

Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Credit Phase 1 Ferrari Ranch Road 2 (V1R3)

Description Unit Quantity **Unit Price Amount Backbone Roadway System** Mobilization JOB \$50,000.00 \$0 0 1 \$7.00 \$0 2 Excavation CY 0 3 4" AB (Under Curb & Gutter and Sidewalk) SF 0 \$1.80 \$0 4 16" AB (assumes a Traffic Index of 9) SF 28720 \$2.25 \$64,600 5 5" AC (assumes a Traffic Index of 9) SF 28720 \$2.70 \$77,500 6 18" AB (assumes a Traffic Index of 11) SF \$2.50 \$0 7 7" AC (assumes a Traffic Index of 11) SF \$4.00 \$0 8 Decomposed Granite Trail (4' width, 4" thick) SF 0 \$1.80 \$0 4" AB Shoulder (2' width) SF \$1.20 \$0 9 0 10 Subgrade Street Prep (Street) SF 28720 \$7,200 \$0.25 Subgrade Prep (Curb & Gutter) 11 SF \$0.30 \$0 0 12 Subgrade Prep (AB Shoulder) SF 0 \$0.30 \$0 Subgrade Prep (DG Trail) 0 \$0.30 \$0 13 SF Signing and Striping (36' ROW)* LF 2470 \$36,900 14 \$15.00 15 Traffic Signals EΑ \$320,000.00 \$0 16 Future Traffic Signal EΑ 0 \$275,000.00 \$0 0 \$0 17 Signalized Intersection EΑ \$900,000.00 SF 0 \$0 18 Sidewalk, Concrete \$6.00 Roundabout 19 EΑ 0 \$100,000.00 \$0 \$0 20 Joint Trench LF 0 \$115.00 21 Underground Existing Utilities in Joint Trench LF 0 \$360.00 \$0 LF \$0 0 \$12.00 22 Type 5 Curb Median 23 SF 0 \$4.50 \$0 Median Landscaping 24 Frontage Landscaping SF 0 \$4.50 \$0 25 Signal Conduit and Wiring EΑ 0 \$75,000.00 \$0 LF \$0 0 26 Curb and Gutter \$27.00 EΑ \$0 27 AC Driveway (Per Approx. 12' wide) 0 \$960.00 28 Irrigation Sleeves LF 0 \$15.00 \$0 EΑ 0 \$0 29 Street Lights (every 150 LF) \$6,000.00 Sawcut and Pavement Removal Median 30 LF 0 \$20.00 \$0 LF \$0 31 0 Sawcut and Pavement Removal \$3.00 32 Reconstruct Ditches LF 0 \$3.00 \$0 LF \$0 33 **Erosion Control** 0 \$25.00 34 ROW Acquisition (Ferrari Ranch Road) ** LS 0 \$100,000.00 \$0 \$0 35 ROW Acquisition (Oak Tree Lane) ** LS 0 \$500,000.00 ROW Acquisition (Oak Tree Lane - South) *** LS \$0 36 0 \$50,000.00 \$0 37 Grind and Remove Pavement SF 0 \$3.00 38 SF 0 \$0 Grind and Overlay \$2.00 FΑ 0 \$0 39 Retrofit Utilities \$3,000.00 \$0 40 Dewatering - Ferrari Ranch Road FΑ 0 \$25,000.00 41 Dewatering - Oak Tree near So. Ingram Slough EΑ 0 \$50,000.00 \$0 42 Dewatering - Oak Tree near new lake EΑ \$75,000.00 \$0 LF 43 Golf Course Fence and Netting 0 \$133.00 \$0 44 Split Rail Fencing LF 0 \$0 \$45.00 45 FRR Supplemental Topo + Aerial Topo JOB 0 \$12,500.00 \$0 \$0 46 Remediation Trench and Monitoring JOB 0 \$1,000,000.00 47 Traffic Control JOB 0 \$100,000.00 \$0 \$0 Traffic Control Oak Tree Lane JOB 48 0 \$250,000.00 Bridge (at Auburn Ravine on Oak Tree Lane) \$0 49 EΑ \$5,500,000.00 Construction Total: \$186,200

Contingency Based upon Hard Costs (15%): \$27,900 Soft Costs Contingency (17%): \$31,700

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TOTAL CIRCULATION \$245,800

^{*} Cost per linear foot of roadway.

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs	
Village 1 - Backbone Roadway System	
DEE Cradit Phace 1 McRoan Park Drive 1 (V	1P2

Item #	Description	Unit	Quantity	Unit Price	Amount
Backb	one Roadway System				
1	Mobilization	JOB	0	\$50,000.00	\$0
2	Excavation	CY	1651	\$7.00	\$11,600
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	22287	\$2.50	\$55,700
7	7" AC (assumes a Traffic Index of 11)	SF	22287	\$4.00	\$89,100
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	22287	\$0.25	\$5,600
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	175	\$15.00	\$2,600
15	Traffic Signals	EA	1	\$320,000.00	\$320,000
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	0	\$6,000.00	\$0
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	0	\$25.00	\$0
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	1050	\$2.00	\$2,100
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0 \$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	<u>LF</u> LF	0	\$133.00	\$0 \$0
44	Split Rail Fencing		0	\$45.00	\$0 \$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0 \$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0 \$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
	Construction Total:				\$486,700

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$73,100 Soft Costs Contingency (17%): \$82,700

** ROW Acquisition includes mapping, purchasing the land,

TOTAL CIRCULATION \$642,500

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs

Village 1 - Backbone Roadway System

PFE Credit Phase 1 McBean Park Drive 2 (V1R19)

1	Item #	edit Phase 1 McBean Park Drive 2 (V1R19) Description	Unit	Quantity	Unit Price	Amount
Mobilization	itoiii #	Doscription	O.I.I.C	Quartity	OTHE T TICC	Amount
Mobilization	Backh	one Poadway System				
Excavation	Dackb	one Roadway System				
Excavation		A4 1 99 - 41	100	1 0	450,000,00	40
4 * AB (Under Curb & Guther and Sidewalk) SF 0 \$1.80	-				· · ·	\$0
16" AB (assumes a Traffic Index of 9)				1		. ,
5 5' AC (assumes a Traffic Index of 9) SF 0 \$2.70 6 18' AB (assumes a Traffic Index of 11) SF 4275 \$2.50 \$10,7 7 7' AC (assumes a Traffic Index of 11) SF 4275 \$4.00 \$17,1 8 Decomposed Granite Trail (4' width, 4' thick) SF 0 \$1.80 9 4' AB Shoulder (2' width) SF 0 \$1.80 10 Subgrade Street Prep (Street) SF 4275 \$0.25 \$1,1 11 Subgrade Prep (Curb & Gutter) SF 0 \$0.30 \$1 12 Subgrade Prep (Curb & Gutter) SF 0 \$0.30 \$1 13 Subgrade Prep (Curb & Gutter) SF 0 \$0.30 \$3.0 13 Subgrade Prep (Curb & Gutter) SF 0 \$0.30 \$3.6 14 Signal Sidewalt EA 0 \$320,000,00 \$3.6 15 Traffic Signals EA 0 \$275,000,00 \$3.6 17 Signal		,				\$0
6 18" B& (assumes a Traffic Index of 11) SF 4275 \$2.50 \$10,7 7 7" AC (assumes a Traffic Index of 11) SF 4275 \$3.40 \$17,1 8 Decomposed Granite Trail (4" width, 4" thick) SF 0 \$1.20 9 4" AB Shoulder (2" width) SF 0 \$1.20 10 Subgrade Exper (Street) SF 4275 \$0.25 \$1,1 11 Subgrade Prep (AB Shoulder) SF 0 \$0.30 12 Subgrade Prep (BG Trail) SF 0 \$0.30 13 Subgrade Prep (BG Trail) SF 0 \$0.30 14 Signing and Striping (36" ROW)" LF 238 \$15.00 \$3.6 15 Traffic Signals EA 0 \$320,000.00 \$3.6 16 Future Traific Signal EA 0 \$320,000.00 \$3.6 17 Signalized Intersection EA 0 \$300,000.00 \$3.6 18 Sidewalk, Concrete SF 0 <td></td> <td>`</td> <td></td> <td></td> <td></td> <td>\$0</td>		`				\$0
7" AC (assumes a Traffic Index of 11)						\$0
8		,		1		
9		,		1		
10						\$0
11						\$0
12 Subgrade Prep (AB Shoulder) SF 0 \$0.30 13 Subgrade Prep (DG Trail) SF 0 \$0.30 14 Signing and Striping (36' ROW)* LF 238 \$15.00 \$3.20 15 Traffic Signals EA 0 \$320,000.00 16 Future Traffic Signal EA 0 \$225,000.00 17 Signalized Intersection EA 0 \$900,000.00 18 Sidewalk, Concrete SF 0 \$6.00 19 Roundabout EA 0 \$100,000.00 19 Roundabout EA 0 \$115.00 19 Roundabout EA 0 \$115.00 10 Joint Trench LF 0 \$115.00 11 Underground Existing Utilities in Joint Trench LF 0 \$360.00 12 Type 5 Curb Median LF 0 \$345.00 12 Type 5 Curb Median LF 0 \$34.50 12 Signalized All Wiring SF 0 \$4.50 12 Signal Conduit and Wiring EA 0 \$75,000.00 13 Sidewalk, Concrete LF 0 \$34.50 14 Frontage Landscaping SF 0 \$4.50 15 Signal Conduit and Wiring EA 0 \$75,000.00 16 Curb and Gutter LF 0 \$27.00 17 AC Driveway (Per Approx. 12' wide) EA 0 \$960.00 18 Irrigation Sleeves LF 0 \$15.00 19 Street Lights (every 150 LF) EA 0 \$6,000.00 10 Sawcut and Pavement Removal LF 0 \$3.00 11 Sawcut and Pavement Removal LF 0 \$3.00 12 Reconstruct Ditches LF 0 \$3.00 13 Savout and Pavement Removal LF 0 \$3.00 14 ROW Acquisition (Oak Tree Lane) ** LS 0 \$50,000.00 15 ROW Acquisition (Oak Tree Lane) ** LS 0 \$50,000.00 16 Traffic Control LF 0 \$3.00 17 Signal Remove Pavement SF 0 \$3.00 18 Signal Remove Pavement SF 0 \$3.00 19 Remodibilities EA 0 \$3.00 10 Signal Remove Pavement SF 0 \$3.00 10 Signal Remove Pavement SF 0 \$3.00 17 Signal Remove Pavement SF 0 \$3.00 18 Signal Remove Pavement SF 0 \$3.00 19 Retrofit Utilities EA 0 \$3.00 10 Signal Remove Pavement SF 0 \$3.00 10 Signal Remove Pavement SF 0 \$3.00 10 Signal Rem						
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Traffic Signals						\$0
Future Traffic Signal				1	·	\$3,600
17		ÿ		1		\$0
Sidewalk, Concrete		-		· -		\$0
19		9		1		\$0
20		·				\$0
Underground Existing Utilities in Joint Trench				1		\$0
Type 5 Curb Median						\$0
SF				1		\$0
24 Frontage Landscaping SF 0 \$4.50 25 Signal Conduit and Wiring EA 0 \$75,000.00 26 Curb and Gutter LF 0 \$27.00 27 AC Driveway (Per Approx. 12' wide) EA 0 \$960.00 28 Irrigation Sleeves LF 0 \$15.00 29 Street Lights (every 150 LF) EA 0 \$6,000.00 30 Sawcut and Pavement Removal Median LF 0 \$20.00 31 Sawcut and Pavement Removal LF 0 \$3.00 32 Reconstruct Ditches LF 0 \$3.00 33 Erosion Control LF 0 \$3.00 34 ROW Acquisition (Ferrari Ranch Road) *** LS 0 \$100,000.00 35 ROW Acquisition (Oak Tree Lane) *** LS 0 \$500,000.00 36 ROW Acquisition (Oak Tree Lane - South) *** LS 0 \$50,000.00 37 Grind and Remove Pavement SF 0					•	\$0
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26 Curb and Gutter LF 0 \$27.00 27 AC Driveway (Per Approx. 12' wide) EA 0 \$960.00 28 Irrigation Sleeves LF 0 \$15.00 29 Street Lights (every 150 LF) EA 0 \$6,000.00 30 Sawcut and Pavement Removal Median LF 0 \$20.00 31 Sawcut and Pavement Removal LF 0 \$3.00 32 Reconstruct Ditches LF 0 \$3.00 33 Erosion Control LF 0 \$3.00 34 ROW Acquisition (Ferrari Ranch Road) ** LS 0 \$100,000.00 35 ROW Acquisition (Oak Tree Lane) ** LS 0 \$500,000.00 36 ROW Acquisition (Oak Tree Lane - South) *** LS 0 \$500,000.00 37 Grind and Remove Pavement SF 0 \$3.00 38 Grind and Remove Pavement SF 0 \$3.00 39 Retrofit Utilities EA 0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>\$0</td></t<>						\$0
27 AC Driveway (Per Approx. 12' wide) EA 0 \$960.00 28 Irrigation Sleeves LF 0 \$15.00 29 Street Lights (every 150 LF) EA 0 \$6,000.00 30 Sawcut and Pavement Removal Median LF 0 \$20.00 31 Sawcut and Pavement Removal LF 0 \$3.00 32 Reconstruct Ditches LF 0 \$3.00 33 Erosion Control LF 0 \$25.00 34 ROW Acquisition (Ferrari Ranch Road) ** LS 0 \$100,000.00 35 ROW Acquisition (Oak Tree Lane) ** LS 0 \$500,000.00 36 ROW Acquisition (Oak Tree Lane - South) *** LS 0 \$50,000.00 37 Grind and Remove Pavement SF 0 \$3.00 38 Grind and Overlay SF 1425 \$2.00 \$2.5 39 Retrofit Utilities EA 0 \$3,000.00 40 Dewatering - Ferrari Ranch Road E				1		\$0
Irrigation Sleeves						\$0 \$0
29 Street Lights (every 150 LF) EA 0 \$6,000.00 30 Sawcut and Pavement Removal Median LF 0 \$20.00 31 Sawcut and Pavement Removal LF 0 \$3.00 32 Reconstruct Ditches LF 0 \$3.00 33 Erosion Control LF 0 \$25.00 34 ROW Acquisition (Ferrari Ranch Road) ** LS 0 \$100,000.00 35 ROW Acquisition (Oak Tree Lane) ** LS 0 \$500,000.00 36 ROW Acquisition (Oak Tree Lane - South) *** LS 0 \$500,000.00 37 Grind and Remove Pavement SF 0 \$3.00 38 Grind and Overlay SF 1425 \$2.00 \$2.5 39 Retrofit Utilities EA 0 \$3,000.00 40 Dewatering - Ferrari Ranch Road EA 0 \$25,000.00 41 Dewatering - Oak Tree near So. Ingram Slough EA 0 \$50,000.00 42 Dewatering - Oak Tr		, , , , ,		1		
Sawcut and Pavement Removal Median LF 0 \$20.00				1		\$0
Sawcut and Pavement Removal LF				1		\$0
32 Reconstruct Ditches LF 0 \$3.00 33 Erosion Control LF 0 \$25.00 34 ROW Acquisition (Ferrari Ranch Road) ** LS 0 \$100,000.00 35 ROW Acquisition (Oak Tree Lane) ** LS 0 \$500,000.00 36 ROW Acquisition (Oak Tree Lane - South) *** LS 0 \$50,000.00 37 Grind and Remove Pavement SF 0 \$3.00 38 Grind and Overlay SF 1425 \$2.00 \$25,00 39 Retrofit Utilities EA 0 \$3,000.00 \$25,000.00 40 Dewatering - Ferrari Ranch Road EA 0 \$25,000.00 41 Dewatering - Oak Tree near So. Ingram Slough EA 0 \$50,000.00 42 Dewatering - Oak Tree near new lake EA 0 \$75,000.00 43 Golf Course Fence and Netting LF 0 \$133.00 44 Split Rail Fencing LF 0 \$45.00 45						\$0
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34 ROW Acquisition (Ferrari Ranch Road) ** LS 0 \$100,000.00 35 ROW Acquisition (Oak Tree Lane) ** LS 0 \$500,000.00 36 ROW Acquisition (Oak Tree Lane - South) *** LS 0 \$50,000.00 37 Grind and Remove Pavement SF 0 \$3.00 38 Grind and Overlay SF 1425 \$2.00 \$2,5 39 Retrofit Utilities EA 0 \$3,000.00 40 Dewatering - Ferrari Ranch Road EA 0 \$25,000.00 41 Dewatering - Oak Tree near So. Ingram Slough EA 0 \$50,000.00 42 Dewatering - Oak Tree near new lake EA 0 \$75,000.00 43 Golf Course Fence and Netting LF 0 \$133.00 44 Split Rail Fencing LF 0 \$45.00 45 FRR Supplemental Topo + Aerial Topo JOB 0 \$1,000,000.00 46 Remediation Trench and Monitoring JOB 0 \$100,000.00				1		\$0
35 ROW Acquisition (Oak Tree Lane) ** LS 0 \$500,000.00 36 ROW Acquisition (Oak Tree Lane - South) *** LS 0 \$50,000.00 37 Grind and Remove Pavement SF 0 \$3.00 38 Grind and Overlay SF 1425 \$2.00 \$2,5 39 Retrofit Utilities EA 0 \$3,000.00 40 Dewatering - Ferrari Ranch Road EA 0 \$25,000.00 41 Dewatering - Oak Tree near So. Ingram Slough EA 0 \$50,000.00 42 Dewatering - Oak Tree near new lake EA 0 \$75,000.00 43 Golf Course Fence and Netting LF 0 \$133.00 44 Split Rail Fencing LF 0 \$45.00 45 FRR Supplemental Topo + Aerial Topo JOB 0 \$1,000,000.00 46 Remediation Trench and Monitoring JOB 0 \$100,000.00 47 Traffic Control JOB 0 \$250,000.00 48 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>\$0</td></t<>						\$0
36 ROW Acquisition (Oak Tree Lane - South) *** LS 0 \$50,000.00 37 Grind and Remove Pavement SF 0 \$3.00 38 Grind and Overlay SF 1425 \$2.00 \$2,5 39 Retrofit Utilities EA 0 \$3,000.00 40 Dewatering - Ferrari Ranch Road EA 0 \$25,000.00 41 Dewatering - Oak Tree near So. Ingram Slough EA 0 \$50,000.00 42 Dewatering - Oak Tree near new lake EA 0 \$75,000.00 43 Golf Course Fence and Netting LF 0 \$133.00 44 Split Rail Fencing LF 0 \$45.00 45 FRR Supplemental Topo + Aerial Topo JOB 0 \$1,000,000.00 46 Remediation Trench and Monitoring JOB 0 \$100,000.00 47 Traffic Control JOB 0 \$250,000.00 48 Traffic Control Oak Tree Lane JOB 0 \$5,500,000.00 49						\$0 \$0
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38 Grind and Overlay SF 1425 \$2.00 \$2,5 39 Retrofit Utilities EA 0 \$3,000.00 40 Dewatering - Ferrari Ranch Road EA 0 \$25,000.00 41 Dewatering - Oak Tree near So. Ingram Slough EA 0 \$50,000.00 42 Dewatering - Oak Tree near new lake EA 0 \$75,000.00 43 Golf Course Fence and Netting LF 0 \$133.00 44 Split Rail Fencing LF 0 \$45.00 45 FRR Supplemental Topo + Aerial Topo JOB 0 \$1,000,000.00 46 Remediation Trench and Monitoring JOB 0 \$1,000,000.00 47 Traffic Control JOB 0 \$250,000.00 48 Traffic Control Oak Tree Lane JOB 0 \$5,500,000.00 49 Bridge (at Auburn Ravine on Oak Tree Lane) EA 0 \$5,500,000.00		,		1		\$0
39 Retrofit Utilities EA 0 \$3,000.00 40 Dewatering - Ferrari Ranch Road EA 0 \$25,000.00 41 Dewatering - Oak Tree near So. Ingram Slough EA 0 \$50,000.00 42 Dewatering - Oak Tree near new lake EA 0 \$75,000.00 43 Golf Course Fence and Netting LF 0 \$133.00 44 Split Rail Fencing LF 0 \$45.00 45 FRR Supplemental Topo + Aerial Topo JOB 0 \$1,000,000.00 46 Remediation Trench and Monitoring JOB 0 \$1,000,000.00 47 Traffic Control JOB 0 \$250,000.00 48 Traffic Control Oak Tree Lane JOB 0 \$250,000.00 49 Bridge (at Auburn Ravine on Oak Tree Lane) EA 0 \$5,500,000.00						
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42 Dewatering - Oak Tree near new lake EA 0 \$75,000.00 43 Golf Course Fence and Netting LF 0 \$133.00 44 Split Rail Fencing LF 0 \$45.00 45 FRR Supplemental Topo + Aerial Topo JOB 0 \$12,500.00 46 Remediation Trench and Monitoring JOB 0 \$1,000,000.00 47 Traffic Control JOB 0 \$100,000.00 48 Traffic Control Oak Tree Lane JOB 0 \$250,000.00 49 Bridge (at Auburn Ravine on Oak Tree Lane) EA 0 \$5,500,000.00		ÿ		1		\$0 \$0
43 Golf Course Fence and Netting LF 0 \$133.00 44 Split Rail Fencing LF 0 \$45.00 45 FRR Supplemental Topo + Aerial Topo JOB 0 \$12,500.00 46 Remediation Trench and Monitoring JOB 0 \$1,000,000.00 47 Traffic Control JOB 0 \$100,000.00 48 Traffic Control Oak Tree Lane JOB 0 \$250,000.00 49 Bridge (at Auburn Ravine on Oak Tree Lane) EA 0 \$5,500,000.00						\$0
44 Split Rail Fencing LF 0 \$45.00 45 FRR Supplemental Topo + Aerial Topo JOB 0 \$12,500.00 46 Remediation Trench and Monitoring JOB 0 \$1,000,000.00 47 Traffic Control JOB 0 \$100,000.00 48 Traffic Control Oak Tree Lane JOB 0 \$250,000.00 49 Bridge (at Auburn Ravine on Oak Tree Lane) EA 0 \$5,500,000.00		ÿ		l .		\$0
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46 Remediation Trench and Monitoring JOB 0 \$1,000,000.00 47 Traffic Control JOB 0 \$100,000.00 48 Traffic Control Oak Tree Lane JOB 0 \$250,000.00 49 Bridge (at Auburn Ravine on Oak Tree Lane) EA 0 \$5,500,000.00				l .		\$0
47 Traffic Control JOB 0 \$100,000.00 48 Traffic Control Oak Tree Lane JOB 0 \$250,000.00 49 Bridge (at Auburn Ravine on Oak Tree Lane) EA 0 \$5,500,000.00						\$0
48 Traffic Control Oak Tree Lane JOB 0 \$250,000.00 49 Bridge (at Auburn Ravine on Oak Tree Lane) EA 0 \$5,500,000.00		ŭ		1		\$0
49 Bridge (at Auburn Ravine on Oak Tree Lane) EA 0 \$5,500,000.00						\$0
	-			1		\$0
Construction Total	49	Construction Total:	EA	1 0	00.000,000,cç	\$37,600

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$5,600 Soft Costs Contingency (17%): \$6,400

off costs contingency (17%):

5,400

TOTAL CIRCULATION

\$49,600

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



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Signing and Striping (36' ROW)*

Underground Existing Utilities in Joint Trench

Traffic Signals

Roundabout

Joint Trench

Future Traffic Signal

Sidewalk, Concrete

Type 5 Curb Median

Median Landscaping

Curb and Gutter

Irrigation Sleeves

Reconstruct Ditches

Erosion Control

Grind and Overlay

Split Rail Fencing

Traffic Control

** ROW Acquisition includes mapping, purchasing the land,

Retrofit Utilities

Frontage Landscaping

Signal Conduit and Wiring

Street Lights (every 150 LF)

Sawcut and Pavement Removal

AC Driveway (Per Approx. 12' wide)

Sawcut and Pavement Removal Median

ROW Acquisition (Ferrari Ranch Road) **

ROW Acquisition (Oak Tree Lane - South) ***

Dewatering - Oak Tree near So. Ingram Slough

ROW Acquisition (Oak Tree Lane) **

Grind and Remove Pavement

Dewatering - Ferrari Ranch Road

Golf Course Fence and Netting

Traffic Control Oak Tree Lane

Dewatering - Oak Tree near new lake

FRR Supplemental Topo + Aerial Topo

Bridge (at Auburn Ravine on Oak Tree Lane)

Construction Total:

Remediation Trench and Monitoring

Signalized Intersection

Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Credit Phase 1 McBean Park Drive 3 (V1R19) Quantity Unit Item # Description **Unit Price Amount Backbone Roadway System** \$50,000.00 Mobilization JOB 0.2 \$10,000 1 2 Excavation CY 453 \$7.00 \$3,200 4" AB (Under Curb & Gutter and Sidewalk) SF 0 \$1.80 \$0 3 16" AB (assumes a Traffic Index of 9) SF \$2.25 \$0 4 0 5 5" AC (assumes a Traffic Index of 9) SF \$2.70 \$0 6 18" AB (assumes a Traffic Index of 11) SF 6120 \$2.50 \$15,300 7 7" AC (assumes a Traffic Index of 11) SF 6120 \$4.00 \$24,500 8 Decomposed Granite Trail (4' width, 4" thick) SF \$1.80 \$0 O 9 4" AB Shoulder (2' width) 0 \$1.20 \$0 SF Subgrade Street Prep (Street) SF 6120 \$1,500 10 \$0.25 Subgrade Prep (Curb & Gutter) \$0.30 \$0 11 SF 0 \$0 12 Subgrade Prep (AB Shoulder) SF 0 \$0.30 13 Subgrade Prep (DG Trail) SF 0 \$0.30 \$0

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\$15.00

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\$360.00

\$12.00

\$4.50

\$4.50

\$27.00

\$960.00

\$15.00

\$20.00

\$3.00

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\$2.00

\$25.00

\$100,000.00

\$500,000.00

\$50,000.00

\$3,000.00

\$25,000.00

\$50,000.00

\$75,000.00

\$12,500.00

\$1,000,000.00

\$100,000.00

\$250,000.00

\$5,500,000.00

\$133.00

\$45.00

\$6,000.00

\$75,000.00

\$320,000.00

\$275,000.00

\$900,000.00

\$100,000.00

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\$63,700

\$4,100

Contingency Based upon Hard Costs (15%): \$9,600 Soft Costs Contingency (17%): \$10,800

^{*} Cost per linear foot of roadway.

^{***} ROW Acquisition includes mapping.



Item #	Description	Unit	Quantity	Unit Price	Amount
Deslate	and Deadway System				
Васкро	one Roadway System				
			1		
1	Mobilization	JOB	0	\$50,000.00	\$0
2	Excavation	CY	160	\$7.00	\$1,100
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	2160	\$2.50	\$5,400
7	7" AC (assumes a Traffic Index of 11)	SF	2160	\$4.00	\$8,600
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	2160	\$0.25	\$500
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	120	\$15.00	\$1,800
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	0	\$6,000.00	\$0
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	0	\$25.00	\$0
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	720	\$2.00	\$1,400
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
	Construction Total:		<u>. </u>	. , -,	\$18,800

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$2,800 Soft Costs Contingency (17%): \$3,200

** ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs
Village 1 - Backbone Roadway System
Phase 1 McBean Park Drive 5 (V1R19)

Item # Description Unit Quantity Unit Price Amount

Item #	Description	Unit	Quantity	Unit Price	Amount
ILCIII #	νεοσημασιι	Offic	Quantity	OHIL FIICE	Amount
Backh	one Roadway System				
Dackb	one Roadway System				
			1		
1	Mobilization	JOB	0	\$50,000.00	\$0
2	Excavation	CY	613	\$7.00	\$4,300
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6 7	18" AB (assumes a Traffic Index of 11)	SF SF	8280	\$2.50	\$20,700 \$33,100
	7" AC (assumes a Traffic Index of 11) Decomposed Granite Trail (4' width, 4" thick)		8280	\$4.00	
8 9	4" AB Shoulder (2' width)	SF SF	0	\$1.80 \$1.20	\$0 \$0
	Subgrade Street Prep (Street)	SF SF		\$1.20	
10			8280		\$2,100
11 12	Subgrade Prep (Curb & Gutter)	SF SF	0	\$0.30 \$0.30	\$0
	Subgrade Prep (AB Shoulder) Subgrade Prep (DG Trail)	SF SF	0	\$0.30	\$0
13 14	Signing and Striping (36' ROW)*	LF	345	\$15.00	\$0 \$5,200
15	Traffic Signals	EA	0	\$320,000.00	\$5,200 \$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$100,000.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	0	\$6,000.00	\$0
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	0	\$25.00	\$0
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
	Construction Total:				\$65,400

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$9,800 Soft Costs Contingency (17%): \$11,100

TOTAL CIRCULATION \$86,300

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System Phase 1 State Route 193 3 (V1R20-21) Item # Description Unit Quantity **Unit Price Amount Backbone Roadway System** Mobilization JOB 0.00 \$50,000.00 \$0 1 \$7.00 \$11,600 2 Excavation CY 1662 4" AB (Under Curb & Gutter and Sidewalk) 3 SF 0 \$1.80 \$0 \$0 4 16" AB (assumes a Traffic Index of 9) SF 0 \$2.25 \$0 5 5" AC (assumes a Traffic Index of 9) SF 0 \$2.70 6 18" AB (assumes a Traffic Index of 11) SF 22440 \$2.50 \$56,100 7 7" AC (assumes a Traffic Index of 11) SF 22440 \$4.00 \$89,800 8 Decomposed Granite Trail (4' width, 4" thick) SF 0 \$1.80 \$0 4" AB Shoulder (2' width) SF \$1.20 \$0 9 0 10 Subgrade Street Prep (Street) SF 22440 \$5,600 \$0.25 Subgrade Prep (Curb & Gutter) 11 SF \$0.30 \$0 0 12 Subgrade Prep (AB Shoulder) SF 0 \$0.30 \$0 Subgrade Prep (DG Trail) 0 \$0.30 \$0 13 SF Signing and Striping (36' ROW)* LF 635 \$9.500 14 \$15.00 15 Traffic Signals EΑ 0 \$320,000.00 \$0 16 Future Traffic Signal EΑ 0 \$275,000.00 \$0 \$0 17 Signalized Intersection EΑ 0 \$900,000.00 SF 0 \$0 18 Sidewalk, Concrete \$6.00 Roundabout 19 EΑ 0 \$100,000.00 \$0 \$0 20 Joint Trench LF 0 \$115.00 21 Underground Existing Utilities in Joint Trench LF 0 \$360.00 \$0 LF \$0 0 \$12.00 22 Type 5 Curb Median 23 SF 0 \$4.50 \$0 Median Landscaping 24 Frontage Landscaping SF 0 \$4.50 \$0 25 Signal Conduit and Wiring EΑ 0 \$75,000.00 \$0 LF \$0 0 26 Curb and Gutter \$27.00 EΑ \$0 27 AC Driveway (Per Approx. 12' wide) 0 \$960.00 28 Irrigation Sleeves LF 0 \$15.00 \$0 EΑ 0 \$0 29 Street Lights (every 150 LF) \$6,000.00 Sawcut and Pavement Removal Median 30 LF 0 \$20.00 \$0 LF \$0 31 0 Sawcut and Pavement Removal \$3.00 32 Reconstruct Ditches LF 0 \$3.00 \$0 LF \$0 33 **Erosion Control** 0 \$25.00 34 ROW Acquisition (Ferrari Ranch Road) ** LS 0 \$100,000.00 \$0 \$0 35 ROW Acquisition (Oak Tree Lane) ** LS 0 \$500,000.00 ROW Acquisition (Oak Tree Lane - South) *** LS \$0 0 \$50,000.00 36 \$0 37 Grind and Remove Pavement SF 0 \$3.00 38 SF 0 \$0 Grind and Overlay \$2.00 FΑ 0 \$0 39 Retrofit Utilities \$3,000.00 \$0 40 Dewatering - Ferrari Ranch Road FΑ 0 \$25,000.00 41 Dewatering - Oak Tree near So. Ingram Slough EΑ 0 \$50,000.00 \$0 42 Dewatering - Oak Tree near new lake EΑ \$75,000.00 \$0 LF 43 Golf Course Fence and Netting 0 \$133.00 \$0

* Cost per linear foot of roadway.

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Contingency Based upon Hard Costs (15%): \$25,900 Soft Costs Contingency (17%): \$29,300

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** ROW Acquisition includes mapping, purchasing the land,

Split Rail Fencing

Traffic Control

FRR Supplemental Topo + Aerial Topo

Bridge (at Auburn Ravine on Oak Tree Lane)

Construction Total:

Remediation Trench and Monitoring

Traffic Control Oak Tree Lane

\$45.00

\$12,500.00

\$1,000,000.00

\$100,000.00

\$250,000.00

\$5,500,000.00

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\$172,600

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^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Credit Phase 1 Oak Tree Lane 8 (V1R7)

Item #	Description	Unit	Quantity	Unit Price	Amount
Backbo	one Roadway System				
1	Mobilization	JOB	0	\$50,000.00	\$(
2	Excavation	CY	0	\$7.00	\$(
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	40589	\$2.25	\$91,300
5	5" AC (assumes a Traffic Index of 9)	SF	40589	\$2.70	\$109,600
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	40589	\$0.25	\$10,100
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	650	\$15.00	\$9,800
15	Traffic Signals	EA	1	\$320,000.00	\$320,000
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF .	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA LF	0	\$960.00	\$0
28	Irrigation Sleeves		0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	0	\$6,000.00	\$0
30	Sawcut and Pavement Removal Median	LF LF	0	\$20.00	\$0
31 32	Sawcut and Pavement Removal Reconstruct Ditches	LF	0	\$3.00 \$3.00	\$0 \$0
33	Erosion Control	LF	0	\$25.00	\$0
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Cak Tree Lane) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$30,000.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
	Construction Total:				\$540,800

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$81,100 Soft Costs Contingency (17%): \$91,900

TOTAL CIRCULATION \$713,800

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs

Village 1 - Backbone Roadway System
PFF Credit Phase 1 Oak Tree Lane 9 (V1R5-6)

	edit Phase 1 Oak Tree Lane 9 (V1R5-6)			-	
Item #	Description	Unit	Quantity	Unit Price	Amount
Backb	one Roadway System				
1	Mobilization	JOB	0	\$50,000.00	\$0
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	16020	\$1.80	\$28,800
4	16" AB (assumes a Traffic Index of 9)	SF	32040	\$2.25	\$72,100
5	5" AC (assumes a Traffic Index of 9)	SF	32040	\$2.70	\$86,500
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	32040	\$0.25	\$8,000
11	Subgrade Prep (Curb & Gutter)	SF	16020	\$0.30	\$4,800
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	890	\$15.00	\$13,400
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	10680	\$6.00	\$64,100
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	890	\$115.00	\$102,400
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	1780	\$12.00	\$21,400
23	Median Landscaping	SF	10680	\$4.50	\$48,100
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	1780	\$27.00	\$48,100
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	6	\$6,000.00	\$36,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	1780	\$25.00	\$44,500
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
	Construction Total:				\$578,200

^{*} Cost per linear foot of roadway.

\$86,700 \$98,400

TOTAL CIRCULATION

Contingency Based upon Hard Costs (15%): ** ROW Acquisition includes mapping, purchasing the land,

Soft Costs Contingency (17%):

^{***} ROW Acquisition includes mapping.



Engineer's (Opinion of (Costs	
Village 1 - B	ackbone R	oadway	System
PFF Summa	rv/		

Item #	nmary Description	Unit	Quantity	Unit Price	Amount
item#	Description	Offic	Quantity	Unit Price	Amount
Doolsho	na Daadway Cyatam				
Васкро	ne Roadway System				
1	Mobilization	JOB	3	\$50,000.00	\$150,000
2	Excavation	CY	24848	\$7.00	\$173,900
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	37815	\$1.80	\$68,100
4	16" AB (assumes a Traffic Index of 9)	SF	340596	\$2.25	\$766,300
5	5" AC (assumes a Traffic Index of 9)	SF	340596	\$2.70	\$919,600
6	18" AB (assumes a Traffic Index of 11)	SF	185447	\$2.50	\$463,700
7	7" AC (assumes a Traffic Index of 11)	SF	185447	\$4.00	\$741,800
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	15420	\$1.20	\$18,500
10	Subgrade Street Prep (Street)	SF	526043	\$0.25	\$131,500
11	Subgrade Prep (Curb & Gutter)	SF	37815	\$0.30	\$11,400
12	Subgrade Prep (AB Shoulder)	SF	15420	\$0.30	\$4,700
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	14933	\$15.00	\$224,000
15	Traffic Signals	EA	5	\$320,000.00	\$1,600,000
16	Future Traffic Signal	EA	2	\$275,000.00	\$550,000
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	14010	\$6.00	\$84,100
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	600	\$115.00	\$69,000
21	Underground Existing Utilities in Joint Trench	LF	1355	\$360.00	\$487,800
22	Type 5 Curb Median	LF	13575	\$12.00	\$162,900
23	Median Landscaping	SF	94295	\$4.50	\$424,400
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	7935	\$27.00	\$214,300
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	58	\$6,000.00	\$348,000
30	Sawcut and Pavement Removal Median	LF	1835	\$20.00	\$36,700
31	Sawcut and Pavement Removal	LF	5600	\$3.00	\$16,800
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	6955	\$25.00	\$173,900
34	ROW Acquisition (Ferrari Ranch Road) **	LS	1	\$100,000.00	\$100,000
35	ROW Acquisition (Oak Tree Lane) **	LS	1	\$500,000.00	\$500,000
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	226280	\$2.00	\$452,500
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	1765	\$45.00	\$79,400
45	FRR Supplemental Topo + Aerial Topo	JOB	1	\$12,500.00	\$12,500
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$(
47	Traffic Control	JOB	2	\$100,000.00	\$200,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$(
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	1	\$5,500,000.00	\$5,500,000
.5	Construction Total:			+=,555,666.00	\$14,685,800

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$2,202,800 Soft Costs Contingency (17%): \$2,496,600

^{**} ROW Acquisition includes mapping, purchasing the land, *** ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Phase 3 Summary

Itom #I	Description	Unit	Quantity	Unit Price	Amount
Item #	Description	Offic	Quantity	Unit Frice	Amount
Daalda	ana Dandurari Cristam				
Васко	one Roadway System				
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	20106	\$7.00	\$140,700
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	15000	\$1.80	\$27,000
4	16" AB (assumes a Traffic Index of 9)	SF	273566	\$2.25	\$615,500
5	5" AC (assumes a Traffic Index of 9)	SF	273566	\$2.70	\$738,600
6	18" AB (assumes a Traffic Index of 11)	SF	121429	\$2.50	\$303,600
7	7" AC (assumes a Traffic Index of 11)	SF	121429	\$4.00	\$485,700
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	2680	\$1.20	\$3,200
10	Subgrade Street Prep (Street)	SF	394995	\$0.25	\$98,700
11	Subgrade Prep (Curb & Gutter)	SF	15000	\$0.30	\$4,500
12	Subgrade Prep (AB Shoulder)	SF	2680	\$0.30	\$800
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	9793	\$15.00	\$146,900
15	Traffic Signals	EA	4	\$320,000.00	\$1,280,000
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	10000	\$12.00	\$120,000
23	Median Landscaping	SF	60000	\$4.50	\$270,000
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF_	5000	\$27.00	\$135,000
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	33	\$6,000.00	\$198,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	5000	\$3.00	\$15,000
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	5000	\$25.00	\$125,000
34	ROW Acquisition (Ferrari Ranch Road) **	LS	1	\$100,000.00	\$100,000
35	ROW Acquisition (Oak Tree Lane) ** ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$500,000.00	\$0
36		LS SF	0	\$50,000.00	\$0 \$0
37	Grind and Remove Pavement	SF SF	0	\$3.00 \$2.00	\$0 \$0
38 39	Grind and Overlay Retrofit Utilities	EA	0	\$3,000.00	•
40		EA	0	\$25,000.00	\$0 \$0
41	Dewatering - Ferrari Ranch Road Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
41		EA	0		\$0
-	Dewatering - Oak Tree near new lake Golf Course Fence and Netting	LF	0	\$75,000.00 \$133.00	\$0
43 44	Split Rail Fencing	LF	+	\$133.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$12,500
46	Remediation Trench and Monitoring	JOB	0	\$12,500.00	\$12,500
46	Traffic Control	JOB	1	\$1,000,000.00	\$100,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$100,000
48	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0 \$0
49	Construction Total:	EA	1 0	00.000,000,cç	\$4,970,700

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$745,600 Soft Costs Contingency (17%): \$845,000

TOTAL CIRCULATION \$6,561,300

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Phase 3 McBean Park Drive 6 (V1R19)

Item #	Description	Unit	Quantity	Unit Price	Amount
Backbo	ne Roadway System				
1	Mobilization	JOB	0	\$50,000.00	\$0
2	Excavation	CY	1347	\$7.00	\$9,400
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	18189	\$2.50	\$45,500
7	7" AC (assumes a Traffic Index of 11)	SF	18189	\$4.00	\$72,800
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	18189	\$0.25	\$4,500
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	598	\$15.00	\$9,000
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF 0F	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24 25	Frontage Landscaping	SF EA	0	\$4.50 \$75,000.00	\$0 \$0
26	Signal Conduit and Wiring Curb and Gutter	LF	0	\$75,000.00	\$0 \$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0 \$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0 \$0
29	Street Lights (every 150 LF)	EA	0	\$6,000.00	\$0
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	0	\$25.00	\$0
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
	Construction Total:			·	\$141,200

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$21,200 Soft Costs Contingency (17%): \$24,000

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TOTAL CIRCULATION \$186,400

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Phase 3 McBean Park Drive 7 (V1R19)

Item #	Description	Unit	Quantity	Unit Price	Amount
Backbo	one Roadway System				
	, ,				
1	Mobilization	JOB	0	\$50,000.00	\$0
2	Excavation	CY	5437	\$7.00	\$38,100
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	73400	\$2.50	\$183,400
7	7" AC (assumes a Traffic Index of 11)	SF	73400	\$4.00	\$293,500
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	73400	\$0.25	\$18,400
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	1835	\$15.00	\$27,500
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	0	\$6,000.00	\$0
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF LF	0	\$3.00	\$0 \$0
33	Erosion Control	LS	0	\$25.00	
34 35	ROW Acquisition (Ferrari Ranch Road) ** ROW Acquisition (Oak Tree Lane) **	LS	0	\$100,000.00 \$500,000.00	\$0 \$0
36	ROW Acquisition (Oak Tree Lane) ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$30,000.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
	Construction Total:				\$560,900

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$84,100 Soft Costs Contingency (17%): \$95,400

TOTAL CIRCULATION \$740,400

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Phase 3 State Route 193 1 (V1R20)

Item #	Description	Unit	Quantity	Unit Price	Amount
Backb	one Roadway System				
1	Mobilization	JOB	0	\$50,000.00	\$0
2	Excavation	CY	920	\$7.00	\$6,400
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	12420	\$2.50	\$31,100
7	7" AC (assumes a Traffic Index of 11)	SF	12420	\$4.00	\$49,700
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	12420	\$0.25	\$3,100
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	380	\$15.00	\$5,700
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	0	\$6,000.00	\$0
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	0	\$25.00	\$0
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
·	Construction Total:	·			\$96,000

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$14,400 Soft Costs Contingency (17%): \$16,300

TOTAL CIRCULATION \$126,700

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs
Village 1 - Backbone Roadway System
PFE Phase 3 State Route 193 2 (V1R20)

Item #	Description	Unit	Quantity	Unit Price	Amount
Backbon	ne Roadway System				
				Ţ	
1	Mobilization	JOB	0	\$50,000.00	\$
2	Excavation	CY	1290	\$7.00	\$9,00
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$
6	18" AB (assumes a Traffic Index of 11)	SF	17420	\$2.50	\$43,60
7	7" AC (assumes a Traffic Index of 11)	SF	17420	\$4.00	\$69,70
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$
9	4" AB Shoulder (2' width)	SF	2680	\$1.20	\$3,20
10	Subgrade Street Prep (Street)	SF	17420	\$0.25	\$4,40
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$1
12	Subgrade Prep (AB Shoulder)	SF	2680	\$0.30	\$80
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$122.12
14	Signing and Striping (36' ROW)*	LF	1340	\$15.00	\$20,10
15	Traffic Signals	EA	0	\$320,000.00	\$1
16	Future Traffic Signal	EA	0	\$275,000.00	\$1
17	Signalized Intersection	EA	0	\$900,000.00	\$1
18	Sidewalk, Concrete	SF EA	0	\$6.00	\$1
19	Roundabout	LF		\$100,000.00	\$1
20	Joint Trench	LF	0	\$115.00	\$(\$(
	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	
22	Type 5 Curb Median Median Landscaping	SF	0	\$12.00 \$4.50	\$(\$(
24	Frontage Landscaping	SF	0	\$4.50	\$(
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$(
26	Curb and Gutter	LF	0	\$27.00	\$(
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$1
28	Irrigation Sleeves	LF	0	\$15.00	\$(
29	Street Lights (every 150 LF)	EA	0	\$6,000.00	\$(
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$(
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$(
32	Reconstruct Ditches	LF	0	\$3.00	\$(
33	Erosion Control	LF	0	\$25.00	\$(
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$(
35	ROW Acquisition (Oak Tree Lane) **	LS	0	\$500,000.00	\$(
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$
37	Grind and Remove Pavement	SF	0	\$3.00	\$(
38	Grind and Overlay	SF	0	\$2.00	\$(
39	Retrofit Utilities	EA	0	\$3,000.00	\$(
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$(
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$1
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$1
43	Golf Course Fence and Netting	LF	0	\$133.00	\$1
44	Split Rail Fencing	LF	0	\$45.00	\$(
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$
47	Traffic Control	JOB	0	\$100,000.00	\$
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$
	Construction Total:				\$150,80

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$22,600 Soft Costs Contingency (17%): \$25,600

TOTAL CIRCULATION \$199,000

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs
Village 1 - Backbone Roadway System
PFE Phase 3 Ferrari Ranch Road 1 (V1R1)

	se 3 Ferrari Ranch Road 1 (V1R1)	l luit	O. contitu	Unit Dates	A
Item #	Description	Unit	Quantity	Unit Price	Amount
Backbo	one Roadway System				
			T .T	,	
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	11111	\$7.00	\$77,800
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	15000	\$1.80	\$27,000
4	16" AB (assumes a Traffic Index of 9)	SF	150000	\$2.25	\$337,400
5	5" AC (assumes a Traffic Index of 9)	SF	150000	\$2.70	\$405,000
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	150000	\$0.25	\$37,400
11	Subgrade Prep (Curb & Gutter)	SF	15000	\$0.30	\$4,500
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	5000	\$15.00	\$75,000
15	Traffic Signals	EA	2	\$320,000.00	\$640,000
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	10000	\$12.00	\$120,000
23	Median Landscaping	SF	60000	\$4.50	\$270,000
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	5000	\$27.00	\$135,000
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	33	\$6,000.00	\$198,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	5000	\$3.00	\$15,000
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	5000	\$25.00	\$125,000
34	ROW Acquisition (Ferrari Ranch Road) **	LS	1	\$100,000.00	\$100,000
35	ROW Acquisition (Oak Tree Lane) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	1	\$12,500.00	\$12,500
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	1	\$100,000.00	\$100,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
	Construction Total:				\$2,729,600

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$409,500 Soft Costs Contingency (17%): \$464,000

TOTAL CIRCULATION \$3,603,100

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Phase 3 Oak Tree Lane 10 (V1R8-9)

Item #	Description	Unit	Quantity	Unit Price	Amount
Backb	one Roadway System				
	<u> </u>				
1	Mobilization	JOB	0	\$50,000.00	\$(
2	Excavation	CY	0	\$7.00	\$(
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	90076	\$2.25	\$202,700
5	5" AC (assumes a Traffic Index of 9)	SF	90076	\$2.70	\$243,200
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	90076	\$0.25	\$22,500
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	640	\$15.00	\$9,600
15	Traffic Signals	EA	1	\$320,000.00	\$320,000
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	0	\$6,000.00	\$0
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	0	\$25.00	\$0
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0 \$0
37 38	Grind and Remove Pavement	SF SF	0	\$3.00 \$2.00	\$C \$C
38	Grind and Overlay	EA	0	\$3,000.00	\$0
40	Retrofit Utilities Dewatering - Ferrari Ranch Road	EA EA	0	\$3,000.00	\$0
40	Dewatering - Ferran Ranch Road Dewatering - Oak Tree near So. Ingram Slough	EA EA	0	\$25,000.00	\$0
42	Dewatering - Oak Tree near so, Ingram Slough Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$75,000.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$(
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$(
47	Traffic Control	JOB	0	\$100,000.00	\$(
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$(
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$(
73	Construction Total:		ı U	,5,500,000.00	\$798,000

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$119,700

Soft Costs Contingency (17%): \$135,700

TOTAL CIRCULATION \$1,053,400

 $[\]ensuremath{^{**}}$ ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Phase 3 Oak Tree Lane 11 (V1R10-12)

Item #	Description	Unit	Quantity	Unit Price	Amount
	,				
Backb	one Roadway System				
_4310	Cite Reduirdy Gyotolii				
1	Mobilization	JOB	0	\$50,000.00	Ċſ
2	Excavation	CY	0		\$(\$(
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$7.00 \$1.80	\$(
4	16" AB (assumes a Traffic Index of 9)	SF	33490	\$2.25	\$75,400
5	5" AC (assumes a Traffic Index of 9)	SF	33490	\$2.70	\$90,400
6	18" AB (assumes a Traffic Index of 11)	SF	33490	\$2.50	\$50,400
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$(
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	33490	\$0.25	\$8,400
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0,480
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	0	\$15.00	\$0
15	Traffic Signals	EA	1	\$320,000.00	\$320,000
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	0	\$6,000.00	\$0
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	0	\$25.00	\$0
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
	Construction Total:				\$494,200

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$74,100

Soft Costs Contingency (17%): \$84,000

TOTAL CIRCULATION \$652,300

 $[\]ensuremath{^{**}}$ ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs
Village 1 - Backbone Roadway System
PFE Phase 4 Summary

Item #	Description	Unit	Quantity	Unit Price	Amount
Doolsh s :-	o Boodway System				
Васкроп	e Roadway System				
1	Mobilization	IOR	0	¢50,000,00	\$(
2	Excavation	JOB CY		\$50,000.00	\$20,10
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	2874	\$7.00 \$1.80	\$20,10
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$1
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$1
6	18" AB (assumes a Traffic Index of 11)	SF	38798	\$2.50	\$97,00
7	7" AC (assumes a Traffic Index of 11)	SF	38798	\$4.00	\$155,20
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$133,28
9	4" AB Shoulder (2' width)	SF	8860	\$1.20	\$10,60
10	Subgrade Street Prep (Street)	SF	38798	\$0.25	\$9,70
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$(
12	Subgrade Prep (AB Shoulder)	SF	8860	\$0.30	\$2,700
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$(
14	Signing and Striping (36' ROW)*	LF	2215	\$15.00	\$33,200
15	Traffic Signals	EA	0	\$320,000.00	\$(
16	Future Traffic Signal	EA	0	\$275,000.00	\$(
17	Signalized Intersection	EA	0	\$900,000.00	\$(
18	Sidewalk, Concrete	SF	0	\$6.00	\$(
19	Roundabout	EA	0	\$100,000.00	\$(
20	Joint Trench	LF	0	\$115.00	\$(
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$(
22	Type 5 Curb Median	LF	2595	\$12.00	\$31,100
23	Median Landscaping	SF	28415	\$4.50	\$127,900
24	Frontage Landscaping	SF	0	\$4.50	\$(
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$(
26	Curb and Gutter	LF	0	\$27.00	\$(
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$(
28	Irrigation Sleeves	LF	0	\$15.00	\$(
29	Street Lights (every 150 LF)	EA	12	\$6,000.00	\$72,000
30	Sawcut and Pavement Removal Median	LF	1835	\$20.00	\$36,700
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$(
32	Reconstruct Ditches	LF	0	\$3.00	\$(
33	Erosion Control	LF	0	\$25.00	\$(
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$(
35	ROW Acquisition (Oak Tree Lane) **	LS	0	\$500,000.00	\$(
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$(
37	Grind and Remove Pavement	SF	0	\$3.00	\$(
38	Grind and Overlay	SF	179720	\$2.00	\$359,400
39	Retrofit Utilities	EA	0	\$3,000.00	\$(
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$(
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$(
43	Golf Course Fence and Netting	LF	0	\$133.00	\$(
44	Split Rail Fencing	LF	0	\$45.00	\$(
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$1
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$
47	Traffic Control	JOB	0	\$100,000.00	\$
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$1
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$1
	Construction Total:				\$955,60

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$143,300 Soft Costs Contingency (17%): \$162,500

TOTAL CIRCULATION \$1,261,400

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Phase 4 McBean Park Drive 8 (V1R17)

Item #	Description	Unit	Quantity	Unit Price	Amount
	•				
Backbo	one Roadway System				
1	Mobilization	JOB	0	\$50,000.00	\$0
2	Excavation	CY	2142	\$7.00	\$15,000
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	28918	\$2.50	\$72,300
7	7" AC (assumes a Traffic Index of 11)	SF	28918	\$4.00	\$115,700
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	7340	\$1.20	\$8,800
10	Subgrade Street Prep (Street)	SF	28918	\$0.25	\$7,200
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	7340	\$0.30	\$2,200
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	1835	\$15.00	\$27,500
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	1835	\$12.00	\$22,000
23	Median Landscaping	SF	23855	\$4.50	\$107,400
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA LF	0	\$960.00	\$0
28	Irrigation Sleeves		0	\$15.00	\$0
29	Street Lights (every 150 LF) Sawcut and Pavement Removal Median	EA LF	12 1835	\$6,000.00	\$72,000
30	Sawcut and Pavement Removal Nedian	LF	1835	\$20.00 \$3.00	\$36,700
31 32	Reconstruct Ditches	LF	0	\$3.00	\$0 \$0
33	Erosion Control	LF	0	\$25.00	\$0
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	161480	\$2.00	\$322,900
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$(
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
	Construction Total:				\$809,700

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$121,400 Soft Costs Contingency (17%): \$137,700

TOTAL CIRCULATION \$1,068,800

 $^{^{\}star\star}$ ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Phase 4 State Route 193 7 (V1R18)

Item #	Description	Unit	Quantity	Unit Price	Amount
Backbon	e Roadway System				
				T.	
1	Mobilization	JOB	0	\$50,000.00	\$
2	Excavation	CY	732	\$7.00	\$5,10
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$
6	18" AB (assumes a Traffic Index of 11)	SF	9880	\$2.50	\$24,70
7	7" AC (assumes a Traffic Index of 11)	SF	9880	\$4.00	\$39,50
8	Decomposed Granite Trail (4' width, 4" thick)	SF_	0	\$1.80	\$1.00
9	4" AB Shoulder (2' width)	SF	1520	\$1.20	\$1,80
10	Subgrade Street Prep (Street)	SF	9880	\$0.25	\$2,50
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$1
12	Subgrade Prep (AB Shoulder)	SF	1520	\$0.30	\$50
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$1
14	Signing and Striping (36' ROW)*	LF	380	\$15.00	\$5,70
15	Traffic Signals	EA	0	\$320,000.00	\$(
16	Future Traffic Signal	EA	0	\$275,000.00	\$(
17	Signalized Intersection	EA	0	\$900,000.00	\$(
18	Sidewalk, Concrete	SF EA	0	\$6.00	\$(
19	Roundabout	LF		\$100,000.00	\$(
20	Joint Trench	LF LF	0	\$115.00	\$(\$(
	Underground Existing Utilities in Joint Trench	LF LF	760	\$360.00	
22	Type 5 Curb Median Median Landscaping	SF	4560	\$12.00 \$4.50	\$9,100 \$20,500
24	Frontage Landscaping	SF	0	\$4.50	\$20,300
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$(
26	Curb and Gutter	LF	0	\$27.00	\$(
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$(
28	Irrigation Sleeves	LF	0	\$15.00	\$1
29	Street Lights (every 150 LF)	EA	0	\$6,000.00	\$(
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$(
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$(
32	Reconstruct Ditches	LF	0	\$3.00	\$(
33	Erosion Control	LF	0	\$25.00	\$(
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$(
35	ROW Acquisition (Oak Tree Lane) **	LS	0	\$500,000.00	\$(
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$(
37	Grind and Remove Pavement	SF	0	\$3.00	\$(
38	Grind and Overlay	SF	18240	\$2.00	\$36,50
39	Retrofit Utilities	EA	0	\$3,000.00	\$(
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$(
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$1
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$1
43	Golf Course Fence and Netting	LF	0	\$133.00	\$1
44	Split Rail Fencing	LF	0	\$45.00	\$(
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$
47	Traffic Control	JOB	0	\$100,000.00	\$
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$
	Construction Total:				\$145,90

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$21,900 Soft Costs Contingency (17%): \$24,800

TOTAL CIRCULATION \$192,600

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFF Phase 5 Summary

Item #	e 5 Summary Description	Unit	Quantity	Unit Price	Amount
				3 7 1100	
Backbor	ne Roadway System				
	io reduinaj Ojetom				
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	1868	\$30,000.00	\$50,000 \$13,100
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	12195	\$1.80	\$22,000
4	16" AB (assumes a Traffic Index of 9)	SF	24390	\$2.25	\$54,900
5	5" AC (assumes a Traffic Index of 9)	SF	24390	\$2.70	\$65,900
6	18" AB (assumes a Traffic Index of 11)	SF	25220	\$2.50	\$63,100
7	7" AC (assumes a Traffic Index of 11)	SF	25220	\$4.00	\$100,900
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$100,500
9	4" AB Shoulder (2' width)	SF	3880	\$1.20	\$4,700
10	Subgrade Street Prep (Street)	SF	49610	\$0.25	\$12,400
11	Subgrade Prep (Curb & Gutter)	SF	12195	\$0.30	\$3,700
12	Subgrade Prep (AB Shoulder)	SF	3880	\$0.30	\$1,200
13	Subgrade Prep (AB Shoulder) Subgrade Prep (DG Trail)	SF	0	\$0.30	\$1,200
14	Signing and Striping (36' ROW)*	LF	2325	\$15.00	\$34,900
15	Traffic Signals	EA	1	\$320,000.00	\$320,000
16	Future Traffic Signal	EA	1	\$275,000.00	\$275,000
17	Signalized Intersection	EA	0	\$900,000.00	\$273,000
18	Sidewalk, Concrete	SF	8130	\$6.00	\$48,800
19	Roundabout	EA	0	\$100,000.00	\$48,800
20	Joint Trench	LF	0	\$100,000.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	1355	\$360.00	\$487,800
22	Type 5 Curb Median	LF	0	\$12.00	\$467,800
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	1355	\$27.00	\$36,600
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$30,000
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	9	\$6,000.00	\$54,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	1355	\$25.00	\$33,900
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	46560	\$2.00	\$93,100
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	1765	\$45.00	\$79,400
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	1	\$100,000.00	\$100,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
	Construction Total:			. , ,	\$1,955,400

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$293,300 \$332,400

Soft Costs Contingency (17%):

TOTAL CIRCULATION \$2,581,100

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Phase 5 State Route 193 8 (V1R18) Item # Description Unit Quantity **Unit Price** Amount **Backbone Roadway System** \$50,000.00 Mobilization JOB \$0 2 Excavation CY 1868 \$7.00 \$13.100 4" AB (Under Curb & Gutter and Sidewalk) 3 SF \$1.80 \$0 4 16" AB (assumes a Traffic Index of 9) SF 0 \$2.25 \$0 5 5" AC (assumes a Traffic Index of 9) SF 0 \$2.70 \$0 6 18" AB (assumes a Traffic Index of 11) SF 25220 \$2.50 \$63,100 7" AC (assumes a Traffic Index of 11) SF 25220 \$4.00 \$100,900 Decomposed Granite Trail (4' width, 4" thick) 8 SF \$1.80 4" AB Shoulder (2' width) \$4,700 9 SF 3880 \$1.20 10 Subgrade Street Prep (Street) SF 25220 \$0.25 \$6,300 11 Subgrade Prep (Curb & Gutter) SF \$0.30 \$0 Subgrade Prep (AB Shoulder) 12 SF 3880 \$0.30 \$1,200 13 Subgrade Prep (DG Trail) \$0.30 SF 0 \$0 Signing and Striping (36' ROW)* 970 \$15.00 \$14,600 14 LF 15 Traffic Signals EΑ \$320,000.00 0 16 Future Traffic Signal FΑ \$275,000.00 \$0 Signalized Intersection 17 EΑ 0 \$900,000.00 \$0 18 Sidewalk, Concrete SF 0 \$6.00 \$0 19 Roundabout EΑ 0 \$100,000.00 \$0 1 F 0 \$0 20 Joint Trench \$115.00 Underground Existing Utilities in Joint Trench 21 LF 0 \$360.00 \$0 Type 5 Curb Median 22 LF 0 \$12.00 \$0 0 23 SF \$4.50 \$0 Median Landscaping SF 0 \$0 \$4.50 24 Frontage Landscaping EΑ \$75,000.00 \$0 25 Signal Conduit and Wiring 0 26 Curb and Gutter 1 F 0 \$27.00 \$0 0 \$0 FΑ 27 AC Driveway (Per Approx. 12' wide) \$960.00 28 Irrigation Sleeves LF 0 \$0 \$15.00 EΑ \$0 29 Street Lights (every 150 LF) \$6,000.00 30 Sawcut and Pavement Removal Median LF 0 \$20.00 \$0 31 LF 0 \$0 Sawcut and Pavement Removal \$3.00 32 Reconstruct Ditches LF 0 \$3.00 \$0 33 LF 0 \$0 **Erosion Control** \$25.00 34 ROW Acquisition (Ferrari Ranch Road) ** LS 0 \$100,000.00 \$0 0 \$500.000.00 \$0 35 ROW Acquisition (Oak Tree Lane) * LS \$0 36 ROW Acquisition (Oak Tree Lane - South) *** LS 0 \$50,000.00 37 Grind and Remove Pavement SF \$0 SF 46560 \$93,100 38 \$2.00 Grind and Overlay 39 Retrofit Utilities EΑ \$3,000.00 \$0 EΑ \$0 40 Dewatering - Ferrari Ranch Road \$25,000.00 41 Dewatering - Oak Tree near So. Ingram Slough EΑ 0 \$50,000.00 \$0 EΑ 42 Dewatering - Oak Tree near new lake 0 \$75,000.00 \$0 \$0 43 Golf Course Fence and Netting LF 0 \$133.00 44 Split Rail Fencing 1 F 0 \$45.00 \$0 JOB 45 FRR Supplemental Topo + Aerial Topo 0 \$12,500.00 \$0 JOB 0 \$0 46 Remediation Trench and Monitoring \$1,000,000.00 47 Traffic Control JOB 0 \$100,000.00 \$0 48 Traffic Control Oak Tree Lane JOB 0 \$250,000.00 \$0 0 49 Bridge (at Auburn Ravine on Oak Tree Lane) EΑ \$5,500,000.00 \$0 Construction Total: \$297,000

Contingency Based upon Hard Costs (15%): \$44,500 Soft Costs Contingency (17%): \$50,400

TOTAL CIRCULATION \$391,900

^{*} Cost per linear foot of roadway.

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Phase 5 State Route 193 9 (V1R21)

Item #	Description	Unit	Quantity	Unit Price	Amount
Backb	one Roadway System				
1	Mobilization	JOB	0	\$50.000.00	\$0
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	0	\$0.25	\$0
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	0	\$15.00	\$0
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	1	\$275,000.00	\$275,000
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	<u>LF</u>	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA LF	_	\$75,000.00	\$0 \$0
26 27	Curb and Gutter	EA	0	\$27.00 \$960.00	\$0
28	AC Driveway (Per Approx. 12' wide) Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	0	\$6,000.00	\$0
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	0	\$25.00	\$0
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
	Construction Total:				\$275,000

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$41,300 Soft Costs Contingency (17%): \$46,800

TOTAL CIRCULATION \$363,100

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.

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\$79,400

\$100,000

\$1,383,400

\$33,900



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Phase 5 Sierra College Boulevard 1 (V1R4) Description Unit Quantity **Unit Price Amount Backbone Roadway System** Mobilization JOB \$50,000.00 \$50,000 1 \$7.00 2 Excavation CY \$0 4" AB (Under Curb & Gutter and Sidewalk) 3 SF 12195 \$1.80 \$22,000 4 16" AB (assumes a Traffic Index of 9) SF 24390 \$2.25 \$54,900 \$65,900 5 5" AC (assumes a Traffic Index of 9) SF 24390 \$2.70 6 18" AB (assumes a Traffic Index of 11) SF \$2.50 \$0 7 7" AC (assumes a Traffic Index of 11) SF \$4.00 \$0 Decomposed Granite Trail (4' width, 4" thick) 8 SF 0 \$1.80 \$0 4" AB Shoulder (2' width) SF \$1.20 \$0 9 0 10 Subgrade Street Prep (Street) SF 24390 \$6,100 \$0.25 Subgrade Prep (Curb & Gutter) 11 SF 12195 \$0.30 \$3,700 12 Subgrade Prep (AB Shoulder) SF \$0.30 \$0 Subgrade Prep (DG Trail) 0 \$0.30 \$0 13 SF Signing and Striping (36' ROW)* LF 1355 \$20,300 14 \$15.00 15 Traffic Signals EΑ \$320,000.00 \$320,000 16 Future Traffic Signal EΑ 0 \$275,000.00 \$0 \$0 17 Signalized Intersection EΑ 0 \$900,000.00 SF 8130 \$48,800 18 Sidewalk, Concrete \$6.00 Roundabout 19 EΑ \$100,000.00 \$0 0 LF 20 Joint Trench \$115.00 \$0 21 Underground Existing Utilities in Joint Trench LF 1355 \$360.00 \$487,800 LF \$12.00 \$0 22 Type 5 Curb Median 23 SF 0 \$4.50 \$0 Median Landscaping 24 Frontage Landscaping SF 0 \$4.50 \$0 25 Signal Conduit and Wiring EΑ 0 \$75,000.00 \$0 LF \$36,600 26 Curb and Gutter 1355 \$27.00 EΑ 27 AC Driveway (Per Approx. 12' wide) 0 \$960.00 \$0 28 Irrigation Sleeves LF 0 \$15.00 \$0 EΑ 9 \$6,000.00 \$54,000 29 Street Lights (every 150 LF) Sawcut and Pavement Removal Median 30 LF 0 \$20.00 \$0

LF

LF

LF

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SF

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JOB

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JOB

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* Cost per line	ear foot of	roadway.
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Sawcut and Pavement Removal

ROW Acquisition (Ferrari Ranch Road) **

ROW Acquisition (Oak Tree Lane - South) ***

Dewatering - Oak Tree near So. Ingram Slough

ROW Acquisition (Oak Tree Lane) **

Grind and Remove Pavement

Dewatering - Ferrari Ranch Road

Golf Course Fence and Netting

Traffic Control Oak Tree Lane

Dewatering - Oak Tree near new lake

FRR Supplemental Topo + Aerial Topo

Bridge (at Auburn Ravine on Oak Tree Lane)

Construction Total:

Remediation Trench and Monitoring

Reconstruct Ditches

Grind and Overlay

Split Rail Fencing

Traffic Control

Retrofit Utilities

Erosion Control

Contingency Based upon Hard Costs (15%): \$207,500 Soft Costs Contingency (17%): \$235,200

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1355

TOTAL CIRCULATION \$1,826,100

\$3.00

\$3.00

\$25.00

\$3.00

\$2.00

\$100,000.00

\$500,000.00

\$50,000.00

\$3,000.00

\$25,000.00

\$50,000.00

\$75,000.00

\$12,500.00

\$1,000,000.00

\$100,000.00

\$250,000.00

\$5,500,000.00

\$133.00

\$45.00

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFF Phase 7 Summary

Item #	e 7 Summary Description	Unit	Quantity	Unit Price	Amount
	2000pulati	Ţ.III		5111.7 1100	
Backhor	ne Roadway System				
Dackboi	le Roadway Oystem				
1	Mobilization	IOR	1	¢50,000,00	¢50.000
2	Excavation	JOB CY	1 0	\$50,000.00 \$7.00	\$50,000
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	10620	\$1.80	\$(\$19,100
4	16" AB (assumes a Traffic Index of 9)	SF	42640	\$2.25	\$19,100
5	5" AC (assumes a Traffic Index of 9)	SF	42640	\$2.23	\$115,100
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$(\$(
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$(
9	4" AB Shoulder (2' width)		0	\$1.80	\$(
	, ,	SF SF	_		
10	Subgrade Street Prep (Street)	SF SF	42640	\$0.25	\$10,700
11	Subgrade Prep (Curb & Gutter)	SF SF	10620	\$0.30	\$3,200
12	Subgrade Prep (AB Shoulder) Subgrade Prep (DG Trail)		0	\$0.30	\$0
13 14			0	\$0.30	\$0,000
	Signing and Striping (36' ROW)*	LF	600	\$15.00	\$9,000
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	1	\$275,000.00	\$275,000
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	5880	\$6.00	\$35,300
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	600	\$115.00	\$69,000
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	980	\$12.00	\$11,800
23	Median Landscaping	SF	5880	\$4.50	\$26,500
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	1580	\$27.00	\$42,700
27	AC Driveway (Per Approx. 12' wide)	EA LF	0	\$960.00	\$0
28	Irrigation Sleeves		0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	4	\$6,000.00	\$24,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	600	\$3.00	\$1,800
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	600	\$25.00	\$15,000
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane) **	LS	1	\$500,000.00	\$500,000
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$(
43	Golf Course Fence and Netting	LF	0	\$133.00	\$(
44	Split Rail Fencing	LF	0	\$45.00	\$(
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$(
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$(
47	Traffic Control	JOB	0	\$100,000.00	\$(
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$(
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	1	\$5,500,000.00	\$5,500,000
	Construction Total:				\$6,804,10

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$1,020,600 Soft Costs Contingency (17%): \$1,156,700

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Phase 7 Oak Tree Lane 12 (V1R12-15)

Item #	Description	Unit	Quantity	Unit Price	Amount
Backh	one Roadway System				
Dackb	one Roadway System				
1	Mobilization	JOB	0	\$50,000.00	\$0
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	8820	\$1.80	\$15,900
4	16" AB (assumes a Traffic Index of 9)	SF	37240	\$2.25	\$83,700
5	5" AC (assumes a Traffic Index of 9)	SF	37240	\$2.70	\$100,500
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$100,500
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	37240	\$0.25	\$9,300
11	Subgrade Prep (Curb & Gutter)	SF	8820	\$0.30	\$2,700
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$2,700
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	0	\$15.00	\$0
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	1	\$275,000.00	\$275,000
17	Signalized Intersection	EA	0	\$900,000.00	\$273,000
18	Sidewalk, Concrete	SF	5880	\$6.00	\$35,300
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	980	\$12.00	\$11,800
23	Median Landscaping	SF	5880	\$4.50	\$26,500
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	980	\$27.00	\$26,500
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	0	\$6,000.00	\$0
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	0	\$25.00	\$0
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane) **	LS	1	\$500,000.00	\$500,000
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	1	\$5,500,000.00	\$5,500,000
	Construction Total:		·	. , -,	\$6,587,200

^{*} Cost per linear foot of roadway.

Contingency Based upon Hard Costs (15%): \$988,100 Soft Costs Contingency (17%): \$1,119,800

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TOTAL CIRCULATION \$8,695,100

^{**} ROW Acquisition includes mapping, purchasing the land,

^{***} ROW Acquisition includes mapping.



Engineer's Opinion of Costs Village 1 - Backbone Roadway System PFE Phase 7 Virginiatown Road 2 (V1R16) Description Unit Quantity **Unit Price** Amount **Backbone Roadway System** Mobilization JOB 1 \$50,000.00 \$50,000 Excavation CY 0 2 \$7.00 ŚC 4" AB (Under Curb & Gutter and Sidewalk) SF \$3,200 3 1800 \$1.80 4 16" AB (assumes a Traffic Index of 9) SF 5400 \$2.25 \$12,200 5 5" AC (assumes a Traffic Index of 9) SF 5400 \$2.70 \$14,600 18" AB (assumes a Traffic Index of 11) SF 6 0 \$2.50 \$0 7" AC (assumes a Traffic Index of 11) \$0 7 SF 0 \$4.00 8 Decomposed Granite Trail (4' width, 4" thick) SF 0 \$1.80 \$0 9 4" AB Shoulder (2' width) SF 0 \$0 \$1.20 Subgrade Street Prep (Street) SF \$1,400 10 5400 \$0.25 11 Subgrade Prep (Curb & Gutter) SF 1800 \$0.30 \$500 12 Subgrade Prep (AB Shoulder) SF 0 \$0.30 \$0 SF \$0.30 \$0 Subgrade Prep (DG Trail) 0 13 14 Signing and Striping (36' ROW) LF 600 \$15.00 \$9,000 15 Traffic Signals EΑ 0 \$320,000.00 \$0 EΑ 0 \$0 16 Future Traffic Signal \$275,000,00 EΑ 0 \$0 17 Signalized Intersection \$900,000.00 \$0 SF 0 18 Sidewalk, Concrete \$6.00 19 Roundabout EΑ 0 \$100,000.00 \$0 Joint Trench LF \$69,000 20 600 \$115.00 Underground Existing Utilities in Joint Trench LF 21 0 \$360.00 \$0 22 Type 5 Curb Median LF 0 \$12.00 \$0 23 Median Landscaping SF 0 \$4.50 \$0 SF \$0 0 24 Frontage Landscaping \$4.50 EΑ \$0 25 Signal Conduit and Wiring 0 \$75,000.00 ΙF \$16,200 26 Curb and Gutter 600 \$27.00 AC Driveway (Per Approx. 12' wide) EΑ 0 \$960.00 \$0 27 28 Irrigation Sleeves LF 0 \$15.00 \$0 EΑ 29 4 Street Lights (every 150 LF) \$6,000.00 \$24,000 30 LF 0 \$20.00 Ś٥ Sawcut and Pavement Removal Median 31 Sawcut and Pavement Removal LF 600 \$3.00 \$1,800 LF 32 \$3.00 Reconstruct Ditches n \$0 \$15,000 33 **Erosion Control** LF 600 \$25.00 34 ROW Acquisition (Ferrari Ranch Road) ** LS 0 \$100,000.00 \$0 35 ROW Acquisition (Oak Tree Lane - North) ** LS 0 \$500,000.00 \$0 \$0 36 ROW Acquisition (Oak Tree Lane - South) *** LS 0 \$50,000.00 37 Grind and Remove Pavement SF 0 \$3.00 \$0 SF 0 \$0 38 \$2.00 Grind and Overlay 39 Retrofit Utilities EΑ 0 \$3,000.00 \$0 ĒΑ \$0 40 Dewatering - Ferrari Ranch Road 0 \$25,000.00 41 EΑ 0 \$0 Dewatering - Oak Tree near So. Ingram Slough \$50,000.00 42 EΑ 0 \$0 Dewatering - Oak Tree near new lake \$75,000.00 \$0 43 Golf Course Fence and Netting LF 0 \$133.00 Split Rail Fencing LF \$0 44 0 \$45.00 45 FRR Supplemental Topo + Aerial Topo JOB 0 \$12,500.00 \$0 \$0 46 Remediation Trench and Monitoring JOB. 0 \$1,000,000.00 JOB \$0 47 Traffic Control 0 \$100,000.00 \$0 48 Traffic Control Oak Tree Lane JOB 0 \$250,000.00 49 Bridge (at Auburn Ravine on Oak Tree Lane) EΑ 0 \$0 \$5,500,000.00 Construction Total: \$216,900

 $\ensuremath{^{**}}$ ROW Acquisition includes mapping, purchasing the land,

Contingency Based upon Hard Costs (15%): \$32,500 Soft Costs Contingency (17%): \$36,900

TOTAL CIRCULATION \$286,300

^{*} Cost per linear foot of roadway.

^{***} ROW Acquisition includes mapping.

APPENDIX 17 Lincoln Village 1 Specific Plan Infrastructure Finance Plan Amenities PFE Costs





Village	Engineer's Opinion of Costs /illage 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition PFE Credit Summary								
Item #	Description	Unit	Quantity	Unit Price	Amount				
AMENI	AMENITIES - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition								
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0				
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0				
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0				
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0				
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0				
6	Frontage Landscaping	SF	24920	\$4.50	\$112,200				
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0				
8	Booster Pump	EA	0	\$75,000.00	\$0				
9	Pumping Station* / Filtration / Standpipe	EA	0	\$350,000.00	\$0				
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0				
11	Intake	EA	0	\$45,000.00	\$0				
12	De-chlorination Station	EA	0	\$75,000.00	\$0				
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0				
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0				
15	Lake Grading	CY	0	\$3.75	\$0				
16	Lake Stabilization	SF	0	\$1.33	\$0				
	Construction Total:				\$112,200				

Contingency Based upon Hard Costs (15%): \$16,800

Soft Costs Contingency (17%): \$19,100

Regional Park Acquisition** \$0

TOTAL AMENITIES \$148,100

^{*} Assumes NID jurisdiction has expanded, therefore no additional Pumping Station is required near Regional Park.

^{**} Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



Village	Engineer's Opinion of Costs Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition PFE Credit Phase 1 Summary							
Item #		Unit	Quantity	Unit Price	Amount			
AMENI	AMENITIES - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition							
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0			
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0			
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0			
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0			
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0			
6	Frontage Landscaping	SF	24920	\$4.50	\$112,200			
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0			
8	Booster Pump	EA	0	\$75,000.00	\$0			
9	Pumping Station* / Filtration / Standpipe	EA	0	\$350,000.00	\$0			
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0			
11	Intake	EA	0	\$45,000.00	\$0			
12	De-chlorination Station	EA	0	\$75,000.00	\$0			
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0			
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0			
15	Lake Grading	CY	0	\$3.75	\$0			
16	Lake Stabilization	SF	0	\$1.33	\$0			
	Construction Total:				\$112,200			

Contingency Based upon Hard Costs (15%): \$16,800

Soft Costs Contingency (17%): \$19,100

Regional Park Acquisition \$0

TOTAL AMENITIES \$148,100

^{*} Assumes NID jurisdiction has expanded, therefore no additional Pumping Station is required near Regional Park.

^{**} Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



Engineer's Opinion of Costs

Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition PFE Credit Phase 1 Oak Tree Lane 6 (V1FL4)

Item #	Description	Unit	Quantity	Unit Price	Amount			
AMENIT	AMENITIES - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition							
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0			
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0			
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0			
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0			
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0			
6	Frontage Landscaping	SF	17220	\$4.50	\$77,500			
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0			
8	Booster Pump	EA	0	\$75,000.00	\$0			
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0			
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0			
11	Intake	EA	0	\$45,000.00	\$0			
12	De-chlorination Station	EA	0	\$75,000.00	\$0			
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0			
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0			
15	Lake Grading	CY	0	\$3.75	\$0			
16	Lake Stabilization	SF	0	\$1.33	\$0			
	Construction Total:				\$77,500			

Contingency Based upon Hard Costs (15%): \$11,600

Soft Costs Contingency (17%):

\$13,200

Regional Park Acquisition

\$0

TOTAL AMENITIES \$102,300

^{**} Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



Engineer's Opinion of Costs

Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition PFE Credit Phase 1 Oak Tree Lane 7 (V1FL3)

Item #	m # Description		Quantity	Unit Price	Amount
AMENI	TIES - Includes Non-Potable Water, Fronta	age Landsc	aping & Re	egional Park A	cquisition
	·		•		•
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	7700	\$4.50	\$34,700
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
	Construction Total:				\$34,700

Contingency Based upon Hard Costs (15%): \$5,200

Soft Costs Contingency (17%):

Regional Park Acquisition \$0

TOTAL AMENITIES \$45,800

\$5,900

^{**} Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



Village	Engineer's Opinion of Costs Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition Summary							
Item #	Description	Unit	Quantity	Unit Price	Amount			
AMENI	TIES - Includes Non-Potable Water, Front	age Landsc	aping & Regio	nal Park Acqui	sition			
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0			
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0			
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0			
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0			
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0			
6	Frontage Landscaping	SF	183375	\$4.50	\$825,200			
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0			
8	Booster Pump	EA	0	\$75,000.00	\$0			
9	Pumping Station* / Filtration / Standpipe	EA	0	\$350,000.00	\$0			
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0			
11	Intake	EA	0	\$45,000.00	\$0			
12	De-chlorination Station	EA	0	\$75,000.00	\$0			
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0			
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0			
15	Lake Grading	CY	0	\$3.75	\$0			
16	Lake Stabilization	SF	0	\$1.33	\$0			
	Construction Total:				\$825,200			

Contingency Based upon Hard Costs (15%): \$123,800

Soft Costs Contingency (17%): \$140,400

Regional Park Acquisition** \$0

TOTAL AMENITIES \$1,089,400

^{*} Assumes NID jurisdiction has expanded, therefore no additional Pumping Station is required near Regional Park.

^{**} Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



16

Lake Stabilization

Village 1 -	Engineer's Opinion of Costs Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition PFE Phase 3 Summary							
Item #	Description	Unit	Quantity	Unit Price	Amount			
AMENITI	ES - Includes Non-Potable Water, Fronta	age Landsc	aping & Re	gional Park Ac	quisition			
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0			
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0			
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0			
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0			
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0			
6	Frontage Landscaping	SF	50000	\$4.50	\$225,000			
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0			
8	Booster Pump	EA	0	\$75,000.00	\$0			
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0			
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0			
11	Intake	EA	0	\$45,000.00	\$0			
12	De-chlorination Station	EA	0	\$75,000.00	\$(
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0			
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0			
15	Lake Grading	CY	0	\$3.75	\$0			

Construction Total:

Contingency Based upon Hard Costs (15%): \$33,800

0

Soft Costs Contingency (17%):

\$38,300

\$0

\$225,000

Regional Park Acquisition

TOTAL AMENITIES \$297,100

\$1.33

SF

^{**} Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



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Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition PFE Phase 3 Ferrari Ranch Road 1 (V1FL1)

Item #	Description	Unit	Quantity	Unit Price	Amount
AMENIT	TES - Includes Non-Potable Water, Fronta	age Landsc	aping & Re	gional Park A	cquisition
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	50000	\$4.50	\$225,000
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
	Construction Total:				\$225,000

Contingency Based upon Hard Costs (15%): \$33,800

Soft Costs Contingency (17%):

\$38,300

Regional Park Acquisition

\$0

TOTAL AMENITIES \$297,100

^{**} Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



Engineer's Opinion of Costs
Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition
PFE Phase 4 Summary

Item #	Description	Unit	Quantity	Unit Price	Amount
AMENI	TIES - Includes Non-Potable Water, Fronta	age Landsca	aping & Re	egional Park A	cquisition
					-
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	128450	\$4.50	\$578,000
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
Construction Total: \$578,0				\$578,000	

Contingency Based upon Hard Costs (15%): \$86,700

Soft Costs Contingency (17%):

Regional Park Acquisition \$0

\$98,300

TOTAL AMENITIES \$763,000

^{**} Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



Engineer's	Opinion o	f Costs
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Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition PFE Phase 4 McBean Park Drive 8 (V1FL2)

Item #	Description	Unit	Quantity	Unit Price	Amount
AMENI	TIES - Includes Non-Potable Water, Fronta	age Landsc	aping & Re	egional Park A	cquisition
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	128450	\$4.50	\$578,000
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
	Construction Total:				\$578,000

Contingency Based upon Hard Costs (15%): \$86,700

Soft Costs Contingency (17%): \$98,300

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\$0

Regional Park Acquisition

TOTAL AMENITIES \$763,000

^{**} Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



Engineer's Opinion of Costs
Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition
Phase 7 Summary

Item #	Description	Unit	Quantity	Unit Price	Amount
AMENI	TIES - Includes Non-Potable Water, Fronta	age Landsc	aping & Ro	egional Park A	cquisition
					-
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	4925	\$4.50	\$22,200
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
	Construction Total:				\$22,200

Contingency Based upon Hard Costs (15%): \$3,300

Soft Costs Contingency (17%):

\$3,800

Regional Park Acquisition

\$0

TOTAL AMENITIES \$29,300

^{**} Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



Engineer's Opinion of Costs
Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition
PFE Phase 7 Oak Tree Lane 12 (V1FL5)

Item #	Description	Unit	Quantity	Unit Price	Amount
AMENI	TIES - Includes Non-Potable Water, Fronta	age Landsc	aping & Re	egional Park A	cquisition
				_	_
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	1925	\$4.50	\$8,700
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
	Construction Total:		•		\$8,700

Contingency Based upon Hard Costs (15%): \$1,300

Soft Costs Contingency (17%):

\$1,500

\$0

Regional Park Acquisition

TOTAL AMENITIES \$11,500

^{**} Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



Engineer's Opinion of Cos	sts	S
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Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition PFE Phase 7 Virginiatown Road 2 (V1FL6)

Item #	Description	Unit	Quantity	Unit Price	Amount
AMENI	ΓΙΕS - Includes Non-Potable Water, Fronta	age Landsc	aping & Re	gional Park A	cquisition
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	3000	\$4.50	\$13,500
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
	Construction Total:	_			\$13,500

Contingency Based upon Hard Costs (15%): \$2,000

Soft Costs Contingency (17%):

\$2,300 \$0

Regional Park Acquisition

TOTAL AMENITIES \$17,800

^{**} Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

APPENDIX 18 Lincoln Village 1 Specific Plan Infrastructure Finance Plan Assumptions





Preliminary Opinion of Costs: General Notes and Assumptions

This estimate has been prepared as a preliminary guide of costs, using engineering judgment, based upon the knowledge available at the time of preparation.

- 1. Frayji Design Group makes no warranty, either expressed or implied as to the accuracy of this estimate.
- 2. This estimate is prepared without the benefit of a final survey, soils, and wetlands investigations, as well as complete knowledge of existing utilities or accurate location of the existing roads.
- 3. This estimate includes information based on meetings with the City of Lincoln on April 11, 2016, May 4, 2016, May 10, 2016 and May 12, 2016.
- 4. The cost opinions presented are based on historical information and do not account for future inflation.
- 5. The costs represent capital costs, not the costs associated with cash flow or the cost of financing.
- 6. This Cost estimate is for off-site infrastructure and improvements needed according to the Specific Plan and do not include other costs including in-tract costs, utilities connections, custom frontage improvements, decorative elements, and temporary water connections, with the exception of the temporary water traversing the Leavell and Silverado Hidden Hills properties.
- 7. The following dwelling units per acre were used in the financing plan calculations:

Zoning	Dwelling Units per Acre
VCE	2
VLDR	4
VMDR	8
VHDR	18
VMU	18

- 8. The Finance plan is based on the principal that PFE fees collected from Village 1 projects will be used for PFE improvements in Village 1 before they are used for other purposes.
- 9. The unit prices used are based on engineering judgment and updated 2016 costs supplied by Teichert Construction.



- 10. The regional park parcel will be purchased for \$675,000 from Placer County and the existing Placer County corporation yard is assumed to remain in the current location. The regional park will be programmed in such a way to screen the existing facilities. Should Placer County elect to relocate at a later date Village 1 will purchase the 4.1 acres site for \$175,000.
- 11. Due to the preliminary nature of the cost estimates not all necessary cost items may have been considered or included. At final design additional items may be discovered and or be required. The final cost will include all of the costs that a developer will incur to complete the facilities.
- 12. Cost estimate tables included in the Report represent estimated construction costs. Future phases will pay escalated Phase 1 & 2 Combined assessments until prior phases have been reimbursed, in accordance with Volume 1 Finance Plan Policy and Strategy.

Additional Assumptions:

- 1. All quantities are based on the Village 1 Specific Plan, tentative maps and discussions with the City of Lincoln and are subject to change in final design.
- 2. Areas and Zoning are based on Developable Areas for VCE, VLDR, VMDR, VHDR, and VMU Land Uses from the Specific Plan.
- 3. The area used in spreading the estimated cost only considers developable area and does not include: right of way, park and open space land that was designated as developable in the Village 1 Specific Plan.
- 4. It is assumed that the infrastructure will be built in sequence and if developers build out of sequence or more than their "fair share", will need to wait for repayment until the plan has collected funds for reimbursement.



5. The 17.00% soft costs assume these cost percentages:

Plan Check & Inspection	5.0%
Soil Inspection	1.5%
Bond Fee	1.0%
Engineering and Staking	9.5%

17.00%

Soft Cost Total

The above percentages are for budgetary purposes and are subject to change. Soft costs will be based on actual incurred costs.

- 6. A City Administration Fee has been included in the plan which equates to 1.50% of the estimated construction costs (pre-contingency). This item is being tracked in Appendix 29 and is in addition to the Village 1 Infrastructure Plan Area (per Developable Are) Fee.
- 7. Improvements will be designed and constructed in accordance with City of Lincoln Design Criteria and Procedures Manual and Public Facilities Improvement Standards.

Circulation:

- 1. The pavement sections used represent what is currently in place or what has been used by projects in the area in the past. The sections may be changed as detailed soils analysis is completed.
- 2. City has proposed to include in the PFE 2 lanes of McBean Park Drive/State Route 193 from Ferrari Ranch Road to the North/South Collector. In addition, the current PFE includes half roadway frontage improvements, including 1 lane, 1 NEV lane, half median and landscaping along the entire southern frontage of McBean Park Drive from Ferrari Ranch Road to Oak Tree lane
- 3. Earthwork on all roads is assumed to be completed with the adjacent associated subdivisions except for the following:

Ferrari Ranch Road south of McBean Park Drive is assumed to have excavation and finish grading to a 2 foot of depth per square foot of road.

McBean Park Drive and State Route 193 are assumed to have excavation and finish grading to a 2 foot depth per square foot of road.



Oak Tree Lane south of McBean Park Drive and State Route 193 to the end of the Hidden Hills Subdivision is assumed to have excavation based on a preliminary grading calculation.

- 4. The Specific Plan mitigation includes placing two traffic signals on Ferrari Ranch Road between McBean Park Drive and the existing bridge north of Lincoln Parkway and constructing two additional lanes of traffic. These will be funded through the PFE program.
- 5. Mobilization costs assume each section will be completed separately, however some portions that should be constructed at the same time have been combined and the mobilization cost reduced.
- 6. Traffic control is combined in road sections that should be completed in the same contract. The circulation section including the Oak Tree Lane and McBean Park Drive intersection has a special traffic control cost due to its complexity.
- 7. At the 193/McBean Park Drive, Oak Tree Lane intersection, the estimates have been prepared assuming the SW approach will not need additional paving for a deceleration or turn lane.
- 8. Right-of-Way for Ferrari Ranch Road and Oak Tree Lane will be dedicated to the City at no cost by the appropriate property owners as part of their final maps, with the exception of Oak Tree Lane traversing the Ryan parcel (APN: 021-231-059). The finance plan has budgeted \$500,000 for right-of-way acquisition including mapping, potential wetland permitting, and potential wetland mitigation for this section of road.
- 9. The Approved Circulation Phasing Table shows the City approved timing of when key infrastructure roads must be in use based upon the number of building permits issued.

Drainage:

- 1. Drainage is based on the Village 1 specific plan and updated to include changes based on tentative map information.
- 2. The cost estimates assume the drainage pipe will be HDPE.
- 3. Costs do not include hydromodification for specific projects.
- 4. Current culvert crossings are sound enough to allow them to be extended.



Sewer:

- 1. The cost estimates assume that all sewer pipes will be VCP except across the bore and jack.
- 2. The cost of upsizing sewer pipes to serve properties outside of Village 1 are included in the PFE program.

Water:

- 1. All water costs are assumed to include necessary appurtenances.
- 2. The cost of upsizing water pipes to serve properties outside of Village 1 are included in the PFE program.

Amenities:

- 1. All frontage landscaping will utilize raw water for irrigation.
- 2. All parks fronting the proposed roads use raw water for irrigation.
- 3. Frontage Landscaping along "orphaned" parcels, to be completed as part of the PFE program and are included in the Circulation estimate for that road section.
- 4. Includes the cost for Regional Park acquisition, but does not include costs for Regional Park improvements. Regional Park improvement cost is included in the PFE.

Trails:

1. All trails to be constructed are assumed to be asphalt concrete multi-use. Trails along McBean Park Drive/State Route 193 are assumed to be 8' wide. All other trails are assumed to be 10' wide. All Specific Plan trails have been included and all of Village 1 will be credited their fair share of the Park-Trail impact fee credit.

APPENDIX 19 Lincoln Village 1 Specific Plan Infrastructure Finance Plan Key Infrastructure Descriptions





Backbone Roadway System

Item #	Description					d in Phase:				
itoiii #		Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8	
	Ferrari Ranch Road									
1	FRR 1			Х						
2	FRR 2	Χ								
3	FRR 3		X							
4	FRR 4		X							
5	FRR 5			X						
	Oak Tree Lane (South)									
	OTL 1					Х				
	OTL 2				X					
	OTL 3			X						
	OTL 4		X							
	OTL 5		Х							
	OTL 6	Χ								
	OTL 7	Х								
	OTL 8	Х								
14	OTL 9	Χ								
	Oak Tree Lane (North)									
	OTL 10			X						
	OTL 11			Х						
17	Auburn Ravine Bridge							X		
18	OTL 12							Х		
	McBean Park Drive									
	McBean 1	Х								
	McBean 2	Х								
21	McBean 3	Х								
	McBean 4	Χ								
	McBean 5	Χ								
	McBean 6			X						
	McBean 7			Х						
26	McBean 8				X					



Backbone Roadway System

Item #	Description				Constructe	d in Phase:					
item #	Description	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8		
	State Route 193										
27	SR193 1			Х							
28	SR193 2			X							
	SR193 3	Х									
	SR193 4	X									
	SR193 5	X									
	SR193 6			X							
	SR193 7				X						
	SR193 8					X					
	SR193 9					Х					
	SR193 10					X					
37	SR193 11					X					
	Collector Loop										
	CL 1				Х						
	CL 2					X					
40	CL 3						X				
	North/South Collector										
41	N/S 1				Х						
42	N/S 2					X					
	Sierra College Blvd.										
43	SCB 1					Х					
	Virginiatown Road										
45	VTR 1							Х			
46	VTR 2							Х			
47	VTR 3							Х			
	Liberty Lane										
48	L1				Х						



Backbone Drainage System

					Constructe	d in Phase:					
Item #	Description	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8		
	Ferrari Ranch Road										
1	FRR 1			Х							
2	FRR 2	Х									
3	FRR 3	Х									
4	FRR 4	Х									
5	FRR 5			Х							
	Auburn Ravine Grading										
6	AR 1	Х									
7	AR 2	X									
	Oak Tree Lane (South)										
	OTL 1					Х					
10	OTL 2				Х						
	OTL 3			Х							
	OTL 4		X								
	OTL 5	X									
14	OTL 6	X									
	Oak Tree Lane (North)										
	OTL 7			Х							
	OTL 8			Х							
	OTL 9			X							
18	OTL 10							Х			
	McBean Park Drive										
	McBean 1	X									
	McBean 2	X									
21	McBean 3	X									
22	McBean 4		X								



Backbone Drainage System

Item #	Description				Constructe	d in Phase:				
iteili #	Description	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8	
	State Route 193									
23	SR193 1		Х							
24	SR193 2	Х								
25	SR193 3	Х								
	Collector Loop	Loop								
26	CL 1				Х					
27	CL 2					X				
28	CL 3						X			
	North/South Collector									
29	N/S 1					Х				
	Virginiatown Road									
30	VTR 1						Х			



BackboneWastewater

					Constructe	d in Phase:			
Item #	Description	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
	Ferrari Ranch Road								
1	FRR 1	Х							
2	AR1 - Auburn Ravine Crossing (Bore & Jack)	Х							
3	FRR 2		Х						
4	FRR 3		Х						
5	FRR 4			X					
	Oak Tree Lane (South)								
6	OTL 1					Х			
7	OTL 2				Х				
8	OTL 3			X					
9	OTL 4		Х						
	OTL 5		Х						
11	OTL 6	X							
	McBean Park Drive								
	McBean 1	Х							
13	McBean 2	Х							
14	McBean 3	X							
	Collector Loop								
	CL 1				Х				
16	CL 2					Х			
17	CL 3						X		
	North/South Collector								
18	N/S 1					Х			
	Regional Park								
19	Region Park 1				Х				
	State Route 193								
21	SR193 1	Х							



36 VTR 3

Backbone Raw Water System and Landscaping (Amenities) Constructed in Phase: Item # Description Phase 2 Phase 3 Phase 4 Phase 5 Phase 6 Phase 1 Phase 7 Phase 8 Ferrari Ranch Road FRR 1 Χ FRR 2 Х 3 FRR 3 Χ FRR 4 Х 5 FRR 5 Χ Oak Tree Lane (South) OTL 1 OTL 2 8 OTL 3 Х OTL 4 10 OTL 5 Х 11 OTL 6 Х 12 OTL 7 Х Oak Tree Lane (North) 13 OTL 8 Χ 14 OTL 9 Х 15 OTL 10 Χ 16 OTL 11 Χ Х Auburn Ravine Bridge 18 OTL 12 **McBean Park Drive** 19 McBean 1 Х 20 McBean 2 Х 21 McBean 3 Х 22 McBean 4 Х State Route 193 23 SR193 1 Х 24 SR193 2 Х 25 SR1933 Х Collector Loop 26 CL 1 Χ 27 CL 2 28 CL 3 North/South Collector 29 N/S 1 30 N/S 2 Х **Regional Park** 31 Regional Park 1 Sierra College Boulevard 32 SCB 1 Х 33 SCB 2 Virginiatown Road 34 VTR 1 Χ VTR 2 Х



Backbone Water System

 40mm #	Description				Constructe	ed in Phase:			
Item #	Description	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
	Ferrari Ranch Road								
1	FRR 1	Х							
2	FRR 2	Х							
3	FRR 3		X						
	Oak Tree Lane (South)								
4	OTL 1					Х			
5	OTL 2				Х				
	OTL 3			Х					
	OTL 4		X						
	OTL 5	Х							
	OTL 6	Х							
	OTL 7	Х							
	OTL 8	Х							
12	OTL 9	Х							
	Oak Tree Lane (North)								
	OTL 10			Х					
	OTL 11			Х					
	OTL 12							X	
	Auburn Ravine Bridge							X	
17	OTL 13							Х	
	McBean Park Drive								
18	McBean 1	X							
	State Route 193								
	SR193 1	Х							
	SR193 2	Х							
	SR193 3	Х							
22	SR193 4	Х							



Backbone Water System

Item #	Description				Constructe	d in Phase:					
iteili #	Description	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8		
	Collector Loop										
23	CL 1				Х						
24	CL 2					X					
25	CL 3						X				
	North/South Collector										
26	N/S 1				Х						
27	N/S 2					X					
	Virginiatown Road										
28	VTR 1							X			
29	VTR 2							X			
30	VTR 3							X			
	Liberty Lane										
31	L 1				Х						
	Auburn Ravine										
32	AR 1	Х									
	Tank Laterals										
33	Tank 1			Х							
34	Tank 2				Х						
	Temporary Lines										
35	Temp 1		Х								
36	Temp 2	X									



Backbo	one Trails									
Item #	Description				Constructe	d in Phase:				
iteili#	Description	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8	
Infrastr	ucture Trails									
	Ferrari Ranch Road									
1	FRR 1	Х								
2	FRR 2			X						
	Oak Tree Lane (North)									
	OTL 1			Х						
4	OTL 2								X	
bn	McBean Park Drive									
4	McBean 1	Х								
5	McBean 2	Х								
	McBean 3			Х						
7	McBean 4			Х						
	State Route 193									
	SR193 1					Х				
	SR193 2					X				
	SR193 3					Х				
	SR193 4					X				
12	SR193 5					Х				
	North/South Collector									
13	N/S 1					Х				
	Turkey Creek Golf Course									
14	Golf Course 1								Х	
	Regional Park									
	Regional Park 1					X				
16	Regional Park 2					Х				
	Trail to Water Tank									
17	Tank 1				Х					



Backbone Trails									
	T				Constructo	d in Phase:			
Item #	Description	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
Non - I	nfrastructure Trails	i ilase i	i ilase z	i ilase s	i ilase 4	i ilase s	i ilase o	i ilase i	1 Hase 0
18	Oak Tree Lane (South)			Х					
10	Ingram Slough			Α					
19	IS 1		I			Х			
20	IS 2			Х		^			
21	IS 3			X					 I
22	IS 4					Х			
23	IS 5							Х	- I
24	IS 6						Х		
	Hidden Hills								
25	HH 1		Х						
	Turkey Creek Estates								
26	TCE 1		Х						
Regional Park									
27	Regional Park 3					Х			
28	Regional Park 4				X				



_	1 Infrastructure Finance Plan 1 Improvements			
Item #	Description	Developer Financed	Paid w/ PFE	Critical Item
	Phase 1			
	Backbone Roadway System			
	FRR 2 - Full ultimate roadway section, excavation, joint trench, street lights, pavement removal, dewatering, irrigation sleeves, erosion control and split rail fencing.	х	x	х
	OTL 6 - Full ultimate roadway section, excavation, joint trench, street lights, erosion control and TCE remediation trench & monitoring.	х		х
	OTL 7 - 1 lane + NEV/shoulder roadway section, 1/2 median curb & landscape, excavation, joint trench, street lights, pavement removal, erosion control and split rail fencing.	х		х
4	OTL 8 - Traffic Signal, 1 lane + NEV/shoulder roadway section, 1/2 median curb & landscape, excavation, joint trench, street lights, pavement removal, erosion control and split rail fencing.	x	X	x
	OTL 9 - 1 lane + NEV/shoulder roadway section, 1/2 median curb & landscape, excavation, joint trench, street lights, pavement removal and erosion control.	х	X	x
6	McBean 1 - Traffic Signal, 1 lane + NEV/shoulder roadway section, excavation, underground existing utilities, street lights, pavement removal, grind & overlay, re-construct drainage ditches and erosion control.	х	X	x
	McBean 2 - 1 lane + NEV/shoulder roadway section, excavation, underground existing utilities, street lights, pavement removal, grind & overlay, re-construct drainage ditches and erosion control.	x	x	x
8	McBean 3 - 1 lane + NEV/shoulder roadway section, excavation, underground existing utilities, street lights, pavement removal, grind & overlay, re-construct drainage ditches and erosion control.	х	х	х
9	McBean 4 - 1 lane + NEV/shoulder roadway section, excavation, underground existing utilities, street lights, pavement removal, grind & overlay, re-construct drainage ditches and erosion control.	х	х	х
10	McBean 5 - 1 lane + NEV/shoulder roadway section, excavation, underground existing utilities, street lights, pavement removal, grind & overlay, re-construct drainage ditches and erosion control.	х	x	x
11	SR 193 3 - 1 lane + NEV/shoulder roadway section, excavation, underground existing utilities, street lights, pavement removal, grind & overlay, re-construct drainage ditches and erosion control.	x	x	x
	SR 193 4 - 1 lane + NEV/shoulder roadway section, excavation, underground existing utilities, street lights, pavement removal, grind & overlay, re-construct drainage ditches and erosion control.	х	x	x
	SR 193 5 - 1 lane + NEV/shoulder roadway section, excavation, underground existing utilities, street lights, pavement removal, grind & overlay, re-construct drainage ditches and erosion control.	х	х	х



	/illage 1 Infrastructure Finance Plan Phase 1 Improvements								
Item #		Developer Financed	Paid w/ PFE	Critical Item					
	Backbone Water System								
14	FRR 1 - 12" water line, valves, fire hydrants and appurtenances.	Х		Х					
15	FRR 2 - 12" water line, valves, fire hydrants and appurtenances.	Х		Х					
16	OTL 5 - 16" water line, valves, fire hydrants and appurtenances. Remove existing 20" water line.	х	Х	х					
17	OTL 6 - 16" water line, valves, fire hydrants and appurtenances.	Х		Х					
18	OTL 7 - 16" water line, valves, fire hydrants and appurtenances. Connection to main transmission line.	х	Х	х					
19	OTL 8 - 16" water line, valves, air release valves, fire hydrants and appurtenances.	х	х	х					
20	OTL 9 - 16" water line, valves, fire hydrants and appurtenances. Connection to main transmission line.	х	х	х					
21	McBean 1 - 18" water line, valves, fire hydrants and appurtenances. Connect to main transmission line.	х		х					
22	SR193 1 - 16" water line, valves, fire hydrants and appurtenances.	Х	Х	Х					
23	SR193 2 - 16" water line, valves, fire hydrants and appurtenances.	Х	Х	Х					
24	SR193 3 - 12" & 16" water line, valves, fire hydrants and appurtenances.	х	Х	х					
25	SR193 4 - 16" water line, valves, fire hydrants and appurtenances.	Х	Х	Х					
26	Auburn Ravine 1 - 12" water line by Bore and Jack.	Х		See Note 1					
27	Temporary 2 - 16" water line and valves.	Х		See Note 2					
	Backbone Wastewater System								
28	FRR 1 - 12" sewer line, sewer manhole and connection to existing main.	х	х	Х					
29	Auburn Ravine Crossing - 12" sewer line by Bore and Jack.	Х		See Note 1					
30	OTL 6 - 10", 12", 15" and 18" sewer line and sewer manhole.	Х		Х					
31	McBean 1 - 12" sewer line, sewer manhole and connection to existing main.	х		х					
32	McBean 2 - 12" sewer line and sewer manhole.	Х		Х					
33	McBean 3 - 12" sewer line, sewer manhole and connection to existing main.	х		х					



	1 Infrastructure Finance Plan 1 Improvements			
Item #	Description	Developer Financed	Paid w/ PFE	Critical Item
	Backbone Drainage System			
34	FRR 2 - 12" and 24" storm drain pipe, storm drain manholes, drainage inlets, vegetated drainage swale, storm water quality basins and	х		Х
35	outfalls. FRR 3 - 12" and 36" storm drain pipe, storm drain manholes and drainage inlets.	Х		Х
36	FRR 4 - 12", 36" and 42" storm drain pipe, storm drain manholes and drainage inlets.	х		Х
37	Auburn Ravine 1 - Grading within Auburn Ravine, CLOMR & LOMR, bank stabilization, hydroseed, armoring and tree planting.	х		Х
38	Auburn Ravine 2 - Grading within Auburn Ravine, CLOMR & LOMR, bank stabilization, hydroseed, armoring and tree planting.	х		Х
39	Auburn Ravine 3 - Grading within Auburn Ravine, CLOMR & LOMR, bank stabilization, hydroseed, armoring and tree planting.	х		Х
40	McBean 1 - 60" storm drain pipe, storm drain manholes and drainage inlets.	х		Х
41	McBean 2 - 60" storm drain pipe and storm drain manholes.	Х		Х
42	McBean 3 - 60" storm drain pipe, storm drain manholes, drainage inlets, 24" culvert extension and headwall retrofit.	х		x
43	SR 193 2 - 18" culvert extension, headwall retrofit and outfall.	Х		Х
44	SR 193 3 - 18", 24" and 36" culvert extensions, headwall retrofit and outfall.	Х		x
45	OTL 5 - 12", 18, 24" and 30" storm drain pipe, storm drain manholes, drainage inlets, storm water quality basins and outfall.	x		Х
46	OTL 6 - 12", 18, 24" and 30" storm drain pipe, storm drain manholes, drainage inlets, storm water quality basins, outfall, 12'x5.5' arch culvert w/ 48" culvert and wetland mitigation.	х		х
	Backbone Raw Water System			
47	FRR 2 - 6" raw water line, valves, 15' wide frontage landscaping and temporary connection to domestic.	х		Х
48	FRR 3 - 15' wide frontage landscaping.	Х		Х
49	OTL 6 - 10" raw water line, valves, booster pumps, 14' wide frontage landscaping and temporary connection to domestic.	х	X	x
50	OTL 7 - 12" raw water line, valves and temporary connection to domestic.	х	x	Х
51	OTL 8 - 12" raw water line, valves, 10' wide frontage landscaping, pump station, intake, de-chlorination station, lake grading and NID water diversion gate.	х		х
52	McBean 1 - 12" raw water line and valves.	Х		Х
53	McBean 2 - 12" raw water line and valves.	Х		Х
54	McBean 3 - 12" raw water line and valves.	Х		Х
55	SR193 1 - 6" raw water line and valves.	X		Х
56	SR193 2 - 6" raw water line and valves.	X		Х
57	SR193 3 - 6" raw water line, valves and end of line flushing valve.	Х		Х
	Backbone Trails System			
58	FRR 1 - 8' wide asphalt trail w/ signing and striping.	X	X	
59	McBean 1 - 8' wide asphalt trail w/ signing and striping.	X	X	
60	McBean 2 - 8' wide asphalt trail w/ signing and striping.	X	Х	

Notes: 1 Bore and jack across Auburn Ravine will required for properties north of Auburn Ravine to build.

2 Temporary 16" water line may be required if additional water capacity is required.



Village 1 Infrastructure Finance Plan Phase 2 Improvements				
Pnase .	2 improvements	Davalanar	Paid w/	Critical
Item #	Description	Developer Financed	Palu W/ PFE	Item
	Phase 2	Tillalloca	115	item
	Backbone Roadway System			
	FRR 3 - Full ultimate roadway section, excavation, joint trench,			
1	median curb & landscaping, street lights, erosion control, dewatering	Х		
	and split rail fencing.			
	FRR 4 - Full ultimate roadway section, excavation, joint trench,			
2	median curb & landscaping, street lights, erosion control, dewatering	Х		
	and split rail fencing.			
3	OTL 4 - Full ultimate roadway section, joint trench, median curb &	X		
	landscaping, street lights and erosion control. OTL 5 - Full ultimate roadway section, joint trench, median curb &			
4	landscaping, street lights and erosion control.	Х		
	Backbone Water System			
5	FRR 3 - 12" water line, valves, fire hydrant and appurtenances.	Х		
	OTL 4 - 12", 16" and 30" water line, valves, fire hydrant and			
6	appurtenances, demolish and remove existing 20" water line.	Х	X	
_	Temp 1 - 16" water line, valves, and transmission line connection to	.,		
7	tank.	Х		
	Backbone Wastewater System			
8	FRR 2 - 10" and 30" sewer line and sewer manholes.	Х	Х	
9	FRR 3 - 10" and 24" sewer line and sewer manholes.	Х	Х	
10	OTL 4 - 10" and 12" sewer line and sewer manholes.	Х		
11	OTL 5 - 12" sewer line and sewer manholes.	X		
	Backbone Drainage System			
12	OTL 4 - 12" and 18" storm drain pipe, storm drain manholes, drainage	х		
12	inlets, vegetated drainage swale and outfall.	^		
13	McBean 4 - 18", 24", and 36" culvert extension, NID box culvert	х		
	expansion and headwall retrofit.			
14	SR 193 1 - 18" culvert extension, headwall retrofit and vegetated	Х		
	drainage swale.			
15	Backbone Raw Water System			
15	FRR 3 - 15' wide frontage landscaping.		Х	
16	OTL 4 - 8" raw water line and water valves.	X		
17	OTL 5 - 8" raw water line and water valves.	X		
18	Regional Park 1 - 6" raw water line. Backbone Trails System	^		
10	•		X	
19 20	HH 1 - 10' wide asphalt trail w/ signing and striping.		X	
20	TCE 1 - 10' wide asphalt trail w/ signing and striping.		٨	



	Village 1 Infrastructure Finance Plan Phase 3 Improvements			
Item #	·	Developer Financed	Paid w/ PFE	Critical Item
	Phase 3			
	Backbone Roadway System			
1	FRR 1 - Additional 2 lane + 1 NEV lane widening w/ 2 traffic signals, excavation, pavement removal, curb & gutter, median curb & landscaping, street lights, erosion control, ROW acquisition, supplemental topo + aerial topo.		х	
2	FRR 5 - Full ultimate roadway section, joint trench, median curb & landscaping, street lights, erosion control and split rail fencing.	X		
3	OTL 3 - Full ultimate roadway section, joint trench, median curb & landscaping, street lights and erosion control.	Х		
4	OTL 10 - Full ultimate 4-lane roadway section (2 lanes to be PFE), joint trench, median curb & landscaping, street lights, erosion control, dewatering - oak tree near new lake and split rail fencing.	х	X	
5	OTL 11 - Full ultimate 4-lane roadway section (2 lanes to be PFE), joint trench, median curb & landscaping, street lights, erosion control, dewatering - oak tree near new lake and golf course fence and netting.	х	х	
6	McBean 6 - 2 outside lanes + 2 NEV lanes w/ AB shoulders, excavation, underground existing utilities, street lights, pavement removal, grind & overlay, re-construct drainage ditches and erosion control.	Х	X	
7	McBean 7 - 1 outside lane + NEV lane w/ AB shoulder, excavation, street lights, pavement removal, grind & overlay, re-construct drainage ditches and erosion control.	х	Х	
8	SR 193 1 - 2 lanes + NEV lane w/ AB shoulders, excavation, underground existing utilities, street lights, pavement removal, grind & overlay, re-construct drainage ditches and erosion control.	x	x	
9	SR193 2 - 2 lanes + NEV lane w/ AB shoulders, excavation, underground existing utilities, street lights, pavement removal, grind & overlay, re-construct drainage ditches and erosion control.	х	x	
10	SR193 6 - 2 lanes + NEV lane w/ AB shoulders, excavation, underground existing utilities, street lights, pavement removal, grind & overlay, re-construct drainage ditches and erosion control.	х		
	Backbone Water System			
11	OTL 3 - 12", 16" and 30" water line, valves, pressure reducing valve, fire hydrant and appurtenances.	Х	Х	
12	OTL 10 - 12" and 24" water line, valves, fire hydrant and appurtenances and connection to transmission line.	х	Х	
13	OTL 11 - 12" and 24" water line, valves, fire hydrant and appurtenances.	X	X	
14	Tank 1 - 16" water line, valves and transmission line connection to existing 30" main.	Х		



IS 3 - 10' wide asphalt trail w/ signing and striping.

_	1 Infrastructure Finance Plan 3 Improvements			
Item #	Description	Developer Financed	Paid w/ PFE	Critical Item
	Backbone Wastewater System			
15	FRR 4 - 24" sewer line and sewer manholes.	Х	Χ	
16	OTL 3 - 10" and 12" sewer line and sewer manholes.	X		
	Backbone Drainage System			
17	FRR 1 - Drainage inlets and retrofit pipes.		Х	
18	FRR 5 - 12", 15" and 18" storm drain pipe, storm drain manholes, drainage inlets and vegetated drainage swale.	х		
19	OTL 3 - 12" and 18" storm drain pipe, storm drain manholes, drainage inlets, vegetated drainage swale, outfall and 30" culvert.	х		
20	OTL 7 - 15" storm drain pipe, drainage inlet, outfall, 12' x 5' arch culvert and grading.	Х	Х	
21	OTL 8 - 12" and 15" storm drain pipe, storm drain manholes, drainage inlets, vegetated drainage swale, outfall and 30" culvert.	х		
22	OTL 9 - 12" and 15" storm drain pipe, storm drain manholes and drainage inlets.	х		
	Backbone Raw Water System			
23	FRR 1 - 10' wide frontage landscaping.		Х	
24	FRR 4 - 15' wide frontage landscaping	X		
25	FRR 5 - 6" raw water line, water valves and 15' wide frontage landscaping.	Х		
26	OTL 3 - 8" raw water line, water valves and booster pump.	X		
27	OTL 8 - 12" raw water line, water valves, pump station, intake, dechlorination station, lake aeration, NID water diversion gate and lake grading & stabilization.	x		
28	OTL 9 - 8" raw water line, water valves and 10' wide frontage landscaping.	х		
29	OTL 10 - 8" raw water line, water valves and 10' wide frontage landscaping.	х		
	Backbone Trails System			
30	McBean 4 - 8' wide asphalt trail w/ signing and striping.		Х	
31	FRR 2 - 10' wide asphalt trail w/ signing and striping.		Х	
32	McBean 3 - 8' wide asphalt trail w/ signing and striping.		Х	
33	OTL 1 - 10' wide asphalt trail w/ signing and striping.		Х	
34	IS 2 - 10' wide asphalt trail w/ signing and striping.		Х	
~ -			V	



_	1 Infrastructure Finance Plan			
Phase 4	4 Improvements			
Item #	Description	Developer	Paid w/	Critical
	Phase 4	Financed	PFE	Item
	Backbone Roadway System			
	OTL 2 - Full ultimate roadway section, median curb & landscaping,			
1	pavement removal, joint trench, street lights and erosion control.	Х		
2	McBean 8 - 1 lane roadway section, grind and overlay full width of roadway, AB shoulder, removal center median pavement, median curb & landscaping, street lights and erosion control.	х	х	
3	SR193 7 - 1 lane + NEV lane roadway section, grind and overlay full width of roadway, AB shoulder, removal center median pavement, median curb & landscaping, street lights and erosion control.	x	X	
4	CL 1 - Full ultimate roadway section, roundabout, joint trench, street lights and erosion control.	х		
5	N/S 1 - Full ultimate roadway section, joint trench, median curb & landscaping, street lights and erosion control.	х		
6	L 1 - 2 lane roadway section, decomposed granite trail, joint trench, street lights and erosion control.	х		
	Backbone Water System			
7	OTL 2 - 12" water line, valve, fire hydrants and appurtenances.	X		
8	CL 1 - 12" water line, valve, fire hydrants and appurtenances.	X		
9	N/S 1 - 12" water line, valve, fire hydrants and appurtenances.	Х		
10	L 1 - 12" water line, valve, fire hydrants and appurtenances and connection to transmission line.	Х		
11	Tank 2 - 30" water line, valves and connection to tank.	Х	Х	
	Backbone Wastewater System			
12	OTL 2 - 12" sewer line and sewer manholes.	Х		
13	CL 1 - 12" sewer line and sewer manholes.	Х		
14	Region Park 1 - 12" and 15" sewer line, sewer manholes and sanitary lift station.	Х		
	Backbone Drainage System			
15	OTL 2 - 12", 15", 18" storm drain pipe, storm drain manholes, drainage inlets, vegetated drainage swale and outfall.	х		
16	Drainage Basin - Retrofit lake outlet and berm.		Х	
17	CL 1 - 12", 18", 24", 30", 36" storm drain pipe, storm drain manholes, drainage inlets and outfall.	х		
	Backbone Raw Water System			
18	OTL 2 - 6" raw water line and water valves.	Х		
19	McBean 8 - 35' wide frontage landscaping.		Х	
20	CL 1 - 6" raw water line and water valves.	Х		
21	N/S 1 - 6" raw water line and water valves.	Х		
	Backbone Trails System			
22	Tank 1 - 10' wide asphalt trail w/ signing and striping.		X	
23	Regional Park 4 - 10' wide asphalt trail w/ signing and striping.		Х	



Village 1 Infrastructure Finance Plan				
Phase	Phase 5 Improvements			
Item #	Description	Developer	Paid w/	Critical
	'	Financed	PFE	Item
	Phase 5			
	Backbone Roadway System			
1	OTL 1 - Full ultimate roadway section, joint trench, median curb & landscaping, street lights, erosion control and split rail fencing.	X		
	SR193 8 1 - lane + NEV lane roadway section, grind and overlay full			
	width of roadway, AB shoulder, removal center median pavement,	v	v	
2	median curb & landscaping, re-construct drainage ditches, street	Х	X	
	lights and erosion control.			
	SR193 9 - Traffic signal, 1 NEV lane roadway section, grind and			
3	overlay full width of roadway, AB shoulder, removal center median	Х	X	
	pavement, median curb & landscaping, re-construct drainage ditches,			
	street lights and erosion control. SR193 10 - 1 NEV lane roadway section, grind and overlay full width			
4	of roadway, AB shoulder, re-construct drainage ditches, street lights	Х		
_	and erosion control.	^		
_	SR193 11 - 1 NEV lane roadway section, grind and overlay full width	ν,		
5	of roadway, AB shoulder, street lights and erosion control.	Х		
6	CL 2 - Full ultimate roadway section, roundabout, joint trench, median	^		
	curb & landscaping, street lights and erosion control.	^		
7	N/S 2 - Full ultimate roadway section, joint trench, median curb &	Х		
	landscaping, street lights and erosion control.			
8	SCB 1 - Traffic signal & associated pavement widening, underground	Х	Х	
0	existing utilities in joint trench, street lights and erosion control.	^	^	
	Backbone Water System			
9	OTL 1 - 12" water line, valves, fire hydrants and appurtenances.	Х		
10	CL 2 - 12" water line, valves, fire hydrants and appurtenances.	Х		
11	N/S 2 - 12" water line, valves, pressure reducing valve, fire hydrants	Х		
- ' '	and appurtenances.	^		
	Backbone Wastewater System			
12	OTL 1 - 12" sewer line and sewer manhole.	Х		
13	CL 2 - 12" sewer line and sewer manhole.	X		
14	N/S 1 - 12" sewer line and sewer manhole.	Х		
	Backbone Drainage System			
15	OTL 1 - 12", 18" storm drain pipe, storm drain manholes, drainage	x		
	inlets, vegetated drainage swale and outfall.			
16	CL 2 - 12" storm drain pipe, storm drain manholes, drainage inlets.	X		
17	N/S 1 - 12", 15" and 18" storm drain pipe, drainage inlets, stormwater	Х		
''	quality basins, outfalls, and 12' x 5.5' arch culvert.	Α		



Village 1 Infrastructure Finance Plan Phase 5 Improvements

Item #	Description	Developer Financed	Paid w/ PFE	Critical Item
	Backbone Raw Water System	- manou		100111
18	OTL 1 - 6" raw water line, water valves, flushing hydrant and 30' wide frontage landscaping.	х		
19	CL 2 - 6" raw water line and water valves.	Х		
20	N/S 2 - 6" raw water line and water valves.	Х		
21	SCB 1 - 30' wide frontage landscaping.	Х		
22	SCB 2 - 30' wide frontage landscaping.	Х		
	Backbone Trails System			
23	SR193 1 - 8' wide asphalt trail w/ signing and striping.		Х	
24	SR193 2 - 8' wide asphalt trail w/ signing and striping.		Х	
25	SR193 3 - 8' wide asphalt trail w/ signing and striping.		Х	
26	SR193 4 - 8' wide asphalt trail w/ signing and striping.		Х	
27	SR193 5 - 8' wide asphalt trail w/ signing and striping.		Х	
28	N/S 1 - 8' wide asphalt trail w/ signing and striping.		Х	
29	IS 1 - 10' wide asphalt trail w/ signing and striping.		Х	
30	IS 4 - 10' wide asphalt trail w/ signing and striping.		Х	
31	Regional Park 1 - 10' wide asphalt trail w/ signing and striping.		Х	
32	Regional Park 2 - 10' wide asphalt trail w/ signing and striping.		Х	
33	Regional Park 3 - 10' wide asphalt trail w/ signing and striping.		Х	



Village 1 Infrastructure Finance Plan Phase 6 Improvements				
Item #	•	Developer Financed	Paid w/ PFE	Critical Item
	Phase 6			
	Backbone Roadway System			
1	CL 3 - Full ultimate roadway section, joint trench, street lights and erosion control.	х		
Backbone Water System				
2	CL 3 - 12" water line, valves, fire hydrant and appurtenances.	Х		
	Backbone Wastewater System			
3	CL 3 - 10" and 12" sewer line and sewer manholes.	Х		
	Backbone Drainage System			
4	CL 3 - 12", 15", 18" storm drain pipe, storm drain manholes, drainage inlets, vegetated drainage swale and outfall.	х		
5	VTR 1 - 48" storm drain pipe, vegetated drainage swale and outfall.	х		
	Backbone Raw Water System			
6	CL 3 - 6" raw water line and water valves.	Х		
	Backbone Trails System			
7	IS 6 - 10' wide asphalt trail w/ signing and striping.		Х	



Village 1 Infrastructure Finance Plan Phase 7 Improvements				
Item #	Description	Developer Financed	Paid w/ PFE	Critical Item
	Phase 7			
	Backbone Roadway System			
1	OTL 12 - Traffic signal, full ultimate 4-lane roadway section (2 lanes to be PFE), 2 - 2 lane bridges, ROW acquisition, joint trench, median curb & landscaping, street lights, erosion control, split rail fencing and golf course netting and fence.	X	X	
2	VTR 1 - 1 lane roadway section, pavement removal, joint trench and erosion control.	Х		
3	VTR 2 - 1 lane roadway section, pavement removal, joint trench and erosion control.	Х	X	
4	VTR 3 - 1 lane roadway section, pavement removal, joint trench and erosion control.	х		
	Backbone Water System			
5	OTL 12 - 24" water line, valves, fire hydrant and appurtenances.		X	
6	OTL 13 - 24" water line, valve, flex joints, fire hydrant and appurtenances.		X	
7	VTR 1 - 18" water line, valves, fire hydrant and appurtenances and connection to transmission line.	х	х	
8	VTR 2 - 18" water line, valves, fire hydrant and appurtenances.	Х	Х	
9	VTR 3 - 18" water line	Х		
	Backbone Wastewater System			
	None			
	Backbone Drainage System			
10	OTL 10 - 12", 15", 18" and 48" storm drain pipe, storm drain manholes, drainage inlets, vegetated drainage swale and outfall.	х		
	Backbone Raw Water System			
11	OTL 12 -6" raw water line, water valves, flushing hydrant and 5' wide frontage landscaping.	Х	X	
12	VTR 1 - 6" raw water line and temporary connection to domestic.	Х		
13	VTR 2 - 6" raw water line, water valves and 5' wide frontage landscaping.	х	x	
14	VTR 3 - 6" raw water line	Х		
	Backbone Trails System			
15	IS 5 - 10' wide asphalt trail w/ signing and striping.		X	



Village	1 Infrastructure Finance Plan			
Phase	8 Improvements			
Item #	Description	Developer Financed	Paid w/ PFE	Critical Item
	Phase 8			
	Backbone Roadway System			
	None			
	Backbone Water System			
	None			
	Backbone Wastewater System			
	None			
	Backbone Drainage System			
	None			
	Backbone Raw Water System			
	None			
	Backbone Trails System			
1	OTL 2 - 8' wide asphalt trail w/ signing and striping.		Х	
2	Golf Course 1 - 10' wide asphalt trail w/ signing and striping.		Х	

APPENDIX 20 Lincoln Village 1 Specific Plan Finance Plan Preparation: 3rd Party Reimbursement Fee





Village 1 Finance Plan Preparation 3rd Party Reimbursement Fee

Executive Summary

Frayji Design Group, Inc. (FDG) was retained to prepare the Village 1 Finance Plan and determine the corresponding Village 1 Finance Plan Preparation (*Plan*) Reimbursement Fee (*Reimbursement Fee*). The *Reimbursement Fee* is a mechanism that will enable the participating/private landowners (Lake Development and Village 1 Ownership Group) to recover the appropriate share of the costs advance-funded for other benefitting Village 1 landowners that did not participate in the original advance funding. This report describes the *Reimbursement Fee* calculations, explains the underlying methodology and assumptions, and serves as the basis for the City of Lincoln's (City) adoption of the *Reimbursement Fee*.

Background

Lake Development, on behalf of Elizabeth Layn and Jeanette Duff, the owners of Walkup Ranch and the Village 1 Ownership Group, which is comprised of:

- Silverado Hidden Hills, LLC
- Leavell Ranch Partnership
- East Lincoln Associates, LLC
- Sunset Tartesso, LLC
- Bella Rosa, LLC

funded the cost of preparing the *Plan* for the Village Specific Plan area. The funding included all City Staff costs and City consultant costs incurred in the City's review and consideration of the *Plan*. The *Reimbursement Fee* includes eligible Finance Plan preparation costs that consist of the following: Engineering fees, Project Management, Legal fees, costs for City review of project documents and exhibits, supporting studies, miscellaneous travel expenses, and indirect costs. Between 2015 to current, Lake Development and the Village 1 Ownership Group have contributed toward the preparation and approval of the Village 1 Finance Plan. The total incurred and projected costs for the Village 1 Infrastructure Finance Plan is \$975,000.

Reimbursement Fee

The *Reimbursement Fee* for non-participating landowners in the Village 1 Finance Plan was calculated by identifying eligible costs for reimbursement and dividing those costs by the Village 1 total developable acreage within the Village 1 annexation boundary. The *Reimbursement Fee* is calculated to be \$1,065 per acre, as shown in **Table 1**. This *Reimbursement Fee* is subject to change and will be reconciled upon adoption of the Finance Plan.

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Fee Collection and Distribution

The *Reimbursement Fee* is to be imposed on a per-acre basis on eligible Village 1 Specific Plan developable acreage, on any persons, including Landowners, filing for final map recordation with the City after the adoption of the *Reimbursement Fee*.

Table 1 - Village 1 Finance Plan Estimated Reimbursement Fee

Item	Reference/ Assumption	Total
City Approved Village 1 Finance Plan Preparation Reimbursement Costs [1]	Table 2	\$975,000
Village 1 Specific Plan Acreage [2] Total Village 1 <i>Reimbursement Fee</i> per Acre [3]	Table 3	915.5 ac \$1,065

Source: FDG and the City of Lincoln.

- [1] Represents total requested reimbursement costs less deducted costs. Costs reviewed by City of Lincoln.
- [2] Represents total participating developable acreage within Village 1 Specific Plan annexation boundary.
- [3] Approximate budget number that may decrease or increase. Shall be reconciled after adoption of Finance Plan.

Fee Credits and Reimbursements

Fee credits are defined as all costs incurred for the benefit of Village 1 that are in excess of the landowner fee obligation. Lake Development and the rest of the Village 1 Ownership Group (Participating Landowners), has exceeded their obligation for the Finance Plan preparation costs by pre-paying all of the costs necessary for the preparation of the Finance Plan and associated documents; therefore, Lake Development and the Village 1 Ownership Group will not be required to pay any fees established by the Reimbursement Agreement.

Annual Adjustments

The *Reimbursement Fee* is to be adjusted annually as outlined in Volume 1 of 2 of the Village 1 Infrastructure and Public Facilities Financing Plan.



Methodology and Assumptions

Eligible Costs for Reimbursement

Entitlement and administrative costs are included in the *Reimbursement Fee*. These costs are described in detail below.

Entitlement Costs

Lake Development and Village 1 Ownership Group funded the Finance Plan preparation costs to prepare the Village 1 Finance Plan document for the Village 1 Specific Plan area.

Costs incurred while preparing the Finance Plan were organized into the following categories:

City of Lincoln (including County Annexation, City Consultants - PMC and EPS)

Engineering, Landscape Architect and Legal Review

Contingency

The Lake Development and the Village 1 Ownership Group submitted proposed Finance Plan preparation costs for reimbursement to the City. The City analyzed these costs to identify which costs would be eligible for reimbursement.

Table 2 - Village 1 Proposed Reimbursable Costs

Cost Category	Total [1]
Requested Reimbursements Costs	
City of Lincoln (including County Annexation, City Consultants - PMC and EPS)	\$285,000
Engineering, Landscape Architect and Legal Review	\$580,000
City of Lincoln Administration - Initial Finance Plan Set-Up	\$40,000
Public Services CFD Formation	\$25,000
Contingency	\$45,000
Approved Reimbursement Costs [2]	\$975,000

Source: FDG and City of Lincoln

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^[1] Costs reviewed by City of Lincoln.

^[2] Approximate budget number that may decrease or increase. Shall be reconciled after adoption of Finance Plan.



Village 1 Specific Plan Acreage

The Village 1 Specific Plan consists of 1,832.1 gross acres, as shown in **Table 3**. The City provided FDG with a breakdown of Village 1 Specific Plan acreage by parcel, which is shown in **Table 3**.

Acreage Adjustments

The total acreage subject to the *Reimbursement Fee* is based on the gross Village 1 Specific Plan acreage of 1,832.1 excluding existing and proposed collector streets and major rights-of-way, open space areas, the golf course, community parks and village paseos and properties not participating. The excluded areas are considered non-developable and have been subtracted from the acreage subject to the *Reimbursement Fee*. The total Village 1 acreage subject to the *Reimbursement Fee* is 915.5 acres. Refer to **Table 3.**

Non-developable Areas

As shown in **Table 3**, non-developable areas have been excluded from the land that is obligated to pay the *Reimbursement Fee*. In **Table 3**, all of the land shown in parenthesis (760.3 acres) is excluded from the reimbursable acreage. The excluded areas contain the following land uses and acreages; Village Park/Recreation (Community Park, Lake, Neighborhood Parks and Golf Course) – 318.7 acres, Village Public Facility – 12.1 acres, Village Open Space (Village Paseos, Development

Edge Buffers, Auburn Ravine and Oak Woodlands/Natural Areas) -367.1 acres, Landscape Corridors -26.8 acres, Proposed Rights-of-Way -45.3 acres, Existing Rights-of-Way (SR 193 & Oak Tree Lane) -33.6 acres and Village Country Estates and Village Low Density Residential (non-participating landowners) -112.6 acres .

Per-Acre Fee Calculation

The total eligible Finance Plan preparation costs for reimbursement were divided by the acreage included in the fee program to generate a per-acre *Reimbursement Fee*. The calculation can be expressed as follows:

City Approved Village 1 Finance Plan reimbursable costs of \$975,000 divided by the total eligible Village 1 Specific Plan acres of 915.5 acres results in a per-acre total *Reimbursement Fee* of \$1,065. See **Table 1**.

In the event of any changes to the County assessor maps, the *Reimbursement Fee* application will be adjusted accordingly to assure capture of all eligible acreage in the Village 1 Specific Plan area.



Table 3 - Village 1 Summary of Specific Plan Acreage

Item	Total
Gross Acreage	1,832.1
Less Village Park Recreational	(319.2)
Less Village Public Facility	(12.1)
Less Village Open Space	(367.1)
Less Landscape Corridor	(26.8)
Less Proposed Rights-of-Way	(45.3)
Less Existing Rights-of-Way	(33.6)
Less Non-Participating Village Country Estates	(111.8)
Less Non-Participating Village Low Density Residential	(0.7)
Eligible Acres in Reimbursement Fee	915.5

Source: City of Lincoln and FDG.

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Table 4 - Village 1 Acreage by Assessor Parcel Number (APN)

APN	Acreage [1]
021-231-026	5
021-231-055	2.4
021-231-056	2.4
021-231-058	0.6
021-231-057	3.3
021-231-023	1.1
021-231-022	5.1
021-231-059 & 021-231-60	56
021-231-019	6.3
021-250-004	80.8
021-250-005	40.1
021-272-009	200.8
021-272-016	2.7
021-231-045	6.4
021-231-046	1
021-231-047	0.5
021-231-048	0.5
021-231-049	0.5
021-231-050	0.5
021-231-054	2.1
021-231-053	0.9
021-231-051	3.9
021-231-052	0.9
021-231-061	1.1
021-231-021	19.9
021-272-010	56.3
021-272-014	69.4
021-272-013	0.7
021-272-012	22.5
021-272-017	145
021-272-023	141.1
021-272-022	106.6
031-460-060	9.6
021-274-033	18.2

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Table 4 - Village 1 Acreage by Assessor Parcel Number (APN)

APN	Acreage [1]
021-274-034	20.1
021-274-035	16.2
021-274-036	18.5
021-274-037	19.3
021-274-042	325.9
021-274-038	11.4
021-274-039	0.6
021-274-032	0.7
021-274-031	46.1
021-274-030	20.9
021-274-040	76.2
021-274-041	21
021-274-028	11.1
021-274-029	9.9
021-274-027 & 021-274-024	35
021-274-026	9
021-274-025	20
031-420-004	5
031-420-023	7.5
031-420-024	7.5
031-101-001	91.3
032-010-013	0.3
032-010-015	3.5
032-010-017	3.4
032-010-014	3
Existing 193, Oak Tree Lane & Leavell Lane ROW	34.5
Total Gross Acreage	1,832.1

Source: County ssessor's Parcel Maps

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^[1] he acreages shown are based upon the ssessor's Parcel Maps and are appro imate Final acreages will be obtained at the time each parcel is surveyed by a licensed Land Surveyor.



Table 5 - Village 1 Participating Percent Share of Fee Reimbursement

	Total	Developable	
Village 1 APN	Acreage [1]	Acreage	% Share [2]
021-231-026	5	4.2	0.46
021-231-055	2.4	2.2	0.24
021-231-056	2.4	2.2	0.24
021-231-058	0.6	0.5	0.05
021-231-057	3.3	3.1	0.34
021-231-023	1.1	0.9	0.10
021-231-022	5.1	4.5	0.49
021-231-059 & 021-231-060	56	23.5	2.57
021-272-016	2.7	2.5	0.27
021-231-045	6.4	6.4	0.70
021-231-046	1	1.0	0.11
021-231-047	0.5	0.5	0.05
021-231-048	0.5	0.5	0.05
021-231-049	0.5	0.5	0.05
021-231-050	0.5	0.5	0.05
021-231-054	2.1	1.1	0.12
021-231-053	0.9	0.9	0.08
021-231-051	3.9	3.9	0.36
021-231-052	0.9	0.9	0.08
021-231-061	1.1	1.1	0.10
021-231-021	19.9	17.6	1.92
021-272-010	56.3	29.2	3.19
021-272-014	69.4	28.3	3.09
021-272-012	22.5	22.0	2.40
021-272-017	145	103.6	11.32
021-272-023	141.1	94.5	10.32
021-272-022	106.6	75.0	8.19
031-460-060	9.6	9.1	0.99
021-274-033	18.2	10.9	1.19
021-274-034	20.1	9.1	0.99
021-274-035	16.2	12.4	1.35
021-274-036	18.5	13.6	1.49
021-274-037	19.3	10.6	1.16
021-274-042	325.9	244.4	26.70
021-274-038	11.4	9.5	1.04

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Table 5 - Village 1 Participating Percent Share of Fee Reimbursement

Village 1 APN	Total Acreage [1]	Developable Acreage	% Share [2]
021-274-039	0.6	0.2	0.02
021-274-031	46.1	10.2	1.11
021-274-030	20.9	15.4	1.68
021-274-040	76.2	54.8	5.99
021-274-041	21.0	13.9	1.52
021-274-028	11.1	6.4	0.70
021-274-029	9.9	8.7	0.95
021-274-027 & 021-274-024	35.0	22.6	2.47
021-274-026	9.0	5.7	0.62
021-274-025	20.0	18.8	2.05
031-420-004	5.0	2.9	0.32
031-420-023	7.5	5.2	0.57
Totals	1366.5	915.5	

Source: County ssessor's Parcel Maps

Implementation and Administration

Fee Implementation

This section describes the method of fee collection along with reporting requirements and annual adjustment provisions.

Fee Collection and Distribution

The *Reimbursement Fee* is to be imposed on a per-acre basis on eligible Village 1 Specific Plan acreage, on any persons, including landowners, filing a final map for recordation with the City after the adoption of the reimbursement fee.

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^[1] he acreages shown are based upon the ssessor's Parcel Maps and are appro imate Final acreages will be obtained at the time each parcel is surveyed by a licensed Land Surveyor.

^[2] Percent share is subject to change. Based on properties within Village 1 that are identified as participating. Should properties, currently not identified as participating develop, the percent share shall be updated accordingly.



Fee revenues collected by the City shall be paid to the participating / private landowner (Lake Development and Village 1 Ownership Group applicant or their landowner assignees), by the City within 30 days of receipt, until all of the required reimbursement fees have been paid in full including any assessed interest.

Annual Reporting

The City will provide landowners (and any landowner assignees) each year with an annual accounting of *Reimbursement Fee* revenues collected and disbursed by the City through June 30 of the immediately preceding fiscal year.

Fee Adjustments

The *Reimbursement Fee* is to be adjusted annually as outlined in Volume 1 of 2 of the Village 1 Infrastructure and Public Facilities Financing Plan. Fee credits also will be adjusted until all fees are reimbursed to landowner, less any fee credits approved by the City from other sources.

Fee Credits and Reimbursements

Fee credits are defined as all costs incurred for the benefit of Village 1 that are in excess of the landowners' fee obligation. The participating / private landowner (Lake Development and Village 1 Ownership Group applicant) has exceeded their obligation for the Finance Plan preparation costs by pre-paying all of the costs necessary for the preparation of the Finance Plan and associated documents therefore, Lake Development and Village 1 Ownership Group will not be required to pay any fees established by the Reimbursement Agreement.¹

The City will maintain records of outstanding fee reimbursement account balances for the Participating Landowner (Lake Development and Village 1 Ownership Group). Reimbursements shall be adjusted as outlined in Volume 1 of 2 of the Village 1 Infrastructure and Public Facilities Financing Plan to compensate Lake Development and Village 1 Ownership Group for cost of funds advanced to defray the Village 1 Finance Plan preparation costs.

1 Any such reimbursements to the Participating Landowner (Lake Development and Village 1 Ownership Group or landowner assignees) shall be limited to funding available from *Reimbursement Fees* collected by City pursuant to this agreement. City will be reimbursed for its costs incurred in the ongoing administration of the Finance Plan Fee prior to any reimbursement being made to the Participating Landowner (Lake Development and Village 1 Ownership Group or Landowner assignees).

Appendix 20 Village 1 Infrastructure Finance Plan Preparation 3rd Party Reimbursement Fee

Project No. 20001 Prepared By: F. Sousa/J. Reed Checked By: T. Frayji Date: 8-9-2016

			Developable Acreage							
Village 1 APN [1]	Owner Name	Total Acreage [3]	VCE	VLDR	VMDR	VHDR	VMU	Total	Village 1 Cost Share Percentage [4]	3rd Party Reimbursement Fee
021-231-026	Anderson	5		4.2				4.2	0.46%	\$4,473
021-231-055	Snyder	2.4		2.2				2.2	0.24%	\$2,343
021-231-056	Ramsdell	2.4		2.2				2.2	0.24%	\$2,343
021-231-058	Simmons & McDonald	0.6		0.5				0.5	0.05%	\$532
021-231-057	Darville	3.3		3.1				3.1	0.34%	\$3,301
021-231-023	Golden	1.1		0.9				0.9	0.10%	\$958
021-231-022	Montgomery	5.1		4.5				4.5	0.49%	\$4,792
021-231-059,60	Ryan	56		23.5				23.5	2.57%	\$25,027
021-231-019	City of Lincoln	6.3						0.0		
021-250-004	Turkey Ranch Golf Course	80.8	28.4					28.4		
021-250-005	Turkey Ranch Golf Course	40.1	23.5					23.5		
021-272-009	Turkey Ranch Golf Course	200.8						0.0		
	Golf Course Subtotal	321.7	51.9					51.9		
021-272-016	McEwen	2.7		2.5				2.5	0.27%	\$2,662
021-231-045	Leavell Ranch Partnership	6.4		6.4				6.4	0.70%	\$6,816
021-231-046	Blansett	1		1				1.0	0.11%	\$1,065
021-231-047	Williams	0.5		0.5				0.5	0.05%	\$532
021-231-048	Burns	0.5		0.5				0.5	0.05%	\$532
021-231-049	Burns	0.5		0.5				0.5	0.05%	\$532
021-231-050	Burns	0.5		0.5				0.5	0.05%	\$532
021-231-054	Thomas	2.1		1.1				1.1	0.12%	\$1,171
021-231-053	Haddox	0.9		0.9				0.9	0.10%	\$958
021-231-051	Maan	3.9		3.9				3.9	0.43%	\$4,153
021-231-052	Tello	0.9		0.9				0.9	0.10%	\$958
021-231-061	Ryan	1.1		1.1				1.1	0.12%	\$1,171
021-231-021	Squier	19.9		17.6				17.6	1.92%	\$18,744
021-272-010	Bella Rosa LLC	56.3		29.2				29.2	3.19%	\$31,098
021-272-014	Leavell Ranch Partnership	69.4		28.3				28.3	3.09%	\$30,139
	Leavell Ranch Partnership Subtotal	75.8		34.7				34.7	3.79%	\$36,955
021-272-013	Tofft	0.7		0.7				0.7		\$0
021-272-012	Leavell	22.5		22				22.0	2.40%	\$23,430
021-272-017	Duff	145		65.4	38.2			103.6	11.32%	\$110,333
021-272-023	East Lincoln Associates	141.1	94.5					94.5	10.32%	\$100,642
021-272-022	Sunset Tratesso LLC	106.6	7.5	67.5				75.0	8.19%	\$79,874
	Elliot Homes Subtotal	247.7	102	67.5				169.5	18.51%	\$180,516
031-460-060 [2]	Kollenberg [2]	9.86	9.1					9.1	0.99%	\$9,691
021-274-033	Highmark Land LLC	18.2					10.9	10.9	1.19%	\$11,608
021-274-034	Ride to Walk	20.1					9.1	9.1	0.99%	\$9,691

Appendix 20 Village 1 Infrastructure Finance Plan Preparation 3rd Party Reimbursement Fee

Project No. 20001 Prepared By: F. Sousa/J. Reed Checked By: T. Frayji Date: 8-9-2016

			Developable Acreage							
Village 1 APN [1]	Owner Name	Total Acreage [3]	VCE	VLDR	VMDR	VHDR	VMU	Total	Village 1 Cost Share Percentage [4]	3rd Party Reimbursement Fee
021-274-035	Vanwagenen	16.2				3.6	8.8	12.4	1.35%	\$13,206
021-274-036	Leavell	18.5				13.6		13.6	1.49%	\$14,484
021-274-037	Leavell	19.3			8.3	2.3		10.6	1.16%	\$11,289
021-274-042	Leavell	325.9	76.8	129.2	38.4			244.4	26.70%	\$260,284
021-274-038	Sturzen	11.4	9.5					9.5	1.04%	\$10,117
021-274-039	Sturzen	0.6	0.2					0.2	0.02%	\$213
021-274-032	Highmark Land LLC	0.7						0.0		
021-274-031	Placer County	46.1					10.2	10.2	1.11%	\$10,863
021-274-030	Parkwood Holdings LLC	20.9			6.1	9.3		15.4	1.68%	\$16,401
021-274-040	Stardust 80	76.2	14.6	40.2				54.8	5.99%	\$58,362
021-274-041	Sacto Teen Challenge	21	13.9					13.9	1.52%	\$14,803
021-274-028	Silverado Hidden Hills LLC	11.1		6.4				6.4	0.70%	\$6,816
021-274-029	Silverado Hidden Hills LLC	9.9		8.7				8.7	0.95%	\$9,265
021-274-027,24	Silverado Hidden Hills LLC	35		22.6				22.6	2.47%	\$24,069
021-274-026	Deloach	9		5.7				5.7	0.62%	\$6,070
021-274-025	Silverado Hidden Hills LLC	20		18.8				18.8	2.05%	\$20,022
	Hidden Hill Subtotal	76		56.5				56.5	6.17%	\$60,172
031-420-004	Ewing	5	2.9					2.9	0.32%	\$3,088
031-420-023	Ewing	7.5	5.2					5.2	0.57%	\$5,538
031-420-024	Ewing	7.5	6.9					6.9		
031-101-001	Allen	91.3	42.8					42.8		
032-010-013	Allen	0.3	0.3					0.3		
032-010-015	Jmag Enterprises LLC	3.5	3.5					3.5		
032-010-017	Obrien	3.4	3.4					3.4		
032-010-014	Bennett	3	3					3.0		
	TOTALS	1366.5	234.2	522.5	91.0	28.8	39.0	915.5	100%	\$ 975,000

^[1] Excludes Parcels north of Turkey Creek Golf Course and areas outside of the annexation boundary (i.e. Allen, Bennett, Ewing, Jmag Enterprises, O'brien and Tofft).

^[2] Includes APN: 021-450-029, 0.26 +/- acres.

^[3] The acreages shown are based on the assessor's parcel maps and are approximate. Final acreages will be obtained at the time each parcel is surveyed by a licensed Land Surveyor.

^[4] Percent share is subject to change. Based on properties within Village 1 that are identified as participating. Should properties, currently not identified as participating develop, the percent share shall be updated accordingly.

APPENDIX 21 Lincoln Village 1 Specific Plan Infrastructure Finance Plan Cost Distribution Methodologies Considered





Analysis of Lincoln Village 1 Finance Plan Cost Distribution Methodologies Considered

Three potential distribution methods were considered to assign the aggregate Village 1 Infrastructure cost to various landowners based upon a logical and fair formula, since all owners who develop benefit from the infrastructure, although not all in the same proportion. To consider the appropriate means to apply the total cost in a fair manner, three distributions were developed that consider fair proportioning being: 1) Acreage; 2) by Home Value; 3) by City of Lincoln Fee Structure Weighting. A discussion of the three methods is provided below for clarification purposes.

Additionally, since the underlying Infrastructure Finance assessment costs established in this Plan are a per acre basis, we have utilized incorporation of average density per land use type to provide a representative 'per unit' cost, if the average density was proposed for the project specific development. The unit count for the basis of this study was determined through review of preliminary site studies within the Village 1 Specific Plan area. The average density was determined based on a combination of averaging currently approved tentative maps for Phase 1 area of Village 1, Hidden Hills and Turkey Creek Estates, preliminary site layouts for APN: 021-274-042 (Leavell) along with an average density based on a range from the Village 1 Specific Plan. The table below shows the average density factors used for each land use category. The assumed dwelling units per acre used for Village Mixed Use was set arbitrarily high to offset the potential for Commercial Use. The dwelling unit density utilized when presenting a cost per unit is included in the table below.

Land Use Category	Finance Plan Dwelling Units
Village Country Estate	2
Village Low Density Residential	4
Village Medium Density Residential	8
Village High Density Residential	18
Village Mixed Use	18

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Distribution by Acreage. Utilizing this method, all developable acres are treated equally when distributing costs. The strength of this method is its simplicity, since the distribution is performed with a single calculation. The weakness to this approach is that the low density Village Country Estate units receive a prohibitively high cost per unit in a manner that subsidizes the higher density units to a very high level. This lopsided cost imbalance would financially constrict VCE construction while encouraging VHDR and VMU, likely rendering the plan insolvent. The Per Acre effective costs are as follows:

	Per Acre Cost
Village Country Estate	\$116,344
Village Low Density Residential	\$116,344
Village Medium Density Residential	\$116,344
Village High Density Residential	\$116,344
Village Mixed Use	\$116,344

Distribution by Home Values. In this method, the estimated average home value determined for Development within the Village 1 Area is used as the basis for weighting the fee distribution to the various land uses. The basis for the average home values was the Village 1 Analysis, performed by Meyers Research for the City of Lincoln in March 2014 to examine Market conditions. The advantage of this method is that is seems to produce a very equitable and reasonable approach that distributes cost proportionally according to the added value of the development. The weakness of the method is that the estimated home values are based upon a market study that must be accepted as authoritative and may not reflect actual market conditions during development. The Per Acre effective costs are as follows:

	Per Acre Cost
Village Country Estate	\$71,179
Village Low Density Residential	\$104,616
Village Medium Density Residential	\$165,282
Village High Density Residential	\$297,256
Village Mixed Use	\$296,912

Distribution by PFE Structure. The City of Lincoln has an existing Public Facilities Element Fee structure that incorporates weighting of fees based upon the zoning of the dwelling unit. Units in very low density land use areas pay a higher per unit fee than low density, medium density and high density, although the ratio varies by infrastructure component. For this



distribution methodology, the proportional ratio associated with each component was applied as a weighing factor to those costs when distributing the Village 1 assessment to each land use. This distribution method uses the rationale of the PFE weighting factors, this mechanism does not substitute, incorporate or replace the current PFE Impact Fees. For each of the Village 1 Residential Land Use Designations, the corresponding weighing factor is provided in the table below.

CFD Element	PFE Category	VCE	VLDR	VMDR	VHDR	VMU
Water	Water	2.37	1.00	1.00	0.54	0.54
Raw Water	Water	2.37	1.00	1.00	0.54	0.54
Drainage	Drainage	1.30	1.00	0.70	0.24	0.24
Wastewater	Wastewater	1.27	1.00	1.00	0.80	0.80
Circulation	Transportation	1.00	1.00	0.72	0.72	0.72
Walls and Landscaping	Transportation	1.00	1.00	0.72	0.72	0.72
Village Trails	Parks / Rec	1.00	1.00	1.00	0.72	0.72
Park	Parks / Rec	1.00	1.00	1.00	0.72	0.72

The summation of all of the subcomponent costs was utilized to calculate the total fee. This method has the strength that it utilizes the rationale already adopted by the City of Lincoln for distributing costs to various types of land uses based upon their actual impact. The result seems to be generally reasonable and is similar to the Home Value Method. The weakness of this method is the added complexity associated with the calculation. However, the City of Lincoln has successfully administered the existing PFE Fee structure, which has even more elements, without any significant difficulties, so that concern is likely academic. The resulting Per Acre and Per Dwelling Unit effective costs are as follows:

	Per Acre Cost
Village Country Estate	\$49,421
Village Low Density Residential	\$78,602
Village Medium Density Residential	\$122,573
Village High Density Residential	\$222,677
Village Mixed Use	\$222,426

For each distribution method, the average density was determined based on a combination of averaging the currently approved tentative maps for Village 1 and an average density based on a



range from the Village 1 Specific Plan. The results of the distribution are provided in tabular summary form.

Conclusion

Based upon the analysis, the Distribution by PFE Structure appears to be the most reasonable, logical and fair method. The weighting factors utilized have been carefully developed and applied by the City of Lincoln in past years for development based upon the actual impacts associated with various land uses within Lincoln. As such, they are accepted as reasonable and fair. While more complex than the other methods proposed, the requisite complexity is necessary and appropriate to normalize otherwise disparate impact.

The other two methods were found to be less desirable overall. A Distribution by Home Values conforms generally to the Distribution by PFE Structure, showing that the method is also reasonable and fair. However, the values used to derive the impact are both subjective and subject to change over time, rather than stable like the PFE Structure. Distribution by Per Acre Cost, while simple, appears to heavily subsidize high density developments at the cost of country estates. As the degree of imbalance would make Village Country Estate development cost prohibitive, the financing mechanisms would become imbalanced and no longer viable.



Distribution Methodologies Summary Table

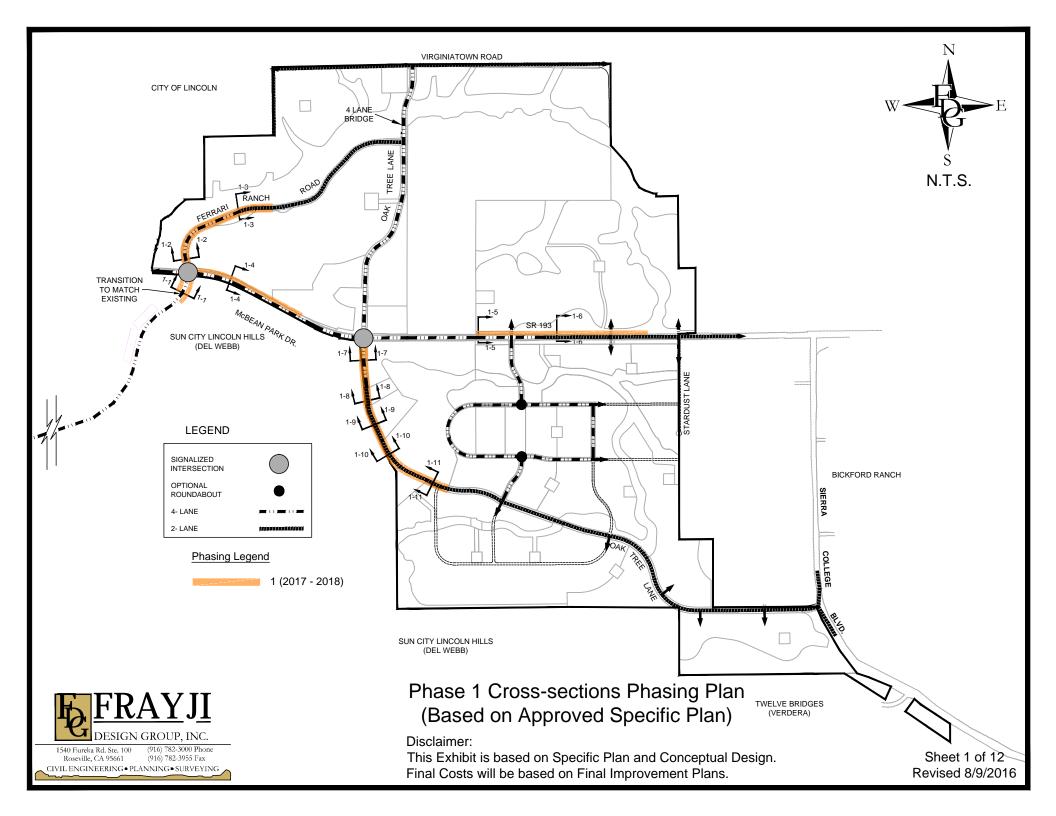
Distribution Method	Equally By Developable Acre	Proportionate to Home Values	By PFE Factor	
	Cost Per Acre	Cost Per Acre	Cost Per Acre	
Village County Estate	\$116,344	\$71,179	\$49,421	
Village Low Density Residential	\$116,344	\$104,616	\$78,602	
Village Medium Density Residential	\$116,344	\$165,282	\$122,573	
Village High Density Residential	\$116,344	\$297,256	\$222,677	
Village Mixed Use	\$116,344	\$296,912	\$222,426	

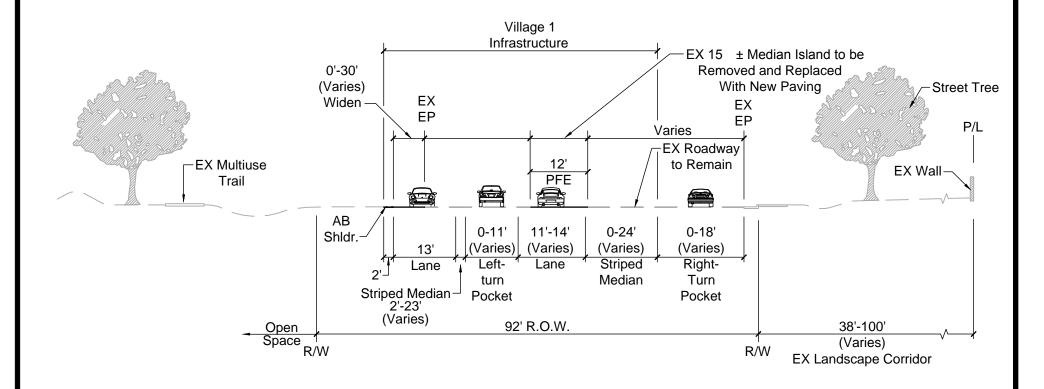
APPENDIX 22 Lincoln Village 1 Specific Plan Infrastructure Finance Plan Roadway Cross-Sections



Phase 1







Cross Section: Ferrari Ranch Road

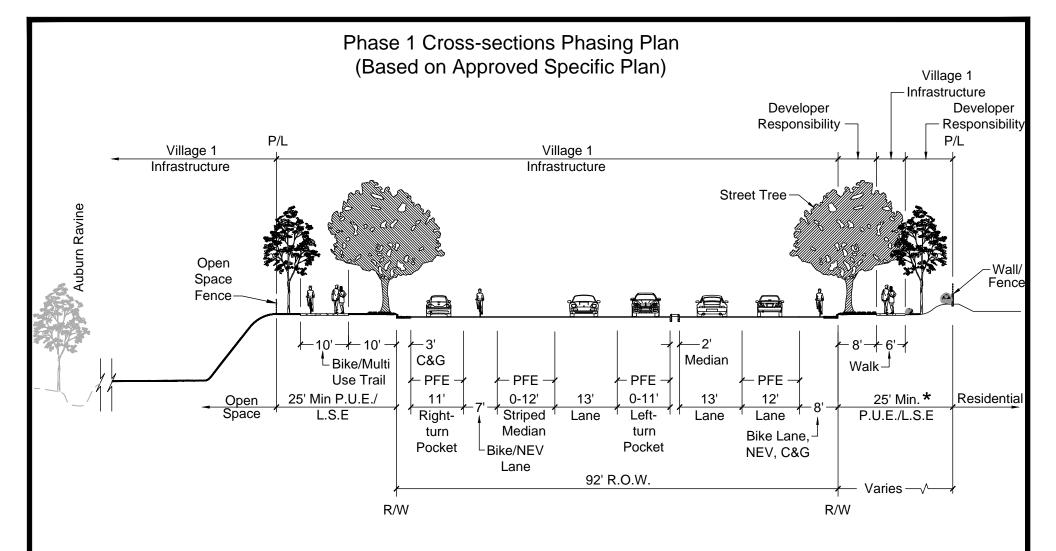
Section 1-1

NTS



Disclaimer:

This Exhibit is based on Specific Plan and Conceptual Design. Final Costs will be based on Final Improvement Plans.



Cross Section: Ferrari Ranch Road

Section 1-2

NTS

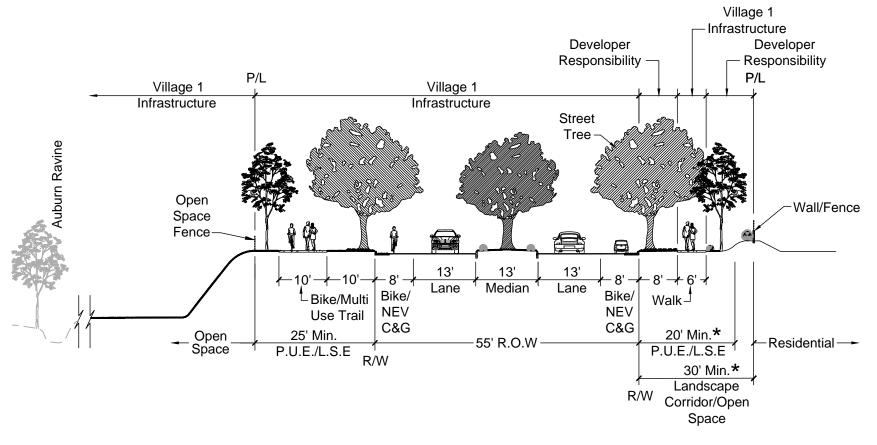
* To be Funded by Fronting Development.



Disclaimer:

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Sheet 3 of 12 Revised 8/9/2016



Cross Section: Ferrari Ranch Road

Section 1-3

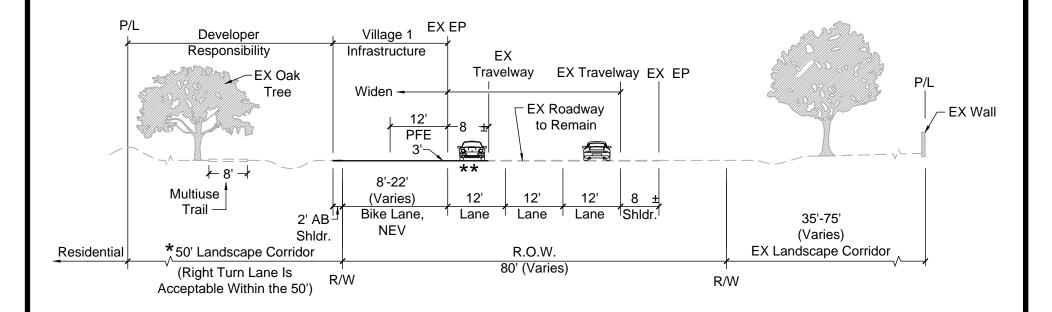
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*To be Funded by Fronting Development.



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Cross Section: McBean Park Drive

Section 1-4

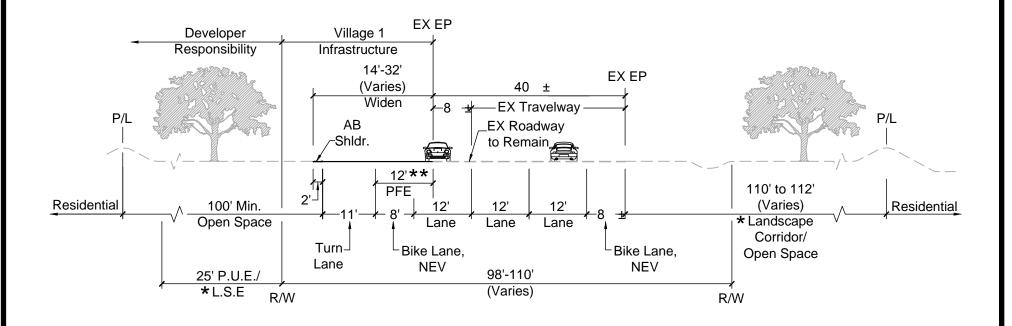
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- * To be Funded by Fronting Development.
- ** Grind and Overlay Existing Shoulder



Disclaimer:

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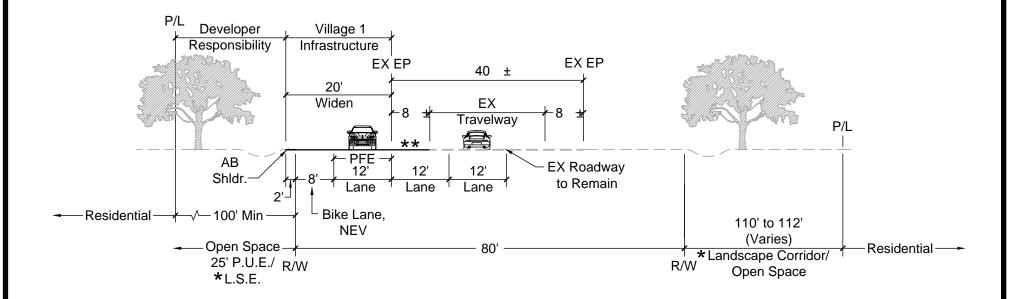
Cross Section: State Route 193
Section 1-5

NTS

* To be Funded by Fronting Development.

** Grind and Overlay Existing Shoulder





Cross Section: State Route 193

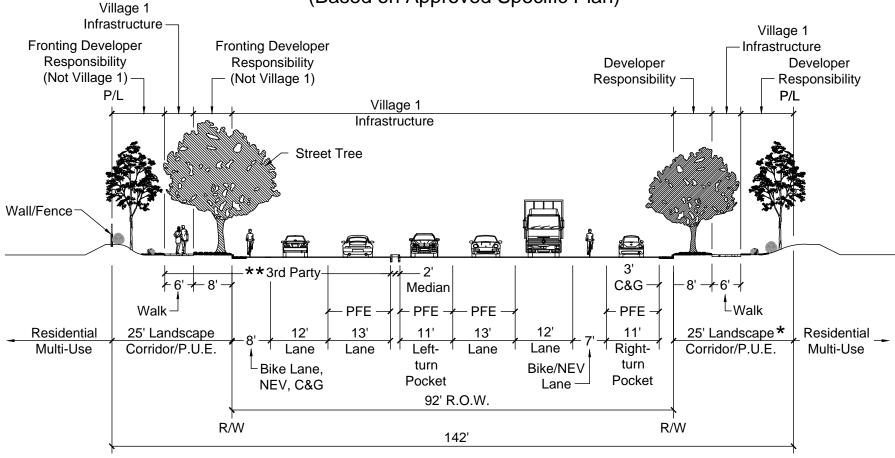
Section 1-6

NTS

* To be Funded by Fronting Development.

** Grind and Overlay Existing Shoulder





Cross Section: Oak Tree Lane

Section 1-7

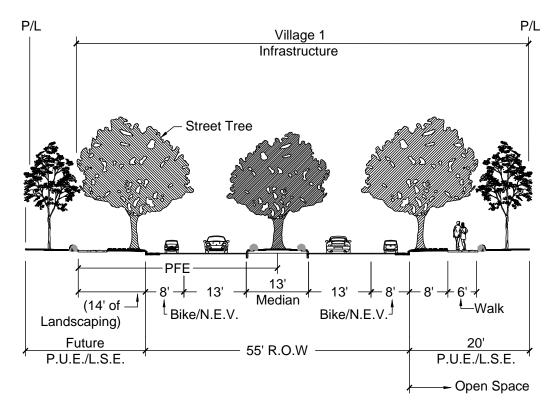
NTS

- * To be Funded by Fronting Development.
- ** Half of Road Improvements fronting the Commercial Parcel will be eligible for 3rd Party Reimbursement



Disclaimer:

This Exhibit is based on Specific Plan and Conceptual Design. Final Costs will be based on Final Improvement Plans.

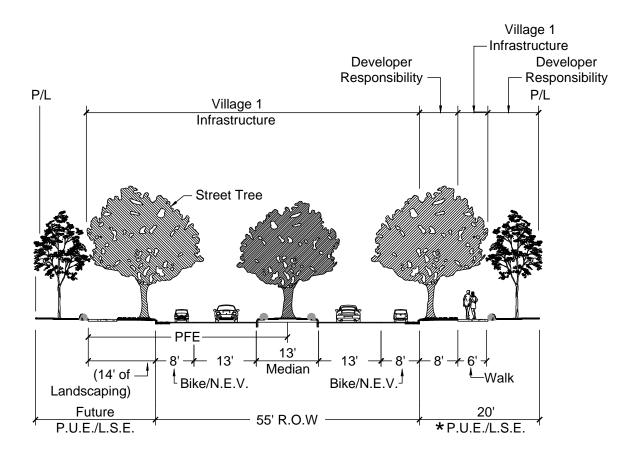


Cross Section: Oak Tree Lane

Section 1-8

NTS





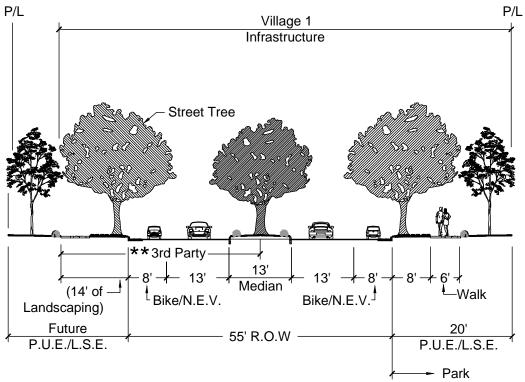
Cross Section: Oak Tree Lane

Section 1-9

NTS

* To be Funded by Fronting Development.





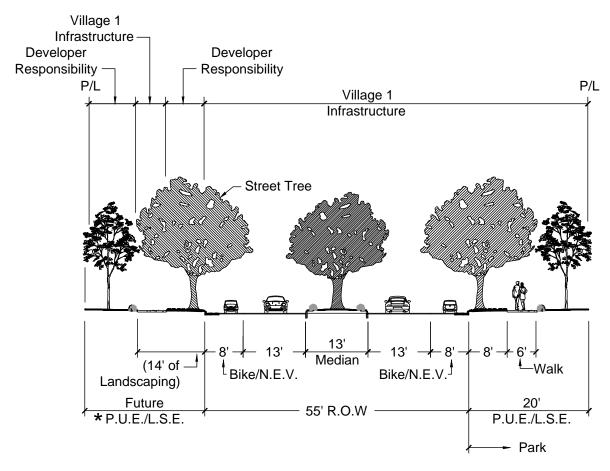
Cross Section: Oak Tree Lane

Section 1-10

NTS

** Half of Road Improvements fronting Crocker Knoll Subdivision will be eligible for 3rd Party Reimbursement





Cross Section: Oak Tree Lane

Section 1-11

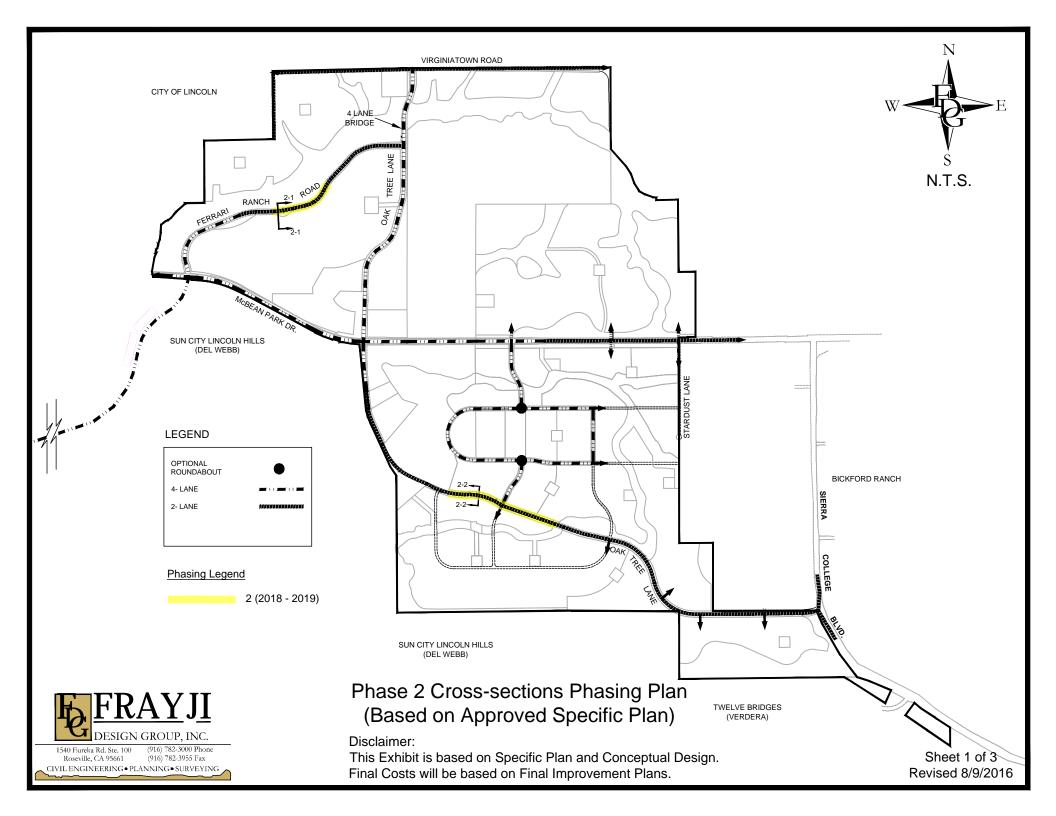
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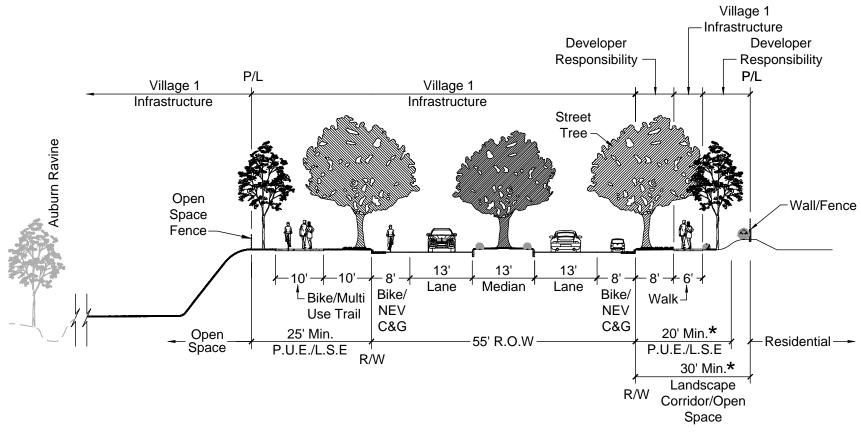
* To be Funded by Fronting Development.



Phase 2







Cross Section: Ferrari Ranch Road

Section 2-1

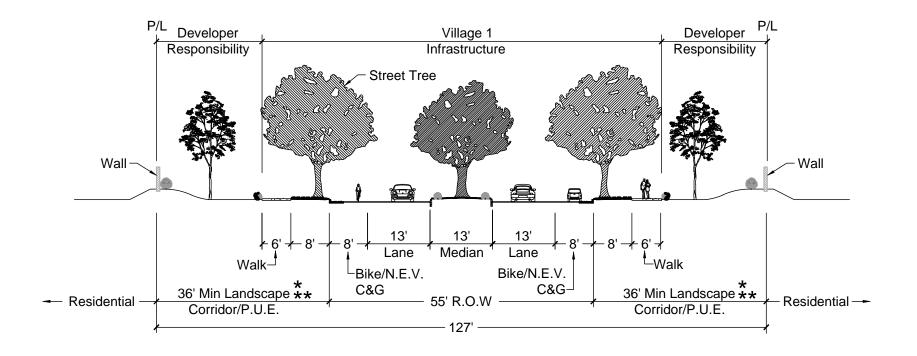
NTS

* To be Funded by Fronting Development.



Disclaimer:

This Exhibit is based on Specific Plan and Conceptual Design. Final Costs will be based on Final Improvement Plans.



Cross Section: Oak Tree Lane

Section 2-2

NTS

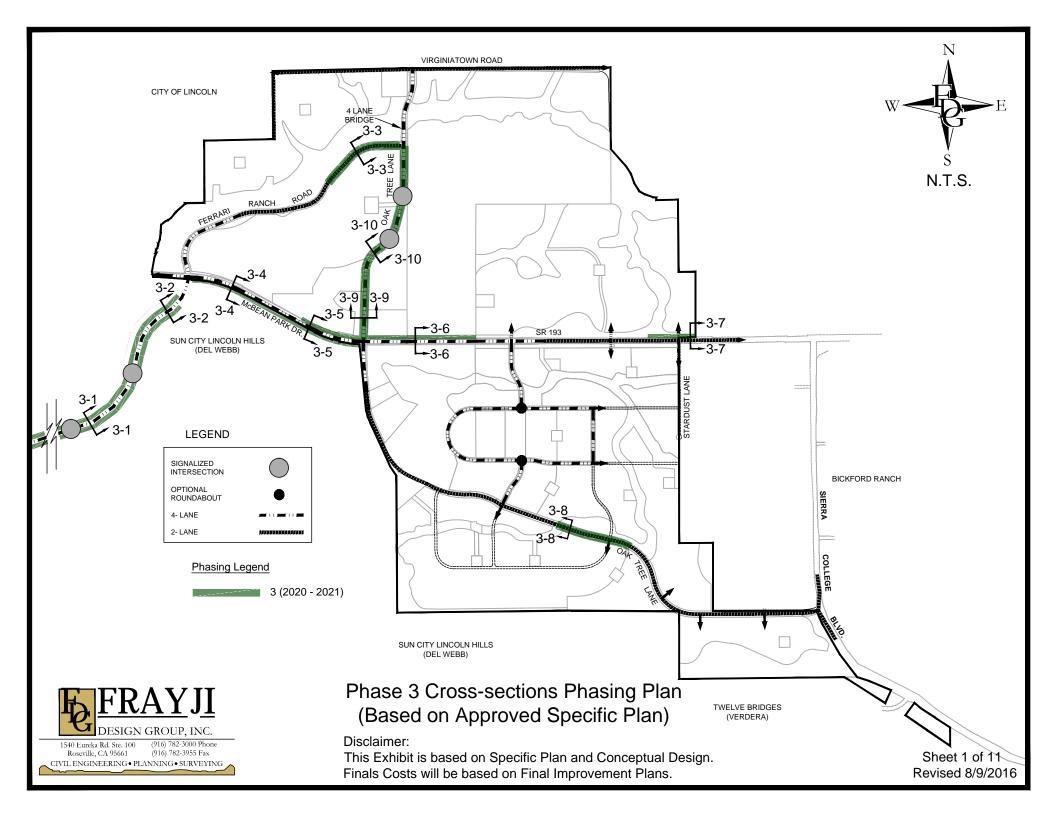
* 25' Min Landscape Corridor along VMDR.

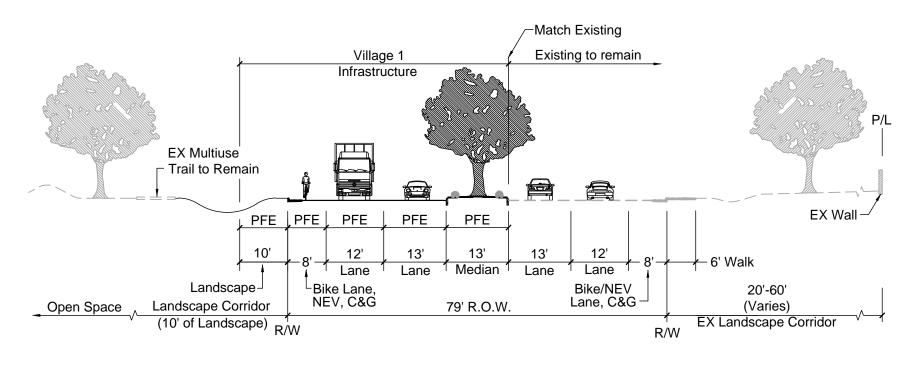
** To be Funded by Fronting Development.



Phase 3





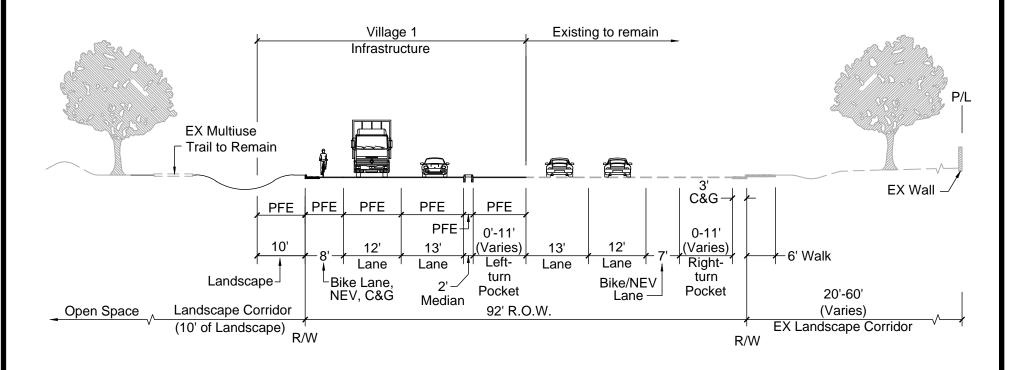


Cross-Section: Ferrari Ranch Road

Section 3-1

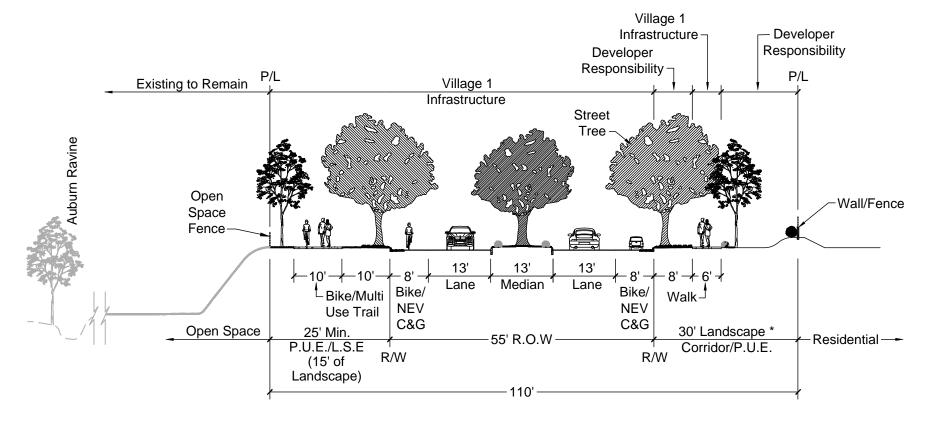
NTS





Cross-Section: Ferrari Ranch Road <u>Section 3-2</u> NTS





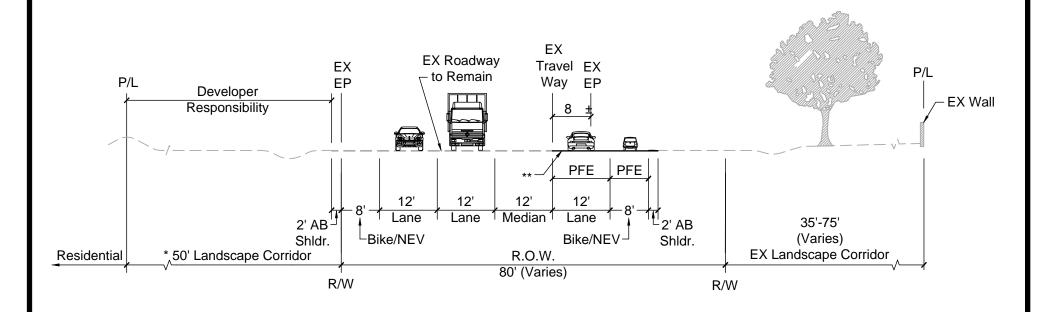
Cross Section: Ferrari Ranch Road

Section 3-3

NTS

* To be Funded by Fronting Development



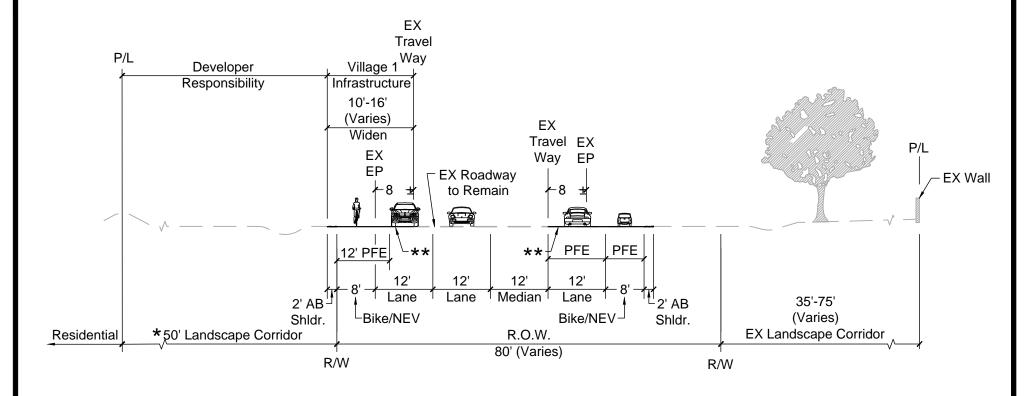


Cross Section: McBean Park Drive

Section 3-4 NTS

* To be Funded by Fronting Development





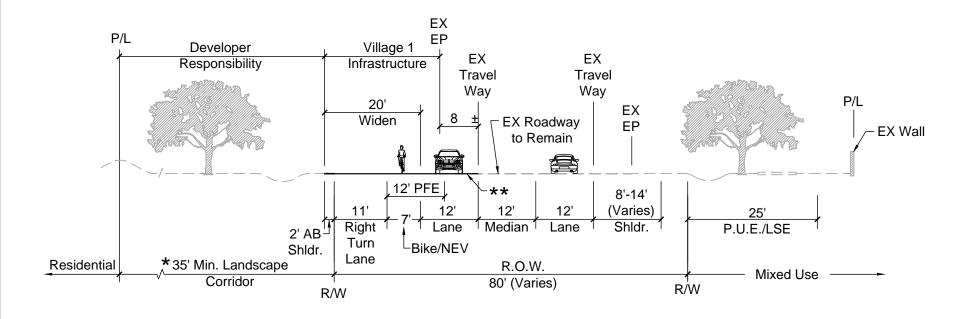
Cross Section: McBean Park Drive

Section 3-5

NTS

* To be Funded by Fronting Development





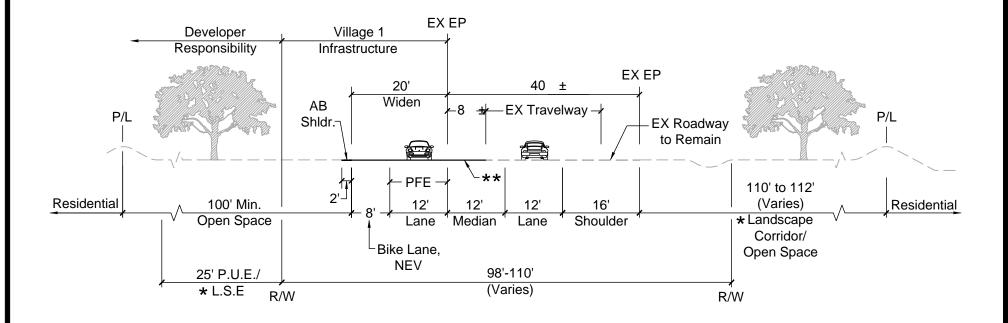
Cross Section: State Route 193

<u>Section 3-6</u>

NTS

* To be Funded by Fronting Development





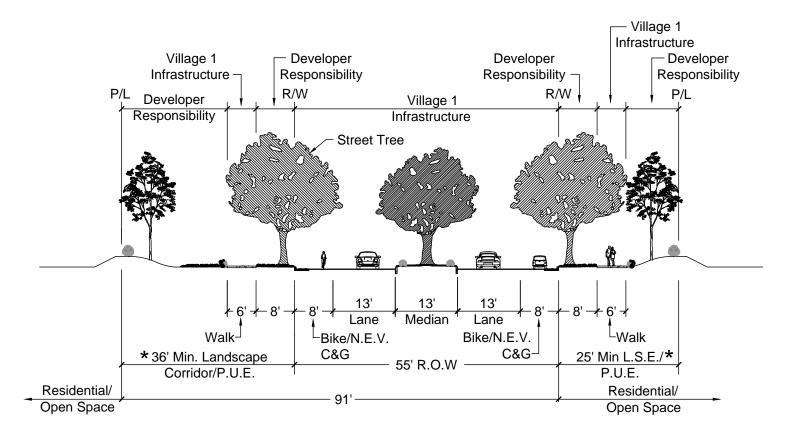
Cross Section: State Route 193

Section 3-7

NTS

 $\ensuremath{\bigstar}$ To be Funded by Fronting Development or to Remain Natural





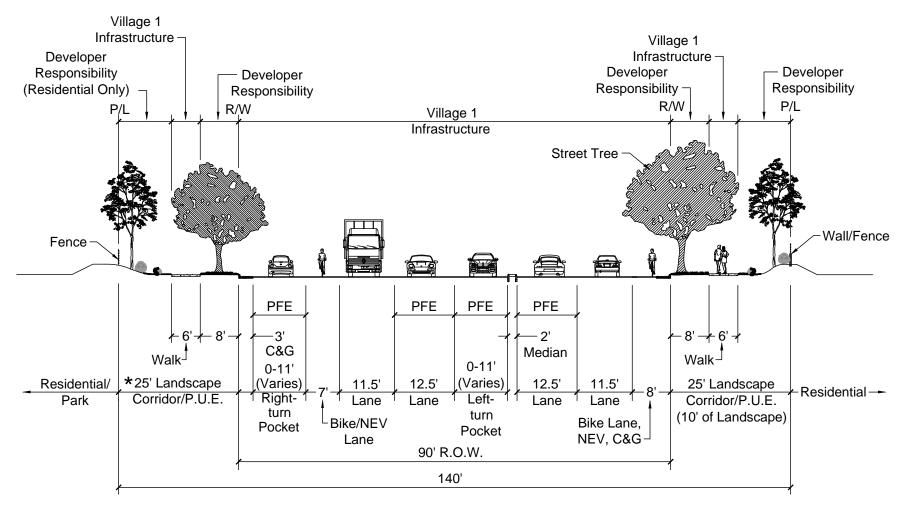
Cross Section: Oak Tree Lane

Section 3-8

NTS

f * To be Funded by Fronting Development





Cross Section: Oak Tree Lane

Section 3-9 NTS

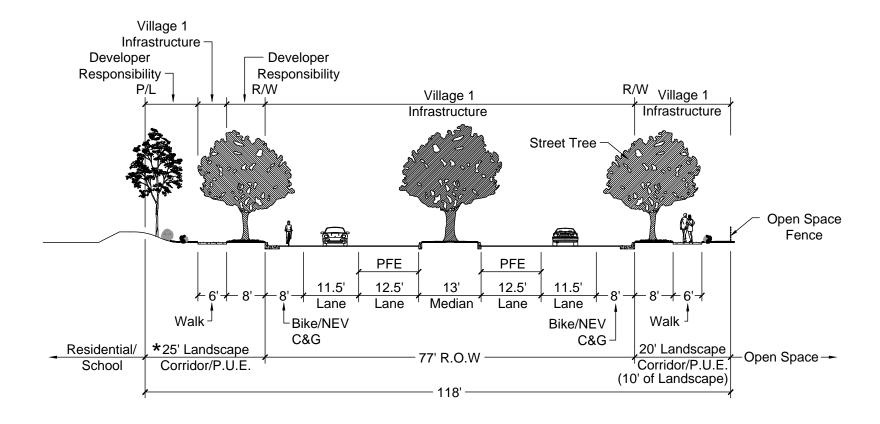


* To be Funded by Fronting Development

Disclaimer:

This Exhibit is based on Specific Plan and Conceptual Design. Finals Costs will be based on Final Improvement Plans.

Sheet 10 of 11 Revised 8/9/2016



Cross Section: Oak Tree Lane

Section 3-10

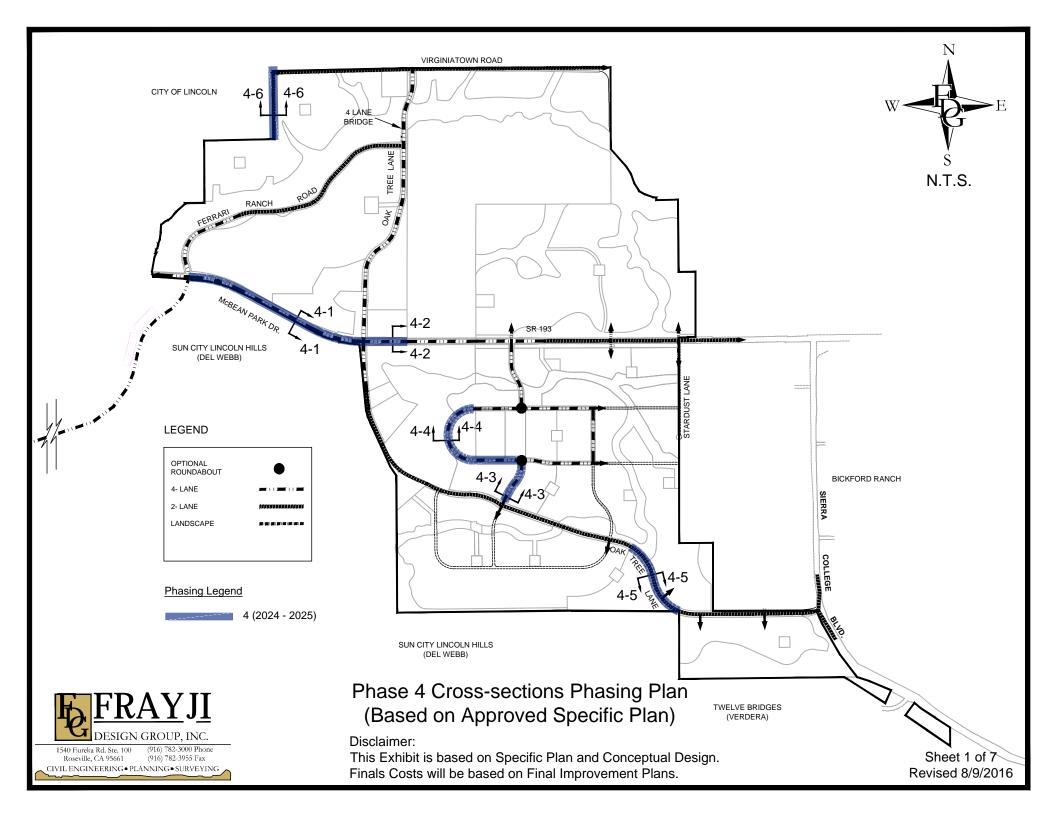
NTS

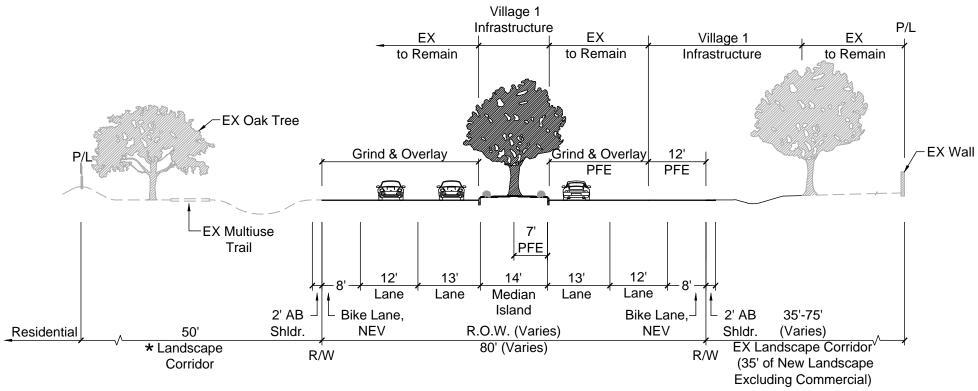
* To be Funded by Fronting Development



Phase 4







Cross Section: McBean Park Drive $\frac{Section \ 4\text{-}1}{NTS}$

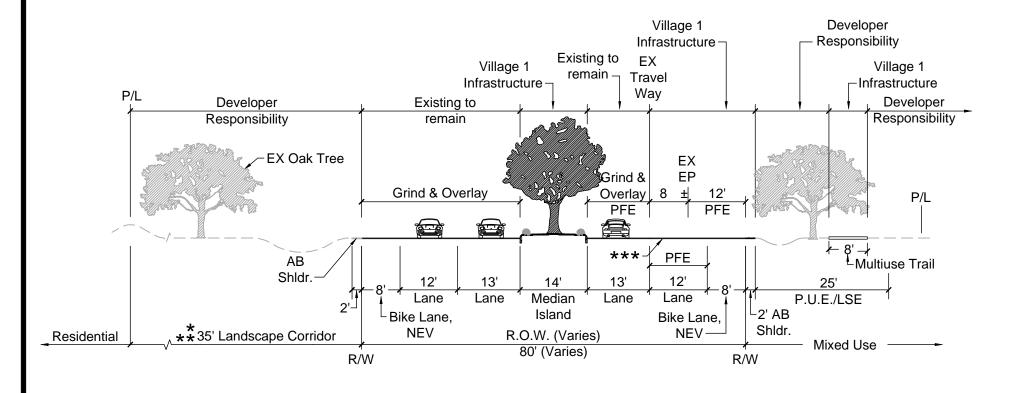
* To be Funded by Fronting Development.

** At Ultimate Buildout, Grind & Overlay entire width of road.



Disclaimer:

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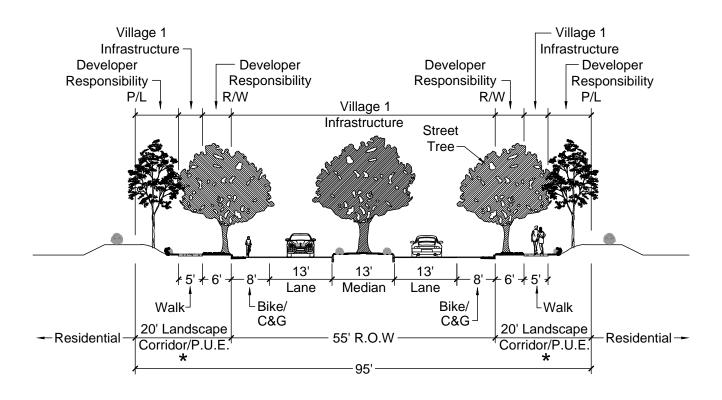
Cross Section: State Route 193 $\frac{Section \ 4-2}{NTS}$

- * To be Funded by Fronting Development.
- ** Landscape Corridor is measured from edge of McBean Park Drive/SR 193 paving.
- *** Grind & Overlay Existing Shoulder
- *** At Ultimate Buildout, Grind & Overlay entire width of road.



This Exhibit is based on Specific Plan and Conceptual Design. Finals Costs will be based on Final Improvement Plans.

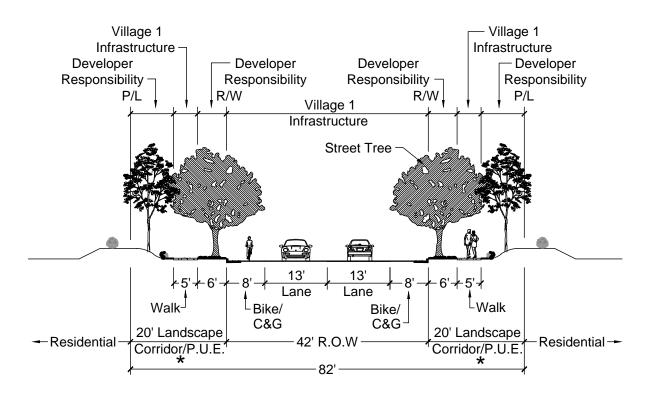




Cross Section: North-South Collector <u>Section 4-3</u> NTS

* To be Funded by Fronting Development.





Cross Section: Collector Loop

Section 4-4

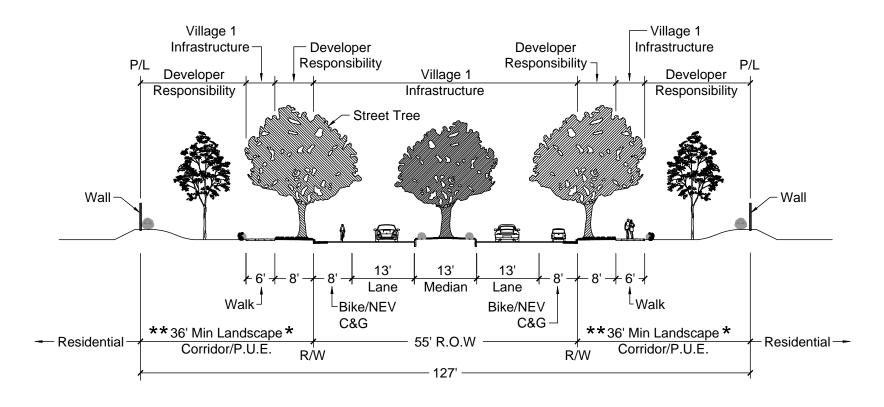
NTS

***** To be Funded by Fronting Development.



Disclaimer:

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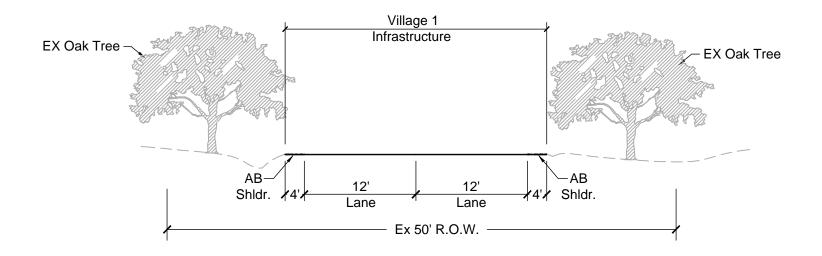


Cross Section: Oak Tree Lane $\frac{\text{Section } 4-5}{\text{NTS}}$

* To be Funded by Fronting Development.

** 20' Landscape/P.U.E. Along Parks.





Cross Section: Liberty Lane

Section 4-6

NTS

 $\ensuremath{\bigstar}$ To be Funded by Fronting Development.

** 20' Landscape/P.U.E. Along Parks.

