

Tra Vigne Development Project Infrastructure Phasing Plan

Appendix B Public Facilities Finance Plan

Prepared for MCD North Stockton, LLC Tra Vigne Project

Prepared by Berkson Associates

Prepared by NorthStar Engineering Group

January 23, 2020

February 28, 2020

Tra Vigne Development Project Infrastructure Phasing Plan

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NorthStar Engineering Group, Inc.

620 12th Street
Modesto, CA 95354
Phone (209) 524-3525
Fax (209) 524-3526

Tra Vigne (West & East) Engineer's Estimate of Probable Cost

Summary of Total Improvements

I. Tra Vigne Shared Construction Cost Summary	
A. Off-Site West Lane Total Street Improvements	\$4,582,421.02
B. Off-Site 8 Mile Rd Total Street Improvements	\$4,187,535.67
C. West Lane - 8 Mile Total Intersection Improvements	\$413,688.00
D. Sanitary Sewer Infrastructure	\$872,090.00
E. Potable Water System Infrastructure	\$2,879,780.00
F. West lane / Bear Creek 24" Water Crossing Infrastructure	\$374,750.00
G. Off-Site Mitigation Improvements	\$412,928.75
SUB-TOTAL ==>	\$13,723,193.43
CONSTRUCTION SUB-TOTAL ==>	\$13,723,193.43
CONTINGENCY - 10% ==>	\$1,372,319.34
CONSTRUCTION TOTAL ==>	\$15,095,512.78
SOFT COSTS - 35% ==>	\$5,283,429.47
GRAND TOTAL ==>	\$20,378,942.25
TOTAL LOTS ==>	1,212
COST PER LOT ==>	\$16,814.31
GRAND TOTAL IMPROVEMENTS AVAILABLE FOR PFF CREDITS ==>	\$2,933,499.34
GRAND TOTAL REIMBURSABLE OFF-SITE SHARED IMPROVEMENTS ==>	\$2,136,319.93
GRAND TOTAL PFF FEE CREDITS AND REIMBURSABLE IMPROVEMENTS ==>	\$5,069,819.27
GRAND TOTAL OFF-SITE SHARED IMPROVEMENTS LESS REIMBURSEMENTS ==>	\$15,309,122.97
TOTAL LOTS ==>	1,212
COST PER LOT ==>	\$12,631.29

II. Tra Vigne West In-Tract Construction Cost Summary		
A.	Tra Vigne West In-Tract Major Infrastructure	\$4,876,151.50
B.	Tra Vigne West Backbone In-Tract Improvements	\$10,279,108.00
C.	Tra Vigne West In-Tract Improvements	\$18,090,349.25
SUB-TOTAL ==>		\$33,245,608.75
CONSTRUCTION SUB-TOTAL ==>		\$33,245,608.75
CONTINGENCY - 10% ==>		\$3,324,560.88
CONSTRUCTION TOTAL ==>		\$36,570,169.63
SOFT COSTS - 35% ==>		\$12,799,559.37
GRAND TOTAL ==>		\$49,369,728.99
TOTAL LOTS ==>		794
COST PER LOT ==>		\$62,178.50
SUB-TOTAL TRA VIGNE WEST IN-TRACT AND SHARED COSTS ==>		\$59,398,972.92
TOTAL LOTS ==>		794
COST PER LOT ==>		\$74,809.79
GRAND TOTAL IMPROVEMENTS AVAILABLE FOR PFF CREDITS ==>		\$4,419,771.35
GRAND TOTAL REIMBURSABLE OFF-SITE SHARED IMPROVEMENTS ==>		\$218,146.50
GRAND TOTAL PFF FEE CREDITS AND REIMBURSABLE IMPROVEMENTS ==>		\$4,637,917.85
GRAND TOTAL TRA VIGNE WEST IN-TRACT AND SHARED COSTS ==>		\$54,761,055.08
TOTAL LOTS ==>		794
COST PER LOT ==>		\$68,968.58

III. Tra Vigne East In-Tract Construction Cost Summary		
A.	Tra Vigne East In-Tract Major Infrastructure	\$2,483,358.00
B.	Tra Vigne East In-Tract Improvements	\$9,855,245.03
SUB-TOTAL ==>		\$12,338,603.03
CONSTRUCTION SUB-TOTAL ==>		\$12,338,603.03
CONTINGENCY - 10% ==>		\$1,233,860.30
CONSTRUCTION TOTAL ==>		\$13,572,463.33
SOFT COSTS - 35% ==>		\$4,750,362.17
GRAND TOTAL ==>		\$18,322,825.50
TOTAL LOTS ==>		418
COST PER LOT ==>		\$43,834.51
SUB-TOTAL TRA VIGNE EAST IN-TRACT AND SHARED COSTS ==>		\$23,602,704.55
TOTAL LOTS ==>		418
COST PER LOT ==>		\$56,465.80
GRAND TOTAL IMPROVEMENTS AVAILABLE FOR PFF CREDITS ==>		\$3,273,649.83
GRAND TOTAL REIMBURSABLE OFF-SITE SHARED IMPROVEMENTS ==>		\$103,534.20
GRAND TOTAL PFF FEE CREDITS AND REIMBURSABLE IMPROVEMENTS ==>		\$3,377,184.03
GRAND TOTAL TRA VIGNE EAST IN-TRACT AND SHARED COSTS ==>		\$20,225,520.52
TOTAL LOTS ==>		418
COST PER LOT ==>		\$48,386.41

TABLE X.X
Infrastructure Linkage to Development Phases
Offsite, On-Site Backbond, and Other Shared Infrastructure

[illegible]

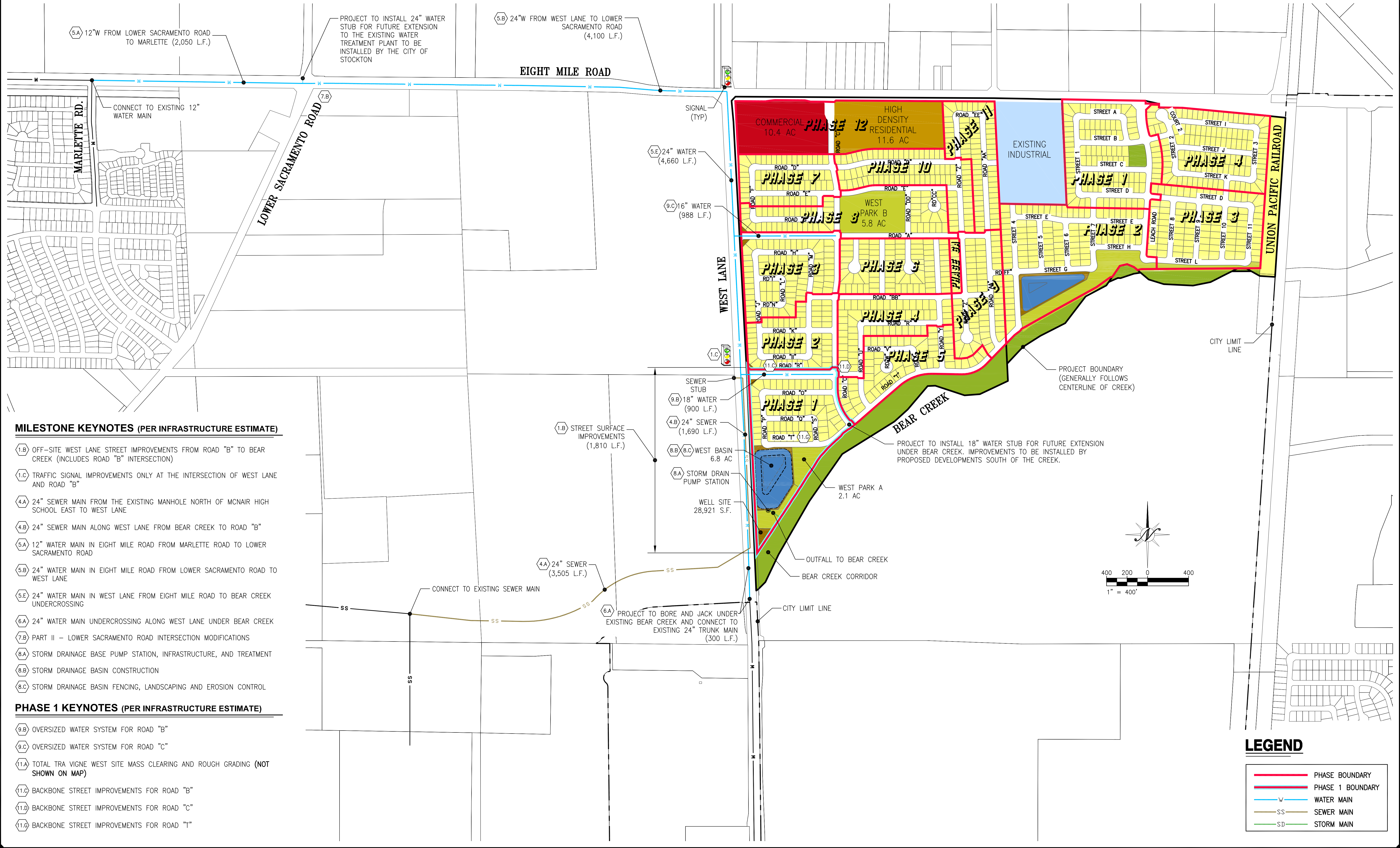
ITEM	DESCRIPTION	PROJECT		VERTICAL DEVELOPMENT PHASES																
				WEST												EAST				
		PHASE	MILESTONE	1	2	3	4	5	6	7	8	9	10	11	CM	MF	1	2	3	4
		EX. REF		6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	6.10	6.11	6.12	6.12	7.1	7.2	7.3	7.4
9 Tra Vigne West Oversized Backbone Water System Improvements																				
9.A	Oversized Water System for Road "A" - Segments (A1), (A2), and (A3)	3.1				X			X	X	X		X	X						
9.B	Oversized Water System for Road "B" - Segment (B)	3.1		X	X	X	X	X	X			X								
9.C	Oversized Water System for Road "C" - Segments (C1), (C2), (C3), (C4), and (C5)	3.1		X	X	X	X	X	X	X	X	X	X	X	X					
9.D	Oversized Water System for Roads "AA", "BB" AND "FF" - Segments (BB1), (BB2), (BB3), (AA), and (FF)	3.1					X	X	X			X								
10 Tra Vigne West In-Tract Parks, Landscaping, Open Space, and Recreational Improvements																				
10.A	In-Tract Park Landscaping Improvements (Does Not Include Major Amenities) (Per Development Agreement)	3.1 , 4.1 5.1		PER DEVELOPMENT AGREEMENT																
11 Tra Vigne West Backbone In-Tract Improvements																				
11.A	Total Tra Vigne West Site Mass Clearing and Rough Grading	4.1 , 5.1		X	X	X	X	X	X	X	X	X	X	X	X	X	P	P	P	P
11.B	Backbone Street Improvements for Road "A" - Segments (A1), (A2), and (A3)	4.1 , 5.1				P			P	P	P		X	X			P	P	P	P
11.C	Backbone Street Improvements for Road "B" - Segment (B)	4.1 , 5.1		X	X	X	X	X	X			X					P	P	P	P
11.D	Backbone Street Improvements for Road "C" - Segments (C1), (C2), (C3), (C4), and (C5)	4.1 , 5.1		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
11.E	Backbone Street Improvements for Roads "AA", "BB" AND "FF" - Segments (BB1), (BB2), (BB3), (AA), and (FF)	4.1 , 5.1					P		P			X					P	P	P	P
11.F	Backbone Street Improvements for Road "E" - Segment (E) - East of Road "C"	4.1 , 5.1									X		X	X						
11.G	Backbone Street Improvements for Road "T" - Segment (T1) and (T2)	4.1 , 5.1		P	P	P	P	P	P	P	P	X	P	P	P	P	P	P	P	P
12 Tra Vigne West In-Tract Improvements																				
12.A	Phase 1 - In-Tract Improvements:	4.1 , 6.1		X	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
12.B	Phase 2 - In-Tract Improvements:	4.1 , 6.2			X	P														
12.C	Phase 3 - In-Tract Improvements:	4.1 , 6.3				X														
12.D	Phase 4 - In-Tract Improvements:	4.1 , 6.4					X	P												
12.E	Phase 5 - In-Tract Improvements:	4.1 , 6.5						X												
12.F	Phase 6 - In-Tract Improvements:	4.1 , 6.6							X											
12.G	Phase 7 - In-Tract Improvements:	4.1 , 6.7								X	P									
12.H	Phase 8 - In-Tract Improvements:	4.1 , 6.8									X									
12.I	Phase 9 - In-Tract Improvements:	4.1 , 6.9										X								
12.J	Phase 10 - In-Tract Improvements:	4.1 , 6.1											X	P						
12.K	Phase 11 - In-Tract Improvements:	4.1 , 6.11												X						
12.L	Phase 12 - Commercial and Multi-Family Land Use	4.1 , 6.12												X	X	X				

ITEM	DESCRIPTION	PROJECT		VERTICAL DEVELOPMENT PHASES																
				WEST												EAST				
		PHASE	MILESTONE	1	2	3	4	5	6	7	8	9	10	11	CM	MF	1	2	3	4
		EX. REF		6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	6.10	6.11	6.12	6.12	7.1	7.2	7.3	7.4
13 Tra Vigne East Oversized Backbone Water System Improvements																				
13.A	Oversized Water System for Backbone Roads	3.1															X	X	X	X
14 Tra Vigne East In-Tract Parks, Landscaping, Open Space, and Recreational Improvements																				
14.A	In-Tract Park Landscaping Improvements (Does Not Include Major Amenities) (Per Development Agreement)	3.1 , 4.1 5.1		PER DEVELOPMENT AGREEMENT																
15 Tra Vigne East In-Tract Improvements																				
15.A	Backbone Street Improvements	4.1 , 5.1															X	X	X	X
15.B	Phase 1 - In-Tract Improvements	4.1 , 7.1															X			
15.C	Phase 2 - In-Tract Improvements	4.1 , 7.2																X		
15.D	Phase 3 - In-Tract Improvements	4.1 , 7.3																	X	
15.E	Phase 4 - In-Tract Improvements	4.1 , 7.4																		X

REFERENCE NOTES

- [X] Denotes improvements that are required per phase of the project
[P] Denotes improvements that are partially required per phase of the project
[M] Designates Milestone Infrastructure Improvements at Start of Project

EXHIBIT E
MILESTONE IMPROVEMENTS AND PHASE 1
SEPTEMBER 13, 2019



TRA VIGNE OFF-SITE SHARED INFRASTRUCTURE IMPROVEMENTS SUMMARY

BREAKDOWN OF TOTAL OFF-SITE IMPROVEMENT COSTS, IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS, AND DETERMINATION REMAINING IMPROVEMENTS AVAILABLE FOR AREA OF BENEFIT REIMBURSEMENTS

Engineer's Estimate of Probable Cost

LAND USE AREA BREAKDOWN

							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	BEAR CREEK SOUTH
							200.2	98	5.3	10.3	590	505.2

BREAKDOWN OF TOTAL IMPROVEMENTS, PFF REIMBURSABLE IMPROVEMENTS, AND AREA OF BENEFIT ANALYSIS

ITEM	DESCRIPTION	EXHIBIT REF	TOTAL IMPROVEMENTS COST [SEE NOTE 1]	IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS [SEE NOTE 2]	IMPROVEMENTS AVAILABLE FOR REIMBURSEMENTS [SEE NOTE 4]	REMAINING IMPROVEMENTS DEVELOPER RESPONSIBILITY AND/OR AREA OF BENEFIT	BREAKDOWN OF REMAINING IMPROVEMENT THAT ARE THE RESPONSIBILITY OF THE DEVELOPER THAT ARE POTENTIALLY AVAILABLE FOR AREA OF BENEFIT ANALYSIS REIMBURSEMENT [SEE NOTES]					
							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	BEAR CREEK SOUTH
1	Off-Site West Lane Total Street Improvements											
1.A	Off-Site West Lane Street Improvements from Eight Mile Road to Road "B" (Includes Road "B" Intersection) - By Frontage [SEE NOTE 3]	2.1 , 2.2 2.3	\$2,664,051	\$238,769	\$0	\$2,425,282	100.0% \$2,425,282	0.0% \$0	0.0% \$0	0.0% \$0	0.0% \$0	0.0% \$0
1.B	Off-Site West Lane Street Improvements from Road "B" to Bear Creek - By Frontage [SEE NOTE 3]	2.1 , 2.2 2.3	\$3,621,094	\$389,879	\$0	\$3,231,216	100.0% \$3,231,216	0.0% \$0	0.0% \$0	0.0% \$0	0.0% \$0	0.0% \$0
1.C	Traffic Signal Improvements Only at the Intersection of West Lane and Road "B" - By Frontage [SEE NOTE 3]	2.1 , 2.3	\$519,750	\$0	\$0	\$519,750	50.0% \$259,875	0.0% \$0	0.0% \$0	0.0% \$0	50.0% \$259,875	0.0% \$0
TOTALS OF SPECIFIC IMPROVEMENTS ==>			\$6,804,895	\$628,647	\$0	\$6,176,248	\$5,916,373	\$0	\$0	\$0	\$259,875	\$0

ITEM	DESCRIPTION	EXHIBIT REF	TOTAL IMPROVEMENTS COST [SEE NOTE 1]	IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS [SEE NOTE 2]	IMPROVEMENTS AVAILABLE FOR REIMBURSEMENTS [SEE NOTE 4]	REMAINING IMPROVEMENTS DEVELOPER RESPONSIBILITY AND/OR AREA OF BENEFIT	BREAKDOWN OF REMAINING IMPROVEMENT THAT ARE THE RESPONSIBILITY OF THE DEVELOPER THAT ARE POTENTIALLY AVAILABLE FOR AREA OF BENEFIT ANALYSIS REIMBURSEMENT [SEE NOTES]					
							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	BEAR CREEK SOUTH
2	Off-Site 8 Mile Rd Total Street Improvements [SEE NOTE 3]											
2.A	Off-Site Eight Mile Road Street Improvements from West Lane to Ham Road - By Frontage [SEE NOTE 3]	2.1 , 2.4 2.5	\$3,004,033	\$803,563	\$0	\$2,200,470	100.0% \$2,200,470	0.0% \$0	0.0% \$0	0.0% \$0	0.0% \$0	0.0% \$0
2.B	Off-Site Eight Mile Road Street Improvements from Ham Road to Leach Road - By Frontage [SEE NOTE 3]	2.1 , 2.4 2.5	\$2,148,970	\$886,962	\$0	\$1,262,001	0.0% \$0	55.5% \$700,734	22.2% \$280,634	22.2% \$280,634	0.0% \$0	0.0% \$0
2.C	Traffic Signal Improvements Only at the Intersection of 8-Mile Road and Road "C" - By Frontage [SEE NOTE 3]	2.1 , 2.5	\$519,750	\$0	\$0	\$519,750	100.0% \$519,750	0.0% \$0	0.0% \$0	0.0% \$0	0.0% \$0	0.0% \$0
2.D	Traffic Signal Improvements Only at the Intersection of 8-Mile Road and Leach Road - By Frontage [SEE NOTE 3]	2.1 , 2.5	\$519,750	\$0	\$0	\$519,750	0.0% \$0	100.0% \$519,750	0.0% \$0	0.0% \$0	0.0% \$0	0.0% \$0
2.E	RTD Bus Stop along Eight-Mile Road adjacent to Commercial Land Use - By Area [SEE NOTE 8]	2.1 , 2.5	\$25,988	\$0	\$0	\$25,988	14.2% \$3,692	7.0% \$1,808	0.4% \$98	0.7% \$190	41.9% \$10,882	35.9% \$9,318
TOTALS OF SPECIFIC IMPROVEMENTS ==>			\$6,218,490	\$1,690,525	\$0	\$4,527,959	\$2,723,913	\$1,222,291	\$280,731	\$280,824	\$10,882	\$9,318

TRA VIGNE OFF-SITE SHARED INFRASTRUCTURE IMPROVEMENTS SUMMARY

BREAKDOWN OF TOTAL OFF-SITE IMPROVEMENT COSTS, IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS, AND DETERMINATION REMAINING IMPROVEMENTS AVAILABLE FOR AREA OF BENEFIT REIMBURSEMENTS

Engineer's Estimate of Probable Cost

ITEM	DESCRIPTION	EXHIBIT REF	TOTAL IMPROVEMENTS COST [SEE NOTE 1]	IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS [SEE NOTE 2]	IMPROVEMENTS AVAILABLE FOR REIMBURSEMENTS [SEE NOTE 4]	REMAINING IMPROVEMENTS DEVELOPER RESPONSIBILITY AND/OR AREA OF BENEFIT	BREAKDOWN OF REMAINING IMPROVEMENT THAT ARE THE RESPONSIBILITY OF THE DEVELOPER THAT ARE POTENTIALLY AVAILABLE FOR AREA OF BENEFIT ANALYSIS REIMBURSEMENT [SEE NOTES]					
							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	BEAR CREEK SOUTH
3	West Lane - 8 Mile Total Intersection Improvements											
3.A	West Lane and Eight Mile Road Intersection Street Improvements and Traffic Signal:	2.1 , 2.3 2.5	\$614,327	\$614,327	\$0	\$0	14.2% \$0	7.0% \$0	0.4% \$0	0.7% \$0	41.9% \$0	35.9% \$0

TOTALS OF SPECIFIC IMPROVEMENTS ==>	\$614,327	\$614,327	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
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ITEM	DESCRIPTION	EXHIBIT REF	TOTAL IMPROVEMENTS COST [SEE NOTE 1]	IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS [SEE NOTE 2]	IMPROVEMENTS AVAILABLE FOR REIMBURSEMENTS [SEE NOTE 4]	REMAINING IMPROVEMENTS DEVELOPER RESPONSIBILITY AND/OR AREA OF BENEFIT	BREAKDOWN OF REMAINING IMPROVEMENT THAT ARE THE RESPONSIBILITY OF THE DEVELOPER THAT ARE POTENTIALLY AVAILABLE FOR AREA OF BENEFIT ANALYSIS REIMBURSEMENT [SEE NOTES]					
							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	BEAR CREEK SOUTH
4	Sanitary Sewer Infrastructure [SEE NOTE 4],[SEE NOTE 5]						22.2%	10.8%	0.6%	1.1%	65.3%	0.0%
4.A	24" Sewer Main from the Existing Manhole North of McNair High School east to West Lane	3.1	\$795,114	\$0	\$511,363	\$283,751	\$62,853	\$30,767	\$1,664	\$3,234	\$185,232	\$0
4.B	24" Sewer Main along West Lane from Bear Creek to Road "A"	3.1	\$499,940	\$0	\$227,008	\$272,932	\$60,457	\$29,594	\$1,601	\$3,110	\$178,170	\$0

TOTALS OF SPECIFIC IMPROVEMENTS ==>	\$1,295,054	\$0	\$738,371	\$556,683	\$123,310	\$60,362	\$3,264	\$6,344	\$363,402	\$0
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ITEM	DESCRIPTION	EXHIBIT REF	TOTAL IMPROVEMENTS COST [SEE NOTE 1]	IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS [SEE NOTE 2]	IMPROVEMENTS AVAILABLE FOR REIMBURSEMENTS [SEE NOTE 4]	REMAINING IMPROVEMENTS DEVELOPER RESPONSIBILITY AND/OR AREA OF BENEFIT	BREAKDOWN OF REMAINING IMPROVEMENT THAT ARE THE RESPONSIBILITY OF THE DEVELOPER THAT ARE POTENTIALLY AVAILABLE FOR AREA OF BENEFIT ANALYSIS REIMBURSEMENT [SEE NOTES]					
							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	BEAR CREEK SOUTH
5	Potable Water System Infrastructure [SEE NOTE 4],[SEE NOTE 6]						14.2%	7.0%	0.4%	0.7%	41.9%	35.9%
5.A	12" Water Main in Eight Mile Road from Marlette Road to Lower Sacramento Road	3.1	\$393,035	\$0	\$0	\$393,035	\$55,845	\$27,337	\$1,478	\$2,873	\$164,578	\$140,924
5.B	24" Water Main in Eight Mile Road from Lower Sacramento Road to West Lane	3.1	\$1,146,420	\$0	\$368,874	\$777,546	\$110,479	\$54,081	\$2,925	\$5,684	\$325,587	\$278,791
5.C	24" Water Main in Eight Mile Road from West Lane to Ham Road	3.1	\$715,711	\$0	\$239,501	\$476,210	\$67,663	\$33,122	\$1,791	\$3,481	\$199,407	\$170,746
5.D	24" Water Main in Eight Mile Road from Ham Road to East End of Tra Vigne East	3.1	\$653,103	\$0	\$217,404	\$435,699	\$61,907	\$30,304	\$1,639	\$3,185	\$182,443	\$156,221
5.E	24" Water Main in West Lane from Eight Mile Road to Bear Creek Undercrossing	3.1	\$1,368,205	\$0	\$423,671	\$944,534	\$134,206	\$65,695	\$3,553	\$6,905	\$395,511	\$338,665

TOTALS OF SPECIFIC IMPROVEMENTS ==>	\$4,276,473	\$0	\$1,249,449	\$3,027,024	\$430,100	\$210,538	\$11,386	\$22,128	\$1,267,526	\$1,085,346
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TRA VIGNE OFF-SITE SHARED INFRASTRUCTURE IMPROVEMENTS SUMMARY

BREAKDOWN OF TOTAL OFF-SITE IMPROVEMENT COSTS, IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS, AND DETERMINATION REMAINING IMPROVEMENTS AVAILABLE FOR AREA OF BENEFIT REIMBURSEMENTS

Engineer's Estimate of Probable Cost

ITEM	DESCRIPTION	EXHIBIT REF	TOTAL IMPROVEMENTS COST [SEE NOTE 1]	IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS [SEE NOTE 2]	IMPROVEMENTS AVAILABLE FOR REIMBURSEMENTS [SEE NOTE 4]	REMAINING IMPROVEMENTS DEVELOPER RESPONSIBILITY AND/OR AREA OF BENEFIT	BREAKDOWN OF REMAINING IMPROVEMENT THAT ARE THE RESPONSIBILITY OF THE DEVELOPER THAT ARE POTENTIALLY AVAILABLE FOR AREA OF BENEFIT ANALYSIS REIMBURSEMENT [SEE NOTES]					
							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	BEAR CREEK SOUTH
6	West lane / Bear Creek 24" Water Crossing Infrastructure [SEE NOTE 4],[SEE NOTE 6]						14.2%	7.0%	0.4%	0.7%	41.9%	35.9%
6.A	24" Water Main Undercrossing along West Lane under Bear Creek	3.1	\$556,504	\$0	\$148,500	\$408,004	\$57,972	\$28,378	\$1,535	\$2,983	\$170,846	\$146,291

TOTALS OF SPECIFIC IMPROVEMENTS ==>>	\$556,504	\$0	\$148,500	\$408,004	\$57,972	\$28,378	\$1,535	\$2,983	\$170,846	\$146,291
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ITEM	DESCRIPTION	EXHIBIT REF	TOTAL IMPROVEMENTS COST [SEE NOTE 1]	IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS [SEE NOTE 2]	IMPROVEMENTS AVAILABLE FOR REIMBURSEMENTS [SEE NOTE 4]	REMAINING IMPROVEMENTS DEVELOPER RESPONSIBILITY AND/OR AREA OF BENEFIT	BREAKDOWN OF REMAINING IMPROVEMENT THAT ARE THE RESPONSIBILITY OF THE DEVELOPER THAT ARE POTENTIALLY AVAILABLE FOR AREA OF BENEFIT ANALYSIS REIMBURSEMENT [SEE NOTES]					
							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	BEAR CREEK SOUTH
7	Off-Site Mitigation Improvements [SEE NOTE 4]						14.2%	7.0%	0.4%	0.7%	41.9%	35.9%
7.A	Part I - Morada Lane - Dedicated Right-Turn Lane	2.6	\$330,635	\$0	\$0	\$330,635	\$46,979	\$22,997	\$1,244	\$2,417	\$138,449	\$118,550
7.B	Part II - Lower Sacramento Road Intersection Modifications	2.6	\$282,564	\$0	\$0	\$282,564	\$40,149	\$19,653	\$1,063	\$2,066	\$118,320	\$101,314

TOTALS OF SPECIFIC IMPROVEMENTS ==>>	\$613,199	\$0	\$0	\$613,199	\$87,127	\$42,650	\$2,307	\$4,483	\$256,769	\$219,864
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ITEM	DESCRIPTION	EXHIBIT REF	TOTAL IMPROVEMENTS COST [SEE NOTE 1]	IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS [SEE NOTE 2]	IMPROVEMENTS AVAILABLE FOR REIMBURSEMENTS [SEE NOTE 4]	REMAINING IMPROVEMENTS DEVELOPER RESPONSIBILITY AND/OR AREA OF BENEFIT	BREAKDOWN OF REMAINING IMPROVEMENT THAT ARE THE RESPONSIBILITY OF THE DEVELOPER THAT ARE POTENTIALLY AVAILABLE FOR AREA OF BENEFIT ANALYSIS REIMBURSEMENT [SEE NOTES]					
							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	BEAR CREEK SOUTH
-	Totals of Project Off-Site and Shared Infrastructure	1.1	\$20,378,942	\$2,933,499	\$2,136,320	\$15,309,116	\$9,338,795	\$1,564,219	\$299,223	\$316,761	\$2,329,300	\$1,460,818

NOTES:

- [1] Above cost estimates include 10% contingency and 35% soft costs.
- [2] Improvements available for PFF Fee Credit assumes that there are sufficient Fee Credits to cover 100% of the improvements that eligible for credit. If it is determined that the PFF Fee Credit will not cover the total of the improvements available for Fee Credit, than the remaining costs should be reimbursed directly from the existing PFF fund through the exection of a reimbursement agreement.
- [3] Cost breakdown for proposed roadway improvements by percentage of project frontages along the said Roadway Improvements
- [4] Sanitary Sewer and Water System Improvements are available for Reimbursement Agreement only and are not available for PFF Fee Credits. Reimbursements for Sanitary Sewer and Water System infrastructure is the cost difference between installing the proposed infrastructure (30" Steel Water, 24" PVC Water, and 24" PVC Sewer) versus the required infrastructure (12" PVC Water and 12" PVC Sewer) to serve the Tra Vigne project.
- [5] Cost breakdown by % of Flow which equal to percentage of Land Area. For Sanitary Sewer Infrastructure Improvements breakdown does not include Bear Creek South in percentage of project area.
- [6] Cost breakdown by % of Flow which equal to percentage of Land Area. For Potable Water System Infrastructure Improvements breakdown includes all Projects
- [7] Cost breakdown by % of Flow which equal to percentage of Land Area. For Storm Drainage Infrastructure Improvements breakdown does not include Bear Creek West and Bear Creek South project area.
- [8] Cost breakdown for proposed improvements by percentage of project area
- [9] Cost breakdown by % of Flow which equal to percentage of Land Area. For In-Tract Backbone Potable Water System Infrastructure Improvements breakdown includes Tra Vigne West, East, AT&T, and Bragg Crane only.

TRA VIGNE IN-TRACT SHARED INFRASTRUCTURE IMPROVEMENTS SUMMARY

BREAKDOWN OF TOTAL OFF-SITE IMPROVEMENT COSTS, IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS, AND DETERMINATION REMAINING IMPROVEMENTS AVAILABLE FOR AREA OF BENEFIT REIMBURSEMENTS

Engineer's Estimate of Probable Cost

LAND USE AREA BREAKDOWN

							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	BEAR CREEK SOUTH
							200.2	98	5.3	10.3	590	505.2

BREAKDOWN OF TOTAL IMPROVEMENTS, PFF REIMBURSABLE IMPROVEMENTS, AND AREA OF BENEFIT ANALYSIS

ITEM	DESCRIPTION	EXHIBIT REF	TOTAL IMPROVEMENTS COST [SEE NOTE 1]	IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS [SEE NOTE 2]	IMPROVEMENTS AVAILABLE FOR REIMBURSEMENTS [SEE NOTE 4]	REMAINING IMPROVEMENTS DEVELOPER RESPONSIBILITY AND/OR AREA OF BENEFIT	BREAKDOWN OF REMAINING IMPROVEMENT THAT ARE THE RESPONSIBILITY OF THE DEVELOPER THAT ARE POTENTIALLY AVAILABLE FOR AREA OF BENEFIT ANALYSIS REIMBURSEMENT [SEE NOTES]					
							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	CREEK SOUTH
8	Shared Storm Drain Pipes, Basin, and Pump Station Infrastructure						63.8%	31.2%	1.7%	3.3%	0.0%	0.0%
8.A	Storm Drainage Base Pump Station, Infrastructure, and Treatment	3.1	\$1,485,000	\$0	\$0	\$1,485,000	\$947,409	\$463,767	\$25,081	\$48,743	\$0	\$0
8.B	Storm Drainage Basin Construction	3.1	\$314,084	\$0	\$0	\$314,084	\$200,381	\$98,089	\$5,305	\$10,309	\$0	\$0
8.C	Storm Drainage Basin Fencing, Landscaping and Erosion Control	3.1	\$220,211	\$0	\$0	\$220,211	\$140,491	\$68,772	\$3,719	\$7,228	\$0	\$0
TOTAL IMPROVEMENT COST ==>			\$2,019,295	\$0	\$0	\$2,019,295	\$1,288,282	\$630,627	\$34,105	\$66,280	\$0	\$0

ITEM	DESCRIPTION	EXHIBIT REF	TOTAL IMPROVEMENTS COST [SEE NOTE 1]	IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS [SEE NOTE 2]	IMPROVEMENTS AVAILABLE FOR REIMBURSEMENTS [SEE NOTE 4]	REMAINING IMPROVEMENTS DEVELOPER RESPONSIBILITY AND/OR AREA OF BENEFIT	BREAKDOWN OF REMAINING IMPROVEMENT THAT ARE THE RESPONSIBILITY OF THE DEVELOPER THAT ARE POTENTIALLY AVAILABLE FOR AREA OF BENEFIT ANALYSIS REIMBURSEMENT [SEE NOTES]					
							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	CREEK SOUTH
9	Tra Vigne West Oversized Backbone Water System Improvements											
9.A	Oversized Water System for Road "A" - Segments (A1), (A2), and (A3)	3.1	\$323,017	\$0	\$80,754	\$403,772	63.8% \$257,601	31.2% \$126,098	1.7% \$6,820	3.3% \$13,253	0.0% \$0	0.0% \$0
9.B	Oversized Water System for Road "B" - Segment (B)	3.1	\$128,839	\$0	\$42,946	\$171,785	63.8% \$109,596	31.2% \$53,649	1.7% \$2,901	3.3% \$5,639	0.0% \$0	0.0% \$0
9.C	Oversized Water System for Road "C" - Segments (C1), (C2), (C3), (C4), and (C5)	3.1	\$267,003	\$0	\$73,656	\$340,659	63.8% \$217,336	31.2% \$106,388	1.7% \$5,754	3.3% \$11,182	0.0% \$0	0.0% \$0
9.D	Oversized Water System for Roads "AA", "BB" AND "FF" - Segments (BB1), (BB2), (BB3), (AA), and (FF)	3.1	\$83,160	\$0	\$20,790	\$103,950	63.8% \$66,319	31.2% \$32,464	1.7% \$1,756	3.3% \$3,412	0.0% \$0	0.0% \$0
TOTAL IMPROVEMENT COST ==>			\$802,019	\$0	\$218,147	\$1,020,165	\$650,851	\$318,598	\$17,230	\$33,485	\$0	\$0

TRA VIGNE IN-TRACT SHARED INFRASTRUCTURE IMPROVEMENTS SUMMARY

BREAKDOWN OF TOTAL OFF-SITE IMPROVEMENT COSTS, IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS, AND DETERMINATION REMAINING IMPROVEMENTS AVAILABLE FOR AREA OF BENEFIT REIMBURSEMENTS

Engineer's Estimate of Probable Cost

ITEM	DESCRIPTION	EXHIBIT REF	TOTAL IMPROVEMENTS COST [SEE NOTE 1]	IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS [SEE NOTE 2]	IMPROVEMENTS AVAILABLE FOR REIMBURSEMENTS [SEE NOTE 4]	REMAINING IMPROVEMENTS DEVELOPER RESPONSIBILITY AND/OR AREA OF BENEFIT	BREAKDOWN OF REMAINING IMPROVEMENT THAT ARE THE RESPONSIBILITY OF THE DEVELOPER THAT ARE POTENTIALLY AVAILABLE FOR AREA OF BENEFIT ANALYSIS REIMBURSEMENT [SEE NOTES]					
							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	CREEK SOUTH
10	Tra Vigne West In-Tract Parks, Landscaping, Open Space, and Recreational Improvements											
10.A	In-Tract Park Landscaping Improvements (Does Not Include Major Amenities)	3.1 , 4.1 5.1	\$4,419,771	\$4,419,771	\$0	\$0	0.0% \$0	0.0% \$0	0.0% \$0	0.0% \$0	0.0% \$0	0.0% \$0
TOTAL IMPROVEMENT COST ==>			\$4,419,771	\$4,419,771	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

ITEM	DESCRIPTION	EXHIBIT REF	TOTAL IMPROVEMENTS COST [SEE NOTE 1]	IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS [SEE NOTE 2]	IMPROVEMENTS AVAILABLE FOR REIMBURSEMENTS [SEE NOTE 4]	REMAINING IMPROVEMENTS DEVELOPER RESPONSIBILITY AND/OR AREA OF BENEFIT	BREAKDOWN OF REMAINING IMPROVEMENT THAT ARE THE RESPONSIBILITY OF THE DEVELOPER THAT ARE POTENTIALLY AVAILABLE FOR AREA OF BENEFIT ANALYSIS REIMBURSEMENT [SEE NOTES]					
							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	CREEK SOUTH
13	Tra Vigne East Oversized Backbone Water System Improvements											
13.A	Oversized Water System for Backbone Roads	3.1	\$414,137	\$0	\$103,534	\$310,603	0.0% \$0	86.3% \$267,949	4.7% \$14,491	9.1% \$28,162	0.0% \$0	0.0% \$0
TOTAL IMPROVEMENT COST ==>			\$414,137	\$0	\$103,534	\$310,603	\$0	\$267,949	\$14,491	\$28,162	\$0	\$0

ITEM	DESCRIPTION	EXHIBIT REF	TOTAL IMPROVEMENTS COST [SEE NOTE 1]	IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS [SEE NOTE 2]	IMPROVEMENTS AVAILABLE FOR REIMBURSEMENTS [SEE NOTE 4]	REMAINING IMPROVEMENTS DEVELOPER RESPONSIBILITY AND/OR AREA OF BENEFIT	BREAKDOWN OF REMAINING IMPROVEMENT THAT ARE THE RESPONSIBILITY OF THE DEVELOPER THAT ARE POTENTIALLY AVAILABLE FOR AREA OF BENEFIT ANALYSIS REIMBURSEMENT [SEE NOTES]					
							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	CREEK SOUTH
14	Tra Vigne East In-Tract Parks, Landscaping, Open Space, and Recreational Improvements											
14.A	In-Tract Park Landscaping Improvements (Does Not Include Major Amenities)	3.1 , 4.1 5.1	\$3,273,650	\$3,273,650	\$0	\$0	0.0% \$0	0.0% \$0	0.0% \$0	0.0% \$0	0.0% \$0	0.0% \$0
TOTAL IMPROVEMENT COST ==>			\$3,273,650	\$3,273,650	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

TRA VIGNE IN-TRACT SHARED INFRASTRUCTURE IMPROVEMENTS SUMMARY

BREAKDOWN OF TOTAL OFF-SITE IMPROVEMENT COSTS, IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS, AND DETERMINATION REMAINING IMPROVEMENTS AVAILABLE FOR AREA OF BENEFIT REIMBURSEMENTS

Engineer's Estimate of Probable Cost

ITEM	DESCRIPTION	EXHIBIT REF	TOTAL IMPROVEMENTS COST [SEE NOTE 1]	IMPROVEMENTS AVAILABLE FOR PFF FEE CREDITS [SEE NOTE 2]	IMPROVEMENTS AVAILABLE FOR REIMBURSEMENTS [SEE NOTE 4]	REMAINING IMPROVEMENTS DEVELOPER RESPONSIBILITY AND/OR AREA OF BENEFIT	BREAKDOWN OF REMAINING IMPROVEMENT THAT ARE THE RESPONSIBILITY OF THE DEVELOPER THAT ARE POTENTIALLY AVAILABLE FOR AREA OF BENEFIT ANALYSIS REIMBURSEMENT [SEE NOTES]					
							TRA VIGNE WEST	TRA VIGNE EAST	AT&T	BRAGG CRANE	BEAR CREEK WEST	CREEK SOUTH
-	Totals of Project In-Tract and Shared Infrastructure		\$10,928,872	\$7,693,421	\$321,681	\$3,350,063	\$1,939,133	\$1,217,175	\$65,827	\$127,928	\$0	\$0

NOTES:

- [1] Above cost estimates include 10% contingency and 35% soft costs.
- [2] Improvements available for PFF Fee Credit assumes that there are sufficient Fee Credits to cover 100% of the improvements that eligible for credit. If it is determined that the PFF Fee Credit will not cover the total of the improvements available for Fee Credit, than the remaining costs should be reimbursed directly from the existing PFF fund through the exection of a reimbursement agreement.
- [3] Cost breakdown for proposed roadway improvements by percentage of project frontages along the said Roadway Improvements
- [4] Sanitary Sewer and Water System Improvements are available for Reimbursement Agreement only and are not available for PFF Fee Credits. Reimbursements for Sanitary Sewer and Water System infrastructure is the cost difference between installing the proposed infrastructure (30" Steel Water, 24" PVC Water, and 24" PVC Sewer) versus the required infrastructure (12" PVC Water and 12" PVC Sewer) to serve the Tra Vigne project.
- [5] Cost breakdown by % of Flow which equal to percentage of Land Area. For Sanitary Sewer Infrastructure Improvements breakdown does not include Bear Creek South in percentage of project area.
- [6] Cost breakdown by % of Flow which equal to percentage of Land Area. For Potable Water System Infrastructure Improvements breakdown includes all Projects
- [7] Cost breakdown by % of Flow which equal to percentage of Land Area. For Storm Drainage Infrastructure Improvements breakdown does not include Bear Creek West and Bear Creek South project area.
- [8] Cost breakdown for proposed improvements by percentage of project area
- [9] Cost breakdown by % of Flow which equal to percentage of Land Area. For In-Tract Backbone Potable Water System Infrastructure Improvements breakdown includes Tra Vigne West, East, AT&T, and Bragg Crane only.

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost

Off-Site West Lane Total Street Improvements

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Off-Site West Lane Street Improvements from Eight Mile Road to Road "B" (Includes Road "B" Intersection)

A. West Lane Street Improvements

1.	Clearing, Grubbing, and Disposal	1.6	\$995.00 AC	\$1,592.00
2.	Sawcut Existing Pavement	5,750	\$2.00 LF	\$11,500.00
3.	Remove and Dispose of Existing Pavement	10,095	\$3.00 SF	\$30,285.00
4.	Relocation of Overhead Utilities Poles	7	\$25,000.00 EA	\$175,000.00
5.	Remove Existing Curb	1,626	\$8.00 LF	\$13,008.00
6.	Remove Existing Headwalls and Culverts	0	\$25,000.00 LS	\$0.00
7.	Rough Grading - Street Right-of-Way	3,896	\$4.50 CY	\$17,532.00
8.	Street Fine Grading	72,183	\$0.40 SF	\$28,873.20
9.	Erosion Control Improvements	1.6	\$2,000.00 AC	\$3,200.00
10.	Mobilization - Major Infrastructure	1	\$30,000.00 LS	\$30,000.00
11.	Traffic Control	100	\$2,200.00 DAY	\$220,000.00
12.	4.0" AC over 14.5" AB Pavement	72,183	\$5.10 SF	\$368,133.30
13.	3" AC Grind and Overlay	119,807	\$2.00 SF	\$239,614.00
14.	6" Vertical Curb and Gutter	2,039	\$19.50 LF	\$39,760.50
15.	8" Median Curb	1,486	\$18.60 LF	\$27,639.60
16.	5" PCC Concrete Walk (Includes Ramps and Returns)	15,732	\$5.00 SF	\$78,660.00
17.	ADA Ramp (Labor and Truncated Domes Only)	6	\$1,900.00 EA	\$11,400.00
18.	200 Watt Electrolier	8	\$6,166.67 EA	\$49,333.33
19.	Street Monuments	3	\$310.00 EA	\$930.00
20.	Traffic Delineation (Striping and Stop bars)	17,213	\$1.75 LF	\$30,122.75
21.	Traffic Arrows	19	\$450.00 EA	\$8,550.00
22.	Striping - Intersection	1	\$10,000.00 LS	\$10,000.00
23.	Street Name and Directional Signs	2	\$380.00 EA	\$760.00
24.	Landscape w/ Irrigation (Streetscape)	7,846	\$5.00 SF	\$39,230.00
25.	Entry Monument (Minor)	1	\$50,000.00 EA	\$50,000.00
26.	Street Barricade	3	\$750.00 EA	\$2,250.00
27.	Underground Existing 12 KVA Utility Poles	0	\$250.00 LF	\$0.00
28.	Joint Trench Main	2,044	\$150.00 LF	\$306,600.00

CONSTRUCTION SUB-TOTAL ==> \$1,793,973.68

CONTINGENCY - 10% ==> \$179,397.37

CONSTRUCTION TOTAL ==> \$1,973,371.05

SOFT COSTS - 35% ==> \$690,679.87

CONSTRUCTION GRAND TOTAL ==> \$2,664,050.92

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Off-Site West Lane Street Improvements from Road "B" to Bear Creek

A. West Lane Street Improvements

1.	Clearing, Grubbing, and Disposal	1.6	\$995.00 AC	\$1,592.00
2.	Sawcut Existing Pavement	9,002	\$2.00 LF	\$18,004.00
3.	Remove and Dispose of Existing Pavement	17,511	\$3.00 SF	\$52,533.00
4.	Relocation of Overhead Utilities Poles	7	\$25,000.00 EA	\$175,000.00
5.	Remove Existing Curb	0	\$8.00 LF	\$0.00
6.	Remove Existing Headwalls and Culverts	1	\$25,000.00 LS	\$25,000.00
7.	Rough Grading - Street Right-of-Way	3,912	\$4.50 CY	\$17,604.00
8.	Street Fine Grading	58,352	\$0.40 SF	\$23,340.80
9.	Erosion Control Improvements	1.6	\$2,000.00 AC	\$3,200.00
10.	Mobilization - Major Infrastructure	1	\$30,000.00 LS	\$30,000.00
11.	Traffic Control	100	\$2,200.00 DAY	\$220,000.00
12.	4.0" AC over 14.5" AB Pavement	58,352	\$5.10 SF	\$297,595.20
13.	3" AC Grind and Overlay	158,831	\$2.00 SF	\$317,662.00
14.	6" Vertical Curb and Gutter	2,340	\$19.50 LF	\$45,630.00
15.	8" Median Curb	1,495	\$18.60 LF	\$27,807.00
16.	5" PCC Concrete Walk (Includes Ramps and Returns)	18,993	\$5.00 SF	\$94,965.00
17.	ADA Ramp (Labor and Truncated Domes Only)	2	\$1,900.00 EA	\$3,800.00
18.	200 Watt Electrolier	8	\$6,166.67 EA	\$49,333.33
19.	Street Monuments	2	\$310.00 EA	\$620.00
20.	Traffic Delineation (Striping and Stop bars)	17,872	\$1.75 LF	\$31,276.00
21.	Traffic Arrows	19	\$450.00 EA	\$8,550.00
22.	Striping - Intersection	1	\$10,000.00 LS	\$10,000.00
23.	Street Name and Directional Signs	2	\$380.00 EA	\$760.00
24.	Landscape w/ Irrigation (Streetscape)	10,105	\$5.00 SF	\$50,525.00
25.	Entry Monument (Minor)	1	\$50,000.00 EA	\$50,000.00
26.	Street Barricade	1	\$750.00 EA	\$750.00
27.	Underground Existing 12 KVA Utility Poles	2,100	\$250.00 LF	\$525,000.00
28.	Joint Trench Main	2,386	\$150.00 LF	\$357,900.00

CONSTRUCTION SUB-TOTAL ==> \$2,438,447.33

CONTINGENCY - 10% ==> \$243,844.73
CONSTRUCTION TOTAL ==> \$2,682,292.07

SOFT COSTS - 35% ==> \$938,802.22
CONSTRUCTION GRAND TOTAL ==> \$3,621,094.29

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Traffic Signal Improvements Only at the Intersection of West Lane and Road "B"

A. TRAFFIC SIGNAL AT ROAD 'B':

1.	Traffic Signal and Controls	1	\$350,000.00 EA	\$350,000.00
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CONSTRUCTION SUB-TOTAL ==> \$350,000.00

CONTINGENCY - 10% ==> \$35,000.00

CONSTRUCTION TOTAL ==> \$385,000.00

SOFT COSTS - 35% ==> \$134,750.00

CONSTRUCTION GRAND TOTAL ==> \$519,750.00

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost

Off-Site West Lane PFF Street Improvements Available for Fee Credits

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Off-Site West Lane Street Improvements from Eight Mile Road to Road "B" (Includes Road "B" Intersection)</u>				
A. West Lane Street Improvements				
1.	Clearing, Grubbing, and Disposal	0	\$995.00 AC	\$0.00
2.	Sawcut Existing Pavement	0	\$2.00 LF	\$0.00
3.	Remove and Dispose of Existing Pavement	0	\$3.00 SF	\$0.00
4.	Relocation of Overhead Utilities Poles	0	\$25,000.00 EA	\$0.00
5.	Remove Existing Curb	0	\$8.00 LF	\$0.00
6.	Remove Existing Headwalls and Culverts	0	\$25,000.00 LS	\$0.00
7.	Rough Grading - Street Right-of-Way	0	\$4.50 CY	\$0.00
8.	Street Fine Grading	22,825	\$0.40 SF	\$9,130.00
9.	Erosion Control Improvements	0	\$2,000.00 AC	\$0.00
10.	Mobilization - Major Infrastructure	0	\$30,000.00 LS	\$0.00
11.	Traffic Control	0	\$2,200.00 DAY	\$0.00
12.	4.0" AC over 14.5" AB Pavement	22,825	\$5.10 SF	\$116,407.50
13.	3" AC Grind and Overlay	3,805	\$2.00 SF	\$7,610.00
14.	6" Vertical Curb and Gutter	0	\$19.50 LF	\$0.00
15.	8" Median Curb	1,486	\$18.60 LF	\$27,639.60
16.	5" PCC Concrete Walk (Includes Ramps and Returns)	0	\$5.00 SF	\$0.00
17.	ADA Ramp (Labor and Truncated Domes Only)	0	\$1,900.00 EA	\$0.00
18.	200 Watt Electrolier	0	\$6,166.67 EA	\$0.00
19.	Street Monuments	0	\$310.00 EA	\$0.00
20.	Traffic Delineation (Striping and Stop bars)	0	\$1.75 EA	\$0.00
21.	Traffic Arrows	0	\$450.00 EA	\$0.00
22.	Striping - Intersection	0	\$10,000.00 LS	\$0.00
23.	Street Name and Directional Signs	0	\$380.00 EA	\$0.00
24.	Landscape w/ Irrigation (Streetscape)	0	\$5.00 SF	\$0.00
25.	Entry Monument (Minor)	0	\$50,000.00 EA	\$0.00
26.	Street Barricade	0	\$750.00 EA	\$0.00
27.	Underground Existing 12 KVA Utility Poles	0	\$250.00 LF	\$0.00
28.	Joint Trench Main	0	\$150.00 LF	\$0.00

CONSTRUCTION SUB-TOTAL ==> \$160,787.10

CONTINGENCY - 10% ==> \$16,078.71

CONSTRUCTION TOTAL ==> \$176,865.81

SOFT COSTS - 35% ==> \$61,903.03

CONSTRUCTION GRAND TOTAL ==> \$238,768.84

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Off-Site West Lane Street Improvements from Road "B" to Bear Creek

A. West Lane Street Improvements

1.	Clearing, Grubbing, and Disposal	0	\$995.00 AC	\$0.00
2.	Sawcut Existing Pavement	5,922	\$2.00 LF	\$11,844.00
3.	Remove and Dispose of Existing Pavement	6,618	\$3.00 SF	\$19,854.00
4.	Relocation of Overhead Utilities Poles	0	\$25,000.00 EA	\$0.00
5.	Remove Existing Curb	0	\$8.00 LF	\$0.00
6.	Remove Existing Headwalls and Culverts	0	\$25,000.00 LS	\$0.00
7.	Rough Grading - Street Right-of-Way	0	\$4.50 CY	\$0.00
8.	Street Fine Grading	29,509	\$0.40 SF	\$11,803.60
9.	Erosion Control Improvements	0	\$2,000.00 AC	\$0.00
10.	Mobilization - Major Infrastructure	0	\$30,000.00 LS	\$0.00
11.	Traffic Control	0	\$2,200.00 DAY	\$0.00
12.	4.0" AC over 14.5" AB Pavement	29,509	\$5.10 SF	\$150,495.90
13.	3" AC Grind and Overlay	20,370	\$2.00 SF	\$40,740.00
14.	6" Vertical Curb and Gutter	0	\$19.50 LF	\$0.00
15.	8" Median Curb	1,495	\$18.60 LF	\$27,807.00
16.	5" PCC Concrete Walk (Includes Ramps and Returns)	0	\$5.00 SF	\$0.00
17.	ADA Ramp (Labor and Truncated Domes Only)	0	\$1,900.00 EA	\$0.00
18.	200 Watt Electrolier	0	\$6,166.67 EA	\$0.00
19.	Street Monuments	0	\$310.00 EA	\$0.00
20.	Traffic Delineation (Striping and Stop bars)	0	\$1.75 EA	\$0.00
21.	Traffic Arrows	0	\$450.00 EA	\$0.00
22.	Striping - Intersection	0	\$10,000.00 LS	\$0.00
23.	Street Name and Directional Signs	0	\$380.00 EA	\$0.00
24.	Landscape w/ Irrigation (Streetscape)	0	\$5.00 SF	\$0.00
25.	Entry Monument (Minor)	0	\$50,000.00 EA	\$0.00
26.	Street Barricade	0	\$750.00 EA	\$0.00
27.	Underground Existing 12 KVA Utility Poles	0	\$250.00 LF	\$0.00
28.	Joint Trench Main	0	\$150.00 LF	\$0.00

CONSTRUCTION SUB-TOTAL ==> \$262,544.50

CONTINGENCY - 10% ==> \$26,254.45

CONSTRUCTION TOTAL ==> \$288,798.95

SOFT COSTS - 35% ==> \$101,079.63

CONSTRUCTION GRAND TOTAL ==> \$389,878.58

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Traffic Signal Improvements Only at the Intersection of West Lane and Road "B"</u>				
A. TRAFFIC SIGNAL AT ROAD 'B':				
1.	Traffic Signal and Controls	0	\$350,000.00 EA	\$0.00
CONSTRUCTION SUB-TOTAL ==>				<u>\$0.00</u>
CONTINGENCY - 10% ==>				<u>\$0.00</u>
CONSTRUCTION TOTAL ==>				<u>\$0.00</u>
SOFT COSTS - 35% ==>				<u>\$0.00</u>
CONSTRUCTION GRAND TOTAL ==>				<u>\$0.00</u>

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost

Off-Site West Lane Developer Responsible Street Improvements

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Off-Site West Lane Street Improvements from Eight Mile Road to Road "B" (Includes Road "B" Intersection)</u>				
A. West Lane Street Improvements				
1.	Clearing, Grubbing, and Disposal	1.6	\$995.00 AC	\$1,592.00
2.	Sawcut Existing Pavement	5,750	\$2.00 LF	\$11,500.00
3.	Remove and Dispose of Existing Pavement	10,095	\$3.00 SF	\$30,285.00
4.	Relocation of Overhead Utilities Poles	7	\$25,000.00 EA	\$175,000.00
5.	Remove Existing Curb	1,626	\$8.00 LF	\$13,008.00
6.	Remove Existing Headwalls and Culverts	0	\$25,000.00 LS	\$0.00
7.	Rough Grading - Street Right-of-Way	3,896	\$4.50 CY	\$17,532.00
8.	Street Fine Grading	49,358	\$0.40 SF	\$19,743.20
9.	Erosion Control Improvements	1.6	\$2,000.00 AC	\$3,200.00
10.	Mobilization - Major Infrastructure	1	\$30,000.00 LS	\$30,000.00
11.	Traffic Control	100	\$2,200.00 DAY	\$220,000.00
12.	4.0" AC over 14.5" AB Pavement	49,358	\$5.10 SF	\$251,725.80
13.	3" AC Grind and Overlay	116,002	\$2.00 SF	\$232,004.00
14.	6" Vertical Curb and Gutter	2,039	\$19.50 LF	\$39,760.50
15.	8" Median Curb	0	\$18.60 LF	\$0.00
16.	5" PCC Concrete Walk (Includes Ramps and Returns)	15,732	\$5.00 SF	\$78,660.00
17.	ADA Ramp (Labor and Truncated Domes Only)	6	\$1,900.00 EA	\$11,400.00
18.	200 Watt Electrolier	8	\$6,166.67 EA	\$49,333.33
19.	Street Monuments	3	\$310.00 EA	\$930.00
20.	Traffic Delineation (Striping and Stop bars)	17,213	\$1.75 EA	\$30,122.75
21.	Traffic Arrows	19	\$450.00 EA	\$8,550.00
22.	Striping - Intersection	1	\$10,000.00 LS	\$10,000.00
23.	Street Name and Directional Signs	2	\$380.00 EA	\$760.00
24.	Landscape w/ Irrigation (Streetscape)	7,846	\$5.00 SF	\$39,230.00
25.	Entry Monument (Minor)	1	\$50,000.00 EA	\$50,000.00
26.	Street Barricade	3	\$750.00 EA	\$2,250.00
27.	Underground Existing 12 KVA Utility Poles	0	\$250.00 LF	\$0.00
28.	Joint Trench Main	2,044	\$150.00 LF	\$306,600.00

CONSTRUCTION SUB-TOTAL ==> \$1,633,186.58

CONTINGENCY - 10% ==> \$163,318.66

CONSTRUCTION TOTAL ==> \$1,796,505.24

SOFT COSTS - 35% ==> \$628,776.83

CONSTRUCTION GRAND TOTAL ==> \$2,425,282.08

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Off-Site West Lane Street Improvements from Road "B" to Bear Creek

A. West Lane Street Improvements

1.	Clearing, Grubbing, and Disposal	1.6	\$995.00 AC	\$1,592.00
2.	Sawcut Existing Pavement	3,080	\$2.00 LF	\$6,160.00
3.	Remove and Dispose of Existing Pavement	10,893	\$3.00 SF	\$32,679.00
4.	Relocation of Overhead Utilities Poles	7	\$25,000.00 EA	\$175,000.00
5.	Remove Existing Curb	0	\$8.00 LF	\$0.00
6.	Remove Existing Headwalls and Culverts	1	\$25,000.00 LS	\$25,000.00
7.	Rough Grading - Street Right-of-Way	3,912	\$4.50 CY	\$17,604.00
8.	Street Fine Grading	28,843	\$0.40 SF	\$11,537.20
9.	Erosion Control Improvements	1.6	\$2,000.00 AC	\$3,200.00
10.	Mobilization - Major Infrastructure	1	\$30,000.00 LS	\$30,000.00
11.	Traffic Control	100	\$2,200.00 DAY	\$220,000.00
12.	4.0" AC over 14.5" AB Pavement	28,843	\$5.10 SF	\$147,099.30
13.	3" AC Grind and Overlay	138,461	\$2.00 SF	\$276,922.00
14.	6" Vertical Curb and Gutter	2,340	\$19.50 LF	\$45,630.00
15.	8" Median Curb	0	\$18.60 LF	\$0.00
16.	5" PCC Concrete Walk (Includes Ramps and Returns)	18,993	\$5.00 SF	\$94,965.00
17.	ADA Ramp (Labor and Truncated Domes Only)	2	\$1,900.00 EA	\$3,800.00
18.	200 Watt Electrolier	8	\$6,166.67 EA	\$49,333.33
19.	Street Monuments	2	\$310.00 EA	\$620.00
20.	Traffic Delineation (Striping and Stop bars)	17,872	\$1.75 EA	\$31,276.00
21.	Traffic Arrows	19	\$450.00 EA	\$8,550.00
22.	Striping - Intersection	1	\$10,000.00 LS	\$10,000.00
23.	Street Name and Directional Signs	2	\$380.00 EA	\$760.00
24.	Landscape w/ Irrigation (Streetscape)	10,105	\$5.00 SF	\$50,525.00
25.	Entry Monument (Minor)	1	\$50,000.00 EA	\$50,000.00
26.	Street Barricade	1	\$750.00 EA	\$750.00
27.	Underground Existing 12 KVA Utility Poles	2,100	\$250.00 LF	\$525,000.00
28.	Joint Trench Main	2,386	\$150.00 LF	\$357,900.00

CONSTRUCTION SUB-TOTAL ==> \$2,175,902.83

CONTINGENCY - 10% ==> \$217,590.28

CONSTRUCTION TOTAL ==> \$2,393,493.12

SOFT COSTS - 35% ==> \$837,722.59

CONSTRUCTION GRAND TOTAL ==> \$3,231,215.71

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Traffic Signal Improvements Only at the Intersection of West Lane and Road "B"

A. TRAFFIC SIGNAL AT ROAD 'B':

1.	Traffic Signal and Controls	1	\$350,000.00 EA	\$350,000.00
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CONSTRUCTION SUB-TOTAL ==> \$350,000.00

CONTINGENCY - 10% ==> \$35,000.00

CONSTRUCTION TOTAL ==> \$385,000.00

SOFT COSTS - 35% ==> \$134,750.00

CONSTRUCTION GRAND TOTAL ==> \$519,750.00

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost

Off-Site 8 Mile Rd Total Street Improvements

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
Off-Site Eight Mile Road Street Improvements from West Lane to Ham Road				
A. WEST LANE TO HAM ROAD				
1.	Street Improvements Clearing, Grubbing, and Disposal	5	\$15,000.00 LS	\$79,200.00
2.	Sawcut Existing Pavement	2,490	\$2.00 LF	\$4,980.00
3.	Remove and Dispose of Existing Pavement	4,982	\$3.00 SF	\$14,946.00
4.	Remove Irrigation Culvert	17	\$16.67 EA	\$283.33
5.	Rough Grading - Street Right-of-Way	6,052	\$4.50 CY	\$27,234.00
6.	Street Fine Grading	132,562	\$0.40 SF	\$53,024.80
7.	Erosion Control Improvements	7	\$2,000.00 AC	\$13,000.00
8.	Mobilization - Major Infrastructure	1	\$30,000.00 LS	\$30,000.00
9.	Traffic Control	80	\$2,200.00 DAY	\$176,000.00
10.	4.0" AC over 14.5" AB Pavement	132,562	\$5.10 SF	\$676,066.20
11.	3" AC Grind and Overlay	77,842	\$2.00 SF	\$155,684.00
12.	6" Vertical Curb and Gutter	2,494	\$19.50 LF	\$48,633.00
13.	5" PCC Concrete Walk (Includes Ramps and Returns)	19,518	\$5.00 SF	\$97,590.00
14.	ADA Ramp (Labor and Truncated Domes Only)	11	\$1,900.00 EA	\$20,900.00
15.	200 Watt Electrolier	9	\$6,166.67 EA	\$55,500.00
16.	Street Monuments	2	\$310.00 EA	\$620.00
17.	Traffic Delineation (Striping and Stop bars)	13,221	\$1.75 EA	\$23,136.75
18.	Traffic Arrows	24	\$450.00 EA	\$10,800.00
19.	Street Name and Directional Signs	4	\$380.00 EA	\$1,520.00
20.	Landscape w/ Irrigation (Streetscape)	15,710	\$5.00 SF	\$78,550.00
21.	Entry Monument (Minor)	1	\$50,000.00 EA	\$50,000.00
22.	Street Barricade	5	\$750.00 EA	\$3,750.00
23.	Joint Trench Main	2,510	\$150.00 LF	\$376,500.00
24.	Relocation of Overhead Utilities Poles	1	\$25,000.00 EA	\$25,000.00

CONSTRUCTION SUB-TOTAL ==> \$2,022,918.08

CONTINGENCY - 10% ==> \$202,291.81

CONSTRUCTION TOTAL ==> \$2,225,209.89

SOFT COSTS - 35% ==> \$778,823.46

CONSTRUCTION GRAND TOTAL ==> \$3,004,033.35

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Off-Site Eight Mile Road Street Improvements from Ham Road to Leach Road</u>				
A. HAM ROAD TO LEACH ROAD				
1.	Street Improvements Clearing, Grubbing, and Disposal	1	\$15,000.00 LS	\$15,000.00
2.	Sawcut Existing Pavement	1,647	\$2.00 LF	\$3,294.00
3.	Remove Existing Pavement	3,295	\$3.00 SF	\$9,885.00
4.	Remove Irrigation Culvert	3	\$16.67 EA	\$50.00
5.	Rough Grading - Street Right-of-Way	5,092	\$4.50 CY	\$22,914.00
6.	Street Fine Grading	75,370	\$0.40 SF	\$30,148.00
7.	SWPPP Maintenance	1	\$7,500.00 LS	\$7,500.00
8.	Traffic Control	80	\$2,200.00 DAY	\$176,000.00
9.	6" Vertical Curb and Gutter	1,511	\$19.50 LF	\$29,464.50
10.	8" Median Curb	0	\$18.60 LF	\$0.00
11.	5" PCC Concrete Walk (Includes Ramps and Returns)	8,081	\$5.00 SF	\$40,405.00
12.	ADA Ramp (Labor and Truncated Domes Only)	2	\$1,900.00 EA	\$3,800.00
13.	4.0" AC over 14.5" AB Pavement	75,370	\$5.10 SF	\$384,387.00
14.	3" AC Grind and Overlay	66,968	\$2.00 SF	\$133,936.00
15.	Street Monuments	2	\$310.00 EA	\$620.00
16.	Landscape w/ Irrigation (Streetscape)	5,182	\$5.00 SF	\$25,910.00
17.	200 Watt Electrolier	5	\$6,166.67 EA	\$30,833.33
18.	Traffic Delineation (Striping and Stop bars)	7,725	\$1.75 EA	\$13,518.75
19.	Traffic Arrows	10	\$450.00 EA	\$4,500.00
20.	Joint Trench Main	1,440	\$150.00 LF	\$216,000.00
21.	Relocation of Overhead Utilities Poles	7	\$25,000.00 EA	\$175,000.00
22.	Right of Way Dedication at AT&T and Bragg Frontage	15,494	\$8.00 SF	\$123,952.00

CONSTRUCTION SUB-TOTAL ==> \$1,447,117.58

CONTINGENCY - 10% ==> \$144,711.76
CONSTRUCTION TOTAL ==> \$1,591,829.34

SOFT COSTS - 35% ==> \$557,140.27
CONSTRUCTION GRAND TOTAL ==> \$2,148,969.61

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Traffic Signal Improvements Only at the Intersection of 8-Mile Road and Road "C"

A. TRAFFIC SIGNAL AT ROAD "C":

1.	Traffic Signal and Controls	1	\$350,000.00 EA	\$350,000.00
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CONSTRUCTION SUB-TOTAL ==> \$350,000.00

CONTINGENCY - 10% ==> \$35,000.00

CONSTRUCTION TOTAL ==> \$385,000.00

SOFT COSTS - 35% ==> \$134,750.00

CONSTRUCTION GRAND TOTAL ==> \$519,750.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Traffic Signal Improvements Only at the Intersection of 8-Mile Road and Leach Road

A. TRAFFIC SIGNAL AT LEACH ROAD:

1.	Traffic Signal and Controls	1	\$350,000.00 EA	\$350,000.00
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CONSTRUCTION SUB-TOTAL ===> \$350,000.00

CONTINGENCY - 10% ===> \$35,000.00

CONSTRUCTION TOTAL ===> \$385,000.00

SOFT COSTS - 35% ===> \$134,750.00

CONSTRUCTION GRAND TOTAL ===> \$519,750.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>RTD Bus Stop along Eight-Mile Road adjacent to Commercial Land Use</u>				
A. RTD BUS STOP:				
1.	RTD Bus Stop	1	\$17,500.00 EA	\$17,500.00
CONSTRUCTION SUB-TOTAL ==>				\$17,500.00
CONTINGENCY - 10% ==>				<u>\$1,750.00</u>
CONSTRUCTION TOTAL ==>				<u>\$19,250.00</u>
SOFT COSTS - 35% ==>				<u>\$6,737.50</u>
CONSTRUCTION GRAND TOTAL ==>				<u>\$25,987.50</u>

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost

Off-Site 8 Mile Rd PFF Street Improvements Available for Fee Credits

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Off-Site Eight Mile Road Street Improvements from West Lane to Ham Road

A. WEST LANE TO HAM ROAD

1.	Street Improvements Clearing, Grubbing, and Disposal	3	\$15,000.00 LS	\$49,200.00
2.	Sawcut Existing Pavement	2,490	\$2.00 LF	\$4,980.00
3.	Remove and Dispose of Existing Pavement	4,982	\$3.00 SF	\$14,946.00
4.	Remove Irrigation Culvert	17	\$16.67 EA	\$283.33
5.	Rough Grading - Street Right-of-Way	3,710	\$4.50 CY	\$16,695.00
6.	Street Fine Grading	64,981	\$0.40 SF	\$25,992.40
7.	Erosion Control Improvements	5	\$2,000.00 AC	\$9,000.00
8.	Mobilization - Major Infrastructure	0	\$30,000.00 LS	\$0.00
9.	Traffic Control	40	\$2,200.00 DAY	\$88,000.00
10.	4.0" AC over 14.5" AB Pavement	64,981	\$5.10 SF	\$331,403.10
11.	3" AC Grind and Overlay	0	\$2.00 SF	\$0.00
12.	6" Vertical Curb and Gutter	0	\$19.50 LF	\$0.00
13.	5" PCC Concrete Walk (Includes Ramps and Returns)	0	\$5.00 SF	\$0.00
14.	ADA Ramp (Labor and Truncated Domes Only)	0	\$1,900.00 EA	\$0.00
15.	200 Watt Electrolier	0	\$6,166.67 EA	\$0.00
16.	Street Monuments	2	\$310.00 EA	\$620.00
17.	Traffic Delineation (Striping and Stop bars)	0	\$1.75 EA	\$0.00
18.	Traffic Arrows	0	\$450.00 EA	\$0.00
19.	Street Name and Directional Signs	0	\$380.00 EA	\$0.00
20.	Landscape w/ Irrigation (Streetscape)	0	\$5.00 SF	\$0.00
21.	Entry Monument (Minor)	0	\$50,000.00 EA	\$0.00
22.	Street Barricade	0	\$750.00 EA	\$0.00
23.	Joint Trench Main	0	\$150.00 LF	\$0.00
24.	Relocation of Overhead Utilities Poles	0	\$25,000.00 EA	\$0.00

CONSTRUCTION SUB-TOTAL ==> \$541,119.83

CONTINGENCY - 10% ==> \$54,111.98

CONSTRUCTION TOTAL ==> \$595,231.82

SOFT COSTS - 35% ==> \$208,331.14

CONSTRUCTION GRAND TOTAL ==> \$803,562.95

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Off-Site Eight Mile Road Street Improvements from Ham Road to Leach Road</u>				
A. HAM ROAD TO LEACH ROAD				
1.	Street Improvements Clearing, Grubbing, and Disposal	0	\$15,000.00 LS	\$0.00
2.	Sawcut Existing Pavement	1,647	\$2.00 LF	\$3,294.00
3.	Remove Existing Pavement	3,295	\$3.00 SF	\$9,885.00
4.	Remove Irrigation Culvert	3	\$16.67 EA	\$50.00
5.	Rough Grading - Street Right-of-Way	1,949	\$4.50 CY	\$8,770.50
6.	Street Fine Grading	34,129	\$0.40 SF	\$13,651.60
7.	SWPPP Maintenance	0	\$7,500.00 LS	\$0.00
8.	Traffic Control	40	\$2,200.00 DAY	\$88,000.00
9.	6" Vertical Curb and Gutter	0	\$19.50 LF	\$0.00
10.	8" Median Curb	0	\$18.60 LF	\$0.00
11.	5" PCC Concrete Walk (Includes Ramps and Returns)	0	\$5.00 SF	\$0.00
12.	ADA Ramp (Labor and Truncated Domes Only)	0	\$1,900.00 EA	\$0.00
13.	4.0" AC over 14.5" AB Pavement	34,129	\$5.10 SF	\$174,057.90
14.	3" AC Grind and Overlay	0	\$2.00 SF	\$0.00
15.	Street Monuments	2	\$310.00 EA	\$620.00
16.	Landscape w/ Irrigation (Streetscape)	0	\$5.00 SF	\$0.00
17.	200 Watt Electrolier	0	\$6,166.67 EA	\$0.00
18.	Traffic Delineation (Striping and Stop bars)	0	\$1.75 EA	\$0.00
19.	Traffic Arrows	0	\$450.00 EA	\$0.00
20.	Joint Trench Main	0	\$150.00 LF	\$0.00
21.	Relocation of Overhead Utilities Poles	7	\$25,000.00 EA	\$175,000.00
22.	Right of Way Dedication at AT&T and Bragg Frontage	15,494	\$8.00 SF	\$123,952.00

CONSTRUCTION SUB-TOTAL ==> \$597,281.00

CONTINGENCY - 10% ==> \$59,728.10
CONSTRUCTION TOTAL ==> \$657,009.10

SOFT COSTS - 35% ==> \$229,953.19
CONSTRUCTION GRAND TOTAL ==> \$886,962.29

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Traffic Signal Improvements Only at the Intersection of 8-Mile Road and Road "C"</u>				
A. TRAFFIC SIGNAL AT ROAD "C":				
1.	Traffic Signal and Controls	0	\$350,000.00 EA	\$0.00
CONSTRUCTION SUB-TOTAL ==>				\$0.00
CONTINGENCY - 10% ==>				\$0.00
CONSTRUCTION TOTAL ==>				\$0.00
SOFT COSTS - 35% ==>				\$0.00
CONSTRUCTION GRAND TOTAL ==>				\$0.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Traffic Signal Improvements Only at the Intersection of 8-Mile Road and Leach Road</u>				
A. TRAFFIC SIGNAL AT LEACH ROAD:				
1.	Traffic Signal and Controls	0	\$350,000.00 EA	\$0.00
CONSTRUCTION SUB-TOTAL ===>				\$0.00
CONTINGENCY - 10% ===>				\$0.00
CONSTRUCTION TOTAL ===>				\$0.00
SOFT COSTS - 35% ===>				\$0.00
CONSTRUCTION GRAND TOTAL ===>				\$0.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>RTD Bus Stop along Eight-Mile Road adjacent to Commercial Land Use</u>				
A. RTD BUS STOP:				
1.	RTD Bus Stop	0	\$17,500.00 EA	\$0.00
CONSTRUCTION SUB-TOTAL ==>				\$0.00
CONTINGENCY - 10% ==>				\$0.00
CONSTRUCTION TOTAL ==>				\$0.00
SOFT COSTS - 35% ==>				\$0.00
CONSTRUCTION GRAND TOTAL ==>				\$0.00

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost

Off-Site 8 Mile Rd Developer Responsible Street Improvements

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
Off-Site Eight Mile Road Street Improvements from West Lane to Ham Road				
A. WEST LANE TO HAM ROAD				
1.	Street Improvements Clearing, Grubbing, and Disposal	2	\$15,000.00 LS	\$30,000.00
2.	Sawcut Existing Pavement	0	\$2.00 LF	\$0.00
3.	Remove and Dispose of Existing Pavement	0	\$3.00 SF	\$0.00
4.	Remove Irrigation Culvert	0	\$16.67 EA	\$0.00
5.	Rough Grading - Street Right-of-Way	2,342	\$4.50 CY	\$10,539.00
6.	Street Fine Grading	67,581	\$0.40 SF	\$27,032.40
7.	Erosion Control Improvements	2	\$2,000.00 AC	\$4,000.00
8.	Mobilization - Major Infrastructure	1	\$30,000.00 LS	\$30,000.00
9.	Traffic Control	40	\$2,200.00 DAY	\$88,000.00
10.	4.0" AC over 14.5" AB Pavement	67,581	\$5.10 SF	\$344,663.10
11.	3" AC Grind and Overlay	77,842	\$2.00 SF	\$155,684.00
12.	6" Vertical Curb and Gutter	2,494	\$19.50 LF	\$48,633.00
13.	5" PCC Concrete Walk (Includes Ramps and Returns)	19,518	\$5.00 SF	\$97,590.00
14.	ADA Ramp (Labor and Truncated Domes Only)	11	\$1,900.00 EA	\$20,900.00
15.	200 Watt Electrolier	9	\$6,166.67 EA	\$55,500.00
16.	Street Monuments	0	\$310.00 EA	\$0.00
17.	Traffic Delineation (Striping and Stop bars)	13,221	\$1.75 EA	\$23,136.75
18.	Traffic Arrows	24	\$450.00 EA	\$10,800.00
19.	Street Name and Directional Signs	4	\$380.00 EA	\$1,520.00
20.	Landscape w/ Irrigation (Streetscape)	15,710	\$5.00 SF	\$78,550.00
21.	Entry Monument (Minor)	1	\$50,000.00 EA	\$50,000.00
22.	Street Barricade	5	\$750.00 EA	\$3,750.00
23.	Joint Trench Main	2,510	\$150.00 LF	\$376,500.00
24.	Relocation of Overhead Utilities Poles	1	\$25,000.00 EA	\$25,000.00

CONSTRUCTION SUB-TOTAL ==> \$1,481,798.25

CONTINGENCY - 10% ==> \$148,179.83

CONSTRUCTION TOTAL ==> \$1,629,978.08

SOFT COSTS - 35% ==> \$570,492.33

CONSTRUCTION GRAND TOTAL ==> \$2,200,470.40

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Off-Site Eight Mile Road Street Improvements from Ham Road to Leach Road</u>				
A. HAM ROAD TO LEACH ROAD				
1.	Street Improvements Clearing, Grubbing, and Disposal	1	\$15,000.00 LS	\$15,000.00
2.	Sawcut Existing Pavement	0	\$2.00 LF	\$0.00
3.	Remove Existing Pavement	0	\$3.00 SF	\$0.00
4.	Remove Irrigation Culvert	0	\$16.67 EA	\$0.00
5.	Rough Grading - Street Right-of-Way	3,142	\$4.50 CY	\$14,139.00
6.	Street Fine Grading	41,241	\$0.40 SF	\$16,496.40
7.	SWPPP Maintenance	1	\$7,500.00 LS	\$7,500.00
8.	Traffic Control	40	\$2,200.00 DAY	\$88,000.00
9.	6" Vertical Curb and Gutter	1,511	\$19.50 LF	\$29,464.50
10.	8" Median Curb	0	\$18.60 LF	\$0.00
11.	5" PCC Concrete Walk (Includes Ramps and Returns)	8,081	\$5.00 SF	\$40,405.00
12.	ADA Ramp (Labor and Truncated Domes Only)	2	\$1,900.00 EA	\$3,800.00
13.	4.0" AC over 14.5" AB Pavement	41,241	\$5.10 SF	\$210,329.10
14.	3" AC Grind and Overlay	66,968	\$2.00 SF	\$133,936.00
15.	Street Monuments	0	\$310.00 EA	\$0.00
16.	Landscape w/ Irrigation (Streetscape)	5,182	\$5.00 SF	\$25,910.00
17.	200 Watt Electrolier	5	\$6,166.67 EA	\$30,833.33
18.	Traffic Delineation (Striping and Stop bars)	7,725	\$1.75 EA	\$13,518.75
19.	Traffic Arrows	10	\$450.00 EA	\$4,500.00
20.	Joint Trench Main	1,440	\$150.00 LF	\$216,000.00
21.	Relocation of Overhead Utilities Poles	0	\$25,000.00 EA	\$0.00
22.	Right of Way Dedication at AT&T and Bragg Frontage	0	\$8.00 SF	\$0.00

CONSTRUCTION SUB-TOTAL ==> \$849,832.08

CONTINGENCY - 10% ==> \$84,983.21
CONSTRUCTION TOTAL ==> \$934,815.29

SOFT COSTS - 35% ==> \$327,185.35
CONSTRUCTION GRAND TOTAL ==> \$1,262,000.64

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Traffic Signal Improvements Only at the Intersection of 8-Mile Road and Road "C"

A. TRAFFIC SIGNAL AT ROAD "C":

1.	Traffic Signal and Controls	1	\$350,000.00 EA	\$350,000.00
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CONSTRUCTION SUB-TOTAL ==> \$350,000.00

CONTINGENCY - 10% ==> \$35,000.00

CONSTRUCTION TOTAL ==> \$385,000.00

SOFT COSTS - 35% ==> \$134,750.00

CONSTRUCTION GRAND TOTAL ==> \$519,750.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Traffic Signal Improvements Only at the Intersection of 8-Mile Road and Leach Road

A. TRAFFIC SIGNAL AT LEACH ROAD:

1.	Traffic Signal and Controls	1	\$350,000.00 EA	\$350,000.00
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CONSTRUCTION SUB-TOTAL ===> \$350,000.00

CONTINGENCY - 10% ===> \$35,000.00

CONSTRUCTION TOTAL ===> \$385,000.00

SOFT COSTS - 35% ===> \$134,750.00

CONSTRUCTION GRAND TOTAL ===> \$519,750.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>RTD Bus Stop along Eight-Mile Road adjacent to Commercial Land Use</u>				
A. RTD BUS STOP:				
1.	RTD Bus Stop	1	\$17,500.00 EA	\$17,500.00
CONSTRUCTION SUB-TOTAL ==>				\$17,500.00
CONTINGENCY - 10% ==>				<u>\$1,750.00</u>
CONSTRUCTION TOTAL ==>				<u>\$19,250.00</u>
SOFT COSTS - 35% ==>				<u>\$6,737.50</u>
CONSTRUCTION GRAND TOTAL ==>				<u>\$25,987.50</u>

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost

West Lane - 8 Mile Total Intersection Improvements

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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West Lane and Eight Mile Road Intersection Street Improvements and Traffic Signal:

A. WEST LANE AND EIGH MILE ROAD IMPROVEMENTS

1.	3" AC Grind and Overlay	26,844	\$2.00 SF	\$53,688.00
2.	Striping - Intersection	1	\$10,000.00 LS	\$10,000.00
3.	Traffic Signal and Controls	1	\$350,000.00 EA	\$350,000.00

CONSTRUCTION SUB-TOTAL ===> \$413,688.00

CONTINGENCY - 10% ===> \$41,368.80

CONSTRUCTION TOTAL ===> \$455,056.80

SOFT COSTS - 35% ===> \$159,269.88

CONSTRUCTION GRAND TOTAL ===> \$614,326.68

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost

West Lane - 8-Mile PFF Street Improvements Available for Fee Credits

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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West Lane and Eight Mile Road Intersection Street Improvements and Traffic Signal:

A. WEST LANE AND EIGH MILE ROAD IMPROVEMENTS

1.	3" AC Grind and Overlay	26,844	\$2.00 SF	\$53,688.00
2.	Striping - Intersection	1	\$10,000.00 LS	\$10,000.00
3.	Traffic Signal and Controls	1	\$350,000.00 EA	\$350,000.00

CONSTRUCTION SUB-TOTAL ===> \$413,688.00

CONTINGENCY - 10% ===> \$41,368.80

CONSTRUCTION TOTAL ===> \$455,056.80

SOFT COSTS - 35% ===> \$159,269.88

CONSTRUCTION GRAND TOTAL ===> \$614,326.68

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost

West Lane - 8-Mile Developer Responsible Intersection Improvements

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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West Lane and Eight Mile Road Intersection Street Improvements and Traffic Signal:

A. WEST LANE AND EIGH MILE ROAD IMPROVEMENTS

1.	3" AC Grind and Overlay	0	\$2.00 SF	\$0.00
2.	Striping - Intersection	0	\$10,000.00 LS	\$0.00
3.	Traffic Signal and Controls	0	\$350,000.00 EA	\$0.00

CONSTRUCTION SUB-TOTAL ===> \$0.00

CONTINGENCY - 10% ===> \$0.00

CONSTRUCTION TOTAL ===> \$0.00

SOFT COSTS - 35% ===> \$0.00

CONSTRUCTION GRAND TOTAL ===> \$0.00

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost

Total Off-Site Major Utility Infrastructure Improvements

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Sanitary Sewer Infrastructure

24" Sewer Main from the Existing Manhole North of McNair High School east to West Lane

1.	24" PVC - Sanitary Sewer	3,564	\$126.67 LF	\$451,440.00
2.	60" - Sanitary Sewer Manhole	8	\$6,000.00 EA	\$48,000.00
3.	Clearing, Grubbing, and Disposal	2	\$995.00 AC	\$1,990.00
4.	Connect to Existing Sewer Manhole	1	\$4,500.00 EA	\$4,500.00
5.	24" West Lane Crossing	1	\$25,000.00 LS	\$25,000.00
6.	Stub and Plug Proposed Sanitary Sewer Line	1	\$2,500.00 EA	\$2,500.00
7.	24" Sewer Extension Restoration	2	\$1,000.00 AC	\$2,000.00

SUB-TOTAL ===> \$535,430.00

24" Sewer Main along West Lane from Bear Creek to Road "A"

1.	24" PVC - Sanitary Sewer (Trench and Repatch)	1,692	\$188.33 LF	\$318,660.00
2.	60" - Sanitary Sewer Manhole	3	\$6,000.00 EA	\$18,000.00

SUB-TOTAL ===> \$336,660.00

SANITARY SEWER INFRASTRUCTURE SUB-TOTAL ===> \$872,090.00

CONTINGENCY - 10% ===> \$87,209.00
CONSTRUCTION TOTAL ===> \$959,299.00

SOFT COSTS - 35% ===> \$335,754.65
GRAND TOTAL ===> \$1,295,053.65

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Potable Water System Infrastructure</u>				
12" Water Main in Eight Mile Road from Marlette Road to Lower Sacramento Road				
1.	Traffic Control	10	\$2,200.00 DAY	\$22,000.00
2.	12" PVC - Water (Trench and Repatch)	2,057	\$110.00 LF	\$226,270.00
3.	Hydrant Bury, Valve, and Tee	2	\$5,200.00 EA	\$10,400.00
4.	12" Water Connection	1	\$6,000.00 EA	\$6,000.00
SUB-TOTAL ==>				\$264,670.00
24" Water Main in Eight Mile Road from Lower Sacramento Road to West Lane				
1.	Traffic Control	15	\$2,200.00 DAY	\$33,000.00
2.	24" PVC - Water (Trench and Repatch)	4,140	\$170.00 LF	\$703,800.00
3.	Hydrant Bury, Valve, and Tee	6	\$5,200.00 EA	\$31,200.00
4.	Blow-off Valve	1	\$4,000.00 EA	\$4,000.00
SUB-TOTAL ==>				\$772,000.00
24" Water Main in Eight Mile Road from West Lane to Ham Road				
1.	24" PVC - Water (Trench and Repatch)	2,588	\$170.00 LF	\$439,960.00
2.	Hydrant Bury, Valve, and Tee	5	\$5,200.00 EA	\$26,000.00
3.	Blow-off Valve	1	\$4,000.00 EA	\$4,000.00
4.	24" Water Connection	1	\$12,000.00 EA	\$12,000.00
SUB-TOTAL ==>				\$481,960.00
24" Water Main in Eight Mile Road from Ham Road to East End of Tra Vigne East				
1.	24" PVC - Water (Trench and Repatch)	2,340	\$170.00 LF	\$397,800.00
2.	Hydrant Bury, Valve, and Tee	5	\$5,200.00 EA	\$26,000.00
3.	Blow-off Valve	1	\$4,000.00 EA	\$4,000.00
4.	24" Water Connection	1	\$12,000.00 EA	\$12,000.00
SUB-TOTAL ==>				\$439,800.00
24" Water Main in West Lane from Eight Mile Road to Bear Creek Undercrossing				
1.	24" PVC - Water (Trench and Repatch)	4,655	\$170.00 LF	\$791,350.00
2.	Hydrant Bury, Valve, and Tee	15	\$5,200.00 EA	\$78,000.00
3.	Blow-off Valve	10	\$4,000.00 EA	\$40,000.00
4.	24" Water Connection	1	\$12,000.00 EA	\$12,000.00
SUB-TOTAL ==>				\$921,350.00
POTABLE WATER SYSTEM INFRASTRUCTURE SUB-TOTAL ==>				\$2,879,780.00
CONTINGENCY - 10% ==>				\$287,978.00
CONSTRUCTION TOTAL ==>				\$3,167,758.00
SOFT COSTS - 35% ==>				\$1,108,715.30
GRAND TOTAL ==>				\$4,276,473.30

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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West lane / Bear Creek 24" Water Crossing Infrastructure

24" Water Main Undercrossing along West Lane under Bear Creek

1.	Traffic Control	25	\$2,200.00 DAY	\$55,000.00
2.	Boring Pit Construction (incl. Shoring) - North Side	1	\$45,000.00 LS	\$45,000.00
3.	Boring Pit Construction (incl. Shoring) - South Side	1	\$35,000.00 LS	\$35,000.00
4.	27" HDPE Horizontal Drill	250	\$500.00 LF	\$125,000.00
5.	24" PVC - Water (Fittings for Connections)	300	\$150.00 LF	\$45,000.00
6.	Dewatering	1	\$20,000.00 LS	\$20,000.00
7.	Connection to Existing 24" Main in West Lane	1	\$25,000.00 LS	\$25,000.00
8.	Street Restoration	550	\$45.00 LF	\$24,750.00

SUB-TOTAL ===> \$374,750.00

WATER LINE - WEST LANE/BEAR CREEK WATER CROSSING SUB-TOTAL ===> \$374,750.00

CONTINGENCY - 10% ===> \$37,475.00
CONSTRUCTION TOTAL ===> \$412,225.00

SOFT COSTS - 35% ===> \$144,278.75
GRAND TOTAL ===> \$556,503.75

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost

Reimbursable Off-Site Major Utility Infrastructure Improvements

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Sanitary Sewer Infrastructure

Cost difference between oversized proposed 24" PVC Sewer Main versus required 12" PVC Sewer Main

24"- Sewer Maing from the Existing Manhole North of McNair High School east to West Lane

1.	24" PVC - 12" PVC - Sanitary Sewer	3,564	\$84.67 LF	\$301,752.00
2.	60" - 48" Sanitary Sewer Manhole	8	\$3,200.00 EA	\$25,600.00
3.	Clearing, Grubbing, and Disposal	0	\$995.00 AC	\$0.00
4.	Connect to Existing Sewer Manhole	1	\$4,500.00 EA	\$4,500.00
5.	24" - 12" West Lane Crossing	1	\$12,500.00 LS	\$12,500.00
6.	Stub and Plug Proposed Sanitary Sewer Line	0	\$2,500.00 EA	\$0.00
7.	24" Sewer Extension Restoration	0	\$1,000.00 AC	\$0.00

SUB-TOTAL ==> \$344,352.00

24" Sewer Main from along West Lane from Bear Creek to Road "A"

1.	24" PVC - 12" PVC Sanitary Sewer (Trench and Repatch)	1,692	\$84.67 LF	\$143,267.28
2.	60" - 48" Sanitary Sewer Manhole	3	\$3,200.00 EA	\$9,600.00

SUB-TOTAL ==> \$152,867.28

SANITARY SEWER INFRASTRUCTURE SUB-TOTAL ==> \$497,219.28

CONTINGENCY - 10% ==> \$49,721.93
CONSTRUCTION TOTAL ==> \$546,941.21

SOFT COSTS - 35% ==> \$191,429.42
GRAND TOTAL ==> \$738,370.63

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
Potable Water System Infrastructure				
Cost difference between oversized proposed 24" / 30" Water Mains versus required 12" PVC Water Mains				
12" Water Main in Eight Mile Road from Marlette Road to Lower Sacramento Road				
1.	Traffic Control	0	\$2,200.00 DAY	\$0.00
2.	12" PVC - Water (Trench and Repatch)	0	\$110.00 LF	\$0.00
3.	Hydrant Bury, Valve, and Tee	0	\$5,200.00 EA	\$0.00
4.	12" Water Connection	0	\$6,000.00 EA	\$0.00
SUB-TOTAL ==>				\$0.00
24" Water Main in Eight Mile Road from Lower Sacramento Road to West Lane				
1.	Traffic Control	0	\$2,200.00 DAY	\$0.00
2.	24" PVC - 12" PVC Water (Trench and Repatch)	4,140	\$60.00 LF	\$248,400.00
3.	Hydrant Bury, Valve, and Tee	0	\$5,200.00 EA	\$0.00
4.	Blow-off Valve	0	\$4,000.00 EA	\$0.00
SUB-TOTAL ==>				\$248,400.00
24" Water Main in Eight Mile Road from West Lane to Ham Road				
1.	24" PVC - 12" PVC Water (Trench and Repatch)	2,588	\$60.00 LF	\$155,280.00
2.	Hydrant Bury, Valve, and Tee	0	\$5,200.00 EA	\$0.00
3.	Blow-off Valve	0	\$4,000.00 EA	\$0.00
4.	24" - 12" Water Connection	1	\$6,000.00 EA	\$6,000.00
SUB-TOTAL ==>				\$161,280.00
24" Water Main in Eight Mile Road from Ham Road to East End of Tra Vigne East				
1.	24" PVC - 12" PVC Water (Trench and Repatch)	2,340	\$60.00 LF	\$140,400.00
2.	Hydrant Bury, Valve, and Tee	0	\$5,200.00 EA	\$0.00
3.	Blow-off Valve	0	\$4,000.00 EA	\$0.00
4.	24" - 12" Water Connection	1	\$6,000.00 EA	\$6,000.00
SUB-TOTAL ==>				\$146,400.00
24" Water Main in West Lane from Eight Mile Road to Bear Creek Undercrossing				
1.	24" PVC - 12" PVC Water (Trench and Repatch)	4,655	\$60.00 LF	\$279,300.00
2.	Hydrant Bury, Valve, and Tee	0	\$5,200.00 EA	\$0.00
3.	Blow-off Valve	0	\$4,000.00 EA	\$0.00
4.	24" - 12" Water Connection	1	\$6,000.00 EA	\$6,000.00
SUB-TOTAL ==>				\$285,300.00
POTABLE WATER SYSTEM INFRASTRUCTURE SUB-TOTAL ==>				\$841,380.00
CONTINGENCY - 10% ==>				\$84,138.00
CONSTRUCTION TOTAL ==>				\$925,518.00
SOFT COSTS - 35% ==>				\$323,931.30
GRAND TOTAL ==>				\$1,249,449.30

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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West lane / Bear Creek 24" Water Crossing Infrastructure

Cost difference between oversized proposed 24" / 30" Water Mains versus required 12" PVC Water Mains

24" Water Main Undercrossing along West Lane under Bear Creek

1.	Traffic Control	0	\$2,200.00 DAY	\$0.00
2.	Boring Pit Construction (incl. Shoring) - North Side	0	\$45,000.00 LS	\$0.00
3.	Boring Pit Construction (incl. Shoring) - South Side	0	\$35,000.00 LS	\$0.00
4.	27" HDPE - 18" HDPE Horizontal Drill	250	\$150.00 LF	\$37,500.00
5.	24" PVC - 12" PVC - Water (Fittings for Connections)	500	\$75.00 LF	\$37,500.00
6.	Dewatering	0	\$20,000.00 LS	\$0.00
7.	Connection to Existing 24" Main in West Lane	1	\$25,000.00 LS	\$25,000.00
8.	Street Restoration	0	\$45.00 LF	\$0.00

SUB-TOTAL ===> \$100,000.00

WATER LINE - WEST LANE/BEAR CREEK WATER CROSSING SUB-TOTAL ===> \$100,000.00

CONTINGENCY - 10% ===> \$10,000.00
CONSTRUCTION TOTAL ===> \$110,000.00

SOFT COSTS - 35% ===> \$38,500.00
GRAND TOTAL ===> \$148,500.00

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost
Off-Site Mitigation Improvements

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
Part I - Morada Lane - Dedicated Right-Turn Lane				
A. SITE PREPARATION AND GRADING				
1.	Clearing, Grubbing, and Disposal	1	\$995.00 AC	\$995.00
2.	Remove Existing Pavement	583	\$3.00 SF	\$1,749.00
3.	Sawcut Existing Pavement	583	\$2.00 LF	\$1,166.00
4.	Traffic Control	10	\$2,200.00 DAY	\$22,000.00
5.	Rough Grading - Street Right-of-Way	271	\$4.50 CY	\$1,220.00
6.	Street Fine Grading	7,320	\$0.40 SF	\$2,928.00
SUB-TOTAL ==>				\$30,058.00
B. EROSION CONTROL				
1.	Temporary Straw Wattle	600.0	\$1.63 LF	\$975.00
SUB-TOTAL ==>				\$975.00
C. STREETS				
1.	4.0" AC over 14.5" AB Pavement	7,320	\$5.10 SF	\$37,332.00
SUB-TOTAL ==>				\$37,332.00
D. STRIPING AND SIGNAGE				
1.	Remove Striping	400	\$1.00 LS	\$400.00
2.	Remove Arrows	1	\$200.00 LS	\$200.00
3.	Traffic Arrows	5	\$450.00 EA	\$2,250.00
4.	Traffic Delineation	820	\$1.75 LF	\$1,435.00
5.	Modified Traffic Signal and Controls	1	\$150,000.00 EA	\$150,000.00
SUB-TOTAL ==>				\$154,285.00
PART 1 - SUB-TOTAL ==>				\$222,650.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
Part II - Lower Sacramento Road Intersection Modifications				
A. SITE PREPARATION AND GRADING				
1.	Clearing, Grubbing, and Disposal	1	\$995.00 AC	\$995.00
2.	Remove Existing Pavement	243	\$3.00 SF	\$729.00
3.	Sawcut Existing Pavement	243	\$2.00 LF	\$486.00
4.	Traffic Control	10	\$2,200.00 DAY	\$22,000.00
5.	Rough Grading - Street Right-of-Way	104	\$4.50 CY	\$468.75
6.	Street Fine Grading	2,500	\$0.40 SF	\$1,000.00
SUB-TOTAL ==>				\$25,678.75
B. EROSION CONTROL				
1.	Temporary Straw Wattle	250.0	\$1.63 LF	\$406.25
SUB-TOTAL ==>				\$406.25
C. STREETS				
1.	4.0" AC over 14.5" AB Pavement	2,500	\$5.10 SF	\$12,750.00
SUB-TOTAL ==>				\$12,750.00
D. STRIPING AND SIGNAGE				
1.	Remove Striping	150	\$1.00 LS	\$150.00
2.	Traffic Arrows	2	\$450.00 EA	\$900.00
3.	Traffic Delineation	225	\$1.75 LF	\$393.75
4.	Modified Traffic Signal and Controls	1	\$150,000.00 EA	\$150,000.00
SUB-TOTAL ==>				\$151,443.75
PART 2 - SUB-TOTAL ==>				\$190,278.75
CONSTRUCTION SUB-TOTAL ==>				\$412,928.75
CONTINGENCY - 10% ==>				\$41,292.88
CONSTRUCTION TOTAL ==>				\$454,221.63
SOFT COSTS - 35% ==>				\$158,977.57
GRAND TOTAL ==>				\$613,199.19
TOTAL LOTS ==>				1,212
COST PER LOT ==>				\$505.94

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost
Tra Vigne West In-Tract Major Infrastructure

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Shared Storm Drain Pipes, Basin, and Pump Station Infrastructure

Storm Drainage Base Pump Station, Infrastructure, and Treatment

1.	Basin Pump Station, Treatment Equipment, & Basin Piping	1	\$1,000,000.00 LS	\$1,000,000.00
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SUB-TOTAL ==> \$1,000,000.00

Storm Drainage Basin Construction

1.	Clearing, Grubbing, and Disposal	5.1	\$995.00 AC	\$5,074.50
2.	Rough Grading - Basin	57,700	\$3.00 CY	\$173,100.00
3.	Park / Basin Fine Grading	222,200	\$0.15 SF	\$33,330.00

SUB-TOTAL ==> \$211,504.50

Storm Drainage Basin Fencing, Landscaping and Erosion Control

1.	Basin Decorative Fencing and Security (signs) Features	1,270	\$30.00 LF	\$38,100.00
2.	Erosion Control Improvements	5.1	\$2,000.00 AC	\$10,200.00
3.	Landscape w/o Irrigation (Basin Hydroseeding)	222,200	\$0.45 SF	\$99,990.00

SUB-TOTAL ==> \$148,290.00

CONSTRUCTION SUB-TOTAL ==> \$1,359,794.50

CONTINGENCY - 10% ==> \$135,979.45

CONSTRUCTION TOTAL ==> \$1,495,773.95

SOFT COSTS - 35% ==> \$523,520.88

GRAND TOTAL ==> \$2,019,294.83

TOTAL LOTS ==> 794

COST PER LOT ==> \$2,543.19

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Tra Vigne West Oversized Backbone Water System Improvements

Oversized Water System for Road "A" - Segments (A1), (A2), and (A3)

1.	16" PVC - Water	2,469	\$80.00 LF	\$197,520.00
2.	16" Butterfly Valve	5	\$4,000.00 EA	\$20,000.00

SUB-TOTAL ===> \$217,520.00

Oversized Water System for Road "B" - Segment (B)

1.	18" PVC - Water	914	\$90.00 LF	\$82,260.00
2.	18" Butterfly Valve	1	\$4,500.00 EA	\$4,500.00

SUB-TOTAL ===> \$86,760.00

Oversized Water System for Road "C" - Segments (C1), (C2), (C3), (C4), and (C5)

1.	18" PVC - Water	520	\$90.00 LF	\$46,800.00
2.	18" Butterfly Valve	2	\$4,500.00 EA	\$9,000.00
3.	16" PVC - Water	1,250	\$80.00 LF	\$100,000.00
4.	16" Butterfly Valve	6	\$4,000.00 EA	\$24,000.00

SUB-TOTAL ===> \$179,800.00

Oversized Water System for Roads "AA", "BB" AND "FF" - Segments (BB1), (BB2), (BB3), (AA), and (FF)

1.	16" PVC - Water	500	\$80.00 LF	\$40,000.00
2.	16" Butterfly Valve	4	\$4,000.00 EA	\$16,000.00

SUB-TOTAL ===> \$56,000.00

CONSTRUCTION SUB-TOTAL ===> \$540,080.00

CONTINGENCY - 10% ===> \$54,008.00

CONSTRUCTION TOTAL ===> \$594,088.00

SOFT COSTS - 35% ===> \$207,930.80

GRAND TOTAL ===> \$802,018.80

TOTAL LOTS ===> 794

COST PER LOT ===> \$1,010.10

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Tra Vigne West In-Tract Parks, Landscaping, Open Space, and Recreational Improvements

In-Tract Park Landscaping Improvements (Does Not Include Major Amenities)

1.	Landscape w/ Irrigation (Tra Vigne West - Park A Area)	159,637	\$6.50 SF	\$1,037,640.50
2.	Landscape w/ Irrigation (Tra Vigne West - Park B Area)	251,281	\$6.50 SF	\$1,633,326.50
3.	Landscape w/ Irrigation (Open Space)	610,620	\$0.50 SF	\$305,310.00

SUB-TOTAL ===> \$2,976,277.00

CONSTRUCTION SUB-TOTAL ===> \$2,976,277.00

CONTINGENCY - 10% ===> \$297,627.70

CONSTRUCTION TOTAL ===> \$3,273,904.70

SOFT COSTS - 35% ===> \$1,145,866.65

GRAND TOTAL ===> \$4,419,771.35

TOTAL LOTS ===> 794

COST PER LOT ===> \$5,566.46

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost

Tra Vigne West In-Tract Major Infrastructure Available for PFF Fee Credits and Reimbursements

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Shared Storm Drain Pipes, Basin, and Pump Station Infrastructure

Storm Drainage Base Pump Station, Infrastructure, and Treatment

1.	Basin Pump Station, Treatment Equipment, & Basin Piping	0	\$1,000,000.00 LS	\$0.00
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SUB-TOTAL ===> \$0.00

Storm Drainage Basin Construction

1.	Clearing, Grubbing, and Disposal	0	\$995.00 AC	\$0.00
2.	Rough Grading - Basin	0	\$3.00 CY	\$0.00
3.	Park / Basin Fine Grading	0	\$0.15 SF	\$0.00

SUB-TOTAL ===> \$0.00

Storm Drainage Basin Fencing, Landscaping and Erosion Control

1.	Basin Decorative Fencing and Security (signs) Features	0	\$30.00 LF	\$0.00
2.	Erosion Control Improvements	0	\$2,000.00 AC	\$0.00
3.	Landscape w/o Irrigation (Basin Hydroseeding)	0	\$0.45 SF	\$0.00

SUB-TOTAL ===> \$0.00

CONSTRUCTION SUB-TOTAL ===> \$0.00

CONTINGENCY - 10% ===> \$0.00

CONSTRUCTION TOTAL ===> \$0.00

SOFT COSTS - 35% ===> \$0.00

GRAND TOTAL ===> \$0.00

TOTAL LOTS ===> 794

COST PER LOT ===> \$0.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Tra Vigne West Oversized Backbone Water System Improvements

Oversized Water System for Road "A" - Segments (A1), (A2), and (A3)

1.	16" PVC - 12" PVC - Water	2,469	\$20.00 LF	\$49,380.00
2.	16" Butterfly Valve - 12" Butterfly Valve	5	\$1,000.00 EA	\$5,000.00

SUB-TOTAL ===> \$54,380.00

Oversized Water System for Road "B" - Segment (B)

1.	18" PVC - 12" PVC - Water	914	\$30.00 LF	\$27,420.00
2.	18" Butterfly Valve - 12" Butterfly Valve	1	\$1,500.00 EA	\$1,500.00

SUB-TOTAL ===> \$28,920.00

Oversized Water System for Road "C" - Segments (C1), (C2), (C3), (C4), and (C5)

1.	18" PVC - 12" PVC - Water	520	\$30.00 LF	\$15,600.00
2.	18" Butterfly Valve - 12" Butterfly Valve	2	\$1,500.00 EA	\$3,000.00
3.	16" PVC - 12" PVC - Water	1,250	\$20.00 LF	\$25,000.00
4.	16" Butterfly Valve - 12" Butterfly Valve	6	\$1,000.00 EA	\$6,000.00

SUB-TOTAL ===> \$49,600.00

Oversized Water System for Roads "AA", "BB" AND "FF" - Segments (BB1), (BB2), (BB3), (AA), and (FF)

1.	16" PVC - 12" PVC - Water	500	\$20.00 LF	\$10,000.00
2.	16" Butterfly Valve - 12" Butterfly Valve	4	\$1,000.00 EA	\$4,000.00

SUB-TOTAL ===> \$14,000.00

CONSTRUCTION SUB-TOTAL ===> \$146,900.00

CONTINGENCY - 10% ===> \$14,690.00

CONSTRUCTION TOTAL ===> \$161,590.00

SOFT COSTS - 35% ===> \$56,556.50

GRAND TOTAL ===> \$218,146.50

TOTAL LOTS ===> 794

COST PER LOT ===> \$274.74

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Tra Vigne West In-Tract Parks, Landscaping, Open Space, and Recreational Improvements

In-Tract Park Landscaping Improvements (Does Not Include Major Amenities)

1.	Landscape w/ Irrigation (Tra Vigne West - Park A Area)	159,637	\$6.50 SF	\$1,037,640.50
2.	Landscape w/ Irrigation (Tra Vigne West - Park B Area)	251,281	\$6.50 SF	\$1,633,326.50
3.	Landscape w/ Irrigation (Open Space)	610,620	\$0.50 SF	\$305,310.00

SUB-TOTAL ==> \$2,976,277.00

CONSTRUCTION SUB-TOTAL ==> \$2,976,277.00

CONTINGENCY - 10% ==> \$297,627.70

CONSTRUCTION TOTAL ==> \$3,273,904.70

SOFT COSTS - 35% ==> \$1,145,866.65

GRAND TOTAL ==> \$4,419,771.35

TOTAL LOTS ==> 794

COST PER LOT ==> \$5,566.46

Tra Vigne West
Engineer's Estimate of Probable Cost
Tra Vigne West Backbone In-Tract Improvements

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Total Tra Vigne West Site Mass Clearing and Rough Grading

A. SITE PREPARTION AND MASS GRADING

1.	Clearing, Grubbing, and Disposal	200	\$995.00 AC	\$199,000.00
2.	Remove and Dispose of Existing Pavement	1,000	\$3.00 SF	\$3,000.00
3.	Rough Grading - Streets and Super Pads	323,000	\$3.75 CY	\$1,211,250.00
4.	Street Fine Grading	639,000	\$0.40 SF	\$255,600.00
5.	Erosion Control Improvements	200	\$2,000.00 AC	\$400,000.00

SUB-TOTAL ==> \$2,068,850.00

SEGMENT - SUB-TOTAL ==> \$2,068,850.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Backbone Street Improvements for Road "A" - Segments (A1), (A2), and (A3)</u>				
A. WATER				
1.	8" PVC - Water	1,050	\$25.00 LF	\$26,250.00
2.	8" Gate Valve	9	\$2,000.00 EA	\$18,000.00
3.	Hydrant Bury, Valve, and Tee	9	\$5,200.00 EA	\$46,800.00
4.	Blow-Off Valve	9	\$4,000.00 EA	\$36,000.00
5.	16" Water Connection	1	\$8,000.00 EA	\$8,000.00
SUB-TOTAL ==>				\$135,050.00
B. STORM				
1.	36" RCP - Storm Drainage	450	\$90.00 LF	\$40,500.00
2.	30" RCP - Storm Drainage	260	\$75.00 LF	\$19,500.00
3.	24" RCP - Storm Drainage	500	\$60.00 LF	\$30,000.00
4.	18" RCP - Storm Drainage	950	\$45.00 LF	\$42,750.00
5.	12" RCP - Storm Drainage	300	\$30.00 LF	\$9,000.00
6.	Curb Inlet - Stockton Vertical	18	\$3,000.00 EA	\$54,000.00
7.	48" - Storm Drainage Manhole	5	\$3,500.00 EA	\$17,500.00
8.	60" - Storm Drainage Manhole	1	\$5,500.00 EA	\$5,500.00
9.	72" - Storm Drainage Manhole	2	\$7,500.00 EA	\$15,000.00
10.	Stub and Plug Proposed Storm Drainage Line	1	\$1,500.00 EA	\$1,500.00
SUB-TOTAL ==>				\$235,250.00
C. SANITARY SEWER				
1.	8" PVC - Sanitary Sewer	970	\$35.00 LF	\$33,950.00
2.	48" - Sanitary Sewer Manhole	8	\$2,800.00 EA	\$22,400.00
3.	Stub and Plug Proposed Sanitary Sewer Line	9	\$2,500.00 EA	\$22,500.00
4.	Connect to Existing Sewer Manhole	1	\$4,500.00 EA	\$4,500.00
SUB-TOTAL ==>				\$83,350.00
D. STREETS				
1.	3.5" AC over 11.5" AB Pavement	80,100	\$4.23 SF	\$338,422.50
2.	6" Vertical Curb and Gutter	4,950	\$19.50 LF	\$96,525.00
3.	8" Median Curb	2,000	\$18.60 LF	\$37,200.00
4.	4" PCC Concrete Walk (Includes Ramps and Returns)	24,700	\$4.00 SF	\$98,800.00
5.	ADA Ramp (Labor and Truncated Domes Only)	18	\$1,900.00 EA	\$34,200.00
6.	100 Watt Electrolier	11	\$4,500.00 EA	\$49,500.00
7.	Street Monuments	7	\$310.00 EA	\$2,170.00
8.	Traffic Delineation (Striping and Stop Bars)	4,930	\$1.75 EA	\$8,627.50
9.	Street Name and Directional Signs	6	\$380.00 EA	\$2,280.00
10.	Street Barricade	6	\$750.00 EA	\$4,500.00
11.	Joint Trench Main	2,470	\$150.00 LF	\$370,500.00
SUB-TOTAL ==>				\$1,042,725.00
SEGMENT - SUB-TOTAL ==>				\$1,496,375.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Backbone Street Improvements for Road "B" - Segment (B)</u>				
A. WATER				
1.	Hydrant Bury, Valve, and Tee	2	\$5,200.00 EA	\$10,400.00
2.	Blow-off Valve	1	\$4,000.00 EA	\$4,000.00
3.	24" Water Connection	1	\$12,000.00 EA	\$12,000.00
SUB-TOTAL ==>				\$26,400.00
B. STORM				
1.	24" RCP - Storm Drainage	300	\$60.00 LF	\$18,000.00
2.	18" RCP - Storm Drainage	580	\$45.00 LF	\$26,100.00
3.	12" RCP - Storm Drainage	250	\$30.00 LF	\$7,500.00
4.	Curb Inlet - Stockton Vertical	5	\$3,000.00 EA	\$15,000.00
5.	48" - Storm Drainage Manhole	3	\$3,500.00 EA	\$10,500.00
6.	Stub and Plug Proposed Storm Drainage Line	1	\$1,500.00 EA	\$1,500.00
SUB-TOTAL ==>				\$78,600.00
C. SANITARY SEWER				
1.	18" PVC - Sanitary Sewer	880	\$79.00 LF	\$69,520.00
2.	48" - Sanitary Sewer Manhole	2	\$2,800.00 EA	\$5,600.00
3.	Stub and Plug Proposed Sanitary Sewer Line	4	\$2,500.00 EA	\$10,000.00
4.	Connect to Existing Sewer Manhole	1	\$4,500.00 EA	\$4,500.00
SUB-TOTAL ==>				\$89,620.00
D. ROADS				
1.	3.5" AC over 11.5" AB Pavement	44,200	\$4.23 SF	\$186,745.00
2.	6" Vertical Curb and Gutter	1,500	\$19.50 LF	\$29,250.00
3.	8" Median Curb	1,800	\$18.60 LF	\$33,480.00
4.	4" PCC Concrete Walk (Includes Ramps and Returns)	14,400	\$4.00 SF	\$57,600.00
5.	ADA Ramp (Labor and Truncated Domes Only)	6	\$1,900.00 EA	\$11,400.00
6.	100 Watt Electrolier	4	\$4,500.00 EA	\$18,000.00
7.	Street Monuments	2	\$310.00 EA	\$620.00
8.	Traffic Delineation (Striping and Stop bars)	1,760	\$1.75 EA	\$3,080.00
9.	Street Name and Directional Signs	4	\$380.00 EA	\$1,520.00
10.	Street Barricade	1	\$750.00 EA	\$750.00
11.	Joint Trench Main	880	\$150.00 LF	\$132,000.00
SUB-TOTAL ==>				\$474,445.00
SEGMENT - SUB-TOTAL ==>				\$669,065.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Backbone Street Improvements for Road "C" - Segments (C1), (C2), (C3), (C4), and (C5)</u>				
A. WATER				
1.	12" PVC - Water	1,290	\$60.00 LF	\$77,400.00
2.	12" Butterfly Valve	6	\$3,000.00 EA	\$18,000.00
3.	Blow-off Valve	9	\$4,000.00 EA	\$36,000.00
4.	Hydrant Bury, Valve, and Tee	2	\$5,200.00 EA	\$10,400.00
5.	24" Water Connection	1	\$12,000.00 EA	\$12,000.00
SUB-TOTAL ==>				\$153,800.00
B. STORM				
1.	60" RCP - Storm Drainage	520	\$150.00 LF	\$78,000.00
2.	48" RCP - Storm Drainage	1,280	\$120.00 LF	\$153,600.00
3.	36" RCP - Storm Drainage	400	\$90.00 LF	\$36,000.00
4.	30" RCP - Storm Drainage	380	\$75.00 LF	\$28,500.00
5.	18" RCP - Storm Drainage	500	\$45.00 LF	\$22,500.00
6.	12" RCP - Storm Drainage	1,040	\$30.00 LF	\$31,200.00
7.	Curb Inlet - Stockton Vertical	26	\$3,000.00 EA	\$78,000.00
8.	48" - Storm Drainage Manhole	1	\$3,500.00 EA	\$3,500.00
9.	60" - Storm Drainage Manhole	1	\$5,500.00 EA	\$5,500.00
10.	72" - Storm Drainage Manhole	8	\$7,500.00 EA	\$60,000.00
11.	Stub and Plug Proposed Storm Drainage Line	2	\$1,500.00 EA	\$3,000.00
SUB-TOTAL ==>				\$499,800.00
C. SANITARY SEWER				
1.	18" PVC - Sanitary Sewer	770	\$79.00 LF	\$60,830.00
2.	12" PVC - Sanitary Sewer	1,270	\$42.00 LF	\$53,340.00
3.	10" PVC - Sanitary Sewer	150	\$38.50 LF	\$5,775.00
4.	8" PVC - Sanitary Sewer	200	\$35.00 LF	\$7,000.00
5.	48" - Sanitary Sewer Manhole	7	\$2,800.00 EA	\$19,600.00
6.	60" - Sanitary Sewer Manhole	3	\$6,000.00 EA	\$18,000.00
7.	Stub and Plug Proposed Sanitary Sewer Line	11	\$2,500.00 EA	\$27,500.00
SUB-TOTAL ==>				\$192,045.00
D. ROADS				
1.	3.5" AC over 11.5" AB Pavement	86,700	\$4.23 SF	\$366,307.50
2.	6" Vertical Curb and Gutter	6,090	\$19.50 LF	\$118,755.00
3.	4" PCC Concrete Walk (Includes Ramps and Returns)	30,500	\$4.00 SF	\$122,000.00
4.	ADA Ramp (Labor and Truncated Domes Only)	28	\$1,900.00 EA	\$53,200.00
5.	100 Watt Electrolier	12	\$4,500.00 EA	\$54,000.00
6.	Street Monuments	9	\$310.00 EA	\$2,790.00
7.	Traffic Delineation (Striping and Stop bars)	6,090	\$1.75 EA	\$10,657.50
8.	Street Name and Directional Signs	18	\$380.00 EA	\$6,840.00
9.	Street Barricade	12	\$750.00 EA	\$9,000.00
10.	Joint Trench Main	3,050	\$150.00 LF	\$457,500.00
SUB-TOTAL ==>				\$1,201,050.00
SEGMENT - SUB-TOTAL ==>				\$2,046,695.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
Backbone Street Improvements for Roads "AA", "BB" AND "FF" - Segments (BB1), (BB2), (BB3), (AA), and (FF)				
A. WATER				
1.	8" PVC - Water	1,805	\$25.00 LF	\$45,125.00
2.	8" Gate Valve	10	\$2,000.00 EA	\$20,000.00
3.	Blow-off Valve	7	\$4,000.00 EA	\$28,000.00
4.	Hydrant Bury, Valve, and Tee	7	\$5,200.00 EA	\$36,400.00
5.	Water Connection	2	\$7,500.00 EA	\$15,000.00
SUB-TOTAL ==>				\$144,525.00
B. STORM				
1.	18" RCP - Storm Drainage	1,050	\$45.00 LF	\$47,250.00
2.	12" RCP - Storm Drainage	720	\$30.00 LF	\$21,600.00
3.	Curb Inlet - Stockton Vertical	19	\$3,000.00 EA	\$57,000.00
4.	Stub and Plug Proposed Storm Drainage Line	1	\$1,500.00 EA	\$1,500.00
5.	48" - Storm Drainage Manhole	6	\$3,500.00 EA	\$21,000.00
SUB-TOTAL ==>				\$148,350.00
C. SANITARY SEWER				
1.	15" PVC - Sanitary Sewer	1,930	\$55.00 LF	\$106,150.00
2.	8" PVC - Sanitary Sewer	1,110	\$35.00 LF	\$38,850.00
3.	48" - Sanitary Sewer Manhole	6	\$2,800.00 EA	\$16,800.00
4.	Stub and Plug Proposed Sanitary Sewer Line	8	\$2,500.00 EA	\$20,000.00
5.	Connect to Existing Sewer Manhole	1	\$4,500.00 EA	\$4,500.00
SUB-TOTAL ==>				\$186,300.00
D. ROADS				
1.	3.5" AC over 11.5" AB Pavement	57,930	\$4.23 SF	\$244,754.25
2.	6" Vertical Curb and Gutter	4,100	\$19.50 LF	\$79,950.00
3.	4" PCC Concrete Walk (Includes Ramps and Returns)	20,500	\$4.00 SF	\$82,000.00
4.	ADA Ramp (Labor and Truncated Domes Only)	16	\$1,900.00 EA	\$30,400.00
5.	100 Watt Electrolier	7	\$4,500.00 EA	\$31,500.00
6.	Street Monuments	5	\$310.00 EA	\$1,550.00
7.	Traffic Delineation (Striping and Stop bars)	3,860	\$1.75 EA	\$6,755.00
8.	Street Name and Directional Signs	16	\$380.00 EA	\$6,080.00
9.	Street Barricade	1	\$750.00 EA	\$750.00
10.	Joint Trench Main	1,931	\$150.00 LF	\$289,650.00
SUB-TOTAL ==>				\$773,389.25
SEGMENT - SUB-TOTAL ==>				\$1,252,564.25

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Backbone Street Improvements for Road "E" - Segment (E) - East of Road "C"</u>				
A. WATER				
1.	8" PVC - Water	1,200	\$25.00 LF	\$30,000.00
2.	8" Gate Valve	8	\$2,000.00 EA	\$16,000.00
3.	Hydrant Bury, Valve, and Tee	5	\$5,200.00 EA	\$26,000.00
4.	Blow-off Valve	4	\$4,000.00 EA	\$16,000.00
5.	Water Connection	1	\$7,500.00 EA	\$7,500.00
SUB-TOTAL ==>				\$95,500.00
B. STORM				
1.	24" RCP - Storm Drainage	1,200	\$60.00 LF	\$72,000.00
2.	12" RCP - Storm Drainage	600	\$30.00 LF	\$18,000.00
3.	60" - Storm Drainage Manhole	5	\$5,500.00 EA	\$27,500.00
4.	Curb Inlet - Stockton Vertical	15	\$3,000.00 EA	\$45,000.00
5.	Stub and Plug Proposed Storm Drainage Line	1	\$1,500.00 EA	\$1,500.00
SUB-TOTAL ==>				\$164,000.00
C. SANITARY SEWER				
1.	8" PVC - Sanitary Sewer	1,200	\$35.00 LF	\$42,000.00
2.	48" - Sanitary Sewer Manhole	5	\$2,800.00 EA	\$14,000.00
3.	Stub and Plug Proposed Sanitary Sewer Line	5	\$2,500.00 EA	\$12,500.00
4.	Connect to Existing Sewer Manhole	1	\$4,500.00 EA	\$4,500.00
SUB-TOTAL ==>				\$73,000.00
D. ROADS				
1.	3.5" AC over 11.5" AB Pavement	36,000	\$4.23 SF	\$152,100.00
2.	6" Vertical Curb and Gutter	2,340	\$19.50 LF	\$45,630.00
3.	4" PCC Concrete Walk (Includes Ramps and Returns)	11,700	\$4.00 SF	\$46,800.00
4.	ADA Ramp (Labor and Truncated Domes Only)	9	\$1,900.00 EA	\$17,100.00
5.	100 Watt Electrolier	5	\$4,500.00 EA	\$22,500.00
6.	Street Monuments	3	\$310.00 EA	\$930.00
7.	Traffic Delineation (Striping and Stop bars)	2,400	\$1.75 EA	\$4,200.00
8.	Street Name and Directional Signs	10	\$380.00 EA	\$3,800.00
9.	Street Barricade	1	\$750.00 EA	\$750.00
10.	Joint Trench Main	1,200	\$150.00 LF	\$180,000.00
SUB-TOTAL ==>				\$473,810.00
SEGMENT - SUB-TOTAL ==>				\$806,310.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Backbone Street Improvements for Road "T" - Segment (T1) and (T2)</u>				
A. WATER				
1.	8" PVC - Water	1,900	\$25.00 LF	\$47,500.00
2.	8" Gate Valve	10	\$2,000.00 EA	\$20,000.00
3.	Blow-off Valve	7	\$4,000.00 EA	\$28,000.00
4.	Hydrant Bury, Valve, and Tee	7	\$5,200.00 EA	\$36,400.00
5.	Water Connection	1	\$7,500.00 EA	\$7,500.00
SUB-TOTAL ==>				\$139,400.00
B. STORM				
1.	60" RCP - Storm Drainage	800	\$150.00 LF	\$120,000.00
2.	42" RCP - Storm Drainage	1,100	\$105.00 LF	\$115,500.00
3.	30" RCP - Storm Drainage	740	\$75.00 LF	\$55,500.00
4.	12" RCP - Storm Drainage	400	\$30.00 LF	\$12,000.00
5.	Curb Inlet - Stockton Vertical	14	\$3,000.00 EA	\$42,000.00
6.	60" - Storm Drainage Manhole	3	\$5,500.00 EA	\$16,500.00
7.	72" - Storm Drainage Manhole	3	\$7,500.00 EA	\$22,500.00
8.	96" - Storm Drainage Manhole	3	\$9,500.00 EA	\$28,500.00
9.	Stub and Plug Proposed Storm Drainage Line	2	\$1,500.00 EA	\$3,000.00
10.	Bubble-up Structure with Rip Rap	1	\$5,500.00 LF	\$5,500.00
SUB-TOTAL ==>				\$421,000.00
C. SANITARY SEWER				
1.	8" PVC - Sanitary Sewer	1,900	\$35.00 LF	\$66,500.00
2.	48" - Sanitary Sewer Manhole	7	\$2,800.00 EA	\$19,600.00
3.	Stub and Plug Proposed Sanitary Sewer Line	7	\$2,500.00 EA	\$17,500.00
4.	Connect to Existing Sewer Manhole	1	\$4,500.00 EA	\$4,500.00
SUB-TOTAL ==>				\$108,100.00
D. ROADS				
1.	3.5" AC over 11.5" AB Pavement	54,450	\$4.23 SF	\$230,051.25
2.	6" Vertical Curb and Gutter	3,510	\$19.50 LF	\$68,445.00
3.	4" PCC Concrete Walk (Includes Ramps and Returns)	17,550	\$4.00 SF	\$70,200.00
4.	ADA Ramp (Labor and Truncated Domes Only)	8	\$1,900.00 EA	\$15,200.00
5.	100 Watt Electrolier	7	\$4,500.00 EA	\$31,500.00
6.	Street Monuments	5	\$310.00 EA	\$1,550.00
7.	Traffic Delineation (Striping and Stop bars)	3,510	\$1.75 EA	\$6,142.50
8.	Street Name and Directional Signs	12	\$380.00 EA	\$4,560.00
9.	Street Barricade	5	\$750.00 EA	\$3,750.00
10.	Joint Trench Main	1,815	\$150.00 LF	\$272,250.00
SUB-TOTAL ==>				\$703,648.75
SEGMENT - SUB-TOTAL ==>				\$1,372,148.75

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>In-Tract Parks, Landscaping, Open Space, and Recreational Improvements</u>				
A. ON-SITE PARKS LANDSCAPING (DOES NOT INCLUDE MAJOR AMENITIES)				
1.	Landscape w/ Irrigation (Streetscape)	113,420	\$5.00 SF	\$567,100.00
SUB-TOTAL ==>				<u>\$567,100.00</u>
PART 8 - SUB-TOTAL ==>				<u>\$567,100.00</u>
CONSTRUCTION SUB-TOTAL ==>				\$10,279,108.00
CONTINGENCY - 10% ==>				<u>\$1,027,910.80</u>
CONSTRUCTION TOTAL ==>				<u>\$11,307,018.80</u>
SOFT COSTS - 35% ==>				<u>\$3,957,456.58</u>
GRAND TOTAL ==>				<u>\$15,264,475.38</u>
TOTAL LOTS ==>				<u>794</u>
COST PER LOT ==>				<u>\$19,224.78</u>

Tra Vigne West
Engineer's Estimate of Probable Cost
Tra Vigne West In-Tract Improvements

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Phase 1 - In-Tract Improvements:</u>				
A. STREET GRADING				
1.	Clearing, Grubbing, and Disposal	12.9	\$995.00 AC	\$12,785.75
2.	Rough Grading - Street Right-of-Way	7,830	\$4.50 CY	\$35,235.00
3.	Street Fine Grading	140,500	\$0.40 SF	\$56,200.00
4.	Erosion Control Improvements	16	\$2,000.00 AC	\$31,000.00
5.	Mobilization - In-Tract	16	\$10,000.00 LS	\$155,000.00
SUB-TOTAL ==>				\$290,220.75
B. WATER				
1.	8" PVC - Water	2,610	\$25.00 LF	\$65,250.00
2.	8" Gate Valve	9	\$2,000.00 EA	\$18,000.00
3.	Hydrant Bury, Valve, and Tee	7	\$5,200.00 EA	\$36,400.00
4.	Blow-Off Valve	1	\$4,000.00 EA	\$4,000.00
5.	1" House Service (Meter Not Included)	62	\$850.00 EA	\$52,700.00
6.	18" Water Connection	2	\$9,000.00 EA	\$18,000.00
7.	24" Water Connection	1	\$12,000.00 EA	\$12,000.00
SUB-TOTAL ==>				\$206,350.00
C. STORM				
1.	12" RCP - Storm Drainage	1,100	\$30.00 LF	\$33,000.00
2.	Curb Inlet - Stockton Vertical	13	\$3,000.00 EA	\$39,000.00
3.	48" - Storm Drainage Manhole	2	\$3,500.00 EA	\$7,000.00
4.	Connect to Existing Storm Manhole	2	\$3,000.00 EA	\$6,000.00
SUB-TOTAL ==>				\$85,000.00
D. SANITARY SEWER				
1.	8" PVC - Sanitary Sewer	2,290	\$35.00 LF	\$80,150.00
2.	48" - Sanitary Sewer Manhole	8	\$2,800.00 EA	\$22,400.00
3.	Lateral Service Connection	62	\$600.00 EA	\$37,200.00
4.	Connect to Existing Sewer Manhole	1	\$4,500.00 EA	\$4,500.00
SUB-TOTAL ==>				\$144,250.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
E. ROADS				
1.	3.0" AC over 9.0" AB Pavement	78,000	\$3.45 SF	\$269,100.00
2.	6" Vertical Curb and Gutter	4,950	\$19.50 LF	\$96,525.00
3.	4" PCC Concrete Walk (Includes Ramps and Returns)	24,700	\$4.00 SF	\$98,800.00
4.	ADA Ramp (Labor and Truncated Domes Only)	12	\$1,900.00 EA	\$22,800.00
5.	100 Watt Electrolier	9	\$4,500.00 EA	\$40,500.00
6.	Street Monuments	6	\$310.00 EA	\$1,860.00
7.	Traffic Delineation (Striping and Stop Bars)	4,950	\$1.75 EA	\$8,662.50
8.	Street Name and Directional Signs	9	\$380.00 EA	\$3,420.00
9.	Joint Trench	62	\$7,500.00 EA	\$465,000.00
10.	Landscape w/ Irrigation (Streetscape)	26,100	\$5.00 SF	\$130,500.00
SUB-TOTAL ==>				\$1,137,167.50
Phase 1 - SUB-TOTAL ==>				\$1,862,988.25

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Phase 2 - In-Tract Improvements:</u>				
A. STREET GRADING				
1.	Clearing, Grubbing, and Disposal	11.2	\$995.00 AC	\$11,144.00
2.	Rough Grading - Street Right-of-Way	7,260	\$4.50 CY	\$32,670.00
3.	Street Fine Grading	130,500	\$0.40 SF	\$52,200.00
4.	Erosion Control Improvements	12	\$2,000.00 AC	\$24,200.00
5.	Mobilization - In-Tract	1	\$10,000.00 LS	\$10,000.00
SUB-TOTAL ==>				\$130,214.00
B. WATER				
1.	8" PVC - Water	2,420	\$25.00 LF	\$60,500.00
2.	8" Gate Valve	10	\$2,000.00 EA	\$20,000.00
3.	Hydrant Bury, Valve, and Tee	7	\$5,200.00 EA	\$36,400.00
4.	Blow-Off Valve	1	\$4,000.00 EA	\$4,000.00
5.	1" House Service (Meter Not Included)	66	\$850.00 EA	\$56,100.00
6.	Water Connection	1	\$7,500.00 EA	\$7,500.00
SUB-TOTAL ==>				\$184,500.00
C. STORM				
1.	12" RCP - Storm Drainage	610	\$30.00 LF	\$18,300.00
2.	24" RCP - Storm Drainage	790	\$60.00 LF	\$47,400.00
3.	Curb Inlet - Stockton Vertical	12	\$3,000.00 EA	\$36,000.00
4.	48" - Storm Drainage Manhole	3	\$3,500.00 EA	\$10,500.00
5.	60" - Storm Drainage Manhole	3	\$5,500.00 EA	\$16,500.00
6.	Connect to Existing Storm Manhole	2	\$3,000.00 EA	\$6,000.00
SUB-TOTAL ==>				\$134,700.00
D. SANITARY SEWER				
1.	8" PVC - Sanitary Sewer	2,395	\$35.00 LF	\$83,825.00
2.	48" - Sanitary Sewer Manhole	7	\$2,800.00 EA	\$19,600.00
3.	Lateral Service Connection	66	\$600.00 EA	\$39,600.00
4.	Connect to Existing Sewer Manhole	2	\$4,500.00 EA	\$9,000.00
5.	Stub and Plug Proposed Sanitary Sewer Line	1	\$2,500.00 EA	\$2,500.00
SUB-TOTAL ==>				\$154,525.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
E. ROADS				
1.	3.0" AC over 9.0" AB Pavement	72,600	\$3.45 SF	\$250,470.00
2.	6" Vertical Curb and Gutter	4,710	\$19.50 LF	\$91,845.00
3.	4" PCC Concrete Walk (Includes Ramps and Returns)	23,550	\$4.00 SF	\$94,200.00
4.	ADA Ramp (Labor and Truncated Domes Only)	14	\$1,900.00 EA	\$26,600.00
5.	100 Watt Electrolier	9	\$4,500.00 EA	\$40,500.00
6.	Street Monuments	5	\$310.00 EA	\$1,550.00
7.	Traffic Delineation (Striping and Stop Bars)	4,710	\$1.75 EA	\$8,242.50
8.	Street Name and Directional Signs	10	\$380.00 EA	\$3,800.00
9.	Joint Trench	66	\$7,500.00 EA	\$495,000.00
10.	Landscape w/ Irrigation (Streetscape)	24,200	\$5.00 SF	\$121,000.00
SUB-TOTAL ==>				\$1,133,207.50
Phase 2 - SUB-TOTAL ==>				\$1,737,146.50

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Phase 3 - In-Tract Improvements:</u>				
A. STREET GRADING				
1.	Clearing, Grubbing, and Disposal	13.7	\$995.00 AC	\$13,631.50
2.	Rough Grading - Street Right-of-Way	4,750	\$4.50 CY	\$21,375.00
3.	Street Fine Grading	127,900	\$0.40 SF	\$51,160.00
4.	Erosion Control Improvements	16	\$2,000.00 AC	\$32,000.00
5.	Mobilization - In-Tract	1	\$10,000.00 LS	\$10,000.00
SUB-TOTAL ==>				\$128,166.50
B. WATER				
1.	8" PVC - Water	2,370	\$25.00 LF	\$59,250.00
2.	8" Gate Valve	8	\$2,000.00 EA	\$16,000.00
3.	Hydrant Bury, Valve, and Tee	7	\$5,200.00 EA	\$36,400.00
4.	Blow-Off Valve	1	\$4,000.00 EA	\$4,000.00
5.	1" House Service (Meter Not Included)	76	\$850.00 EA	\$64,600.00
6.	Water Connection	2	\$7,500.00 EA	\$15,000.00
SUB-TOTAL ==>				\$195,250.00
C. STORM				
1.	12" RCP - Storm Drainage	1,540	\$30.00 LF	\$46,200.00
2.	Curb Inlet - Stockton Vertical	14	\$3,000.00 EA	\$42,000.00
3.	48" - Storm Drainage Manhole	6	\$3,500.00 EA	\$21,000.00
4.	Connect to Existing Storm Manhole	2	\$3,000.00 EA	\$6,000.00
SUB-TOTAL ==>				\$115,200.00
D. SANITARY SEWER				
1.	8" PVC - Sanitary Sewer	2,360	\$35.00 LF	\$82,600.00
2.	48" - Sanitary Sewer Manhole	8	\$2,800.00 EA	\$22,400.00
3.	Lateral Service Connection	76	\$600.00 EA	\$45,600.00
4.	Connect to Existing Sewer Manhole	2	\$4,500.00 EA	\$9,000.00
SUB-TOTAL ==>				\$159,600.00
E. ROADS				
1.	3.0" AC over 9.0" AB Pavement	71,100	\$3.45 SF	\$245,295.00
2.	6" Vertical Curb and Gutter	4,740	\$19.50 LF	\$92,430.00
3.	4" PCC Concrete Walk (Includes Ramps and Returns)	23,700	\$4.00 SF	\$94,800.00
4.	ADA Ramp (Labor and Truncated Domes Only)	12	\$1,900.00 EA	\$22,800.00
5.	100 Watt Electrolier	10	\$4,500.00 EA	\$45,000.00
6.	Street Monuments	6	\$310.00 EA	\$1,860.00
7.	Traffic Delineation (Striping and Stop Bars)	4,740	\$1.75 EA	\$8,295.00
8.	Street Name and Directional Signs	8	\$380.00 EA	\$3,040.00
9.	Joint Trench	76	\$7,500.00 EA	\$570,000.00
10.	Landscape w/ Irrigation (Streetscape)	24,200	\$5.00 SF	\$121,000.00
SUB-TOTAL ==>				\$1,204,520.00
Phase 3 - SUB-TOTAL ==>				\$1,802,736.50

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Phase 4 - In-Tract Improvements:

A. STREET GRADING

1.	Clearing, Grubbing, and Disposal	11.0	\$995.00 AC	\$10,945.00
2.	Rough Grading - Street Right-of-Way	5,460	\$4.50 CY	\$24,570.00
3.	Street Fine Grading	98,280	\$0.40 SF	\$39,312.00
4.	Erosion Control Improvements	12	\$2,000.00 AC	\$24,600.00
5.	Mobilization - In-Tract	1	\$10,000.00 LS	\$10,000.00

SUB-TOTAL ==> \$109,427.00

B. WATER

1.	8" PVC - Water	1,820	\$25.00 LF	\$45,500.00
2.	8" Gate Valve	9	\$2,000.00 EA	\$18,000.00
3.	Hydrant Bury, Valve, and Tee	6	\$5,200.00 EA	\$31,200.00
4.	Blow-Off Valve	1	\$4,000.00 EA	\$4,000.00
5.	1" House Service (Meter Not Included)	59	\$850.00 EA	\$50,150.00
6.	Water Connection	2	\$7,500.00 EA	\$15,000.00

SUB-TOTAL ==> \$163,850.00

C. STORM

1.	30" RCP - Storm Drainage	250	\$75.00 LF	\$18,750.00
2.	12" RCP - Storm Drainage	910	\$30.00 LF	\$27,300.00
3.	Curb Inlet - Stockton Vertical	15	\$3,000.00 EA	\$45,000.00
4.	72" - Storm Drainage Manhole	1	\$7,500.00 EA	\$7,500.00
5.	48" - Storm Drainage Manhole	5	\$3,500.00 EA	\$17,500.00
6.	Connect to Existing Storm Manhole	2	\$3,000.00 EA	\$6,000.00

SUB-TOTAL ==> \$122,050.00

D. SANITARY SEWER

1.	8" PVC - Sanitary Sewer	1,820	\$35.00 LF	\$63,700.00
2.	48" - Sanitary Sewer Manhole	7	\$2,800.00 EA	\$19,600.00
3.	Lateral Service Connection	59	\$600.00 EA	\$35,400.00
4.	Connect to Existing Sewer Manhole	2	\$4,500.00 EA	\$9,000.00

SUB-TOTAL ==> \$127,700.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
E. ROADS				
1.	3.0" AC over 9.0" AB Pavement	54,600	\$3.45 SF	\$188,370.00
2.	6" Vertical Curb and Gutter	3,640	\$19.50 LF	\$70,980.00
3.	4" PCC Concrete Walk (Includes Ramps and Returns)	18,200	\$4.00 SF	\$72,800.00
4.	ADA Ramp (Labor and Truncated Domes Only)	15	\$1,900.00 EA	\$28,500.00
5.	100 Watt Electrolier	7	\$4,500.00 EA	\$31,500.00
6.	Street Monuments	5	\$310.00 EA	\$1,550.00
7.	Traffic Delineation (Striping and Stop Bars)	3,640	\$1.75 EA	\$6,370.00
8.	Street Name and Directional Signs	9	\$380.00 EA	\$3,420.00
9.	Joint Trench	59	\$7,500.00 EA	\$442,500.00
10.	Landscape w/ Irrigation (Streetscape)	18,200	\$5.00 SF	\$91,000.00
SUB-TOTAL ==>				\$936,990.00
Phase 4 - SUB-TOTAL ==>				\$1,460,017.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Phase 5 - In-Tract Improvements:

A. STREET GRADING

1.	Clearing, Grubbing, and Disposal	12.1	\$995.00 AC	\$12,039.50
2.	Rough Grading - Street Right-of-Way	5,010	\$4.50 CY	\$22,545.00
3.	Street Fine Grading	90,180	\$0.40 SF	\$36,072.00
4.	Erosion Control Improvements	14	\$2,000.00 AC	\$28,000.00
5.	Mobilization - In-Tract	1	\$10,000.00 LS	\$10,000.00

SUB-TOTAL ==> \$108,656.50

B. WATER

1.	8" PVC - Water	1,670	\$25.00 LF	\$41,750.00
2.	8" Gate Valve	9	\$2,000.00 EA	\$18,000.00
3.	Hydrant Bury, Valve, and Tee	7	\$5,200.00 EA	\$36,400.00
4.	Blow-Off Valve	1	\$4,000.00 EA	\$4,000.00
5.	1" House Service (Meter Not Included)	62	\$850.00 EA	\$52,700.00
6.	Water Connection	4	\$7,500.00 EA	\$30,000.00

SUB-TOTAL ==> \$182,850.00

C. STORM

1.	30" RCP - Storm Drainage	470	\$75.00 LF	\$35,250.00
2.	12" RCP - Storm Drainage	550	\$30.00 LF	\$16,500.00
3.	Curb Inlet - Stockton Vertical	9	\$3,000.00 EA	\$27,000.00
4.	72" - Storm Drainage Manhole	3	\$7,500.00 EA	\$22,500.00
5.	48" - Storm Drainage Manhole	3	\$3,500.00 EA	\$10,500.00
6.	Connect to Existing Storm Manhole	3	\$3,000.00 EA	\$9,000.00

SUB-TOTAL ==> \$120,750.00

D. SANITARY SEWER

1.	8" PVC - Sanitary Sewer	1,670	\$35.00 LF	\$58,450.00
2.	48" - Sanitary Sewer Manhole	5	\$2,800.00 EA	\$14,000.00
3.	Lateral Service Connection	62	\$600.00 EA	\$37,200.00
4.	Connect to Existing Sewer Manhole	3	\$4,500.00 EA	\$13,500.00

SUB-TOTAL ==> \$123,150.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
E. ROADS				
1.	3.0" AC over 9.0" AB Pavement	50,100	\$3.45 SF	\$172,845.00
2.	6" Vertical Curb and Gutter	3,340	\$19.50 LF	\$65,130.00
3.	4" PCC Concrete Walk (Includes Ramps and Returns)	16,700	\$4.00 SF	\$66,800.00
4.	ADA Ramp (Labor and Truncated Domes Only)	11	\$1,900.00 EA	\$20,900.00
5.	100 Watt Electrolier	6	\$4,500.00 EA	\$27,000.00
6.	Street Monuments	5	\$310.00 EA	\$1,550.00
7.	Traffic Delineation (Striping and Stop Bars)	3,340	\$1.75 EA	\$5,845.00
8.	Street Name and Directional Signs	13	\$380.00 EA	\$4,940.00
9.	Joint Trench	62	\$7,500.00 EA	\$465,000.00
10.	Landscape w/ Irrigation (Streetscape)	16,700	\$5.00 SF	\$83,500.00
SUB-TOTAL ==>				\$913,510.00
Phase 5 - SUB-TOTAL ==>				\$1,448,916.50

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Phase 6 - In-Tract Improvements:</u>				
A. STREET GRADING				
1.	Clearing, Grubbing, and Disposal	15.6	\$995.00 AC	\$15,522.00
2.	Rough Grading - Street Right-of-Way	5,400	\$4.50 CY	\$24,300.00
3.	Street Fine Grading	97,200	\$0.40 SF	\$38,880.00
4.	Erosion Control Improvements	14	\$2,000.00 AC	\$27,000.00
5.	Mobilization - In-Tract	1	\$10,000.00 LS	\$10,000.00
SUB-TOTAL ==>				\$115,702.00
B. WATER				
1.	8" PVC - Water	1,800	\$25.00 LF	\$45,000.00
2.	8" Gate Valve	12	\$2,000.00 EA	\$24,000.00
3.	Hydrant Bury, Valve, and Tee	8	\$5,200.00 EA	\$41,600.00
4.	Blow-Off Valve	1	\$4,000.00 EA	\$4,000.00
5.	1" House Service (Meter Not Included)	81	\$850.00 EA	\$68,850.00
6.	Water Connection	6	\$7,500.00 EA	\$45,000.00
SUB-TOTAL ==>				\$228,450.00
C. STORM				
1.	12" RCP - Storm Drainage	1,150	\$30.00 LF	\$34,500.00
2.	Curb Inlet - Stockton Vertical	12	\$3,000.00 EA	\$36,000.00
3.	72" - Storm Drainage Manhole	2	\$7,500.00 EA	\$15,000.00
4.	60" - Storm Drainage Manhole	2	\$5,500.00 EA	\$11,000.00
5.	48" - Storm Drainage Manhole	2	\$3,500.00 EA	\$7,000.00
6.	Connect to Existing Storm Manhole	6	\$3,000.00 EA	\$18,000.00
SUB-TOTAL ==>				\$121,500.00
D. SANITARY SEWER				
1.	8" PVC - Sanitary Sewer	1,700	\$35.00 LF	\$59,500.00
2.	48" - Sanitary Sewer Manhole	6	\$2,800.00 EA	\$16,800.00
3.	Lateral Service Connection	81	\$600.00 EA	\$48,600.00
4.	Connect to Existing Sewer Manhole	4	\$4,500.00 EA	\$18,000.00
SUB-TOTAL ==>				\$142,900.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
E. ROADS				
1.	3.0" AC over 9.0" AB Pavement	54,000	\$3.45 SF	\$186,300.00
2.	6" Vertical Curb and Gutter	3,600	\$19.50 LF	\$70,200.00
3.	4" PCC Concrete Walk (Includes Ramps and Returns)	18,000	\$4.00 SF	\$72,000.00
4.	ADA Ramp (Labor and Truncated Domes Only)	12	\$1,900.00 EA	\$22,800.00
5.	100 Watt Electrolier	10	\$4,500.00 EA	\$45,000.00
6.	Street Monuments	8	\$310.00 EA	\$2,480.00
7.	Traffic Delineation (Striping and Stop Bars)	3,600	\$1.75 EA	\$6,300.00
8.	Street Name and Directional Signs	12	\$380.00 EA	\$4,560.00
9.	Joint Trench	81	\$7,500.00 EA	\$607,500.00
10.	Landscape w/ Irrigation (Streetscape)	18,000	\$5.00 SF	\$90,000.00
SUB-TOTAL ==>				\$1,107,140.00
Phase 6 - SUB-TOTAL ==>				\$1,715,692.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Phase 7 - In-Tract Improvements:</u>				
A. STREET GRADING				
1.	Clearing, Grubbing, and Disposal	10.2	\$995.00 AC	\$10,149.00
2.	Rough Grading - Street Right-of-Way	6,360	\$4.50 CY	\$28,620.00
3.	Street Fine Grading	114,480	\$0.40 SF	\$45,792.00
4.	Erosion Control Improvements	11	\$2,000.00 AC	\$21,600.00
5.	Mobilization - In-Tract	1	\$10,000.00 LS	\$10,000.00
SUB-TOTAL ==>				\$116,161.00
B. WATER				
1.	8" PVC - Water	2,120	\$25.00 LF	\$53,000.00
2.	8" Gate Valve	9	\$2,000.00 EA	\$18,000.00
3.	Hydrant Bury, Valve, and Tee	6	\$5,200.00 EA	\$31,200.00
4.	Blow-Off Valve	5	\$4,000.00 EA	\$20,000.00
5.	1" House Service (Meter Not Included)	62	\$850.00 EA	\$52,700.00
6.	Water Connection	2	\$7,500.00 EA	\$15,000.00
SUB-TOTAL ==>				\$189,900.00
C. STORM				
1.	18" RCP - Storm Drainage	800	\$45.00 LF	\$36,000.00
2.	12" RCP - Storm Drainage	350	\$30.00 LF	\$10,500.00
3.	Curb Inlet - Stockton Vertical	10	\$3,000.00 EA	\$30,000.00
4.	72" - Storm Drainage Manhole	2	\$7,500.00 EA	\$15,000.00
5.	48" - Storm Drainage Manhole	4	\$3,500.00 EA	\$14,000.00
6.	Connect to Existing Storm Manhole	2	\$3,000.00 EA	\$6,000.00
SUB-TOTAL ==>				\$111,500.00
D. SANITARY SEWER				
1.	8" PVC - Sanitary Sewer	2,045	\$35.00 LF	\$71,575.00
2.	48" - Sanitary Sewer Manhole	8	\$2,800.00 EA	\$22,400.00
3.	Lateral Service Connection	62	\$600.00 EA	\$37,200.00
4.	Connect to Existing Sewer Manhole	2	\$4,500.00 EA	\$9,000.00
5.	Stub and Plug Proposed Sanitary Sewer Line	2	\$2,500.00 EA	\$5,000.00
SUB-TOTAL ==>				\$145,175.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
E. ROADS				
1.	3.0" AC over 9.0" AB Pavement	63,600	\$3.45 SF	\$219,420.00
2.	6" Vertical Curb and Gutter	4,240	\$19.50 LF	\$82,680.00
3.	4" PCC Concrete Walk (Includes Ramps and Returns)	21,200	\$4.00 SF	\$84,800.00
4.	ADA Ramp (Labor and Truncated Domes Only)	10	\$1,900.00 EA	\$19,000.00
5.	100 Watt Electrolier	8	\$4,500.00 EA	\$36,000.00
6.	Street Monuments	5	\$310.00 EA	\$1,550.00
7.	Traffic Delineation (Striping and Stop Bars)	4,240	\$1.75 EA	\$7,420.00
8.	Street Name and Directional Signs	8	\$380.00 EA	\$3,040.00
9.	Joint Trench	62	\$7,500.00 EA	\$465,000.00
10.	Landscape w/ Irrigation (Streetscape)	21,200	\$5.00 SF	\$106,000.00
SUB-TOTAL ==>				\$1,024,910.00
Phase 7 - SUB-TOTAL ==>				\$1,587,646.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Phase 8 - In-Tract Improvements:</u>				
A. STREET GRADING				
1.	Clearing, Grubbing, and Disposal	17.2	\$995.00 AC	\$17,114.00
2.	Rough Grading - Street Right-of-Way	4,725	\$4.50 CY	\$21,262.50
3.	Street Fine Grading	85,050	\$0.40 SF	\$34,020.00
4.	Erosion Control Improvements	18.5	\$2,000.00 AC	\$37,000.00
5.	Mobilization - In-Tract	1	\$10,000.00 LS	\$10,000.00
SUB-TOTAL ==>				\$119,396.50
B. WATER				
1.	8" PVC - Water	1,575	\$25.00 LF	\$39,375.00
2.	8" Gate Valve	8	\$2,000.00 EA	\$16,000.00
3.	Hydrant Bury, Valve, and Tee	7	\$5,200.00 EA	\$36,400.00
4.	Blow-Off Valve	2	\$4,000.00 EA	\$8,000.00
5.	1" House Service (Meter Not Included)	54	\$850.00 EA	\$45,900.00
6.	Water Connection	4	\$7,500.00 EA	\$30,000.00
SUB-TOTAL ==>				\$175,675.00
C. STORM				
1.	24" RCP - Storm Drainage	400	\$60.00 LF	\$24,000.00
2.	12" RCP - Storm Drainage	975	\$30.00 LF	\$29,250.00
3.	Curb Inlet - Stockton Vertical	10	\$3,000.00 EA	\$30,000.00
4.	60" - Storm Drainage Manhole	2	\$5,500.00 EA	\$11,000.00
5.	48" - Storm Drainage Manhole	3	\$3,500.00 EA	\$10,500.00
6.	Connect to Existing Storm Manhole	5	\$3,000.00 EA	\$15,000.00
SUB-TOTAL ==>				\$119,750.00
D. SANITARY SEWER				
1.	8" PVC - Sanitary Sewer	1,575	\$35.00 LF	\$55,125.00
2.	48" - Sanitary Sewer Manhole	6	\$2,800.00 EA	\$16,800.00
3.	Lateral Service Connection	54	\$600.00 EA	\$32,400.00
4.	Connect to Existing Sewer Manhole	5	\$4,500.00 EA	\$22,500.00
SUB-TOTAL ==>				\$126,825.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
E. ROADS				
1.	3.0" AC over 9.0" AB Pavement	47,250	\$3.45 SF	\$163,012.50
2.	6" Vertical Curb and Gutter	3,150	\$19.50 LF	\$61,425.00
3.	4" PCC Concrete Walk (Includes Ramps and Returns)	15,750	\$4.00 SF	\$63,000.00
4.	ADA Ramp (Labor and Truncated Domes Only)	10	\$1,900.00 EA	\$19,000.00
5.	100 Watt Electrolier	6	\$4,500.00 EA	\$27,000.00
6.	Street Monuments	5	\$310.00 EA	\$1,550.00
7.	Traffic Delineation (Striping and Stop Bars)	3,150	\$1.75 EA	\$5,512.50
8.	Street Name and Directional Signs	8	\$380.00 EA	\$3,040.00
9.	Joint Trench	54	\$7,500.00 EA	\$405,000.00
10.	Landscape w/ Irrigation (Streetscape)	15,750	\$5.00 SF	\$78,750.00
SUB-TOTAL ==>				\$827,290.00
Phase 8 - SUB-TOTAL ==>				\$1,368,936.50

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Phase 9 - In-Tract Improvements:</u>				
A. STREET GRADING				
1.	Clearing, Grubbing, and Disposal	11.3	\$995.00 AC	\$11,243.50
2.	Rough Grading - Street Right-of-Way	5,685	\$4.50 CY	\$25,582.50
3.	Street Fine Grading	102,330	\$0.40 SF	\$40,932.00
4.	Erosion Control Improvements	14.6	\$2,000.00 AC	\$29,200.00
5.	Mobilization - In-Tract	1	\$10,000.00 LS	\$10,000.00
SUB-TOTAL ==>				\$116,958.00
B. WATER				
1.	16" PVC - Water	300	\$80.00 LF	\$24,000.00
2.	16" Butterfly Valve	2	\$4,000.00 EA	\$8,000.00
3.	8" PVC - Water	1,595	\$25.00 LF	\$39,875.00
4.	8" Gate Valve	9	\$2,000.00 EA	\$18,000.00
5.	Hydrant Bury, Valve, and Tee	7	\$5,200.00 EA	\$36,400.00
6.	Blow-Off Valve	3	\$4,000.00 EA	\$12,000.00
7.	1" House Service (Meter Not Included)	71	\$850.00 EA	\$60,350.00
8.	Water Connection	5	\$7,500.00 EA	\$37,500.00
SUB-TOTAL ==>				\$236,125.00
C. STORM				
1.	24" RCP - Storm Drainage	150	\$60.00 LF	\$9,000.00
2.	18" RCP - Storm Drainage	750	\$45.00 LF	\$33,750.00
3.	12" RCP - Storm Drainage	400	\$30.00 LF	\$12,000.00
4.	Curb Inlet - Stockton Vertical	17	\$3,000.00 EA	\$51,000.00
5.	72" - Storm Drainage Manhole	1	\$7,500.00 EA	\$7,500.00
6.	48" - Storm Drainage Manhole	9	\$3,500.00 EA	\$31,500.00
7.	Connect to Existing Storm Manhole	5	\$3,000.00 EA	\$15,000.00
8.	Stub and Plug Proposed Storm Drainage Line	1	\$1,500.00 EA	\$1,500.00
SUB-TOTAL ==>				\$161,250.00
D. SANITARY SEWER				
1.	8" PVC - Sanitary Sewer	1,420	\$35.00 LF	\$49,700.00
2.	48" - Sanitary Sewer Manhole	8	\$2,800.00 EA	\$22,400.00
3.	Lateral Service Connection	71	\$600.00 EA	\$42,600.00
4.	Connect to Existing Sewer Manhole	5	\$4,500.00 EA	\$22,500.00
5.	Stub and Plug Proposed Sanitary Sewer Line	1	\$2,500.00 EA	\$2,500.00
SUB-TOTAL ==>				\$139,700.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
E. ROADS				
1.	3.0" AC over 9.0" AB Pavement	56,850	\$3.45 SF	\$196,132.50
2.	6" Vertical Curb and Gutter	3,790	\$19.50 LF	\$73,905.00
3.	4" PCC Concrete Walk (Includes Ramps and Returns)	18,950	\$4.00 SF	\$75,800.00
4.	ADA Ramp (Labor and Truncated Domes Only)	16	\$1,900.00 EA	\$30,400.00
5.	100 Watt Electrolier	7	\$4,500.00 EA	\$31,500.00
6.	Street Monuments	7	\$310.00 EA	\$2,170.00
7.	Traffic Delineation (Striping and Stop Bars)	3,790	\$1.75 EA	\$6,632.50
8.	Street Name and Directional Signs	12	\$380.00 EA	\$4,560.00
9.	Joint Trench	71	\$7,500.00 EA	\$532,500.00
10.	Landscape w/ Irrigation (Streetscape)	18,950	\$5.00 SF	\$94,750.00
SUB-TOTAL ==>				\$1,048,350.00
Phase 9 - SUB-TOTAL ==>				\$1,702,383.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Phase 10 - In-Tract Improvements:</u>				
A. STREET GRADING				
1.	Clearing, Grubbing, and Disposal	12.9	\$995.00 AC	\$12,835.50
2.	Rough Grading - Street Right-of-Way	5,580	\$4.50 CY	\$25,110.00
3.	Street Fine Grading	100,440	\$0.40 SF	\$40,176.00
4.	Erosion Control Improvements	12.9	\$2,000.00 AC	\$25,800.00
5.	Mobilization - In-Tract	1	\$10,000.00 LS	\$10,000.00
6.	Finish and Clean-Up	1	\$40,000.00 LS	\$40,000.00
SUB-TOTAL ==>				\$153,921.50
B. WATER				
1.	8" PVC - Water	1,860	\$25.00 LF	\$46,500.00
2.	8" Gate Valve	8	\$2,000.00 EA	\$16,000.00
3.	Hydrant Bury, Valve, and Tee	8	\$5,200.00 EA	\$41,600.00
4.	Blow-Off Valve	1	\$4,000.00 EA	\$4,000.00
5.	1" House Service (Meter Not Included)	85	\$850.00 EA	\$72,250.00
6.	Water Connection	3	\$7,500.00 EA	\$22,500.00
SUB-TOTAL ==>				\$202,850.00
C. STORM				
1.	24" RCP - Storm Drainage	1,190	\$60.00 LF	\$71,400.00
2.	12" RCP - Storm Drainage	400	\$30.00 LF	\$12,000.00
3.	Curb Inlet - Stockton Vertical	12	\$3,000.00 EA	\$36,000.00
4.	72" - Storm Drainage Manhole	3	\$7,500.00 EA	\$22,500.00
5.	48" - Storm Drainage Manhole	2	\$3,500.00 EA	\$7,000.00
6.	Connect to Existing Storm Manhole	2	\$3,000.00 EA	\$6,000.00
7.	Stub and Plug Proposed Storm Drainage Line	1	\$1,500.00 EA	\$1,500.00
SUB-TOTAL ==>				\$156,400.00
D. SANITARY SEWER				
1.	8" PVC - Sanitary Sewer	1,860	\$35.00 LF	\$65,100.00
2.	48" - Sanitary Sewer Manhole	6	\$2,800.00 EA	\$16,800.00
3.	Lateral Service Connection	85	\$600.00 EA	\$51,000.00
4.	Connect to Existing Sewer Manhole	3	\$4,500.00 EA	\$13,500.00
5.	Stub and Plug Proposed Sanitary Sewer Line	1	\$2,500.00 EA	\$2,500.00
SUB-TOTAL ==>				\$148,900.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
E. ROADS				
1.	3.0" AC over 9.0" AB Pavement	55,800	\$3.45 SF	\$192,510.00
2.	6" Vertical Curb and Gutter	3,720	\$19.50 LF	\$72,540.00
3.	4" PCC Concrete Walk (Includes Ramps and Returns)	18,600	\$4.00 SF	\$74,400.00
4.	ADA Ramp (Labor and Truncated Domes Only)	11	\$1,900.00 EA	\$20,900.00
5.	100 Watt Electrolier	7	\$4,500.00 EA	\$31,500.00
6.	Street Monuments	6	\$310.00 EA	\$1,860.00
7.	Traffic Delineation (Striping and Stop Bars)	3,720	\$1.75 EA	\$6,510.00
8.	Street Name and Directional Signs	12	\$380.00 EA	\$4,560.00
9.	Joint Trench	85	\$7,500.00 EA	\$637,500.00
10.	Landscape w/ Irrigation (Streetscape)	18,600	\$5.00 SF	\$93,000.00
SUB-TOTAL ==>				\$1,135,280.00
Phase 10 - SUB-TOTAL ==>				\$1,797,351.50

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Phase 11 - In-Tract Improvements:</u>				
A. STREET GRADING				
1.	Clearing, Grubbing, and Disposal	10.7	\$995.00 AC	\$10,646.50
2.	Rough Grading - Street Right-of-Way	5,970	\$4.50 CY	\$26,865.00
3.	Street Fine Grading	107,460	\$0.40 SF	\$42,984.00
4.	Erosion Control Improvements	10.7	\$2,000.00 AC	\$21,400.00
5.	Mobilization - In-Tract	1	\$10,000.00 LS	\$10,000.00
6.	Finish and Clean-UP	1	\$40,000.00 LS	\$40,000.00
SUB-TOTAL ==>				\$151,895.50
B. WATER				
1.	8" PVC - Water	1,990	\$25.00 LF	\$49,750.00
2.	8" Gate Valve	7	\$2,000.00 EA	\$14,000.00
3.	Hydrant Bury, Valve, and Tee	7	\$5,200.00 EA	\$36,400.00
4.	Blow-Off Valve	1	\$4,000.00 EA	\$4,000.00
5.	1" House Service (Meter Not Included)	67	\$850.00 EA	\$56,950.00
6.	Water Connection	2	\$7,500.00 EA	\$15,000.00
SUB-TOTAL ==>				\$176,100.00
C. STORM				
1.	24" RCP - Storm Drainage	400	\$60.00 LF	\$24,000.00
2.	12" RCP - Storm Drainage	700	\$30.00 LF	\$21,000.00
3.	Curb Inlet - Stockton Vertical	10	\$3,000.00 EA	\$30,000.00
4.	72" - Storm Drainage Manhole	2	\$7,500.00 EA	\$15,000.00
5.	48" - Storm Drainage Manhole	4	\$3,500.00 EA	\$14,000.00
6.	Connect to Existing Storm Manhole	2	\$3,000.00 EA	\$6,000.00
7.	Stub and Plug Proposed Storm Drainage Line	1	\$1,500.00 EA	\$1,500.00
SUB-TOTAL ==>				\$111,500.00
D. SANITARY SEWER				
1.	8" PVC - Sanitary Sewer	1,990	\$35.00 LF	\$69,650.00
2.	48" - Sanitary Sewer Manhole	6	\$2,800.00 EA	\$16,800.00
3.	Lateral Service Connection	67	\$600.00 EA	\$40,200.00
4.	Connect to Existing Sewer Manhole	2	\$4,500.00 EA	\$9,000.00
5.	Stub and Plug Proposed Sanitary Sewer Line	1	\$2,500.00 EA	\$2,500.00
SUB-TOTAL ==>				\$138,150.00

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
E. ROADS				
1.	3.0" AC over 9.0" AB Pavement	59,700	\$3.45 SF	\$205,965.00
2.	6" Vertical Curb and Gutter	3,980	\$19.50 LF	\$77,610.00
3.	4" PCC Concrete Walk (Includes Ramps and Returns)	19,900	\$4.00 SF	\$79,600.00
4.	ADA Ramp (Labor and Truncated Domes Only)	11	\$1,900.00 EA	\$20,900.00
5.	100 Watt Electrolier	7	\$4,500.00 EA	\$31,500.00
6.	Street Monuments	3	\$310.00 EA	\$930.00
7.	Traffic Delineation (Striping and Stop Bars)	3,980	\$1.75 EA	\$6,965.00
8.	Street Name and Directional Signs	9	\$380.00 EA	\$3,420.00
9.	Joint Trench	67	\$7,500.00 EA	\$502,500.00
10.	Landscape w/ Irrigation (Streetscape)	19,900	\$5.00 SF	\$99,500.00

SUB-TOTAL ==> \$1,028,890.00

Phase 11 - SUB-TOTAL ==> \$1,606,535.50

CONSTRUCTION SUB-TOTAL ==> \$18,090,349.25

CONTINGENCY - 10% ==> \$1,809,034.93

CONSTRUCTION TOTAL ==> \$19,899,384.18

SOFT COSTS - 35% ==> \$6,964,784.46

GRAND TOTAL ==> \$26,864,168.64

TOTAL LOTS ==> 794

COST PER LOT ==> \$33,833.97

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost

Tra Vigne East In-Tract Major Infrastructure

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Tra Vigne East Oversized Backbone Water System Improvements

Oversized Water System for Backbone Roads

1.	16" PVC - Water	3,086	\$80.00 LF	\$246,880.00
2.	16" Butterfly Valve	8	\$4,000.00 EA	\$32,000.00

SUB-TOTAL ===> \$278,880.00

CONSTRUCTION SUB-TOTAL ===> \$278,880.00

CONTINGENCY - 10% ===> \$27,888.00

CONSTRUCTION TOTAL ===> \$306,768.00

SOFT COSTS - 35% ===> \$107,368.80

GRAND TOTAL ===> \$414,136.80

TOTAL LOTS ===> 794

COST PER LOT ===> \$521.58

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
<u>Tra Vigne East In-Tract Parks, Landscaping, Open Space, and Recreational Improvements</u>				
In-Tract Park Landscaping Improvements (Does Not Include Major Amenities)				
1.	Landscape w/ Irrigation (Tra Vigne East - Park A Area)	286,133	\$6.50 SF	\$1,859,864.50
2.	Landscape w/ Irrigation (Tra Vigne East - Park B Area)	35,669	\$6.50 SF	\$231,848.50
3.	Landscape w/ Irrigation (Open Space)	225,530	\$0.50 SF	\$112,765.00
SUB-TOTAL ==>				\$2,204,478.00
CONSTRUCTION SUB-TOTAL ==>				\$2,204,478.00
CONTINGENCY - 10% ==>				\$220,447.80
CONSTRUCTION TOTAL ==>				\$2,424,925.80
SOFT COSTS - 35% ==>				\$848,724.03
GRAND TOTAL ==>				\$3,273,649.83
TOTAL LOTS ==>				794
COST PER LOT ==>				\$4,122.98

Tra Vigne (West & East)
Engineer's Estimate of Probable Cost

Tra Vigne East In-Tract Major Infrastructure Available for PFF Fee Credits and Reimbursements

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Tra Vigne East Oversized Backbone Water System Improvements

Oversized Water System for Backbone Roads

1.	16" PVC - 12" PVC - Water	3,086	\$20.00 LF	\$61,720.00
2.	16" Butterfly Valve - 12" Butterfly Valve	8	\$1,000.00 EA	\$8,000.00

SUB-TOTAL ===> \$69,720.00

CONSTRUCTION SUB-TOTAL ===> \$69,720.00

CONTINGENCY - 10% ===> \$6,972.00

CONSTRUCTION TOTAL ===> \$76,692.00

SOFT COSTS - 35% ===> \$26,842.20

GRAND TOTAL ===> \$103,534.20

TOTAL LOTS ===> 794

COST PER LOT ===> \$130.40

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Tra Vigne East In-Tract Parks, Landscaping, Open Space, and Recreational Improvements

In-Tract Park Landscaping Improvements (Does Not Include Major Amenities)

1.	Landscape w/ Irrigation (Tra Vigne East - Park A Area)	286,133	\$6.50 SF	\$1,859,864.50
2.	Landscape w/ Irrigation (Tra Vigne East - Park B Area)	35,669	\$6.50 SF	\$231,848.50
3.	Landscape w/ Irrigation (Open Space)	225,530	\$0.50 SF	\$112,765.00

SUB-TOTAL ==> \$2,204,478.00

CONSTRUCTION SUB-TOTAL ==> \$2,204,478.00

CONTINGENCY - 10% ==> \$220,447.80

CONSTRUCTION TOTAL ==> \$2,424,925.80

SOFT COSTS - 35% ==> \$848,724.03

GRAND TOTAL ==> \$3,273,649.83

TOTAL LOTS ==> 794

COST PER LOT ==> \$4,122.98

Tra Vigne West
Engineer's Estimate of Probable Cost
Tra Vigne East In-Tract Improvements

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
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Tra Vigne East

A. IN-TRACT IMPROVEMENTS

1.	Total In-Tract Improvements per MCR	1	\$9,855,245.03 LS	\$9,855,245.03
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SUB-TOTAL ===> \$9,855,245.03

SUB-TOTAL ===> \$9,855,245.03

CONSTRUCTION SUB-TOTAL ===> \$9,855,245.03

CONTINGENCY - 10% ===> \$985,524.50

CONSTRUCTION TOTAL ===> \$10,840,769.53

SOFT COSTS - 35% ===> \$3,794,269.34

GRAND TOTAL ===> \$14,635,038.87

TOTAL LOTS ===> 418

COST PER LOT ===> \$35,012.05

Tra Vigne West
Engineer's Estimate of Probable Cost

Estimate General Notes

1. This Engineer's Estimate of Probable Cost is based on the Tra Vigne Tentative Map prepared by NorthStar Engineering, Inc. titled "Tra Vigne Subdivision, Tentative Subdivision Map", dated June 30, 2017. Changes or increases may occur upon processing Entitlements, preparation of Civil Designs and/or Improvement Plan processing and approvals.
2. This Engineer's Estimate of Probable Cost is based upon preliminary information and is provided to assist the project proponent. Units costs are based on local knowledge and previous project bids. Units costs are subject to change. Three contractors, Teichert, Knife River, and George Reed provided current unit prices.
3. This Engineer's Estimate of Probable Cost does not include the following:
 - a. City plan check, final map, development fees or fees due at building or encroachment permit
 - b. Development Agreement fees
 - c. Fees for Lighting and Landscape, Assessment, Mello-Roos District or similar Districts
 - d. Land costs, right-of-way acquisition, easements, or rights-of-entry
 - e. Costs associated with toxic substance removal or over excavation of unsuitable soils
 - f. Costs associated with finding on-site human, archaeological, or tribal remains.
 - g. Provisions for Inflation
4. This Engineer's Estimate of Probable Cost includes preliminary Soft Costs (35%) which includes the following:
(The percentages provided below are assumed and may vary depending on specific job requirements)
 - a. Engineering Plans and Studies (3%)
 - b. Geotechnical Studies, Services or Construction Support (2%)
 - c. Construction Management (4%)
 - d. Field Supervision (2%)
 - e. Special Inspection (1%)
 - f. Construction Staking (2%)
 - g. Legal Services (2%)
 - h. Architectural and Landscape Architectural Services (4%)
 - i. Joint Trench Plan or Consulting (1%)
 - j. Site / Field Indirect Costs (4%)
 - k. Overhead Charges including Developer's Internal Company Overhead (5%)
 - l. Bond Premiums (4%)
 - m. SWPPP Maintenance (1%)
5. This estimate assumes that the entire project site will be rough graded at one time. Earthwork is **NOT** delineated by potential phasing of the project.
6. Site Preparation and Grading does not include any stripping, shrinkage, swell, or trench spoils. Upon completion of the final grading design additional fees may occur for any import or export operations.
7. Unit Cost for Asphalt Concrete is assumed to be \$0.55 per square foot per inch thick. Unit Cost for Aggregate Base is assumed to be \$0.20 per square foot per inch thick. Pavement sections taken from "Preliminary Geotechnical Investigation" prepared by Lowney Associates, dated March 7, 2005, document number 2039-2.

NorthStar Engineering Group, Inc.

620 12th Street

Modesto, CA 95354

Phone (209) 524-3525

Contingency ~~50%~~ (209) 524-3526

Tra Vigne

Engineer's Estimate of Probable Cost

Phase 1 - In-Tract

ITEM	DESCRIPTION	QUANTITY	UNIT COST	COST
A. SITE PREPARATION AND GRADING				
1.	Clearing, Grubbing, and Disposal		\$995.00 AC	\$0.00
1.	Street Improvements Clearing, Grubbing, and Disposal		\$15,000.00 LS	\$0.00
2.	Site Preparation, Clearing & Grubbing		\$10,000.00 LS	\$0.00
3.	Clearing Only		\$750.00 AC	\$0.00
3.	Orchard Removal		\$300.00 AC	\$0.00
4.	Remove Irrigation		\$12.00 LF	\$0.00
5.	Remove Irrigation Culvert		\$16.67 EA	\$0.00
6.	Remove and Dispose of Existing Pavement		\$3.00 SF	\$0.00
7.	Sawcut Existing Pavement		\$2.00 LF	\$0.00
8.	Remove Existing Curb		\$8.00 LF	
9.	Remove Existing Concrete		\$1.00 SF	
10.	Remove Existing Signs		\$50.00 EA	\$0.00
10.	Remove Existing Pavement		\$3.00 SF	\$0.00
11.	Remove Existing Gate		\$500.00 EA	\$0.00
12.	Remove Existing Fence		\$0.00 LF	\$0.00
13.	Remove Existing xx" Sanitary Sewer Line		\$0.00 LF	\$0.00
14.	Remove Existing xx" Water Line		\$0.00 LF	\$0.00
15.	Remove Existing xx" Storm Drainage Line		\$0.00 LF	\$0.00
16.	Remove Existing Manhole		\$0.00 EA	\$0.00
17.	Remove Existing Inlet		\$0.00 EA	\$0.00
18.	Remove Existing Tree		\$1,662.50 EA	\$0.00
19.	Remove Headwall		\$60.00 EA	\$0.00
19.	Remove Existing Headwalls and Culverts		\$25,000.00 LS	\$0.00
20.	Remove Existing Building		\$0.00 EA	\$0.00
21.	Remove Existing Home, Well, and Septic System		\$30,000.00 EA	\$0.00
22.	Remove Existing SSJID Concrete Channel		\$1.00 SF	\$0.00
23.	Remove Existing SSJID Concrete Channel Appurtenances		\$10,000.00 LS	\$0.00
24.	Earthwork		\$2.80 CY	\$0.00
25.	Relocation of Overhead Utilities Poles		\$15,000.00 EA	\$0.00
26.	Traffic Control		\$2,200.00 DAY	\$0.00
27.	Rough Grading - Street Right-of-Way		\$4.50 CY	\$0.00
27.	Rough Grading - Basin		\$3.00 CY	\$0.00
27.	Rough Grading - Streets and Super Pads		\$3.75 CY	\$0.00
28.	Import		\$0.00 CY	\$0.00
29.	Export		\$0.00 CY	\$0.00
30.	Lot Grading		\$440.00 LOT	\$0.00
31.	Street Fine Grading		\$0.40 SF	\$0.00
32.	Park / Basin Fine Grading		\$0.15 SF	\$0.00
33.	Drainage Swale		\$2.50 LF	\$0.00
34.	Mobilization - Major Infrastructure		\$30,000.00 LS	\$0.00
34.	Mobilization - In-Tract		\$10,000.00 LS	\$0.00
34.	Mobilization -		\$0.00 LS	\$0.00
35.	Demo Structures and Growth		\$40,000.00 LS	\$0.00

36.	Asbestos/Lead Survey		\$10,000.00 LS	\$0.00
37.	Asbestos/Lead Mitigation		\$15,000.00 LS	\$0.00
38.	Weed Abatement		\$1,500.00 AC	\$0.00
39.	12" over Ex. Of Fills and Recompact		\$3.50 CY	\$0.00
39.	Finish and Clean-UP		\$40,000.00 LS	\$0.00

SUB-TOTAL ==> \$0.00

B. EROSION CONTROL

1.	Erosion Control Improvements		\$2,000.00 AC	\$0.00
2.	Temporary Concrete Washout		\$1,100.00 EA	\$0.00
3.	Temporary Inlet Protection - Gravel Bags		\$190.00 EA	\$0.00
4.	Temporary Inlet Protection - Silt Sack		\$0.00 EA	\$0.00
5.	Temporary Straw Wattle		\$1.63 LF	\$0.00
6.	Temporary Stabilized Construction Entrance		\$1,620.00 LS	\$0.00
7.	Temporary Silt Fence		\$0.00 LF	\$0.00
8.	Temporary Slope Protection		\$0.00 SF	\$0.00
9.	Hydroseeding		\$0.08 SF	\$0.00
10.	Street Sweeping		\$2,712.50 LS	\$0.00
11.	Hydro Mulch Pads		\$5,000.00 AC	\$0.00
12.	Maintenance		\$2,500.00 MON	\$0.00
13.	SWPPP Maintenance		\$7,500.00 LS	\$0.00

SUB-TOTAL ==> \$0.00

C. SANITARY SEWER

1.	30" PVC - Sanitary Sewer		\$0.00 LF	\$0.00
2.	27" PVC - Sanitary Sewer		\$0.00 LF	\$0.00
3.	24" PVC - Sanitary Sewer		\$126.67 LF	\$0.00
4.	24" PVC - 12" PVC - Sanitary Sewer		\$84.67 LF	\$0.00
5.	24" PVC - Sanitary Sewer (Trench and Repatch)		\$188.33 LF	\$0.00
6.	24" PVC - 12" PVC Sanitary Sewer (Trench and Repatch)		\$84.67 LF	\$0.00
7.	21" PVC - Sanitary Sewer		\$92.50 LF	\$0.00
8.	18" PVC - Sanitary Sewer		\$79.00 LF	\$0.00
9.	15" PVC - Sanitary Sewer		\$55.00 LF	\$0.00
10.	12" PVC - Sanitary Sewer		\$42.00 LF	\$0.00
11.	12" PVC - Sanitary Sewer (Trench and Repatch)		\$103.66 LF	\$0.00
12.	10" PVC - Sanitary Sewer		\$38.50 LF	\$0.00
13.	8" PVC - Sanitary Sewer		\$35.00 LF	\$0.00
14.	8" PVC - Sanitary Sewer (Trench and Repatch)		\$100.00 LF	\$0.00
15.	8" DIP - Sanitary Sewer (Concrete Slurry and Backfill)		\$90.00 LF	\$0.00
16.	6" PVC - Sanitary Sewer		\$26.75 LF	\$0.00
17.	4" PVC - Sanitary Sewer		\$23.00 LF	\$0.00
18.	12" PVC - Sanitary Sewer-SDR26 (Trench and Repatch)		\$172.00 EA	\$0.00
19.	8" PVC - Sanitary Sewer-SDR26 (Trench and Repatch)		\$153.50 EA	\$0.00
20.	6" PVC - Sanitary Sewer-SDR26 (Trench and Repatch)		\$71.50 EA	\$0.00
21.	48" - Sanitary Sewer Manhole		\$2,800.00 EA	\$0.00
22.	60" - Sanitary Sewer Manhole		\$6,000.00 EA	\$0.00
23.	60" - 48" Sanitary Sewer Manhole		\$3,200.00 EA	\$0.00
24.	72" - Sanitary Sewer Manhole		\$0.00 EA	\$0.00
25.	Sanitary Sewer Cleanout		\$857.50 EA	\$0.00
26.	Sanitary Sewer Lamphole		\$0.00 EA	\$0.00
27.	Lateral Service Connection		\$600.00 EA	\$0.00
28.	Lateral Service Connection (Trench - Repatch)		\$0.00 EA	\$0.00
29.	Stub and Plug Proposed Sanitary Sewer Line		\$2,500.00 EA	\$0.00

30.	Remove Plug and Connect to Existing Sewer Line		\$0.00 EA	\$0.00
31.	Connect to Existing Sewer Manhole		\$4,500.00 EA	\$0.00
32.	Sanitary Sewer System Dewatering		\$0.00 EA	\$0.00
33.	Sanitary Sewer Lift Station Complete		\$262,500.00 LS	\$0.00
34.	Railroad Crossing (24" casing)		\$600.00 LF	\$0.00
35.	24" West Lane Crossing		\$25,000.00 LS	\$0.00
36.	24" - 12" West Lane Crossing		\$12,500.00 LS	\$0.00
37.	24" Sewer Extension Restoration		\$1,000.00 AC	\$0.00

SUB-TOTAL ==> \$0.00

D. STORM

1.	60" RCP - Storm Drainage		\$150.00 LF	\$0.00
2.	54" RCP - Storm Drainage		\$135.00 LF	\$0.00
3.	48" RCP - Storm Drainage		\$120.00 LF	\$0.00
3.	42" RCP - Storm Drainage		\$105.00 LF	\$0.00
4.	36" RCP - Storm Drainage		\$90.00 LF	\$0.00
5.	30" RCP - Storm Drainage		\$75.00 LF	\$0.00
6.	24" RCP - Storm Drainage		\$60.00 LF	\$0.00
7.	24" RCP (CL3) - Storm Drainage		\$0.00 LF	\$0.00
8.	21" RCP - Storm Drainage		\$52.50 LF	\$0.00
9.	18" RCP - Storm Drainage		\$45.00 LF	\$0.00
10.	18" RCP - Storm Drainage (Trench and Repatch)		\$87.50 LF	\$0.00
11.	15" RCP - Storm Drainage		\$37.50 LF	\$0.00
12.	15" RCP - Storm Drainage (Trench and Repatch)		\$80.00 LF	
13.	12" RCP - Storm Drainage		\$30.00 LF	\$0.00
14.	10" RCP - Storm Drainage		\$29.33 LF	\$0.00
15.	60" HDPE - Storm Drainage		\$0.00 LF	\$0.00
16.	54" HDPE - Storm Drainage		\$0.00 LF	\$0.00
17.	48" HDPE - Storm Drainage		\$0.00 LF	\$0.00
18.	36" HDPE - Storm Drainage		\$0.00 LF	\$0.00
19.	30" HDPE - Storm Drainage		\$0.00 LF	\$0.00
20.	24" HDPE - Storm Drainage		\$0.00 LF	\$0.00
21.	18" HDPE - Storm Drainage		\$0.00 LF	\$0.00
22.	15" HDPE - Storm Drainage		\$0.00 LF	\$0.00
23.	12" HDPE - Storm Drainage		\$0.00 LF	\$0.00
24.	10" HDPE - Storm Drainage		\$0.00 LF	\$0.00
25.	8" HDPE - Storm Drainage		\$0.00 LF	\$0.00
26.	6" HDPE - Storm Drainage		\$0.00 LF	\$0.00
27.	4" HDPE - Storm Drainage		\$0.00 LF	\$0.00
28.	60" PVC - Storm Drainage		\$0.00 LF	\$0.00
29.	54" PVC - Storm Drainage		\$0.00 LF	\$0.00
30.	48" PVC - Storm Drainage		\$0.00 LF	\$0.00
31.	36" PVC - Storm Drainage		\$0.00 LF	\$0.00
32.	30" PVC - Storm Drainage		\$0.00 LF	\$0.00
33.	24" PVC - Storm Drainage		\$49.25 LF	\$0.00
34.	18" PVC - Storm Drainage		\$48.42 LF	\$0.00
35.	15" PVC - Storm Drainage		\$0.00 LF	\$0.00
36.	12" PVC - Storm Drainage		\$37.00 LF	\$0.00
37.	12" PVC - Storm Drainage (Trench and Repatch)		\$90.00 LF	\$0.00
38.	12" PVC - Storm Drainage (Trench and Replace Landscaping)		\$40.00 LF	\$0.00
39.	10" PVC - Storm Drainage		\$0.00 LF	\$0.00
40.	8" PVC - Storm Drainage		\$0.00 LF	\$0.00
41.	6" PVC - Storm Drainage		\$0.00 LF	\$0.00
42.	4" PVC - Storm Drainage		\$0.00 LF	\$0.00

43.	18" Diameter Area Drain		\$1,866.67 EA	\$0.00
44.	24" Diameter Area Drain (installed on 12" pipe)		\$1,480.00 EA	\$0.00
45.	24" Diameter Area Drain		\$2,150.00 EA	\$0.00
46.	12" Force Main - Storm Drainage		\$45.00 LF	\$0.00
47.	10" Force Main - Storm Drainage		\$107.00 LF	\$0.00
48.	12" Perforated Pipe		\$28.33 SF	\$0.00
49.	Curb Inlet - Type GO		\$2,550.00 EA	\$0.00
50.	Curb Inlet - County Standard		\$2,550.00 EA	\$0.00
51.	Curb Inlet - City Standard		\$2,550.00 EA	\$0.00
52.	Curb Inlet - Manteca Vertical		\$2,000.00 EA	\$0.00
53.	Curb Inlet - Manteca Drive Over		\$2,000.00 EA	\$0.00
54.	Curb Inlet - Stockton Vertical		\$3,000.00 EA	\$0.00
55.	Curb Inlet - Stockton Drive Over		\$2,850.00 EA	\$0.00
56.	Landscape Drain		\$1,700.00 EA	\$0.00
57.	ACO Trench Drain		\$0.00 LF	\$0.00
58.	Bubble-up Structure with Rip Rap		\$5,500.00 LF	\$0.00
59.	48" - Storm Drainage Manhole		\$3,500.00 EA	\$0.00
60.	60" - Storm Drainage Manhole		\$5,500.00 EA	\$0.00
61.	72" - Storm Drainage Manhole		\$7,500.00 EA	\$0.00
62.	96" - Storm Drainage Manhole		\$9,500.00 EA	\$0.00
63.	Saddle - Storm Drainage Manhole		\$4,166.67 EA	\$0.00
64.	Stub and Plug Proposed Storm Drainage Line		\$1,500.00 EA	\$0.00
65.	Remove Plug and Connect to Existing Storm Line		\$1,500.00 EA	\$0.00
66.	Connect to Existing Storm Manhole		\$3,000.00 EA	\$0.00
67.	Basin Nuisance Flow Swale		\$0.00 LF	\$0.00
68.	Storm Drainage Pump Station Complete		\$150,000.00 EA	\$0.00
69.	Storm Drainage System Dewatering		\$0.00 LS	\$0.00
70.	Railroad Crossing (30" Casing)		\$675.00 LF	\$0.00
71.	Storm Drain Flow Control Structure (Complete)		\$20,000.00 LS	\$0.00
72.	Storm Water Treatment Control Device		\$75,000.00 LS	\$0.00
73.	Kristar Perk-Filter		\$108,200.00 EA	\$0.00
74.	Discharge Structure		\$12,900.00 LS	\$0.00
75.	Headwall Structure		\$6,400.00 EA	\$0.00
76.	Neoprent Check Valve		\$7,200.00 EA	\$0.00
77.	Drainage Rock		\$31.50 LF	\$0.00
78.	Filter Sand		\$30.00 LF	\$0.00
79.	Storm Drainage Treatment Filter		\$25,000.00 EA	\$0.00
80.	Storm Drainage Outfall Control Valve		\$10,000.00 EA	\$0.00
81.	Storm Drainage Basin Non-porous Liner		\$0.20 SF	\$0.00
81.	Basin Pump Station, Treatment Equipment, & Basin Piping		\$1,000,000.00 LS	\$0.00

SUB-TOTAL ==> \$0.00

E. WATER SYSTEM

1.	30" Steel - Water Main		\$225.00 LF	\$0.00
1.	30" Steel - 12" PVC - Water Main		\$165.00 LF	\$0.00
1.	24" PVC - Water		\$120.00 LF	\$0.00
1.	24" PVC - 12" PVC - Water		\$60.00 LF	\$0.00
1.	24" PVC - Water (Trench and Repatch)		\$170.00 LF	\$0.00
1.	24" PVC - 12" PVC Water (Trench and Repatch)		\$60.00 LF	\$0.00
2.	18" PVC - Water		\$90.00 LF	\$0.00
2.	16" PVC - Water		\$80.00 LF	\$0.00
3.	12" PVC - Water		\$60.00 LF	\$0.00
4.	12" PVC - Water (Trench and Repatch)		\$110.00 LF	\$0.00
5.	8" PVC - Water		\$25.00 LF	\$0.00

6.	8" PVC - Water (Trench and Repatch)		\$85.00 LF	\$0.00
7.	6" PVC - Water		\$29.55 LF	\$0.00
8.	4" PVC - Water		\$24.75 LF	\$0.00
9.	2" PVC - Water		\$0.00 LF	\$0.00
10.	1.5" PVC - Water		\$12.00 LF	\$0.00
11.	24" Butterfly Valve		\$6,000.00 EA	\$0.00
12.	18" Butterfly Valve		\$4,500.00 EA	\$0.00
12.	16" Butterfly Valve		\$4,000.00 EA	\$0.00
13.	12" Butterfly Valve		\$3,000.00 EA	\$0.00
14.	8" Gate Valve		\$2,000.00 EA	\$0.00
15.	6" Gate Valve		\$975.00 EA	\$0.00
16.	4" Gate Valve		\$820.00 EA	\$0.00
17.	2" Ball Valve		\$0.00 EA	\$0.00
18.	4" Double Detector Check Valve		\$5,225.00 EA	\$0.00
19.	6" Single Detector Check Valve w/FDC		\$3,525.00 EA	\$0.00
20.	4" Backflow Preventer		\$2,950.00 EA	\$0.00
21.	Hydrant Bury, Valve, and Tee		\$5,200.00 EA	\$0.00
22.	1" House Service (Meter Not Included)		\$850.00 EA	\$0.00
23.	House Service (Meter Not Included) (Trench - Repatch)		\$0.00 EA	\$0.00
24.	Landscape Service (Meter Not Included)		\$2,300.00 EA	\$0.00
25.	Landscape Service (Meter Not Included) (Trench - Repatch)		\$0.00 EA	\$0.00
26.	Remove Plug and Connect to Existing Water Line		\$3,500.00 EA	\$0.00
27.	Hot Tap into Existing Water Line		\$0.00 EA	\$0.00
28.	Cut-in Tee to Existing Water Line		\$500.00 EA	\$0.00
29.	Air Release Valve		\$0.00 EA	\$0.00
30.	Blow-off Valve		\$4,000.00 EA	\$0.00
31.	Water Well Complete		\$0.00 LS	\$0.00
32.	1" Water Service Meter Connection to Public System		\$825.00 EA	\$0.00
33.	3" Water Service Meter Connection to Public System		\$10,650.00 EA	\$0.00
34.	Stub and Plug Proposed Water Line		\$1,800.00 EA	\$0.00
35.	Water Sampling Station		\$5,000.00 EA	\$0.00
35.	12" Water Connection		\$6,000.00 EA	\$0.00
35.	16" Water Connection		\$8,000.00 EA	\$0.00
35.	18" Water Connection		\$9,000.00 EA	\$0.00
35.	24" Water Connection		\$12,000.00 EA	\$0.00
35.	24" - 12" Water Connection		\$6,000.00 EA	\$0.00
35.	Water Connection		\$7,500.00 EA	\$0.00
35.	Boring Pit Construction (incl. Shoring) - North Side		\$45,000.00 LS	\$0.00
35.	Boring Pit Construction (incl. Shoring) - South Side		\$35,000.00 LS	\$0.00
35.	27" HDPE Horizontal Drill		\$500.00 LF	\$0.00
35.	27" HDPE - 18" HDPE Horizontal Drill		\$150.00 LF	\$0.00
35.	18" HDPE Horizontal Drill		\$350.00 LF	\$0.00
35.	24" PVC - Water (Fittings for Connections)		\$150.00 LF	\$0.00
35.	24" PVC - 12" PVC - Water (Fittings for Connections)		\$75.00 LF	\$0.00
35.	12" PVC - Water (Fittings for Connections)		\$75.00 LF	\$0.00
35.	Dewatering		\$20,000.00 LS	\$0.00
35.	Connection to Existing 24" Main in West Lane		\$25,000.00 LS	\$0.00
35.	Street Restoration		\$45.00 LF	\$0.00

SUB-TOTAL ==> \$0.00

F. NON-POTABLE WATER SYSTEM

1.	12" PVC - Non-Potable Water		\$0.00 LF	\$0.00
2.	10" PVC - Non-Potable Water		\$0.00 LF	\$0.00
3.	8" PVC - Non-Potable Water		\$124.00 LF	\$0.00

4.	6" PVC - Non-Potable Water		\$0.00 LF	\$0.00
5.	12" Butterfly Valve Non-Potable		\$0.00 EA	\$0.00
6.	10" Gate Valve Non-Potable		\$0.00 EA	\$0.00
7.	8" Gate Valve Non-Potable		\$1,466.67 EA	\$0.00
8.	6" Gate Valve Non-Potable		\$0.00 EA	\$0.00
9.	4" Gate Valve Non-Potable		\$0.00 EA	\$0.00
10.	Landscape Service (Meter Not Included)		\$2,500.00 EA	\$0.00
11.	Landscape Service (Meter Not Included) (Trench - Repatch)		\$0.00 EA	\$0.00
12.	Landscape Irrigation Well		\$0.00 EA	\$0.00

SUB-TOTAL ===> \$0.00

F. IRRIGATION

1.	48" RGRCP		\$140.00 LF	\$0.00
2.	42" RGRCP		\$115.00 LF	\$0.00
3.	36" RGRCP		\$87.50 EA	\$0.00
4.	30" RGRCP		\$0.00 EA	\$0.00
5.	24" RGRCP		\$86.00 EA	\$0.00
6.	Irrigation Valves		\$7,000.00 SF	\$0.00
7.	Irrigation Transition Structure		\$26,666.67 EA	\$0.00
8.	48" - Irrigation Manhole		\$17,000.00 EA	\$0.00
9.	2" Irrigation Service		\$2,500.00 LS	\$0.00
10.	1.5" Irrigation Meter		\$500.00 EA	\$0.00

SUB-TOTAL ===> \$0.00

H. STREETS

1.	6" Vertical Curb		\$18.58 LF	\$0.00
2.	6" Vertical Curb and Gutter		\$19.50 LF	\$0.00
3.	4" Drive Over Curb and Gutter		\$14.90 LF	\$0.00
4.	4" Drive Over Curb and Gutter (Roundabout)		\$17.33 LF	\$0.00
5.	4.5" Special Vertical Curb and Gutter		\$20.00 LF	\$0.00
6.	4.5" Drive Over Curb and Gutter		\$14.75 LF	\$0.00
7.	8" Median Curb		\$18.60 LF	\$0.00
8.	4' Valley Gutter		\$10.00 SF	\$0.00
9.	3" Valley Gutter		\$0.00 SF	\$0.00
10.	4" PCC Concrete Walk (Includes Ramps and Returns)		\$4.00 SF	\$0.00
10.	5" PCC Concrete Walk (Includes Ramps and Returns)		\$5.00 SF	\$0.00
11.	6" PCC Concrete Driveway		\$6.00 SF	\$0.00
12.	8" PCC #4 Rebar 12"OC Truck Apron		\$10.69 SF	\$0.00
13.	8" PCC #4 Rebar 12"OC Bus Stop		\$11.00 SF	\$0.00
14.	Mow Strip		\$0.00 SF	\$0.00
15.	ADA Ramp (Labor and Truncated Domes Only)		\$1,900.00 EA	\$0.00
16.	Mid-Block ADA Ramp (Labor and Truncated Domes Only)		\$550.00 EA	\$0.00
17.	Raised Crosswalk		\$2,750.00 EA	\$0.00
17.	2" AC Grind and Overlay		\$1.25 SF	\$0.00
18.	5" AC over 12" AB Pavement		\$5.15 SF	\$0.00
18.	5" AC over 8" AB Pavement		\$4.35 SF	\$0.00
19.	4" AC over 10" AB Pavement		\$4.20 SF	\$0.00
20.	3.5" AC over 7.0" AB Pavement		\$3.33 SF	\$0.00
21.	3" AC over 10" AB Pavement		\$3.65 SF	\$0.00
22.	3" AC over 6" AB Pavement		\$2.85 SF	\$0.00
23.	3" AC over 4" AB Pavement		\$2.45 SF	\$0.00
24.	3" AC over 4" AB Pavement 14" Lime Treat		\$3.85 SF	\$0.00
25.	2.5" AC over 4.0" AB Pavement		\$2.18 SF	\$0.00

25.	5"AC over 22" AB Pavement (TI=8.5)		\$7.15	SF	\$0.00
26.	18" AB		\$3.60	SF	\$0.00
27.	11" AB		\$2.20	SF	\$0.00
28.	8" AB		\$1.60	SF	\$0.00
29.	4" AC		\$2.20	SF	\$0.00
30.	3" AC		\$1.65	SF	\$0.00
30.	3" AC Grind and Overlay		\$2.00	SF	\$0.00
31.	4.5' Monolithic Sidewalk		\$0.00	SF	\$0.00
32.	Enhanced Pavement		\$0.00	SF	\$0.00
33.	Headerboard		\$5.80	LF	\$0.00
34.	Commercial Driveway		\$6,250.00	LS	\$0.00

SUB-TOTAL ==> \$0.00

I. RAIN GARDEN

1.	Excavation		\$0.40	CF	\$0.00
2.	Soil - Planting Media		\$0.00	CF	\$0.00
3.	1.5" Washed Drain Rock		\$0.00	CF	\$0.00
4.	4" Perforated Pipe		\$0.00	LF	\$0.00
5.	24" Diameter Inlet		\$0.00	EA	\$0.00

SUB-TOTAL ==> \$0.00

J. STREET LIGHTS

1.	70 Watt Electrolier		\$0.00	EA	\$0.00
2.	100 Watt Electrolier		\$4,500.00	EA	\$0.00
3.	150 Watt Electrolier		\$5,075.00	EA	\$0.00
4.	200 Watt Electrolier		\$6,166.67	EA	\$0.00
5.	70 Watt Electrolier - Decorative		\$0.00	EA	\$0.00
6.	100 Watt Electrolier - Decorative		\$0.00	EA	\$0.00
7.	150 Watt Electrolier - Decorative		\$0.00	EA	\$0.00
8.	200 Watt Electrolier - Decorative		\$0.00	EA	\$0.00
9.	4430 Lumen - LED Electrolier		\$4,525.00	EA	\$0.00
10.	5920 Lumen - LED Electrolier		\$5,530.00	EA	\$0.00

SUB-TOTAL ==> \$0.00

K. STRIPING AND SIGNAGE

1.	Stop Bar Legend		\$575.00	EA	\$0.00
2.	Street Name and Directional Signs		\$380.00	EA	\$0.00
3.	ADA Sign		\$225.00	EA	\$0.00
4.	ADA Stall Striping		\$125.00	EA	\$0.00
5.	ADA Stall Striping Loading Zones		\$20.00	EA	\$0.00
6.	Compact Stall Striping		\$15.00	EA	\$0.00
7.	Regular Stall Striping		\$14.00	EA	\$0.00
8.	Red Curb Paint		\$1.00	LF	\$0.00
9.	Fire Hydrant Markers		\$5.00	EA	\$0.00
10.	Roundabout Advance Warning Sign		\$308.33	EA	\$0.00
11.	Roundabout Signage		\$937.50	EA	\$0.00
12.	Traffic Delineation		\$1.75	LF	\$0.00
13.	Bicycle Lane Striping		\$1.50	LF	\$0.00
14.	Bicycle Lane Signage		\$337.50	EA	\$0.00
15.	Dead End Sign (W14-1)		\$337.50	EA	\$0.00
16.	No Outlet Sign (W14-2)		\$337.50	EA	\$0.00
17.	Signage and Striping		\$11,791.67	LS	\$0.00

18.	Street Monuments		\$310.00 EA	\$0.00
19.	Traffic Delineation (Striping and Stop bars)		\$1.75 EA	\$0.00
20.	Street Monuments		\$311.00 EA	\$0.00
21.	Traffic Arrows		\$450.00 EA	\$0.00
22.	Street Monuments		\$311.00 EA	\$0.00
23.	Traffic Signal and Controls		\$350,000.00 EA	\$0.00
24.	Modified Traffic Signal and Controls		\$150,000.00 EA	\$0.00
24.	Street Monuments		\$311.00 EA	\$0.00
25.	RTD Bus Stop		\$17,500.00 EA	\$0.00
26.	Striping - Intersection		\$10,000.00 LS	\$0.00
27.	Remove Striping		\$1.00 LS	\$0.00
28.	Remove Arrows		\$200.00 LS	\$0.00

SUB-TOTAL ==> \$0.00

L. PHASE TRANSITION (SEE ESTIMATE NOTES)

1.	Phasing Transition Temporary		\$10,000.00 LS	\$0.00
2.	Phasing Transition Removal		\$6,250.00 LS	\$0.00

SUB-TOTAL ==> \$0.00

M. LANDSCAPE AND TREES

1.	Park Fixtures and Hard Improvements		\$100,000.00 LS	\$0.00
2.	Levee Improvements		\$12,000.00 LS	\$0.00
3.	Park/Basin Maintenance		\$3,000.00 MON	\$0.00

SUB-TOTAL ==> \$0.00

N. MISCELLANEOUS

1.	Landscape w/ Irrigation (Streetscape)		\$5.00 SF	\$0.00
2.	Landscape w/ Irrigation (Median)		\$5.00 SF	\$0.00
3.	Landscape w/ Irrigation (Park Area)		\$6.50 SF	\$0.00
4.	Landscape w/ Irrigation (Roundabout)		\$5.00 SF	\$0.00
5.	Landscape w/ Irrigation (Basin)		\$5.00 SF	\$0.00
6.	Landscape w/ Irrigation (Entry)		\$5.00 SF	\$0.00
6.	Landscape w/ Irrigation (Open Space)		\$0.50 SF	\$0.00
6.	Landscape w/ Irrigation (Park-Basin Area)		\$142,256.32 SF	\$0.00
6.	Landscape w/ Irrigation (Park-Upland Area)		\$368,352.20 SF	\$0.00
6.	Landscape w/o Irrigation (Basin Hydroseeding)		\$0.45 SF	\$0.00
6.	Basin Decorative Fencing and Security (signs) Features		\$30.00 LF	\$0.00
7.	16' Sound Wall		\$0.00 LF	\$0.00
8.	12.67' Sound Wall		\$160.00 LF	\$0.00
9.	10' Sound Wall		\$140.00 LF	\$0.00
10.	8' Sound Wall		\$110.00 LF	\$0.00
11.	7.33' Sound Wall		\$0.00 LF	\$0.00
12.	6.67' Sound Wall		\$0.00 LF	\$0.00
13.	6' Sound Wall		\$120.00 LF	\$0.00
14.	4.00' Masonry Wall		\$128.00 LF	\$0.00
15.	4.67' Masonry Wall		\$131.00 LF	\$0.00
16.	7.33' Masonry Wall		\$146.00 LF	\$0.00
17.	8.00' Masonry Wall		\$159.00 LF	\$0.00
18.	8.67' Masonry Wall		\$166.00 LF	\$0.00
19.	4' Sound Wall		\$0.00 LF	\$0.00
20.	3.33' Retaining Wall		\$65.00 LF	\$0.00
21.	2.67' Retaining Wall		\$55.00 LF	\$0.00

22.	2' Retaining Wall		\$45.00 LF	\$0.00
23.	Wood Fence		\$0.00 LF	\$0.00
24.	Wood Fence Gate		\$0.00 LF	\$0.00
25.	Wrought Iron Fence		\$0.00 LF	\$0.00
26.	Wrought Iron Fence Gate		\$0.00 LF	\$0.00
27.	Chain Link Fence		\$0.00 LF	\$0.00
28.	Chain Link Fence Gate		\$0.00 LF	\$0.00
29.	Barbed Wire Fence		\$0.00 LF	\$0.00
30.	Barbed Wire Fence Gate		\$0.00 LF	\$0.00
31.	Joint Trench		\$7,000.00 EA	\$0.00
31.	Joint Trench Main		\$100.00 LF	\$0.00
31.	Underground Existing 12 KVA Utility Poles		\$200.00 LF	\$0.00
32.	Construction Dewatering		\$52.50 LF	\$0.00
33.	Construction Dewatering (total)		\$100,000.00 EA	\$0.00
34.	Gate 28' (Levee Access Road)		\$2,333.33 EA	\$0.00
35.	Entry Monument (Minor)		\$50,000.00 EA	\$0.00
36.	Entry Monument (Major)		\$100,000.00 EA	\$0.00
37.	Replacement of Existing Landscape		\$5.00 SF	\$0.00
38.	Trench Patching		\$72.50 LF	\$0.00
39.	Street Barricade		\$750.00 EA	\$0.00

SUB-TOTAL ==> \$0.00

CONSTRUCTION SUB-TOTAL ==> \$0.00

CONTINGENCY - 10% ==> \$0.00

CONSTRUCTION TOTAL ==> \$0.00

SOFT COSTS - 20% ==> \$0.00

GRAND TOTAL ==> \$0.00

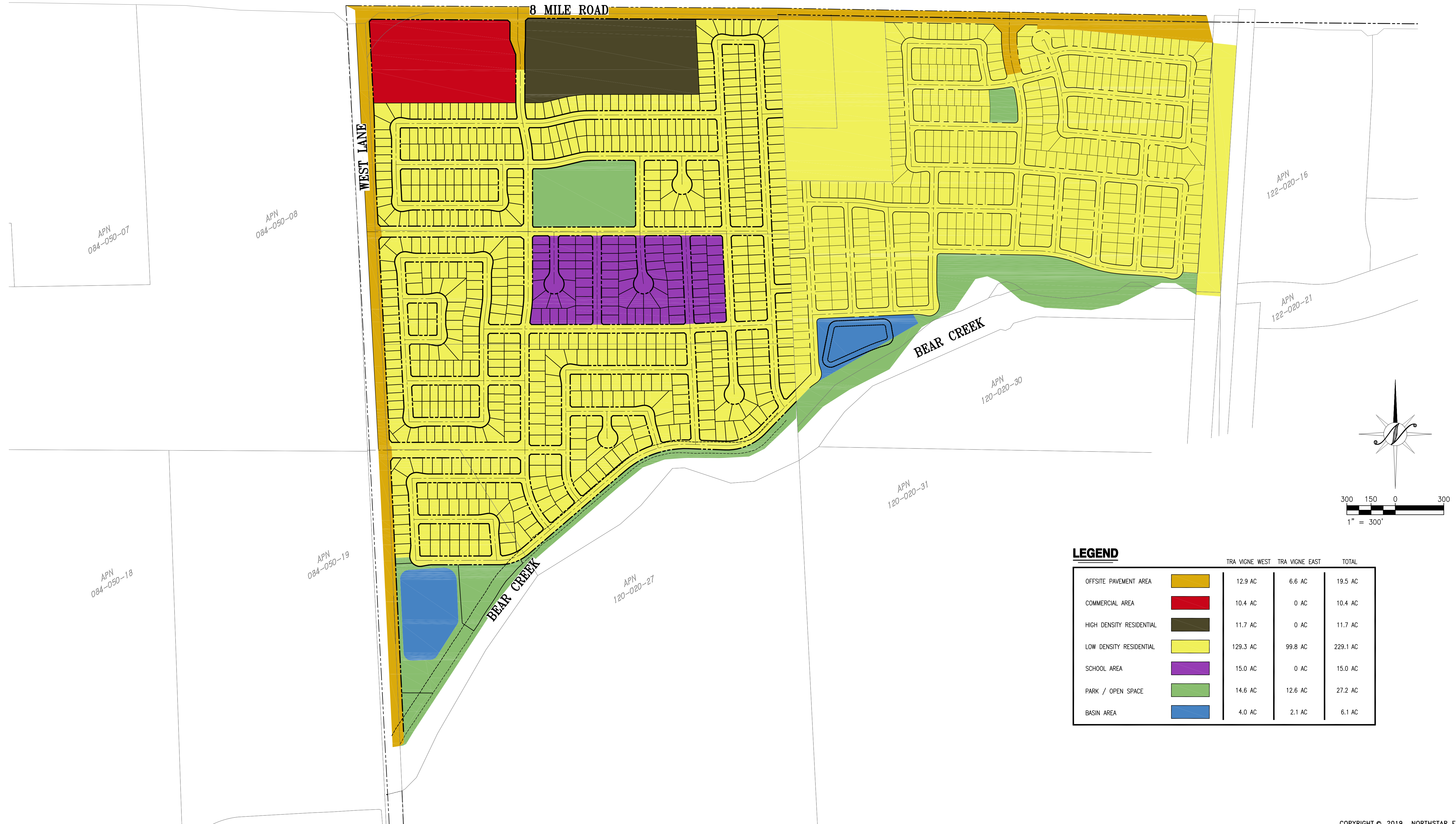
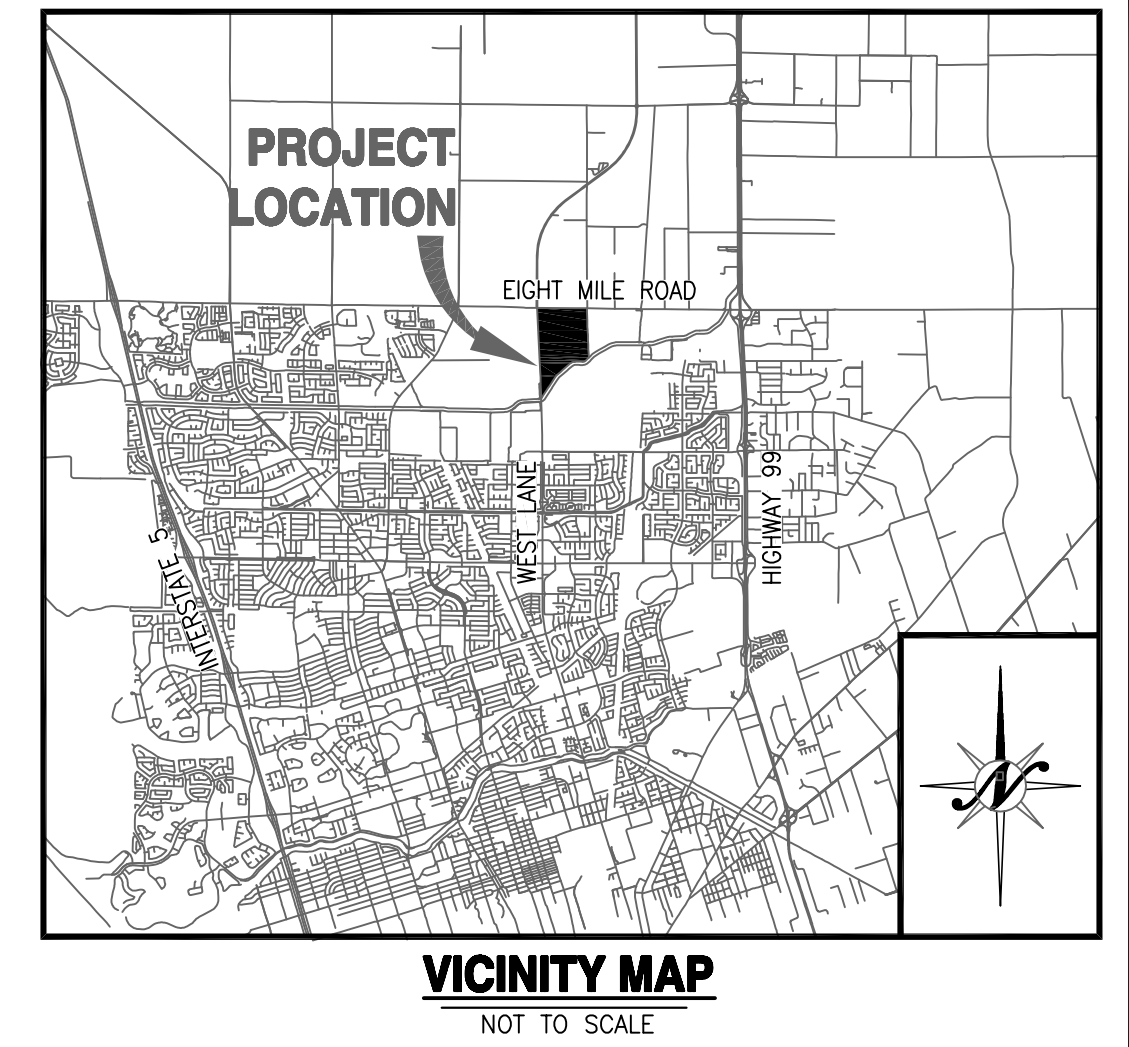
TOTAL LOTS ==> 1








COST PER LOT ==> \$0.00

STORM DRAINAGE TRIBUTARY AREA MAP

TRA VIGNE

STOCKTON, CALIFORNIA



LEGEND		TRA VIGNE WEST	TRA VIGNE EAST	TOTAL
OFFSITE PAVEMENT AREA		12.9 AC	6.6 AC	19.5 AC
COMMERCIAL AREA		10.4 AC	0 AC	10.4 AC
HIGH DENSITY RESIDENTIAL		11.7 AC	0 AC	11.7 AC
LOW DENSITY RESIDENTIAL		129.3 AC	99.8 AC	229.1 AC
SCHOOL AREA		15.0 AC	0 AC	15.0 AC
PARK / OPEN SPACE		14.6 AC	12.6 AC	27.2 AC
BASIN AREA		4.0 AC	2.1 AC	6.1 AC

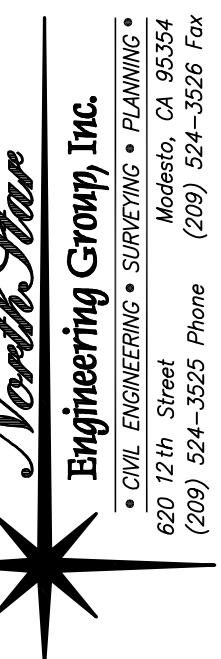


NO.	DESCRIPTIONS	DATE	APPROVED

STOCKTON

TRA VIGNE SUBDIVISION

STORM DRAINAGE TRIBUTARY AREA MAP

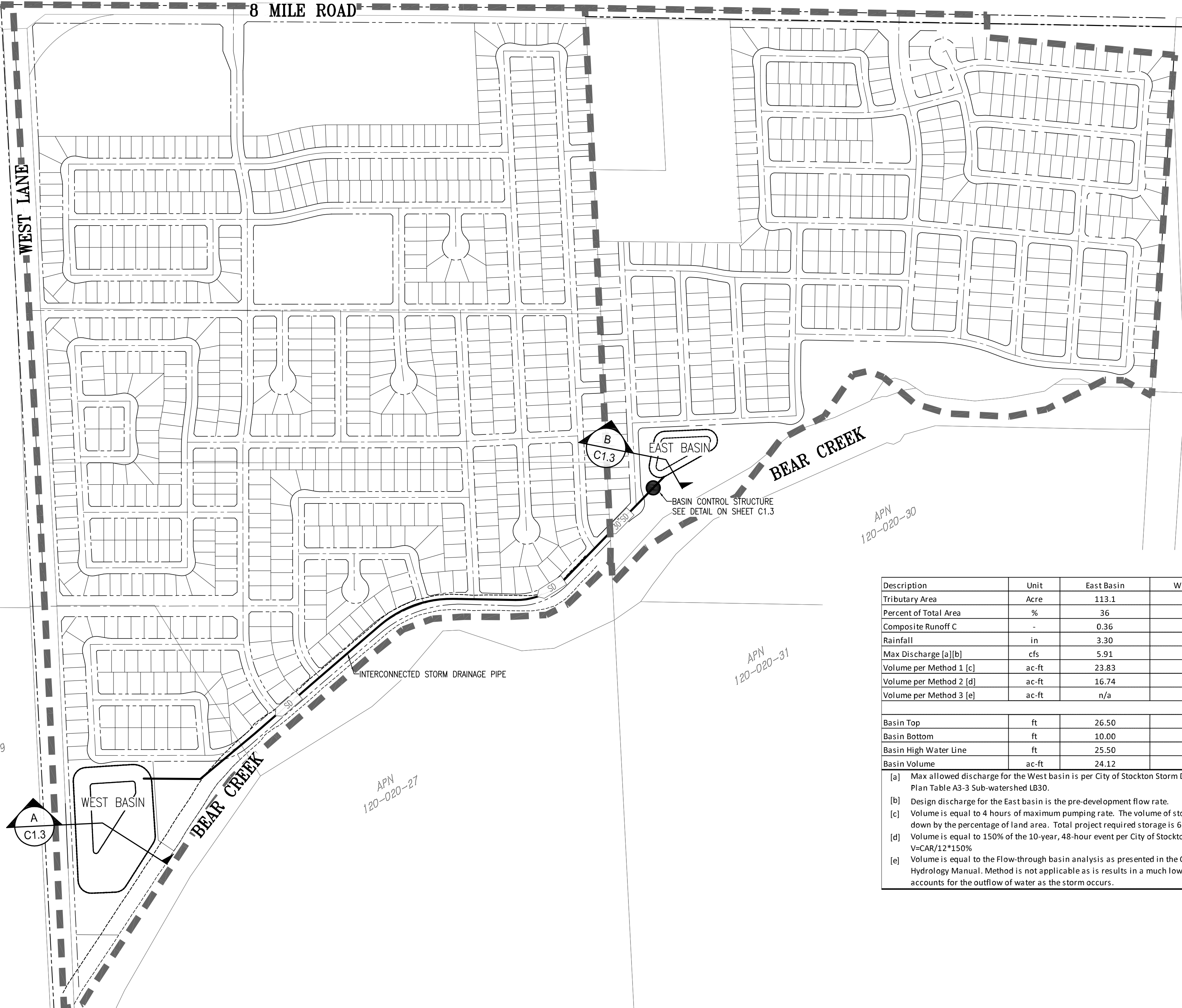
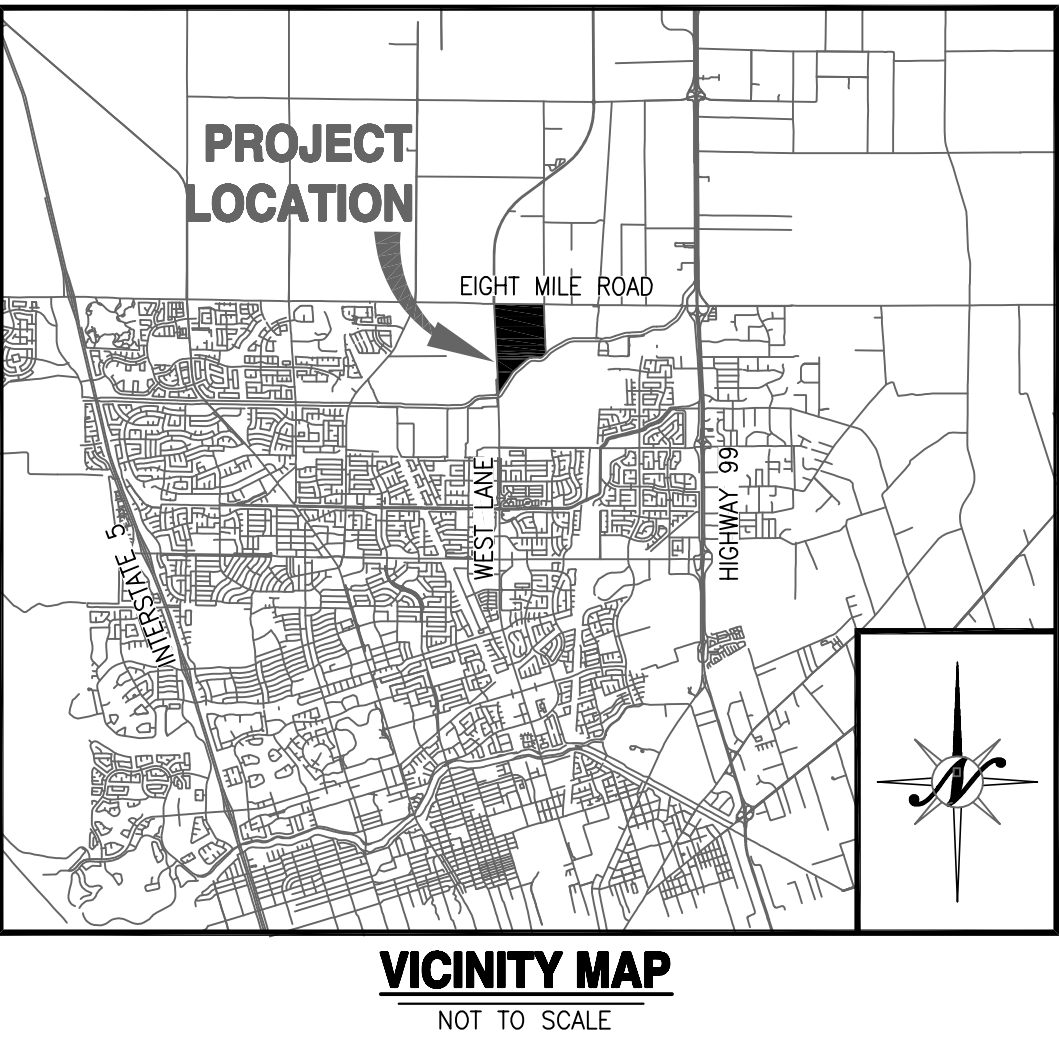


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:	09/13/2019
E:	AS SHOWN
WN:	CV
GN:	CV
D:	APD

SHEET
NUMBER

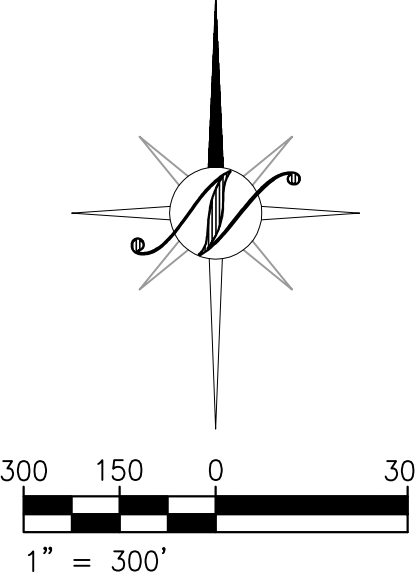
C1.1

PRELIMINARY STORM DRAINAGE BASIN DESIGN
TRA VIGNE
STOCKTON, CALIFORNIA



Description	Unit	East Basin	West Basin
Tributary Area	Acre	113.1	198.0
Percent of Total Area	%	36	64
Composite Runoff C	-	0.36	0.45
Rainfall	in	3.30	3.30
Max Discharge [a][b]	cfs	5.91	204
Volume per Method 1 [c]	ac-ft	23.83	41.72
Volume per Method 2 [d]	ac-ft	16.74	36.70
Volume per Method 3 [e]	ac-ft	n/a	n/a
Basin Top	ft	26.50	25.00
Basin Bottom	ft	10.00	10.00
Basin High Water Line	ft	25.50	24.00
Basin Volume	ac-ft	24.12	37.30

[a] Max allowed discharge for the West basin is per City of Stockton Storm Drain Master Plan Table A3-3 Sub-watershed LB30.
[b] Design discharge for the East basin is the pre-development flow rate.
[c] Volume is equal to 4 hours of maximum pumping rate. The volume of storage is broken down by the percentage of land area. Total project required storage is 65.55 ac-ft.
[d] Volume is equal to 150% of the 10-year, 48-hour event per City of Stockton Standards, $V=CAR/12*150\%$
[e] Volume is equal to the Flow-through basin analysis as presented in the County Hydrology Manual. Method is not applicable as is results in a much lower volume as it accounts for the outflow of water as the storm occurs.



NO.	REVISIONS	DATE	APPROVED
	DESCRIPTIONS		

PRELIMINARY STORM BASIN DESIGN
TRA VIGNE SUBDIVISION
STOCKTON, CALIFORNIA



JOB #: 15-1532
DATE: 09/13/2019
SCALE: AS SHOWN
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DESIGN: CV
CHK'D: APD

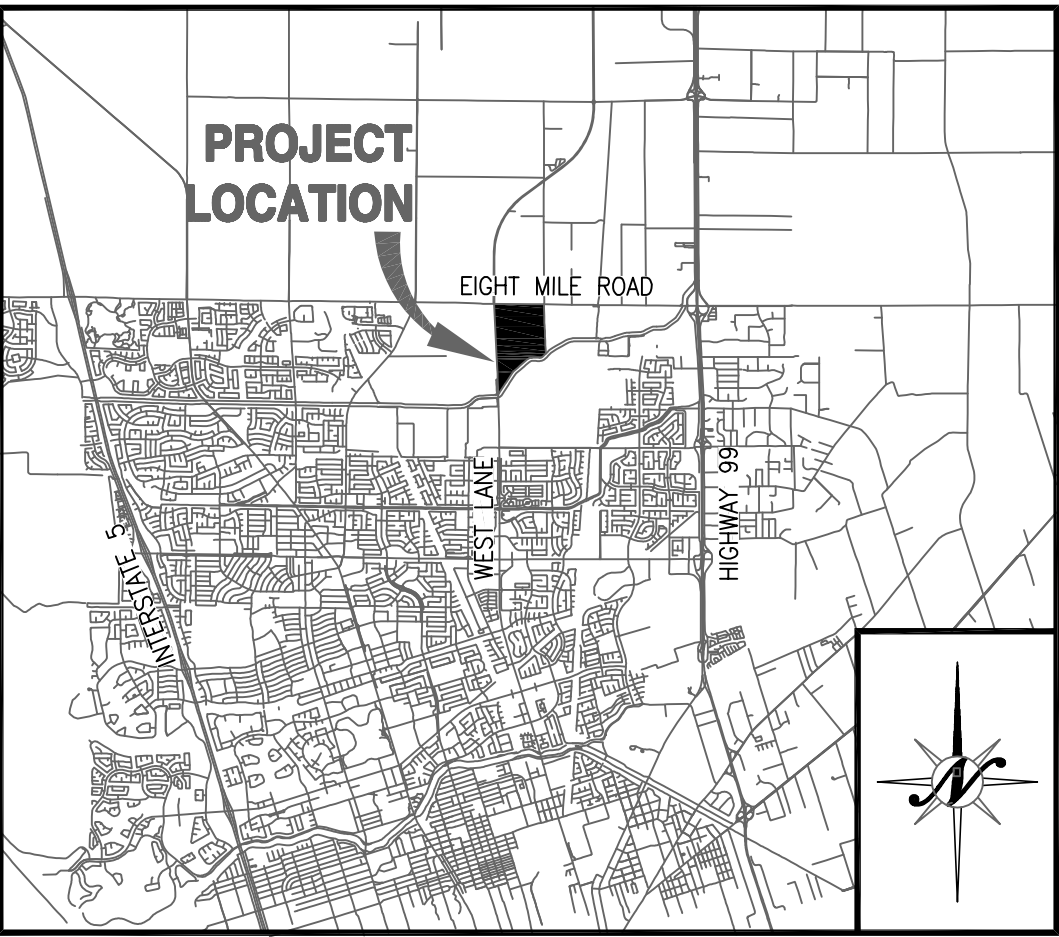
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NUMBER

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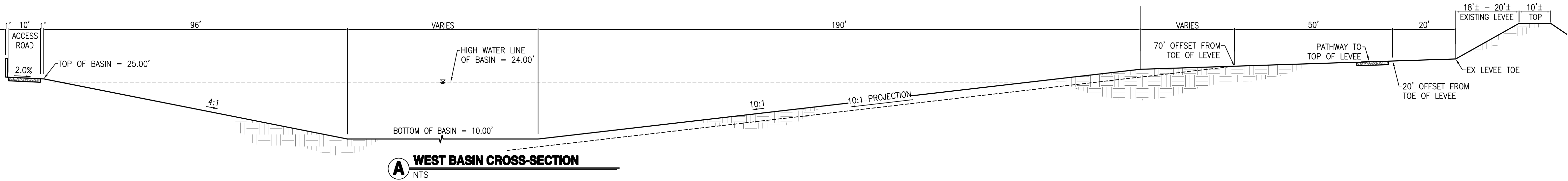
BASIN CROSS SECTIONS AND CONTROL STRUCTURE DETAIL

TRA VIGNE

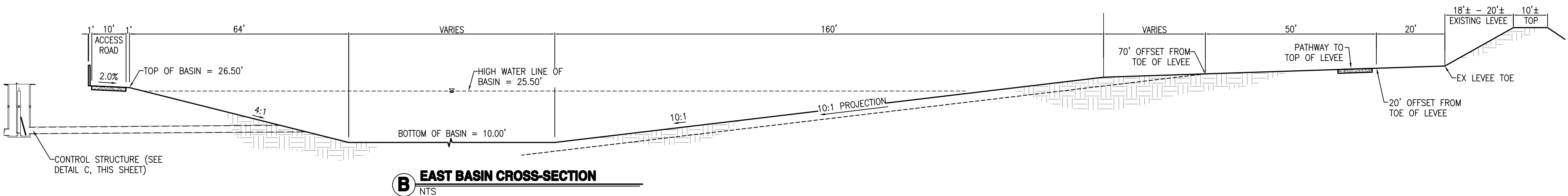
STOCKTON, CALIFORNIA



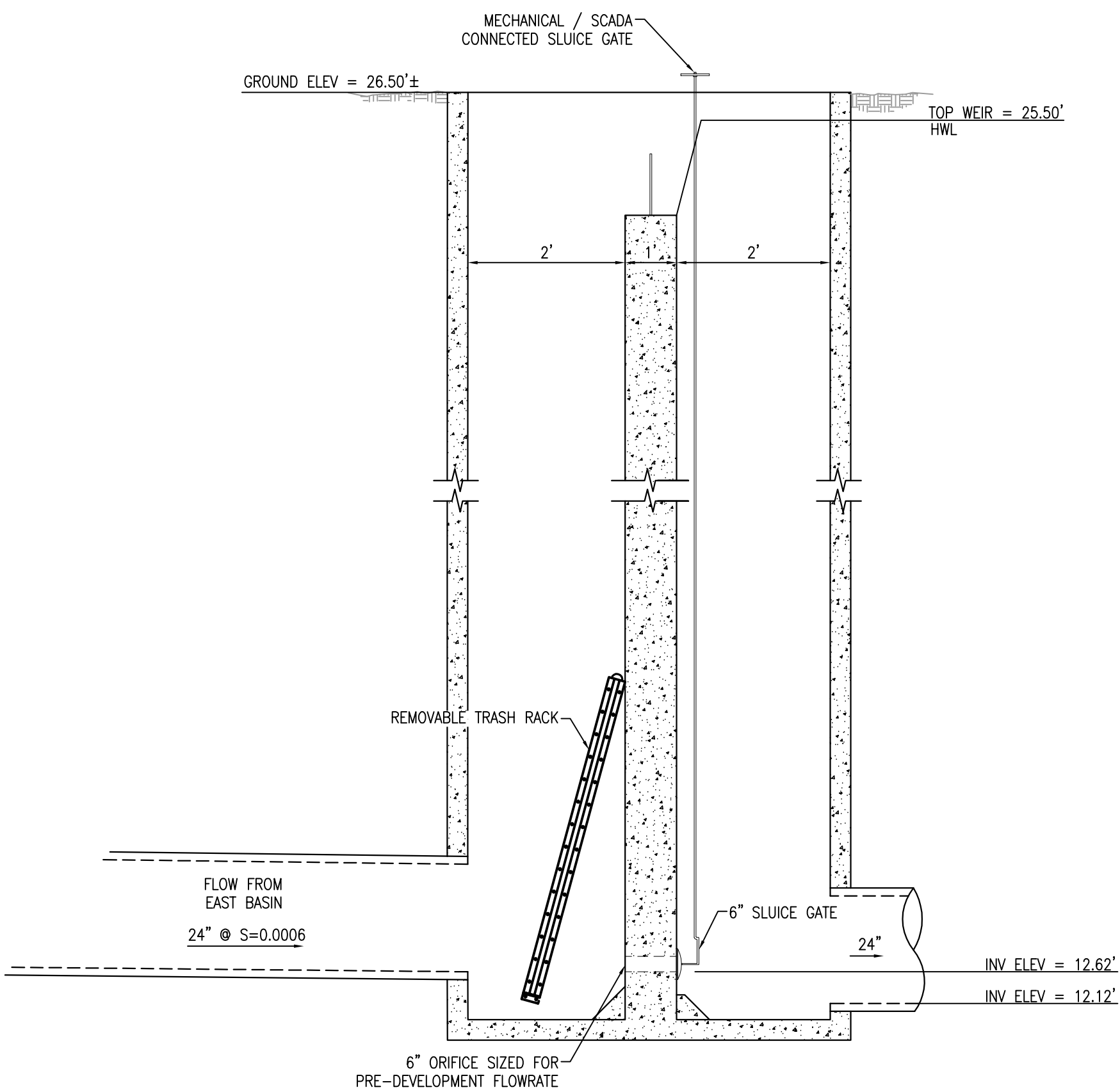
VICINITY MAP
NOT TO SCALE



A WEST BASIN CROSS-SECTION
NTS



B EAST BASIN CROSS-SECTION
NTS



C BASIN CONTROL STRUCTURE
NTS



NO.	REVISIONS	DATE	APPROVED
	DESCRIPTIONS		

BASIN CROSS-SECTIONS AND CONTROL STRUCTURE DETAIL

TRA VIGNE SUBDIVISION

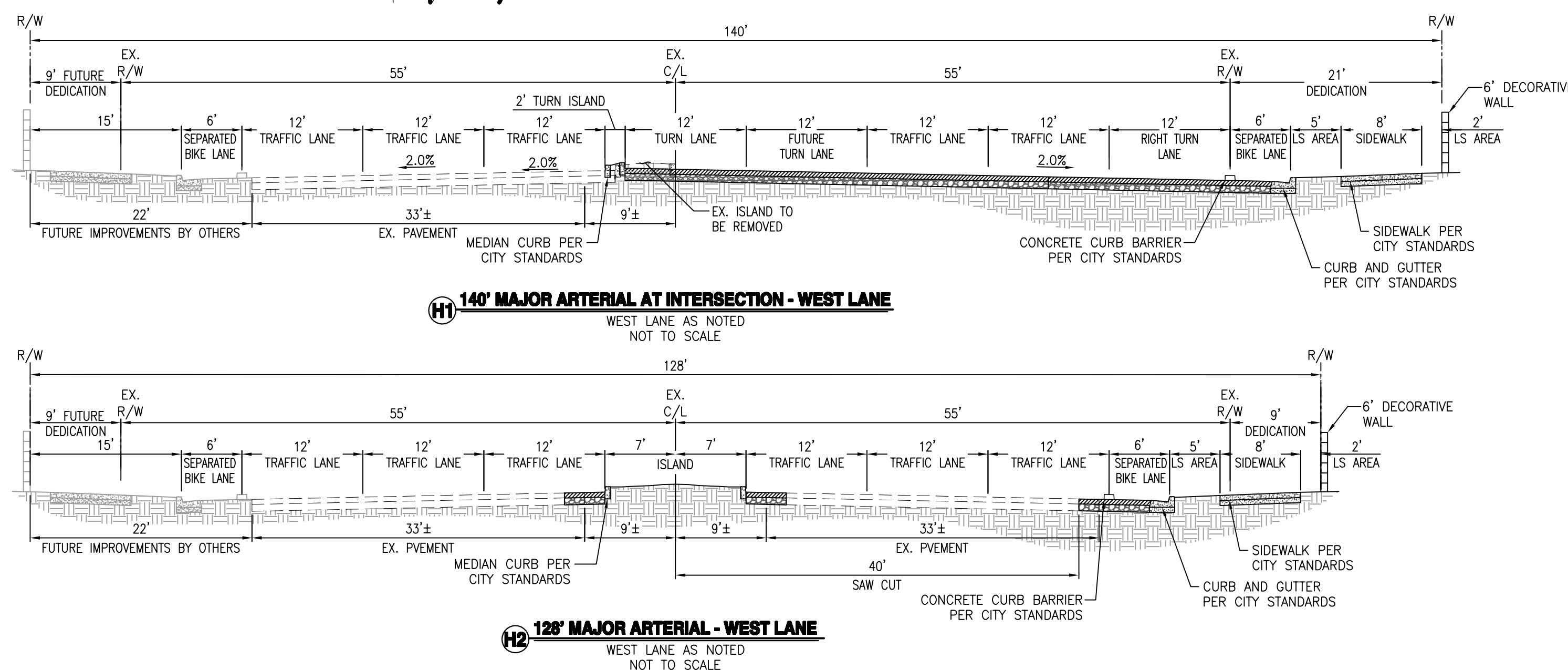
STOCKTON, CALIFORNIA



JOB #: 15-1532
DATE: 09/13/2019
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CHK'D: APD

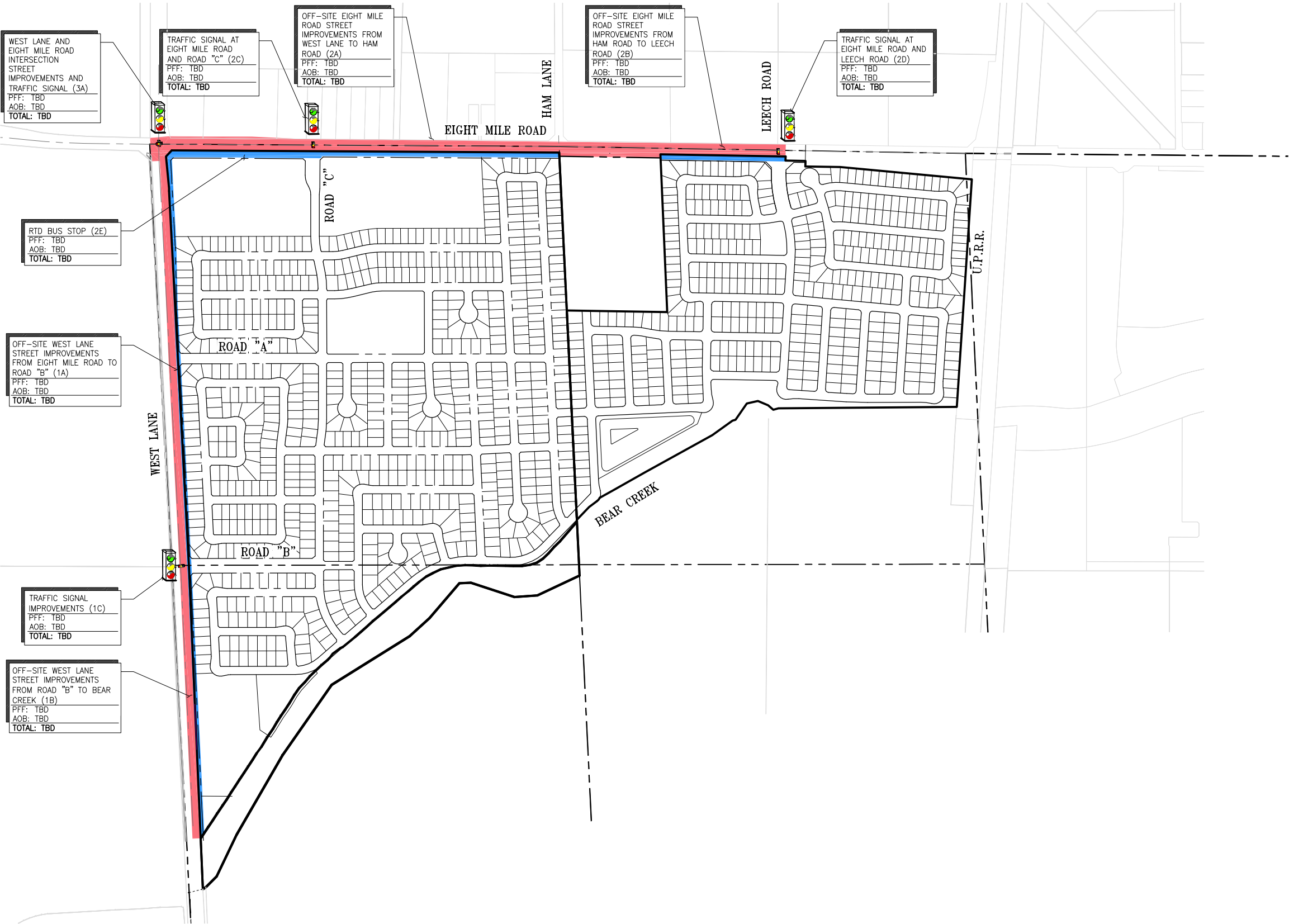
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C1.3



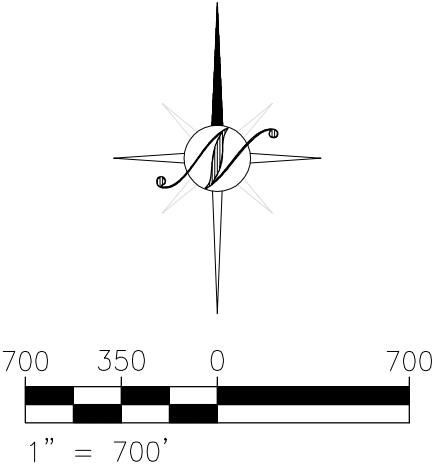
EX 2.1
OFF-SITE WEST LANE AND EIGHT MILE ROAD STREET IMPROVEMENTS
PFF & AOB REFERENCE EXHIBIT

SEPTEMBER 13, 2019







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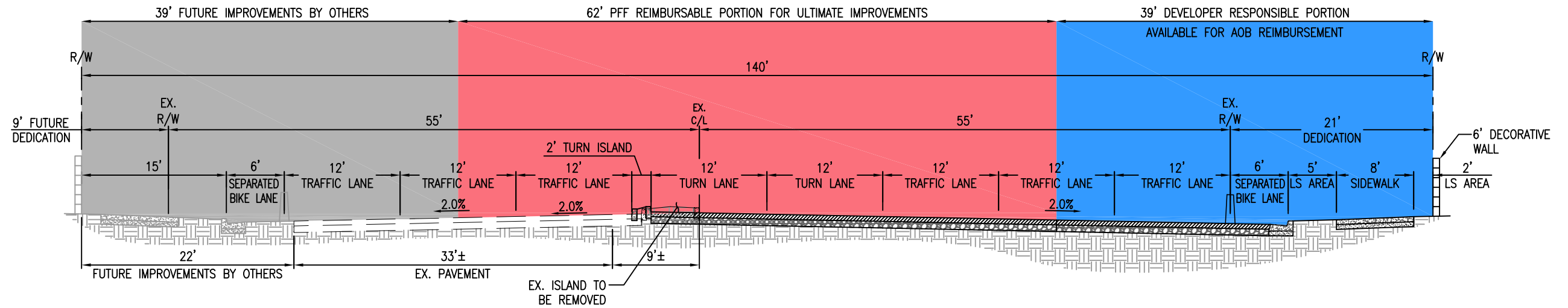


LEGEND

-  PFF REIMBURSABLE IMPROVEMENTS (SEE EX 2.2 - 2.5)
-  DEVELOPER RESPONSIBLE PORTION AVAILABLE FOR AOB REIMBURSEMENT

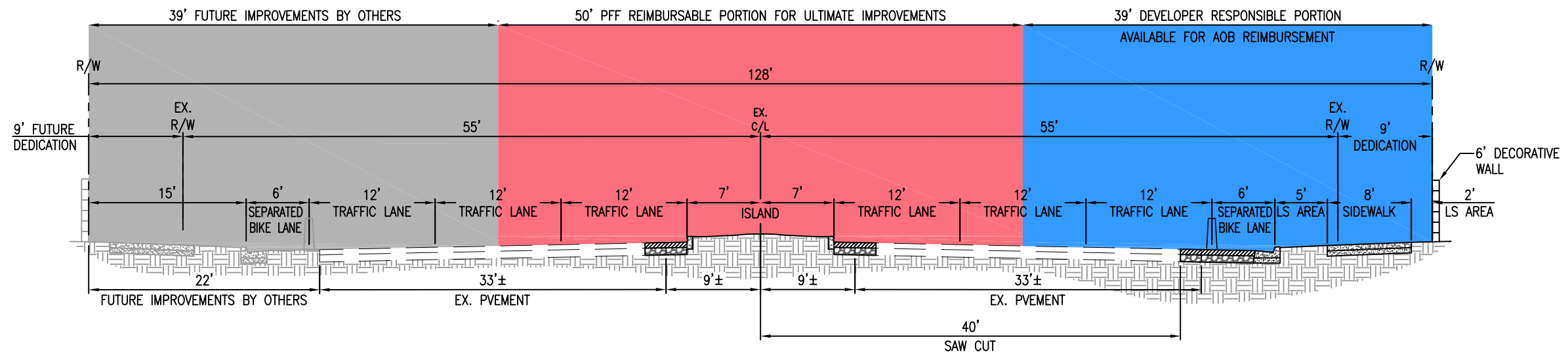
EX 2.2 WEST LANE TYPICAL CROSS SECTIONS

SEPTEMBER 13, 2019



140' WEST LANE AT EIGHT MILE ROAD INTERSECTION

NTS

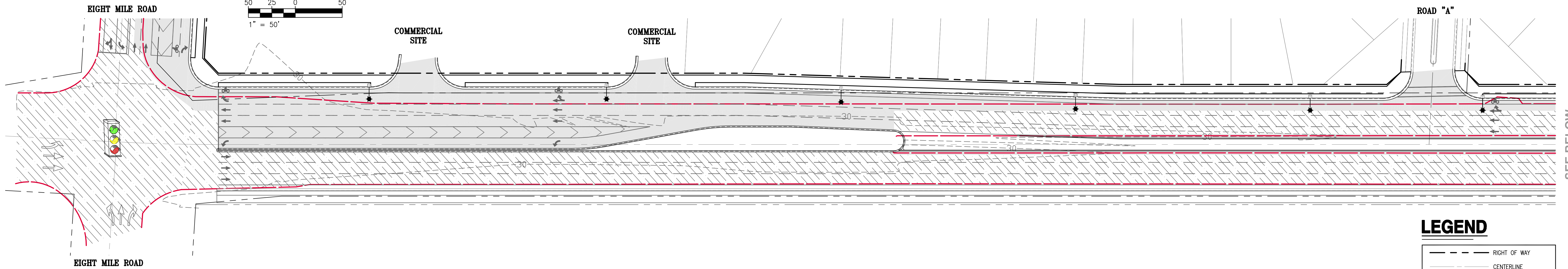


128' WEST LANE

NTS

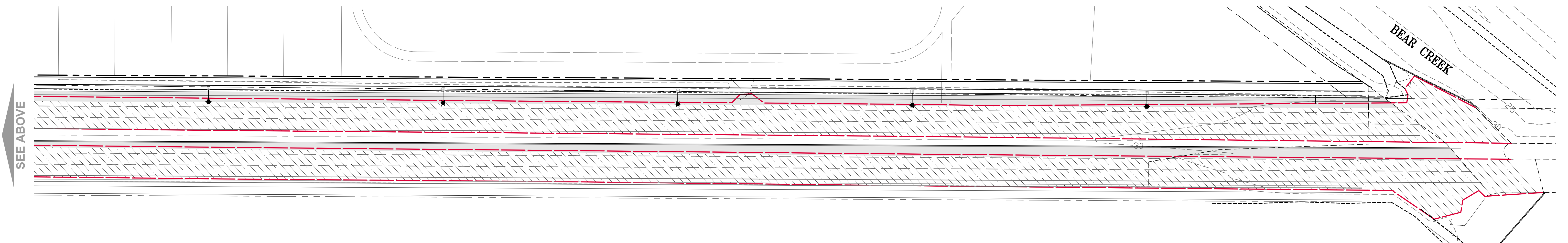
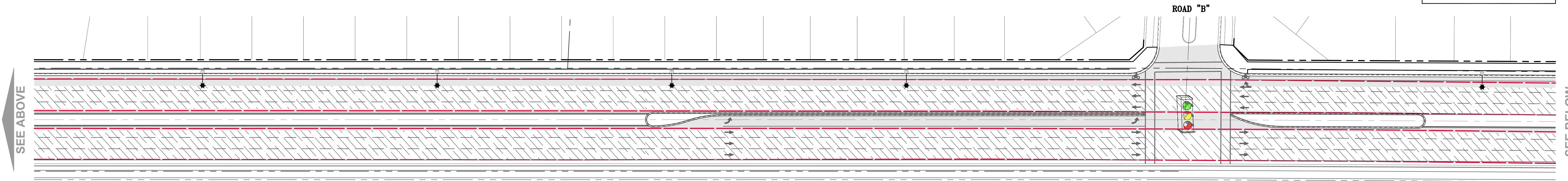
EX2.3
WEST LANE
PROPOSED STREET
IMPROVEMENTS TO BE
CONSTRUCTED WITH TRA VIGNE
DEVELOPMENT

SEPTEMBER 13, 2019



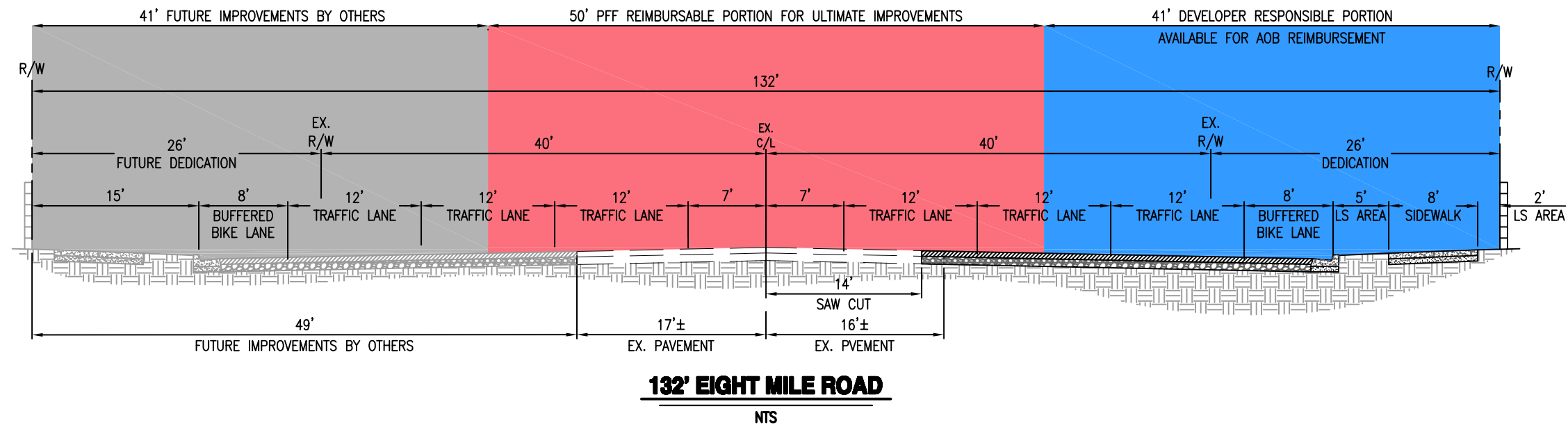
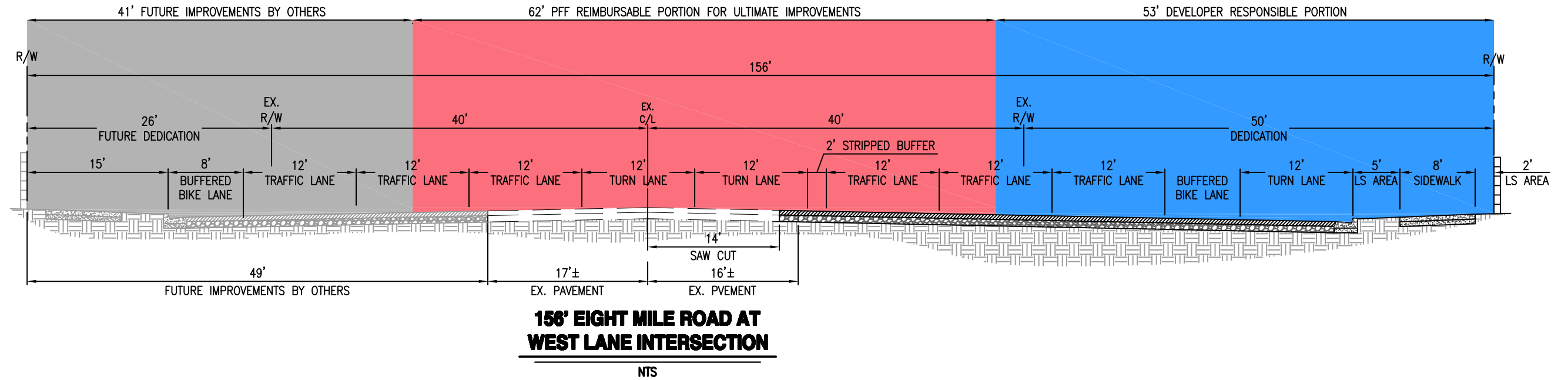
LEGEND

---	RIGHT OF WAY
---	CENTERLINE
---	CURB AND GUTTER
---	MEDIAN
---	EXISTING PAVEMENT
---	PAVEMENT OVERLAY
---	NEW PAVEMENT



EX 2.4 EIGHT MILE ROAD TYPICAL ROAD CROSS SECTIONS

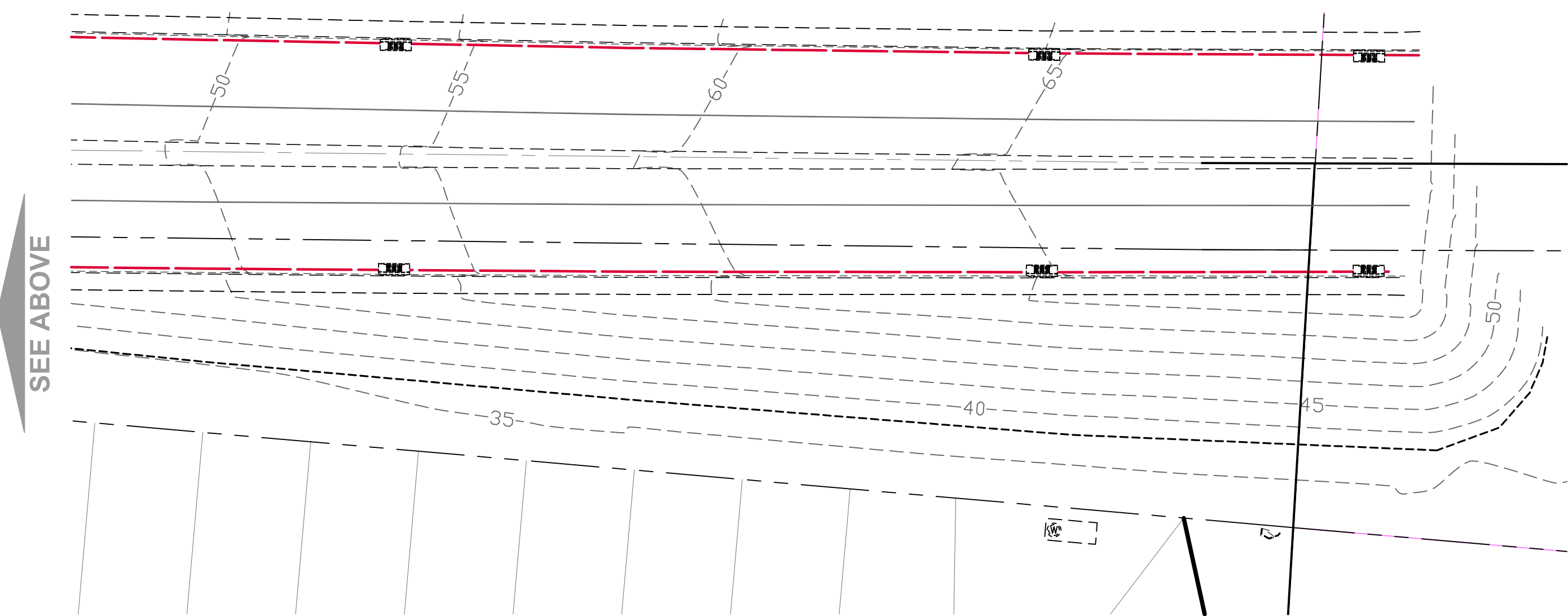
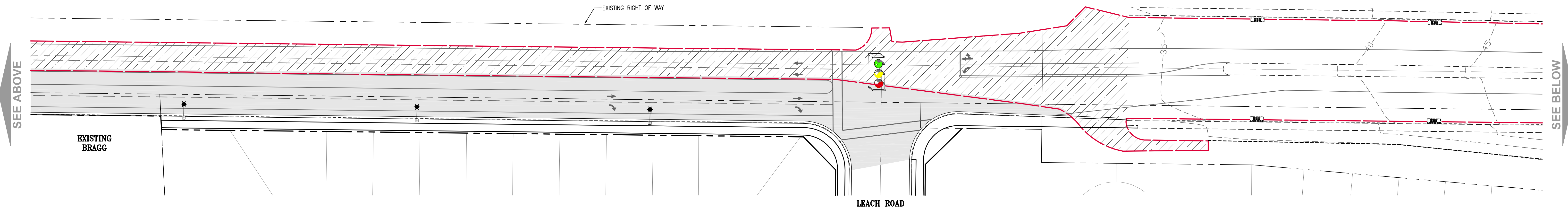
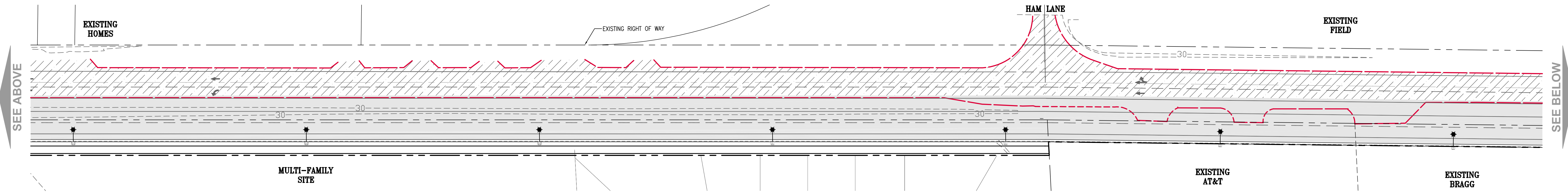
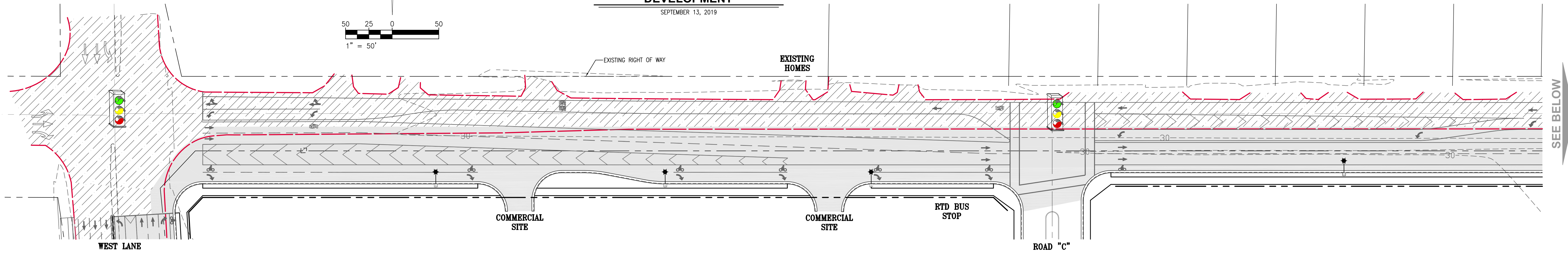
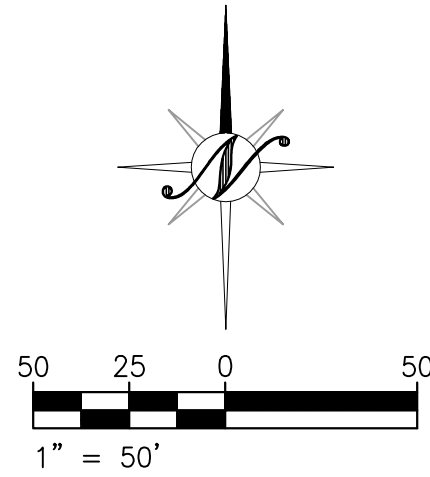
SEPTEMBER 13, 2019



EX 2.5
EIGHT MILE ROAD
PROPOSED STREET
IMPROVEMENTS TO BE
CONSTRUCTED WITH TRA VIGNE
DEVELOPMENT

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LEGEND

	RIGHT OF WAY
	CENTERLINE
	CURB AND GUTTER
	MEDIAN
	EXISTING PAVEMENT
	PAVEMENT OVERLAY
	NEW PAVEMENT

EX 2.6

OFF-SITE INTERSECTION IMPROVEMENT PER EIR MITIGATION

AOB EXHIBIT

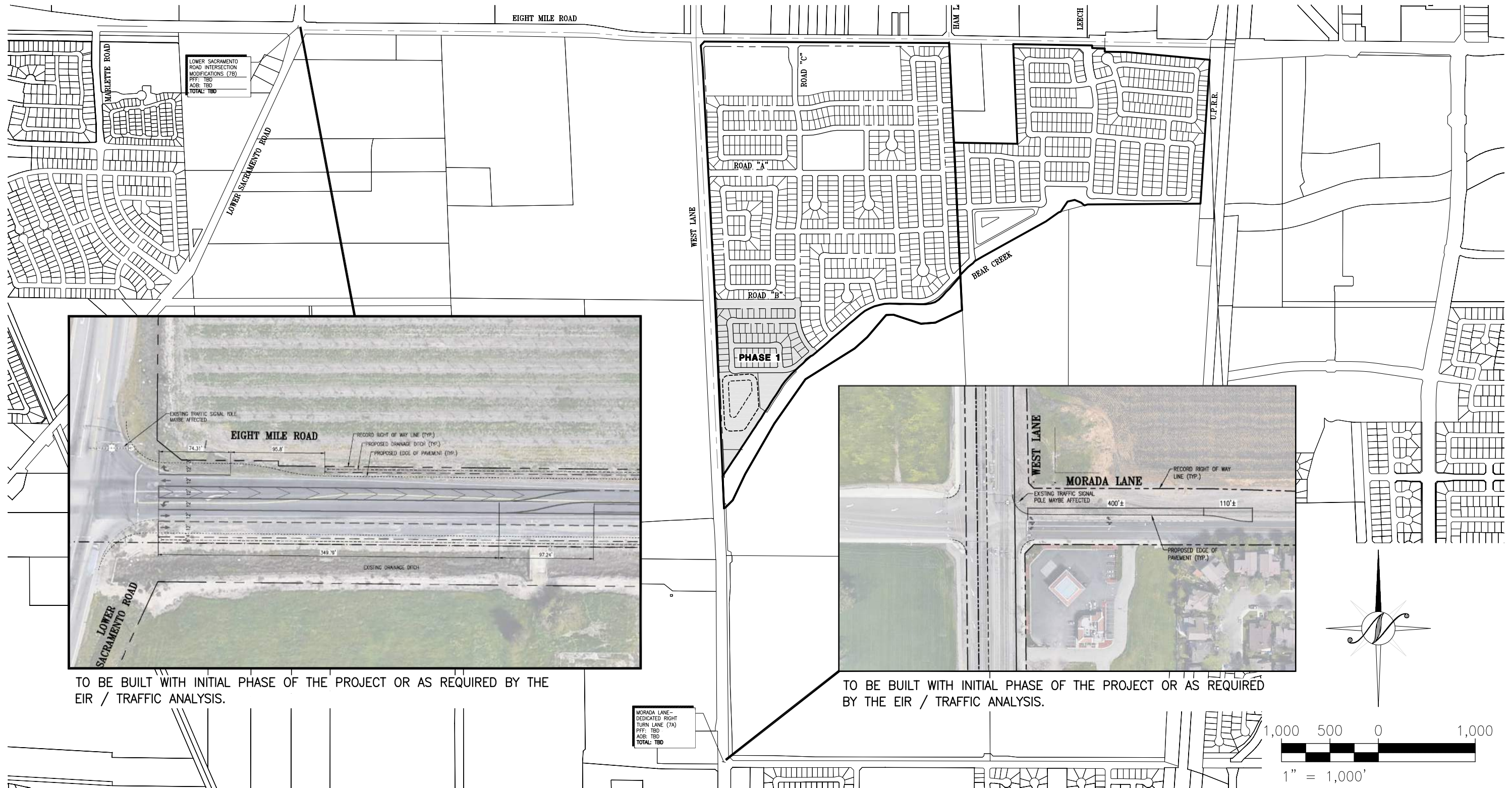
SEPTEMBER 13, 2019



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EX 3.1

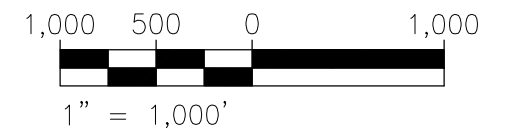
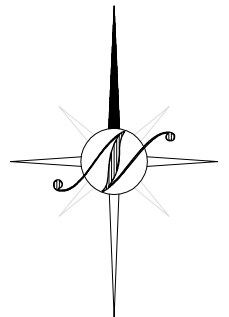
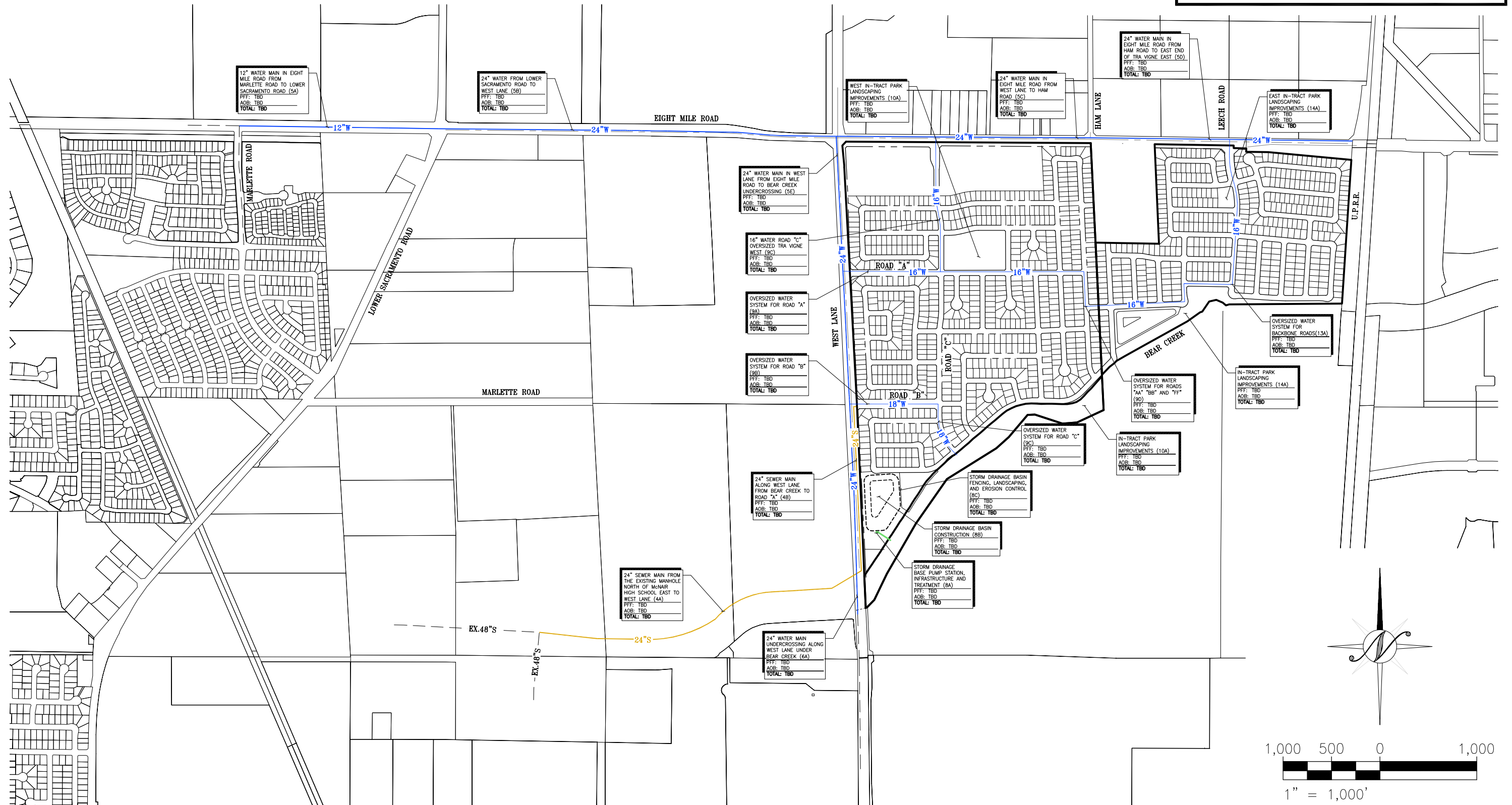
OFF-SITE AND ON-SITE UTILITY INFRASTRUCTURE REIMBURSEMENT AND AOB EXHIBIT

SEPTEMBER 13, 2019

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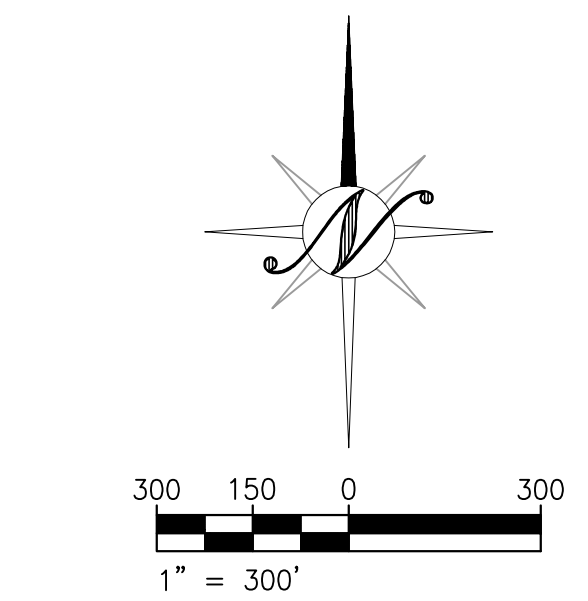
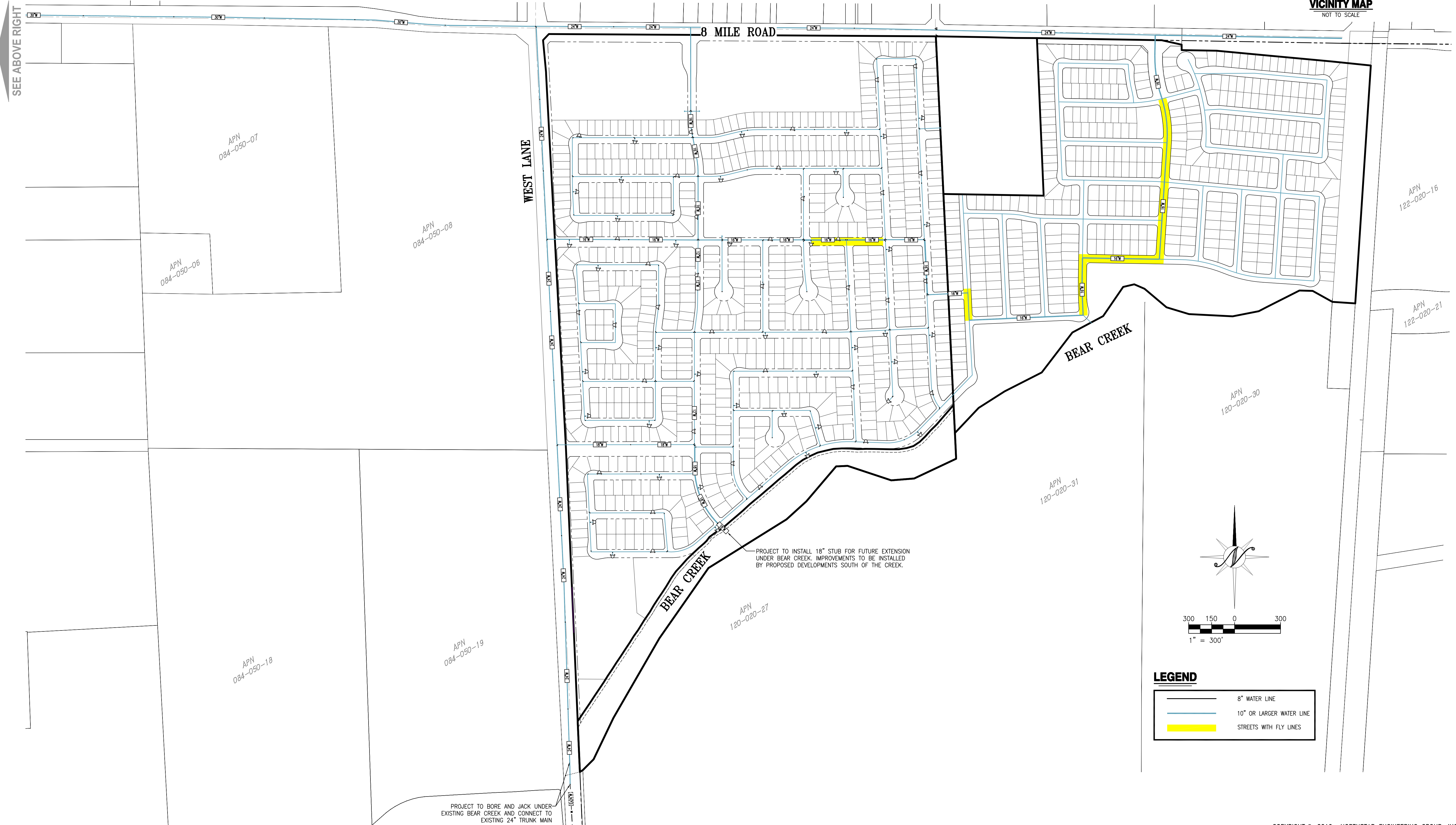
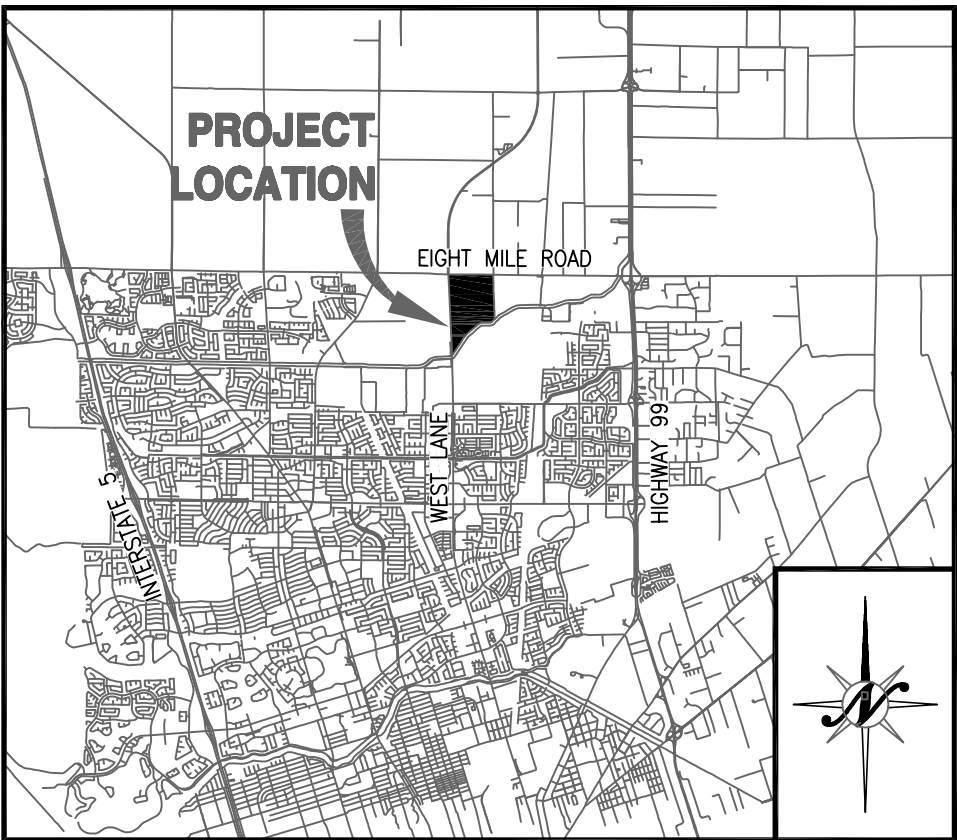
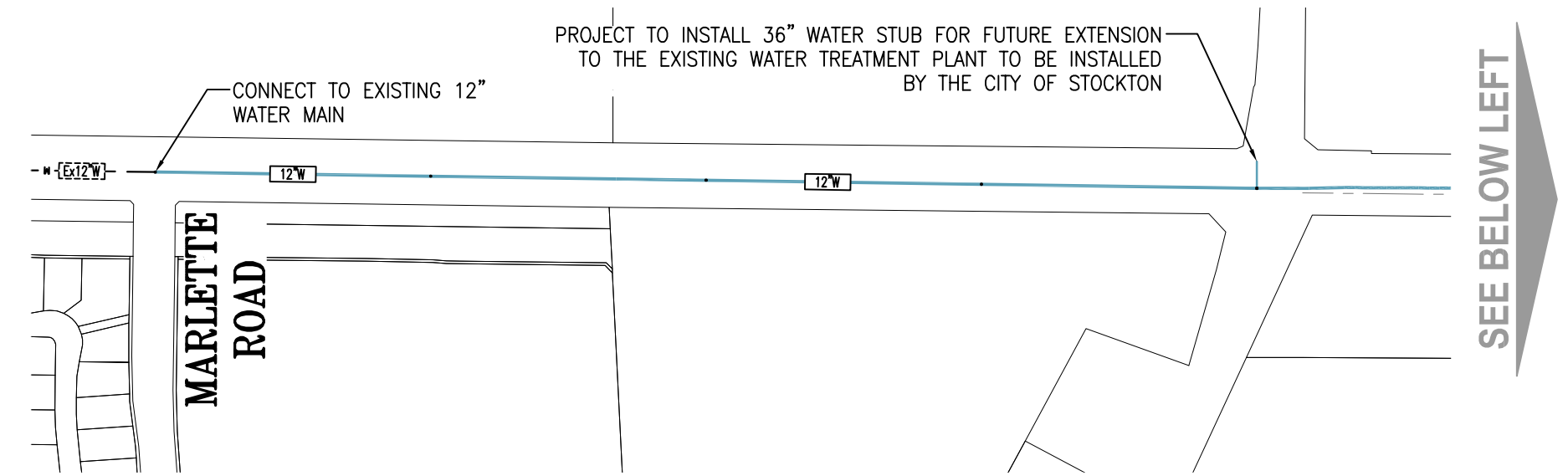
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PRELIMINARY MAJOR WATER INFRASTRUCTURE SYSTEM

TRA VIGNE

STOCKTON, CALIFORNIA



LEGEND

	8" WATER LINE
	10" OR LARGER WATER LINE
	STREETS WITH FLY LINES



NO.	REVISIONS	DATE	APPROVED

PRELIMINARY MAJOR WATER INFRASTRUCTURE SYSTEM

TRA VIGNE SUBDIVISION

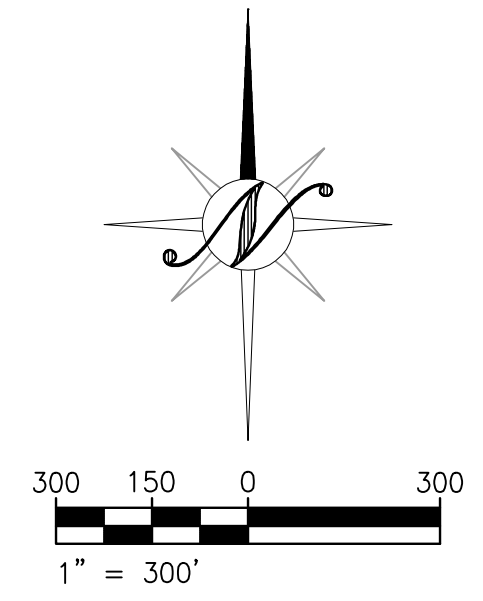
STOCKTON, CALIFORNIA





JOB #:	15-1532
DATE:	09/13/2019
SCALE:	AS SHOWN
DRAWN:	CV/PMH
DESIGN:	CV
CHK'D:	APD

SHEET NUMBER

W1.1



 BACKBONE TRUNK SEWER LINES
 8" DISTRIBUTION SEWER LINES
 STREETS WITH FLYLINES

[illegible]

IN A VIGNE SUBDIVISION

CALIFORNIA

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TE:	09/13/2019
ALE:	AS SHOWN
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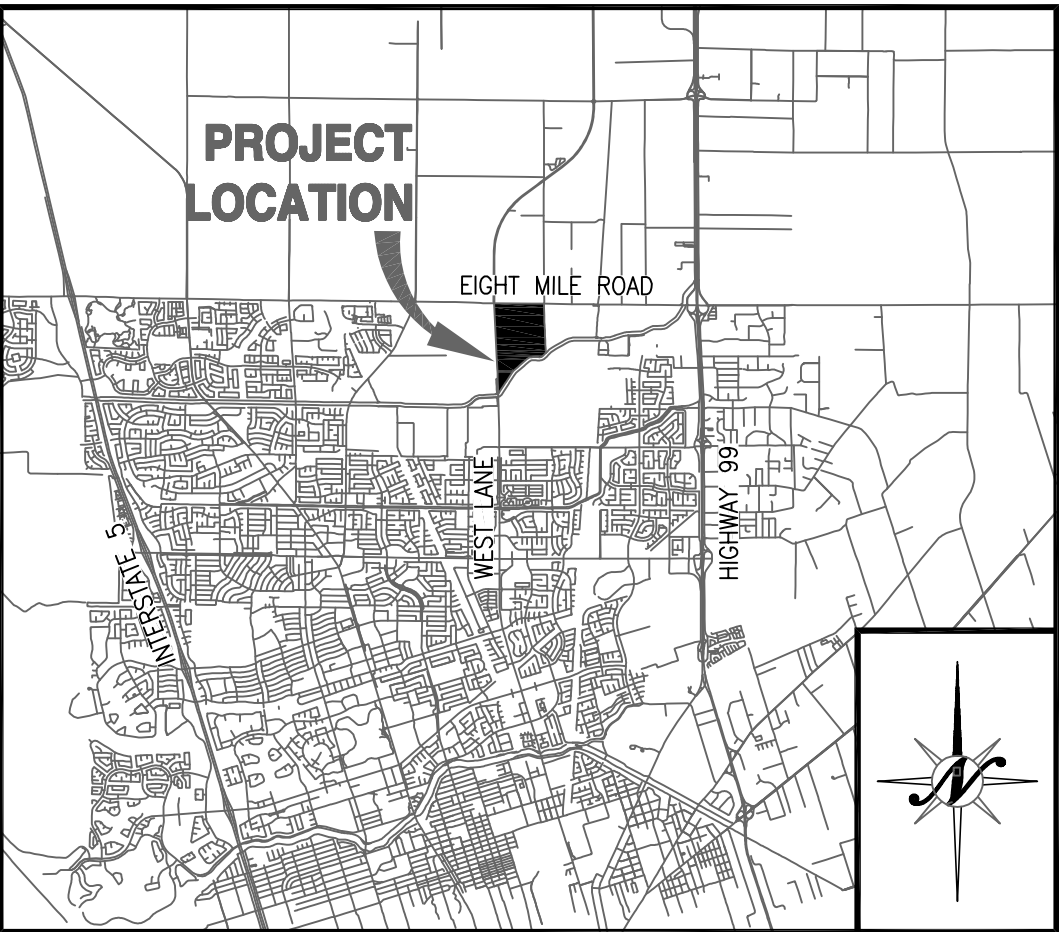
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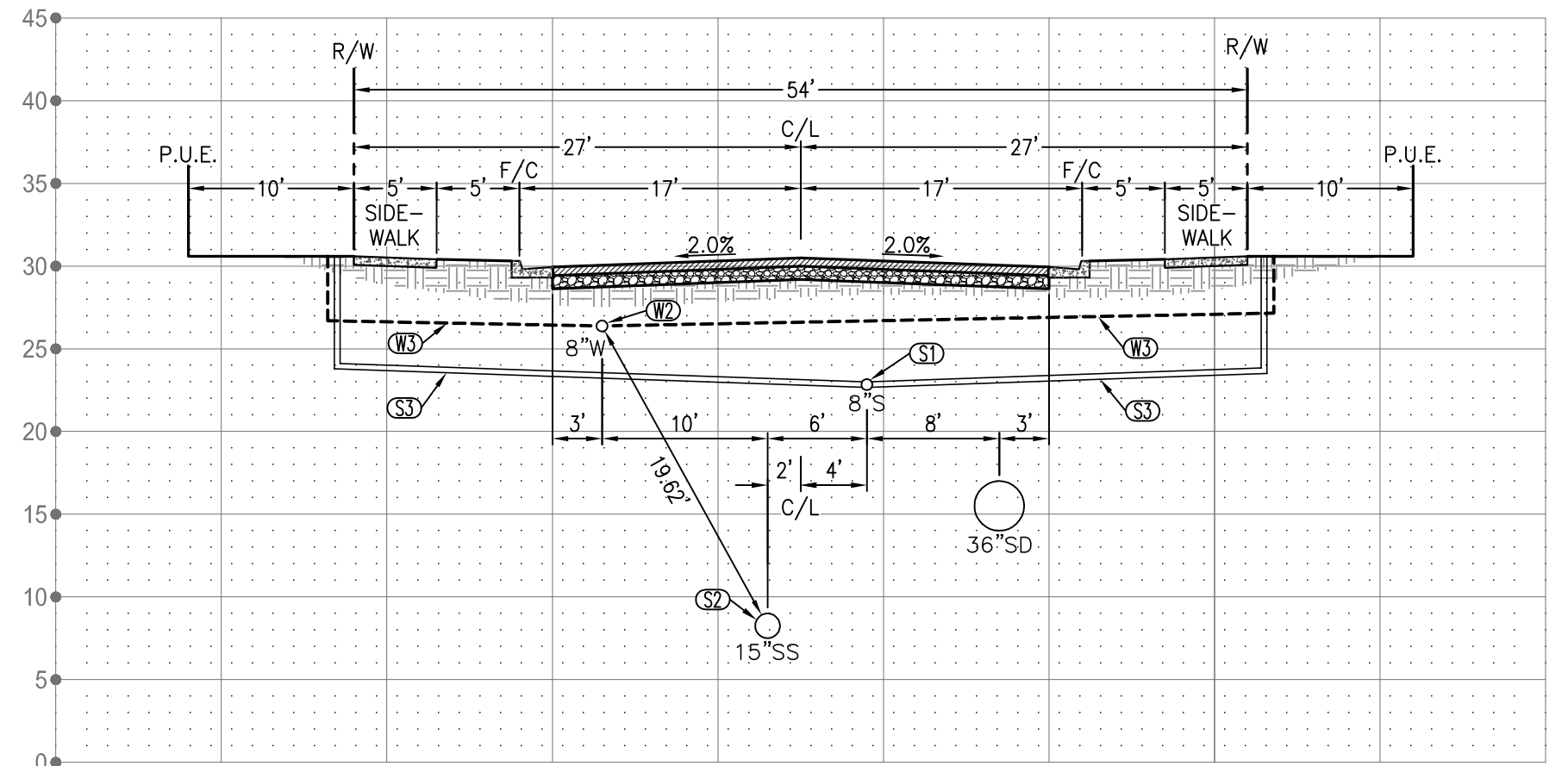
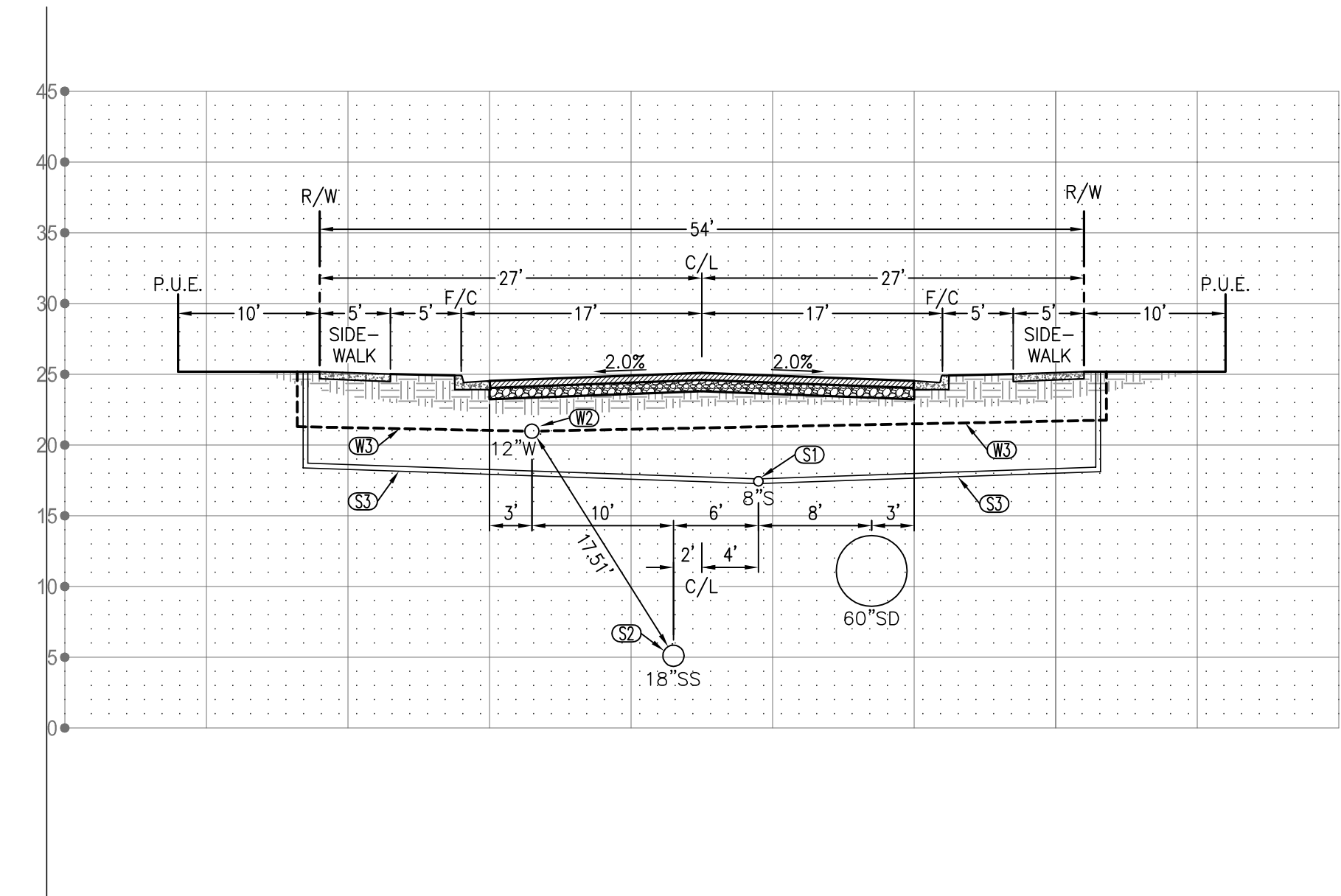
PRELIMINARY MAJOR SEWER INFRASTRUCTURE SYSTEM

TRA VIGNE

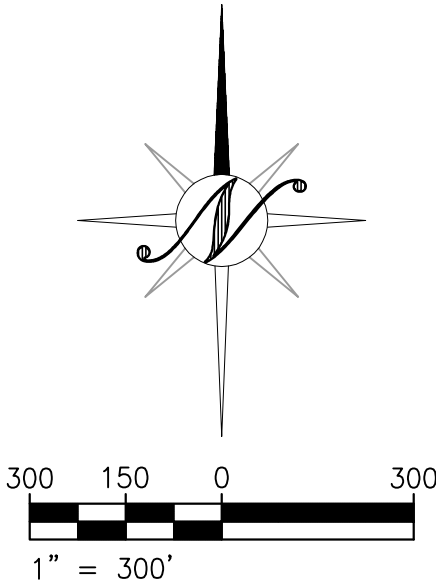
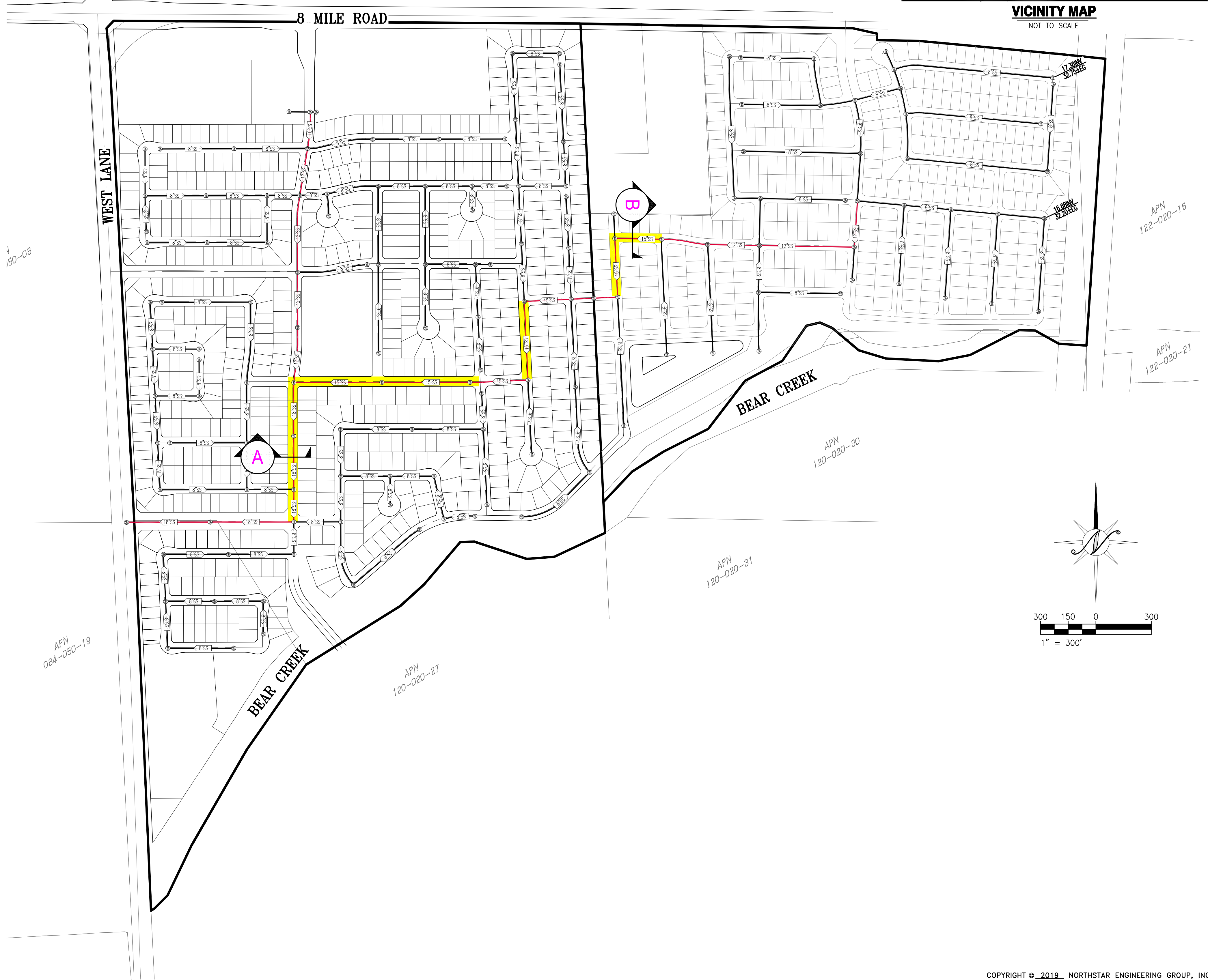
STOCKTON, CALIFORNIA



VICINITY MAP
NOT TO SCALE



- LEGEND**
- WATER SERVICE (FLY) LINE
 - WATER TRUNK LINE
 - WATER LATERAL
 - SEWER SERVICE (FLY) LINE
 - SEWER TRUNK LINE
 - SEWER LATERAL
 - STREETS WITH (FLY) LINES



NO.	DATE	APPROVED	REVISIONS	DESCRIPTIONS

PRELIMINARY MAJOR SEWER
INFRASTRUCTURE SYSTEM

TRA VIGNE SUBDIVISION

STOCKTON, CALIFORNIA



JOB #:	15-1532
DATE:	09/13/2019
SCALE:	AS SHOWN
DRAWN:	CV/PMH
DESIGN:	CV
CHK'D:	APD

SHEET
NUMBER

A1.2

EX 1.1
PROJECT REFERENCE MAP
FOR AREA OF BENEFIT ANALYSIS

FEBRUARY 27, 2019



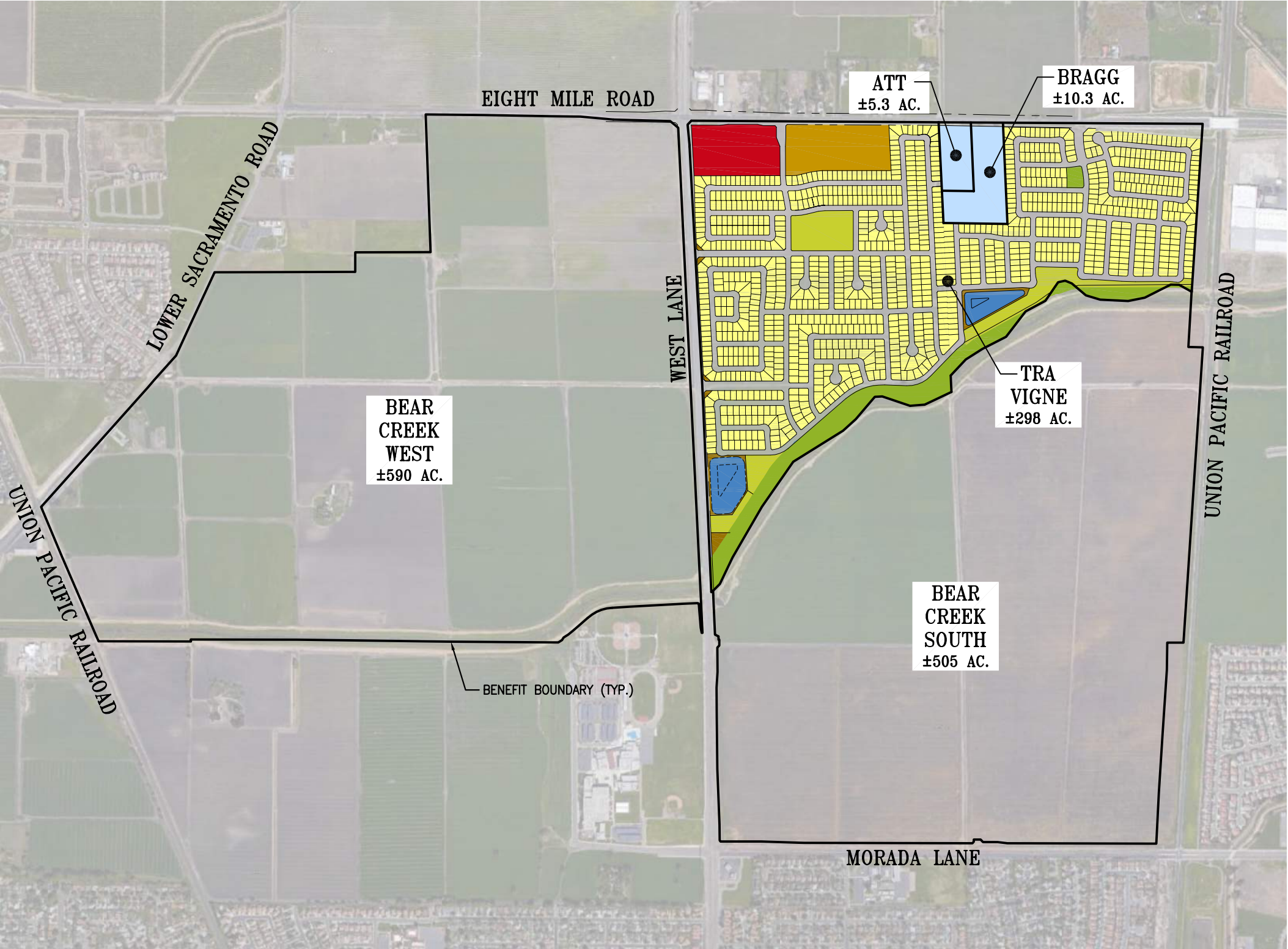
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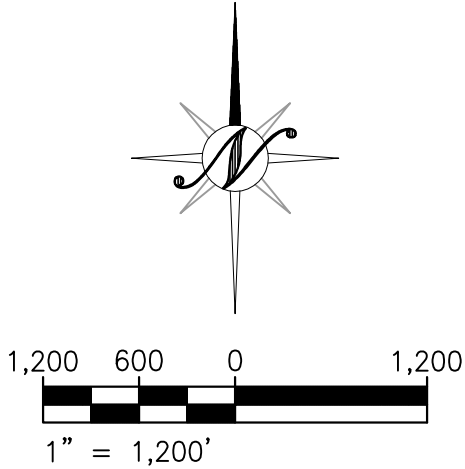
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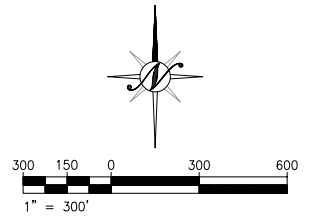


SHEET INDEX

- | | | |
|-----|--------|---|
| 1. | EX1.1 | AREA OF BENEFIT EXHIBIT WITH TABLE OF CONTENTS |
| 2. | EX2.1 | OFFSITE STREET INFRASTRUCTURE PFF & AOB EXHIBIT |
| 3. | EX2.2 | WEST LANE CROSS SECTION EXHIBIT |
| 4. | EX2.3 | WEST LANE GEOMETRICS EXHIBIT |
| 5. | EX2.4 | EIGHT MILE ROAD CROSS SECTION EXHIBIT |
| 6. | EX2.5 | EIGHT MILE ROAD GEOMETRICS EXHIBIT |
| 7. | EX2.6 | OFFSITE INTERSECTION INFRASTRUCTURE PFF & AOB EXHIBIT |
| 8. | EX3.1 | OFF-SITE AND ON-SITE INFRASTRUCTURE REIMBURSEMENT AND AOB EXHIBIT |
| 9. | EX4.1 | TRA VIGNE IN-TRACT PHASING PLAN |
| 10. | EX5.1 | ONSITE BACKBONE COST ESTIMATE EXHIBIT |
| 11. | EX6.1 | TRA VIGNE PHASE 1 INFRASTRUCTURE |
| 12. | EX6.2 | TRA VIGNE PHASE 2 INFRASTRUCTURE |
| 13. | EX6.3 | TRA VIGNE PHASE 3 INFRASTRUCTURE |
| 14. | EX6.4 | TRA VIGNE PHASE 4 INFRASTRUCTURE |
| 15. | EX6.5 | TRA VIGNE PHASE 5 INFRASTRUCTURE |
| 16. | EX6.6 | TRA VIGNE PHASE 6 INFRASTRUCTURE |
| 17. | EX6.7 | TRA VIGNE PHASE 7 INFRASTRUCTURE |
| 18. | EX6.8 | TRA VIGNE PHASE 8 INFRASTRUCTURE |
| 19. | EX6.9 | TRA VIGNE PHASE 9 INFRASTRUCTURE |
| 20. | EX6.10 | TRA VIGNE PHASE 10 INFRASTRUCTURE |
| 21. | EX6.11 | TRA VIGNE PHASE 11 INFRASTRUCTURE |
| 22. | EX6.12 | TRA VIGNE PHASE 12 INFRASTRUCTURE |
| 23. | EX7.1 | TRA VIGNE EAST PHASE 1 INFRASTRUCTURE |
| 24. | EX7.2 | TRA VIGNE EAST PHASE 2 INFRASTRUCTURE |
| 25. | EX7.3 | TRA VIGNE EAST PHASE 3 INFRASTRUCTURE |
| 26. | EX7.4 | TRA VIGNE EAST PHASE 4 INFRASTRUCTURE |



EX 4.1
LOT LAYOUT EXHIBIT
SCENARIO 43.a.2 PHASING
NO BRIDGE, NO SCHOOL
SEPTEMBER 13, 2019



LAND USE LEGEND-WEST SIDE

	COMMERCIAL	10.4 ACRES
	TRADITIONAL PARK AREA	7.9 ACRES
	NON-TRADITIONAL PARK AREA	13.75 ACRES
	TOTAL RL LOTS	747
	TOTAL HD UNITS	340

LAND USE LEGEND-EAST SIDE

	TRADITIONAL PARK AREA	5.57 ACRES
	NON-TRADITIONAL PARK AREA	6.61 ACRES
	TOTAL RL LOTS	418

LAND USE LEGEND-TOTAL

	COMMERCIAL	10.4 ACRES
	TRADITIONAL PARK AREA	13.5 ACRES
	NON-TRADITIONAL PARK AREA	20.36 ACRES
	TOTAL RL LOTS	1,165
	TOTAL HD UNITS	340





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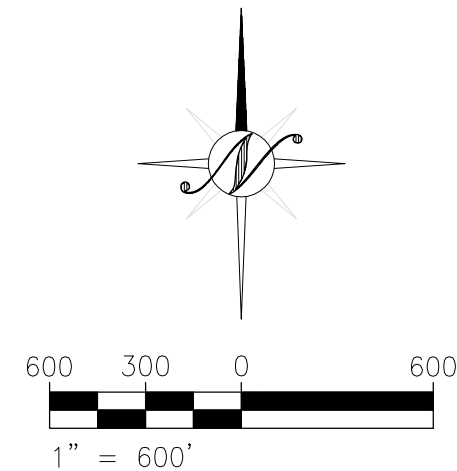
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EX 5.1 IN-TRACT BACKBONE IMPROVEMENTS

SEPTEMBER 13, 2019

LEGEND

- ROAD "A"– SEGMENTS (A1), (A2), AND (A3)
- ROAD "B"– SEGMENT (B)
- ROAD "C"– SEGMENTS (C1), (C2), (C3), (C4), AND (C5)
- ROADS "AA", "BB", AND "FF"– SEGMENTS (BB1), (BB2), (BB3), (AA), AND (FF)
- ROAD "E"– SEGMENT (E)–EAST OF ROAD "C"
- ROAD "T"– SEGMENT (T)
- IN-TRACT PARKS, LANDSCAPING, OPEN SPACE, AND RECREATIONAL IMPROVEMENTS– WEST PARK A
- IN-TRACT PARKS, LANDSCAPING, OPEN SPACE, AND RECREATIONAL IMPROVEMENTS– WEST PARK B
- IN-TRACT PARKS, LANDSCAPING, OPEN SPACE, AND RECREATIONAL IMPROVEMENTS– EAST
- IN-TRACT PARKS, LANDSCAPING, OPEN SPACE, AND RECREATIONAL IMPROVEMENTS– BEAR CREEK OPEN SPACE
- TRA VIGNE EAST (E1) AND (E2)





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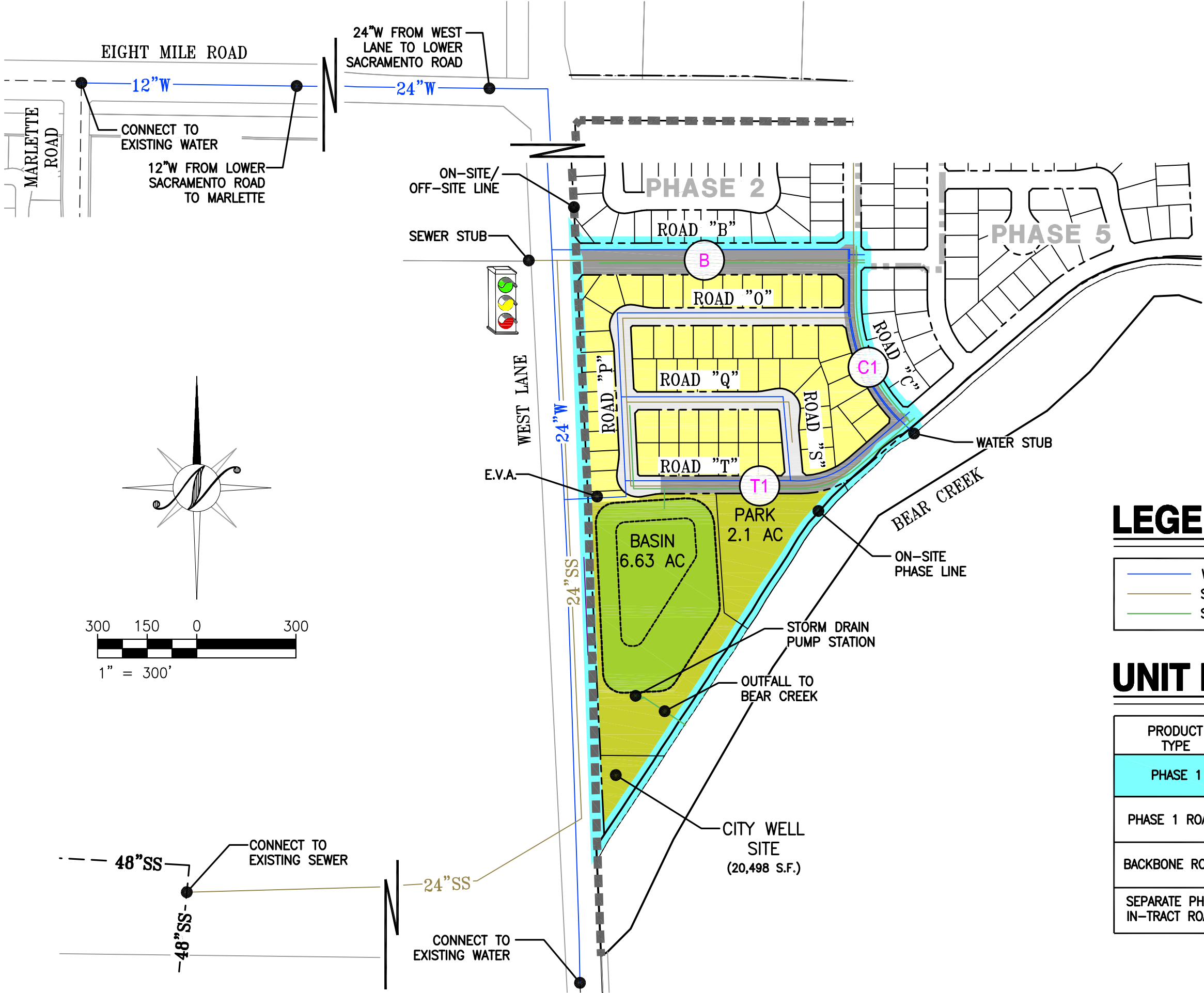
EX 6.1

TRA VIGNE




PHASE 1

INFRASTRUCTURE

FEBRUARY 27, 2019



LEGEND

	WATER MAIN
	SEWER MAIN
	STORM MAIN

UNIT DISTRIBUTION

PRODUCT TYPE	5,000 SF	5,500 SF	6,000 SF	TOTAL
PHASE 1	-	-	62	62
PHASE 1 ROADS				
BACKBONE ROADS	<div>T1</div> SEE EXHIBIT 5.1			
SEPARATE PHASE IN-TRACT ROADS				



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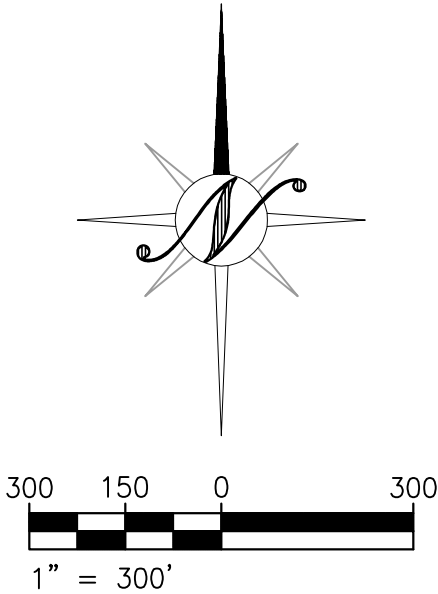
EX 6.2

TRA VIGNE




PHASE 2

INFRASTRUCTURE

FEBRUARY 27, 2019



LEGEND

	WATER MAIN
	SEWER MAIN
	STORM MAIN

UNIT DISTRIBUTION

PRODUCT TYPE	5,000 SF	5,500 SF	6,000 SF	TOTAL
PHASE 2	66	-	-	66
PHASE 2 ROADS				
BACKBONE ROADS	<div>T1</div> SEE EXHIBIT 5.1			
SEPARATE PHASE IN-TRACT ROADS				



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EX 6.3

TRA VIGNE




PHASE 3

INFRASTRUCTURE

FEBRUARY 27, 2019



LEGEND

	WATER MAIN
	SEWER MAIN
	STORM MAIN

UNIT DISTRIBUTION

PRODUCT TYPE	5,000 SF	5,500 SF	6,000 SF	TOTAL
PHASE 3	-	76	-	76
PHASE 3 ROADS				
BACKBONE ROADS	<div>T1</div> SEE EXHIBIT 5.1			
SEPARATE PHASE IN-TRACT ROADS	SEE EXHIBIT 6.2			



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EX 6.4




TRA VIGNE

PHASE 4

INFRASTRUCTURE

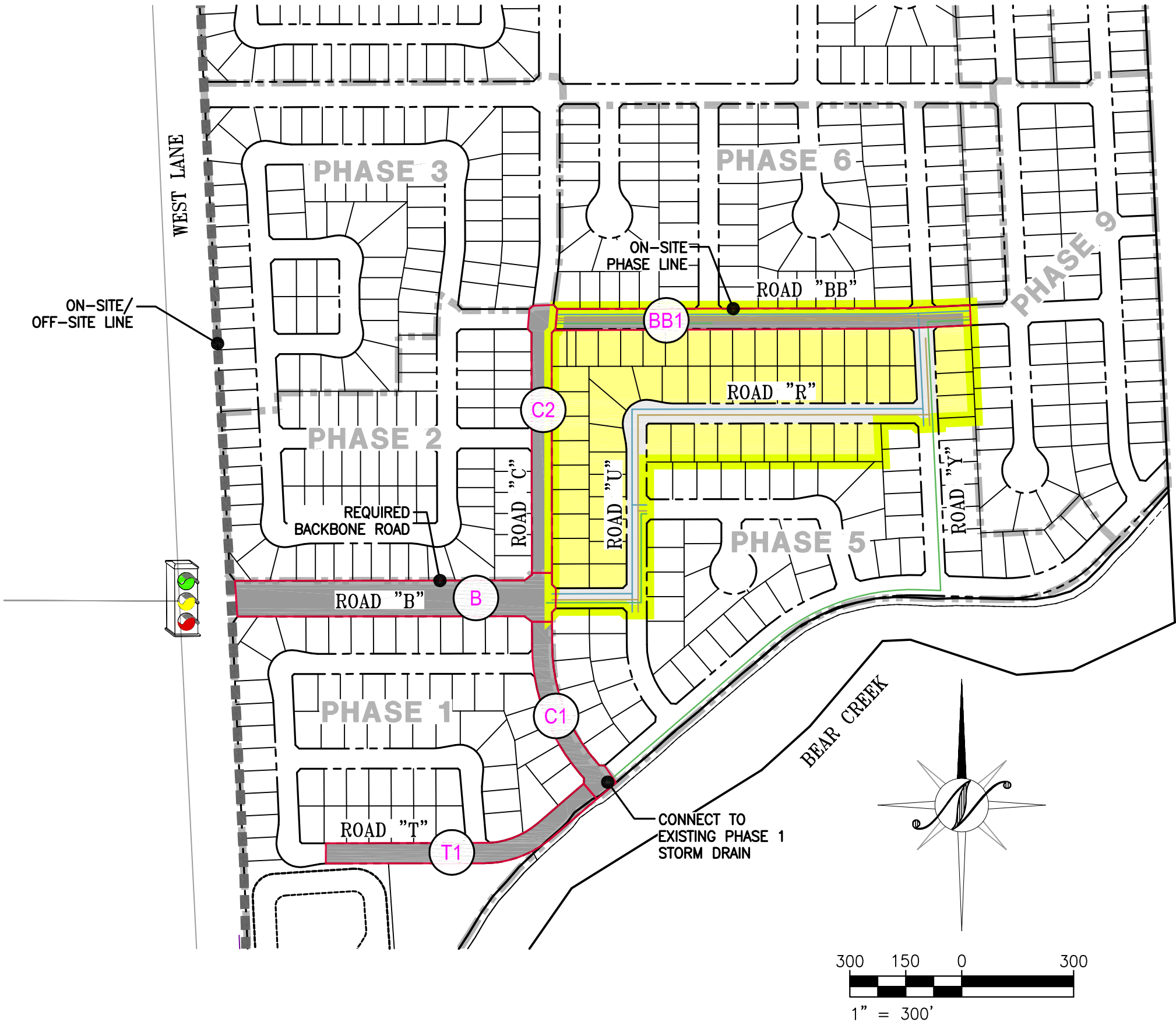
FEBRUARY 27, 2019

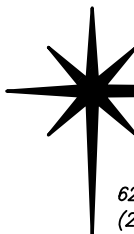
LEGEND

	WATER MAIN
	SEWER MAIN
	STORM MAIN

UNIT DISTRIBUTION

PRODUCT TYPE	5,000 SF	5,500 SF	6,000 SF	TOTAL
PHASE 4	—	—	60	60
PHASE 4 ROADS				
BACKBONE ROADS	<div>T1</div> SEE EXHIBIT 5.1			
SEPARATE PHASE IN-TRACT ROADS				





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EX 6.5 TRA VIGNE PHASE 5 INFRASTRUCTURE

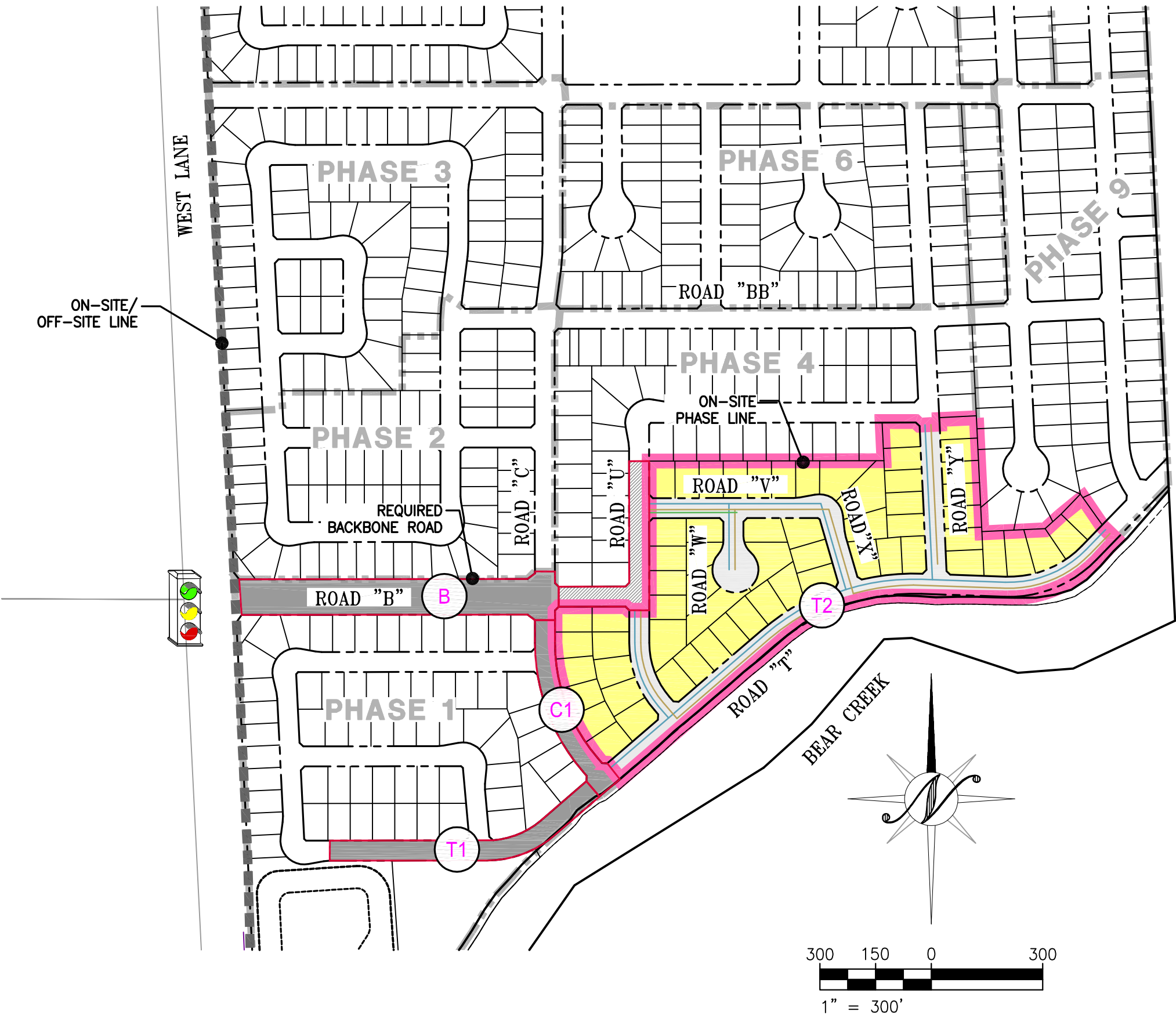
FEBRUARY 27, 2019

LEGEND

- WATER MAIN
- SEWER MAIN
- STORM MAIN

UNIT DISTRIBUTION

PRODUCT TYPE	5,000 SF	5,500 SF	6,000 SF	TOTAL
PHASE 5	—	—	57	57
PHASE 5 ROADS				
BACKBONE ROADS	T1 SEE EXHIBIT 5.1			
SEPARATE PHASE IN-TRACT ROADS	SEE EXHIBIT 6.4			





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EX 6.6




TRA VIGNE

PHASE 6

INFRASTRUCTURE

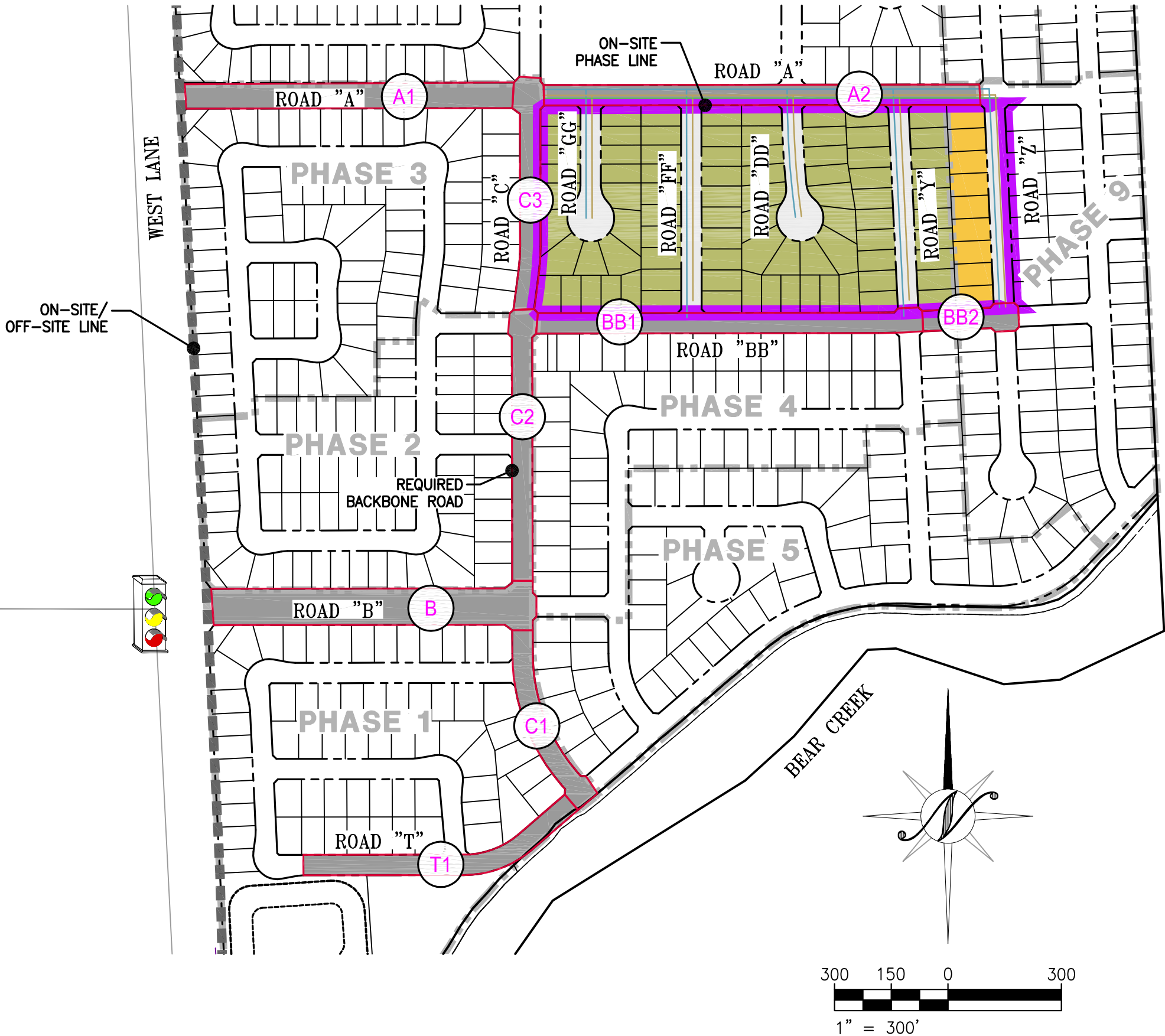
FEBRUARY 27, 2019

LEGEND

	WATER MAIN
	SEWER MAIN
	STORM MAIN

UNIT DISTRIBUTION

PRODUCT TYPE	5,000 SF	5,500 SF	6,000 SF	TOTAL
PHASE 6	82	—	—	82
PHASE 6a	—	9	—	9
PHASE 6 ROADS				
BACKBONE ROADS	<div>T1</div> SEE EXHIBIT 5.1			
SEPARATE PHASE IN-TRACT ROADS				





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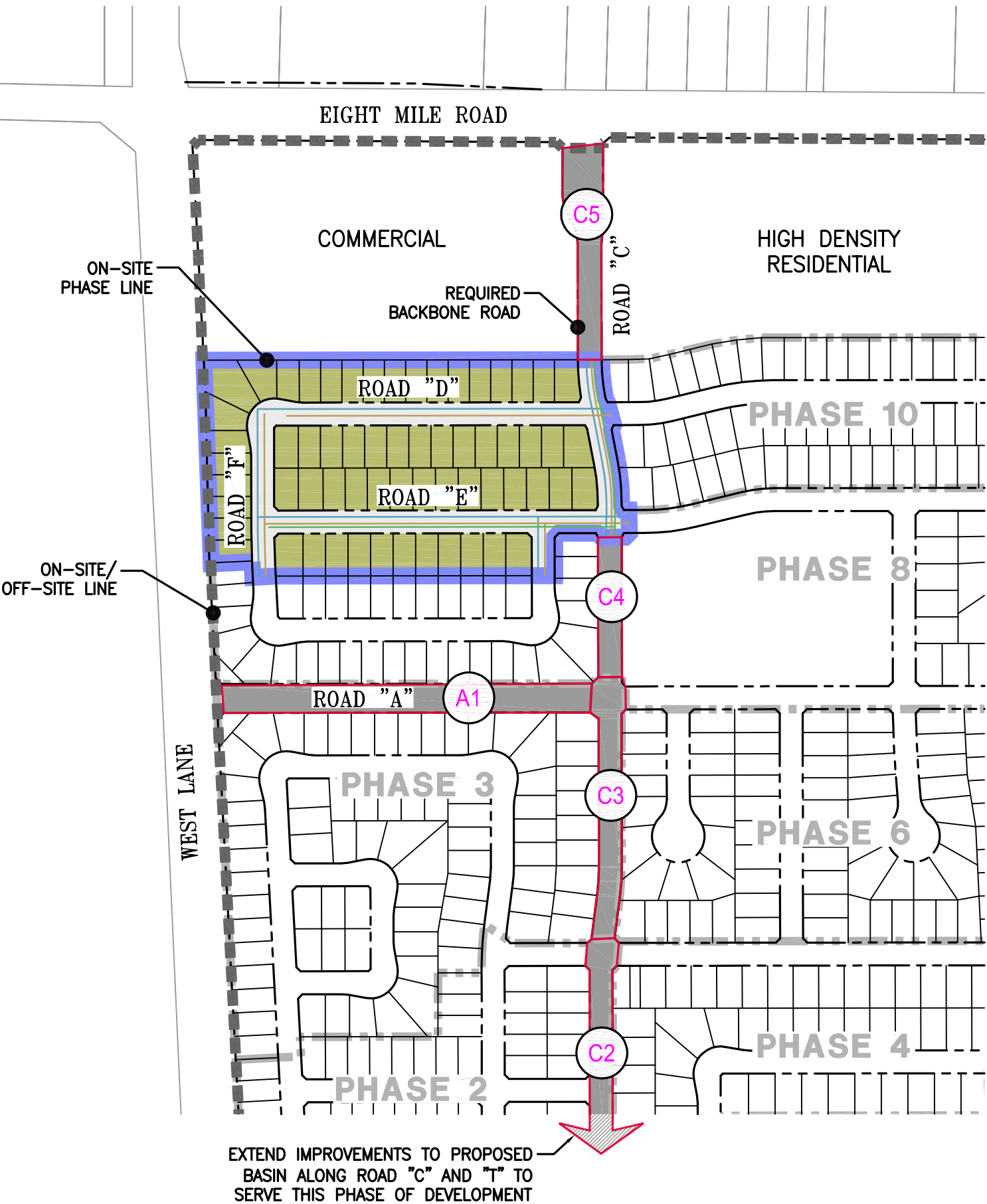
EX 6.7

TRA VIGNE

PHASE 7

INFRASTRUCTURE

FEBRUARY 27, 2019

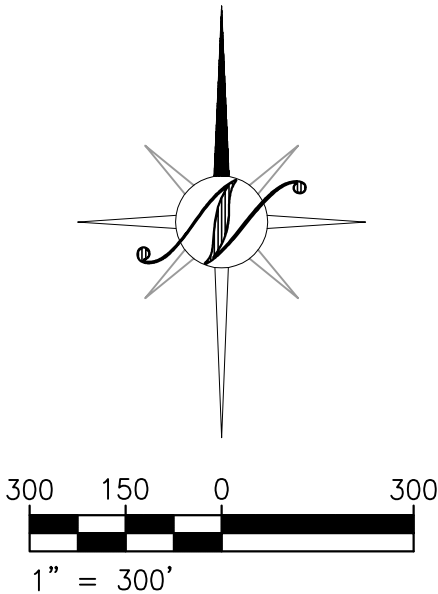


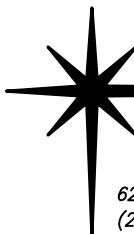
LEGEND

	WATER MAIN
	SEWER MAIN
	STORM MAIN

UNIT DISTRIBUTION

PRODUCT TYPE	5,000 SF	5,500 SF	6,000 SF	TOTAL
PHASE 7	62	-	-	62
PHASE 7 ROADS				
BACKBONE ROADS	<div>T1</div> SEE EXHIBIT 5.1			
SEPARATE PHASE IN-TRACT ROADS				





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EX 6.8 TRA VIGNE PHASE 8 INFRASTRUCTURE

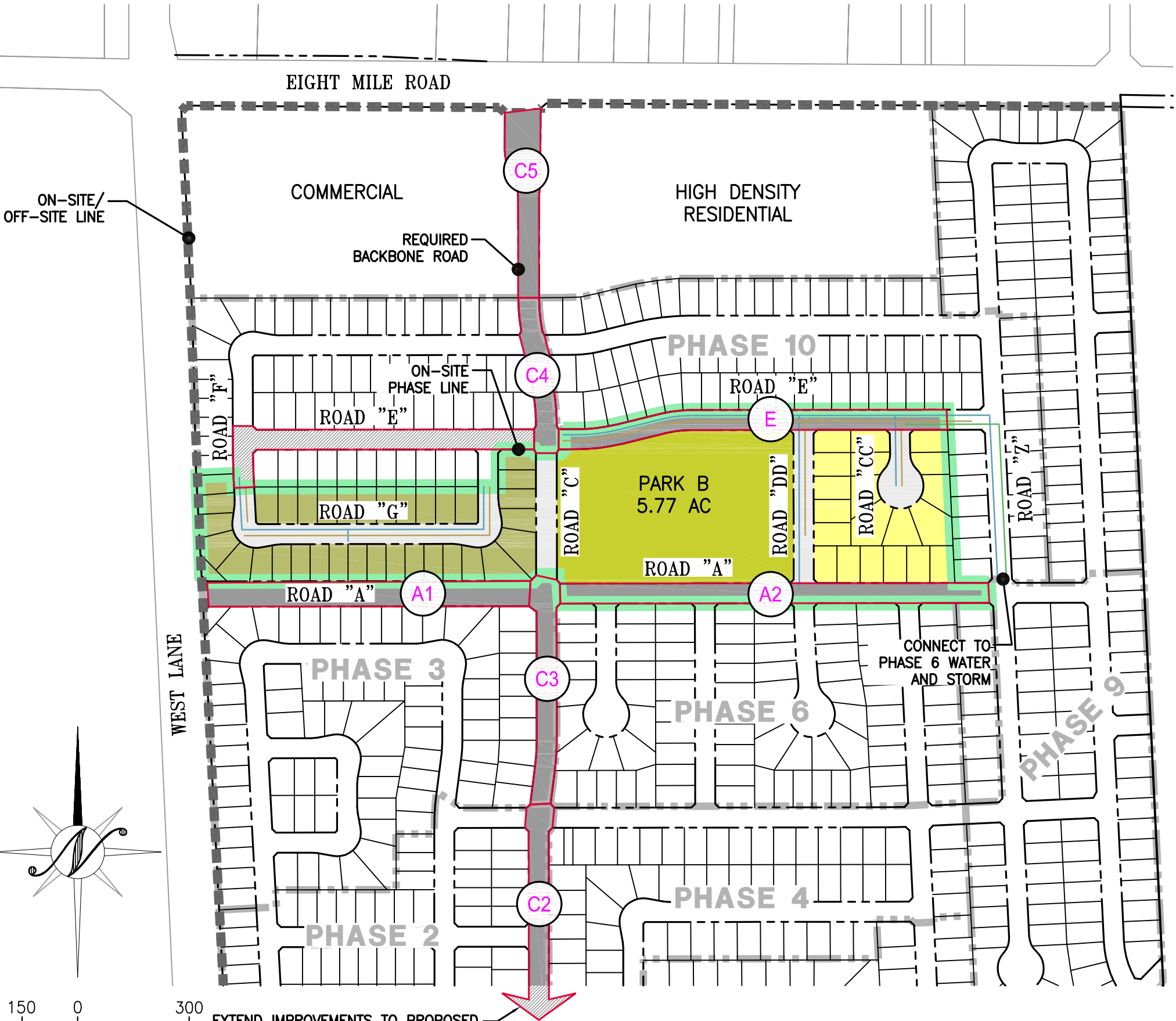
FEBRUARY 27, 2019

LEGEND

- WATER MAIN
- SEWER MAIN
- STORM MAIN

UNIT DISTRIBUTION

PRODUCT TYPE	5,000 SF	5,500 SF	6,000 SF	TOTAL
PHASE 8	34	—	20	54
PHASE 8 ROADS				
BACKBONE ROADS	T1 SEE EXHIBIT 5.1			
SEPARATE PHASE IN-TRACT ROADS	SEE EXHIBIT 6.7			





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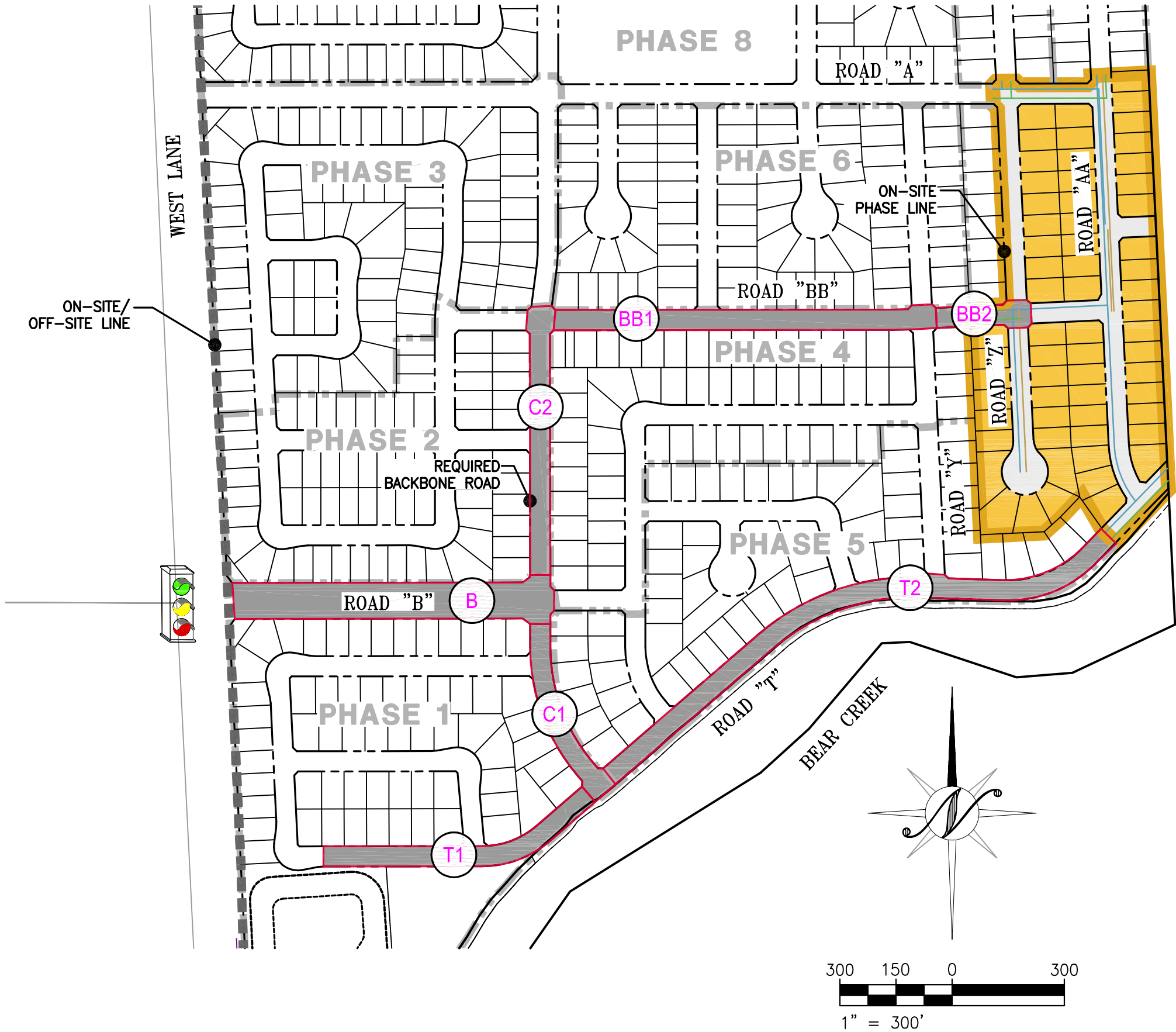
EX 6.9

TRA VIGNE




PHASE 9

INFRASTRUCTURE


FEBRUARY 27, 2019



LEGEND

	WATER MAIN
	SEWER MAIN
	STORM MAIN

UNIT DISTRIBUTION

PRODUCT TYPE	5,000 SF	5,500 SF	6,000 SF	TOTAL
PHASE 9	—	62	—	62
PHASE 9 ROADS				
BACKBONE ROADS	 SEE EXHIBIT 5.1			
SEPARATE PHASE IN-TRACT ROADS				



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EX 6.10




TRA VIGNE

PHASE 10

INFRASTRUCTURE

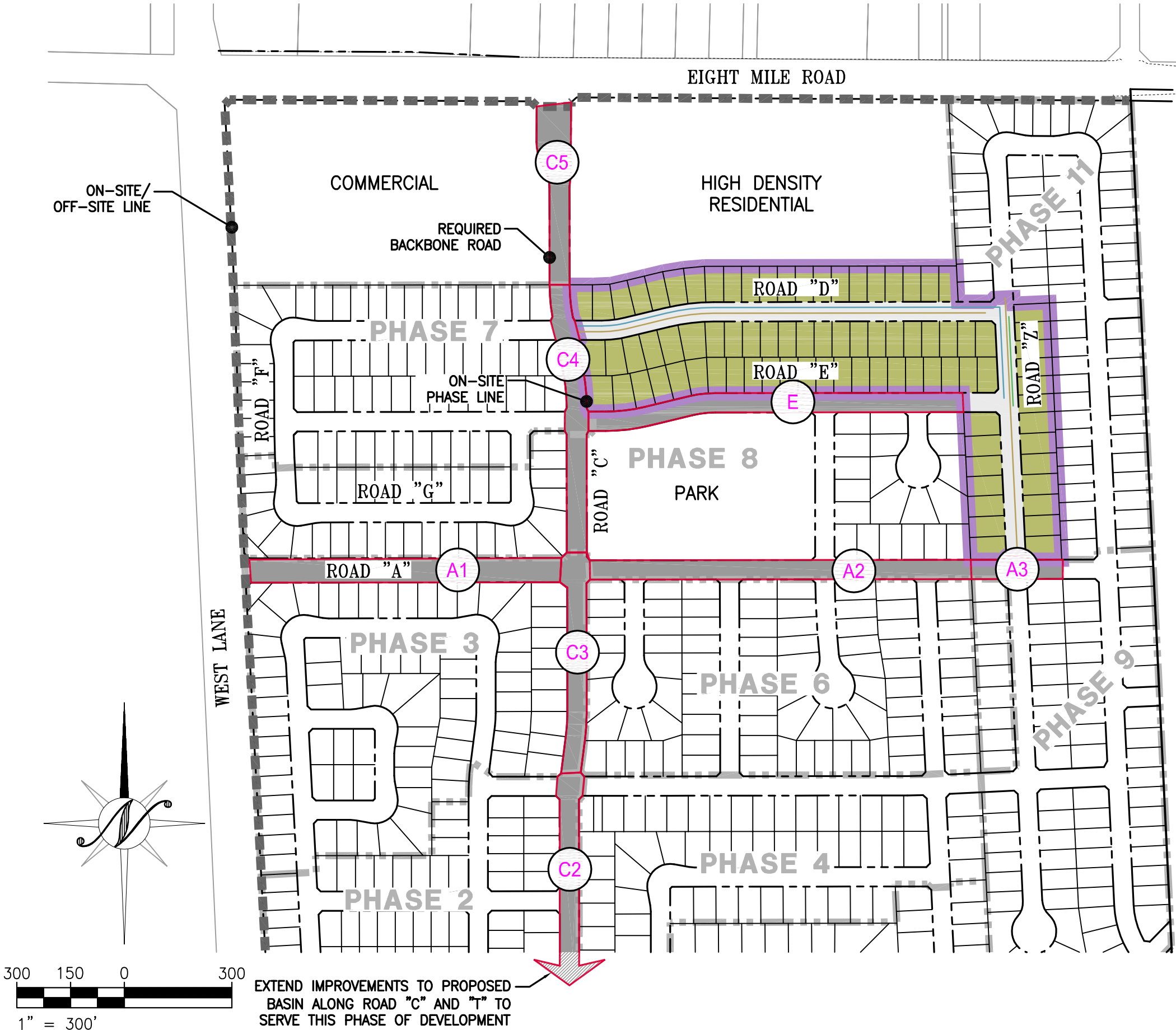
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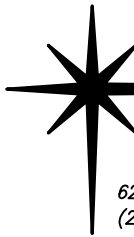
LEGEND

	WATER MAIN
	SEWER MAIN
	STORM MAIN

UNIT DISTRIBUTION

PRODUCT TYPE	5,000 SF	5,500 SF	6,000 SF	TOTAL
PHASE 10	85	—	—	85
PHASE 10 ROADS				
BACKBONE ROADS	<div>T1</div> SEE EXHIBIT 5.1			
SEPARATE PHASE IN-TRACT ROADS				





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EX 6.11 TRA VIGNE PHASE 11 INFRASTRUCTURE

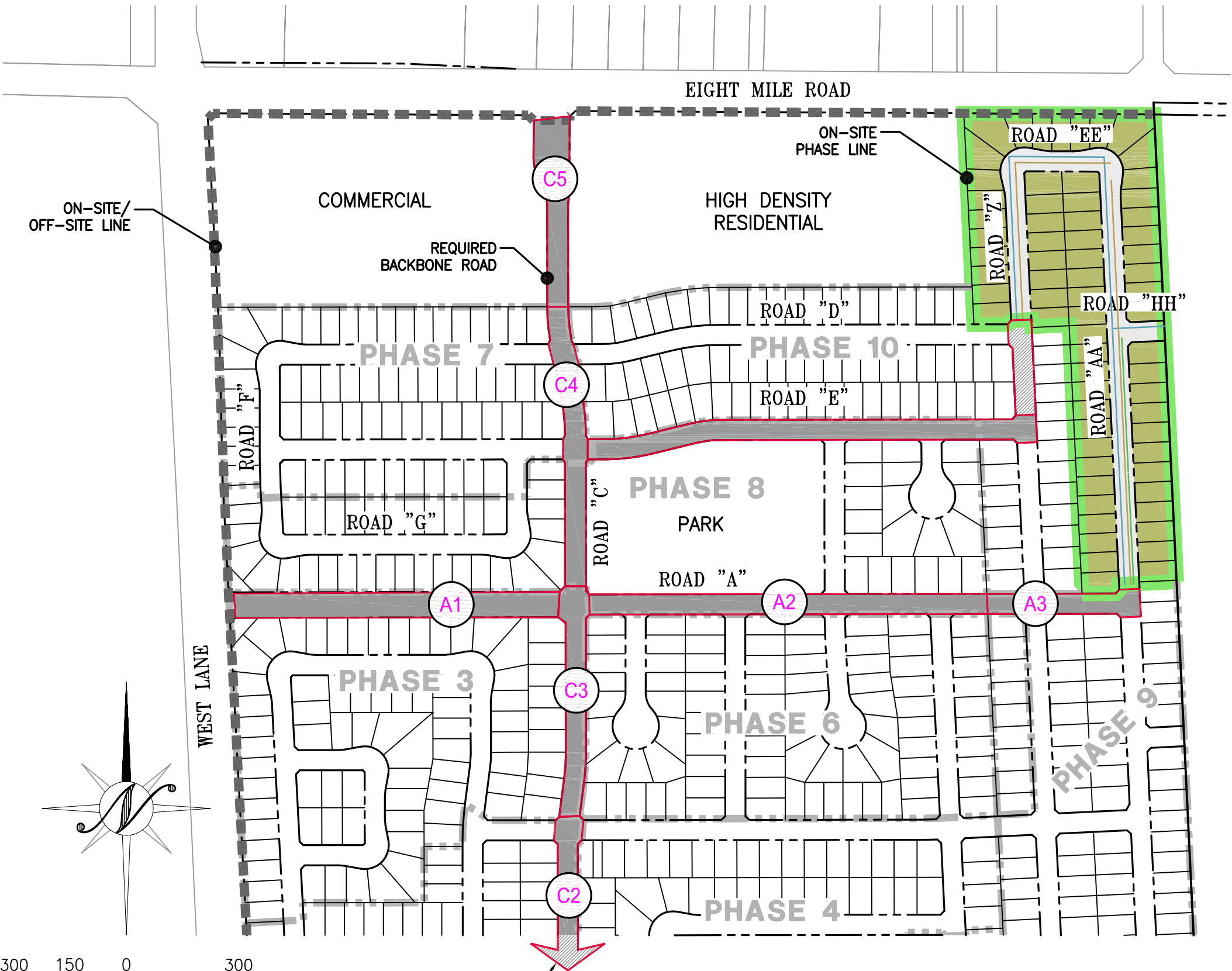
FEBRUARY 27, 2019

LEGEND

- WATER MAIN
- SEWER MAIN
- STORM MAIN

UNIT DISTRIBUTION

PRODUCT TYPE	5,000 SF	5,500 SF	6,000 SF	TOTAL
PHASE 11	67	-	-	67
PHASE 11 ROADS				
BACKBONE ROADS	T1 SEE EXHIBIT 5.1			
SEPARATE PHASE IN-TRACT ROADS	SEE EXHIBIT 6.10			





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EX 6.12

TRA VIGNE

PHASE 12

INFRASTRUCTURE

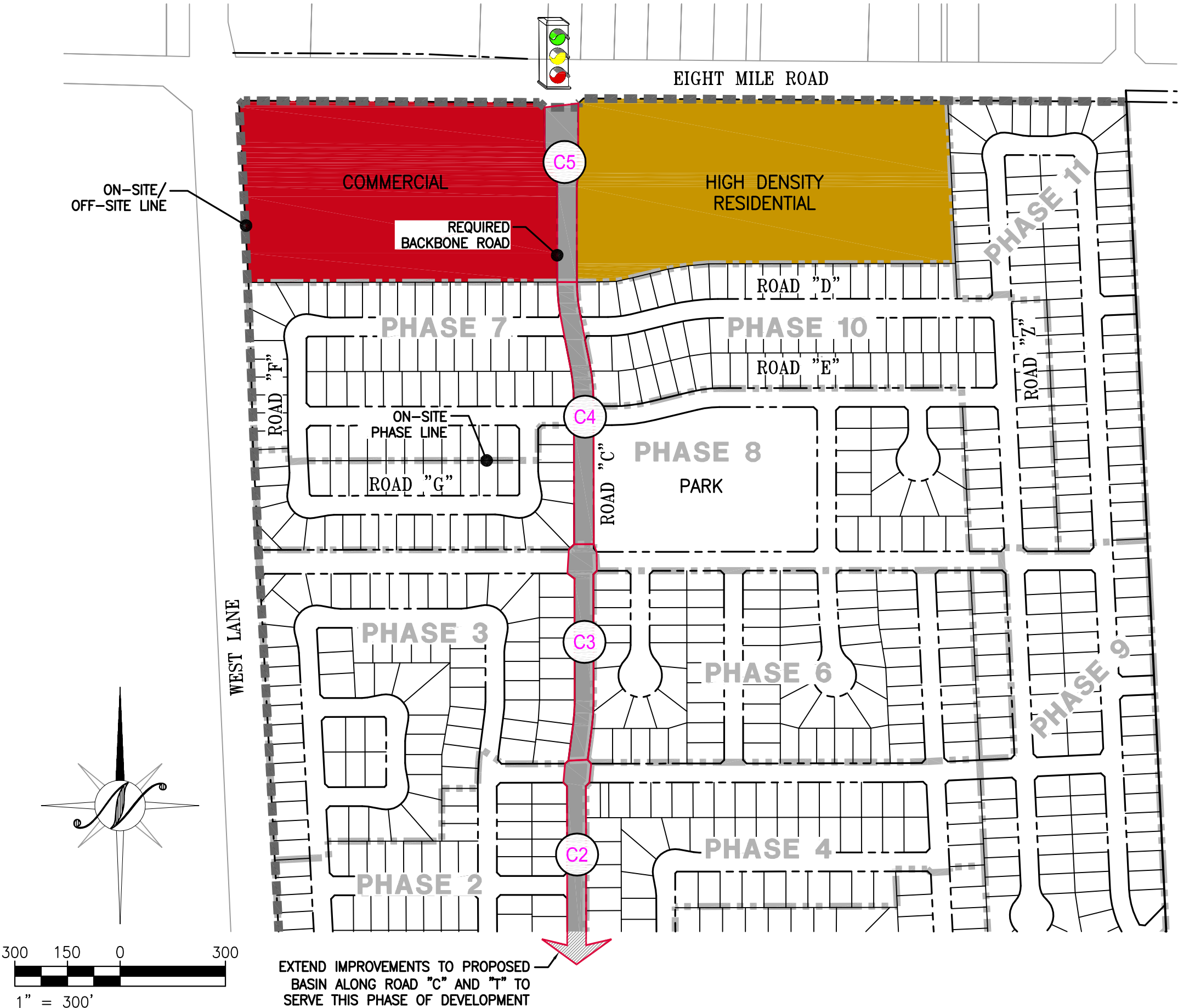
FEBRUARY 27, 2019

NOTE

IF MULTI-FAMILY/ COMMERCIAL SITES ARE DEVELOPED FIRST, NECESSARY EIGHT MILE ROAD AND WEST LANE ROADWAY AND INFRASTRUCTURE IMPROVEMENTS ARE REQUIRED.

LAND DISTRIBUTION

PRODUCT TYPE	COMMERCIAL (CM)	MULTI-FAMILY (MF)
UNIT COUNT		340
BACKBONE ROADS	T1	SEE EXHIBIT 5.1
SEPARATE PHASE IN-TRACT ROADS		





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EX 7.1




TRA VIGNE EAST

PHASE 1

INFRASTRUCTURE

FEBRUARY 27, 2019

LEGEND

	WATER MAIN
	SEWER MAIN
	STORM MAIN

UNIT DISTRIBUTION

PRODUCT TYPE	5,000 SF	5,500 SF	6,000 SF	TOTAL
PHASE 1	109	—	—	109
PHASE 1 ROADS				
BACKBONE ROADS	<div>E1</div> SEE EXHIBIT 5.1			
SEPARATE PHASE IN-TRACT ROADS				





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EX 7.2




TRA VIGNE EAST

PHASE 2

INFRASTRUCTURE

FEBRUARY 27, 2019

LEGEND

	WATER MAIN
	SEWER MAIN
	STORM MAIN

UNIT DISTRIBUTION

PRODUCT TYPE	5,000 SF	5,500 SF	6,000 SF	TOTAL
PHASE 2	—	102	—	102
PHASE 2 ROADS				
BACKBONE ROADS	<div>E1</div> SEE EXHIBIT 5.1			
SEPARATE PHASE IN-TRACT ROADS				





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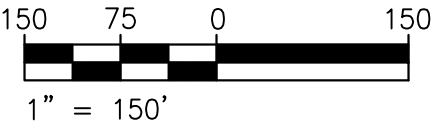
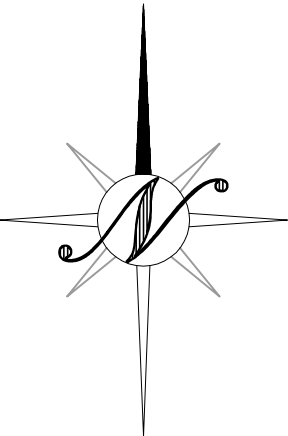
EX 7.3

TRA VIGNE EAST




PHASE 3

INFRASTRUCTURE

FEBRUARY 27, 2019



LEGEND

	WATER MAIN
	SEWER MAIN
	STORM MAIN

UNIT DISTRIBUTION

PRODUCT TYPE	5,000 SF	5,500 SF	6,000 SF	TOTAL
PHASE 3	—	—	93	93
PHASE 3 ROADS				
BACKBONE ROADS	<div>E1</div> SEE EXHIBIT 5.1			
SEPARATE PHASE IN-TRACT ROADS				





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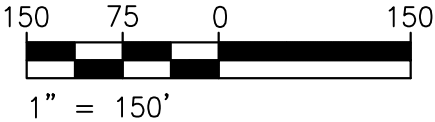
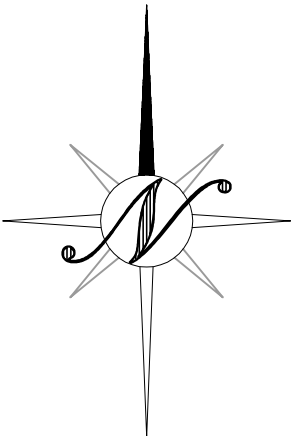
EX 7.4

TRA VIGNE EAST




PHASE 4

INFRASTRUCTURE

FEBRUARY 27, 2019



LEGEND

	WATER MAIN
	SEWER MAIN
	STORM MAIN

UNIT DISTRIBUTION

PRODUCT TYPE	5,000 SF	5,500 SF	6,000 SF	TOTAL
PHASE 4	114	—	—	114
PHASE 4 ROADS				
BACKBONE ROADS	<div>E1</div> SEE EXHIBIT 5.1			
SEPARATE PHASE IN-TRACT ROADS				

