

Date: September 18, 2020

To: Natalie Porter, PE, TE
Senior Traffic Engineer
El Dorado County - Community Development Services

From: Jason Jurrens, PE
Project Manager
Quincy Engineering

Subject: 2020 El Dorado County Traffic Impact Mitigation Fee Update
Cost Estimate Methodology

Ms. Porter,

This memorandum provides information on the methodology that will be used by Quincy Engineering to prepare project cost estimates in support of the 2020 CIP Traffic Impact Mitigation Fee Update.

PROJECT ESTIMATING APPROACH

Unit Costs

While unit costs can vary widely from project to project based on market trends, fuel costs, project location, project size, and complexity, best engineering judgement will be used in order to identify common project improvement cost items and to develop associated unit costs that are accurate when compared to recent bid data on CIP projects in El Dorado County.

Quincy has established unit costs that will be applied uniformly to all project estimates (local roads and auxiliary lanes) to be included with the 2020 TIM Fee Update. The unit costs have been developed by utilizing a combination of recently advertised and awarded CIP projects in El Dorado County, as well as the Caltrans Construction Cost Index (CCCI).

Preference in establishing unit costs for the 2020 update will be given to El Dorado County bid data, as that provides a direct comparison with anticipated bid unit costs. For items that do not have a correlating item of work from established bid data, unit costs from the 2016 update will be escalated in accordance with CCCI data from August 2016 and August 2020. The Caltrans Construction Cost Index can be viewed at the following link:

<https://www.dgs.ca.gov/RES/Resources/Page-Content/Real-Estate-Services-Division-Resources-List-Folder/DGS-California-Construction-Cost-Index-CCCI>

The escalation rate applied to unit costs will be 12%. The attached Unit Cost Index illustrates the construction items, their 2016 unit costs, an applied cost increase of 12% from the CCI, comparable CIP bid data, and the unit cost being applied to the 2020 TIM Fee Update. The index is color coded to indicate which criteria was used to establish the 2020 unit costs.

Right of Way

Right of way costs for the local road segments will be based on a square foot area for developed or undeveloped areas. Where existing parking will be impacted, costs per parking stall taken will be included. The road segment estimates will include an additional 10% for right of way acquisition support.

Earthwork and Drainage

Earthwork/Grading Factors will be applied to the roadway excavation quantity based on the grading difficulty of the terrain from 1 to 5; 1=5%, 2=30%, 3=90%, 4=150% and 5=220%.

Drainage will be estimated at 15% of the earthwork and structural section quantity totals which is a close approximated average for actual constructed projects.

Supplemental Items (Local Road Estimates Only)

Traffic Management Plan/Traffic Control will be estimated at 4% of the total roadway construction cost.

Construction Contingency will be estimated at 25% of the total roadway construction cost.

Capital Support

Each estimate includes items that were measured or otherwise quantified, however there are other items associated with each project that were not separately measured but nonetheless likely to be required. Therefore, the support costs and contingencies provided in each estimate will represent project components not specifically measured, either due to the preliminary nature of the project, or presently known work items that typically fall within a percentage range of project construction costs. The following support costs and contingency values will be added to the estimated construction as defined below:

- *Project Report/Environmental Document (Preliminary Design, Preliminary Engineering, Project Management)* at 10% of the total construction cost; addresses the project development support costs required to complete the Environmental Document milestone.
- *Final Design- Plans, Specifications & Estimate* at 20% of the total construction cost; addresses the project design phase support costs required to complete construction contract documents.
- *Construction Management* at 15% of the total construction cost; addresses the project construction phase support costs required to administer the construction contract.

Should there be any further information required for approval of our cost estimating methodology, please let us know.

Attachments: Unit Cost Index for El Dorado County 2020 TIM Fee Update

El Dorado County - 2020 TIM Fee Update

Unit Cost Index



Item Description	Unit	2016 Unit Cost	CT Cost Index Increase (12%)	EDC Bid Data	Use for 2020 Estimates
Earthwork					
Roadway Excavation	CY	\$30.00	\$33.60	\$60.00	\$60.00
Existing Facilities					
Sawcut Existing Asphalt Concrete	LF	\$2.50	\$2.80		\$3.00
Removal of Striping	LF	\$1.25	\$1.40	\$1.50	\$1.50
Removal of Pavement Markings	SF	\$3.00	\$3.36	\$3.00	\$3.00
Relocate Existing Fence	LF	\$20.00	\$22.40	\$25.00	\$25.00
Structural Section					
Hot Mix Asphalt (Type A)	Ton	\$110.00	\$123.20	\$125.00	\$125.00
Class 2 Aggregate Base	CY	\$60.00	\$67.20	\$80.00	\$80.00
AC Overlay	Ton	\$110.00	\$123.20	\$125.00	\$125.00
Drainage & Utilities					
Drainage (15% of Earthwork & Struc Sec total)		15%	-		15%
Relocate Utility Pole	EA	\$7,500.00	\$8,400.00		\$8,500.00
Specialty Items					
Concrete Sidewalk	SF	\$10.00	\$11.20		\$12.00
Curb and Gutter	LF	\$30.00	\$33.60		\$33.00
Median Island Curb	LF	\$15.00	\$16.80		\$17.00
Median Island Flatwork	SF	\$8.00	\$8.96		\$9.00
Driveway	EA	\$4,000.00	\$4,480.00		\$5,000.00
Sidewalk Ramp	EA	\$2,500.00	\$2,800.00		\$3,000.00
Small Retaining Wall (0 to 5')	LF	\$200.00	\$224.00		\$250.00
Medium Retaining Wall (6 to 10')	LF	\$400.00	\$448.00		\$450.00
Large Retaining Wall (11' & up)	LF	\$550.00	\$616.00		\$620.00
Midwest Guardrail System	LF	\$200.00	\$224.00		\$225.00
Railroad Crossing Imp (Type 1)	LS	\$500,000.00	\$560,000.00		\$600,000.00
Railroad Crossing Imp (Type 2)	LS	\$650,000.00	\$728,000.00		\$730,000.00
Railroad Crossing Imp (Type 3)	LS	\$800,000.00	\$896,000.00		\$900,000.00
Landscaping					
Landscaping & Irrigation	SF	\$4.50	\$5.04		\$5.00
Median Treatment	SF	\$5.00	\$5.60		\$6.00
Traffic Items					
Street Lights and Pull Boxes	EA	\$4,000.00	\$4,480.00		\$5,000.00
Street Lights Conduit System	EA	\$25.00	\$28.00		\$30.00
Traffic Signal Modification (low)	LS	\$75,000.00	\$84,000.00		\$100,000.00
Traffic Signal Modification (high)	LS	\$170,000.00	\$190,400.00		\$200,000.00
Traffic Signal New (low)	LS	\$190,000.00	\$212,800.00		\$250,000.00
Traffic Signal New (high)	LS	\$290,000.00	\$324,800.00		\$350,000.00
Striping Imps (6 lanes)	LF	\$7.50	\$8.40		\$8.50
Striping Imps (4 lanes)	LF	\$6.00	\$6.72		\$7.00
Striping Imps (3 lanes)	LF	\$4.50	\$5.04		\$5.00
Pavement Markings	SF	\$5.00	\$5.60	\$6.00	\$6.00
Roadside Sign	EA	\$300.00	\$336.00	\$350.00	\$350.00
Supplemental Items					
Traffic Management Plan/Traffic Control		4%	-		4%
Construction Contingency		25%	-		25%
Right-of-Way¹					
Developed (parking)	Stall	\$2,500.00	\$2,800.00		\$3,000.00
Developed (landscaped)	SF	\$17.50	\$19.60		\$20.00
Developed (building)	SF	\$200.00	\$224.00		\$225.00
Undeveloped	SF	\$10.00	\$11.20		\$12.00
Right-of-way Acquisition Support		10%	-		10%
Capital Support (Note, reduced to 45% total for larger/interchange projects)					
PR/ED (PD,PE,PM)		10%	-		10%
PS&E (PS)		20%	-		20%
CONSTRUCTION (CM)		15%	-		15%

Note: EDC Bid Data utilized bid results from several projects bid between 2018 and 2020, most notably the Silver Springs Parkway South Segment and Diamond Springs Parkway

Note: Caltrans Construction Cost Index

<https://www.dqs.ca.gov/RES/RES/Real-Estate-Services-Division-Resources-List-Folder/DGS-California-Construction-Cost-Index-CCC/>

El Dorado County - 2020 TIM Fee Update

A-1

Prepared By:



PRELIMINARY COST

U.S. 50 Auxiliary Lane Westbound

Project Limits: El Dorado Hills Blvd I/C to Sacramento County Line

TYPE: 1-LANE - Utilizing current drop lane, widening starts where the third merge arrow is currently located

Right-of-Way and proposed improvements are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits.

				PROJECT LENGTH	1,500
Item Description	Quantity	Units	Unit Cost	Total Cost	
Earthwork					
Roadway Excavation	3,667	CY	\$60.00	\$220,000	
Earthwork/Grading Factor			90%	\$198,000	
Existing Facilities					
Sawcut Existing Asphalt Concrete	1,500	LF	\$3.00	\$4,500	
Removal of Striping	3,000	LF	\$1.50	\$4,500	
Removal of Pavement Markings	135	SF	\$3.00	\$405	
Structural Section					
Hot Mix Asphalt (Type A)	1,755	Ton	\$130.00	\$228,150	
Rubberized Hot Mix Asphalt - Open Graded	270	Ton	\$150.00	\$40,500	
Class 2 Aggregate Base	2,467	CY	\$80.00	\$197,333	
Drainage & Utilities					
Drainage (15% of Earthwork & Struc Sec total)			15%	\$132,598	
Specialty Items					
Medium Retaining Wall (6 to 10')	300	LF	\$450.00	\$135,000	
Traffic Items					
Street Lights and Pull Boxes	8	EA	\$8,000.00	\$64,000	
Street Lights Conduit System	1,500	LF	\$30.00	\$45,000	
Traffic Signal Modification (low)	1	LS	\$75,000.00	\$75,000	
Pavement Markings	135	SF	\$6.00	\$810	
Signs	6	EA	\$350.00	\$2,100	
Subtotal Roadway Construction Items				\$1,347,896	
Supplemental Items					
Traffic Management Plan/Traffic Control			4%	\$53,916	
Construction Contingency			25%	\$336,974	
Subtotal Supplemental Items				\$390,890	
Construction Subtotal				\$1,738,786	
Right-of-Way¹					
Undeveloped	0	SF	\$12.00	\$0	
Right-of-way Acquisition Support			10%	\$0	
Subtotal R/W Items				\$0	
Capital Support					
PR/ED (PD,PE,PM)			15%	\$260,818	
PS&E (PS)			25%	\$434,696	
CONSTRUCTION (CM)			15%	\$260,818	
Subtotal Capital Support Items				\$956,332	
Project Subtotal				\$2,695,118	
On-System Cost Increases for Capital Support and Construction			15%	\$404,268	
Project Total				\$3,099,385	
Rounded				\$3,100,000	
1. Pavement Section assumed based on US 50 widening design for Silva Valley Parkway Interchange. 2. Retaining Wall assumed to be needed at large culvert/creek crossing 3. Street Lighting spacing of 200' matches current condition.					

El Dorado County - 2020 TIM Fee Update

Segment R-3

Prepared By:



PRELIMINARY COST

Green Valley Road Widening

Project Limits: Francisco Dr to Loch Way

TYPE: 4-LANE (with Concrete Median to match adjacent widened segment, sidewalk, curb and gutter)

Right-of-Way and proposed improvements are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits.

				PROJECT LENGTH	4,300
Item Description	Quantity	Units	Unit Cost	Total Cost	
Earthwork					
Roadway Excavation	15,431	CY	\$60.00	\$925,842	
Earthwork/Grading Factor			150%	\$1,388,762	
Existing Facilities					
Sawcut Existing Asphalt Concrete	8,600	LF	\$3.00	\$25,800	
Removal of Striping	12,900	LF	\$1.50	\$19,350	
Removal of Pavement Markings	450	SF	\$3.00	\$1,350	
Structural Section					
Hot Mix Asphalt (Type A)	6,386	Ton	\$130.00	\$830,115	
Class 2 Aggregate Base	8,541	CY	\$80.00	\$683,286	
AC Overlay	1,161	Ton	\$125.00	\$145,125	
Drainage & Utilities					
Drainage (15% of Earthwork & Struc Sec total)			15%	\$595,969	
Relocate Utility Pole	3	EA	\$8,500.00	\$25,500	
Specialty Items					
Concrete Sidewalk	25,800	SF	\$15.00	\$387,000	
Curb and Gutter	4,300	LF	\$50.00	\$215,000	
Median Island Curb	8,600	LF	\$25.00	\$215,000	
Median Island Flatwork	12,900	SF	\$15.00	\$193,500	
Driveway	1	EA	\$5,000.00	\$5,000	
Sidewalk Ramp	4	EA	\$4,000.00	\$16,000	
Medium Retaining Wall (6 to 10')	1800	LF	\$400.00	\$720,000	
Medium Sound Wall (6' to 10')	1300	LF	\$200.00	\$260,000	
Traffic Items					
Street Lights and Pull Boxes	4	EA	\$8,000.00	\$32,000	
Street Lights Conduit System	600	LF	\$30.00	\$18,000	
Traffic Signal Modification (high) ²	2	LS	\$200,000.00	\$400,000	
Striping Imps (4 lanes)	4,300	LF	\$7.00	\$30,100	
Pavement Markings	810	SF	\$6.00	\$4,860	
Signs	18	EA	\$350.00	\$6,300	
Subtotal Roadway Construction Items				\$7,143,859	
Supplemental Items					
Traffic Management Plan/Traffic Control			4%	\$285,754	
Construction Contingency			25%	\$1,785,965	
Subtotal Supplemental Items				\$2,071,719	
Construction Subtotal				\$9,215,579	
Right-of-Way¹					
Undeveloped	86,000	SF	\$12.00	\$1,032,000	
Right-of-way Acquisition Support			10%	\$103,200	
Subtotal R/W Items				\$1,135,200	
Capital Support					
PR/ED (PD,PE,PM)			10%	\$921,558	
PS&E (PS)			20%	\$1,843,116	
CONSTRUCTION (CM)			15%	\$1,382,337	
Subtotal Capital Support Items				\$4,147,010	
Project Total				\$14,497,789	
Rounded				\$14,498,000	
1. Assuming 10' Swath or ROW needed on both sides to widen road 2. Retaining walls will be needed along both sides of widened Green Valley Road to cut back existing slopes 3. Sidewalk, Curb, and Gutter only on north side (matching existing widened section) 4. Signal at Loch Way to be constructed during separate project 5. Street lights (2) at intersections only (EDH, SVP)					

El Dorado County - 2020 TIM Fee Update

Segment R-17

Prepared By:

PRELIMINARY COST



Latrobe Road

Project Limits: Golden Foothill Parkway (N) to White Rock Road

TYPE: 6-LANE

Right-of-Way and proposed improvements are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits.

				PROJECT LENGTH	2,100
Item Description	Quantity	Units	Unit Cost	Total Cost	
Earthwork					
Roadway Excavation	6,397	CY	\$60.00		\$383,840
Earthwork/Grading Factor			150%		\$575,760
Existing Facilities					
Sawcut Existing Asphalt Concrete	4,200	LF	\$3.00		\$12,600
Removal of Striping	12,600	LF	\$1.50		\$18,900
Removal of Pavement Markings	675	SF	\$3.00		\$2,025
Relocate Existing Fence	0	LF	\$25.00		\$0
Structural Section					
Hot Mix Asphalt (Type A)	3,119	Ton	\$130.00		\$405,405
Class 2 Aggregate Base	4,279	CY	\$80.00		\$342,311
AC Overlay	1,654	Ton	\$125.00		\$206,719
Drainage & Utilities					
Drainage (15% of Earthwork & Struc Sec total)			15%		\$287,105
Relocate Utility Pole	2	EA	\$8,500.00		\$17,000
Specialty Items					
Concrete Sidewalk	18,000	SF	\$15.00		\$270,000
Curb and Gutter	3,000	LF	\$50.00		\$150,000
Driveway	1	EA	\$6,000.00		\$6,000
Sidewalk Ramp	4	EA	\$4,000.00		\$16,000
Traffic Items					
Traffic Signal Modification (high) ²	1	LS	\$200,000.00		\$200,000
Striping Imps (6 lanes)	2,100	LF	\$7.50		\$15,750
Pavement Markings	675	SF	\$6.00		\$4,050
Signs	6	EA	\$350.00		\$2,100
Subtotal Roadway Construction Items					\$2,915,565
Supplemental Items					
Traffic Management Plan/Traffic Control			4%		\$116,623
Construction Contingency			25%		\$728,891
Subtotal Supplemental Items					\$845,514
Construction Subtotal					\$3,761,079
Right-of-Way¹					
Undeveloped	31,100	SF	\$12.00		\$373,200
Right-of-way Acquisition Support			10%		\$37,320
Subtotal R/W Items					\$410,520
Capital Support					
PR/ED (PD,PE,PM)			10%		\$376,108
PS&E (PS)			20%		\$752,216
CONSTRUCTION (CM)			15%		\$564,162
Subtotal Capital Support Items					\$1,692,486
Project Total					\$5,864,085
Rounded					\$5,865,000

El Dorado County - 2020 TIM Fee Update

Segment R-5

Prepared By:



PRELIMINARY COST

Missouri Flat Road Widening

Project Limits: China Garded Road to SR 49

TYPE: 4-LANE, Sidewalk, Curb and Gutter

Right-of-Way and proposed improvements are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits.

				PROJECT LENGTH	2,680
Item Description	Quantity	Units	Unit Cost	Total Cost	
Earthwork					
Roadway Excavation	7,739	CY	\$60.00	\$464,310	
Earthwork/Grading Factor			150%	\$696,465	
Existing Facilities					
Sawcut Existing Asphalt Concrete	5,360	LF	\$3.00	\$16,080	
Removal of Striping	6,700	LF	\$1.50	\$10,050	
Removal of Pavement Markings	990	SF	\$3.00	\$2,970	
Structural Section					
Hot Mix Asphalt (Type A)	3,683	Ton	\$130.00	\$478,764	
Class 2 Aggregate Base	5,222	CY	\$80.00	\$417,720	
AC Overlay	1,085	Ton	\$125.00	\$135,675	
Drainage & Utilities					
Drainage (15% of Earthwork & Struc Sec total)			15%	\$328,940	
Relocate Utility Pole	30	EA	\$8,500.00	\$255,000	
Specialty Items					
Concrete Sidewalk	29,700	SF	\$15.00	\$445,500	
Curb and Gutter	4,950	LF	\$50.00	\$247,500	
Driveway	25	EA	\$6,000.00	\$150,000	
Sidewalk Ramp	8	EA	\$4,000.00	\$32,000	
Traffic Items					
Striping Imps (4 lanes)	2,680	LF	\$7.00	\$18,760	
Signs	14	EA	\$350.00	\$4,900	
Subtotal Roadway Construction Items				\$3,704,634	
Supplemental Items					
Traffic Management Plan/Traffic Control			4%	\$148,185	
Construction Contingency			25%	\$926,159	
Subtotal Supplemental Items				\$1,074,344	
Construction Subtotal				\$4,778,978	
Right-of-Way					
Developed (parking)	8	Stall	\$2,500.00	\$20,000	
Developed (landscaped)	32,160	SF	\$17.50	\$562,800	
Right-of-way Acquisition Support			20%	\$116,560	
Subtotal R/W Items				\$699,360	
Capital Support					
PR/ED (PD,PE,PM)			10%	\$477,898	
PS&E (PS)			20%	\$955,796	
CONSTRUCTION (CM)			15%	\$716,847	
Subtotal Capital Support Items				\$2,150,541	
Project Total				\$7,628,878	
Rounded				\$7,629,000	
1. Keeping TWLTL in middle, adding one lane, shoulder, and CGSW to the outside 2. Heavy OH Utility relocation required 3 ROW Acquisition on East side needed throughout project limits (approximately additional 12') 4. Increased ROW Acquisition Support to 20% for this project, several properties impacted					

El Dorado County - 2020 TIM Fee Update

Segment R-18

Prepared By:



PRELIMINARY COST

Pleasant Valley Road

Project Limits: SR 49 (that heads north) to Toyan Drive

TYPE: 4-LANE (with two-way left turn lane)

Right-of-Way and proposed improvements are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits.

				PROJECT LENGTH	450
Item Description	Quantity	Units	Unit Cost	Total Cost	
Existing Facilities					
Removal of Striping	2,250	LF	\$1.50	\$3,375	
Removal of Pavement Markings	270	SF	\$3.00	\$810	
Drainage & Utilities					
Drainage (15% of Earthwork & Struc Sec total)			15%	\$0	
Specialty Items					
Sidewalk Ramp	2	EA	\$4,000.00	\$8,000	
Traffic Items					
Traffic Signal Modification (high) ²	1	LS	\$200,000.00	\$200,000	
Striping Imps (4 lanes)	450	LF	\$7.00	\$3,150	
Pavement Markings	360	SF	\$6.00	\$2,160	
Signs	2	EA	\$350.00	\$630	
Subtotal Roadway Construction Items				\$218,125	
Supplemental Items					
Traffic Management Plan/Traffic Control			4%	\$8,725	
Construction Contingency			25%	\$54,531	
Subtotal Supplemental Items				\$63,256	
Construction Subtotal				\$281,381	
Right-of-Way¹					
Undeveloped	0	SF	\$12.00	\$0	
Right-of-way Acquisition Support			10%	\$0	
Subtotal R/W Items				\$0	
Capital Support					
PR/ED (PD,PE,PM)			10%	\$28,138	
PS&E (PS)			20%	\$56,276	
CONSTRUCTION (CM)			15%	\$42,207	
Subtotal Capital Support Items				\$126,622	
Project Total				\$408,003	
Rounded				\$409,000	
1. Restriping project only, pavement width is currently adequate for 4 lanes.					

El Dorado County - 2020 TIM Fee Update

Segment R-16

Prepared By:



PRELIMINARY COST

White Rock Road Widening (2 to 4 lanes)

Project Limits: Windfield Way to Sacramento County Line

TYPE: 4-LANE (with two-way left turn lane)

Right-of-Way and proposed improvements are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits.

PROJECT LENGTH **4,700**

Item Description	Quantity	Units	Unit Cost	Total Cost
Earthwork				
Roadway Excavation	13,103	CY	\$60.00	\$786,151
Earthwork/Grading Factor			150%	\$1,179,226
Existing Facilities				
Sawcut Existing Asphalt Concrete	9,400	LF	\$3.00	\$28,200
Removal of Striping	21,150	LF	\$1.50	\$31,725
Removal of Pavement Markings	1,800	SF	\$3.00	\$5,400
Structural Section				
Hot Mix Asphalt (Type A)	6,435	Ton	\$130.00	\$836,550
Class 2 Aggregate Base	8,696	CY	\$80.00	\$695,713
AC Overlay	3,116	Ton	\$125.00	\$389,531
Drainage & Utilities				
Drainage (15% of Earthwork & Struc Sec total)			15%	\$583,076
Specialty Items				
Concrete Sidewalk	14,100	SF	\$15.00	\$211,500
Curb and Gutter	9,400	LF	\$50.00	\$470,000
Median Island Curb	3,600	LF	\$25.00	\$90,000
Driveway	1	EA	\$6,000.00	\$6,000
Sidewalk Ramp	3	EA	\$4,000.00	\$12,000
Metal Beam Guard Railing	300	LF	\$200.00	\$60,000
Landscaping				
Landscaping & Irrigation	21,600	SF	\$4.50	\$97,200
Median Treatment	10,800	SF	\$5.00	\$54,000
Traffic Items				
Traffic Signal Modification (high) ²	2	LS	\$200,000.00	\$400,000
Striping Imps (4 lanes)	4,700	LF	\$7.00	\$32,900
Pavement Markings	1800	SF	\$6.00	\$10,800
Signs	38	EA	\$350.00	\$13,300
Subtotal Roadway Construction Items				\$5,993,271
Supplemental Items				
Traffic Management Plan/Traffic Control			4%	\$239,731
Construction Contingency			25%	\$1,498,318
Subtotal Supplemental Items				\$1,738,049
Construction Subtotal				\$7,731,320
Right-of-Way¹				
Undeveloped	42,000	SF	\$12.00	\$504,000
Right-of-way Acquisition Support			10%	\$50,400
Subtotal R/W Items				\$554,400
Capital Support				
PR/ED (PD,PE,PM)			10%	\$773,132
PS&E (PS)			20%	\$1,546,264
CONSTRUCTION (CM)			15%	\$1,159,698
Subtotal Capital Support Items				\$3,479,094
Project Total				\$11,764,814
Rounded				\$11,765,000
1. Right of way acquisition needed south of Stonebriar Drive on the west side				
2. Signal modifications at intersections with El Dorado Hills Blvd and Silva Valley Rd.				

El Dorado County - TIM Fee Update

Segment R-4

Prepared By:



PRELIMINARY COST

White Rock Road Widening

Project Limits: Post Street to south of Silva Valley Parkway

TYPE: 4-LANE (sidewalk, curb and gutter)

Right-of-Way and proposed improvements are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits.

PROJECT LENGTH **3,560**

Item Description	Quantity	Units	Unit Cost	Total Cost
Earthwork				
Roadway Excavation	9,431	CY	\$60.00	\$565,883
Earthwork/Grading Factor			90%	\$509,294
Existing Facilities				
Sawcut Existing Asphalt Concrete	7,120	LF	\$3.00	\$21,360
Removal of Striping	8,900	LF	\$1.50	\$13,350
Removal of Pavement Markings	540	SF	\$3.00	\$1,620
Structural Section				
Hot Mix Asphalt (Type A)	4,482	Ton	\$130.00	\$582,689
Class 2 Aggregate Base	6,371	CY	\$80.00	\$509,704
AC Overlay	1,181	Ton	\$125.00	\$147,572
Drainage & Utilities				
Drainage (15% of Earthwork & Struc Sec total)			15%	\$347,271
Relocate Utility Pole	7	EA	\$8,500.00	\$59,500
Specialty Items				
Concrete Sidewalk	38,640	SF	\$15.00	\$579,600
Curb and Gutter	5,720	LF	\$50.00	\$286,000
Driveway	11	EA	\$6,000.00	\$66,000
Sidewalk Ramp	14	EA	\$4,000.00	\$56,000
Traffic Items				
Traffic Signal Modification (low)	1	LS	\$75,000.00	\$75,000
Traffic Signal Modification (medium)	1	LS	\$125,000.00	\$125,000
Traffic Signal Modification (high)	1	LS	\$170,000.00	\$170,000
Striping Imps (4 lanes)	3,560	LF	\$7.00	\$24,920
Signs	14	EA	\$350.00	\$4,900
Subtotal Roadway Construction Items				\$4,145,664
Supplemental Items				
Traffic Management Plan/Traffic Control			4%	\$165,827
Construction Contingency			25%	\$1,036,416
Subtotal Supplemental Items				\$1,202,242
Structure Items				
Box Culvert Extension	25	LF	\$3,000.00	\$75,000
Subtotal Structure Construction Items				\$75,000
Construction Subtotal				\$5,422,906
Right-of-Way				
Developed (landscaped)	49,000	SF	\$17.50	\$857,500
Developed (building)	3,000	SF	\$200.00	\$600,000
Right-of-way Acquisition Support			10%	\$145,750
Subtotal R/W Items				\$1,603,250
Capital Support				
PR/ED (PD,PE,PM)			10%	\$542,291
PS&E (PS)			20%	\$1,084,581
CONSTRUCTION (CM)			15%	\$813,436
Subtotal Capital Support Items				\$2,440,308
Project Total				\$9,466,464
Rounded				\$9,467,000
1. ROW Acquisition for building near Keagles Lane				

El Dorado County - 2020 TIM Fee Update

Segment R-14

Prepared By:



PRELIMINARY COST

Bass Lake Road Widening

Project Limits: U.S. 50 to N. of Country Club Drive Realignment

TYPE: 4-LANE (with two-way left turn lane)

Right-of-Way and proposed improvements are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits.

				PROJECT LENGTH	1,100
Item Description	Quantity	Units	Unit Cost	Total Cost	
Earthwork					
Roadway Excavation	1,927	CY	\$60.00	\$115,633	
Earthwork/Grading Factor			150%	\$173,450	
Existing Facilities					
Sawcut Existing Asphalt Concrete	2,200	LF	\$3.00	\$6,600	
Removal of Striping	3,300	LF	\$1.50	\$4,950	
Removal of Pavement Markings	45	SF	\$3.00	\$135	
Relocate Existing Fence	2,200	LF	\$25.00	\$55,000	
Structural Section					
Hot Mix Asphalt (Type A)	869	Ton	\$130.00	\$112,928	
Class 2 Aggregate Base	1,312	CY	\$80.00	\$104,943	
AC Overlay	446	Ton	\$125.00	\$55,688	
Drainage & Utilities					
Drainage (15% of Earthwork & Struc Sec total)			15%	\$84,396	
Relocate Utility Pole	2	EA	\$8,500.00	\$17,000	
Traffic Items					
Striping Imps (4 lanes)	1,100	LF	\$7.00	\$7,700	
Pavement Markings	405	SF	\$6.00	\$2,430	
Signs	6	EA	\$350.00	\$2,100	
Subtotal Roadway Construction Items				\$742,953	
Supplemental Items					
Traffic Management Plan/Traffic Control			4%	\$29,718	
Construction Contingency			25%	\$185,738	
Subtotal Supplemental Items				\$215,456	
Construction Subtotal				\$958,410	
Right-of-Way¹					
Undeveloped	20,000	SF	\$12.00	\$240,000	
Right-of-way Acquisition Support			10%	\$24,000	
Subtotal R/W Items				\$264,000	
Capital Support					
PR/ED (PD,PE,PM)			10%	\$95,841	
PS&E (PS)			20%	\$191,682	
CONSTRUCTION (CM)			15%	\$143,761	
Subtotal Capital Support Items				\$431,284	
Project Total				\$1,653,694	
Rounded				\$1,654,000	
1. Widening to 4 lanes in addition to Bass Lake improvements being implemented with Country Club Realignment					

El Dorado County - 2020 TIM Fee Update

Segment R-13

Prepared By:

PRELIMINARY COST



Headington Road Extension

Project Limits: Missouri Flat Road to El Dorado Road

TYPE: 2 Lane

Right-of-Way and proposed improvements are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits.

				PROJECT LENGTH	3,500
Item Description	Quantity	Units	Unit Cost	Total Cost	
Earthwork					
Roadway Excavation	14,625	CY	\$60.00	\$877,528	
Earthwork/Grading Factor			150%	\$1,316,292	
Structural Section					
Hot Mix Asphalt (Type A)	7,605	Ton	\$140.00	\$1,064,700	
Class 2 Aggregate Base	8,788	CY	\$80.00	\$703,040	
Drainage & Utilities					
Drainage (15% of Earthwork & Struc Sec total)			15%	\$594,234	
Specialty Items					
HMA Dike	650	LF	\$15.00	\$9,750	
HMA Gutter	650	LF	\$30.00	\$19,500	
Driveway	1	EA	\$6,000.00	\$6,000	
Sidewalk Ramp	2	EA	\$4,000.00	\$8,000	
Traffic Items					
Street Lights and Pull Boxes	4	EA	\$8,000.00	\$32,000	
Street Lights Conduit System	400	LF	\$30.00	\$12,000	
Striping Imps (2 lanes)	3,500	LF	\$5.00	\$17,500	
Pavement Markings	360	SF	\$6.00	\$2,160	
Signs	13	EA	\$350.00	\$4,550	
Subtotal Roadway Construction Items				\$4,667,254	
Supplemental Items					
Traffic Management Plan/Traffic Control			4%	\$186,690	
Construction Contingency			25%	\$1,166,814	
Subtotal Supplemental Items				\$1,353,504	
Structure Items					
Bridge / CONSPAN	5,600	SF	\$350.00	\$1,960,000	
Subtotal Structure Construction Items				\$1,960,000	
Construction Subtotal				\$7,980,758	
Right-of-Way					
Undeveloped	252,000	SF	\$12.00	\$3,024,000	
Right-of-way Acquisition Support			10%	\$302,400	
Subtotal R/W Items				\$3,326,400	
Capital Support					
PR/ED (PD,PE,PM)			10%	\$798,076	
PS&E (PS)			20%	\$1,596,152	
CONSTRUCTION (CM)			15%	\$1,197,114	
Subtotal Capital Support Items				\$3,591,341	
Project Total				\$14,898,499	
Rounded				\$14,899,000	
1. Design per plans provided by County on 9/24/20					
2. Project does not include signalization of Missouri Flat/Headington, that work is a separate project					

El Dorado County

Segment R-6

Prepared By:



PRELIMINARY COST

Saratoga Way

Project Limits: El Dorado Hills Blvd to Wilson Blvd

TYPE: 4-LANE

Right-of-Way and proposed improvements are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits.

				PROJECT LENGTH	3,700
Item Description	Quantity	Units	Unit Cost	Total Cost	
Earthwork					
Roadway Excavation	9,916	CY	\$60.00		\$594,931
Earthwork/Grading Factor			90%		\$535,438
Existing Facilities					
Sawcut Existing Asphalt Concrete	3,700	LF	\$3.00		\$11,100
Removal of Striping	14,800	LF	\$1.50		\$22,200
Removal of Pavement Markings	400	SF	\$3.00		\$1,200
Removal of Existing Landscaping	8,800	SF	\$20.00		\$176,000
Remove Existing Curb, Gutter, Sidewalk	880	LF	\$100.00		\$88,000
Structural Section					
Hot Mix Asphalt (Type A)	4,876	Ton	\$130.00		\$633,848
Class 2 Aggregate Base	6,614	CY	\$80.00		\$529,124
AC Overlay	914	Ton	\$125.00		\$114,244
Drainage & Utilities					
Drainage (15% of Earthwork & Struc Sec total)			15%		\$361,138
Specialty Items					
Concrete Sidewalk	25,680	SF	\$15.00		\$385,200
Curb and Gutter	4,280	LF	\$50.00		\$214,000
Median Island Curb	7,000	LF	\$25.00		\$175,000
Median Island Flatwork	10,500	SF	\$15.00		\$157,500
Driveway	1	EA	\$6,000.00		\$6,000
Sidewalk Ramp	4	EA	\$4,000.00		\$16,000
Small Retaining Wall (0 to 5')	300	LF	\$250.00		\$75,000
Medium Retaining Wall (6 to 10')	880	LF	\$450.00		\$396,000
Concrete Barrier	700	LF	\$500.00		\$350,000
Landscaping					
Median Treatment	21,000	SF	\$6.00		\$126,000
Traffic Items					
Street Lights and Pull Boxes	2	EA	\$8,000.00		\$16,000
Street Lights Conduit System	100	LF	\$30.00		\$3,000
Traffic Signal Modification (high)	2	LS	\$200,000.00		\$400,000
Striping Imps (4 lanes)	3,700	LF	\$7.00		\$25,900
Pavement Markings	990	SF	\$6.00		\$5,940
Signs	15	EA	\$350.00		\$5,180
Subtotal Roadway Construction Items					\$5,423,941
Supplemental Items					
Traffic Management Plan/Traffic Control			4%		\$216,958
Construction Contingency			25%		\$1,355,985
Subtotal Supplemental Items					\$1,572,943
Construction Subtotal					\$6,996,884
Right-of-Way					
Developed (landscaped)	32,500	SF	\$20.00		\$650,000
Undeveloped	184,000	SF	\$12.00		\$2,208,000
Right-of-way Acquisition Support			10%		\$285,800
Subtotal R/W Items					\$3,143,800
Capital Support					
PR/ED (PD,PE,PM)			10%		\$699,688
PS&E (PS)			20%		\$1,399,377
CONSTRUCTION (CM)			15%		\$1,049,533
Subtotal Capital Support Items					\$3,148,598
Project Total					\$13,289,282
Rounded					\$13,290,000
1. Saratoga is widened to 4 lanes west of Wilson to Iron Point 2. Extending concrete barrier south side of Saratoga near finders where alignment is close to US 50 WB On ramp 3. Assuming no landscaping to replace existing between Mammouth and Arrowhead, not enough room 4. Assuming street lighting only at Finders and Arrowhead intersections 5. ROW Acquisition assumed for landscaped areas on west side north and south of Arrowhead 6. Sidewalk is along north/west side for full length, and east side from Arrowhead to commercial driveway					

El Dorado County

Segment R-7

Prepared By:



PRELIMINARY COST

Country Club Drive

Project Limits: East of El Dorado Hills Blvd to Silva Valley Pkwy

TYPE: 2-LANE

Right-of-Way and proposed improvements are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits.

				PROJECT LENGTH	5,000
Item Description	Quantity	Units	Unit Cost	Total Cost	
Earthwork					
Roadway Excavation	17,360	CY	\$60.00	\$1,041,610	
Earthwork/Grading Factor			150%	\$1,562,415	
Existing Facilities					
Removal of Striping	1,200	LF	\$1.50	\$1,800	
Removal of Pavement Markings	180	SF	\$3.00	\$540	
Structural Section					
Hot Mix Asphalt (Type A)	8,337	Ton	\$130.00	\$1,083,761	
Class 2 Aggregate Base	10,479	CY	\$80.00	\$838,341	
AC Overlay	145	Ton	\$125.00	\$18,141	
Drainage & Utilities					
Drainage (15% of Earthwork & Struc Sec total)			15%	\$681,640	
Specialty Items					
Concrete Sidewalk	60,000	SF	\$15.00	\$900,000	
Curb and Gutter	10,000	LF	\$50.00	\$500,000	
Driveway	2	EA	\$6,000.00	\$12,000	
Sidewalk Ramp	4	EA	\$4,000.00	\$16,000	
Traffic Items					
Street Lights and Pull Boxes	8	EA	\$8,000.00	\$64,000	
Street Lights Conduit System	400	LF	\$30.00	\$12,000	
Traffic Signal Modification (high)	1	LS	\$200,000.00	\$200,000	
Traffic Signal New (high)	1	LS	\$350,000.00	\$350,000	
Striping Imps (4 lanes)	5,000	LF	\$7.00	\$35,000	
Pavement Markings	540	SF	\$6.00	\$3,240	
Signs	20	EA	\$350.00	\$7,000	
Subtotal Roadway Construction Items				\$7,327,488	
Supplemental Items					
Traffic Management Plan/Traffic Control			4%	\$293,100	
Construction Contingency			25%	\$1,831,872	
Subtotal Supplemental Items				\$2,124,971	
Structure Items					
Box Culvert	5,600	SF	\$350.00	\$1,960,000	
Mobilization			10%	\$196,000	
Time-Related Overhead			10%	\$196,000	
Subtotal Structure Construction Items				\$2,352,000	
Construction Subtotal				\$11,804,459	
Right-of-Way ¹					
Developed (parking)	13	Stall	\$2,800.00	\$36,400	
Developed (landscaped)	3,400	SF	\$19.60	\$66,640	
Developed (building)	0	SF	\$225.00	\$0	
Undeveloped	300,000	SF	\$12.00	\$3,600,000	
Right-of-way Acquisition Support			10%	\$370,304	
Subtotal R/W Items				\$4,073,344	
Capital Support					
PR/ED (PD,PE,PM)			10%	\$1,180,446	
PS&E (PS)			20%	\$2,360,892	
CONSTRUCTION (CM)			15%	\$1,770,669	
Subtotal Capital Support Items				\$5,312,007	
Project Total				\$21,189,810	
Rounded				\$21,190,000	
1. Right of way and feasibility need to be researched through Raley's shopping center. 2. Assuming connection to EDH Blvd is via Park Drive 3. Signal mod is for Country Club (Park) / EDH Blvd 4. Box Culvert is for creek crossing just west of intersection with SVP					

El Dorado County

Segment R-8

Prepared By:

PRELIMINARY COST



Country Club Drive

Project Limits: Silva Valley Pkwy to Tong Road

TYPE: 2-LANE (with two-way left turn lane)

Right-of-Way and proposed improvements are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits.

				PROJECT LENGTH	3,600
Item Description	Quantity	Units	Unit Cost	Total Cost	
Earthwork					
Roadway Excavation	11,688	CY	\$60.00	\$701,282	
Earthwork/Grading Factor			90%	\$631,154	
Structural Section					
Hot Mix Asphalt (Type A)	5,581	Ton	\$130.00	\$725,546	
Class 2 Aggregate Base	7,877	CY	\$80.00	\$630,151	
AC Overlay	304	Ton	\$125.00	\$37,969	
Drainage & Utilities					
Drainage (15% of Earthwork & Struc Sec total)			15%	\$408,915	
Specialty Items					
Concrete Sidewalk	43,200	SF	\$15.00	\$648,000	
Curb and Gutter	7,200	LF	\$50.00	\$360,000	
Driveway	1	EA	\$6,000.00	\$6,000	
Sidewalk Ramp	6	EA	\$4,000.00	\$24,000	
Traffic Items					
Street Lights and Pull Boxes	2	EA	\$8,000.00	\$16,000	
Street Lights Conduit System	400	LF	\$30.00	\$12,000	
Striping Imps (4 lanes)	300	LF	\$7.00	\$2,100	
Striping Imps (2 lanes)	2,300	LF	\$5.00	\$11,500	
Pavement Markings	450	SF	\$6.00	\$2,700	
Signs	20	EA	\$350.00	\$7,000	
Subtotal Roadway Construction Items				\$4,574,317	
Supplemental Items					
Traffic Management Plan/Traffic Control			4%	\$182,973	
Construction Contingency			25%	\$1,143,579	
Subtotal Supplemental Items				\$1,326,552	
Structure Items					
Box Culvert Extensions	320	SF	\$350.00	\$112,000	
Bridge Mobilization			10%	\$11,200	
Bridge Time-Related Overhead			10%	\$11,200	
Subtotal Structure Construction Items				\$134,400	
Construction Subtotal				\$6,035,269	
Right-of-Way					
Undeveloped	223,600	SF	\$12.00	\$2,683,200	
Right-of-way Acquisition Support			10%	\$268,320	
Subtotal R/W Items				\$2,951,520	
Capital Support					
PR/ED (PD,PE,PM)			10%	\$603,527	
PS&E (PS)			20%	\$1,207,054	
CONSTRUCTION (CM)			15%	\$905,290	
Subtotal Capital Support Items				\$2,715,871	
Project Total				\$11,702,660	
Rounded				\$11,703,000	

1. Project limits are same as exhibit for Country Club Drive Extension and El Dorado Hills 52 Development
2. Signal Installation at SVP is included with the Country Club from EDH to SVP estimate

El Dorado County

Segment R-9

Prepared By:



PRELIMINARY COST

Country Club Drive

Project Limits: Tong Road to Bass Lake Rd

TYPE: 2-LANE

TYPICAL CROSS SECTION

Right-of-Way and proposed improvements are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits.

Item Description	PROJECT LENGTH			6,000
	Quantity	Units	Unit Cost	Total Cost
Earthwork				
Roadway Excavation	22,062	CY	\$60.00	\$1,323,720
Earthwork/Grading Factor			150%	\$1,985,580
Structural Section				
Hot Mix Asphalt (Type A)	10,643	Ton	\$130.00	\$1,383,525
Class 2 Aggregate Base	14,813	CY	\$80.00	\$1,185,067
Drainage & Utilities				
Drainage (15% of Earthwork & Struc Sec total)			15%	\$881,684
Specialty Items				
Driveway	2	EA	\$6,000.00	\$12,000
Sidewalk Ramp	2	EA	\$4,000.00	\$8,000
Traffic Items				
Street Lights and Pull Boxes	2	EA	\$8,000.00	\$16,000
Street Lights Conduit System	200	LF	\$30.00	\$6,000
Traffic Signal Modification (high)	1	LS	\$200,000.00	\$200,000
Striping Imps (2 lanes)	6,000	LF	\$5.00	\$30,000
Pavement Markings	450	SF	\$6.00	\$2,700
Signs	20	EA	\$350.00	\$7,000
Subtotal Roadway Construction Items				\$7,041,275
Supplemental Items				
Traffic Management Plan/Traffic Control			4%	\$281,651
Construction Contingency			25%	\$1,760,319
Subtotal Supplemental Items				\$2,041,970
Construction Subtotal				\$9,083,245
Right-of-Way				
Undeveloped	360,000	SF	\$12.00	\$4,320,000
Right-of-way Acquisition Support			10%	\$432,000
Subtotal R/W Items				\$4,752,000
Capital Support				
PR/ED (PD,PE,PM)			10%	\$908,325
PS&E (PS)			20%	\$1,816,649
CONSTRUCTION (CM)			15%	\$1,362,487
Subtotal Capital Support Items				\$4,087,460
Project Total				\$17,922,706
Rounded				\$17,923,000
1. Traffic Signal Mod and Street Lighting are assumed to be at the Country Club/Bass Lake intersection.				
2. Cross Section is similar to exhibit for SVP to Tong Road segment minues Crub Gutter and Sidewalk.				

El Dorado County

Segment R-12

Prepared By:

PRELIMINARY COST



Latrobe Connector 2-LANE

Right-of-Way and proposed improvements are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits.

				PROJECT LENGTH	1,000
Item Description	Quantity	Units	Unit Cost	Total Cost	
Earthwork					
Roadway Excavation	3,308	CY	\$60.00	\$198,493	
Earthwork/Grading Factor			90%	\$178,644	
Structural Section					
Hot Mix Asphalt (Type A)	1,650	Ton	\$130.00	\$214,500	
Class 2 Aggregate Base	2,194	CY	\$80.00	\$175,496	
AC Overlay	0	Ton	\$125.00	\$0	
Drainage & Utilities					
Drainage (15% of Earthwork & Struc Sec total)			15%	\$115,070	
Specialty Items					
Concrete Sidewalk	6,000	SF	\$15.00	\$90,000	
Curb and Gutter	1,000	LF	\$50.00	\$50,000	
Median Island Curb	2,000	LF	\$25.00	\$50,000	
Driveway	2	EA	\$6,000.00	\$12,000	
Sidewalk Ramp	4	EA	\$4,000.00	\$16,000	
Landscaping					
Landscaping & Irrigation	10,000	SF	\$5.00	\$50,000	
Traffic Items					
Street Lights and Pull Boxes	2	EA	\$8,000.00	\$16,000	
Street Lights Conduit System	200	LF	\$30.00	\$6,000	
Traffic Signal New (high)	1	LS	\$350,000.00	\$350,000	
Striping Imps (2 lanes)	1,000	LF	\$5.00	\$5,000	
Pavement Markings	900	SF	\$6.00	\$5,400	
Signs	10	EA	\$350.00	\$3,500	
Subtotal Roadway Construction Items				\$1,536,104	
Supplemental Items					
Traffic Management Plan/Traffic Control			4%	\$61,444	
Construction Contingency			25%	\$384,026	
Subtotal Supplemental Items				\$445,470	
Construction Subtotal				\$1,981,574	
Capital Support					
PR/ED (PD,PE,PM)			10%	\$198,157	
PS&E (PS)			20%	\$396,315	
CONSTRUCTION (CM)			15%	\$297,236	
Subtotal Capital Support Items				\$891,708	
Project Total				\$2,873,282	
Rounded				\$2,874,000	
1. Matching cross section of existing Carson Crossing (2 lanes, SW on one side, landscaped median) 2. Curb and Gutter or open graded ditch assumed to be equivalent cost. Leaving in C&G item. 3. Signal is for intersection of Carson Crossing/Golden Foothill Parkway 4. Assuming no Right of Way acquisition needed (developer dedicated)					

El Dorado County - 2020 TIM Fee Update

Prepared By:



PRELIMINARY COST

El Dorado Hills Blvd/Saratoga Way/Park Drive Intersection Improvements

Project Limits: Intersection Improvements Only

Right-of-Way and proposed improvements are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits.

				PROJECT LENGTH	600
Item Description	Quantity	Units	Unit Cost	Total Cost	
Earthwork					
Roadway Excavation	861	CY	\$60.00		\$51,671
Earthwork/Grading Factor			90%		\$46,504
Existing Facilities					
Sawcut Existing Asphalt Concrete	520	LF	\$3.00		\$1,560
Removal of Striping	12,000	LF	\$1.50		\$18,000
Removal of Pavement Markings	540	SF	\$3.00		\$1,620
Remove Existing Lighting and Landscaping	1	LS	\$50,000.00		\$50,000
Structural Section					
Hot Mix Asphalt (Type A)	447	Ton	\$130.00		\$58,130
Rubberized Hot Mix Asphalt - Open Graded	81	Ton	\$150.00		\$12,195
Class 2 Aggregate Base	562	CY	\$80.00		\$44,966
AC Overlay	377	Ton	\$125.00		\$47,109
Drainage & Utilities					
Drainage (15% of Earthwork & Struc Sec total)			15%		\$39,086
Specialty Items					
Concrete Sidewalk	100	SF	\$12.00		\$1,200
Curb and Gutter	100	LF	\$33.00		\$3,300
Median Island Curb	120	LF	\$15.00		\$1,800
Median Island Flatwork	960	SF	\$8.00		\$7,680
Sidewalk Ramp	2	EA	\$4,000.00		\$8,000
Small Retaining Wall (0 to 5')	150	LF	\$200.00		\$30,000
Traffic Items					
Street Lights and Pull Boxes	2	EA	\$8,000.00		\$16,000
Street Lights Conduit System	400	LF	\$30.00		\$12,000
Traffic Signal Modification (high) ²	1	LS	\$200,000.00		\$200,000
Striping Imps (6 lanes)	450	LF	\$7.50		\$3,375
Pavement Markings	450	SF	\$6.00		\$2,700
Signs	8	EA	\$350.00		\$2,800
Subtotal Roadway Construction Items					\$659,695
Supplemental Items					
Traffic Management Plan/Traffic Control			4%		\$26,388
Construction Contingency			25%		\$164,924
Subtotal Supplemental Items					\$191,312
Construction Subtotal					\$851,007
Capital Support					
CONSTRUCTION (CM)			15%		\$127,651
Subtotal Capital Support Items					\$127,651
Project Total					\$978,658
Rounded					\$979,000
1. Assuming all improvements can fit inside existing County ROW 2. Need ramp and sidewalk work on NW and SW curb returns due to addition of right turn lane 3. Added overlay to full length of improvements on El Dorado and 50' up Saratoga and Park 4. Retaining wall will be needed at NW corner of intersection behind curb return					