ln]	0.61	0.33	1.53	1.88	0.71	2.68	0.54	1.24	1.27	0.23
95th-Percentile Queue Length [ft/ln]	15.19	8.19	38.31	47.06	17.77	66.89	13.41	30.93	31.70	5.83

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	17.07	10.64	10.64	13.16	13.16	12.45	19.07	10.97	8.94	19.61	9.01	8.08
Movement LOS	B	B	B	B	B	B	B	B	A	B	A	A
d_A, Approach Delay [s/veh]	14.24			12.76			11.29			10.78		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	11.53											
Intersection LOS	B											
Intersection V/C	0.413											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Main St/Empire Ave

Control Type:	Signalized	Delay (sec / veh):	19.3
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.482

Intersection Setup

Name	Main St			Empire Ave			Charles Way			Main St		
Approach	Westbound			Northeastbound			Southwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	100.00	120.00	100.00	100.00	100.00	100.00	80.00	190.00	100.00	250.00
Speed [mph]	30.00			40.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Main St			Empire Ave			Charles Way			Main St		
Base Volume Input [veh/h]	194	522	8	315	35	141	24	50	18	16	380	221
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	4	0	3	0	0	0	0	0	0	12	9
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	194	526	8	318	35	141	24	50	18	16	392	230
Peak Hour Factor	0.8000	0.8000	0.8000	0.7500	0.7500	0.7500	0.7900	0.7900	0.7900	0.8500	0.8500	0.8500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	164	3	106	12	47	8	16	6	5	115	68
Total Analysis Volume [veh/h]	243	658	10	424	47	188	30	63	23	19	461	271
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	54.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss
Signal group	1	6	0	0	3	0	0	4	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	4	10	0	0	4	0	0	4	0	4	10	0
Maximum Green [s]	13	34	0	0	21	0	0	25	0	11	33	0
Amber [s]	3.0	4.8	0.0	0.0	4.4	0.0	0.0	3.6	0.0	3.0	4.4	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	16	40	0	0	26	0	0	30	0	14	38	0
Vehicle Extension [s]	2.5	3.5	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.5	3.5	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	0	0	0	20	0	0	24	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	3.8	0.0	0.0	3.4	0.0	0.0	2.6	0.0	1.0	3.4	0.0
Minimum Recall	No	Yes			No			No		No	Yes	
Maximum Recall	No	No			No			No		No	No	
Pedestrian Recall	No	No			No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	C	R	L	C	R
C, Cycle Length [s]	53	53	53	53	53	53	53	53	53	53	53
L, Total Lost Time per Cycle [s]	3.00	5.80	5.80	5.40	5.40	5.40	4.60	4.60	3.00	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	3.80	3.80	3.40	3.40	3.40	2.60	2.60	1.00	3.40	3.40
g_i, Effective Green Time [s]	9	20	20	9	9	9	4	4	1	13	13
g / C, Green / Cycle	0.17	0.38	0.38	0.17	0.17	0.17	0.07	0.07	0.02	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.14	0.18	0.18	0.12	0.03	0.12	0.05	0.01	0.01	0.13	0.17
s, saturation flow rate [veh/h]	1774	1863	1853	3445	1863	1583	1833	1583	1774	3547	1583
c, Capacity [veh/h]	300	717	714	585	317	269	135	117	33	859	383
d1, Uniform Delay [s]	21.32	12.28	12.28	20.94	18.84	20.84	24.09	23.21	25.95	17.59	18.47
k, delay calibration	0.10	0.13	0.13	0.04	0.04	0.04	0.04	0.04	0.08	0.13	0.13
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.77	0.57	0.57	0.64	0.08	1.23	2.33	0.30	11.21	0.63	2.89
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

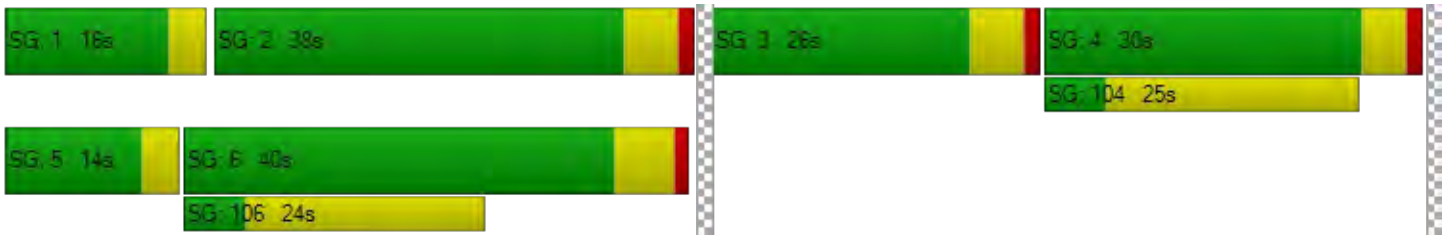
X, volume / capacity	0.81	0.47	0.47	0.72	0.15	0.70	0.69	0.20	0.58	0.54	0.71
d, Delay for Lane Group [s/veh]	26.09	12.86	12.86	21.59	18.92	22.07	26.43	23.51	37.16	18.22	21.35
Lane Group LOS	C	B	B	C	B	C	C	C	D	B	C
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.04	2.65	2.63	2.21	0.44	2.00	1.17	0.27	0.33	2.28	3.02
50th-Percentile Queue Length [ft/ln]	76.04	66.16	65.83	55.25	10.93	49.90	29.19	6.68	8.14	56.93	75.62
95th-Percentile Queue Length [veh/ln]	5.47	4.76	4.74	3.98	0.79	3.59	2.10	0.48	0.59	4.10	5.44
95th-Percentile Queue Length [ft/ln]	136.87	119.09	118.50	99.44	19.68	89.82	52.54	12.02	14.66	102.47	136.11

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	26.09	12.86	12.86	21.59	18.92	22.07	26.43	26.43	23.51	37.16	18.22	21.35
Movement LOS	C	B	B	C	B	C	C	C	C	D	B	C
d_A, Approach Delay [s/veh]	16.39			21.53			25.85			19.83		
Approach LOS	B			C			C			B		
d_I, Intersection Delay [s/veh]	19.29											
Intersection LOS	B											
Intersection V/C	0.482											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 14: Empire Ave/Oakley Rd

Control Type:	Signalized	Delay (sec / veh):	28.6
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.410

Intersection Setup

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Approach	Eastbound			Northeastbound			Southwestbound			Northwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	315.00	100.00	100.00	110.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			40.00			40.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Base Volume Input [veh/h]	61	16	92	182	430	6	27	362	67	21	15	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	3	0	0	9	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	16	92	182	433	6	27	371	67	21	15	23
Peak Hour Factor	0.8300	0.8300	0.8300	0.8000	0.8000	0.8000	0.6600	0.6600	0.6600	0.7000	0.7000	0.7000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	5	28	57	135	2	10	141	25	8	5	8
Total Analysis Volume [veh/h]	73	19	111	228	541	8	41	562	102	30	21	33
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			1			1			4		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	1.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split
Signal group	0	4	0	5	2	0	1	6	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	4	0	4	4	0	4	4	0	0	4	0
Maximum Green [s]	0	11	0	15	38	0	12	35	0	0	30	0
Amber [s]	0.0	4.1	0.0	3.0	4.4	0.0	3.0	4.4	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0	0.0	1.0	0.0
Split [s]	0	16	0	19	44	0	16	41	0	0	34	0
Vehicle Extension [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	4	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	23	0	0	26	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.1	0.0	2.0	4.4	0.0	2.0	4.4	0.0	0.0	2.0	0.0
Minimum Recall		No		No	No		No	No			No	
Maximum Recall		No		No	Yes		No	Yes			No	
Pedestrian Recall		No		No	No		No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	4.00	6.40	6.40	4.00	6.40	6.40	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	3.10	2.00	4.40	4.40	2.00	4.40	4.40	2.00	2.00
g_i, Effective Green Time [s]	10	10	10	15	73	73	3	61	61	5	5
g / C, Green / Cycle	0.09	0.09	0.09	0.14	0.66	0.66	0.03	0.55	0.55	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.03	0.03	0.07	0.13	0.15	0.15	0.02	0.18	0.18	0.03	0.02
s, saturation flow rate [veh/h]	1774	1809	1583	1774	1863	1853	1774	1863	1765	1810	1573
c, Capacity [veh/h]	155	158	138	242	1227	1220	53	1028	974	85	74
d1, Uniform Delay [s]	47.04	47.03	49.29	47.07	7.52	7.52	53.00	13.51	13.52	51.38	51.00
k, delay calibration	0.04	0.04	0.08	0.35	0.50	0.50	0.04	0.50	0.50	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.39	0.38	8.17	35.49	0.42	0.43	8.79	0.86	0.92	2.47	1.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

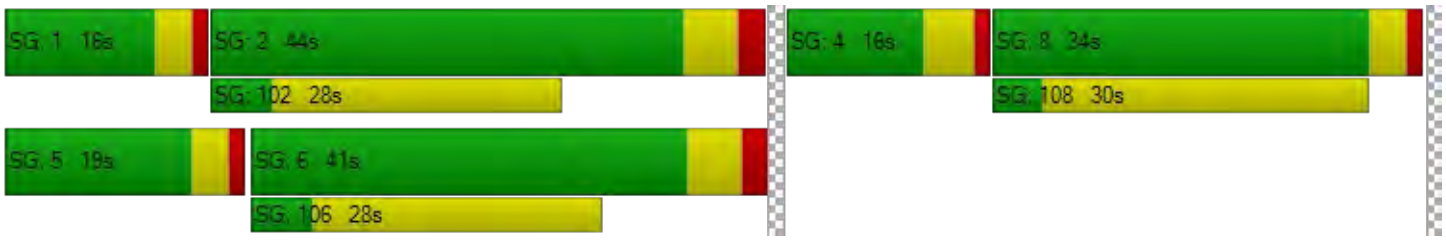
X, volume / capacity	0.30	0.29	0.80	0.94	0.22	0.22	0.78	0.33	0.33	0.60	0.44
d, Delay for Lane Group [s/veh]	47.43	47.41	57.46	82.57	7.95	7.95	61.79	14.37	14.44	53.84	52.54
Lane Group LOS	D	D	E	F	A	A	E	B	B	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.18	1.19	3.27	8.42	2.43	2.42	1.23	4.55	4.35	1.47	0.94
50th-Percentile Queue Length [ft/ln]	29.48	29.86	81.79	210.40	60.74	60.47	30.83	113.81	108.68	36.78	23.48
95th-Percentile Queue Length [veh/ln]	2.12	2.15	5.89	13.17	4.37	4.35	2.22	8.05	7.77	2.65	1.69
95th-Percentile Queue Length [ft/ln]	53.06	53.74	147.21	329.34	109.34	108.84	55.49	201.29	194.16	66.20	42.26

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	47.43	47.41	57.46	82.57	7.95	7.95	61.79	14.40	14.44	53.84	53.84	52.54
Movement LOS	D	D	E	F	A	A	E	B	B	D	D	D
d_A, Approach Delay [s/veh]	52.91			29.84			17.16			53.33		
Approach LOS	D			C			B			D		
d_I, Intersection Delay [s/veh]	28.55											
Intersection LOS	C											
Intersection V/C	0.410											

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 23: Neroly Rd/Live Oak Ave

Control Type:	All-way stop	Delay (sec / veh):	26.2
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.821

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	155.00	100.00	100.00
Speed [mph]	50.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Base Volume Input [veh/h]	210	64	22	119	125	1	3	128	132	17	313	95
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	2	0	12	6	0	0	0	0	0	0	4
Total Hourly Volume [veh/h]	210	66	22	131	131	1	3	128	132	17	313	99
Peak Hour Factor	0.8900	0.8900	0.8900	0.7100	0.7100	0.7100	0.8800	0.8800	0.8800	0.8600	0.8600	0.8600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	59	19	6	46	46	0	1	36	38	5	91	29
Total Analysis Volume [veh/h]	236	74	25	185	185	1	3	145	150	20	364	115
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	446	452	387	411	448	405	431	450
Degree of Utilization, x	0.75	0.82	0.01	0.35	0.33	0.05	0.56	0.53

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	6.26	7.77	0.02	1.57	1.45	0.16	3.31	3.06
95th-Percentile Queue Length [ft]	156.39	194.29	0.59	39.16	36.30	3.89	82.64	76.55
Approach Delay [s/veh]	31.73	38.22	15.41			19.93		
Approach LOS	D	E	C			C		
Intersection Delay [s/veh]	26.18							
Intersection LOS	D							

Intersection Level Of Service Report
Intersection 24: Live Oak Ave/Oakley Rd

Control Type:	All-way stop	Delay (sec / veh):	16.5
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.573

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Base Volume Input [veh/h]	31	176	15	50	135	40	93	53	10	22	143	73
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	7	0	0	22	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	183	15	50	157	40	93	53	10	22	143	73
Peak Hour Factor	0.7200	0.7200	0.7200	0.7600	0.7600	0.7600	0.6600	0.6600	0.6600	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	64	5	16	52	13	35	20	4	6	41	21
Total Analysis Volume [veh/h]	43	254	21	66	207	53	141	80	15	25	163	83
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	564	569	531	557
Degree of Utilization, x	0.56	0.57	0.44	0.49

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	3.49	3.60	2.26	2.64
95th-Percentile Queue Length [ft]	87.14	89.96	56.51	66.07
Approach Delay [s/veh]	17.32	17.47	15.09	15.41
Approach LOS	C	C	C	C
Intersection Delay [s/veh]	16.46			
Intersection LOS	C			

Intersection Level Of Service Report
Intersection 29: Neroly Rd/Laurel Rd

Control Type:	Signalized	Delay (sec / veh):	12.0
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.505

Intersection Setup

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	0	0	0
Pocket Length [ft]	230.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		No	

Volumes

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Base Volume Input [veh/h]	232	625	975	183	43	192
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.80	2.80	2.80	2.80	2.80	2.80
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	4	0	0	0	0	12
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	236	625	975	183	43	204
Peak Hour Factor	0.8900	0.8900	0.7800	0.7800	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	66	176	313	59	11	53
Total Analysis Volume [veh/h]	265	702	1250	235	45	213
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	2	2	2	0	2	0
Maximum Green [s]	20	40	40	0	20	0
Amber [s]	3.0	4.0	4.0	0.0	3.0	0.0
All red [s]	1.0	2.0	2.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	2.0	4.0	4.0	0.0	2.0	0.0
Walk [s]	0	0	7	0	0	0
Pedestrian Clearance [s]	0	0	35	0	0	0
Rest In Walk						
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	8
Pedestrian Walk [s]	7
Pedestrian Clearance [s]	30

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	52	52	52	52	52	52
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	6.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	4.00	4.00	4.00	2.00	2.00
g_i, Effective Green Time [s]	6	33	23	23	9	9
g / C, Green / Cycle	0.12	0.64	0.44	0.44	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.08	0.14	0.28	0.29	0.03	0.14
s, saturation flow rate [veh/h]	3418	5035	3519	1694	1760	1571
c, Capacity [veh/h]	398	3212	1565	754	300	267
d1, Uniform Delay [s]	22.06	3.97	11.19	11.36	18.43	20.77
k, delay calibration	0.04	0.15	0.15	0.15	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.72	0.05	0.61	1.40	0.09	2.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.22	0.63	0.66	0.15	0.80
d, Delay for Lane Group [s/veh]	22.78	4.02	11.79	12.75	18.51	22.84
Lane Group LOS	C	A	B	B	B	C
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	1.36	0.47	3.21	3.41	0.42	2.34
50th-Percentile Queue Length [ft/ln]	34.07	11.71	80.17	85.35	10.44	58.61
95th-Percentile Queue Length [veh/ln]	2.45	0.84	5.77	6.15	0.75	4.22
95th-Percentile Queue Length [ft/ln]	61.32	21.08	144.31	153.63	18.80	105.50

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	22.78	4.02	11.99	12.75	18.51	22.84
Movement LOS	C	A	B	B	B	C
d_A, Approach Delay [s/veh]	9.16		12.11		22.08	
Approach LOS	A		B		C	
d_I, Intersection Delay [s/veh]	12.01					
Intersection LOS	B					
Intersection V/C	0.505					

Sequence

Ring 1	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 91: Main St & West Driveway

Control Type:	Two-way stop	Delay (sec / veh):	39.4
Analysis Method:	HCM 2010	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.335

Intersection Setup

Name			Main St			
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Main St			
Base Volume Input [veh/h]	0	0	639	0	0	830
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	42	0	22	0	0	22
Total Hourly Volume [veh/h]	42	0	661	0	0	852
Peak Hour Factor	0.8100	1.0000	0.8100	1.0000	1.0000	0.9100
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	0	204	0	0	234
Total Analysis Volume [veh/h]	52	0	816	0	0	936
Pedestrian Volume [ped/h]	3		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.33	0.00	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	39.39	22.35	0.00	0.00	9.48	0.00
Movement LOS	E	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.36	1.36	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	34.11	34.11	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	39.39		0.00		0.00	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	1.14					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 92: New Intersection

Control Type:	Two-way stop	Delay (sec / veh):	24.0
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.130

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	639	0	0	577
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	22	21	0	22	0	0
Total Hourly Volume [veh/h]	22	21	639	22	0	577
Peak Hour Factor	0.8000	0.8000	0.9100	0.9100	0.8100	0.8100
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	7	176	6	0	178
Total Analysis Volume [veh/h]	28	26	702	24	0	712
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.04	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	24.00	13.01	0.00	0.00	9.12	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.61	0.61	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	15.15	15.15	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	18.71		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.68					
Intersection LOS	C					

Village at Main TISI

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12/12/2018

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Bridgehead Rd/Main St	189	195	30	130	107	42	85	476	100	45	753	323	2475

ID	Intersection Name	Northbound		Southbound			Eastbound			Westbound			Total Volume
		Left	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Live Oak Rd/Main St	232	72	0	0	0	0	502	173	47	928	0	1954

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Big Break Rd/Main St	40	10	21	92	25	153	53	688	83	87	376	38	1666

ID	Intersection Name	Westbound			Northeastbound			Southwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Main St/Empire Ave	194	526	8	318	35	141	24	50	18	16	392	230	1952

ID	Intersection Name	Eastbound			Northeastbound			Southwestbound			Northwestbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	Empire Ave/Oakley Rd	61	16	92	182	433	6	27	371	67	21	15	23	1314

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
23	Neroly Rd/Live Oak Ave	210	66	22	131	131	1	3	128	132	17	313	99	1253

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
24	Live Oak Ave/Oakley Rd	31	183	15	50	157	40	93	53	10	22	143	73	870

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
29	Neroly Rd/Laurel Rd	236	625	975	183	43	204	2266

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
91	Main St & West Driveway	42	0	661	0	0	852	1555

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
92	New Intersection	22	21	639	22	0	577	1281

Village at Main TISI

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Scenario 5 5 Existing plus Project AM

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12/12/2018

Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Bridgehead Rd/Main St	Final Base	189	195	30	130	107	42	85	461	100	45	709	323	2416
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	15	0	0	44	0	59
		Future Total	**189**	**195**	**30**	**130**	**107**	**42**	**85**	**476**	**100**	**45**	**753**	**323**	**2475**

ID	Intersection Name	Volume Type	Northbound		Southbound			Eastbound			Westbound			Total Volume
			Left	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Live Oak Rd/Main St	Final Base	232	65	0	0	0	0	487	173	27	884	0	1868
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	7	0	0	0	0	15	0	20	44	0	86
		Future Total	**232**	**72**	**0**	**0**	**0**	**0**	**502**	**173**	**47**	**928**	**0**	**1954**

ID	Intersection Name	Volume Type	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Big Break Rd/Main St	Final Base	40	10	21	92	25	153	53	667	83	87	369	38	1638
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	21	0	0	7	0	28
		Future Total	**40**	**10**	**21**	**92**	**25**	**153**	**53**	**688**	**83**	**87**	**376**	**38**	**1666**

ID	Intersection Name	Volume Type	Westbound			Northeastbound			Southwestbound			Southeastbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Main St/Empire Ave	Final Base	194	522	8	315	35	141	24	50	18	16	380	221	1924
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	4	0	3	0	0	0	0	0	0	12	9	28
		Future Total	**194**	**526**	**8**	**318**	**35**	**141**	**24**	**50**	**18**	**16**	**392**	**230**	**1952**

ID	Intersection Name	Volume Type	Eastbound			Northeastbound			Southwestbound			Northwestbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	Empire Ave/Oakley Rd	Final Base	61	16	92	182	430	6	27	362	67	21	15	23	1302
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	3	0	0	9	0	0	0	0	12
		Future Total	**61**	**16**	**92**	**182**	**433**	**6**	**27**	**371**	**67**	**21**	**15**	**23**	**1314**

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
23	Neroly Rd/Live Oak Ave	Final Base	210	64	22	119	125	1	3	128	132	17	313	95	1229
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	2	0	12	6	0	0	0	0	0	0	4	24
		Future Total	**210**	**66**	**22**	**131**	**131**	**1**	**3**	**128**	**132**	**17**	**313**	**99**	**1253**

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
24	Live Oak Ave/Oakley Rd	Final Base	31	176	15	50	135	40	93	53	10	22	143	73	841
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	7	0	0	22	0	0	0	0	0	0	0	29
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	**31**	**183**	**15**	**50**	**157**	**40**	**93**	**53**	**10**	**22**	**143**	**73**	**870**

ID	Intersection Name	Volume Type	Northeastbound		Southwestbound		Southeastbound		Total Volume
			Left	Thru	Thru	Right	Left	Right	
29	Neroly Rd/Laurel Rd	Final Base	232	625	975	183	43	192	2250
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	4	0	0	0	0	12	16
		Future Total	**236**	**625**	**975**	**183**	**43**	**204**	**2266**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
91	Main St & West Driveway	Final Base	0	0	639	0	0	830	1469
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	42	0	22	0	0	22	86
		Future Total	**42**	**0**	**661**	**0**	**0**	**852**	**1555**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
92	New Intersection	Final Base	0	0	639	0	0	577	1216
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	22	21	0	22	0	0	65
		Future Total	**22**	**21**	**639**	**22**	**0**	**577**	**1281**

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Village at Main TIS

Vistro File: J:\...\Oakley Citywide Model - Village at Main TIS Version.vistro
Scenario 6 Existing plus Project PM

Report File: J:\...\Existing plus Project PM.pdf
12/12/2018

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bridgehead Rd/Main St	Signalized	HCM 2010	WB Left	0.582	24.1	C
2	Live Oak Rd/Main St	Signalized	HCM 2010	WB Left	0.455	10.7	B
3	Big Break Rd/Main St	Signalized	HCM 2010	NWB Left	0.391	14.1	B
5	Main St/Empire Ave	Signalized	HCM 2010	SEB Left	0.491	19.5	B
14	Empire Ave/Oakley Rd	Signalized	HCM 2010	EB Right	0.362	31.4	C
23	Neroly Rd/Live Oak Ave	All-way stop	HCM 2010	NB Left	0.549	14.4	B
24	Live Oak Ave/Oakley Rd	All-way stop	HCM 2010	WB Thru	0.268	9.5	A
29	Neroly Rd/Laurel Rd	Signalized	HCM 2010	SEB Right	0.373	8.3	A
91	Main St & West Driveway	Two-way stop	HCM 2010	NB Left	0.248	46.7	E
92	Main St & West Driveway	Two-way stop	HCM 2010	NB Left	0.168	44.0	E

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Bridgehead Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	24.1
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.582

Intersection Setup

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	1	0	0	1	0	1
Pocket Length [ft]	250.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	100.00	235.00	100.00	495.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Base Volume Input [veh/h]	157	73	42	344	171	29	82	732	160	31	461	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	50	0	0	29	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	157	73	42	344	171	29	82	782	160	31	490	125
Peak Hour Factor	0.9400	0.9400	0.9400	0.9000	0.9000	0.9000	0.8700	0.8700	0.8700	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	19	11	96	48	8	24	225	46	9	136	35
Total Analysis Volume [veh/h]	167	78	45	382	190	32	94	899	184	34	544	139
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	2			0			0			0		
Bicycle Volume [bicycles/h]	1			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	7	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	21	0	0	35	0	11	30	0	11	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	4.5	0.0	3.0	4.5	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	0	0	0	12	0	0	12	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.5	0.0	2.0	4.5	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	20.0	0.0	0.0	0.0	0.0	20.0	20.0	0.0	20.0	20.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	66	66	66	66	66	66	66	66	66	66	66
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	6.50	6.50	4.00	6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	2.00	4.50	4.50
g_i, Effective Green Time [s]	8	8	13	13	13	5	25	25	2	22	22
g / C, Green / Cycle	0.13	0.13	0.20	0.20	0.20	0.07	0.37	0.37	0.03	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.10	0.07	0.16	0.16	0.02	0.05	0.30	0.31	0.02	0.11	0.09
s, saturation flow rate [veh/h]	1745	1711	1745	1801	1557	1745	1832	1724	1745	4991	1557
c, Capacity [veh/h]	223	219	341	352	304	122	679	638	50	1641	512
d1, Uniform Delay [s]	28.00	27.28	25.70	25.70	22.01	30.44	18.97	19.00	32.06	16.84	16.47
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.21	0.22	0.04	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.88	0.84	1.96	1.88	0.06	3.83	4.91	5.33	6.12	0.17	0.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.75	0.56	0.83	0.82	0.11	0.77	0.82	0.82	0.69	0.33	0.27
d, Delay for Lane Group [s/veh]	29.88	28.12	27.67	27.58	22.06	34.27	23.87	24.32	38.18	17.00	16.87
Lane Group LOS	C	C	C	C	C	C	C	C	D	B	B
Critical Lane Group	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.47	1.74	4.05	4.16	0.38	1.48	7.37	7.04	0.58	1.82	1.40
50th-Percentile Queue Length [ft/ln]	61.76	43.50	101.26	104.12	9.51	36.99	184.14	175.90	14.55	45.46	35.05
95th-Percentile Queue Length [veh/ln]	4.45	3.13	7.29	7.50	0.68	2.66	11.82	11.39	1.05	3.27	2.52
95th-Percentile Queue Length [ft/ln]	111.17	78.30	182.28	187.41	17.12	66.59	295.42	284.66	26.18	81.83	63.08

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	29.88	28.12	28.12	27.64	27.58	22.06	34.27	24.05	24.32	38.18	17.00	16.87
Movement LOS	C	C	C	C	C	C	C	C	C	D	B	B
d_A, Approach Delay [s/veh]	29.13			27.33			24.91			17.98		
Approach LOS	C			C			C			B		
d_I, Intersection Delay [s/veh]	24.09											
Intersection LOS	C											
Intersection V/C	0.582											

Sequence

Ring 1	1	2	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: Live Oak Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	10.7
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.455

Intersection Setup

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	160.00	255.00	100.00	100.00
Speed [mph]	40.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			No		

Volumes

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Base Volume Input [veh/h]	48	0	59	0	0	0	0	1049	88	27	597	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.30	2.00	4.30	2.00	2.00	2.00	2.00	4.30	4.30	4.30	4.30	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	22	0	0	0	0	50	0	13	29	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	48	0	81	0	0	0	0	1099	88	40	626	0
Peak Hour Factor	0.8100	1.0000	0.8100	1.0000	1.0000	1.0000	0.8800	0.8800	0.8800	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	0	25	0	0	0	0	312	25	11	165	0
Total Analysis Volume [veh/h]	59	0	100	0	0	0	0	1249	100	42	659	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	4	0	0	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	8	0	0	0	8	0	0	10	0	5	10	0
Maximum Green [s]	20	0	0	0	20	0	0	30	0	20	30	0
Amber [s]	4.7	0.0	0.0	0.0	4.7	0.0	0.0	5.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	0.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0	3.0	4.0	0.0
Walk [s]	7	0	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	23	0	0	0	23	0	0	23	0	0	0	0
Rest In Walk	No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.7	0.0	0.0	0.0	3.7	0.0	0.0	4.0	0.0	4.0	4.0	0.0
Minimum Recall	No				No			No		No	No	
Maximum Recall	No				No			No		No	No	
Pedestrian Recall	No				No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	L	C	R	L	C	C
C, Cycle Length [s]	52	52	52	52	52	52	52	52	52
L, Total Lost Time per Cycle [s]	5.70	5.70	0.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	3.70	3.70	0.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	7	7	0	24	24	24	2	33	33
g / C, Green / Cycle	0.14	0.14	0.00	0.47	0.47	0.47	0.04	0.63	0.63
(v / s)_i Volume / Saturation Flow Rate	0.04	0.06	0.00	0.00	0.36	0.07	0.03	0.18	0.18
s, saturation flow rate [veh/h]	1381	1548	0	772	3468	1516	1381	1822	1822
c, Capacity [veh/h]	281	216	70	415	1643	718	150	1156	1156
d1, Uniform Delay [s]	21.77	20.48	0.00	0.00	11.20	7.67	25.82	4.22	4.22
k, delay calibration	0.15	0.15	0.15	0.50	0.15	0.15	0.11	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.52	2.19	0.00	0.00	1.06	0.12	1.00	0.19	0.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.21	0.46	0.00	0.00	0.76	0.14	0.28	0.29	0.29
d, Delay for Lane Group [s/veh]	22.29	22.67	0.00	0.00	12.26	7.80	26.82	4.42	4.42
Lane Group LOS	C	C	A	A	B	A	C	A	A
Critical Lane Group	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.63	1.09	0.00	0.00	4.13	0.45	0.50	0.74	0.74
50th-Percentile Queue Length [ft/ln]	15.72	27.35	0.00	0.00	103.36	11.30	12.60	18.50	18.50
95th-Percentile Queue Length [veh/ln]	1.13	1.97	0.00	0.00	7.44	0.81	0.91	1.33	1.33
95th-Percentile Queue Length [ft/ln]	28.29	49.24	0.00	0.00	186.05	20.34	22.68	33.29	33.29

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	22.29	0.00	22.67	0.00	0.00	0.00	0.00	12.26	7.80	26.82	4.42	4.42
Movement LOS	C		C	A	A	A	A	B	A	C	A	A
d_A, Approach Delay [s/veh]	22.53			0.00			11.93			5.76		
Approach LOS	C			A			B			A		
d_I, Intersection Delay [s/veh]	10.73											
Intersection LOS	B											
Intersection V/C	0.455											

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 3: Big Break Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	14.1
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.391

Intersection Setup

Name	Driveway			Big Break Rd			Main St			Main St		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	1	1	0	1
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00	230.00	100.00	135.00	240.00	100.00	205.00
Speed [mph]	25.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Big Break Rd			Main St			Main St		
Base Volume Input [veh/h]	46	42	82	70	24	86	64	454	67	190	733	110
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	14	0	0	24	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	42	82	70	24	86	64	468	67	190	757	110
Peak Hour Factor	0.7700	0.7700	0.7700	0.8300	0.8300	0.8300	0.9500	0.9500	0.9500	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	14	27	21	7	26	17	123	18	49	195	28
Total Analysis Volume [veh/h]	60	55	106	84	29	104	67	493	71	196	780	113
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	1			0			5			1		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	16	0	0	16	0	16	25	0	16	25	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	5.0	0.0	3.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	18	0	0	18	0	0	11	0	0	11	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	R	L	C	R
C, Cycle Length [s]	42	42	42	42	42	42	42	42	42	42
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	12	12	12	12	2	10	10	6	14	14
g / C, Green / Cycle	0.29	0.29	0.29	0.29	0.05	0.24	0.24	0.14	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.04	0.10	0.13	0.07	0.04	0.14	0.05	0.11	0.22	0.07
s, saturation flow rate [veh/h]	1349	1632	879	1553	1742	3482	1554	1742	3482	1554
c, Capacity [veh/h]	279	472	402	449	91	820	366	253	1144	511
d1, Uniform Delay [s]	18.75	11.89	13.98	11.48	19.82	14.44	12.99	17.46	12.32	10.31
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.14	0.16	0.14	0.10	4.30	0.27	0.09	1.93	0.27	0.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

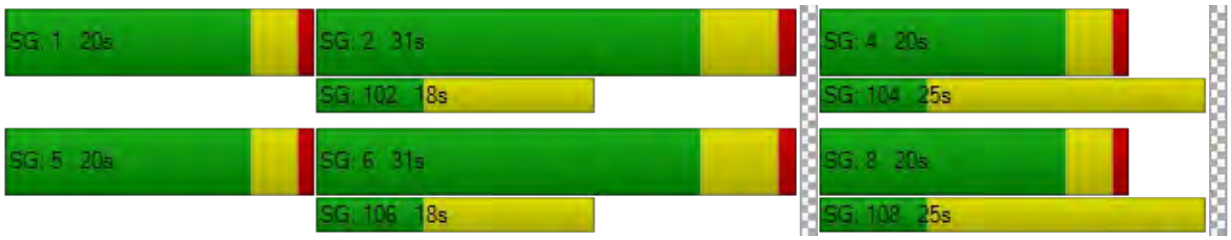
X, volume / capacity	0.22	0.34	0.28	0.23	0.74	0.60	0.19	0.77	0.68	0.22
d, Delay for Lane Group [s/veh]	18.90	12.05	14.12	11.58	24.12	14.71	13.09	19.39	12.59	10.39
Lane Group LOS	B	B	B	B	C	B	B	B	B	B
Critical Lane Group	No	No	Yes	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.52	1.04	0.83	0.62	0.64	1.59	0.41	1.57	2.22	0.54
50th-Percentile Queue Length [ft/ln]	13.08	25.98	20.80	15.56	15.92	39.66	10.32	39.25	55.51	13.48
95th-Percentile Queue Length [veh/ln]	0.94	1.87	1.50	1.12	1.15	2.86	0.74	2.83	4.00	0.97
95th-Percentile Queue Length [ft/ln]	23.55	46.77	37.44	28.01	28.66	71.39	18.58	70.66	99.92	24.27

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	18.90	12.05	12.05	14.12	14.12	11.58	24.12	14.71	13.09	19.39	12.59	10.39
Movement LOS	B	B	B	B	B	B	C	B	B	B	B	B
d_A, Approach Delay [s/veh]	13.91			12.91			15.53			13.59		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	14.12											
Intersection LOS	B											
Intersection V/C	0.391											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Main St/Empire Ave

Control Type:	Signalized	Delay (sec / veh):	19.5
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.491

Intersection Setup

Name	Main St			Empire Ave			Charles Way			Main St		
Approach	Westbound			Northeastbound			Southwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	100.00	120.00	100.00	100.00	100.00	100.00	80.00	190.00	100.00	250.00
Speed [mph]	30.00			40.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Main St			Empire Ave			Charles Way			Main St		
Base Volume Input [veh/h]	199	411	9	264	24	149	12	21	18	36	733	293
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	4	0	10	0	0	0	0	0	0	8	6
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	199	415	9	274	24	149	12	21	18	36	741	299
Peak Hour Factor	0.9800	0.9800	0.9800	0.7900	0.7900	0.7900	0.5500	0.5500	0.5500	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	106	2	87	8	47	5	10	8	10	199	80
Total Analysis Volume [veh/h]	203	423	9	347	30	189	22	38	33	39	797	322
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	54.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss
Signal group	1	6	0	0	3	0	0	4	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	4	10	0	0	4	0	0	4	0	4	10	0
Maximum Green [s]	17	37	0	0	17	0	0	25	0	12	33	0
Amber [s]	3.0	4.8	0.0	0.0	4.4	0.0	0.0	3.6	0.0	3.0	4.4	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	20	43	0	0	22	0	0	30	0	15	38	0
Vehicle Extension [s]	2.5	3.5	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.5	3.5	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	0	0	0	20	0	0	24	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	3.8	0.0	0.0	3.4	0.0	0.0	2.6	0.0	1.0	3.4	0.0
Minimum Recall	No	Yes			No			No		No	Yes	
Maximum Recall	No	No			No			No		No	No	
Pedestrian Recall	No	No			No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	C	R	L	C	R
C, Cycle Length [s]	56	56	56	56	56	56	56	56	56	56	56
L, Total Lost Time per Cycle [s]	3.00	5.80	5.80	5.40	5.40	5.40	4.60	4.60	3.00	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	3.80	3.80	3.40	3.40	3.40	2.60	2.60	1.00	3.40	3.40
g_i, Effective Green Time [s]	8	23	23	9	9	9	3	3	2	18	18
g / C, Green / Cycle	0.14	0.42	0.42	0.16	0.16	0.16	0.05	0.05	0.03	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.11	0.12	0.12	0.10	0.02	0.12	0.03	0.02	0.02	0.22	0.20
s, saturation flow rate [veh/h]	1774	1863	1849	3445	1863	1583	1829	1583	1774	3547	1583
c, Capacity [veh/h]	257	779	773	554	299	255	100	87	58	1111	496
d1, Uniform Delay [s]	23.27	10.79	10.79	22.06	20.16	22.52	26.02	25.70	26.94	17.13	16.67
k, delay calibration	0.08	0.13	0.13	0.04	0.04	0.04	0.04	0.04	0.08	0.13	0.13
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.09	0.23	0.23	0.44	0.05	1.61	2.13	1.02	9.58	1.06	1.73
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.28	0.28	0.63	0.10	0.74	0.60	0.38	0.67	0.72	0.65
d, Delay for Lane Group [s/veh]	27.35	11.03	11.03	22.49	20.21	24.14	28.15	26.72	36.53	18.20	18.41
Lane Group LOS	C	B	B	C	C	C	C	C	D	B	B
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.69	1.57	1.56	1.92	0.30	2.21	0.81	0.43	0.64	4.19	3.41
50th-Percentile Queue Length [ft/ln]	67.30	39.32	39.08	47.95	7.56	55.26	20.25	10.81	16.04	104.86	85.20
95th-Percentile Queue Length [veh/ln]	4.85	2.83	2.81	3.45	0.54	3.98	1.46	0.78	1.15	7.55	6.13
95th-Percentile Queue Length [ft/ln]	121.14	70.77	70.34	86.31	13.60	99.47	36.44	19.46	28.87	188.75	153.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	27.35	11.03	11.03	22.49	20.21	24.14	28.15	28.15	26.72	36.53	18.20	18.41
Movement LOS	C	B	B	C	C	C	C	C	C	D	B	B
d_A, Approach Delay [s/veh]	16.25			22.92			27.64			18.87		
Approach LOS	B			C			C			B		
d_I, Intersection Delay [s/veh]	19.46											
Intersection LOS	B											
Intersection V/C	0.491											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 14: Empire Ave/Oakley Rd

Control Type:	Signalized	Delay (sec / veh):	31.4
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.362

Intersection Setup

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Approach	Eastbound			Northeastbound			Southwestbound			Northwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	315.00	100.00	100.00	110.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			40.00			40.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Base Volume Input [veh/h]	44	44	137	102	357	12	94	350	62	83	31	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	10	0	0	6	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	44	44	137	102	367	12	94	356	62	83	31	51
Peak Hour Factor	0.8900	0.8900	0.8900	0.8600	0.8600	0.8600	0.9300	0.9300	0.9300	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	12	38	30	107	3	25	96	17	24	9	14
Total Analysis Volume [veh/h]	49	49	154	119	427	14	101	383	67	94	35	58
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	2			0			6			2		
Bicycle Volume [bicycles/h]	0			1			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	1.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split
Signal group	0	4	0	5	2	0	1	6	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	4	0	4	4	0	4	4	0	0	4	0
Maximum Green [s]	0	13	0	13	38	0	10	35	0	0	30	0
Amber [s]	0.0	4.1	0.0	3.0	4.4	0.0	3.0	4.4	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0	0.0	1.0	0.0
Split [s]	0	18	0	17	44	0	14	41	0	0	34	0
Vehicle Extension [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	4	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	23	0	0	26	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.1	0.0	2.0	4.4	0.0	2.0	4.4	0.0	0.0	2.0	0.0
Minimum Recall		No		No	No		No	No			No	
Maximum Recall		No		No	Yes		No	Yes			No	
Pedestrian Recall		No		No	No		No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	4.00	6.40	6.40	4.00	6.40	6.40	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	3.10	2.00	4.40	4.40	2.00	4.40	4.40	2.00	2.00
g_i, Effective Green Time [s]	13	13	13	9	59	59	8	57	57	12	12
g / C, Green / Cycle	0.11	0.11	0.11	0.08	0.53	0.53	0.07	0.52	0.52	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.03	0.03	0.10	0.07	0.12	0.12	0.06	0.12	0.13	0.07	0.04
s, saturation flow rate [veh/h]	1774	1861	1583	1774	1863	1839	1774	1863	1754	1797	1556
c, Capacity [veh/h]	202	212	180	146	991	978	126	970	913	191	165
d1, Uniform Delay [s]	44.40	44.39	47.85	49.64	13.68	13.69	50.32	14.42	14.46	47.36	45.66
k, delay calibration	0.04	0.04	0.19	0.04	0.50	0.50	0.06	0.50	0.50	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.22	0.21	17.72	4.12	0.52	0.53	6.45	0.58	0.63	1.57	0.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.24	0.24	0.85	0.81	0.22	0.22	0.80	0.24	0.24	0.68	0.35
d, Delay for Lane Group [s/veh]	44.62	44.60	65.57	53.76	14.20	14.22	56.77	15.00	15.09	48.93	46.13
Lane Group LOS	D	D	E	D	B	B	E	B	B	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.20	1.24	4.98	3.32	2.90	2.87	2.91	3.12	3.00	3.57	1.54
50th-Percentile Queue Length [ft/ln]	29.94	31.04	124.39	82.96	72.43	71.85	72.71	77.91	75.08	89.36	38.38
95th-Percentile Queue Length [veh/ln]	2.16	2.23	8.63	5.97	5.22	5.17	5.24	5.61	5.41	6.43	2.76
95th-Percentile Queue Length [ft/ln]	53.88	55.87	215.85	149.32	130.38	129.34	130.88	140.24	135.15	160.85	69.08

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.62	44.60	65.57	53.76	14.21	14.22	56.77	15.03	15.09	48.93	48.93	46.13
Movement LOS	D	D	E	D	B	B	E	B	B	D	D	D
d_A, Approach Delay [s/veh]	57.42			22.62			22.69			48.06		
Approach LOS	E			C			C			D		
d_I, Intersection Delay [s/veh]	31.37											
Intersection LOS	C											
Intersection V/C	0.362											

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 23: Neroly Rd/Live Oak Ave

Control Type:	All-way stop	Delay (sec / veh):	14.4
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.549

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	155.00	100.00	100.00
Speed [mph]	50.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Base Volume Input [veh/h]	97	76	20	81	70	0	2	178	163	11	146	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	6	0	8	4	0	0	0	0	0	0	14
Total Hourly Volume [veh/h]	97	82	20	89	74	0	2	178	163	11	146	139
Peak Hour Factor	0.7000	0.7000	0.7000	0.7900	0.7900	0.7900	0.8700	0.8700	0.8700	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	29	7	28	23	0	1	51	47	3	41	39
Total Analysis Volume [veh/h]	139	117	29	113	94	0	2	205	187	13	166	158
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	519	500	477	512	569	469	502	558
Degree of Utilization, x	0.55	0.41	0.00	0.38	0.34	0.03	0.32	0.29

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	3.28	2.01	0.01	1.78	1.53	0.09	1.38	1.20
95th-Percentile Queue Length [ft]	82.10	50.24	0.32	44.48	38.24	2.14	34.55	29.96
Approach Delay [s/veh]	18.06	15.19	13.16			12.43		
Approach LOS	C	C	B			B		
Intersection Delay [s/veh]	14.44							
Intersection LOS	B							

Intersection Level Of Service Report
Intersection 24: Live Oak Ave/Oakley Rd

Control Type:	All-way stop	Delay (sec / veh):	9.5
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.268

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Base Volume Input [veh/h]	18	56	34	29	62	2	4	144	29	36	97	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	22	0	0	13	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	78	34	29	75	2	4	144	29	36	97	18
Peak Hour Factor	0.8400	0.8400	0.8400	0.8000	0.8000	0.8000	0.8900	0.8900	0.8900	0.7900	0.7900	0.7900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	23	10	9	23	1	1	40	8	11	31	6
Total Analysis Volume [veh/h]	21	93	40	36	94	3	4	162	33	46	123	23
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	722	695	742	730
Degree of Utilization, x	0.21	0.19	0.27	0.26

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.80	0.70	1.08	1.05
95th-Percentile Queue Length [ft]	20.10	17.57	27.06	26.34
Approach Delay [s/veh]	9.33	9.40	9.62	9.68
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	9.53			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 29: Neroly Rd/Laurel Rd

Control Type:	Signalized	Delay (sec / veh):	8.3
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.373

Intersection Setup

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	0	0	0
Pocket Length [ft]	230.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		No	

Volumes

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Base Volume Input [veh/h]	220	1267	690	63	75	140
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.80	2.80	2.80	2.80	2.80	2.80
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	220	1267	690	63	75	140
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	58	333	182	17	23	42
Total Analysis Volume [veh/h]	232	1334	726	66	90	169
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	2	2	2	0	2	0
Maximum Green [s]	20	40	40	0	20	0
Amber [s]	3.0	4.0	4.0	0.0	3.0	0.0
All red [s]	1.0	2.0	2.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	2.0	4.0	4.0	0.0	2.0	0.0
Walk [s]	0	0	7	0	0	0
Pedestrian Clearance [s]	0	0	35	0	0	0
Rest In Walk						
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	8
Pedestrian Walk [s]	7
Pedestrian Clearance [s]	30

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	35	35	35	35	35	35
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	6.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	4.00	4.00	4.00	2.00	2.00
g_i, Effective Green Time [s]	4	19	11	11	5	5
g / C, Green / Cycle	0.12	0.56	0.32	0.32	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.07	0.26	0.15	0.15	0.05	0.11
s, saturation flow rate [veh/h]	3418	5035	3519	1764	1760	1571
c, Capacity [veh/h]	405	2798	1134	568	276	246
d1, Uniform Delay [s]	14.50	4.67	9.40	9.40	13.03	13.86
k, delay calibration	0.04	0.15	0.15	0.15	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.48	0.18	0.43	0.84	0.25	1.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.57	0.48	0.47	0.46	0.33	0.69
d, Delay for Lane Group [s/veh]	14.97	4.85	9.83	10.24	13.29	15.13
Lane Group LOS	B	A	A	B	B	B
Critical Lane Group	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.64	0.48	0.98	1.05	0.49	1.04
50th-Percentile Queue Length [ft/ln]	15.98	11.89	24.59	26.23	12.36	25.89
95th-Percentile Queue Length [veh/ln]	1.15	0.86	1.77	1.89	0.89	1.86
95th-Percentile Queue Length [ft/ln]	28.76	21.40	44.26	47.22	22.26	46.60

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.97	4.85	9.94	10.24	13.29	15.13
Movement LOS	B	A	A	B	B	B
d_A, Approach Delay [s/veh]	6.35		9.97		14.49	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	8.25					
Intersection LOS	A					
Intersection V/C	0.373					

Sequence

Ring 1	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 91: Main St & West Driveway

Control Type:	Two-way stop	Delay (sec / veh):	46.7
Analysis Method:	HCM 2010	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.248

Intersection Setup

Name			Main St			
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Main St			
Base Volume Input [veh/h]	0	1	1084	0	1	576
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	28	0	72	0	0	14
Total Hourly Volume [veh/h]	28	1	1156	0	1	590
Peak Hour Factor	1.0000	0.2500	0.9800	1.0000	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	1	295	0	0	159
Total Analysis Volume [veh/h]	28	4	1180	0	1	634
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.25	0.01	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	46.66	22.72	0.00	0.00	11.14	0.00
Movement LOS	E	C	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.96	0.96	0.00	0.00	0.01	0.00
95th-Percentile Queue Length [ft/ln]	23.98	23.98	0.00	0.00	0.13	0.00
d_A, Approach Delay [s/veh]	43.67		0.00		0.02	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	0.76					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 92: Main St & West Driveway

Control Type:	Two-way stop	Delay (sec / veh):	44.0
Analysis Method:	HCM 2010	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.168

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	1084	0	0	577
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	14	14	0	72	24	0
Total Hourly Volume [veh/h]	14	14	1084	72	24	577
Peak Hour Factor	0.8000	0.8000	0.9800	0.9800	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	4	277	18	6	155
Total Analysis Volume [veh/h]	18	18	1106	73	26	620
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.17	0.04	0.01	0.00	0.04	0.01
d_M, Delay for Movement [s/veh]	44.01	18.36	0.00	0.00	11.40	0.00
Movement LOS	E	C	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.75	0.75	0.00	0.00	0.14	0.00
95th-Percentile Queue Length [ft/ln]	18.87	18.87	0.00	0.00	3.46	0.00
d_A, Approach Delay [s/veh]	31.19		0.00		0.46	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.76					
Intersection LOS	E					

Village at Main TIS

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Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Bridgehead Rd/Main St	157	73	42	344	171	29	82	782	160	31	490	125	2486

ID	Intersection Name	Northbound		Southbound			Eastbound			Westbound			Total Volume
		Left	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Live Oak Rd/Main St	48	81	0	0	0	0	1099	88	40	626	0	1982

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Big Break Rd/Main St	46	42	82	70	24	86	64	468	67	190	757	110	2006

ID	Intersection Name	Westbound			Northeastbound			Southwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Main St/Empire Ave	199	415	9	274	24	149	12	21	18	36	741	299	2197

ID	Intersection Name	Eastbound			Northeastbound			Southwestbound			Northwestbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	Empire Ave/Oakley Rd	44	44	137	102	367	12	94	356	62	83	31	51	1383

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
23	Neroly Rd/Live Oak Ave	97	82	20	89	74	0	2	178	163	11	146	139	1001

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
24	Live Oak Ave/Oakley Rd	18	78	34	29	75	2	4	144	29	36	97	18	564

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
29	Neroly Rd/Laurel Rd	220	1267	690	63	75	140	2455

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
91	Main St & West Driveway	28	1	1156	0	1	590	1776

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
92	Main St & West Driveway	14	14	1084	72	24	577	1785

Village at Main TIS

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Scenario 6 Existing plus Project PM

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Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Bridgehead Rd/Main St	Final Base	157	73	42	344	171	29	82	732	160	31	461	125	2407
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	50	0	0	29	0	79
		Future Total	**157**	**73**	**42**	**344**	**171**	**29**	**82**	**782**	**160**	**31**	**490**	**125**	**2486**

ID	Intersection Name	Volume Type	Northbound		Southbound			Eastbound			Westbound			Total Volume
			Left	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Live Oak Rd/Main St	Final Base	48	59	0	0	0	0	1049	88	27	597	0	1868
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	22	0	0	0	0	50	0	13	29	0	114
		Future Total	**48**	**81**	**0**	**0**	**0**	**0**	**1099**	**88**	**40**	**626**	**0**	**1982**

ID	Intersection Name	Volume Type	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Big Break Rd/Main St	Final Base	46	42	82	70	24	86	64	454	67	190	733	110	1968
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	14	0	0	24	0	38
		Future Total	**46**	**42**	**82**	**70**	**24**	**86**	**64**	**468**	**67**	**190**	**757**	**110**	**2006**

ID	Intersection Name	Volume Type	Westbound			Northeastbound			Southwestbound			Southeastbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Main St/Empire Ave	Final Base	199	411	9	264	24	149	12	21	18	36	733	293	2169
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	4	0	10	0	0	0	0	0	0	8	6	28
		Future Total	**199**	**415**	**9**	**274**	**24**	**149**	**12**	**21**	**18**	**36**	**741**	**299**	**2197**

ID	Intersection Name	Volume Type	Eastbound			Northeastbound			Southwestbound			Northwestbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	Empire Ave/Oakley Rd	Final Base	44	44	137	102	357	12	94	350	62	83	31	51	1367
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	10	0	0	6	0	0	0	0	16
		Future Total	**44**	**44**	**137**	**102**	**367**	**12**	**94**	**356**	**62**	**83**	**31**	**51**	**1383**

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
23	Neroly Rd/Live Oak Ave	Final Base	97	76	20	81	70	0	2	178	163	11	146	125	969
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	6	0	8	4	0	0	0	0	0	0	14	32
		Future Total	**97**	**82**	**20**	**89**	**74**	**0**	**2**	**178**	**163**	**11**	**146**	**139**	**1001**

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
24	Live Oak Ave/Oakley Rd	Final Base	18	56	34	29	62	2	4	144	29	36	97	18	529
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
		Other	0	22	0	0	13	0	0	0	0	0	0	0	35
		Future Total	**18**	**78**	**34**	**29**	**75**	**2**	**4**	**144**	**29**	**36**	**97**	**18**	**564**

ID	Intersection Name	Volume Type	Northeastbound		Southwestbound		Southeastbound		Total Volume
			Left	Thru	Thru	Right	Left	Right	
29	Neroly Rd/Laurel Rd	Final Base	220	1267	690	63	75	140	2455
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0
		Future Total	**220**	**1267**	**690**	**63**	**75**	**140**	**2455**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
91	Main St & West Driveway	Final Base	0	1	1084	0	1	576	1662
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	28	0	72	0	0	14	114
		Future Total	**28**	**1**	**1156**	**0**	**1**	**590**	**1776**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
92	Main St & West Driveway	Final Base	0	0	1084	0	0	577	1661
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	0	0	0	0	0
		Other	14	14	0	72	24	0	124
		Future Total	**14**	**14**	**1084**	**72**	**24**	**577**	**1785**

Appendix D

Background Conditions LOS Analysis

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Village at Main TIS

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Scenario 2 Background Conditions AM

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Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bridgehead Rd/Main St	Signalized	HCM 2010	WB Thru	0.713	39.6	D
2	Live Oak Rd/Main St	Signalized	HCM 2010	WB Thru	0.730	26.8	C
3	Big Break Rd/Main St	Signalized	HCM 2010	NWB Left	0.586	13.5	B
5	Main St/Empire Ave	Signalized	HCM 2010	WB Left	0.624	31.9	C
14	Empire Ave/Oakley Rd	Signalized	HCM 2010	NEB Left	0.490	36.3	D
23	Neroly Rd/Live Oak Ave	All-way stop	HCM 2010	SB Thru	1.051	45.0	E
24	Live Oak Ave/Oakley Rd	All-way stop	HCM 2010	NB Thru	0.714	21.2	C
29	Neroly Rd/Laurel Rd	Signalized	HCM 2010	SWB Right	0.738	21.7	C
91	Main St & West Driveway	Two-way stop	HCM 2010	WB Thru	0.015	0.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Bridgehead Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	39.6
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.713

Intersection Setup

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	1	0	0	1	0	1
Pocket Length [ft]	250.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	100.00	235.00	100.00	495.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Base Volume Input [veh/h]	189	195	30	130	107	42	85	461	100	45	709	323
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	82	0	1	0	0	0	0	214	27	0	577	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	271	195	31	130	107	42	85	675	127	45	1286	323
Peak Hour Factor	0.9200	0.9200	0.9200	0.8100	0.8100	0.8100	0.8000	0.8000	0.8000	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	74	53	8	40	33	13	27	211	40	12	349	88
Total Analysis Volume [veh/h]	295	212	34	160	132	52	106	844	159	49	1398	351
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	1			0			0			4		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	7	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	21	0	0	35	0	11	30	0	11	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	4.5	0.0	3.0	4.5	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	0	0	0	12	0	0	12	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.5	0.0	2.0	4.5	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	20.0	0.0	0.0	0.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	6.50	6.50	4.00	6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	2.00	4.50	4.50
g_i, Effective Green Time [s]	16	16	9	9	9	6	33	33	3	30	30
g / C, Green / Cycle	0.20	0.20	0.11	0.11	0.11	0.08	0.42	0.42	0.04	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.17	0.14	0.08	0.08	0.03	0.06	0.28	0.28	0.03	0.40	0.23
s, saturation flow rate [veh/h]	1745	1787	1745	1822	1557	1745	1832	1732	1745	3489	1557
c, Capacity [veh/h]	356	365	192	200	171	136	766	724	63	1312	586
d1, Uniform Delay [s]	30.42	29.31	34.43	34.42	32.70	36.09	18.78	18.79	38.15	24.90	20.06
k, delay calibration	0.12	0.04	0.04	0.04	0.04	0.04	0.26	0.26	0.04	0.15	0.17
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.47	0.82	2.17	2.05	0.37	3.56	2.45	2.60	7.64	35.37	1.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.67	0.75	0.74	0.30	0.78	0.67	0.67	0.78	1.07	0.60
d, Delay for Lane Group [s/veh]	35.89	30.13	36.60	36.47	33.06	39.65	21.23	21.40	45.80	60.26	21.59
Lane Group LOS	D	C	D	D	C	D	C	C	D	F	C
Critical Lane Group	Yes	No	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.61	4.16	2.66	2.77	0.90	2.03	7.17	6.83	1.03	17.18	4.88
50th-Percentile Queue Length [ft/ln]	140.22	103.88	66.62	69.14	22.43	50.84	179.33	170.63	25.71	429.40	121.95
95th-Percentile Queue Length [veh/ln]	9.49	7.48	4.80	4.98	1.61	3.66	11.57	11.11	1.85	25.01	8.50
95th-Percentile Queue Length [ft/ln]	237.32	186.99	119.92	124.45	40.37	91.51	289.14	277.74	46.28	625.26	212.50

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	35.89	30.13	30.13	36.58	36.47	33.06	39.65	21.30	21.40	45.80	60.26	21.59
Movement LOS	D	C	C	D	D	C	D	C	C	D	F	C
d_A, Approach Delay [s/veh]	33.27			36.01			23.07			52.32		
Approach LOS	C			D			C			D		
d_I, Intersection Delay [s/veh]	39.57											
Intersection LOS	D											
Intersection V/C	0.713											

Sequence

Ring 1	1	2	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: Live Oak Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	26.8
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.730

Intersection Setup

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	160.00	255.00	100.00	100.00
Speed [mph]	40.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			No		

Volumes

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Base Volume Input [veh/h]	232	0	65	0	0	0	0	487	173	27	884	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.30	2.00	4.30	2.00	2.00	2.00	2.00	4.30	4.30	4.30	4.30	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	0	0	0	0	0	214	2	0	571	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	239	0	65	0	0	0	0	701	175	27	1455	0
Peak Hour Factor	0.6800	1.0000	0.6800	1.0000	1.0000	1.0000	1.0000	0.7900	0.7900	0.8400	0.8400	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	0	24	0	0	0	0	222	55	8	433	0
Total Analysis Volume [veh/h]	351	0	96	0	0	0	0	887	222	32	1732	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	4	0	0	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	8	0	0	0	8	0	0	10	0	5	10	0
Maximum Green [s]	20	0	0	0	20	0	0	30	0	20	30	0
Amber [s]	4.7	0.0	0.0	0.0	4.7	0.0	0.0	5.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	0.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0	3.0	4.0	0.0
Walk [s]	7	0	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	23	0	0	0	23	0	0	23	0	0	0	0
Rest In Walk	No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.7	0.0	0.0	0.0	3.7	0.0	0.0	4.0	0.0	4.0	4.0	0.0
Minimum Recall	No				No			No		No	No	
Maximum Recall	No				No			No		No	No	
Pedestrian Recall	No				No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	L	C	R	L	C	C
C, Cycle Length [s]	61	61	61	61	61	61	61	61	61
L, Total Lost Time per Cycle [s]	5.70	5.70	0.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	3.70	3.70	0.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	19	19	0	22	22	22	2	30	30
g / C, Green / Cycle	0.31	0.31	0.00	0.36	0.36	0.36	0.03	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.25	0.06	0.00	0.00	0.26	0.14	0.02	0.48	0.48
s, saturation flow rate [veh/h]	1381	1548	0	278	3468	1548	1381	1822	1822
c, Capacity [veh/h]	509	485	59	118	1250	558	125	900	900
d1, Uniform Delay [s]	20.96	15.28	0.00	0.00	16.73	14.53	30.39	14.84	14.84
k, delay calibration	0.26	0.15	0.15	0.50	0.15	0.15	0.11	0.40	0.40
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.96	0.28	0.00	0.00	1.08	0.65	1.06	19.01	19.01
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.69	0.20	0.00	0.00	0.71	0.40	0.26	0.96	0.96
d, Delay for Lane Group [s/veh]	24.92	15.57	0.00	0.00	17.80	15.19	31.45	33.84	33.84
Lane Group LOS	C	B	A	A	B	B	C	C	C
Critical Lane Group	Yes	No	No	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.69	0.88	0.00	0.00	4.49	1.97	0.47	12.96	12.96
50th-Percentile Queue Length [ft/ln]	117.15	22.06	0.00	0.00	112.33	49.36	11.76	324.04	324.04
95th-Percentile Queue Length [veh/ln]	8.24	1.59	0.00	0.00	7.97	3.55	0.85	18.87	18.87
95th-Percentile Queue Length [ft/ln]	205.90	39.71	0.00	0.00	199.24	88.85	21.17	471.64	471.64

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	24.92	0.00	15.57	0.00	0.00	0.00	0.00	17.80	15.19	31.45	33.84	33.84
Movement LOS	C		B	A	A	A	A	B	B	C	C	C
d_A, Approach Delay [s/veh]	22.91			0.00			17.28			33.80		
Approach LOS	C			A			B			C		
d_I, Intersection Delay [s/veh]	26.82											
Intersection LOS	C											
Intersection V/C	0.730											

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 3: Big Break Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	13.5
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.586

Intersection Setup

Name	Driveway			Big Break Rd			Main St			Main St		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	1	1	0	1
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00	230.00	100.00	135.00	240.00	100.00	205.00
Speed [mph]	25.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Big Break Rd			Main St			Main St		
Base Volume Input [veh/h]	40	10	21	92	25	153	53	667	83	87	369	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	8	0	0	0	571	8	0	214	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	10	21	100	25	153	53	1238	91	87	583	38
Peak Hour Factor	0.8500	0.8500	0.8500	0.7900	0.7900	0.7900	0.9300	0.9300	0.9300	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	3	6	32	8	48	14	333	24	25	166	11
Total Analysis Volume [veh/h]	47	12	25	127	32	194	57	1331	98	99	663	43
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			2			1		
Bicycle Volume [bicycles/h]	1			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	16	0	0	16	0	16	25	0	16	25	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	5.0	0.0	3.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	18	0	0	18	0	0	11	0	0	11	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	R	L	C	R
C, Cycle Length [s]	47	47	47	47	47	47	47	47	47	47
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	10	10	10	10	2	20	20	3	21	21
g / C, Green / Cycle	0.20	0.20	0.20	0.20	0.04	0.43	0.43	0.07	0.45	0.45
(v / s)_i Volume / Saturation Flow Rate	0.03	0.02	0.15	0.13	0.03	0.38	0.06	0.06	0.19	0.03
s, saturation flow rate [veh/h]	1346	1615	1079	1532	1742	3482	1554	1742	3482	1554
c, Capacity [veh/h]	162	327	356	310	79	1489	665	127	1587	708
d1, Uniform Delay [s]	23.55	15.36	18.72	17.19	22.24	12.51	8.25	21.48	8.63	7.19
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.36	0.06	0.33	0.78	4.67	0.80	0.04	3.80	0.07	0.01
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

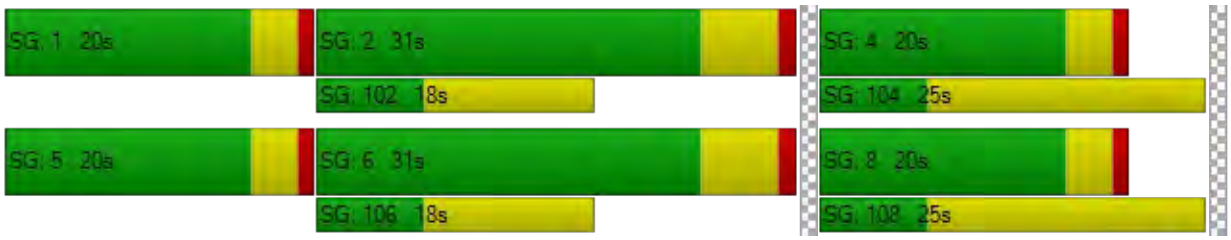
X, volume / capacity	0.29	0.11	0.45	0.63	0.73	0.89	0.15	0.78	0.42	0.06
d, Delay for Lane Group [s/veh]	23.92	15.42	19.05	17.96	26.91	13.31	8.28	25.28	8.70	7.20
Lane Group LOS	C	B	B	B	C	B	A	C	A	A
Critical Lane Group	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.51	0.30	1.50	1.74	0.63	4.42	0.42	1.04	1.48	0.16
50th-Percentile Queue Length [ft/ln]	12.68	7.49	37.45	43.61	15.74	110.39	10.49	25.89	37.00	4.02
95th-Percentile Queue Length [veh/ln]	0.91	0.54	2.70	3.14	1.13	7.86	0.76	1.86	2.66	0.29
95th-Percentile Queue Length [ft/ln]	22.83	13.49	67.41	78.50	28.33	196.54	18.88	46.61	66.61	7.24

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	23.92	15.42	15.42	19.05	19.05	17.96	26.91	13.31	8.28	25.28	8.70	7.20
Movement LOS	C	B	B	B	B	B	C	B	A	C	A	A
d_A, Approach Delay [s/veh]	20.17			18.45			13.50			10.66		
Approach LOS	C			B			B			B		
d_I, Intersection Delay [s/veh]	13.51											
Intersection LOS	B											
Intersection V/C	0.586											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Main St/Empire Ave

Control Type:	Signalized	Delay (sec / veh):	31.9
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.624

Intersection Setup

Name	Main St			Empire Ave			Charles Way			Main St		
Approach	Westbound			Northeastbound			Southwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	100.00	120.00	100.00	100.00	100.00	100.00	80.00	190.00	100.00	250.00
Speed [mph]	30.00			40.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Main St			Empire Ave			Charles Way			Main St		
Base Volume Input [veh/h]	194	522	8	315	35	141	24	50	18	16	380	221
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	80	561	0	26	0	76	0	0	0	0	212	17
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	274	1083	8	341	35	217	24	50	18	16	592	238
Peak Hour Factor	0.8000	0.8000	0.8000	0.7500	0.7500	0.7500	0.7900	0.7900	0.7900	0.8500	0.8500	0.8500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	86	338	3	114	12	72	8	16	6	5	174	70
Total Analysis Volume [veh/h]	343	1354	10	455	47	289	30	63	23	19	696	280
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	54.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss
Signal group	1	6	0	0	3	0	0	4	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	4	10	0	0	4	0	0	4	0	4	10	0
Maximum Green [s]	13	34	0	0	21	0	0	25	0	11	33	0
Amber [s]	3.0	4.8	0.0	0.0	4.4	0.0	0.0	3.6	0.0	3.0	4.4	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	16	40	0	0	26	0	0	30	0	14	38	0
Vehicle Extension [s]	2.5	3.5	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.5	3.5	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	0	0	0	20	0	0	24	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	3.8	0.0	0.0	3.4	0.0	0.0	2.6	0.0	1.0	3.4	0.0
Minimum Recall	No	Yes			No			No		No	Yes	
Maximum Recall	No	No			No			No		No	No	
Pedestrian Recall	No	No			No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	C	R	L	C	R
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	3.00	5.80	5.80	5.40	5.40	5.40	4.60	4.60	3.00	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	3.80	3.80	3.40	3.40	3.40	2.60	2.60	1.00	3.40	3.40
g_i, Effective Green Time [s]	13	30	30	15	15	15	5	5	1	18	18
g / C, Green / Cycle	0.19	0.42	0.42	0.22	0.22	0.22	0.07	0.07	0.02	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.19	0.37	0.37	0.13	0.03	0.18	0.05	0.01	0.01	0.20	0.18
s, saturation flow rate [veh/h]	1774	1863	1858	3445	1863	1572	1833	1583	1774	3547	1583
c, Capacity [veh/h]	329	788	786	751	406	343	132	114	32	927	414
d1, Uniform Delay [s]	28.51	18.37	18.39	24.66	21.96	26.22	31.75	30.58	34.13	23.77	23.21
k, delay calibration	0.47	0.26	0.26	0.04	0.04	0.07	0.04	0.04	0.08	0.13	0.13
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	59.32	6.92	7.01	0.29	0.05	3.50	2.53	0.32	12.55	1.51	2.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.04	0.87	0.87	0.61	0.12	0.84	0.70	0.20	0.60	0.75	0.68
d, Delay for Lane Group [s/veh]	87.83	25.29	25.40	24.95	22.00	29.72	34.28	30.90	46.67	25.28	25.55
Lane Group LOS	F	C	C	C	C	C	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	10.65	10.45	10.46	3.13	0.58	4.52	1.60	0.37	0.42	5.15	4.16
50th-Percentile Queue Length [ft/ln]	266.13	261.24	261.62	78.32	14.40	113.10	39.90	9.20	10.53	128.80	104.10
95th-Percentile Queue Length [veh/ln]	16.32	15.75	15.77	5.64	1.04	8.01	2.87	0.66	0.76	8.87	7.50
95th-Percentile Queue Length [ft/ln]	408.08	393.78	394.25	140.98	25.92	200.30	71.82	16.57	18.96	221.87	187.38

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	87.83	25.35	25.40	24.95	22.00	29.72	34.28	34.28	30.90	46.67	25.28	25.55
Movement LOS	F	C	C	C	C	C	C	C	C	D	C	C
d_A, Approach Delay [s/veh]	37.90			26.52			33.61			25.76		
Approach LOS	D			C			C			C		
d_I, Intersection Delay [s/veh]	31.92											
Intersection LOS	C											
Intersection V/C	0.624											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 14: Empire Ave/Oakley Rd

Control Type:	Signalized	Delay (sec / veh):	36.3
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.490

Intersection Setup

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Approach	Eastbound			Northeastbound			Southwestbound			Northwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	315.00	100.00	100.00	110.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			40.00			40.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Base Volume Input [veh/h]	61	16	92	182	430	6	27	362	67	21	15	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	0	37	21	79	0	0	71	26	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	84	16	129	203	509	6	27	433	93	21	15	23
Peak Hour Factor	0.8300	0.8300	0.8300	0.8000	0.8000	0.8000	0.6600	0.6600	0.6600	0.7000	0.7000	0.7000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	5	39	63	159	2	10	164	35	8	5	8
Total Analysis Volume [veh/h]	101	19	155	254	636	8	41	656	141	30	21	33
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			1			1			4		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	1.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split
Signal group	0	4	0	5	2	0	1	6	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	4	0	4	4	0	4	4	0	0	4	0
Maximum Green [s]	0	11	0	15	38	0	12	35	0	0	30	0
Amber [s]	0.0	4.1	0.0	3.0	4.4	0.0	3.0	4.4	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0	0.0	1.0	0.0
Split [s]	0	16	0	19	44	0	16	41	0	0	34	0
Vehicle Extension [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	4	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	23	0	0	26	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.1	0.0	2.0	4.4	0.0	2.0	4.4	0.0	0.0	2.0	0.0
Minimum Recall		No		No	No		No	No			No	
Maximum Recall		No		No	Yes		No	Yes			No	
Pedestrian Recall		No		No	No		No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	4.00	6.40	6.40	4.00	6.40	6.40	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	3.10	2.00	4.40	4.40	2.00	4.40	4.40	2.00	2.00
g_i, Effective Green Time [s]	11	11	11	15	71	71	3	59	59	5	5
g / C, Green / Cycle	0.10	0.10	0.10	0.14	0.65	0.65	0.03	0.54	0.54	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.03	0.03	0.10	0.14	0.17	0.17	0.02	0.22	0.22	0.03	0.02
s, saturation flow rate [veh/h]	1774	1801	1583	1774	1863	1854	1774	1863	1750	1810	1573
c, Capacity [veh/h]	176	178	157	242	1205	1199	53	1006	945	85	74
d1, Uniform Delay [s]	46.19	46.19	49.48	47.50	8.30	8.31	53.00	14.93	14.93	51.38	51.00
k, delay calibration	0.04	0.04	0.28	0.43	0.50	0.50	0.04	0.50	0.50	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.42	0.41	51.05	67.52	0.55	0.55	8.79	1.23	1.31	2.47	1.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

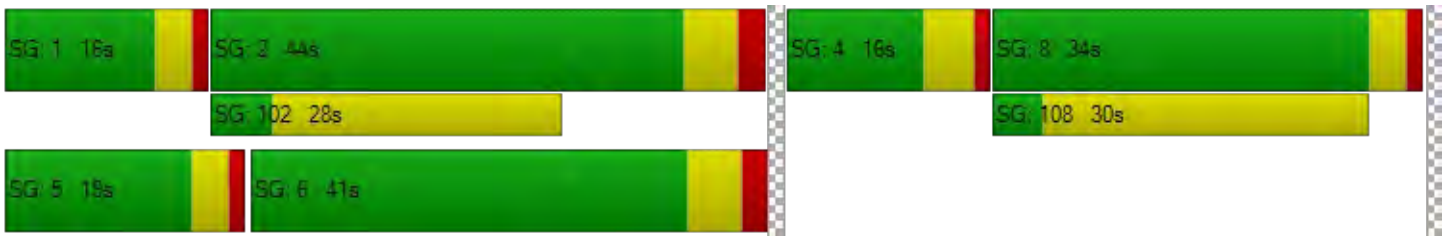
X, volume / capacity	0.34	0.34	0.99	1.05	0.27	0.27	0.78	0.41	0.41	0.60	0.44
d, Delay for Lane Group [s/veh]	46.61	46.60	100.53	115.02	8.85	8.85	61.79	16.16	16.24	53.84	52.54
Lane Group LOS	D	D	F	F	A	A	E	B	B	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.53	1.55	6.42	10.99	3.09	3.08	1.23	5.98	5.65	1.47	0.94
50th-Percentile Queue Length [ft/ln]	38.18	38.64	160.50	274.84	77.19	76.88	30.83	149.59	141.27	36.78	23.48
95th-Percentile Queue Length [veh/ln]	2.75	2.78	10.58	16.80	5.56	5.54	2.22	10.00	9.55	2.65	1.69
95th-Percentile Queue Length [ft/ln]	68.72	69.56	264.39	419.94	138.95	138.38	55.49	249.88	238.73	66.20	42.26

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	46.61	46.60	100.53	115.02	8.85	8.85	61.79	16.19	16.24	53.84	53.84	52.54
Movement LOS	D	D	F	F	A	A	E	B	B	D	D	D
d_A, Approach Delay [s/veh]	77.00			38.88			18.43			53.33		
Approach LOS	E			D			B			D		
d_I, Intersection Delay [s/veh]	36.28											
Intersection LOS	D											
Intersection V/C	0.490											

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 23: Neroly Rd/Live Oak Ave

Control Type:	All-way stop	Delay (sec / veh):	45.0
Analysis Method:	HCM 2010	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.051

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	155.00	100.00	100.00
Speed [mph]	50.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Base Volume Input [veh/h]	210	64	22	119	125	1	3	128	132	17	313	95
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	35	0	24	42	5	1	22	2	0	48	38
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	217	99	22	143	167	6	4	150	134	17	361	133
Peak Hour Factor	0.8900	0.8900	0.8900	0.7100	0.7100	0.7100	0.8800	0.8800	0.8800	0.8600	0.8600	0.8600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	28	6	50	59	2	1	43	38	5	105	39
Total Analysis Volume [veh/h]	244	111	25	201	235	8	5	170	152	20	420	155
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	430	444	374	395	425	395	418	437
Degree of Utilization, x	0.88	1.05	0.01	0.41	0.38	0.05	0.69	0.66

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	9.21	14.32	0.04	1.94	1.74	0.16	5.06	4.64
95th-Percentile Queue Length [ft]	230.25	358.09	1.01	48.49	43.50	3.99	126.41	115.92
Approach Delay [s/veh]	48.52	87.55	17.05			26.41		
Approach LOS	E	F	C			D		
Intersection Delay [s/veh]	45.02							
Intersection LOS	E							

Intersection Level Of Service Report
Intersection 24: Live Oak Ave/Oakley Rd

Control Type:	All-way stop	Delay (sec / veh):	21.2
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.714

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Base Volume Input [veh/h]	31	176	15	50	135	40	93	53	10	22	143	73
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	2	47	2	0	0	0	11	3	16	26	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	178	62	52	135	40	93	64	13	38	169	78
Peak Hour Factor	0.7200	0.7200	0.7200	0.7600	0.7600	0.7600	0.6600	0.6600	0.6600	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	62	22	17	44	13	35	24	5	11	48	22
Total Analysis Volume [veh/h]	46	247	86	68	178	53	141	97	20	43	192	89
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	531	511	490	518
Degree of Utilization, x	0.71	0.58	0.53	0.63

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	5.74	3.71	3.02	4.27
95th-Percentile Queue Length [ft]	143.53	92.72	75.46	106.74
Approach Delay [s/veh]	24.89	19.49	18.21	20.89
Approach LOS	C	C	C	C
Intersection Delay [s/veh]	21.21			
Intersection LOS	C			

Intersection Level Of Service Report
Intersection 29: Neroly Rd/Laurel Rd

Control Type:	Signalized	Delay (sec / veh):	21.7
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.738

Intersection Setup

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	0	0	0
Pocket Length [ft]	230.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		No	

Volumes

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Base Volume Input [veh/h]	232	625	975	183	43	192
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.80	2.80	2.80	2.80	2.80	2.80
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	321	870	84	31	15
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	234	946	1845	267	74	207
Peak Hour Factor	0.8900	0.8900	0.7800	0.7800	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	66	266	591	86	19	54
Total Analysis Volume [veh/h]	263	1063	2365	342	77	216
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	2	2	2	0	2	0
Maximum Green [s]	20	40	40	0	20	0
Amber [s]	3.0	4.0	4.0	0.0	3.0	0.0
All red [s]	1.0	2.0	2.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	2.0	4.0	4.0	0.0	2.0	0.0
Walk [s]	0	0	7	0	0	0
Pedestrian Clearance [s]	0	0	35	0	0	0
Rest In Walk						
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	8
Pedestrian Walk [s]	7
Pedestrian Clearance [s]	30

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	74	74	74	74	74	74
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	6.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	4.00	4.00	4.00	2.00	2.00
g_i, Effective Green Time [s]	8	52	40	40	12	12
g / C, Green / Cycle	0.11	0.70	0.54	0.54	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.08	0.21	0.51	0.52	0.04	0.14
s, saturation flow rate [veh/h]	3418	5035	3519	1723	1760	1571
c, Capacity [veh/h]	365	3524	1898	929	291	259
d1, Uniform Delay [s]	32.05	4.23	16.16	16.52	27.03	29.97
k, delay calibration	0.04	0.15	0.15	0.42	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.01	0.07	4.67	20.86	0.18	2.67
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.72	0.30	0.95	0.97	0.26	0.83
d, Delay for Lane Group [s/veh]	33.07	4.30	20.82	37.38	27.21	32.64
Lane Group LOS	C	A	C	D	C	C
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	2.16	1.19	12.13	16.53	1.15	3.72
50th-Percentile Queue Length [ft/ln]	54.04	29.66	303.13	413.17	28.68	92.89
95th-Percentile Queue Length [veh/ln]	3.89	2.14	17.84	23.19	2.06	6.69
95th-Percentile Queue Length [ft/ln]	97.28	53.39	445.90	579.85	51.62	167.20

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	33.07	4.30	24.75	37.38	27.21	32.64
Movement LOS	C	A	C	D	C	C
d_A, Approach Delay [s/veh]	10.00		26.34		31.21	
Approach LOS	B		C		C	
d_I, Intersection Delay [s/veh]	21.66					
Intersection LOS	C					
Intersection V/C	0.738					

Sequence

Ring 1	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 91: Main St & West Driveway

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

Intersection Setup

Name			Main St			
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Main St			
Base Volume Input [veh/h]	0	0	639	0	0	830
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	214	0	0	571
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	853	0	0	1401
Peak Hour Factor	1.0000	1.0000	0.8100	0.8100	0.9100	0.9100
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	263	0	0	385
Total Analysis Volume [veh/h]	0	0	1053	0	0	1540
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	57.46	12.26	0.00	0.00	10.48	0.00
Movement LOS	F	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	34.86		0.00		0.00	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Village at Main TIS

Vistro File: J:\...\Oakley Citywide Model - Village at Main TIS Version.vistro
Scenario 2 Background Conditions AM

Report File: J:\...\Background AM.pdf
12/12/2018

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Bridgehead Rd/Main St	271	195	31	130	107	42	85	675	127	45	1286	323	3317

ID	Intersection Name	Northbound		Southbound			Eastbound			Westbound			Total Volume
		Left	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Live Oak Rd/Main St	239	65	0	0	0	0	701	175	27	1455	0	2662

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Big Break Rd/Main St	40	10	21	100	25	153	53	1238	91	87	583	38	2439

ID	Intersection Name	Westbound			Northeastbound			Southwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Main St/Empire Ave	274	1083	8	341	35	217	24	50	18	16	592	238	2896

ID	Intersection Name	Eastbound			Northeastbound			Southwestbound			Northwestbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	Empire Ave/Oakley Rd	84	16	129	203	509	6	27	433	93	21	15	23	1559

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
23	Neroly Rd/Live Oak Ave	217	99	22	143	167	6	4	150	134	17	361	133	1453

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
24	Live Oak Ave/Oakley Rd	33	178	62	52	135	40	93	64	13	38	169	78	955

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
29	Neroly Rd/Laurel Rd	234	946	1845	267	74	207	3573

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
91	Main St & West Driveway	0	0	853	0	0	1401	2254

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Citywide Model

Vistro File: J:\...\Oakley Citywide Model - Village at Main TIS Version.vistro
Scenario 4 Background Conditions PM

Report File: J:\...\Background PM.pdf
12/12/2018

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bridgehead Rd/Main St	Signalized	HCM 2010	EB Right	0.875	118.5	F
2	Live Oak Rd/Main St	Signalized	HCM 2010	EB Thru	0.641	36.7	D
3	Big Break Rd/Main St	Signalized	HCM 2010	NWB Left	0.610	19.5	B
5	Main St/Empire Ave	Signalized	HCM 2010	SEB Thru	0.835	66.7	E
14	Empire Ave/Oakley Rd	Signalized	HCM 2010	EB Right	0.446	46.1	D
23	Neroly Rd/Live Oak Ave	All-way stop	HCM 2010	NB Thru	0.705	20.3	C
24	Live Oak Ave/Oakley Rd	All-way stop	HCM 2010	WB Thru	0.376	10.8	B
29	Neroly Rd/Laurel Rd	Signalized	HCM 2010	NEB Left	0.601	10.5	B
91	Main St & West Driveway	Two-way stop	HCM 2010	NB Right	0.014	18.2	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Bridgehead Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	118.5
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.875

Intersection Setup

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	1	0	0	1	0	1
Pocket Length [ft]	250.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	100.00	235.00	100.00	495.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Base Volume Input [veh/h]	157	73	42	344	171	29	82	732	160	31	461	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	56	0	0	0	0	0	0	708	102	1	459	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	213	73	42	344	171	29	82	1440	262	32	920	125
Peak Hour Factor	0.9400	0.9400	0.9400	0.9000	0.9000	0.9000	0.8700	0.8700	0.8700	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	57	19	11	96	48	8	24	414	75	9	256	35
Total Analysis Volume [veh/h]	227	78	45	382	190	32	94	1655	301	36	1022	139
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	2			0			0			0		
Bicycle Volume [bicycles/h]	1			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	7	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	21	0	0	35	0	11	30	0	11	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	4.5	0.0	3.0	4.5	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	0	0	0	12	0	0	12	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.5	0.0	2.0	4.5	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	20.0	0.0	0.0	0.0	0.0	20.0	20.0	0.0	20.0	20.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	78	78	78	78	78	78	78	78	78	78	78
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	6.50	6.50	4.00	6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	2.00	4.50	4.50
g_i, Effective Green Time [s]	12	12	15	15	15	5	30	30	2	27	27
g / C, Green / Cycle	0.16	0.16	0.19	0.19	0.19	0.07	0.39	0.39	0.03	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.13	0.07	0.16	0.16	0.02	0.05	0.53	0.56	0.02	0.20	0.09
s, saturation flow rate [veh/h]	1745	1712	1745	1801	1557	1745	1832	1736	1745	4991	1557
c, Capacity [veh/h]	276	271	333	344	297	122	706	669	49	1715	535
d1, Uniform Delay [s]	31.74	29.75	30.41	30.40	26.03	35.61	23.95	23.95	37.55	21.11	18.43
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.50	0.50	0.04	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.36	0.44	2.30	2.20	0.06	3.82	182.38	216.30	7.38	0.48	0.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.45	0.85	0.84	0.11	0.77	1.39	1.46	0.73	0.60	0.26
d, Delay for Lane Group [s/veh]	34.10	30.19	32.70	32.60	26.09	39.43	206.33	240.26	44.93	21.59	18.80
Lane Group LOS	C	C	C	C	C	D	F	F	D	C	B
Critical Lane Group	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.06	2.00	4.96	5.10	0.47	1.77	46.87	50.72	0.74	4.61	1.67
50th-Percentile Queue Length [ft/ln]	101.40	50.03	124.11	127.61	11.67	44.28	1171.75	1267.95	18.54	115.22	41.73
95th-Percentile Queue Length [veh/ln]	7.30	3.60	8.62	8.81	0.84	3.19	70.54	77.50	1.33	8.13	3.00
95th-Percentile Queue Length [ft/ln]	182.52	90.06	215.46	220.24	21.01	79.70	1763.45	1937.56	33.37	203.24	75.11

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	34.10	30.19	30.19	32.68	32.60	26.09	39.43	220.21	240.26	44.93	21.59	18.80
Movement LOS	C	C	C	C	C	C	D	F	F	D	C	B
d_A, Approach Delay [s/veh]	32.73			32.30			214.86			21.96		
Approach LOS	C			C			F			C		
d_I, Intersection Delay [s/veh]	118.48											
Intersection LOS	F											
Intersection V/C	0.875											

Sequence

Ring 1	1	2	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: Live Oak Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	36.7
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.641

Intersection Setup

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	160.00	255.00	100.00	100.00
Speed [mph]	40.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			No		

Volumes

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Base Volume Input [veh/h]	48	0	59	0	0	0	0	1049	88	27	597	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.30	2.00	4.30	2.00	2.00	2.00	2.00	4.30	4.30	4.30	4.30	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	0	0	0	0	703	5	0	456	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	0	59	0	0	0	0	1752	93	27	1053	0
Peak Hour Factor	0.8100	1.0000	0.8100	1.0000	1.0000	1.0000	0.8800	0.8800	0.8800	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	0	18	0	0	0	0	498	26	7	277	0
Total Analysis Volume [veh/h]	64	0	73	0	0	0	0	1991	106	28	1108	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	4	0	0	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	8	0	0	0	8	0	0	10	0	5	10	0
Maximum Green [s]	20	0	0	0	20	0	0	30	0	20	30	0
Amber [s]	4.7	0.0	0.0	0.0	4.7	0.0	0.0	5.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	0.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0	3.0	4.0	0.0
Walk [s]	7	0	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	23	0	0	0	23	0	0	23	0	0	0	0
Rest In Walk	No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.7	0.0	0.0	0.0	3.7	0.0	0.0	4.0	0.0	4.0	4.0	0.0
Minimum Recall	No				No			No		No	No	
Maximum Recall	No				No			No		No	No	
Pedestrian Recall	No				No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	L	C	R	L	C	C
C, Cycle Length [s]	57	57	57	57	57	57	57	57	57
L, Total Lost Time per Cycle [s]	5.70	5.70	0.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	3.70	3.70	0.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	7	7	0	30	30	30	2	38	38
g / C, Green / Cycle	0.13	0.13	0.00	0.53	0.53	0.53	0.03	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.05	0.05	0.00	0.00	0.57	0.07	0.02	0.30	0.30
s, saturation flow rate [veh/h]	1381	1548	0	507	3468	1516	1381	1822	1822
c, Capacity [veh/h]	262	197	63	297	1829	799	137	1216	1216
d1, Uniform Delay [s]	24.25	22.75	0.00	0.00	13.45	6.84	28.37	4.53	4.53
k, delay calibration	0.15	0.15	0.15	0.50	0.15	0.15	0.11	0.16	0.16
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.68	1.65	0.00	0.00	43.41	0.11	0.72	0.40	0.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.24	0.37	0.00	0.00	1.09	0.13	0.20	0.46	0.46
d, Delay for Lane Group [s/veh]	24.93	24.40	0.00	0.00	56.86	6.94	29.09	4.92	4.92
Lane Group LOS	C	C	A	A	F	A	C	A	A
Critical Lane Group	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.78	0.89	0.00	0.00	18.49	0.46	0.37	1.47	1.47
50th-Percentile Queue Length [ft/ln]	19.51	22.24	0.00	0.00	462.30	11.59	9.33	36.65	36.65
95th-Percentile Queue Length [veh/ln]	1.40	1.60	0.00	0.00	27.19	0.83	0.67	2.64	2.64
95th-Percentile Queue Length [ft/ln]	35.11	40.03	0.00	0.00	679.82	20.87	16.80	65.97	65.97

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	24.93	0.00	24.40	0.00	0.00	0.00	0.00	56.86	6.94	29.09	4.92	4.92
Movement LOS	C		C	A	A	A	A	F	A	C	A	A
d_A, Approach Delay [s/veh]	24.65			0.00			54.34			5.52		
Approach LOS	C			A			D			A		
d_I, Intersection Delay [s/veh]	36.67											
Intersection LOS	D											
Intersection V/C	0.641											

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 3: Big Break Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	19.5
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.610

Intersection Setup

Name	Driveway			Big Break Rd			Main St			Main St		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	1	1	0	1
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00	230.00	100.00	135.00	240.00	100.00	205.00
Speed [mph]	25.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Big Break Rd			Main St			Main St		
Base Volume Input [veh/h]	46	42	82	70	24	86	64	454	67	190	733	110
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	6	0	0	0	456	5	0	703	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	42	82	76	24	86	64	910	72	190	1436	110
Peak Hour Factor	0.7700	0.7700	0.7700	0.8300	0.8300	0.8300	0.9500	0.9500	0.9500	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	14	27	23	7	26	17	239	19	49	370	28
Total Analysis Volume [veh/h]	60	55	106	92	29	104	67	958	76	196	1480	113
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	1			0			5			1		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	16	0	0	16	0	16	25	0	16	25	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	5.0	0.0	3.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	18	0	0	18	0	0	11	0	0	11	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	R	L	C	R
C, Cycle Length [s]	58	58	58	58	58	58	58	58	58	58
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	16	16	16	16	3	20	20	8	25	25
g / C, Green / Cycle	0.28	0.28	0.28	0.28	0.05	0.34	0.34	0.14	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.04	0.10	0.15	0.07	0.04	0.28	0.05	0.11	0.43	0.07
s, saturation flow rate [veh/h]	1349	1632	826	1553	1742	3482	1554	1742	3482	1554
c, Capacity [veh/h]	188	450	337	428	88	1188	530	247	1504	672
d1, Uniform Delay [s]	27.53	16.87	20.78	16.30	27.18	17.37	13.24	24.08	16.27	10.09
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.36	0.18	0.24	0.11	4.92	0.50	0.05	2.21	3.83	0.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

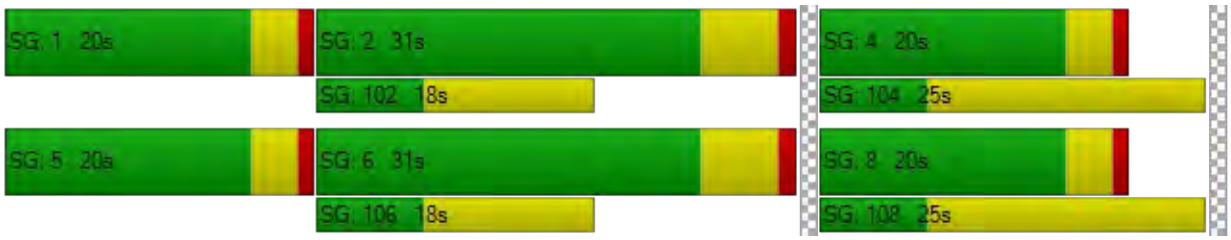
X, volume / capacity	0.32	0.36	0.36	0.24	0.76	0.81	0.14	0.79	0.98	0.17
d, Delay for Lane Group [s/veh]	27.89	17.05	21.02	16.41	32.10	17.87	13.28	26.29	20.10	10.13
Lane Group LOS	C	B	C	B	C	B	B	C	C	B
Critical Lane Group	No	No	Yes	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.81	1.63	1.41	0.99	0.94	4.73	0.57	2.42	7.96	0.69
50th-Percentile Queue Length [ft/ln]	20.34	40.66	35.17	24.72	23.44	118.22	14.21	60.41	199.06	17.16
95th-Percentile Queue Length [veh/ln]	1.46	2.93	2.53	1.78	1.69	8.29	1.02	4.35	12.59	1.24
95th-Percentile Queue Length [ft/ln]	36.61	73.18	63.31	44.49	42.19	207.37	25.58	108.75	314.75	30.88

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	27.89	17.05	17.05	21.02	21.02	16.41	32.10	17.87	13.28	26.29	20.10	10.13
Movement LOS	C	B	B	C	C	B	C	B	B	C	C	B
d_A, Approach Delay [s/veh]	19.99			18.89			18.42			20.15		
Approach LOS	B			B			B			C		
d_I, Intersection Delay [s/veh]	19.48											
Intersection LOS	B											
Intersection V/C	0.610											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Main St/Empire Ave

Control Type:	Signalized	Delay (sec / veh):	66.7
Analysis Method:	HCM 2010	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.835

Intersection Setup

Name	Main St			Empire Ave			Charles Way			Main St		
Approach	Westbound			Northeastbound			Southwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	100.00	120.00	100.00	100.00	100.00	100.00	80.00	190.00	100.00	250.00
Speed [mph]	30.00			40.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Main St			Empire Ave			Charles Way			Main St		
Base Volume Input [veh/h]	199	411	9	264	24	149	12	21	18	36	733	293
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	85	446	0	22	0	106	0	0	0	0	696	19
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	284	857	9	286	24	255	12	21	18	36	1429	312
Peak Hour Factor	0.9800	0.9800	0.9800	0.7900	0.7900	0.7900	0.5500	0.5500	0.5500	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	72	219	2	91	8	81	5	10	8	10	384	84
Total Analysis Volume [veh/h]	290	874	9	362	30	323	22	38	33	39	1537	335
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	54.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss
Signal group	1	6	0	0	3	0	0	4	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	4	10	0	0	4	0	0	4	0	4	10	0
Maximum Green [s]	17	37	0	0	17	0	0	25	0	12	33	0
Amber [s]	3.0	4.8	0.0	0.0	4.4	0.0	0.0	3.6	0.0	3.0	4.4	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	20	43	0	0	22	0	0	30	0	15	38	0
Vehicle Extension [s]	2.5	3.5	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.5	3.5	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	0	0	0	20	0	0	24	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	3.8	0.0	0.0	3.4	0.0	0.0	2.6	0.0	1.0	3.4	0.0
Minimum Recall	No	Yes			No			No		No	Yes	
Maximum Recall	No	No			No			No		No	No	
Pedestrian Recall	No	No			No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	C	R	L	C	R
C, Cycle Length [s]	89	89	89	89	89	89	89	89	89	89	89
L, Total Lost Time per Cycle [s]	3.00	5.80	5.80	5.40	5.40	5.40	4.60	4.60	3.00	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	3.80	3.80	3.40	3.40	3.40	2.60	2.60	1.00	3.40	3.40
g_i, Effective Green Time [s]	16	46	46	17	17	17	5	5	3	33	33
g / C, Green / Cycle	0.18	0.52	0.52	0.19	0.19	0.19	0.05	0.05	0.03	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.16	0.24	0.24	0.11	0.02	0.21	0.03	0.02	0.02	0.43	0.21
s, saturation flow rate [veh/h]	1774	1863	1856	3445	1863	1571	1829	1583	1774	3547	1583
c, Capacity [veh/h]	326	967	964	654	354	298	95	82	51	1308	584
d1, Uniform Delay [s]	35.63	13.56	13.56	32.81	29.84	36.24	41.59	41.08	43.15	28.24	22.61
k, delay calibration	0.34	0.15	0.15	0.04	0.04	0.41	0.04	0.04	0.08	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	21.32	0.46	0.46	0.27	0.04	71.01	2.58	1.18	15.78	81.60	1.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.89	0.46	0.46	0.55	0.08	1.08	0.63	0.40	0.76	1.18	0.57
d, Delay for Lane Group [s/veh]	56.96	14.02	14.02	33.08	29.88	107.25	44.16	42.25	58.93	109.84	23.81
Lane Group LOS	E	B	B	C	C	F	D	D	E	F	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	7.96	5.36	5.34	3.41	0.51	12.06	1.36	0.73	1.07	28.04	5.62
50th-Percentile Queue Length [ft/ln]	198.90	133.96	133.52	85.33	12.86	301.44	34.10	18.27	26.77	701.08	140.43
95th-Percentile Queue Length [veh/ln]	12.58	9.15	9.13	6.14	0.93	18.47	2.45	1.32	1.93	40.76	9.50
95th-Percentile Queue Length [ft/ln]	314.55	228.87	228.27	153.59	23.15	461.71	61.37	32.89	48.18	1019.00	237.60

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.96	14.02	14.02	33.08	29.88	107.25	44.16	44.16	42.25	58.93	109.84	23.81
Movement LOS	E	B	B	C	C	F	D	D	D	E	F	C
d_A, Approach Delay [s/veh]	24.63			66.45			43.48			93.72		
Approach LOS	C			E			D			F		
d_I, Intersection Delay [s/veh]	66.69											
Intersection LOS	E											
Intersection V/C	0.835											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 14: Empire Ave/Oakley Rd

Control Type:	Signalized	Delay (sec / veh):	46.1
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.446

Intersection Setup

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Approach	Eastbound			Northeastbound			Southwestbound			Northwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	315.00	100.00	100.00	110.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			40.00			40.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Base Volume Input [veh/h]	44	44	137	102	357	12	94	350	62	83	31	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	39	0	62	16	89	0	0	67	37	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	83	44	199	118	446	12	94	417	99	83	31	51
Peak Hour Factor	0.8900	0.8900	0.8900	0.8600	0.8600	0.8600	0.9300	0.9300	0.9300	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	12	56	34	130	3	25	112	27	24	9	14
Total Analysis Volume [veh/h]	93	49	224	137	519	14	101	448	106	94	35	58
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	2			0			6			2		
Bicycle Volume [bicycles/h]	0			1			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	1.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split
Signal group	0	4	0	5	2	0	1	6	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	4	0	4	4	0	4	4	0	0	4	0
Maximum Green [s]	0	13	0	13	38	0	10	35	0	0	30	0
Amber [s]	0.0	4.1	0.0	3.0	4.4	0.0	3.0	4.4	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0	0.0	1.0	0.0
Split [s]	0	18	0	17	44	0	14	41	0	0	34	0
Vehicle Extension [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	4	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	23	0	0	26	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.1	0.0	2.0	4.4	0.0	2.0	4.4	0.0	0.0	2.0	0.0
Minimum Recall		No		No	No		No	No			No	
Maximum Recall		No		No	Yes		No	Yes			No	
Pedestrian Recall		No		No	No		No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	4.00	6.40	6.40	4.00	6.40	6.40	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	3.10	2.00	4.40	4.40	2.00	4.40	4.40	2.00	2.00
g_i, Effective Green Time [s]	13	13	13	10	58	58	8	56	56	12	12
g / C, Green / Cycle	0.12	0.12	0.12	0.09	0.53	0.53	0.07	0.51	0.51	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.04	0.04	0.14	0.08	0.14	0.14	0.06	0.15	0.16	0.07	0.04
s, saturation flow rate [veh/h]	1774	1833	1583	1774	1863	1843	1774	1863	1724	1797	1556
c, Capacity [veh/h]	208	215	186	165	984	974	126	943	873	191	165
d1, Uniform Delay [s]	44.62	44.61	48.55	49.03	14.29	14.29	50.32	15.82	15.87	47.36	45.66
k, delay calibration	0.04	0.04	0.47	0.10	0.50	0.50	0.06	0.50	0.50	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.35	0.34	130.65	9.57	0.68	0.69	6.45	0.83	0.91	1.57	0.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.34	0.34	1.21	0.83	0.27	0.27	0.80	0.30	0.31	0.68	0.35
d, Delay for Lane Group [s/veh]	44.97	44.95	179.21	58.59	14.97	14.98	56.77	16.65	16.79	48.93	46.13
Lane Group LOS	D	D	F	E	B	B	E	B	B	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.76	1.81	11.76	4.06	3.64	3.62	2.91	4.17	3.95	3.57	1.54
50th-Percentile Queue Length [ft/ln]	43.92	45.28	293.96	101.44	91.06	90.39	72.71	104.22	98.86	89.36	38.38
95th-Percentile Queue Length [veh/ln]	3.16	3.26	18.71	7.30	6.56	6.51	5.24	7.50	7.12	6.43	2.76
95th-Percentile Queue Length [ft/ln]	79.05	81.50	467.66	182.60	163.91	162.70	130.88	187.60	177.95	160.85	69.08

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.97	44.95	179.21	58.59	14.98	14.98	56.77	16.70	16.79	48.93	48.93	46.13
Movement LOS	D	D	F	E	B	B	E	B	B	D	D	D
d_A, Approach Delay [s/veh]	127.12			23.90			22.89			48.06		
Approach LOS	F			C			C			D		
d_I, Intersection Delay [s/veh]	46.07											
Intersection LOS	D											
Intersection V/C	0.446											

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 23: Neroly Rd/Live Oak Ave

Control Type:	All-way stop	Delay (sec / veh):	20.3
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.705

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	155.00	100.00	100.00
Speed [mph]	50.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Base Volume Input [veh/h]	97	76	20	81	70	0	2	178	163	11	146	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	31	0	25	29	4	6	65	10	0	41	67
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	102	107	20	106	99	4	8	243	173	11	187	192
Peak Hour Factor	0.7000	0.7000	0.7000	0.7900	0.7900	0.7900	0.8700	0.8700	0.8700	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	38	7	34	31	1	2	70	50	3	53	55
Total Analysis Volume [veh/h]	146	153	29	134	125	5	9	279	199	13	213	218
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	466	451	423	450	487	418	446	490
Degree of Utilization, x	0.70	0.59	0.02	0.53	0.49	0.03	0.48	0.44

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	5.44	3.67	0.07	3.05	2.66	0.10	2.53	2.25
95th-Percentile Queue Length [ft]	135.94	91.66	1.63	76.16	66.49	2.40	63.25	56.37
Approach Delay [s/veh]	27.16	21.67	18.07			16.72		
Approach LOS	D	C	C			C		
Intersection Delay [s/veh]	20.26							
Intersection LOS	C							

Intersection Level Of Service Report
Intersection 24: Live Oak Ave/Oakley Rd

Control Type:	All-way stop	Delay (sec / veh):	10.8
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.376

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Base Volume Input [veh/h]	18	56	34	29	62	2	4	144	29	36	97	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	1	65	5	0	0	0	30	7	30	19	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	57	99	34	62	2	4	174	36	66	116	21
Peak Hour Factor	0.8400	0.8400	0.8400	0.8000	0.8000	0.8000	0.8900	0.8900	0.8900	0.7900	0.7900	0.7900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	17	29	11	19	1	1	49	10	21	37	7
Total Analysis Volume [veh/h]	29	68	118	43	78	3	4	196	40	84	147	27
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	695	633	695	686
Degree of Utilization, x	0.31	0.20	0.35	0.38

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.31	0.72	1.54	1.75
95th-Percentile Queue Length [ft]	32.86	18.06	38.54	43.79
Approach Delay [s/veh]	10.48	10.06	10.89	11.38
Approach LOS	B	B	B	B
Intersection Delay [s/veh]	10.81			
Intersection LOS	B			

Intersection Level Of Service Report
Intersection 29: Neroly Rd/Laurel Rd

Control Type:	Signalized	Delay (sec / veh):	10.5
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.601

Intersection Setup

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	0	0	0
Pocket Length [ft]	230.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		No	

Volumes

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Base Volume Input [veh/h]	220	1267	690	63	75	140
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.80	2.80	2.80	2.80	2.80	2.80
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	1058	705	94	80	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	233	2325	1395	157	155	150
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	612	367	41	47	45
Total Analysis Volume [veh/h]	245	2447	1468	165	187	181
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	2	2	2	0	2	0
Maximum Green [s]	20	40	40	0	20	0
Amber [s]	3.0	4.0	4.0	0.0	3.0	0.0
All red [s]	1.0	2.0	2.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	2.0	4.0	4.0	0.0	2.0	0.0
Walk [s]	0	0	7	0	0	0
Pedestrian Clearance [s]	0	0	35	0	0	0
Rest In Walk						
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	8
Pedestrian Walk [s]	7
Pedestrian Clearance [s]	30

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	54	54	54	54	54	54
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	6.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	4.00	4.00	4.00	2.00	2.00
g_i, Effective Green Time [s]	6	35	25	25	8	8
g / C, Green / Cycle	0.11	0.66	0.48	0.48	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.07	0.49	0.31	0.31	0.11	0.12
s, saturation flow rate [veh/h]	3418	5035	3519	1747	1760	1571
c, Capacity [veh/h]	373	3318	1673	830	272	243
d1, Uniform Delay [s]	22.92	6.06	10.69	10.72	21.45	21.67
k, delay calibration	0.04	0.15	0.15	0.15	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.74	0.47	0.62	1.26	1.16	1.72
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.74	0.65	0.66	0.69	0.75
d, Delay for Lane Group [s/veh]	23.66	6.53	11.30	11.98	22.61	23.39
Lane Group LOS	C	A	B	B	C	C
Critical Lane Group	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.32	2.53	3.48	3.64	2.07	2.05
50th-Percentile Queue Length [ft/ln]	32.88	63.29	87.02	90.99	51.68	51.28
95th-Percentile Queue Length [veh/ln]	2.37	4.56	6.27	6.55	3.72	3.69
95th-Percentile Queue Length [ft/ln]	59.19	113.92	156.64	163.78	93.02	92.31

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	23.66	6.53	11.48	11.98	22.61	23.39
Movement LOS	C	A	B	B	C	C
d_A, Approach Delay [s/veh]	8.09		11.53		22.99	
Approach LOS	A		B		C	
d_I, Intersection Delay [s/veh]	10.46					
Intersection LOS	B					
Intersection V/C	0.601					

Sequence

Ring 1	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 91: Main St & West Driveway

Control Type:	Two-way stop	Delay (sec / veh):	18.2
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name			Main St			
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Main St			
Base Volume Input [veh/h]	0	1	1084	0	1	576
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	703	0	0	456
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	1787	0	1	1032
Peak Hour Factor	1.0000	0.2500	0.9800	1.0000	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	456	0	0	277
Total Analysis Volume [veh/h]	0	4	1823	0	1	1110
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.02	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	131.18	18.21	0.00	0.00	15.88	0.00
Movement LOS	F	C	A	A	C	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.01	0.00
95th-Percentile Queue Length [ft/ln]	1.10	1.10	0.00	0.00	0.23	0.00
d_A, Approach Delay [s/veh]	18.21		0.00		0.01	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.03					
Intersection LOS	C					

Citywide Model

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Scenario 4 Background Conditions PM

Report File: J:\...\Background PM.pdf
12/12/2018

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Bridgehead Rd/Main St	213	73	42	344	171	29	82	1440	262	32	920	125	3733

ID	Intersection Name	Northbound		Southbound			Eastbound			Westbound			Total Volume
		Left	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Live Oak Rd/Main St	52	59	0	0	0	0	1752	93	27	1053	0	3036

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Big Break Rd/Main St	46	42	82	76	24	86	64	910	72	190	1436	110	3138

ID	Intersection Name	Westbound			Northeastbound			Southwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Main St/Empire Ave	284	857	9	286	24	255	12	21	18	36	1429	312	3543

ID	Intersection Name	Eastbound			Northeastbound			Southwestbound			Northwestbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	Empire Ave/Oakley Rd	83	44	199	118	446	12	94	417	99	83	31	51	1677

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
23	Neroly Rd/Live Oak Ave	102	107	20	106	99	4	8	243	173	11	187	192	1252

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
24	Live Oak Ave/Oakley Rd	24	57	99	34	62	2	4	174	36	66	116	21	695

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
29	Neroly Rd/Laurel Rd	233	2325	1395	157	155	150	4415

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
91	Main St & West Driveway	0	1	1787	0	1	1032	2821

Appendix E

Background plus Project Conditions LOS Analysis

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Village at Main TIS

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Scenario 7 Background plus Project AM

Report File: J:\...\Background plus Project AM.pdf
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Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bridgehead Rd/Main St	Signalized	HCM 2010	WB Thru	0.721	43.3	D
2	Live Oak Rd/Main St	Signalized	HCM 2010	WB Thru	0.744	29.9	C
3	Big Break Rd/Main St	Signalized	HCM 2010	NWB Left	0.589	13.5	B
14	Empire Ave/Oakley Rd	Signalized	HCM 2010	NEB Left	0.494	36.1	D
23	Neroly Rd/Live Oak Ave	All-way stop	HCM 2010	SB Thru	1.118	51.6	F
24	Live Oak Ave/Oakley Rd	All-way stop	HCM 2010	NB Thru	0.753	23.6	C
29	Neroly Rd/Laurel Rd	Signalized	HCM 2010	SWB Right	0.747	23.1	C
91	Main St & West Driveway	Two-way stop	HCM 2010	NB Left	0.820	169.3	F
92	Main St & East Driveway	Two-way stop	HCM 2010	NB Left	0.340	79.3	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Bridgehead Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	43.3
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.721

Intersection Setup

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	1	0	0	1	0	1
Pocket Length [ft]	250.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	100.00	235.00	100.00	495.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Base Volume Input [veh/h]	189	195	30	130	107	42	85	461	100	45	709	323
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	82	0	1	0	0	0	0	214	27	0	577	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	15	0	0	29	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	271	195	31	130	107	42	85	690	127	45	1315	323
Peak Hour Factor	0.9200	0.9200	0.9200	0.8100	0.8100	0.8100	0.8000	0.8000	0.8000	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	74	53	8	40	33	13	27	216	40	12	357	88
Total Analysis Volume [veh/h]	295	212	34	160	132	52	106	863	159	49	1429	351
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	1			0			0			4		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	7	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	21	0	0	35	0	11	30	0	11	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	4.5	0.0	3.0	4.5	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	0	0	0	12	0	0	12	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.5	0.0	2.0	4.5	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	20.0	0.0	0.0	0.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	6.50	6.50	4.00	6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	2.00	4.50	4.50
g_i, Effective Green Time [s]	16	16	9	9	9	6	33	33	3	30	30
g / C, Green / Cycle	0.20	0.20	0.11	0.11	0.11	0.08	0.42	0.42	0.04	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.17	0.14	0.08	0.08	0.03	0.06	0.29	0.29	0.03	0.41	0.23
s, saturation flow rate [veh/h]	1745	1787	1745	1822	1557	1745	1832	1734	1745	3489	1557
c, Capacity [veh/h]	356	365	192	200	171	136	766	725	63	1312	586
d1, Uniform Delay [s]	30.42	29.31	34.43	34.42	32.70	36.09	18.92	18.93	38.15	24.90	20.06
k, delay calibration	0.12	0.04	0.04	0.04	0.04	0.04	0.27	0.27	0.04	0.15	0.17
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.47	0.82	2.17	2.05	0.37	3.56	2.67	2.84	7.64	44.89	1.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.67	0.75	0.74	0.30	0.78	0.68	0.69	0.78	1.09	0.60
d, Delay for Lane Group [s/veh]	35.89	30.13	36.60	36.47	33.06	39.65	21.58	21.77	45.80	69.78	21.59
Lane Group LOS	D	C	D	D	C	D	C	C	D	F	C
Critical Lane Group	Yes	No	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.61	4.16	2.66	2.77	0.90	2.03	7.39	7.04	1.03	18.91	4.88
50th-Percentile Queue Length [ft/ln]	140.22	103.88	66.62	69.14	22.43	50.84	184.76	176.09	25.71	472.75	121.95
95th-Percentile Queue Length [veh/ln]	9.49	7.48	4.80	4.98	1.61	3.66	11.85	11.40	1.85	27.56	8.50
95th-Percentile Queue Length [ft/ln]	237.32	186.99	119.92	124.45	40.37	91.51	296.21	284.90	46.28	688.98	212.50

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	35.89	30.13	30.13	36.58	36.47	33.06	39.65	21.66	21.77	45.80	69.78	21.59
Movement LOS	D	C	C	D	D	C	D	C	C	D	F	C
d_A, Approach Delay [s/veh]	33.27			36.01			23.36			59.89		
Approach LOS	C			D			C			E		
d_I, Intersection Delay [s/veh]	43.28											
Intersection LOS	D											
Intersection V/C	0.721											

Sequence

Ring 1	1	2	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: Live Oak Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	29.9
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.744

Intersection Setup

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	160.00	255.00	100.00	100.00
Speed [mph]	40.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			No		

Volumes

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Base Volume Input [veh/h]	232	0	65	0	0	0	0	487	173	27	884	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.30	2.00	4.30	2.00	2.00	2.00	2.00	4.30	4.30	4.30	4.30	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	0	0	0	0	0	214	2	0	571	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	7	0	0	0	0	15	0	20	44	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	239	0	72	0	0	0	0	716	175	47	1499	0
Peak Hour Factor	0.6800	1.0000	0.6800	1.0000	1.0000	1.0000	1.0000	0.7900	0.7900	0.8400	0.8400	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	0	26	0	0	0	0	227	55	14	446	0
Total Analysis Volume [veh/h]	351	0	106	0	0	0	0	906	222	56	1785	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	4	0	0	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	8	0	0	0	8	0	0	10	0	5	10	0
Maximum Green [s]	20	0	0	0	20	0	0	30	0	20	30	0
Amber [s]	4.7	0.0	0.0	0.0	4.7	0.0	0.0	5.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	0.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0	3.0	4.0	0.0
Walk [s]	7	0	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	23	0	0	0	23	0	0	23	0	0	0	0
Rest In Walk	No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.7	0.0	0.0	0.0	3.7	0.0	0.0	4.0	0.0	4.0	4.0	0.0
Minimum Recall	No				No			No		No	No	
Maximum Recall	No				No			No		No	No	
Pedestrian Recall	No				No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	L	C	R	L	C	C
C, Cycle Length [s]	62	62	62	62	62	62	62	62	62
L, Total Lost Time per Cycle [s]	5.70	5.70	0.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	3.70	3.70	0.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	19	19	0	22	22	22	4	31	31
g / C, Green / Cycle	0.31	0.31	0.00	0.35	0.35	0.35	0.06	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.25	0.07	0.00	0.00	0.26	0.14	0.04	0.49	0.49
s, saturation flow rate [veh/h]	1381	1548	0	265	3468	1548	1381	1822	1822
c, Capacity [veh/h]	505	484	58	116	1202	536	153	910	910
d1, Uniform Delay [s]	21.52	15.81	0.00	0.00	18.02	15.54	30.60	15.28	15.28
k, delay calibration	0.27	0.15	0.15	0.50	0.15	0.15	0.11	0.43	0.43
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.26	0.32	0.00	0.00	1.40	0.73	1.47	23.28	23.28
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.69	0.22	0.00	0.00	0.75	0.41	0.37	0.98	0.98
d, Delay for Lane Group [s/veh]	25.78	16.13	0.00	0.00	19.41	16.27	32.07	38.56	38.56
Lane Group LOS	C	B	A	A	B	B	C	D	D
Critical Lane Group	Yes	No	No	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.86	1.01	0.00	0.00	4.97	2.11	0.83	14.76	14.76
50th-Percentile Queue Length [ft/ln]	121.48	25.35	0.00	0.00	124.14	52.72	20.87	369.11	369.11
95th-Percentile Queue Length [veh/ln]	8.47	1.83	0.00	0.00	8.62	3.80	1.50	21.07	21.07
95th-Percentile Queue Length [ft/ln]	211.85	45.64	0.00	0.00	215.51	94.89	37.57	526.65	526.65

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	25.78	0.00	16.13	0.00	0.00	0.00	0.00	19.41	16.27	32.07	38.56	38.56
Movement LOS	C		B	A	A	A	A	B	B	C	D	D
d_A, Approach Delay [s/veh]	23.54			0.00			18.79			38.37		
Approach LOS	C			A			B			D		
d_I, Intersection Delay [s/veh]	29.94											
Intersection LOS	C											
Intersection V/C	0.744											

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 3: Big Break Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	13.5
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.589

Intersection Setup

Name	Driveway			Big Break Rd			Main St			Main St		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	1	1	0	1
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00	230.00	100.00	135.00	240.00	100.00	205.00
Speed [mph]	25.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Big Break Rd			Main St			Main St		
Base Volume Input [veh/h]	40	10	21	92	25	153	53	667	83	87	369	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	8	0	0	0	571	8	0	214	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	7	0	0	0	0	0	21	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	10	21	100	32	153	53	1238	91	87	604	38
Peak Hour Factor	0.8500	0.8500	0.8500	0.7900	0.7900	0.7900	0.9300	0.9300	0.9300	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	3	6	32	10	48	14	333	24	25	172	11
Total Analysis Volume [veh/h]	47	12	25	127	41	194	57	1331	98	99	686	43
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			2			1		
Bicycle Volume [bicycles/h]	1			1			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	16	0	0	16	0	16	25	0	16	25	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	5.0	0.0	3.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	18	0	0	18	0	0	11	0	0	11	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	R	L	C	R
C, Cycle Length [s]	47	47	47	47	47	47	47	47	47	47
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	10	10	10	10	2	20	20	3	22	22
g / C, Green / Cycle	0.20	0.20	0.20	0.20	0.04	0.43	0.43	0.07	0.45	0.45
(v / s)_i Volume / Saturation Flow Rate	0.04	0.02	0.15	0.13	0.03	0.38	0.06	0.06	0.20	0.03
s, saturation flow rate [veh/h]	1335	1615	1121	1532	1742	3482	1554	1742	3482	1554
c, Capacity [veh/h]	162	328	361	311	79	1489	665	128	1587	709
d1, Uniform Delay [s]	23.61	15.37	18.63	17.20	22.29	12.54	8.27	21.53	8.72	7.20
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.36	0.06	0.35	0.77	4.68	0.80	0.04	3.78	0.07	0.01
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

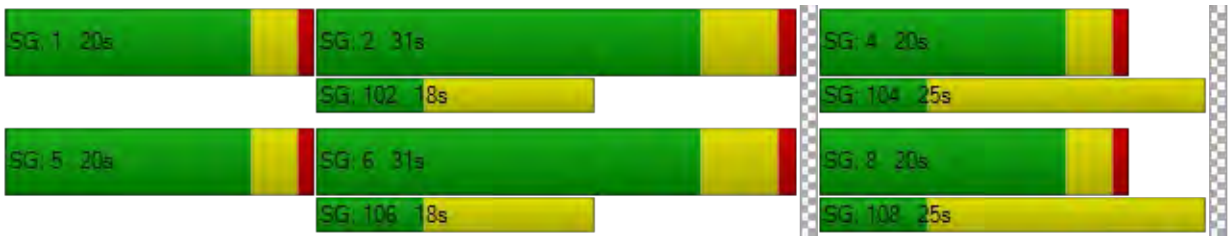
X, volume / capacity	0.29	0.11	0.47	0.62	0.73	0.89	0.15	0.78	0.43	0.06
d, Delay for Lane Group [s/veh]	23.97	15.43	18.98	17.97	26.97	13.34	8.30	25.31	8.79	7.21
Lane Group LOS	C	B	B	B	C	B	A	C	A	A
Critical Lane Group	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.51	0.30	1.59	1.75	0.63	4.44	0.42	1.04	1.55	0.16
50th-Percentile Queue Length [ft/ln]	12.72	7.51	39.63	43.68	15.78	110.90	10.54	25.95	38.79	4.04
95th-Percentile Queue Length [veh/ln]	0.92	0.54	2.85	3.14	1.14	7.89	0.76	1.87	2.79	0.29
95th-Percentile Queue Length [ft/ln]	22.89	13.51	71.34	78.62	28.41	197.26	18.97	46.71	69.83	7.27

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	23.97	15.43	15.43	18.98	18.98	17.97	26.97	13.34	8.30	25.31	8.79	7.21
Movement LOS	C	B	B	B	B	B	C	B	A	C	A	A
d_A, Approach Delay [s/veh]	20.21			18.43			13.53			10.68		
Approach LOS	C			B			B			B		
d_I, Intersection Delay [s/veh]	13.52											
Intersection LOS	B											
Intersection V/C	0.589											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 14: Empire Ave/Oakley Rd

Control Type:	Signalized	Delay (sec / veh):	36.1
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.494

Intersection Setup

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Approach	Eastbound			Northeastbound			Southwestbound			Northwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	315.00	100.00	100.00	110.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			40.00			40.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Base Volume Input [veh/h]	61	16	92	182	430	6	27	362	67	21	15	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	0	37	21	79	0	0	71	26	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	3	0	0	9	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	84	16	129	203	512	6	27	442	93	21	15	23
Peak Hour Factor	0.8300	0.8300	0.8300	0.8000	0.8000	0.8000	0.6600	0.6600	0.6600	0.7000	0.7000	0.7000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	5	39	63	160	2	10	167	35	8	5	8
Total Analysis Volume [veh/h]	101	19	155	254	640	8	41	670	141	30	21	33
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			1			1			4		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	1.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split
Signal group	0	4	0	5	2	0	1	6	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	4	0	4	4	0	4	4	0	0	4	0
Maximum Green [s]	0	11	0	15	38	0	12	35	0	0	30	0
Amber [s]	0.0	4.1	0.0	3.0	4.4	0.0	3.0	4.4	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0	0.0	1.0	0.0
Split [s]	0	16	0	19	44	0	16	41	0	0	34	0
Vehicle Extension [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	4	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	23	0	0	26	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.1	0.0	2.0	4.4	0.0	2.0	4.4	0.0	0.0	2.0	0.0
Minimum Recall		No		No	No		No	No			No	
Maximum Recall		No		No	Yes		No	Yes			No	
Pedestrian Recall		No		No	No		No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	4.00	6.40	6.40	4.00	6.40	6.40	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	3.10	2.00	4.40	4.40	2.00	4.40	4.40	2.00	2.00
g_i, Effective Green Time [s]	11	11	11	15	71	71	3	59	59	5	5
g / C, Green / Cycle	0.10	0.10	0.10	0.14	0.65	0.65	0.03	0.54	0.54	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.03	0.03	0.10	0.14	0.17	0.17	0.02	0.22	0.22	0.03	0.02
s, saturation flow rate [veh/h]	1774	1801	1583	1774	1863	1854	1774	1863	1752	1810	1573
c, Capacity [veh/h]	176	178	157	242	1205	1199	53	1006	946	85	74
d1, Uniform Delay [s]	46.19	46.19	49.48	47.50	8.32	8.32	53.00	15.00	15.00	51.38	51.00
k, delay calibration	0.04	0.04	0.28	0.43	0.50	0.50	0.04	0.50	0.50	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.42	0.41	51.05	67.52	0.55	0.55	8.79	1.26	1.35	2.47	1.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

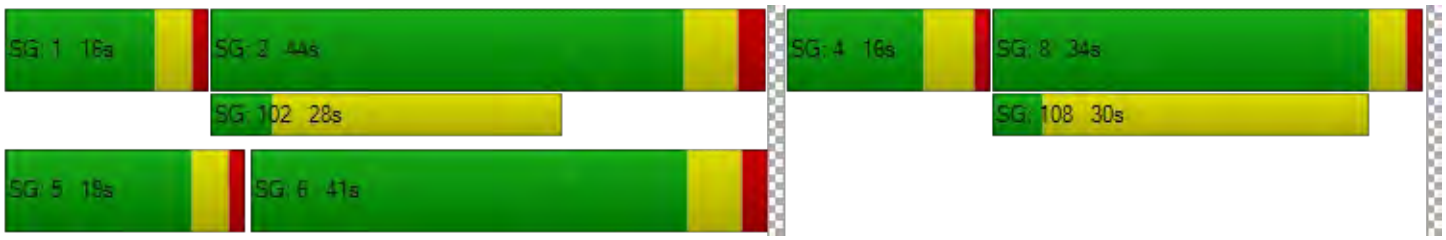
X, volume / capacity	0.34	0.34	0.99	1.05	0.27	0.27	0.78	0.42	0.42	0.60	0.44
d, Delay for Lane Group [s/veh]	46.61	46.60	100.53	115.02	8.87	8.87	61.79	16.26	16.35	53.84	52.54
Lane Group LOS	D	D	F	F	A	A	E	B	B	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.53	1.55	6.42	10.99	3.11	3.10	1.23	6.12	5.78	1.47	0.94
50th-Percentile Queue Length [ft/ln]	38.18	38.64	160.50	274.84	77.78	77.46	30.83	152.96	144.56	36.78	23.48
95th-Percentile Queue Length [veh/ln]	2.75	2.78	10.58	16.80	5.60	5.58	2.22	10.18	9.73	2.65	1.69
95th-Percentile Queue Length [ft/ln]	68.72	69.56	264.39	419.94	140.00	139.43	55.49	254.38	243.15	66.20	42.26

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	46.61	46.60	100.53	115.02	8.87	8.87	61.79	16.30	16.35	53.84	53.84	52.54
Movement LOS	D	D	F	F	A	A	E	B	B	D	D	D
d_A, Approach Delay [s/veh]	77.00			38.76			18.49			53.33		
Approach LOS	E			D			B			D		
d_I, Intersection Delay [s/veh]	36.14											
Intersection LOS	D											
Intersection V/C	0.494											

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 23: Neroly Rd/Live Oak Ave

Control Type:	All-way stop	Delay (sec / veh):	51.6
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.118

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	155.00	100.00	100.00
Speed [mph]	50.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Base Volume Input [veh/h]	210	64	22	119	125	1	3	128	132	17	313	95
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	35	0	24	42	5	1	22	2	0	48	38
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	2	0	12	6	0	0	0	0	0	0	4
Total Hourly Volume [veh/h]	217	101	22	155	173	6	4	150	134	17	361	137
Peak Hour Factor	0.8900	0.8900	0.8900	0.7100	0.7100	0.7100	0.8800	0.8800	0.8800	0.8600	0.8600	0.8600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	28	6	55	61	2	1	43	38	5	105	40
Total Analysis Volume [veh/h]	244	113	25	218	244	8	5	170	152	20	420	159
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	430	470	373	394	424	394	417	436
Degree of Utilization, x	0.89	1.12	0.01	0.41	0.38	0.05	0.69	0.66

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	9.38	16.73	0.04	1.95	1.75	0.16	5.16	4.72
95th-Percentile Queue Length [ft]	234.44	418.19	1.02	48.70	43.70	4.00	128.95	118.03
Approach Delay [s/veh]	49.67	108.84	17.12			26.83		
Approach LOS	E	F	C			D		
Intersection Delay [s/veh]	51.63							
Intersection LOS	F							

Intersection Level Of Service Report
Intersection 24: Live Oak Ave/Oakley Rd

Control Type:	All-way stop	Delay (sec / veh):	23.6
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.753

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Base Volume Input [veh/h]	31	176	15	50	135	40	93	53	10	22	143	73
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	2	47	2	0	0	0	11	3	16	26	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	7	0	0	20	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	185	62	52	155	40	93	64	13	38	169	78
Peak Hour Factor	0.7200	0.7200	0.7200	0.7600	0.7600	0.7600	0.6600	0.6600	0.6600	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	64	22	17	51	13	35	24	5	11	48	22
Total Analysis Volume [veh/h]	46	257	86	68	204	53	141	97	20	43	192	89
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	517	501	474	500
Degree of Utilization, x	0.75	0.65	0.54	0.65

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	6.50	4.60	3.21	4.57
95th-Percentile Queue Length [ft]	162.38	114.92	80.17	114.20
Approach Delay [s/veh]	28.20	22.56	19.32	22.48
Approach LOS	D	C	C	C
Intersection Delay [s/veh]	23.59			
Intersection LOS	C			

Intersection Level Of Service Report
Intersection 29: Neroly Rd/Laurel Rd

Control Type:	Signalized	Delay (sec / veh):	23.1
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.747

Intersection Setup

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	0	0	0
Pocket Length [ft]	230.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		No	

Volumes

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Base Volume Input [veh/h]	232	625	975	183	43	192
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.80	2.80	2.80	2.80	2.80	2.80
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	321	870	84	31	15
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	4	0	0	0	0	12
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	238	946	1845	267	74	219
Peak Hour Factor	0.8900	0.8900	0.7800	0.7800	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	266	591	86	19	57
Total Analysis Volume [veh/h]	267	1063	2365	342	77	228
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	2	2	2	0	2	0
Maximum Green [s]	20	40	40	0	20	0
Amber [s]	3.0	4.0	4.0	0.0	3.0	0.0
All red [s]	1.0	2.0	2.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	2.0	4.0	4.0	0.0	2.0	0.0
Walk [s]	0	0	7	0	0	0
Pedestrian Clearance [s]	0	0	35	0	0	0
Rest In Walk						
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	8
Pedestrian Walk [s]	7
Pedestrian Clearance [s]	30

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	6.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	4.00	4.00	4.00	2.00	2.00
g_i, Effective Green Time [s]	8	52	40	40	13	13
g / C, Green / Cycle	0.11	0.69	0.53	0.53	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.08	0.21	0.51	0.52	0.04	0.15
s, saturation flow rate [veh/h]	3418	5035	3519	1723	1760	1571
c, Capacity [veh/h]	368	3496	1877	919	303	271
d1, Uniform Delay [s]	32.39	4.44	16.76	17.14	26.86	30.05
k, delay calibration	0.04	0.15	0.15	0.43	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.03	0.07	5.58	23.33	0.16	2.74
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.30	0.96	0.98	0.25	0.84
d, Delay for Lane Group [s/veh]	33.42	4.51	22.34	40.48	27.02	32.79
Lane Group LOS	C	A	C	D	C	C
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	2.23	1.27	12.78	17.54	1.15	3.97
50th-Percentile Queue Length [ft/ln]	55.63	31.78	319.43	438.40	28.75	99.24
95th-Percentile Queue Length [veh/ln]	4.01	2.29	18.64	24.40	2.07	7.15
95th-Percentile Queue Length [ft/ln]	100.13	57.20	465.99	610.10	51.75	178.63

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	33.42	4.51	26.64	40.48	27.02	32.79
Movement LOS	C	A	C	D	C	C
d_A, Approach Delay [s/veh]	10.31		28.39		31.33	
Approach LOS	B		C		C	
d_I, Intersection Delay [s/veh]	23.06					
Intersection LOS	C					
Intersection V/C	0.747					

Sequence

Ring 1	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 91: Main St & West Driveway

Control Type:	Two-way stop	Delay (sec / veh):	169.3
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.820

Intersection Setup

Name			Main St			
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Main St			
Base Volume Input [veh/h]	0	0	639	0	0	830
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	214	0	0	571
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	42	0	22	0	0	22
Total Hourly Volume [veh/h]	42	0	875	0	0	1423
Peak Hour Factor	0.8000	1.0000	0.8100	0.8100	0.9100	0.9100
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	0	270	0	0	391
Total Analysis Volume [veh/h]	53	0	1080	0	0	1564
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.82	0.00	0.01	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	169.33	121.01	0.00	0.00	10.61	0.00
Movement LOS	F	F	A	A	B	A
95th-Percentile Queue Length [veh/ln]	3.79	3.79	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	94.79	94.79	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	169.33		0.00		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	3.33					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 92: Main St & East Driveway

Control Type:	Two-way stop	Delay (sec / veh):	79.3
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.340

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	639	0	0	830
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	214	0	0	571
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	22	21	0	22	7	0
Total Hourly Volume [veh/h]	22	21	853	22	7	1401
Peak Hour Factor	1.0000	1.0000	0.8100	0.8100	0.9100	0.9100
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	5	263	7	2	385
Total Analysis Volume [veh/h]	22	21	1053	27	8	1540
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.34	0.04	0.01	0.00	0.01	0.02
d_M, Delay for Movement [s/veh]	79.25	31.06	0.00	0.00	10.68	0.00
Movement LOS	F	D	A	A	B	A
95th-Percentile Queue Length [veh/ln]	1.58	1.58	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	39.39	39.39	0.00	0.00	0.95	0.00
d_A, Approach Delay [s/veh]	55.72		0.00		0.06	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	0.93					
Intersection LOS	F					

Village at Main TIS

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Scenario 7 Background plus Project AM

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12/12/2018

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Bridgehead Rd/Main St	271	195	31	130	107	42	85	690	127	45	1315	323	3361

ID	Intersection Name	Northbound		Southbound			Eastbound			Westbound			Total Volume
		Left	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Live Oak Rd/Main St	239	72	0	0	0	0	716	175	47	1499	0	2748

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Big Break Rd/Main St	40	10	21	100	32	153	53	1238	91	87	604	38	2467

ID	Intersection Name	Eastbound			Northeastbound			Southwestbound			Northwestbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	Empire Ave/Oakley Rd	84	16	129	203	512	6	27	442	93	21	15	23	1571

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
23	Neroly Rd/Live Oak Ave	217	101	22	155	173	6	4	150	134	17	361	137	1477

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
24	Live Oak Ave/Oakley Rd	33	185	62	52	155	40	93	64	13	38	169	78	982

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
29	Neroly Rd/Laurel Rd	238	946	1845	267	74	219	3589

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
91	Main St & West Driveway	42	0	875	0	0	1423	2340

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
92	Main St & East Driveway	22	21	853	22	7	1401	2326

Village at Main TIS

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Scenario 7 Background plus Project AM

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Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Bridgehead Rd/Main St	Final Base	189	195	30	130	107	42	85	461	100	45	709	323	2416
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	82	0	1	0	0	0	0	214	27	0	577	0	901
		Other	0	0	0	0	0	0	0	15	0	0	29	0	44
		Future Total	**271**	**195**	**31**	**130**	**107**	**42**	**85**	**690**	**127**	**45**	**1315**	**323**	**3361**

ID	Intersection Name	Volume Type	Northbound		Southbound			Eastbound			Westbound			Total Volume
			Left	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Live Oak Rd/Main St	Final Base	232	65	0	0	0	0	487	173	27	884	0	1868
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	7	0	0	0	0	0	214	2	0	571	0	794
		Other	0	7	0	0	0	0	15	0	20	44	0	86
		Future Total	**239**	**72**	**0**	**0**	**0**	**0**	**716**	**175**	**47**	**1499**	**0**	**2748**

ID	Intersection Name	Volume Type	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Big Break Rd/Main St	Final Base	40	10	21	92	25	153	53	667	83	87	369	38	1638
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	8	0	0	0	571	8	0	214	0	801
		Other	0	0	0	0	7	0	0	0	0	0	21	0	28
		Future Total	**40**	**10**	**21**	**100**	**32**	**153**	**53**	**1238**	**91**	**87**	**604**	**38**	**2467**

ID	Intersection Name	Volume Type	Eastbound			Northeastbound			Southwestbound			Northwestbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	Empire Ave/Oakley Rd	Final Base	61	16	92	182	430	6	27	362	67	21	15	23	1302
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	23	0	37	21	79	0	0	71	26	0	0	0	257
		Other	0	0	0	0	3	0	0	9	0	0	0	0	12
		Future Total	**84**	**16**	**129**	**203**	**512**	**6**	**27**	**442**	**93**	**21**	**15**	**23**	**1571**

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
23	Neroly Rd/Live Oak Ave	Final Base	210	64	22	119	125	1	3	128	132	17	313	95	1229
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	7	35	0	24	42	5	1	22	2	0	48	38	224
		Other	0	2	0	12	6	0	0	0	0	0	0	4	24
		Future Total	**217**	**101**	**22**	**155**	**173**	**6**	**4**	**150**	**134**	**17**	**361**	**137**	**1477**

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
24	Live Oak Ave/Oakley Rd	Final Base	31	176	15	50	135	40	93	53	10	22	143	73	841
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	2	2	47	2	0	0	0	11	3	16	26	5	114
		Other	0	7	0	0	20	0	0	0	0	0	0	0	27
		Future Total	**33**	**185**	**62**	**52**	**155**	**40**	**93**	**64**	**13**	**38**	**169**	**78**	**982**

ID	Intersection Name	Volume Type	Northeastbound		Southwestbound		Southeastbound		Total Volume
			Left	Thru	Thru	Right	Left	Right	
29	Neroly Rd/Laurel Rd	Final Base	232	625	975	183	43	192	2250
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	2	321	870	84	31	15	1323
		Other	4	0	0	0	0	12	16
		Future Total	**238**	**946**	**1845**	**267**	**74**	**219**	**3589**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
91	Main St & West Driveway	Final Base	0	0	639	0	0	830	1469
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	214	0	0	571	785
		Other	42	0	22	0	0	22	86
		Future Total	**42**	**0**	**875**	**0**	**0**	**1423**	**2340**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
92	Main St & East Driveway	Final Base	0	0	639	0	0	830	1469
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	214	0	0	571	785
		Other	22	21	0	22	7	0	72
		Future Total	**22**	**21**	**853**	**22**	**7**	**1401**	**2326**

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Village at Main TIS

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Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bridgehead Rd/Main St	Signalized	HCM 2010	EB Right	0.891	127.7	F
2	Live Oak Rd/Main St	Signalized	HCM 2010	EB Thru	0.685	49.9	D
3	Big Break Rd/Main St	Signalized	HCM 2010	NWB Left	0.614	20.2	C
5	Main St/Empire Ave	Signalized	HCM 2010	SEB Thru	0.839	68.6	E
14	Empire Ave/Oakley Rd	Signalized	HCM 2010	EB Right	0.448	45.8	D
23	Neroly Rd/Live Oak Ave	All-way stop	HCM 2010	NB Thru	0.738	22.0	C
24	Live Oak Ave/Oakley Rd	All-way stop	HCM 2010	WB Thru	0.387	11.3	B
29	Neroly Rd/Laurel Rd	Signalized	HCM 2010	NEB Left	0.607	10.8	B
91	Main St & West Driveway	Two-way stop	HCM 2010	NB Left	1.394	542.4	F
92	Main St & East Driveway	Two-way stop	HCM 2010	NB Left	0.787	314.3	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Bridgehead Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	127.7
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.891

Intersection Setup

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	1	0	0	1	0	1
Pocket Length [ft]	250.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	100.00	235.00	100.00	495.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Base Volume Input [veh/h]	157	73	42	344	171	29	82	732	160	31	461	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	56	0	0	0	0	0	0	708	102	1	459	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	50	0	0	29	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	213	73	42	344	171	29	82	1490	262	32	949	125
Peak Hour Factor	0.9400	0.9400	0.9400	0.9000	0.9000	0.9000	0.8700	0.8700	0.8700	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	57	19	11	96	48	8	24	428	75	9	264	35
Total Analysis Volume [veh/h]	227	78	45	382	190	32	94	1713	301	36	1054	139
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	2			0			0			0		
Bicycle Volume [bicycles/h]	1			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	7	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	21	0	0	35	0	11	30	0	11	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	4.5	0.0	3.0	4.5	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	0	0	0	12	0	0	12	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.5	0.0	2.0	4.5	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	20.0	0.0	0.0	0.0	0.0	20.0	20.0	0.0	20.0	20.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	78	78	78	78	78	78	78	78	78	78	78
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	6.50	6.50	4.00	6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	2.00	4.50	4.50
g_i, Effective Green Time [s]	12	12	15	15	15	5	30	30	2	27	27
g / C, Green / Cycle	0.16	0.16	0.19	0.19	0.19	0.07	0.39	0.39	0.03	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.13	0.07	0.16	0.16	0.02	0.05	0.55	0.58	0.02	0.21	0.09
s, saturation flow rate [veh/h]	1745	1712	1745	1801	1557	1745	1832	1739	1745	4991	1557
c, Capacity [veh/h]	276	271	333	344	297	122	706	670	49	1714	535
d1, Uniform Delay [s]	31.74	29.75	30.41	30.40	26.04	35.62	23.96	23.96	37.56	21.29	18.44
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.50	0.50	0.04	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.36	0.44	2.29	2.20	0.06	3.81	200.41	234.46	7.37	0.51	0.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.45	0.85	0.84	0.11	0.77	1.43	1.50	0.73	0.61	0.26
d, Delay for Lane Group [s/veh]	34.10	30.20	32.70	32.60	26.09	39.43	224.37	258.42	44.94	21.81	18.81
Lane Group LOS	C	C	C	C	C	D	F	F	D	C	B
Critical Lane Group	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.06	2.00	4.96	5.10	0.47	1.77	50.40	54.17	0.74	4.80	1.67
50th-Percentile Queue Length [ft/ln]	101.41	50.04	124.11	127.62	11.67	44.28	1260.02	1354.18	18.54	119.91	41.74
95th-Percentile Queue Length [veh/ln]	7.30	3.60	8.62	8.81	0.84	3.19	76.33	83.21	1.33	8.39	3.01
95th-Percentile Queue Length [ft/ln]	182.53	90.07	215.46	220.25	21.01	79.70	1908.31	2080.23	33.37	209.71	75.13

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	34.10	30.20	30.20	32.67	32.60	26.09	39.43	238.41	258.42	44.94	21.81	18.81
Movement LOS	C	C	C	C	C	C	D	F	F	D	C	B
d_A, Approach Delay [s/veh]	32.73			32.30			232.39			22.15		
Approach LOS	C			C			F			C		
d_I, Intersection Delay [s/veh]	127.72											
Intersection LOS	F											
Intersection V/C	0.891											

Sequence

Ring 1	1	2	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 2: Live Oak Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	49.9
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.685

Intersection Setup

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	160.00	255.00	100.00	100.00
Speed [mph]	40.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			No		

Volumes

Name	Live Oak Avenue			Live Oak Avenue			Main St			Main St		
Base Volume Input [veh/h]	48	0	59	0	0	0	0	1049	88	27	597	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.30	2.00	4.30	2.00	2.00	2.00	2.00	4.30	4.30	4.30	4.30	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	0	0	0	0	703	5	0	456	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	22	0	0	0	0	50	0	13	29	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	0	81	0	0	0	0	1802	93	40	1082	0
Peak Hour Factor	0.8100	1.0000	0.8100	1.0000	1.0000	1.0000	0.8800	0.8800	0.8800	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	0	25	0	0	0	0	512	26	11	285	0
Total Analysis Volume [veh/h]	64	0	100	0	0	0	0	2048	106	42	1139	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	8	0	0	0	4	0	0	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	8	0	0	0	8	0	0	10	0	5	10	0
Maximum Green [s]	20	0	0	0	20	0	0	30	0	20	30	0
Amber [s]	4.7	0.0	0.0	0.0	4.7	0.0	0.0	5.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	4.0	0.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0	3.0	4.0	0.0
Walk [s]	7	0	0	0	7	0	0	7	0	0	0	0
Pedestrian Clearance [s]	23	0	0	0	23	0	0	23	0	0	0	0
Rest In Walk	No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.7	0.0	0.0	0.0	3.7	0.0	0.0	4.0	0.0	4.0	4.0	0.0
Minimum Recall	No				No			No		No	No	
Maximum Recall	No				No			No		No	No	
Pedestrian Recall	No				No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	L	C	R	L	C	C
C, Cycle Length [s]	58	58	58	58	58	58	58	58	58
L, Total Lost Time per Cycle [s]	5.70	5.70	0.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	3.70	3.70	0.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	7	7	0	30	30	30	3	39	39
g / C, Green / Cycle	0.13	0.13	0.00	0.52	0.52	0.52	0.04	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.05	0.06	0.00	0.00	0.59	0.07	0.03	0.31	0.31
s, saturation flow rate [veh/h]	1381	1548	0	492	3468	1516	1381	1822	1822
c, Capacity [veh/h]	265	202	62	283	1797	786	151	1216	1216
d1, Uniform Delay [s]	24.48	23.40	0.00	0.00	13.95	7.23	28.61	4.66	4.66
k, delay calibration	0.15	0.15	0.15	0.50	0.16	0.15	0.11	0.18	0.18
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.66	2.65	0.00	0.00	65.33	0.11	0.99	0.46	0.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.24	0.49	0.00	0.00	1.14	0.13	0.28	0.47	0.47
d, Delay for Lane Group [s/veh]	25.15	26.05	0.00	0.00	79.28	7.34	29.60	5.12	5.12
Lane Group LOS	C	C	A	A	F	A	C	A	A
Critical Lane Group	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.79	1.28	0.00	0.00	24.03	0.50	0.57	1.62	1.62
50th-Percentile Queue Length [ft/ln]	19.81	32.11	0.00	0.00	600.66	12.40	14.25	40.47	40.47
95th-Percentile Queue Length [veh/ln]	1.43	2.31	0.00	0.00	35.25	0.89	1.03	2.91	2.91
95th-Percentile Queue Length [ft/ln]	35.66	57.79	0.00	0.00	881.34	22.32	25.64	72.85	72.85

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	25.15	0.00	26.05	0.00	0.00	0.00	0.00	79.28	7.34	29.60	5.12	5.12
Movement LOS	C		C	A	A	A	A	F	A	C	A	A
d_A, Approach Delay [s/veh]	25.70			0.00			75.74			5.99		
Approach LOS	C			A			E			A		
d_I, Intersection Delay [s/veh]	49.85											
Intersection LOS	D											
Intersection V/C	0.685											

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 3: Big Break Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	20.2
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.614

Intersection Setup

Name	Driveway			Big Break Rd			Main St			Main St		
Approach	Northeastbound			Southwestbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	1	1	0	1
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00	230.00	100.00	135.00	240.00	100.00	205.00
Speed [mph]	25.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Driveway			Big Break Rd			Main St			Main St		
Base Volume Input [veh/h]	46	42	82	70	24	86	64	454	67	190	733	110
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	6	0	0	0	456	5	0	703	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	24	0	0	14	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	42	82	76	24	86	64	934	72	190	1450	110
Peak Hour Factor	0.7700	0.7700	0.7700	0.8300	0.8300	0.8300	0.9500	0.9500	0.9500	0.9700	0.9700	0.9700
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	14	27	23	7	26	17	246	19	49	374	28
Total Analysis Volume [veh/h]	60	55	106	92	29	104	67	983	76	196	1495	113
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	1			0			5			1		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	16	0	0	16	0	16	25	0	16	25	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	5.0	0.0	3.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	18	0	0	18	0	0	11	0	0	11	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	R	L	C	R
C, Cycle Length [s]	58	58	58	58	58	58	58	58	58	58
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00
g_i, Effective Green Time [s]	16	16	16	16	3	20	20	8	25	25
g / C, Green / Cycle	0.28	0.28	0.28	0.28	0.05	0.34	0.34	0.14	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.04	0.10	0.15	0.07	0.04	0.28	0.05	0.11	0.43	0.07
s, saturation flow rate [veh/h]	1349	1632	825	1553	1742	3482	1554	1742	3482	1554
c, Capacity [veh/h]	188	450	337	428	88	1188	530	247	1505	672
d1, Uniform Delay [s]	27.55	16.88	20.79	16.30	27.18	17.54	13.24	24.08	16.39	10.09
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.36	0.18	0.24	0.11	4.91	0.58	0.05	2.20	5.27	0.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

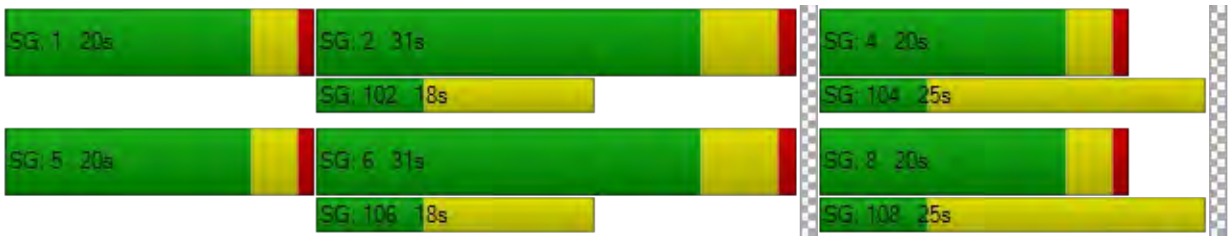
X, volume / capacity	0.32	0.36	0.36	0.24	0.76	0.83	0.14	0.79	0.99	0.17
d, Delay for Lane Group [s/veh]	27.91	17.06	21.03	16.41	32.09	18.12	13.28	26.28	21.67	10.13
Lane Group LOS	C	B	C	B	C	B	B	C	C	B
Critical Lane Group	No	No	Yes	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.81	1.63	1.41	0.99	0.94	4.91	0.57	2.42	8.39	0.69
50th-Percentile Queue Length [ft/ln]	20.35	40.67	35.19	24.72	23.43	122.76	14.21	60.41	209.81	17.16
95th-Percentile Queue Length [veh/ln]	1.47	2.93	2.53	1.78	1.69	8.54	1.02	4.35	13.14	1.24
95th-Percentile Queue Length [ft/ln]	36.63	73.20	63.34	44.50	42.18	213.62	25.58	108.74	328.59	30.88

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	27.91	17.06	17.06	21.03	21.03	16.41	32.09	18.12	13.28	26.28	21.67	10.13
Movement LOS	C	B	B	C	C	B	C	B	B	C	C	B
d_A, Approach Delay [s/veh]	20.00			18.90			18.63			21.44		
Approach LOS	C			B			B			C		
d_I, Intersection Delay [s/veh]	20.24											
Intersection LOS	C											
Intersection V/C	0.614											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: Main St/Empire Ave

Control Type:	Signalized	Delay (sec / veh):	68.6
Analysis Method:	HCM 2010	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.839

Intersection Setup

Name	Main St			Empire Ave			Charles Way			Main St		
Approach	Westbound			Northeastbound			Southwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	100.00	120.00	100.00	100.00	100.00	100.00	80.00	190.00	100.00	250.00
Speed [mph]	30.00			40.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Main St			Empire Ave			Charles Way			Main St		
Base Volume Input [veh/h]	199	411	9	264	24	149	12	21	18	36	733	293
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	85	446	0	22	0	106	0	0	0	0	696	19
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	8	6	10	0	0	0	0	0	0	14	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	284	865	15	296	24	255	12	21	18	36	1443	312
Peak Hour Factor	0.9800	0.9800	0.9800	0.7900	0.7900	0.7900	0.5500	0.5500	0.5500	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	72	221	4	94	8	81	5	10	8	10	388	84
Total Analysis Volume [veh/h]	290	883	15	375	30	323	22	38	33	39	1552	335
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	54.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss
Signal group	1	6	0	0	3	0	0	4	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	4	10	0	0	4	0	0	4	0	4	10	0
Maximum Green [s]	17	37	0	0	17	0	0	25	0	12	33	0
Amber [s]	3.0	4.8	0.0	0.0	4.4	0.0	0.0	3.6	0.0	3.0	4.4	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	20	43	0	0	22	0	0	30	0	15	38	0
Vehicle Extension [s]	2.5	3.5	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.5	3.5	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	0	0	0	20	0	0	24	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	3.8	0.0	0.0	3.4	0.0	0.0	2.6	0.0	1.0	3.4	0.0
Minimum Recall	No	Yes			No			No		No	Yes	
Maximum Recall	No	No			No			No		No	No	
Pedestrian Recall	No	No			No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	C	R	L	C	R
C, Cycle Length [s]	89	89	89	89	89	89	89	89	89	89	89
L, Total Lost Time per Cycle [s]	3.00	5.80	5.80	5.40	5.40	5.40	4.60	4.60	3.00	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	3.80	3.80	3.40	3.40	3.40	2.60	2.60	1.00	3.40	3.40
g_i, Effective Green Time [s]	16	46	46	17	17	17	5	5	3	33	33
g / C, Green / Cycle	0.18	0.52	0.52	0.19	0.19	0.19	0.05	0.05	0.03	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.16	0.24	0.24	0.11	0.02	0.21	0.03	0.02	0.02	0.44	0.21
s, saturation flow rate [veh/h]	1774	1863	1852	3445	1863	1571	1829	1583	1774	3547	1583
c, Capacity [veh/h]	326	967	962	654	354	298	95	82	51	1308	584
d1, Uniform Delay [s]	35.63	13.64	13.64	32.95	29.84	36.24	41.59	41.08	43.15	28.24	22.61
k, delay calibration	0.34	0.15	0.15	0.04	0.04	0.41	0.04	0.04	0.08	0.16	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	21.32	0.49	0.50	0.30	0.04	71.01	2.58	1.18	15.78	86.69	1.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.89	0.47	0.47	0.57	0.08	1.08	0.63	0.40	0.76	1.19	0.57
d, Delay for Lane Group [s/veh]	56.96	14.13	14.14	33.24	29.88	107.25	44.16	42.25	58.93	114.93	23.81
Lane Group LOS	E	B	B	C	C	F	D	D	E	F	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	7.96	5.49	5.46	3.55	0.51	12.06	1.36	0.73	1.07	28.97	5.62
50th-Percentile Queue Length [ft/ln]	198.90	137.34	136.60	88.80	12.86	301.44	34.10	18.27	26.77	724.19	140.43
95th-Percentile Queue Length [veh/ln]	12.58	9.34	9.30	6.39	0.93	18.47	2.45	1.32	1.93	42.18	9.50
95th-Percentile Queue Length [ft/ln]	314.55	233.43	232.44	159.83	23.15	461.71	61.37	32.89	48.18	1054.61	237.60

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.96	14.14	14.14	33.24	29.88	107.25	44.16	44.16	42.25	58.93	114.93	23.81
Movement LOS	E	B	B	C	C	F	D	D	D	E	F	C
d_A, Approach Delay [s/veh]	24.59			65.94			43.48			97.95		
Approach LOS	C			E			D			F		
d_I, Intersection Delay [s/veh]	68.59											
Intersection LOS	E											
Intersection V/C	0.839											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 14: Empire Ave/Oakley Rd

Control Type:	Signalized	Delay (sec / veh):	45.8
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.448

Intersection Setup

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Approach	Eastbound			Northeastbound			Southwestbound			Northwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	315.00	100.00	100.00	110.00	100.00	100.00	140.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			40.00			40.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Oakley Rd			Empire Ave			Empire Ave			Driveway		
Base Volume Input [veh/h]	44	44	137	102	357	12	94	350	62	83	31	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	39	0	62	16	89	0	0	67	37	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	10	0	0	6	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	83	44	199	118	456	12	94	423	99	83	31	51
Peak Hour Factor	0.8900	0.8900	0.8900	0.8600	0.8600	0.8600	0.9300	0.9300	0.9300	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	12	56	34	133	3	25	114	27	24	9	14
Total Analysis Volume [veh/h]	93	49	224	137	530	14	101	455	106	94	35	58
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	2			0			6			2		
Bicycle Volume [bicycles/h]	0			1			1			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	1.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split
Signal group	0	4	0	5	2	0	1	6	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	4	0	4	4	0	4	4	0	0	4	0
Maximum Green [s]	0	13	0	13	38	0	10	35	0	0	30	0
Amber [s]	0.0	4.1	0.0	3.0	4.4	0.0	3.0	4.4	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0	0.0	1.0	0.0
Split [s]	0	18	0	17	44	0	14	41	0	0	34	0
Vehicle Extension [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	4	0
Pedestrian Clearance [s]	0	0	0	0	23	0	0	23	0	0	26	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.1	0.0	2.0	4.4	0.0	2.0	4.4	0.0	0.0	2.0	0.0
Minimum Recall		No		No	No		No	No			No	
Maximum Recall		No		No	Yes		No	Yes			No	
Pedestrian Recall		No		No	No		No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	4.00	6.40	6.40	4.00	6.40	6.40	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.10	3.10	3.10	2.00	4.40	4.40	2.00	4.40	4.40	2.00	2.00
g_i, Effective Green Time [s]	13	13	13	10	58	58	8	56	56	12	12
g / C, Green / Cycle	0.12	0.12	0.12	0.09	0.53	0.53	0.07	0.51	0.51	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.04	0.04	0.14	0.08	0.15	0.15	0.06	0.16	0.16	0.07	0.04
s, saturation flow rate [veh/h]	1774	1833	1583	1774	1863	1843	1774	1863	1726	1797	1556
c, Capacity [veh/h]	208	215	186	165	984	974	126	943	874	191	165
d1, Uniform Delay [s]	44.62	44.61	48.55	49.03	14.34	14.34	50.32	15.86	15.91	47.36	45.66
k, delay calibration	0.04	0.04	0.47	0.10	0.50	0.50	0.06	0.50	0.50	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.35	0.34	130.65	9.57	0.70	0.71	6.45	0.84	0.93	1.57	0.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.34	0.34	1.21	0.83	0.28	0.28	0.80	0.31	0.31	0.68	0.35
d, Delay for Lane Group [s/veh]	44.97	44.95	179.21	58.59	15.04	15.05	56.77	16.70	16.84	48.93	46.13
Lane Group LOS	D	D	F	E	B	B	E	B	B	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.76	1.81	11.76	4.06	3.73	3.70	2.91	4.23	4.01	3.57	1.54
50th-Percentile Queue Length [ft/ln]	43.92	45.28	293.96	101.44	93.28	92.60	72.71	105.77	100.36	89.36	38.38
95th-Percentile Queue Length [veh/ln]	3.16	3.26	18.71	7.30	6.72	6.67	5.24	7.60	7.23	6.43	2.76
95th-Percentile Queue Length [ft/ln]	79.05	81.50	467.66	182.60	167.90	166.68	130.88	190.11	180.65	160.85	69.08

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.97	44.95	179.21	58.59	15.05	15.05	56.77	16.75	16.84	48.93	48.93	46.13
Movement LOS	D	D	F	E	B	B	E	B	B	D	D	D
d_A, Approach Delay [s/veh]	127.12			23.81			22.87			48.06		
Approach LOS	F			C			C			D		
d_I, Intersection Delay [s/veh]	45.82											
Intersection LOS	D											
Intersection V/C	0.448											

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 23: Neroly Rd/Live Oak Ave

Control Type:	All-way stop	Delay (sec / veh):	22.0
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.738

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	155.00	100.00	100.00
Speed [mph]	50.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Base Volume Input [veh/h]	97	76	20	81	70	0	2	178	163	11	146	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	31	0	25	29	4	6	65	10	0	41	67
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	6	0	8	4	0	0	0	0	0	0	14
Total Hourly Volume [veh/h]	102	113	20	114	103	4	8	243	173	11	187	206
Peak Hour Factor	0.7000	0.7000	0.7000	0.7900	0.7900	0.7900	0.8700	0.8700	0.8700	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	40	7	36	33	1	2	70	50	3	53	59
Total Analysis Volume [veh/h]	146	161	29	144	130	5	9	279	199	13	213	234
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	455	442	410	436	472	408	434	476
Degree of Utilization, x	0.74	0.63	0.02	0.55	0.51	0.03	0.49	0.49

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	6.02	4.25	0.07	3.21	2.81	0.10	2.64	2.67
95th-Percentile Queue Length [ft]	150.51	106.30	1.68	80.25	70.18	2.47	66.08	66.63
Approach Delay [s/veh]	30.07	24.10	19.04			17.85		
Approach LOS	D	C	C			C		
Intersection Delay [s/veh]	21.96							
Intersection LOS	C							

Intersection Level Of Service Report
Intersection 24: Live Oak Ave/Oakley Rd

Control Type:	All-way stop	Delay (sec / veh):	11.3
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.387

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Base Volume Input [veh/h]	18	56	34	29	62	2	4	144	29	36	97	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	22	0	0	13	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	1	65	5	0	0	0	30	7	30	19	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	79	99	34	75	2	4	174	36	66	116	21
Peak Hour Factor	0.8400	0.8400	0.8400	0.8000	0.8000	0.8000	0.8900	0.8900	0.8900	0.7900	0.7900	0.7900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	24	29	11	23	1	1	49	10	21	37	7
Total Analysis Volume [veh/h]	29	94	118	43	94	3	4	196	40	84	147	27
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	681	624	674	666
Degree of Utilization, x	0.35	0.22	0.36	0.39

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.60	0.86	1.61	1.83
95th-Percentile Queue Length [ft]	39.92	21.42	40.27	45.78
Approach Delay [s/veh]	11.15	10.44	11.26	11.78
Approach LOS	B	B	B	B
Intersection Delay [s/veh]	11.25			
Intersection LOS	B			

Intersection Level Of Service Report
Intersection 29: Neroly Rd/Laurel Rd

Control Type:	Signalized	Delay (sec / veh):	10.8
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.607

Intersection Setup

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Approach	Northeastbound		Southwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	0	0	0
Pocket Length [ft]	230.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		No	

Volumes

Name	Laurel Rd		Laurel Rd		Neroly Rd	
Base Volume Input [veh/h]	220	1267	690	63	75	140
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.80	2.80	2.80	2.80	2.80	2.80
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	1058	705	94	80	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	14	0	0	0	0	8
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	247	2325	1395	157	155	158
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	65	612	367	41	47	48
Total Analysis Volume [veh/h]	260	2447	1468	165	187	190
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		1		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Split
Signal group	5	2	6	0	4	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	2	2	2	0	2	0
Maximum Green [s]	20	40	40	0	20	0
Amber [s]	3.0	4.0	4.0	0.0	3.0	0.0
All red [s]	1.0	2.0	2.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	2.0	4.0	4.0	0.0	2.0	0.0
Walk [s]	0	0	7	0	0	0
Pedestrian Clearance [s]	0	0	35	0	0	0
Rest In Walk						
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	8
Pedestrian Walk [s]	7
Pedestrian Clearance [s]	30

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	55	55	55	55	55	55
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	6.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	4.00	4.00	4.00	2.00	2.00
g_i, Effective Green Time [s]	6	36	26	26	9	9
g / C, Green / Cycle	0.11	0.66	0.47	0.47	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.08	0.49	0.31	0.31	0.11	0.12
s, saturation flow rate [veh/h]	3418	5035	3519	1747	1760	1571
c, Capacity [veh/h]	388	3312	1658	823	281	250
d1, Uniform Delay [s]	23.27	6.23	11.08	11.11	21.63	21.99
k, delay calibration	0.04	0.15	0.15	0.15	0.04	0.04
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.75	0.47	0.64	1.30	1.02	1.78
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.74	0.66	0.66	0.67	0.76
d, Delay for Lane Group [s/veh]	24.02	6.70	11.71	12.42	22.65	23.78
Lane Group LOS	C	A	B	B	C	C
Critical Lane Group	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.43	2.73	3.66	3.82	2.10	2.21
50th-Percentile Queue Length [ft/ln]	35.78	68.16	91.48	95.56	52.43	55.21
95th-Percentile Queue Length [veh/ln]	2.58	4.91	6.59	6.88	3.78	3.98
95th-Percentile Queue Length [ft/ln]	64.40	122.68	164.67	172.00	94.38	99.38

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	24.02	6.70	11.90	12.42	22.65	23.78
Movement LOS	C	A	B	B	C	C
d_A, Approach Delay [s/veh]	8.37		11.95		23.22	
Approach LOS	A		B		C	
d_I, Intersection Delay [s/veh]	10.79					
Intersection LOS	B					
Intersection V/C	0.607					

Sequence

Ring 1	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 91: Main St & West Driveway

Control Type:	Two-way stop	Delay (sec / veh):	542.4
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.394

Intersection Setup

Name			Main St			
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Main St			
Base Volume Input [veh/h]	0	1	1084	0	1	576
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	703	0	0	456
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	28	0	72	0	0	14
Total Hourly Volume [veh/h]	28	1	1859	0	1	1046
Peak Hour Factor	0.8000	0.2500	0.9800	1.0000	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	1	474	0	0	281
Total Analysis Volume [veh/h]	35	4	1897	0	1	1125
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	1.39	0.02	0.02	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	542.35	412.70	0.00	0.00	16.63	0.00
Movement LOS	F	F	A	A	C	A
95th-Percentile Queue Length [veh/ln]	4.60	4.60	0.00	0.00	0.01	0.00
95th-Percentile Queue Length [ft/ln]	114.94	114.94	0.00	0.00	0.24	0.00
d_A, Approach Delay [s/veh]	529.06		0.00		0.01	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	6.74					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 92: Main St & East Driveway

Control Type:	Two-way stop	Delay (sec / veh):	314.3
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.787

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	1084	0	0	577
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	703	0	0	456
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	14	14	0	72	24	0
Total Hourly Volume [veh/h]	14	14	1787	72	24	1033
Peak Hour Factor	0.8000	0.8000	0.9800	0.9800	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	4	456	18	6	278
Total Analysis Volume [veh/h]	18	18	1823	73	26	1111
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.79	0.07	0.02	0.00	0.08	0.01
d_M, Delay for Movement [s/veh]	314.34	170.72	0.00	0.00	17.64	0.00
Movement LOS	F	F	A	A	C	A
95th-Percentile Queue Length [veh/ln]	3.31	3.31	0.00	0.00	0.27	0.00
95th-Percentile Queue Length [ft/ln]	82.86	82.86	0.00	0.00	6.80	0.00
d_A, Approach Delay [s/veh]	242.53		0.00		0.40	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	2.99					
Intersection LOS	F					

Village at Main TIS

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Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Bridgehead Rd/Main St	213	73	42	344	171	29	82	1490	262	32	949	125	3812

ID	Intersection Name	Northbound		Southbound			Eastbound			Westbound			Total Volume
		Left	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Live Oak Rd/Main St	52	81	0	0	0	0	1802	93	40	1082	0	3150

ID	Intersection Name	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Big Break Rd/Main St	46	42	82	76	24	86	64	934	72	190	1450	110	3176

ID	Intersection Name	Westbound			Northeastbound			Southwestbound			Southeastbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Main St/Empire Ave	284	865	15	296	24	255	12	21	18	36	1443	312	3581

ID	Intersection Name	Eastbound			Northeastbound			Southwestbound			Northwestbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	Empire Ave/Oakley Rd	83	44	199	118	456	12	94	423	99	83	31	51	1693

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
23	Neroly Rd/Live Oak Ave	102	113	20	114	103	4	8	243	173	11	187	206	1284

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
24	Live Oak Ave/Oakley Rd	24	79	99	34	75	2	4	174	36	66	116	21	730

ID	Intersection Name	Northeastbound		Southwestbound		Southeastbound		Total Volume
		Left	Thru	Thru	Right	Left	Right	
29	Neroly Rd/Laurel Rd	247	2325	1395	157	155	158	4437

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
91	Main St & West Driveway	28	1	1859	0	1	1046	2935

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
92	Main St & East Driveway	14	14	1787	72	24	1033	2944

Village at Main TIS

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Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Bridgehead Rd/Main St	Final Base	157	73	42	344	171	29	82	732	160	31	461	125	2407
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	56	0	0	0	0	0	0	708	102	1	459	0	1326
		Other	0	0	0	0	0	0	0	50	0	0	29	0	79
		Future Total	**213**	**73**	**42**	**344**	**171**	**29**	**82**	**1490**	**262**	**32**	**949**	**125**	**3812**

ID	Intersection Name	Volume Type	Northbound		Southbound			Eastbound			Westbound			Total Volume
			Left	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Live Oak Rd/Main St	Final Base	48	59	0	0	0	0	1049	88	27	597	0	1868
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	4	0	0	0	0	0	703	5	0	456	0	1168
		Other	0	22	0	0	0	0	50	0	13	29	0	114
		Future Total	**52**	**81**	**0**	**0**	**0**	**0**	**1802**	**93**	**40**	**1082**	**0**	**3150**

ID	Intersection Name	Volume Type	Northeastbound			Southwestbound			Northwestbound			Southeastbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3	Big Break Rd/Main St	Final Base	46	42	82	70	24	86	64	454	67	190	733	110	1968
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	6	0	0	0	456	5	0	703	0	1170
		Other	0	0	0	0	0	0	0	24	0	0	14	0	38
		Future Total	**46**	**42**	**82**	**76**	**24**	**86**	**64**	**934**	**72**	**190**	**1450**	**110**	**3176**

ID	Intersection Name	Volume Type	Westbound			Northeastbound			Southwestbound			Southeastbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
5	Main St/Empire Ave	Final Base	199	411	9	264	24	149	12	21	18	36	733	293	2169
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	85	446	0	22	0	106	0	0	0	0	696	19	1374
		Other	0	8	6	10	0	0	0	0	0	0	14	0	38
		Future Total	**284**	**865**	**15**	**296**	**24**	**255**	**12**	**21**	**18**	**36**	**1443**	**312**	**3581**

ID	Intersection Name	Volume Type	Eastbound			Northeastbound			Southwestbound			Northwestbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
14	Empire Ave/Oakley Rd	Final Base	44	44	137	102	357	12	94	350	62	83	31	51	1367
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	39	0	62	16	89	0	0	67	37	0	0	0	310
		Other	0	0	0	0	10	0	0	6	0	0	0	0	16
		Future Total	**83**	**44**	**199**	**118**	**456**	**12**	**94**	**423**	**99**	**83**	**31**	**51**	**1693**

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
23	Neroly Rd/Live Oak Ave	Final Base	97	76	20	81	70	0	2	178	163	11	146	125	969
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	5	31	0	25	29	4	6	65	10	0	41	67	283
		Other	0	6	0	8	4	0	0	0	0	0	0	14	32
		Future Total	**102**	**113**	**20**	**114**	**103**	**4**	**8**	**243**	**173**	**11**	**187**	**206**	**1284**

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
24	Live Oak Ave/Oakley Rd	Final Base	18	56	34	29	62	2	4	144	29	36	97	18	529
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	22	0	0	13	0	0	0	0	0	0	0	35
		Net New Trips	6	1	65	5	0	0	0	30	7	30	19	3	166
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	**24**	**79**	**99**	**34**	**75**	**2**	**4**	**174**	**36**	**66**	**116**	**21**	**730**

ID	Intersection Name	Volume Type	Northeastbound		Southwestbound		Southeastbound		Total Volume
			Left	Thru	Thru	Right	Left	Right	
29	Neroly Rd/Laurel Rd	Final Base	220	1267	690	63	75	140	2455
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	13	1058	705	94	80	10	1960
		Other	14	0	0	0	0	8	22
		Future Total	**247**	**2325**	**1395**	**157**	**155**	**158**	**4437**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
91	Main St & West Driveway	Final Base	0	1	1084	0	1	576	1662
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	703	0	0	456	1159
		Other	28	0	72	0	0	14	114
		Future Total	**28**	**1**	**1859**	**0**	**1**	**1046**	**2935**

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
92	Main St & East Driveway	Final Base	0	0	1084	0	0	577	1661
		Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	0	0	703	0	0	456	1159
		Other	14	14	0	72	24	0	124
		Future Total	**14**	**14**	**1787**	**72**	**24**	**1033**	**2944**

Appendix F

Background plus Project Mitigated LOS Analysis

Intersection Level Of Service Report
Intersection 23: Neroly Rd/Live Oak Ave

Control Type:	Signalized	Delay (sec / veh):	39.2
Analysis Method:	HCM 2000	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.644

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	155.00	100.00	100.00
Speed [mph]	50.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Base Volume Input [veh/h]	210	64	22	119	125	1	3	128	132	17	313	95
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	35	0	24	42	5	1	22	2	0	48	38
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	2	0	12	6	0	0	0	0	0	0	4
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	217	101	22	155	173	6	4	150	134	17	361	137
Peak Hour Factor	0.8900	0.8900	0.8900	0.7100	0.7100	0.7100	0.8800	0.8800	0.8800	0.8600	0.8600	0.8600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	28	6	55	61	2	1	43	38	5	105	40
Total Analysis Volume [veh/h]	244	113	25	218	244	8	5	170	152	20	420	159
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	4	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	0	5	0	0	5	0	0	5	0
Maximum Green [s]	0	30	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C
C, Cycle Length [s]	102	102	102	102	102	102
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	30	30	30	30	30	30
g / C, Green / Cycle	0.29	0.29	0.29	0.29	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.21	0.26	0.01	0.10	0.02	0.17
Total Saturation Flow Adjustment	0.94	0.95	0.27	0.87	0.48	0.89
s, saturation flow rate [veh/h]	1786	1813	521	3289	916	3394
c, Capacity [veh/h]	525	533	153	967	269	998
d1, Uniform Delay [s]	32.33	34.31	25.66	28.17	25.98	30.64
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.55	18.62	0.40	0.93	0.53	2.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.88	0.03	0.33	0.07	0.58
d, Delay for Lane Group [s/veh]	40.88	52.92	26.05	29.10	26.51	33.10
Lane Group LOS	D	D	C	C	C	C
Critical Lane Group	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	11.63	16.66	0.11	4.13	0.45	8.39
50th-Percentile Queue Length [ft/ln]	290.84	416.59	2.81	103.33	11.22	209.71
95th-Percentile Queue Length [veh/ln]	19.75	27.26	0.29	8.42	1.13	14.99
95th-Percentile Queue Length [ft/ln]	493.73	681.41	7.24	210.54	28.21	374.71

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	40.88	40.88	40.88	52.92	52.92	52.92	26.05	29.10	29.10	26.51	33.10	33.10
Movement LOS	D	D	D	D	D	D	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	40.88			52.92			29.05			32.88		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	39.19											
Intersection LOS	D											
Intersection V/C	0.644											

Sequence

Ring 1	2	6	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 1: Bridgehead Rd/Main St

Control Type:	Signalized	Delay (sec / veh):	36.0
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.705

Intersection Setup

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	1	0	0	1	0	1
Pocket Length [ft]	250.00	100.00	100.00	100.00	100.00	125.00	100.00	100.00	100.00	235.00	100.00	495.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Neroly Rd			Bridgehead Rd			Main St			Main St		
Base Volume Input [veh/h]	157	73	42	344	171	29	82	732	160	31	461	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	56	0	0	0	0	0	0	708	102	1	459	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	50	0	0	29	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	213	73	42	344	171	29	82	1490	262	32	949	125
Peak Hour Factor	0.9400	0.9400	0.9400	0.9000	0.9000	0.9000	0.8700	0.8700	0.8700	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	57	19	11	96	48	8	24	428	75	9	264	35
Total Analysis Volume [veh/h]	227	78	45	382	190	32	94	1713	301	36	1054	139
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	2			0			0			0		
Bicycle Volume [bicycles/h]	1			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	8	0	0	7	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	4	0	0	4	0	4	10	0	4	10	0
Maximum Green [s]	0	21	0	0	35	0	11	30	0	11	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	4.5	0.0	3.0	4.5	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.0	0.0	2.0	4.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	24	0	0	0	0	0	12	0	0	12	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	4.5	0.0	2.0	4.5	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	20.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	78	78	78	78	78	78	78	78	78	78	78
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	6.50	6.50	4.00	6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	4.50	4.50	2.00	4.50	4.50
g_i, Effective Green Time [s]	12	12	15	15	15	5	30	30	2	27	27
g / C, Green / Cycle	0.16	0.16	0.19	0.19	0.19	0.07	0.39	0.39	0.03	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.13	0.07	0.16	0.16	0.02	0.05	0.39	0.39	0.02	0.21	0.09
s, saturation flow rate [veh/h]	1745	1712	1745	1801	1557	1745	3489	1695	1745	4991	1557
c, Capacity [veh/h]	276	271	333	344	297	122	1343	653	49	1715	535
d1, Uniform Delay [s]	31.74	29.75	30.41	30.40	26.04	35.63	23.96	23.96	37.56	21.29	18.44
k, delay calibration	0.04	0.04	0.04	0.04	0.04	0.04	0.15	0.42	0.04	0.15	0.15
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.36	0.44	2.29	2.20	0.06	3.84	14.51	37.46	7.37	0.51	0.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82	0.45	0.85	0.84	0.11	0.77	1.00	1.02	0.73	0.61	0.26
d, Delay for Lane Group [s/veh]	34.10	30.20	32.70	32.60	26.09	39.47	38.47	61.42	44.94	21.80	18.80
Lane Group LOS	C	C	C	C	C	D	F	F	D	C	B
Critical Lane Group	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.06	2.00	4.96	5.10	0.47	1.77	13.30	17.08	0.74	4.80	1.67
50th-Percentile Queue Length [ft/ln]	101.41	50.04	124.11	127.62	11.67	44.30	332.38	426.93	18.54	119.89	41.73
95th-Percentile Queue Length [veh/ln]	7.30	3.60	8.62	8.81	0.84	3.19	19.32	24.18	1.33	8.39	3.00
95th-Percentile Queue Length [ft/ln]	182.53	90.07	215.46	220.25	21.01	79.74	483.09	604.57	33.37	209.67	75.12

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	34.10	30.20	30.20	32.67	32.60	26.09	39.47	43.36	61.42	44.94	21.80	18.80
Movement LOS	C	C	C	C	C	C	D	D	E	D	C	B
d_A, Approach Delay [s/veh]	32.73			32.30			45.76			22.14		
Approach LOS	C			C			D			C		
d_I, Intersection Delay [s/veh]	36.04											
Intersection LOS	D											
Intersection V/C	0.705											

Sequence

Ring 1	1	2	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 23: Neroly Rd/Live Oak Ave

Control Type:	All-way stop	Delay (sec / veh):	22.0
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.738

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	155.00	100.00	100.00
Speed [mph]	50.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Base Volume Input [veh/h]	97	76	20	81	70	0	2	178	163	11	146	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	31	0	25	29	4	6	65	10	0	41	67
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	6	0	8	4	0	0	0	0	0	0	14
Total Hourly Volume [veh/h]	102	113	20	114	103	4	8	243	173	11	187	206
Peak Hour Factor	0.7000	0.7000	0.7000	0.7900	0.7900	0.7900	0.8700	0.8700	0.8700	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	40	7	36	33	1	2	70	50	3	53	59
Total Analysis Volume [veh/h]	146	161	29	144	130	5	9	279	199	13	213	234
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	455	442	410	436	472	408	434	476
Degree of Utilization, x	0.74	0.63	0.02	0.55	0.51	0.03	0.49	0.49

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	6.02	4.25	0.07	3.21	2.81	0.10	2.64	2.67
95th-Percentile Queue Length [ft]	150.51	106.30	1.68	80.25	70.18	2.47	66.08	66.63
Approach Delay [s/veh]	30.07	24.10	19.04			17.85		
Approach LOS	D	C	C			C		
Intersection Delay [s/veh]	21.96							
Intersection LOS	C							

Intersection Level Of Service Report
Intersection 24: Live Oak Ave/Oakley Rd

Control Type:	All-way stop	Delay (sec / veh):	11.3
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.387

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Base Volume Input [veh/h]	18	56	34	29	62	2	4	144	29	36	97	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	22	0	0	13	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	1	65	5	0	0	0	30	7	30	19	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	79	99	34	75	2	4	174	36	66	116	21
Peak Hour Factor	0.8400	0.8400	0.8400	0.8000	0.8000	0.8000	0.8900	0.8900	0.8900	0.7900	0.7900	0.7900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	24	29	11	23	1	1	49	10	21	37	7
Total Analysis Volume [veh/h]	29	94	118	43	94	3	4	196	40	84	147	27
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	681	624	674	666
Degree of Utilization, x	0.35	0.22	0.36	0.39

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.60	0.86	1.61	1.83
95th-Percentile Queue Length [ft]	39.92	21.42	40.27	45.78
Approach Delay [s/veh]	11.15	10.44	11.26	11.78
Approach LOS	B	B	B	B
Intersection Delay [s/veh]	11.25			
Intersection LOS	B			

Intersection Level Of Service Report
Intersection 5: Main St/Empire Ave

Control Type:	Signalized	Delay (sec / veh):	33.1
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.708

Intersection Setup

Name	Main St			Empire Ave			Charles Way			Main St		
Approach	Westbound			Northeastbound			Southwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	1	1	0	1
Pocket Length [ft]	205.00	100.00	100.00	120.00	100.00	100.00	100.00	100.00	80.00	190.00	100.00	250.00
Speed [mph]	30.00			40.00			25.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Main St			Empire Ave			Charles Way			Main St		
Base Volume Input [veh/h]	199	411	9	264	24	149	12	21	18	36	733	293
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	85	446	0	22	0	106	0	0	0	0	696	19
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	8	6	10	0	0	0	0	0	0	14	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	284	865	15	296	24	255	12	21	18	36	1443	312
Peak Hour Factor	0.9800	0.9800	0.9800	0.7900	0.7900	0.7900	0.5500	0.5500	0.5500	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	72	221	4	94	8	81	5	10	8	10	388	84
Total Analysis Volume [veh/h]	290	883	15	375	30	323	22	38	33	39	1552	335
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	5			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	54.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss
Signal group	1	6	0	0	3	0	0	4	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	4	10	0	0	4	0	0	4	0	4	10	0
Maximum Green [s]	17	37	0	0	17	0	0	25	0	12	33	0
Amber [s]	3.0	4.8	0.0	0.0	4.4	0.0	0.0	3.6	0.0	3.0	4.4	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	20	43	0	0	22	0	0	30	0	15	38	0
Vehicle Extension [s]	2.5	3.5	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.5	3.5	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	19	0	0	0	0	0	20	0	0	24	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	1.0	3.8	0.0	0.0	3.4	0.0	0.0	2.6	0.0	1.0	3.4	0.0
Minimum Recall	No	Yes			No			No		No	Yes	
Maximum Recall	No	No			No			No		No	No	
Pedestrian Recall	No	No			No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	C	R	L	C	R
C, Cycle Length [s]	88	88	88	88	88	88	88	88	88	88	88
L, Total Lost Time per Cycle [s]	3.00	5.80	5.80	5.40	5.40	5.40	4.60	4.60	3.00	5.40	5.40
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	1.00	3.80	3.80	3.40	3.40	3.40	2.60	2.60	1.00	3.40	3.40
g_i, Effective Green Time [s]	16	45	45	17	17	17	4	4	2	32	32
g / C, Green / Cycle	0.18	0.51	0.51	0.19	0.19	0.19	0.05	0.05	0.03	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.16	0.24	0.24	0.11	0.02	0.21	0.03	0.02	0.02	0.31	0.21
s, saturation flow rate [veh/h]	1774	1863	1852	3445	1863	1571	1829	1583	1774	5074	1583
c, Capacity [veh/h]	327	954	949	667	361	304	94	81	51	1833	572
d1, Uniform Delay [s]	34.92	13.77	13.77	32.04	29.02	35.40	40.86	40.36	42.36	25.80	22.72
k, delay calibration	0.33	0.15	0.15	0.04	0.04	0.39	0.04	0.04	0.08	0.13	0.14
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	20.37	0.49	0.49	0.28	0.04	63.15	2.69	1.21	16.32	1.39	1.22
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.89	0.47	0.47	0.56	0.08	1.06	0.64	0.41	0.77	0.85	0.59
d, Delay for Lane Group [s/veh]	55.29	14.25	14.26	32.31	29.05	98.56	43.55	41.57	58.68	27.19	23.94
Lane Group LOS	E	B	B	C	C	F	D	D	E	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	7.74	5.46	5.44	3.45	0.50	11.48	1.34	0.72	1.06	9.67	5.57
50th-Percentile Queue Length [ft/ln]	193.41	136.62	135.89	86.28	12.50	286.93	33.46	17.91	26.45	241.77	139.33
95th-Percentile Queue Length [veh/ln]	12.30	9.30	9.26	6.21	0.90	17.56	2.41	1.29	1.90	14.77	9.44
95th-Percentile Queue Length [ft/ln]	307.45	232.47	231.49	155.30	22.50	438.97	60.23	32.24	47.62	369.27	236.12

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.29	14.26	14.26	32.31	29.05	98.56	43.55	43.55	41.57	58.68	27.19	23.94
Movement LOS	E	B	B	C	C	F	D	D	D	E	C	C
d_A, Approach Delay [s/veh]	24.27			61.57			42.85			27.26		
Approach LOS	C			E			D			C		
d_I, Intersection Delay [s/veh]	33.07											
Intersection LOS	C											
Intersection V/C	0.708											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 23: Neroly Rd/Live Oak Ave

Control Type:	All-way stop	Delay (sec / veh):	22.0
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.738

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	155.00	100.00	100.00
Speed [mph]	50.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Neroly Rd			Neroly Rd		
Base Volume Input [veh/h]	97	76	20	81	70	0	2	178	163	11	146	125
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	31	0	25	29	4	6	65	10	0	41	67
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	6	0	8	4	0	0	0	0	0	0	14
Total Hourly Volume [veh/h]	102	113	20	114	103	4	8	243	173	11	187	206
Peak Hour Factor	0.7000	0.7000	0.7000	0.7900	0.7900	0.7900	0.8700	0.8700	0.8700	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	40	7	36	33	1	2	70	50	3	53	59
Total Analysis Volume [veh/h]	146	161	29	144	130	5	9	279	199	13	213	234
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	455	442	410	436	472	408	434	476
Degree of Utilization, x	0.74	0.63	0.02	0.55	0.51	0.03	0.49	0.49

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	6.02	4.25	0.07	3.21	2.81	0.10	2.64	2.67
95th-Percentile Queue Length [ft]	150.51	106.30	1.68	80.25	70.18	2.47	66.08	66.63
Approach Delay [s/veh]	30.07	24.10	19.04			17.85		
Approach LOS	D	C	C			C		
Intersection Delay [s/veh]	21.96							
Intersection LOS	C							

Intersection Level Of Service Report
Intersection 24: Live Oak Ave/Oakley Rd

Control Type:	All-way stop	Delay (sec / veh):	11.3
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.387

Intersection Setup

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Live Oak Ave			Live Oak Ave			Oakley Rd			Oakley Rd		
Base Volume Input [veh/h]	18	56	34	29	62	2	4	144	29	36	97	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	22	0	0	13	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	1	65	5	0	0	0	30	7	30	19	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	79	99	34	75	2	4	174	36	66	116	21
Peak Hour Factor	0.8400	0.8400	0.8400	0.8000	0.8000	0.8000	0.8900	0.8900	0.8900	0.7900	0.7900	0.7900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	24	29	11	23	1	1	49	10	21	37	7
Total Analysis Volume [veh/h]	29	94	118	43	94	3	4	196	40	84	147	27
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	681	624	674	666
Degree of Utilization, x	0.35	0.22	0.36	0.39

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.60	0.86	1.61	1.83
95th-Percentile Queue Length [ft]	39.92	21.42	40.27	45.78
Approach Delay [s/veh]	11.15	10.44	11.26	11.78
Approach LOS	B	B	B	B
Intersection Delay [s/veh]	11.25			
Intersection LOS	B			

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