

APPENDIX D

Construction Traffic Level of Service Analysis

Chevron Coke Drum Transportation
Existing + Project
PM Peak Hour

Scenario Report

Scenario: Ex + Proj PM
Command: Ex + Proj PM
Volume: Ex + Proj PM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Project
Trip Distribution: Project
Paths: Default Path
Routes: Default Route
Configuration: Ex + Proj PM

 Chevron Coke Drum Transportation
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Turning Movement Report
 Project PM

Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
#1 Main St / Imperial Hwy													
Base	171	0	471	0	0	1	0	625	302	558	735	1	2864
Added	0	0	167	0	0	0	0	0	0	167	0	0	334
Total	171	0	638	0	0	1	0	625	302	725	735	1	3198
#2 Vista Del Mar / Imperial Hwy													
Base	4	432	266	122	897	13	13	10	1	430	13	143	2344
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	4	432	266	122	897	13	13	10	1	430	13	143	2344
#3 Vista Del Mar / Grand Ave													
Base	1	495	92	142	1067	7	7	12	3	151	8	111	2096
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	495	92	142	1067	7	7	12	3	151	8	111	2096
#4 Main St / Imperial Ave													
Base	16	416	27	92	590	194	146	31	41	29	24	64	1670
Added	0	167	0	0	167	0	0	0	0	0	0	0	334
Total	16	583	27	92	757	194	146	31	41	29	24	64	2004
#5 Main St / Grand Ave													
Base	79	268	36	143	135	73	50	246	58	34	232	109	1463
Added	0	167	0	0	167	0	0	0	0	0	0	0	334
Total	79	435	36	143	302	73	50	246	58	34	232	109	1797
#6 Main St / Holly Ave													
Base	19	414	21	19	285	39	26	10	21	12	8	17	891
Added	0	167	0	0	167	0	0	0	0	0	0	0	334
Total	19	581	21	19	452	39	26	10	21	12	8	17	1225
#7 Main St / Mariposa Ave													
Base	43	467	30	67	367	54	74	52	24	26	65	99	1368
Added	0	167	0	0	167	0	0	0	0	0	0	0	334
Total	43	634	30	67	534	54	74	52	24	26	65	99	1702
#10 Vista Del Mar / Rosecrans Ave													
Base	0	0	0	0	0	0	0	0	0	0	0	0	0
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
#11 Rosecrans / Chevron Gate 21 (Pacific Ave)													
Base	0	0	0	0	0	0	0	0	0	0	0	0	0
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0

 Chevron Coke Drum Transportation
 Existing + Project
 PM Peak Hour

Impact Analysis Report
 Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Main St / Imperial Hwy	A xxxxx	0.443	A xxxxx	0.501	+ 0.058 V/C
# 2 Vista Del Mar / Imperial Hwy	A xxxxx	0.433	A xxxxx	0.433	+ 0.000 V/C
# 3 Vista Del Mar / Grand Ave	A xxxxx	0.419	A xxxxx	0.419	+ 0.000 V/C
# 4 Main St / Imperial Ave	A xxxxx	0.448	A xxxxx	0.500	+ 0.052 V/C
# 5 Main St / Grand Ave	A xxxxx	0.358	A xxxxx	0.410	+ 0.052 V/C
# 6 Main St / Holly Ave	A xxxxx	0.197	A xxxxx	0.249	+ 0.052 V/C
# 7 Main St / Mariposa Ave	A xxxxx	0.376	A xxxxx	0.428	+ 0.052 V/C

 Chevron Coke Drum Transportation
 Existing + Project
 PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Main St / Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.501
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Street Name:	Main St	Imperial Hwy	
Approach:	North Bound	South Bound	East Bound West Bound
Movement:	L - T - R	L - T - R	L - T - R L - T - R
Control:	Split Phase	Split Phase	Protected Protected
Rights:	Ignore	Include	Ignore Include
Min. Green:	0 0 0	0 0 0	0 0 0 0 0 0
Lanes:	1 1 0 0 1	0 0 0 0 1	0 0 2 0 1 2 0 2 0 1

Volume Module:												
Base Vol:	171	0	471	0	0	1	0	625	302	558	735	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	171	0	471	0	0	1	0	625	302	558	735	1
Added Vol:	0	0	167	0	0	0	0	0	0	167	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	171	0	638	0	0	1	0	625	302	725	735	1
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	171	0	0	0	0	1	0	625	0	725	735	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	171	0	0	0	0	1	0	625	0	725	735	1
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	171	0	0	0	0	1	0	625	0	725	735	1

Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	1.00	0.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	0	1600	0	0	1600	0	3200	1600	2880	3200	1600

Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.25	0.23	0.00
Crit Moves:	****					****		****		****		

Chevron Coke Drum Transportation
Existing + Project
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Vista Del Mar / Imperial Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.433
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: A

Table with columns for Street Name (Vista Del Mar, Imperial Hwy), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat and Crit Moves.

 Chevron Coke Drum Transportation
 Existing + Project
 PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Vista Del Mar / Grand Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.419
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Street Name:	Vista Del Mar	Grand Ave	
Approach:	North Bound	South Bound	East Bound West Bound
Movement:	L - T - R	L - T - R	L - T - R L - T - R
Control:	Protected	Protected	Split Phase Split Phase
Rights:	Include	Include	Include Include
Min. Green:	0 0 0	0 0 0	0 0 0 0 0 0
Lanes:	1 0 1 1 0	1 0 1 1 0	0 0 1! 0 0 1 1 0 0 1

Volume Module:												
Base Vol:	1	495	92	142	1067	7	7	12	3	151	8	111
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	495	92	142	1067	7	7	12	3	151	8	111
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	495	92	142	1067	7	7	12	3	151	8	111
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	495	92	142	1067	7	7	12	3	151	8	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	495	92	142	1067	7	7	12	3	151	8	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	495	92	142	1067	7	7	12	3	151	8	111

Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.69	0.31	1.00	1.99	0.01	0.32	0.54	0.14	1.90	0.10	1.00
Final Sat.:	1600	2698	502	1600	3179	21	509	873	218	3039	161	1600

Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.18	0.09	0.34	0.34	0.01	0.01	0.01	0.05	0.05	0.07
Crit Moves:	****				****			****				****

Chevron Coke Drum Transportation
Existing + Project
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Main St / Imperial Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.500
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A

Table with columns for Street Name (Main St, Imperial Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat and Crit Moves.

Chevron Coke Drum Transportation
Existing + Project
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Main St / Grand Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.410
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Table with columns for Street Name (Main St, Grand Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat and Crit Moves.

Chevron Coke Drum Transportation
Existing + Project
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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Main St / Holly Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.249
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 19 Level Of Service: A

Table with columns for Street Name (Main St, Holly Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, and Lanes.

Volume Module:

Table with columns for various volume metrics: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MFL Adj, Final Volume.

Saturation Flow Module:

Table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:

Table with columns for Vol/Sat and Crit Moves.

Chevron Coke Drum Transportation
Existing + Project
PM Peak Hour

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Main St / Mariposa Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.428
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Table with columns for Street Name (Main St, Mariposa Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, and Lanes.

Volume Module:

Table showing traffic volume data including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module:

Table showing saturation flow data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:

Table showing capacity analysis data including Vol/Sat and Crit Moves.
