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GOODWIN CONSULTING GROUP



**FLORIN VINEYARD COMMUNITY PLAN
DEVELOPMENT IMPACT FEE PROGRAM
NEXUS STUDY**

May 14, 2019

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EXECUTIVE SUMMARY

Introduction

The Florin Vineyard Community Plan (“FVCP”) area is located in the County of Sacramento, approximately 13 miles southeast of Downtown Sacramento and four miles north of the City of Elk Grove. The irregularly-shaped FVCP area includes approximately 3,872 gross acres that are adjacent to the North Vineyard Station Specific Plan and extends into the Florin portion of South Sacramento. The FVCP encompasses large areas between Elder Creek Road and Florin Road from west of South Watt Avenue to east of Bradshaw Road, on both sides of Elk Grove-Florin Road between Florin Road and Gerber Road, and south of Gerber Road between the Union Pacific Railroad alignment and Bradshaw Road.

As approved by the Board of Supervisors on December 15, 2010, the FVCP area includes a wide range of residential densities, retail commercial, industrial and business uses, open spaces, and road right-of-ways. Approximately 9,919 residential units are planned for the FVCP area. Residential land uses expected in the FVCP area include zoning categories of AR-5 through AR-1 agriculture residential, RD-2 through RD-7 low density residential, RD-9 through RD-12 median density residential, and RD-20 multi-family zoning categories. Non-residential land uses in the FVCP include 10.2 acres of General Commercial (GC), 140.6 acres of Shopping Center (SC), 18.5 acres of Limited Commercial (LC), 13.3 acres of Business Professional (BP), 885.3 acres of Industrial (M-1), and 237.6 acres of Industrial Reserve. Public uses include 98.1 acres of open space and 119.4 acres of major roadways and other public uses.

For purposes of this study, a 13% reduction is applied to gross acreage estimates to account for the loss of developable land due to schools and parks. The amount of developable acreage was further adjusted for agriculture residential use with existing residents and land uses with approved amendments since the FVCP approval in 2010. In addition, the amount of anticipated development on M-1 and Industrial Reserve uses is adjusted due to a high probability that much of these uses may not develop in the foreseeable future. Consequently, only 25% of the M-1 land is assumed to be developable for purposes of this study. The remaining 75% of M-1 and 100% of Industrial Reserve land uses are assumed to remain undevelopable and therefore are excluded from this fee study. A mapping factor of 10% is also applied to all land uses to account for potential loss of developable acreage as parcels are subdivided. Accounting for these adjustments, the proposed fee program includes 8,174 residential units, including 7,305 single-family units on 1,618 acres and 869 multi-family units on 48 acres, as well as 123 acres of commercial and business professional uses and 199 acres of industrial uses.

The FVCP area will need major backbone infrastructure as well as municipal facilities, such as roadway and frontage lane improvements, the area’s fair share of roadway improvements within another jurisdiction (i.e., City of Sacramento), park and recreation facilities, and transit facilities. Much of the funding for these facilities will come from development impact fees. Since such facilities are needed as a result of development in the FVCP area, the cost of these facilities should be borne by development in the FVCP area. The impact fees discussed in this report will apply only to development within the FVCP area.

Purpose of Study

The County of Sacramento retained Goodwin Consulting Group, Inc. to establish the Florin Vineyard Community Plan Development Impact Fee Program (“Fee Program”). The Fee Program will be established by the County of Sacramento Board of Supervisors through the adoption of this *Florin Vineyard Community Plan Development Impact Fee Program Nexus Study* (“Nexus Study”). The Nexus Study ensures that a rational nexus exists between future development in the FVCP area and the use and need of the proposed facilities and the impact fees that fund them. The Nexus Study will also demonstrate that a reasonable relationship exists between the amount of each impact fee component and the cost of the facilities attributable to the type of development that will be required to pay the impact fees.

Fees included in FVCP Nexus Study

Development impact fees for the FVCP area (“FVCP Fees”) included in this Nexus Study are needed to mitigate the impacts of future development in the FVCP area for the following types of improvements and/or facilities:

- Roadway and Frontage Lane Improvements
- Other Jurisdiction’s Roadway Improvements (Fair Share)
- Park and Recreation Facilities
- Transit Facilities

Facilities and Costs

The FVCP area will fund various types of infrastructure and public facilities that will serve future development in this area. The table below summarizes the public facilities in the FVCP area that will be funded with FVCP Fees. The capital facilities (FVCP CIP) to be funded with FVCP Fees are presented in Appendix A of this report.

Facility	CIP Costs
Roadway and Frontage Lane Improvements	\$165,307,363
Other Jurisdiction’s Roadway Improvements (Fair Share)	\$6,485,698
Park and Recreation Facilities	\$75,682,473
Transit Facilities	\$561,010
Total Costs	\$248,036,544

The infrastructure and costs listed in the table above are not a complete list of the facilities that will be funded by FVCP development, but only those for which the County will establish project-specific development impact fees. The FVCP area will also be required to pay development impact fees or construct additional infrastructure associated with permanent water, sewer, drainage, fire, library, and schools facilities; however, the fees and costs associated with these facilities are administered under separate County or other jurisdictions' fee programs and therefore are not part of the County's FVCP Fee Program. Any overlapping facilities between the Sacramento County Transportation Development Fee (SCTDF) program and the FVCP Fee Program will receive a corresponding credit in the SCTDF program.

Summary of the FVCP Fees

The table on the following page summarizes the development impact fee components in the FVCP Fee Program as calculated in this report. These impact fees may be adjusted in future years to reflect revised facility standards or costs, receipt of funding from alternative sources (i.e., state or federal grants), or changes in demographics or the FVCP development land use plan. In addition to such adjustments, the FVCP Fees will be inflated each year by a construction cost index, as determined by the County.

Zoning Category	Fee per Unit, Acre, or Bldg SF	FVCP Roadway & Frontage Lane Fee /1	Other Jurisdiction's Roadway Fee /1	Park & Recreation Fee /2	Transit Fee	Administration Fee (4.0%)	Total Fee
Residential							
Single Family							
AG-80	per Unit	\$16,732	\$656	\$9,729	\$32	\$1,086	\$28,235
AG-20	per Unit	\$16,732	\$656	\$9,729	\$32	\$1,086	\$28,235
A-10/AR-10	per Unit	\$16,732	\$656	\$9,729	\$32	\$1,086	\$28,235
AR-5	per Unit	\$16,732	\$656	\$9,729	\$32	\$1,086	\$28,235
AR-2	per Unit	\$16,732	\$656	\$9,729	\$32	\$1,086	\$28,235
AR-1	per Unit	\$16,732	\$656	\$9,729	\$32	\$1,086	\$28,235
RD-1	per Acre	\$16,732	\$656	\$9,729	\$32	\$1,086	\$28,235
RD-2	per Acre	\$33,464	\$1,312	\$19,458	\$64	\$2,172	\$56,470
RD-3	per Acre	\$46,850	\$1,837	\$28,214	\$90	\$3,080	\$80,071
RD-4	per Acre	\$58,562	\$2,296	\$35,997	\$112	\$3,879	\$100,846
RD-5	per Acre	\$68,601	\$2,690	\$43,781	\$131	\$4,608	\$119,811
RD-6	per Acre	\$81,987	\$3,214	\$52,537	\$157	\$5,516	\$143,411
RD-7	per Acre	\$95,372	\$3,739	\$61,293	\$176	\$6,423	\$167,003
RD-9	per Acre	\$108,758	\$4,264	\$64,601	\$352	\$7,119	\$185,094
RD-10	per Acre	\$120,470	\$4,723	\$71,995	\$390	\$7,903	\$205,481
Multi-Family							
RD-12	per Acre	\$143,895	\$5,642	\$83,669	\$467	\$9,347	\$243,020
RD-15	per Acre	\$158,954	\$6,232	\$99,236	\$586	\$10,600	\$275,608
RD-20	per Acre	\$170,666	\$6,691	\$113,829	\$1,219	\$11,696	\$304,101
RD-25	per Acre	\$200,784	\$7,872	\$134,260	\$1,434	\$13,774	\$358,124
RD-30	per Acre	\$240,941	\$9,446	\$160,529	\$1,718	\$16,505	\$429,139
Non-Residential							
M-1/M-2/IR/UR	per Bldg SF	\$7.68	\$0.30	\$0.96	\$0.02	\$0.36	\$9.32
MP	per Bldg SF	\$17.29	\$0.68	\$1.95	\$0.04	\$0.80	\$20.76
BP	per Bldg SF	\$14.82	\$0.58	\$2.04	\$0.08	\$0.70	\$18.22
SC	per Bldg SF	\$18.38	\$0.72	\$1.68	\$0.17	\$0.84	\$21.79
GC	per Bldg SF	\$25.04	\$0.98	\$1.52	\$0.16	\$1.11	\$28.81
LC	per Bldg SF	\$25.04	\$0.98	\$2.23	\$0.16	\$1.14	\$29.55
TC	per Bldg SF	\$25.04	\$0.98	\$2.68	\$0.05	\$1.15	\$29.90

- /1 Roadway & Frontage Lane fees and Other Jurisdiction's Roadway fees for Age Restricted residential uses equal 34% of the rates shown in this table.
/2 Park and Recreation fees for Age Restricted residential uses equal 69% of the rates shown in this table.

I. INTRODUCTION

The Florin Vineyard Community Plan (“FVCP”) area is located in the County of Sacramento, approximately 13 miles southeast of Downtown Sacramento and four miles north of the City of Elk Grove. The irregularly-shaped FVCP area includes approximately 3,872 gross acres that are adjacent to the North Vineyard Station Specific Plan and extends into the Florin portion of South Sacramento. The FVCP encompasses large areas between Elder Creek Road and Florin Road from west of South Watt Avenue to east of Bradshaw Road, on both sides of Elk Grove-Florin Road between Florin Road and Gerber Road, and south of Gerber Road between the Union Pacific Railroad alignment and Bradshaw Road.

The FVCP area will need major backbone infrastructure as well as municipal facilities, such as roadway and frontage lane improvements, the area’s fair share of roadway improvements for other jurisdiction’s, park and recreation facilities, and transit facilities. Much of the funding for these facilities will come from development impact fees. Since such facilities are needed as a result of development in the FVCP area, the cost of these facilities should be borne by development in the FVCP area. The impact fees discussed in this report will apply only to development within the FVCP area. A map of the FVCP area is presented at the end of this chapter.

Purpose of Study

The County of Sacramento retained Goodwin Consulting Group, Inc. to establish the Florin Vineyard Community Plan Development Impact Fee Program. The Fee Program will be established by the County of Sacramento Board of Supervisors through the adoption of this *Florin Vineyard Community Plan Development Impact Fee Program Nexus Study* (“Nexus Study”). The Nexus Study ensures that a rational nexus exists between future development in the FVCP area and the use and need of the proposed facilities and the impact fees that fund them. The Nexus Study will also demonstrate that a reasonable relationship exists between the amount of each impact fee component and the cost of the facilities attributable to the type of development that will be required to pay the impact fees.

AB 1600 Nexus Requirements

Assembly Bill (AB) 1600, which was enacted by the State of California in 1987, created Section 66000 et. seq. of the Government Code. AB 1600, also referred to as the Mitigation Fee Act, requires that all public agencies satisfy the following requirements when establishing, increasing, or imposing a fee as a condition of approval for a development project:

1. Identify the purpose of the fee
2. Identify the use to which the fee will be put
3. Determine how there is a reasonable relationship between:

- A. The fee's use and the type of development project on which the fee is imposed
- B. The need for the public facility and the type of development project on which the fee is imposed.
- C. The amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.

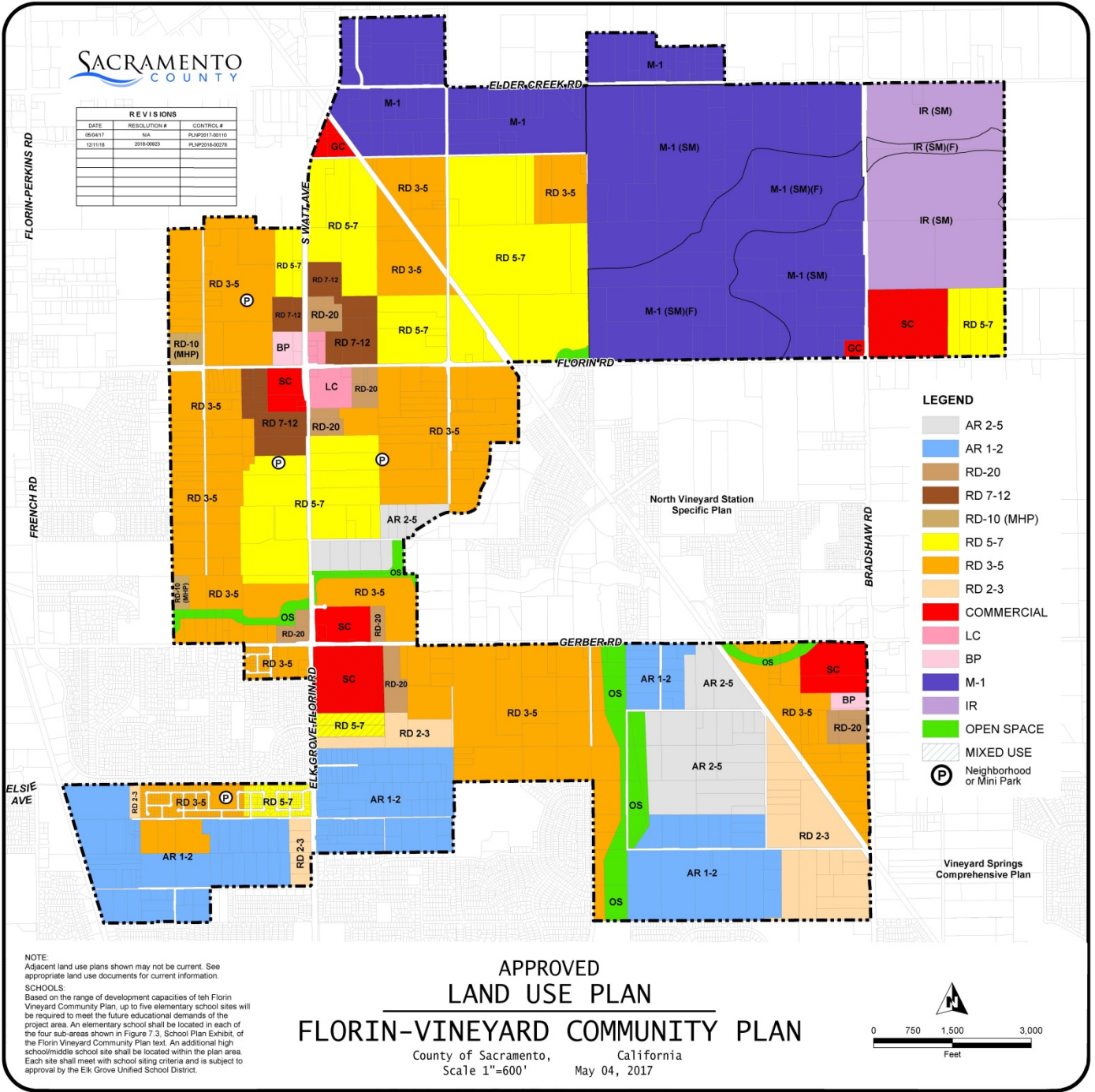
As stated above, the purpose of this Nexus Study is to demonstrate that all fee components of the FVCP Fee Program comply with AB 1600. The assumptions, cost allocation methodology, facility standards that were used to establish the nexus between the fees (“FVCP Fees”) in this Nexus Study and the development on which they will be levied are summarized in the subsequent chapters of this report.

Organization of Report

The remainder of this report has been organized into the following chapters:

- Section II** Provides a general explanation of the methodology used to calculate the fees in the FVCP Fee Program.
- Section III** Discusses the FVCP land uses to be used in the application of the fees.
- Section IV** Defines infrastructure categories in the FVCP CIP and their related costs
- Sections V-VIII** Provides details of the individual fee component calculations: (i) roadway and frontage lane improvements; (ii) the FVCP’s fair share of roadway improvements within another jurisdiction (i.e., City of Sacramento); (iii) park and recreation facilities; and (iv) transit facilities
- Section IX** Provides a summary of the impact fees calculated in this report and addresses future fee adjustments, credit/reimbursement policies, fee implementation issues and administrative duties for the Fee Program

Florin Vineyard Community Plan Land Use Map



II. FEE METHODOLOGY

When an impact fee is calculated, an analysis must be presented in enough detail to demonstrate that a logical and thorough consideration was applied in the process of determining how the fee relates to the impact from new development. Various findings must be made to ensure that there is a reasonable relationship between the use, need and amount of an impact fee and the type of development on which that impact fee will be levied.

Dwelling Unit Equivalentents (DUE) Factors

Dwelling unit equivalentents factors, or DUEs, are measurements by which the impact on public facilities of one type of land use or zoning category is measured relative to another. This nexus study utilizes DUEs developed by the County to allocate the facilities costs in the FVCP Capital Improvement Plan (“FVCP CIP”), which is presented in Appendix A of this report. The County DUE factors are set up so that the RD-1 land use category equals 1.0 DUE. Other land use categories have their DUE factor calculated based on their relative impact on an infrastructure or facility type to that of the RD-1 category. DUE schedules that show the assigned DUE factor for each land use category are shown in Appendix C.

Fee Calculation

Fees calculated in the Fee Program utilize dwelling unit equivalentents, or DUE factors, to spread the cost of infrastructure and other public facilities over the expected future development in the FVCP. The steps to calculate each fee component of the Fee Program are as follows:

- Step 1.* Determine the expected number of units or acres by land use zoning in the development area
- Step 2.* Determine the facilities and improvements needed to serve future development
- Step 3.* Estimate the total cost of the facilities needed to serve the future development
- Step 4.* Determine the appropriate DUE factors for each land use category and apply DUEs to the land use categories for each infrastructure facility or Fee Program cost
- Step 5.* Calculate the total amount of DUEs that will be generated by all future development land use categories by multiplying the land uses by their assigned DUE factor
- Step 6.* Divide the total cost of the facility by the total DUEs calculated in Step 5 to calculate a cost per DUE for the facility category

- Step 7.** Multiply a land use's DUE factor by the cost per DUE for each facility category to determine the impact fee per acre for each land use category of that facility component
- Step 8.** For AG and AR residential zoning designations, divide the resultant per acre fee by the estimated density for the specific zoning designation to determine the impact fee per unit. For each non-residential use, divide the resultant per acre fee by the estimated building square feet per acre, which is based on an average floor-to-area ratio, for each land use category.

III. LAND USE CATEGORIES

Land Use Categories

The FVCP area includes approximately 3,872 gross acres that encompasses a wide range of residential densities, retail commercial, industrial and business uses, open spaces, and road right-of-ways. Approximately 9,919 residential units are planned for the FVCP area. Residential land uses expected in the FVCP area include zoning categories of AR-5 through AR-1 agriculture residential, RD-2 through RD-7 low density residential, RD-9 through RD-12 median density residential, and RD-20 multi-family zoning categories. Non-residential land uses in the FVCP include 10.2 acres of General Commercial (GC), 140.6 acres of Shopping Center (SC), 18.5 acres of Limited Commercial (LC), 13.3 acres of Business Professional (BP), 885.3 acres of Industrial (M-1), and 237.6 acres of Industrial Reserve. Public uses include 98.1 acres of open spaces and 119.4 acres of major roadways and other public uses.

For purposes of this study, a 13% reduction is applied to gross acreage estimates to account for the loss of developable land due to schools and parks. The developable acreage was further adjusted for agriculture residential use with existing residents and land uses with approved amendments since the FVCP approval in 2010. In addition, the amount of anticipated development on M-1 and Industrial Reserve uses is adjusted due to a high probability that much of these uses may not develop in the foreseeable future. Consequently, only 25% of the M-1 land is assumed to be developable for purposes of this study. The remaining 75% of M-1 and 100% of Industrial Reserve uses are assumed will be undevelopable and therefore are excluded from this fee study. A mapping factor of 10% is also applied to all land uses to account for potential loss of developable acreages as parcels are subdivided. Accounting for these adjustments, the proposed fee program includes 8,174 residential units, including 7,305 single-family units on 1,618 acres and 869 multi-family units on 48 acres, as well as 123 acres of commercial and business professional uses and 199 acres of industrial uses, as summarized in Table B-1 in Appendix B of this report. The total developable acres for the plan area have been reduced from 3,872 acres, as shown in the Florin Vineyard Community Plan, to 1,988 net developable acres in this study.

The Mitigation Fee Act requires that a reasonable relationship exists between the need for the public facilities and the type of development on which an impact fee is imposed. The need for public facilities is related to the level of service demanded, which varies in proportion to the number of residents or employees generated by a particular development type. Therefore, land use categories and DUEs have been calculated in order to distinguish between relative impacts on facilities. FVCP Fees have been calculated on a per acre basis for residential development and on a per square foot basis for non-residential land use categories. When assigning FVCP Fees, the County will make the final determination as to which land use category a particular development will be assigned.

IV. INFRASTRUCTURE AND PUBLIC FACILITIES

The FVCP area will fund various types of infrastructure and public facilities that will serve future development in this area. The table below summarizes the public facilities and costs in the FVCP CIP. A total of \$248.0 million in facilities costs will be funded through the Fee Program. Detailed facilities components and their costs are shown in Appendix A of this report.

FVCP Facilities & Costs Funded through the FVCP Fee Program	
Facilities	Total Cost
Roadway and Frontage Lane Improvements	\$165,307,363
Other Jurisdiction's Roadway Improvements (Fair Share)	\$6,485,698
Park and Recreation Facilities	\$75,682,473
Transit Facilities	\$561,010
FVCP Facilities Cost	\$248,036,544

The infrastructure categories and costs listed in the table above are not a complete list of the facilities that will be funded by FVCP development but only those for which the County will collect development impact fees established through the Fee Program. The remainder of the costs will be funded through various sources and fees including:

- Sacramento County Transportation Development Fees (SCTDF)
- Sacramento County Water Agency (SCWA) Zone 40 Water Fees
- Sacramento Area Sewer District (SASD) Sewer Fees
- Sacramento Regional County Sanitation District (SRCSD) Sewer Fees
- County Zone 11 Drainage Fees
- County-wide Library Fees
- Sacramento Metro Fire District Capital Facilities Fee
- EGUSD School Fee Program

Any overlapping facilities between the Sacramento County Transportation Development Fee (SCTDF) program and the FVCP Fee Program will receive a corresponding credit in the SCTDF program. The following sections of this report will address the individual facilities listed in the table above and the associated FVCP Fee components.

V. FVCP ROADWAY & FRONTAGE LANE IMPROVEMENTS AND FEE COMPONENT

The project-specific roadway and frontage lane improvements component of the FVCP Fee Program includes funding for construction and widening of roads and intersections, signalizations, median improvements with landscaping, culverts, bridges, land acquisition, as well as contiguous frontage lane, shoulders and roadside ditch improvements. The need for these roadway and frontage lane improvements is triggered by the increase in traffic that will be generated by future development in the FVCP area, and therefore, these improvements will be included in the Fee Program and funded by development in the FVCP area. The roadway and frontage lane fee component of the FVCP Fee meets the AB 1600 nexus requirements, as outlined below.

Purpose of Fee

The purpose of the fee is to fund project-specific roadway and frontage lane improvements for the FVCP area.

Use of Fee

FVCP roadway and frontage lane fee revenue will fund the construction and improvement of roads, intersections, and other roadway and frontage lane improvements identified in Tables A-1 and A-2 of Appendix A of this report.

Reasonable Relationship between the Fee's Use and the Type of Development

Development will place increasing demand on the County's roadways and frontage lanes in the FVCP area and create a need to expand the capacity of the roadway system in this area. Roadway and frontage lane fees imposed on new residential and non-residential land uses will be used to fund the construction and expansion of roadways and frontage lanes and thereby meet the increased demand caused by future development in the FVCP area.

Reasonable Relationship between the Need for the Facility and the Type of Development

This expected development will create new residents and employees who will use the County's roadways. The additional demand placed on existing roadway and frontage lane facilities from new residents and employees will require new roadways and frontage lanes to be constructed as well as the expansion of existing facilities to handle the increased traffic. Roadway and frontage lane fee revenue from new development will be used to fund construction of the needed project-specific transportation facilities that were either identified in the traffic study and environmental document for the FVCP or as on site improvements needed for the development.

Reasonable Relationship between the Amount of the Fee and the Cost of the Facility

A reasonable relationship between the amount of the fee and the cost of the public facility or portion attributable to new development must be shown. The relationship between the amount of the fee and the portion of the facility and cost attributable to the development type is based on roadway and frontage lane DUEs which in turn are based on the PM peak hour trip generation rates assigned to each specific land use category, as shown in Table C-1 of Appendix C. The amount of PM peak hour trips generated by each land use type establishes the usage or demand for roadway and frontage lane facilities and can therefore be used to quantify a proportionate

roadway and frontage lane fee. New development will be allocated a fair share of the cost based on the DUE factor assigned to each land use type.

Existing Facilities

In general, most of the FVCP area roadways are rural, two-lane facilities with narrow lane widths and unimproved shoulders. The FVCP is accessible from two major freeways. US Highway 50 is approximately 4.5 miles north of the plan area, while State Route 99 is approximately 3 miles to the west of the plan area.

Future Facility Requirements and Costs

Existing roadway facilities are not adequate to meet the demand for roadway and frontage lane facilities generated by new development within the FVCP area. The roadway improvements included in Table A-1 of Appendix A consist of construction, reconstruction or widening of the center section of major arterial roadways with landscaped median, bridge and culvert improvements, intersection, traffic signal and railroad crossing improvements. Table A-2 in Appendix A identifies costs associated with the construction of frontage lane improvements. Appendix D includes a map of the various improvements included in the Roadway CIP. Appendix E includes a summary of the conceptual cost estimates for Fee Program improvements.

The Roadway CIP provides a fair share funding for a comprehensive transportation network designed in accordance with anticipated traffic volumes and travel demands of the planned land uses, as well as the regional system envisioned by the County General Plan. The circulation system has been designed to adhere to the County's Level of Service (LOS) standards. Major FVCP roadway improvements included in the Roadway CIP that are funded by the FVCP area and planned to accommodate the ultimate development in the area include the following roadway segments including intervening intersections as well as major drainage and railroad crossings:

- Bradshaw Road
- Calvine Road
- Elder Creek Road
- Elk Grove-Florin Road
- Florin Road
- Fruitridge Road
- Gerber Road
- South Watt Avenue
- Waterman Road

The Roadway CIP also includes corresponding frontage lane improvements. As a condition of approval, development within the FVCP is required to install roadway frontages in addition to its own frontage along a logical segment, approximately 1/4 mile in length. Table A-2 in Appendix A identifies these frontage improvements and its associated costs. The cost of

preparing the FVCP PFFP, the Nexus Study, other technical studies, and establishing the Fee Program, estimated at \$1.0 million, is also included in the Roadway CIP because the roadway component is the largest element of the Fee Program and essentially creates the need for the Fee Program to be established. This amount does not include the cost of ongoing administration of the Fee Program. The Roadway and Frontage CIP includes a total of \$165.3 million in funding for transportation improvements, which include facilities that are also anticipated to be funded by the SCTDF program. Any overlapping facilities between the SCTDF program and the FVCP Fee Program will receive a corresponding credit in the SCTDF program.

Roadway Fee Component

The facilities in the Roadway CIP are required to serve future development in the FVCP area; no facilities in this CIP will cure existing roadway deficiencies in the County. The expected increases in traffic resulting from development of the FVCP area will trigger the need for these roadway facilities and frontage lane improvements. As a result, the cost of project-specific roadway and frontage lane improvements in the Roadway CIP will be allocated to future development in the FVCP.

Table B-6 in Appendix B shows the calculation of the roadway and frontage lane fee component of the FVCP Fee Program. The \$165.3 million roadway and frontage lane cost is allocated to future land uses in the FVCP area based on the roadway and frontage lane DUE factors shown in Table C-1 of Appendix C. The DUE factors were based on peak hour trip rates adjusted for zoning category and assumed development density.

Table B-6 shows that by applying the assigned roadway DUE factors to the expected zoning category and development density, the total expected roadway DUEs for the FVCP area equals 9,880. Allocating the \$165.3 million roadway and frontage lane cost to the total roadway DUEs within the FVCP area yields a cost of \$16,732 per DUE. The roadway and frontage lane fee per acre for each land use category can be calculated by multiplying the cost per DUE by the per-acre DUE factor assigned to the specific land use category. The total fee for a residential property with an RD zoning designation would be calculated by multiplying the roadway fee per acre for the land use category by the property's acreage. The roadway and frontage lane fee for age-restricted developments within each residential zoning designation is reduced to equal 34% of the non-age restricted development rate based on lower trip generation assumptions for age-restricted land uses.

For AG and AR residential zoning designations, the roadway and frontage lane fee per unit can be determined by dividing the resultant per acre fee by the estimated density for the specific zoning designation. Similarly, the roadway fee per square foot of building space for non-residential categories is calculated by dividing the resultant per acre fee by the Floor Space per Acre shown in Table C-1.

VI. OTHER JURISDICTION'S ROADWAY IMPROVEMENTS AND FEE COMPONENT

Due to the project's location and close proximity to the City of Sacramento (City), certain roadways located within the boundaries of the City of Sacramento will need to be improved to mitigate anticipated traffic impacts created by future development, including development within the FVCP area. Consequently, the FVCP Fee Program includes funding for the project's fair share of costs for certain roadways located in the City of Sacramento.

The need for these roadway improvements is triggered by the increase in traffic that will be generated by future development, including future development in the FVCP area, and therefore, the project's fair share of these improvements will be included in the Fee Program and funded by development in the FVCP area. The other jurisdiction's roadway fee component of the FVCP Fee meets the AB 1600 nexus requirements, as outlined below.

Purpose of Fee

The purpose of the fee is to fund FVCP's fair share of required roadway improvements located in the City of Sacramento to mitigate traffic impacts created by future development in the FVCP area.

Use of Fee

FVCP other jurisdiction's roadway fee revenue will fund the construction and improvement of roads, intersections, and other roadway improvements located in the City of Sacramento as identified in Tables A-3 of Appendix A of this report.

Reasonable Relationship between the Fee's Use and the Type of Development

Development will place increasing demand on the roadways located in the City of Sacramento and create a need to expand the capacity of the roadway system in the City of Sacramento. Roadway fees imposed on new residential and non-residential land uses will be used to fund the construction and expansion of roadways in the City of Sacramento that will serve the FVCP area.

Reasonable Relationship between the Need for the Facility and the Type of Development

The engineering firm MacKay and Soms developed the necessary roadway facilities for the FVCP area based on the expected future development in this area. This expected development will create new residents and employees who will use the roadways located in the City of Sacramento. The additional demand placed on the City's roadways from new residents and employees will require the City to construct or expand roadways to handle the increased traffic. Roadway fee revenue provided to the City of Sacramento from new development will be used to fund construction or expansion of roadway improvements needed to mitigate traffic impacts on the City from the FVCP area.

Reasonable Relationship between the Amount of the Fee and the Cost of the Facility

A reasonable relationship between the amount of the fee and the cost of the public facility or portion attributable to new development must be shown. The relationship between the amount of the fee and the portion of the facility and cost attributable to the development type is based on roadway DUEs which in turn are based on the PM peak hour trip generation rates assigned to

each specific land use category, as shown in Table C-1 of Appendix C. The amount of PM peak hour trips generated by each land use type establishes the usage or demand for roadway facilities and can therefore be used to quantify a proportionate roadway fee. New development will be allocated a fair share of the cost based on the DUE factor assigned to each land use type.

Other Jurisdiction's Roadway Facility Requirements and Costs

As discussed in the chapter V, existing roadway facilities are not adequate to meet the demand for roadway facilities generated by new development within the FVCP area. Several roadways that will need to be improved or expanded are located in the City of Sacramento. A separate other jurisdiction's roadway fee component is included in the FVCP Fee Program to delineate the City's roadway costs from those of the County. Table A-3 in Appendix A identifies the FVCP area's fair share of roadway project costs in the City of Sacramento by roadway segment. Roadway improvements include widening, reconstruction or construction of new and existing major arterial roadways. The total cost of the roadway improvements to be funded through the FVCP Fee Program is approximately \$6.5 million.

Other Jurisdiction's Roadway Fee Component

The expected increases in traffic resulting from development of the FVCP area will generate an impact on roadway facilities located in the City of Sacramento. As a result, the fair share cost of the City's roadway improvements is allocated to future development in the FVCP area. Table B-7 in Appendix B shows the calculation of the other jurisdiction's roadway fee component of the FVCP Fee Program. The \$6.5 million roadway cost is allocated to future land uses in the FVCP area based on the roadway DUE factors shown in Table C-1 of Appendix C. The DUE factors were based on peak hour trip rates adjusted for zoning category and assumed development density.

Table B-7 shows that by applying the assigned roadway DUE factors to the expected zoning category and development density, the total expected roadway DUEs for the FVCP area equals 9,880. Allocating the \$6.5 million other jurisdiction's roadway cost to the total roadway DUEs within the FVCP area yields a cost of \$656 per DUE. The other jurisdiction's roadway fee per acre for each land use category can be calculated by multiplying the cost per DUE by the per-acre DUE factor assigned to that specific land use category. The total fee for a residential property with an RD zoning designation would be calculated by multiplying the roadway fee per acre for the land use category by the property's acreage. The other jurisdiction's roadway fee for age-restricted developments within each residential zoning designation is reduced to equal 34% of the non-age restricted development rate based on lower trip generation assumptions for age-restricted uses.

For AG and AR residential zoning designations, the other jurisdiction's roadway fee per unit can be determined by dividing the resultant per acre fee by the estimated density for the specific zoning designation. Similarly, the other jurisdiction's roadway fee per square foot of building space for non-residential categories is calculated by dividing the resultant per acre fee by the Floor Space per Acre shown in Table C-1.

As per County policy, the other jurisdiction's roadway fee component of the FVCP Fee Program shall only be collected if the County and City have an executed FVCP operational agreement. Prior to the execution of such agreement, the other jurisdiction's roadway fee component will not be collected.

VII. PARK FACILITIES AND FEE COMPONENT

The park fee component of the FVCP Fee Program calculated in this section of the report meets the AB 1600 nexus requirements, as outlined below. The FVCP is in the Southgate Recreation and Park District (“District”).

Purpose of the Fee

The purpose of the park fee is to fund park and recreation facilities to serve the FVCP area. There are currently no parks within the FVCP boundaries.

Use of the Fee

Fee revenue will be used to fund the development of approximately 107 acres of neighborhood and community parks, trails within the open space/drainage preserve and detention basins, as well as a 16,500-square foot community center.

Reasonable Relationship between the Fee's Use and the Type of Development

New development will generate additional residents and employees that will create the demand for parks and recreation facilities, which will require the development of parks and recreation facilities within the FVCP area. Park and recreation fee revenue from residential and non-residential development will fund these facilities and will benefit future residents and employees in the FVCP area.

Reasonable Relationship between the Need for the Facility and the Type of Development

Development in the FVCP area will create new residents and employees who will use parks and recreation facilities. The demand for parks and recreation facilities from new residents and employees will require the District to construct new facilities to handle the increased demand.

Reasonable Relationship between the Amount of the Fee and the Cost of the Facility

The relationship between the amount of the park fee and the portion of the facility and cost attributable to the development type is based on the number of residents or employees for each specific land use category, as shown in Table C-2 of Appendix C. The number of residents or employees generated by each land use type establishes the potential for usage or demand for parks and recreation facilities and can therefore be used to quantify a proportionate parks and recreation fee.

Future Facility Requirements and Costs

The District requires land dedication of 5 acres per 1,000 population. According to the FVCP PFFP and the District, approximately 107 acres of neighborhood and community parks are planned. The park and recreation fee component of the Fee Program will also fund open space/drainage parkway and trail facilities, linear open space trail facilities, joint-use detention basin/trail facilities, playground facilities, and a 16,500 square foot community center in the FVCP area.

The total cost of park and recreation facilities is estimated to be approximately \$75.7 million. This amount includes \$51.2 million for basic park development, \$12.8 million for a community center, and \$11.7 million for drainage parkway and trail facilities. The total cost also includes contingency and master plan costs. Regional trails are partially funded through the SCTDF program; therefore, certain trail costs overlap with the FVCP park and recreation fee component. Any overlapping facilities between the SCTDF program and the FVCP Fee Program will receive a corresponding credit in the SCTDF program.

The park and recreation fee component of the Fee Program includes funding for excavation and construction of paved trails/maintenance road located in the drainage corridor. Trail improvements shall be constructed concurrently with drainage corridor improvements. The detention basins within the FVCP area will be designed to serve several functions: drainage, storm water detention and retention, water quality and passive recreation. The District will maintain the perimeter of the detention basins within the FVCP area. Drainage and flood control functions will remain the responsibility of the County of Sacramento Water Resources and will be managed through an easement to the District and a future Detention Basin Joint Use Agreement. The park and recreation component of the Fee Program will fund certain basin development and improvement costs including but not limited to some landscaping, trail and trailside improvements, and signage. At a minimum, upon completion, passive recreational uses will be available to the public in conjunction with these basins. Walking paths, benches, resting and viewing areas will be constructed around the basin perimeters. Possible joint use and active recreational areas will be considered in the final design and construction of the basins, for the greatest public benefit.

The District will ultimately own and maintain the open space/drainage corridors within the FVCP area. Drainage and flood control functions will remain the responsibility of the County of Sacramento Water Resources and will be managed through an easement from the District and an Open Space/Drainage Corridor Working Agreement. This area will be designated a “Preserve area,” which will significantly limit access and types of use and activity within the area. Upon completion, passive recreational uses will be available to the public in conjunction with open space and multi-use trails. Walking/bicycling paths, equestrian trails, benches, resting, and viewing areas will be constructed along Gerber Creek and Elder Creek Open Space/Draining corridor.

Park Development Fee Component

Since there are currently no parks within the FVCP area, new parks and recreation facilities will have to be built to serve development within FVCP. These parks and recreation facilities will primarily benefit future residents and employees in the FVCP area. The cost of these facilities is allocated among future residents and employees in this area.

Table A-6 in Appendix A shows the Southgate Recreation and Park District Capital Improvement Plan (“Park CIP”) for the FVCP area. The cost for park and recreation facilities totals approximately \$75.7 million. Table A-7 presents a summary of the proposed park facilities anticipated in the FVCP area, which have been developed assuming an anticipated development base of 7,779 DUEs. The DUE total represents the expected development in FVCP

after developable land is reduced in this Nexus Study by a 10% mapping factor and by other adjustments to account for the development uncertainties previously discussed in this report as well as anticipated age-restricted developments. Table B-8 in Appendix B shows the calculation of the park and recreation fee component of the FVCP Fee. The \$75.7 million park and recreation cost is allocated to future land uses in the FVCP area based on the park DUE factors shown in Table C-2 of Appendix C. Allocating the \$75.7 million park cost to the total park DUEs within the FVCP area yields a cost of \$9,729 per DUE. The park and recreation fee per acre for each land use category can be calculated by multiplying the cost per DUE by the per-acre DUE factor assigned to that specific land use category. The total fee for a residential property with an RD zoning designation would be calculated by multiplying the park and recreation fee per acre for the land use category by the property's acreage. The park and recreation fee for age-restricted developments within each residential zoning designation is reduced to equal 69% of the non-age restricted development rate based on lower persons per household assumptions for age-restricted land uses.

For AG and AR residential zoning designations, the park and recreation fee per unit can be determined by dividing the resultant per acre fee by the estimated density for the specific zoning designation. Similarly, the park and recreation fee per square foot of building space for non-residential categories is calculated by dividing the resultant per acre fee by the Floor Space per Acre shown in Table C-1.

VIII. TRANSIT FACILITIES AND FEE COMPONENT

Development in the FVCP area will be required to contribute to Sacramento Regional Transit District (“RT”) toward the provision of transit facilities. Transit facilities needed to serve the FVCP area are jointly funded under the SCTDF program and the FVCP Fee Program. The FVCP Fee Program includes the cost of land acquisition and construction of the planned park and ride facility and bus shelters, while the SCTDF program includes funding for transit facilities that are more regional in nature, such as buses and bus maintenance facilities. The transit fee component of the FVCP Fee calculated in this Nexus Study meets the AB 1600 nexus requirements, as outlined below.

Purpose of the Fee

The purpose of the transit fee is to fund transit facilities to serve residents and employees in the FVCP area.

Use of the Fee

Fee revenue will fund the construction of a park and ride facility and bus shelters that will serve the FVCP area.

Reasonable Relationship between the Fee's Use and the Type of Development

New residential and non-residential development will generate additional residents and employees in the FVCP area who will create a demand for transit service. The transit facilities, which will serve the FVCP area, will benefit future residents and employees in the FVCP area. Impact fees collected through the FVCP Fee Program from new development will be used to fund these facilities.

Reasonable Relationship between the Need for the Facility and the Type of Development

Development in the FVCP area will create new residents and employees who will require transit service. Currently, there is no bus or transit service in the FVCP area. Future bus service will be available to serve residents and employees. The demand for new transit facilities will require the RT to acquire or construct these facilities.

Reasonable Relationship between the Amount of the Fee and the Cost of the Facility

Transit DUEs, shown in Table C-3 of Appendix C, are used to establish the relative impact on transit facilities between land use categories. The County IFS derived the transit DUE factors based on trip generation characteristics, estimated vehicle occupancy rates, and estimated percent of transit trips as documented by the Transportation Research Board’s NCHRP Report 187. These transit DUEs are used in this Nexus Study to allocate a fair share portion of the transit facilities cost to each land use in the FVCP area.

Future Facility Requirements and Costs

RT does not currently provide service to the FVCP area. The nearest bus routes operate on Gerber Road, west of French Road, and on Power Inn Road adjacent to the FVCP area. However, RT’s 20-year *Transit Action Plan* identifies Hi-Bus services along the Elk Grove-

Florin/Watt Avenue, Bradshaw Road, and Florin Road corridors. RT has indicated that these services are planned but not guaranteed. The provision of future transit services will be dependent upon community-wide land use patterns, densities/intensities, street configurations, and the availability of capital and operating funds.

In order to accommodate anticipated growth as a result of development in FVCP area, RT staff provided transit facility needs and cost estimates for the transit fee component of the Fee Program. The estimated costs include land and construction costs for a park and ride facility and bus shelters. Table A-8 provides a summary of the transit facilities to be funded by the FVCP Fee Program.

Transit Fee Component

Since the demand for transit service is a direct result of development within FVCP and will primarily benefit future residents and employees in the FVCP area, the cost of these facilities is allocated among future residents and employees in this area.

Table B-9 in Appendix B shows the calculation of the transit fee component of the FVCP Fee. The total \$561,000 cost is allocated to future land uses in FVCP area based on 17,629 transit DUEs, which results in a cost per DUE of \$32. The transit fee per acre for each land use category can be calculated by multiplying the cost per DUE by the per-acre DUE factor assigned to the specific land use category. The total fee for a residential property with an RD zoning designation would be calculated by multiplying the transit fee per acre for the land use category by the property's acreage.

For AG and AR residential zoning designations, the transit fee per unit can be determined by dividing the resultant per acre fee by the estimated density for the specific zoning designation. Similarly, the transit fee per square foot of building space for non-residential categories is calculated by dividing the resultant per acre fee by the Floor Space per Acre shown in Table C-1.

IX. FEE SUMMARY AND PROGRAM ADMINISTRATION

The table below summarizes the fee components in the FVCP Fee Program for the expected land use categories (zoning category) for the FVCP area. See the section below entitled **FVCP Fee Calculation** for information on calculating fees for land use categories not listed in the table below.

Zoning Category	Fee per Unit, Acre, or Bldg SF	FVCP Roadway & Frontage Lane Fee /1	Other Jurisdiction's Roadway Fee /1	Park & Recreation Fee /2	Transit Fee	Administration Fee (4.0%)	Total Fee
Residential							
Single Family							
AG-80	<i>per Unit</i>	\$16,732	\$656	\$9,729	\$32	\$1,086	\$28,235
AG-20	<i>per Unit</i>	\$16,732	\$656	\$9,729	\$32	\$1,086	\$28,235
A-10/AR-10	<i>per Unit</i>	\$16,732	\$656	\$9,729	\$32	\$1,086	\$28,235
AR-5	<i>per Unit</i>	\$16,732	\$656	\$9,729	\$32	\$1,086	\$28,235
AR-2	<i>per Unit</i>	\$16,732	\$656	\$9,729	\$32	\$1,086	\$28,235
AR-1	<i>per Unit</i>	\$16,732	\$656	\$9,729	\$32	\$1,086	\$28,235
RD-1	<i>per Acre</i>	\$16,732	\$656	\$9,729	\$32	\$1,086	\$28,235
RD-2	<i>per Acre</i>	\$33,464	\$1,312	\$19,458	\$64	\$2,172	\$56,470
RD-3	<i>per Acre</i>	\$46,850	\$1,837	\$28,214	\$90	\$3,080	\$80,071
RD-4	<i>per Acre</i>	\$58,562	\$2,296	\$35,997	\$112	\$3,879	\$100,846
RD-5	<i>per Acre</i>	\$68,601	\$2,690	\$43,781	\$131	\$4,608	\$119,811
RD-6	<i>per Acre</i>	\$81,987	\$3,214	\$52,537	\$157	\$5,516	\$143,411
RD-7	<i>per Acre</i>	\$95,372	\$3,739	\$61,293	\$176	\$6,423	\$167,003
RD-9	<i>per Acre</i>	\$108,758	\$4,264	\$64,601	\$352	\$7,119	\$185,094
RD-10	<i>per Acre</i>	\$120,470	\$4,723	\$71,995	\$390	\$7,903	\$205,481
Multi-Family							
RD-12	<i>per Acre</i>	\$143,895	\$5,642	\$83,669	\$467	\$9,347	\$243,020
RD-15	<i>per Acre</i>	\$158,954	\$6,232	\$99,236	\$586	\$10,600	\$275,608
RD-20	<i>per Acre</i>	\$170,666	\$6,691	\$113,829	\$1,219	\$11,696	\$304,101
RD-25	<i>per Acre</i>	\$200,784	\$7,872	\$134,260	\$1,434	\$13,774	\$358,124
RD-30	<i>per Acre</i>	\$240,941	\$9,446	\$160,529	\$1,718	\$16,505	\$429,139
Non-Residential							
M-1/M-2/IR/UR	<i>per Bldg SF</i>	\$7.68	\$0.30	\$0.96	\$0.02	\$0.36	\$9.32
MP	<i>per Bldg SF</i>	\$17.29	\$0.68	\$1.95	\$0.04	\$0.80	\$20.76
BP	<i>per Bldg SF</i>	\$14.82	\$0.58	\$2.04	\$0.08	\$0.70	\$18.22
SC	<i>per Bldg SF</i>	\$18.38	\$0.72	\$1.68	\$0.17	\$0.84	\$21.79
GC	<i>per Bldg SF</i>	\$25.04	\$0.98	\$1.52	\$0.16	\$1.11	\$28.81
LC	<i>per Bldg SF</i>	\$25.04	\$0.98	\$2.23	\$0.16	\$1.14	\$29.55
TC	<i>per Bldg SF</i>	\$25.04	\$0.98	\$2.68	\$0.05	\$1.15	\$29.90

/1 Roadway & Frontage Lane fees and Other Jurisdiction's Roadway fees for Age Restricted residential uses equal 34% of the rates shown in this table.

/2 Park and Recreation fees for Age Restricted residential uses equal 69% of the rates shown in this table.

Administration Fee

To defray the County's costs associated with administering the FVCP Fee Program, tracking fee credits and reimbursements, updating engineering studies, the Nexus Study, and any other necessary studies in support of the FVCP Fee Program, the County will charge an administration fee equal to 4.0% of the total fees. The administration fee must be paid at the time of building permit issuance, or as designated by the County, and cannot be credited against through a fee credit or reimbursement agreement.

Fee Adjustments

The FVCP Fees may be adjusted in future years to reflect revised facility costs or standards, or receipt of funding from alternative sources (i.e., state or federal grants). In addition to such adjustments, the FVCP Fees will be inflated each year by a construction cost index, as determined by the County ordinance adopting the FVCP Fee Program.

Fee Collection

The four fee components in the FVCP Fee Program and the administration fee will be collected prior to issuance of building permits. Fees will be placed in separate fee accounts to prevent commingling of revenues and to allow for accurate accounting of funds. Park & Recreation fee, Other Jurisdiction's fee, and Transit fee revenues will be collected by the County and distributed to the Southgate Recreation and Park District, City of Sacramento, and the Sacramento Regional Transit District, respectively.

FVCP Fee Calculation

The calculation of the FVCP Fees will be based on the following formula:

For Residential Land Uses:

RD Zoning Designations:

Cost per DUE x DUE Factor per Acre x Net Acres of Property = FVCP Fee

AG and AR Zoning Designations:

Cost per DUE x DUE Factor per Acre ÷ Units per Acre x Number of Units = FVCP Fee

For Non-Residential Land Uses:

Cost per DUE x DUE Factor per Acre ÷ Floor Space per Acre (as identified on Table C-1 of Appendix C) x Building Square Feet (as shown in the building permit) = FVCP Fee

Cost per DUE – the Cost per DUE for each of separate FVCP Fee components can be found in Tables B-6 through B-9 in Appendix B.

DUE Factor per Acre – the DUE Factor per Acre for each County land use category (zoning category) is presented in Tables C-1 through C-3 of Appendix C.

Net Acres – Net acres, as shown in the Florin Vineyard Community Plan Public Facilities Financing Plan equals gross acres less acreage associated with parks, schools, golf course, open space, parkway, major streets, railroad ROW, and any public acreage associated with municipal services and facilities. The total gross acreage in the FVCP area is 3,872.0 acres, and the net developable acreage equals 1,988.4 acres.

The DUE factors used to compute the development fees must be those listed for the land use zoning category for the site that is adopted by ordinance by the Sacramento County Board of Supervisors. If a subdivision site is zoned RD-7, but the developer chooses to build homes on large lots that would comply with RD-5 zoning standards, the FVCP Fees will be calculated based on the DUE factors for the RD-7 zoning in effect for the property. Only with the approval of a rezone to RD-5, prior to approval of improvement plans, would the fee obligation of the site be reduced to the RD-5 level.

Roadway and Frontage Lane Fee Credit and Reimbursement Policies

Many of the major roadway or frontage lane improvements included in the Fee Program CIP will be constructed privately by developers and dedicated to the County. In order to create the necessary link between the collection of FVCP fees from new development and the private construction of major roadway improvements, detailed credit and reimbursement procedures are incorporated in the FVCP Fee Program Ordinance. These credit and reimbursement procedures are necessary to assure that the roadway and frontage lane improvements are constructed and funded in compliance with the scheduling priorities established by the FVCP CIP. In addition, agreements between the County and developer that further outline the specifics of the credit and reimbursement requirements are required by the FVCP Fee Program Ordinance.

Amount of Credit / Reimbursement

The amounts to be considered for credit or reimbursement of the facilities constructed by private development will be the actual cost of constructing the facility, including costs such as engineering design, design surveys, construction surveys, construction inspection and materials testing, and contingency, up to the estimated cost contained in the Fee Program CIP, as detailed in Appendix A. In the event that the fee rates and facilities costs are adjusted by either the built-in annual adjustments or periodic program updates, the maximum amount allowed for credit or reimbursement shall be the cost set forth in the FVCP CIP in effect at the time of the project's acceptance. Amounts for contingencies will be examined on a case-by-case basis and will be allowed based upon the determination of the Administrator of the Municipal Services Agency.

At the time of the execution of the credit/reimbursement agreement, the eligible amount and allowable credits would be based on the estimated cost contained in the Fee Program CIP in effect at the time of the agreement. Upon acceptance of the improvement, the County will verify the actual cost of the project. If the project cost is less than the amount contained in the agreement, the difference in terms of credit will be applied to lower any remaining credits or be paid back to the County by the developer when no more credits are available. If there is reimbursement due the developer, this difference will be adjusted to the reimbursement amount. If the project cost is more than the amount contained in the agreement and the cost in the Fee

Program CIP in effect at the time of the project acceptance is greater than amount contained in the agreement due to annual adjustments to the CIP or periodic updates to the Fee Program, the difference between the amount contained in the agreement and the lesser of the project cost or the eligible amount in effect at the time of the project acceptance, will be applied to increase any future available credits or be reimbursed by the County to the developer in accordance with the reimbursement policy.

For FVCP CIP facilities funded through a community facilities district (CFD), only funding up to the facility category fee for the development will be allowed to be credited; any amount over the fee obligation for the development will not be funded through the CFD. For example, a developer that planned to build 1,000 RD-5 units would have a total project-specific roadway and frontage lane fee obligation of approximately \$24.1 million based on the project-specific roadway and frontage lane fee calculated in this Nexus Study. Funding of FVCP CIP roadway and frontage lane improvements up to \$24.1 million would be allowed through the CFD; however, any amount over this would have to be funded by the developer without any funding from the CFD and reimbursed at some future date by the County from the FVCP Fee Program. Alternatively, the CFD could fund these amounts if the reimbursement from the Fee Program is paid to the CFD and not the developer.

Credit Requirements

To obtain credits, an application must be submitted to the County and a credit agreement must be entered into prior to issuance of any building permit for which the credit will be used. Credits shall be prorated over each unit in a residential subdivision and given after a security is posted for the complete performance of the construction project in a form that is acceptable to the County or after the facility is accepted by the County. Also, credits can be used only against like fees, so that credit for construction of roadway facilities can only be used to reduce the roadway fee obligation.

Reimbursement Requirements

To obtain a reimbursement, a reimbursement agreement is needed between the County and the developer. Reimbursement Agreements shall not be paid unless the improvement is completed and accepted by the County. Reimbursement agreements are an obligation of the FVCP Fee Program and are not an obligation of the County General Fund or any other fund of the County. Timing of reimbursements will be on a first-come-first-served basis based on the acceptance date of the improvement and the availability of funds in the FVCP Fee Program Roadway Fund. Construction projects that the County is responsible for will take funding precedence over reimbursing developers.

ROW Acquisitions and Dedications

In addition to roadway and frontage lane fee credits and reimbursements, the County will also provide credits or reimbursements for ROW acquisitions and dedications up to the cost in the FVCP CIP for roadway ROW at the time of dedication and for up to twenty-five feet in width of the public utility easement area. The land must be dedicated to the County and an agreement

must be entered into prior to any credits and/or reimbursements being given. The timing of reimbursement for land dedication is further subject to the availability of funds in the FVCP Fee Program Roadway Fund and is also given on a first-come-first-served basis based on the dedication date.

Other Facilities

The FVCP Fee Program Ordinance also allows for credits for park and transit improvements, which are constructed by private development at the discretion of the facility/service provider. Additionally, the Ordinance allows for reimbursement of park and transit improvements that are constructed by private development. Such reimbursements are to be administered by the SRPD and RT, respectively.

Fee Implementation

According to California Government Code, prior to levying a new fee or increasing an existing fee, an agency must hold at least one open and public meeting. At least 10 days prior to this meeting, the agency must make data on infrastructure costs and funding sources available to the public. Notice of the time and place of the meeting, and a general explanation of the matter, are to be published in accordance with Section 6062a of the Government Code, which states that publication of notice shall occur, for 10 days in a newspaper regularly published once a week or more. The County may then adopt the new fees at the second reading.

The FVCP Fee Program will be adopted through a County ordinance. Once the FVCP Fee is adopted by the Board of Supervisors, it shall become effective no sooner than sixty days later, unless an urgency measure is adopted. An urgency measure is an interim authorization that waives the sixty-day waiting period and allows the new fees to be collected immediately if a finding of a current and immediate threat to the public health, welfare and safety can be demonstrated. The interim authorization requires a four-fifths vote of the Board and stays in effect for thirty days; no more than two extensions of the authorization can be granted.

Annual Administrative Duties

The Government Code requires the County to report, every year and every fifth year, certain financial information regarding the impact fees. Within 180 days after the last day of each fiscal year the County must make the following information available for the past fiscal year:

- (a) A brief description of the type of fee in the account or fund
- (b) The amount of fee revenue
- (c) The beginning and ending balance of the account or fund
- (d) The amount of fee revenue collected and interest earned
- (e) An identification of each public improvement on which fees were expended and the amount of expenditures on each improvement, including the total percentage of the cost of public improvement that was funded with fees
- (f) An identification of an approximate date by which time construction on the improvement will commence if the local agency determines that sufficient funds

- have been collected to complete financing on an incomplete public improvement
- (g) A description of each interfund transfer or loan made from the account or fund, when it will be repaid and at what interest rate
- (h) The amount of any refunds made once it is determined that sufficient monies have been collected to fund all projects

The County must make this information available for public review and must also present it at the next regularly scheduled public meeting not less than 15 days after this information is made available to the public.

Fifth-Year Administrative Duties

For the fifth year following the first deposit into the fee account and every five years thereafter, the County must make the following findings with respect to any remaining funds in the fee accounts:

- (a) Identify the purpose to which the fee is to be put
- (b) Demonstrate a reasonable relationship between the fee and the purpose for which it is charged
- (c) Identify all sources and amounts of funding anticipated to complete financing incomplete improvements
- (d) Designate the approximate dates on which funding is expected to be deposited into the appropriate accounts or funds

As with the annual report, the five-year report must be made public within 180 days after the end of the County's fiscal year and must be reviewed at the next regularly scheduled public meeting. The County must make these findings; otherwise the law states that the County must refund the fee revenue to the then current owners of the development project.

APPENDIX A

Detailed Costs for Public Facilities

Roadway and Frontage Lane Improvements

Other Jurisdiction's Roadway Improvements (Fair Share)

Park and Recreation Facilities

Transit Facilities

Table A-1
Florin Vineyard Community Plan Fee Program
Roadway Improvements CIP Summary
(based on 2010 Conditions of Approval)

revised: 10/12/2018

FVCP COA #	FVCP Trigger	Mit. Measure	Proj #	Roadway Segment/ Item ^{2,3}	Project Description	Overlapping NVS COA	Fin Plan Reference Figure	Qty	Unit	Unit Price	Total Estimated Cost	Vineyard Springs Fee Program	Measure A/Federal Funding	NVS Fair Share % ("E+P" only)	NVS Fair Share ("E+P" only)	Other identified and/or fair share funding	Net Funding oblig. (FVCP) for non-SCTDF overlap	Net Funding oblig. (FVCP) for SCTDF overlap ¹	Cumulative Total Estimated Net Cost (FVCP)
				South Watt Ave.															
1	451	TC-1(d), TC-1(n), TC-1(o), TC-1(t)	7.3	SR-16 to Fruitridge Rd.	Widen existing 2-lane rural to 4-lane thoroughfare center section		COA 1/ County Min	1	L.S.	\$ 4,651,000	\$ 4,651,000		\$ 1,004,000			\$ 1,004,000	\$ -	\$ 3,647,000	\$ 3,647,000
				Fruitridge Rd.															
2a	451	County Minimum	4	At South Watt Ave.	Widen existing intersection to modified 4x6 per Sacramento County S. Watt at Fruitridge Minimum Alternative 1		COA 2a/ County Min	1	L.S.	\$ 3,074,000	\$ 3,074,000		\$ 655,000			\$ 655,000	\$ -	\$ 2,419,000	\$ 6,066,000
2b		TC-2(h) TC-4(h)	4	At South Watt Ave.	Widen mod. 4X6 Intx to full 4x6 intx. (dual LT & sep. RT - 4-way; County Std.)		COA 2b	1	L.S.	\$ 1,105,000	\$ 1,105,000					\$ -	\$ -	\$ 1,105,000	\$ 7,171,000
				Elder Creek Rd.															
3	451	TC-2(dd)	6	At South Watt Ave.	Widen existing intersection to modified 4x4 per County S. Watt at Elder Creek Minimum Alternative 1 (includes 6 lane RR Xing)	29b	COA 3/ County Min	1	L.S.	\$ 3,900,000	\$ 3,900,000		\$ 834,000			\$ 834,000	\$ -	\$ 3,066,000	\$ 10,237,000
				Elk Grove-Florin Rd.															
4	451	TC-1(q), TC-3(aa)	8.1	Florin Rd. to Gerber Rd.	Widen existing 2-lane rural to 4-lane thoroughfare center section (County Estimate)		COA 4/ County Est.	1	L.S.	\$ 8,110,565	\$ 8,110,565	\$6,288,957				\$ 6,288,957	\$ -	\$ 1,821,608	\$ 12,058,608
5	451	TC-1(q)	8.1d	Florin Rd. to Gerber Rd.	Replace exist creek bridge w/6-lane bridge (County estimate)	72	A-1.5.7	1	L.S.	\$ 8,196,216	\$ 8,196,216		\$ 4,413,616	9.00%	\$ 340,434	\$ 4,754,050	\$ -	\$ 3,442,166	\$ 15,500,774
				Sub-total 451 DUE							\$ 29,036,781	\$6,288,957	\$ 6,906,616		\$ 340,434	\$ 13,536,007	\$ -	\$ 15,500,774	\$ 15,500,774
				South Watt Ave.															
6	766	TC-1(p)	7.5	Elder Creek Rd. to Florin Rd.	Widen existing 2-lane rural to 4-lane thoroughfare center section (County estimate)	70	COA 6/ County Min	1	L.S.	\$ 6,259,000	\$ 6,259,000		\$ 1,351,000	5.00%	\$ 245,400	\$ 1,596,400	\$ -	\$ 4,662,600	\$ 20,163,374
7	766	TC-1(p)	7.5r	Elder Creek Rd. to Florin Rd.	4-lane at-grade replacement of exist RR X-ing, incl. Appurtenances (included in COA 3)			1	L.S.	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ 20,163,374
				Sub-total 766 DUE						\$ 6,259,000	\$ -	\$ 1,351,000	\$ 245,400	\$ 1,596,400	\$ -	\$ 4,662,600	\$ 20,163,374	\$ 20,163,374	
				SR-16															
8	826	TC-2(f)	2	At Bradshaw	Widen ex. Intx. & Signal relocation (add NB,EB,SB,WB lanes - mod. 4x6))		A-1.4.10b	1	L.S.	\$ 1,455,000	\$ 1,455,000					\$ -	\$ -	\$ 1,455,000	\$ 21,618,374
				Bradshaw Rd.															
9	826	TC-2(c)	19	At Kiefer Blvd.	Widen ex. mod. 4x4 intx. to mod. 4x6 Intx. (restripe SB approach & add receiving lane), relocate 1 Signal		COA 9	1	L.S.	\$ 899,000	\$ 899,000					\$ -	\$ -	\$ 899,000	\$ 22,517,374
10	826	TC-1(v), TC-1(y), TC-1(z)	9.3	Florin Rd. to Calvine Rd.	Widen Exist. 2-lane rural to 4-lane thoroughfare center section (Florin Rd. to Calvine Rd.. has been completed)			1	L.S.	\$ -	\$ -					\$ -	\$ -	\$ -	\$ 22,517,374
				Elder Creek Rd.															
11	826	TC-2(cc)	7	At Bradshaw	Widen ex. Mod. 2x4 to mod. 2x6: add NB & SB shared through/right-turn lanes	108	COA 11	1	L.S.	\$ 968,000	\$ 968,000			28.00%	\$ 271,040	\$ 271,040	\$ -	\$ 696,960	\$ 23,214,334
				Sub-total 826 DUE						\$ 3,322,000	\$ -	\$ -	\$ 271,040	\$ 271,040	\$ -	\$ 3,050,960	\$ 23,214,334	\$ 23,214,334	
				South Watt Ave.															
12	1,036	TC-1(o), TC-1(d), TC-1(t)	7.4	Fruitridge Rd. to Elder Creek Rd.	Widen existing 2-lane rural to 4-lane thoroughfare center section (County Minimum Alt)		COA #12 (County Min)	1	L.S.	\$ 11,302,000	\$ 11,302,000		\$ 2,439,000			\$ 2,439,000	\$ -	\$ 8,863,000	\$ 32,077,334
13	1,036	TC-1(o)	7.4d	Fruitridge Rd. to Elder Creek Rd.	Widen ex. bridge over Morrison Creek to 108' ROW(included in COA #12)		COA #12	0	L.S.	\$ -	\$ -					\$ -	\$ -	\$ -	\$ 32,077,334
				Gerber Rd.															
14a	1,036		9	At Elk Grove-Florin Rd.	Widen SB receiving lanes to thoroughfare standard.(County Estimate)		COA 14a	1	L.S.	\$ 473,385	\$ 473,000					\$ -	\$ -	\$ 473,000	\$ 32,550,334
14b	1,036	TC-2(gg), TC-4(aa)	10	At Elk Grove-Florin Rd.	Widen ex. Intx. to 4X6 Intersection, relocate Signal		COA 14b	1	L.S.	\$ 969,000	\$ 969,000					\$ -	\$ -	\$ 969,000	\$ 33,519,334
				Bradshaw Rd.															
15	1,036	TC-1(u), TC-3(ee)	9.5	Kiefer Blvd. to SR-16	Widen Exist. Section from 4 to 6 Lanes (add median & outside lanes)		COA 15	1	L.S.	\$ 4,317,000	\$ 4,317,000					\$ -	\$ -	\$ 4,317,000	\$ 37,836,334
				Sub-total 1,036 DUE						\$ 17,061,000	\$ -	\$ 2,439,000	\$ -	\$ 2,439,000	\$ -	\$ 14,622,000	\$ 37,836,334	\$ 37,836,334	
				Gerber Rd.															
16	1,326	TC-2(t)	10	At Bradshaw	Widen ex. Intx. to 4X4 Intx (future 6x4), Signalization; (per EIR and COA, only need one additional EB and WB T-RT lanes)		COA 16	1	L.S.	\$ 773,000	\$ 773,000					\$ -	\$ -	\$ 773,000	\$ 38,609,334
				Bradshaw Rd.															
17	1,326	TC-1(x), TC-3(ff)	9.1	SR-16 to Elder Creek Rd.	Widen Exist. 4-lane to 6-lane thoroughfare	39	A-1.3.7	5,040	L.F.	\$ 486	\$ 2,449,000			2.00%	\$ 48,640	\$ 48,640	\$ -	\$ 2,400,360	\$ 41,009,694
18	1,326	TC-1(x)	9.1d	SR-16 to Elder Creek Rd.	Widen exist Morrison Creek bridge w/6-lane bridge	40	A-1.5.3	1	L.S.	\$ 5,822,000	\$ 5,822,000			32.00%	\$ 1,863,040	\$ 1,863,040	\$ -	\$ 3,958,960	\$ 44,968,654
				Sub-total 1,326 DUE						\$ 9,044,000	\$ -	\$ -	\$ 1,911,680	\$ 1,911,680	\$ -	\$ 7,132,320	\$ 44,968,654	\$ 44,968,654	
				Calvine Rd.															
19	1,446	TC-1(j), TC-3(o)	10.1.1	Power Inn Rd. to Elk Grove-Florin Rd.	Widen ex. Section from 4 to 6 lanes (add WB & frontage)		SCTDF - RR	1	L.S.	\$ 3,678,100	\$ 3,678,000					\$ -	\$ -	\$ 3,678,000	\$ 48,646,654
20	1,446	TC-1(j), TC-3(o)	10.1r	Railroad Crossing	At-grade widening of exist. (EB), incl. appurtenances			1	L.S.	\$ 216,000	\$ 216,000	\$ 108,000				\$ 108,000	\$ -	\$ 108,000	\$ 48,754,654
				South Watt Ave.															
21	1,446	TC-2(b), TC-4(c)	13	At Folsom Blvd.	Widen ex. Intx. to 4X6 Intersection, Signalization (construction completed)				n/a	\$ -	\$ -					\$ -	\$ -	\$ -	\$ 48,754,654
				Sub-total 1,446 DUE						\$ 3,894,000	\$ 108,000	\$ -	\$ -	\$ 108,000	\$ -	\$ 3,786,000	\$ 48,754,654	\$ 48,754,654	

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revised: 10/12/2018

FVCP COA #	FVCP Trigger	Mit. Measure	Proj #	Roadway Segment/ Item ^{2,3}	Project Description	Overlapping NVS COA	Fin Plan Reference Figure	Qty	Unit	Unit Price	Total Estimated Cost	Vineyard Springs Fee Program	Measure A/Federal Funding	NVS Fair Share % ("E+P" only)	NVS Fair Share ("E+P" only)	Other identified and/or fair share funding	Net Funding oblig. (FVCP) for non-SCTDF overlap	Net Funding oblig. (FVCP) for SCTDF overlap ¹	Cumulative Total Estimated Net Cost (FVCP)	
				Florin Rd.																
22	1,646	TC-2(l), TC-4(r)	12	At Power Inn Rd.	Restripe to provide shared through/right turn on SB & WB approaches; lengthen WB receiving & merge lanes		COA 22	1	L.S.	\$ 745,000	\$ 745,000					\$ -	\$ -	\$ 745,000	\$ 49,499,654	
				Gerber Rd.																
23	1,646	TC-2(u)	11	At Vineyard	2X2 Signalization, 3-way		COA 23	1	L.S.	\$ 483,000	\$ 483,000					\$ -	\$ -	\$ 483,000	\$ 49,982,654	
				South Watt Ave.																
24	1,646	TC-1(m), TC-3(w)	7.2	Kiefer Blvd. to SR-16	Widen from ex. sect. to 3 lanes each direction (only SB frontage - 11'pvm't, C, G, & SW - required)		COA 24	2,010	L.F.	\$ 447	898,000.00					\$ -	\$ -	\$ 898,000	\$ 50,880,654	
				Sub-total 1,646 DUE							\$ 2,126,000	\$ -	\$ -		\$ -	\$ -	\$ -	\$ 2,126,000	\$ 50,880,654	
				Florin Rd.																
25	1,841	TC-2(p)	8	At Excelsior Rd.	2X2 Intersection (fut. 4x2 w/ dual LT) & Signalization, 4-way	15, 30	COA 25	1	L.S.	\$ 2,273,000	\$ 2,273,000			84%	\$ 1,907,550	\$ 1,907,550	\$ -	\$ 365,450	\$ 51,246,104	
				South Watt Ave.																
26	1,841	TC-2(bb)	21	At Kiefer Blvd.	Widen ex. Intx. To Add NB & SB through lanes, re-locate signal (project completed)			1	L.S.	\$ -	\$ -					\$ -	\$ -	\$ -	\$ 51,246,104	
				SR-16																
27a	1,841	County Minimum	1	At South Watt Ave.	Widen ex. Intx. to mod. 4x5 Intersection per Sacramento County S. Watt at Jackson Minimum Alternative 1	57a	COA#27a/ (County Min)	1	L.S.	\$ 3,363,000	\$ 3,363,000		\$ 717,000			\$ 717,000	\$ -	\$ 2,646,000	\$ 53,892,104	
27b	1,841	TC-2(e)	1	At South Watt Ave.	Widen ex. Intx. to mod. 4x6 Intersection (future mod. 6x6) & Signalization (reduced scope!)		COA 27b	1	L.S.	\$ 805,000	\$ 805,000					\$ -	\$ -	\$ 805,000	\$ 54,697,104	
				Sub-total 1,841 DUE							\$ 6,441,000	\$ -	\$ 717,000		\$ 1,907,550	\$ 2,624,550	\$ -	\$ 3,816,450	\$ 54,697,104	
				French Road																
				12.1.1																
28	2,021	TC-1(l), TC-1(cc), TC-3(r), TC-3(v)		12.1.2 Florin Road to Gerber Road	Widen ex. section to 4-lane arterial, incl. landscaped median, curb & gutter, sidewalk (assumes only re-stripping of sections along Siemens' frontage (includes cost of COA #29)		COA 28	1	L.S.	\$ 4,846,000	\$ 4,846,000					\$ -	\$ -	\$ -	\$ 54,697,104	
				12.1.3																
29	2,021	TC-1(l), TC-1(cc), TC-3(r), TC-3(v)		12.1d Florin Road to Gerber Road	Creek Crossing - Widen Elder Creek Bridge from 76' to 84' ROW (replace)		A-1.5.6	1	L.S.	\$ 4,678,000	\$ 4,678,000					\$ -	\$ -	\$ -	\$ 54,697,104	
				Sub-total 2,021 DUE							\$ 9,524,000	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ 54,697,104	
				Florin Rd.																
30	2,126	TC-2(ee), TC-4(s)	14	At Florin-Perkins Rd.	Widen ex. Intx. (add WB right turn lane)		COA 30	1	L.S.	\$ 473,000	\$ 473,000					\$ -	\$ -	\$ 473,000	\$ 55,170,104	
31a	2,126	TC-4(u)	15	At South Watt Ave.	Widen ex. partial 4x4 Intx. - add sep. RT lane on all approaches		COA 31a	1	L.S.	\$ 2,333,072	\$ 2,333,000					\$ -	\$ -	\$ 2,333,000	\$ 57,503,104	
31b	2,126	TC-4(u)	15	At South Watt Ave.	Widen 4x4 Intx. per COA 31a to full 6x6	106	COA 31b	1	L.S.	\$ 1,101,000	\$ 1,101,000					\$ 125,891	\$ 125,891	\$ -	\$ 975,109	\$ 58,478,213
				Gerber Rd.																
32	2,126	TC-2(ff)	18	At French Rd.	EB (2 left, 1 thru, 1 shared thru/right - add 2nd Left)		COA 32	1	L.S.	\$ 400,000	\$ 400,000					\$ -	\$ 400,000	\$ -	\$ 58,878,213	
				Calvine Rd.																
33	2,126	TC-2(z)	44	At Waterman Rd.	Widen EB & WB approaches, relocate Signal		COA 33	1	L.S.	\$ 1,854,000	\$ 1,854,000					\$ -	\$ -	\$ 1,854,000	\$ 60,732,213	
				Florin Rd.																
34	2,126	TC-2(o)	16	At Bradshaw Rd.	No intersection-specific imp's req'd (system-wide study area mitigation)			1	L.S.	\$ -	\$ -					\$ -	\$ -	\$ -	\$ 60,732,213	
				Gerber Rd.																
35	2,126	TC-2(q)	17	At Power Inn Rd.	No intersection-specific imp's req'd (system-wide study area mitigation)			1	L.S.	\$ -	\$ -					\$ -	\$ -	\$ -	\$ 60,732,213	
				Sub-total 2,126 DUE							\$ 6,161,000	\$ -	\$ -		\$ 125,891	\$ 125,891	\$ 400,000	\$ 5,635,109	\$ 60,732,213	
				Elk Grove-Florin Rd.																
39	2,236	TC-2(x), TC-4(ii)	30	At Caselman	Widening to mod. 2X6 Intersection & Signalization (EB dual I-turn lanes)	76	A-1.4.4	1	L.S.	\$ 1,519,000	\$ 1,519,000					\$ -	\$ 1,519,000	\$ -	\$ 62,251,213	
				South Watt Ave.																
40	2,236	TC-1(t), TC-3(y), TC-3(dd)	7.4	Fruitridge Rd. to Elder Creek Rd.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes - Class D (Segment between Osage Ave and Alder Ave)	113	A-1.3.7	1,610	L.F.	\$ 243	\$ 391,000			6.00%	\$ 23,480	\$ 23,480	\$ -	\$ 367,520	\$ 62,618,733	
40	2,236	TC-1(t), TC-3(y), TC-3(dd)	7.4	Fruitridge Rd. to Elder Creek Rd.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes - Class A (200' undeveloped area east of 43rd street and 350' SB segment north of Morrison Creek). Fair share from NVS at NVS unit price.	113	A-1.3.11	550	L.F.	\$ 1,239	\$ 681,000			6.00%	\$ 8,020	\$ 8,020	\$ -	\$ 672,980	\$ 63,291,713	
40	2,236	TC-1(t), TC-3(y), TC-3(dd)	7.4	Fruitridge Rd. to Elder Creek Rd.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes - Class D (650' NB, from Osage Ave to 650' north)	113	A-1.3.7	1,000	L.F.	\$ 243	\$ 243,000			6.00%	\$ 14,580	\$ 14,580	\$ -	\$ 228,420	\$ 63,520,133	
				South Watt Ave.																
41 / 45	2,236	TC-4(n)	6	At Elder Creek Rd.	4 X 6 Intersection Widening (based on County Min COA #3), 4-way Turn Lane installation (left-turn)		COA 41/45	1	L.S.	\$ 934,000	\$ 934,000					\$ -	\$ -	\$ 934,000	\$ 64,454,133	
				Sub-total 2,236 DUE							\$ 3,768,000	\$ -	\$ -		\$ 46,080	\$ 46,080	\$ 1,519,000	\$ 2,202,920	\$ 64,454,133	
				South Watt Ave.																
42	2,556	TC-1(n), TC-3(s&x), TC-3(dd)	7.3	SR-16 to Fruitridge Rd.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes		A-1.3.7	4,470	L.F.	\$ 486	\$ 2,172,000			8.00%	\$ 173,760	\$ 173,760	\$ -	\$ 1,998,240	\$ 66,452,373	
43	2,761	TC-1(p), TC-3(u), TC-3(z)	7.5	Elder Creek Rd. to Florin	Widen exist. Thoroughfare Center Section from 4 to 6 Lanes	112	A-1.3.7	630	L.F.	\$ 243	\$ 153,100			5.00%	\$ 7,655	\$ 7,655	\$ -	\$ 145,445	\$ 66,597,818	
43	2,761	TC-1(p), TC-3(u), TC-3(z)	7.5	Elder Creek Rd. to Florin	Widen exist. Thoroughfare Center Section from 4 to 6 Lanes - Class D southbound within City limits	112	A-1.3.7	1,600	L.F.	\$ 243	\$ 389,000			5.00%	\$ 19,450	\$ 19,450	\$ -	\$ 369,550	\$ 66,967,368	
				Sub-total 2,556 DUE							\$ 2,714,100	\$ -	\$ -		\$ 200,865	\$ 200,865	\$ -	\$ 2,513,235	\$ 66,967,368	

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FVCP COA #	FVCP Trigger	Mit. Measure	Proj #	Roadway Segment/ Item ^{2,3}	Project Description	Overlapping NVS COA	Fin Plan Reference Figure	Qty	Unit	Unit Price	Total Estimated Cost	Vineyard Springs Fee Program	Measure A/Federal Funding	NVS Fair Share % ("E+P" only)	NVS Fair Share ("E+P" only)	Other identified and/or fair share funding	Net Funding oblig. (FVCP) for non-SCTDF overlap	Net Funding oblig. (FVCP) for SCTDF overlap ¹	Cumulative Total Estimated Net Cost (FVCP)
South Watt Ave.																			
44	2,761	TC-1(p)	7.5r	Elder Creek Rd. to Florin Rd.	Widen ex. 4-lane RR X-ing to 6 lanes (Full 6 lane replacement constructed by COA 3)			1	L.S.	\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ 66,967,368
Sub-total 2,761 DUE											\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 66,967,368
Calvine Rd.																			
46	2,856	TC-2(y)	20	At Elk Grove Florin Rd.	Re-stripe ex. Intx. to 4X6 Intersection (see COA #99 for widening to 6x6 intx.)			1	L.S.	\$ 10,000	\$ 10,000					\$ -	\$ -	\$ -	\$ 66,967,368
Elk Grove-Florin Rd.																			
47	2,856	TC-1(s), TC-3(cc)	8.5	Vintage Park Dr. to 380' south of Britany Park	Widen exist. thoroughfare Center Section from 4 to 6 Lanes	76		380	L.F.	\$ -	\$ -					\$ -	\$ -	\$ -	\$ 66,967,368
48	2,856	TC-1(s), TC-3(cc)	8.6	380' south of Britany Park to Calvine Rd.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes: only 790' of SB frontage lane improvements between 380' south of Britany Dr. and Robbins Rd. plus re-stripping of entire 1,850' SB req'd)	76	A-1.3.7	790	L.F.	\$ 243	\$ 192,000					\$ -	\$ -	\$ 192,000	\$ 67,159,368
SR-16																			
49	2,856	(n.a.)	67	at Hedge Ave.	move signal & constr. southern curb returns (EB & WB lanes incl. in COA 50)		COA 49	1	L.S.	\$ 360,000	\$ 360,000					\$ -	\$ -	\$ 360,000	\$ 67,519,368
Sub-total 2,856 DUE											\$ 562,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 552,000	\$ 67,519,368	
SR-16																			
50	3,416	TC-1(b)	1.1	South Watt Ave. to Bradshaw Rd.	Widen ex. partial Arterial Center Section from 2 to 4-lane thoroughfare center section (Total segment length= 9,910'; EB widening only = 2,210'; widening EB and WB = 7,700')		A-1.3.5; A-1.3.8; A-1.3.10	1	L.S.	\$ 13,117,360	\$ 13,117,000					\$ -	\$ -	\$ -	\$ 67,519,368
Sub-total 3,416 DUE											\$ 13,117,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 67,519,368	
Florin Rd.																			
52	4,306	TC-1(h), TC-3(i)	4.1, 4.1f.n	South Watt Ave. to Hedge Ave	Widen ex. 2-lane rural section to 4-lane thoroughfare center section	102	A-1.3.5	1,730	L.F.	\$ 1,455	\$ 2,517,000			25.00%	\$ 629,250	\$ 629,250	\$ -	\$ 1,887,750	\$ 69,407,118
55	4,306	TC-2(m), TC-4(t)	27	At Gardner Ave	Widen ex. Intx. to 2X6 Intersection, Signalization, 4-way (north leg by adjacent project)		COA 55	1	L.S.	\$ 3,415,000	\$ 3,415,000					\$ -	\$ 3,415,000	\$ -	\$ 72,822,118
56a				At Hedge Ave	2x2 intersection widening (Constructed by Lennar)	15a	COA 56a	1	L.S.	\$ 1,781,000	\$ 1,781,000			100.00%	\$ 1,781,000	\$ 1,781,000	\$ -	\$ -	\$ 72,822,118
56b	4,306	TC-2(n), TC-4(v)	28	At Hedge Ave	Widen 2x2 intersection to County Standard 2x4	15b	COA 56b	1	L.S.	\$ 2,664,000	\$ 2,664,000					\$ -	\$ -	\$ 2,664,000	\$ 75,486,118
Fruitridge Rd.																			
57	4,306	TC-2(i), TC-4(l)	25	At Hedge Ave.	widen exist Intx. to 2X2 Intx. (fut. 6x6), Signalization, 4-way		COA 57	1	L.S.	\$ 2,273,000	\$ 2,273,000					\$ -	\$ -	\$ 2,273,000	\$ 77,759,118
Gerber Rd.																			
58	4,306	TC-1(i)	5.2	Elk Grove-Florin Rd. to Bradshaw Rd.	Widen ex. 2-lane section to 4-lane arterial (existing west-bound frontage, off-site) - Gerber Creek Crossing #3	17	A-1.5.14	1	L.S.	\$ 1,876,287	\$ 1,876,000			100.00%	\$ 1,876,000	\$ 1,876,000	\$ -	\$ -	\$ 77,759,118
59	4,306	TC-2(r)	29	At Waterman	Constr. 2x4 Intx. - CR's on south side only (fut. 4x4), Signalization		COA 59	1	L.S.	\$ 592,000	\$ 592,000					\$ -	\$ -	\$ 592,000	\$ 78,351,118
Waterman Rd.																			
60	4,306	TC-1(s), TC-3(hh)	14.1.2	Vintage Park Dr. to Gerber Rd.	Constr. 2-lane arterial center section w/median (incl. south intersection leg at Gerber Rd.)		COA 60a & COA 60b	1	L.S.	\$ 4,544,680	\$ 4,545,000					\$ -	\$ -	\$ 4,545,000	\$ 82,896,118
Sub-total 4,306 DUE											\$ 19,663,000	\$ -	\$ -	\$ 4,286,250	\$ 4,286,250	\$ 3,415,000	\$ 11,961,750	\$ 82,896,118	
Elder Creek Rd.																			
61	5,306	TC-2(k), TC-4(o)A	26	At Hedge	Widen ex. Intx. to 2x4 intx, signalize (incl. 450' arterial leg ea. way)		COA 61	1	L.S.	\$ 1,978,000	\$ 1,978,000					\$ -	\$ -	\$ 1,978,000	\$ 84,874,118
62	5,306	TC-1(w), TC-3(ii)	3.4	South Watt Ave to Hedge Ave.	Widen ex. 2-lane rural section to 4 lane arterial center section		A-1.3.3	1,118	L.F.	\$ 1,023	\$ 1,144,000					\$ -	\$ -	\$ 1,144,000	\$ 86,018,118
63	5,306	TC-1(ee), TC-3(g)	3.5	Hedge Ave. to Bradshaw Rd.	Widen ex. 2-lane rural section to 4 lane arterial center section		A-1.3.3	6,957	L.F.	\$ 1,023	\$ 7,117,000					\$ -	\$ -	\$ 7,117,000	\$ 93,135,118
63	5,306	TC-1(ee), TC-3(g)	3.5	Hedge Ave. to Bradshaw Rd.	Widen ex. 2-lane rural section to 4 lane arterial - off-site frontage WB only		A-1.3.12	4,330	L.F.	\$ 221	\$ 957,000					\$ -	\$ -	\$ 957,000	\$ 94,092,118
Sub-total 5,306 DUE											\$ 11,196,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,196,000	\$ 94,092,118	
Florin Rd.																			
64	5,701	TC-3(jj)	4.2	Bradshaw Rd. to Excelsior Rd.(See below - excludes southside NVSSP frontage improvements)	Widen ex. 2-lane rural section to 4-lane thoroughfare center section (excluded 1338' of frontage at existing water treatment plant)		A-1.3.5	8,234	L.F.	\$ 1,455	\$ 11,980,000					\$ -	\$ -	\$ -	\$ 94,092,118
65	5,701	TC-3(jj)	4.2	Bradshaw Rd. to 2650' west of Vineyard Rd	Widen ex. 2-lane rural section to 4-lane thoroughfare center section (northside frontage excludes outside lane and frontage)		A-1.3.5	2,150	L.F.	\$ 728	\$ 1,564,000					\$ -	\$ -	\$ 1,564,000	\$ 95,656,118
66	5,701	TC-3(jj)	4.2d	Bradshaw Rd. to Excelsior Rd.	Replace Gerber Creek Bridge with 6 lane thoroughfare bridge (exist. crossing is small culvert - no bridge needed!)		A-1.5.13	1	L.S.	\$ 214,000	\$ 214,000					\$ -	\$ 214,000	\$ -	\$ 95,870,118
67	5,701	TC-2(o)	48	At Bradshaw	Widen ex. mod 2x4 Intx. to 4X6 Intx.(add 1 thru ea. way, rt-lane WB; CAC mitigation only) (Cost includes on-site)	79	COA #67	1	L.S.	\$ 2,366,000	\$ 2,366,000			50.00%	\$ 1,183,000	\$ 1,183,000	\$ -	\$ 1,183,000	\$ 97,053,118
68	5,701	TC-4(y)	51	At Excelsior Rd.	Constr. 4x2 intx., signalize 4-way		COA 68	1	L.S.	\$ 1,361,000	\$ 1,361,000					\$ -	\$ -	\$ -	\$ 97,053,118
69	5,701	TC-4(x)	53	At Vineyard Rd.	Constr. 2x4 intx., signalize 4-way		COA 69	1	L.S.	\$ 964,000	\$ 964,000					\$ -	\$ -	\$ -	\$ 97,053,118
70/92a	5,700	TC-4(v)B	54	At Waterman Rd.	Constr. Mod. 2x2	27a	COA 70/92a	1	L.S.	\$ 776,000	\$ 776,000			50.00%	\$ 388,000	\$ 388,000	\$ -	\$ 388,000	\$ 97,441,118
70/92b	5,701	TC-4(v)B	54	At Waterman Rd.	Constr. 4x6 intx (future 4x6)	27b	COA 70/92b	1	L.S.	\$ 2,054,000	\$ 2,054,000			50.00%	\$ 1,027,000	\$ 1,027,000	\$ -	\$ 1,027,000	\$ 98,468,118
71	5,701	TC-3(i)	4.4	Power Inn Road to Florin- Perkins Road	Const. Alta Florin Rd (2-lane arterial center section) from Power Inn Rd to Florin-Perkins Rd.		(SCTDF)	1	L.S.	\$ 33,889,815	\$ 33,889,815					\$ -	\$ -	\$ -	\$ 98,468,118
Sub-total 5,701 DUE											\$ 55,168,815	\$ -	\$ -	\$ 2,598,000	\$ 2,598,000	\$ 214,000	\$ 4,162,000	\$ 98,468,118	

Table A-1
Florin Vineyard Community Plan Fee Program
Roadway Improvements CIP Summary
(based on 2010 Conditions of Approval)

revised: 10/12/2018

FVCP COA #	FVCP Trigger	Mit. Measure	Proj #	Roadway Segment/ Item ^{2,3}	Project Description	Overlapping NVS COA	Fin Plan Reference Figure	Qty	Unit	Unit Price	Total Estimated Cost	Vineyard Springs Fee Program	Measure A/Federal Funding	NVS Fair Share % ("E+P" only)	NVS Fair Share ("E+P" only)	Other identified and/or fair share funding	Net Funding oblig. (FVCP) for non-SCTDF overlap	Net Funding oblig. (FVCP) for SCTDF overlap ¹	Cumulative Total Estimated Net Cost (FVCP)
Bradshaw Road																			
73	6,801	TC-3(kk)	9.6	Florin Rd. to Gerber Rd.	Widen Exist. Thoroughfare Center Section from 4 to 6 lanes											\$ -	\$ -	\$ -	\$ 98,468,118
73				Florin Rd. to Gerber Rd.	NB frontage improvements (off-site)		A-1.3.7	4,334	L.F.	\$ 243	\$ 1,053,000					\$ -	\$ -	\$ -	\$ 98,468,118
73				Florin Rd. to Gerber Rd.	SB frontage improvements (partially complete; off-site)		A-1.3.7	3,274	L.F.	\$ 243	\$ 796,000					\$ -	\$ -	\$ -	\$ 98,468,118
74	6,801	TC-4(e)	65	At Kiefer Blvd.	Widen exist. mod. 4x6 intx. (add 2nd. Lt-lanes - EB & WB, rt-lane EB)		COA 74	1	L.S.	\$ 478,000	\$ 478,000					\$ -	\$ -	\$ -	\$ 98,468,118
Elder Creek Rd.																			
75	6,801	TC-4(p)	33	At Bradshaw ⁵	Widen mod. 2x6 to mod. 4x6 intx (add through lanes & RT-lanes, 4-way)	109	COA 75	1	L.S.	\$ 4,514,000	\$ 4,514,000			6.00%	\$ 253,920	\$ 253,920	\$ -	\$ 4,260,080	\$ 102,728,198
Florin Rd.																			
76	6,801	TC-1(g), TC-3(h)	4.3	Stockton Blvd to Power Inn Road	Widen Exist. Thoroughfare Center Section from 4 to 6 Lanes (requires potential impact to 67 residences and additional businesses!!)		(SCTDF)	1	L.S.	\$ 20,702,500	\$ 20,702,500					\$ -	\$ -	\$ -	\$ 102,728,198
Gerber Rd.																			
77	6,801	TC-4(z)	38	At French Rd.	widen WB approach (add rt-lane); widen WB approach (add 2nd LT) - may be R.O.W. constrained		COA 77	1	L.S.	\$ 434,000	\$ 434,000					\$ -	\$ -	\$ -	\$ 102,728,198
78	6,801	TC-4(dd)	40	At Bradshaw	Widen 4x4 Intx. to 4X6 Intx. (1/4 of intersection on-site frontage improvements)	41	COA 78	1	L.S.	\$ 3,170,000	\$ 3,170,000			75.00%	\$ 2,377,500	\$ 2,377,500	\$ -	\$ 792,500	\$ 103,520,698
79	6,801	TC-2(r)	41	At Waterman	only northern Waterman leg req'd (see COA 59 & 60)	22b	COA 79	1	L.S.	\$ 1,268,000	\$ 1,268,000				\$ -	\$ -	\$ -	\$ 1,268,000	\$ 104,788,698
80	6,801	TC-2(s), TC-4(cc)	42	At Bardu Lane	Constr. 4x2 Intx	123	COA 80	1	L.S.	\$ 928,000	\$ 928,000			50.00%	\$ 464,000	\$ 464,000	\$ 464,000	\$ -	\$ 105,252,698
81	6,801	TC-2(u), TC-4(ee)	60	At Vineyard	Modify from 3-way 2x2 to 4 way mod. 4x4		COA 81	1	L.S.	\$ 1,628,000	\$ 1,628,000					\$ -	\$ -	\$ -	\$ 105,252,698
82	6,801	TC-2(v), TC-4(ff)	43	At Excelsior	Replace ex rural intx. w/mod. 4x2, 4-way, signalize		COA 82	1	L.S.	\$ 1,605,000	\$ 1,605,000			100.00%	\$ 1,605,000	\$ 1,605,000	\$ -	\$ -	\$ 105,252,698
Sub-total 5,801 DUE											\$ 36,576,500	\$ -	\$ -	\$ 4,700,420	\$ 4,700,420	\$ 464,000	\$ 6,320,580	\$ 105,252,698	
Elder Creek Rd.																			
85	8,501	TC-4(q)	34	At Excelsior	Replace ex rural intx - add NB left turn lane & EB right turn lane, signalization		COA 85	1	L.S.	\$ 1,438,000	\$ 1,438,000					\$ -	\$ -	\$ -	\$ 105,252,698
86	8,501	TC-4(v)B3	64	At Waterman Rd.	Constr. 4x4 intx (3-way), signalize		75% of A-1.4.2	1	L.S.	\$ 2,449,500	\$ 2,450,000					\$ -	\$ -	\$ -	\$ 105,252,698
Florin Rd.																			
87	8,501	TC-1(aa), TC-3(j)	4.5	Florin-Perkins Rd to Gardner Ave.	Widen Exist. Thoroughfare Center Section from 4 to 6 Lanes (2,475' of WB frontage and 235' of EB frontage req'd; off-site)		A-1.3.7	1,983	L.F.	\$ 243	\$ 482,000					\$ -	\$ -	\$ 482,000	\$ 105,734,698
89a	8,501	(n.a.)	4.0f.n	Crossing at Elder Creek ⁵	Elder Creek bridge replacement (thoroughfare standard)	46	A-1.5.12	1	L.S.	\$ 1,861,000	\$ 1,861,000			100.00%	\$ 1,861,000	\$ 1,861,000	\$ -	\$ -	\$ 105,734,698
89b	8,501	(n.a.)	4.0f.n	Hedge Ave. to Bradshaw Rd.	Culvert extension @ Florin Rd. 2,842' west of Bradshaw Rd.	47b	A-1.5.12b	1	L.S.	\$ 83,000	\$ 83,000			50.00%	\$ 41,500	\$ 41,500	\$ -	\$ 41,500	\$ 105,776,198
89c	8,501	(n.a.)	4.0f.n	Hedge Ave. to CTCC RR (northside)	6 Lane 96' R/W; center sect. w/ med. (excludes outside lanes & fig.)	102	A-1.3.5	630	L.F.	\$ 728	\$ 458,300			25.00%	\$ 114,575	\$ 114,575	\$ -	\$ 343,725	\$ 106,119,923
89d	8,501	(n.a.)	4.0f.n	CCTC RR Crossing	Reconstruct at-grade RR crossing (108' R/W)	45		1	L.S.	\$ 1,485,000	\$ 1,485,000			50.00%	\$ 742,500	\$ 742,500	\$ -	\$ 742,500	\$ 106,862,423
89e	8,501	(n.a.)	4.0f.n	CCTC RR to Waterman Rd	6 Lane 96' R/W; center sect. w/ med. (excludes outside lanes & fig.)	93	A-1.3.5	3,440	L.F.	\$ 1,455	\$ 5,005,000			50.00%	\$ 2,502,500	\$ 2,502,500	\$ -	\$ 2,502,500	\$ 109,364,923
89f	8,501	(n.a.)	4.0f.n	Waterman to 1,350' east of Waterman	6 Lane 96' R/W; center sect. w/ med. (excludes outside lanes & fig.)	94	A-1.3.5	1,350	L.F.	\$ 1,455	\$ 1,964,000			50.00%	\$ 982,000	\$ 982,000	\$ -	\$ 982,000	\$ 110,346,923
89g	8,501	(n.a.)	4.0f.n	1,350' east of Waterman to Bradshaw	6 Lane 96' R/W; center sect. w/ med. (excludes outside lanes & fig.)	47a	A-1.3.5	1,520	L.F.	\$ 1,455	\$ 2,212,000			50.00%	\$ 1,106,000	\$ 1,106,000	\$ -	\$ 1,106,000	\$ 111,452,923
90	8,501	(n.a.)	4.0f.s	Hedge Ave. to CCTC RR (Southside)	6 Lane 96' R/W; center sect. w/ med. (excludes outside lanes & fig.)	102	A-1.3.5	630	L.F.	\$ 728	\$ 458,300			25.00%	\$ 114,575	\$ 114,575	\$ -	\$ 343,725	\$ 111,796,648
Fruitridge Rd.																			
91	8,501	TC-2(i), TC-4(i)	62	At Hedge Ave.	widen exist Intx. (add rt-lane, EB))		COA 91	1	L.S.	\$ 379,000	\$ 379,000					\$ -	\$ -	\$ -	\$ 111,796,648
Waterman Rd																			
92	8,501	TC-4(v)B3	66	At Florin Rd.	Improvement captured in COA 70/92			1	L.S.	\$ -	\$ -					\$ -	\$ -	\$ -	\$ 111,796,648
Sub-total 8,501 DUE											\$ 18,275,600	\$ -	\$ -	\$ 7,464,650	\$ 7,464,650	\$ -	\$ 6,543,950	\$ 111,796,648	

Table A-1
Florin Vineyard Community Plan Fee Program
Roadway Improvements CIP Summary
(based on 2010 Conditions of Approval)

revised: 10/12/2018

FVCP COA #	FVCP Trigger	Mit. Measure	Proj #	Roadway Segment/ Item ^{2,3}	Project Description	Overlapping NVS COA	Fin Plan Reference Figure	Qty	Unit	Unit Price	Total Estimated Cost	Vineyard Springs Fee Program	Measure A/Federal Funding	NVS Fair Share % ("E+P" only)	NVS Fair Share ("E+P" only)	Other identified and/or fair share funding	Net Funding oblig. (FVCP) for non-SCTDF overlap	Net Funding oblig. (FVCP) for SCTDF overlap ¹	Cumulative Total Estimated Net Cost (FVCP)
Waterman Road																			
93	9,201	TC-4(v)B3	14.2	Florin Rd. to Elder Creek Rd.	Constr. 4-lane arterial		A-1.3.2	4,480	L.F.	\$ 2,485	\$ 11,133,000					\$ -	\$ -	\$ 11,133,000	\$ 122,929,648
94	9,201	TC-4(v)B3	14.2d	Florin Rd. to Elder Creek Rd.	Constr. Elder Creek Culvert		A-1.5.11	1	L.S.	\$ 990,000	\$ 990,000					\$ -	\$ -	\$ 990,000	\$ 123,919,648
Calvine Rd.																			
95	9,201	TC-4(jj)	44	At Waterman Rd.	Widen ex. Intx. to mod. 6x4 intx, relocate signal		COA 95	1	L.S.	\$ 822,000	\$ 822,000					\$ -	\$ -	\$ -	\$ 123,919,648
96	9,201	TC-4(kk)	45	At Excelsior	Widen ex. Intx (add left turn lanes), signalize (4-way) (CAC plan mitigation only)		COA 96	1	L.S.	\$ 1,635,000	\$ 1,635,000					\$ -	\$ -	\$ -	\$ 123,919,648
97	9,201	TC-3(p)	10.2.1	Elk Grove-Florin Rd to Grand Cru Drive	Widen Exist. Thoroughfare Center Section from 4 to 6 Lanes (add EB frontage)		A-1.3.7	395	L.F.	\$ 243	\$ 96,000	\$ 321,349				\$ 321,349	\$ -	\$ -	\$ 123,919,648
98	9,201	TC-3(p)	10.2.2	Elk Grove-Florin Rd to Grand Cru Drive	Widen Exist. Thoroughfare Center Section from 4 to 6 Lanes (add WB frontage)		A-1.3.7	1,620	L.F.	\$ 243	\$ 394,000					\$ -	\$ -	\$ -	\$ 123,919,648
Elk Grove-Florin Rd.																			
99	9,201	TC-4(gg)	46	At Calvine Rd	Widen intersection to 6x6 intx. (cost per SCTDF incl. in segment widening COA #19 and COA #48)		COA 99	1	LS	\$ 898,000	\$ 898,000					\$ -	\$ -	\$ -	\$ 123,919,648
100	9,201	TC-4(hh)	47	At Vintage Park Drive	Modify exist. signal and add "no U-Turn" sign			1	L.S.	\$ 10,000	\$ 10,000					\$ -	\$ -	\$ -	\$ 123,919,648
South Watt Ave.																			
101	9,201	TC-4(d)	61	At Kiefer Blvd.	Widen ex. Intx. to add NB right turn lane		COA 101	1	L.S.	\$ 1,323,000	\$ 1,323,000					\$ -	\$ -	\$ -	\$ 123,919,648
SR-16																			
102	9,201	TC-3(c)	1.3	South Watt Ave to Bradshaw Rd	Widen ex. 4-lane (thoroughfare section) to 6-lane (2 frontages)		A-1.3.7	19,796	L.F.	\$ 486	\$ 9,621,000					\$ -	\$ -	\$ -	\$ 123,919,648
103	9,201	TC-3(d)	1.4	Bradshaw Rd to Excelsior Rd.	Widen ex. 2-lane rural section to 4-lane arterial (thoroughfare center section)		A-1.3.5	10,195	L.F.	\$ 1,455	\$ 14,834,000					\$ -	\$ -	\$ -	\$ 123,919,648
104	9,201	TC-3(d)	1.4d	Bradshaw Rd to Excelsior Rd.	Creek Crossing - Morrison Creek Bridge new bridge 6 lane thoroughfare		A-1.5.4	1	L.S.	\$ 6,469,000	\$ 6,469,000					\$ -	\$ -	\$ -	\$ 123,919,648
105a	9,201	TC-3(d)	1.5	Excelsior Rd. to Sunrise Blvd.	Widen ex. 2-lane rural section to 4-lane arterial (thoroughfare center section)		A-1.3.14	15,472	L.F.	\$ 1,339	\$ 20,717,000					\$ -	\$ -	\$ -	\$ 123,919,648
105b	9,201	TC-3(d)	1.5	Excelsior Rd. to Sunrise Blvd.	New Bridge Construction (108' R/W + 2' curb & railing ea. side).		A-1.5.9	1	L.S.	\$ 6,146,000	\$ 6,146,000					\$ -	\$ -	\$ -	\$ 123,919,648
105c	9,201	TC-3(d)	1.5	Excelsior Rd. to Sunrise Blvd.	Culvert Replacement (Length = 88')		A-1.5.15	1	L.S.	\$ 54,000	\$ 54,000					\$ -	\$ -	\$ -	\$ 123,919,648
106	9,201	TC-4(k) TC-4(h)	63	At Bradshaw	Widen 4x6 Intx. to 6x6 Intersection (CAC only, yet consistent w/CP-2 and CP-26)		A-1.4.5	1	L.S.	\$ 700,000	\$ 700,000					\$ -	\$ -	\$ -	\$ 123,919,648
107a	9,201	TC-4(i)	35	At Excelsior	Widen ex. 2x2 to mod. 4x4 intx; relocate signal		COA 107	1	L.S.	\$ 909,000	\$ 909,000					\$ -	\$ -	\$ -	\$ 123,919,648
107b	9,201	TC-4(i)	35	At Excelsior	Lengthen existing culverts for 4x4 intx. Widening		A-1.5.8	1	L.S.	\$ 632,000	\$ 632,000					\$ -	\$ -	\$ -	\$ 123,919,648
108	9,201	TC-4(q)	36	At South Watt Ave.	Widen ex. mod. 4x6 intx to mod. 6x6 intx.		A-1.4.5	1	L.S.	\$ 700,000	\$ 700,000					\$ -	\$ -	\$ -	\$ 123,919,648
SR 99 and HWY 50																			
109	9,201	TC-5		SR 99 and HWY 50 Corridor Improvements	SR 99 and HWY 50 Corridor Improvements			1	L.S.	\$ 108,600,000	\$ 108,600,000					\$ -	\$ 543,000	\$ -	\$ 124,462,648
Elk Grove-Florin Rd.																			
110	9,201	TC-2(w)		At Tiogawoods Drive	widen NB approach for LT, 2T, T-RT (improvement included in COA #36)		COA 110	1	L.S.	\$ -	\$ -					\$ -	\$ -	\$ -	\$ 124,462,648
Location TBD																			
					8 Traffic Signals (FVCP responsibility)			8	EA	\$ 623,000	\$ 4,984,000					\$ -	\$ 4,984,000	\$ -	\$ 129,446,648
					7 Traffic Signals modifications for 3-way to 4 way (borders with NVS)			7	EA	\$ 468,000	\$ 3,276,000					\$ -	\$ 3,276,000	\$ -	\$ 132,722,648
					3 Pedestrian Crossings			3	EA	\$ 164,000	\$ 492,000					\$ -	\$ 492,000	\$ -	\$ 133,214,648
																			\$ 133,214,648
Sub-total 9,201 DUE											\$ 195,435,000	\$ 321,349	\$ -	\$ -	\$ 321,349	\$ 9,295,000	\$ 12,123,000	\$ 133,214,648	
Mainline Improvements 1% ROW Contingency ⁴											\$ 4,493,448					\$ -	\$ 153,070	\$ 1,179,076	\$ 134,546,794
Preparation of P.F.F.P. and technical studies											\$ 1,000,000					\$ -	\$ 1,000,000	\$ -	\$ 135,546,794
MAINLINE IMPROVEMENTS TOTAL											\$ 454,838,244	\$ 6,718,306	\$ 11,413,616	\$ 24,098,260	\$ 42,230,182	\$ 16,460,070	\$ 119,086,724	\$ 135,546,794	

¹ (This analysis is based on the 2019 SCTDF update. SCTDF overlapping projects but not included in "Other Identified Funding," as it is assumed that overlapping portion will be addressed in the form of credit against the SCTDF fee.

² (Right-of-way acquisition cost as a percentage of construction cost is included in detailed construction cost estimate.

³ (Segment funding exclude 500' intersection leg (450' plus 50' to P.I.) from segment funding and show it as part of intersection reimbursements.

⁴ (1% ROW contingency is in addition to 5% ROW line item cost within the conceptual Cost Estimate Summary

⁵ (Due to construction schedule, a fair share obligation of \$1,010,000 is shifted between NVS and FVCP for an even trade. See also Frontage table. For even trade COA # 75 in FVCP is allocated additional 1,010,000 while deducting sum of \$634,000 from COA # 89a and \$317,000 from COA # 58 (FVCP on-site frontage).

Table A-2
Florin Vineyard Community Plan Fee Program
Frontage Lane Improvements CIP Summary
(based on 2010 Conditions of Approval)

revised: 10/12/2018

FVCP COA #	FVCP Trigger	Mit. Measure	Proj #	Roadway Segment/ Item ^{2, 3}	Project Description	Overlapping NVS COA#	Fin Plan Reference Figure	Qty	Unit	Unit Price	Total Estimated Cost	NVS Fair Share % ("E+P" only)	NVS Fair Share ("E+P" only)	Other identified and/or fair share funding	Net Funding oblig. (FVCP) for non-SCTDF overlap	Net Funding oblig. (FVCP) for SCTDF overlap ¹	Cumulative Total Estimated Net Cost (FVCP)
Elk Grove-Florin Rd.																	
36	2,236	TC-1(r), TC-3(bb)	8.2	Gerber Rd. to Unionhouse Creek	Widen exist. thoroughfare Center Section from 4 to 6 Lanes (add NB frontage)												\$ -
36				Gerber Rd. to Unionhouse Creek	NB frontage improvement (on-site) - not incl. intx leg or ex. dev. Frontage - Class D	76	A-1.3.7	2,332	L.F.	\$ 243	\$ 567,000			\$ -	\$ -	\$ 567,000	\$ 567,000
36				Gerber Rd. to Unionhouse Creek	NB frontage improvement (on-site) - ex. dev. Frontage Class A	76	A-1.3.11	535	L.F.	\$ 1,239	\$ 663,000			\$ -	\$ -	\$ 663,000	\$ 1,230,000
36				Gerber Rd. to Unionhouse Creek	SB frontage improvement (on-site)	76	A-1.3.7	130	L.F.	\$ 243	\$ 32,000			\$ -	\$ -	\$ 32,000	\$ 1,262,000
36				Tiogawoods Dr and Elk Grove Florin Rd	Tiogawoods Dr Signal Modification	76	COA#36 Sig Mod	1	L.S.	\$ 307,000	\$ 307,000			\$ -	\$ -	\$ 307,000	\$ 1,569,000
Unionhouse Creek to Caselman Rd.																	
37	2,236	TC-1(r), TC-3(bb)	8.3	Unionhouse Creek to Caselman Rd.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes												\$ 1,569,000
37				Unionhouse Creek to Caselman Rd.	NB frontage improvement (on-site) - Class D	76	A-1.3.7	375	L.F.	\$ 243	\$ 91,000			\$ -	\$ -	\$ 91,000	\$ 1,660,000
37				Unionhouse Creek to Caselman Rd.	NB frontage improvement (on-site) - Class A at existing development frontage	76	A-1.3.11	335	L.F.	\$ 1,239	\$ 415,000			\$ -	\$ -	\$ 415,000	\$ 2,075,000
37				Unionhouse Creek to Caselman Rd.	SB frontage improvement (on-site) - Class D	76	A-1.3.7	710	L.F.	\$ 243	\$ 173,000			\$ -	\$ -	\$ 173,000	\$ 2,248,000
Caselman Rd. to Carlisle Ave.																	
38	2,236	TC-1(r), TC-3(bb)	8.4	Caselman Rd. to Carlisle Ave.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes (add NB frontage)												\$ 2,248,000
38					NB frontage improvement - Class A	76	A-1.3.11	620	L.F.	\$ 1,239	\$ 768,000			\$ -	\$ -	\$ 768,000	\$ 3,016,000
South Watt Ave.																	
40	2,236	TC-1(t), TC-3(y), TC-3(dd)	7.4	Fruitridge Rd. to Elder Creek Rd.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes												\$ 3,016,000
40				Fruitridge Rd. to Elder Creek Rd.	NB frontage improvement (on-site) - NB Class A (200' south of 43rd St. to 400' south of 43rd St.) Fair share from NVS at NVS unit price.	113	A-1.3.11	200	L.F.	\$ 1,239	\$ 248,000	6.00%	\$ 2,920	\$ 2,920	\$ -	\$ 245,080	\$ 3,261,080
40				Fruitridge Rd. to Elder Creek Rd.	NB frontage improvement (on-site) - Class D	113	A-1.3.7	520	L.F.	\$ 243	\$ 126,000	6.00%	\$ 7,580	\$ 7,580	\$ -	\$ 118,420	\$ 3,379,500
				Sub-total Frontage Improvements 2,236 DUE													\$ 3,379,500
South Watt Ave.																	
43	2,761	TC-1(p), TC-3(u), TC-3(z)	7.5	Elder Creek Rd. to Florin	Widen exist. Thoroughfare Center Section from 4 to 6 Lanes												\$ 3,379,500
43				Elder Creek Rd. to Florin	NB frontage improvements (on-site) - Class D	112	A-1.3.7	4,360	L.F.	\$ 243	\$ 1,059,500	5.00%	\$ 52,975	\$ 52,975	\$ -	\$ 1,006,525	\$ 4,386,025
43				Elder Creek Rd. to Florin	SB frontage improvements (on-site) - Class D	112	A-1.3.7	2,380	L.F.	\$ 243	\$ 578,300	5.00%	\$ 28,915	\$ 28,915	\$ -	\$ 549,385	\$ 4,935,410
				Sub-total Frontage Improvements 2,761 DUE													\$ 4,935,410
Elk Grove-Florin Rd																	
51	3,466	TC-1(q), TC-3(aa)	8.1	Florin Rd. to Gerber Rd.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes												\$ 4,935,410
51				Florin Rd. to Gerber Rd.	NB frontage improvements (on-site)	115	A-1.3.7	4,287	L.F.	\$ 243	\$ 1,042,000			\$ -	\$ -	\$ 1,042,000	\$ 5,977,410
51				Florin Rd. to Gerber Rd.	SB frontage improvements (on-site)	115	A-1.3.7	4,287	L.F.	\$ 243	\$ 1,042,000			\$ -	\$ -	\$ 1,042,000	\$ 7,019,410
				Sub-total Frontage Improvements 3,416 DUE													\$ 7,019,410
Florin Road																	
53	4,306	TC-1(h), TC-3(l)	4.1f.n	South Watt Ave. to Hedge Ave	Frontage on-site impr. (north side) - built concurrent with center section		A-1.3.7	1,730	L.F.	\$ 243	\$ 420,000			\$ -	\$ -	\$ 420,000	\$ 7,439,410
54	4,306	TC-1(h), TC-3(l)	4.1f.s	South Watt Ave. to Hedge Ave	Frontage on-site impr. (south side) - built concurrent with center section		A-1.3.7	1,730	L.F.	\$ 243	\$ 420,000			\$ -	\$ -	\$ 420,000	\$ 7,859,410
Gerber Rd																	
58	4,306	TC-1(i)	5.2	Elk Grove-Florin Rd. to Waterman Rd. ⁵	Widen ex. 2-lane section to 4-lane arterial (east bound frontage; on-site) Class D	17	A-1.3.12	3,650	L.F.	\$ 221	\$ 807,000		\$ 634,000	\$ 634,000	\$ -	\$ 173,000	\$ 8,032,410
58	4,306	TC-1(i)	5.2	Waterman Rd. to Bradshaw Rd.	Widen ex. 2-lane section to 4-lane arterial (west bound frontage; on-site)	35	A-1.3.12	4,972	L.F.	\$ 221	\$ 1,099,000		\$ 95,500	\$ 95,500	\$ -	\$ 1,003,500	\$ 9,035,910

Table A-2
 Florin Vineyard Community Plan Fee Program
 Frontage Lane Improvements CIP Summary
 (based on 2010 Conditions of Approval)

revised: 10/12/2018

FVCP COA #	FVCP Trigger	Mit. Measure	Proj #	Roadway Segment/ Item ² , ³	Project Description	Overlapping NVS COA#	Fin Plan Reference Figure	Qty	Unit	Unit Price	Total Estimated Cost	NVS Fair Share % ("E+P" only)	NVS Fair Share ("E+P" only)	Other identified and/or fair share funding	Net Funding oblig. (FVCP) for non-SCTDF overlap	Net Funding oblig. (FVCP) for SCTDF overlap ¹	Cumulative Total Estimated Net Cost (FVCP)
Elder Creek Rd																	
62	5,306	TC-1(w), TC-3(ii)	3.4	South Watt Ave. to Hedge Ave	Widen ex. 2-lane rural section to 4 lane arterial												\$ 9,035,910
62				South Watt Ave. to Hedge Ave	WB frontage improvements (on-site) - built concurrent with center section		A-1.3.7	1,118	L.F.	\$ 243	\$ 272,000			\$ -	\$ -	\$ 272,000	\$ 9,307,910
62				South Watt Ave. to Hedge Ave	EB frontage improvements (on-site) - built concurrent with center section		A-1.3.7	1,118	L.F.	\$ 243	\$ 272,000			\$ -	\$ -	\$ 272,000	\$ 9,579,910
63	5,306	TC-1(ee), TC-3(g)	3.5	Hedge Ave. to Bradshaw Rd.	Widen ex. 2-lane rural section to 4 lane arterial									\$ -	\$ -	\$ -	\$ 9,579,910
63				Hedge Ave. to Bradshaw Rd.	WB frontage improvements (on-site) - built concurrent with center section		A-1.3.7	2,650	L.F.	\$ 243	\$ 644,000			\$ -	\$ -	\$ 644,000	\$ 10,223,910
63				Hedge Ave. to Bradshaw Rd.	EB frontage improvements (on-site) - built concurrent with center section		A-1.3.7	6,980	L.F.	\$ 243	\$ 1,696,000			\$ -	\$ -	\$ 1,696,000	\$ 11,919,910
ECREBF	n/a			Bradshaw Rd. to half mile east thereof	EB frontage improvements (on-site)		A-1.3.7	2,200	L.F.	\$ 243	\$ 535,000			\$ -	\$ 535,000	\$ -	\$ 12,454,910
Florin Road																	
65	5,701	TC-3(jj)	4.2f.n	Bradshaw Rd. to 2650' west of Vineyard Rd.	Frontage on-site impr. (north side)									\$ -	\$ -	\$ -	\$ 12,454,910
65				Bradshaw Rd. to 2650' west of Vineyard Rd.	WB frontage improvements		A-1.3.7	2,140	L.F.	\$ 243	\$ 520,000			\$ -	\$ -	\$ 520,000	\$ 12,974,910
Sub-total Frontage Improvements 5,701 DUE											\$ 6,685,000	\$ 729,500	\$ 729,500	\$ 535,000	\$ 5,420,500	\$ 12,974,910	
Bradshaw Road																	
72	6,801	TC-3(gg)	9.2	Elder Creek Rd. to Florin Rd.	Widen Exist. Thoroughfare Center Section from 4 to 6 lanes												\$ 12,974,910
72				Elder Creek Rd. to Florin Rd.	NB frontage improvements (on-site) - Class A		A-1.3.11	3,400	L.F.	\$ 1,239	\$ 4,213,000			\$ -	\$ -	\$ 4,213,000	\$ 17,187,910
72				Elder Creek Rd. to Florin Rd.	NB frontage improvements (on-site) - Class D		A-1.3.7	815	L.F.	\$ 243	\$ 198,000			\$ -	\$ -	\$ 198,000	\$ 17,385,910
72				Elder Creek Rd. to Florin Rd.	SB frontage improvements (on-site) - Class A		A-1.3.11	990	L.F.	\$ 1,239	\$ 1,227,000			\$ -	\$ -	\$ 1,227,000	\$ 18,612,910
72				Elder Creek Rd. to Florin Rd.	SB frontage improvements (on-site) - Class D		A-1.3.7	3,015	L.F.	\$ 243	\$ 733,000			\$ -	\$ -	\$ 733,000	\$ 19,345,910
BF-SOG				Gerber Rd. to one mile south of Gerber Rd.	SB frontage improvements (on-site)		A-1.3.11	4,328	L.F.	\$ 1,239	\$ 5,362,000			\$ -	\$ -	\$ 5,362,000	\$ 24,707,910
72				Elder Creek Culvert Crossing @ Bradshaw	Widen ex. culvert to 108'		A-1.5.16	1	L.S.	\$ 151,823	\$ 152,000			\$ -	\$ -	\$ 152,000	\$ 24,859,910
Waterman Rd.																	
83	6,801	TC-3(hh)	14.1.1	Vintage Park Dr to Gerber Rd	Widen ex. Section to 4 lane arterial (add NB frontage & median) - median in COA #60		A-1.3.7	5,960	L.F.	\$ 243	\$ 1,448,000			\$ -	\$ -	\$ 1,448,000	\$ 26,307,910
84	6,801	TC-3(hh)	14.1.2	Vintage Park Dr to Gerber Rd	Widen ex.section to 4-lane arterial (add SB frontage from Gerber to 80' N of Dersingham)		A-1.3.7	3,220	L.F.	\$ 243	\$ 782,000			\$ -	\$ -	\$ 782,000	\$ 27,089,910
84	6,801	TC-3(hh)	14.1.2	Vintage Park Dr to Gerber Rd	Widen ex.section to 4-lane arterial (add SB frontage from 80' N of Dersingham to Vintage Park Dr) Frontage improvements complete		0	0	L.F.	\$ -	\$ -			\$ -	\$ -	\$ -	\$ 27,089,910
Sub-total Frontage Improvements 5,801 DUE											\$ 14,115,000	\$ -	\$ -	\$ -	\$ 14,115,000	\$ 27,089,910	
Florin Road																	
88	8,501	TC-1(bb), TC-3(k)	4.6	Gardner Ave. to South Watt Ave.	Widen Exist. Thoroughfare Center Section from 4 to 6 Lanes												\$ 27,089,910
88				Gardner Ave. to South Watt Ave.	WB frontage improvements (on-site)		A-1.3.7	952	L.F.	\$ 243	\$ 231,000			\$ -	\$ -	\$ 231,000	\$ 27,320,910
88				Gardner Ave. to South Watt Ave.	EB frontage improvements (on-site)		A-1.3.7	952	L.F.	\$ 243	\$ 231,000			\$ -	\$ -	\$ 231,000	\$ 27,551,910
87	8,501	TC-1(aa), TC-3(j)	4.5	Florin-Perkins Rd to Gardner Ave.	Widen Exist. Thoroughfare Center Section from 4 to 6 Lanes (2,475' of WB frontage and 235' of EB frontage req'd; off-site)		A-1.3.7	238	L.F.	\$ 243	\$ 58,000			\$ -	\$ 58,000	\$ -	\$ 27,609,910
89	8,501	(n.a.)	4.0f.n	Hedge Ave. to Bradshaw Rd.	Frontage Impr. (north side)									\$ -	\$ -	\$ -	\$ 27,609,910
89				Hedge Ave. to Bradshaw Rd.	WB frontage improvements (on-site)		A-1.3.7	6,942	L.F.	\$ 243	\$ 1,687,000			\$ -	\$ 1,687,000	\$ -	\$ 29,296,910
90	8,501	(n.a.)	4.0f.s	Hedge Ave. to CCTC	Frontage Impr. (south side)									\$ -	\$ -	\$ -	\$ 29,296,910
90				Hedge Ave. to CCTC	EB frontage improvements (on-site)		A-1.3.7	694	L.F.	\$ 243	\$ 169,000			\$ -	\$ 169,000	\$ -	\$ 29,465,910
Sub-total Frontage Improvements 8,501 DUE											\$ 2,376,000	\$ -	\$ -	\$ 1,914,000	\$ 462,000	\$ 29,465,910	
1% Frontage Improvement ROW Contingency ⁴											\$ 302,878			\$ 24,490	\$ 270,169	\$ 29,760,569	
FRONTAGE IMPROVEMENT TOTAL											\$ 30,590,678		\$ 821,890	\$ 821,890	\$ 2,473,490	\$ 27,287,079	\$ 29,760,569
Roadway and Frontage CIP Total														\$ 18,933,560	\$ 146,373,804	\$ 165,307,363	

¹(This analysis is based on the 2019 SCTDF update. SCTDF overlapping projects but not included in "Other Identified Funding," as it is assumed that overlapping portion will be addressed in the form of credit against the SCTDF fee.

² (Right-of-way acquisition cost as a percentage of construction cost is included in detailed construction cost estimate.

³(Segment funding exclude 500' intersection leg (450' plus 50' to P.I.) from segment funding and show it as part of intersection reimbursements.

⁴(1% ROW contingency is in addition to 5% ROW line item cost within the conceptual Cost Estimate Summary

⁵(Due to construction schedule, a fair share obligation of \$1,010,000 is shifted between NVS and FVCP for an even trade. See also Roadway table. For even trade COA # 75 (Roadway CIP) in FVCP is allocated additional 1,010,000 while deducting sum of \$634,000 from COA # 89a (Roadway CIP) and \$317,000 from COA # 58.

Table A-3
Florin Vineyard Community Plan Fee Program
Other Jurisdiction Roadway Fair Share CIP Summary
(based on 2010 Conditions of Approval)

Traffic Mitigation Roadway Improvements Located in the City of Sacramento

Mitigation measure roadway improvements located predominantly within the jurisdiction of the City of Sacramento are not required to be constructed pursuant to development threshold restrictions, with the exception of South Watt Avenue. Governing these improvements will be an adopted memorandum of understanding with the County for cooperation, as well as reciprocal funding agreements, and cooperative agreements for construction. The following specific roadway improvements have been identified:

COA #	Trigger	Mit. Measure	Proj #	Roadway Segment/ Item	Project Description	Fin Plan Reference Figure	Qty	Unit	Unit Price	Total Estimated Cost	FVCP Fair Share % (C+P)	Net Funding oblig. (FVCP)	Cumulative Total Estimated Net Cost (FVCP)
Elder Creek Rd.													
A.	City	TC-1(e)	3.1.1	Power Inn Rd. to Florin-Perkins Rd.	Widen ex. 2-lane rural section to 4-lane arterial (Class "D")	A-1.3.5	2,465	L.F.	\$ 1,455	\$ 3,587,000	33.0%	\$ 1,183,710	\$ 1,183,710
B.	City	TC-1(e)	3.1.2	Power Inn Rd. to Florin-Perkins Rd.	Widen ex. 3-lane+median section to 4-lane arterial (add WB frontage - Class "D")	A-1.3.12	1,865	L.F.	\$ 221	\$ 412,000	33.0%	\$ 135,960	\$ 1,319,670
C.	City	TC-1(e)	3.1r	Power Inn Rd. to Florin-Perkins Rd.	4-lane at-grade replacement of exist RR X-ing, incl. appurtenances		1	L.S.	\$ 1,274,000	\$ 1,274,000	33.0%	\$ 420,420	\$ 1,740,090
D.	City	TC-4(m)	5	At Florin-Perkins Rd.	Widen exist. To modified 4x4 signalized intx. (relocate signal, add EB and NB LT-lanes)	COA 'D'	1	L.S.	\$ 637,000	\$ 637,000	32.1%	\$ 204,477	\$ 1,944,567
Sub-total Elder Creek Rd.										\$ 5,910,000		\$ 1,944,567	\$ 1,944,567
Florin-Perkins Rd.													
E.	City	TC-1(k)	6.2	SR-16 to Fruitridge Rd.	Widen ex. Arterial Center Section from 4 to 6 Lanes (requires GPA)	City	1	L.S.	\$ 8,215,000	\$ 8,215,000	10.2%	\$ 837,930	\$ 2,782,497
F.	City	TC-1(k)	6.2r	SR-16 to Fruitridge Rd.	Replacement of at-grade dual-track crossing RR X-ing(requires GPA)		1	L.S.	\$ 1,260,000	\$ 1,260,000	10.2%	\$ 128,520	\$ 2,911,017
111	City	TC-4(b)		At Folsom Blvd.	Widen WB approach to provide 2LT, T, T-RT	COA 111	1	L.S.	\$ 351,000	\$ 351,000	3.0%	\$ 10,530	\$ 2,921,547
Sub-total Florin-Perkins Rd.										\$ 9,475,000		\$ 976,980	\$ 2,921,547
Fruitridge Rd.													
G.	City	TC-2(g), TC-4(j)	3	At Florin-Perkins Rd.	Widen ex. Intx. to 4x6 Intersection, relocate signal (cost included in COA 'E')	A-1.4.5	1	L.S.	\$ -	(cost incl. in COA #E.)	14.9%	\$ -	\$ 2,921,547
H.	City	TC-1(c)	2.1	Florin-Perkins Rd. to South Watt Ave.	Widen ex. 2-lane rural section to 4-lane arterial	A-1.3.5	3,470	L.F.	\$ 1,455	\$ 5,049,000	19.5%	\$ 984,555	\$ 3,906,102
I.	City	TC-1(c)	2.1r	Florin-Perkins Rd. to South Watt Ave.	4-lane at-grade replacement of exist RR X-ing, incl. appurtenances		1	L.S.	\$ 1,274,000	\$ 1,274,000	19.5%	\$ 248,430	\$ 4,154,532
Sub-total Fruitridge Rd.										\$ 6,323,000		\$ 1,232,985	\$ 4,154,532
Elder Creek Rd.													
J.	City	TC-1(f)	3.2.1	Florin-Perkins Rd. to South Watt Ave.	Widen ex. 2-lane rural section to 4-lane arterial (Class "D")	A-1.3.5	970	L.F.	\$ 1,455	\$ 1,411,000	32.7%	\$ 461,397	\$ 4,615,929
K.	City	TC-1(f)	3.2.2	Florin-Perkins Rd. to South Watt Ave.	Widen ex. 3-lane+median section to 4-lane arterial (add various Clas "D" frontage segments)	A-1.3.12	3,970	L.F.	\$ 221	\$ 877,000	32.7%	\$ 286,779	\$ 4,902,708
L.	City	TC-1(f)	3.2r	Florin-Perkins Rd. to South Watt Ave.	4-lane at-grade RR replacement of exist, incl. appurtenances		1	L.S.	\$ 1,274,000	\$ 1,274,000	32.7%	\$ 416,598	\$ 5,319,306
Sub-total Elder Creek Rd.										\$ 3,562,000		\$ 1,164,774	\$ 5,319,306
SR-16													
M.	City	TC-1(a), TC-1(dd), TC-3(b)	1.2	Folsom Blvd. to South Watt Ave.	Widen ex. 2-lane rural section to 4-lane thoroughfare center section	A-1.3.4 + A-1.3.8	7,500	L.F.	\$ 834	\$ 6,255,000	18.1%	\$ 1,132,155	\$ 6,451,461
N.	City	TC-2(a)	22	At Folsom Blvd.	Modify Traffic Signal Timing		1	L.S.	\$ 6,750	\$ 6,800	16.3%	\$ 1,108	\$ 6,452,569
O.	City	TC-2(d), TC-4(f)	23	At Florin-Perkins Rd.	Widen ex. Intx. to 4X6 Intersection (4-way) (cost of NB & SB widening in Proj 6.2 - COA #E.; requires GPA)	1/3 x A-1.4.5	1	L.S.	\$ 233,333	\$ 233,300	14.2%	\$ 33,129	\$ 6,485,698
Sub-total SR-16										\$ 6,495,100		\$ 1,166,392	\$ 6,485,698
Sub-total Net Construction Cost (FVCP)													\$ 6,485,698
Total City of Sacramento Roadway Projects:										\$ 32,082,751		\$ 6,485,698	\$ 6,485,698

Table A-4
Florin Vineyard Community Plan Fee Program
SCTDF Roadway and Frontage Improvement Fair Share CIP Summary
(based on 2010 Conditions of Approval)

FVCP COA #	FVCP Trigger	Mit. Measure	Proj #	Roadway Segment/ Item ¹ , ²	Project Description	FVCP's Regional Fair Share	Net Funding oblig. (FVCP) for SCTDF overlap ¹
				South Watt Ave.			
1	451	TC-1(d), TC-1(n), TC-1(o), TC-1(t)	7.3	SR-16 to Fruitridge Rd.	Widen existing 2-lane rural to 4-lane thoroughfare center section	\$ 1,210,895	\$ 3,647,000
				Fruitridge Rd.			
2a	451	County Minimum	4	At South Watt Ave.	Widen existing intersection to modified 4x6 per Sacramento County S. Watt at Fruitridge Minimum Alternative 1	\$ 591,321	\$ 2,419,000
2b		TC-2(h) TC-4(h)	4	At South Watt Ave.	Widen mod. 4X6 Intx to full 4x6 intx. (dual LT & sep. RT - 4-way; County Std.)	\$ 270,116	\$ 1,105,000
				Elder Creek Rd.			
3	451	TC-2(dd)	6	At South Watt Ave.	Widen existing intersection to modified 4x4 per County S. Watt at Elder Creek Minimum Alternative 1 (includes 6 lane RR Xing)	\$ 620,742	\$ 3,066,000
				Elk Grove-Florin Rd.			
4	451	TC-1(q), TC-3(aa)	8.1	Florin Rd. to Gerber Rd.	Widen existing 2-lane rural to 4-lane thoroughfare center section (County Estimate)	\$ 2,253,009	\$ 1,821,608
5	451	TC-1(g)	8.1d	Florin Rd. to Gerber Rd.	Replace exist creek bridge w/6-lane bridge (County estimate)	\$ 1,592,468	\$ 3,442,166
				Sub-total 451 DUE		\$ 6,538,552	\$ 15,500,774
				South Watt Ave.			
6	766	TC-1(p)	7.5	Elder Creek Rd. to Florin Rd.	Widen existing 2-lane rural to 4-lane thoroughfare center section (County estimate)	\$ 3,159,252	\$ 4,662,600
				Sub-total 766 DUE		\$ 3,159,252	\$ 4,662,600
				SR-16			
8	826	TC-2(f)	2	At Bradshaw	Widen ex. Intx. & Signal relocation (add NB,EB,SB,WB lanes - mod. 4x6))	\$ 333,194	\$ 1,455,000
				Bradshaw Rd.			
9	826	TC-2(c)	19	At Kiefer Blvd.	Widen ex. mod. 4x4 intx. to mod. 4x6 Intx. (restripe SB approach & add receiving lane), relocate 1 Signal	\$ 455,733	\$ 899,000
				Elder Creek Rd.			
11	826	TC-2(cc)	7	At Bradshaw	Widen ex. Mod. 2x4 to mod. 2x6: add NB & SB shared through/right-turn lanes	\$ 157,629	\$ 696,960
				Sub-total 826 DUE		\$ 946,556	\$ 3,050,960
				South Watt Ave.			
12	1,036	TC-1(o), TC-1(d), TC-1(t)	7.4	Fruitridge Rd. to Elder Creek Rd.	Widen existing 2-lane rural to 4-lane thoroughfare center section (County Minimum Alt)	\$ 3,422,455	\$ 8,863,000
				Gerber Rd.			
14a	1,036		9	At Elk Grove-Florin Rd.	Widen SB receiving lanes to thoroughfare standard (County Estimate)	\$ 219,422	\$ 473,000
14b	1,036	TC-2(gg), TC-4(aa)	10	At Elk Grove-Florin Rd.	Widen ex. Intx. to 4X6 Intersection, relocate Signal	\$ 449,514	\$ 969,000
				Bradshaw Rd.			
15	1,036	TC-1(u), TC-3(ee)	9.5	Kiefer Blvd. to SR-16	Widen Exist. Section from 4 to 6 Lanes (add median & outside lanes)	\$ 543,265	\$ 4,317,000
				Sub-total 1,036 DUE		\$ 4,634,656	\$ 14,622,000
				Gerber Rd.			
16	1,326	TC-2(t)	10	At Bradshaw	Widen ex. Intx. to 4X4 Intx (future 6x4), Signalization; (per EIR and COA, only need one additional EB and WB T-RT lanes)	\$ 479,359	\$ 773,000
				Bradshaw Rd.			
17	1,326	TC-1(x), TC-3(ff)	9.1	SR-16 to Elder Creek Rd.	Widen Exist. 4-lane to 6-lane thoroughfare	\$ 254,632	\$ 2,400,360
18	1,326	TC-1(x)	9.1d	SR-16 to Elder Creek Rd.	Widen exist Morrison Creek bridge w/6-lane bridge	\$ 605,335	\$ 3,958,960
				Sub-total 1,326 DUE		\$ 1,339,325	\$ 7,132,320
				Calvine Rd.			
19	1,446	TC-1(j), TC-3(o)	10.1.1	Power Inn Rd. to Elk Grove-Florin Rd.	Widen ex. Section from 4 to 6 lanes (add WB & frontage)	\$ 2,034,582	\$ 3,678,000
20	1,446	TC-1(j), TC-3(o)	10.1r	Railroad Crossing	At-grade widening of exist. (EB), incl. appurtenances	\$ 119,486	\$ 108,000
				South Watt Ave.			
				Sub-total 1,446 DUE		\$ 2,154,068	\$ 3,786,000
				Florin Rd.			
22	1,646	TC-2(l), TC-4(r)	12	At Power Inn Rd.	Restripe to provide shared through/right turn on SB & WB approaches; lengthen WB receiving & merge lanes	\$ 487,632	\$ 745,000
				Gerber Rd.			
23	1,646	TC-2(u)	11	At Vineyard	2X2 Signalization, 3-way	\$ 298,808	\$ 483,000
				South Watt Ave.			
24	1,646	TC-1(m), TC-3(w)	7.2	Kiefer Blvd. to SR-16	Widen from ex. sect. to 3 lanes each direction (only SB frontage - 11'pvm't, C, G, & SW - required)	\$ 1,797,405	\$ 898,000
				Sub-total 1,646 DUE		\$ 2,583,845	\$ 2,126,000
				Florin Rd.			
25	1,841	TC-2(p)	8	At Excelsior Rd.	2X2 Intersection (fut. 4x2 w/ dual LT) & Signalization, 4-way	\$ 614,387	\$ 365,450
				SR-16			
27a	1,841	County Minimum	1	At South Watt Ave.	Widen ex. Intx. to mod. 4x5 Intersection per Sacramento County S. Watt at Jackson Minimum Alternative 1	\$ 530,445	\$ 2,646,000
27b	1,841	TC-2(e)	1	At South Watt Ave.	Widen ex. Intx. to mod. 4x6 Intersection (future mod. 6x6) & Signalization (reduced scope!)	\$ 161,379	\$ 805,000
				Sub-total 1,841 DUE		\$ 1,306,210	\$ 3,816,450
				French Road			
28	2,021	TC-1(l), TC-1(cc), TC-3(r), TC-3(v)	12.1.1 12.1.2 12.1.3	Florin Road to Gerber Road	Widen ex. section to 4-lane arterial, incl. landscaped median, curb & gutter, sidewalk (assumes only re-striping of sections along Siemens' frontage (includes cost of COA #29)	\$ 1,755,216	\$ -
29	2,021	TC-1(l), TC-1(cc), TC-3(r), TC-3(v)	12.1d	Florin Road to Gerber Road	Creek Crossing - Widen Elder Creek Bridge from 76' to 84' ROW (replace)	\$ 1,694,367	\$ -
				Sub-total 2,021 DUE		\$ 3,449,583	\$ -
				Florin Rd.			
30	2,126	TC-2(ee), TC-4(s)	14	At Florin-Perkins Rd.	Widen ex. Intx. (add WB right turn lane)	\$ 223,659	\$ 473,000
31a	2,126	TC-4(u)	15	At South Watt Ave.	Widen ex. partial 4x4 Intx. - add sep. RT lane on all approaches	\$ 1,341,561	\$ 2,333,000
31b	2,126	TC-4(u)	15	At South Watt Ave.	Widen 4x4 Intx. per COA 31a to full 6x6	\$ 560,724	\$ 975,109
				Calvine Rd.			
33	2,126	TC-2(z)	44	At Waterman Rd.	Widen EB & WB approaches, relocate Signal	\$ 768,194	\$ 1,854,000
				Sub-total 2,126 DUE		\$ 2,894,139	\$ 5,635,109

Table A-4
Florin Vineyard Community Plan Fee Program
SCTDF Roadway and Frontage Improvement Fair Share CIP Summary
(based on 2010 Conditions of Approval)

FVCP COA #	FVCP Trigger	Mit. Measure	Proj #	Roadway Segment/ Item ¹ , ²	Project Description	FVCP's Regional Fair Share	Net Funding oblig. (FVCP) for SCTDF overlap ¹
South Watt Ave.							
40	2,236	TC-1(t), TC-3(y), TC-3(dd)	7.4	Fruitridge Rd. to Elder Creek Rd.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes - Class D (Segment between Osage Ave and Alder Ave)	\$ 7,549	\$ 367,520
40	2,236	TC-1(t), TC-3(y), TC-3(dd)	7.4	Fruitridge Rd. to Elder Creek Rd.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes - Class A (200' undeveloped area east of 43rd street and 350' SB segment north of Morrison Creek). Fair share from NVS at NVS unit price.	\$ 262,969	\$ 672,980
40	2,236	TC-1(t), TC-3(y), TC-3(dd)	7.4	Fruitridge Rd. to Elder Creek Rd.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes - Class D (650' NB, from Osage Ave to 650' north)	\$ 93,835	\$ 228,420
South Watt Ave.							
41 / 45	2,236	TC-4(n)	6	At Elder Creek Rd.	4 X 6 Intersection Widening (based on County Min COA #3), 4-way Turn Lane installation (left-turn)	\$ 189,098	\$ 934,000
Sub-total 2,236 DUE						\$ 553,450	\$ 2,202,920
South Watt Ave.							
42	2,556	TC-1(n), TC-3(s&x), TC-3(dd)	7.3	SR-16 to Fruitridge Rd.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes	\$ 663,465	\$ 1,998,240
43	2,761	TC-1(p), TC-3(u), TC-3(z)	7.5	Elder Creek Rd. to Florin	Widen exist. Thoroughfare Center Section from 4 to 6 Lanes	\$ 98,550	\$ 145,445
43	2,761	TC-1(p), TC-3(u), TC-3(z)	7.5	Elder Creek Rd. to Florin	Widen exist. Thoroughfare Center Section from 4 to 6 Lanes - Class D southbound within City limits	\$ 263,576	\$ 369,550
Sub-total 2,556 DUE						\$ 1,025,591	\$ 2,513,235
Calvine Rd.							
46	2,856	TC-2(y)	20	At Elk Grove Florin Rd.	Re-stripe ex. Intx. to 4X6 Intersection (see COA #99 for widening to 6x6 intx.)	\$ 85,642	-
Elk Grove-Florin Rd.							
48	2,856	TC-1(s), TC-3(cc)	8.6	380' south of Britany Park to Calvine Rd.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes: only 790' of SB frontage lane improvements between 380' south of Britany Dr. and Robbins Rd. plus re-striping of entire 1.850' SB req'd	\$ 1,148,260	\$ 192,000
49	2,856	(n.a.)	67	At Hedge Ave.	move signal & constr. southern curb returns (EB & WB lanes incl. in COA 50)	\$ 98,663	\$ 360,000
Sub-total 2,856 DUE						\$ 1,332,565	\$ 552,000
SR-16							
50	3,416	TC-1(b)	1.1	South Watt Ave. to Bradshaw Rd.	Widen ex. partial Arterial Center Section from 2 to 4-lane thoroughfare center section (Total segment length= 9,910'; EB widening only = 2,210'; widening EB and WB = 7,700')	630,285	\$ -
Sub-total 3,416 DUE						\$ 630,285	\$ -
Florin Rd.							
52	4,306	TC-1(h), TC-3(l)	4.1, 4.1f.n	South Watt Ave. to Hedge Ave	Widen ex. 2-lane rural section to 4-lane thoroughfare center section	\$ 205,480	\$ 1,887,750
56a				At Hedge Ave	2x2 intersection widening (Constructed by Lennar)	\$ 295,640	\$ -
56b	4,306	TC-2(n), TC-4(v)	28	At Hedge Ave	Widen 2x2 intersection to County Standard 2x4	\$ 508,776	\$ 2,664,000
Fruitridge Rd.							
57	4,306	TC-2(i), TC-4(i)	25	At Hedge Ave.	widen exist Intx. to 2X2 Intx. (fut. 6x6). Signalization, 4-way	\$ 108,619	\$ 2,273,000
Gerber Rd.							
59	4,306	TC-2(r)	29	At Waterman	Constr. 2x4 Intx. - CR's on south side only (fut. 4x4), Signalization	\$ 363,961	\$ 592,000
Waterman Rd.							
60	4,306	TC-1(s), TC-3(hh)	14.1.2	Vintage Park Dr. to Gerber Rd.	Constr. 2-lane arterial center section w/median (incl. south intersection leg at Gerber Rd.)	\$ 4,592,067	\$ 4,545,000
Sub-total 4,306 DUE						\$ 6,074,543	\$ 11,961,750
Elder Creek Rd.							
61	5,306	TC-2(k), TC-4(oA)	26	At Hedge	Widen ex. Intx. to 2x4 intx., signalize (incl. 450' arterial leg ea. way)	\$ 676,755	\$ 1,978,000
62	5,306	TC-1(w), TC-3(ii)	3.4	South Watt Ave to Hedge Ave.	Widen ex. 2-lane rural section to 4 lane arterial center section	\$ 961,970	\$ 1,144,000
63	5,306	TC-1(ee), TC-3(g)	3.5	Hedge Ave. to Bradshaw Rd.	Widen ex. 2-lane rural section to 4 lane arterial center section	\$ 2,193,049	\$ 7,117,000
63	5,306	TC-1(ee), TC-3(g)	3.5	Hedge Ave. to Bradshaw Rd.	Widen ex. 2-lane rural section to 4 lane arterial - off-site frontage WB only	\$ 294,892	\$ 957,000
Sub-total 5,306 DUE						\$ 4,126,667	\$ 11,196,000
Florin Rd.							
64	5,701	TC-3(jj)	4.2	Bradshaw Rd. to Excelsior Rd. (See below - excludes southside NVSSP frontage improvements)	Widen ex. 2-lane rural section to 4-lane thoroughfare center section (excluded 1338' of frontage at existing water treatment plant)	\$ 4,995,463	\$ -
65	5,701	TC-3(jj)	4.2	Bradshaw Rd. to 2650' west of Vineyard Rd	Widen ex. 2-lane rural section to 4-lane thoroughfare center section (northside frontage excludes outside lane and frontage)	\$ 652,162	\$ 1,564,000
67	5,701	TC-2(o)	48	At Bradshaw	Widen ex. mod 2x4 Intx. to 4X6 Intx. (add 1 thru ea. way, rt-lane WB; CAC mitigation only) (Cost includes on-site)	\$ 149,042	\$ 1,183,000
68	5,701	TC-4(y)	51	At Excelsior Rd.	Constr. 4x 2 intx., signalize 4-way	\$ 434,736	\$ -
69	5,701	TC-4(x)	53	At Vineyard Rd.	Constr. 2x4 intx., signalize 4-way	\$ 666,954	\$ -
70/92a	5,700	TC-4(v)B	54	At Waterman Rd.	Constr. Mod. 2x2	\$ 254,792	\$ 388,000
70/92b	5,701	TC-4(v)B	54	At Waterman Rd.	Constr. 4x6 intx (future 4x6)	\$ 674,410	\$ 1,027,000
71	5,701	TC-3(i)	4.4	Power Inn Road to Florin- Perkins Road	Const. Alta Florin Rd (2-lane arterial center section) from Power Inn Rd to Florin-Perkins Rd.	\$ 9,949,760	\$ -
Sub-total 5,701 DUE						\$ 17,777,318	\$ 4,162,000
Bradshaw Road							
73				Florin Rd. to Gerber Rd.	NB frontage improvements (off-site)	\$ 1,458,503	\$ -
73				Florin Rd. to Gerber Rd.	SB frontage improvements (partially complete; off-site)	\$ 1,102,534	\$ -
74	6,801	TC-4(e)	65	At Kiefer Blvd.	Widen exist. mod. 4x6 intx. (add 2nd. Lt-lanes - EB & WB, rt-lane EB)	\$ 33,924	\$ -
Elder Creek Rd.							
75	6,801	TC-4(p)	33	At Bradshaw	Widen mod. 2x6 to mod. 4x6 intx (add through lanes & RT-lanes, 4-way)	\$ 963,488	\$ 4,260,080
Florin Rd.							
76	6,801	TC-1(g), TC-3(h)	4.3	Stockton Blvd to Power Inn Road	Widen Exist. Thoroughfare Center Section from 4 to 6 Lanes (requires potential impact to 67 residences and additional businesses!!)	\$ 8,945,763	\$ -
Gerber Rd.							
78	6,801	TC-4(dd)	40	At Bradshaw	Widen 4x4 Intx. to 4X6 Intx. (1/4 of intersection on-site frontage improvements)	\$ 491,451	\$ 792,500
79	6,801	TC-2(r)	41	At Waterman	only northern Waterman leg req'd (see COA 59 & 60)	\$ 389,782	\$ 1,268,000
81	6,801	TC-2(u), TC-4(ee)	60	At Vineyard	Modify from 3-way 2x2 to 4 way mod. 4x4	\$ 201,433	\$ -
82	6,801	TC-2(v), TC-4(ff)	43	At Excelsior	Replace ex rural intx. w/mod. 4x2, 4-way, signalize	\$ 282,161	\$ -
Sub-total 5,801 DUE						\$ 13,869,039	\$ 6,320,580

Table A-4
 Florin Vineyard Community Plan Fee Program
 SCTDF Roadway and Frontage Improvement Fair Share CIP Summary
 (based on 2010 Conditions of Approval)

FVCP COA #	FVCP Trigger	Mit. Measure	Proj #	Roadway Segment/ Item ¹ , ²	Project Description	FVCP's Regional Fair Share	Net Funding oblig. (FVCP) for SCTDF overlap ¹
86	8,501	TC-4(v)B3	64	Elder Creek Rd. At Waterman Rd.	Constr. 4x4 intx (3-way), signalize	\$ 612,796	\$ -
			Florin Rd.				
87	8,501	TC-1(aa), TC-3(j)	4.5	Florin-Perkins Rd to Gardner Ave.	Widen Exist. Thoroughfare Center Section from 4 to 6 Lanes (2,475' of WB frontage and 235' of EB frontage req'd; off-site)	\$ 3,707,830	\$ 482,000
89b	8,501	(n.a.)	4.0f.n	Hedge Ave. to Bradshaw Rd.	Culvert extension @ Florin Rd. 2,842' west of Bradshaw Rd.	\$ 40,501	\$ 41,500
89c	8,501	(n.a.)	4.0f.n	Hedge Ave. to CTCC RR (northside)	6 Lane 96' R/W; center sect. w/ med. (excludes outside lanes & ftg.)	\$ 335,448	\$ 343,725
89d	8,501	(n.a.)	4.0f.n	CCTC RR Crossing	Reconstruct at-grade RR crossing (108' R/W)	\$ 724,621	\$ 742,500
89e	8,501	(n.a.)	4.0f.n	CCTC RR to Waterman Rd.	6 Lane 96' R/W; center sect. w/ med. (excludes outside lanes & ftg.)	\$ 2,442,241	\$ 2,502,500
89f	8,501	(n.a.)	4.0f.n	Waterman to 1,350' east of Waterman	6 Lane 96' R/W; center sect. w/ med. (excludes outside lanes & ftg.)	\$ 958,354	\$ 982,000
89g	8,501	(n.a.)	4.0f.n	1,350' east of Waterman to Bradshaw	6 Lane 96' R/W; center sect. w/ med. (excludes outside lanes & ftg.)	\$ 1,079,368	\$ 1,106,000
90	8,501	(n.a.)	4.0f.s	Hedge Ave. to CCTC RR (Southside)	6 Lane 96' R/W; center sect. w/ med. (excludes outside lanes & ftg.)	\$ 335,448	\$ 343,725
			Fruitridge Rd.				
91	8,501	TC-2(l), TC-4(l)	62	At Hedge Ave.	widen exist intx. (add rt-lane, EB))	\$ 1,449	\$ -
Sub-total 8,501 DUE						\$ 10,238,056	\$ 6,543,950
			Waterman Road				
93	9,201	TC-4(v)B3	14.2	Florin Rd. to Elder Creek Rd.	Constr. 4-lane arterial	\$ 3,711,088	\$ 11,133,000
94	9,201	TC-4(v)B3	14.2d	Florin Rd. to Elder Creek Rd.	Constr. Elder Creek Culvert	\$ 330,008	\$ 990,000
			Calvine Rd.				
95	9,201	TC-4(j)	44	At Waterman Rd.	Widen ex. Intx. to mod. 6x4 intx, relocate signal	\$ 44,277	\$ -
96	9,201	TC-4(kk)	45	At Excelsior	Widen ex. Intx (add left turn lanes), signalize (4-way) (CAC plan mitigation only)	\$ 19,923	\$ -
97	9,201	TC-3(p)	10.2.1	Elk Grove-Florin Rd to Grand Cru Drive	Widen Exist. Thoroughfare Center Section from 4 to 6 Lanes (add EB frontage)	\$ 153,618	\$ -
98	9,201	TC-3(p)	10.2.2	Elk Grove-Florin Rd to Grand Cru Drive	Widen Exist. Thoroughfare Center Section from 4 to 6 Lanes (add WB frontage)	\$ 630,474	\$ -
			Elk Grove-Florin Rd.				
99	9,201	TC-4(gg)	46	At Calvine Rd	Widen intersection to 6x6 intx. (cost per SCTDF incl. in segment widening COA #19 and COA #48)	\$ 1,230,503	\$ -
			SR-16				
102	9,201	TC-3(c)	1.3	South Watt Ave to Bradshaw Rd	Widen ex. 4-lane (thoroughfare section) to 6-lane (2 frontages)	\$ 41,607	\$ -
103	9,201	TC-3(d)	1.4	Bradshaw Rd to Excelsior Rd.	Widen ex. 2-lane rural section to 4-lane arterial (thoroughfare center section)	\$ 25,341	\$ -
104	9,201	TC-3(d)	1.4d	Bradshaw Rd to Excelsior Rd.	Creek Crossing - Morrison Creek Bridge new bridge 6 lane thoroughfare	\$ 11,051	\$ -
105a	9,201	TC-3(d)	1.5	Excelsior Rd. to Sunrise Blvd.	Widen ex. 2-lane rural section to 4-lane arterial (thoroughfare center section)	\$ 205,890	\$ -
105b	9,201	TC-3(d)	1.5	Excelsior Rd. to Sunrise Blvd.	New Bridge Construction (108' R/W + 2' curb & railing ea. side).	\$ 61,080	\$ -
105c	9,201	TC-3(d)	1.5	Excelsior Rd. to Sunrise Blvd.	Culvert Replacement (Length = 88')	\$ 537	\$ -
106	9,201	TC-4(k) TC-4(h)	63	At Bradshaw	Widen 4x6 Intx. to 6x6 Intersection (CAC only, yet consistent w/CP-2 and CP-26)	\$ 22,442	\$ -
107a	9,201	TC-4(i)	35	At Excelsior	Widen ex. 2x2 to mod. 4x4 intx; relocate signal	\$ 159,539	\$ -
107b	9,201	TC-4(i)	35	At Excelsior	Lengthen existing culverts for 4x4 intx. Widening	\$ 110,923	\$ -
Sub-total 9,201 DUE						\$ 6,758,302	\$ 12,123,000
Mainline Improvements 1% ROW Contingency							\$ 1,179,076
MAINLINE IMPROVEMENTS TOTAL						\$ 91,392,003	\$ 119,086,724
On-Site Frontage Improvements							
			Elk Grove-Florin Rd.				
36				Gerber Rd. to Unionhouse Creek	NB frontage improvement (on-site) - not incl. intx leg or ex. dev. Frontage - Class D	\$ 3,390,955	\$ 567,000
36				Gerber Rd. to Unionhouse Creek	NB frontage improvement (on-site) - ex. dev. Frontage Class A	\$ 3,965,085	\$ 663,000
36				Gerber Rd. to Unionhouse Creek	SB frontage improvement (on-site)	\$ 191,377	\$ 32,000
36				Tiogawoods Dr and Elk Grove Florin Rd	Tiogawoods Dr Signal Modification	\$ 1,836,020	\$ 307,000
37				Unionhouse Creek to Caselman Rd.	NB frontage improvement (on-site) - Class D	\$ 544,227	\$ 91,000
37				Unionhouse Creek to Caselman Rd.	NB frontage improvement (on-site) - Class A at existing development frontage	\$ 2,481,916	\$ 415,000
37				Unionhouse Creek to Caselman Rd.	SB frontage improvement (on-site) - Class D	\$ 1,034,630	\$ 173,000
38					NB frontage improvement - Class A	\$ 4,593,040	\$ 768,000
			South Watt Ave.				
40	2,236	TC-1(t), TC-3(y), TC-3(dd)	7.4	Fruitridge Rd. to Elder Creek Rd.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes		
40				Fruitridge Rd. to Elder Creek Rd.	NB frontage improvement (on-site) - NB Class A (200' south of 43rd St. to 400' south of 43rd St.) Fair share from NVS at NVS unit price.	\$ 95,765	\$ 245,080
40				Fruitridge Rd. to Elder Creek Rd.	NB frontage improvement (on-site) - Class D	\$ 48,655	\$ 118,420
Sub-total Frontage Improvements 2,236 DUE						\$ 18,181,670	\$ 3,379,500

Table A-4
 Florin Vineyard Community Plan Fee Program
 SCTDF Roadway and Frontage Improvement Fair Share CIP Summary
 (based on 2010 Conditions of Approval)

FVCP COA #	FVCP Trigger	Mit. Measure	Proj #	Roadway Segment/ Item ^{1,2}	Project Description	FVCP's Regional Fair Share	Net Funding oblig. (FVCP) for SCTDF overlap ¹
South Watt Ave.							
43				Elder Creek Rd. to Florin	NB frontage improvements (on-site) - Class D	\$ 681,994	\$ 1,006,525
43				Elder Creek Rd. to Florin	SB frontage improvements (on-site) - Class D	\$ 372,248	\$ 549,385
				Sub-total Frontage Improvements 2,761 DUE		\$ 1,054,243	\$ 1,555,910
Elk Grove-Florin Rd							
51	3,466	TC-1(q), TC-3(aa)	8.1	Florin Rd. to Gerber Rd.	Widen exist. thoroughfare Center Section from 4 to 6 Lanes		
51				Florin Rd. to Gerber Rd.	NB frontage improvements (on-site)	\$ 1,325,192	\$ 1,042,000
51				Florin Rd. to Gerber Rd.	SB frontage improvements (on-site)	\$ 1,325,192	\$ 1,042,000
				Sub-total Frontage Improvements 3,416 DUE		\$ 2,650,384	\$ 2,084,000
Florin Road							
53	4,306	TC-1(h), TC-3(l)	4.1f.n	South Watt Ave. to Hedge Ave	Frontage on-site impr. (north side) -built concurrent with center section	\$ 34,287	\$ 420,000
54	4,306	TC-1(h), TC-3(l)	4.1f.s	South Watt Ave. to Hedge Ave	Frontage on-site impr. (south side) - built concurrent with center section	\$ 34,287	\$ 420,000
Gerber Rd							
58	4,306	TC-1(i)	5.2	Elk Grove-Florin Rd. to Waterman Rd.	Widen ex. 2-lane section to 4-lane arterial (east bound frontage; on-site) Class D	\$ 859,517	\$ 173,000
58	4,306	TC-1(i)	5.2	Waterman Rd. to Bradshaw Rd.	Widen ex. 2-lane section to 4-lane arterial (west bound frontage; on-site)	\$ 4,985,695	\$ 1,003,500
Elder Creek Rd							
62	5,306	TC-1(w), TC-3(ii)	3.4	South Watt Ave. to Hedge Ave	Widen ex. 2-lane rural section to 4 lane arterial		
62				South Watt Ave. to Hedge Ave	WB frontage improvements (on-site) - built concurrent with center section	\$ 228,720	\$ 272,000
62				South Watt Ave. to Hedge Ave	EB frontage improvements (on-site) - built concurrent with center section	\$ 228,720	\$ 272,000
63	5,306	TC-1(ee), TC-3(q)	3.5	Hedge Ave. to Bradshaw Rd.	Widen ex. 2-lane rural section to 4 lane arterial		
63				Hedge Ave. to Bradshaw Rd.	WB frontage improvements (on-site) - built concurrent with center section	\$ 198,444	\$ 644,000
63				Hedge Ave. to Bradshaw Rd.	EB frontage improvements (on-site) - built concurrent with center section	\$ 522,609	\$ 1,696,000
Florin Road							
65	5,701	TC-3(jj)	4.2f.n	Bradshaw Rd. to 2650' west of Vineyard Rd.	Frontage on-site impr. (north side)		
65				Bradshaw Rd. to 2650' west of Vineyard Rd.	WB frontage improvements	\$ 216,831	\$ 520,000
				Sub-total Frontage Improvements 5,701 DUE		\$ 7,309,112	\$ 5,420,500
Bradshaw Road							
72	6,801	TC-3(qg)	9.2	Elder Creek Rd. to Florin Rd.	Widen Exist. Thoroughfare Center Section from 4 to 6 lanes		
72			9.2	Elder Creek Rd. to Florin Rd.	NB frontage improvements (on-site) - Class A	\$ 1,633,746	\$ 4,213,000
72			9.2	Elder Creek Rd. to Florin Rd.	NB frontage improvements (on-site) - Class D	\$ 76,782	\$ 198,000
72			9.2	Elder Creek Rd. to Florin Rd.	SB frontage improvements (on-site) - Class A	\$ 475,815	\$ 1,227,000
72			9.2	Elder Creek Rd. to Florin Rd.	SB frontage improvements (on-site) - Class D	\$ 284,248	\$ 733,000
BF-SOG				Gerber Rd. to one mile south of Gerber Rd.	SB frontage improvements (on-site)	\$ 4,847,485	\$ 5,362,000
72				Elder Creek Culvert Crossing @ Bradshaw	Widen ex. culvert to 108'	\$ 58,944	\$ 152,000
Waterman Rd.							
83	6,801	TC-3(hh)	14.1.1	Vintage Park Dr to Gerber Rd	Widen ex. Section to 4 lane arterial (add NB frontage & median) - median in COA #60	\$ 1,462,995	\$ 1,448,000
84	6,801	TC-3(hh)	14.1.2	Vintage Park Dr to Gerber Rd	Widen ex section to 4-lane arterial (add SB frontage from Gerber to 80' N of Dersingham)	\$ 790,098	\$ 782,000
				Sub-total Frontage Improvements 5,801 DUE		\$ 9,630,112	\$ 14,115,000
Florin Road							
88	8,501	TC-1(bb), TC-3(k)	4.6	Gardner Ave. to South Watt Ave.	Widen Exist. Thoroughfare Center Section from 4 to 6 Lanes		
88				Gardner Ave. to South Watt Ave.	WB frontage improvements (on-site)	\$ 1,776,989	\$ 231,000
88				Gardner Ave. to South Watt Ave.	EB frontage improvements (on-site)	\$ 1,776,989	\$ 231,000
				Sub-total Frontage Improvements 8,501 DUE		\$ 3,553,978	\$ 462,000
				Mainline Improvements 1% ROW Contingency			\$ 270,169
FRONTAGE IMPROVEMENT TOTAL						\$ 42,379,499	\$ 27,287,079
Total SCTDF Fairshare for Overlapping FVCP Roadway and Frontage CIP						\$133,771,502	\$146,373,803

¹ (This analysis is based on the 2019 SCTDF update. SCTDF overlapping projects but not included in "Other Identified Funding," as it is assumed that overlapping portion will be addressed in the form of credit against the SCTDF fee.

² (Segment funding shown in SCTDF program update (2018) is detailed in SCTDF program; exclude 500' intersection leg (450' plus 50' to P.I.) from segment funding and show it as part of intersection reimbursements.

Table A-5

**Florin Vineyard Community Plan Fee Program
Infeasible Mitigation Measure Summary**

The following improvements are considered infeasible. No funding is included in the Fee Program for these improvements.

Proj #	Roadway Segment/ Item ¹(Project Description
Infeasible Mitigation Measures ("Significant and Unavoidable") Impacts		
Florin-Perkins Rd.		
6.1	Fruitridge Rd. to Elder Creek Rd.	Widen ex. Arterial Center Section from 4 to 6 Lanes (requires GPA; r.o.w. constrained)
6.1d	Fruitridge Rd. to Elder Creek Rd.	Widen ex. bridge over Morrison Creek to 96' ROW (requires GPA; r.o.w. constrained)
6.3	Elder Creek Rd. to Florin Rd.	Widen ex. Arterial Center Section from 4 to 6 Lanes (requires GPA; r.o.w. constrained)
6.3d	Elder Creek Rd. to Florin Rd.	Widen ex. Florin Creek culvert to 96' ROW (requires GPA; r.o.w. constrained)
24	At Folsom Blvd.	Mitigation Infeasible (4X6 widening)
South Watt Ave.		
7.1	Folsom Blvd. to Kiefer Blvd.	Mitigation Infeasible (widen to 8 lanes; requires GPA; r.o.w. constrained)
Gerber Rd.		
5.1	Power Inn Rd. to French Rd	Widen ex. Arterial Center Section from 4 to 6 Lanes (requires GPA; r.o.w. constrained)
5.1d	Creek Crossing	Widen Elder Creek Bridge from 4 to 6 lanes (requires GPA; r.o.w. constrained)
5.3	French Rd to Elk Grove-Florin Rd	Widen ex. Arterial Center Section from 4 to 6 Lanes (requires GPA; r.o.w. constrained)
SR-16		
37	At Folsom Blvd.	Widen EB approach by adding 2nd right turn lane (mitigation not feasible - ROW constraints)
Fruitridge Rd.		
2.2	Power Inn Rd. to Florin-Perkins Rd.	Widen ex. Arterial Section from 4 to 6 Lanes (requires GPA; r.o.w. constrained)
56	At Florin-Perkins Rd.	Widen ex. Intx. To 4x4 intx, relocate Signal - dual lefts, 4-way (infeasible; r.o.w. constrained)
Folsom Blvd		
13.1	SR-16 to Watt Ave.	Widen Exist. Arterial Center Section from 4 to 6 Lanes (requires GPA; r.o.w. constrained)
Power Inn Road		
11.1	Elder Creek Road to Florin Road	Widen Exist. Arterial Center Section from 4 to 6 Lanes (requires GPA; r.o.w. constrained)
Florin Rd.		
12	At Power Inn Rd.	Widen SB approach (add shared through/RT lane)

¹(Required improvements in excess of (inconsistent with) existing General Plan Transportation Element roadway designations are deemed infeasible.

Table A-6
Florin Vineyard Community Plan Fee Program
Parks and Recreation Capital Improvements Plan Summary

Description	Units	Cost per Unit (5)	Total Cost
Basic Park Development Costs (1)			
1 to 3 acres (Mini Parks)	10.55 acres	\$369,296.22	\$ 3,896,075
3 to 6 acres (Small Neighborhood Parks)	28.15 acres	\$267,241.16	\$ 7,522,839
6 to 11 acres (Large Neighborhood Parks)	47.77 acres	\$227,313.00	\$ 10,858,742
11 + acres (4-Acre is included in Community Center below)	20.60 acres	\$212,092.17	\$ 4,369,099
Subtotal Basic Park Development Costs (with 10% Contingency)	107.07 acres		\$ 29,311,430
Park Facilities Costs			
Playground Equipment - Small	18 each	\$176,799	\$ 3,182,382
Playground Equipment - Large	18 each	\$353,598	\$ 6,364,764
Soccer Fields	18 each	\$15,155	\$ 272,790
Youth Baseball Fields/Softball Fields Backstops Only	4 each	\$50,514	\$ 202,056
Youth Baseball Fields/Softball Fields	11 each	\$60,617	\$ 666,787
Tennis Court with Fence (set of 2)	6 each	\$101,028	\$ 606,168
Sports Lighting Fixtures (multiple fields for 6 parks)	45 each	\$39,401	\$ 1,773,045
Basketball Courts (1/2 Court)	21 each	\$45,463	\$ 954,723
Shade Structures - Large (50 people)	5 each	\$91,229	\$ 456,145
Shade Structures - Small (25 people)	38 each	\$46,675	\$ 1,773,650
Restroom Buildings (2 small & 2 large)	4 each	\$292,982	\$ 1,171,928
Parking Lots (6 Lots; 3 @ 70 & 3 @ 150 stalls)	660 stall	\$3,739	\$ 2,467,740
Subtotal Park Facilities Costs (with 10% Contingency)			\$ 21,881,396
Total Park Development Costs			\$ 51,192,826
Community Center Facilities	16,500 square feet	\$557	\$ 9,190,500
Site Improvements for 4 Acre Site	1 lump sum	\$1,166,874	\$ 1,166,874
Architectural & Engineering Fees @ 12%	12% percentage	\$10,357,374	\$ 1,242,885
Subtotal Community Center Facilities Costs			\$ 12,760,285
Total Park Development Costs (with Community Center)			\$ 63,953,111
Fee Rate per DUE for Park Development with Community Center			\$ 8,221
Drainage Parkway and Other Trail Facilities (2)			
Creek Corridor and Open Space Trails (4)			
Gerber Creek (S of Gerber Rd. E of CCTRR)	2,131 lineal feet	\$197.42	\$ 420,702
Elder Creek W of Elk Grove-Florin Rd.	3,249 lineal feet	\$197.42	\$ 641,418
Elder Creek S of Florin Rd. E of EGF Rd.	6,432 lineal feet	\$197.42	\$ 1,269,805
Elder Creek N of Florin Rd.	11,081 lineal feet	\$197.42	\$ 2,187,611
Powerline Open Space Corridor	5,328 lineal feet	\$139.33	\$ 742,350
Pedestrian Signal Crossings			
Elder Creek at Florin Rd.	1 lump sum	\$165,686	\$ 165,686
Elder Creek at Elk Grove-Florin Rd.	1 lump sum	\$165,686	\$ 165,686
Gerber Creek at Gerber Rd. (West)	1 lump sum	\$165,686	\$ 165,686
Powerline Trail at Gerber Rd.	1 lump sum	\$165,686	\$ 165,686
Parkway Facilities			
Gardner Avenue Parkway; 35' wide	5.8 acres	\$319,664	\$ 1,854,051
Hedge Avenue North Parkway; 20' wide	2.4 acres	\$319,664	\$ 767,194
Hedge Avenue Parkway South; 35' wide	2.1 acres	\$319,664	\$ 671,294
Florencia Lane Parkway; 35' wide	3.3 acres	\$319,664	\$ 1,054,891
Subtotal Trail Cost (with 10% Contingency)			\$ 11,299,266
JOINT-USE Detention Basins (Five Basins)			
Trail & Trailside Improvements (3)	3,000 lineal feet	\$121	\$ 363,000
District Park, & Open Space Master Plan	1 lump sum	\$67,096	\$ 67,096
Total Trail Development Costs			\$ 11,729,362
Fee Rate per DUE for Drainage Parkway, and Trails Development			\$ 1,508
Total Estimated Park DUE's	7,779		
Total Park Fee per DUE			\$ 9,729

(1) Infrastructure costs for sanitary sewer, water & drainage fees are included in the costs for parks, parkways and other trail facilities. The Developer is responsible for paying for any cost shortfall if the Drainage Fees and Zone 40 Water Fee Costs are more than the estimated costs included in the financing plan.

(2) Improvements costs include 12' wide trail construction including clearing for the bike and a 4' equestrian trail, excavation, grading, aggregate base, asphalt pavement, and 2' DG shoulders, as well as, striping, drinking fountains, benches and minimal landscape plantings.

(3) Improvements costs include 8' wide paved trail construction, including; excavation, grading, aggregate base & concrete pavement, as well as, lights, benches and landscape plantings for 5 basins with a total of approximately 16,500 linear feet.

(4) Any trail facilities overlapping between SCTDF and FVCP Fee Programs will receive a corresponding credit in the SCTDF.

(5) Project Cost inflated from June 2018 to Jan 2019 by 1.028%

Table A-7
 Florin Vineyard Community Plan Fee Program
 Parks Facilities Summary

Southgate Recreation & Park District
 FLORIN-VINEYARD COMMUNITY PLAN
 Park Facilities

Playgrounds & Phase II Park Facilities Park (Subdivision) Name	Type	Requested Park Sizes (Approx.)	Soccer Fields	Softball Fields (Backstops Only)	Youth Baseball Fields (LL)	Tennis Courts (set of 2)	Basketball Courts (1/2 Ct.)	SM Shade Shelter & Tables	LG Shade Shelter & Tables	LARGE Playground	SMALL Playground	Restrooms	Parking Lot	Sports Field Lighting
		Acres												
"Florin-Vineyard" Park	L	9.50	2		2		2	3	1	1	1	1	1	X
"Shehadeh" Ranch Park	M	3.40						1			1			
"Stonehedge" Park	L	6.15	1		1		2	2		1	1			
"Roemer Ranch" Park	M	2.00						2		1	1			
"Roemer Ranch" Park	M	2.10						1			1			
"Roemer Ranch" Park	M	2.50					1	2		1	1			
Park Sites -N of Florin E of So. Watt	S	6.00	1		1		1	2		1	1			
"Gardner Parke" Park	M	5.95	1					2			1			
"Villages at Elder Creek" Park #1	L	7.40	2		1		2	2	1	1	1		1	X
"Villages at Elder Creek" Park #2	M	1.45						2		1	1			
Park Site -S of Florin E of So. Watt	S	6.72	1		1		1	2		1	1			
"Caselman Ranch" Park	S	3.30	1				1	2		1	1			
Park Site - SW of Caselman Rd & EGF Rd.	L	10.00	2	2		3	2	2	1	2	1	1	1	X
"Dakuzaku Village" Park (Phase 1)	S	4.00	1		1		1	2		1				
"Dakuzaku Village" Park (Phase 2)	S	2.00						1			1			
Park Site - S of Gerber/School ("Elk Trail")	L	8.00	1		2		2	2		1	1		1	X
"Lawson"/Gerber Crk -W of Brad (Phase 1)	S	0.50						2						
"Lawson"/Gerber Crk -W of Brad (Phase 2)	S	5.50						2		1				
Community Parks														
Sunrise-Florin Com. Park Ext. (Gardner Ave.)	C	12.00	3	2			2	2	1	2	1	1	1	X
"Hedge Avenue" Community Park	C	12.60	2		2	3	4	2	1	2	2	1	1	X
TOTAL		111.07	18	4	11	6	21	38	5	18	18	4	6	

C=Community Park; M=Mini Park; S=Small Neighborhood Park; L=Large Neighborhood Park

Notes:

- (1) Parks planned as part of Tentative Subdivision Maps are identified in table with Subdivision Name in quotes and bolded.
- (2) Total parkland acreage based on proposed Tentative Subdivision Maps and Plan Area Land Use densities. County Planning Dept. Dwelling Unit Estimate is 7,706.
- (3) Additional parkland will be provided as Parkways along Gardner Ave., Hedge Ave. and Florencia Lane. These Parkway corridors are estimated at approximately 13 acres based on estimated street length and a total landscaped corridor width of 20-35 feet.

Table A-8

**Florin Vineyard Community Plan Fee Program
Transit Cost and Fair-Share Allocation to FVCP**

Description	Cost ¹
Park & Ride Facilities: 100 spaces per acre	50 spaces; 1/2 acre
Land Acquisition Cost	\$ 64,375
Construction Cost	\$ 257,500
Total Cost	\$ 321,875
Interim Bus Stops	
Interim bus stops to include, but not limited to, shelter, bench, lighting	
Number of Stops	5
Cost to Construct	\$ 47,827
Total Cost	\$ 239,135
GRAND TOTAL - TRANSIT FACILITIES & EQUIPMENT	\$ 561,010

Notes:

¹ Any transit facilities that overlap between SCTDF and FVCP Fee Programs will receive a corresponding credit in the SCTDF.

APPENDIX B

Fee Calculation Summary Tables

**Table B-1
Florin Vineyard Community Plan Fee Program
Land Use Summary**

Zoning Category	Expected Units	Net Acreage Based on Community Plan	Fee Program Net Acreage /1
Residential			
Single Family			
AR 2-5	12	169.1	36.5
AR 1-2	119	448.8	179.6
RD 2-3	284	145.0	113.5
RD 3-5	3,375	918.5	750.0
RD 5-7	2,798	519.9	466.3
RD 7-12	610	74.6	61.0
RD-10 (MHP)	107	13.7	10.7
Subtotal	7,305	2,289.6	1,617.7
Multi-Family			
RD-20	869	59.4	48.3
Total Residential	8,174	2,349.0	1,666.0
Non-Residential			
General Commercial (GC)		10.2	9.2
Shopping Center (SC)		140.6	85.5
Limited Commercial (LC)		18.5	16.7
Business Professional (BP)		13.3	12.0
Industrial (M-1) /2		885.3	199.2
Industrial Reserve (IR) /2		237.6	-
Total Non-Residential		1,305.5	322.5
Open Space		98.1	-
Major Roads & CTRR		119.4	-
TOTAL		3,872.0	1,988.4

/1 The Florin Vineyard Community Plan Fee Program assumes a 10% reduction in net acres to address development uncertainties. Reductions have also been taken to address school and park lands.

/2 Due to the high probability that much of the proposed M-1 and IR land uses may not develop in the foreseeable future, the Fee Program includes only 25% of the anticipated M-1 development. The remaining 75% of M-1 and all IR uses are excluded from the fee allocation. Additional studies will be required to identify needed facilities and funding at the time these uses develop. (MHP) = Mobile Home Park

Source: County of Sacramento; Goodwin Consulting Group, Inc.

**Table B-2
Florin Vineyard Community Plan Fee Program
Land Use Allocation**

Zoning Category				Fee Program Total Acres
Residential				
Single Family				
AR-5				21.9
AR-2				133.3
AR-1				61.0
RD-2				17.0
RD-3				122.8
RD-4				84.7
RD-5				701.4
RD-6				255.4
RD-7				171.6
RD-9				5.0
RD-10				28.0
RD-12				5.0
RD-10 (MHP)				10.7
Subtotal				1,617.7
Multi-Family				
RD-20				48.3
Total Residential				1,666.0
Non-Residential				
	<u>FAR</u>	<u>Square Feet</u>		
General Commercial (GC)	0.25	99,970	9.2	
Shopping Center (SC)	0.28	1,042,460	85.5	
Limited Commercial (LC)	0.25	181,319	16.7	
Business Professional (BP)	0.35	182,495	12.0	
Industrial (M-1) /1	0.35	3,036,851	199.2	
Industrial Reserve (IR) /1		-	-	
Total Non-Residential		4,543,095	322.5	
Total Net Developable Acreage				1,988.4

/1 Due to the high probability that much of the proposed M-1 and IR land uses may not develop in the foreseeable future, the Fee Program includes only 25% of the anticipated M-1 development. The remaining 75% of M-1 and all IR uses are excluded from the fee allocation. Additional studies will be required to identify needed facilities and funding at the time these uses develop.

Source: County of Sacramento; Goodwin Consulting Group, Inc.

**Table B-3
Florin Vineyard Community Plan Fee Program
Facility Costs Summary**

Facility	Estimated Costs at Buildout /1
Roadway and Frontage Lane Improvements	\$165,307,363
Other Jurisdictions Roadway Improvements (Fair Share)	\$6,485,698
Park and Recreation Facilities	\$75,682,473
Transit Facilities	<u>\$561,010</u>
Total Costs	<u>\$248,036,544</u>

/1 Any overlapping facilities between the SCTDF program and the FVCP Fee Program will receive a corresponding credit in the SCTDF program.

Source: County of Sacramento; Goodwin Consulting Group, Inc.

**Table B-4
Florin Vineyard Community Plan Fee Program
Dwelling Unit Equivalent (DUEs) per Acre**

Land Use Category	Roadway & Frontage Lane DUEs per Acre /1	Park DUEs per Acre /2	Transit DUEs per Acre
Residential DUEs			
Single Family			
AR-5	0.20	0.20	0.20
AR-2	0.50	0.50	0.50
AR-1	1.00	1.00	1.00
RD-2	2.00	2.00	2.00
RD-3	2.80	2.90	2.80
RD-4	3.50	3.70	3.50
RD-5	4.10	4.50	4.10
RD-6	4.90	5.40	4.90
RD-7	5.70	6.30	5.50
RD-9	6.50	6.64	11.00
RD-10	7.20	7.40	12.20
RD-12	8.60	8.60	14.60
RD-10 (MHP)	7.20	7.40	12.20
Multi-Family			
RD-20	10.20	11.70	38.10
Non-Residential DUEs			
General Commercial (GC)	16.30	1.70	52.80
Shopping Center (SC)	13.40	2.10	66.40
Limited Commercial (LC)	16.30	2.50	52.80
Business Professional (BP)	13.50	3.20	36.90
Industrial (M-1) /3	7.00	1.50	9.20
Industrial Reserve (IR) /3	-	-	-

/1 Roadway & Frontage Lane fees and Other Jurisdiction's Roadway DUEs for Age Restricted development uses equal 34% of the amounts shown in this table.

/2 Park and Recreation DUEs for Age Restricted development uses equal 69% of the amounts shown in this table.

/3 Due to the high probability that much of the proposed M-1 and IR land uses may not develop in the foreseeable future, all IR uses are excluded from the fee allocation. Additional studies will be required to identify needed facilities and funding at the time these uses develop.

Source: County of Sacramento; Goodwin Consulting Group, Inc.

**Table B-5
Florin Vineyard Community Plan Fee Program
DUE Summary**

Land Use Category	Program Acres	Roadway & Frontage Lane DUEs	Park DUEs /1	Transit DUEs
Residential DUEs				
Single Family				
AR-5	21.90	4.38	4.38	4.38
AR-2	133.28	66.64	66.64	66.64
AR-1	60.96	60.96	60.96	60.96
RD-2	17.03	34.06	34.06	34.06
RD-3	122.79	343.82	356.09	343.82
RD-4	84.67	296.36	313.29	296.36
RD-5	701.43	2,875.87	3,059.80	2,875.87
RD-6	255.37	1,251.30	1,314.86	1,251.30
RD-7	171.55	977.84	1,070.51	943.53
RD-9	5.00	32.49	31.64	54.97
RD-10	27.99	201.58	205.46	341.57
RD-12	5.00	42.98	42.98	72.97
RD-10 (MHP)	10.73	77.24	79.38	130.87
Subtotal	1,617.70	6,265.51	6,640.05	6,477.30
Multi-Family				
RD-20	48.27	492.35	564.76	1,839.09
Total Residential DUEs		6,757.86	7,204.81	8,316.39
Non-Residential DUEs				
General Commercial (GC)	9.18	149.63	15.61	484.70
Shopping Center (SC)	85.47	1,145.24	179.48	5,674.94
Limited Commercial (LC)	16.65	271.40	41.63	878.33
Business Professional (BP)	11.97	161.60	38.30	441.69
Industrial (M-1) /2	199.19	1,394.35	298.79	1,832.57
Industrial Reserve (IR) /2	-	-	-	-
Total Non-Residential DUEs		3,122.22	573.81	9,312.23
TOTAL DUEs		9,880.08	7,778.62	17,628.62

/1 Total Park DUEs reflect an adjustment for proposed age-restricted residential uses.

/2 Due to the high probability that much of the proposed M-1 and IR land uses may not develop in the foreseeable future, the Fee Program includes only 25% of the anticipated M-1 development. The remaining 75% of M-1 and all IR uses are excluded from the fee allocation. Additional studies will be required to identify needed facilities and funding at the time these uses develop.

Source: County of Sacramento; Goodwin Consulting Group, Inc.

**Table B-6
Florin Vineyard Community Plan Fee Program
Roadway and Frontage Lane Fee Calculation**

		Total Roadway and Frontage Lane CIP Costs				\$165,307,363	
		Total DUEs				9,880	
		Cost Per DUE				\$16,732	
							Age Restricted
Residential	Unit of Measure	DUE Factor per Acre /1	Cost per Acre	Estimated Density or FAR /1	Impact Fee per Unit of Measure /2	Impact Fee per Unit of Measure /3	
Single Family							
AG-80	<i>per Unit</i>	0.01	\$167	0.01	\$16,732	\$5,689	
AG-20	<i>per Unit</i>	0.05	\$837	0.05	\$16,732	\$5,689	
A-10/AR-10	<i>per Unit</i>	0.10	\$1,673	0.10	\$16,732	\$5,689	
AR-5	<i>per Unit</i>	0.20	\$3,346	0.20	\$16,732	\$5,689	
AR-2	<i>per Unit</i>	0.50	\$8,366	0.50	\$16,732	\$5,689	
AR-1	<i>per Unit</i>	1.00	\$16,732	1.00	\$16,732	\$5,689	
RD-1	<i>per Acre</i>	1.00	\$16,732	n/a	\$16,732	\$5,689	
RD-2	<i>per Acre</i>	2.00	\$33,464	n/a	\$33,464	\$11,378	
RD-3	<i>per Acre</i>	2.80	\$46,850	n/a	\$46,850	\$15,929	
RD-4	<i>per Acre</i>	3.50	\$58,562	n/a	\$58,562	\$19,911	
RD-5	<i>per Acre</i>	4.10	\$68,601	n/a	\$68,601	\$23,324	
RD-6	<i>per Acre</i>	4.90	\$81,987	n/a	\$81,987	\$27,876	
RD-7	<i>per Acre</i>	5.70	\$95,372	n/a	\$95,372	\$32,427	
RD-9	<i>per Acre</i>	6.50	\$108,758	n/a	\$108,758	\$36,978	
RD-10	<i>per Acre</i>	7.20	\$120,470	n/a	\$120,470	\$40,960	
Multi-Family							
RD-12	<i>per Acre</i>	8.60	\$143,895	n/a	\$143,895	\$48,924	
RD-15	<i>per Acre</i>	9.50	\$158,954	n/a	\$158,954	\$54,044	
RD-20	<i>per Acre</i>	10.20	\$170,666	n/a	\$170,666	\$58,027	
RD-25	<i>per Acre</i>	12.00	\$200,784	n/a	\$200,784	\$68,267	
RD-30	<i>per Acre</i>	14.40	\$240,941	n/a	\$240,941	\$81,920	
Non-Residential							
M-1/M-2/IR/UR	<i>per Bldg SF</i>	7.00	\$117,124	0.35	\$7.68	-	
MP	<i>per Bldg SF</i>	18.00	\$301,176	0.40	\$17.29	-	
BP	<i>per Bldg SF</i>	13.50	\$225,882	0.35	\$14.82	-	
SC	<i>per Bldg SF</i>	13.40	\$224,209	0.28	\$18.38	-	
GC	<i>per Bldg SF</i>	16.30	\$272,732	0.25	\$25.04	-	
LC	<i>per Bldg SF</i>	16.30	\$272,732	0.25	\$25.04	-	
TC	<i>per Bldg SF</i>	16.30	\$272,732	0.25	\$25.04	-	

/1 Based on DUE factors and density assumptions shown in Table C-1.

/2 Impact Fees do not include the County's 4.0% administrative fee.

/3 For Age-restricted development, an adjustment factor of 34% is applied to reduce the applicable residential zoning category.

Source: County of Sacramento; Goodwin Consulting Group, Inc.

**Table B-7
Florin Vineyard Community Plan Fee Program
Other Jurisdiction's Roadway Fee Calculation**

Total Other Jurisdiction's Roadway CIP Costs							\$6,485,698
Total DUEs							9,880
Cost Per DUE							\$656
	<u>Unit of Measure</u>	<u>DUE Factor per Acre /1</u>	<u>Cost per Acre</u>	<u>Estimated Density or FAR /1</u>	<u>Impact Fee per Unit of Measure /2</u>	<u>Age Restricted Impact Fee per Unit of Measure /3</u>	
Residential							
Single Family							
	<i>per Unit</i>	0.01	\$7	0.01	\$656	\$223	
	<i>per Unit</i>	0.05	\$33	0.05	\$656	\$223	
	<i>per Unit</i>	0.10	\$66	0.10	\$656	\$223	
	<i>per Unit</i>	0.20	\$131	0.20	\$656	\$223	
	<i>per Unit</i>	0.50	\$328	0.50	\$656	\$223	
	<i>per Unit</i>	1.00	\$656	1.00	\$656	\$223	
	<i>per Acre</i>	1.00	\$656	n/a	\$656	\$223	
	<i>per Acre</i>	2.00	\$1,312	n/a	\$1,312	\$446	
	<i>per Acre</i>	2.80	\$1,837	n/a	\$1,837	\$625	
	<i>per Acre</i>	3.50	\$2,296	n/a	\$2,296	\$781	
	<i>per Acre</i>	4.10	\$2,690	n/a	\$2,690	\$914	
	<i>per Acre</i>	4.90	\$3,214	n/a	\$3,214	\$1,093	
	<i>per Acre</i>	5.70	\$3,739	n/a	\$3,739	\$1,271	
	<i>per Acre</i>	6.50	\$4,264	n/a	\$4,264	\$1,450	
	<i>per Acre</i>	7.20	\$4,723	n/a	\$4,723	\$1,606	
Multi-Family							
	<i>per Acre</i>	8.60	\$5,642	n/a	\$5,642	\$1,918	
	<i>per Acre</i>	9.50	\$6,232	n/a	\$6,232	\$2,119	
	<i>per Acre</i>	10.20	\$6,691	n/a	\$6,691	\$2,275	
	<i>per Acre</i>	12.00	\$7,872	n/a	\$7,872	\$2,676	
	<i>per Acre</i>	14.40	\$9,446	n/a	\$9,446	\$3,212	
Non-Residential							
	<i>per Bldg SF</i>	7.00	\$4,592	0.35	\$0.30	-	
	<i>per Bldg SF</i>	18.00	\$11,808	0.40	\$0.68	-	
	<i>per Bldg SF</i>	13.50	\$8,856	0.35	\$0.58	-	
	<i>per Bldg SF</i>	13.40	\$8,790	0.28	\$0.72	-	
	<i>per Bldg SF</i>	16.30	\$10,693	0.25	\$0.98	-	
	<i>per Bldg SF</i>	16.30	\$10,693	0.25	\$0.98	-	
	<i>per Bldg SF</i>	16.30	\$10,693	0.25	\$0.98	-	

/1 Based on DUE factors and density assumptions shown in Table C-1.

/2 Impact Fees do not include the County's 4.0% administrative fee.

/3 For Age-restricted development, an adjustment factor of 34% is applied to reduce the applicable residential zoning category.

Source: County of Sacramento; Goodwin Consulting Group, Inc.

**Table B-8
Florin Vineyard Community Plan Fee Program
Park and Recreation Fee Calculation**

Total Park and Recreation CIP Costs						\$75,682,473
Total DUEs						7,779
Cost Per DUE						\$9,729
<hr/>						
		DUE	Cost	Estimated	Impact Fee	Age Restricted
Residential	Unit of Measure	Factor per Acre /1	per Acre	Density or FAR /1	per Unit of Measure /2	Impact Fee per Unit of Measure /3
Single Family						
AG-80	<i>per Unit</i>	0.01	\$97	0.01	\$9,729	\$6,713
AG-20	<i>per Unit</i>	0.05	\$486	0.05	\$9,729	\$6,713
A-10/AR-10	<i>per Unit</i>	0.10	\$973	0.10	\$9,729	\$6,713
AR-5	<i>per Unit</i>	0.20	\$1,946	0.20	\$9,729	\$6,713
AR-2	<i>per Unit</i>	0.50	\$4,865	0.50	\$9,729	\$6,713
AR-1	<i>per Unit</i>	1.00	\$9,729	1.00	\$9,729	\$6,713
RD-1	<i>per Acre</i>	1.00	\$9,729	n/a	\$9,729	\$6,713
RD-2	<i>per Acre</i>	2.00	\$19,458	n/a	\$19,458	\$13,426
RD-3	<i>per Acre</i>	2.90	\$28,214	n/a	\$28,214	\$19,468
RD-4	<i>per Acre</i>	3.70	\$35,997	n/a	\$35,997	\$24,838
RD-5	<i>per Acre</i>	4.50	\$43,781	n/a	\$43,781	\$30,209
RD-6	<i>per Acre</i>	5.40	\$52,537	n/a	\$52,537	\$36,250
RD-7	<i>per Acre</i>	6.30	\$61,293	n/a	\$61,293	\$42,292
RD-9	<i>per Acre</i>	6.64	\$64,601	n/a	\$64,601	\$44,574
RD-10	<i>per Acre</i>	7.40	\$71,995	n/a	\$71,995	\$49,676
Multi-Family						
RD-12	<i>per Acre</i>	8.60	\$83,669	n/a	\$83,669	\$57,732
RD-15	<i>per Acre</i>	10.20	\$99,236	n/a	\$99,236	\$68,473
RD-20	<i>per Acre</i>	11.70	\$113,829	n/a	\$113,829	\$78,542
RD-25	<i>per Acre</i>	13.80	\$134,260	n/a	\$134,260	\$92,640
RD-30	<i>per Acre</i>	16.50	\$160,529	n/a	\$160,529	\$110,765
Non-Residential						
M-1/M-2/IR/UR	<i>per Bldg SF</i>	1.50	\$14,594	0.35	\$0.96	-
MP	<i>per Bldg SF</i>	3.50	\$34,052	0.40	\$1.95	-
BP	<i>per Bldg SF</i>	3.20	\$31,133	0.35	\$2.04	-
SC	<i>per Bldg SF</i>	2.10	\$20,431	0.28	\$1.68	-
GC	<i>per Bldg SF</i>	1.70	\$16,539	0.25	\$1.52	-
LC	<i>per Bldg SF</i>	2.50	\$24,323	0.25	\$2.23	-
TC	<i>per Bldg SF</i>	3.00	\$29,187	0.25	\$2.68	-

/1 Based on DUE factors and density assumptions shown in Table C-2.

/2 Impact Fees do not include the County's 4.0% administrative fee.

/3 For Age-restricted development, an adjustment factor of 69% is applied to reduce the applicable residential zoning category.

**Table B-9
Florin Vineyard Community Plan Fee Program
Transit Fee Calculation**

						\$561,010
						17,629
						\$32
<hr/>						
Residential	<u>Unit of Measure</u>	<u>DUE Factor per Acre /1</u>	<u>Cost per Acre</u>	<u>Estimated Density or FAR /1</u>	<u>Impact Fee per Unit of Measure /2</u>	
Single Family						
	<i>per Unit</i>	0.01	\$0	0.01	\$32	
	<i>per Unit</i>	0.05	\$2	0.05	\$32	
	<i>per Unit</i>	0.10	\$3	0.10	\$32	
	<i>per Unit</i>	0.20	\$6	0.20	\$32	
	<i>per Unit</i>	0.50	\$16	0.50	\$32	
	<i>per Unit</i>	1.00	\$32	1.00	\$32	
	<i>per Acre</i>	1.00	\$32	n/a	\$32	
	<i>per Acre</i>	2.00	\$64	n/a	\$64	
	<i>per Acre</i>	2.80	\$90	n/a	\$90	
	<i>per Acre</i>	3.50	\$112	n/a	\$112	
	<i>per Acre</i>	4.10	\$131	n/a	\$131	
	<i>per Acre</i>	4.90	\$157	n/a	\$157	
	<i>per Acre</i>	5.50	\$176	n/a	\$176	
	<i>per Acre</i>	11.00	\$352	n/a	\$352	
	<i>per Acre</i>	12.20	\$390	n/a	\$390	
Multi-Family						
	<i>per Acre</i>	14.60	\$467	n/a	\$467	
	<i>per Acre</i>	18.30	\$586	n/a	\$586	
	<i>per Acre</i>	38.10	\$1,219	n/a	\$1,219	
	<i>per Acre</i>	44.80	\$1,434	n/a	\$1,434	
	<i>per Acre</i>	53.70	\$1,718	n/a	\$1,718	
Non-Residential						
	<i>per Bldg SF</i>	9.20	\$294	0.35	\$0.02	
	<i>per Bldg SF</i>	24.40	\$781	0.40	\$0.04	
	<i>per Bldg SF</i>	36.90	\$1,181	0.35	\$0.08	
	<i>per Bldg SF</i>	66.40	\$2,125	0.28	\$0.17	
	<i>per Bldg SF</i>	52.80	\$1,690	0.25	\$0.16	
	<i>per Bldg SF</i>	52.80	\$1,690	0.25	\$0.16	
	<i>per Bldg SF</i>	17.60	\$563	0.25	\$0.05	

/1 Based on DUE factors and density assumptions shown in Table C-1 and Table C-3.

/2 Impact Fees do not include the County's 4.0% administrative fee.

Source: County of Sacramento; Goodwin Consulting Group, Inc.

APPENDIX C

Dwelling Unit Equivalents (DUEs)

Table C-1
Florin Vineyard Community Plan Fee Program
Roadway and Frontage Lane Facilities DUES

I. Residential Dwelling Units Equivalent (DUE) Factors

ZONING	A MAXIMUM ZONING DENSITY PER ACRE	B ASSUMED DENSITY	C ASSUMED YIELD UNITS PER ACRE (AxB)	D PEAK HOUR TRIPS PER UNIT	E PEAK HOUR TRIPS PER ACRE (DUE FACTOR) (Cx D)
AG-80	0.01	100%	0.01	1.00	0.01
AG-20	0.05	100%	0.05	1.00	0.05
A-10/AR-10	0.10	100%	0.10	1.00	0.10
AR-5	0.20	100%	0.20	1.00	0.20
AR-2	0.50	100%	0.50	1.00	0.50
AR-1	1.00	100%	1.00	1.00	1.00
RD-1	1.00	100%	1.00	1.00	1.00
RD-2	2.00	100%	2.00	1.00	2.00
RD-3	3.00	97%	2.91	0.97	2.80
RD-4	4.00	93%	3.72	0.93	3.50
RD-5	5.00	90%	4.50	0.90	4.10
RD-6	6.00	90%	5.40	0.90	4.90
RD-7	7.00	90%	6.30	0.90	5.70
RD-9	9.00	90%	8.10	0.80	6.50
RD-10	10.00	90%	9.00	0.80	7.20
RD-12	12.00	90%	10.80	0.80	8.60
RD-15	15.00	90%	13.50	0.70	9.50
RD-20	20.00	85%	17.00	0.60	10.20
RD-25	25.00	80%	20.00	0.60	12.00
RD-30	30.00	80%	24.00	0.60	14.40

II. Non Residential Dwelling Unit Equivalent (DUE) Factors

ZONING	ASSUMED FLOOR AREA RATIO	FLOORSPAC E PER ACRE	PEAK HOUR TRIPS PER ACRE (DUE FACTOR)
M-1/M-2/ IR/UR	35%	15,246	7.0
MP	40%	17,424	18.0
BP	35%	15,246	13.5
SC	28%	12,197	13.4
GC	25%	10,890	16.3
LC	25%	10,890	16.3
TC	25%	10,890	16.3

Table C-2
Florin Vineyard Community Plan Fee Program
Park Improvement Facilities DUES

I. Residential Dwelling Units Equivalent (DUE) Factors

ZONING	A MAXIMUM ZONING DENSITY PER ACRE	B ASSUMED YIELD UNITS PER ACRE	C PERSONS PER HOUSEHOLD	D PERSON PER ACRE (BxC)	E PEAK HOUR TRIPS PER ACRE (DUE FACTOR) (D/2.88)
AG-80	0.01	0.01	2.88	0.03	0.01
AG-20	0.05	0.05	2.88	0.14	0.05
A-10/AR-10	0.10	0.10	2.88	0.29	0.10
AR-5	0.20	0.20	2.88	0.58	0.20
AR-2	0.50	0.50	2.88	1.44	0.50
AR-1	1.00	1.00	2.88	2.88	1.00
RD-1	1.00	1.00	2.88	2.88	1.00
RD-2	2.00	2.00	2.88	5.76	2.00
RD-3	3.00	2.91	2.88	8.38	2.90
RD-4	4.00	3.72	2.88	10.71	3.70
RD-5	5.00	4.50	2.88	12.96	4.50
RD-6	6.00	5.40	2.88	15.55	5.40
RD-7	7.00	6.30	2.88	18.14	6.30
RD-9	9.00	8.10	2.36	19.12	6.64
RD-10	10.00	9.00	2.36	21.24	7.40
RD-12	12.00	10.80	2.28	24.62	8.60
RD-15	15.00	13.50	2.17	29.30	10.20
RD-20	20.00	17.00	1.98	33.66	11.70
RD-25	25.00	20.00	1.98	39.60	13.80
RD-30	30.00	24.00	1.98	47.52	16.50

II. Non Residential Dwelling Unit Equivalent (DUE) Factors

ZONING	EMPLOYEES PER ACRE	EMPLOYEE DENSITY (Ax0.25)	DUE FACTOR PERSONS/ACRE (B/2.88)
M-1/M-2/ IR/UR	17.35	4.34	1.50
MP	40.60	10.15	3.50
BP	37.30	9.33	3.20
SC	23.90	5.98	2.10
GC	19.80	4.95	1.70
LC	28.75	7.19	2.50
TC	34.60	8.65	3.00

From 1990 Census data, per SACOG

HOUSING TYPE	PERSONS PER HOUSEHOLD IN UNINCORPORATED COUNTY
SINGLE FAMILY:	2.88
DUPLEX-QUADPLEX:	2.36
5+ MULTIFAMILY APTS:	1.98

Table C-3
Florin Vineyard Community Plan Fee Program
Transit Facilities DUES

I. Residential Dwelling Units Equivalent (DUE) Factors

ZONING	A PEAK HOUR VEHICLE TRIPS PER ACRE	B TYPICAL VEHICLE OCCUPANCY	C PEAK HOUR TRIPS PER ACRE (AxB)	D PERCENT TRANSIT TRIPS /1	E PEAK HOUR TRANSIT TRIPS/ACRE /1 (Cx D)	F PEAK HOUR TRIPS PER ACRE (DUE FACTOR) (E/.052)
AG-80	0.01	1.62	0.02	0.032	0.001	0.01
AG-20	0.05	1.62	0.08	0.032	0.003	0.05
A-10/AR-10	0.10	1.62	0.16	0.032	0.005	0.10
AR-5	0.20	1.62	0.32	0.032	0.010	0.20
AR-2	0.50	1.62	0.81	0.032	0.026	0.50
AR-1	1.00	1.62	1.62	0.032	0.052	1.00
RD-1	1.00	1.62	1.62	0.032	0.052	1.00
RD-2	2.00	1.62	3.24	0.032	0.104	2.00
RD-3	2.80	1.62	4.54	0.032	0.145	2.80
RD-4	3.50	1.62	5.67	0.032	0.181	3.50
RD-5	4.10	1.62	6.64	0.032	0.213	4.10
RD-6	4.90	1.62	7.94	0.032	0.254	4.90
RD-7	5.70	1.57	8.95	0.032	0.286	5.50
RD-9	6.50	1.57	10.21	0.056	0.571	11.00
RD-10	7.20	1.57	11.30	0.056	0.633	12.20
RD-12	8.60	1.57	13.50	0.056	0.756	14.60
RD-15	10.80	1.57	16.96	0.056	0.950	18.30
RD-20	10.20	1.56	15.91	0.124	1.973	38.10
RD-25	12.00	1.56	18.72	0.124	2.321	44.80
RD-30	14.40	1.56	22.46	0.124	2.786	53.70

II. Non Residential Dwelling Unit Equivalent (DUE) Factors

ZONING	A PEAK HOUR VEHICLE TRIPS PER ACRE	B TYPICAL VEHICLE OCCUPANCY	C PEAK HOUR TRIPS PER ACRE (AxB)	D PERCENT TRANSIT TRIPS /1	E PEAK HOUR TRANSIT TRIPS/ACRE /1 (Cx D)	F PEAK HOUR TRIPS PER ACRE (DUE FACTOR) 9.2x(E/0.48)
M-1/M-2/IR/UR	6.80	1.40	9.52	0.05	0.48	9.20
MP	18.00	1.40	25.20	0.05	1.26	24.40
BP	28.30	1.35	38.21	0.05	1.91	36.90
SC	69.80	1.64	114.47	0.03	3.43	66.40
GC	55.50	1.64	91.02	0.03	2.73	52.80
LC	55.50	1.64	91.02	0.03	2.73	52.80
TC	55.50	1.64	91.02	0.01	0.91	17.60

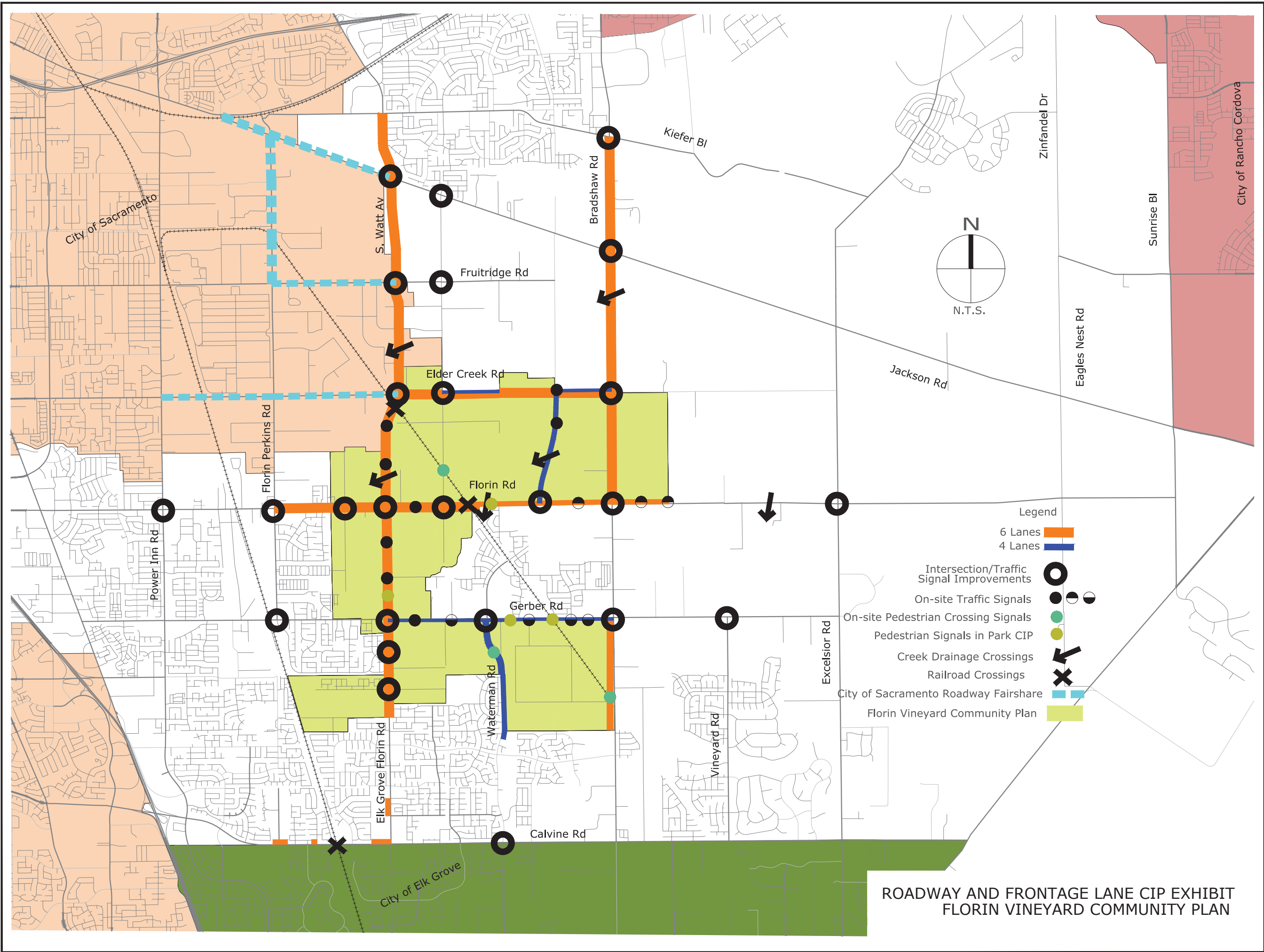
/1 From NCHRP Report 187, Transportation Research Board, 1978.

APPENDIX D

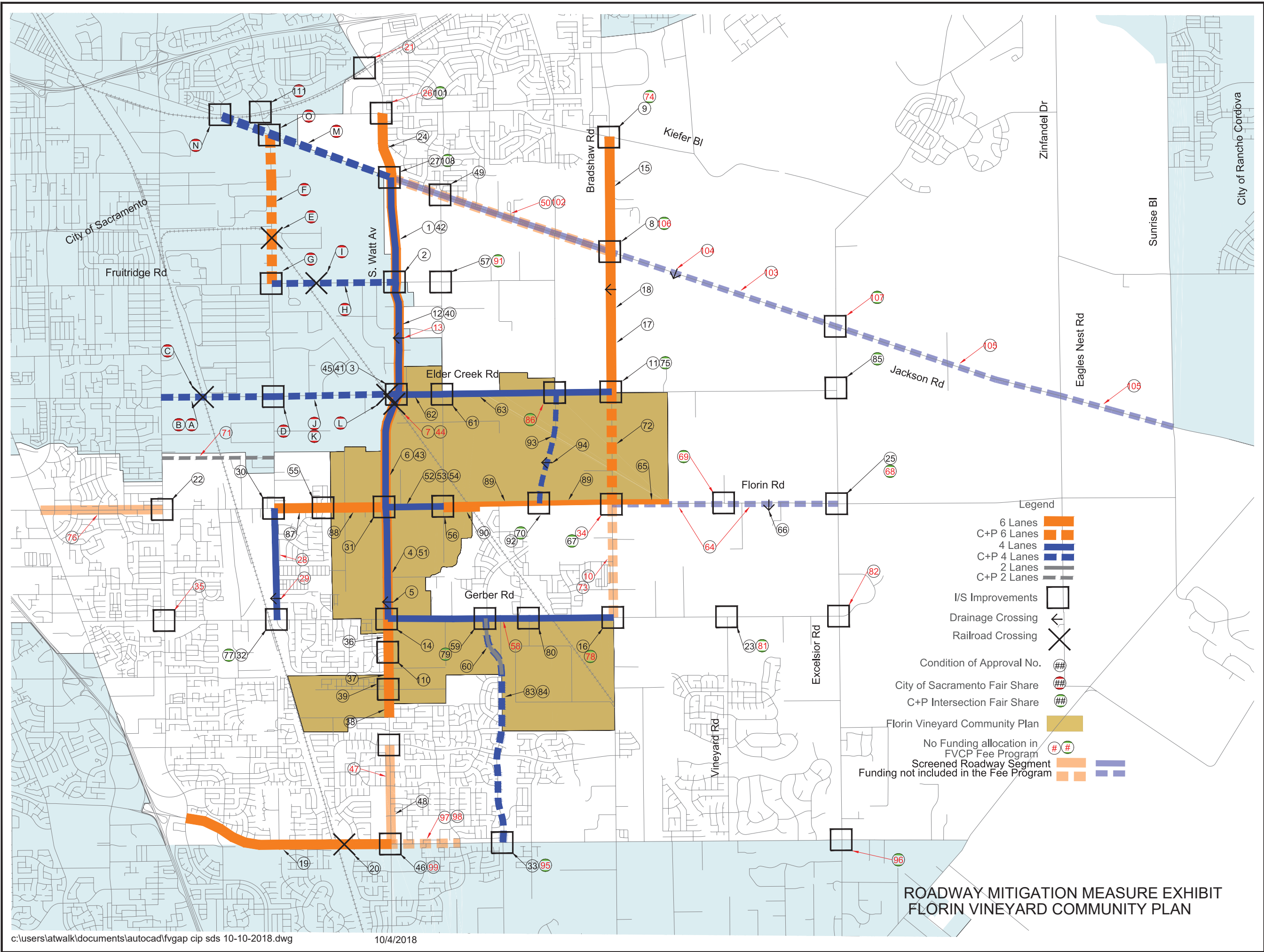
Roadway CIP Map

and

Roadway Mitigation Measures Map



ROADWAY AND FRONTAGE LANE CIP EXHIBIT
FLORIN VINEYARD COMMUNITY PLAN



- Legend**
- 6 Lanes [Orange thick line]
 - C+P 6 Lanes [Orange thick line with dashed blue border]
 - 4 Lanes [Blue thick line]
 - C+P 4 Lanes [Blue thick line with dashed orange border]
 - 2 Lanes [Thin grey line]
 - C+P 2 Lanes [Thin grey line with dashed blue border]
 - I/S Improvements [Square with diagonal lines]
 - Drainage Crossing [Arrow pointing left]
 - Railroad Crossing [X symbol]
 - Condition of Approval No. [Circle with #]
 - City of Sacramento Fair Share [Circle with #]
 - C+P Intersection Fair Share [Circle with #]
 - Florin Vineyard Community Plan [Brown shaded area]
 - No Funding allocation in FVCP Fee Program [Circle with #]
 - Screened Roadway Segment [Orange thick line]
 - Funding not included in the Fee Program [Blue thick line]

**ROADWAY MITIGATION MEASURE EXHIBIT
FLORIN VINEYARD COMMUNITY PLAN**

APPENDIX E

Conceptual Cost Estimate Summary

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Table A-2
Florin Vineyard Community Plan - Roadway CIP
Figure A-1.3
Roadway Cross Section index
Summary of Preliminary Per Foot Cost Estimate

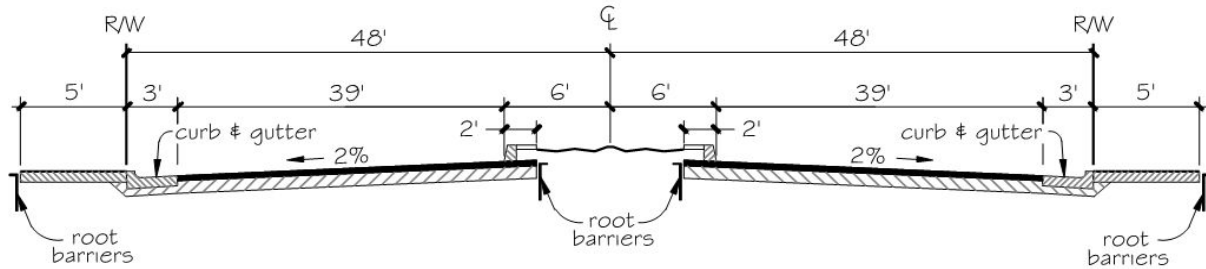
SHEET	PROJECT NAME	COST PER L.F
A-1.3.1	96' R/W (THOROUGHFARE) FULL SECTION (Class 'A')	\$ 2,956.00
A-1.3.2	74' R/W (ARTERIAL) FULL SECTION (Class 'A')	\$ 2,485.00
A-1.3.3	74' R/W (ARTERIAL) CENTER SECTION (Class 'D')	\$ 1,023.00
A-1.3.4	WIDEN EXIST. 2-LANE THOROUGHFARE CENTER SECTION TO 4 LANES (Class 'D')	\$ 486.00
A-1.3.5	96' R/W (THOROUGHFARE) CENTER SECTION (Class 'D')	\$ 1,455.00
A-1.3.6	96' R/W (THOROUGHFARE) HALF-SECTION (Class 'D')	\$ 906.00
A-1.3.7	96' R/W (THOROUGHFARE) ON-SITE & OFF-SITE FRONTAGE LANE (Class 'D')	\$ 243.00
A-1.3.8	12' MEDIAN	\$ 348.00
A-1.3.9	INTENTIONALLY LEFT BLANK	
A-1.3.10	96' R/W (THOROUGHFARE) SOUTH SIDE 2 CENTER LANES (Class 'D')	\$ 518.00
A-1.3.11	ON-SITE THOROUGHFARE FRONTAGE LANE (Class 'A')	\$ 1,239.00
A-1.3.12	74' R/W ON-SITE & OFF-SITE ARTERIAL FRONTAGE LANE (Class 'D')	\$ 221.00
A-1.3.13	74' R/W ON-SITE ARTERIAL FRONTAGE LANE (Class 'A')	\$ 1,216.00
A-1.3.14	74' R/W ON-SITE ARTERIAL CENTER SECTION (CLASS D)	\$ 1,339.00
COA #1	S. Watt Ave - Fruitridge to SR16 (County Minimum Alternative)	\$ 4,651,000.00
COA #4	Elk Grove Florin Rd - Elder Creek to Florin Rd (County Project)	\$ 8,110,565.00
COA #6	South Watt - Elder Creek Rd to Florin Rd	\$ 6,259,000.00
COA #12	South Watt - Elder Creek Rd to Fruitridge Rd	\$ 11,302,000.00
COA #15	Bradshaw Rd: Kiefer to SR-16	\$ 8,716,000.00
COA #24	South Watt Ave.: Kiefer to SR 16	\$ 447.00
COA#28	Typical 84' R/W Arterial - Widen Exist. Section	\$ 4,846,000.00
COA #60a	Waterman from Vintage Park Dr to Gerber Rd.	\$ 1,717,000.00
COA #60b	Waterman from Vintage Park Drive to Gerber Rd.	\$ 2,827,680.00

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

Table A-3
Florin Vineyard Community Plan - Roadway CIP
Figure A-1.3.1
Roadway Cross Section index
Preliminary Per Foot Cost Estimate
Typical 96' R/W Thoroughfare

Project Description:
12' Landscaped Median (41' Pavement, 5' Sidewalk and 3' C&G Each Side)



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	7.1	\$ 128.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 128.00
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	1	\$ 30.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 30.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	3.3	\$ 333.13
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	8.7	\$ 177.12
SIDEWALK	SF	\$ 6.00	10	\$ 60.00
CURB & GUTTER	LF	\$ 26.00	2	\$ 52.00
MEDIAN CURB & 16" CONCRETE LANDSCAPE STR	LF	\$ 17.00	2	\$ 34.00
TOTAL OR ITEM 3 PAVEMENT				\$ 656.25
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	1	\$ 63.64
JOINT TRENCH	LF	\$ 380.00	1	\$ 380.00
LANDSCAPING	SF	\$ 15.00	8	\$ 120.00
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 563.64
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 1,377.89	\$ 413.37
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 413.37

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00	0	\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 1,791.26
CONTINGENCY	%	15.0%	\$ 1,791.26	\$ 268.69
TOTAL CONSTRUCTION COST				\$ 2,059.94
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 2,059.94	\$ 61.80
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 2,059.94	\$ 30.90
DESIGN ENGINEERING	%	12.0%	\$ 2,059.94	\$ 247.19
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 2,059.94	\$ 30.90
CONSTRUCTION STAKING	%	2.5%	\$ 2,059.94	\$ 51.50
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 2,059.94	\$ 267.79
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 690.08
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 2,059.94	\$ 103.00
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 103.00
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 2,059.94	\$ 41.20
TOTAL FOR ITEM 10 UTILITIES				\$ 41.20
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 2,059.94	\$ 61.80
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 61.80

GRAND TOTAL \$ 2,956.00

NOTES:

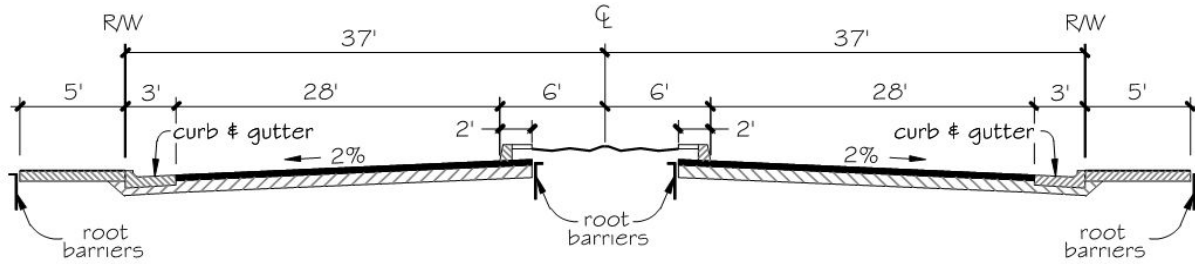
- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

Table A-4
Florin Vineyard Community Plan - Roadway CIP
Figure A-1.3.2
Roadway Cross Section index
Preliminary Per Foot Cost Estimate
Typical 74' R/W Arterial

Project Description:
12' Landscaped Median plus 30' Pavement, 5' Sidewalk and 3' C&G Each Side



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	5.0	\$ 90.44
TOTAL FOR ITEM 1 EARTHWORK				\$ 90.44
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	1	\$ 30.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 30.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	2.1	\$ 206.25
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	6.0	\$ 122.20
SIDEWALK	SF	\$ 6.00	10	\$ 60.00
CURB & GUTTER	LF	\$ 26.00	2	\$ 52.00
MEDIAN CURB & 16" CONCRETE LANDSCAPE STR	LF	\$ 17.00	2	\$ 34.00
TOTAL OR ITEM 3 PAVEMENT				\$ 474.45
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	1	\$ 63.64
JOINT TRENCH	LF	\$ 380.00	1	\$ 380.00
LANDSCAPING	SF	\$ 15.00	8	\$ 120.00
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 563.64
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 1,158.53	\$ 347.56
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 347.56

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00	0	\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 1,506.09
CONTINGENCY	%	15.0%	\$ 1,506.09	\$ 225.91
TOTAL CONSTRUCTION COST				\$ 1,732.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 1,732.00	\$ 51.96
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 1,732.00	\$ 25.98
DESIGN ENGINEERING	%	12.0%	\$ 1,732.00	\$ 207.84
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 1,732.00	\$ 25.98
CONSTRUCTION STAKING	%	2.5%	\$ 1,732.00	\$ 43.30
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 1,732.00	\$ 225.16
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 580.22
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 1,732.00	\$ 86.60
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 86.60
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 1,732.00	\$ 34.64
TOTAL FOR ITEM 10 UTILITIES				\$ 34.64
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 1,732.00	\$ 51.96
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 51.96

GRAND TOTAL \$ 2,485.00

NOTES:

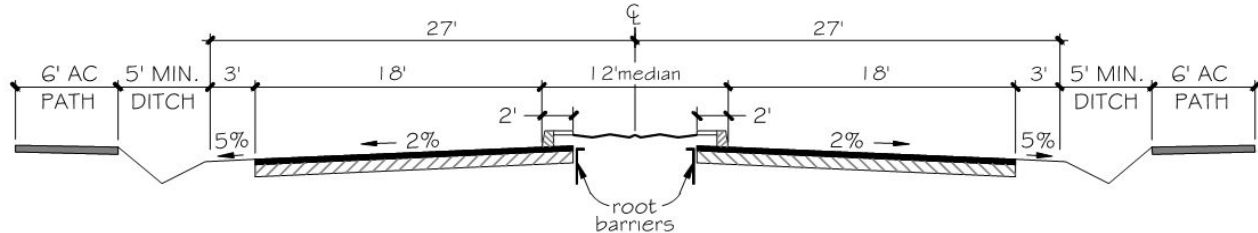
- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

Table A-5
Florin Vineyard Community Plan - Roadway CIP
Figure A-1.3.3
Roadway Cross Section index
Preliminary Per Foot Cost Estimate
Typical 74' R/W (Arterial) Center-Section

Project Description:
12' Landscape Median, 18' Pavement, 3' Shoulder, 5' Roadside Ditch and 6' AC Path (Each Side)'



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	3.3	\$ 58.67
TOTAL FOR ITEM 1 EARTHWORK				\$ 58.67
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1	\$ 15.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 15.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC + 4" AC)	TON	\$ 100.00	1.7	\$ 167.50
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	4.0	\$ 81.46
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 16" CONCRETE LANDSCAPE STR	LF	\$ 17.00	2	\$ 34.00
TOTAL OR ITEM 3 PAVEMENT				\$ 282.96
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	8	\$ 120.00
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 120.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 476.63	\$ 142.99
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 142.99

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 619.62
CONTINGENCY	%	15.0%	\$ 619.62	\$ 92.94
TOTAL CONSTRUCTION COST				\$ 712.56
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 712.56	\$ 21.38
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 712.56	\$ 10.69
DESIGN ENGINEERING	%	12.0%	\$ 712.56	\$ 85.51
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 712.56	\$ 10.69
CONSTRUCTION STAKING	%	2.5%	\$ 712.56	\$ 17.81
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 712.56	\$ 92.63
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 238.71
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 712.56	\$ 35.63
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 35.63
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 712.56	\$ 14.25
TOTAL FOR ITEM 10 UTILITIES				\$ 14.25
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 712.56	\$ 21.38
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 21.38

GRAND TOTAL \$ 1,023.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20
- 3 OUTSIDE 11' TRAVEL LANE, CURB, GUTTER & S/W ARE NOT INCLUDED
- 4 WHEN CONSTRUCTING CONCURRENT W/FRONTAGE, COST IS REDUCED BY DRAINAGE AND AC PATH

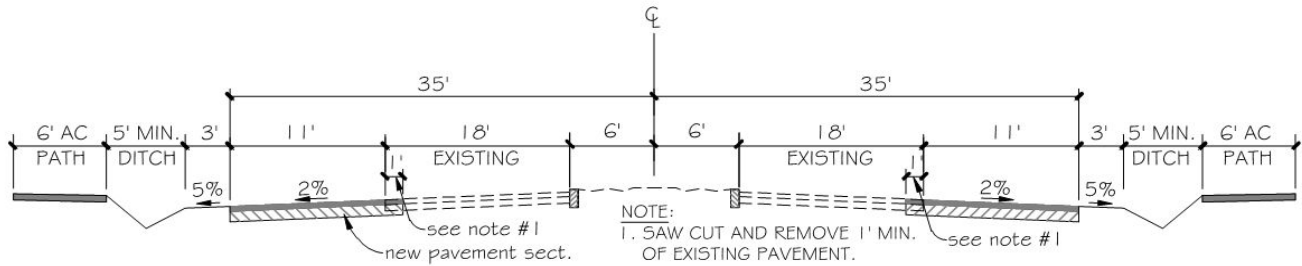
Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

Table A-6
Florin Vineyard Community Plan - Roadway CIP
Figure A-1.3.4

Roadway Cross Section index
Preliminary Per Foot Cost Estimate
Widen 96' R/W (Thoroughfare) 2-Lane Center Section to 4 Lanes

Project Description:
12' Pavement, 3' Shoulder, 5' Roadside Ditch and 6' AC Path (Each Side) - assumes 1' sawcut & pvm't removal on ex. outside edge



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	1.8	\$ 32.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 32.00
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1	\$ 15.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 15.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" + 4" AC)	TON	\$ 100.00	1.3	\$ 127.50
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	2.5	\$ 51.84
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 179.34
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 226.34	\$ 67.90
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 67.90

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 294.24
CONTINGENCY	%	15.0%	\$ 294.24	\$ 44.14
TOTAL CONSTRUCTION COST				\$ 338.38
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 338.38	\$ 10.15
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 338.38	\$ 5.08
DESIGN ENGINEERING	%	12.0%	\$ 338.38	\$ 40.61
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 338.38	\$ 5.08
CONSTRUCTION STAKING	%	2.5%	\$ 338.38	\$ 8.46
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 338.38	\$ 43.99
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 113.36
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 338.38	\$ 16.92
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 16.92
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 338.38	\$ 6.77
TOTAL FOR ITEM 10 UTILITIES				\$ 6.77
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 338.38	\$ 10.15
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 10.15

GRAND TOTAL \$ 486.00

NOTES:

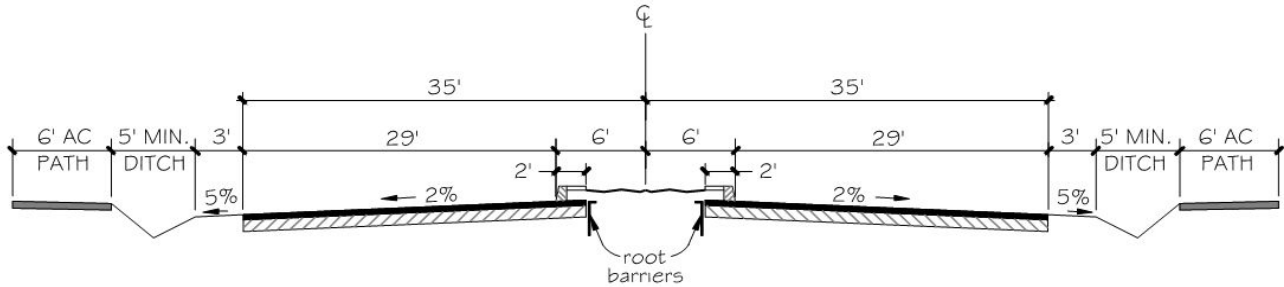
- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20
- 3 OUTSIDE 11' TRAVEL LANE, CURB, GUTTER & S/W ARE NOT INCLUDED
- 4 OVERLAY OF EXIST. SECTION NOT REQUIRED - SECTION ASSUMED PER COUNTY STD.

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

Table A-7
Florin Vineyard Community Plan - Roadway CIP
Figure A-1.3.5
Roadway Cross Section index
Preliminary Per Foot Cost Estimate
Typical 96' R/W (Thoroughfare) 4 - Lane Center Section

Project Description:
12' Landscaped Median plus 31' Pavement, 3' Shoulder, 5' Roadside Ditch, and 6' AC Path (Each Side)



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	5.2	\$ 93.33
TOTAL FOR ITEM 1 EARTHWORK				\$ 93.33
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1	\$ 15.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 15.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" + 4" AC)	TON	\$ 100.00	2.8	\$ 281.88
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	6.6	\$ 133.92
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 16" CONCRETE LANDSCAPE STR	LF	\$ 17.00	2	\$ 34.00
TOTAL OR ITEM 3 PAVEMENT				\$ 449.80
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	8	\$ 120.00
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 120.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 678.13	\$ 203.44
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 203.44

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 881.57
CONTINGENCY	%	15.0%	\$ 881.57	\$ 132.24
TOTAL CONSTRUCTION COST				\$ 1,013.81
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 1,013.81	\$ 30.41
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 1,013.81	\$ 15.21
DESIGN ENGINEERING	%	12.0%	\$ 1,013.81	\$ 121.66
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 1,013.81	\$ 15.21
CONSTRUCTION STAKING	%	2.5%	\$ 1,013.81	\$ 25.35
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 1,013.81	\$ 131.79
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 339.63
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 1,013.81	\$ 50.69
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 50.69
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 1,013.81	\$ 20.28
TOTAL FOR ITEM 10 UTILITIES				\$ 20.28
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 1,013.81	\$ 30.41
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 30.41

GRAND TOTAL \$ 1,455.00

NOTES:

- FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20
- 3 OUTSIDE 11' TRAVEL LANE, CURB, GUTTER & S/W ARE NOT INCLUDED
- 4 WHEN CONSTRUCTING CONCURRENT W/FRONTAGE, COST IS REDUCED BY DRAINAGE AND AC PATH

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job #: 27121.000
By: N.T./HF

Florin Vineyard Community Plan - Roadway CIP

Figure A-1.3.6

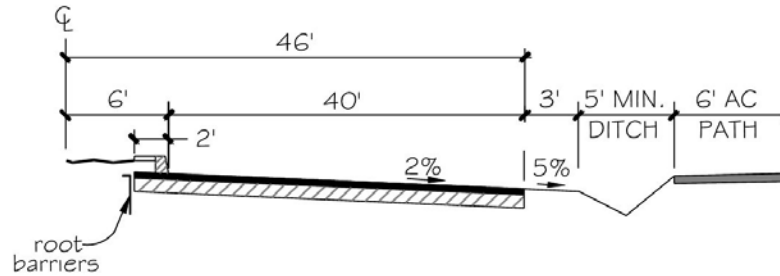
Roadway Cross Section index

Preliminary Per Foot Cost Estimate

Typical Off-Site Thoroughfare Half Section

Project Description:

6' Half Median, 40' Pavement, 3' Shoulder, 5' Roadside Ditch, 6' AC Path= 58' (W/O Soundwall)
Widening / Outside Travel Lane - One side Only



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	3.4	\$ 61.33
TOTAL FOR ITEM 1 EARTHWORK				\$ 61.33
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0.5	\$ 7.50
TOTAL FOR ITEM 2 DRAINAGE				\$ 7.50
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" + 4" AC)	TON	\$ 100.00	1.9	\$ 185.63
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	4.4	\$ 90.72
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 16" CONCRETE LANDSCAPE STR	LF	\$ 17.00	1	\$ 17.00
TOTAL OR ITEM 3 PAVEMENT				\$ 293.35
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	4	\$ 60.00
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 60.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 422.18	\$ 126.65
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 126.65

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 548.83
CONTINGENCY	%	15.0%	\$ 548.83	\$ 82.33
TOTAL CONSTRUCTION COST				\$ 631.16
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 631.16	\$ 18.93
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 631.16	\$ 9.47
DESIGN ENGINEERING	%	12.0%	\$ 631.16	\$ 75.74
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 631.16	\$ 9.47
CONSTRUCTION STAKING	%	2.5%	\$ 631.16	\$ 15.78
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 631.16	\$ 82.05
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 211.44
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 631.16	\$ 31.56
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 31.56
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 631.16	\$ 12.62
TOTAL FOR ITEM 10 UTILITIES				\$ 12.62
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 631.16	\$ 18.93
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 18.93

GRAND TOTAL \$ 906.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

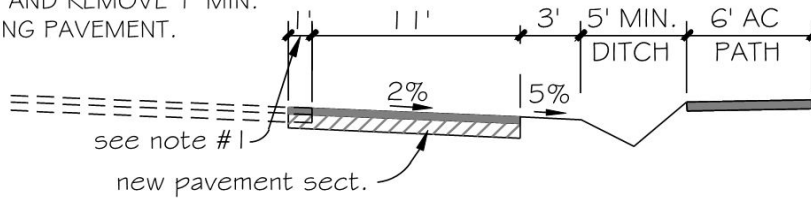
Table A-9
Florin Vineyard Community Plan - Roadway CIP
Figure A-1.3.7

Roadway Cross Section index
Preliminary Per Foot Cost Estimate
Typical On-Site and Off-Site Thoroughfare Frontage Lane

Project Description:
12' Pavement, 3' Shoulder, 5' Roadside Ditch, 6' AC Path (w/o Soundwall; assumes 1' saw cut & pvm't removal of exist. edge)
Widening / Outside Travel Lane - One Side Only

NOTE:

1. SAW CUT AND REMOVE 1' MIN. OF EXISTING PAVEMENT.



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0.9	\$ 16.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 16.00
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0.5	\$ 7.50
TOTAL FOR ITEM 2 DRAINAGE				\$ 7.50
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" + 4" AC)	TON	\$ 100.00	0.6	\$ 63.75
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	1.3	\$ 25.92
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 89.67
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 113.17	\$ 33.95
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 33.95

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 147.12
CONTINGENCY	%	15.0%	\$ 147.12	\$ 22.07
TOTAL CONSTRUCTION COST				\$ 169.19
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 169.19	\$ 5.08
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 169.19	\$ 2.54
DESIGN ENGINEERING	%	12.0%	\$ 169.19	\$ 20.30
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 169.19	\$ 2.54
CONSTRUCTION STAKING	%	2.5%	\$ 169.19	\$ 4.23
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 169.19	\$ 21.99
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 56.68
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 169.19	\$ 8.46
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 8.46
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 169.19	\$ 3.38
TOTAL FOR ITEM 10 UTILITIES				\$ 3.38
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 169.19	\$ 5.08
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 5.08

GRAND TOTAL \$ 243.00

NOTES:

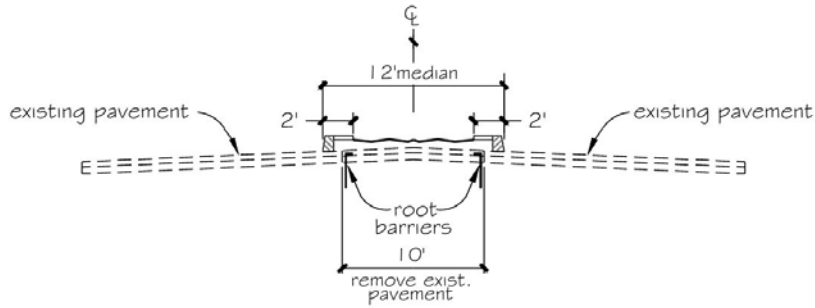
- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

Table A-10
Florin Vineyard Community Plan - Roadway CIP
Figure A-1.3.8
Roadway Cross Section index
Preliminary Per Foot Cost Estimate
12' Median (in exist. roadway)

Project Description:
12' Landscape Median = 12'



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0.7	\$ 13.33
TOTAL FOR ITEM 1 EARTHWORK				\$ 13.33
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE	TON	\$ 100.00	0.0	\$ -
AGGREGATE BASE	TON	\$ 20.43	0.0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 16" CONCRETE LANDSCAPE STR	LF	\$ 17.00	2	\$ 34.00
TOTAL OR ITEM 3 PAVEMENT				\$ 34.00
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	8	\$ 120.00
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 120.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ 50.20
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 50.20

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 217.53
CONTINGENCY	%	15.0%		\$ 32.63
TOTAL CONSTRUCTION COST				\$ 250.16
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 250.16	\$ 7.50
ENVIROMENTAL DOCUMENT	%	1.5%	\$ -	\$ -
DESIGN ENGINEERING	%	12.0%	\$ 250.16	\$ 30.02
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 250.16	\$ 3.75
CONSTRUCTION STAKING	%	2.5%	\$ 250.16	\$ 6.25
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 250.16	\$ 32.52
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 80.05
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 250.16	\$ 12.51
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 12.51
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 250.16	\$ 5.00
TOTAL FOR ITEM 10 UTILITIES				\$ 5.00
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ -	\$ -
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ -

GRAND TOTAL \$ 348.00

NOTES:

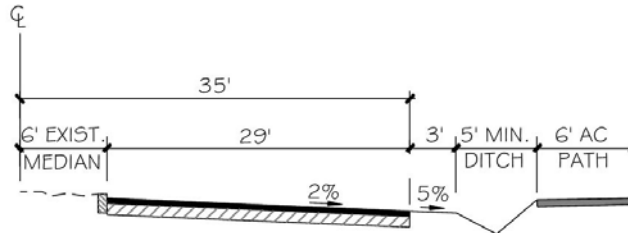
1. "Utility Relocation" assumed to cover items such as adjustment of valves to grade, setting valve boxes, etc.

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job #: 27121.000
By: N.T./HF

Table A-12
Florin Vineyard Community Plan - Roadway CIP
Figure A-1.3.10
Roadway Cross Section index
Preliminary Per Foot Cost Estimate
Typical 96' R/W (Thoroughfare) South Side Only

Project Description:
29' Pavement and 3' Shoulder, 5' Roadside Ditch, 6' AC Path, South Side Only, not incl. outside travel lane



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	2.1	\$ 38.67
TOTAL FOR ITEM 1 EARTHWORK				\$ 38.67
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0.5	\$ 7.50
TOTAL FOR ITEM 2 DRAINAGE				\$ 7.50
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" + 4" AC)	TON	\$ 100.00	1.3	\$ 132.81
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	3.1	\$ 62.64
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 195.45
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 241.62	\$ 72.49
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 72.49

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 314.11
CONTINGENCY	%	15.0%	\$ 314.11	\$ 47.12
TOTAL CONSTRUCTION COST				\$ 361.22
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 361.22	\$ 10.84
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 361.22	\$ 5.42
DESIGN ENGINEERING	%	12.0%	\$ 361.22	\$ 43.35
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 361.22	\$ 5.42
CONSTRUCTION STAKING	%	2.5%	\$ 361.22	\$ 9.03
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 361.22	\$ 46.96
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 121.01
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 361.22	\$ 18.06
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 18.06
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 361.22	\$ 7.22
TOTAL FOR ITEM 10 UTILITIES				\$ 7.22
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 361.22	\$ 10.84
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 10.84

GRAND TOTAL \$ 518.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20
- 3 OUTSIDE 11' TRAVEL LANE, CURB, GUTTER & S/W ARE NOT INCLUDED

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

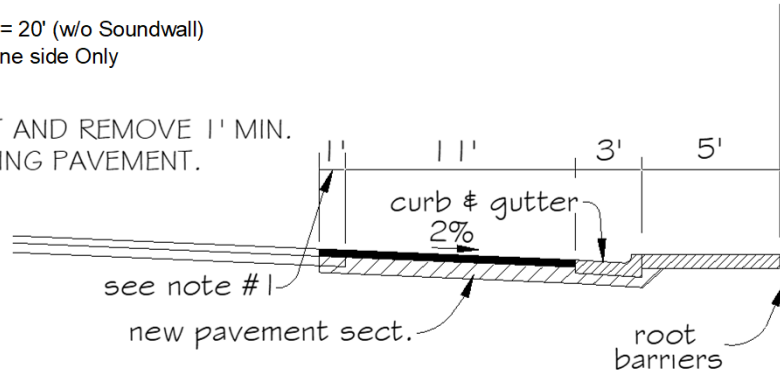
Date: 10/18/2017
Job # 27121.000
By: N.T./HF

Table A-13
Florin Vineyard Community Plan - Roadway CIP
Figure A-1.3.11
Roadway Cross Section index
Preliminary Per Foot Cost Estimate

Typical On-Site Thoroughfare Frontage Lane (only to be used at locations of no future development)

Project Description:
11' Pavement, 3' C&G, 5' Sidewalk = 20' (w/o Soundwall)
Widening / Outside Travel Lane - One side Only

NOTE:
1. SAW CUT AND REMOVE 1' MIN.
OF EXISTING PAVEMENT.



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	1.1	\$ 20.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 20.00
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0.5	\$ 15.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 15.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	0.5	\$ 48.75
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	1.3	\$ 25.92
SIDEWALK	SF	\$ 6.00	5	\$ 30.00
CURB & GUTTER	LF	\$ 26.00	1	\$ 26.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 130.67
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0.5	\$ 31.82
JOINT TRENCH	LF	\$ 380.00	1	\$ 380.00
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 411.82
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 577.49	\$ 173.25
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 173.25

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 750.74
CONTINGENCY	%	15.0%	\$ 750.74	\$ 112.61
TOTAL CONSTRUCTION COST				\$ 863.35
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 863.35	\$ 25.90
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 863.35	\$ 12.95
DESIGN ENGINEERING	%	12.0%	\$ 863.35	\$ 103.60
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 863.35	\$ 12.95
CONSTRUCTION STAKING	%	2.5%	\$ 863.35	\$ 21.58
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 863.35	\$ 112.24
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 289.22
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 863.35	\$ 43.17
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 43.17
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 863.35	\$ 17.27
TOTAL FOR ITEM 10 UTILITIES				\$ 17.27
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 863.35	\$ 25.90
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 25.90

GRAND TOTAL \$ 1,239.00

WHEN CONSTRUCTED CONCURRENTLY WITH CENTER SECTION IMP'S, USE \$1,219.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

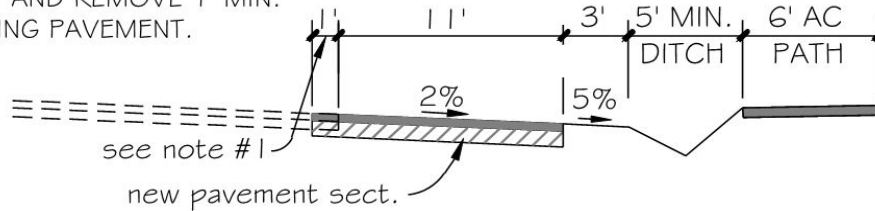
Table A-14
Florin Vineyard Community Plan - Roadway CIP
Figure A-1.3.12

Roadway Cross Section index
Preliminary Per Foot Cost Estimate
Typical On-Site and Off-Site 74' R/W (Arterial) Frontage Lane Improvements

Project Description:
12' Pavement, 3' Shoulder, 5' Roadside Ditch, 6' AC Path (w/o soundwall)
Wideneing / Outside Travel Lane - One Side Only

NOTE:

1. SAW CUT AND REMOVE 1' MIN. OF EXISTING PAVEMENT.



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0.8	\$ 14.67
TOTAL FOR ITEM 1 EARTHWORK				\$ 14.67
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0.5	\$ 7.50
TOTAL FOR ITEM 2 DRAINAGE				\$ 7.50
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 4" AC)	TON	\$ 100.00	0.6	\$ 56.25
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	1.2	\$ 24.44
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 80.69
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 102.86	\$ 30.86
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 30.86

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 133.71
CONTINGENCY	%	15.0%	\$ 133.71	\$ 20.06
TOTAL CONSTRUCTION COST				\$ 153.77
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 153.77	\$ 4.61
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 153.77	\$ 2.31
DESIGN ENGINEERING	%	12.0%	\$ 153.77	\$ 18.45
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 153.77	\$ 2.31
CONSTRUCTION STAKING	%	2.5%	\$ 153.77	\$ 3.84
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 153.77	\$ 19.99
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 51.51
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 153.77	\$ 7.69
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 7.69
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 153.77	\$ 3.08
TOTAL FOR ITEM 10 UTILITIES				\$ 3.08
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 153.77	\$ 4.61
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 4.61

GRAND TOTAL \$ 221.00

WHEN CONSTRUCTED CONCURRENTLY WITH CENTER SECTION IMP'S, USE \$206.00

NOTES:

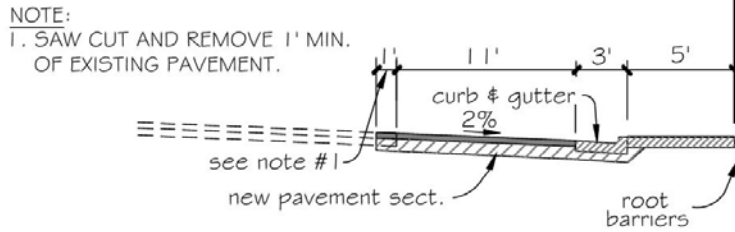
- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20
- 3 OUTSIDE CURB, GUTTER, S/W, AND STREET LIGHTS ARE NOT INCLUDED
- 4 WHEN CONSTRUCTING CONCURRENT W/CENTER SECTION, COST IS REDUCED BY 1' PVM'T CUT/REPLACE

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

Table A-15
Florin Vineyard Community Plan - Roadway CIP
Figure A-1.3.13
Roadway Cross Section index
Preliminary Per Foot Cost Estimate
Typical On-Site 74' R/W (Arterial) Frontage Lane Improvements

Project Description:
12' Pavement, 3' C&G, 5' Sidewalk (W/O Soundwall)
Widening / Outside Travel Lane - One Side Only



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	1.0	\$ 18.33
TOTAL FOR ITEM 1 EARTHWORK				\$ 18.33
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0.5	\$ 15.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 15.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	0.4	\$ 41.25
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	1.2	\$ 24.44
SIDEWALK	SF	\$ 6.00	5	\$ 30.00
CURB & GUTTER	LF	\$ 26.00	1	\$ 26.00
MEDIAN CURB & 16" CONCRETE LANDSCAPE STR	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 121.69
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0.5	\$ 31.82
JOINT TRENCH	LF	\$ 380.00	1	\$ 380.00
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 411.82
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 566.84	\$ 170.05
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 170.05

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 736.90
CONTINGENCY	%	15.0%	\$ 736.90	\$ 110.53
TOTAL CONSTRUCTION COST				\$ 847.43
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 847.43	\$ 25.42
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 847.43	\$ 12.71
DESIGN ENGINEERING	%	12.0%	\$ 847.43	\$ 101.69
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 847.43	\$ 12.71
CONSTRUCTION STAKING	%	2.5%	\$ 847.43	\$ 21.19
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 847.43	\$ 110.17
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 283.89
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 847.43	\$ 42.37
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 42.37
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 847.43	\$ 16.95
TOTAL FOR ITEM 10 UTILITIES				\$ 16.95
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 847.43	\$ 25.42
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 25.42

GRAND TOTAL \$ 1,216.00

WHEN CONSTRUCTED CONCURRENTLY WITH CENTER SECTION IMP'S, USE \$1,202.00

NOTES:

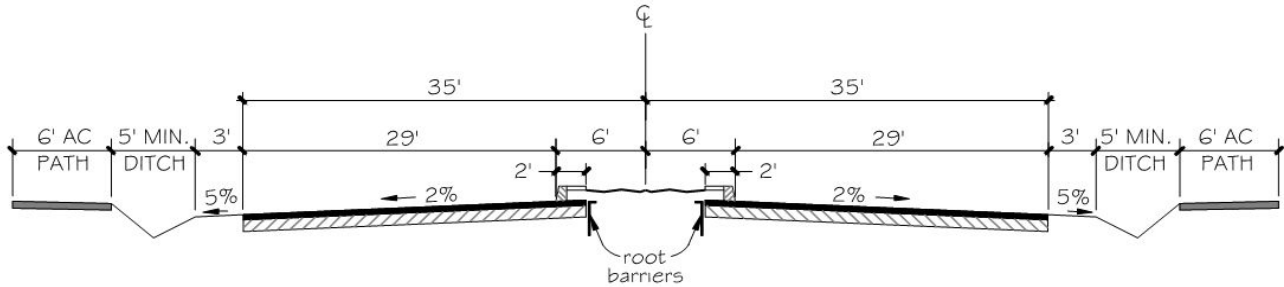
- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20
- 3 WHEN CONSTRUCTING CONCURRENT W/CENTER SECTION, COST IS REDUCED BY 1' PVM'T CUT/REPLACE

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

Table A-7
Florin Vineyard Community Plan - Roadway CIP
Figure A-1.3.14
Roadway Cross Section index
Preliminary Per Foot Cost Estimate
Typical 96' R/W (Arterial) 4 - Lane Center Section

Project Description:
12' Landscaped Median plus 31' Pavement, 3' Shoulder, 5' Roadside Ditch, and 6' AC Path (Each Side)



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	4.8	\$ 85.56
TOTAL FOR ITEM 1 EARTHWORK				\$ 85.56
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1	\$ 15.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 15.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 4" AC)	TON	\$ 100.00	2.4	\$ 243.13
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	6.2	\$ 126.27
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 16" CONCRETE LANDSCAPE STR	LF	\$ 17.00	2	\$ 34.00
TOTAL OR ITEM 3 PAVEMENT				\$ 403.40
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	8	\$ 120.00
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 120.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 623.95	\$ 187.19
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 187.19

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 811.14
CONTINGENCY	%	15.0%	\$ 811.14	\$ 121.67
TOTAL CONSTRUCTION COST				\$ 932.81
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 932.81	\$ 27.98
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 932.81	\$ 13.99
DESIGN ENGINEERING	%	12.0%	\$ 932.81	\$ 111.94
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 932.81	\$ 13.99
CONSTRUCTION STAKING	%	2.5%	\$ 932.81	\$ 23.32
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 932.81	\$ 121.26
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 312.49
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 932.81	\$ 46.64
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 46.64
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 932.81	\$ 18.66
TOTAL FOR ITEM 10 UTILITIES				\$ 18.66
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 932.81	\$ 27.98
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 27.98

GRAND TOTAL \$ 1,339.00

WHEN CONSTRUCTED CONCURRENTLY WITH FRONTAGE IMP'S, USE \$1,325.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20
- 3 OUTSIDE 11' TRAVEL LANE, CURB, GUTTER & S/W ARE NOT INCLUDED
- 4 WHEN CONSTRUCTING CONCURRENT W/FRONTAGE, COST IS REDUCED BY DRAINAGE AND AC PATH

**Appendix E:
CONCEPTUAL COST ESTIMATE SUMMARY**

**SOUTH WATT AVENUE - FRUITRIDGE RD TO JACKSON RD
TOTAL PROJECT EXPENDITURES**

Nov-16

ASSUMPTIONS:

Project Length 4,360 LF
Structural Section: 6.5" AC over 23" AB (thoroughfare)
Streetlights not included

COA #1

RESOURCE	COST
DESIGN	
Design Services (20%)	603,012
Survey Labor (3.5%)	105,527
Material Testing	25,000
Environmental	
PER (with mitigation)	20,000
Permits	0
Right of Way	
Real Estate Labor	10,000
Title Reports	500
Acquisition	13,250
Total PS&E	777,000
Construction	
Contract	3,015,060
Construction Support	
Construction Inspection (12%)	361,807
Construction Engineering (2%)	60,301
Construction Surveys (3.5%)	105,527
Materials Testing (1%)	30,151
Change Order (10%)	301,506
Total Construction	3,874,000
TOTAL PROJECT EXPENDITURES	4,651,000

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

County of Sacramento
Municipal Services Agency - Department of Transportation
PRELIMINARY CONSTRUCTION ESTIMATE

Project: **SOUTH WATT AVE - Fruitridge to Jackson**

Date: 11/01/16

Item	Description	Unit	Quantity	Unit Price	Amount
1	SWPPP	AL	1	25,000.00	25,000.00
2	Water Pollution Control	AL	1	75,000.00	75,000.00
3	Clearing & Grubbing	LS	1	35,000.00	35,000.00
4	Roadway Excavation	CY	13,850	29.00	401,650.00
5	Aggregate Base, Class 2	TN	18,100	36.00	651,600.00
6	Type 4 Curb	LF	6,700	17.00	113,900.00
7	Asphalt Concete (Type A)	TN	6,240	85.00	530,400.00
8	Slurry Seal (Type III)	SF	141,830	0.60	85,098.00
9	Median Landscape	LS	1	494,400.00	494,400.00
					-
SUBTOTAL					2,412,048
CONTINGENCY (25%)					603,012.00
TOTAL CONSTRUCTION ESTIMATE					3,015,060

4651000

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

**Florin Vineyard Community Plan - Roadway CIP
COA #4
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Elk Grove Florin - Elder Creek To Florin Road**

Project Description:

Widen existing 2 lane rural road to 4 lane thoroughfare center section. Improvements begin at Elder Creek crossing to 500' south of Florin road intersection.

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY
DEPARTMENT OF TRANSPORTATION**

ENGINEER'S ESTIMATE - "C"

Project: Elk Grove-Florin Road Widening
Limits: Elk Grove-Florin Rd (Omitted Elk Grove-Florin Rd & Florin Rd Intersection & Florin Road Improvements)

Date: August 2017
Prepared By: JVC & YTR

BID OPEN:		ENGINEER'S ESTIMATE			
ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	Project Information Signs	4	EA	\$300.00	\$ 1,200.00
2	Survey Monument (Type D)	1	EA	\$1,000.00	\$ 1,000.00
3	Clearing and Grubbing	1	LS	\$80,000.00	\$ 80,000.00
4	Storm Water Pollution Program Preparation	1	Allowance	\$7,000.00	\$ 7,000.00
5	Storm Water Pollution Control	1	Allowance	\$25,000.00	\$ 25,000.00
6	Roadway Excavation	30,415	CY	\$45.00	\$ 1,368,675.00
7	Imported Borrow	0	CY	\$50.00	\$ -
8	Asphalt Rubber Hot Mix-Gap Graded (ARHM-GG)	3,251	TN	\$125.00	\$ 406,375.00
9	Asphalt Concrete	6,437	TN	\$115.00	\$ 740,255.00
10	Aggregate Base (Class 2)	25,792	TN	\$85.00	\$ 2,192,320.00
11	PCC Curb Type 4/4A	5,080	LF	\$35.00	\$ 177,800.00
12	Detail 9 - Thermoplastic Striping	6,070	LF	\$0.50	\$ 3,035.00
13	Detail 22 - Thermoplastic Striping	850	LF	\$1.50	\$ 1,275.00
14	Detail 32 - Thermoplastic Striping	555	LF	\$1.50	\$ 832.50
15	Detail 38 - Thermoplastic Striping	180	LF	\$1.50	\$ 270.00
16	Detail 39 - Thermoplastic Striping	6,955	LF	\$1.00	\$ 6,955.00

P:\Shared Folders\Projects\Elk Grove Florin Rd - Elder Creek to Florin\Estimates\For ATWALIEGF - B Plan Estimate C.xlsx

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
17	Detail 39A - Thermoplastic Striping	120	LF	\$1.00	\$ 120.00
18	Pavement Markings - Thermoplastic	235	SF	\$5.00	\$ 1,175.00
19	Pavement Marker (Type D)	117	EA	\$3.50	\$ 409.50
20	Pavement Marker (Type G)	134	EA	\$3.50	\$ 469.00
21	Pavement Marker (Type H)	106	EA	\$3.50	\$ 371.00
22	Object Marker (Type K-1 CA)	3	EA	\$6.00	\$ 18.00
23	Fence Relocation (Barbed Wire)	2,805	LF	\$15.00	\$ 42,075.00
24	Fence Relocation (Iron Fence)	150	LF	\$40.00	\$ 6,000.00
25	Fence Relocation (Chainlink Fence)	75	LF	\$25.00	\$ 1,875.00
26	Tree Removal	1	LS	\$45,000.00	\$ 45,000.00
27	Drainage	1	LS	\$85,000.00	\$ 85,000.00
TOTAL BASE BID (Items 1-27)					\$ 5,194,505.00

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Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

COUNTY OF SACRAMENTO
MUNICIPAL SERVICES
DEPARTMENT OF TRANSPORTATION

PRELIMINARY SUMMARY OF PROJECT COSTS

Project: Elk Grove-Florin Road Widening: Elder Creek to Florin Road

Limits: Segment C - Elder Creek (End of Bridge Project) to 500' south of intersection with Florin Road (Stations 360+50 to 396+80).

Date: August 24, 2017

ESTIMATED CONSTRUCTION COST (No Contingency) \$5,200,000.00

COST No.	COST DESCRIPTION	COST as % of CONSTRUCTION COST	AMOUNT
1	ROADWAY DESIGN	17	\$780,000
2	ENVIRONMENTAL (Permitting, CEQA & NEPA)	0.6	\$31,200.00
3	CONSTRUCTION INSPECTION	12	\$624,000.00
4	CONSTRUCTION ENGINEERING	0.75	\$39,000.00
5	MATERIAL LABORATORY (Material Testing)	1	\$62,400.00
6	REAL ESTATE LABOR (14 parcels, 13 owners @ \$12,500/owner)	13	\$162,500.00
7	RIGHT-OF-WAY (Per RE Documents)	85,000	\$85,000.00
8	COUNTY SURVEY	3	\$156,000.00
9	CONSTRUCTION COST	100	\$5,200,000.00
	Project SUB-TOTAL COST		\$7,140,100.00
	PROJECT CONTINGENCY (10% of Project SUB-TOTAL)		\$714,010.00
	PROJECT TOTAL COST		\$7,854,110.00

P:\Shared Folders\Projects\Elk Grove Florin Rd - Elder Creek to Florin\Estimates\For ATWAL\EGFR WIDENING SEGMENT 2 ALL COSTS.xlsx of 1
 2017 Estimate \$7,854,110
 Updated Estimate, December 2018 \$8,110,565

Appendix E:

SOUTH WATT AVENUE - FLORIN RD TO ELDER CREEK RD TOTAL PROJECT EXPENDITURES

COA #6

Nov-16

ASSUMPTIONS:

Project Length 4,620 LF

Structural Section: 6.5" AC over 23" AB (thoroughfare)

Streetlights not included

RESOURCE	COST
DESIGN	
Design Services (20%)	792,543
Survey Labor (3.5%)	138,695
Material Testing	25,000
Environmental	
PER (with mitigation)	20,000
Permits	0
Right of Way	
Real Estate Labor	155,000
Title Reports	6,500
Acquisition	29,000
Total PS&E	1,167,000
Construction	
Contract	3,962,713
Construction Support	
Construction Inspection (12%)	475,526
Construction Engineering (2%)	79,254
Construction Surveys (3.5%)	138,695
Materials Testing (1%)	39,627
Contingency (10%)	396,271
Total Construction	5,092,000
TOTAL PROJECT EXPENDITURES	6,259,000

Appendix E:

County of Sacramento
Municipal Services Agency - Department of Transportation
PRELIMINARY CONSTRUCTION ESTIMATE

Project: **SOUTH WATT AVE - Florin Rd to Elder Creek Rd**

Date: 11/01/16

Item	Description	Unit	Quantity	Unit Price	Amount
1	SWPPP	AL	1	25,000.00	25,000.00
2	Water Pollution Control	AL	1	75,000.00	75,000.00
3	Clearing & Grubbing	LS	1	35,000.00	35,000.00
4	Roadway Excavation	CY	17,380	29.00	504,020.00
5	Aggregate Base, Class 2	TN	23,850	36.00	858,600.00
6	Type 4 Curb	LF	27,230	17.00	462,910.00
7	Asphalt Concete (Type A)	TN	7,440	85.00	632,400.00
8	Slurry Seal (Type II)	SF	127,400	0.60	76,440.00
9	Median Landscape	LS	1	500,800.00	500,800.00
					-
					-
SUBTOTAL					3,170,170
CONTINGENCY (25%)					792,542.50
TOTAL CONSTRUCTION ESTIMATE					3,962,713

Appendix E:

SOUTH WATT AVENUE - ELDER CREEK RD TO FRUITRIDGE RD TOTAL PROJECT EXPENDITURES

COA #12

Nov-16

ASSUMPTIONS:

Project Length 4,760 LF

Structural Section: 6.5" AC over 23" AB (thoroughfare)

Streetlights not included

Includes bridge at Morrison Creek

RESOURCE	COST
DESIGN	
Design Services (20%)	1,381,250
Survey Labor (3.5%)	241,719
Material Testing	25,000
Consulting Services	300,000
Environmental	
PER (with mitigation)	20,000
Permits	50,000
Right of Way	
Real Estate Labor	110,000
Title Reports	4,000
Acquisition	19,275
Total PS&E	2,151,000
Construction	
Contract	6,906,250
Construction Support	
Construction Inspection (15%)	1,035,938
Construction Engineering (2%)	138,125
Construction Surveys (3.5%)	241,719
Materials Testing (2%)	138,125
Contingency (10%)	690,625
Total Construction	9,151,000
TOTAL PROJECT EXPENDITURES	11,302,000

Appendix E:

County of Sacramento
Municipal Services Agency - Department of Transportation
PRELIMINARY CONSTRUCTION ESTIMATE

Project: **SOUTH WATT AVE - Elder Creek to Fruitridge**
Date: 11/01/16

Item	Description	Unit	Quantity	Unit Price	Amount
1	SWPPP	AL	1	25,000.00	25,000.00
2	Water Pollution Control	AL	1	100,000.00	100,000.00
3	Clearing & Grubbing	LS	1	35,000.00	35,000.00
4	Roadway Excavation	CY	18,970	29.00	550,130.00
5	Aggregate Base, Class 2	TN	34,920	36.00	1,257,120.00
6	Type 4 Curb	LF	7,850	17.00	133,450.00
7	Asphalt Concete (Type A)	TN	9,160	85.00	778,600.00
8	Slurry Seal (Type II)	SF	99,000	0.60	59,400.00
9	Median Landscape	LS	1	516,300.00	516,300.00
9	Bridge at Morrison Creek	LS	1	2,070,000.00	2,070,000.00
					-
SUBTOTAL					5,525,000
CONTINGENCY (25%)					1,381,250.00
TOTAL CONSTRUCTION ESTIMATE					6,906,250

11302000

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job #: 27121.000
By: N.T./HF

Florin Vineyard Community Plan - Roadway CIP

COA #15

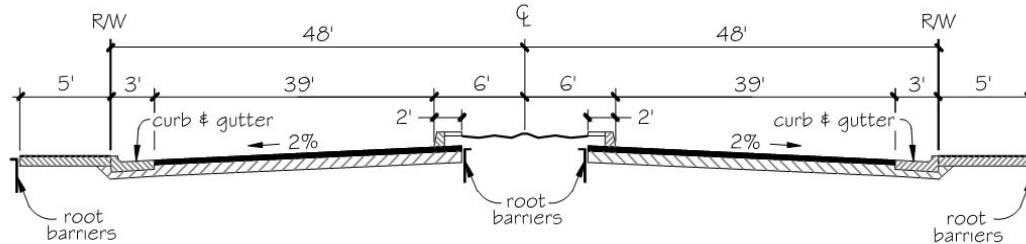
Segment Index

Preliminary Cost Estimate

Bradshaw Rd: Kiefer to SR-16

Project Description:

Widen Exist. 4 lane to 6-Lane Thoroughfare (incl. C&G, S/W). Construct median plus 1' saw cut both sides. Salvage 31' of existing pavement.



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	11,479	\$ 206,613.33
TOTAL FOR ITEM 1 EARTHWORK				\$ 206,613.33
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	7,970	\$ 239,100.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 239,100.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	5,323.9	\$ 532,390.63
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	13,855.8	\$ 283,074.14
SIDEWALK	SF	\$ 6.00	47,820	\$ 286,920.00
CURB & GUTTER	LF	\$ 26.00	7,970	\$ 207,220.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	7,970	\$ 135,490.00
TOTAL OR ITEM 3 PAVEMENT				\$ 1,445,094.77
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
JOINT TRENCH	LF	\$ 380.00	3985	\$ 1,514,300.00
LANDSCAPING	SF	\$ 15.00	43,830	\$ 657,450.00
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 2,171,750.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	4,062,558	\$ 1,218,767.43
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 1,218,767.43

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 5,281,325.53
CONTINGENCY	%	15.0%	5,281,326	\$ 792,198.83
TOTAL CONSTRUCTION COST				\$ 6,073,524.36
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	6,073,524	\$ 182,205.73
ENVIROMENTAL DOCUMENT	%	1.5%	6,073,524	\$ 91,102.87
DESIGN ENGINEERING	%	12.0%	6,073,524	\$ 728,822.92
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	6,073,524	\$ 91,102.87
CONSTRUCTION STAKING	%	2.5%	6,073,524	\$ 151,838.11
CONSTRUCTION MANAGEMENT	%	13.0%	6,073,524	\$ 789,558.17
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 2,034,630.66
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	6,073,524	\$ 303,676.22
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 303,676.22
10 UTILITIES				
UTILITIES RELOCATION	%	2%	6,073,524	\$ 121,470.49
TOTAL FOR ITEM 10 UTILITIES				\$ 121,470.49
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	6,073,524	\$ 182,205.73
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 182,205.73

GRAND TOTAL \$ 8,716,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

Florin Vineyard Community Plan - Roadway CIP

Coa #24

Segment Index

Preliminary Cost Estimate

South Watt Ave.: Kiefer to SR 16

Project Description:

11' Pavement (incl. 1' pavement cut & replace), 3' C&G, 5' sidewalk = 20'
 Widening / Outside Travel Lane - One Side Only (2,010 LF)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	1.04	\$ 18.67
TOTAL FOR ITEM 1 EARTHWORK				\$ 18.67
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0.5	\$ 15.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 15.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	0.45	\$ 44.69
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	1.16	\$ 23.76
SIDEWALK	SF	\$ 6.00	5	\$ 30.00
CURB & GUTTER	LF	\$ 26.00	1	\$ 26.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 124.45
4 MISCELLANEOUS				
TRAFFIC SIGNAL	EA	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	EA	\$ 150,000	0	\$ -
RELOCATE TRAFFIC SIGNAL	LF	\$ 50	1	\$ 50.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
JOINT TRENCH	LF	\$ 380.00	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 50.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	208	\$ 62.43
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 62.43

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 270.55
CONTINGENCY	%	15.0%	270.55	\$ 40.58
TOTAL CONSTRUCTION COST				\$ 311.13
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	311.13	\$ 9.33
ENVIROMENTAL DOCUMENT	%	1.5%	311.13	\$ 4.67
DESIGN ENGINEERING	%	12.0%	311.13	\$ 37.34
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	311.13	\$ 4.67
CONSTRUCTION STAKING	%	2.5%	311.13	\$ 7.78
CONSTRUCTION MANAGEMENT	%	13.0%	311.13	\$ 40.45
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 104.23
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	311.13	\$ 15.56
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 15.56
10 UTILITIES				
UTILITIES RELOCATION	%	2%	311.13	\$ 6.22
TOTAL FOR ITEM 10 UTILITIES				\$ 6.22
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	311.13	\$ 9.33
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 9.33

SUBTOTAL \$ 447.00

NOTES:

GRAND TOTAL PROJECT COST (2,010 LF): \$ 898,470.00

- 1 FRONTAGE LANDSCAPING, STREETLIGHTS, SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 3 COST OF SIGNAL RELOCATION SPREAD OVER TOTAL LENGTH OF PROJECT

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job #: 27121.000
By: N.T./HF

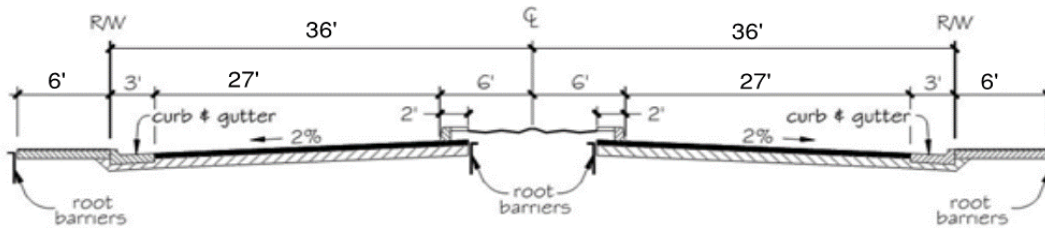
Florin Vineyard Community Plan - Roadway CIP
COA #28

Segment Index

Preliminary Cost Estimate - Typical 84' BOW to BOW Arterial - Widen Exist. Section

French Road: Florin Rd. to Gerber Rd.

Project Description: Install Landscaped Median & Widen Exist. Pavement to 84' BOW to BOW Arterial (12' median, (2) 12' travel lane, (2) 11' travel lane, (2) 4' bike lane, (2) 3' c&g, (2) 5' Walk). Reconstructed southern Florin Rd and French Rd intersection leg to provide County standard tapers.



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	15,744	\$ 283,388.89
TOTAL FOR ITEM 1 EARTHWORK				\$ 283,388.89
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	5,030	\$ 150,900.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 150,900.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	2,585.0	\$ 258,500.00
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	7,496.5	\$ 153,153.50
SIDEWALK	SF	\$ 6.00	30,180	\$ 181,080.00
CURB & GUTTER	LF	\$ 26.00	5,030	\$ 130,780.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	16,640	\$ 282,880.00
TOTAL OR ITEM 3 PAVEMENT				\$ 1,006,393.50
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	5,030	\$ 320,109.20
JOINT TRENCH	LF	\$ 380.00	0	\$ -
LANDSCAPING	SF	\$ 15.00	33,200	\$ 498,000.00
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 818,109.20
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	2,258,792	\$ 677,637.48
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 677,637.48

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 275.00	0	\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 2,936,429.06
CONTINGENCY	%	15.0%	2,936,429	\$ 440,464.36
TOTAL CONSTRUCTION COST				\$ 3,376,893.42
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	3,376,893	\$ 101,306.80
ENVIROMENTAL DOCUMENT	%	1.5%	3,376,893	\$ 50,653.40
DESIGN ENGINEERING	%	12.0%	3,376,893	\$ 405,227.21
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	3,376,893	\$ 50,653.40
CONSTRUCTION STAKING	%	2.5%	3,376,893	\$ 84,422.34
CONSTRUCTION MANAGEMENT	%	13.0%	3,376,893	\$ 438,996.14
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 1,131,259.30
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	3,376,893	\$ 168,844.67
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 168,844.67
10 UTILITIES				
UTILITIES RELOCATION	%	2%	3,376,893	\$ 67,537.87
TOTAL FOR ITEM 10 UTILITIES				\$ 67,537.87
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	3,376,893	\$ 101,306.80
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 101,306.80

GRAND TOTAL \$ 4,846,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 STREET LIGHT COST COVERS RE-LOCATION OF 7 EXISTING STREET LIGHTS
- 3 EXISTING C&G AND S/W ACROSS OF SIEMENS TO BE RECONSTRUCTED TO 84' BOW CROSS SECTION
- 4 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

Florin Vineyard Community Plan - Roadway CIP
COA #60a
Segment Index
Preliminary Cost Estimate
Waterman from Vintage Park Dr to Gerber Rd.

Project Description:
 Existing to Modified 2 Lane Arterial Center Section With Landscaped Median (From Audra Ct. to Dersingham Dr) - add 3,220 LF of 12' landscaped median, 18' of pavement, & 6' temp. AC walk

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	6,559	\$ 118,066.67
TOTAL FOR ITEM 1 EARTHWORK				\$ 118,066.67
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	3,220	\$ 48,300.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 48,300.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 4" AC)	TON	\$ 100.00	2,475.4	\$ 247,537.50
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	5,777.9	\$ 118,042.24
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	6,440	\$ 109,480.00
TOTAL OR ITEM 3 PAVEMENT				\$ 475,059.74
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	11,340	\$ 170,100.00
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 170,100.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	811,526	\$ 243,457.92
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 243,457.92

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 1,054,984.33
CONTINGENCY	%	15.0%	1,054,984	\$ 158,247.65
TOTAL CONSTRUCTION COST				\$ 1,213,231.98
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	1,213,232	\$ 36,396.96
ENVIROMENTAL DOCUMENT	%	1.5%	1,213,232	\$ 18,198.48
DESIGN ENGINEERING	%	12.0%	1,213,232	\$ 145,587.84
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	1,213,232	\$ 18,198.48
CONSTRUCTION STAKING	%	2.5%	1,213,232	\$ 30,330.80
CONSTRUCTION MANAGEMENT	%	13.0%	1,213,232	\$ 157,720.16
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 406,432.71
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	1,213,232	\$ 60,661.60
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 60,661.60
10 UTILITIES				
UTILITIES RELOCATION	%	2%	0	\$ -
TOTAL FOR ITEM 10 UTILITIES				\$ -
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	1,213,232	\$ 36,396.96
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 36,396.96

GRAND TOTAL \$ 1,717,000.00

COA #60 SUMARY:

SUB-TOTAL PROJECT COST (COA 60A)	LS	1	1,717,000	\$ 1,717,000.00
SUB-TOTAL PROJECT COST (COA 60b)	LS	1	2,827,680	\$ 2,827,680.00
TOTAL PROJECT COST (COA 60A + COA 60B)				<u>\$ 4,544,680.00</u>

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 NO EXISTING UTILITIES ARE REQUIRED TO BE RE-LOCATED
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

Florin Vineyard Community Plan - Roadway CIP
COA #60b
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Waterman from Vintage Park Drive to Gerber Rd.

Project Description:
 2 Lane Arterial Center Section With Landscaped Median ("new road") from Dersingham Dr to Gerber Rd (2,740 LF) - SEE FIGURE A-1.3.3
 "TYPICAL 72' R/W (ARTERIAL) CENTER SECTION" ESTIMATE

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	3	\$ 58.67
TOTAL FOR ITEM 1 EARTHWORK				\$ 58.67
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1	\$ 15.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 15.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC + 2" AC)	TON	\$ 100.00	2.0	\$ 198.75
AGGREGATE BASE (16 1/2" AB + 4" AB)	TON	\$ 20.43	3.7	\$ 76.28
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	2	\$ 34.00
TOTAL OR ITEM 3 PAVEMENT				\$ 309.03
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	7	\$ 105.00
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 105.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	488	\$ 146.31
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 146.31

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 634.01
CONTINGENCY	%	15.0%	634	\$ 95.10
TOTAL CONSTRUCTION COST				\$ 729.11
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	729	\$ 21.87
ENVIROMENTAL DOCUMENT	%	1.5%	729	\$ 10.94
DESIGN ENGINEERING	%	12.0%	729	\$ 87.49
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	729	\$ 10.94
CONSTRUCTION STAKING	%	2.5%	729	\$ 18.23
CONSTRUCTION MANAGEMENT	%	13.0%	729	\$ 94.78
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 244.25
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	729	\$ 36.46
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 36.46
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	0	\$ -
TOTAL FOR ITEM 10 UTILITIES				\$ -
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	729	\$ 21.87
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 21.87

GRAND TOTAL \$ 1,032.00

COA #60 SUMMARY:

SUB-TOTAL PROJECT COST (COA 60b)	LF	2740	1,032	\$ 2,827,680.00
SUB-TOTAL PROJECT COST (COA 60A)	LS	1	1,717,000	\$ 1,717,000.00
TOTAL PROJECT COST (COA 60A + COA 60B)				<u>\$ 4,544,680.00</u>

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20
- 3 OUTSIDE 11' TRAVEL LANE, CURB, GUTTER & S/W ARE NOT INCLUDED
- 4 NO UTILITY RE-LOCATION REQ'D WITH NEW ROAD SEGMENT ("GREEN-FIELD")

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Figure A-1.4
Intersection index
Summary of Preliminary Intersection Cost Estimate

SHEET	PROJECT NAME	COST
Figure A-1.4.2	Replacement of Two-Lane Rural Intersection	\$ 3,266,000.00
Figure A-1.4.3	Replacement of Two-Lane Rural Intersection	\$ 3,946,000.00
Figure A-1.4.4	Widen Two-Lane Rural Intersection Including Protective Turn Lane	\$ 1,519,000.00
Figure A-1.4.5	Widen Existing 4 x 4 to 4 x 6	\$ 700,000.00
Figure A-1.4.7	Replacement of Two-Lane Rural Intersection - Two Legs Only	\$ 1,761,000.00
Figure A-1.4.8	Replacement of Two-Lane Rural Intersection	\$ 2,051,000.00
Figure A-1.4.9	Shoulder Improvements	\$ 914,000.00
Figure A-1.4.10a	Widen Existing 4x4 to 6x6	\$ 928,000.00
Figure A-1.4.10b	Widen Existing 4x4 to 6x6	\$ 1,455,000.00
Figure A-1.4.11	Additional Right Turn Lane (Total Cost - Class 'A')	\$ 200,207.00
COA#2a	Fruitridge Rd at South Watt Rd	\$ 3,074,000.00
COA#2b	Fruitridge Rd at South Watt Rd	\$ 1,105,000.00
COA#3	South Watt Ave & Elder Creek	\$ 3,900,000.00
COA#9	Kiefer Blvd at Bradshaw Rd	\$ 899,000.00
COA#11	Elder Creek Rd. at Bradshaw Rd.	\$ 968,000.00
COA#14a	Elk Grove-Florin Rd at Gerber Rd	\$ 473,385.00
COA#14b	Elk Grove-Florin Rd at Gerber Rd	\$ 969,000.00
COA#16	Gerber Rd. at Bradshaw Rd.	\$ 773,000.00
COA#22	Florin Rd. at Power Inn Rd.	\$ 745,000.00
COA#23	Gerber Rd. at Vineyard Rd.	\$ 483,000.00
COA#25	Widen Two-Lane Rural Intersection Including Protective Turn Lane	\$ 2,273,000.00
COA#27a	South Watt & SR-16 - County Minimum Alternative 1	\$ 3,363,000.00
COA#27b	SR 16 at South Watt Ave	\$ 805,000.00
COA#30	Florin Rd. at Florin-Perkins Rd.	\$ 473,000.00
COA#31a	Florin Rd. at South Watt Ave	\$ 2,333,072.00
COA#31b	Florin Rd. at South Watt Ave	\$ 1,101,000.00
COA#32	Gerber Rd. at French Rd.	\$ 400,000.00
COA#33	Calvine Rd. at Waterman Rd.	\$ 1,854,000.00
COA#36	Elk Grove Florin Rd at Tiogawoods Drive Signal Mod	\$ 307,000.00
COA#41&45	South Watt Ave & Elder Creek	\$ 934,000.00
COA#49	SR-16 at Hedge Avenue	\$ 360,000.00
COA#55	Florin Rd. at Gardner Ave.	\$ 3,415,000.00
COA#56a	Florin Rd at Hedge Ave - Constructed by Lennar	\$ 1,548,000.00
COA#56b	Florin Rd at Hedge Ave	\$ 2,664,000.00
COA#57	Widen Two-Lane Rural Intersection Including Protective Turn Lane	\$ 2,273,000.00
COA#59	Gerber Rd. at Waterman Rd.	\$ 592,000.00
COA#61	Elder Creek Rd. at Hedge Avenue	\$ 1,978,000.00
COA#67	Florin Rd and Bradshaw	\$ 2,366,000.00
COA#68	Florin Rd. at Excelsior Rd.	\$ 1,361,000.00
COA#69	Florin Rd. at Vineyard Rd.	\$ 964,000.00
COA #70/92a	Waterman at Florin Road - Constructed by Lennar	\$ 776,000.00
COA #70/92b	Waterman at Florin Road	\$ 2,054,000.00
COA#74	Kiefer Blvd at Bradshaw Rd.	\$ 478,000.00
COA#75	Elder Creek Rd. at Bradshaw Rd.	\$ 4,514,000.00
COA#77	Gerber Rd. at French Rd.	\$ 434,000.00
COA#78	Gerber Rd. and Bradshaw Rd.	\$ 3,170,000.00
COA#79	Gerber Rd. at Waterman Rd.	\$ 1,268,000.00
COA#80	Gerber Rd. at Bardu Ln.	\$ 928,000.00
COA#81	Vineyard Rd. at Gerber Rd.	\$ 1,628,000.00
COA#82	Excelsior Rd. at Gerber Rd.	\$ 1,605,000.00
COA#85	Elder Creek Rd. at Excelsior Rd.	\$ 1,438,000.00
COA#91	Fruitridge Rd. at Hedge Rd.	\$ 379,000.00
COA#95	Calvine Rd. and Waterman Rd.	\$ 822,000.00
COA#96	Calvine Rd. at Excelsior Rd.	\$ 1,635,000.00

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Table A-1.4
Florin Vineyard Community Plan - Roadway CIP
Intersection index
Summary of Preliminary Per Foot Cost Estimate

SHEET	PROJECT NAME	COST
COA#99	Elk Grove-Florin Rd. at Calvine Rd.	\$ 898,000.00
COA#101	South Watt Ave at Kiefer Blvd.	\$ 1,323,000.00
COA#107	Excelsior Rd. and SR-16	\$ 909,000.00
COA#110	Tioga Woods Drive at Elk Grove-Florin Road	\$ -
COA#111	Florin-Perkins Rd. and Folsom Blvd.	\$ 351,000.00
COA#D	Elder Creek Rd. at Florin-Perkins Rd.	\$ 637,000.00
Traffic Signals	FVCP Traffic Signals	\$ 623,000.00
Traffic Signals	FVCP Traffic Signal Modificatons for 3 Way to 4 Way (Borders NVS)	\$ 468,000.00
Pedestrian Crossings	FVCP Pedestrian Crossings	\$ 164,000.00

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

Figure A-1.4.2
Traffic Signal and Intersection Index
Typical 4x4 Intersection
Replacement of Two-Lane Rural Intersection

Project Description:
 Existing two-lane intersection widened to a typical 4x4 intersection

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	10,932	\$ 196,768.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 196,768.00
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1,680	\$ 25,200.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 25,200.00
3 PAVEMENT				
ASPHALT CONCRETE (5-1/2" + 4"AC)	TON	\$ 100.00	6,038.1	\$ 603,810.00
AGGREGATE BASE (16-1/2" AB)	TON	\$ 20.43	16,048.9	\$ 327,878.82
SIDEWALK	SF	\$ 6.00	1060	\$ 6,360.00
CURB & GUTTER	LF	\$ 26.00	200	\$ 5,200.00
MEDIAN CURB	LF	\$ 17.00	3360	\$ 57,120.00
TOTAL OR ITEM 3 PAVEMENT				\$ 1,000,368.82
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 300,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 300,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ 456,701.05
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 456,701.05

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 1,979,037.87
CONTINGENCY	%	15.0%	\$ 1,979,037.87	\$ 296,855.68
TOTAL CONSTRUCTION COST				\$ 2,275,893.55
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 2,275,893.55	\$ 68,276.81
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 2,275,893.55	\$ 34,138.40
DESIGN ENGINEERING	%	12.0%	\$ 2,275,893.55	\$ 273,107.23
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 2,275,893.55	\$ 34,138.40
CONSTRUCTION STAKING	%	2.5%	\$ 2,275,893.55	\$ 56,897.34
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 2,275,893.55	\$ 295,866.16
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 762,424.34
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 2,275,893.55	\$ 113,794.68
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 113,794.68
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 2,275,893.55	\$ 45,517.87
TOTAL FOR ITEM 10 UTILITIES				\$ 45,517.87
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 2,275,893.55	\$ 68,276.81
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 68,276.81

GRAND TOTAL \$ 3,266,000.00

NOTES:

WITHOUT SIGNAL, USE: \$ 2,622,000

- 1 FRONTAGE IMPROVEMENTS (11' PVM'T, C&G, LANDSCAPING, AND SOUNDWALL) ARE EXCLUDED
- 2 CURB RETURNS ARE INCLUDED AND ASSUMED AT ULTIMATE LOCATION (100' TAPERS PROVIDED)
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 4 INCLUDES 450' INTERSECTION LEGS EACH WAY

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

Figure A-1.4.3
Traffic Signal and Intersection Index
Typical 6x4 Intersection
Replacement of Two-Lane Rural Intersection

Project Description:
Existing two lane rural intersection widened to a 6x4 intersection.

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	13,162	\$ 236,924.56
TOTAL FOR ITEM 1 EARTHWORK				\$ 236,924.56
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1,680	\$ 25,200.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 25,200.00
3 PAVEMENT				
ASPHALT CONCRETE (6-1/2" + 5-1/2" + 4" AC)	TON	\$ 100.00	7,480.3	\$ 748,032.50
AGGREGATE BASE (17-1/2" + 16-1/2" AB)	TON	\$ 20.43	18,934.8	\$ 386,837.24
SIDEWALK	SF	\$ 6.00	1,060	\$ 6,360.00
CURB & GUTTER	LF	\$ 26.00	200	\$ 5,200.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	3,360	\$ 57,120.00
TOTAL OR ITEM 3 PAVEMENT				\$ 1,203,549.74
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 300,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	4,920	\$ 73,800.00
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 373,800.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 1,839,474.30	\$ 551,842.29
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 551,842.29

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 2,391,316.58
CONTINGENCY	%	15.0%	\$ 2,391,316.58	\$ 358,697.49
TOTAL CONSTRUCTION COST				\$ 2,750,014.07
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 2,750,014.07	\$ 82,500.42
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 2,750,014.07	\$ 41,250.21
DESIGN ENGINEERING	%	12.0%	\$ 2,750,014.07	\$ 330,001.69
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 2,750,014.07	\$ 41,250.21
CONSTRUCTION STAKING	%	2.5%	\$ 2,750,014.07	\$ 68,750.35
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 2,750,014.07	\$ 357,501.83
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 921,254.71
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 2,750,014.07	\$ 137,500.70
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 137,500.70
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 2,750,014.07	\$ 55,000.28
TOTAL FOR ITEM 10 UTILITIES				\$ 55,000.28
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 2,750,014.07	\$ 82,500.42
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 82,500.42

GRAND TOTAL \$ 3,946,000.00

NOTES:

- 1 FRONTAGE IMPROVEMENTS (11' PVM'T, C&G, LANDSCAPING, AND SOUNDWALL) ARE EXCLUDED
- 2 CURB RETURNS ARE INCLUDED AND ASSUMED AT ULTIMATE LOCATION (100' TAPERS PROVIDED)
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 4 INCLUDES 450' INTERSECTION LEGS EACH WAY

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

Figure A-1.4.4
Traffic Signal and Intersection Index
Typical 2x2 and 4x2 Intersection Widening
Widen Two-Lane Rural Intersection Including Protective Turn Lane

Project Description:
 Widen 2x2 rural intersection to a 4x2 intersection

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	3,782	\$ 68,077.78
TOTAL FOR ITEM 1 EARTHWORK				\$ 68,077.78
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1560	\$ 23,400.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 23,400.00
3 PAVEMENT				
ASPHALT CONCRETE (5-1/2" AC)	TON	\$ 100.00	1,914.7	\$ 191,468.75
AGGREGATE BASE (16-1/2" AB)	TON	\$ 20.43	5,552.6	\$ 113,439.49
SIDEWALK	SF	\$ 6.00	1060	\$ 6,360.00
CURB & GUTTER	LF	\$ 26.00	200	\$ 5,200.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 316,468.24
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 300,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 300,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ 212,383.81
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 212,383.81

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 920,329.82
CONTINGENCY	%	15.0%	\$ 920,329.82	\$ 138,049.47
TOTAL CONSTRUCTION COST				\$ 1,058,379.30
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 1,058,379.30	\$ 31,751.38
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 1,058,379.30	\$ 15,875.69
DESIGN ENGINEERING	%	12.0%	\$ 1,058,379.30	\$ 127,005.52
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 1,058,379.30	\$ 15,875.69
CONSTRUCTION STAKING	%	2.5%	\$ 1,058,379.30	\$ 26,459.48
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 1,058,379.30	\$ 137,589.31
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 354,557.06
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 1,058,379.30	\$ 52,918.96
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 52,918.96
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 1,058,379.30	\$ 21,167.59
TOTAL FOR ITEM 10 UTILITIES				\$ 21,167.59
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 1,058,379.30	\$ 31,751.38
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 31,751.38

GRAND TOTAL \$ 1,519,000.00

NOTES:

- 1 FRONTAGE IMPROVEMENTS (11' PVM'T, C&G, LANDSCAPING, AND SOUNDWALL) ARE EXCLUDED
- 2 CURB RETURNS ARE INCLUDED AND ASSUMED AT ULTIMATE LOCATION (100' TAPERS PROVIDED)
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 4 INCLUDES 450' INTERSECTION LEGS EACH WAY

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

Figure A-1.4.5
Traffic Signal and Intersection Index
Typical 6x4 Intersection
Widen Existing 4 x 4 to 4 x 6

Project Description:

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	1,007	\$ 18,133.33
TOTAL FOR ITEM 1 EARTHWORK				\$ 18,133.33
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1,560	\$ 23,400.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 23,400.00
3 PAVEMENT				
ASPHALT CONCRETE (6-1/2" AC)	TON	\$ 100.00	552.5	\$ 55,250.00
AGGREGATE BASE (17-1/2" AB)	TON	\$ 20.43	1,437.9	\$ 29,376.64
SIDEWALK	SF	\$ 6.00	1,060	\$ 6,360.00
CURB & GUTTER	LF	\$ 26.00	1,680	\$ 43,680.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 134,666.64
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 326,199.97	\$ 97,859.99
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 97,859.99

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 424,059.96
CONTINGENCY	%	15.0%	\$ 424,059.96	\$ 63,608.99
TOTAL CONSTRUCTION COST				\$ 487,668.96
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 487,668.96	\$ 14,630.07
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 487,668.96	\$ 7,315.03
DESIGN ENGINEERING	%	12.0%	\$ 487,668.96	\$ 58,520.27
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 487,668.96	\$ 7,315.03
CONSTRUCTION STAKING	%	2.5%	\$ 487,668.96	\$ 12,191.72
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 487,668.96	\$ 63,396.96
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 163,369.10
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 487,668.96	\$ 24,383.45
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 24,383.45
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 487,668.96	\$ 9,753.38
TOTAL FOR ITEM 10 UTILITIES				\$ 9,753.38
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 487,668.96	\$ 14,630.07
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 14,630.07

GRAND TOTAL \$ 700,000.00

NOTES:

- 1 FRONTAGE IMPROVEMENTS (JOINT TRENCH, STREETLIGHTS, LANDSCAPING, AND SOUNDWALL) ARE EXCLUDED
- 2 EX. CURB RETURNS ASSUMED AT ULTIMATE LOCATION
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 4 INCLUDES 450' INTERSECTION LEGS EACH WAY

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

Figure A-1.4.7

Traffic Signal and Intersection Index

Typical 6x6 Intersection

Replacement of Two-Lane Rural Intersection - Two Legs Only

Project Description:

Widen existing two lane rural intersection to typical 6x6 intersection

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	4,630	\$ 83,333.33
TOTAL FOR ITEM 1 EARTHWORK				\$ 83,333.33
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	780	\$ 11,700.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 11,700.00
3 PAVEMENT				
ASPHALT CONCRETE (6-1/2" AC)	TON	\$ 100.00	2,539.1	\$ 253,906.25
AGGREGATE BASE (17-1/2" AB)	TON	\$ 20.43	6,608.1	\$ 135,002.93
SIDEWALK	SF	\$ 6.00	530	\$ 3,180.00
CURB & GUTTER	LF	\$ 26.00	200	\$ 5,200.00
MEDIAN CURB	LF	\$ 17.00	1,680	\$ 28,560.00
TOTAL OR ITEM 3 PAVEMENT				\$ 425,849.18
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 300,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 300,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	820,883	\$ 246,264.75
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 246,264.75

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 1,067,147.27
CONTINGENCY	%	15.0%	1,067,147	\$ 160,072.09
TOTAL CONSTRUCTION COST				\$ 1,227,219.36
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	1,227,219	\$ 36,816.58
ENVIROMENTAL DOCUMENT	%	1.5%	1,227,219	\$ 18,408.29
DESIGN ENGINEERING	%	12.0%	1,227,219	\$ 147,266.32
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	1,227,219	\$ 18,408.29
CONSTRUCTION STAKING	%	2.5%	1,227,219	\$ 30,680.48
CONSTRUCTION MANAGEMENT	%	13.0%	1,227,219	\$ 159,538.52
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 411,118.48
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	1,227,219	\$ 61,360.97
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 61,360.97
10 UTILITIES				
UTILITIES RELOCATION	%	2%	1,227,219	\$ 24,544.39
TOTAL FOR ITEM 10 UTILITIES				\$ 24,544.39
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	1,227,219	\$ 36,816.58
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 36,816.58

GRAND TOTAL \$ 1,761,000.00

NOTES:

- 1 FRONTAGE IMPROVEMENTS (11' PVM'T, C&G, LANDSCAPING, AND SOUNDWALL) ARE EXCLUDED
- 2 CURB RETURNS ARE INCLUDED AND ASSUMED AT ULTIMATE LOCATION (100' TAPERS PROVIDED)
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 4 INCLUDES 450' INTERSECTION LEGS EACH WAY

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

Figure A-1.4.8
Traffic Signal and Intersection Index
Typical 6x2-Plus Intersection (3-way)
Replacement of Two-Lane Rural Intersection

Project Description:
Widen two lane rural intersection to typical 6x2 intersection

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	6,189	\$ 111,400.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 111,400.00
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1,170	\$ 17,550.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 17,550.00
3 PAVEMENT				
ASPHALT CONCRETE (6-1/2" AC)	TON	\$ 100.00	3,394.2	\$ 339,421.88
AGGREGATE BASE (17-1/2" AB)	TON	\$ 20.43	8,833.7	\$ 180,471.92
SIDEWALK	SF	\$ 6.00	795	\$ 4,770.00
CURB & GUTTER	LF	\$ 26.00	100	\$ 2,600.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 527,263.79
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 300,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 300,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	956,214	\$ 286,864.14
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 286,864.14

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 1,243,077.93
CONTINGENCY	%	15.0%	1,243,078	\$ 186,461.69
TOTAL CONSTRUCTION COST				\$ 1,429,539.62
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	1,429,540	\$ 42,886.19
ENVIROMENTAL DOCUMENT	%	1.5%	1,429,540	\$ 21,443.09
DESIGN ENGINEERING	%	12.0%	1,429,540	\$ 171,544.75
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	1,429,540	\$ 21,443.09
CONSTRUCTION STAKING	%	2.5%	1,429,540	\$ 35,738.49
CONSTRUCTION MANAGEMENT	%	13.0%	1,429,540	\$ 185,840.15
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 478,895.77
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	1,429,540	\$ 71,476.98
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 71,476.98
10 UTILITIES				
UTILITIES RELOCATION	%	2%	1,429,540	\$ 28,590.79
TOTAL FOR ITEM 10 UTILITIES				\$ 28,590.79
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	1,429,540	\$ 42,886.19
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 42,886.19

GRAND TOTAL \$ 2,051,000.00

NOTES:

- 1 FRONTAGE IMPROVEMENTS (11' PVM'T, C&G, LANDSCAPING, AND SOUNDWALL) ARE EXCLUDED
- 2 CURB RETURNS ARE INCLUDED AND ASSUMED AT ULTIMATE LOCATION (100' TAPERS PROVIDED)
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 4 INCLUDES 450' INTERSECTION LEGS EACH WAY

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

Figure A-1.4.9
Traffic Signal and Intersection Index
Intersection Widening (3-way)
Shoulder Improvements

Project Description:
 Widen existing intersection to include shoulders (3 way)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	1,100	\$ 19,800.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 19,800.00
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1,170	\$ 17,550.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 17,550.00
3 PAVEMENT				
ASPHALT CONCRETE (5-1/2" AC)	TON	\$ 100.00	556.9	\$ 55,687.50
AGGREGATE BASE (16-1/2" AB)	TON	\$ 20.43	1,614.9	\$ 32,993.17
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 88,680.67
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 300,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 300,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	426,031	\$ 127,809.20
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 127,809.20

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 553,839.88
CONTINGENCY	%	15.0%	553,840	\$ 83,075.98
TOTAL CONSTRUCTION COST				\$ 636,915.86
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	636,916	\$ 19,107.48
ENVIROMENTAL DOCUMENT	%	1.5%	636,916	\$ 9,553.74
DESIGN ENGINEERING	%	12.0%	636,916	\$ 76,429.90
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	636,916	\$ 9,553.74
CONSTRUCTION STAKING	%	2.5%	636,916	\$ 15,922.90
CONSTRUCTION MANAGEMENT	%	13.0%	636,916	\$ 82,799.06
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 213,366.81
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	636,916	\$ 31,845.79
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 31,845.79
10 UTILITIES				
UTILITIES RELOCATION	%	2%	636,916	\$ 12,738.32
TOTAL FOR ITEM 10 UTILITIES				\$ 12,738.32
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	636,916	\$ 19,107.48
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 19,107.48

GRAND TOTAL \$ 914,000.00

NOTES:

- 1 FRONTAGE IMPROVEMENTS (11' PVM'T, C&G, LANDSCAPING, AND SOUNDWALL) ARE EXCLUDED
- 2 CURB RETURNS ARE INCLUDED AND ASSUMED AT ULTIMATE LOCATION (100' TAPERS PROVIDED)
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 4 INCLUDES 450' INTERSECTION LEGS EACH WAY

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

Figure A-1.4.10a
Traffic Signal and Intersection Index
Typical 6x6 Intersection
Widen Existing 4x4 to 6x6

Project Description:
(Existing CR's and Signal already at Ultimate Location; Class D improvements beyond CRs)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	2,541	\$ 45,733
TOTAL FOR ITEM 1 EARTHWORK				\$ 45,733
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1,560	\$ 23,400.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 23,400.00
3 PAVEMENT				
ASPHALT CONCRETE (6-1/2" AC)	TON	\$ 100.00	1,393.4	\$ 139,343.75
AGGREGATE BASE (17-1/2" AB)	TON	\$ 20.43	3,626.5	\$ 74,089.61
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 213,433.36
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	432,567	\$ 129,770.01
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 129,770.01

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 562,336.70
CONTINGENCY	%	15.0%	562,337	\$ 84,350.50
TOTAL CONSTRUCTION COST				\$ 646,687.20
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	646,687	\$ 19,400.62
ENVIROMENTAL DOCUMENT	%	1.5%	646,687	\$ 9,700.31
DESIGN ENGINEERING	%	12.0%	646,687	\$ 77,602.46
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	646,687	\$ 9,700.31
CONSTRUCTION STAKING	%	2.5%	646,687	\$ 16,167.18
CONSTRUCTION MANAGEMENT	%	13.0%	646,687	\$ 84,069.34
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 216,640.21
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	646,687	\$ 32,334.36
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 32,334.36
10 UTILITIES				
UTILITIES RELOCATION	%	2%	646,687	\$ 12,933.74
TOTAL FOR ITEM 10 UTILITIES				\$ 12,933.74
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	646,687	\$ 19,400.62
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 19,400.62

GRAND TOTAL \$ 928,000.00

NOTES:

- 1 FRONTAGE IMPROVEMENTS (11' PVM'T, C&G, LANDSCAPING, AND SOUNDWALL) ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 3 EXIST. CURB RETURNS ALREADY LOCATED AT ULTIMATE LOCATION (100' TAPERS PROVIDED)
- 4 INCLUDES 450' INTERSECTION LEGS EACH WAY

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

Figure A-1.4.10b COA #8
Traffic Signal and Intersection Index
Typical 6x6 Intersection
Widen Existing 4x4 to 6x6

Project Description: Improve existing intersection to modified 4x6 intersection (future 6x6 intersection)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	2,556	\$ 46,000.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 46,000.00
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1,560	\$ 23,400.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 23,400.00
3 PAVEMENT				
ASPHALT CONCRETE (6-1/2" AC)	TON	\$ 100.00	1,393.4	\$ 139,343.75
AGGREGATE BASE (17-1/2" AB)	TON	\$ 20.43	3,626.5	\$ 74,089.61
SIDEWALK	SF	\$ 6.00	1,200	\$ 7,200.00
CURB & GUTTER	LF	\$ 26.00	200	\$ 5,200.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 225,833.36
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	445,233	\$ 133,570.01
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 133,570.01

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 578,803.37
CONTINGENCY	%	15.0%	578,803	\$ 86,820.50
TOTAL CONSTRUCTION COST				\$ 665,623.87
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	665,624	\$ 19,968.72
ENVIROMENTAL DOCUMENT	%	1.5%	665,624	\$ 9,984.36
DESIGN ENGINEERING	%	12.0%	665,624	\$ 79,874.86
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	665,624	\$ 9,984.36
CONSTRUCTION STAKING	%	2.5%	665,624	\$ 16,640.60
CONSTRUCTION MANAGEMENT	%	13.0%	665,624	\$ 86,531.10
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 222,984.00
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	665,624	\$ 33,281.19
EASEMENT	SF	\$ 3.00	0	\$ -
PROPERTY ACQUISITION	LS	\$ 500,000.00	1	\$ 500,000.00
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 533,281.19
10 UTILITIES				
UTILITIES RELOCATION	%	2%	665,624	\$ 13,312.48
TOTAL FOR ITEM 10 UTILITIES				\$ 13,312.48
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	665,624	\$ 19,968.72
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 19,968.72

GRAND TOTAL \$ 1,455,000.00

NOTES:

- 1 FRONTAGE IMPROVEMENTS (11' PVM'T, C&G, LANDSCAPING, AND SOUNDWALL) ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 3 CURB RETURNS ARE INCLUDED AND ASSUMED AT ULTIMATE LOCATION (100' TAPERS PROVIDED)
- 4 INCLUDES 450' INTERSECTION LEGS EACH WAY

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

Figure A-1.4.11
Roadway Cross Section index
Preliminary Per Foot Cost Estimate
Additional Right-turn Lane

Project Description:
 Additional Right-Turn Lane at Exist. Intersection
 (Including 11' Lane, C&G, S/W, w/ 250' Lane Transition per Sacramento County Standard Improvement Details 4-12 & 4-14 as appended)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	475	\$ 8,555.56
TOTAL FOR ITEM 1 EARTHWORK				\$ 8,555.56
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	450	\$ 6,750.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 6,750.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	189.06	\$ 18,906.25
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	744.03	\$ 15,200.56
SIDEWALK	SF	\$ 6.00	2500	\$ 15,000.00
CURB & GUTTER	LF	\$ 26.00	500	\$ 13,000.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 62,106.81
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 31.82	500	\$ 15,910.00
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 15,910.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 93,322.36	\$ 27,996.71
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 27,996.71

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

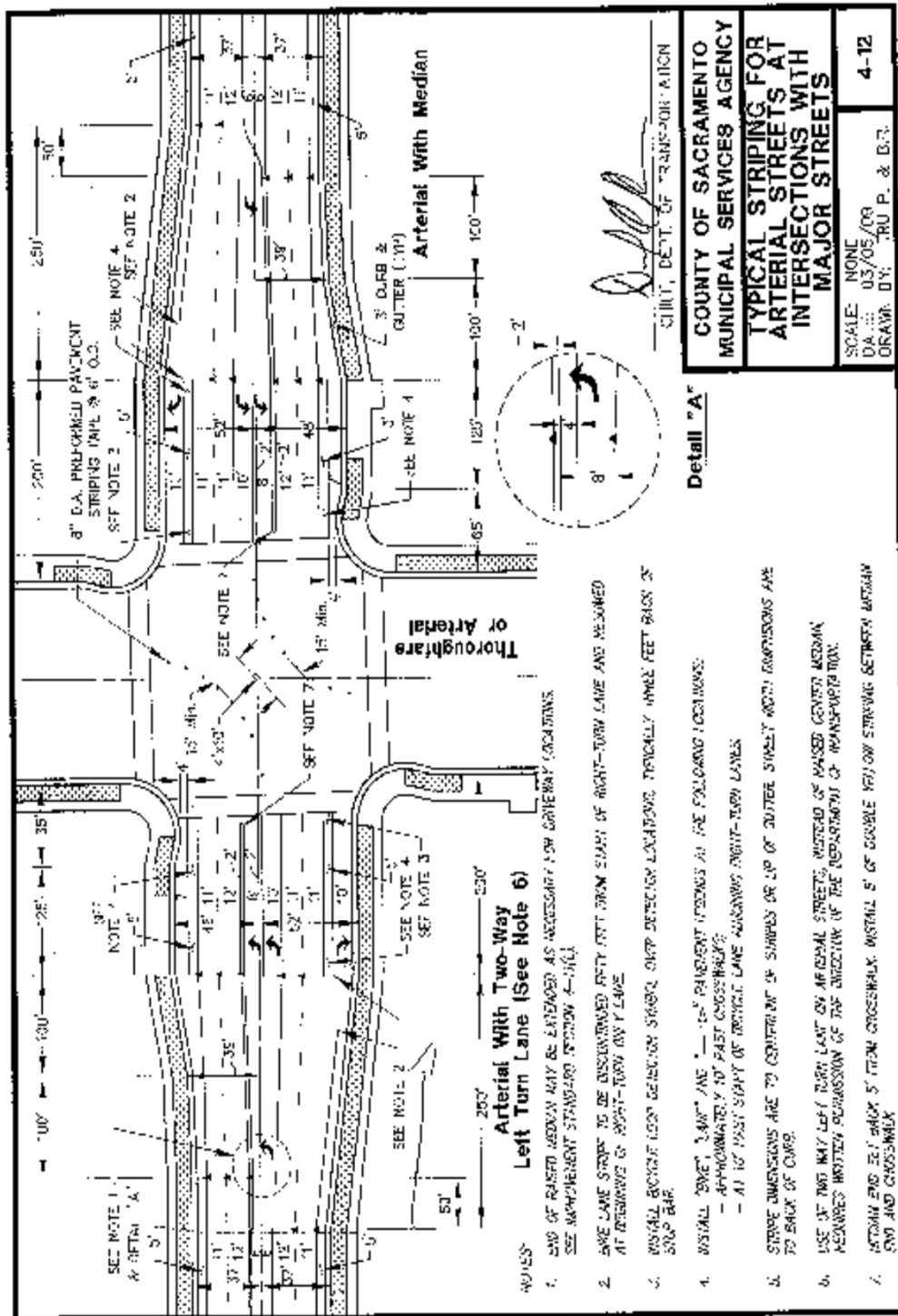
ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 121,319.07
CONTINGENCY	%	15.0%	\$ 121,319.07	\$ 18,197.86
TOTAL CONSTRUCTION COST				\$ 139,516.93
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 139,516.93	\$ 4,185.51
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 139,516.93	\$ 2,092.75
DESIGN ENGINEERING	%	12.0%	\$ 139,516.93	\$ 16,742.03
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 139,516.93	\$ 2,092.75
CONSTRUCTION STAKING	%	2.5%	\$ 139,516.93	\$ 3,487.92
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 139,516.93	\$ 18,137.20
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 46,738.17
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 139,516.93	\$ 6,975.85
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 6,975.85
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 139,516.93	\$ 2,790.34
TOTAL FOR ITEM 10 UTILITIES				\$ 2,790.34
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 139,516.93	\$ 4,185.51
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 4,185.51

GRAND TOTAL \$ 200,207.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY



Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

SOUTH WATT AVENUE AT FRUITRIDGE ROAD INTERSECTION TOTAL PROJECT EXPENDITURES

Sep-16

ASSUMPTIONS:

Project Length 3,485 LF

Structural Section: 6.5" AC over 23" AB (thoroughfare)

Streetlights not included

COA #2a

RESOURCE	COST
DESIGN	
Design Services (20%)	373,330
Survey Labor (3%)	56,000
Material Testing	25,000
Environmental	
PER (with mitigation)	20,000
Permits	
Right of Way	
Real Estate Labor	80,000
Title Reports	1,500
Acquisition	128,475
Total Prelim Engg Costs	684,305
Construction	
Contract	1,866,650
Construction Support	
Construction Inspection (12%)	223,998
Construction Engineering (2%)	37,333
Construction Surveys (3%)	56,000
Materials Testing (1%)	18,667
Change Order (10%)	186,665
Total Construction Costs	2,389,312
TOTAL PROJECT EXPENDITURES	
	3,074,000

P:\Shared Folders\Projects\South Watt (State Route 16 to Florin Rd)\Estimates\prelim - min alt 1\prelim estimate - fruitridg

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

County of Sacramento
Municipal Services Agency - Department of Transportation
PRELIMINARY CONSTRUCTION ESTIMATE

Project: **SOUTH WATT AVE AT FRUITRIDGE RD INTERSECTION**
Date: 09/16/16

Item	Description	Unit	Quantity	Unit Price	Amount
1	SWPPP	AL	1	25,000.00	25,000.00
2	Water Pollution Control	AL	1	75,000.00	75,000.00
3	Clearing & Grubbing	LS	1	35,000.00	35,000.00
4	Roadway Excavation	CY	5,980	29.00	173,420.00
5	Aggregate Base, Class 2	TN	9,570	36.00	344,520.00
6	Type 2 Curb and Gutter	LF	220	23.00	5,060.00
7	Type 4 Curb	LF	2,150	17.00	36,550.00
8	PCC Sidewalk	SF	2,860	7.00	20,020.00
9	Asphalt Concete (Type A)	TN	2,810	85.00	238,850.00
10	Slurry Seal (Type II)	SF	143,500	0.60	86,100.00
11	Traffic Signal @ Fruitridge Road	LS	1	400,000.00	400,000.00
12	Median Hardscape	LS	1	53,800.00	53,800.00
					-
					-
SUBTOTAL					1,493,320
CONTINGENCY (25%)					373,330.00
TOTAL CONSTRUCTION ESTIMATE					1,866,650

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #2b (M.M. TC-4(r))
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Fruitridge Rd at South Watt Rd

Project Description:
 Widen NB & SB: Widen mod. 4X6 Intx to full 4X6 intx. (Dual LT & sep. RT - 4 way; County Std.) (based on COA #2a improvements)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	3,653	\$ 65,760.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 65,760.00
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" +4" AC)	TON	\$ 100.00	2,061.0	\$ 206,100.00
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	4,567.5	\$ 93,314.03
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 299,414.03
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	515,174	\$ 154,552.21
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 154,552.21

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 669,726.23
CONTINGENCY	%	15.0%	669,726	\$ 100,458.93
TOTAL CONSTRUCTION COST				\$ 770,185.17
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	770,185	\$ 23,105.56
ENVIROMENTAL DOCUMENT	%	1.5%	770,185	\$ 11,552.78
DESIGN ENGINEERING	%	12.0%	770,185	\$ 92,422.22
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	770,185	\$ 11,552.78
CONSTRUCTION STAKING	%	2.5%	770,185	\$ 19,254.63
CONSTRUCTION MANAGEMENT	%	13.0%	770,185	\$ 100,124.07
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 258,012.03
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	770,185	\$ 38,509.26
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 38,509.26
10 UTILITIES				
UTILITIES RELOCATION	%	2%	770,185	\$ 15,403.70
TOTAL FOR ITEM 10 UTILITIES				\$ 15,403.70
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	770,185	\$ 23,105.56
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 23,105.56

GRAND TOTAL \$ 1,105,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ELECTRICAL 230 KV TOWERS IN NE CORNER TO REMAIN PER DOT DIRECTION
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

SOUTH WATT AVENUE AT ELDER CREEK INTERSECTION TOTAL PROJECT EXPENDITURES

Sep-16

ASSUMPTIONS:

- Project Length 3,100 LF
- Structural Section: 6.5" AC over 23" AB (thoroughfare)
- Streetlights not included
- Includes Civil and Railroad crossing

COA #3

RESOURCE	COST
DESIGN	
Design Services (20%)	361,716
Survey Labor (3%)	54,257
Material Testing	25,000
Environmental	
PER (with mitigation)	20,000
Permits	0
Right of Way	
Real Estate Labor	125,000
Title Reports	2,500
Acquisition	96,400
Total Prelim Engg Costs	685,000
Construction	
Contract	1,808,580
Construction Support	
Construction Inspection (12%)	217,030
Construction Engineering (2%)	36,172
Construction Surveys (3%)	54,257
Materials Testing (1%)	18,086
Change Order (10%)	180,858
RR Crossing Upgrades	900,000
Total Construction Costs	3,215,000
TOTAL PROJECT EXPENDITURES	
	3,900,000

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

County of Sacramento
Municipal Services Agency - Department of Transportation
PRELIMINARY CONSTRUCTION ESTIMATE

Project: **SOUTH WATT AVE AT ELDER CREEK RD INTERSECTION**

Date: 09/16/16

Item	Description	Unit	Quantity	Unit Price	Amount
1	SWPPP	AL	1	25,000.00	25,000.00
2	Water Pollution Control	AL	1	75,000.00	75,000.00
3	Clearing & Grubbing	LS	1	35,000.00	35,000.00
4	Roadway Excavation	CY	6,110	29.00	177,190.00
5	Aggregate Base, Class 2	TN	9,380	36.00	337,680.00
6	Type 2 Curb and Gutter	LF	720	23.00	16,560.00
7	Type 4 Curb	LF	1,960	17.00	33,320.00
8	PCC Sidewalk	SF	4,810	7.00	33,670.00
9	Asphalt Concete (Type A)	TN	2,790	85.00	237,150.00
10	Slurry Seal (Type II)	SF	152,990	0.60	91,794.00
11	Traffic Signal @ Elder Creek Road	LS	1	300,000.00	300,000.00
12	Median Hardscape	LS	1	84,500.00	84,500.00
					-
					-
SUBTOTAL					1,446,864
CONTINGENCY (25%)					361,716.00
TOTAL CONSTRUCTION ESTIMATE					1,808,580

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #9

Traffic Signal and Intersection Index

Preliminary Cost Estimate

Kiefer Blvd at Bradshaw Rd

Project Description:

11' Receiving Lane, 5' bike lane, & 550' merge taper for the SB Traffic, Restripe SB Lanes, C&G + conc. S/W within intersection leg; 8' shoulder along merge taper (merge taper length overlaps with COA #15) ; ult. CR at S/W corner (Mod. 4x6)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	762	\$ 13,720.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 13,720.00
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	830	\$ 12,450.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 12,450.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	365.6	\$ 36,562.50
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	951.6	\$ 19,440.42
SIDEWALK	SF	\$ 6.00	2,050	\$ 12,300.00
CURB & GUTTER	LF	\$ 26.00	430	\$ 11,180.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 79,482.92
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
JOINT TRENCH	LF	\$ 380.00	430	\$ 163,400.00
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 313,400.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	419,053	\$ 125,715.88
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 125,715.88

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 544,768.80
CONTINGENCY	%	15.0%	544,769	\$ 81,715.32
TOTAL CONSTRUCTION COST				\$ 626,484.12
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	626,484	\$ 18,794.52
ENVIROMENTAL DOCUMENT	%	1.5%	626,484	\$ 9,397.26
DESIGN ENGINEERING	%	12.0%	626,484	\$ 75,178.09
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	626,484	\$ 9,397.26
CONSTRUCTION STAKING	%	2.5%	626,484	\$ 15,662.10
CONSTRUCTION MANAGEMENT	%	13.0%	626,484	\$ 81,442.94
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 209,872.18
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	626,484	\$ 31,324.21
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 31,324.21
10 UTILITIES				
UTILITIES RELOCATION	%	2%	626,484	\$ 12,529.68
TOTAL FOR ITEM 10 UTILITIES				\$ 12,529.68
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	626,484	\$ 18,794.52
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 18,794.52

GRAND TOTAL \$ 899,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 3 ROADWAY DRAINAGE LIMITED TO ONE SIDE, THEREFORE COST = \$30/2/LF

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #11
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Elder Creek Rd. at Bradshaw Rd.

Project Description:
 Widen ex. mod 2x4 to mod 2x6 (Add NB & SB Shared Through / Right Turn Lanes, incl. SB receiving frontage as part of Plan Area frontage imp's (EB approach & departure frontage Class D imp's included)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	2,882	\$ 51,867.89
TOTAL FOR ITEM 1 EARTHWORK				\$ 51,867.89
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	900	\$ 13,500.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 13,500.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	1,123.7	\$ 112,371.88
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	2,540.7	\$ 51,905.93
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	450.5	\$ 45,048.44
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	1,306.4	\$ 26,689.85
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 236,016.09
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	451,384	\$ 135,415.19
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 135,415.19

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 586,799.17
CONTINGENCY	%	15.0%	586,799	\$ 88,019.88
TOTAL CONSTRUCTION COST				\$ 674,819.04
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	674,819	\$ 20,244.57
ENVIROMENTAL DOCUMENT	%	1.5%	674,819	\$ 10,122.29
DESIGN ENGINEERING	%	12.0%	674,819	\$ 80,978.29
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	674,819	\$ 10,122.29
CONSTRUCTION STAKING	%	2.5%	674,819	\$ 16,870.48
CONSTRUCTION MANAGEMENT	%	13.0%	674,819	\$ 87,726.48
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 226,064.38
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	674,819	\$ 33,740.95
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 33,740.95
10 UTILITIES				
UTILITIES RELOCATION	%	2%	674,819	\$ 13,496.38
TOTAL FOR ITEM 10 UTILITIES				\$ 13,496.38
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	674,819	\$ 20,244.57
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 20,244.57

GRAND TOTAL \$ 968,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

COA#14a
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Elk Grove-Florin Rd at Gerber Rd

Project Description:
Widen SB receiving lane to (3) Through, bike lane, bus turnout, c&g and sidewalk. Estimate provided by County DOT.

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY
DEPARTMENT OF TRANSPORTATION**

ENGINEER'S ESTIMATE - "A"

Project: Elk Grove-Florin Road Widening
Limits: 700' South of Gerber Rd to Gerber Rd

Date: August 2017
Prepared By: JVC & YTR

BID OPEN:		ENGINEER'S			
AWARD:		ESTIMATE			
ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	Project Information Signs	2	EA	\$300.00	\$ 600.00
2	Clearing and Grubbing	1	LS	\$5,000.00	\$ 5,000.00
3	Storm Water Pollution Program Preparation	1	Allowance	\$2,500.00	\$ 2,500.00
4	Storm Water Pollution Control	1	Allowance	\$5,000.00	\$ 5,000.00
5	Roadway Excavation	1,348	CY	\$45.00	\$ 60,660.00
6	Imported Borrow	0	CY	\$50.00	\$ -
7	Asphalt Rubber Hot Mix-Cap Creaded (ARHM-CG)	88	TN	\$125.00	\$ 11,000.00
8	Asphalt Concrete	171	TN	\$115.00	\$ 19,665.00
9	Aggregate Base (Class 2)	685	TN	\$85.00	\$ 58,225.00
10	Slurry Seal (Type 2)	21,790	SF	\$1.00	\$ 21,790.00
11	PCC Curb Type 4/4A	1,170	LF	\$35.00	\$ 40,950.00
12	PCC Curb & Gutter (Type 2)	295	LF	\$25.00	\$ 7,375.00
13	PCC Curb & Gutter (Type 2 Reinforced)	260	LF	\$35.00	\$ 9,100.00
14	PCC Sidewalk	2,955	SF	\$10.00	\$ 29,550.00
15	Remove Traffic Stripe & Pavement Markings- Thermoplastic	1,266	SF	\$4.00	\$ 5,064.00
16	Detail 9 - Thermoplastic Striping	1,400	LF	\$0.50	\$ 700.00

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Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
17	Detail 22 - Thermoplastic Striping	5	LF	\$1.50	\$ 7.50
18	Detail 38 - Thermoplastic Striping	125	LF	\$1.50	\$ 187.50
19	Detail 39 - Thermoplastic Striping	700	LF	\$1.00	\$ 700.00
20	Detail A (12" White) - Thermoplastic	40	LF	\$5.00	\$ 200.00
21	Pavement Markings - Thermoplastic	18	SF	\$5.00	\$ 90.00
22	Pavement Marker (Type D)	5	EA	\$3.50	\$ 17.50
23	Pavement Marker (Type G)	34	EA	\$3.50	\$ 119.00
24	Pavement Marker (Type H)	14	EA	\$3.50	\$ 49.00
25	Object Marker (Type K-1 CA)	1	EA	\$6.00	\$ 6.00
26	Relocate Roadside Sign	2	EA	\$200.00	\$ 400.00
27	Tree Removal	1	LS	\$500.00	\$ 500.00
28	Drainage	1	LS	\$10,000.00	\$ 10,000.00
TOTAL BASE BID (Items 1-28)					\$ 289,455.50

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Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

COUNTY OF SACRAMENTO
MUNICIPAL SERVICES
DEPARTMENT OF TRANSPORTATION

PRELIMINARY SUMMARY OF PROJECT COSTS

Project: Elk Grove-Florin Road Widening: Elder Creek to Florin Road

Limits: Segment A - 700' south of Gerber Road to Gerber Road (Stations 342+31 to 348+00).

Date: August 24, 2017

ESTIMATED CONSTRUCTION COST (No **\$300,000.00**
Contingency)

COST No.	COST DESCRIPTION	COST as % of CONSTRUCTION COST	AMOUNT
1	ROADWAY DESIGN	17	\$51,000
2	ENVIRONMENTAL (Permitting, CEQA & NEPA)	0.5	\$1,500.00
3	CONSTRUCTION INSPECTION	12	\$36,000.00
4	CONSTRUCTION ENGINEERING	0.75	\$2,250.00
5	MATERIAL LABORATORY (Material Testing)	1	\$3,600.00
6	REAL ESTATE LABOR (3 parcels, 2 owners @ \$12,500/owner)	2	\$25,000.00
7	RIGHT-OF-WAY (Per RE Documents)	2,000	\$2,000.00
8	COUNTY SURVEY	3	\$9,000.00
9	CONSTRUCTION COST	100	\$300,000.00
	Project SUB-TOTAL COST		\$430,350.00
	PROJECT CONTINGENCY (10% of Project SUB-TOTAL)		\$43,035.00
	PROJECT TOTAL COST		\$473,385.00

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473,385

NOTES:

- 1 RIGHT OF WAY COST IS AN ASSUMED PERCENTAGE
- 2 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA#14b

Traffic Signal and Intersection Index

Preliminary Cost Estimate

Elk Grove-Florin Rd at Gerber Rd

Project Description:

Widen COA #14a 4x4 intersection to 4x6 Intx. based on County's Elder Creek Bridge replacement project (N/E corner completed by Walmart); incl. CR's and Class 'A' frontage improvements for all existing development frontages within 450' intersection leg , incl. replacement of EB approach frontage for bikeway widening

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	1,193	\$ 21,478.89
TOTAL FOR ITEM 1 EARTHWORK				\$ 21,478.89
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	2,250	\$ 67,500.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 67,500.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	232.4	\$ 23,237.50
AGGREGATE BASE (17.5" AB)	TON	\$ 20.43	604.8	\$ 12,355.47
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	322.1	\$ 32,209.38
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	934.1	\$ 19,083.09
SIDEWALK	SF	\$ 6.00	11,250	\$ 67,500.00
CURB & GUTTER	LF	\$ 26.00	2,250	\$ 58,500.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 212,885.43
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
JOINT TRENCH	LF	\$ 380.00	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	451,864	\$ 135,559.30
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 135,559.30

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 587,423.62
CONTINGENCY	%	15.0%	587,424	\$ 88,113.54
TOTAL CONSTRUCTION COST				\$ 675,537.16
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	675,537	\$ 20,266.11
ENVIROMENTAL DOCUMENT	%	1.5%	675,537	\$ 10,133.06
DESIGN ENGINEERING	%	12.0%	675,537	\$ 81,064.46
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	675,537	\$ 10,133.06
CONSTRUCTION STAKING	%	2.5%	675,537	\$ 16,888.43
CONSTRUCTION MANAGEMENT	%	13.0%	675,537	\$ 87,819.83
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 226,304.95
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	675,537	\$ 33,776.86
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 33,776.86
10 UTILITIES				
UTILITIES RELOCATION	%	2%	675,537	\$ 13,510.74
TOTAL FOR ITEM 10 UTILITIES				\$ 13,510.74
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	675,537	\$ 20,266.11
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 20,266.11

GRAND TOTAL \$ 969,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #16
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Gerber Rd. at Bradshaw Rd.

Project Description:
 Mitigation Measure TC-2(t): add EB & WB shared thru-RT and dual lefts for mod. 4x4 intx; incl. s/w corner Class D frontage (plus SB receiving lane & bus turnout), EB and WB bus turnouts w/C&G; locate northwest CR at ultimate location;

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	2,024	\$ 36,433.89
TOTAL FOR ITEM 1 EARTHWORK				\$ 36,433.89
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	800	\$ 12,000.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 12,000.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" 4" AC)	TON	\$ 100.00	579.1	\$ 57,907.94
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	1,575.6	\$ 32,189.33
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	313.2	\$ 31,321.88
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	768.6	\$ 15,702.31
SIDEWALK	SF	\$ 6.00	250	\$ 1,500.00
CURB & GUTTER	LF	\$ 26.00	50	\$ 1,300.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	1,300	\$ 22,100.00
TOTAL OR ITEM 3 PAVEMENT				\$ 162,021.45
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
JOINT TRENCH	LF	\$ 380.00	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	360,455	\$ 108,136.60
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 108,136.60

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 468,591.94
CONTINGENCY	%	15.0%	468,592	\$ 70,288.79
TOTAL CONSTRUCTION COST				\$ 538,880.73
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	538,881	\$ 16,166.42
ENVIROMENTAL DOCUMENT	%	1.5%	538,881	\$ 8,083.21
DESIGN ENGINEERING	%	12.0%	538,881	\$ 64,665.69
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	538,881	\$ 8,083.21
CONSTRUCTION STAKING	%	2.5%	538,881	\$ 13,472.02
CONSTRUCTION MANAGEMENT	%	13.0%	538,881	\$ 70,054.49
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 180,525.04
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	538,881	\$ 26,944.04
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 26,944.04
10 UTILITIES				
UTILITIES RELOCATION	%	2%	538,881	\$ 10,777.61
TOTAL FOR ITEM 10 UTILITIES				\$ 10,777.61
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	538,881	\$ 16,166.42
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 16,166.42

GRAND TOTAL \$ 773,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 COSTS TO REMODEL GAS STATION AT NE CORNER OF INTERSECTION WERE NOT CONSIDERED - INCLUDED IN COA #78
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #22

Traffic Signal and Intersection Index

Preliminary Cost Estimate

Florin Rd. at Power Inn Rd.

Project Description:

Add Shared Through / Right Turn Lane on WB & SB approaches (re-locate median on SB and NB approaches to west to accommodate bike lane on SB approach); add receiving lane merge tapers (on SB and WB receiving lane)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	1,002	\$ 18,033.33
TOTAL FOR ITEM 1 EARTHWORK				\$ 18,033.33
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	1,000	\$ 30,000.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 30,000.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	384.9	\$ 38,492.19
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	1,001.8	\$ 20,466.44
SIDEWALK	SF	\$ 6.00	6,650	\$ 39,900.00
CURB & GUTTER	LF	\$ 26.00	1,350	\$ 35,100.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	900	\$ 15,300.00
TOTAL OR ITEM 3 PAVEMENT				\$ 149,258.63
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
JOINT TRENCH	LF	\$ 380.00	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	347,292	\$ 104,187.59
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 104,187.59

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 451,479.55
CONTINGENCY	%	15.0%	451,480	\$ 67,721.93
TOTAL CONSTRUCTION COST				\$ 519,201.49
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	519,201	\$ 15,576.04
ENVIROMENTAL DOCUMENT	%	1.5%	519,201	\$ 7,788.02
DESIGN ENGINEERING	%	12.0%	519,201	\$ 62,304.18
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	519,201	\$ 7,788.02
CONSTRUCTION STAKING	%	2.5%	519,201	\$ 12,980.04
CONSTRUCTION MANAGEMENT	%	13.0%	519,201	\$ 67,496.19
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 173,932.50
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	519,201	\$ 25,960.07
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 25,960.07
10 UTILITIES				
UTILITIES RELOCATION	%	2%	519,201	\$ 10,384.03
TOTAL FOR ITEM 10 UTILITIES				\$ 10,384.03
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	519,201	\$ 15,576.04
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 15,576.04

GRAND TOTAL \$ 745,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 3 EXIST. STREET LIGHTS TO BE RE-LOCATED

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #23
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Gerber Rd. at Vineyard Rd.

Project Description:
 2x2 signalization, 3-way

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 4" AC)	TON	\$ 100.00	0.0	\$ -
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	0.0	\$ -
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	0.0	\$ -
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	0.0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0.75	\$ 225,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 225,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	225,000	\$ 67,500.00
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 67,500.00

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00	0	\$ -
CULVERTS	LF	\$ 375.00	0	\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 292,500.00
CONTINGENCY	%	15.0%	292,500	\$ 43,875.00
TOTAL CONSTRUCTION COST				\$ 336,375.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	336,375	\$ 10,091.25
ENVIROMENTAL DOCUMENT	%	1.5%	336,375	\$ 5,045.63
DESIGN ENGINEERING	%	12.0%	336,375	\$ 40,365.00
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	336,375	\$ 5,045.63
CONSTRUCTION STAKING	%	2.5%	336,375	\$ 8,409.38
CONSTRUCTION MANAGEMENT	%	13.0%	336,375	\$ 43,728.75
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 112,685.63
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	336,375	\$ 16,818.75
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 16,818.75
10 UTILITIES				
UTILITIES RELOCATION	%	2%	336,375	\$ 6,727.50
TOTAL FOR ITEM 10 UTILITIES				\$ 6,727.50
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	336,375	\$ 10,091.25
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 10,091.25

GRAND TOTAL \$ 483,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #25

Traffic Signal and Intersection Index

Florin Rd. at Excelsior Rd.

Widen Two-Lane Rural Intersection Including Protective Turn Lane

Project Description: Replace exist. 2x2 rural intx. w/2x2 4-way intx.; signalize (LT + shared Thru-RT + 6' shoulders 4-way; future 6x6)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	7,204	\$ 129,677.33
TOTAL FOR ITEM 1 EARTHWORK				\$ 129,677.33
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1640	\$ 24,600.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 24,600.00
3 PAVEMENT				
ASPHALT CONCRETE (6-1/2" AC)	TON	\$ 100.00	3,951.1	\$ 395,110.63
AGGREGATE BASE (17-1/2" AB)	TON	\$ 20.43	10,283.0	\$ 210,081.84
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 605,192.46
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 300,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 300,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ 317,840.94
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 317,840.94

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 1,377,310.74
CONTINGENCY	%	15.0%	\$ 1,377,310.74	\$ 206,596.61
TOTAL CONSTRUCTION COST				\$ 1,583,907.35
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 1,583,907.35	\$ 47,517.22
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 1,583,907.35	\$ 23,758.61
DESIGN ENGINEERING	%	12.0%	\$ 1,583,907.35	\$ 190,068.88
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 1,583,907.35	\$ 23,758.61
CONSTRUCTION STAKING	%	2.5%	\$ 1,583,907.35	\$ 39,597.68
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 1,583,907.35	\$ 205,907.96
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 530,608.96
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 1,583,907.35	\$ 79,195.37
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 79,195.37
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 1,583,907.35	\$ 31,678.15
TOTAL FOR ITEM 10 UTILITIES				\$ 31,678.15
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 1,583,907.35	\$ 47,517.22
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 47,517.22

GRAND TOTAL \$ 2,273,000.00

NOTES:

- 1 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 2 INCLUDES 310' INTERSECTION LEGS + DEPARTURE TAPERS EACH WAY

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

SOUTH WATT AVENUE AT STATE ROUTE 16 INTERSECTION TOTAL PROJECT EXPENDITURES

COA #27a

Sep-16

ASSUMPTIONS:

Project Length 3,580 LF
Structural Section: 6.5" AC over 23" AB (thoroughfare)
Streetlights not included

RESOURCE	COST
DESIGN	
Design Services (18%)	371,578
Survey Labor (3%)	61,930
Material Testing	25,000
Environmental	
PER (with mitigation)	20,000
Permits	
Right of Way	
Real Estate Labor	130,000
Title Reports	2,000
Acquisition	109,800
Total Prelim Engg Costs	720,308
Construction	
Contract	2,064,323
Construction Support	
Construction Inspection (12%)	247,719
Construction Engineering (2%)	41,286
Construction Surveys (3%)	61,930
Materials Testing (1%)	20,643
Change Order (10%)	206,432
Total Construction Costs	2,642,333
TOTAL PROJECT EXPENDITURES	
	3,363,000

P:\Shared Folders\Projects\South Watt (State Route 16 to Florin Rd)\Estimates\prelim - min alt 1\prelim estimate - jackson - min alt 1.xls

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

County of Sacramento
Municipal Services Agency - Department of Transportation
PRELIMINARY CONSTRUCTION ESTIMATE

Project: **SOUTH WATT AVE AT SR 16 INTERSECTION**

Date: 09/16/16

Item	Description	Unit	Quantity	Unit Price	Amount
1	SWPPP	AL	1	25,000.00	25,000.00
2	Water Pollution Control	AL	1	75,000.00	75,000.00
3	Clearing & Grubbing	LS	1	35,000.00	35,000.00
4	Roadway Excavation	CY	6,860	29.00	198,940.00
5	Aggregate Base, Class 2	TN	11,020	36.00	396,720.00
6	Type 2 Curb and Gutter	LF	240	23.00	5,520.00
7	Type 4 Curb	LF	1,500	17.00	25,500.00
8	PCC Sidewalk	SF	2,310	7.00	16,170.00
9	Asphalt Concete (Type A)	TN	3,160	85.00	268,600.00
10	Slurry Seal (Type II)	SF	130,680	0.60	78,408.00
11	Traffic Signal @ SR 16 Road	LS	1	500,000.00	500,000.00
12	Median Hardscape	LS	1	26,600.00	26,600.00
					-
					-
SUBTOTAL					1,651,458
CONTINGENCY (25%)					412,864.50
TOTAL CONSTRUCTION ESTIMATE					2,064,323

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #27b
Traffic Signal and Intersection Index
Preliminary Cost Estimate - Modified 6x4 Intersection
SR 16 at South Watt Ave

Project Description:
 Widen existing modified 4x5 (County Minimum) intx. to 4x6 intx based on COA #27 imp's: add SB thru + receiving lane w/merge taper and additional EB and WB LT.

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	2,208	\$ 39,746.67
TOTAL FOR ITEM 1 EARTHWORK				\$ 39,746.67
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	1,211.0	\$ 121,103.13
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	3,151.8	\$ 64,391.00
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 185,494.12
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
JOINT TRENCH	LF	\$ 380.00	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	375,241	\$ 112,572.24
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 112,572.24

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 487,813.03
CONTINGENCY	%	15.0%	487,813	\$ 73,171.95
TOTAL CONSTRUCTION COST				\$ 560,984.98
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	560,985	\$ 16,829.55
ENVIROMENTAL DOCUMENT	%	1.5%	560,985	\$ 8,414.77
DESIGN ENGINEERING	%	12.0%	560,985	\$ 67,318.20
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	560,985	\$ 8,414.77
CONSTRUCTION STAKING	%	2.5%	560,985	\$ 14,024.62
CONSTRUCTION MANAGEMENT	%	13.0%	560,985	\$ 72,928.05
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 187,929.97
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	560,985	\$ 28,049.25
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 28,049.25
10 UTILITIES				
UTILITIES RELOCATION	%	2%	560,985	\$ 11,219.70
TOTAL FOR ITEM 10 UTILITIES				\$ 11,219.70
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	560,985	\$ 16,829.55
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 16,829.55

GRAND TOTAL \$ 805,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #30
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Florin Rd. at Florin-Perkins Rd.

Project Description:
 Add WB Right-Turn Lane, Re-Locate Signal

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	594	\$ 10,693.33
TOTAL FOR ITEM 1 EARTHWORK				\$ 10,693.33
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	450	\$ 6,750.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 6,750.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	325.8	\$ 32,581.25
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	847.9	\$ 17,323.58
SIDEWALK	SF	\$ 6.00	270	\$ 1,620.00
CURB & GUTTER	LF	\$ 26.00	50	\$ 1,300.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 52,824.83
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	220,268	\$ 66,080.45
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 66,080.45

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 286,348.61
CONTINGENCY	%	15.0%	286,349	\$ 42,952.29
TOTAL CONSTRUCTION COST				\$ 329,300.90
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	329,301	\$ 9,879.03
ENVIROMENTAL DOCUMENT	%	1.5%	329,301	\$ 4,939.51
DESIGN ENGINEERING	%	12.0%	329,301	\$ 39,516.11
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	329,301	\$ 4,939.51
CONSTRUCTION STAKING	%	2.5%	329,301	\$ 8,232.52
CONSTRUCTION MANAGEMENT	%	13.0%	329,301	\$ 42,809.12
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 110,315.80
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	329,301	\$ 16,465.04
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 16,465.04
10 UTILITIES				
UTILITIES RELOCATION	%	2%	329,301	\$ 6,586.02
TOTAL FOR ITEM 10 UTILITIES				\$ 6,586.02
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	329,301	\$ 9,879.03
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 9,879.03

GRAND TOTAL \$ 473,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

COA #31a
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Florin Rd. at South Watt Ave

Project Description:
Widen Exist To full 4x4 Intx based on County project - add separate RT lanes on all 4 approaches

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY
DEPARTMENT OF TRANSPORTATION**

ENGINEER'S ESTIMATE - "B"

Project: Elk Grove-Florin Road Widening
Limits: Elk Grove-Florin Rd Station 396+80 to South Watt Ave Station 24+25 AND Florin Rd Improvements

Date: August 2017
Prepared By: JVC & YTR

BID OPEN:		ENGINEER'S ESTIMATE			
AWARD:		QUANTITY	UNIT	UNIT PRICE	AMOUNT
ITEM NO.	ITEM DESCRIPTION				
1	Project Information Signs	4	EA	\$300.00	\$ 1,200.00
2	Survey Monument (Type D)	1	EA	\$1,000.00	\$ 1,000.00
3	Clearing and Grubbing	1	LS	\$15,000.00	\$ 15,000.00
4	Storm Water Pollution Program Preparation	1	Allowance	\$4,000.00	\$ 4,000.00
5	Storm Water Pollution Control	1	Allowance	\$10,000.00	\$ 10,000.00
6	Roadway Excavation	6,195	CY	\$45.00	\$ 278,775.00
7	Imported Borrow	0	CY	\$50.00	\$ -
8	Asphalt Rubber Hot Mix-Gap Graded (ARHM-GG)	1,378	TN	\$125.00	\$ 172,250.00
9	Asphalt Concrete	1,217	TN	\$115.00	\$ 139,955.00
10	Aggregate Base (Class 2)	4,947	TN	\$85.00	\$ 420,495.00
11	Slurry Seal (Type 2)	87,605	SF	\$1.00	\$ 87,605.00
12	PCC Curb Type 4/4A	2,055	LF	\$35.00	\$ 71,925.00
13	PCC Curb & Gutter (Type 2)	385	LF	\$25.00	\$ 9,625.00
14	PCC Sidewalk	1,965	SF	\$10.00	\$ 19,650.00
15	Detectable Warning Surface 3' x 4'	8	EA	\$750.00	\$ 6,000.00
16	Remove Traffic Stripe & Pavement Markings- Thermoplastic	6,975	SF	\$4.00	\$ 27,900.00
17	Detail 9 - Thermoplastic Striping	3,305	LF	\$0.50	\$ 1,652.50

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Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
18	Detail 22 - Thermoplastic Striping	905	LF	\$1.50	\$ 1,357.50
19	Detail 27B - Thermoplastic Striping	1,910	LF	\$1.50	\$ 2,865.00
20	Detail 27C - Thermoplastic Striping	120	LF	\$1.50	\$ 180.00
21	Detail 38 - Thermoplastic Striping	1,500	LF	\$1.50	\$ 2,250.00
22	Detail 38A - Thermoplastic Striping	770	LF	\$1.50	\$ 1,155.00
23	Detail 39 - Thermoplastic Striping	2,400	LF	\$1.00	\$ 2,400.00
24	Detail 39A - Thermoplastic Striping	240	LF	\$1.00	\$ 240.00
25	Detail 40 - Thermoplastic Striping	515	LF	\$12.00	\$ 6,180.00
26	4' x 10' Preformed Pavement Striping - Thermoplastic	40	SF	\$10.00	\$ 400.00
27	Detail A (12" White) - Thermoplastic	1,285	LF	\$5.00	\$ 6,425.00
28	Pavement Markings - Thermoplastic	250	SF	\$5.00	\$ 1,250.00
29	Pavement Marker (Type D)	75	EA	\$3.50	\$ 262.50
30	Pavement Marker (Type G)	131	EA	\$3.50	\$ 458.50
31	Pavement Marker (Type H)	43	EA	\$3.50	\$ 150.50
32	Object Marker (Type K-1 CA)	6	EA	\$6.00	\$ 36.00
33	Fence Relocation (Barbed Wire)	65	LF	\$15.00	\$ 975.00
34	Fence Relocation (Chainlink Fence)	75	LF	\$25.00	\$ 1,875.00
35	Tree Removal	1	LS	\$5,000.00	\$ 5,000.00
36	Drainage	1	LS	\$48,000.00	\$ 48,000.00
37	Traffic Signal Modification (Elk Grove-Florin Rd and Florin Rd)	1	LS	\$80,000.00	\$ 80,000.00
TOTAL BASE BID (Items 1-37)					\$ 1,428,492.50

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Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

COUNTY OF SACRAMENTO
MUNICIPAL SERVICES
DEPARTMENT OF TRANSPORTATION

PRELIMINARY SUMMARY OF PROJECT COSTS

Project: Elk Grove-Florin Road Widening: Elder Creek to Florin Road

Limits: Segment B - Elder Creek - From 500' south of intersection with Florin Road (Stations 360+50 to 396+80) to South Watt Ave Sta 24+25 and Florin Road (Station 240+62 to 258+7)

Date: August 24, 2017

ESTIMATED CONSTRUCTION COST (No Contingency) **\$1,450,000.00**

COST No.	COST DESCRIPTION	COST as % of CONSTRUCTION COST	AMOUNT
1	ROADWAY DESIGN	17	\$217,500
2	ENVIRONMENTAL (Permitting, CEQA & NEPA)	0.6	\$8,700.00
3	CONSTRUCTION INSPECTION	12	\$174,000.00
4	CONSTRUCTION ENGINEERING	0.75	\$10,875.00
5	MATERIAL LABORATORY (Material Testing)	1	\$17,400.00
6	REAL ESTATE LABOR (10 parcels, 10 owners @ \$12,500/owner)	10	\$125,000.00
7	RIGHT-OF-WAY (\$6/SF for R/W, TCE & PUPFE) [SF]	74,000	\$74,000.00
8	COUNTY SURVEY	3	\$43,500.00
9	CONSTRUCTION COST	100	\$1,450,000.00
	Project SUB-TOTAL COST		\$2,120,975.00
	PROJECT CONTINGENCY (10% of Project SUB-TOTAL)		\$212,097.50
	PROJECT TOTAL COST		\$2,333,072.50

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Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #31b
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Florin Rd. at South Watt Ave

Project Description:
 Widen full 4x4 Intx based on COA 31a to full 6x6

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	3,965	\$ 71,373.33
TOTAL FOR ITEM 1 EARTHWORK				\$ 71,373.33
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	3,600	\$ 108,000.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 108,000.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" + 4" AC)	TON	\$ 100.00	402.1	\$ 40,206.25
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	5,659.7	\$ 115,627.31
SIDEWALK	SF	\$ 6.00	2,500	\$ 15,000.00
CURB & GUTTER	LF	\$ 26.00	500	\$ 13,000.00
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 183,833.56
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
JOINT TRENCH	LF	\$ 380.00	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	513,207	\$ 153,962.07
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 153,962.07

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 667,168.96
CONTINGENCY	%	15.0%	667,169	\$ 100,075.34
TOTAL CONSTRUCTION COST				\$ 767,244.30
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	767,244	\$ 23,017.33
ENVIROMENTAL DOCUMENT	%	1.5%	767,244	\$ 11,508.66
DESIGN ENGINEERING	%	12.0%	767,244	\$ 92,069.32
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	767,244	\$ 11,508.66
CONSTRUCTION STAKING	%	2.5%	767,244	\$ 19,181.11
CONSTRUCTION MANAGEMENT	%	13.0%	767,244	\$ 99,741.76
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 257,026.84
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	767,244	\$ 38,362.22
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 38,362.22
10 UTILITIES				
UTILITIES RELOCATION	%	2%	767,244	\$ 15,344.89
TOTAL FOR ITEM 10 UTILITIES				\$ 15,344.89
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	767,244	\$ 23,017.33
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 23,017.33

GRAND TOTAL \$ 1,101,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 INCLUDES 450' INTERSECTION LEGS & PAVEMENT/LANE CONFORM EACH WAY
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

COA #32
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Gerber Rd. at French Rd.

Project Description:
Provide Dual LT on EB Approach (EB: 2 LT, 1T, 1TR - add 2nd LT)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	49	\$ 875.11
TOTAL FOR ITEM 1 EARTHWORK				\$ 875.11
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	174.6	\$ 17,462.50
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	67.8	\$ 1,384.90
SIDEWALK	SF	\$ 6.00	720	\$ 4,320.00
CURB & GUTTER	LF	\$ 26.00	120	\$ 3,120.00
MEDIAN CURB	LF	\$ 17.00	560	\$ 9,520.00
TOTAL OR ITEM 3 PAVEMENT				\$ 35,807.40
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	186,683	\$ 56,004.75
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 56,004.75

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 242,687.26
CONTINGENCY	%	15.0%	242,687	\$ 36,403.09
TOTAL CONSTRUCTION COST				\$ 279,090.35
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	279,090	\$ 8,372.71
ENVIROMENTAL DOCUMENT	%	1.5%	279,090	\$ 4,186.36
DESIGN ENGINEERING	%	12.0%	279,090	\$ 33,490.84
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	279,090	\$ 4,186.36
CONSTRUCTION STAKING	%	2.5%	279,090	\$ 6,977.26
CONSTRUCTION MANAGEMENT	%	13.0%	279,090	\$ 36,281.75
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 93,495.27
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	279,090	\$ 13,954.52
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 13,954.52
10 UTILITIES				
UTILITIES RELOCATION	%	2%	279,090	\$ 5,581.81
TOTAL FOR ITEM 10 UTILITIES				\$ 5,581.81
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	279,090	\$ 8,372.71
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 8,372.71

GRAND TOTAL \$ 400,000.00

NOTES:

- 1 ADEQUATE RIGHT OF WAY EXISTS
- 2 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 3 IMPROVEMENTS ARE LIMITED TO RE-CONFIGURATION OF MEDIAN, RE-STRIPING OF EB DUAL LT-LANES, RE-STRIPING OF WB DUAL THROUGH LANES AND A BIKE LANE ON THE DEPARTURE, AND SIGNAL MODIFICATION. ASSUMES AC OVERLAY OF EB LT POCKET AND WB DEPARTURE UP TO RR TRACKS.
- 4 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #33
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Calvine Rd. at Waterman Rd.

Project Description:
 TC-2(z): widen EB and WB approaches, tapers, relocate signal

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	32,254	\$ 580,576.81
TOTAL FOR ITEM 1 EARTHWORK				\$ 580,576.81
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	450	\$ 6,750.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 6,750.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	653.7	\$ 65,365.63
AGGREGATE BASE (17.5" AB)	TON	\$ 20.43	1,701.2	\$ 34,755.15
SIDEWALK	SF	\$ 6.00	2,500	\$ 15,000.00
CURB & GUTTER	LF	\$ 26.00	450	\$ 11,700.00
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 126,820.78
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	864,148	\$ 259,244.28
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 259,244.28

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 1,123,391.86
CONTINGENCY	%	15.0%	1,123,392	\$ 168,508.78
TOTAL CONSTRUCTION COST				\$ 1,291,900.64
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	1,291,901	\$ 38,757.02
ENVIROMENTAL DOCUMENT	%	1.5%	1,291,901	\$ 19,378.51
DESIGN ENGINEERING	%	12.0%	1,291,901	\$ 155,028.08
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	1,291,901	\$ 19,378.51
CONSTRUCTION STAKING	%	2.5%	1,291,901	\$ 32,297.52
CONSTRUCTION MANAGEMENT	%	13.0%	1,291,901	\$ 167,947.08
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 432,786.71
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	1,291,901	\$ 64,595.03
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 64,595.03
10 UTILITIES				
UTILITIES RELOCATION	%	2%	1,291,901	\$ 25,838.01
TOTAL FOR ITEM 10 UTILITIES				\$ 25,838.01
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	1,291,901	\$ 38,757.02
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 38,757.02

GRAND TOTAL \$ 1,854,000.00

NOTES:

- 1 Existing eastbound approach requires demo and reconstruction Class A frontage in order to accommodate widening of the intersection
- 2 Estimate includes tapers on the east bound departure
- 3 Estimate includes dual left hand turns on east bound and west bound approach at the request of the County DOT
- 4 Roadway section assumes average R value of 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #36 Signal Mod
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Elk Grove Florin Rd. at Tiogawoods Drive

Project Description: Traffic signal modification for Elk Grove Florin Rd at Tiogawoods Drive

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	0.0	\$ -
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	0.0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	150,000	\$ 45,000.00
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 45,000.00

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 195,000.00
CONTINGENCY	%	15.0%	195,000	\$ 29,250.00
TOTAL CONSTRUCTION COST				\$ 224,250.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	224,250	\$ 6,727.50
ENVIROMENTAL DOCUMENT	%	1.5%	0	\$ -
DESIGN ENGINEERING	%	12.0%	224,250	\$ 26,910.00
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	224,250	\$ 3,363.75
CONSTRUCTION STAKING	%	2.5%	224,250	\$ 5,606.25
CONSTRUCTION MANAGEMENT	%	13.0%	224,250	\$ 29,152.50
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 71,760.00
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	224,250	\$ 11,212.50
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 11,212.50
10 UTILITIES				
UTILITIES RELOCATION	%	2%	0	\$ -
TOTAL FOR ITEM 10 UTILITIES				\$ -
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	0	\$ -
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ -

GRAND TOTAL \$ 307,000.00

NOTES:

- 1 ALL WORK TO OCCUR WITHIN EXIST. PVM'T & RIGHT OF WAY
- 2 MEDIAN CURB MODS, RE-STRIPING AND SIGNAL MODS CONSIDERED ENVIRONMENTALLY EXCEMPT

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #41 / #45

Traffic Signal and Intersection Index

Preliminary Cost Estimate

South Watt Ave & Elder Creek

Project Description:

Widen existing intersection (County Minimum Alternative #1 (COA #3)) to County standard 4x6 intersection. Replace Class A frontage on the westbound receiving lane and construct Class D on northbound, southbound and eastbound receiving.

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	2,325	\$ 41,841.67
TOTAL FOR ITEM 1 EARTHWORK				\$ 41,841.67
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1,800	\$ 27,000.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 27,000.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" + 4" AC)	TON	\$ 100.00	1,301.4	\$ 130,140.63
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	2,860.0	\$ 58,429.27
SIDEWALK	SF	\$ 6.00	2,700	\$ 16,200.00
CURB & GUTTER	LF	\$ 26.00	450	\$ 11,700.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 216,469.89
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	435,312	\$ 130,593.47
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 130,593.47

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 565,905.03
CONTINGENCY	%	15.0%	565,905	\$ 84,885.75
TOTAL CONSTRUCTION COST				\$ 650,790.78
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	650,791	\$ 19,523.72
ENVIROMENTAL DOCUMENT	%	1.5%	650,791	\$ 9,761.86
DESIGN ENGINEERING	%	12.0%	650,791	\$ 78,094.89
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	650,791	\$ 9,761.86
CONSTRUCTION STAKING	%	2.5%	650,791	\$ 16,269.77
CONSTRUCTION MANAGEMENT	%	13.0%	650,791	\$ 84,602.80
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 218,014.91
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	650,791	\$ 32,539.54
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 32,539.54
10 UTILITIES				
UTILITIES RELOCATION	%	2%	650,791	\$ 13,015.82
TOTAL FOR ITEM 10 UTILITIES				\$ 13,015.82
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	650,791	\$ 19,523.72
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 19,523.72

GRAND TOTAL \$ 934,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 3 INTERSECTION ESTIMATE COA #3 IS ASSUMED COMPLETE PER COUNTY EXHIBIT ATTACHED.

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #49
Traffic Signal and Intersection Index
Preliminary Cost Estimate
SR-16 at Hedge Avenue

Project Description:
 Relocate signal and construct mod. 2x4 - South Side CRs plus signal relocate only (SR-16 mainline segment included in COA #50)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	145	\$ 2,604.07
TOTAL FOR ITEM 1 EARTHWORK				\$ 2,604.07
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	63.2	\$ 6,319.50
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	183.3	\$ 3,744.11
SIDEWALK	SF	\$ 6.00	470	\$ 2,820.00
CURB & GUTTER	LF	\$ 26.00	98	\$ 2,548.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 15,431.61
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	168,036	\$ 50,410.70
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 50,410.70

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 218,446.39
CONTINGENCY	%	15.0%	218,446	\$ 32,766.96
TOTAL CONSTRUCTION COST				\$ 251,213.34
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	251,213	\$ 7,536.40
ENVIROMENTAL DOCUMENT	%	1.5%	251,213	\$ 3,768.20
DESIGN ENGINEERING	%	12.0%	251,213	\$ 30,145.60
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	251,213	\$ 3,768.20
CONSTRUCTION STAKING	%	2.5%	251,213	\$ 6,280.33
CONSTRUCTION MANAGEMENT	%	13.0%	251,213	\$ 32,657.73
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 84,156.47
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	251,213	\$ 12,560.67
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 12,560.67
10 UTILITIES				
UTILITIES RELOCATION	%	2%	251,213	\$ 5,024.27
TOTAL FOR ITEM 10 UTILITIES				\$ 5,024.27
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	251,213	\$ 7,536.40
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 7,536.40

GRAND TOTAL \$ 360,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 EXISTING CURB RETURNS ON NORTH SIDE
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #55
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Florin Rd. at Gardner Ave.

Project Description: widen exist. intx. and signalize to provide: EB & WB - LT, 2 thru, shared thru/RT; NB & SB - LT, thru, RT (Collector std.); provide curb, gutter, & sidewalk within limits of intersection legs per plan area frontage.

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	3,486	\$ 62,744.58
TOTAL FOR ITEM 1 EARTHWORK				\$ 62,744.58
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	2,230	\$ 66,900.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 66,900.00
3 PAVEMENT				
ASPHALT CONCRETE (6-1/2" + 3-1/2" + 4" + 2"AC)	TON	\$ 100.00	2,310.8	\$ 231,084.38
AGGREGATE BASE (17-1/2" + 13" AB)	TON	\$ 20.43	4,648.4	\$ 94,967.39
SIDEWALK	SF	\$ 6.00	8,625	\$ 51,750.00
CURB & GUTTER	LF	\$ 26.00	1,755	\$ 45,630.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 423,431.76
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 300,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	1,130	\$ 71,913.20
JOINT TRENCH	LF	\$ 380.00	1,755	\$ 666,900.00
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 1,038,813.20
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	1,591,890	\$ 477,566.86
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 477,566.86

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 2,069,456.41
CONTINGENCY	%	15.0%	2,069,456	\$ 310,418.46
TOTAL CONSTRUCTION COST				\$ 2,379,874.87
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	2,379,875	\$ 71,396.25
ENVIROMENTAL DOCUMENT	%	1.5%	2,379,875	\$ 35,698.12
DESIGN ENGINEERING	%	12.0%	2,379,875	\$ 285,584.98
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	2,379,875	\$ 35,698.12
CONSTRUCTION STAKING	%	2.5%	2,379,875	\$ 59,496.87
CONSTRUCTION MANAGEMENT	%	13.0%	2,379,875	\$ 309,383.73
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 797,258.08
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	2,379,875	\$ 118,993.74
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 118,993.74
10 UTILITIES				
UTILITIES RELOCATION	%	2%	2,379,875	\$ 47,597.50
TOTAL FOR ITEM 10 UTILITIES				\$ 47,597.50
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	2,379,875	\$ 71,396.25
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 71,396.25

GRAND TOTAL \$ 3,415,000.00

NOTES:

- 1 FRONTAGE IMPROVEMENTS (11' PVM'T, C&G) ARE INCLUDED
- 2 CURB RETURNS ARE INCLUDED AND ASSUMED AT ULTIMATE LOCATION
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 4 INCLUDES 310' ARTERIAL AND 255' COLLECTOR INTERSECTION LEGS EACH WAY
- 5 INCLUDES 2" AC OVERLAY OVER EXISTING PAVEMENT WITHIN LIMITS OF INTERSECTION LEGS

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #56a
 Traffic Signal and Intersection Index
 Preliminary Cost Estimate
 Florin Rd. at Hedge Ave.

Project Description: 2x2 intersection widening (Constructed by Lennar)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 4" AC)	TON	\$ 100.00	0.0	\$ -
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	0.0	\$ -
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	0.0	\$ -
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	0.0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB	LF	\$ 17.00	0	\$ -
			0	
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	0	\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 350.00	0	\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ -
CONTINGENCY	%	15.0%	0	\$ -
TOTAL CONSTRUCTION COST				\$ 1,413,810.66
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	1,413,811	\$ 42,414.32
ENVIROMENTAL DOCUMENT	%	1.5%	1,413,811	\$ 21,207.16
DESIGN ENGINEERING	%	0.0%	1,413,811	\$ -
DESIGN SERVICES DURING CONSTRUCTION	%	0.0%	1,413,811	\$ -
CONSTRUCTION STAKING	%	0.0%	1,413,811	\$ -
CONSTRUCTION MANAGEMENT	%	0.0%	1,413,811	\$ -
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 63,621.48
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	1,413,811	\$ 70,690.53
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 70,690.53
10 UTILITIES				
UTILITIES RELOCATION	%	0%	0	\$ -
TOTAL FOR ITEM 10 UTILITIES				\$ -
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	0	\$ -
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ -

GRAND TOTAL \$ 1,548,000.00

NOTES:

- 1 Estimate provided by Lennar includes Design Engineering, Design Services during construction, Construction Staking, Construction Management

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Item No.	Description	Contract Total (Includes CCO's)	Paid to Date	% To Date
Contract Total				
(Includes CCO's)				
Contract				
McGuire Hester - General Contractor		\$ 1,264,865	\$ 1,264,865	100.0%
Wood Rodgers - IP Design Engineer		\$ 75,750.00	\$ 74,217.02	98.0%
Lupton - Utilities Relocation		\$ 3,500.00	\$ 3,500.00	100.0%
Wallace Kuhl - Construction Management		\$ 15,598.00	\$ 13,951.00	89.4%
Rokni - SWPP		\$ 22,740.00	\$ 22,740.00	100.0%
MacKay & Soms - Staking		\$ 31,358.00	\$ 29,208.00	93.1%
Total		\$1,413,810.66	\$1,408,480.68	99.6%

McGUIRE AND HESTER
Hedge Avenue at Florin Road (3902)
Intersection Signal

CONTRACT DATE 1/12/16

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT PRICE	Contract Total	Billed to Date	% To Date	Billing 1	Billing 2	Billing 3	Billing 4	Billing 5	Billing 6	Billing 7	Billing 8	Retainage		
								20359	20440	20441	20589	20681	20761	20830	20919	20951	Date	2/20/16
GRADING & SITE PREP																		
1	Mobilization	ls	1	\$60,000.00	\$60,000.00	\$60,000.00	100.0%	\$3,000.00	\$3,000.00			\$33,000.00	\$12,000.00	\$9,000.00				
2	Clearing & Grubbing	ls	1	\$10,000.00	\$10,000.00	\$10,000.00	100.0%					\$10,000.00						
3	Tree Removal	ea	51	\$300.00	\$15,300.00	\$15,300.00	100.0%	\$15,300.00										
4	Sawcut	lf	3,549	\$1.00	\$3,549.00	\$3,549.00	100.0%											
5	Pavement Removal	sf	7,098	\$1.00	\$7,098.00	\$7,098.00	100.0%											
6	Remove Existing Driveway	sf	535	\$2.00	\$1,070.00	\$1,070.00	100.0%											
7	Remove Corrugated Metal pipe	lf	72	\$85.00	\$6,120.00	\$6,120.00	100.0%											
8	Excavation	cy	3,900	\$12.00	\$46,800.00	\$46,800.00	100.0%											
9	Finish Grading	sf	46,625	\$1.00	\$46,625.00	\$46,625.00	100.0%		\$2,400.00			\$20,000.00			\$26,625.00			
10	Haul off/Removal of excess spoils	lf	1	\$35,000.00	\$35,000.00	\$35,000.00	100.0%											
	SUBTOTAL GRADING & SITE PREP				\$227,962.00	\$227,962.00	100.0%	\$18,300.00	\$5,400.00	\$0.00	\$156,637.00	\$12,000.00	\$9,000.00	\$26,625.00	\$0.00	\$0.00		
DRAINAGE																		
11	Roadside Ditch	lf	2,616	\$1.50	\$3,924.00	\$3,924.00	100.0%											
12	12" RCP Pipe, Class 5	lf	60	\$75.00	\$4,500.00	\$4,500.00	100.0%											
13	3/8" Pea Gravel (pipe bedding)	cy	0	\$650.00	\$0.00	\$162.50	100.0%				\$2,250.00	\$2,250.00	\$3,924.00					
14	CL II AB (pipe backfill)	cy	12	\$60.00	\$720.00	\$162.50	100.0%					\$162.50	\$162.50					
	SUBTOTAL DRAINAGE				\$9,282.50	\$9,282.50	100.0%	\$0.00	\$0.00	\$0.00	\$2,250.00	\$3,924.00	\$0.00	\$0.00	\$0.00	\$0.00		
CONCRETE																		
15	Type 2 Vertical Curb & Gutter	lf	741	\$70.00	\$51,870.00	\$51,870.00	100.0%											
16	Type 3 Vertical Curb	lf	173	\$80.00	\$13,840.00	\$13,840.00	100.0%											
17	Type 4 Median Curb	lf	853	\$80.00	\$68,240.00	\$68,240.00	100.0%											
18	8" Median Center	lf	419	\$15.00	\$6,285.00	\$6,285.00	100.0%											
19	Sidewalk (6" PC/C2" AB CL II)	sf	390	\$25.00	\$9,750.00	\$9,750.00	100.0%											
20	Sidewalk Ramps, parallel style	lf	4	\$5,000.00	\$20,000.00	\$20,000.00	100.0%				\$2,500.00	\$7,250.00	\$20,000.00					
	SUBTOTAL CONCRETE				\$73,685.00	\$73,685.00	100.0%	\$0.00	\$0.00	\$0.00	\$2,500.00	\$37,120.00	\$34,065.00	\$0.00	\$0.00	\$0.00		
STREETWORK																		
21	7" AC Overlay	sf	33,545	\$4.60	\$154,307.00	\$154,307.00	100.0%											
22	0"-2" AC Overlay	sf	4,746	\$3.20	\$15,187.20	\$15,187.20	100.0%											
23	7" AC/1.5" AB	sf	17,321	\$8.00	\$138,568.00	\$138,568.00	100.0%				\$120,000.00	\$15,187.20	\$178,568.00					
24	7" AC/6" AB CL II	sf	6,207	\$6.00	\$37,242.00	\$37,242.00	100.0%					\$9,000.00	\$28,242.00					
25	Replace Driveway 2" AC/6" AB	sf	388	\$10.00	\$3,880.00	\$3,880.00	100.0%											
26	Type A AC Dike	lf	84	\$45.00	\$3,780.00	\$3,780.00	100.0%											
27	Pedestrian Landing 4" AC/6" AB	sf	766	\$11.00	\$8,426.00	\$8,426.00	100.0%											
28	Maintenance Road 4" AC/6" AB CL II	sf	354	\$12.00	\$4,248.00	\$4,248.00	100.0%											
29	Slurry Seal	sf	3,982	\$2.00	\$7,964.00	\$7,964.00	100.0%											
30	3' w/ Detectable Warning Surface	sf	4	\$1,500.00	\$6,000.00	\$6,000.00	100.0%											
31	Street Barricade, w/Signage	lf	19	\$30.00	\$570.00	\$570.00	100.0%											
32	Pedestrian Barricade	lf	30	\$30.00	\$900.00	\$900.00	100.0%											
	SUBTOTAL STREETWORK				\$541,072.20	\$541,072.20	100.0%	\$0.00	\$0.00	\$0.00	\$129,000.00	\$380,184.20	\$31,888.00	\$0.00	\$0.00	\$0.00		
SIGNAL/STREETLIGHTS																		
33	Signal	ls	1	\$170,000.00	\$170,000.00	\$170,000.00	100.0%											
34	FMI Poles (sizes vary)				Included	\$0.00												
35	FMI - Pedestrian heads				Included	\$0.00												
36	FMI - Pedestrian Push button w/ audible signal				Included	\$0.00												
37	FMI - Signal Heads				Included	\$0.00												
38	FMI - Detector Loops (vehicle and bike)				Included	\$0.00												
39	FMI - New Pull Boxes				Included	\$0.00												
40	FMI Conduit				Included	\$0.00												
41	FMI Wiring				Included	\$0.00												
42	FMI - Street Lights 165 Watt				Included	\$0.00												
43	Service Point				Included	\$0.00												
44	FMI - Mast-Arm-Mounted Illuminated Street Name Signs				Included	\$0.00												
45	FMI - Emergency Vehicle Pre-Emission System				Included	\$0.00												
46	Concrete Finishwork Controller Pad				Included	\$0.00												
47	Start-up, Test				Included	\$0.00												
	SUBTOTAL SIGNAL/STREETLIGHTS				\$170,000.00	\$170,000.00	100.0%	\$0.00	\$0.00	\$62,900.00	\$25,500.00	\$17,000.00	\$47,600.00	\$17,000.00	\$0.00	\$0.00		
MISCELLANEOUS																		
48	Traffic Control	ls	1	\$60,000.00	\$60,000.00	\$60,000.00	100.0%	\$3,000.00	\$3,000.00									
49	Stripping	ls	1	\$9,000.00	\$9,000.00	\$9,000.00	100.0%											
50	Signage	ls	1	\$6,500.00	\$6,500.00	\$6,500.00	100.0%											
51	Protect Utility Pole	ea	6	\$500.00	\$3,000.00	\$3,000.00	100.0%											
52	Protective Fencing for Trees	lf	488	\$4.00	\$1,952.00	\$1,952.00	100.0%	\$1,952.00	\$3,000.00									
	SUBTOTAL MISCELLANEOUS				\$80,452.00	\$80,452.00	100.0%	\$1,952.00	\$6,000.00	\$0.00	\$30,000.00	\$15,000.00	\$15,500.00	\$9,000.00	\$0.00	\$0.00		
EROSION CONTROL																		
53	Hydroseed	sf	22,578	\$0.20	\$4,515.60	\$4,515.60	100.0%											
54	Fiber Rolls	lf	210	\$10.00	\$2,100.00	\$2,100.00	100.0%	\$2,100.00										
55	Silt Fence	lf	900	\$10.00	\$9,000.00	\$9,000.00	100.0%											
56	Check Dam	ea	4	\$200.00	\$800.00	\$800.00	100.0%					\$3,000.00	\$800.00					
57	Stabilized Site Access	sf	3,627	\$2.00	\$7,254.00	\$7,254.00	100.0%											
58	Concrete Washout	ea	1	\$2,000.00	\$2,000.00	\$2,000.00	100.0%											
59	Storage Area	ea	1	\$1,000.00	\$1,000.00	\$1,000.00	100.0%											
	SUBTOTAL EROSION CONTROL				\$20,669.60	\$20,669.60	100.0%	\$2,100.00	\$0.00	\$0.00	\$3,800.00	\$10,254.00	\$4,515.60	\$0.00	\$0.00	\$0.00		
TOTAL - ORIGINAL CONTRACT																		
					\$1,123,123.30	\$1,123,123.30	100.0%	\$25,352.00	\$11,400.00	\$62,900.00	\$349,687.00	\$476,656.70	\$146,492.60	\$32,625.00	\$0.00	\$0.00		

McGUIRE AND HESTER
Hedge Avenue at Florin Road (3902)
Intersection Signal

CONTRACT DATE 1/12/16

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT PRICE	Contract Total	Billed to Date	% To Date	Billing 1	Billing 2	Billing 3	Billing 4	Billing 5	Billing 6	Billing 7	Billing 8	Retainage		
								20359	20440	20441	20589	20681	20761	20830	20919	20951	Date	2/20/16
CHANGE ORDER WORK																		
60	Removal of Trees	ea	2	\$300.00	\$600.00	\$600.00	100.0%	\$600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
	SUBTOTAL		</															

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #56b
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Florin Rd. at Hedge Ave.

Project Description: Widen exist. intx.to County standard 2x4

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	41,387	\$ 744,960.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 744,960.00
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	3,490	\$ 52,350.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 52,350.00
3 PAVEMENT				
ASPHALT CONCRETE (6-1/2")	TON	\$ 100.00	1,891.5	\$ 189,150.00
AGGREGATE BASE (17-1/2")	TON	\$ 20.43	4,922.8	\$ 100,571.78
SIDEWALK	SF	\$ 6.00	120	\$ 720.00
CURB & GUTTER	LF	\$ 26.00	160	\$ 4,160.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 294,601.78
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	1,241,912	\$ 372,573.53
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 372,573.53

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 1,614,485.32
CONTINGENCY	%	15.0%	1,614,485	\$ 242,172.80
TOTAL CONSTRUCTION COST				\$ 1,856,658.11
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	1,856,658	\$ 55,699.74
ENVIROMENTAL DOCUMENT	%	1.5%	1,856,658	\$ 27,849.87
DESIGN ENGINEERING	%	12.0%	1,856,658	\$ 222,798.97
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	1,856,658	\$ 27,849.87
CONSTRUCTION STAKING	%	2.5%	1,856,658	\$ 46,416.45
CONSTRUCTION MANAGEMENT	%	13.0%	1,856,658	\$ 241,365.55
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 621,980.47
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	1,856,658	\$ 92,832.91
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 92,832.91
10 UTILITIES				
UTILITIES RELOCATION	%	2%	1,856,658	\$ 37,133.16
TOTAL FOR ITEM 10 UTILITIES				\$ 37,133.16
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	1,856,658	\$ 55,699.74
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 55,699.74

GRAND TOTAL \$ 2,664,000.00

NOTES:

- 1 2 CURB RETURNS ARE INCLUDED AND ASSUMED AT ULTIMATE LOCATION
- 2 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 3 INCLUDES 310' ARTERIAL AND 255' COLLECTOR INTERSECTION LEGS EACH WAY

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #57

Traffic Signal and Intersection Index

Fruitridge Rd. at Hedge Ave.

Widen Two-Lane Rural Intersection Including Protective Turn Lane

Project Description: Replace exist. 2x2 rural intx. w/2x2 4-way intx.; signalize (LT + shared R-RT + 6' shoulders 4-way; future 6x6)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	7,204	\$ 129,677.33
TOTAL FOR ITEM 1 EARTHWORK				\$ 129,677.33
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1640	\$ 24,600.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 24,600.00
3 PAVEMENT				
ASPHALT CONCRETE (6-1/2" AC)	TON	\$ 100.00	3,951.1	\$ 395,110.63
AGGREGATE BASE (17-1/2" AB)	TON	\$ 20.43	10,283.0	\$ 210,081.84
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 605,192.46
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 300,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 300,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ 317,840.94
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 317,840.94

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 1,377,310.74
CONTINGENCY	%	15.0%	\$ 1,377,310.74	\$ 206,596.61
TOTAL CONSTRUCTION COST				\$ 1,583,907.35
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 1,583,907.35	\$ 47,517.22
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 1,583,907.35	\$ 23,758.61
DESIGN ENGINEERING	%	12.0%	\$ 1,583,907.35	\$ 190,068.88
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 1,583,907.35	\$ 23,758.61
CONSTRUCTION STAKING	%	2.5%	\$ 1,583,907.35	\$ 39,597.68
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 1,583,907.35	\$ 205,907.96
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 530,608.96
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 1,583,907.35	\$ 79,195.37
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 79,195.37
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 1,583,907.35	\$ 31,678.15
TOTAL FOR ITEM 10 UTILITIES				\$ 31,678.15
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 1,583,907.35	\$ 47,517.22
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 47,517.22

GRAND TOTAL \$ 2,273,000.00

NOTES:

- 1 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 2 INCLUDES 310' INTERSECTION LEGS + DEPARTURE TAPERS EACH WAY

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

COA #59

Traffic Signal and Intersection Index

Preliminary Cost Estimate

Gerber Rd. at Waterman Rd.

Project Description:

Construct signalized 2x4 (Future 4x4) - South Side CRs plus signal only (M.M. TC-2 (r)); 4-lane Gerber Rd. segment widening a part of preceding COA #58. Class D improvements on west bound approach and departure.

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	1,308	\$ 23,540.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 23,540.00
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	623.9	\$ 62,390.63
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	1,689.7	\$ 34,520.63
SIDEWALK	SF	\$ 6.00	500	\$ 3,000.00
CURB & GUTTER	LF	\$ 26.00	100	\$ 2,600.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 102,511.26
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	276,051	\$ 82,815.38
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 82,815.38

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 358,866.64
CONTINGENCY	%	15.0%	358,867	\$ 53,830.00
TOTAL CONSTRUCTION COST				\$ 412,696.63
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	412,697	\$ 12,380.90
ENVIROMENTAL DOCUMENT	%	1.5%	412,697	\$ 6,190.45
DESIGN ENGINEERING	%	12.0%	412,697	\$ 49,523.60
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	412,697	\$ 6,190.45
CONSTRUCTION STAKING	%	2.5%	412,697	\$ 10,317.42
CONSTRUCTION MANAGEMENT	%	13.0%	412,697	\$ 53,650.56
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 138,253.37
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	412,697	\$ 20,634.83
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 20,634.83
10 UTILITIES				
UTILITIES RELOCATION	%	2%	412,697	\$ 8,253.93
TOTAL FOR ITEM 10 UTILITIES				\$ 8,253.93
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	412,697	\$ 12,380.90
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 12,380.90

GRAND TOTAL \$ 592,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 EXISTING CURB RETURNS ON NORTH SIDE & EXISTING PARTIAL 4X4 IMPROVEMENTS
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #61
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Elder Creek Rd. at Hedge Avenue

Project Description: reconstruct and widen exist rual 2x2 intersection to 2x4 signalized intersection

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	6,082	\$ 109,474.44
TOTAL FOR ITEM 1 EARTHWORK				\$ 109,474.44
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	1400	\$ 42,000.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 42,000.00
3 PAVEMENT				
ASPHALT CONCRETE (5-1/2" + 4" AC)	TON	\$ 100.00	2,142.7	\$ 214,268.75
AGGREGATE BASE (16-1/2" AB)	TON	\$ 20.43	5,552.6	\$ 113,439.49
ASPHALT CONCRETE (3 1/2" AC)	TON	\$ 100.00	759.5	\$ 75,950.00
AGGREGATE BASE (13" AB)	TON	\$ 20.43	2,727.0	\$ 55,711.93
SIDEWALK	SF	\$ 6.00	1000	\$ 6,000.00
CURB & GUTTER	LF	\$ 26.00	200	\$ 5,200.00
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 470,570.17
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 300,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 300,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ 276,613.38
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 276,613.38

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 1,198,658.00
CONTINGENCY	%	15.0%	\$ 1,198,658.00	\$ 179,798.70
TOTAL CONSTRUCTION COST				\$ 1,378,456.70
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 1,378,456.70	\$ 41,353.70
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 1,378,456.70	\$ 20,676.85
DESIGN ENGINEERING	%	12.0%	\$ 1,378,456.70	\$ 165,414.80
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 1,378,456.70	\$ 20,676.85
CONSTRUCTION STAKING	%	2.5%	\$ 1,378,456.70	\$ 34,461.42
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 1,378,456.70	\$ 179,199.37
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 461,782.99
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 1,378,456.70	\$ 68,922.83
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 68,922.83
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 1,378,456.70	\$ 27,569.13
TOTAL FOR ITEM 10 UTILITIES				\$ 27,569.13
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 1,378,456.70	\$ 41,353.70
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 41,353.70

GRAND TOTAL \$ 1,978,000.00

NOTES:

- 1 FRONTAGE IMPROVEMENTS (11' PVM/T, C&G, AND SIDEWALK) ON ALL FRONTAGES ARE INCLUDED
- 2 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 3 INCLUDES 450' ARTERIAL INTERSECTION LEGS EACH WAY
- 4 INCLUDES 310' COLLECTOR LEGS EA. WAY

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #67

Traffic Signal and Intersection Index

Preliminary Cost Estimate

Florin Rd and Bradshaw Rd

Project Description:

Added additional lanes in both directions. Class D frontage on the south side.
 Includes drainage along tapers to existing lanes. intersection Paving and CR's to remain.
 North side on-site to FVCP and southside is on-site to NVSSP.

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	8,087	\$ 145,573.33
TOTAL FOR ITEM 1 EARTHWORK				\$ 145,573.33
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	2000	\$ 30,000.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 30,000.00
3 PAVEMENT				
ASPHALT CONCRETE (6-1/2" AC)	TON	\$ 100.00	4,893.9	\$ 489,385.94
AGGREGATE BASE (17-1/2" AB)	TON	\$ 20.43	11,301.9	\$ 230,898.21
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	3360	\$ 57,120.00
TOTAL OR ITEM 3 PAVEMENT				\$ 777,404.15
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ 330,893.24
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 330,893.24

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 1,433,870.73
CONTINGENCY	%	15.0%	\$ 1,433,870.73	\$ 215,080.61
TOTAL CONSTRUCTION COST				\$ 1,648,951.33
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 1,648,951.33	\$ 49,468.54
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 1,648,951.33	\$ 24,734.27
DESIGN ENGINEERING	%	12.0%	\$ 1,648,951.33	\$ 197,874.16
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 1,648,951.33	\$ 24,734.27
CONSTRUCTION STAKING	%	2.5%	\$ 1,648,951.33	\$ 41,223.78
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 1,648,951.33	\$ 214,363.67
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 552,398.70
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 1,648,951.33	\$ 82,447.57
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 82,447.57
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 1,648,951.33	\$ 32,979.03
TOTAL FOR ITEM 10 UTILITIES				\$ 32,979.03
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 1,648,951.33	\$ 49,468.54
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 49,468.54

GRAND TOTAL \$ 2,366,000.00

NOTES:

- 1 LANDSCAPING, AND SOUNDWALL ARE EXCLUDED
- 2 EX. CURB RETURNS ASSUMED AT ULTIMATE LOCATION
- 3 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 4 INCLUDES 450' INTERSECTION LEGS EACH WAY
- 5 OFFSITE FRONTAGE = CLASS D

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #68 (TC-4(y))

Traffic Signal and Intersection Index

Preliminary Cost Estimate - 4x2 Intersection (Replacement of Rural 2x2)

Florin Rd. at Excelsior Rd.

Project Description:

Widen exist. 2x2 intx. per COA #25 to 4x2 Intersection (EB & WB: Dual-LT; NB & SB: Single LT; future 6x6 intx.)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	4,170	\$ 75,053.33
TOTAL FOR ITEM 1 EARTHWORK				\$ 75,053.33
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1,280	\$ 19,200.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 19,200.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" + 4" AC)	TON	\$ 100.00	2,320.2	\$ 232,015.63
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	5,710.4	\$ 116,664.13
SIDEWALK	SF	\$ 6.00	1,200	\$ 7,200.00
CURB & GUTTER	LF	\$ 26.00	200	\$ 5,200.00
MEDIAN CURB	LF	\$ 17.00	1,720	\$ 29,240.00
TOTAL OR ITEM 3 PAVEMENT				\$ 390,319.76
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	634,573	\$ 190,371.93
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 190,371.93

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 824,945.02
CONTINGENCY	%	15.0%	824,945	\$ 123,741.75
TOTAL CONSTRUCTION COST				\$ 948,686.77
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	948,687	\$ 28,460.60
ENVIROMENTAL DOCUMENT	%	1.5%	948,687	\$ 14,230.30
DESIGN ENGINEERING	%	12.0%	948,687	\$ 113,842.41
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	948,687	\$ 14,230.30
CONSTRUCTION STAKING	%	2.5%	948,687	\$ 23,717.17
CONSTRUCTION MANAGEMENT	%	13.0%	948,687	\$ 123,329.28
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 317,810.07
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	948,687	\$ 47,434.34
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 47,434.34
10 UTILITIES				
UTILITIES RELOCATION	%	2%	948,687	\$ 18,973.74
TOTAL FOR ITEM 10 UTILITIES				\$ 18,973.74
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	948,687	\$ 28,460.60
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 28,460.60

GRAND TOTAL \$ 1,361,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 FUTURE 6 X 6 INTERSECTION CURB RETURNS IN ULTIMATE LOCATION
- 3 INCLUDES 450' INTERSECTION LEGS EACH WAY
- 4 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20
- 5 INCL. STREETLIGHTS ALONG ULTIMATE NW AND SE FRONTAGE

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #69 (TC-4(x))

Traffic Signal and Intersection Index

Preliminary Cost Estimate - 4x2 Intersection (Replacement of Rural 2x2)

Florin Rd. at Vineyard Rd.

Project Description:

Replace Rural 2x2 with 4x2 Intersection w/Signal (Single LT on All Approaches)

(Cost of EB and WB intersection legs through intersection included in 4-lane segment widening as part of preceding COA #64; SB approach exist.)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	1,299	\$ 23,388.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 23,388.00
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	467	\$ 7,005.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 7,005.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 6 1/2" + 4" AC)	TON	\$ 100.00	802.0	\$ 80,200.00
AGGREGATE BASE (16 1/2" + 17 1/2" AB)	TON	\$ 20.43	1,903.6	\$ 38,890.72
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 119,090.72
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 300,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 300,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	449,484	\$ 134,845.12
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 134,845.12

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 584,328.83
CONTINGENCY	%	15.0%	584,329	\$ 87,649.33
TOTAL CONSTRUCTION COST				\$ 671,978.16
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	671,978	\$ 20,159.34
ENVIROMENTAL DOCUMENT	%	1.5%	671,978	\$ 10,079.67
DESIGN ENGINEERING	%	12.0%	671,978	\$ 80,637.38
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	671,978	\$ 10,079.67
CONSTRUCTION STAKING	%	2.5%	671,978	\$ 16,799.45
CONSTRUCTION MANAGEMENT	%	13.0%	671,978	\$ 87,357.16
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 225,112.68
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	671,978	\$ 33,598.91
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 33,598.91
10 UTILITIES				
UTILITIES RELOCATION	%	2%	671,978	\$ 13,439.56
TOTAL FOR ITEM 10 UTILITIES				\$ 13,439.56
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	671,978	\$ 20,159.34
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 20,159.34

GRAND TOTAL \$ 964,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 FRONTAGE IMPROVEMENTS (11' PVM'T, CURB & GUTTER, S/W) NOT INCLUDED (FUTURE 4X6 INTX)
- 3 INCLUDES 450' INTERSECTION LEGS ON NB APPROACH
- 4 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job #: 27121.000
 By: N.T./HF

COA #70 / 92a
Traffic Signal and Intersection Index
4x6 intersection
Waterman Road & Florin Road

Project Description: 3-way interim 2x2 intersection (E, W, S) (Future 6 x 4). Interim 2 x 2 intersection expected to be built in summer of 2017 by Lennar. Additional pavement rehab required by the project is covered by the "Minor Items" line item.
 (See COA70/92b for 6x4 widening)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$18.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (6-1/2" AC)	TON	\$100.00	0.0	\$ -
AGGREGATE BASE (17-1/2" AB)	TON	\$20.43	0.0	\$ -
SIDEWALK	SF	\$6.00	0	\$ -
CURB & GUTTER	LF	\$26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$63.64	0	\$ -
LANDSCAPING	SF	\$15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	0	\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$350.00		\$ -
CULVERTS	LF	\$375.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ -
CONTINGENCY	%	15.0%	0	\$ -
TOTAL CONSTRUCTION COST				\$ 540,667.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	540,667	\$ 16,220.01
ENVIROMENTAL DOCUMENT	%	1.5%	540,667	\$ 8,110.01
DESIGN ENGINEERING	%	12.0%	540,667	\$ 64,880.04
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	540,667	\$ 8,110.01
CONSTRUCTION STAKING	%	2.5%	540,667	\$ 13,516.68
CONSTRUCTION MANAGEMENT	%	13.0%	540,667	\$ 70,286.71
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 181,123.45
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	540,667	\$ 27,033.35
EASEMENT	SF	\$3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 27,033.35
10 UTILITIES				
UTILITIES RELOCATION	%	2%	540,667	\$10,813.34
TOTAL FOR ITEM 10 UTILITIES				\$10,813.34
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	540,667	\$ 16,220.01
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 16,220.01

GRAND TOTAL \$ 776,000.00

NOTES:

- 1 Cost Estimate based on approved Waterman Road improvement plans dated 2/06/2017

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job #: 27121.000
By: N.T./HF

COA #70 / 92b
Traffic Signal and Intersection Index
4x6 intersection
Waterman Road & Florin Road

Project Description:
Existing Condition: Modified 2x2 3 way (west, east and south legs) intersection constructed by Lennar.
Proposed Improvements: Complete intersection to a built out 4x6 with Class D improvements.

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	7,227	\$ 130,089
TOTAL FOR ITEM 1 EARTHWORK				\$ 130,089
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	2,700	\$ 40,500.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 40,500.00
3 PAVEMENT				
ASPHALT CONCRETE (6-1/2" + 4" AC)	TON	\$ 100.00	2,293.0	\$ 229,301.56
AGGREGATE BASE (17-1/2" AB)	TON	\$ 20.43	5,712.0	\$ 116,696.53
ASPHALT CONCRETE (5-1/2" AC)	TON	\$ 100.00	1,632.8	\$ 163,281.25
AGGREGATE BASE (16-1/2" AB)	TON	\$ 20.43	4,735.2	\$ 96,739.24
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	1,800	\$ 30,600.00
TOTAL OR ITEM 3 PAVEMENT				\$ 636,618.59
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	957,207	\$ 287,162.24
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 287,162.24

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00	0	\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 1,244,369.72
CONTINGENCY	%	15.0%	1,244,370	\$ 186,655.46
TOTAL CONSTRUCTION COST				\$ 1,431,025.18
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	1,431,025	\$ 42,930.76
ENVIROMENTAL DOCUMENT	%	1.5%	1,431,025	\$ 21,465.38
DESIGN ENGINEERING	%	12.0%	1,431,025	\$ 171,723.02
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	1,431,025	\$ 21,465.38
CONSTRUCTION STAKING	%	2.5%	1,431,025	\$ 35,775.63
CONSTRUCTION MANAGEMENT	%	13.0%	1,431,025	\$ 186,033.27
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 479,393.43
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	1,431,025	\$ 71,551.26
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 71,551.26
10 UTILITIES				
UTILITIES RELOCATION	%	2%	1,431,025	\$ 28,620.50
TOTAL FOR ITEM 10 UTILITIES				\$ 28,620.50
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	1,431,025	\$ 42,930.76
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 42,930.76

GRAND TOTAL \$ 2,054,000.00

NOTES:

- 1 ROADWAY SECTION ASSUMES AVERAGE R VALUE OF 20
- 2 INCLUDES 450' INTERSECTION LEGS EACH WAY
- 3 FOR EASE OF ADMINISTRATION, THE INTERSECTION IMPROVEMENTS FOR COA 70 AND 92 HAVE BEEN CONSOLIDATED INTO A SINGLE ESTIMATE.

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #74

Traffic Signal and Intersection Index

Preliminary Cost Estimate

Kiefer Blvd at Bradshaw Rd.

Project Description:

Add EB Right Turn Lane and SB receiving lane (dual LT-lanes WB and EB already exist)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	567	\$ 10,212.22
TOTAL FOR ITEM 1 EARTHWORK				\$ 10,212.22
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 6.5" AC)	TON	\$ 100.00	429.4	\$ 42,940.63
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	824.8	\$ 16,850.22
SIDEWALK	SF	\$ 6.00	250	\$ 1,500.00
CURB & GUTTER	LF	\$ 26.00	50	\$ 1,300.00
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 62,590.84
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	222,803	\$ 66,840.92
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 66,840.92

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 289,643.98
CONTINGENCY	%	15.0%	289,644	\$ 43,446.60
TOTAL CONSTRUCTION COST				\$ 333,090.58
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	333,091	\$ 9,992.72
ENVIROMENTAL DOCUMENT	%	1.5%	333,091	\$ 4,996.36
DESIGN ENGINEERING	%	12.0%	333,091	\$ 39,970.87
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	333,091	\$ 4,996.36
CONSTRUCTION STAKING	%	2.5%	333,091	\$ 8,327.26
CONSTRUCTION MANAGEMENT	%	13.0%	333,091	\$ 43,301.78
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 111,585.34
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	333,091	\$ 16,654.53
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 16,654.53
10 UTILITIES				
UTILITIES RELOCATION	%	2%	333,091	\$ 6,661.81
TOTAL FOR ITEM 10 UTILITIES				\$ 6,661.81
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	333,091	\$ 9,992.72
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 9,992.72

GRAND TOTAL \$ 478,000.00

NOTES:

- 1 EXIST. RIGHT OF WAY IS ADEQUATE
- 2 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 3 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #77

Traffic Signal and Intersection Index

Preliminary Cost Estimate

Gerber Rd. at French Rd.

Project Description:

Provide RT-Lane On WB Approach (IMPROVEMENTS ARE LIMITED TO RE-CONFIGURATION OF WB APPROACH - WIDEN BY REMOVE & REPLACE CURB, GUTTER, & S/W; RE-STRIPE, RE-LOCATE SIGNAL, UTILITY VAULT; REPLACE COMMERCIAL D/W)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	251	\$ 4,522.22
TOTAL FOR ITEM 1 EARTHWORK				\$ 4,522.22
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	127	\$ 12,718.75
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	369	\$ 7,535.48
SIDEWALK	SF	\$ 6.00	2,520	\$ 15,120.00
CURB & GUTTER	LF	\$ 26.00	470	\$ 12,220.00
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 47,594.23
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
JOINT TRENCH	LF	\$ 380.00	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	202,116	\$ 60,634.94
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 60,634.94

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 262,751.39
CONTINGENCY	%	15.0%	262,751	\$ 39,412.71
TOTAL CONSTRUCTION COST				\$ 302,164.09
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	302,164	\$ 9,064.92
ENVIROMENTAL DOCUMENT	%	1.5%	302,164	\$ 4,532.46
DESIGN ENGINEERING	%	12.0%	302,164	\$ 36,259.69
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	302,164	\$ 4,532.46
CONSTRUCTION STAKING	%	2.5%	302,164	\$ 7,554.10
CONSTRUCTION MANAGEMENT	%	13.0%	302,164	\$ 39,281.33
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 101,224.97
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	302,164	\$ 15,108.20
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 15,108.20
10 UTILITIES				
UTILITIES RELOCATION	%	2%	302,164	\$ 6,043.28
TOTAL FOR ITEM 10 UTILITIES				\$ 6,043.28
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	302,164	\$ 9,064.92
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 9,064.92

GRAND TOTAL \$ 434,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #75

Traffic Signal and Intersection Index

Preliminary Cost Estimate

Elder Creek Rd. at Bradshaw Rd.

Project Description:

Widen exist. mod. 2x6 intx. to mod. 4x6 (add NB, SB, WB RT-lanes, TR lanes & bus turnouts) -see also Prior COA #11 Improvements (EB frontage imp's completed as part of COA #11).

Improve 6x2 intersection to a 6x6 intersection. (Refer to NVS A-1.4.R26b)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	54,533	\$ 981,594.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 981,594.00
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	2,940	\$ 44,100.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 44,100.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 6 1/2" + 4" AC)	TON	\$ 100.00	5,900.0	\$ 590,000.00
AGGREGATE BASE (16 1/2" + 17 1/2" AB)	TON	\$ 20.43	16,012.4	\$ 327,133.33
SIDEWALK	SF	\$ 6.00	1,000	\$ 6,000.00
CURB & GUTTER	LF	\$ 26.00	200	\$ 5,200.00
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 928,333.33
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	2,104,027	\$ 631,208.20
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 631,208.20

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 2,735,235.53
CONTINGENCY	%	15.0%	2,735,236	\$ 410,285.33
TOTAL CONSTRUCTION COST				\$ 3,145,520.86
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	3,145,521	\$ 94,365.63
ENVIROMENTAL DOCUMENT	%	1.5%	3,145,521	\$ 47,182.81
DESIGN ENGINEERING	%	12.0%	3,145,521	\$ 377,462.50
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	3,145,521	\$ 47,182.81
CONSTRUCTION STAKING	%	2.5%	3,145,521	\$ 78,638.02
CONSTRUCTION MANAGEMENT	%	13.0%	3,145,521	\$ 408,917.71
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 1,053,749.49
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	3,145,521	\$ 157,276.04
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 157,276.04
10 UTILITIES				
UTILITIES RELOCATION	%	2%	3,145,521	\$ 62,910.42
TOTAL FOR ITEM 10 UTILITIES				\$ 62,910.42
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	3,145,521	\$ 94,365.63
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 94,365.63

GRAND TOTAL \$ 4,514,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #78
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Gerber Rd. and Bradshaw Rd.

Project Description:
 TC-4(dd) based on TC-2(t) COA #16 -. Improve existing modified 4x4 intx to standard 4x6 intx. Add NB bus turnout and RT, Add SB bus turnout and single thru with 550' taper, Add west bound thru, RT bus turnout and single receiving lane, add all CR's to final location. Includes remodel of existing gas station at northwest corner.

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$18.00	3,852	\$ 69,338.33
TOTAL FOR ITEM 1 EARTHWORK				\$ 69,338.33
2 DRAINAGE				
DRAINAGE	LF	\$15.00	2,700	\$ 40,500.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 40,500.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" + 5 1/2" + 4" AC)	TON	\$100.00	2,584.5	\$ 258,454.69
AGGREGATE BASE (17 1/2" + 16 1/2" AB)	TON	\$20.43	5,564.1	\$ 113,675.55
SIDEWALK	SF	\$6.00	0	\$ -
CURB & GUTTER	LF	\$26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 372,130.24
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$63.64	0	\$ -
LANDSCAPING	SF	\$15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	631,969	\$ 189,590.57
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 189,590.57

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
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Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

6 STRUCTURES					
	BRIDGES	SF	\$350.00		\$ -
	TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY					
				SUBTOTAL CONSTRUCTION COST	\$ 821,559.15
	CONTINGENCY	%	15.0%	821,559	\$ 123,233.87
				TOTAL CONSTRUCTION COST	\$ 944,793.02
8 ENGINEERING & MANAGEMENT					
	ENGINEERING STUDIES	%	3.0%	944,793	\$ 28,343.79
	ENVIROMENTAL DOCUMENT	%	1.5%	944,793	\$ 14,171.90
	DESIGN ENGINEERING	%	12.0%	944,793	\$ 113,375.16
	DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	944,793	\$ 14,171.90
	CONSTRUCTION STAKING	%	2.5%	944,793	\$ 23,619.83
	CONSTRUCTION MANAGEMENT	%	13.0%	944,793	\$ 122,823.09
	TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 316,505.66
	(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY					
	RIGHT OF WAY	%	5.0%	944,793	\$ 47,239.65
	EASEMENT	SF	\$3.00	0	\$ -
	PROPERTY ACQUISITION	EA	\$1,800,000.00	1	\$ 1,800,000.00
	TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 1,847,239.65
10 UTILITIES					
	UTILITIES RELOCATION	%	2%	944,793	\$18,895.86
	TOTAL FOR ITEM 10 UTILITIES				\$18,895.86
11 ENVIROMENTAL MITIGATION					
	ENVIROMENTAL DOCUMENTATION	%	1.50%	944,793	\$ 14,171.90
	ENVIROMENTAL MITIGATION	%	3.0%	944,793	\$ 28,343.79
	TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 42,515.69

GRAND TOTAL \$ 3,170,000.00

NOTES:

- 1 GAS STATION ACQUISITION & DEMO COST IS PLACE HOLDER COST ONLY; ACTUAL COST TO BE DETERMINED BY REAL
- 2 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 3 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

COA #79

Traffic Signal and Intersection Index

Preliminary Cost Estimate

Gerber Rd. at Waterman Rd.

Project Description:

Build Out To 4x4 Intersection (48' wide SB Leg Included In COA #60, EB & WB Included In COA #59) - exist. curb returns on north side & exist. partial 4x4 intx. Improvements; Class D improvements on NB approach. [only northern Waterman leg req'd (see COA 59 & 60)]

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	4,047	\$ 72,854.22
TOTAL FOR ITEM 1 EARTHWORK				\$ 72,854.22
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	800	\$ 24,000.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 24,000.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 4"AC)	TON	\$ 100.00	2,059.3	\$ 205,933.75
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	5,260.3	\$ 107,468.13
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB	LF	\$ 17.00	1,800	\$ 30,600.00
TOTAL OR ITEM 3 PAVEMENT				\$ 344,001.88
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
JOINT TRENCH	LF	\$ 380.00	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	590,856	\$ 177,256.83
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 177,256.83

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 768,112.94
CONTINGENCY	%	15.0%	768,113	\$ 115,216.94
TOTAL CONSTRUCTION COST				\$ 883,329.88
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	883,330	\$ 26,499.90
ENVIROMENTAL DOCUMENT	%	1.5%	883,330	\$ 13,249.95
DESIGN ENGINEERING	%	12.0%	883,330	\$ 105,999.59
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	883,330	\$ 13,249.95
CONSTRUCTION STAKING	%	2.5%	883,330	\$ 22,083.25
CONSTRUCTION MANAGEMENT	%	13.0%	883,330	\$ 114,832.88
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 295,915.51
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	883,330	\$ 44,166.49
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 44,166.49
10 UTILITIES				
UTILITIES RELOCATION	%	2%	883,330	\$ 17,666.60
TOTAL FOR ITEM 10 UTILITIES				\$ 17,666.60
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	883,330	\$ 26,499.90
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 26,499.90

GRAND TOTAL \$ 1,268,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #80
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Gerber Rd. at Bardu Ln.

Project Description:
 2x4 Intersection Widening & Signalization; north west CR's exist. (Bardu leg = Collector)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	1,091	\$ 19,644.44
TOTAL FOR ITEM 1 EARTHWORK				\$ 19,644.44
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	150	\$ 4,500.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 4,500.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 4" AC)	TON	\$ 100.00	704.4	\$ 70,437.50
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	1,455.4	\$ 29,734.59
SIDEWALK	SF	\$ 6.00	750	\$ 4,500.00
CURB & GUTTER	LF	\$ 26.00	150	\$ 3,900.00
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 108,572.09
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 300,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 300,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	432,717	\$ 129,814.96
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 129,814.96

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 562,531.49
CONTINGENCY	%	15.0%	562,531	\$ 84,379.72
TOTAL CONSTRUCTION COST				\$ 646,911.22
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	646,911	\$ 19,407.34
ENVIROMENTAL DOCUMENT	%	1.5%	646,911	\$ 9,703.67
DESIGN ENGINEERING	%	12.0%	646,911	\$ 77,629.35
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	646,911	\$ 9,703.67
CONSTRUCTION STAKING	%	2.5%	646,911	\$ 16,172.78
CONSTRUCTION MANAGEMENT	%	13.0%	646,911	\$ 84,098.46
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 216,715.26
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	646,911	\$ 32,345.56
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 32,345.56
10 UTILITIES				
UTILITIES RELOCATION	%	2%	646,911	\$ 12,938.22
TOTAL FOR ITEM 10 UTILITIES				\$ 12,938.22
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	646,911	\$ 19,407.34
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 19,407.34

GRAND TOTAL \$ 928,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION BASED ON DOT STD.
- 3 NORTHWEST CR AND SIDEWALK TO REMAIN
- 4 NE, SE AND SW CURB RETURNS TO BE PLACED AT ULTIMATE LOCATION
- 5 NORTH AND SOUTH LEG IMPROVEMENTS WILL BE IMPROVED BY THE FRONTING DEVELOPER

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #81
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Vineyard Rd. at Gerber Rd.

Project Description:
 TC-2(u) and TC-4(ee) Based On Existing - widen exist. 3-way intx. to 4-way intx. (Modify from 3 way to 4 way mod 4x4)
 (Note: Wildhawk Subdivision To build out Southwest Corner Of Intersection; In Design Fall '14)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	5,467	\$ 98,413.89
TOTAL FOR ITEM 1 EARTHWORK				\$ 98,413.89
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	2,505	\$ 37,575.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 37,575.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 4" AC)	TON	\$ 100.00	2,609.9	\$ 260,992.19
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	7,568.8	\$ 154,630.04
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB	LF	\$ 17.00	3,360	\$ 57,120.00
TOTAL OR ITEM 3 PAVEMENT				\$ 472,742.23
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
JOINT TRENCH	LF	\$ 380.00	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	758,731	\$ 227,619.34
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 227,619.34

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 986,350.45
CONTINGENCY	%	15.0%	986,350	\$ 147,952.57
TOTAL CONSTRUCTION COST				\$ 1,134,303.02
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	1,134,303	\$ 34,029.09
ENVIROMENTAL DOCUMENT	%	1.5%	1,134,303	\$ 17,014.55
DESIGN ENGINEERING	%	12.0%	1,134,303	\$ 136,116.36
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	1,134,303	\$ 17,014.55
CONSTRUCTION STAKING	%	2.5%	1,134,303	\$ 28,357.58
CONSTRUCTION MANAGEMENT	%	13.0%	1,134,303	\$ 147,459.39
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 379,991.51
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	1,134,303	\$ 56,715.15
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 56,715.15
10 UTILITIES				
UTILITIES RELOCATION	%	2%	1,134,303	\$ 22,686.06
TOTAL FOR ITEM 10 UTILITIES				\$ 22,686.06
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	1,134,303	\$ 34,029.09
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 34,029.09

GRAND TOTAL \$ 1,628,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #82
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Excelsior Rd. at Gerber Rd.

Project Description:
 Construct 4 way modified 4x2 signalized intersection - construction quantities and cost provided by Lennar.

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 4" AC)	TON	\$ 100.00	0.0	\$ -
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	0.0	\$ -
ASPHALT CONCRETE (3 1/2" AC)	TON	\$ 100.00	0.0	\$ -
AGGREGATE BASE (13" AB)	TON	\$ 20.43	0.0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	0	\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 972,851.00
CONTINGENCY	%	15.0%	972,851	\$ 145,927.65
TOTAL CONSTRUCTION COST				\$ 1,118,778.65
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	1,118,779	\$ 33,563.36
ENVIROMENTAL DOCUMENT	%	1.5%	1,118,779	\$ 16,781.68
DESIGN ENGINEERING	%	12.0%	1,118,779	\$ 134,253.44
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	1,118,779	\$ 16,781.68
CONSTRUCTION STAKING	%	2.5%	1,118,779	\$ 27,969.47
CONSTRUCTION MANAGEMENT	%	13.0%	1,118,779	\$ 145,441.22
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 374,790.85
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	1,118,779	\$ 55,938.93
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 55,938.93
10 UTILITIES				
UTILITIES RELOCATION	%	2%	1,118,779	\$ 22,375.57
TOTAL FOR ITEM 10 UTILITIES				\$ 22,375.57
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	1,118,779	\$ 33,563.36
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 33,563.36

GRAND TOTAL \$ 1,605,000.00

NOTES:

- 1 RIGHT OF WAY COST IS AN ASSUMED PERCENTAGE
- 2 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 3 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

PRELIMINARY COST ESTIMATE

Excelsior Road

Sacramento County, CA

Based on Based on 3rd Submittal of Improvements Plans
dated March, 2017

CONSTRUCTION COSTS

<u>ITEM No.</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>DESCRIPTION</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
A. EARTHWORK					
1	1	LS	Erosion Control	\$10,000.00	\$10,000
2	1	LS	Clear & Grub	\$10,000.00	\$10,000
3	160,600	SF	Finish Grading	\$0.25	\$40,150
TOTAL EARTHWORK					\$60,150
B. STORM DRAIN SYSTEM					
1	62	LF	12" Storm Drain, RCP	\$55.00	\$3,410
2	213	LF	12" Storm Drain, CMP	\$50.00	\$10,650
3	19	TON	12"Cobble Rock Slope Protection	\$35.00	\$665
4	510	SF	Geotextile Fabric	\$0.19	\$97
TOTAL STORM DRAIN SYSTEM					\$14,822
C. CONCRETE WORK					
1	99	LF	Type 1A Curb & Gutter	\$17.00	\$1,683
2	998	SF	Sidewalk ramps(2-2 ea plaza style)	\$5.00	\$4,990
3	567	LF	Type 4 Median curb	\$15.00	\$8,505
4	48	SF	Pedestrian Landing 3.6"PCC/6"AB	\$10.00	\$480
TOTAL CONCRETE WORK					\$15,658
D. STREETWORK					
1	84,252	SF	5.5" A.C. Paving / 18" A.B.	\$8.00	\$674,016
2	583	SF	4" AC Paving / 4" AB (pedestrian landing)	\$4.00	\$2,332
3	149	LF	AC Dike	\$15.00	\$2,235
4	230	LF	Sidewalk Barricade	\$20.00	\$4,600
5	25,632	SF	6" to 1' Slurry Seal Overlay	\$5.00	\$128,160
6	16,536	SF	6" Slurry Seal Overlay	\$3.00	\$49,608
7	13,463	SF	2"Slurry Seal Overlay	\$0.80	\$10,770
8	1	EA	Centerline Monuments	\$500.00	\$500
9	1	LS	Striping	\$10,000.00	\$10,000
TOTAL STREETWORK					\$882,221
E. SIGNAL					
1	1	LS	Traffic Signal	\$300,000.00	\$300,000
TOTAL STREETWORK					\$300,000

Appendix E:
CONCEPTUAL COST ESTIMATE SUMMARY

CONSTRUCTION COST ESTIMATE SUMMARY

A. EARTHWORK	\$60,150
B. STORM DRAIN SYSTEM	\$14,822
C. CONCRETE	\$15,658
D. STREETWORK	\$882,221
E. SIGNAL	\$300,000
	Subtotal Construction Costs (A-F)
	\$972,851
	15% Contingency
	\$145,900
	TOTAL CONSTRUCTION COST
	\$1,118,751

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #85
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Elder Creek Rd. at Excelsior Rd.

Project Description:
 Replace ex rural intx - add NB left turn lane & EB right turn lane, signalization

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	3,455	\$ 62,186.67
TOTAL FOR ITEM 1 EARTHWORK				\$ 62,186.67
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1,200	\$ 18,000.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 18,000.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2")	TON	\$ 100.00	1,894.8	\$ 189,475.00
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	4,931.2	\$ 100,744.59
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 290,219.59
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 300,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 300,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	670,406	\$ 201,121.88
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 201,121.88

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 871,528.13
CONTINGENCY	%	15.0%	871,528	\$ 130,729.22
TOTAL CONSTRUCTION COST				\$ 1,002,257.35
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	1,002,257	\$ 30,067.72
ENVIROMENTAL DOCUMENT	%	1.5%	1,002,257	\$ 15,033.86
DESIGN ENGINEERING	%	12.0%	1,002,257	\$ 120,270.88
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	1,002,257	\$ 15,033.86
CONSTRUCTION STAKING	%	2.5%	1,002,257	\$ 25,056.43
CONSTRUCTION MANAGEMENT	%	13.0%	1,002,257	\$ 130,293.46
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 335,756.21
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	1,002,257	\$ 50,112.87
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 50,112.87
10 UTILITIES				
UTILITIES RELOCATION	%	2%	1,002,257	\$ 20,045.15
TOTAL FOR ITEM 10 UTILITIES				\$ 20,045.15
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	1,002,257	\$ 30,067.72
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 30,067.72

GRAND TOTAL \$ 1,438,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #91
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Fruitridge Rd. at Hedge Rd.

Project Description:
 Add EB RT-Lane (Based On Existing COA #57)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	27	\$ 482.78
TOTAL FOR ITEM 1 EARTHWORK				\$ 482.78
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	225	\$ 3,375.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 3,375.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	135.8	\$ 13,578.13
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	393.8	\$ 8,044.63
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	50	\$ 1,300.00
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 22,922.76
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	176,781	\$ 53,034.16
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 53,034.16

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 229,814.69
CONTINGENCY	%	15.0%	229,815	\$ 34,472.20
TOTAL CONSTRUCTION COST				\$ 264,286.90
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	264,287	\$ 7,928.61
ENVIROMENTAL DOCUMENT	%	1.5%	264,287	\$ 3,964.30
DESIGN ENGINEERING	%	12.0%	264,287	\$ 31,714.43
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	264,287	\$ 3,964.30
CONSTRUCTION STAKING	%	2.5%	264,287	\$ 6,607.17
CONSTRUCTION MANAGEMENT	%	13.0%	264,287	\$ 34,357.30
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 88,536.11
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	264,287	\$ 13,214.34
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 13,214.34
10 UTILITIES				
UTILITIES RELOCATION	%	2%	264,287	\$ 5,285.74
TOTAL FOR ITEM 10 UTILITIES				\$ 5,285.74
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	264,287	\$ 7,928.61
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 7,928.61

GRAND TOTAL \$ 379,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #95
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Calvine Rd. and Waterman Rd.

Project Description:
 Constr. 4x6 Intersection Based On Built TC-2(z)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	1,722	\$ 30,995.56
IMPORT FILL	CY	\$ 16.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ 30,995.56
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	450	\$ 13,500.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 13,500.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 4" AC)	TON	\$ 100.00	1,074.3	\$ 107,425.00
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	2,528.1	\$ 51,648.57
SIDEWALK	SF	\$ 6.00	2,950	\$ 17,700.00
CURB & GUTTER	LF	\$ 26.00	450	\$ 11,700.00
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 188,473.57
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	382,969	\$ 114,890.74
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 114,890.74

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 497,859.87
CONTINGENCY	%	15.0%	497,860	\$ 74,678.98
TOTAL CONSTRUCTION COST				\$ 572,538.85
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	572,539	\$ 17,176.17
ENVIROMENTAL DOCUMENT	%	1.5%	572,539	\$ 8,588.08
DESIGN ENGINEERING	%	12.0%	572,539	\$ 68,704.66
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	572,539	\$ 8,588.08
CONSTRUCTION STAKING	%	2.5%	572,539	\$ 14,313.47
CONSTRUCTION MANAGEMENT	%	13.0%	572,539	\$ 74,430.05
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 191,800.51
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	572,539	\$ 28,626.94
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 28,626.94
10 UTILITIES				
UTILITIES RELOCATION	%	2%	572,539	\$ 11,450.78
TOTAL FOR ITEM 10 UTILITIES				\$ 11,450.78
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	572,539	\$ 17,176.17
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 17,176.17

GRAND TOTAL \$ 822,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20
- 3 ESTIMATE INCLUDES CLASS D IMPROVEMENTS ON THE NORTHBOUND APPROACH, EASTBOUND DEPARTURE AND WEST BOUND APPROACH.
- 4 EXISTING SIDEWALK ON THE NORTHBOUND DEPARTURE AND SOUTHBOUND DEPARTURE WILL REQUIRE DEMO AND RECONSTRUCTION

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #96
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Calvine Rd. at Excelsior Rd.

Project Description:
 Signalize and Provide LT-Lanes and Temp. 6' AC Walks, 4-Way (Replace Existing)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	3,958	\$ 71,236.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 71,236.00
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1,240	\$ 18,600.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 18,600.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 4" AC)	TON	\$ 100.00	2,362.3	\$ 236,231.25
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	5,771.9	\$ 117,920.04
SIDEWALK	SF	\$ 6.00	2,460	\$ 14,760.00
CURB & GUTTER	LF	\$ 26.00	128	\$ 3,328.00
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 372,239.29
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 300,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 300,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	762,075	\$ 228,622.59
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 228,622.59

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 990,697.88
CONTINGENCY	%	15.0%	990,698	\$ 148,604.68
TOTAL CONSTRUCTION COST				\$ 1,139,302.57
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	1,139,303	\$ 34,179.08
ENVIROMENTAL DOCUMENT	%	1.5%	1,139,303	\$ 17,089.54
DESIGN ENGINEERING	%	12.0%	1,139,303	\$ 136,716.31
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	1,139,303	\$ 17,089.54
CONSTRUCTION STAKING	%	2.5%	1,139,303	\$ 28,482.56
CONSTRUCTION MANAGEMENT	%	13.0%	1,139,303	\$ 148,109.33
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 381,666.36
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	1,139,303	\$ 56,965.13
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 56,965.13
10 UTILITIES				
UTILITIES RELOCATION	%	2%	1,139,303	\$ 22,786.05
TOTAL FOR ITEM 10 UTILITIES				\$ 22,786.05
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	1,139,303	\$ 34,179.08
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 34,179.08

GRAND TOTAL \$ 1,635,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #99

Traffic Signal and Intersection Index

Preliminary Cost Estimate

Elk Grove-Florin Rd. at Calvin Rd.

Project Description:
 Widen Existing 4x6 to 6x6 Intersection
 (Project Cost Included in COA #19 & COA #48 - Segment Widening in SCTDF)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	1,595	\$ 28,710.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 28,710.00
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	562	\$ 56,200.00
AGGREGATE BASE (17.5" AB)	TON	\$ 20.43	1,462	\$ 29,868.66
SIDEWALK	SF	\$ 6.00	12,610	\$ 75,660.00
CURB & GUTTER	LF	\$ 26.00	2,135	\$ 55,510.00
MEDIAN CURB	LF	\$ 17.00	1,320	\$ 22,440.00
TOTAL OR ITEM 3 PAVEMENT				\$ 239,678.66
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
JOINT TRENCH	LF	\$ 380.00	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	418,389	\$ 125,516.60
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 125,516.60

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 543,905.26
CONTINGENCY	%	15.0%	543,905	\$ 81,585.79
TOTAL CONSTRUCTION COST				\$ 625,491.05
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	625,491	\$ 18,764.73
ENVIROMENTAL DOCUMENT	%	1.5%	625,491	\$ 9,382.37
DESIGN ENGINEERING	%	12.0%	625,491	\$ 75,058.93
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	625,491	\$ 9,382.37
CONSTRUCTION STAKING	%	2.5%	625,491	\$ 15,637.28
CONSTRUCTION MANAGEMENT	%	13.0%	625,491	\$ 81,313.84
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 209,539.50
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	625,491	\$ 31,274.55
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 31,274.55
10 UTILITIES				
UTILITIES RELOCATION	%	2%	625,491	\$ 12,509.82
TOTAL FOR ITEM 10 UTILITIES				\$ 12,509.82
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	625,491	\$ 18,764.73
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 18,764.73

GRAND TOTAL \$ 898,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 EXISTING 69KV STEEL TOWER AT S/E CORNER TO REMAIN
- 3 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #101
Traffic Signal and Intersection Index
Preliminary Cost Estimate
South Watt Ave at Kiefer Blvd.

Project Description:
 Add NB Right Turn Lane

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	310	\$ 5,586.67
TOTAL FOR ITEM 1 EARTHWORK				\$ 5,586.67
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	355	\$ 10,650.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 10,650.00
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" AC)	TON	\$ 100.00	81.3	\$ 8,125.00
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	211.5	\$ 4,320.09
SIDEWALK	SF	\$ 6.00	2,250	\$ 13,500.00
CURB & GUTTER	LF	\$ 26.00	355	\$ 9,230.00
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 35,175.09
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	19,500	\$ 292,500.00
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 442,500.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	493,912	\$ 148,173.53
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 148,173.53

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 642,085.29
CONTINGENCY	%	15.0%	642,085	\$ 96,312.79
TOTAL CONSTRUCTION COST				\$ 738,398.08
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	738,398	\$ 22,151.94
ENVIROMENTAL DOCUMENT	%	1.5%	738,398	\$ 11,075.97
DESIGN ENGINEERING	%	12.0%	738,398	\$ 88,607.77
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	738,398	\$ 11,075.97
CONSTRUCTION STAKING	%	2.5%	738,398	\$ 18,459.95
CONSTRUCTION MANAGEMENT	%	13.0%	738,398	\$ 95,991.75
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 247,363.36
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY (ACQUISITION OF 2 HOMES)	LS	2	150,000	\$ 300,000.00
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 300,000.00
10 UTILITIES				
UTILITIES RELOCATION	%	2%	738,398	\$ 14,767.96
TOTAL FOR ITEM 10 UTILITIES				\$ 14,767.96
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	738,398	\$ 22,151.94
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 22,151.94

GRAND TOTAL \$ 1,323,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #107a
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Excelsior Rd. and SR-16

Project Description:
 Widen exist to mod. 4x4 lntx (EB & WB RT lanes, NB & SB shared T-RT lanes; ult. curb returns)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	1,757	\$ 31,625.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 31,625.00
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	1,840	\$ 27,600.00
TOTAL FOR ITEM 2 DRAINAGE				\$ 27,600.00
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 6 1/2" + 4" AC)	TON	\$ 100.00	1,444	\$ 144,412.50
AGGREGATE BASE (16 1/2 + 17 1/2" AB)	TON	\$ 20.43	2,542	\$ 51,933.70
SIDEWALK	SF	\$ 6.00	2,464	\$ 14,784.00
CURB & GUTTER	LF	\$ 26.00	128	\$ 3,328.00
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ 214,458.20
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	423,683	\$ 127,104.96
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 127,104.96

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
CULVERTS	SF	\$ 275.00	0	\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 550,788.16
CONTINGENCY	%	15.0%	550,788	\$ 82,618.22
TOTAL CONSTRUCTION COST				\$ 633,406.38
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	633,406	\$ 19,002.19
ENVIROMENTAL DOCUMENT	%	1.5%	633,406	\$ 9,501.10
DESIGN ENGINEERING	%	12.0%	633,406	\$ 76,008.77
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	633,406	\$ 9,501.10
CONSTRUCTION STAKING	%	2.5%	633,406	\$ 15,835.16
CONSTRUCTION MANAGEMENT	%	13.0%	633,406	\$ 82,342.83
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 212,191.14
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	633,406	\$ 31,670.32
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 31,670.32
10 UTILITIES				
UTILITIES RELOCATION	%	2%	633,406	\$ 12,668.13
TOTAL FOR ITEM 10 UTILITIES				\$ 12,668.13
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	633,406	\$ 19,002.19
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 19,002.19

GRAND TOTAL \$ 909,000.00

NOTES:

- 1 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 2 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #110
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Tioga Woods Drive at Elk Grove-Florin Road

Project Description:
 Widen NB approach to provide LT-lane, 2 thru, and shared thru-RT lane (**Note: Improvements covered by COA #36 improvements**)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 4"AC)	TON	\$ 100.00	0	\$ -
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	0	\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ -
CONTINGENCY	%	15.0%	0	\$ -
TOTAL CONSTRUCTION COST				\$ -
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	0	\$ -
ENVIROMENTAL DOCUMENT	%	1.5%	0	\$ -
DESIGN ENGINEERING	%	12.0%	0	\$ -
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	0	\$ -
CONSTRUCTION STAKING	%	2.5%	0	\$ -
CONSTRUCTION MANAGEMENT	%	13.0%	0	\$ -
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ -
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	0	\$ -
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ -
10 UTILITIES				
UTILITIES RELOCATION	%	2%	0	\$ -
TOTAL FOR ITEM 10 UTILITIES				\$ -
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	0	\$ -
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ -

GRAND TOTAL \$ -

NOTES:

- 1 NO PAVEMENT MODIFICATION IS REQ'D AS PART OF THIS COA
- 2 RE-STRIPING AND SIGNAL MODS CONSIDERED ENVIRONMENTALLY EXCEMPT
- 3 ENGINEERING & MANAGEMENT LIMITED TO SIGNAL MOD. WORK ORDER & TESTING, & MINOR STRIPING PLAN

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #111
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Florin-Perkins Rd. and Folsom Blvd.

Project Description:
 Widen WB approach to provide 2LT, T, T-RT (scope limited to realignment of median curb and restriping)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	275	\$ 4,950.00
TOTAL FOR ITEM 1 EARTHWORK				\$ 4,950.00
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	46.4	\$ 4,640.63
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	134.6	\$ 2,749.43
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB	LF	\$ 17.00	900	\$ 15,300.00
TOTAL OR ITEM 3 PAVEMENT				\$ 22,690.06
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	177,640	\$ 53,292.02
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 53,292.02

**Appendix E:
CONCEPTUAL COST ESTIMATE SUMMARY**

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 230,932.07
CONTINGENCY	%	15.0%	230,932	\$ 34,639.81
TOTAL CONSTRUCTION COST				\$ 265,571.88
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	265,572	\$ 7,967.16
ENVIROMENTAL DOCUMENT	%	1.5%	0	\$ -
DESIGN ENGINEERING	%	12.0%	265,572	\$ 31,868.63
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	265,572	\$ 3,983.58
CONSTRUCTION STAKING	%	2.5%	265,572	\$ 6,639.30
CONSTRUCTION MANAGEMENT	%	13.0%	265,572	\$ 34,524.34
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 84,983.00
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	0	\$ -
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ -
10 UTILITIES				
UTILITIES RELOCATION	%	2%	0	\$ -
TOTAL FOR ITEM 10 UTILITIES				\$ -
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	0	\$ -
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ -

GRAND TOTAL \$ 351,000.00

NOTES:

- 1 ALL WORK TO OCCUR WITHIN EXIST. PVM'T & RIGHT OF WAY
- 2 MEDIAN CURB MODS, RE-STRIPING AND SIGNAL MODS CONSIDERED ENVIRONMENTALLY EXCEMPT

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

COA #D

Traffic Signal and Intersection Index

Preliminary Cost Estimate

Elder Creek Rd. at Florin-Perkins Rd.

Project Description:

Provide dual LT-Lanes4-Way and modify signal (replace median curb and re-strip all 4 approaches

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	913	\$ 16,426.67
TOTAL FOR ITEM 1 EARTHWORK				\$ 16,426.67
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" + 4" AC)	TON	\$ 100.00	462.0	\$ 46,200.00
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	1,339.8	\$ 27,372.11
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB	LF	\$ 17.00	3,360	\$ 57,120.00
TOTAL OR ITEM 3 PAVEMENT				\$ 130,692.11
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	1	\$ 150,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 150,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	297,119	\$ 89,135.63
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 89,135.63

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 386,254.41
CONTINGENCY	%	15.0%	386,254	\$ 57,938.16
TOTAL CONSTRUCTION COST				\$ 444,192.58
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	444,193	\$ 13,325.78
ENVIROMENTAL DOCUMENT	%	1.5%	444,193	\$ 6,662.89
DESIGN ENGINEERING	%	12.0%	444,193	\$ 53,303.11
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	444,193	\$ 6,662.89
CONSTRUCTION STAKING	%	2.5%	444,193	\$ 11,104.81
CONSTRUCTION MANAGEMENT	%	13.0%	444,193	\$ 57,745.04
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 148,804.51
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	444,193	\$ 22,209.63
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 22,209.63
10 UTILITIES				
UTILITIES RELOCATION	%	2%	444,193	\$ 8,883.85
TOTAL FOR ITEM 10 UTILITIES				\$ 8,883.85
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	444,193	\$ 13,325.78
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 13,325.78

GRAND TOTAL \$ 637,000.00

NOTES:

- 1 ALL WORK OCCURS WITHIN LIMITS OF EXIST. RIGHT OF WAY
- 2 FRONTAGE LANDSCAPING AND SOUNDWALL ARE EXCLUDED
- 3 ROADWAY SECTION ASSUMES AN AVERAGE R VALUE OF 20

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

Plan Area Traffic Signals
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Location TBD

8 Signals within FVCP area at Collector intersections with major arterials or thoroughfares (No NVS Fairshare)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	0.0	\$ -
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	0.0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 300,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 300,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	300,000	\$ 90,000.00
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 90,000.00

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 390,000.00
CONTINGENCY	%	15.0%	390,000	\$ 58,500.00
TOTAL CONSTRUCTION COST				\$ 448,500.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	448,500	\$ 13,455.00
ENVIROMENTAL DOCUMENT	%	1.5%	0	\$ -
DESIGN ENGINEERING	%	12.0%	448,500	\$ 53,820.00
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	448,500	\$ 6,727.50
CONSTRUCTION STAKING	%	2.5%	448,500	\$ 11,212.50
CONSTRUCTION MANAGEMENT	%	13.0%	448,500	\$ 58,305.00
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 143,520.00
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	448,500	\$ 22,425.00
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 22,425.00
10 UTILITIES				
UTILITIES RELOCATION	%	2%	448,500	\$ 8,970.00
TOTAL FOR ITEM 10 UTILITIES				\$ 8,970.00
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	0	\$ -
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ -

GRAND TOTAL \$ 623,000.00

NOTES:

- 1 ALL WORK TO OCCUR WITHIN EXIST. PVM'T & RIGHT OF WAY
- 2 MEDIAN CURB MODS, RE-STRIPING AND SIGNAL MODS CONSIDERED ENVIRONMENTALLY EXCEMPT

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: N.T./HF

Plan Area Traffic Signals
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Location TBD

8 Signals within FVCP area at Collector intersections with major arterials or thoroughfares (50% NVS Fairshare)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	0.0	\$ -
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	0.0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	1	\$ 225,000.00
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 225,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	225,000	\$ 67,500.00
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 67,500.00

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 292,500.00
CONTINGENCY	%	15.0%	292,500	\$ 43,875.00
TOTAL CONSTRUCTION COST				\$ 336,375.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	336,375	\$ 10,091.25
ENVIROMENTAL DOCUMENT	%	1.5%	0	\$ -
DESIGN ENGINEERING	%	12.0%	336,375	\$ 40,365.00
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	336,375	\$ 5,045.63
CONSTRUCTION STAKING	%	2.5%	336,375	\$ 8,409.38
CONSTRUCTION MANAGEMENT	%	13.0%	336,375	\$ 43,728.75
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 107,640.00
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	336,375	\$ 16,818.75
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 16,818.75
10 UTILITIES				
UTILITIES RELOCATION	%	2%	336,375	\$ 6,727.50
TOTAL FOR ITEM 10 UTILITIES				\$ 6,727.50
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	0	\$ -
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ -

GRAND TOTAL \$ 468,000.00

NOTES:

- 1 ALL WORK TO OCCUR WITHIN EXIST. PVM'T & RIGHT OF WAY
- 2 MEDIAN CURB MODS, RE-STRIPING AND SIGNAL MODS CONSIDERED ENVIRONMENTALLY EXCEMPT

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: N.T./HF

Plan Area Pedestrian Crossing
Traffic Signal and Intersection Index
Preliminary Cost Estimate
Location TBD

Pedestrian within FVCP area

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (5 1/2" AC)	TON	\$ 100.00	0.0	\$ -
AGGREGATE BASE (16 1/2" AB)	TON	\$ 20.43	0.0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
PEDESTRIAN CROSSING	EA	\$ 80,000	1	\$ 80,000.00
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ 80,000.00
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	80,000	\$ 24,000.00
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 24,000.00

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00		\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 104,000.00
CONTINGENCY	%	15.0%	104,000	\$ 15,600.00
TOTAL CONSTRUCTION COST				\$ 119,600.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	119,600	\$ 3,588.00
ENVIROMENTAL DOCUMENT	%	1.5%	0	\$ -
DESIGN ENGINEERING	%	12.0%	119,600	\$ 14,352.00
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	119,600	\$ 1,794.00
CONSTRUCTION STAKING	%	2.5%	119,600	\$ 2,990.00
CONSTRUCTION MANAGEMENT	%	13.0%	119,600	\$ 15,548.00
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 38,272.00
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	119,600	\$ 5,980.00
EASEMENT	SF	\$ 3.00	0	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 5,980.00
10 UTILITIES				
UTILITIES RELOCATION	%	2%	0	\$ -
TOTAL FOR ITEM 10 UTILITIES				\$ -
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	0	\$ -
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ -

GRAND TOTAL \$ 164,000.00

NOTES:

- 1 ALL WORK TO OCCUR WITHIN EXIST. PVM'T & RIGHT OF WAY

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Figure A-1.5
Roadway Drainage Structure Cost Index
Summary of Costs

SHEET	PROJECT NAME	COST PER L.F
A-1.5.1	Morrison Creek Crossing @ Florin Perkins Rd. (existing)	\$ -
A-1.5.2	Morrison Creek Crossing @ South Watt Ave. (Cost included in COA # 12)	\$ -
A-1.5.3	Morrison Creek Crossing @ Bradshaw Rd.	\$ 5,822,000.00
A-1.5.4	Morrison Creek Crossing @ SR-16	\$ 6,469,000.00
A-1.5.6	Elder Creek Crossing @ French Rd. (GPA)	\$ 4,678,000.00
A-1.5.7	Elder Creek Crossing @ Elk Grove Florin	\$ 8,196,216.00
A-1.5.8	Elder Creek Crossing @ SR-16 (included in COA #107b)	\$ 632,000.00
A-1.5.9	Folsom South Canal Crossing @ SR-16	\$ 6,146,000.00
A-1.5.10	Gerber Creek Crossing @ Bradshaw Rd. (PROJECT COMPLETE)	\$ -
A-1.5.11	Elder Creek Crossing @ Waterman Rd.	\$ 990,000.00
A-1.5.12	Elder Creek Crossing @ Florin Road	\$ 1,386,000.00
A-1.5.12b	Roadside Ditch Crossing @ Florin Road (2,842' west of Bradshaw Rd.)	\$ 83,000.00
A-1.5.13	Gerber Creek Crossing @ Florin Rd.	\$ 214,000.00
A-1.5.14	Gerber Creek Crossing #3 (Gerber Rd. just west of Bradshaw Rd.)	\$ 1,876,287.00
A-1.5.15	SR-16 West of Eagles Nest Culvert Replacement	\$ 54,000.00
A-1.5.16	Elder Creek Crossing @ Bradshaw	\$ 151,823.00

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: H.F./N.T.

Figure A-1.5.2

Roadway Drainage Structure Cost Index
COA #13 - Project No. P1-7.1d (See COA #12)
Morrison Creek Crossing @ South Watt Ave.

Project Description:
 New Bridge Construction (108' R/W+2' curb & rail ea. side). **Cost included in COA #12.**

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE	TON	\$ 100.00	0	\$ -
AGGREGATE BASE	TON	\$ 20.43	0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 350.00	0	\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ -
CONTINGENCY	%	15.0%	\$ -	\$ -
TOTAL CONSTRUCTION COST				\$ -
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ -	\$ -
ENVIROMENTAL DOCUMENT	%	1.5%	\$ -	\$ -
DESIGN ENGINEERING	%	12.0%	\$ -	\$ -
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ -	\$ -
CONSTRUCTION STAKING	%	2.5%	\$ -	\$ -
CONSTRUCTION MANAGEMENT	%	13.0%	\$ -	\$ -
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ -
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5%	\$ -	\$ -
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ -
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ -	\$ -
TOTAL FOR ITEM 10 UTILITIES				\$ -
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ -	\$ -
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ -

GRAND TOTAL \$ -

NOTES:

- 1 WIDTH = 108' + 4' = 112'
- 2 SPAN = 90'
- 3 COST INCLUDES DEMOLITION, EROSION CONTROL, ETC.
- 4 EASEMENT COST ASSUMED TO BE COVERED BY R.O.W. COST, GIVEN CONSERVATIVE NATURE OF CREEK R.O.W. UNIT

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: H.F./N.T.

Figure A-1.5.3
Roadway Drainage Structure Cost Index
COA #18 - Project No. P-9.1d
Morrison Creek Crossing @ Bradshaw Rd.

Project Description:
 New Bridge Construction (108' R/W + 2' curb & rail ea. side)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE	TON	\$ 100.00	0	\$ -
AGGREGATE BASE	TON	\$ 20.43	0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 350.00	10,080	\$ 3,528,000.00
TOTAL FOR ITEM 6 STRUCTURES				\$ 3,528,000.00
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 3,528,000.00
CONTINGENCY	%	15.0%	\$ 3,528,000.00	\$ 529,200.00
TOTAL CONSTRUCTION COST				\$ 4,057,200.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 4,057,200.00	\$ 121,716.00
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 4,057,200.00	\$ 60,858.00
DESIGN ENGINEERING	%	12.0%	\$ 4,057,200.00	\$ 486,864.00
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 4,057,200.00	\$ 60,858.00
CONSTRUCTION STAKING	%	2.5%	\$ 4,057,200.00	\$ 101,430.00
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 4,057,200.00	\$ 527,436.00
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 1,359,162.00
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	SF	5%	\$ 4,057,200.00	\$ 202,860.00
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 202,860.00
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 4,057,200.00	\$ 81,144.00
TOTAL FOR ITEM 10 UTILITIES				\$ 81,144.00
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 4,057,200.00	\$ 121,716.00
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 121,716.00

GRAND TOTAL \$ 5,822,000.00

NOTES:

- 1 WIDTH = 108' + 4' = 112'
- 2 SPAN = 90'
- 3 COST INCLUDES DEMOLITION, EROSION CONTROL, ETC.
- 4 EASEMENT COST ASSUMED TO BE COVERED BY R.O.W. COST, GIVEN CONSERVATIVE NATURE OF CREEK R.O.W. UNIT

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: H.F./N.T.

Figure A-1.5.4
Roadway Drainage Structure Cost Index
COA #104 - Project No. P-1.4d
Morrison Creek Crossing @ SR 16

Project Description:
 New Bridge Construction (108' R/W + 2' curb & rail ea. side)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE	TON	\$ 100.00	0	\$ -
AGGREGATE BASE	TON	\$ 20.43	0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 350.00	11,200	\$ 3,920,000.00
TOTAL FOR ITEM 6 STRUCTURES				\$ 3,920,000.00
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 3,920,000.00
CONTINGENCY	%	15.0%	\$ 3,920,000.00	\$ 588,000.00
TOTAL CONSTRUCTION COST				\$ 4,508,000.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 4,508,000.00	\$ 135,240.00
DESIGN ENGINEERING	%	12.0%	\$ 4,508,000.00	\$ 540,960.00
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 4,508,000.00	\$ 67,620.00
CONSTRUCTION STAKING	%	2.5%	\$ 4,508,000.00	\$ 112,700.00
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 4,508,000.00	\$ 586,040.00
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 1,442,560.00
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	SF	5%	\$ 4,508,000.00	\$ 225,400.00
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 225,400.00
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 4,508,000.00	\$ 90,160.00
TOTAL FOR ITEM 10 UTILITIES				\$ 90,160.00
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 4,508,000.00	\$ 67,620.00
ENVIROMENTAL MITIGATION	%	3.0%	\$ 4,508,000.00	\$ 135,240.00
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 202,860.00

GRAND TOTAL \$ 6,469,000.00

NOTES:

- 1 WIDTH = 108' + 4' = 112'
- 2 SPAN = 100'
- 3 COST INCLUDES DEMOLITION, EROSION CONTROL, ETC.
- 4 EASEMENT COST ASSUMED TO BE COVERED BY R.O.W. COST, GIVEN CONSERVATIVE NATURE OF CREEK R.O.W. UNIT

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: H.F./N.T.

Figure A-1.5.6
Roadway Drainage Structure Cost Index
COA #29 - Project No. P-12d
Elder Creek Crossing @ French Rd.

Project Description:
 Widen exist. Elder Creek Bridge to 86' ROW (6' SW + 2' curb & rail ea. side) - requires new bridge.

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE	TON	\$ 100.00	0	\$ -
AGGREGATE BASE	TON	\$ 20.43	0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 350.00	8,100	\$ 2,835,000.00
TOTAL FOR ITEM 6 STRUCTURES				\$ 2,835,000.00
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 2,835,000.00
CONTINGENCY	%	15.0%		\$ 425,250.00
TOTAL CONSTRUCTION COST				\$ 3,260,250.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 3,260,250.00	\$ 97,807.50
DESIGN ENGINEERING	%	12.0%	\$ 3,260,250.00	\$ 391,230.00
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 3,260,250.00	\$ 48,903.75
CONSTRUCTION STAKING	%	2.5%	\$ 3,260,250.00	\$ 81,506.25
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 3,260,250.00	\$ 423,832.50
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 1,043,280.00
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	SF	5%	\$ 3,260,250.00	\$ 163,012.50
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 163,012.50
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 3,260,250.00	\$ 65,205.00
TOTAL FOR ITEM 10 UTILITIES				\$ 65,205.00
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 3,260,250.00	\$ 48,903.75
ENVIROMENTAL MITIGATION	%	3.0%	\$ 3,260,250.00	\$ 97,807.50
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 146,711.25

GRAND TOTAL \$ 4,678,000.00

NOTES:

- 1 WIDTH = 86' +4' = 90'
- 2 SPAN = 90'
- 3 COST INCLUDES DEMOLITION, EROSION CONTROL, ETC.
- 4 EASEMENT COST ASSUMED TO BE COVERED BY R.O.W. COST, GIVEN CONSERVATIVE NATURE OF CREEK R.O.W. UNIT

Appendix E:
CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
Job # 27121.000
By: H.F./N.T.

Figure A-1.5.7
Roadway Drainage Structure Cost Index
COA 5
Elder Creek Crossing @ Elk Grove Florin Rd

Project Description:
Replace existing EGF bridge over Elder Creek with thoroughfare standard bridge.

2018 Vineyard Fee Program	\$6,200,000
2018 update Adjusted (~32%)	\$8,196,216
	\$8,196,216

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: H.F./N.T.

Figure A-1.5.8
Roadway Drainage Structure Cost Index
 see COA #107b - Project No. BP-35d
Elder Creek Crossing @ SR 16

Project Description:
 Lengthen exist. box culvert beneath Exelsior Rd./SR16 intersection by 12' ea. Side

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
IMPORT FILL	CY	\$ 16.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE	TON	\$ 100.00	0	\$ -
AGGREGATE BASE	TON	\$ 20.43	0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 350.00		\$ -
CULVERTS	SF	\$ 275.00	1,392	\$ 382,800.00
TOTAL FOR ITEM 6 STRUCTURES				\$ 382,800.00
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 382,800.00
CONTINGENCY	%	15.0%	\$ 382,800.00	\$ 57,420.00
TOTAL CONSTRUCTION COST				\$ 440,220.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 440,220.00	\$ 13,206.60
DESIGN ENGINEERING	%	12.0%	\$ 440,220.00	\$ 52,826.40
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 440,220.00	\$ 6,603.30
CONSTRUCTION STAKING	%	2.5%	\$ 440,220.00	\$ 11,005.50
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 440,220.00	\$ 57,228.60
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 140,870.40
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 440,220.00	\$ 22,011.00
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 22,011.00
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 440,220.00	\$ 8,804.40
TOTAL FOR ITEM 10 UTILITIES				\$ 8,804.40
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 440,220.00	\$ 6,603.30
ENVIROMENTAL MITIGATION	%	3.0%	\$ 440,220.00	\$ 13,206.60
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 19,809.90

GRAND TOTAL \$ 632,000.00

NOTES:

- 1 WIDTH = 58', INCL. CULVERT WIDTH, 2' WORKING SPACE, AND 2:1 SLOPE OF EXCAVATION.
- 2 SPAN = 12' LENGTHENING, EA. SIDE
- 3 COST INCLUDES DEMOLITION, EROSION CONTROL, ETC.
- 4 EASEMENT COST ASSUMED TO BE COVERED BY R.O.W. COST, GIVEN CONSERVATIVE NATURE OF CREEK R.O.W. UNIT

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: H.F./N.T.

Figure A-1.5.9
Roadway Drainage Structure Cost Index
Project No. P-1.6d
Folsom South Canal Crossing @ SR 16

Project Description:
 New Bridge Construction (108' R/W + 2' curb & railing ea. side).

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
IMPORT FILL	CY	\$ 16.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE	TON	\$ 100.00	0	\$ -
AGGREGATE BASE	TON	\$ 20.43	0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 350.00	10,640	\$ 3,724,000.00
TOTAL FOR ITEM 6 STRUCTURES				\$ 3,724,000.00
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 3,724,000.00
CONTINGENCY	%	15.0%	\$ 3,724,000.00	\$ 558,600.00
TOTAL CONSTRUCTION COST				\$ 4,282,600.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 4,282,600.00	\$ 128,478.00
DESIGN ENGINEERING	%	12.0%	\$ 4,282,600.00	\$ 513,912.00
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 4,282,600.00	\$ 64,239.00
CONSTRUCTION STAKING	%	2.5%	\$ 4,282,600.00	\$ 107,065.00
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 4,282,600.00	\$ 556,738.00
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 1,370,432.00
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	SF	5%	\$ 4,282,600.00	\$ 214,130.00
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 214,130.00
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 4,282,600.00	\$ 85,652.00
TOTAL FOR ITEM 10 UTILITIES				\$ 85,652.00
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 4,282,600.00	\$ 64,239.00
ENVIROMENTAL MITIGATION	%	3.0%	\$ 4,282,600.00	\$ 128,478.00
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 192,717.00

GRAND TOTAL \$ 6,146,000.00

NOTES:

- 1 WIDTH = 108' + 4' = 112'
- 2 SPAN = 95'
- 3 COST INCLUDES DEMOLITION, EROSION CONTROL, ETC.
- 4 EASEMENT COST ASSUMED TO BE COVERED BY R.O.W. COST, GIVEN CONSERVATIVE NATURE OF CREEK R.O.W. UNIT

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: H.F./N.T.

Figure A-1.5.10
Roadway Drainage Structure Cost Index
Project No. P1-9.3d
Gerber Creek Crossing @ Bradshaw Rd.

Project Description:
 Exist. Bridge - Construction to 108' R/W completed by D.O.T. **PROJECT COMPLETE**

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
IMPORT FILL	CY	\$ 16.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE	TON	\$ 100.00	0	\$ -
AGGREGATE BASE	TON	\$ 20.43	0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 350.00	0	\$ -
TOTAL FOR ITEM 6 STRUCTURES				\$ -
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ -
CONTINGENCY	%	15.0%		\$ -
TOTAL CONSTRUCTION COST				\$ -
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ -	\$ -
DESIGN ENGINEERING	%	12.0%	\$ -	\$ -
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ -	\$ -
CONSTRUCTION STAKING	%	2.5%	\$ -	\$ -
CONSTRUCTION MANAGEMENT	%	13.0%	\$ -	\$ -
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ -
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ -	\$ -
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ -
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ -	\$ -
TOTAL FOR ITEM 10 UTILITIES				\$ -
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL DOCUMENT	%	1.5%	\$ -	\$ -
ENVIROMENTAL MITIGATION	%	3.0%	\$ -	\$ -
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ -

GRAND TOTAL \$ -

NOTES:

- 1 WIDTH = 112' (exist.)
- 2 SPAN = 36' (exist)
- 3 S.F. TO CONSTRUCT = n/a.

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: H.F./N.T.

COA #94 - Figure A-1.5.11
Roadway Drainage Structure Cost Index

Elder Creek Crossing @ Waterman Rd.

Project Description:
 New culvert construction: 74' R.O.W. plus 6' SW and 2' curb & rail ea. side

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
IMPORT FILL	CY	\$ 16.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE	TON	\$ 100.00	0	\$ -
AGGREGATE BASE	TON	\$ 20.43	0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
Culvert	LS	\$ 600,000.00	1	\$ 600,000.00
TOTAL FOR ITEM 6 STRUCTURES				\$ 600,000.00
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 600,000.00
CONTINGENCY	%	15.0%	\$ 600,000.00	\$ 90,000.00
TOTAL CONSTRUCTION COST				\$ 690,000.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 690,000.00	\$ 20,700.00
DESIGN ENGINEERING	%	12.0%	\$ 690,000.00	\$ 82,800.00
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 690,000.00	\$ 10,350.00
CONSTRUCTION STAKING	%	2.5%	\$ 690,000.00	\$ 17,250.00
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 690,000.00	\$ 89,700.00
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 220,800.00
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	SF	5%	\$ 690,000.00	\$ 34,500.00
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 34,500.00
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 690,000.00	\$ 13,800.00
TOTAL FOR ITEM 10 UTILITIES				\$ 13,800.00
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 690,000.00	\$ 10,350.00
ENVIROMENTAL MITIGATION	%	3.0%	\$ 690,000.00	\$ 20,700.00
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 31,050.00

GRAND TOTAL \$ 990,000.00

NOTES:

- 1 CULVERT ESTIMATE BASED ON WATERMAN ROAD AND GERBER CREEK CROSSING CULVERT COST.
- 2 COST INCLUDES EROSION CONTROL, ETC.
- 3 EASEMENT COST ASSUMED TO BE COVERED BY R.O.W. COST, GIVEN CONSERVATIVE NATURE OF CREEK R.O.W. UNIT

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: H.F./N.T.

COA #89 - Figure A-1.5.12
Roadway Drainage Structure Cost Index

Elder Creek Crossing @ Florin Rd.

Project Description:

Existing 2 lane culvert crossing replacement with new triple 10'x14' pre-cast culverts to accomodate 6 lanes

Note: project is scheduled for construction by Lennar in 2017

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
IMPORT FILL	CY	\$ 16.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE	TON	\$ 100.00	0	\$ -
AGGREGATE BASE	TON	\$ 20.43	0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00	0	\$ -
CULVERTS	LS	\$ 840,000.00	1	\$ 840,000.00
TOTAL FOR ITEM 6 STRUCTURES				\$ 840,000.00
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 840,000.00
CONTINGENCY	%	15.0%		\$ 126,000.00
TOTAL CONSTRUCTION COST				\$ 966,000.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 966,000.00	\$ 28,980.00
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 966,000.00	\$ 14,490.00
DESIGN ENGINEERING	%	12.0%	\$ 966,000.00	\$ 115,920.00
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 966,000.00	\$ 14,490.00
CONSTRUCTION STAKING	%	2.5%	\$ 966,000.00	\$ 24,150.00
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 966,000.00	\$ 125,580.00
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 323,610.00
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5%	966,000.00	\$ 48,300.00
EASEMENT	SF	\$ 3.00	0.00	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 48,300.00
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 966,000.00	\$ 19,320.00
TOTAL FOR ITEM 10 UTILITIES				\$ 19,320.00
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3%	\$ 966,000.00	\$ 28,980.00
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 28,980.00

GRAND TOTAL \$ 1,386,000.00

NOTES:

- 1 Span = 35.25' (per M&S improvement plans)
- 2 Width =119' (per M&S improvement plans)
- 3 Culvert cost estimate is placeholder estimate based on M&S improvement plans;

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: H.F./N.T.

COA #89 - Figure A-1.5.12b
Roadway Drainage Structure Cost Index

Roadside Ditch crossing culvert @ Florin Rd. (2,842' west of Bradshaw Rd.)

Project Description:
 Existing 2 lane arch CMP culvert crossing (3.5'x2.4') to be lengthened to accomodate 6 lanes

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
IMPORT FILL	CY	\$ 16.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE	TON	\$ 100.00	0	\$ -
AGGREGATE BASE	TON	\$ 20.43	0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
CULVERTS	SF	\$ 300.00	68	\$ 20,400.00
CULVERT HEADWALLS AND WINGWALLS	EA	\$ 15,000.00	2	\$ 30,000.00
TOTAL FOR ITEM 6 STRUCTURES				\$ 50,400.00
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 50,400.00
CONTINGENCY	%	15.0%		\$ 7,560.00
TOTAL CONSTRUCTION COST				\$ 57,960.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 57,960.00	\$ 1,738.80
DESIGN ENGINEERING	%	12.0%	\$ 57,960.00	\$ 6,955.20
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 57,960.00	\$ 869.40
CONSTRUCTION STAKING	%	2.5%	\$ 57,960.00	\$ 1,449.00
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 57,960.00	\$ 7,534.80
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 18,547.20
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 57,960.00	\$ 2,898.00
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 2,898.00
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 57,960.00	\$ 1,159.20
TOTAL FOR ITEM 10 UTILITIES				\$ 1,159.20
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 57,960.00	\$ 869.40
ENVIROMENTAL MITIGATION	%	3.0%	\$ 57,960.00	\$ 1,738.80
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 2,608.20

GRAND TOTAL \$ 83,000.00

NOTES:

Span = exist. = 40'; ultimate = 108'

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: H.F./N.T.

Figure A-1.5.13
Roadway Drainage Structure Cost Index
COA #66 - Project No. 4.2d
Gerber Creek Crossing @ Florin Rd.

Project Description:
 Replace exist. culvert w/new culvert (96' ROW)

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE	TON	\$ 100.00	0	\$ -
AGGREGATE BASE	TON	\$ 20.43	0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 175.00	0	\$ -
CULVERTS	SF	\$ 150.00	864	\$ 129,600.00
TOTAL FOR ITEM 6 STRUCTURES				\$ 129,600.00
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 129,600.00
CONTINGENCY	%	15.0%	\$ 129,600.00	\$ 19,440.00
TOTAL CONSTRUCTION COST				\$ 149,040.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 149,040.00	\$ 4,471.20
DESIGN ENGINEERING	%	12.0%	\$ 149,040.00	\$ 17,884.80
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 149,040.00	\$ 2,235.60
CONSTRUCTION STAKING	%	2.5%	\$ 149,040.00	\$ 3,726.00
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 149,040.00	\$ 19,375.20
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 47,692.80
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	SF	5%	\$ 149,040.00	\$ 7,452.00
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 7,452.00
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 149,040.00	\$ 2,980.80
TOTAL FOR ITEM 10 UTILITIES				\$ 2,980.80
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 149,040.00	\$ 2,235.60
ENVIROMENTAL MITIGATION	%	3.0%	\$ 149,040.00	\$ 4,471.20
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 6,706.80

GRAND TOTAL \$ 214,000.00

NOTES:

- 1 WIDTH = 96'(ROW) + 12'(S/W) + 16' (LS STRIP) + 8' (SHOULDER/SLOPE)= 132'
- 2 COST INCLUDES DEMOLITION, EROSION CONTROL, ETC.
- 3 EASEMENT COST ASSUMED TO BE COVERED BY R.O.W. COST, GIVEN CONSERVATIVE NATURE OF CREEK R.O.W. UNIT

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: H.F./N.T.

Figure A-1.5.14

Roadway Drainage Structure Cost Index

COA #58 - Project No. 5.2

Gerber Creek Crossing #3 at Gerber Rd. (just west of Bradshaw Rd.)

Project Description:

Replace exist. culvert with bridge per VE Solutions Inc. estimate.

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0.0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" + 4" AC)	TON	\$ 100.00	0.0	\$ -
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	0.0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL FOR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
5 STRUCTURES				
BRIDGES	LS	\$ 874,593.50	1	\$ 874,593.50
TOTAL FOR ITEM 6 STRUCTURES				\$ 874,593.50
6 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ 874,593.50	\$ 262,378.05
TOTAL FOR ITEM 5 MINOR ITEMS				\$ 262,378.05
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 1,136,971.55
CONTINGENCY	%	15.0%	\$ 1,136,971.55	\$ 170,545.73
TOTAL CONSTRUCTION COST				\$ 1,307,517.28
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 1,307,517.28	\$ 39,225.52
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 1,307,517.28	\$ 19,612.76
DESIGN ENGINEERING	%	12.0%	\$ 1,307,517.28	\$ 156,902.07
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 1,307,517.28	\$ 19,612.76
CONSTRUCTION STAKING	%	2.5%	\$ 1,307,517.28	\$ 32,687.93
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 1,307,517.28	\$ 169,977.25
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 438,018.29
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 1,307,517.28	\$ 65,375.86
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 65,375.86
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 1,307,517.28	\$26,150.35
TOTAL FOR ITEM 10 UTILITIES				\$26,150.35
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 1,307,517.28	\$ 39,225.52
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 39,225.52

GRAND TOTAL \$ 1,876,287.00

NOTES:

- 1 Gerber Road bridge cost estimate provided by VE Solutions Inc, date 06/22/17.
- 2 Total construction cost estimate provided by VE solutions includes mobilization. Minor items added to the construction cost at the request of the County DOT.
- 3 All roadway excavation assumed by others
- 4 Channel work and Rock Slope Protection included in Gerber Creek Reach 2A & 2B channel improvements.

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

VE Solutions, Inc.

6/21/2017

Opinion of Probable Construction Costs Gerber Road Bridge Replacement Project

Item	Description	Qty	Unit	Unit Price	Amount
	Bridge Removal	1	LS	35000	\$ 35,000.00
	Structure Excavation, Bridge	420	LF	\$85	\$ 35,700.00
	Structure Backfill, Bridge	85	CY	\$125	\$ 10,625.00
	24" Cast-in-Drilled-Hole Concrete Piling	690	LF	\$150	\$ 103,500.00
	Structural Concrete, Bridge Footing	65	CY	\$550	\$ 35,750.00
	Structural Concrete, Bridge	387	CY	\$850	\$ 328,950.00
	Bar Reinforcing Steel, Bridge	124900	LBS	\$1.40	\$ 174,860.00
	Concrete Barrier (Type 732 SW)	LF	140	250	\$ 35,000.00
	Midwest Guardrail System	LF	150	50	\$ 7,500.00
	Transition Railing (Type WB-31)	EA	4	3800	\$ 15,200.00
	Alternate In-Line Terminal System	EA	2	3500	\$ 7,000.00
	Alternate Flared Terminal System	EA	2	3000	\$ 6,000.00
					\$ -
					\$ -
	Subtotal - Construction Estimate				\$ 795,085.00
			Mobilization @	0.1	\$ 79,508.50
			Subtotal		\$ 874,593.50
			Contingency @	0.25	\$ 218,648.38
	Total Construction w/ mob & contingency				\$ 1,093,241.88

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: H.F./N.T.

Figure A-1.5.15
Roadway Drainage Structure Cost Index
COA #105c
Jackson Road Culverts West of Eagles Nest

Project Description:
 Replace 2 culvert for 4 lane thoroughfare widening.
 Existing Culvert 1 is located approximately 4,050' west of the Jackson and Eagles Nest intersection.
 Existing Culvert 2 is located approximately 3,210' west of Jackson and Eagles Nest intersection.

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE	TON	\$ 100.00	0	\$ -
AGGREGATE BASE	TON	\$ 20.43	0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
TRAFFIC SIGNAL	INT	\$ 300,000	0	\$ -
TRAFFIC SIGNAL MODIFICATION	INT	\$ 150,000	0	\$ -
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%		\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 325.00	0	\$ -
CULVERTS	LF	\$ 375.00	88	\$ 33,000.00
TOTAL FOR ITEM 6 STRUCTURES				\$ 33,000.00
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 33,000.00
CONTINGENCY	%	15.0%	\$ 33,000.00	\$ 4,950.00
TOTAL CONSTRUCTION COST				\$ 37,950.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 37,950.00	\$ 1,138.50
DESIGN ENGINEERING	%	12.0%	\$ 37,950.00	\$ 4,554.00
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 37,950.00	\$ 569.25
CONSTRUCTION STAKING	%	2.5%	\$ 37,950.00	\$ 948.75
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 37,950.00	\$ 4,933.50
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 12,144.00
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
9 RIGHT OF WAY				
RIGHT OF WAY	SF	5%	\$ 37,950.00	\$ 1,897.50
EASEMENT	SF	\$ 3.00	-	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 1,897.50
10 UTILITIES				
UTILITIES RELOCATION	%	2%	\$ 37,950.00	\$ 759.00
TOTAL FOR ITEM 10 UTILITIES				\$ 759.00
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 37,950.00	\$ 569.25
ENVIROMENTAL MITIGATION	%	3.0%	\$ 37,950.00	\$ 1,138.50
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 1,707.75

GRAND TOTAL \$ 54,000.00

NOTES:

- Each culvert will be lengthened by approximately 44'.

Appendix E:

CONCEPTUAL COST ESTIMATE SUMMARY

Date: 10/18/2017
 Job # 27121.000
 By: H.F./N.T.

Offsite Roadway Crossings
COA #72
 TRIBUTARY TO ELDER CREEK CROSSING @ BRADSHAW ROAD

Project Description:
 108' FT ROW; Extend exist. 97 LF dbl. RCP culverts to 108 FT.

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
1 Earthwork				
ROADWAY EXCAVATION	CY	\$ 18.00	0.0	\$ -
TOTAL FOR ITEM 1 EARTHWORK				\$ -
2 DRAINAGE				
DRAINAGE	LF	\$ 30.00	0	\$ -
TOTAL FOR ITEM 2 DRAINAGE				\$ -
3 PAVEMENT				
ASPHALT CONCRETE (6 1/2" + 4" AC)	TON	\$ 100.00	0.0	\$ -
AGGREGATE BASE (17 1/2" AB)	TON	\$ 20.43	0.0	\$ -
SIDEWALK	SF	\$ 6.00	0	\$ -
CURB & GUTTER	LF	\$ 26.00	0	\$ -
MEDIAN CURB & 2' CONCRETE LANDSCAPE STRIP	LF	\$ 17.00	0	\$ -
TOTAL OR ITEM 3 PAVEMENT				\$ -
4 MISCELLANEOUS				
STREET LIGHTS / ELECTROLIERS	LF	\$ 63.64	0	\$ -
LANDSCAPING	SF	\$ 15.00	0	\$ -
TOTAL FOR ITEM 4 MISCELLANEOUS				\$ -
5 MINOR ITEMS				
MINOR ITEMS	%	30.0%	\$ -	\$ -
TOTAL FOR ITEM 5 MINOR ITEMS				\$ -

Appendix E: CONCEPTUAL COST ESTIMATE SUMMARY

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
6 STRUCTURES				
BRIDGES	SF	\$ 350.00	0	\$ -
CULVERTS	LF	\$ 2,000.00	11	\$ 22,000.00
CULVERT HEADWALLS AND WINGWALLS	EA	\$ 35,000.00	2	\$ 70,000.00
TOTAL FOR ITEM 6 STRUCTURES				\$ 92,000.00
7 CONTINGENCY				
SUBTOTAL CONSTRUCTION COST				\$ 92,000.00
CONTINGENCY	%	15.0%	\$ 92,000.00	\$ 13,800.00
TOTAL CONSTRUCTION COST				\$ 105,800.00
8 ENGINEERING & MANAGEMENT				
ENGINEERING STUDIES	%	3.0%	\$ 105,800.00	\$ 3,174.00
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 105,800.00	\$ 1,587.00
DESIGN ENGINEERING	%	12.0%	\$ 105,800.00	\$ 12,696.00
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 105,800.00	\$ 1,587.00
CONSTRUCTION STAKING	%	2.5%	\$ 105,800.00	\$ 2,645.00
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 105,800.00	\$ 13,754.00
TOTAL FOR ITEM 8 ENGINEERING & MANAGEMENT				\$ 35,443.00
THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK				
9 RIGHT OF WAY				
RIGHT OF WAY	%	5.0%	\$ 105,800.00	\$ 5,290.00
EASEMENT	SF	\$ 3.00	\$ -	\$ -
TOTAL FOR ITEM 9 RIGHT OF WAY				\$ 5,290.00
10 UTILITIES				
UTILITIES RELOCATION	%	2.0%	\$ 105,800.00	\$ 2,116.00
TOTAL FOR ITEM 10 UTILITIES				\$ 2,116.00
11 ENVIROMENTAL MITIGATION				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 105,800.00	\$ 3,174.00
TOTAL FOR ITEM 11 ENVIROMENTAL MITIGATION				\$ 3,174.00

GRAND TOTAL \$ 151,823.00

NOTES:

- 1 LENGTHEN EXIST. CULVERTS
- 2 CULVERTS UNIT COST BASED ON PRELIMINARY ENGINEERS ESTIMATE