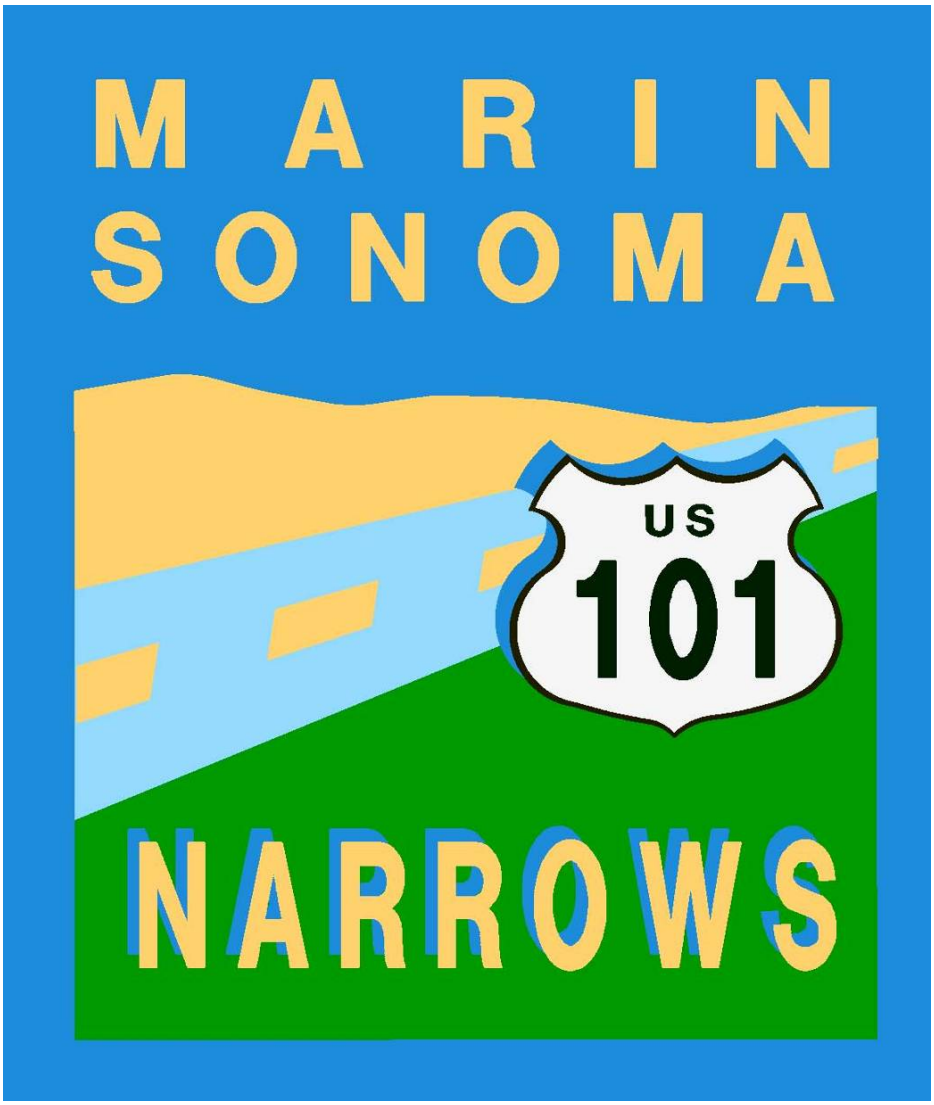
Initial Financial Plan



Submitted in Partnership by: Federal Highway Administration
California Dept. of Transportation (Caltrans)
Sonoma County Transportation Authority
Transportation Authority of Marin

April 2012

California Department of Transportation
Route 101 Marin-Sonoma Narrows Project
Initial Financial Plan
Letter of Certification

The California Department of Transportation, Sonoma County Transportation Authority, and Transportation Authority of Marin have developed a comprehensive Initial Financial Plan for the Marin Sonoma Narrows (MSN) Project in accordance with the requirements outlined in the Federal Highway Administration's January 2007 *Major Projects Financial Plans Guidance*. This Initial Financial Plan provides detailed cost estimates to complete the MSN Project, as well as a detailed accounting of the financial resources to be used to fully fund the Project.

The cost data in this Initial Financial Plan provides an accurate accounting of costs incurred as of the end of the fourth quarter of State Fiscal Year 2010/2011, an estimate of future costs based on the best available engineers' estimates, and reasonable estimates of construction-related inflation factors. The estimates of financial resources to fund the Project also represent the best available information and reasonable assumptions for future resources. These estimates will be updated, as new information becomes available and will be provided to the Federal Highway Administration in annual updates to this Initial Financial Plan. The next annual update will be in October 2012

To the best of our knowledge and belief, the Initial Financial Plan, as submitted herewith, is based on sound underlying assumptions that fairly and accurately present the financial position of the MSN Project, cash flows, and expected conditions for the Project's lifecycle. This Initial Financial Plan is our reasonable best effort at providing an accurate basis upon which to schedule and fund the MSN Project. We have made available all significant information that is relevant to the Initial Financial Plan and, to the best of our knowledge and belief, the inputs and assumptions derived from these documents and records are appropriate.

Respectfully Submitted:

4-18-12

BIJAN SARTIPI — Date
District Director
California Department of Transportation

4/17/12

SUZANNE SMITH — Date
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17 Apr 2012

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5. F-TIP
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Acronyms and Abbreviations

BEES	Base Engineering Estimate System
C&M	Construction and Maintenance Agreement
Caltrans	California Department of Transportation
CAP	capital
CCA	Construction Contract Acceptance
CDFG	California Department of Fish and Game
CER	Cost Estimate Review
CMIA	Corridor Mobility Improvement Account
CON	construction
COS	capital outlay support
CPM	Critical Path Method
CRLF	California red-legged frog
CSMP	Corridor System Management Plan
CTC	California Transportation Commission
EA	Expense Authorization
Earmark-HPP	SAFETEA High Priority Program
Earmark-STP	Earmark Surface Transportation Projects
EIR	Environmental Impact Report
EIS	Environmental Impact Study
ENV MITG	Environmental Mitigation
F-TIP	Federal Transportation Improvement Plan
FHWA	Federal Highway Administration
FY	State Fiscal Year
HOV	high-occupancy vehicle
HPP	high-priority project
IFP	Initial Financial Plan
MOU	Memorandum of Understanding
MSN	Marin-Sonoma Narrows
MTC	Metropolitan Transportation Commission
NHS	National Highway System
NMWD	North Marin Water District
NWP	Northwestern Pacific Railroad
OA	Obligated Amount
OC	Overcrossing (Street over Freeway)
PA&ED	Project Approval and Environmental Document

PDT	Project Development Team
PPNO	Project Planning Number
PS&E	plans, specifications, and estimates
RMP	Risk Management Plan
ROD	Record of Decision
RON	Resolution of Necessity
RTL	Ready to List
RTP	MTC 2035 Regional Transportation Plan
RTP-LRP	Long-Range Regional Transportation Plan
R/W	right-of-way
RWQCB	Regional Water Quality Control Board
SCTA	Sonoma County Transportation Authority
SCWA	Sonoma County Water Agency
SLC	State Lands Commission
SLPP	State Local Partnership Program
SR	State Route
STIP	State Transportation Improvement Plan
STIP-IIP	Interregional Transportation Improvement Program
STIP-RIP	Regional Transportation Improvement Program
SUP	Support
TAM	Transportation Authority of Marin
TCRP	Traffic Congestion Relief Program
TIP	Transportation Improvement Plan
TMP	Transportation Management Plan
US	United States Highway
USACE	United States Army Corps of Engineers
USCG	United States Coast Guard
VA	value analysis

Chapter 1 Introduction

1.1 Project Purpose and Description

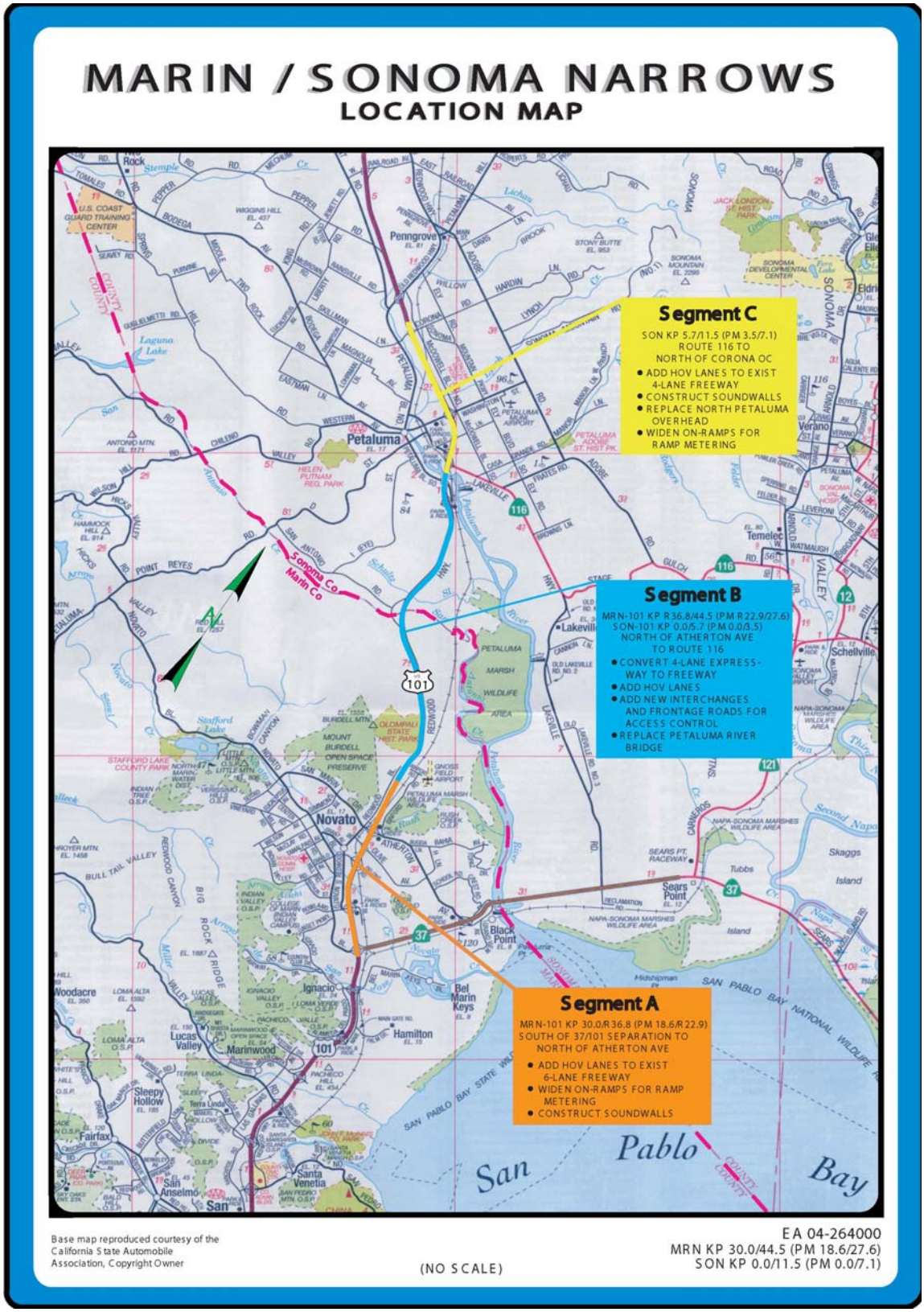
The purpose of the Marin-Sonoma Narrows (MSN) Project is to: (1) reduce congestion and improve mobility while providing an incentive for commuters to use buses, carpools, or vanpools for peak period travel, and (2) improve freeway operations, including providing safe access to and from the facility. The Project will also improve the safety of the route by increasing visibility (sight distance), improving drainage to address recurring flooding, and providing wider shoulders for emergencies. The California Department of Transportation (Caltrans) and its partner agencies, Metropolitan Transportation Commission (MTC), Transportation Authority of Marin (TAM), and Sonoma County Transportation Authority (SCTA), are sponsoring the MSN Project.

The MSN Project proposes to add high-occupancy vehicle (HOV) facilities to United States Highway (US) 101 from the junction of State Route (SR) 37 in the City of Novato to just north of the Corona Road Overcrossing in the City of Petaluma, a distance of approximately 16 miles. The Project area is divided into three segments (A, B, and C), shown on Figure 1. Although these segments were originally presented as three separate projects, they have been combined into a single study area to ensure that environmental impacts are addressed cumulatively in a comprehensive Environmental Impact Report/Environmental Impact Statement.

Segments A and C consist of the existing freeway in the cities of Novato and Petaluma, respectively. Segment B is the existing expressway between the two cities. Two build alternatives were studied during Project Approval and Environmental Document (PA&ED): (1) fixed HOV lanes throughout the project limits, and (2) fixed HOV lanes through the cities of Novato and Petaluma and a reversible HOV lane between the two cities.

The improvements for Segments A and C are similar and include inside and outside widening to accommodate HOV lanes, widening of bridges, installing ramp metering, installing a concrete median barrier, constructing sound walls, and upgrading drainage facilities.

Figure 1. MSN Segment Map



Through Segment B, locally referred to as the "Novato Narrows," the modifications would be more extensive because it is proposed to upgrade the existing facility from an expressway, with at-grade intersections and driveway access, to a freeway, with new interchanges and frontage roads to provide access to intersecting roadways and adjacent parcels. Four Access Options (4B, 12B, 14B, and 14D) were studied within this segment. The four access options vary in the locations of proposed interchanges, frontage roads, and bikeways. Option 12B was selected as the preferred option, and this option is being implemented with fixed HOV alternatives. Improvements in this segment also include the replacement of the Petaluma River Bridge.

The Project, segment limits, and a summary of proposed improvements within each segment are shown in Figure 1.

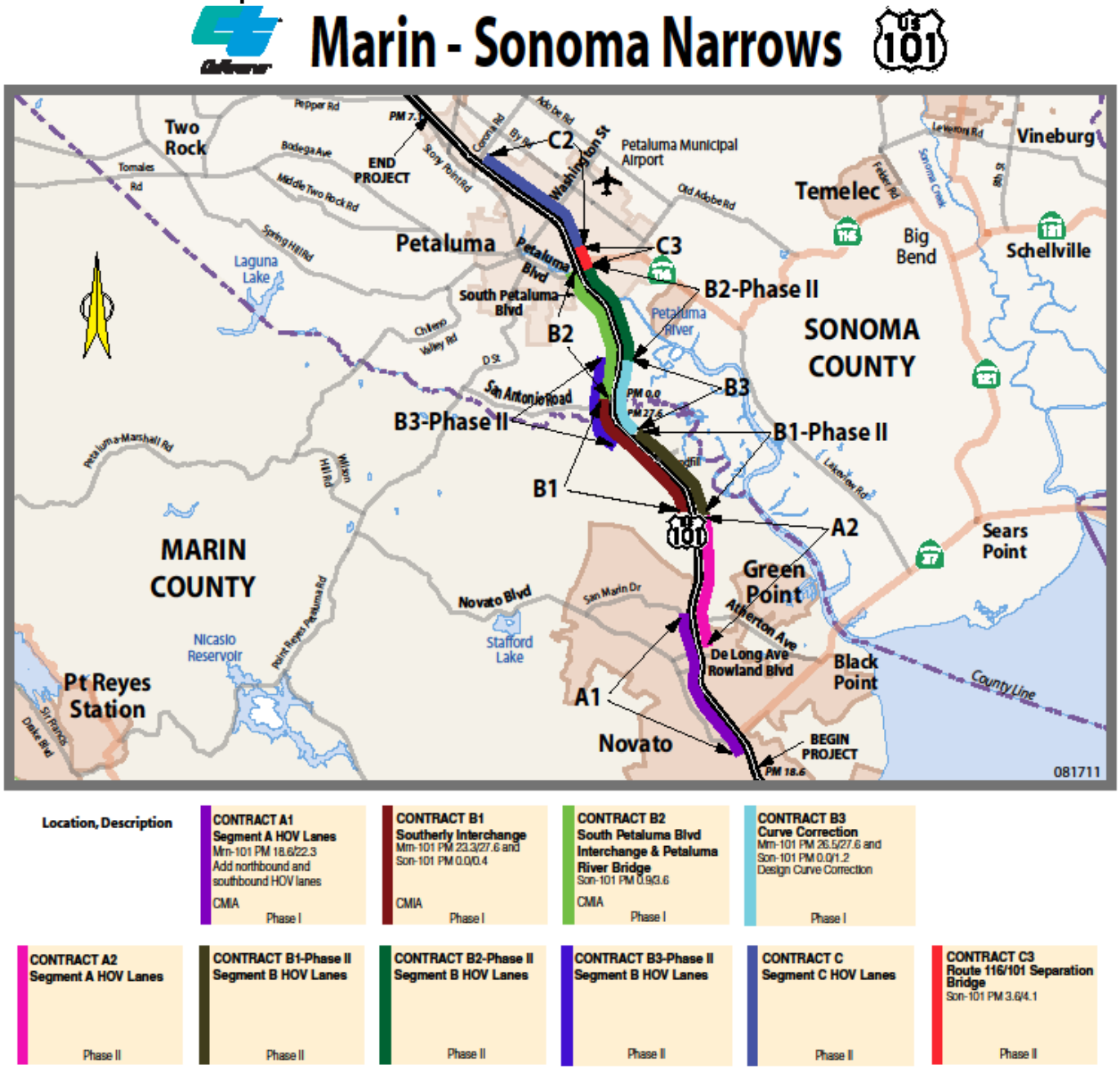
Although the MSN Project was divided into three segments based on type of existing facility for PA&ED studies, the Project plans, specifications, and estimates (PS&E) and construction activities are being performed incrementally using smaller, independent, individual contracts/projects. The contracts are being developed based on available funding and scope of work that provide the most benefit to Route 101 corridor mobility and safety. The MSN Project will be implemented in two phases. Caltrans and its partners jointly developed the scope of work for the Phase 1 contracts and will continue to develop Phase 2 contracts as funds are programmed in accordance with the Project schedule.

Phase 1 consists of four roadway contracts (A1, B1, B2, and B3), shown on Figure 2, as well as follow-up landscape Contract L1. The scope of work for each of these contracts is summarized below. The Expense Authorization (EA) number and the Project Planning Number (PPNO) are included to facilitate reference to programming documents and other documents included in the Appendices.

1. Contract A1 (EA 04-26406, PPNO 0360F): HOV Lanes in Marin – This contract will construct a northbound HOV lane from SR 37 to Atherton Avenue and a southbound HOV lane from Rowland Boulevard to SR 37 on Route 101. The project also includes sound walls, ramp metering, and traffic operation system elements.

2. Contract B1 (EA 26407, PPNO 0360J): Redwood Landfill Interchange – This project will construct an interchange at Redwood Landfill Road and Route 101, including frontage roads and a portion of the Segment B pedestrian/bicycle facility.

Figure 2. Contract Location Map



3. Contract B2 (EA 04-26408, PPNO 0360H): Petaluma Boulevard South Interchange – This contract will construct a new interchange at Petaluma Boulevard South and Route 101, including frontage roads and a portion of the Segment B pedestrian/bicycle facility. This project will also replace the Petaluma River Bridge and raise the Route 101 grade from Petaluma Boulevard South Interchange to the Petaluma River Bridge.

   Please note that the scope of Contract B2 scope was increased in June 2011 to include the Petaluma River Bridge replacement. Previously, the Petaluma River Bridge replacement was part of Phase 2, Contract B4. Contract B4 scope included Petaluma River Bridge and SR 116 separation bridges. The SR 116 separation bridges remain a Phase 2 contract (re-named as Contract C3). Since the limits of work on SR 116 separation bridges is entirely within Segment C, the Contract B4 name was not retained. A Programming Change Request (PCR) was approved to document this change.

4. Contract B3 (EA 04-26409, PPNO 0360G): Curve Correction – This contract will construct Route 101 on a new alignment in the vicinity of San Antonio Creek, including frontage roads and pedestrian/bicycle facility.

5. Contract L1 (EA 04-26406, PPNO 0360L): Landscape/Mitigation and Sound wall – This contract will establish landscaping and implement mitigation measures within the limits of Contracts A1, B1, B2, and B3.

The A and B designations of the contracts refer to segments defined earlier with two exceptions: (1) A small portion of frontage road work in Contract B1 is located in Segment A to make the new southerly interchange (Contract B1) independent and functional, and (2) some of the proposed mainline work on Route 101 in Contract A2 is located in Segment B.

Phase 2 consists of at least seven contracts (A2, B1–Phase II, B2 –Phase II, B3 – Phase II, C2, C3, and L2) that cover the remainder of the MSN Project scope. The scope of the Phase 2 contracts is preliminary at this time and will be updated as these projects (contracts) are programmed. The EA number and the PPNO for Phase 2 projects, except contract C2, will be assigned when the contracts are programmed.

1. Contract A2: HOV Lanes – This contract will construct a northbound HOV lane from Atherton Avenue to 1 mile south of Redwood Landfill Road and a

Southbound HOV lane from 1 mile south of Redwood Landfill Road to Novato Creek.

2. Contract B1 Phase II: HOV Lanes – This project will construct HOV lanes from 1 mile south of Redwood Landfill Road to south of San Antonio Road and correct the roadway vertical profile.

3. Contract B2 Phase II: HOV Lanes – This contract will construct HOV lanes in both directions from 1 mile south of Petaluma Boulevard South Interchange to Petaluma Boulevard Interchange.

4. Contract B3 Phase II: HOV Lanes – This contract will reconstruct San Antonio Road (County Road), construct a new bridge on San Antonio Road at San Antonio Creek, and construct an HOV lane from San Antonio Road to 1 mile south of Petaluma Boulevard South Interchange.

5. Contract C2 (EA 04-2640F, PPNO 0360Q): HOV Lanes in Petaluma – This contract will construct a northbound and southbound HOV lane in both directions from the SR 116 (East Interchange) to Corona Road. The project also includes sound walls, ramp metering, and traffic operation system elements.

6. Contract C3: State Route 116 Separation Bridges – This contract will replace the northbound SR 116 separation bridge and widen southbound SR 116 separation bridge to provide HOV lanes in both directions from the Petaluma River Bridge to SR 116.

   Please note that the scope of work of Contract C3 was previously part of Contract B4, which included both the Petaluma River Bridge replacement and SR 116 separation bridges. When funding became available to replace the Petaluma River Bridge, the Petaluma River Bridge was added to Contract B2 and the SR 116 separation bridges scope was renamed as Contract C3.

Phase 1 Contracts A1, B1, and B2 are partially funded by Proposition 1B, Corridor Mobility Improvement Account (CMIA). These projects/contracts collectively will be referred to as the MSN-CMIA Project. The remainder of the contracts collectively will be referred to as MSN-Non CMIA Project. The entire MSN Project will be referred to as the MSN Project. These distinctions are necessary because the CMIA Project must be accounted for and reported on separately to the California Transportation Commission (CTC).

1.2 Project Timeline

The Phase 1 contracts of the MSN Project are currently in either design (PS&E) or construction phase. The PA&ED phase was completed on October 29, 2009. The schedules for the MSN contracts, based on State Fiscal Year (FY), are included in Appendix A (Figure A-1). The FY starts on July 1 of each calendar year and ends on June 30 of the following calendar year. The schedules for all Phase 2 contracts, except for Contract C2 PS&E, are preliminary and will be updated in the annual updates of this Initial Financial Plan (IFP) as Phase 2 contracts are programmed.

The schedules for Contracts B3, C2, and C3 have a gap between design and construction phases. The construction funding for Contract B3 is programmed in FY 2014/2015. However, it is necessary to complete the design and acquisition of some parcels for this contract by FY 2012/2013 to facilitate the relocation of North Marin Water District (NMWD) aqueduct. The NMWD aqueduct relocation needed for the MSN Project spans Contracts B1 and B3. The relocation of the aqueduct in Contract B1 has to be performed simultaneously with the roadway construction to accommodate construction staging. The relocation of the aqueduct in Contract B3 must be done prior to construction. The schedule is reflective of aligning the NMWD relocation work in Contracts B1 and B3 to avoid multiple shutdown of this critical utility. Contracts C2 and C3 are Phase 2 contracts and their construction funding has not been programmed. SCTA is using local funds to complete the design and to partially fund the right-of-way (R/W) to make these projects “shovel ready” and position them to compete for time-sensitive state and federal funding opportunities.

1.3 Project Sponsors

Caltrans and its local partners, TAM and SCTA, are co-sponsors of the MSN Project, and they will jointly fund project phases in conjunction with the MTC. These agencies have secured or committed/scheduled federal, state, and local resources for the Project. The Project funding is shown in the MTC Long Range Regional Transportation Plan (RTP-LRP).

1.4 Project Management Strategy

Caltrans and its partnering agencies are managing the MSN Project collectively and as individual projects or contracts. The corridor management of the contracts is intended to facilitate faster and more cost-effective delivery of the corridor project

using a mix of resources made available by the sponsoring agencies. The project management strategy is outlined in a Memorandum of Understanding (MOU) between Caltrans, TAM, and SCTA dated April 2008. This MOU defines how the three agencies will work together in cooperation to successfully deliver the MSN Project. The MOU constitutes a guide to the intentions and strategies of the parties involved and provides the overall framework, including outlining respective roles, responsibilities, and funding strategy for the Project. A copy of the MOU is attached in Appendix E.

The PA&ED for the entire MSN Project was completed as a single study. Caltrans was the lead in completing the Environmental Impact Report/ Environmental Impact Study (EIR/EIS) in collaboration with its partners, SCTA, TAM, and the Federal Highway Administration (FHWA). FHWA issued the Record of Decision (ROD) for the Project on October 29, 2009. The PS&E of each contract is being (or will be) managed as a separate project with a team comprising a mix of Caltrans, TAM, and/or SCTA staff in a manner that minimizes standard Caltrans oversight activities whenever possible. SCTA and TAM have hired consultants to perform the key project engineering and management tasks, and Caltrans is mostly using in-house resources. Each of the contracts will be designed, advertised, awarded, and administered separately or together with others as approved by the management team. Caltrans is responsible for R/W activities. SCTA is assisting Caltrans with some R/W activities to expedite the delivery of Sonoma County contracts. Caltrans is and will be responsible for all construction contract Advertisement, Award, and Approval (AAA) and construction management.

Chapter 2 Cost Estimate

The FHWA and Caltrans have conducted two 3-day Cost Estimate Review (CER) workshops to verify the accuracy and reasonableness of Caltrans's project cost estimate and schedule. The CERs developed a probability range for the cost estimate that represents the project's stage of design. The first CER was conducted in May 2008 during the PA&ED phase. At that time, the final project cost was estimated to be approximately $909 million for 70 percent confidence level. The second CER was conducted in May 2010 during the PS&E phase of Phase 1 contracts. The second CER determined that the total cost, for all contracts and components, of the MSN Project ranges from $642 to $749 million, with a 70 percent confidence level cost estimate of $708 million. The difference in project cost between the two CERs was attributed to dramatic change in Bay Area economic forecast as the 2 years saw bid price reductions of approximately 30 percent. Additionally, at the time of first CER in 2008, there was uncertainty regarding the timing of Phase 2 of MSN Project. While still unknown, the potential date for the delivery of Phase 2 contracts at the time of second CER in 2010 was much more constrained. The economic forecast and bid climate in the Bay Area has not changed significantly since May 2010, and the findings and conclusions of the second CER are valid.

The FHWA May 2010 CER identified that the most significant project risks (both threats and opportunities) relate to the project schedule and uncertain escalation of costs. FHWA recommended that opportunities should be explored for moving costs forward from Phase 2 to Phase 1 whenever possible to reduce the amount of potential escalation. The FHWA review identified that the escalation rate alone makes up 88 percent of the variability in the estimated cost. At the time of the CER, Caltrans escalated cost to beginning of construction. The CER showed that mid-year construction dates of several of the Phase 2 contracts also factor prominently in the sensitivity. The two factors together accounted for approximately 90 percent of the variability. Immediately after the May 2010 CER, the cost estimate was updated to $718 million to account for escalation to the mid-year of construction as recommended by the CER.

Significant progress has been made in moving costs forward from Phase 2 to Phase 1 to reduce the amount of potential escalation cost. In July 2011, the Project secured an additional $45 million of CMIA funds, $1.9 million of State Local Partnership Program (SLPP) funds, and $7.2 million of local funds for the construction

(replacement) of Petaluma River Bridge. This bridge replacement was part of Phase 2 work that has now moved forward to Phase 1. Design refinement of Contract B1 reduced its construction capital cost and allowed some of the scope (construction and utility relocation) in Contract B1-Phase 2 to move forward to Contract B1. All of this scope moving forward reduced the project escalation cost by $17.7 million.

2.1 Current Project Cost Estimate

The current cost estimate for the MSN Project, as of June 2011, is approximately $670 million. The total project costs, including cost of each individual contract component as well as the inflation costs, are summarized in Table B1 in Appendix B. The detailed construction cost estimates of all MSN contracts are included in Appendix B. The difference between the current cost estimate and the May 2010 estimate of $718 million is due to the following major reasons:

1. Favorable bid for MSN Contracts A1. The bid was approximately $7.4 million below engineers' estimate. Additionally, there was reduction in construction support estimate and R/W cost, resulting in a total reduction of $9 million.

2. Anticipated favorable bid environment until FY 2012/2013. The current cost estimate assumes no escalation in FY 2012/2013. This has resulted in cost reduction of $5.3 million in Phase 1 contracts. The assumption of no escalation until FY 2013/2014 is reasonable because the bid continues to decline, and August 2011 bids in the region were typically 15 percent to 30 percent below engineers' estimates. Please note that there is no net decrease in Phase 2 contracts escalation cost because of Phase 2 funding moving forward by one year from FY 2013/2014 to FY 2014/2015.

3. Reduction in escalation cost due to Phase 2 scope in Contracts B1 and B2 moving forward to Phase 1, as discussed earlier. This has reduced project cost by approximately $17.7 million.

4. A net decrease in project capital cost of $11.2 million due to (1) addition of utility relocation work in Contract B1, which resulted in reduced utility scope in Phase 2 Contract B1-Phase II, and (2) more defined cost estimates for Contracts C3 and L2.

5. A net decrease in project support cost of $4.8 million. This decrease is mainly in Phase 2 contracts.

The project cost estimate broken down by Phase, Segment, Contract, and Component is presented in Figures 3, 4, 5, and 6, respectively. The project support cost is approximately 32 percent of the construction capital cost and 24 percent of the total project cost. The capital-to-support ratios are typical of projects of similar size in California as documented in Caltrans' 2002 study *Historical Cost Analysis of Capital Outlay Support for FYs 1998 to 2002*. Copies of this study can be obtained from Caltrans' Project Management Application System. Two tables from this study are attached in Appendix E: Table 6.3, which summarizes support costs for major State Transportation Improvement Plan (STIP) projects, and Table 7, which summarizes support costs for projects with an EIR/EIS. Furthermore, it is Caltrans' proposed goal to keep support costs for projects with capital cost greater than $20 million to less than 35 percent of the total capital cost. The capital to support ratio for the MSN Project is consistent with past historical data and Caltrans' proposed goal.

The above cost estimate represents the baseline cost estimate against which future adjustments can be reviewed. The year-of-expenditure estimate reflects the current project schedule and reasonable assumptions for future inflation. Caltrans will continue to monitor and adjust the cost estimate based on new information on underlying economic conditions.

Figure 3. Cost Estimate Breakdown by Phase

(dollars in thousands and escalated)

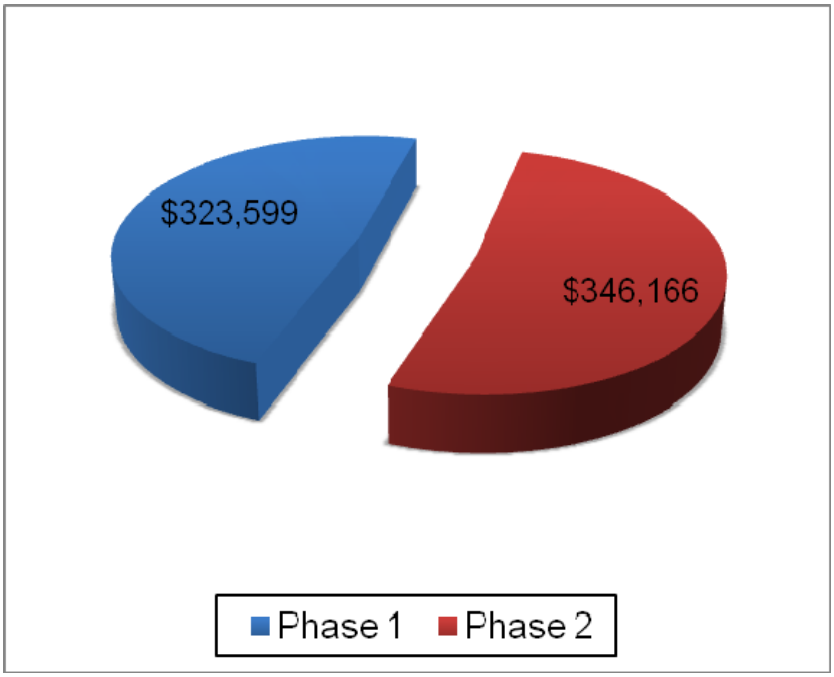


Figure 4. Cost Estimate Breakdown by Segment

(dollars in thousands and escalated)

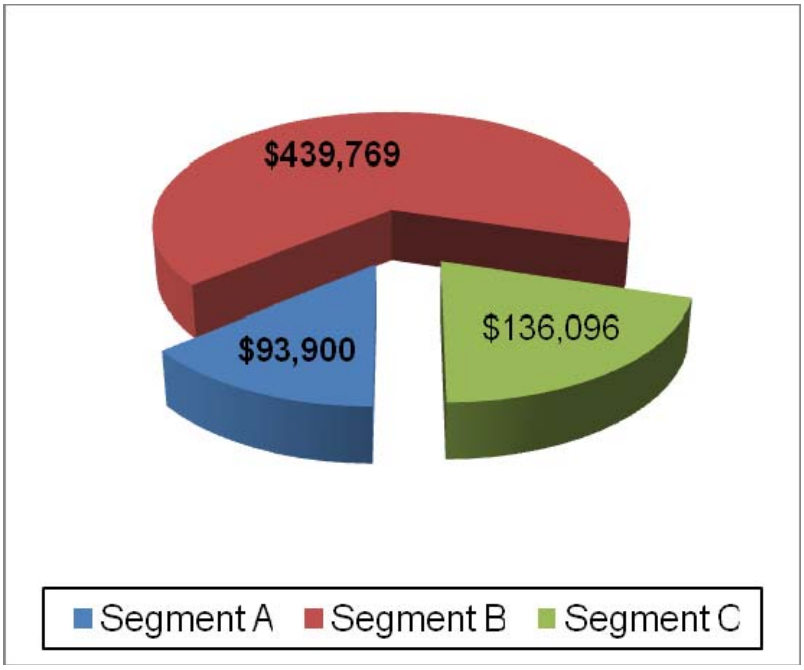


Figure 5. Cost Estimate Breakdown by Contract

(dollars in thousands and escalated)

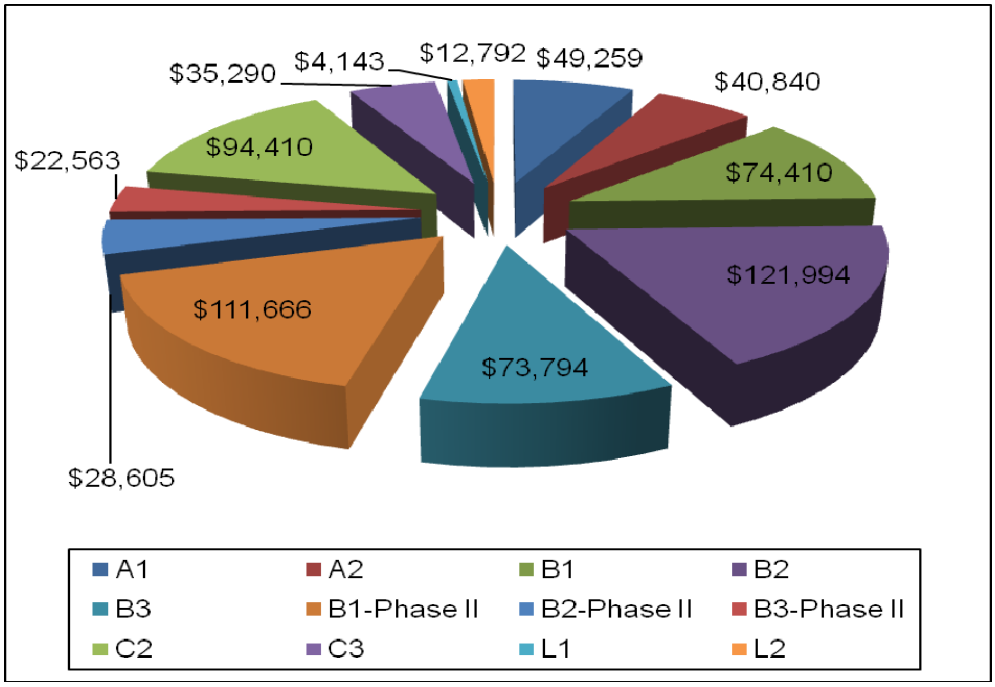


Figure 6. Cost Estimate Breakdown by Component

(dollars in thousands and escalated)

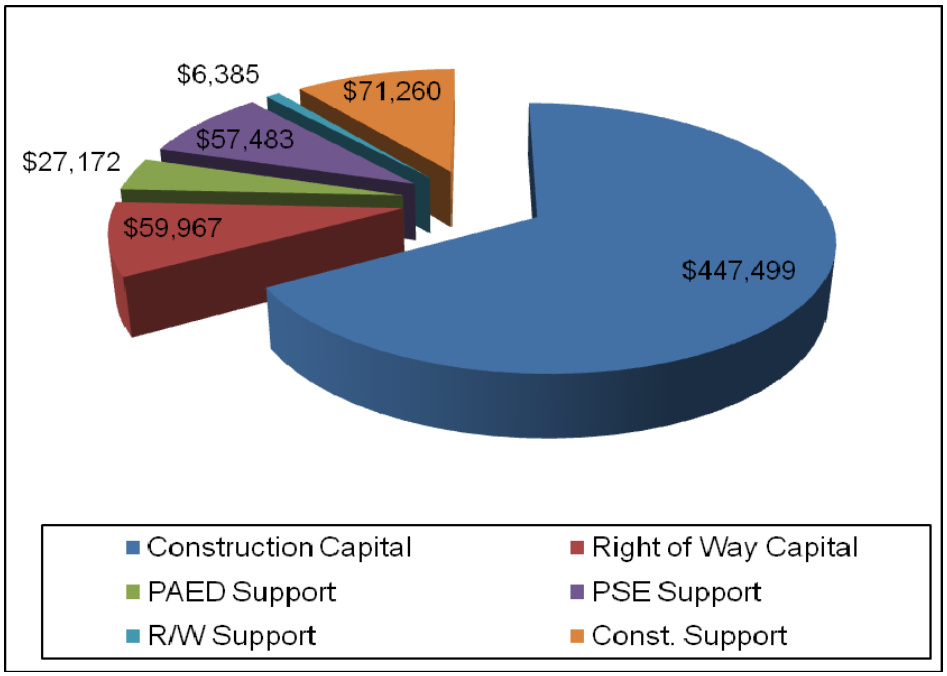


Table D1 in Appendix D shows the detailed funding plans and cash flow of the Project.

2.2 Cost Estimating Methodology and Key Assumptions

The capital construction cost estimate in this IFP is based on preliminary engineering plans, advanced design, and bid results for the contract in construction. The plans and estimates for the individual contracts are at various stages of development. The Phase 1 contracts are in advance stages of design and have Caltrans's detailed Basic Engineering Estimate System (BEES) estimate for construction capital cost. BEES is a computer program used for storing estimated quantities and prices for each item of the project. The Phase 1 contracts have detailed R/W data sheets that estimate the R/W costs. The Phase 2 contracts have preliminary plans and have less detailed 6-page estimates. The stage of plan development and estimate type for each contract is listed in Table 1.

Table 1. Cost Estimate Type

Phase	Contract	Estimate Type
1	A1	Contractors Bid
1	B1	BEES - 95% Plan Estimate
1	B2	BEES - 95% Plan Estimate
1	B3	BEES - 95% Plan Estimate
1	L1	Preliminary Estimate
2	B1-Phase II	Six-Page Estimate
2	B2-Phase II	Six-Page Estimate
2	B3-Phase II	Six-Page Estimate
2	C2	Six-Page Estimate
2	C3	BEES - 95% Plan Estimate
2	L2	Preliminary Estimate

2.2.1 Capital Cost

Construction Capital Estimate: The estimate includes a quantity takeoff of major pay items. The estimate was compiled using standard Caltrans practice, which involves using current unit costs for each pay item with consideration to recent similar projects. The Phase 1 and Phase 2 contracts construction costs were escalated to the anticipated mid-year of construction at a rate of 3.5 percent per year from FY 2013/2014. The Caltrans Project Development Planning Manual (PDPM) requires the project sponsor(s) to establish the escalation rate. The escalation rate of 3.5 percent per year is based on the project sponsors' assumptions of market conditions, economic outlook, geographical location, and historic data.

The Caltrans Division of Design, Cost Estimating Section has compiled cost data including national and state construction cost indices and forecasts from various sources. The national forecast for escalation rate is between 1.9 percent and 3.5 percent from 2012 to 2017. Historically in California, and more specifically in the San Francisco Bay Area, inflation rates have been higher than the national average, and therefore a higher escalation rate of 3.5 percent was selected for this project. Forecasts of escalation rates in California are not available on the Caltrans Division of Design webpage. A summary of the construction cost indices and forecast is included in Appendix E.

Based on the current bid environment bid, no escalation is anticipated until FY 2012/2013. A 5 percent to 20 percent contingency was added to the capital construction cost depending on the stage of contract design and project risks. The

contingency will be reduced to the standard 5 percent at the completion of final design. A 10 percent contingency will be requested for construction contracts where risks during construction are determined to be high. A higher than 5 percent contingency will require approval from Caltrans Chief Engineer and FHWA. For the contract in construction (Contract A1), the capital estimate is based on winning contractor's bid. Construction estimates for all Phase 1 and Phase 2 contracts are included in Appendix C.

Right-of-Way Capital Estimate: The R/W capital estimate is divided into three components: R/W acquisition, utility relocation, and off-site environmental mitigation. These three components are discussed below.

R/W Acquisition: The MSN Project will require a purchase of 62 parcels and numerous temporary construction easements. A large numbers of the parcels will be purchased in Phase 1. The R/W acquisition estimate was determined based on a detailed or preliminary R/W study of the parcels to be acquired. The R/W acquisition costs were escalated at the same rate as construction cost to the anticipated year of need. For Phase 1 contracts, the R/W acquisition cost estimates are shown on the R/W data sheets in Appendix B. The R/W acquisition cost estimate for Phase 2 contracts is included in the six-page estimates in Appendix C.

Utility Relocation: The Project will require relocation of several major utilities, including 30-inch-diameter NMWD aqueduct, 30-inch-diameter Sonoma County Water Agency (SCWA) aqueduct, 16-inch and 12-inch PG&E gas lines, 60kv and 1kv PG&E overhead electric transmission lines, and Verizon and AT&T overhead and fiber-optics lines. Utility relocation costs for Phase 1 contracts were provided by the utility companies based on utility relocation plans. Generally, a 10 percent contingency was added to the estimates. The breakdown of the utility relocation cost for each Phase 1 contract is included in Tables B2, B3, and B4 in Appendix B. Most of the utility relocation will be performed by the utility companies and will be paid for from the R/W capital (utility) budget, with the exception of NMWD aqueduct in Contract B1 and the SCWA aqueducts and a temporary bypass of NMWD aqueduct in Contract B2. These aqueducts will be relocated during construction by the roadway contractor, and their costs are included in the construction capital budgets of Contracts B1 and B2. The design cost of the NMWD and SCWA aqueducts are included in the contract PS&E budgets of Contract B1 and B2, respectively.

NMWD has requested that Caltrans include upsizing of a portion (8,215 feet out of 10,885 feet) of the NMWD aqueduct to 42-inch diameter along with its planned relocation to eliminate a pump station and improve operational efficiency. It is mutually beneficial for Caltrans and NMWD to combine the upsizing (betterments) with the MSN B1 construction contract. Not including the betterments in the construction contract would require a separate NMWD project for upsizing the pipe in the future. The future project would replace a relatively new 30-inch diameter pipe, making the relocation work done in MSN Contract B1 a throw-away. Furthermore, a future project to replace the pipe would result in patching/scarring of newly placed pavement and recurring disruptions to the traveling public and affected property owners. NMWD has an approved EIR for the Aqueduct Energy Efficiency Project that provides environmental clearance for the betterment. NMWD will pay for all actual construction capital and support costs incurred by Caltrans for constructing the betterments. The estimated betterment capital and support costs are $2,430,000 and $120,000, respectively, for a total of $2,550.000. A negotiated cooperative agreement has been approved by Caltrans legal and the NMWD board and is expected to be executed by the end of April 2012. A copy of the approved cooperative agreement is included in Appendix E. The fully executed cooperative agreement will be included in the future updates of this IFP.

Please note that the utility relocation cost of Contract B3 exceeds the programmed amount. Some of the NMWD aqueduct relocation cost of Contract B3 will be paid from the Contract B1 R/W budget (Regional Transportation Improvement Program [STIP-RIP] state fund).

As noted earlier, the scope of Contract B2 was increased in June 2011 to include the Petaluma River Bridge. The Petaluma River Bridge was previously part of a Phase 2 contract known as Contract B4. The R/W data sheet for these contracts has not been combined, and the numbers in both data sheets have been combined to account for the scope added to Contact B2.

Environmental Mitigation: The environmental mitigation cost was determined based on the environmental commitments made in the Environmental Impact Report/ Environmental Impact Statement, the Biological Opinions, the cultural resource recovery agreement with the State Historic Preservation Officer, and actual/ anticipated permit requirements imposed by the regulatory agencies. Environmental mitigation costs were escalated at the same rate as construction costs to the

anticipated year of need. MSN Project mitigation is broadly divided in two parts: off-site mitigation and on-site mitigation.

The Phase 1 off-site environmental mitigation includes: (1) purchase of wetland credits from an approved bank, (2) purchase of an easement for California red-legged frog (CRLF) (*Rana draytonii*) habitat, and (3) tree replacement to mitigate for riparian trees and stream restoration for other waters of the U.S. and State. The regulatory agencies are requiring that the Phase 1 off-site mitigation be completed along with the Segment B roadway Contracts B1 and B2. The estimated impacts and costs of these items are summarized in Tables B5 and B6 in Appendix B. Off-site mitigation will be funded from the Environmental Mitigation budget of Contracts B1 and B2.

The Phase 1 on-site mitigation includes: (1) stormwater and hydro-modification mitigation, (2) cultural resources recovery and preservation, and (3) tree replacement mitigation. The cost for stormwater and hydro-modification mitigation is included in the construction capital cost of Phase 1 contracts. The cost for cultural resource recovery is included in the PS&E budget of affected Phase 1 contracts. On-site tree replacement mitigation cost is included in the follow-up Landscape and Mitigation Contract L1 construction capital.

The Phase 2 off-site environmental mitigation includes purchase of wetland credits from an approved bank and tree replacement mitigation. The cost of these items is included in the environmental mitigation costs estimates of various Phase 2 contracts, as shown in the six-page estimates in Appendix C and as summarized in Table B1 in Appendix B. The Phase 2 on-site mitigation includes hydro-modification and riparian tree replacement mitigation, where possible. The cost for hydro-modification is included in the construction capital cost of Phase 2 contracts. Phase 2 on-site tree replacement mitigation cost is part of the follow-up Landscape/Mitigation Contract L2.

The off-site wetland credits for the Phase 1 contracts have been purchased. The CRLF easement is being negotiated with a private property owner (Barboni Ranch) to secure 204 acres of CRLF habitat for the entire MSN Project. The task orders for the cultural resource recovery service contracts are being drafted. These task orders will be executed prior to start of construction activities in the affected contracts.

2.2.2 Support Cost

The PA&ED component (phase) of the MSN Project is complete, and sunk cost was used in the current cost estimate. The PS&E costs for the contract in construction (Contract A1) is sunk cost. The PS&E support cost for Phase 1 contracts in design phase and Phase 2 Contracts C2 and C3 were estimated using a bottom-up approach by the Project Development Team (PDT). The PS&E cost for Phase 2 Contract C3 is based on re-packing the 95-percent PS&E of the remaining scope of Contract B4, which was not added to Contract B2 (see discussion under Contract B2 in Chapter 1, Section 1.1). The cost estimate for remaining Phase 2 contracts is estimated as 15 percent of the escalated construction capital costs where needed.

The R/W support costs for Phase 1 contracts were estimated using a bottom-up approach by the Project R/W team. The support cost for Phase 2 contracts was estimated as 15 percent of the escalated R/W capital cost. The 15 percent capital cost is consistent with Caltrans' most recent (2002) capital outlay support study discussed in Section 2.1 of this IFP.

2.3 Cost Incurred to Date and Expenditure Forecast

The Project contracts are currently in PS&E and construction. Table 2 provides the Project expenditures as of the end of June 2011 (end of FY 2010/2011), as well as the current estimate to completion for each Project component. The Project expenditure will be updated in the next update of the IFP in October 2012.

Table 2. Project Expenditure and Estimate to Completion

(dollars in thousands and estimate escalated)

Component	Expenditure	Estimate at Completion
PA&ED [a]	$27,172	**$27,172**
PS&E	$21,178	**$57,482**
R/W Support	$1,132	**$6,685**
Construction Support	$219	**$71,260**
Environmental Mitigation	$4,631	**$18,540**
R/W	$147	**$41,426**
Construction	$0	**$447,499**
Project Total	$54,478	**$669,765**

Note:
[a] Completed Phase

Table 3 and Table 4 show the annual expenditure and cost estimate (forecast) of the MSN Project by component. Table 3 shows the combined annual expenditure and cost estimate for Phases 1 and 2, while Table 4 shows the annual expenditure and cost estimate for Phase 1 only. The future annual costs were generally determined based on reasonable expectation of the expenditure and/or using assumptions listed below:

- Linear distribution of construction capital cost by month from the beginning of construction to Construction Contract Acceptance (CCA).
- Linear distribution of 95 percent of the construction support cost by month from beginning of construction to CCA and linear distribution of the remaining 5 percent of construction support cost by month from CCA to construction contract closeout. A one year construction closeout contract period is assumed for all contracts in the schedule.
- For Phase 1 contracts, linear distribution of 70 percent of R/W capital expenditure 1 year prior to construction and a linear distribution of remaining 30 percent of R/W capital funds from beginning of construction to CCA. For Phase 2 contracts, linear distribution of 70 percent of R/W capital expenditure 2 years prior to construction and linear distribution of remaining 30 percent capital funds from beginning of construction to CCA.
- Linear distribution of 70 percent of R/W support cost from beginning of PS&E to Ready to List (RTL) and linear distribution of the remaining 30 percent of R/W support cost to CCA. A project is RTL is when all applicable design, R/W, environmental, regulatory, and statutory conditions have been addressed in the PS&E.
- Linear distribution of 98 percent of the PS&E support cost from beginning of design to Read to List and 2 percent for advertise/award of construction contract.
- For Phase 1 contracts, linear distribution of 80 percent of environmental mitigation cost in a year prior to construction and linear distribution of the remaining 20 percent from beginning of construction to CCA. For Phase 2 contracts, linear distribution of environmental mitigation capital cost from 1 year prior to construction to CCA.

Table 3. Expenditure and Forecast By State Fiscal Year (Phase 1 and 2)

(dollars in thousands and estimate escalated)

Component	State Fiscal Year												Total
	Prior	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	
PA&ED	$27,172	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$27,172
PS&E	$9,751	$11,427	$9,919	$1,873	$0	$10,025	$11,422	$2,926	$140	$0	$0	$0	$57,482
R/W SUP	$274	$858	$2,745	$634	$634	$524	$261	$149	$150	$102	$55	$0	$6,385
CON SUP	$0	$219	$3,216	$8,919	$6,173	$7,329	$6,501	$8,281	$14,470	$13,982	$1,931	$240	$71,260
ENV MITG	$0	$4,631	$2,349	$596	$596	$369	$1,879	$567	$6,865	$689	$0	$0	$18,540
R/W CAP	$4	$143	$17,838	$2,857	$8,915	$4,287	$4,509	$1,037	$918	$918	$0	$0	$41,426
CON CAP	$0	$0	$20,918	$42,981	$38,501	$47,863	$40,657	$56,872	$98,448	$99,732	$833	$694	$447,499
Project Total	**$37,201**	**$17,277**	**$56,983**	**$57,859**	**$54,819**	**$70,397**	**$65,229**	**$69,832**	**$120,991**	**$115,424**	**$2,819**	**$934**	**$669,765**

Table 4. Expenditure and Forecast By State Fiscal Year (Phase 1)

(dollars in thousands and estimate escalated)

Component	State Fiscal Year												Total
	Prior	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	
PA&ED	$27,172	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$27,172
PS&E	$9,751	$9,343	$7,835	$1,352	$0	$278	$230	$0	$0	$0	$0	$0	$28,789
R/W SUP	$274	$858	$2,080	$634	$634	$346	$0	$0	$0	$0	$0	$0	$4,825
CON SUP	$0	$219	$3,216	$8,919	$6,173	$7,329	$4,526	$1,556	$315	$33	$6	$0	$32,290
ENV MITG	$0	$4,631	$2,349	$596	$596	$369	$0	$0	$0	$0	$0	$0	$8,540
R/W CAP	$4	$143	$17,838	$2,857	$8,915	$2,796	$1,298	$433	$0	$0	$0	$0	$34,285
CON CAP	$0	$0	$20,918	$42,981	$38,501	$47,863	$26,792	$9,680	$482	$482	$0	$0	$187,699
Project Total	**$37,201**	**$15,194**	**$54,234**	**$57,338**	**$54,819**	**$58,981**	**$32,845**	**$11,669**	**$797**	**$514**	**$6**	**$0**	**$323,599**

Chapter 3 Implementation Plan

The environmental phase (PA&ED) for the entire MSN Project, which included preparation of an EIR/EIS, Project Report, and a Record of Decision by FHWA, was completed in October 2009. The ROD was signed on October 29, 2009. The PS&E and construction of the MSN Project will be implemented in two phases using independent construction contracts and in accordance with the management strategy and schedule described in Section 1.4 of this IFP.

3.1 Project Schedule

The current overall project schedule for Phase 1, Phase 2, and individual contract schedules is discussed in Section 1.2, Project Timeline, of this IFP and is presented in more detail in Appendix A (Figure A-1). A Critical Path Method (CPM) construction schedule for Contract A1 (contract is construction) is also included in Appendix A. The schedules show that the last Phase 1 roadway contract, Contract B3, will close out in FY 2017/2018, and the follow-up landscape contract, Contract L1, which has a 3-year plant establishment period, will close out in FY 2019/2020. The design of Phase 2 contracts, except for Contracts C2 and C3, will begin in FY 2014/2015 when RTP-LRP funding becomes available. Contract C2 and C3 design is ongoing using local funds, and construction/utility relocation is anticipated to begin in FY 2014/2015 when RTP-LRP funds become available. It is anticipated that the last roadway contract will close out in FY 2019/2020, and the follow-up landscape/mitigation contract (Contract L2), which has a 3-year plant establishment period, will close out in FY 2020/2021. The schedule for Phase 2 contracts will be updated in future updates to this IFP. A CPM construction schedule for contracts in construction will also be provided in the update to this IFP when appropriate.

3.2 Status of Permits and Approvals

Numerous permits and agreements are needed for the MSN Project. Consistent with Caltrans' project development process, permit acquisition and agreements will be the responsibility of the individual functional designers, contractors, and project managers. The permits and agreements needed include the following:

Permits: A Streambed Alteration Agreement (1602 Permit) is required from the California Department of Fish and Game (CDFG) for the proposed bridge (over water) and box culvert work for each contract. A corridor-wide Individual Section 404 Permit is required from the United States Army Corps of Engineers (USACE) for fill material in wetland areas, and a Section 401 Water Quality Certification is required from the California Regional Water Quality Control Board (RWQCB) for each contract. The proposed replacement of the Petaluma River Bridge requires a new lease agreement from the State Lands Commission (SLC), as well as Section 9 approval from the United States Coast Guard (USCG). The status and approval/target dates of permits of Phase 1 contracts are provided in Table 5.

Freeway Agreements and New Connections: The MSN Project will require new freeway agreements and/or amended freeway agreements with Marin County, Sonoma County, City of Petaluma, and City of Novato. New freeway agreements have been executed with Marin County and Sonoma Counties. The freeway agreement with the City of Novato has been amended. CTC has approved the new public road connection to Route 101 at Redwood Landfill overcrossing. The status and approval/target dates of Phase 1 freeway agreements are provided in Table 5.

Cooperative Agreements: An MOU was developed between TAM, SCTA, and Caltrans in 2008. This MOU outlines the overall project management strategy and the roles/responsibilities of the partners. Due to the large scope and phased funding of the MSN Project, the design and construction will occur in smaller contracts that will allow for easier funding and competitive bidding. The cooperative agreements for funding and staff responsibilities for the PS&E and R/W support for Phase 1 contracts have been executed. Cooperative agreements for the construction phase with TAM and NMWD are in the final stage of negotiations, and they will be executed as the contracts move into the construction phase. Please note that the first Contract, A1, currently in construction, did not require cooperative agreements, as Caltrans performed all functions with state funding. The status and approval/target dates of cooperative agreements are provided in Table 5.

Maintenance Agreements: Revised Maintenance Agreements are needed with the City of Novato, City of Petaluma, County of Marin and County of Sonoma. Maintenance agreements must be fully executed prior to construction contract acceptance. The status and approval/target dates of Maintenance Agreements are provided in Table 5.

Table 5. Status of Permits and Agreements

Phase	Contract	Permit/ Agreement	Status	Approval/ Target Date
1 & 2	All	USFWS Biological Opinion (BO)	Approved	4/1/10
1 & 2	All	NMFS Biological Opinion	Approved	1/26/09
1	A1	CDFG 1602 permit	Approved Amended on 9/12/11	8/3/10
1	A1	RWQCB 401 permit	Approved	7/22/10
1	A1	USACE 404 permit	Approved	9/28/10
1	B1	CDFG 1602 permit	Submitted to CDFG for final signatures	4/20/12
1	B1	RWQCB 401permit	Approved	4/26/12
1	B1	USACE 404 permit	Approved	4/3/12
1	B1 & B3	Freeway Agreement with County of Marin	Executed	10/11/10
1	B1	Freeway Agreement Amendment with City of Novato	Executed	2/14/12
1	B1	Cooperative Agreement for PS&E and R/W with TAM	Executed Last Amendment on 12/15/11	9/19/08
1	B1	Cooperative Agreement for construction with TAM	Approved by TAM. Caltrans is processing for final signatures.	4/20/12
1	B1	Cooperative Agreement with the NMWD	Agreement approved by NMWD board and Caltrans. Agreement is being circulated for signatures.	4/20/12
1	B1	Maintenance Agreement with County of Marin	Draft and initial review by County of Marin completed. Approval anticipated prior to project award.	10/1/12
1	B2	CDFG 1602 permit	Approved	3/29/12
1	B2	RWQCB 401 permit	Approved	3/29/12
1	B2	USACE 404 permit	Approved	4/3/12
1	B2	SLC Lease Agreement	Lease approved by the Board. Documents are being circulated for final signatures	4/20/12
1	B2	USCG permit	Approved by NMWD board. Document circulating for signature.	4/30/12
1	B2	Freeway Agreement with the County of Sonoma	Executed	8/10/10
1	B2	Cooperative Agreement for PS&E and R/W with SCTA	Executed Last amendment on 10/20/11	2/23/09
1	B2	Cooperative Agreement for construction with SCTA	Executed	1/30/12
1	B2	Maintenance Agreement with County of Sonoma	Draft and initial review by County of Marin completed. Approval anticipated prior to project award.	10/1/12

Table 5. Status of Permits and Agreements

Phase	Contract	Permit/ Agreement	Status	Approval/ Target Date
1	B3	CDFG 1602 permit	Draft application will be prepared when 95% PS&E is completed	4/1/13
1	B3	RWQCB 401 permit	Draft application t will be prepared when 95% PS&E is completed	4/1/13
1	B3	USACE 404 permit	Draft application Permit will be prepared when 95% PS&E is completed	4/1/13
1	B3	Maintenance Agreement with the County of Sonoma	Draft being prepared	12/1/12
1	B3	Cooperative Agreement for PS&E and R/W with TAM	Executed Last amendment on 2/28/12	10/21/08
2	All Contracts	All Permits/Agreements	To be determined when Phase 2 contracts are programmed	TBD

Notes:
CDFG = California Department of Fish and Game
NMWD = North Marin Water District
RWQCB = Regional Water Quality Control Board
SCTA = Sonoma County Transportation Authority
SLC = State Land Commission
TAM = Transportation Authority of Marin
TBD = To be determined
USACE = U.S. Army Corps of Engineers
USCG = U.S. Coast Guard

Other Agreements: There are several existing freeway maintenance agreements within the MSN Project limits. The existing agreements are listed in Table 6. No changes to the existing agreement within the cities of Novato and Petaluma are anticipated in Phase 1 of the MSN Project. Revised freeway maintenance agreements are anticipated with Marin County, Sonoma County, and City of Petaluma to outline their roles/responsibilities with respect to the overcrossings, frontage roads, and bike paths required for the freeway upgrade. Draft maintenance agreements with Marin and Sonoma County have been submitted for review. It is anticipated that all freeway maintenance agreements needed for Phase 1 contracts will be signed prior to start of construction of Contracts B1 and B2.

An amended Construction and Maintenance (C&M) Agreement from Sonoma Marin Area Rail Transit/Northwest Pacific Railroad and a Section 134 “long clause” are required for the proposed widening of the Franklin Avenue Overhead, North Novato Overhead, Route 101/SR 116 Southbound Overhead (left structure), the replacement of the Route 101/SR 116 Southbound Overhead (right structure), and the North Petaluma Overhead. The C&M Agreement for the Franklin Avenue Overhead has been approved by Sonoma Marin Area Rail Transit/Northwest Pacific Railroad and

the California Public Utilities Commission. The remaining C&M Agreements will be obtained during the PS&E of Phase 2 contracts.

Table 6. Existing Freeway Maintenance Agreements

Entity	Date Approved
Marin County	June 16, 1983
City of Novato	July 1, 1980
City of Petaluma	March 12, 1980
Sonoma County	January 12, 1990
City of Novato – Electrical Facilities	March 30, 1993
Golden Gate Bridge, Highway and Transportation District - Electrical Facilities	May 14, 2003
Sonoma County – Traffic Signals and Intersection Lighting	March 11, 1974
Golden Gate Bridge, Highway and Transportation District – Bus Shelters	March 12, 2004

Application for the appropriate permits or preparation of required notifications to permitting agencies are being monitored by the individual MSN contract project managers to assure that the applications are filed in a timely manner to avoid schedule delays.

Chapter 4 Project Financing and Revenue

The MSN Project will be funded through a variety of federal, state, and local transportation funding programs. The MSN Project is divided into two phases. All of Phase 1 contracts and PS&E and R/W support of two Phase 2 contract (Contract C2 and C3) are funded with programmed state, local, and federal funds. The remainder of Phase 2 is funded with regional funds, as outlined in the MTC 2035 Regional Transportation Plan (RTP). All of the project funding is listed in the Marin and Sonoma Transportation Improvement Plans (TIPs) and RTP. Relevant portions of the Marin and Sonoma TIPs and RTP are included in Appendix E.

4.1 Sources of Funds

For the purposes of this IFP, the status of funding sources falls into one of three categories below:

- **Expended Funds**: these are obligated funds that have actually been spent (sunk cost).

- **Programmed Funds**: these are funds for which there is a commitment from the state, federal, and local funds source but no actual expenditures or obligations. Details of these funds are presented in this Chapter of the IFP.

- **Regional RTP-LRP Funds (Committed and Discretionary)**: these refer to funding included in the MTC 2035 Regional Transportation Plan (RTP) but that is not yet committed through the relevant budgetary process. Committed RTP-LRP funds are funds reserved by Law for specific use. MTC has allocated $228 million of committed RTP-LRP funds to the MSN Project. Discretionary funds are moneys available to the MTC for assignment to projects via the Transportation 2035 planning process. MTC has committed $176 million of discretionary funds to the MSN Project. These RTP-LRP funds have a reasonable expectation of being realized through a variety of fund sources. The project sponsors estimate, based on historical funding of similar transportation projects in the region, that these funds will come from a combination of State Transportation Projects/Congestion, Mitigation, and Air Quality improvements; STIPs; and local and other funding sources. Since the regional funds are in the financially constrained element of the RTP-LRP, the Project is considered a fully funded project for planning purposes.

It is not practical to provide a precise breakdown of regional funds in the RTP-LRP by state, federal, and local sources at this time. However, based on historical data on funding in the region, it is anticipated that 25 percent of the RTP-LRP funds will come from federal sources. The average historical state/local/federal split for Marin and Sonoma counties for the last ten years (from 2010 to 2011) is shown in Table 7. The breakdown picture for the MSN Project will evolve as Phase 2 contracts are programmed and will be provided in future updates of this IFP. The RTP-LRP amount will be reduced or removed in the TIP when specific funds sources are identified and funds are programmed to the Project.

Table 7. Historical Project Federal Funding Sources*

Fund Type	Marin County	Sonoma County	Total
Federal	17%	8%	25%
Local	17%	29%	46%
Regional	2%	1%	3%
State	12%	15%	27%
Total	**48%**	**52%**	**100%**

Note:
*The numbers in the table are 10-year averages from 2001 to 2011.
Source: MTC.

The primary traditional sources for state transportation projects are gasoline and diesel fuel taxes, vehicle weight fees, and federal revenue. Local sources include Sonoma County sales tax Measure M. Table 8 shows all of the funding sources and amounts, including programmed and committed/discretionary funds, broken down by project component. The regional committed/discretionary funds breakdown, shown by project component in Table 8, is preliminary and subject to change. The 2011 TIP has $404 million of RTP-LRP funds for the MSN Project in the construction phase. The project STIP and TIP are included in Appendix E. Please note that The current TIP do not exactly match the STIP and this IFP and it needs to be updated to reflect recent amendment made by CTC and bid amount of Contact A1. The TIP will be updated to match the STIP by July 2012.

Table 9 shows the funding plans by state fiscal year and project component for the entire MSN Project. The funding distribution by fund source for Phase 2 contracts, except design and some R/W of Contracts C2 and C3, has not been established, and all Phase 2 contracts are lumped together in Tables 8 and 9. The funding plan for Phase 2 contracts will be updated in the annual updates to the IFP when funds are programmed for individual Phase 2 contracts.

Table 8. Summary of Project Funding Sources

(dollars in thousands and escalated)

Fund Type	Component							Total
	PA&ED	PS&E	R/W SUP	CON SUP	ENV MITG	R/W CAP	CON CAP	
Phase 1 Programmed								
CMIA (State)				$15,392			$105,648	$121,040
TCRP (State)	$9,410	$9,990						$19,400
STIP- IIP (State, Incl. Augment.)	$14,100	$800		$2,650				$17,550
STIP- IIP (Fed - NHS)			$265	$11,810	$1,359	$3,843	$52,113	$69,390
STIP-RIP Marin (State, Incl. Augment.)		$7,792	$2,310	$700	$1,469	$7,062	$3,050	$22,383
STIP-RIP Marin (Fed - NHS)			$350	$355			$13,614	$14,319
STIP-RIP Sonoma (State)					$1,454	$9,356		$10,810
STIP RIP Sonoma (Fed - NHS)		$110		$115			$8,165	$8,390
SAFETEA-LU-2444 Mrn. (Fed)					$2,872	$7,926		$10,798
SAFETEA-LU-3736 Mrn (Fed)					$108	$297		$405
SAFETEA-LU-3736 Son. (Fed)						$45		$45
SAFETEA-LU-1767 Son. (Fed)						$360		$360
DEMO – TEA 21 (Fed)	$3,100				$1,359	$3,750		$8,209
Appropriation Marin (Fed)	$562	$280						$842
MEA. M Sonoma (Local)		$9,817	$1,900	$1,148	$545	$1,646	$6,065	$21,121
SLPP (Sonoma)							$1,865	$1,865
NMWD (Local)				$120			$2,492	$2,612
Subtotal -Phase 1	$27,172	$28,789	$4,825	$32,290	$9,166	$34,285	$193,012	$329,539
Phase 2 Programmed								
MEA. M Sonoma (Local)		$4,784	$950					$5,734
Phase 2 - Regional (RTP-LRP) Funds*		$36,331	$8,074	$44,405	$12,110	$40,368	$262,393	$403,681
Subtotal -Phase 2		$41,115	$9,024	$44,405	$12,110	$40,368	$262,393	$409,415
Project Total	**$27,172**	**$69,904**	**$13,849**	**$76,695**	**$21,276**	**$74,653**	**$455,405**	**$738,954**

Note:

* See Table 7 for the anticipated split for of RTP-LRP funds between federal, state and local sources. Marin TIP (ID MRN050034) has $160,843,000 of RTP-LRP funds and Sonoma TIP (ID SON070004) has $243,519,000 of RTP-LRP funds

Table 9. Project Programmed Funding
(dollars in thousands and escalated)

Phase	Contract	Component	State Fiscal Year						Total
			Prior 10/11		11/12	12/13	13/14	14/15	
1	A1	PA&ED	$9,520						$9,520
1	A1	PS&E	$4,507						$4,507
1	A1	R/W SUP	$65						$65
1	A1	CON SUP		$7,000					$7,000
1	A1	R/W CAP	$277						$277
1	A1	CON CAP		$28,473					$28,473
1	B1	PA&ED	$9,384						$9,384
1	B1	PS&E	$2,538	$5,035					$7,573
1	B1	R/W SUP	$2,595						$2,595
1	B1	CON SUP		$4,850	$120				$4,970
1	B1	R/W CAP	$24,566						$24,566
1	B1	CON CAP		$11,114	$21,042				$32,156
1	B2	PA&ED	$7,600						$7,600
1	B2	PS&E	$5,584	$5,453					$11,037
1	B2	R/W SUP	$1,200	$500	$200				$1,900
1	B2	CON SUP			$12,190				$12,190
1	B2	R/W CAP	$12,630	$776					$13,406
1	B2	CON CAP		$7,395	$69,605				$77,000
1	B3	E&P	$668						$668
1	B3	PS&E	$4,812	$400					$5,212
1	B3	R/W SUP		$265					$265
1	B3	CON SUP						$7,660	$7,660
1	B3	R/W CAP			$5,202				$5,202
1	B3	CON CAP						$52,113	$52,113
1	L1	PA&ED							$0
1	L1	PS&E						$460	$460
1	L1	R/W SUP							$0
1	L1	CON SUP						$470	$470
1	L1	R/W CAP							$0
1	L1	CON CAP						$3,270	$3,270
2	C2	PA&ED							$0
2	C2	PS&E		$4,784					$4,784
2	C2	R/W SUP		$950					$950
2	C2	CON SUP							$0
2	C2	R/W CAP							$0
2	C2	CON CAP							$0
	Subtotal								$335,273
2	Remaining Phase 2 Contracts *	All Components						$403,681	$403,681
PROJECT TOTAL			$85,946	$76,995	$108,359	$0	$0	$467,654	$738,954
Cumulative Total			$85,946	$162,941	$271,300	$271,300	$271,300	$738,954	$738,954

Note:
* Remaining Phase 2 contracts include A2, B1-Phase II, B2-Phase II, B3-Phase II, & L2

Brief descriptions, including match requirements, of the programmed state, federal, and local funding sources (programs) listed in Table 8 are provided below.

State Funding Programs:

- ***Traffic Congestion Relief Program (TRCP):*** TCRP fund was created in June 2000 by Assembly Bill 2928 and Senate Bill 1662 and is one of California's major programs for construction of new transportation projects. TCRP committed $4.9 billion to 141 specific projects. TCRP is managed by the CTC and the Governor. CTC has approved TCRP funding for the MSN Project (TCRP Project No. 18).

- ***State Transportation Improvement Plan:*** This is a state biennial 5-year plan adopted by the CTC for future allocations of certain state transportation funds for state highway improvements, intercity rail, and regional highway and transit improvements. State law requires the CTC to update the STIP biennially, in even-numbered years, with each new STIP adding 2 new years to prior programming commitments. STIP has two broad programs: the Regional Transportation Improvement Program (STIP-RIP), funded from 75 percent of STIP funding, and the Interregional Transportation Improvement Program (STIP-IIP), funded from 25 percent of STIP funding.

  - *STIP-RIP:* This is a funding program for regional highway construction, rail expansion, transit projects, and road rehabilitation. The MSN Project is part of the 2010 STIP-IIP. Since the MSN Project is on the interstate system, STIP-RIP funds programmed include funding from state-only funds (state cash or bond) and the federal National Highway System (NHS) program. Federal NHS program requires a 20 percent state/local match.

  - *STIP-IIP:* This funding program is for interregional road or rail expansion projects outside urban areas or projects of statewide significance. The MSN Project is part of the current STIP-IIP. Since the MSN Project is on the interstate system, the STIP-IIP funds programmed include funding from state-only funds (state cash or bond) and the federal NHS program. The federal NHS program requires a 20 percent state /local match.

- ***Corridor Mobility Improvement Account:*** The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 was approved by California voters in November 2006 as Proposition 1B. This act authorized

$19.8 billion to be deposited in the CMIA account to be available, upon appropriation by the Legislature, for allocation by the CTC over a 5-year period to eligible transportation projects. MSN Project is part of the CMIA program.

- ***State Local Partnership Program (SLPP):*** The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 was approved by California voters in November 2006 as Proposition 1B. This authorized $1.0 billion to be deposited in the SLPP account to be available, upon appropriation by the Legislature, for allocation by the CTC over a 5-year period to eligible transportation projects nominated by an applicant local transportation agency. Sonoma County has committed $1.865 million of SLPP funds to the MSN Project. The SLPP program requires a dollar-for-dollar match from local funds, and this match, which will come from Sonoma Measure M funds, is discussed below.

Local Funding Program

- ***Sonoma Measure M:*** Traffic Relief Act for Sonoma County (Sonoma Measure M), passed by the voters in November 2004, dedicates funding for multimodal transportation projects in Sonoma County. The Act provides for a ¼ cent sales tax to be used for transportation-related projects. Sonoma County has dedicated funds towards specific programs and projects, including the MSN Project.

Federal Funding Programs

There are several federal fund sources, including federal earmarks and NHS that contribute to Phase 1 of MSN Project. Phase 2 contracts are currently not programmed, and it is not practical to determines federal fund source or quantify exact federal participation for Phase 2 contracts. However, based on historic information of funding in the region and the history of MSN Project, is anticipated to be about 25 percent of the total Phase 2 cost. All of the Phase 1 federal fund sources are listed in Table 10 and include:

- ***SAFETEA-LU High Priority Project (HPP) Program:*** This earmark program is funded by contract authority and available until expended. Subject to Section 117 of Title 23, United States Code, the amount listed for each HPP Project in SAFETEA-LU is available (from amounts made available by Section 1101(a)(16) of SAFETEA-LU) for FY years 2005 through 2009 to carry out each project. High Priority Project funds require a state/local match and in accordance with

Title 23, United States Code, Section 117(c), the federal share for HPP funds is 80 percent unless otherwise specified within the project description or in law. Several federal earmarks have been obligated to the MSN Project. The MSN earmarks have been partially received, and the remainder are listed on the current STIP. Table 11 shows a breakdown and details of the earmarked funds, including the MSN contract they are designated for and the status of federal "Authorization to Proceed" (E-76). E-76 establishes the reimbursement date for a phase of work. The MSN Project will provide the required 20 percent match from state/local funding sources identified earlier.

Table 10. Project Federal Funding Sources (Phase 1)

(dollars in thousands and escalated)

Fund Type	Component							Total
	PA&ED	PS&E	R/W SUP	CON SUP	ENV MITG	R/W CAP	CON CAP	
STIP- IIP – NHS			$265	$11,810	$1,359	$3,843	$52,113	$69,390
STIP-RIP Marin –NHS			$350	$355			$13,614	$14,319
STIP RIP Sonoma – NHS		$110		$115			$8,165	$8,390
SAFETEA-LU-2444 (Marin County)					$2,872	$7,926		$10,798
SAFETEA-LU-3736 (Marin County)					$108	$297		$405
SAFETEA-LU-3736 (Sonoma County)						$45		$45
SAFETEA-LU-1767 (Sonoma County)						$360		$360
DEMO - TEA 21	$3,100				$1,359	$3,750		$8,209
Appropriation Marin	$562	$280						$842
Total Federal Phase 1	**$3,662**	**$390**	**$615**	**$12,280**	**$5,698**	**$16,221**	**$73,892**	**$112,758**

- ***TEA-21 Demonstration Project Program:*** This program is funded by designated funding for specific projects (commonly referred to as demonstration projects) identified by Congress and is now included in Title 23 United States Code, Section 117. TEA-21 Demonstration program includes 1,850 projects, including the MSN Project. The designated funding can only be used for the project as described in the law. These funds require a 20 percent state/local match unless otherwise specified within the project description or in law. Table 11 shows the details of the TEA-21 Demonstration funds, including the MSN contract it is designated for and the status of E-76. The MSN Project will provide the required 20 percent match from state/local funding sources indentified earlier.

Table 11. MSN Project Federal Earmarks and Demonstration Funding (Including Obligation Authority)

(dollars in thousands)

Fund Source	Description	Demo ID	FY 04/05	85.55% OA FY 04/05	FY 05/06	86.18% OA FY 05/06	FY 06/07	92.12% OA FY 06-07	FY 07/08	92.45% OA FY 07/08	FY 08/09	93.65% OA FY 08/09	Total Unadjusted Earmark	OA Adjusted Earmark	MSN Contract & E-76 Status
SAFETEA-LU HPP #2444	Widen Hwy 101 in Marin and Sonoma Counties from Hwy 37 in Novato to Old Redwood Hwy in Petaluma	CA571	$2,400	$2,053	$2,400	$2,068	$2,400	$2,211	$2,400	$2,219	$2,400	$2,248	$12,000	$10,798	MSN B1 E-76 Approved
SAFETEA-LU HPP #3763	Construct Hwy 101 bicycle pedestrian project in Marin and Sonoma Counties from north of Atherton Ave to south of Petaluma River Bridge	CA687	$100	$86	$100	$86	$100	$92	$100	$92	$100	$94	$500	$450	MSN B1 & B2 E-76 Approved for $405K for B1, E-76 for B2 pending
SAFETEA-LU HPP #1767	Construct Hwy 101 bicycle pedestrian project in Marin and Sonoma Counties from north of Atherton Ave to south of Petaluma River Bridge	CA494	$80	$68	$80	$69	$80	$74	$80	$74	$80	$75	$400	$360	MSN B2 E-76 Pending
TEA-21 Demo #1340	Widen Hwy 101 from Petaluma Bridge to Novato	CA051	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	$5,650	$5,109	MSN B1 E-76 Approved
TEA-21 Demo #1340	Widen Hwy 101 from Petaluma Bridge to Novato	CA051	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	$3,100	$3,025*	PAED E-76 Approved
Marin Appropriation	HOV Lanes in Marin	CA06L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	$842	S842	PAED E-76 Approved

Notes:

*$75K of TEA-21 Demo #1340 was de- obligated on 11/13/11.

OA = obligated amount; NA = Not applicable

- ***NHS Program:*** The program provides funding for improvements to rural and urban roads that are part of the NHS, including the interstate system and designated connections to major intermodal terminals. The federal share is generally 80 percent, subject to the sliding-scale adjustment. When the funds are used for interstate projects to add HOV or auxiliary lanes, but not other lanes, the federal share may be 90 percent, also subject to the sliding-scale adjustment. The NHS funds are part of the STIP (RIP and IIP). The MSN Project intends to use "soft match" or toll credits for the 10 percent non-federal share for Contract B3 (R/W and construction) and Contract L1. There is a possibility that the toll credits may no longer be available. If this happens, state and local funds will be used to match.

The MSN Project needs to program RTP-LRP funds for Phase 2 contracts. The challenge lies in matching project needs by component with the timing of RTP-LRP funding. Currently, approximately $340 million is needed from regional RTP-LRP funds to complete the Project. It is anticipated that these funds will be secured from a variety of sources, including federal, state and local sources. The Project sponsors are confident that the Phase 2 funding can be secured to complete the Project on schedule (see Section 6.1 of the IFP for discussion on funding risks and mitigation strategies). It should be noted that the CTC will not allocate construction funding if the contract is not fully funded with secured funding. Therefore it would not be possible to execute any construction contract without secured funding.

The funding sources identified are consistent with the fiscally constrained STIP/TIP long-range plans for the state. The MSN Project is listed in the following state planning and regional planning documents (long-range plans).

4.1.1 State Planning (STIP)

- ***Route Concept Report and Corridor System Management Plans:*** The MSN Project is consistent with the current Route Concept Report, dated March 13, 1986, and the Corridor System Management Plan (CSMP) US 101 North corridor, dated May 19, 2011. The CSMP represents a cooperative commitment to develop a corridor management vision for the US 101 North corridor. The CSMP development process was a joint effort of the Caltrans MTC, TAM, and SCTA. The goal of CSPM is to propose strategies to achieve the highest mobility benefits to travelers across all jurisdictions and modes along the US 101 North corridor.

- ***Transportation System Development Plan:*** Caltrans developed a Statewide System Management Plan (1998) that includes a strategy for Bay Area transportation corridors. This study found that congestion relief in the US 101 corridor will require a multimodal (carpool, bus, rail, ferry, bicycle, and pedestrian) approach.

4.1.2 Regional Planning (TIP)

The MSN Project is listed in the MTC Transportation 2035 Plan (RTP Reference #230701) and 2011 Transportation Improvement Plan (TIP) (TIP ID Nos. MRN050034 and SON070004). The MTC Transportation 2035 Plan includes $745 million for the MSN Project. Of this amount, $341 million is programmed, and $404 million is regionally committed (RTP-LRP) funds. Relevant portions of the Marin County and Sonoma County TIPs and the RTP are included in Appendix E.

Please note that the current TIP does not match the STIP and this IFP. The TIP needs to be updated to reflect recent STIP amendments and Contract A1 award. The total project allocation (TIP listing) will reduce by $6,593,000, from $745,400,000 to $738,954,000. The TIP will be updated by July 2012.

Sonoma TIP (SON070004) will be adjusted to increase the programmed amount by $681,000, from $129,181,000 to $129,862,000, to account for increased local funding for PS&E and R/W support and decrease the RTP-LRP by the same amount. Additionally, there will be minor adjustments to FY of programming to match STIP programming and the MSN IFP. There will be no change to the total funding in the Sonoma TIP listing.

Marin TIP (MRN050034) will be adjusted to decrease the programmed amount by $6,446,000, from $211,857,000 to $205,411,000, to account for Contract A1 bid/award which was below the programmed amount. Additionally, there will be adjustments to FY of programming to match STIP programming and the MSN IFP. The total amount in the Marin TIP listing will reduce by $6,446,000, from $372,700,000 to $366,254,000. The RTP-LRP funding will not change.

TAM and SCTA have been requested by MTC to update the TIP to match programming in the STIP by July 2012.

MTC forecasts that $218 billion in federal, state, and local revenue will become available to the San Francisco Bay Area over the 25-year horizon of the

Transportation 2035 Plan. This $218 billion constitutes the "budget" for the financially constrained long-range plan. The revenue for it will come from:
(1) committed funds that have been reserved by law for specific uses or allocated by the MTC prior to the development of the Transportation 2035 Plan, and
(2) discretionary funds that are available for projects via the Transportation 2035 Plan planning process.

It is important to note that all projects/programs identified in the Appendix 1 of the Transportation 2035 Plan are fully funded by a combination of committed and discretionary funds.

4.1.3 Local Planning

The Project is being developed in partnership with TAM, SCTA, and FHWA. The completion of an HOV system through Marin and Sonoma counties is consistent with goals of the regional planning documents, including the US 101 Corridor Strategic Plan, the Marin County Congestion Management Plan, the Sonoma/Marin 1997 Multi-Modal Transportation and Land Use Study, the MTC 2005 HOV Master Plan, the MTC 2005 HOV Master Plan, the SCTA Measure M 2010 Strategic Plan, and the MTC Transportation 2035 Plan.

4.2 Comparison of Project Revenue and Cost

The programmed funds exceed the current cost estimate of $670 million. Figures 7 and 8 show the comparison of programmed funds and project cost estimate by component for the entire MSN Project (Phase 1 and 2) and MSN Phase 1, respectively. The programmed amounts exceed the estimated need for each component for the entire Project and for all components. The funds for environmental mitigation and R/W capital are programmed together and can be used interchangeably. The timing of Project revenue and expenditure is addressed in this IFP in Chapter 5, Cash Flow.

Figure 7. Comparison of Programmed Funds and Expenditure Forecast (Phases 1 and 2)

(dollars in thousands and escalated)

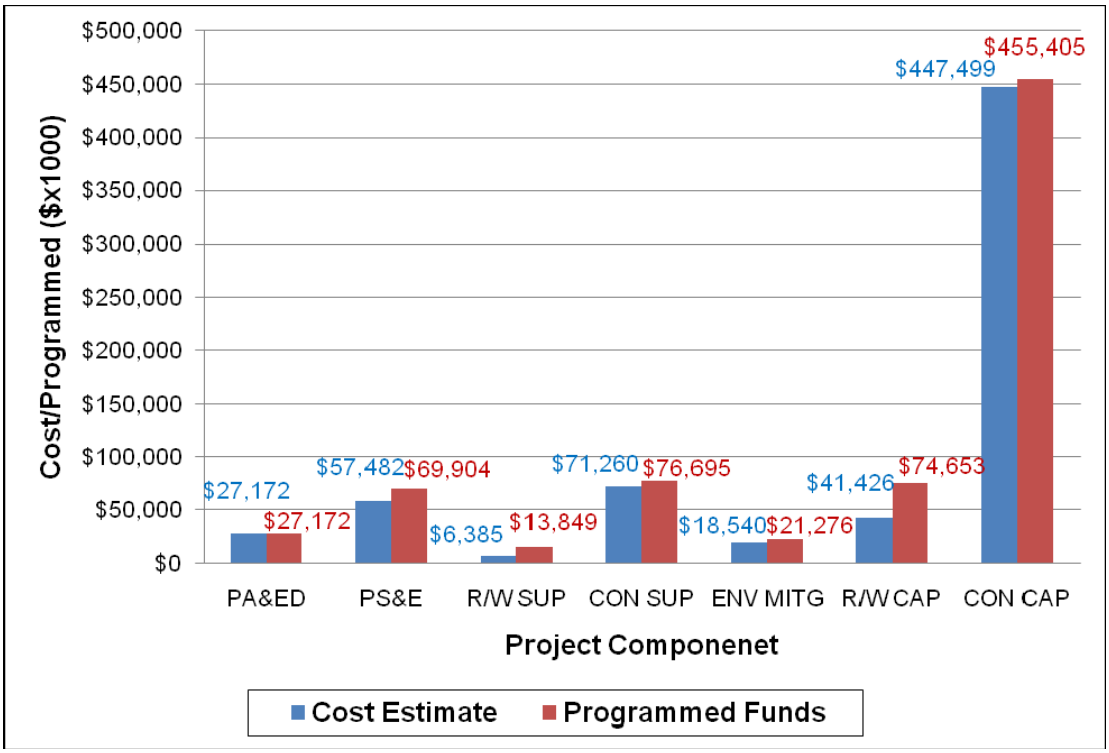
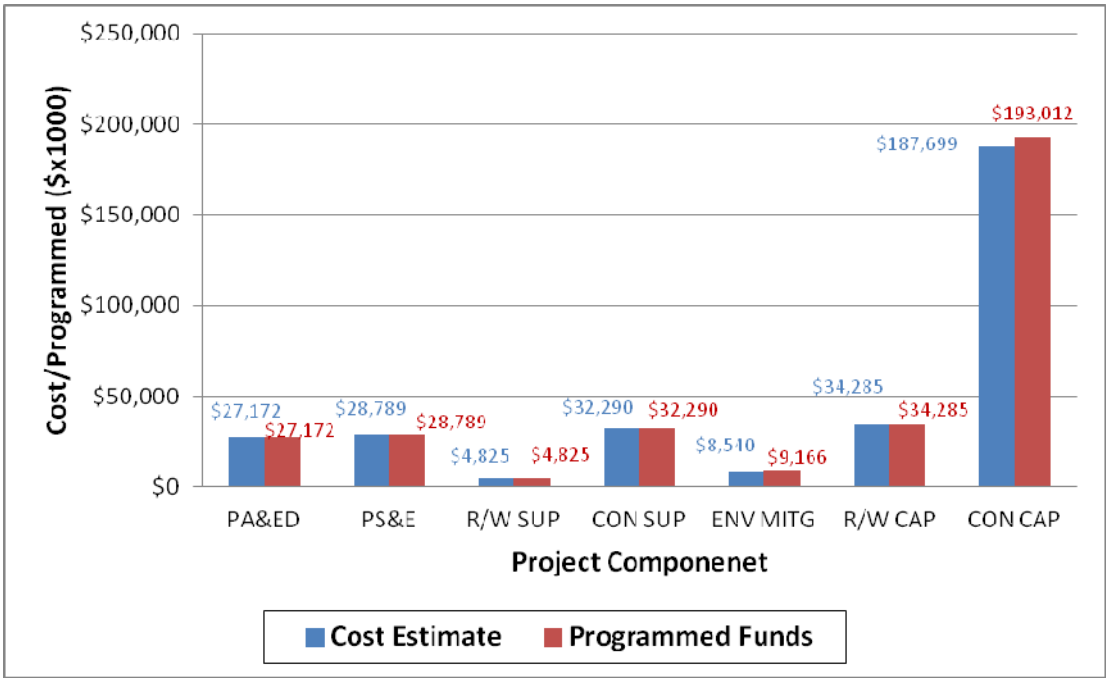


Figure 8. Comparison of Programmed Funds and Expenditure Forecast (Phase 1)

(dollars in thousands and escalated)



Chapter 5 Cash Flow

Table D1 in Appendix D shows the detailed cash flow for the MSN Project. The cash flow was determined based on assumptions listed in Section 2.3, Cost Incurred to Date and Expenditure Forecast. The amounts shown for prior fiscal year and FY 2010/2011 are sunk costs.

Figures 9, 10, and 11 show the annual cash outlay for the MSN Project based on project fund source, phase/contract, and project component, respectively. Figure 12 shows the annual cash outlay for Phase 1 by project component. The prior expenditures and FY 2010/2011 shown in Figures 9, 10, and 11 are the sunk costs. The PA&ED cost is distributed between Contracts A1, B1, B2, and B3. Figure 13 shows that annual cash outlay for federal funds types, including anticipated federal contribution for federal source for the RTP-LRP funds.

Figures 14 and 15 show the comparison of the cumulative annual cash outlay with the project revenue (funding) for the entire Project and for Phase 1, respectively. Figures 14a and 15a show the comparison of the annual cash outlay with the project revenue (programmed funding) for the entire Project and for Phase 1, respectively. These figures show that the timing of the funding is consistent with the project schedule and is appropriate for the Project. Marin and Sonoma County F-TIPs that show RTP-LRP funding are included in Appendix E. Applicable excerpts of the current STIP, TIP, and RTP are included in Appendix E,

Figure 9. Annual Expenditure by Fund Source

(dollars in thousands and escalated)

Fund Source	State Fiscal Year												Total
	Prior	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	
State	$28,124	$8,769	$41,202	$44,513	$36,020	$29,846	$1,088	$173	$0	$0	$0	$0	$189,733
Federal	$3,662	$3,099	$9,036	$2,104	$1,824	$932	$0	$0	$0	$0	$0	$0	$20,658
Local	$5,415	$5,410	$6,745	$3,090	$5,181	$2,569	$201	$95	$95	$48	$0	$0	$28,847
Federal (NHS)	$0	$0	$0	$8,153	$11,794	$25,634	$31,700	$11,497	$797	$514	$6	$0	$90,095
RTP-LRP	$0	$0	$0	$0	$0	$11,416	$32,241	$58,067	$120,099	$114,863	$2,813	$934	$340,432
Project Totals	$37,201	$17,277	$56,983	$57,859	$54,819	$70,397	$65,229	$69,832	$120,991	$115,424	$2,819	$934	$669,765

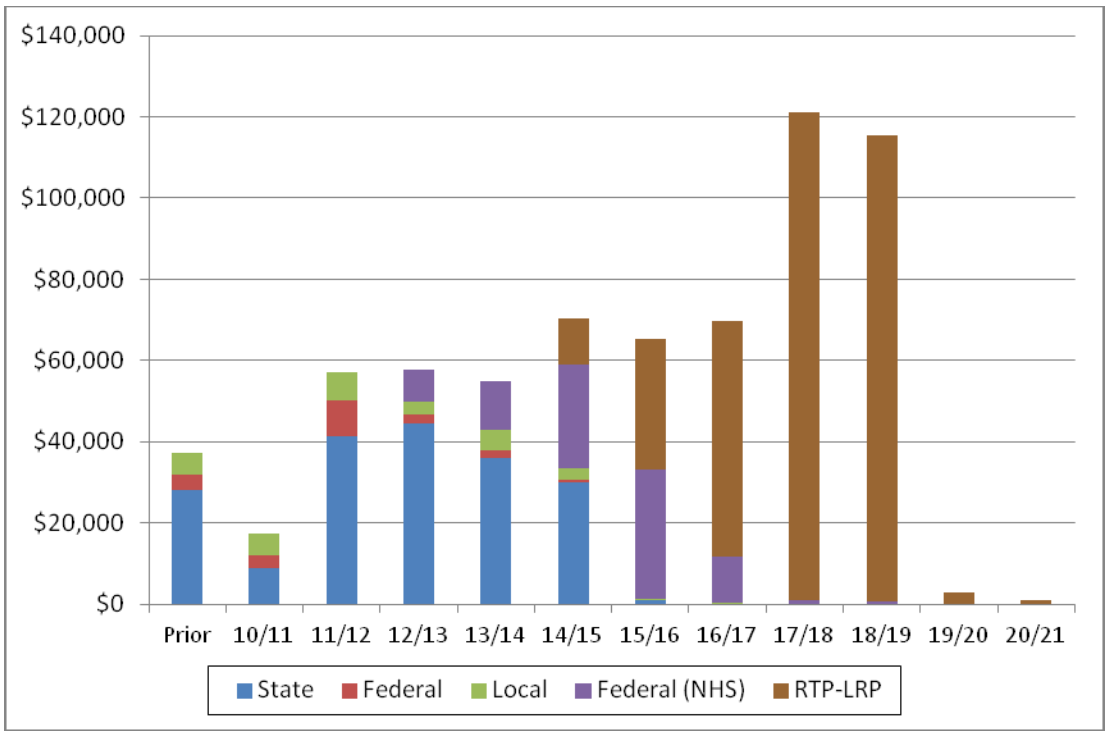


Figure 10. Annual Expenditure by Contracts

(dollars in thousands and escalated)

Contract	State Fiscal Year												Total
	Prior	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	
A1	$10,464	$4,124	$24,133	$10,188	$350	$0	$0	$0	$0	$0	$0	$0	**$49,259**
A2	$0	$0	$0	$0	$0	$1,938	$2,355	$5,650	$15,329	$15,329	$238	$0	**$40,840**
B1	$11,019	$6,149	$16,927	$14,999	$17,586	$7,608	$121	$0	$0	$0	$0	$0	**$74,409**
B2	$13,718	$3,724	$11,866	$30,692	$30,692	$30,692	$610	$0	$0	$0	$0	$0	**$121,994**
B3	$2,000	$1,197	$1,308	$1,459	$6,191	$20,451	$30,604	$10,329	$255	$0	$0	$0	**$73,794**
B1-Phase II	$0	$0	$0	$0	$0	$6,072	$7,366	$15,327	$41,116	$41,116	$670	$0	**$111,666**
B2-Phase II	$0	$0	$0	$0	$0	$1,348	$1,617	$3,927	$10,774	$10,774	$165	$0	**$28,605**
B3-Phase II	$0	$0	$0	$0	$0	$1,558	$1,929	$3,117	$7,923	$7,923	$114	$0	**$22,563**
C2	$0	$2,084	$2,749	$521	$0	$0	$3,275	$12,237	$36,521	$36,473	$551	$0	**$94,410**
C3	$0	$0	$0	$0	$0	$500	$15,841	$17,281	$1,667	$0	$0	$0	**$35,290**
L1	$0	$0	$0	$0	$0	$230	$1,511	$1,340	$541	$514	$6	$0	**$4,143**
L2	$0	$0	$0	$0	$0	$0	$0	$623	$6,865	$3,295	$1,074	$934	**$12,792**
Project Totals	**$37,201**	**$17,277**	**$56,983**	**$57,859**	**$54,819**	**$70,397**	**$65,229**	**$69,832**	**$120,991**	**$115,424**	**$2,819**	**$934**	**$669,765**

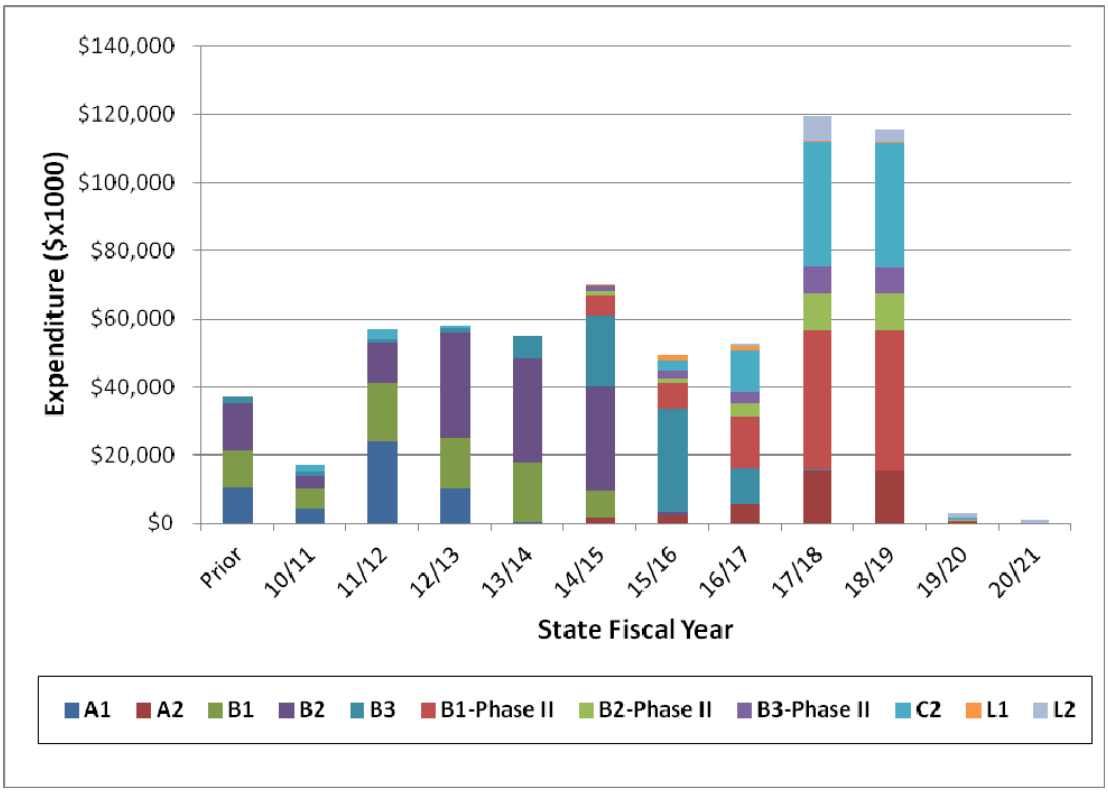


Figure 11. Annual Expenditure by Components

(dollars in thousands and escalated)

Component	State Fiscal Years												Total
	Prior	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	
PA&ED	$27,172	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$27,172**
PS&E	$9,751	$11,427	$9,919	$1,873	$0	$10,025	$11,422	$2,926	$140	$0	$0	$0	**$57,482**
R/W SUP	$274	$858	$2,745	$634	$634	$524	$261	$149	$150	$102	$55	$0	**$6,385**
CON SUP	$0	$219	$3,216	$8,919	$6,173	$7,329	$6,501	$8,281	$14,470	$13,982	$1,931	$240	**$71,260**
ENV MITG	$0	$4,631	$2,349	$596	$596	$369	$1,879	$567	$6,865	$689	$0	$0	**$18,540**
R/W CAP	$4	$143	$17,838	$2,857	$8,915	$4,287	$4,509	$1,037	$918	$918	$0	$0	**$41,426**
CON CAP	$0	$0	$20,918	$42,981	$38,501	$47,863	$40,657	$56,872	$98,448	$99,732	$833	$694	**$447,499**
Project Totals	**$37,201**	**$17,277**	**$56,983**	**$57,859**	**$54,819**	**$70,397**	**$65,229**	**$69,832**	**$120,991**	**$115,424**	**$2,819**	**$934**	**$669,765**

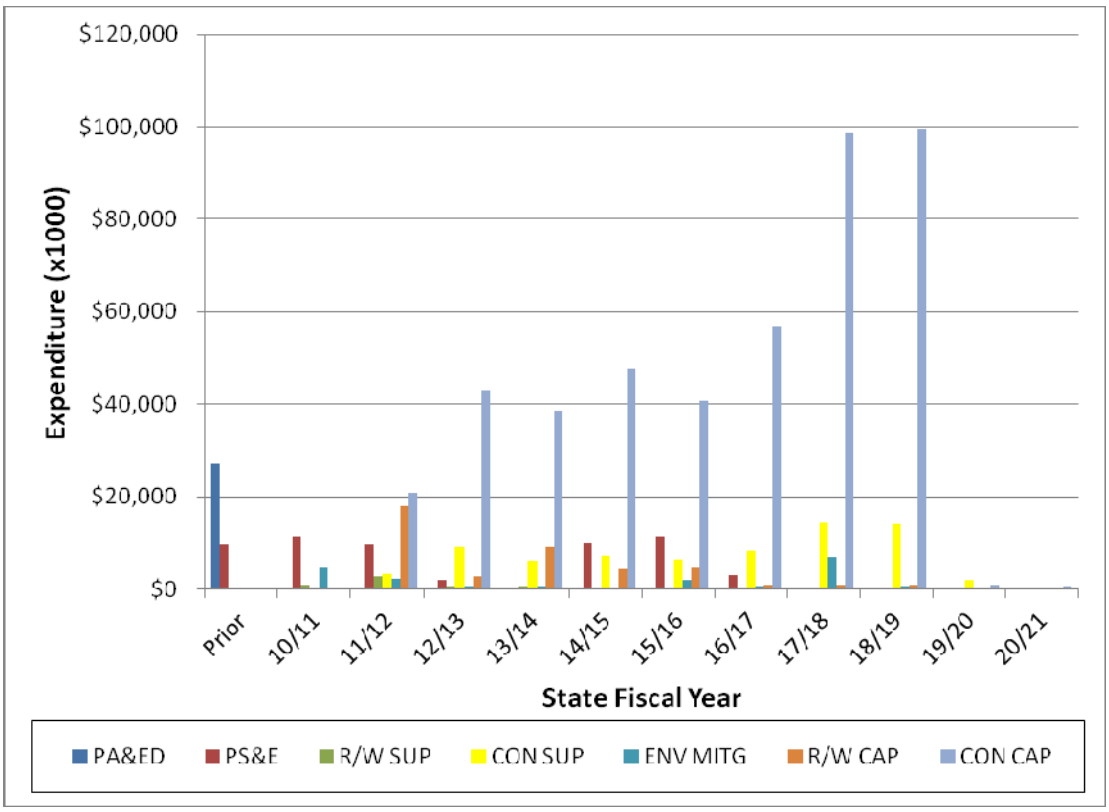


Figure 12. Annual Expenditure by Components (Phase 1 Only)

(dollars in thousands and escalated)

Component	State Fiscal Year												Total
	Prior	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	
PA&ED	$27,172	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$27,172**
PS&E	$9,751	$9,343	$7,835	$1,352	$0	$278	$230	$0	$0	$0	$0	$0	**$28,789**
R/W SUP	$274	$858	$2,080	$634	$634	$346	$0	$0	$0	$0	$0	$0	**$4,825**
CON SUP	$0	$219	$3,216	$8,919	$6,173	$7,329	$4,526	$1,556	$315	$33	$6	$0	**$32,290**
ENV MITG	$0	$4,631	$2,349	$596	$596	$369	$0	$0	$0	$0	$0	$0	**$8,540**
R/W CAP	$4	$143	$17,838	$2,857	$8,915	$2,796	$1,298	$433	$0	$0	$0	$0	**$34,285**
CON CAP	$0	$0	$20,918	$42,981	$38,501	$47,863	$26,792	$9,680	$482	$482	$0	$0	**$187,699**
Project Total	**$37,201**	**$15,194**	**$54,234**	**$57,338**	**$54,819**	**$58,981**	**$32,845**	**$11,669**	**$797**	**$514**	**$6**	**$0**	**$323,599**

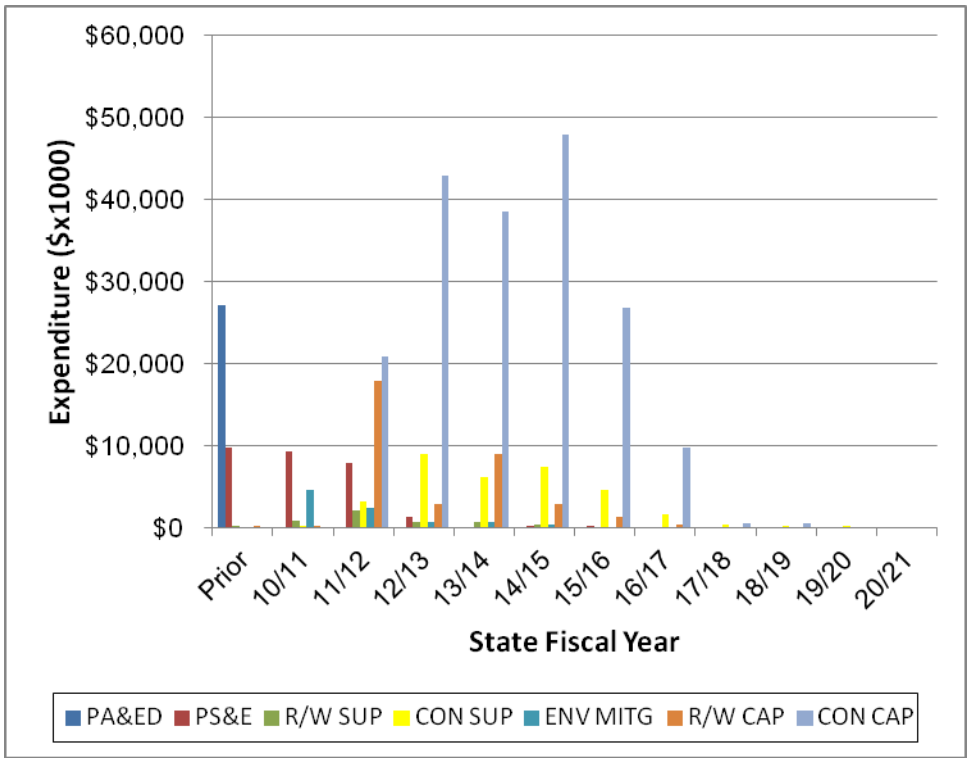


Figure 13. Annual Expenditure of Federal Funds

(dollars in thousands and escalated)

Fund Source	State Fiscal Year												Total
	Prior	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	
Marin Appropriation	$562				$280								**$842**
DEMO TEA21	$3,100	$975	$2,737	$559	$559	$279							**$8,209**
SAFETEA-LU-1767			$252	$36	$36	$36							**$360**
SAFETEA-LU-2444-Mrn		$2,038	$5,808	$1,181	$1,181	$590							**$10,798**
SAFETEA-LU-3736-Son		$86	$239	$49	$49	$27							**$450**
Federal (NHS)	$0	$0	$0	$8,487	$12,128	$25,801	$31,700	$11,497	$797	$514	$6	$0	**$90,930**
RTP-LRP*	$0	$0	$0	$0	$0	$2,780	$4,161	$11,444	$33,311	$32,419	$760	$234	**$85,108**
Project Total	**$3,100**	**$3,099**	**$9,036**	**$10,311**	**$13,953**	**$29,513**	**$35,861**	**$22,940**	**$34,108**	**$32,933**	**$766**	**$234**	**$196,696**

Note:
* Federal Share of RTP-LRP is 25%.

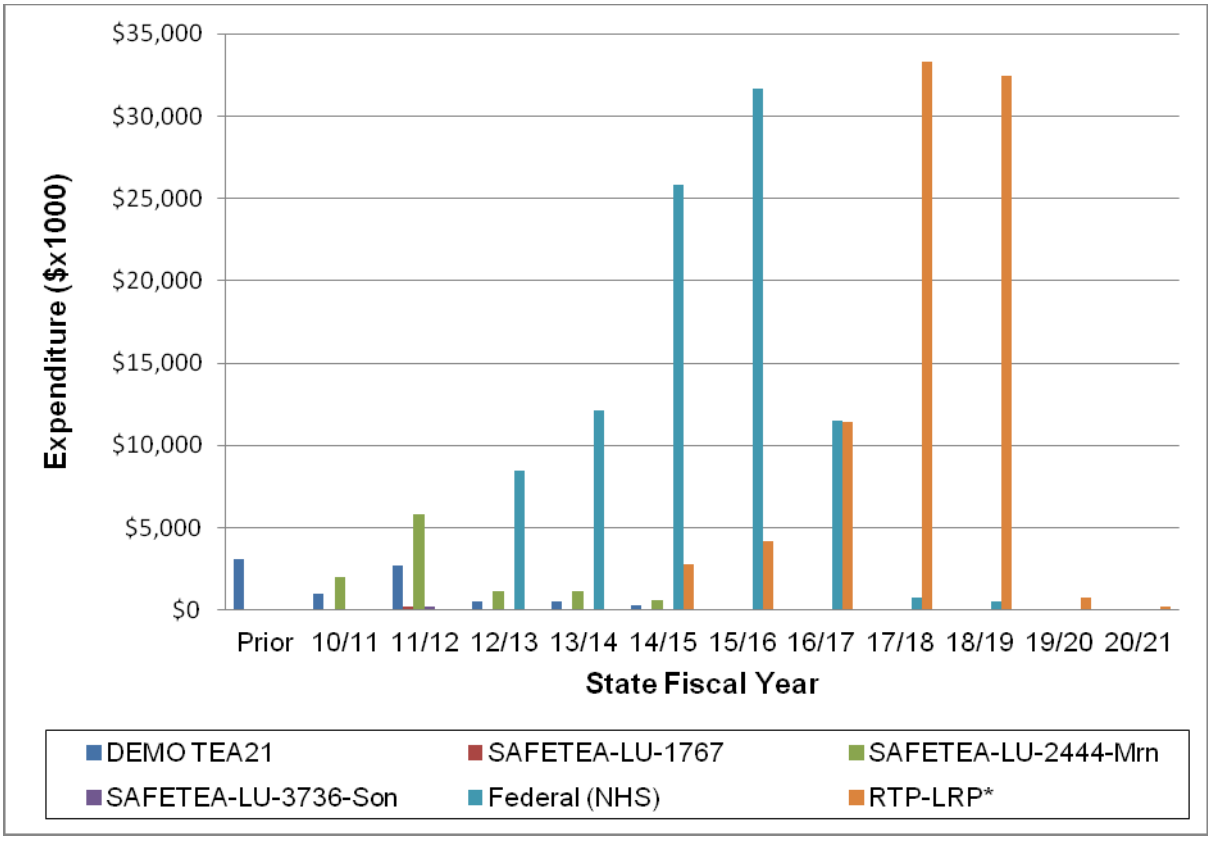


Figure 14. Comparison of Cumulative Expenditure and Revenue

(dollars in thousands and escalated)

Expenditure/ Revenue	State Fiscal Year											
	Prior	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Cumulative Expenditure	$37,201	$54,478	$111,461	$169,321	$224,140	$294,536	$359,766	$429,597	$550,589	$666,013	$668,832	$669,765
Cumulative Revenue	$85,946	$162,941	$271,300	$271,300	$271,300	$739,634	$739,634	$739,634	$739,634	$739,634	$739,634	$739,634

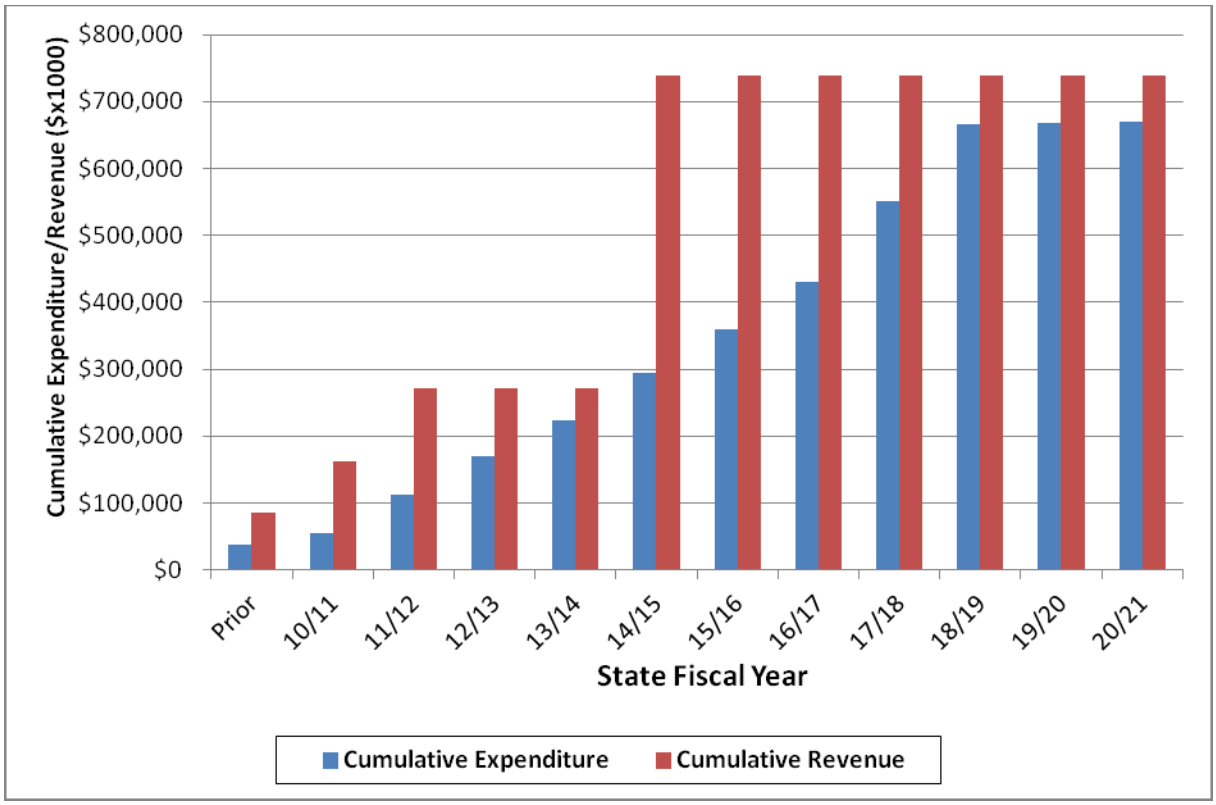


Figure 14a. Comparison of Annual Expenditure and Revenue

(dollars in thousands and escalated)

Expenditure/ Revenue	State Fiscal Year											
	Prior	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Annual Expenditure	$37,201	$17,277	$57,193	$57,859	$54,819	$70,397	$65,244	$69,862	$121,021	$115,439	$2,819	$934
Annual Revenue	$85,946	$76,995	$108,359	$0	$0	$468,334	$0	$0	$0	$0	$0	$0

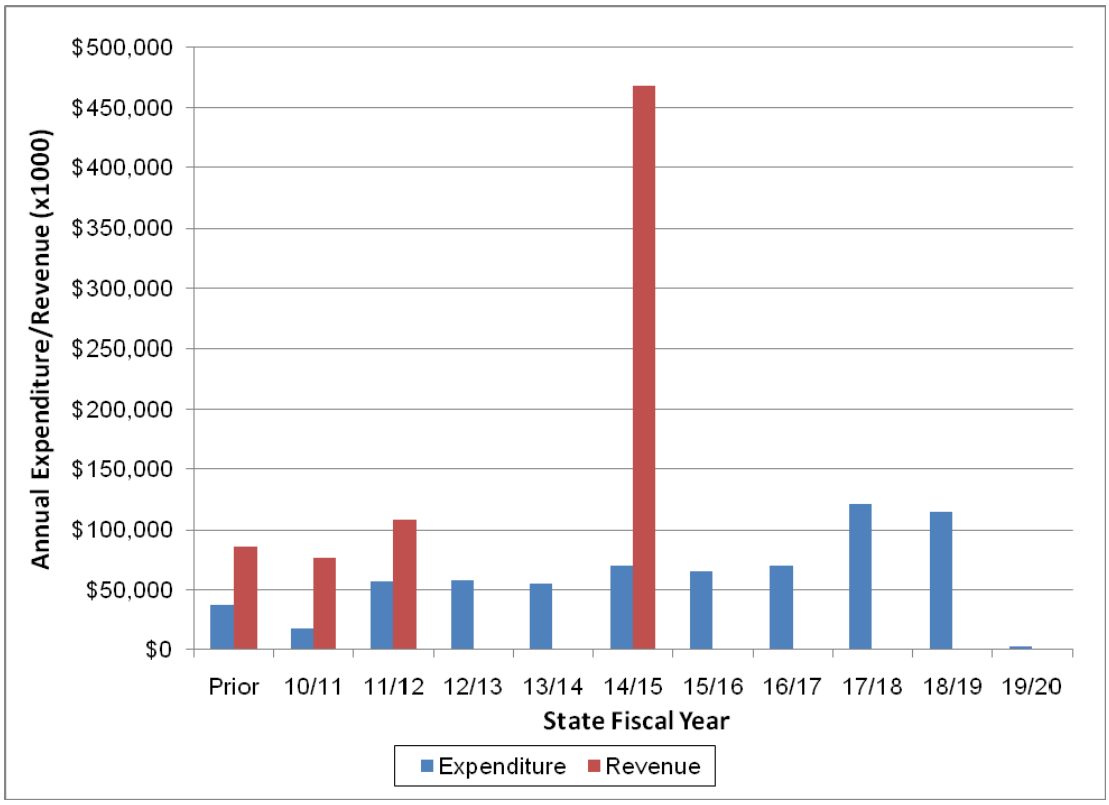


Figure 15. Comparison of Cumulative Expenditure and Revenue (Phase 1)

(dollars in thousands and escalated)

Expenditure/ Revenue	State Fiscal Year											
	Prior	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Cumulative Expenditure	$37,201	$52,395	$106,629	$163,967	$218,786	$277,767	$310,613	$322,282	$323,079	$323,593	$323,599	$323,599
Cumulative Revenue	$85,946	$157,207	$265,566	$265,566	$265,566	$329,539	$329,539	$329,539	$329,539	$329,539	$329,539	$329,539

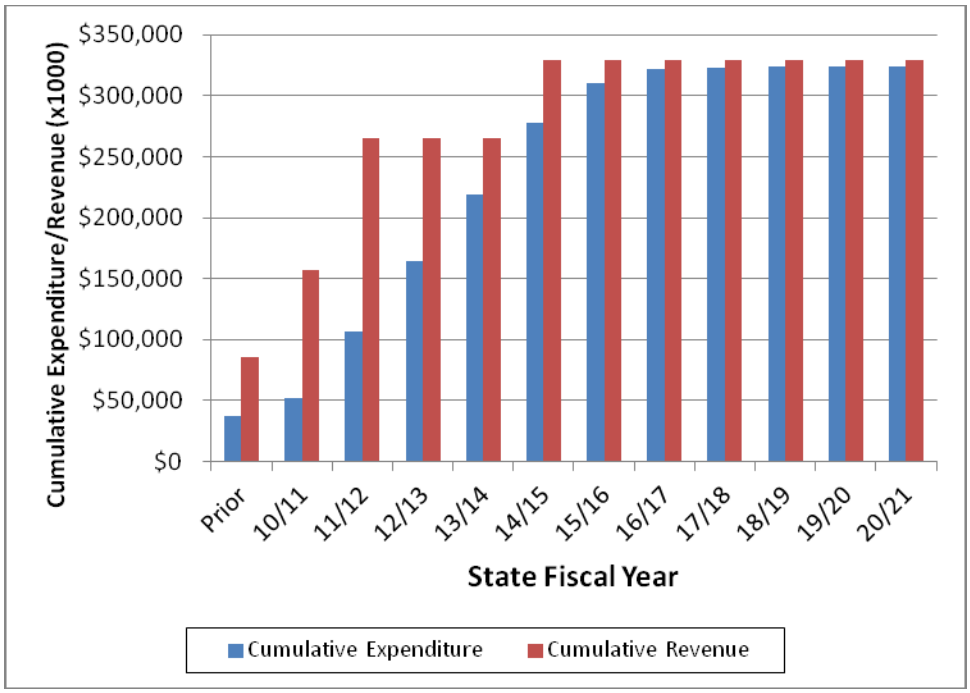
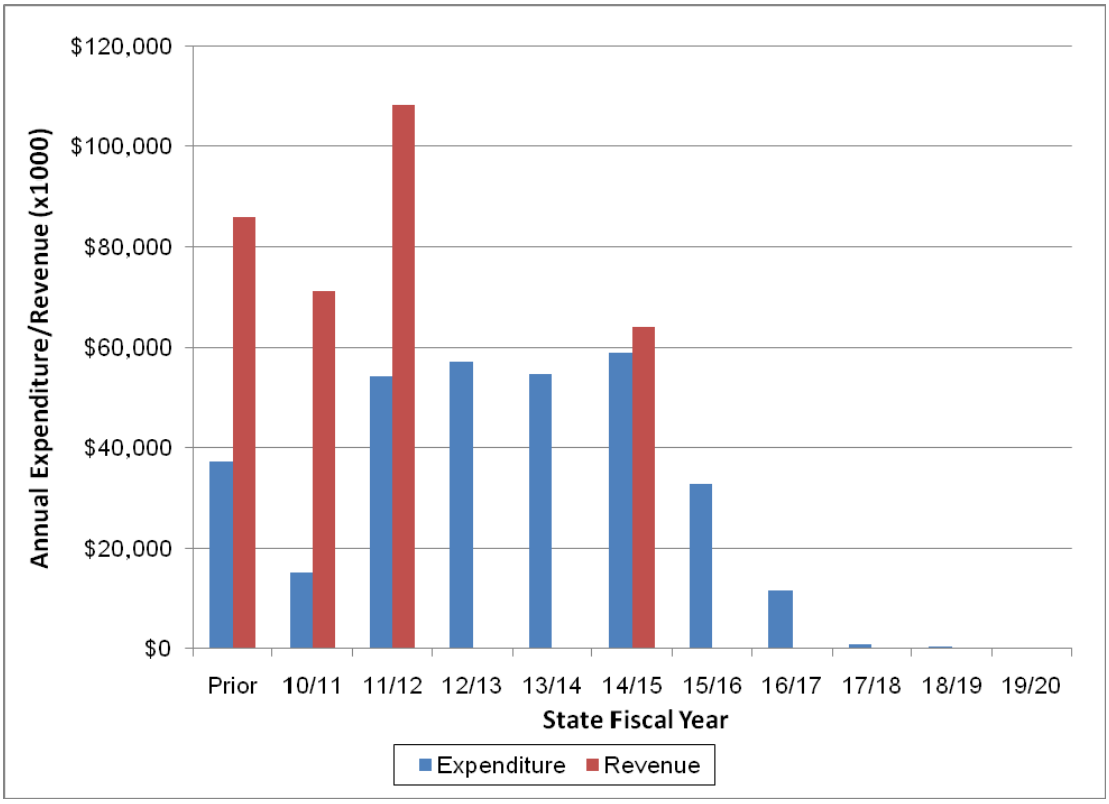


Figure 15a. Comparison of Annual Expenditure and Revenue (Phase 1)

(dollars in thousands and escalated)

Expenditure/ Revenue	State Fiscal Year											
	Prior	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
annual Expenditure	$37,201	$15,194	$54,234	$57,338	$54,819	$58,981	$32,845	$11,669	$797	$514	$6	$0
Annual Revenue	$85,946	$71,261	$108,359	$0	$0	$63,973	$0	$0	$0	$0	$0	$0



Chapter 6 Risk Identification and Mitigation Factors

A Risk Management Plan (RMP) has been prepared for each MSN contract currently in design (PS&E) or construction. These RMPs are maintained and updated by the PDT at the regularly scheduled PDT meetings. RMPs for Phase 2 contracts will be prepared when those contracts start PS&E phase.

As with any major construction project, there are uncertainties associated with project funding and cost escalation. Following is a review of the key funding-related project risks and associated mitigation strategies that Caltrans is considering and/or actively pursuing to address these risks.

6.1 Funding Risks

6.1.1 Risk of Non-appropriation of Funds

There is a risk that funds are withheld or otherwise compromised. The Project has $91.3 million of CMIA funds that are subject to lapse if Contracts B1 and B2 are not awarded by December 2012. CMIA Contracts B1 and B2 require a large number of parcels with some possible condemnations. The CMIA schedule does not allow sufficient time to complete the condemnation process. To mitigate this risk, Caltrans and its partners are pursuing R/W certification with a workaround (R/W Cert 3W) that would allow Contracts B1 and B2 to start construction before possession of some parcels ultimately required for these contracts. The construction schedules and staging of Contracts B1 and B2 have been modified to accommodate possession of some parcels by April 2013.

The risk that the regional (RTP-LRP) funding for Phase 2 of the Project may not materialize in the amounts projected in the RTP, TIP, and MSN IFP is low. The RTP forecasts $218 billion in revenue in the financially constrained long-range plan over the 25-year horizon. Historically, the region has maintained the level of funding committed in the RTP and there is reasonable expectation that this will continue to be the case for the duration of this Project. This is substantiated by the fact that the Project has made significant progress in securing Phase 2 funding since the FHWA CER in 2010. The Project secured $45 million in CMIA funds, $1.9 million in SLPP funds, and $7.2 million in local funds in 2011. The Project has been nominated to

receive an additional $53 million of CMIA funds by June 2012 to fund construction of Phase 2 Contracts C3 and a portion of Contract A2. The CMIA program is approaching sunset in December of 2012 and there is over $300 million of savings in the program due to the favorable bid climate in the past few years. The CTC will be allocating the CMIA savings to new projects and has indicated that the MSN nomination projects have a very good chance of receiving funding for construction if the design and R/W can be completed and the project can be awarded prior to sunset of the program. The project teams have started work on the design and R/W activities and are on track to award the nomination projects prior to the December 2012 deadline. The nomination projects have been selected such that there is minimal need for R/W and utility relocation to expedite delivery. TAM and SCTA have allocated over $1.2 million of local funds for the design and R/W activities for these nomination projects. Details of nomination projects will be provided in the next update of the IFP in October 2012.

The risks that the RTP-LRP funds will get diverted to other projects is also low. The Marin-Sonoma 101 corridor is one of the most congested corridors in the region. The delay experienced by the motorist during the AM and PM peak commuting periods are among the worst in the San Francisco Bay Area. It is estimated that without improvements, segments of the corridor will operate at Level of Service (LOS) F during AM and PM peak periods by 2015. For reasons stated above, the MSN Project ranks high in the region's transportation priority.

To manage and mitigate the risk of RTP-LRP funds not materializing or getting diverted, Project sponsors are continuously exploring opportunities for secured funding from all available sources. The local partners, TAM and SCTA, continue to use local funds to advance the design of Phase 2 contracts with the aim of making these contracts "shovel ready" for construction and position these contracts for future time-sensitive funding. SCTA is considering extending the sales tax measures to fund transportation projects and Sonoma County voters could be asked to include the MSN Project in a future expenditure plan. The proposal to extend the Sonoma sales tax measure is at a preliminary stage and the logistics and time frame for the availability of funds from a sales tax extension have not been determined at this time.

6.1.2 Risk of Delay in Funding Availability

Funding is expected from various state, federal, and local sources. A recognized funding risk is that of delays in state/federal funding due to, for example, failure to

pass state budget on time, delay in selling bonds for state bond program, delay in securing RTP-LRP funding, or competition for available funding by other projects in the region. Recognizing the importance of secure funds for the Project, Caltrans and its partners are implementing the Project in phases based on available funding.

It is important to consider that the MSN Project is linear in nature, which has made phasing an effective tool to ensure staged delivery. Each phase and contract is operationally independent which makes this Project significantly different than other large projects subject to FHWA's cost review. The various phases and contracts could have each been scoped and environmentally cleared as separate projects. This strategy was not employed, because federal regulatory agencies (FHWA, NOAA Fisheries, and USFWS) wanted to see the corridor impacts of the combined phases of what is now the MSN Project. We expect the project scope to be completed consistent with the Project's National Environmental Policy Act (NEPA) document in a phased manner.

Between the various state, local, and federal funding sources, project sponsors are confident that RTP-LRP funding will become available and the Project will be completed within the programmed budget. The actual cost will be monitored with each annual update of the IFP, and if a future analysis finds that the project schedule could get delayed, the project schedule will be updated along with the associated escalation costs. The first update to this IFP is due in October 2012.

6.2 Cost Escalation Risks

6.2.1 Uncertain Schedule of Phase 2 Contracts

The most significant project risks relate to the Phase 2 project schedule and uncertain escalation of costs. The projected escalation cost is based on the current project schedule. If the Project gets delayed beyond a certain point, the RTP-LRP funding may not be sufficient to complete the Project. Caltrans and its local partners are actively seeking opportunities for moving costs forward from Phase 2 to Phase 1 whenever possible to minimize costs escalation. In order to position MSN Phase 2 contracts for future funding opportunities, SCTA programmed and started the design and some R/W activities for Contracts C2 and C3. In 2011 Caltrans and local partners successfully secured $45 million of CMIA funds, $1.9 million of SLPP funds, and $7.2 million of local funds for the Petaluma River Bridge replacement, which was part of Contract B4. The funding and scope for Petaluma River Bridge was added to

Contract B2. The remainder of Contract B4 scope has been renamed Contract C3, which is now being repackaged to be “shovel ready” as a CMIA nomination project.

Furthermore, as shown in the expenditure forecast (Figure 13), the RTP-LRP funding will be needed starting in FY 2014/2015 over a period of 5 years to complete the Project per schedule. Currently, the Project has total funding of $739 million and total estimated cost of $670 million. As shown in Table B1 in Appendix B, the average escalation is $9.6 million a year (from FY 13/14 to 18/19) based on a 3.5 percent escalation rate. Assuming a conservative yearly escalation cost of $9.6 million a year, the project schedule could push out another 7 years to start Phase 2 work in state fiscal year 2021/22 and still be fully funded. The risk of not being able to secure funding from a variety of sources in the time frame described above is very low.

6.2.2 Large Number of R/W Parcels

Numerous pieces of property will have to be acquired for the construction of the MSN Project. Delay in property acquisition of parcels can lead to cost increase as the purchase price is affected by escalation in the real estate values. To mitigate potential cost increase due to escalation in real estate value, Caltrans and its partners have identified properties to be acquired for Phase 1 contracts and are also attempting advance acquisitions to impact property owners only once, whenever possible. Where condemnation is anticipated, the local partner (Sonoma County) is assisting Caltrans by securing Resolution of Necessity (RON). This will expedite the condemnation process for parcels located in Sonoma County. It is important to note that most of the R/W acquisition is for Phase 1 contracts. Phase 2 work will be mostly within the state R/W. Therefore, the risk of future cost increase due to escalation in the real estate values is very low.

6.2.3 Timing of Environmental Surveys and Obtaining Permits

Numerous permits are required for the MSN Project. Failure to secure permits as needed can lead to construction delays and cost escalation. To mitigate potential permitting delays, permitting agencies were contacted and engaged early and made aware of the permitting needs. Caltrans and its partners have successfully secured most permits for Phase 1 contracts and will be actively working with the regulatory agencies to secure Phase 2 permits, as needed, to avoid delays.

6.2.4 Phasing and Contract Schedule

The MSN Project has two phases and an estimated 12 independent contracts. The increased phasing can adversely impact earthwork operations, traffic control costs, construction time, and support costs. It can also require rework or duplication of work, additional interfaces, and coordination between contractors. Nonetheless, the cost of such inefficiencies is easily offset by less escalation by completion of as much work as funding permits. Additionally, if the contracts are sized and tailored to maximize competition by making them independent and not overlapping, the competitive bidding of the medium-size contracts could further offset any cost associated with increased phasing. Large projects have historically received fewer bids, making them less competitive. All of the Phase 1 contracts are designed to be operationally independent and are not overlapping.

6.2.5 Multiple Teams

With multiple contracts, contractors, agencies, and consultants involved, the risk of delay is a concern. Caltrans has implemented ongoing risk management to avoid additional costly delays to the Project.

6.3 Cost Containment Strategies

The biggest cost risk for the MSN Project is uncertainty in the timing of Phase 2 contracts due to lack of secured programmed funds. Caltrans and its partnering agencies are committed to working together aggressively in seeking funds to complete the Project on schedule. This understanding has been codified in the MOU. In accordance with the May 2010 FHWA CER, Caltrans and its partners successfully moved $52 million of Phase 2 scope (construction capital and R/W capital) into Phase 1. This has reduced the overall escalation cost by about $18 million. The added scope in Phase 1 was made possible by securing additional funding for a portion of the Contract B4 scope. Contract B4 was being advanced through design using local funds. The funded portion of Contract B4 was added to Contract B2. Additionally, design refinement of Contract B1, which reduced the project cost and allowed incorporation of Phase 2 work into Phase 1, resulted in further saving in anticipated escalation. Design and R/W activities of Phase 2 Contracts C2, C3, and portions of A2 are ongoing (using local funding) to make these contracts “shovel ready” and position them to compete for time-sensitive state and federal funds that might become available in the future. As stated earlier, Contract C2 and a portion of Contract A2 have been nominated to receive CMIA funds for construction.

Various other cost containment strategies have been implemented to date, and new cost containment strategies will be evaluated during the detailed project design (PS&E). Some of the cost containment strategies implemented include:

- ***Value Analysis:*** A formal value analysis (VA) was conducted in September 2006. The Value Analysis Report validated the techniques that were used throughout the development and winnowing of alternatives by the PDT. A VA implementation meeting was held on January 31, 2007. Comments and decisions from the meeting were incorporated into the final VA Report. Some of the VA recommendations were implemented in the preliminary project plans.

- ***Value Engineering:*** Value engineering to identify cost saving during PS&E development while maintaining project benefit.

- ***Use of Innovative Contracting Techniques:*** The construction contracts for the first MSN contract (Contract A1) employed A+B bidding to promote efficient construction of the contract. The A+B bidding is anticipated to complete major construction activities 1 year ahead of baseline schedule and to reduce construction support cost. Subsequent Phase 1 contracts will likely include similar provisions where possible.

- ***Multiple Constructability Reviews***: Conduct constructability reviews at each internal milestone throughout the detailed design (PS&E) of the contracts.

- ***Monitoring***: Expenditures are monitored at regular monthly meetings, and schedule reviews are conducted periodically to ensure that individual contract elements stay on schedule, within scope and budget, and that design issues that could have an effect on other MSN contracts are immediately and efficiently addressed.

- Routine project management interface between the partnering agencies to ensure that the Project is on schedule and budget.

Chapter 7 Schedule of Annual Updates

This IFP will be updated every state FY, with the first update in October 2012 at the beginning of FY 2012/2013. The next annual update will include financial and Project information as of June 30, 2012 and will be due to the FHWA California Division Office by October 31, 2012.

The updates will be based on the anticipated progress on the Project. This approach will allow Caltrans to incorporate information from the state's multiyear transportation plan as well the regular budget and legislative schedule. The annual updates to the IFP will provide updates to the cost based on the completion of design work and re-estimation of the pay item unit costs. Other updates would include more refined cash flow forecasting, incorporation of additional funding sources, and tracking of actual expenditure against Project cash-flow needs.

Appendix A Project Schedule

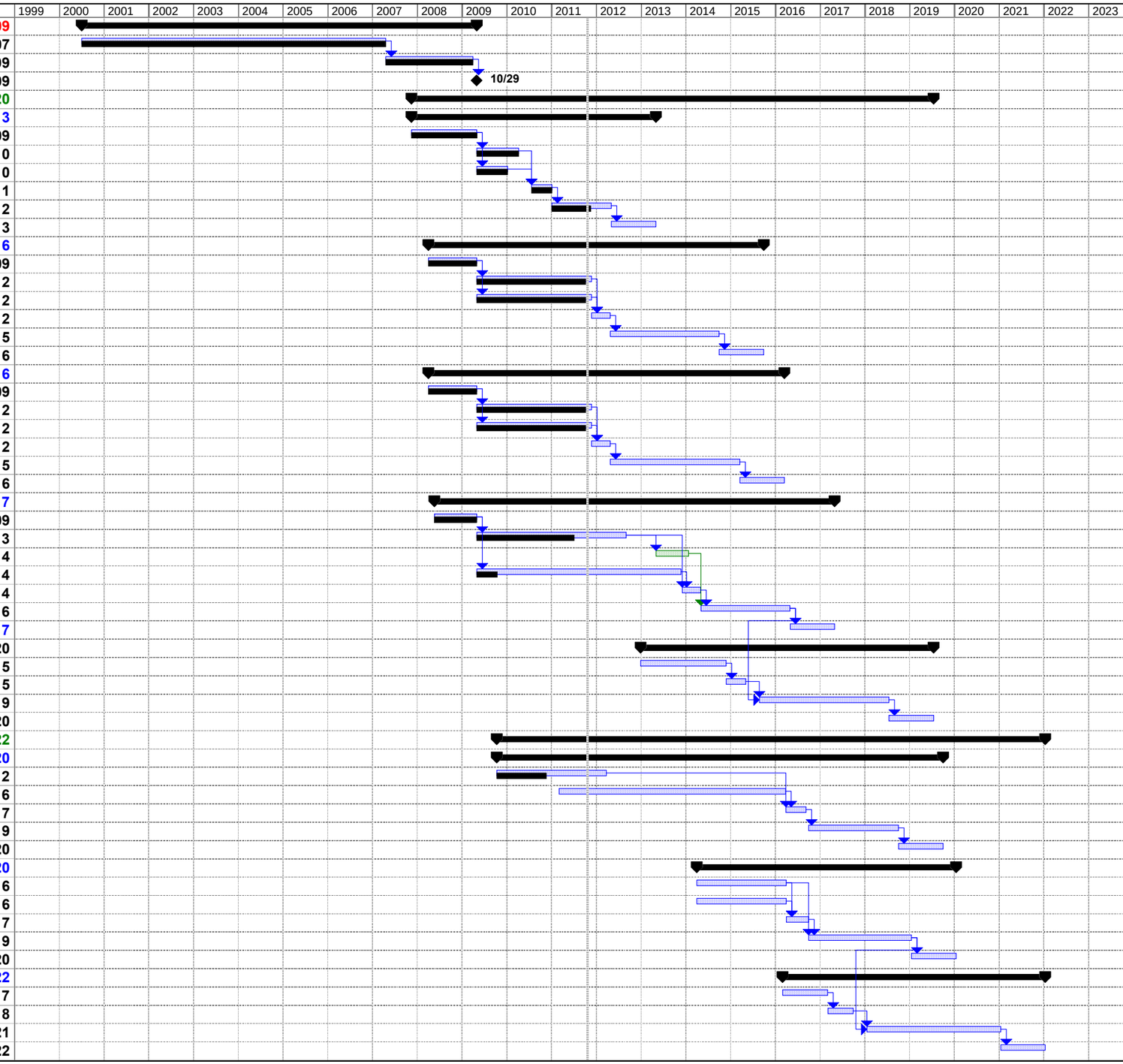
Figure A-1 - Marin Sonoma Narrows (MSN) Project Schedule

Contract A1 CPM Construction Schedule

Figure A1 – Overall Project Schedule

Marin-Sonoma Narrows (MSN) Project Schedule

Task Name	Start	Finish
PA&ED	Tue 1/2/01	Thu 10/29/09
Draft Env. Doc.	Tue 1/2/01	Thu 10/18/07
Final Env. Doc.	Thu 10/18/07	Tue 9/29/09
FHWA ROD	Thu 10/29/09	Thu 10/29/09
Phase 1 Contracts	Thu 5/15/08	Mon 1/13/20
Contract A1	Thu 5/15/08	Wed 10/30/13
Adv. Pelim. Design	Thu 5/15/08	Thu 10/29/09
PS&E (RTL)	Fri 10/30/09	Wed 10/6/10
Right of Way	Fri 10/30/09	Thu 7/8/10
Advertise & Award Contract	Thu 1/20/11	Tue 7/5/11
Construction	Tue 7/5/11	Wed 10/31/12
Construction Closeout	Thu 11/1/12	Wed 10/30/13
Contract B1	Wed 10/1/08	Mon 3/28/16
Adv. Pelim. Design	Wed 10/1/08	Thu 10/29/09
PS&E (RTL)	Fri 10/30/09	Wed 5/23/12
Right of Way	Fri 10/30/09	Wed 5/23/12
Advertise & Award Contract	Thu 5/24/12	Mon 10/22/12
Construction	Tue 10/23/12	Mon 3/30/15
Construction Closeout	Tue 3/31/15	Mon 3/28/16
Contract B2	Wed 10/1/08	Tue 9/13/16
Adv. Pelim. Design	Wed 10/1/08	Thu 10/29/09
PS&E (RTL)	Fri 10/30/09	Wed 5/23/12
Right of Way	Fri 10/30/09	Wed 5/23/12
Advertise & Award Contract	Thu 5/24/12	Mon 10/22/12
Construction	Tue 10/23/12	Tue 9/15/15
Construction Closeout	Wed 9/16/15	Tue 9/13/16
Contract B3	Wed 11/19/08	Fri 10/27/17
Adv. Pelim. Design	Wed 11/19/08	Thu 10/29/09
PS&E	Fri 10/30/09	Fri 3/1/13
NMWD Aqueduct Relocation Advance Contract	Fri 11/1/13	Thu 7/24/14
Right of Way (RTL)	Fri 10/30/09	Fri 5/23/14
Advertise & Award Contract	Tue 6/3/14	Fri 10/31/14
Construction	Mon 11/3/14	Fri 10/28/16
Const. Closeout	Mon 10/31/16	Fri 10/27/17
Contract L1	Fri 6/28/13	Mon 1/13/20
PS&E (RTL)	Fri 6/28/13	Tue 5/26/15
Advertise & Award Contract	Wed 5/27/15	Tue 11/3/15
Construction	Mon 2/22/16	Mon 1/14/19
Const. Closeout	Tue 1/15/19	Mon 1/13/20
Phase 2 Contracts	Mon 4/12/10	Tue 7/12/22
Contract C2	Mon 4/12/10	Tue 3/31/20
PS&E	Mon 4/12/10	Fri 9/21/12
Right of Way (RTL)	Fri 9/2/11	Fri 9/23/16
Advertise & Award Contract	Mon 9/26/16	Thu 3/9/17
Construction	Thu 3/30/17	Tue 4/2/19
Construction Closeout	Wed 4/3/19	Tue 3/31/20
Other Phase 2 Contracts (A2, B1-II, B2-II, B3-II, & C3)	Tue 9/30/1	Wed 7/15/20
PS&E (RTL)	Tue 9/30/14	Wed 9/28/16
Right of Way	Tue 9/30/14	Wed 9/28/16
Advertise & Award Contract	Thu 9/29/16	Wed 3/29/17
Construction	Thu 3/30/17	Wed 7/17/19
Const. Closeout	Thu 7/18/19	Wed 7/15/20
Contract L2	Tue 8/30/16	Tue 7/12/22
PS&E (RTL)	Tue 8/30/16	Fri 9/1/17
Advertise & Award	Mon 9/4/17	Wed 3/28/18
Construction	Thu 7/19/18	Wed 7/14/21
Const. Closeout	Thu 7/15/21	Tue 7/12/22



Project: MSN Sch
Date: Mon 4/16/12

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

Contract A1 – Project Schedule

Activity ID	Activity Description	Cal ID	Orig Dur	Rem Dur	Early Start	Early Finish	% Comp	Total Float
General Project								
Project Milestones								
100	Project Award	1	0	0	02JUN11A		100	
102	GBI Executes Contract	1	10	0	03JUN11A	16JUN11A	100	
104	Caltrans Executes Contract	2	21	0	17JUN11A	07JUL11A	100	
215	Start Excavation	1	0	0	25JUL11A		100	
105	Notice to Proceed - 55 cd from Execution	1	0	0	31AUG11A		100	
185	Project Duration - 77 wd from NTP + weather	1	0	0		17MAY12	0	0
190	Project Complete	1	0	0		19JUN12	0	-22
Submittals								
500	S/R/A Baseline Schedule	1	32	0	02JUN11A	18JUL11A	100	
505	S/R/A SWPPP	1	36	0	02JUN11A	22JUL11A	100	
520	Submit Creek Diversion	1	5	0	02JUN11A	08JUN11A	100	
525	S/R/A WQCP	1	15	0	02JUN11A	22JUN11A	100	
530	Submit DRB	1	5	0	02JUN11A	08JUN11A	100	
535	S/R/A Bridge Submittals	1	24	0	02JUN11A	06JUL11A	100	
540	S/R/A Retainingwall Submittals	1	24	0	02JUN11A	06JUL11A	100	
545	S/R/A Soundwall Submittals	1	24	0	02JUN11A	06JUL11A	100	
550	Submit HMA and RHMA QC/QA	1	15	0	02JUN11A	22JUN11A	100	
555	Procure Sign Structures	1	45	0	02JUN11A	04AUG11A	100	
560	S/R/A Pile Driving System	1	20	0	02JUN11A	29JUN11A	100	
565	S/R/A CIDH Pile Installation Plan	1	15	0	02JUN11A	22JUN11A	100	
570	S/R/A Steel Pipe Piling Working Drawings	1	7	0	02JUN11A	10JUN11A	100	
575	S/R/A Sign Structure Drawings & QCP	1	30	0	02JUN11A	14JUL11A	100	
585	Procure All Electrical Items	1	45	0	02JUN11A	04AUG11A	100	
580	Fabricate Sign Structures	1	45	0	15JUL11A	16SEP11A	100	
All								
1220	Contruction Area Signs	1	5	0	20JUN11A	24JUN11A	100	
1222	Temporary Erosion Measures	1	5	0	27JUN11A	01JUL11A	100	
1248	Electrical	1	60	11	11JUL11A	04APR12	82	16
800	CIDH Gamma Testing	1	20	0	01SEP11A	01SEP11A	100	
1275	Permanent Erosion Control	1	5	4	30OCT11A	24MAY12	15	-14
1260	Planting	1	3	1	15DEC11A	24MAY12	80	-14
1225	Install Sign Structures	1	10	10	18APR12	01MAY12	0	7
1242	Crack Treatment	1	9	9	14MAY12	24MAY12	0	-22
1240	Conform Grind	1	5	5	18MAY12	24MAY12	0	-22

Start Date	02JUN11	Early Bar
Finish Date	19JUN12	Progress Bar
Data Date	21MAR12	Critical Activity
Run Date	31MAR12 14:03	

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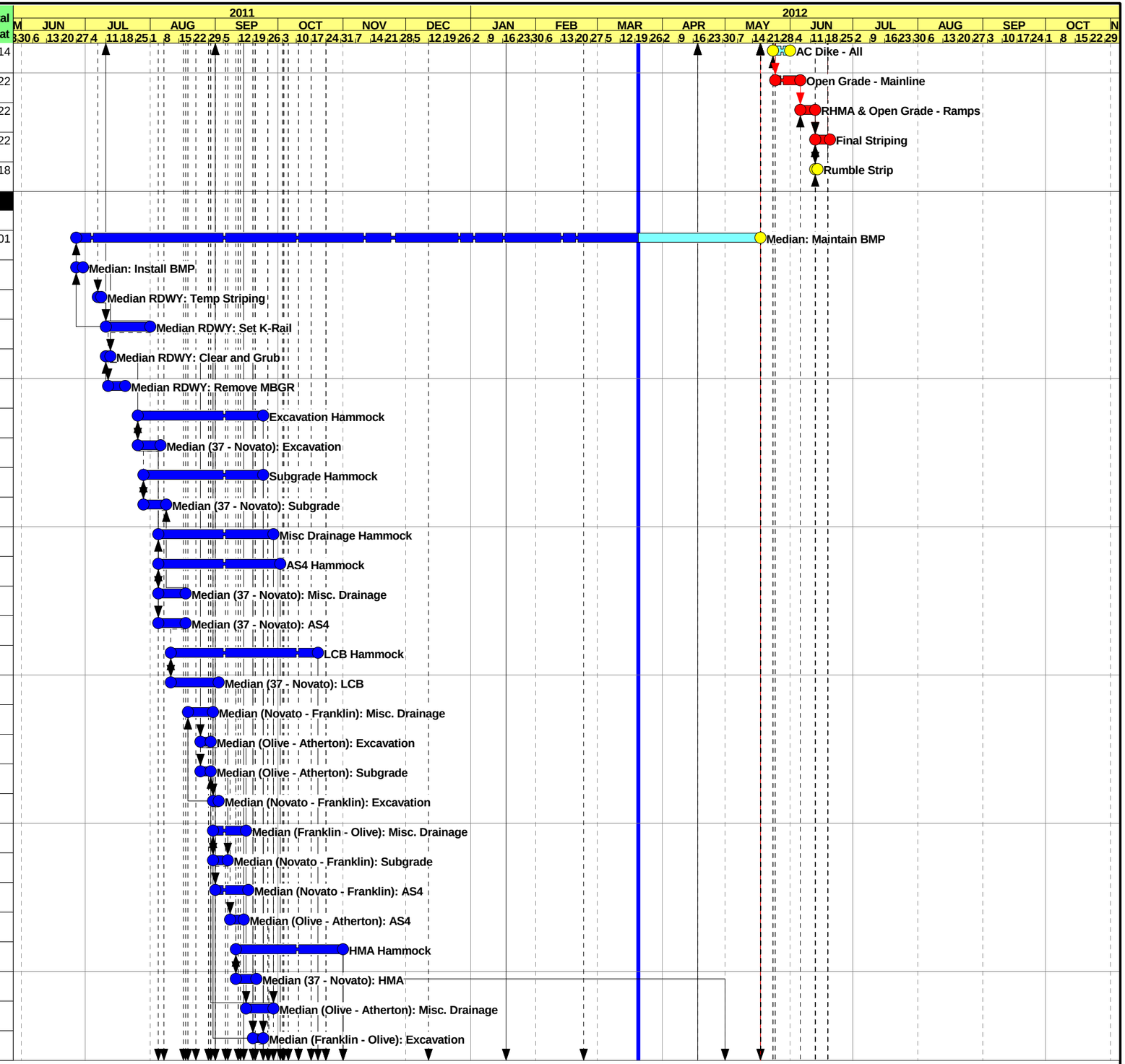
Ghilotti Bros / RM Harris JV

Hwy 101 HOV Lanes and Bridge: Hwy 37

21MAR12 Progress Schedule Update

Date	Revision	Checked	Approved
21MAR12	Added TIA #4 Fragnet to Schedule		

Activity ID	Activity Description	Cal ID	Orig Dur	Rem Dur	Early Start	Early Finish	% Comp	Total Float
1270	AC Dike - All	1	5	5	24MAY12	31MAY12	0	-14
1245	Open Grade - Mainline	1	7	7	25MAY12	05JUN12	0	-22
1250	RHMA & Open Grade - Ramps	4	5	5	06JUN12	12JUN12	0	-22
1255	Final Striping	1	5	5	13JUN12	19JUN12	0	-22
1265	Rumble Strip	1	1	1	13JUN12	13JUN12	0	-18
Roadway								
Median - All								
1117	Median: Maintain BMP	1	223*	42*	27JUN11A	17MAY12	81	-101
1116	Median: Install BMP	1	2	0	27JUN11A	29JUN11A	100	
1115	Median RDWY: Temp Striping	1	2	0	07JUL11A	08JUL11A	100	
1120	Median RDWY: Set K-Rail	1	8	0	11JUL11A	31JUL11A	100	
1130	Median RDWY: Clear and Grub	1	2	0	11JUL11A	12JUL11A	100	
1125	Median RDWY: Remove MBGR	1	7	0	12JUL11A	19JUL11A	100	
1135	Excavation Hammock	1	43*	0*	26JUL11A	23SEP11A	100	
1135.1	Median (37 - Novato): Excavation	1	4	0	26JUL11A	05AUG11A	100	
1145	Subgrade Hammock	1	40*	0*	29JUL11A	23SEP11A	100	
1145.1	Median (37 - Novato): Subgrade	1	1	0	29JUL11A	08AUG11A	100	
1142	Misc Drainage Hammock	1	38*	0*	05AUG11A	28SEP11A	100	
1150	AS4 Hammock	1	40*	0*	05AUG11A	01OCT11A	100	
1142.1	Median (37 - Novato): Misc. Drainage	1	2	0	05AUG11A	17AUG11A	100	
1150.1	Median (37 - Novato): AS4	1	3	0	05AUG11A	17AUG11A	100	
1155	LCB Hammock	1	48*	0*	11AUG11A	19OCT11A	100	
1155.1	Median (37 - Novato): LCB	1	3	0	11AUG11A	02SEP11A	100	
1142.2	Median (Novato - Franklin): Misc. Drainage	1	2	0	19AUG11A	30AUG11A	100	
1135.4	Median (Olive - Atherton): Excavation	1	4	0	25AUG11A	29AUG11A	100	
1145.4	Median (Olive - Atherton): Subgrade	1	1	0	25AUG11A	29AUG11A	100	
1135.2	Median (Novato - Franklin): Excavation	1	4	0	31AUG11A	02SEP11A	100	
1142.3	Median (Franklin - Olive): Misc. Drainage	1	2	0	31AUG11A	15SEP11A	100	
1145.2	Median (Novato - Franklin): Subgrade	1	1	0	31AUG11A	06SEP11A	100	
1150.2	Median (Novato - Franklin): AS4	1	3	0	01SEP11A	16SEP11A	100	
1150.4	Median (Olive - Atherton): AS4	1	3	0	08SEP11A	14SEP11A	100	
1160	HMA Hammock	1	36*	0*	11SEP11A	31OCT11A	100	
1160.1	Median (37 - Novato): HMA	1	3	0	11SEP11A	20SEP11A	100	
1142.4	Median (Olive - Atherton): Misc. Drainage	1	2	0	16SEP11A	28SEP11A	100	
1135.3	Median (Franklin - Olive): Excavation	1	4	0	19SEP11A	23SEP11A	100	



Start Date	02JUN11	Early Bar
Finish Date	19JUN12	Progress Bar
Data Date	21MAR12	Critical Activity
Run Date	31MAR12 14:03	

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Ghilotti Bros / RM Harris JV

Hwy 101 HOV Lanes and Bridge: Hwy 37

21MAR12 Progress Schedule Update

Date	Revision	Checked	Approved
21MAR12	Added TIA #4 Fragnet to Schedule		

Activity ID	Activity Description	Cal ID	Orig Dur	Rem Dur	Early Start	Early Finish	% Comp	Total Float
1145.3	Median (Franklin - Olive): Subgrade	1	1	0	20SEP11A	23SEP11A	100	
1150.3	Median (Franklin - Olive): AS4	1	3	0	23SEP11A	01OCT11A	100	
1155.4	Median (Olive - Atherton): LCB	1	3	0	27SEP11A	18OCT11A	100	
1140	Median RDWY: Drainage System 2	1	10	0	29SEP11A	03NOV11A	100	
1155.2	Median (Novato - Franklin): LCB	1	3	0	11OCT11A	14OCT11A	100	
1155.3	Median (Franklin - Olive): LCB	1	3	0	18OCT11A	19OCT11A	100	
1160.2	Median (Novato - Franklin): HMA	1	3	0	24OCT11A	31OCT11A	100	
1160.3	Median (Franklin - Olive): HMA	1	3	0	24OCT11A	31OCT11A	100	
1160.4	Median (Olive - Atherton): HMA	1	3	0	24OCT11A	31OCT11A	100	
1162A	RHMA Low Temperature Restriction	1	111	29	01NOV11A	30APR12	74	-130
1166	Median RDWY: Vegitation Control	1	3	1	01DEC11A	10MAY12	99	5
1164	Median RDWY: Metal Thrie Beam Barrier	1	20	3	05DEC11A	10MAY12	86	-22
1168	Median RDWY: Concrete Barrier	1	10	1	05DEC11A	10MAY12	95	-22
1118	Median: Remove BMP	1	2	1	14FEB12A	17MAY12	30	-10
1162	Median RDWY: RHMA	4	8	8	01MAY12*	10MAY12	0	-8
1170	Median RDWY: Remove K-Rail	1	5	5	11MAY12*	17MAY12	0	-22
Southbound Ramps								
1180	SB Ramps: Set K-Rail	1	5	1	16AUG11A	21MAR12	92	-19
1177	SB Ramps: Maintain BMP	1	140*	3*	29AUG11A	23MAR12	98	22
1176	SB Ramps: Install BMP	1	2	0	29AUG11A		100	
1185	SB Ramps: Clear and Grub	1	2	0	29AUG11A	30AUG11A	100	
1175	SB Ramps: Temp Striping	1	2	0	06SEP11A	07SEP11A	100	
1190	SB Ramps: RDWY Excavation	1	8	2	11OCT11A	22MAR12	73	22
1200	SB Ramps: Subgrade	1	2	1	13OCT11A	21MAR12	69	22
1205	SB Ramps: AS4	1	6	1	14OCT11A	21MAR12	86	22
1210	SB Ramps: LCB	1	4	3	20OCT11A	23MAR12	17	29
1195	SB Ramps: Drainage	1	4	1	13JAN12A	21MAR12	86	22
1215	SB Ramps: HMA	1	3	1	18JAN12A	21MAR12	55	29
1107	SB Ramps: Sign Structure Foundations	1	5	5	21MAR12	27MAR12	0	22
1178	SB Ramps: Remove BMP	1	2	2	22MAR12	23MAR12	0	29
1217	SB Ramps: Remove K-Rail	1	4	4	22MAR12	27MAR12	0	29
Northbound Ramps								
1042	NB Ramps: Maintain BMP	1	156*	19*	29AUG11A	16APR12	88	7
1040	NB Ramps: Temp Striping	1	2	0	29AUG11A		100	
1041	NB Ramps: Install BMP	1	2	0	29AUG11A	30AUG11A	100	

Start Date	02JUN11
Finish Date	19JUN12
Data Date	21MAR12
Run Date	31MAR12 14:03

Early Bar
Progress Bar
Critical Activity

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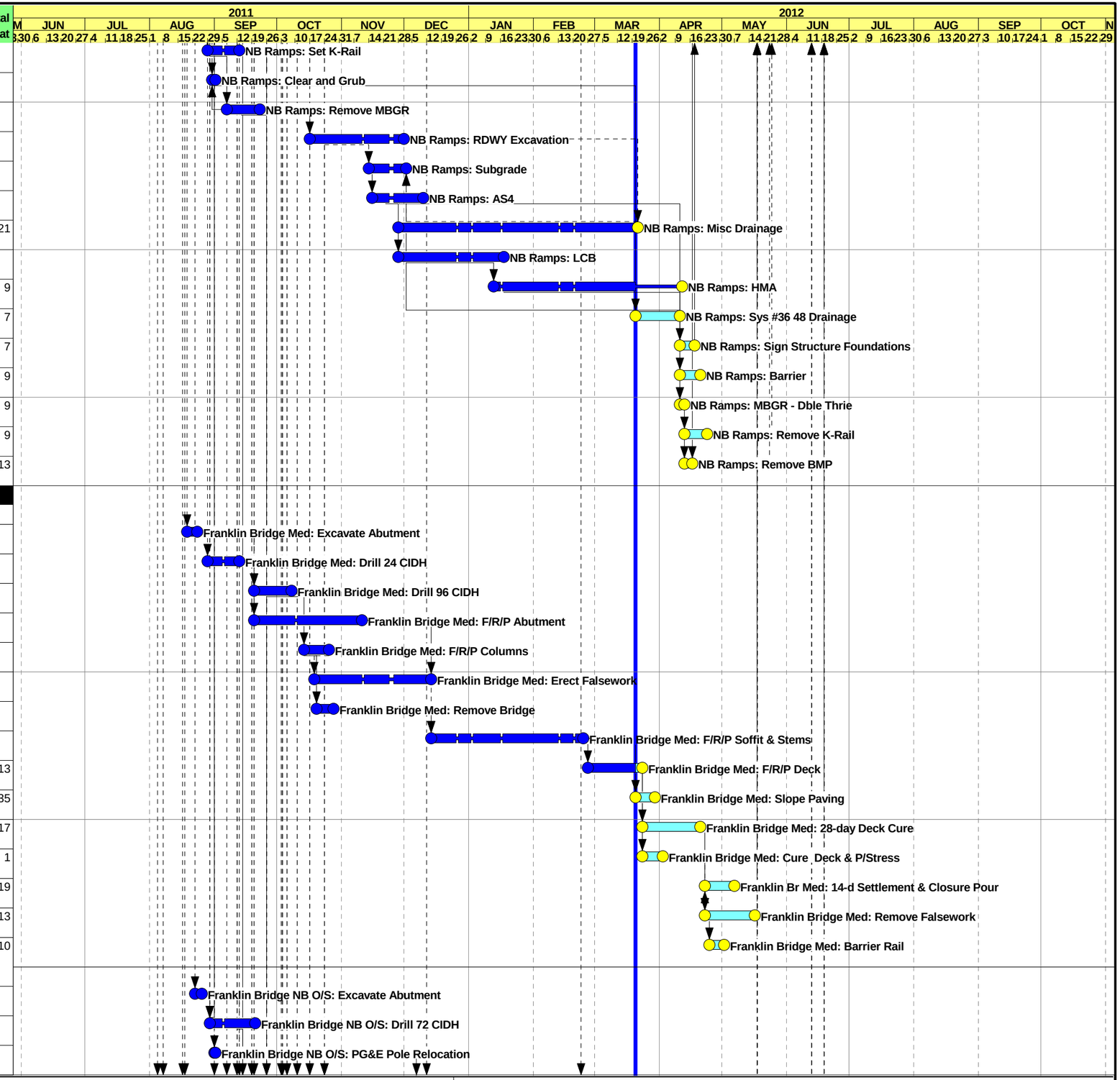
Ghilotti Bros / RM Harris JV

Hwy 101 HOV Lanes and Bridge: Hwy 37

21MAR12 Progress Schedule Update

Date	Revision	Checked	Approved
21MAR12	Added TIA #4 Fragnet to Schedule		

Activity ID	Activity Description	Cal ID	Orig Dur	Rem Dur	Early Start	Early Finish	% Comp	Total Float
1045	NB Ramps: Set K-Rail	1	10	0	29AUG11A	12SEP11A	100	
1055	NB Ramps: Clear and Grub	1	2	0	31AUG11A	01SEP11A	100	
1050	NB Ramps: Remove MBGR	1	7	0	07SEP11A	22SEP11A	100	
1060	NB Ramps: RDWY Excavation	1	5	0	17OCT11A	30NOV11A	100	
1070	NB Ramps: Subgrade	1	5	0	14NOV11A	01DEC11A	100	
1075	NB Ramps: AS4	1	6	0	16NOV11A	09DEC11A	100	
1065	NB Ramps: Misc Drainage	1	5	1	28NOV11A	21MAR12	96	21
1080	NB Ramps: LCB	1	4	0	28NOV11A	17JAN12A	100	
1085	NB Ramps: HMA	1	3	1	13JAN12A	11APR12	85	9
1062	NB Ramps: Sys #36 48 Drainage	1	15	15	21MAR12*	10APR12	0	7
1077	NB Ramps: Sign Structure Foundations	1	5	5	11APR12	17APR12	0	7
1090	NB Ramps: Barrier	1	8	8	11APR12	20APR12	0	9
1095	NB Ramps: MBGR - Dble Thrie	1	2	2	11APR12	12APR12	0	9
1100	NB Ramps: Remove K-Rail	1	7	7	13APR12	23APR12	0	9
1043	NB Ramps: Remove BMP	1	2	2	13APR12	16APR12	0	13
Structures								
Franklin Bridge (Median)								
2060	Franklin Bridge Med: Excavate Abutment	1	2	0	19AUG11A	23AUG11A	100	
2065	Franklin Bridge Med: Drill 24 CIDH	1	7	0	29AUG11A	12SEP11A	100	
2055	Franklin Bridge Med: Drill 96 CIDH	1	7	0	20SEP11A	07OCT11A	100	
2070	Franklin Bridge Med: F/R/P Abutment	1	6	0	20SEP11A	10NOV11A	100	
2075	Franklin Bridge Med: F/R/P Columns	1	6	0	14OCT11A	25OCT11A	100	
2080	Franklin Bridge Med: Erect Falsework	1	8	0	19OCT11A	13DEC11A	100	
2085	Franklin Bridge Med: Remove Bridge	1	1	0	20OCT11A	27OCT11A	100	
2090	Franklin Bridge Med: F/R/P Soffit & Stems	1	10	0	14DEC11A	24FEB12A	100	
2095	Franklin Bridge Med: F/R/P Deck	1	9	3	27FEB12A	23MAR12	33	-13
2117	Franklin Bridge Med: Slope Paving	1	7	7	21MAR12	29MAR12	0	35
2100	Franklin Bridge Med: 28-day Deck Cure	2	28	28	24MAR12	20APR12	0	-17
2105	Franklin Bridge Med: Cure Deck & P/Stress	2	10	10	24MAR12	02APR12	0	1
2102	Franklin Br Med: 14-d Settlement & Closure Pour	2	14	14	23APR12	06MAY12	0	-19
2115	Franklin Bridge Med: Remove Falsework	1	18	18	23APR12	16MAY12	0	-13
2110	Franklin Bridge Med: Barrier Rail	1	5	5	25APR12	01MAY12	0	-10
Franklin Bridge (NB O/S)								
2125	Franklin Bridge NB O/S: Excavate Abutment	1	2	0	23AUG11A	25AUG11A	100	
2120	Franklin Bridge NB O/S: Drill 72 CIDH	1	10	0	30AUG11A	20SEP11A	100	
2118	Franklin Bridge NB O/S: PG&E Pole Relocation	1	20	0	01SEP11A	01SEP11A	100	



Start Date	02JUN11	Early Bar
Finish Date	19JUN12	Progress Bar
Data Date	21MAR12	Critical Activity
Run Date	31MAR12 14:03	

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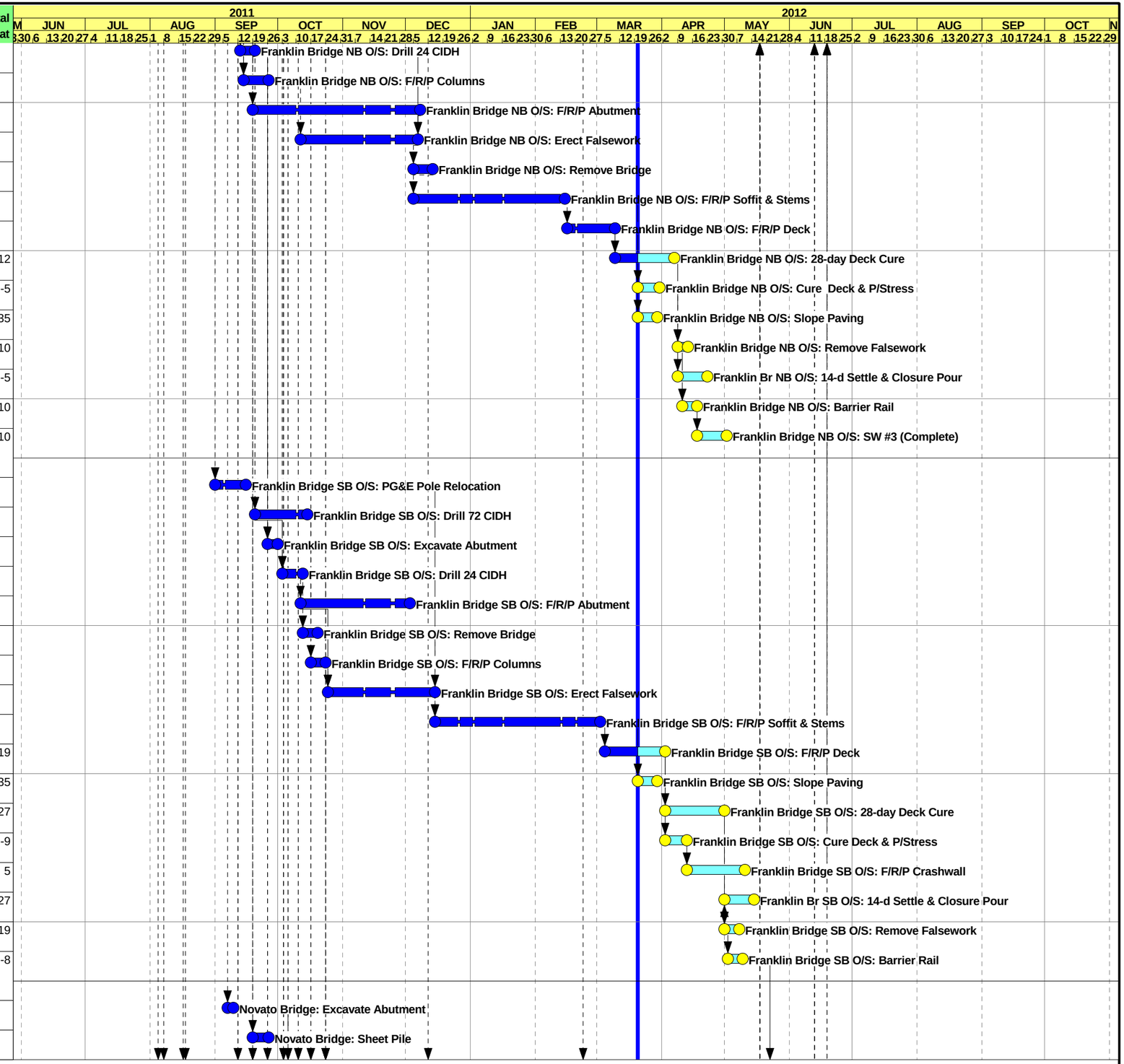
Ghilotti Bros / RM Harris JV

Hwy 101 HOV Lanes and Bridge: Hwy 37

21MAR12 Progress Schedule Update

Date	Revision	Checked	Approved
21MAR12	Added TIA #4 Fragnet to Schedule		

Activity ID	Activity Description	Cal ID	Orig Dur	Rem Dur	Early Start	Early Finish	% Comp	Total Float
2130	Franklin Bridge NB O/S: Drill 24 CIDH	1	3	0	13SEP11A	19SEP11A	100	
2140	Franklin Bridge NB O/S: F/R/P Columns	1	6	0	15SEP11A	26SEP11A	100	
2135	Franklin Bridge NB O/S: F/R/P Abutment	1	8	0	19SEP11A	07DEC11A	100	
2145	Franklin Bridge NB O/S: Erect Falsework	1	4	0	12OCT11A	06DEC11A	100	
2150	Franklin Bridge NB O/S: Remove Bridge	1	2	0	05DEC11A	13DEC11A	100	
2155	Franklin Bridge NB O/S: F/R/P Soffit & Stems	1	10	0	05DEC11A	14FEB12A	100	
2160	Franklin Bridge NB O/S: F/R/P Deck	1	13	0	16FEB12A	09MAR12A	100	
2170	Franklin Bridge NB O/S: 28-day Deck Cure	2	28	17	10MAR12A	06APR12	39	-12
2165	Franklin Bridge NB O/S: Cure Deck & P/Stress	2	10	10	21MAR12	30MAR12	0	-5
2187	Franklin Bridge NB O/S: Slope Paving	1	7	7	21MAR12	29MAR12	0	35
2180	Franklin Bridge NB O/S: Remove Falsework	1	5	5	09APR12	13APR12	0	-10
2172	Franklin Br NB O/S: 14-d Settle & Closure Pour	2	14	14	09APR12	22APR12	0	-5
2175	Franklin Bridge NB O/S: Barrier Rail	1	5	5	11APR12	17APR12	0	-10
2177	Franklin Bridge NB O/S: SW #3 (Complete)	1	10	10	18APR12	01MAY12	0	-10
Franklin Bridge (SB O/S)								
2188	Franklin Bridge SB O/S: PG&E Pole Relocation	1	10	0	01SEP11A	15SEP11A	100	
2185	Franklin Bridge SB O/S: Drill 72 CIDH	1	10	0	20SEP11A	14OCT11A	100	
2190	Franklin Bridge SB O/S: Excavate Abutment	1	8	0	26SEP11A	30SEP11A	100	
2195	Franklin Bridge SB O/S: Drill 24 CIDH	1	3	0	03OCT11A	12OCT11A	100	
2200	Franklin Bridge SB O/S: F/R/P Abutment	1	8	0	12OCT11A	02DEC11A	100	
2215	Franklin Bridge SB O/S: Remove Bridge	1	2	0	13OCT11A	19OCT11A	100	
2205	Franklin Bridge SB O/S: F/R/P Columns	1	6	0	17OCT11A	23OCT11A	100	
2210	Franklin Bridge SB O/S: Erect Falsework	1	4	0	25OCT11A	14DEC11A	100	
2220	Franklin Bridge SB O/S: F/R/P Soffit & Stems	1	10	0	15DEC11A	02MAR12A	100	
2225	Franklin Bridge SB O/S: F/R/P Deck	1	10	9	05MAR12A	02APR12	10	-19
2247	Franklin Bridge SB O/S: Slope Paving	1	7	7	21MAR12	29MAR12	0	35
2230	Franklin Bridge SB O/S: 28-day Deck Cure	2	28	28	03APR12	30APR12	0	-27
2235	Franklin Bridge SB O/S: Cure Deck & P/Stress	2	10	10	03APR12	12APR12	0	-9
2237	Franklin Bridge SB O/S: F/R/P Crashwall	1	20	20	13APR12	10MAY12	0	5
2232	Franklin Br SB O/S: 14-d Settle & Closure Pour	2	14	14	01MAY12	14MAY12	0	-27
2245	Franklin Bridge SB O/S: Remove Falsework	1	5	5	01MAY12	07MAY12	0	-19
2240	Franklin Bridge SB O/S: Barrier Rail	1	5	5	03MAY12	09MAY12	0	-8
Novato Bridge								
2250	Novato Bridge: Excavate Abutment	1	3	0	07SEP11A	09SEP11A	100	
2256	Novato Bridge: Sheet Pile	3	5	0	19SEP11A	26SEP11A	100	



Start Date	02JUN11
Finish Date	19JUN12
Data Date	21MAR12
Run Date	31MAR12 14:03

Early Bar
Progress Bar
Critical Activity

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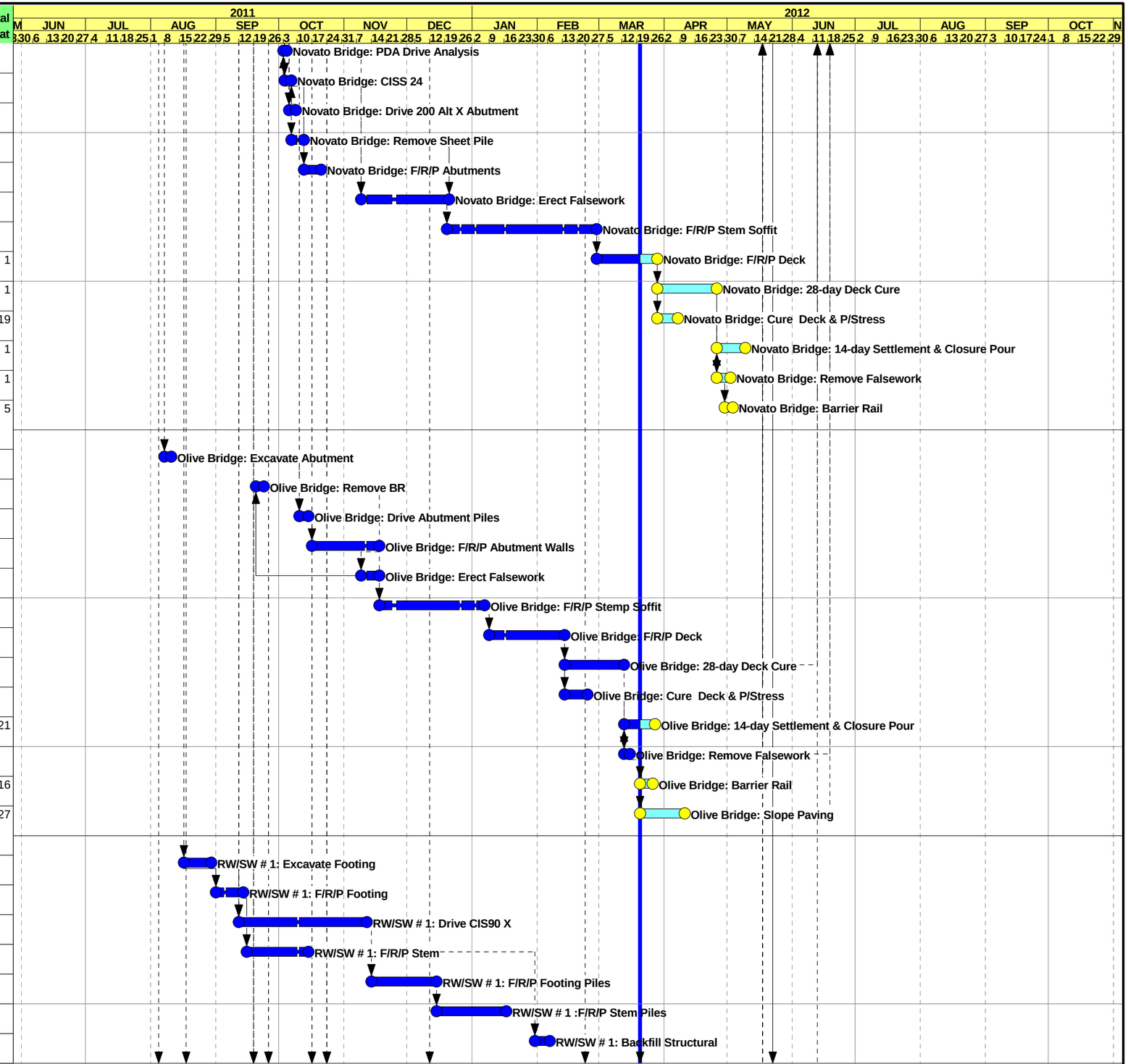
Ghilotti Bros / RM Harris JV

Hwy 101 HOV Lanes and Bridge: Hwy 37

21MAR12 Progress Schedule Update

Date	Revision	Checked	Approved
21MAR12	Added TIA #4 Fragnet to Schedule		

Activity ID	Activity Description	Cal ID	Orig Dur	Rem Dur	Early Start	Early Finish	% Comp	Total Float
2262	Novato Bridge: PDA Drive Analysis	1	1	0	03OCT11A	04OCT11A	100	
2260	Novato Bridge: CISS 24	3	5	0	04OCT11A	06OCT11A	100	
2255	Novato Bridge: Drive 200 Alt X Abutment	1	6	0	06OCT11A	08OCT11A	100	
2470	Novato Bridge: Remove Sheet Pile	3	2	0	07OCT11A	12OCT11A	100	
2265	Novato Bridge: F/R/P Abutments	1	8	0	13OCT11A	20OCT11A	100	
2270	Novato Bridge: Erect Falsework	1	7	0	09NOV11A	20DEC11A	100	
2275	Novato Bridge: F/R/P Stem Soffit	1	10	0	20DEC11A	28FEB12A	100	
2280	Novato Bridge: F/R/P Deck	2	11	8	29FEB12A	28MAR12	27	1
2285	Novato Bridge: 28-day Deck Cure	2	28	28	29MAR12	25APR12	0	1
2290	Novato Bridge: Cure Deck & P/Stress	2	10	10	29MAR12	07APR12	0	19
2287	Novato Bridge: 14-day Settlement & Closure Pour	2	14	14	26APR12	09MAY12	0	1
2295	Novato Bridge: Remove Falsework	1	5	5	26APR12	02MAY12	0	1
2300	Novato Bridge: Barrier Rail	1	4	4	30APR12	03MAY12	0	5
Olive Bridge								
2000	Olive Bridge: Excavate Abutment	1	3	0	08AUG11A	10AUG11A	100	
2020	Olive Bridge: Remove BR	1	2	0	20SEP11A	23SEP11A	100	
2005	Olive Bridge: Drive Abutment Piles	1	4	0	11OCT11A	14OCT11A	100	
2010	Olive Bridge: F/R/P Abutment Walls	1	6	0	17OCT11A	17NOV11A	100	
2015	Olive Bridge: Erect Falsework	1	5	0	09NOV11A	17NOV11A	100	
2025	Olive Bridge: F/R/P Stemp Soffit	1	9	0	18NOV11A	06JAN12A	100	
2030	Olive Bridge: F/R/P Deck	1	8	0	09JAN12A	13FEB12A	100	
2035	Olive Bridge: 28-day Deck Cure	2	28	0	14FEB12A	12MAR12A	100	
2040	Olive Bridge: Cure Deck & P/Stress	2	8	0	14FEB12A	24FEB12A	100	
2037	Olive Bridge: 14-day Settlement & Closure Pour	2	14	7	13MAR12A	27MAR12	50	21
2050	Olive Bridge: Remove Falsework	1	6	0	13MAR12A	15MAR12A	100	
2045	Olive Bridge: Barrier Rail	1	4	4	21MAR12	26MAR12	0	16
2053	Olive Bridge: Slope Paving	1	15	15	21MAR12	10APR12	0	27
Retaining/Soundwall # 1								
2305	RW/SW # 1: Excavate Footing	1	9	0	17AUG11A	29AUG11A	100	
2315	RW/SW # 1: F/R/P Footing	1	8	0	01SEP11A	13SEP11A	100	
2310	RW/SW # 1: Drive CIS90 X	1	10	0	12SEP11A	11NOV11A	100	
2320	RW/SW # 1: F/R/P Stem	1	13	0	16SEP11A	14OCT11A	100	
2465	RW/SW # 1: F/R/P Footing Piles	B	7	0	14NOV11A	14DEC11A	100	
2460	RW/SW # 1 :F/R/P Stem Piles	B	6	0	15DEC11A	16JAN12A	100	
2325	RW/SW # 1: Backfill Structural	1	5	0	31JAN12A	06FEB12A	100	



Start Date	02JUN11
Finish Date	19JUN12
Data Date	21MAR12
Run Date	31MAR12 14:03

Early Bar
Progress Bar
Critical Activity

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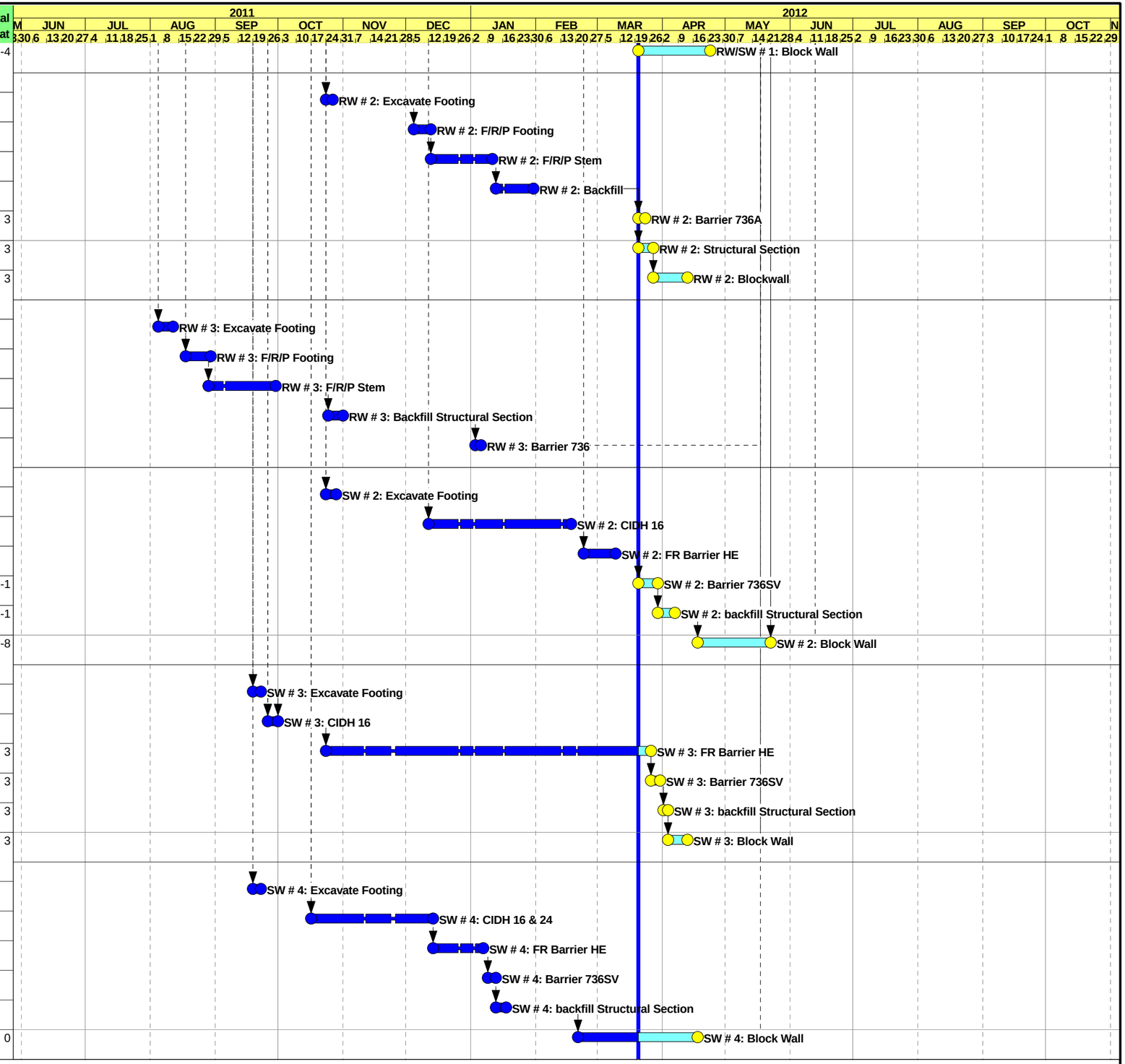
Ghilotti Bros / RM Harris JV

Hwy 101 HOV Lanes and Bridge: Hwy 37

21MAR12 Progress Schedule Update

Date	Revision	Checked	Approved
21MAR12	Added TIA #4 Fragnet to Schedule		

Activity ID	Activity Description	Cal ID	Orig Dur	Rem Dur	Early Start	Early Finish	% Comp	Total Float
2330	RW/SW # 1: Block Wall	1	24	24	21MAR12	23APR12	0	-4
Retaining Wall # 2								
2335	RW # 2: Excavate Footing	1	16	0	24OCT11A	26OCT11A	100	
2340	RW # 2: F/R/P Footing	1	7	0	05DEC11A	12DEC11A	100	
2345	RW # 2: F/R/P Stem	1	5	0	13DEC11A	10JAN12A	100	
2350	RW # 2: Backfill	1	6	0	13JAN12A	30JAN12A	100	
2355	RW # 2: Barrier 736A	1	3	3	21MAR12	23MAR12	0	3
2357	RW # 2: Structural Section	1	5	5	21MAR12	27MAR12	0	3
2360	RW # 2: Blockwall	1	12	12	28MAR12	12APR12	0	3
Retaining Wall # 3								
2365	RW # 3: Excavate Footing	1	5	0	05AUG11A	11AUG11A	100	
2370	RW # 3: F/R/P Footing	1	13	0	18AUG11A	29AUG11A	100	
2375	RW # 3: F/R/P Stem	1	7	0	29AUG11A	29SEP11A	100	
2380	RW # 3: Backfill Structural Section	1	5	0	25OCT11A	31OCT11A	100	
2385	RW # 3: Barrier 736	1	5	0	03JAN12A	05JAN12A	100	
Soundwall # 2								
2390	SW # 2: Excavate Footing	1	16	0	24OCT11A	28OCT11A	100	
2395	SW # 2: CIDH 16	1	15	0	12DEC11A	17FEB12A	100	
2400	SW # 2: FR Barrier HE	1	8	0	24FEB12A	09MAR12A	100	
2405	SW # 2: Barrier 736SV	1	7	7	21MAR12	29MAR12	0	-1
2410	SW # 2: backfill Structural Section	1	6	6	30MAR12	06APR12	0	-1
2415	SW # 2: Block Wall	1	25	25	18APR12	22MAY12	0	-8
Soundwall # 3								
2420	SW # 3: Excavate Footing	1	2	0	19SEP11A	22SEP11A	100	
2425	SW # 3: CIDH 16	1	4	0	26SEP11A	30SEP11A	100	
2430	SW # 3: FR Barrier HE	1	4	4	24OCT11A	26MAR12	0	3
2435	SW # 3: Barrier 736SV	1	4	4	27MAR12	30MAR12	0	3
2440	SW # 3: backfill Structural Section	1	2	2	02APR12	03APR12	0	3
2445	SW # 3: Block Wall	1	7	7	04APR12	12APR12	0	3
Soundwall # 4								
2450	SW # 4: Excavate Footing	1	3	0	19SEP11A	22SEP11A	100	
2451	SW # 4: CIDH 16 & 24	1	7	0	17OCT11A	13DEC11A	100	
2452	SW # 4: FR Barrier HE	1	5	0	14DEC11A	06JAN12A	100	
2453	SW # 4: Barrier 736SV	1	3	0	09JAN12A	12JAN12A	100	
2454	SW # 4: backfill Structural Section	1	3	0	13JAN12A	17JAN12A	100	
2455	SW # 4: Block Wall	1	20	20	21FEB12A	17APR12	0	0



Start Date	02JUN11	Early Bar
Finish Date	19JUN12	Progress Bar
Data Date	21MAR12	Critical Activity
Run Date	31MAR12 14:03	

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203R

Sheet 7 of 7

Ghilotti Bros / RM Harris JV

Hwy 101 HOV Lanes and Bridge: Hwy 37

21MAR12 Progress Schedule Update

Date	Revision	Checked	Approved
21MAR12	Added TIA #4 Fragnet to Schedule		

Appendix B Cost Estimates

Table B1 - Project Cost Summary, All Segments, All Phases, and All Contracts

R/W Data Sheets for Contracts A1, B1, B2, B3, and B4*

Table B2 - Utility Relocation Estimate for Contract B1

Table B3 - Utility Relocation Estimate for Contract B2

Table B4 - Utility Relocation Estimate for Contract B3

Table B5 – MSN Phase 1 Off-Site Mitigation Cost Estimate

Table B6 – MSN Phase 1 On-Site Mitigation Cost Estimate

*Scope of work in Contract B4 has been split between Contracts B2 and C3.

Table B1 – Project Cost Summary, All Segments, All Phases, and All Contracts

Table B1: PROJECT COST SUMMARY - ALL PHASES, ALL SEGMENTS & ALL CONTRACTS ($x1000)

Prpject Segment	Segment A		Segment B						Segment C		Segments A & B	Segments A, B, & C	Project Total
Project Phase	Phase 1	Phase 2	Phase 1			Phase 2			Phase 2		Phase 1	Phase 2	
Project EA / PPNO	04-26406 / 0360F		04-26407 / 0360J	04-26408 / 0360H	04-26409 / 0360G				04-2640G /0360M		04-2640H / 0360L		
Contract	A1	A2	B1	B2	B3	B1-Phase II	B2-Phase II	B3-Phase II	C2	C3	L1	L2	
ROADWAY ITEMS:		$18,500				$61,888	$17,900	$10,800	$49,000		$2,800	$4,000	
STRUCTURE ITEMS:		$6,800				$5,320	$0	$1,700	$10,780		$0	$0	
SUBTOTAL CONSTRUCTION:	$27,890	$25,300	$27,802	$73,900	$46,300	$67,208	$17,900	$12,410	$59,780	$24,610	$2,800	$4,000	$389,900
Escalation 3.5% for State FY 12/13:		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Escalation 3.5% for State FY 13/14:		$886	$973	$2,587	$1,621	$2,352	$627	$434	$2,092	$861	$98	$140	$12,670
Escalation 3.5% for State FY 14/15:		$916			$1,677	$2,435	$648	$450	$2,166	$891	$101	$145	$9,430
Escalation 3.5% for State FY 15/16:		$949			$1,736	$2,520	$671	$465	$2,241	$923	$105	$150	$9,760
Escalation 3.5% for State FY 16/17:		$982				$2,608	$695	$482	$2,320	$955	$109	$155	$8,305
Escalation 3.5% for State FY 17/18:		$1,016				$2,699	$719	$498	$2,401	$988	$0	$161	$8,483
Escalation 3.5% for State FY 18/19:		$1,052				$2,794	$744	$516	$2,485	$1,023	$0	$166	$8,780
Escalation 3.5% for State FY 19/20:											$0	$172	$172
Escalation 3.5% for State FY 20/21:											$0	$0	$0
Escalation 3.5% for State FY 21/22:												$0	$0
SUBTOTAL ESCALATION:	$0	$5,800	$973	$2,587	$5,034	$15,408	$4,104	$2,845	$13,705	$5,642	$413	$1,089	$57,599
Total Escalated Construction Capital:	**$27,890**	**$31,100**	**$28,775**	**$76,487**	**$51,334**	**$82,616**	**$22,004**	**$15,255**	**$73,485**	**$30,252**	**$3,213**	**$5,089**	**$447,499**
ACQUISITION ITEMS:	$4	$0	$5,360	$8,072	$1,624	$938	$0	$1,300	$1,663	$0	$0	$0	$18,961
UTILITY ITEMS:	$143	$50	$10,073	$1,978	$7,031	$1,515	$0	$500	$47	$0	$0	$0	$21,337
ENVIRONMENTAL MITIGATION ITEMS:	$130	$250	$5,680	$2,730	$0	$670	$0	$500	$1,800	$0	$0	$5,200	$16,960
SUBTOTAL RIGHT OF WAY:	$277	$300	$21,113	$12,780	$8,655	$3,123	$0	$2,300	$3,510	$0	$0	$5,200	$57,258
Escalation 3.5% for 5 years for Phase 2:	$0	$56	$0	$0	$0	$586	$0	$432	$659	$0	$0	$976	$2,709
Total Escalated Right of Way Capital:	**$277**	**$356**	**$21,113**	**$12,780**	**$8,655**	**$3,709**	**$0**	**$2,732**	**$4,169**	**$0**	**$0**	**$6,176**	**$59,967**
PAED Support:	**$9,520**	**$0**	**$9,384**	**$7,600**	**$668**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$27,172**
PSE Support:	**$4,507**	**$4,665**	**$7,573**	**$11,037**	**$5,212**	**$12,392**	**$3,301**	**$2,288**	**$4,784**	**$500**	**$460**	**$763**	**$57,483**
R/W Support:	**$65**	**$53**	**$2,595**	**$1,900**	**$265**	**$556**	**$0**	**$0**	**$950**	**$0**	**$0**	**$0**	**$6,385**
Const. Support:	**$7,000**	**$4,665**	**$4,970**	**$12,190**	**$7,660**	**$12,392**	**$3,301**	**$2,288**	**$11,023**	**$4,538**	**$470**	**$763**	**$71,260**
TOTAL COST:	**$49,259**	**$40,840**	**$74,410**	**$121,994**	**$73,794**	**$111,666**	**$28,605**	**$22,563**	**$94,410**	**$35,290**	**$4,143**	**$12,792**	**$669,765**

Notes:

1 Contract A1 - Combined bid for structure and roadway items.
2 Contracts B1, B2, B3 & B4 - Combine estimate for structure and roadway items.
3 Contracts A1, B1, B2, B3, B4, & L1 are funded in Phase 1 with programmed funds. Escalation is to the mid-year of construction where appropriate.
4 Contracts B1-Phase II, B2-Phase II, B3-Phase II, C2 and C3 are funded by RTP-LRP funds. Escalation to the mid-year of construction.
5 Contracts L1 & L2 are follow-up landscape & mitigation projects for Phase 1 & 2, respectively.
6 Off-site mitigation cost for Phase 1 contracts is included in environmental mitigation cost of Phase 1 roadway contracts.
7 For B2 R/W costs, combine estimate in Contract B2 & B4 data sheets. Contract B4 R/W scope was added to B2 and R/W data sheet is pending update.
8 Project EA & PPNO numbers for Phase 2 contracts, except for Contract C2, have not been established.
9 Contracts B4 scope of work was split into two portions. One portion was added to Contract B2 and other become Contract C3.

Phase 1	**$323,599**
Phase 2	**$346,166**
Total	**$669,765**

Segment A	**$93,900**
Segment B	**$439,769**
Segment C	**$136,096**
Total	**$669,765**

R/W Data Sheets for Contracts A1, B1, B2, B3 and B4

FINAL R/W CAPITAL ESTIMATE

(Dollars in thousands)

DISTRICT-EA:	264061
PPNO	0360F

R/W Capital Project Budget

CTIPS Data on: 7/7/2010

STIP-RIP	STIP-IIP	SHOPP	Local Federal	TCRP Funds	Local	TOTAL
730	0	0	0	0	0	**730**

R/W Capital Committed to Date

TRAMS (FIDO) Data on: 7/7/2010

STIP-RIP	STIP-IIP	SHOPP	Local Federal	TCRP Funds	Local	TOTAL
147	0	0	0	0	0	**147**

Estimated Remaining R/W Capital Costs

Functional Manager Responses- Data on: 7/23/2010

STIP-RIP	STIP-IIP	SHOPP	Local Federal	TCRP Funds	Local	TOTAL
130	0	0	0	0	0	**130**

Final R/W Capital Estimated Costs

PMCS COST Screen Data on:

STIP-RIP	STIP-IIP	SHOPP	Local Federal	TCRP Funds	Local	TOTAL
277	0	0	0	0	0	**277**

T0: BKF – Engineers/Surveyors/Planners

Date 4/12/2011
Dist 4 Co Mrn Rte 101
PM 24.8/26.9

Attention: Gordon Sweet

EA 264072 (04-0000-0733-2)

From: ENID LAU
Right of Way Resource Manager

MSN B1 – Redwood Landfill I/C
D.S. #5857

Subject: Current Estimated Right of Way Costs

We have completed an estimate of the right of way costs for the above referenced project based on maps we received from you on September 23, 2010 and the following assumptions and limiting conditions.

[ ] 1. The mapping did not provide sufficient detail to determine the limits of the right of way required.

[ ] 2. The transportation facilities have not been sufficiently designed so our estimator could determine the damages to any of the remainder parcels affected by the project.

[ ] 3. Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the early design requirements.

[ ] 4. This estimate does not include $_____right of way costs previously incurred on the project, which may affect the total project right of way costs for programming purposes.

[ ] 5. We have determined there are no right of way functional involvements in the proposed project at this time, as designed.

Right of Way Lead Time will require a minimum of 21 months after we begin receiving final right of way requirements (PYPSCAN node No. 224), necessary environmental clearance has been obtained, and freeway agreements have been approved. From the date of receipt of final right of way requirements (PYPSCAN node No. 265), we will require a minimum of 18 months prior to the date of certification of the project. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed. Either of these actions may reflect adversely on the District's other programs or our public image generally.

Right of Way Resource Manager

Attachments:

[✓] Right of Way Data Sheet – Page One (always required)
[✓] Right of Way Data Sheet – All Pages (required when interest in real property is being acquired)
[✓] Utility Information Sheet
[ ] Railroad Information Sheet

RIGHT OF WAY DATA SHEET

TO: BKF Engineers

Date 4/6/11 D.S. # 5857

Dist 04 Co Mrn Rte 101 PM 24.8/26.9

ATTN: Gordon Sweet

EA 264071(04-0000-0733-2)

Project Description: B1 Redwood Landfill I/C

SUBJECT: Right of Way Data – Alternate No.

1. Right of Way Cost Estimate:

		Current Value (Future Use)	Escalation Rate	Escalated Value
A.	Acquisition, including Excess Lands, Damages, and Goodwill.	$ 5,310,000.00	%	$ 5,310,000.00
	Project Permit Fees			$ 00.00
	Grantor's Appraisal Cost			$ 30,000.00
B.	Utility Relocation (State Share)	$ 10,073,000.00	%	$ *10,073,000.00
C.	Relocation Assistance	$ 00.00	%	$ 00.00
D.	Clearance/Demolition	$ 00.00	%	$ 00.00
E.	Title and Escrow Fees	$ 20,000.00	%	$ 20,000.00
F.	TOTAL ESCALATED VALUE			$ 15,433,000.00
G.	Construction Contract Work	$ 00.00		

*** This figure could be reduced by $2,000,000 if a longitudinal encroachment exception is approved by Headquarters.**

2. Anticipated Date of Right of Way Certification

3. Parcel Data:

Type		Dual/Appr	Utilities		RR Involvements	
X			U4-1		None	X
A	3		-2		C&M Agrmt	
B	6		-3		Svc Contract	
C			-4	5	Design	
D			U5-7		Const.	
E	XXXX		-8	4	Lic/RE/Clauses	
F	XXXX		-9	6		
					Misc R/W Work	
					RAP Displ	0
					Clear Demo	0
Total	9				Const. Permits	0
					Condemnation	2

Areas: Right of Way 67.25 acres No. Excess Parcels _____ Excess _____

Enter PMCS Screens 4 / 6 / 2011 by P.T.

Enter AGRE Screen (Railroad data only) ____/____/____ by _____

4. Are there any major items of construction contract work?
Yes ☐ No ☒ (If yes, explain)

5. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.). No right of way required ☐

There are 9 parcels required for this project. The following parcels are required for this project: Olompali State Park requires a Fee take, TCE and utility easement, two agricultural properties require fee takes, drainage easements, utility easements and TCE's, two agricultural parcels require access rights, two commercial properties require fee takes, an agricultural property requires a full take because the parcel will be landlocked and the final parcel is owned by Marin County and requires a PTE&C.

6. Is there an effect on assessed valuation?
Yes ☐ Not Significant ☒ No ☐ (If yes, explain)

7. Are utility facilities or rights of way affected? Yes ☒ No ☐
(If yes, attach Utility Information Sheet Exhibit 01-01-05)

8. Are railroad facilities or rights of way affected? Yes ☐ No ☒
(If yes, attach Railroad Information Sheet Exhibit 01-01-06)

9. Were any previously unidentified sites with hazardous waste and/or material found?
Yes ☐ None evident ☒ (If yes, attach memorandum per Procedural Handbook Volume 1, Section 101.011)

10. Are RAP displacements required? Yes ☐ No ☒
(If yes, provide the following information)

No. of single family _____ No. of business/non profit _____

No. of multi-family _____ No. of farms _____

Based on Draft/Final Relocation Impact Statement/Study dated _____, it is anticipated that sufficient replacement housing (will/will not) be available without Last Resort Housing.

11. Are there material borrow and/or disposal sites required? Yes ☐ No ☒
(If yes, explain)

12. Are there potential relinquishments and/or abandonments? Yes ☐ No ☒
(If yes, explain)

13. Are there any existing and/or potential Airspace sites? Yes ☐ No ☒
(If yes, explain)

14. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if District proposes less that PMCS lead time and/or if significant pressures for project advancement are anticipated.)

PYPSCAN lead time (from Regular R/W to project certification) 21 months

15. Is it anticipated that all Right of Way work be performed by CALTRANS staff?
Yes ☒ No ☐ (If no, discuss)

Assumptions and Limiting Conditions

- This data sheet was completed without a hazardous waste/materials report.
- Information on this data sheet was based on information provided by Gordon Sweet. The maps are dated 1/28/11.
- Mitigation costs were not available at the time of this estimate.

Evaluation Prepared By: Lynn White

Right of Way:	Name		Date	4-6-11
Railroad:	Name		Date	4-6-11
Utilities:	Name		Date	4-6-11

Recommended for Approval:

Right of Way Capital Cost Coordinator

I have personally reviewed this Right of Way Data Sheet and all supporting information. It is my opinion that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set forth, and find this Data Sheet complete and current.

Chief, R/W Appraisal Services

4.12.11

Date

cc: Program Manager
Project Manager

UTILITY INFORMATION SHEET

1. Utility Owners located within project limits:

   PG&E, AT&T, Verizon and NMWD

2. Facilities potentially impacted by project (if known, include Owner(s) and facility type(s)):

   PG&E – gas & electric, AT&T – OH Telephone, Verizon – OH Telephone - underground and NMWD – water lines 30"

3. Anticipated Workload:
   - X Utility Verification required
   - X Positive Identification
   - X Utility Relocation
   - ____ Other (Specify)

4. Additional information concerning anticipated utility involvements (include limiting conditions and a narrative addressing likelihood that conflicts will occur);

   X Involves possible relocation of electric transmission facilities
   (If X'd, Data sheet should be forwarded to environmental)

5. PMCS input information

U4-1	____	Owner Expense Involvements	U5-7	____	Verifications-without involvements
U4-2	____	State Expense Involvements *(Conventional, No Fed Aid)*	U5-8	4	Verifications-50% involvements
U4-3	____	State Expense Involvements *(Freeway, No Fed Aid)*	U5-9	6	Verifications resulting in involvements
U4-4	5	State Expense Involvements *(Conventional or Freeway, No Fed Aid)*			

NOTE: The sum of the U-4's must equal the sum of ½ of the U5-8's and all of the U5-9's.

ESTIMATED STATE SHARE OF COSTS $10,073,000.00

Prepared by:

Edgar Velez
Right of Way Utility Coordinator

4/6/11
Date

RIGHT OF WAY DATA SHEET

TO: URS Corporation

Date 5/31/11 D.S. # 5942

Dist 04 Co Son Rte 101 PM 0.9/3.0

ATTN: Ramsey Hissen

EA 264081

Project Description: B2 - Petaluma Blvd. I/C

SUBJECT: Right of Way Data – Alternate No.

1. Right of Way Cost Estimate:

		Current Value (Future Use)	Escalation Rate	Escalated Value
A.	Acquisition, including Excess Lands, Damages, and Goodwill.	$ 7,283,000.00	%	$ 7,283,000.00
	Mitigation Costs			$ 2,730,000.00
	Grantor's Appraisal Cost			$ 130,000.00
B.	Utility Relocation (State Share)	$ 1,687,000.00	%	$ 1,687,000.00
C.	Relocation Assistance	$ 75,000.00	%	$ 75,000.00
D.	Clearance/Demolition	$ 95,000.00	%	$ 95,000.00
E.	Title and Escrow Fees	$ 55,000.00	%	$ 55,000.00
F.	TOTAL ESCALATED VALUE			$ 12,055,000.00
G.	Construction Contract Work	$ 110,000.00		

2. Anticipated Date of Right of Way Certification 3/2012

3. Parcel Data:

Type		Dual/Appr	Utilities		RR Involvements	
X			U4-1		None	
A	10		-2		C&M Agrmt	
B	11		-3		Svc Contract	
C	3		-4	2	Design	
D			U5-7		Const.	
E	XXXX		-8		Lic/RE/Clauses	1
F	XXXX		-9	4		
					Misc R/W Work	
					RAP Displ	5
					Clear Demo	2
Total	24				Const. Permits	0
					Condemnation	6

Areas: Right of Way 35.72 acres No. Excess Parcels 2 Excess 14.59 ac

Enter PMCS Screens _____/_____/_____ by _____

Enter AGRE Screen (Railroad data only) _____/_____/_____ by _____

4. Are there any major items of construction contract work?
Yes ☐ No ☒ (If yes, explain)

5. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.). No right of way required ☐

There are 24 parcels required for this project. All requirements are for fee takes, easements and Temporary Construction Easements. Two parcels are part takes from light industrial, two parcels are full take rural residential, two parcels will be secured using Section 83, one parcel is improved with a service station on Kastania Road which will lose access to Highway 101 and the remaining 17 parcels are all rural residential and pasture land. One parcel has a two sided sign board.

6. Is there an effect on assessed valuation?
Yes ☐ Not Significant ☒ No ☐ (If yes, explain)

7. Are utility facilities or rights of way affected? Yes ☒ No ☐
(If yes, attach Utility Information Sheet Exhibit 01-01-05)

8. Are railroad facilities or rights of way affected? Yes ☒ No ☐
(If yes, attach Railroad Information Sheet Exhibit 01-01-06)

9. Were any previously unidentified sites with hazardous waste and/or material found?
Yes ☐ None evident ☒ (If yes, attach memorandum per Procedural Handbook Volume 1, Section 101.011)

10. Are RAP displacements required? Yes ☒ No ☐
(If yes, provide the following information)

No. of single family 2 No. of business/non profit _____

No. of multi-family _____ No. of farms 3

Based on Draft/Final Relocation Impact Statement/Study dated _____, it is anticipated that sufficient replacement housing (will/will not) be available without Last Resort Housing.

11. Are there material borrow and/or disposal sites required? Yes ☐ No ☒
(If yes, explain)

12. Are there potential relinquishments and/or abandonments? Yes ☐ No ☒
(If yes, explain)

13. Are there any existing and/or potential Airspace sites? Yes ☐ No ☒
(If yes, explain)

14. Are there Environmental Mitigation costs? Yes ☒ No ☐
(If yes, explain)

Mitigation costs of $2,730,000.00 were provided by Guy Preston from SCTA.

15. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if District proposes less that PMCS lead time and/or if significant pressures for project advancement are anticipated.)

PYPSCAN lead time (from Regular R/W to project certification) _____ months

16. Is it anticipated that all Right of Way work be performed by CALTRANS staff?
Yes ☒ No ☐ (If no, discuss)

Assumptions and Limiting Conditions

- This data sheet was completed without a hazardous waste/materials report.
- Information on this data sheet was based on information provided by Ramsey Hissen, URS. Appraisal maps are dated 4/4/11.

Evaluation Prepared By: Lynn White

Right of Way:	Name	_____	Date	_____
Railroad:	Name	_____	Date	_____
Utilities:	Name	_____	Date	_____

Recommended for Approval:

_____
Right of Way Capital Cost Coordinator

I have personally reviewed this Right of Way Data Sheet and all supporting information. It is my opinion that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set forth, and find this Data Sheet complete and current.

_____
Chief, R/W Appraisal Services

_____
Date

cc: Program Manager
Project Manager

UTILITY INFORMATION SHEET

1. Utility Owners located within project limits:

   PG&E, AT&T, North Marin Water District and SCWA.

2. Facilities potentially impacted by project (if known, include Owner(s) and facility type(s)):

   PG&E – gas & electric, AT&T - Telephone
   NMWD – Water, SCWA – water (The relocation for this facility will be handled during construction under phase 4, so the cost is not reflected in this estimate)

3. Anticipated Workload:
   - X Utility Verification required
   - X Positive Identification
   - X Utility Relocation
   - ____ Other (Specify)

4. Additional information concerning anticipated utility involvements (include limiting conditions and a narrative addressing likelihood that conflicts will occur);

   X Involves possible relocation of electric transmission facilities
   (If X'd, Data sheet should be forwarded to environmental)

5. PMCS input information

U4-1	____	Owner Expense Involvements	U5-7	____	Verifications-without involvements
U4-2	____	State Expense Involvements *(Conventional, No Fed Aid)*	U5-8	____	Verifications-50% involvements
U4-3	____	State Expense Involvements *(Freeway, No Fed Aid)*	U5-9	4	Verifications resulting in involvements
U4-4	2	State Expense Involvements *(Conventional or Freeway, No Fed Aid)*			

NOTE: The sum of the U-4's must equal the sum of ½ of the U5-8's and all of the U5-9's.

ESTIMATED STATE SHARE OF COSTS $1,687,000.00

Prepared by:

Edgar Velez
Right of Way Utility Coordinator

5/31/11
Date

RAILROAD INFORMATION SHEET

1. Describe railroad facilities or right of way affected.

   S.M.A.R.T.

2. When branch lines or spurs are affected, would acquisition and/or payment of damages to businesses and/or industries served by the railroad facility be more cost effective than construction of a facility to perpetuate the rail services? (See Procedural Handbook Volume 4a, Chapter 440 for further detail.)
   Yes ☐ No ☐ (If yes, explain)

3. Discuss types of agreements and rights required from the railroads. Are grade crossings requiring service contracts, or grade separations requiring construction and maintenance agreements involved?

   C & M Agreement

4. Remarks (Nonoperating railroad right of way involved?)

5. PMCS Input Information

RR Involvements		
None		
C&M Agreement		
Svc Contract		
	Design	
	Const.	
Lic/RE Clauses		1

Prepared By: Pat Coggins

Pat Coggins
Right of Way Railroad Coordinator

5/31/11
Date

T0: Mark Thomas & Company

Date: 3/30/09

Attention: Sasha Dansky

Dist 4-MRN-101 PM 25.6/27.6
EA: 264091 – B3
Project Description : Realign 101
Marin-Sonoma-Narrows

From: ENID LAU
Right of Way Resource Manager

Subject: Current Estimated Right of Way Costs

We have completed an estimate of the right of way costs for the above referenced project based on maps we received from you on 9-14-06, and the following assumptions and limiting conditions.

[ ] 1. The mapping did not provide sufficient detail to determine the limits of the right of way required.

[ ] 2. The transportation facilities have not been sufficiently designed so our estimator could determine the damages to any of the remainder parcels affected by the project.

[ ] 3. Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the early design requirements.

[ ] 4. This estimate does not include $_____right of way costs previously incurred on the project, which may affect the total project right of way costs for programming purposes.

[ ] 5. We have determined there are no right of way functional involvements in the proposed project at this time, as designed.

Right of Way Lead Time will require a minimum of 15 months after we begin receiving final right of way requirements (PYPSCAN node No. 224), necessary environmental clearance has been obtained, and freeway agreements have been approved. From the date of receipt of final right of way requirements (PYPSCAN node No. 265), we will require a minimum of 12 months prior to the date of certification of the project. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed. Either of these actions may reflect adversely on the District's other programs or our public image generally.

Right of Way Resource Manager

Attachments:

[ ] Right of Way Data Sheet – Page One (always required)
[✓] Right of Way Data Sheet – All Pages (required when interest in real property is being acquired)
[✓] Utility Information Sheet
[ ] Railroad Information Sheet

RIGHT OF WAY DATA SHEET

TO: MARK THOMAS & CO.

Date 3/12/09 D.S. # 5608

Dist 04 Co Mrn/Son Rte 101 PM 25.6/27.6

ATTN: SASHA DANSKY

EA 264091

Project Description: B3 - Curve Correction

SUBJECT: Right of Way Data – Alternate No.

1. Right of Way Cost Estimate:

		Current Value (Future Use)	Escalation Rate	Escalated Value
A.	Acquisition, including Excess Lands, Damages, and Goodwill.	$ 1,526,000.00	%	$ 1,526,000.00
	Project Permit Fees			$ 00.00
	Grantor's Appraisal Cost			$ 65,000.00
B.	Utility Relocation (State Share)	$ 6,607,000.00	%	$ 6,607,000.00
C.	Relocation Assistance	$ 00.00	%	$ 00.00
D.	Clearance/Demolition	$	%	$ 00.00
E.	Title and Escrow Fees	$ 33,000.00	%	$ 33,000.00
F.	TOTAL ESCALATED VALUE			$ 8,231,000.00
G.	Construction Contract Work	$ 00.00		

2. Anticipated Date of Right of Way Certification

3. Parcel Data:

Type		Dual/Appr	Utilities		RR Involvements	
X			U4-1		None	X
A	6		-2		C&M Agrmt	
B	7		-3		Svc Contract	
C			-4	1	Design	
D			U5-7		Const.	
E	XXXX		-8		Lic/RE/Clauses	
F	XXXX		-9	4		
					Misc R/W Work	
					RAP Displ	0
					Clear Demo	0
Total	13				Const. Permits	0
					Condemnation	0

Areas: Right of Way 32.51 acres No. Excess Parcels _____ Excess _____

Enter PMCS Screens 3 / 13 / 09 by D. Kelly

Enter AGRE Screen (Railroad data only) ____/____/____ by _____

4. Are there any major items of construction contract work?
Yes ☐ No ☒ (If yes, explain)

5. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.). No right of way required ☐

There are 13 parcels required for this project. All parcels are rural residential and pasture land and no improvements are affected.

6. Is there an effect on assessed valuation?
Yes ☐ Not Significant ☐ No ☒ (If yes, explain)

7. Are utility facilities or rights of way affected? Yes ☒ No ☐
(If yes, attach Utility Information Sheet Exhibit 01-01-05)

8. Are railroad facilities or rights of way affected? Yes ☐ No ☒
(If yes, attach Railroad Information Sheet Exhibit 01-01-06)

9. Were any previously unidentified sites with hazardous waste and/or material found?
Yes ☐ None evident ☒ (If yes, attach memorandum per Procedural Handbook Volume 1, Section 101.011)

10. Are RAP displacements required? Yes ☐ No ☒
(If yes, provide the following information)

No. of single family _____ No. of business/non profit _____

No. of multi-family _____ No. of farms _____

Based on Draft/Final Relocation Impact Statement/Study dated _____, it is anticipated that sufficient replacement housing (will/will not) be available without Last Resort Housing.

11. Are there material borrow and/or disposal sites required? Yes ☐ No ☒
(If yes, explain)

12. Are there potential relinquishments and/or abandonments? Yes ☐ No ☒
(If yes, explain)

13. Are there any existing and/or potential Airspace sites? Yes ☐ No ☒
(If yes, explain)

14. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if District proposes less that PMCS lead time and/or if significant pressures for project advancement are anticipated.)

PYPSCAN lead time (from Regular R/W to project certification) 15 months

15. Is it anticipated that all Right of Way work be performed by CALTRANS staff?
Yes ☒ No ☐ (If no, discuss)

Assumptions and Limiting Conditions

- This data sheet was completed without a hazardous waste/materials report.
- Information on this data sheet was based on information and maps dated 3/2/09 provided by Mark Thomas company, Inc.
- Mitigation costs have not been provided.

Evaluation Prepared By: Lynn White

Right of Way:	Name		Date	3-12-09
Railroad:	Name		Date	3/12/09
Utilities:	Name		Date	3/12/09

Recommended for Approval:

Right of Way Capital Cost Coordinator

I have personally reviewed this Right of Way Data Sheet and all supporting information. It is my opinion that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set forth, and find this Data Sheet complete and current.

Chief, R/W Appraisal Services

3/25/09

Date

cc: Program Manager
Project Manager

UTILITY INFORMATION SHEET

1. Utility Owners located within project limits:

   PG&E, NMWD, AT&T

2. Facilities potentially impacted by project (if known, include Owner(s) and facility type(s)):

   PG&E – gas, electric, AT&T – telephone, NMWD - water

3. Anticipated Workload:
   - X Utility Verification required
   - X Positive Identification
   - X Utility Relocation
   - ____ Other (Specify)

4. Additional information concerning anticipated utility involvements (include limiting conditions and a narrative addressing likelihood that conflicts will occur);

   X Involves possible relocation of electric transmission facilities
   (If X'd, Data sheet should be forwarded to environmental)

5. PMCS input information

U4-1	____	Owner Expense Involvements	U5-7	____	Verifications-without involvements
U4-2	____	State Expense Involvements *(Conventional, No Fed Aid)*	U5-8	____	Verifications-50% involvements
U4-3	____	State Expense Involvements *(Freeway, No Fed Aid)*	U5-9	4	Verifications resulting in involvements
U4-4	1	State Expense Involvements *(Conventional or Freeway, No Fed Aid)*			

NOTE: The sum of the U-4's must equal the sum of ½ of the U5-8's and all of the U5-9's.

ESTIMATED STATE SHARE OF COSTS $16,607,000.00

Prepared by:

Edgar Velez
Right of Way Utility Coordinator

3/12/09
Date

T0: URS

Date April 11, 2011
Dist 4 Co Son Rte 101 PM 2.5/4.1

Attention: Ramsey Hissen
Project Engineer

EA 2640C1

From: ENID LAU
Right of Way Resource Manager

Marin Sonoma Narrows – B4

D.S. #5889
Updated

Subject: Current Estimated Right of Way Costs

We have completed an estimate of the right of way costs for the above referenced project based on maps we received from you on February 9, 2011 and the following assumptions and limiting conditions.

[ ] 1. The mapping did not provide sufficient detail to determine the limits of the right of way required.

[ ] 2. The transportation facilities have not been sufficiently designed so our estimator could determine the damages to any of the remainder parcels affected by the project.

[ ] 3. Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the early design requirements.

[ ] 4. This estimate does not include $_____right of way costs previously incurred on the project, which may affect the total project right of way costs for programming purposes.

[ ] 5. We have determined there are no right of way functional involvements in the proposed project at this time, as designed.

Right of Way Lead Time will require a minimum of 28 months after we begin receiving final right of way requirements (PYPSCAN node No. 224), necessary environmental clearance has been obtained, and freeway agreements have been approved. From the date of receipt of final right of way requirements (PYPSCAN node No. 265), we will require a minimum of 24 months prior to the date of certification of the project. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed. Either of these actions may reflect adversely on the District's other programs or our public image generally.

Right of Way Resource Manager

Attachments:

[✓] Right of Way Data Sheet – Page One (always required)
[✓] Right of Way Data Sheet – All Pages (required when interest in real property is being acquired)
[✓] Utility Information Sheet
[✓] Railroad Information Sheet

RIGHT OF WAY DATA SHEET

TO: URS Corporation

Date 4/5/11 D.S. # 5889

Dist 04 Co Son Rte 101 PM 2.5/4.1

ATTN: Ramsey Hissen

EA 2640C2

Project Description: MSN B4

SUBJECT: Right of Way Data – Alternate No.

1. Right of Way Cost Estimate:

		Current Value (Future Use)	Escalation Rate	Escalated Value
A.	Acquisition, including Excess Lands, Damages, and Goodwill.	$ 269,000.00	%	$ 269,000.00
	Project Permit Fees			$ 00.00
	Grantor's Appraisal Cost			$ 20,000.00
B.	Utility Relocation (State Share)	$ 291,000.00	%	$ 291,000.00
C.	Railroad (C & M)			$ 30,000.00
D.	Relocation Assistance	$ 00.00	%	$ 00.00
E.	Clearance/Demolition	$ 00.00	%	$ 00.00
F.	Title and Escrow Fees	$ 5,000.00	%	$ 5,000.00
G.	TOTAL ESCALATED VALUE			$ 615,000.00
H.	Construction Contract Work	$		

2. Anticipated Date of Right of Way Certification —

3. Parcel Data:

Type		Dual/Appr	Utilities		RR Involvements	
X			U4-1	3	None	
A	1		-2		C&M Agrmt	1
B	3		-3	4	Svc Contract	
C			-4		Design	
D			U5-7		Const.	
E	XXXX		-8		Lic/RE/Clauses	1
F	XXXX		-9	7		
					Misc R/W Work	
					RAP Displ	0
					Clear Demo	0
Total	4				Const. Permits	0
					Condemnation	1

Areas: Right of Way _____ No. Excess Parcels _____ Excess _____

Enter PMCS Screens 4 / 5 / 11 by [illegible]

Enter AGRE Screen (Railroad data only) _____/_____/_____ by _____

4. Are there any major items of construction contract work?
Yes ☐ No ☒ (If yes, explain)

5. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.). No right of way required ☐

There are four parcels required for this project. An industrial parcel requires an ingress and egress easement and a TCE for dewatering basin and staging area, another industrial parcel requires a TCE for dewatering basin and staging area, A City of Petaluma parcel requires a TCE and the final parcel is the Sonoma county Water Agency which has a fee take and a TCE.

6. Is there an effect on assessed valuation?
Yes ☐ Not Significant ☒ No ☐ (If yes, explain)

7. Are utility facilities or rights of way affected? Yes ☒ No ☐
(If yes, attach Utility Information Sheet Exhibit 01-01-05)

8. Are railroad facilities or rights of way affected? Yes ☒ No ☐
(If yes, attach Railroad Information Sheet Exhibit 01-01-06)

9. Were any previously unidentified sites with hazardous waste and/or material found?
Yes ☐ None evident ☒ (If yes, attach memorandum per Procedural Handbook Volume 1, Section 101.011)

10. Are RAP displacements required? Yes ☐ No ☒
(If yes, provide the following information)

No. of single family _____ No. of business/non profit _____

No. of multi-family _____ No. of farms _____

Based on Draft/Final Relocation Impact Statement/Study dated _____, it is anticipated that sufficient replacement housing (will/will not) be available without Last Resort Housing.

11. Are there material borrow and/or disposal sites required? Yes ☐ No ☒
(If yes, explain)

12. Are there potential relinquishments and/or abandonments? Yes ☐ No ☒
(If yes, explain)

13. Are there any existing and/or potential Airspace sites? Yes ☐ No ☒
(If yes, explain)

14. Are there Environmental Mitigation costs? Yes ☒ No ☐
(If yes, explain)

Mitigation costs are being handled by SCTA per Guy Preston.

15. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if District proposes less that PMCS lead time and/or if significant pressures for project advancement are anticipated.)

PYPSCAN lead time (from Regular R/W to project certification) 28 months

16. Is it anticipated that all Right of Way work be performed by CALTRANS staff?
Yes ☒ No ☐ (If no, discuss)

Assumptions and Limiting Conditions

- This data sheet was completed without a hazardous waste/materials report.
- Information on this data sheet was based on maps provided by Ramsey Hissen on 2/10/11.

Evaluation Prepared By: Lynn White

Right of Way:	Name		Date	4-5-11
Railroad:	Name		Date	4-5-11
Utilities:	Name		Date	4-5-11

Recommended for Approval:

Right of Way Capital Cost Coordinator

I have personally reviewed this Right of Way Data Sheet and all supporting information. It is my opinion that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set forth, and find this Data Sheet complete and current.

Chief, R/W Appraisal Services

4/8/11
Date

cc: Program Manager
Project Manager

UTILITY INFORMATION SHEET

1. Utility Owners located within project limits:

   AT&T, Qwest Comm, PG&E and Comcast

2. Facilities potentially impacted by project (if known, include Owner(s) and facility type(s)):

   PG&E-gas and electric distribution, AT&T-OH telephone & fiber optics u/g. Qwest Comm-fiber optics, Comcast-fiber optics

3. Anticipated Workload:
   - X Utility Verification required
   - X Positive Identification
   - X Utility Relocation
   - ____ Other (Specify)

4. Additional information concerning anticipated utility involvements (include limiting conditions and a narrative addressing likelihood that conflicts will occur);

   AT&T fiber optic will be 100% state liability due to 2nd move. Fiber optic relocation may vary +/- depending on conflict.

   ____ Involves possible relocation of electric transmission facilities
   (If X'd, Data sheet should be forwarded to environmental)

5. PMCS input information

U4-1	3	Owner Expense Involvements	U5-7	____	Verifications-without involvements
U4-2	____	State Expense Involvements *(Conventional, No Fed Aid)*	U5-8	____	Verifications-50% involvements
U4-3	4	State Expense Involvements *(Freeway, No Fed Aid)*	U5-9	7	Verifications resulting in involvements
U4-4	____	State Expense Involvements *(Conventional or Freeway, No Fed Aid)*			

NOTE: The sum of the U-4's must equal the sum of ½ of the U5-8's and all of the U5-9's.

ESTIMATED STATE SHARE OF COSTS $290,950.00

Prepared by:

Edgar Velez
Right of Way Utility Coordinator

4/5/11
Date

RAILROAD INFORMATION SHEET

1. Describe railroad facilities or right of way affected.

   S.M.A.R.T.

2. When branch lines or spurs are affected, would acquisition and/or payment of damages to businesses and/or industries served by the railroad facility be more cost effective than construction of a facility to perpetuate the rail services? (See Procedural Handbook Volume 4a, Chapter 440 for further detail.)
   Yes ☐ No ☐ (If yes, explain)

3. Discuss types of agreements and rights required from the railroads. Are grade crossings requiring service contracts, or grade separations requiring construction and maintenance agreements involved?

   C & M Agreement

4. Remarks (Nonoperating railroad right of way involved?)

5. PMCS Input Information

RR Involvements		
None		
C&M Agreement		1
Svc Contract		
	Design	
	Const.	
Lic/RE Clauses		1

Prepared By: Pat Coggins

Pat Coggins
Right of Way Railroad Coordinator

4/05/11
Date

Tables B2 – B6

Table B2: Marin-Sonoma Narrows (MSN) Contract B1 Utility Relocation Cost Estimate
EA: 04-26407

Utility Relocation	Count / Length	Unit	Unit Cost		Utility Cost Estimate		State Liability	Total Estimated Cost (State Share)
PG&E - 16" Gas (Buck Center)	1,824	lf	$800		$1,459,200		100%	$1,459,200
PG&E 16" Gas (Buck Center)	1,820	lf	$800		$1,456,000		100%	$1,456,000
NMWD - 30" Water*	10,885	lf	$487		$5,300,995			$0
NMWD - Oversight		LS			$386,419		100%	$386,419
PG&E - 12" Gas (West- Silver East)	2,592	lf	$700		$1,814,400		100%	$1,814,400
PG&E - 16" Gas (East - Silvera East)	2,671	lf	$800		$2,136,800		100%	$2,136,800
PG&E - 12kV & 60kV Electrical Transmission (Silvera East)	18	poles	$25,000		$450,000		50%	$225,000
Verizon - Overhead Telephone (Olompali)	11	poles	$4,000		$44,000		50%	$22,000
Verizon Wireless - Underground Telephone (Redwood I/C))	98	lf	$300		$29,400		50%	$14,700
AT&T - Overhead Telephone	22	poles	$3,410		$75,020		50%	$37,510
PG&E - 8/12" Gas	3,132	lf	$800		$2,505,600		50%	$1,252,800
PG&E - 12 kV & 60 kV OH Pole (Replacements Silvera East)	8	poles	$75,000		$600,000		50%	$300,000
Verizon - Overhead Telephone (Birkinstock to Miramonte)	26	lf	$4,000		$104,000		50%	$52,000
							Sub-total:	$9,156,829
							10% Contingency:	$915,683
Total Utility Cost Estimate (State Share)								**$10,072,512**

Six PG&E 60Kv, 12Kv poles are in conflict with NMWD water line - 100% State liability.

** NMWD relocation cost part of construction contract. Cost included in construction capital estimate*

Table B3: Marin-Sonoma Narrows (MSN) Contract B2 Utility Relocation Cost Estimate
EA: 04-26408

Utility Relocation	Count / Length	Unit	Unit Cost		Utility Cost Estimate		State Liability	Total Estimated Cost (State Share)
PG&E/AT&T-pole 60kv,12kv,Tel	23	Pole	$27,000		$621,000		50%	$310,500
PG&E/AT&T-12kv/Tel	15	Pole	$15,000		$225,000		50%	$112,500
PG&E - 60kv,12kv	3	Pole	$25,000		$75,000		50%	$37,500
PG&E - 12kv	3	Pole	$12,000		$36,000		50%	$18,000
AT&T - Telephone	6	Pole	$10,000		$60,000		50%	$30,000
NMWD - Oversight		LS	$100,000		$100,000		100%	$100,000
SCWA - Oversight		LS	$208,000		$208,000		100%	$208,000
City of Petaluma - Oversight		LS	$200,000		$200,000		100%	$200,000
NMWD - 2" Water	200	LF	$250		$50,000		100%	$50,000
NMWD - Water Meter Relocation	1	Each	$75,000		$75,000		100%	$75,000
PG&E - 12" Gas	1500	LF	$500		$750,000		50%	$375,000
PG&E - 8" Gas	100	LF	$800		$80,000		50%	$40,000
PG&E - 2" Gas	70	LF	$300		$21,000		50%	$10,500
PG&E - 1" Gas	20	LF	$300		$6,000		50%	$3,000
PG&E - 3/4" Gas	70	LF	$300		$21,000		50%	$10,500
PGE - 1/2" Gas	450	LF	$300		$135,000		50%	$67,500
AT&T - Under Ground Copper	200	LF	$25.00		$5,000		50%	$2,500
PG&E - Under Ground Electric	200	LF	$200.00		$40,000		50%	$20,000
PG&E - 12kv (B4)	2	Pole	$12,000		$2,400		50%	$1,200
PG&E - 8" Gas (B4)	300	LF	$800		$240,000		50%	$120,000
AT&T - Under Ground Copper (B4)	500	LF	$25		$12,500		50%	$6,250
							Subtotal:	$1,797,950
						10% Contingency:		$179,795
Estimated Cost (State Share)								**$1,977,745**

Notes:
The 8"gas line may require hand digging therefore more costly per linear foot. $800/lf.
The 12" gas will relocated along roadway paved area less labor envolved.$500/lf.
NMWD, SCWA and City of Petaluma water will be relocated as part of the construction contract. Oversight part of R/W utility cost

Table B4: Marin-Sonoma Narrows (MSN) Contract B3 Utility Relocation Cost Estimate
EA: 04-26409

Utility Relocation	Count / Length	Unit	Unit Cost		Utility Cost Estimate		State Liability	Total Estimated Cost (State Share)
PG&E - 60kv, 12kv*	**6**	**Pole**	$25,000		$150,000		**100%**	$150,000
PG&E- 60kv, 12kv	**35**	**Pole**	$25,000		$875,000		**50%**	$437,500
PG&E - 1" Gas	**1,620**	**Lf**	$250		$405,000		**50%**	$202,500
AT&T - Telephone	**14**	**Pole**	$6,000		$84,000		**50%**	$42,000
NMWD - 30" Water	**10,000**	**Lf**	$500		$5,000,000		**100%**	$5,000,000
NMWD - 30" Water	**1,149**	**Lf**	$500		$574,500		**0%**	$0
NMWD - Oversight		**LS**			$867,600		**100%**	$867,600
							Subtotal	$6,699,600
							****5% Contingency**	$330,980
Total Utility Cost Estimate								**$7,030,580**

** Oversight cost estimated as 15% of Capital Cost*

*** The contingency is reduced to 5% to account for contingency included in the NMWD cost*

Table B5: MARIN SONOMA NARROWS - PHASE 1 CONTRACTS
OFF-SITE & ON-SITE ENVIRONMENMENTAL MITIGATION ESTIMATE

ID	Impact / Mitigation Type	Units	Unit Price	A1			B1			B2			B3			Phase 1 Total	
				Quantities		Cost	Quantities		Cost	Quantities		Cost	Quantities		Cost	Offsite Mitigation	Cost
				Impacts	Mitigation		Impacts	Mitigation		Impacts	Mitigation		Impacts	Mitigation			
1	Permanent Wetlands of the US (1:1)	CREDITS	$ 60,820	2.00	2.00	$ 121,640	35.00	35.00	$ 2,128,700	10.00	10.00	$ 608,200	29.00	29.00	$ 1,763,780	76.00	$ 4,622,320
2	Permanent Waters of the US (1:1)	AC	N/A	0.11	0.00	$ -	0.22	0.00	$ -	0.19	0.00	$ -	1.31	0.00	$ -	0.00	$ -
3	Other Wetlands/Waters (State) (3:1)	AC	$ 390,000	0.00	0.00	$ -	0.16	0.48	$ 187,200	0.00	0.00	$ -	0.03	0.09	$ 35,100	0.57	$ 222,300
4	Storm Water & Hydromodification (1:1)	AC	$ 75,000	0.00	0.00	$ -	0.00	0.00	$ -	0.00	0.00	$ -	0.00	0.00	$ -	0.00	$ -
5A	California Red Legged Frog (1:1)	AC	$ 10,000	0.00	0.00	$ -	54.40	54.40	$ 544,000	58.61	58.61	$ 586,100	55.01	55.01	$ 550,100	168.02	$ 1,680,200
5B	Corridor Residual Red Legged Frog (1:1)	AC	$ 10,000	0.00	0.00			0.00	$ -	35.77	35.77	$ 357,700		0.00	$ -	35.77	$ 357,700
5C	Total California Red Legged Frog (1:1)																
	Trees - Non Riparian (Visual Impacts)																
6	Non-Riparian Oaks (Residual 5:1) (1:1 in A only)	EA	$ 2,000	60	4	$ 8,000	63	233	$ 466,000	70	350	$ 700,000	30	0	$ -	587	$ 1,174,000
7	Other Non - Riparian Natives (Residual 5:1) (1:1 in A1)	EA	$ 2,000	31	0	$ -	75	0	$ -	15	0	$ -	25	0	$ -	0	$ -
8	Non - Riparian non-native (Residual 1:1)	EA	$ 2,000	9	0	$ -	22	0	$ -	105	0	$ -	5	0	$ -	0	$ -
	Trees - Riparian (CDFG Impacts)																
9	Riparian Oaks (Residual 5:1)	EA	$ 2,000	7	0	$ -	1	0	$ -	5	25	$ 50,000	39	0	$ -	25	$ 30,000
10	Other Riparian Natives (Residual 3:1)	EA	$ 2,000	7	0	$ -	15	0	$ -	5	15	$ 30,000	133	0	$ -	15	$ 30,000
11	Riparian Non - Native (Residual 1:1)	EA	$ 2,000	3	0	$ -	1	0	$ -	20	20	$ 40,000	3	0	$ -	20	$ 40,000
12	Cultural Resources	LS	$ 2,500,000	0.000	0.000	$ -	0.000	0.000	$ -	0.000	0.000	$ -	0.000	0.000	$ -	0.000	$ -
13	Rookery Mitigation	LS	$ 358,000	0.000	0.000	$ -	0.000	0.000	$ -	1.000	1.000	$ 358,000	0.000	0.000	$ -	1.000	$ 358,000
	TOTALS:					$ 129,640			$ 3,325,900			$ 2,730,000			$ 2,348,980		$ 8,514,520

Notes:

1. Tree counts are estimates and require additional surveys for final verification.
2. Waters of the U.S. are mitigated as part of construction contracts. No off-site cost.
3. All Storm Water & Hydromodification mitigation will be on-site as part of construction contract
4. ID # 5C - 204 Acres per Biological Opinion (BO)
5. Off site mitigation for ID #'s 7-8 is zero. ED requires mitigation only where planting can be done on-site.
6. Cultural Resources (ID #12) is not an off-site mitigation cost. Mitigation is done as part of PS&E budget.
7. Permanent Wetlands (ID #1) actual purchase cost.

Table B6: MARIN SONOMA NARROWS - CONTACT L1
ON-SITE TREE MITIGATION AS PART OF FOLLOW-UP LANDSCAPE PROJECT

ID	Impact / Mitigation Type	Units	Unit Price for On-Site Mitigation	A1					B1					B2					B3					Total	
				Quantities				Cost	Quantities				Cost	Quantities				Cost	Quantities				Cost	Quantity	Cost
				Total Impacts	Total Mitigation	On-Site Mitigation	Off-Site Mitigation	On-Site Mitigation	Total Impacts	Total Mitigation	On-Site Mitigation	Off-Site Mitigation		Total Impacts	Total Mitigation	On-Site Mitigation	Off-Site Mitigation	On-Site Mitigation	Total Impacts	Total Mitigation	On-Site Mitigation	Off-Site Mitigation	On-Site Mitigation	On-Site Mitigation	On-Site Mitigation
	Trees - Non Riparian																								
6	Non-Riparian Oaks (5:1) (1:1 in A only)	EA	$ 1,520	60	60	56	4	$ 85,120	63	315	82	233	$ 124,640	70	350		350	$ -	30	150	150	0	$ 228,000	288	$ 437,760
7	Other Non - Riparian Natives (5:1 & 1:1 in A1)	EA	$ 1,520	31	31		31	$ -	75	375		375	$ -	15	75		75	$ -	25	125		125	$ -	0	$ -
8	Non - Riparian non-native (1:1)	EA	$ 1,520	9	9		9	$ -	22	22		22	$ -	105	105		105	$ -	5	5		5	$ -	0	$ -
	Trees - Riparian																								
9	Riparian Oaks (5:1)	EA	$ 1,520	7	35	35	0	$ 53,200	1	5	5	0	$ 7,600	5	25	0	25	$ -	39	195	195	0	$ 296,400	235	$ 357,200
10	Other Riparian Natives (3:1)	EA	$ 1,520	7	21	21	0	$ 31,920	15	45	45	0	$ 68,400	5	15	0	15	$ -	133	399	399	0	$ 606,480	465	$ 706,800
11	Riparian Non - Native (1:1)	EA	$ 1,520	3	3	3	0	$ 4,560	1	1	1	0	$ 1,520	20	20	0	20	$ -	3	3	3	0	$ 4,560	7	$ 10,640
	TOTALS:			117	159	115	44	$ 174,800	177	763	133	630	$ 202,160	220	590	0	590	$ -	235	877	747	130	$ 1,135,440	995	$ 1,512,400

Notes:

1 Total Impacts is linked to Off-Site Impact Spreadsheet.

2 See Contract L1 estimate for total Contract L1 Cost

Appendix C Construction Cost Estimates

1) Award Summary for Contract A1
2) 95% Construction Cost Estimate for Contract B1
3) 95% Construction Cost Estimate for Contract B2
4) 65% Construction Cost Estimate for Contract B3
5) Six-page Estimate for Contract A2
6) Six-page Estimate for Contract B1—Phase II
7) Six-page Estimate for Contract B2—Phase II
8) Six-page Estimate for Contract B3—Phase II
9) Six-page Estimate for Contract C2
10) 95% Construction Cost Estimate for Contract C3
11) Preliminary Estimate for Contract L1 (On-site)
12) Preliminary Estimate for Contract L2 (On-site)
13) Preliminary Estimate for Contract L2 (Off-site)

Award Summary for Contract A1

State of California
Department of Transportation

CONTRACT AWARD SUMMARY

Description
In Marin County In And Near Novato From Route 37 To Atherton Avenue

Construct HOV Lanes and Widen Bridge

File
04-Mrn-101-18.6/R22.3

NO FED AID

Contract No. 04-264064 0400000732

B.O. Date	No. of Proposals	Bids Received	Engr's Estimate	No. Working Days	% Under Estimate	Goals %	Cert %
4/26/11	022	6	$32,076,610	77	24.31	No Goals	No Goals 0.6

Award to (Name, Address, & Telephone) 132128 A
GHILOTTI BROTHERS/RM HARRIS JV
525 JACOBY STREET
SAN RAFAEL CA 94901 (415)454-7011

Amount
$24,280,252.85 + 77 Days
$25,182,461.85

Next Lowest Bidders
O C JONES AND SONS INC — $25,557,492.10 + 87 Days $26,576,871.10

GHILOTTI CONSTRUCTION COMPANY INC — $25,299,487.25 + 146 Days $27,010,169.25

Project Allotment
$27,890,000

Budget Allocation
2010/11 721.000 $31,433,000 - $6,010,000 G12 + 2010/11 075.600 $3,050,000 - $583,000 G12

Check Appropriate Box

- [ ] Contractor is certified as a small business by OSBCR
- [ ] California Contractor status NOT claimed
- [X] This project includes railroad insurance
- [ ] This Federal Aid Project does NOT require FHWA approval for award
- [ ] FHWA concurs in recommendation of award of this Federal Aid Project

○ None ○ Measure ○ Local Only ○ Local F ◉ STIP ○ SHOPP ◉ Other ○ Maintenance ○ Min

Delivery Plan ? ○ Yes ○ No

☐ Abbrev. Award ☐ Early Return/S ☐ Prebid Meeting ☐ Split Funde

☒ A+B ☐ Design Sequencing ☐ Escrow ☐ Incentive/Disincentive ☐ Informal ☒ Partnering ☐ Pre-Award Qualifi

Remarks

This is an A+B project. Each bidder submitted a bid for the A (bid items) portion, and a bid for an estimated number of working days at the Department's predetermined rate of $11,717.00 per day, not to exceed 300 days, for the B (working days) portion. These two figures are added together for comparison purposes to determine the ranking of the bidders. The total number of working days to complete all work in the contract shall be the number of working days bid, not to exceed 300 days.

Contractor shall deliver to Railroad a Certificate of Insurance which shall stipulate that thirty (30) days advance written notice of cancellation or non-renewal shall be given to Railroad.

Bid Surety
Pay/Perf Surety

CONTRACT AWARDED
June 2, 2011

95% Construction Cost Estimate for Contract B1

PRELIMINARY SCHEDULE OF PRICES AND QUANTITIES FOR
04-Mrn-PM R23.2/27.1
Project Number: 0400000733 - Phase 1
(EA 04-264071)

Marin/Sonoma Narrows HOV Widening Project -
1.0 Miles North of North Novato Overhead To 0.6 miles South of Sonoma County Line

Revised 95% BEES Estimate*
May 27, 2011

Item No.	Item Code	Final Pay Item	Item Description	Unit of Measure	Estimated Quantity	Unit Cost	Total Cost
1	070012		Progress Schedule (Critical Path Method)	LS	1	$ 20,000.00	$ 20,000
2	070018		Time-Related Overhead	LS	1	$ 1,000,000.00	$ 1,000,000
3	074015		Temporary Active Treatment System	LS	1	$ 75,000.00	$ 75,000
4	074016		Construction Site Management	LS	1	$ 100,000.00	$ 100,000
5	074019		Prepare Storm Water Pollution Prevention Plan	LS	1	$ 10,000.00	$ 10,000
6	071325		Temporary Fence (Type ESA)	LF	21,100	$ 3.00	$ 63,300
7	074028		Temporary Fiber Roll	LF	20,400	$ 3.00	$ 61,200
8	074042		Temporary Concrete Washout (Portable)	LS	1	$ 25,000.00	$ 25,000
9	074033		Temporary Construction Entrance	EA	16	$ 2,000.00	$ 32,000
10	074035		Temporary Check Dam	LF	850	$ 10.00	$ 8,500
11	074038		Temporary Drainage Inlet Protection	EA	31	$ 250.00	$ 7,750
12	074040		Temporary Hydraulic Mulch (Bonded Fiber Matrix)	SQYD	21,800	$ 1.00	$ 21,800
13	074041		Street Sweeping	LS	1	$ 15,000.00	$ 15,000
14	074056		Rain Event Action Plan	EA	90	$ 500.00	$ 45,000
15	074057		Storm Water Annual Report	EA	3	$ 2,000.00	$ 6,000
16	074058		Storm Water Sampling and Analysis Day	EA	40	$ 750.00	$ 30,000
17	129105A		Temporary Crash Cushion (Type Absorb 350)	EA	13	$ 10,000.00	$ 130,000
18	120090		Construction Area Sign	LS	1	$ 20,000.00	$ 20,000
19	120100		Traffic Control System	LS	1	$ 150,000.00	$ 150,000
20	120120		Type III Barricade	EA	12	$ 125.00	$ 1,500
21	120149		Temporary Pavement Marking (Paint)	SQFT	420	$ 3.00	$ 1,260
22	120159		Temporary Traffic Stripe (Paint)	LF	31,200	$ 0.75	$ 23,400
23	120165		Channelizer (Surfaced Mounted)	EA	250	$ 40.00	$ 10,000
24	120300		Temporary Pavement Marker	EA	1,970	$ 4.00	$ 7,880
25	128650		Portable Changeable Message Sign	EA	3	$ 10,000.00	$ 30,000
26	129000		Temporary Railing (Type K)	LF	19,600	$ 7.00	$ 137,200
27	129100		Temporary Crash Cushion Module	EA	112	$ 200.00	$ 22,400
28	150206		Abandon Culvert	EA	1	$ 1,000.00	$ 1,000
29	150227		Abandon Pipeline	LF	9,560	$ 36.00	$ 344,160
30	150605		Remove Fence	LF	22,700	$ 3.00	$ 68,100
31	150662		Remove Metal Beam Guard Railing	LF	2,570	$ 5.00	$ 12,850
32	150685		Remove Existing Irrigation Facility	LS	1	$ 5,000.00	$ 5,000
33	150714		Remove Thermoplastic Traffic Stripe	LF	29,400	$ 1.00	$ 29,400
34	150715		Remove Thermoplastic Pavement Marking	SQFT	390	$ 3.00	$ 1,170
35	150722		Remove Pavement Marker	EA	1,780	$ 2.00	$ 3,560
36	150742		Remove Roadside Sign	EA	45	$ 150.00	$ 6,750
37	150805		Remove Culvert	LF	2,100	$ 25.00	$ 52,500
38	150806		Remove Pipe	LF	1,190	$ 100.00	$ 119,000
39	150820		Remove Inlet	EA	13	$ 500.00	$ 6,500
40	150821		Remove Headwall	EA	16	$ 850.00	$ 13,600
41	150825		Remove Reinforced Concrete Box Culvert	LF	6.90	$ 275.00	$ 1,898
42	150860		Remove Base and Surfacing	CY	10,800	$ 15.00	$ 162,000

PRELIMINARY SCHEDULE OF PRICES AND QUANTITIES FOR
04-Mrn-PM R23.2/27.1
Project Number: 0400000733 - Phase 1
(EA 04-264071)

Marin/Sonoma Narrows HOV Widening Project -
1.0 Miles North of North Novato Overhead To 0.6 miles South of Sonoma County Line

Revised 95% BEES Estimate*
May 27, 2011

Item No.	Item Code	Final Pay Item	Item Description	Unit of Measure	Estimated Quantity	Unit Cost	Total Cost
43	152390		Relocate Roadside Sign	EA	2	$ 250.00	$ 500
44	153103		Cold Plane Hot Mix Asphalt	SQYD	6,990	$ 3.00	$ 20,970
45	153221		Remove Concrete Barrier	LF	1,810	$ 15.00	$ 27,150
46	153210A		**Remove Concrete (Lined Ditch)**	LF	3,610	$ 20.00	$ 72,200
47	156590		Remove Crash Cushion (Sand Filled)	EA	24	$ 200.00	$ 4,800
48	157560		Bridge Removal (Portion)	LS	1	$ 33,400.00	$ 33,400
49	160101		Clearing and Grubbing	LS	1	$ 175,000.00	$ 175,000
50	170101		Develop Water Supply	LS	1	$ 20,000.00	$ 20,000
51	190101		Roadway Excavation	CY	153,000	$ 11.00	$ 1,683,000
52	014762		Settlement Instrumentation (Survey Hubs)	LS	1	$ 20,000.00	$ 10,000
53	190107		Roadway Excavation (Type Y-1)(Aerially Deposited Lead)	CY	57	$ 100.00	$ 5,700
54	190110		Lead Compliance Plan	LS	1	$ 4,000.00	$ 4,000
55	190111		ADL Aerial Burial Location Report	LS	1	$ 2,500.00	$ 2,500
56	190139		Roadway Excavation (Unsuitable Material)	CY	36,500	$ 15.00	$ 547,500
57	190160		Rock Excavation (Controlled Blasting)	CY	42	$ 500.00	$ 21,000
58	192003	F	Structure Excavation (Bridge)	CY	552	$ 100.00	$ 55,200
59	192037	F	Structure Excavation (Retaining Wall)	CY	1,157	$ 60.00	$ 69,420
60	192049	F	Structure Excavation (Soldier Pile Wall)	CY	428	$ 75.00	$ 32,100
61	192057	F	Structure Excavation (Type Y-1)(Aerially Deposited Lead)	CY	94	$ 100.00	$ 9,400
62	193003	F	Structure Backfill (Bridge)	CY	337	$ 70.00	$ 23,590
63	193013	F	Structure Backfill (Retaining Wall)	CY	808	$ 70.00	$ 56,560
64	193029	F	Structure Backfill (Soldier Pile Wall)	CY	73	$ 100.00	$ 7,300
65	193031	F	Pervious Backfill (Retaining Wall)	CY	77	$ 100.00	$ 7,700
66	193118	F	Concrete Backfill	CY	199	$ 180.00	$ 35,820
67	193119	F	Lean Concrete Backfill	CY	308	$ 140.00	$ 43,120
68	198001		Imported Borrow	CY	86,900	$ 15.00	$ 1,303,500
69	198205		Subgrade Enhancement Geotextile	SQYD	1,960	$ 15.00	$ 29,400
70	203002		Erosion Control (Compost Blanket)	CY	9,080	$ 40.00	$ 363,200
71	203021		Fiber Rolls	LF	60,500	$ 2.50	$ 151,250
72	203025		Compost, Incorporate	SQYD	22,300	$ 5.25	$ 117,075
73	020692		Imported Biofiltration Soil	CY	4,510	$ 40.00	$ 180,400
74	203026		Move-in/Move-out (Erosion Control)	EA	10	$ 900.00	$ 9,000
75	203031		Erosion Control (Hydroseed)(Seed Type 1 and 2)	SQFT	1,420,000	$ 0.15	$ 213,000
76	203034		Rolled Erosion Control Product (Netting)	SQFT	414,000	$ 0.45	$ 186,300
77	204013		Plant (Group M)	EA	14,800	$ 15.00	$ 222,000
78	208738	F	8" Corrugated High Density Polyethylene Pipe Conduit	LF	125	$ 50.00	$ 6,250
79	208808	F	8" Welded Steel Pipe Conduit (0.25" Thick)	LF	108	$ 120.00	$ 12,960
80	208820		20" Welded Steel Pipe (0.25" Thick)	LF	70	$ 200.00	$ 14,000
81	013812		12" Cement-Mortar Lined and Tape Wrapped Steel Pipe (0.134" Thick)	LF	190	$ 160.00	$ 30,400
82	013830		30" Cement-Mortar Lined and Tape Wrapped Steel Pipe (0.134" Thick)	LF	10,900	$ 290.00	$ 3,161,000
83	250401		Class 4 Aggregate Subbase	CY	18,100	$ 15.00	$ 271,500
84	260201		Class 2 Aggregate Base	CY	16,200	$ 45.00	$ 729,000

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May 27, 2011

Item No.	Item Code	Final Pay Item	Item Description	Unit of Measure	Estimated Quantity	Unit Cost	Total Cost
85	280000		Lean Concrete Base	CY	3,060	$ 85.00	$ 260,100
86	390132		Hot Mix Asphalt (Type A)	TON	22,600	$ 75.00	$ 1,695,000
87	394044		Place Hot Mix Asphalt Concrete Dike (Type C)	LF	190	$ 3.00	$ 570
88	394049		Place Hot Mix Asphalt Concrete Dike (Type F)	LF	240	$ 4.00	$ 960
89	394060		Data Core	LS	1	$ 10,000.00	$ 10,000
90	397005		Tack Coat	TON	21.20	$ 700.00	$ 14,840
91	490603		24" Cast-In-Drilled-Hole Concrete Piling	LF	880	$ 180.00	$ 158,400
92	49XXXX		30" Drilled Hole	LF	2,770	$ 60.00	$ 166,200
93	49XXXX		Steel Soldier Piling (W21x44)	LF	280	$ 38.00	$ 10,640
94	49XXXX		Steel Soldier Piling (W21x68)	LF	430	$ 44.00	$ 18,920
95	49XXXX		Steel Soldier Piling (W21x101)	LF	140	$ 62.00	$ 8,680
96	49XXXX		Steel Soldier Piling (2 W18x35)	LF	1,230	$ 65.00	$ 79,950
97	49XXXX		Steel Soldier Piling (2 W18x60)	LF	710	$ 92.00	$ 65,320
98	500001		Prestressing Cast-In-Place Concrete	LS	1	$ 18,300.00	$ 18,300
99	500050		Tieback Anchor	EA	78	$ 2,400.00	$ 187,200
100	510051	F	Structural Concrete, Bridge Footing	CY	292	$ 400.00	$ 116,800
101	510053	F	Structural Concrete, Bridge	CY	312	$ 750.00	$ 234,000
102	510060	F	Structural Concrete (Retaining Wall)	CY	490	$ 400.00	$ 196,000
103	510085	F	Structural Concrete, Approach Slab (Type EQ)	CY	7	$ 1,000.00	$ 7,000
104	510502	F	Minor Concrete (Minor Structure)	CY	75.14	$ 1,000.00	$ 75,140
105	510526		Minor Concrete (Backfill)	CY	52.50	$ 200.00	$ 10,500
106	510540		Minor Concrete (Structure)	CY	560	$ 1,000.00	$ 560,000
107	511106		Drill and Bond Dowel	LF	480	$ 30.00	$ 14,400
108	511035		Architectural Treatment	SQFT	4,720	$ 10.00	$ 47,200
109	511047	F	Anti-Graffiti Coating	SQFT	4,717	$ 0.80	$ 3,774
110	5110XX		Architectural Treatment (Textured Shotcrete)	SQFT	5,810	$ 8.00	$ 46,480
111	51XXXX		Concrete Lagging	SQFT	10,100	$ 22.00	$ 222,200
112	519091		Joint Seal (MR 1 1/2")	LF	13	$ 36.00	$ 468
113	519100		Joint Seal (MR 2")	LF	13	$ 56.00	$ 728
114	520102	F	Bar Reinforcing Steel (Bridge)	LB	162,427	$ 1.10	$ 178,670
115	520120	F	Headed Bar Reinforcement	EA	88	$ 15.00	$ 1,320
116	520101	F	Bar Reinforcing Steel	LB	88,782	$ 1.00	$ 88,782
117	520103	F	Bar Reinforcing Steel (Retaining Wall)	LB	114,600	$ 1.10	$ 126,060
118	530100		Shotcrete	CY	300	$ 500.00	$ 150,000
119	5XXXXX	F	Cap Livestock Tunnel (with Access Hatches)	LS	1	$ 8,000.00	$ 8,000
120	800702A		Removable Bollard	EA	6	$ 1,200.00	$ 7,200
121	012792		Cathodic Protection	EA	11	$ 50,000.00	$ 550,000
122	01383X		Pipe Disinfection Including Dechlorination and Disposal of Disinfection Water	LS	1	$ 50,000.00	$ 50,000
123	012172		Water Service Connection	LS	1	$ 5,000.00	$ 5,000
124	019275A		4" Air/Vacuum Valve	EA	7	$ 1,500.00	$ 10,500
125	01536X		30" Butterfly Valve	EA	9	$ 20,000.00	$ 180,000
126	017177A		Telemetry System Wire and Conduit	LF	10,900	$ 15.00	$ 163,500

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127	560245		Furnish Laminated Sign Panel (2 1/2" - Type B)	SQFT	640	$ 30.00	$ 19,200
128	560248		Furnish Single Sheet Sign Aluminum Sign (0.063" - Unframed)	SQFT	620	$ 20.00	$ 12,400
129	560249		Furnish Single Sheet Sign Aluminum Sign (0.080" - Unframed)	SQFT	40	$ 20.00	$ 800
130	560251		Furnish Single Sheet Aluminum Sign (0.063" -Framed)	SQFT	190	$ 22.00	$ 4,180
131	566011		Roadside Sign - One Post	EA	130	$ 200.00	$ 26,000
132	566012		Roadside Sign - Two Post	EA	10	$ 500.00	$ 5,000
133	620060		12" Alternative Pipe Culvert	LF	16	$ 80.00	$ 1,280
134	620100		18" Alternative Pipe Culvert	LF	2,370	$ 60.00	$ 142,200
135	620140		24" Alternative Pipe Culverts	LF	470	$ 75.00	$ 35,250
136	620180		30" Alternative Pipe Culvert	LF	530	$ 125.00	$ 66,250
137	620220		36" Alternative Pipe Culvert	LF	210	$ 150.00	$ 31,500
138	650026		36" Reinforced Concrete Pipe	LF	55.90	$ 175.00	$ 9,783
139	665003		6" Corrugated Steel Pipe (0.079" Thick)	LF	61	$ 100.00	$ 6,100
140	665017		18" Corrugated Steel Pipe (0.079" Thick)	LF	590	$ 150.00	$ 88,500
141	680905		8" Perforated Plastic Pipe Underdrain	LF	2,900	$ 35.00	$ 101,500
142			8" Perforated Plastic Pipe	LF	6,600	$ 20.00	$ 132,000
143	641000		8" Plastic Pipe	LF	370	$ 20.00	$ 7,400
144	641001		8" Plastic Pipe Riser	LF	190	$ 35.00	$ 6,650
145	680901		4" Perforated Plastic Pipe Underdrain	LF	7,780	$ 25.00	$ 194,500
146	680902		4" Plastic Pipe Riser	LF	80	$ 15.00	$ 1,200
147	682008		Permeable Material (Blanket)	CY	7,600	$ 60.00	$ 456,000
148	692301		Anchor Assembly	EA	2	$ 500.00	$ 1,000
149	700617		Drainage Inlet Marker	EA	49	$ 45.00	$ 2,205
150	702610		6" Corrugated Steel Pipe Energy Dissipator	EA	1	$ 300.00	$ 300
151	702614		18" Corrugated Steel Pipe Energy Dissipator	EA	1	$ 500.00	$ 500
152	705307		12" Alternative Flared End Section	EA	1	$ 375.00	$ 375
153	705311		18" Alternative Flared End Section	EA	26	$ 600.00	$ 15,600
154	705315		24" Alternative Flared End Section	EA	5	$ 550.00	$ 2,750
155	705319		30" Alternative Flared End Section	EA	6	$ 750.00	$ 4,500
156	705321		36" Alternative Flared End Section	EA	6	$ 775.00	$ 4,650
157	721011		Rock Slope Protection (Backing No. 2, Method B)	CY	310	$ 150.00	$ 46,500
158	720107		Rock Slope Protection (Granular Material)	CY	3.44	$ 150.00	$ 516
159	727901		Minor Concrete (Ditch Lining)	CY	880	$ 400.00	$ 352,000
160	729010		Rock Slope Protection Fabric (Class 8)	SQYD	790	$ 15.00	$ 11,850
161	731502		Minor Concrete (Miscellaneous Construction)	CY	7	$ 350.00	$ 2,450
162	731517		Minor Concrete (Gutter)	CY	42	$ 350.00	$ 14,700
163			Minor Concrete (Curb Ramp)	CY	1	$ 350.00	$ 350
164			Minor Concrete (Textured Paving)	CY	88	$ 350.00	$ 30,800
165	750001	F	Miscellaneous Iron and Steel	LB	12,895	$ 1.50	$ 19,343
166	800701A		Fence (Type Split Wood)	LF	5,950	$ 25.00	$ 148,750
167	800XXX		Fence (No Climb)	LF	470	$ 20.00	$ 9,400
168	800321		Chain Link Fence (Type CL-4, Vinyl Clad)	LF	1,770	$ 18.00	$ 31,860

PRELIMINARY SCHEDULE OF PRICES AND QUANTITIES FOR
04-Mrn-PM R23.2/27.1
Project Number: 0400000733 - Phase 1
(EA 04-264071)

Marin/Sonoma Narrows HOV Widening Project -
1.0 Miles North of North Novato Overhead To 0.6 miles South of Sonoma County Line

Revised 95% BEES Estimate*
May 27, 2011

Item No.	Item Code	Final Pay Item	Item Description	Unit of Measure	Estimated Quantity	Unit Cost	Total Cost
169	800360		Chain Link Fence (Type CL-6)	LF	15,800	$ 12.00	$ 189,600
170	802520		6' Chain Link Gate (Type CL-6)	EA	1	$ 1,500.00	$ 1,500
171	820107		Delineator (Class 1)	EA	61	$ 50.00	$ 3,050
172	820118		Guard Railing Delineator	EA	170	$ 20.00	$ 3,400
173	820130		Object Marker	EA	26	$ 65.00	$ 1,690
174	832001		Metal Beam Guard Railing	LF	2,630	$ 35.00	$ 92,050
175	832070		Vegetation Control (Minor Concrete)	SQYD	3,190	$ 50.00	$ 159,500
176	839310		Double Thrie Beam Barrier	LF	1,110	$ 40.00	$ 44,400
177	839301		Single Thrie Beam Barrier	LF	290	$ 30.00	$ 8,700
178	839541		Transition Railing (Type WB)	EA	14	$ 3,100.00	$ 43,400
179	839555		End Cap	EA	14	$ 500.00	$ 7,000
180	839581		End Anchor Assembly (Type SFT)	EA	3	$ 1,000.00	$ 3,000
181	839584		Alternative In-Line Terminal System	EA	1	$ 2,700.00	$ 2,700
182	839585		Alternative Flared Terminal System	EA	35	$ 2,300.00	$ 80,500
183	839703		Concrete Barrier (Type 60C)	LF	1,710	$ 50.00	$ 85,500
184	839704	F	Concrete Barrier (Type 60D)	LF	925	$ 50.00	$ 46,250
185	839717	F	Concrete Barrier (Type 732 Modified)	LF	289	$ 85.00	$ 24,565
186	840504		4" Thermoplastic Traffic Stripe	LF	80,100	$ 0.75	$ 60,075
187	840505		6" Thermoplastic Traffic Stripe	LF	30,500	$ 1.00	$ 30,500
188	840506		8" Thermoplastic Traffic Stripe	LF	1,680	$ 1.50	$ 2,520
189	840515		Thermoplastic Pavement Marking	SQFT	1,010	$ 4.00	$ 4,040
190	840526		4" Thermoplastic Traffic Stripe (Broken 17-7)	LF	18,700	$ 0.50	$ 9,350
191	850101		Pavement Marker (Non-Reflective)	EA	1,070	$ 2.00	$ 2,140
192	850111		Pavement Marker (Retroreflective)	EA	2,070	$ 4.00	$ 8,280
193	860401		Lighting	LS	1	$ 196,000.00	$ 196,000
194	860402A		Lighting (County)	LS	1	$ 80,000.00	$ 80,000
195	860415		Lighting (Stage Construction)	LS	1	$ 10,000.00	$ 10,000
196	860090		Maintaining Existing Traffic Management System Elements During Construction	LS	1	$ 5,000.00	$ 5,000
197	860991		Integrated Camera Unit	EA	1	$ 4,000.00	$ 4,000
198	860992		Camera Control Unit	EA	1	$ 1,000.00	$ 1,000
199	860993		Video Encoder Unit	EA	1	$ 800.00	$ 800
200	860891		Traffic Operations System	LS	1	$ 149,000.00	$ 149,000
201	860999A		General Packet Radio System	EA	2	$ 1,600.00	$ 3,200
202	993002		Fire Hydrant	EA	2	$ 3,000.00	$ 6,000
203	999990		Mobilization (10%)	LS	1	$ 2,000,000	$ 2,000,000

*** Costs include 30" NMWD Aqueduct Relocation**

CONSTRUCTION SUBTOTAL	**$**	**24,020,000**
CONTINGENCIES (10%)	**$**	**2,402,000**
CONSTRUCTION TOTAL	**$**	**26,422,000**

PRELIMINARY SCHEDULE OF PRICES AND QUANTITIES FOR
04-Mrn-PM R23.2/27.1
Project Number: 0400000733 - Phase 1
(EA 04-264071)

Marin/Sonoma Narrows HOV Widening Project -
1.0 Miles North of North Novato Overhead To 0.6 miles South of Sonoma County Line

Revised 95% BEES Estimate*
May 27, 2011

Item No.	Item Code	Final Pay Item	Item Description	Unit of Measure	Estimated Quantity	Unit Cost	Total Cost
			SUPPLEMENTAL WORK ITEMS				
1	066070		Maintain Traffic	LS	1	$ 50,000.00	$ 50,000
2	066094		Value Analysis	LS	1	$ 10,000.00	$ 10,000
3	066099		Textured Paving Samples	LS	1	$ 20,000.00	$ 20,000
4	066162		Repair Slope	LS	1	$ 50,000.00	$ 50,000
5	066178		Additional Excavation and Backfill *(See 190101 and 190139)*	LS	1	$ 100,000.00	$ 100,000
6	066188		Environmental Mitigation (Relocation of Cultural Material)	LS	1	$ 200,000.00	$ 200,000
7	066198		Additional Imported Borrow *(See 198001)*	LS	1	$ 100,000.00	$ 100,000
8	066XXX		Additional Soldier-Pile Earthworks *(See 192049, 193029, & 190160)*	LS	1	$ 50,000.00	$ 50,000
9	066595		Water Pollution Control Maintenance Sharing	LS	1	$ 5,000.00	$ 5,000
10	066596		Additional Water Pollution Control Work	LS	1	$ 5,000.00	$ 5,000
11	066597		Storm Water Sampling and Analysis	LS	1	$ 8,000.00	$ 8,000
12	066920		Disputes Review Board	LS	1	$ 20,000.00	$ 20,000
13	066670		Payment Adjustments for Price Index Fluctuations (See Notes)	LS	1	$ 339,775.16	$ 339,775

SUPPLEMENTAL WORK SUBTOTAL $ 960,000

			STATE FURNISHED MATERIALS				
Item No.	Item Code		Item Description	Unit of Measure	Estimated Quantity	Unit Cost	Total Cost
1	066062		COZEEP Contract	LS	1	$ 75,000.00	$ 75,000
2	066065		Tow Truck Service Patrol	LS	1	$ 15,000.00	$ 15,000
3	66105		Resident Engineer's Office	LS	1	$ 300,000.00	$ 300,000
4	066814A		Reflective Numbers and Edge Sealer	LS	1	$ 500.00	$ 500
5	066871		Electrical Service Connections	LS	1	$ 3,000.00	$ 3,000
6	066871A		Telephone Service Connections	LS	1	$ 2,000.00	$ 2,000
	66876		Loop Detector Sensor Units	EA	10	$ 800.00	$ 8,000
7	066879A		Model 170 Controller Assembly in Type 334 Cabinet	EA	2	$ 6,000.00	$ 12,000

STATE FURNISHED MATERIALS SUBTOTAL $ 420,000

TOTAL CONSTRUCTION CAPITAL (Construction Subtotal, Supplemental Work Items, and State Furnished Materials) $ 27,802,000

NOTES:
1. California Statewide Crude Oil Price Index and Assumed Theoretical Asphalt Content :

Month	Crude Oil Price Index	HMA: Estimated % Asphalt Content	RHMA-G: Estimated % Asphalt Content
May-11	656.60	7.0	7.0

95% Construction Cost Estimate for Contract B2

SCHEDULE OF PRICES AND QUANTITIES FOR
EA# 264081. PM (0.9/3.6)
101 Marin-Sonoma Narrows (MSN) Contract B2: Petaluma Boulevard South Interchange & Petaluma River Bridge
July 28, 2011

Item No.	Item Code		Item Description	Unit	Total Quantity	Unit Price	Item Total
1	070012		Progress Schedule (Critical Path Method)	LS	40,000	$ 40,000.00	$ 40,000
2	070018		Time-Related Overhead	LS		$ 3,990,000.00	$ 3,990,000
3	071321		Temporary Fence	LF	13,400	$ 10.00	$ 134,000
4	071323A		Temporary Gate	EA	11	$ 800.00	$ 8,800
5	071324		Temporary Reinforced Silt Fence	LF	2,820	$ 15.00	$ 42,300
6	071325		Temporary Fence (Type ESA)	LF	2,690	$ 3.00	$ 8,070
7	073006		18" Temporary Culvert	LF	1,352	$ 90.00	$ 121,680
8	073006A		18" Temporary Slotted Corrugated Steel Pipe	LF	310	$ 200.00	$ 62,000
9	073102A		12" Temporary Welded Steel Pipe (0.105" Thick)	LF	50	$ 100.00	$ 5,000
10	074015		Temporary Active Treatment System	LS	30,000	$ 30,000.00	$ 30,000
11	074016		Construction Site Management	LS	290,000	$ 300,000.00	$ 300,000
12	074019		Prepare Storm Water Pollution Prevention Plan	LS	40,000	$ 40,000.00	$ 40,000
13	074028		Temporary Fiber Rolls	LF	42,300	$ 2.10	$ 88,830
14	074029		Temporary Silt Fence	LF	52,310	$ 1.80	$ 94,158
15	074032		Temporary Concrete Washout Facility	EA	5	$ 1,600.00	$ 8,000
16	074033		Temporary Construction Entrance	EA	15	$ 2,500.00	$ 37,500
17	074034		Temporary Cover	SQYD	14,700	$ 2.25	$ 33,075
18	074035		Temporary Check Dam	LF	2,500	$ 5.00	$ 12,500
19	074037		Move In/Move Out (Temporary Erosion Control)	EA	17	$ 900.00	$ 15,300
20	074038		Temporary Drainage Inlet Protection	EA	180	$ 300.00	$ 54,000
21	074040		Temporary Hydraulic Mulch (Bonded Fiber Matrix)	SQYD	90,950	$ 0.85	$ 77,308
22	074041		Street Sweeping	LS	30,000	$ 30,000.00	$ 30,000
23	074042		Temporary Concrete Washout (Portable)	EA	3	$ 5,000.00	$ 15,000
24	074056		Rain Event Action Plan	EA	227	$ 500.00	$ 113,500
25	074057		Storm Water Annual Report	EA	3	$ 2,000.00	$ 6,000
26	074058		Storm Water Sampling and Analysis Day	EA	120	$ 3,200.00	$ 384,000
27	120090		Construction Area Signs	LS	90,000	$ 90,000.00	$ 90,000
28	120100		Traffic Control System	LS	340,000	$ 340,000.00	$ 340,000
29	120120		Type III Barricade	EA	9	$ 250.00	$ 2,250
30	120149		Temporary Pavement Marking (Paint)	SQFT	3,277	$ 5.50	$ 18,024
31	120159		Temporary Traffic Stripe (Paint)	LF	191,209	$ 0.60	$ 114,725
32	120165		Channelizer (Surface Mounted)	EA	244	$ 40.00	$ 9,760
33	120300		Temporary Pavement Marker	EA	6,183	$ 3.75	$ 23,186
34	128650		Portable Changeable Message Sign	LS	50,000	$ 50,000.00	$ 50,000
35	129000		Temporary Railing (Type K)	LF	60,240	$ 12.00	$ 722,880
36	129100		Temporary Crash Cushion Module	EA	421	$ 200.00	$ 84,200
37	129510		Temporary Retaining Wall	SQFT	75,120	$ 8.00	$ 600,960
38	141103		Remove Yellow Thermoplastic Traffic Stripe (Hazardous Waste)	LF	27,500	$ 1.50	$ 41,250
39	148005		Noise Monitoring	LS	10,000	$ 10,000.00	$ 10,000
40	150206		Abandon Culvert	LF	789	$ 30.00	$ 23,670
41	150605		Remove Fence	LF	22,320	$ 1.80	$ 40,176
42	150620		Remove Gate	EA	6	$ 200.00	$ 1,200
43	150647		Remove Bollard	EA	31	$ 250.00	$ 7,750
44	150662		Remove Metal Beam Guard Railing	LF	5,017	$ 8.00	$ 40,136
45	150667A		Remove Double Thrie Beam Barrier	LF	4,340	$ 13.50	$ 58,590
46	150668		Remove Flared End Section	EA	1	$ 450.00	$ 450
47	150713		Remove Pavement Marking	SQFT	2,472	$ 2.20	$ 5,438
48	150714		Remove Thermoplastic Traffic Stripe	LF	72,268	$ 0.50	$ 36,134
49	150722		Remove Pavement Marker	EA	3,687	$ 1.50	$ 5,531
50	150742		Remove Roadside Sign	EA	102	$ 200.00	$ 20,400
51	150760		Remove Sign Structure	EA	1	$ 6,000.00	$ 6,000
52	150805		Remove Culvert	LF	2,659	$ 30.00	$ 79,770
53	150820		Remove Inlet	EA	26	$852.00	$ 22,152
54	150821		Remove Headwall	EA	11	$ 950.00	$ 10,450
55	150826		Remove Manhole	EA	1	$ 1,600.00	$ 1,600
56	150860		Remove Base And Surfacing	CY	12,324	$ 15.00	$ 184,860
57	151286		Salvage Sign Structure	EA	1	$ 5,000.00	$ 5,000
58	152370		Relocate Mailbox	EA	6	$ 250.00	$ 1,500
59	152373A		Relocate Cluster Mailbox	EA	1	$ 250.00	$ 250
60	152394		Remove Sign Structure	EA	1	$ 6,000.00	$ 6,000
61	152395A		Relocate Private Sign	EA	4	$ 300.00	$ 1,200
62	152402		Adjust Water Valve Cover to Grade	EA	6	$ 1,200.00	$ 7,200
63	152430		Adjust Inlet	EA	8	$ 1,300.00	$ 10,400

SCHEDULE OF PRICES AND QUANTITIES FOR
EA# 264081. PM (0.9/3.6)
101 Marin-Sonoma Narrows (MSN) Contract B2: Petaluma Boulevard South Interchange & Petaluma River Bridge
July 28, 2011

Item No.	Item Code		Item Description	Unit	Total Quantity	Unit Price	Item Total
64	152432		Adjust Manhole	EA	1	$ 15,000.00	$ 15,000
65	152438		Adjust Frame and Cover to Grade	EA	1	$ 1,500.00	$ 1,500
66	152469		Adjust Utility Cover to Grade	EA	7	$ 900.00	$ 6,300
67	153103		Cold Plane Asphalt Concrete Pavement	SQYD	2,835	$ 5.50	$ 15,593
68	153210		Remove Concrete	CY	2,542	$ 45.00	$ 114,390
69	153221		Remove Concrete Barrier	LF	60	$ 20.00	$ 1,200
70	153229		Remove Concrete Barrier (Type K)	LF	234	$ 18.00	$ 4,212
71	155003		Cap Drainage Inlet	EA	6	$ 1,600.00	$ 9,600
72	156590		Remove Crash Cushion (Sand Filled)	EA	2	$ 180.00	$ 360
73	157551		Bridge Removal, Location A	LS	240,000	$ 240,000.00	$ 240,000
74	157552		Bridge Removal, Location B	LS	264,000	$ 264,000.00	$ 264,000
75	157553		Bridge Removal, Location C	LS	3,800,000	$ 3,800,000.00	$ 3,800,000
76	159021A		Remove Fender System	LS	340,000	$ 340,000.00	$ 340,000
77	160101		Clearing and Grubbing	LS	80,000	$ 100,000.00	$ 100,000
78	170101		Develop Water Supply	LS	10,000	$ 10,000.00	$ 10,000
79	190101		Roadway Excavation	CY	205,833	$ 10.00	$ 1,959,000
80	190107		Roadway Excavation (Type Y 1) (Aerially Deposited Lead)	CY	8,100	$ 20.00	$ 162,000
81	190108		Roadway Excavation (Type Y -2) (Aerially Deposited Lead)	CY	487	$ 25.00	$ -
82	190110		Lead Compliance Plan	LS	5,000	$ 5,000.00	$ 5,000
83	190111		ADL Burial Location Report	LS	5,000	$ 5,000.00	$ 5,000
84	192003	(F) (B)	Structure Excavation (Bridge)	CY	4,317	$ 75.00	$ 48,000
85	192008		Structure Excavation (Type A)	CY	4,279	$ 190.00	$ 813,010
86	192020		Structure Excavation (Type D)	CY	5,051	$ 95.00	$ 479,845
87	192037	(F)	Structure Excavation (Retaining Wall)	CY	8,006	$ 30.00	$ 240,180
88	192055	(F) (B)	Structure Excavation (Soil Nail Wall)	CY	420	$ 35.00	$ 14,700
89	193003	(F) (B)	Structure Backfill (Bridge)	CY	3,912	$ 40.00	$ 156,480
90	193013	(F)	Structure Backfill (Retaining Wall)	CY	7,996	$ 40.00	$ 319,840
91	193028	(F) (B)	Structure Backfill (Soil Nail Wall)	CY	15	$ 65.00	$ 975
92	193114		Sand Backfill	CY	345	$ 100.00	$ 34,500
93	194001		Ditch Excavation	CY	3,438	$ 25.00	$ 85,950
94	197020	(F) (B)	Earth Retaining Structures	SQFT	26,880	$ 45.00	$ 1,209,600
95	197060	(B)	Soil Nail Assembly	LF	1,930	$ 20.00	$ 38,600
96	198001		Imported Borrow	CY	228,300	$ 7.50	$ 1,712,250
97	200101A		Imported Biofiltration Soil	CY	1,274	$ 50.00	$ 63,700
98	203002		Erosion Control (Compost Blanket)	CY	3,570	$ 55.00	$ 196,350
99	203021		Fiber Rolls	LF	43,298	$ 1.80	$ 77,936
100	203025		Compost, Incorporate	SQYD	11,686	$ 5.50	$ 64,273
101	203026		Move-in/Move-Out (Erosion Control)	EA	15	$ 1,500.00	$ 22,500
102	203031		Erosion Control (Hydroseed)	SQFT	1,263,521	$ 0.10	$ 126,352
103	203034		Rolled Erosion Control Product (Netting)	SQFT	1,055,380	$ 0.55	$ 580,459
104	204013		Plant (Group M)	EA	15,142	$ 7.50	$ 113,565
105	208282		8" Plastic Pipe	LF	600	$ 30.00	$ 18,000
106	014980		1" Ultraviolet Resistant Plastic Pipe (Supply Line) (SCH 40)	LF	49	$ 4.00	$ 196
107	208738		8" Corrugated High Density Polyethylene Pipe Conduit	LF	390	$ 50.00	$ 19,500
108	250401		Class 4 Aggregate Subbase	CY	29,786	$ 17.00	$ 506,362
109	260201		Class 2 Aggregate Base	CY	21,300	$ 38.00	$ 809,400
110	280000		Lean Concrete Base	CY	15,357	$ 91.00	$ 1,397,487
111	390132		Hot Mix Asphalt (Type A)	TON	43,705	$ 82.00	$ 3,583,810
112	390136		Minor Hot Mix Asphalt	TON	2	$ 125.00	$ 250
113	390137		Rubberized Hot Mix Asphalt (Gap Graded)	TON	5,408	$ 110.00	$ 594,880
114	393003		Geosynthetic Pavement Interlayer	SQYD	4,100	$ 4.00	$ 16,400
115	394060		Data Core	LS	20,000	$ 10,000.00	$ 10,000
116	394073		Place Hot Mix Asphalt Dike (Type A)	LF	1,100	$ 2.50	$ 2,750
117	394074		Place Hot Mix Asphalt Dike (Type C)	LF	7,579	$ 5.00	$ 37,895
118	394076		Place Hot Mix Asphalt Dike (Type E)	LF	12,041	$ 2.00	$ 24,082
119	394077		Place Hot Mix Asphalt Dike (Type F)	LF	1,307	$ 6.00	$ 7,842
120	394090		Place Hot Mix Asphalt (Miscellaneous Area)	SQYD	6	$ 15.00	$ 86
121	397005		Tack Coat	TON	48	$ 750.00	$ 36,000
122	490601	(B)	16" Cast-In-Drilled-Hole Concrete Piling	LF	32	$ 75.00	$ 2,400
123	490603	(B)	24" Cast-In-Drilled-Hole Concrete Piling	LF	2,900	$ 110.00	$ 319,000
124	490605		36" Cast-In-Drilled-Hole Concrete Piling	LS	7,584	$ 200.00	$ 1,516,800
125	490746A		Furnish Piling (Class 140)(Alternative "X")	LF	6,941	$ 20.00	$ 138,820
126	490747A		Drive Pile (Class 140)(Alternative "X")	EA	88	$ 1,500.00	$ 132,000
127	500001	(B)	Prestressing Cast-In-Place Concrete	LS	159,000	$ 152,000.00	$ 152,000

SCHEDULE OF PRICES AND QUANTITIES FOR
EA# 264081. PM (0.9/3.6)
101 Marin-Sonoma Narrows (MSN) Contract B2: Petaluma Boulevard South Interchange & Petaluma River Bridge
July 28, 2011

Item No.	Item Code		Item Description	Unit	Total Quantity	Unit Price	Item Total
128	500001A		Prestressing Precast Concrete Girders	LS	668,000	$ 640,000.00	$ 640,000
129	500060		Tiedown Anchor	EA	36	$ 6,200.00	$ 223,200
130	510051	(F) (B)	Structural Concrete, Bridge Footing	CY	5,581	$ 350.00	$ 1,953,350
131	510053	(F) (B)	Structural Concrete, Bridge	CY	10,085	$ 620.00	$ 6,252,700
132	510060	(F) (B)	Structural Concrete, Retaining Wall	CY	2,650	$ 335.00	$ 887,750
133	510072	(F) (B)	Structural Concrete, Barrier Slab	CY	760	$ 335.00	$ 254,600
134	510086	(F) (B)	Structural Concrete, Approach Slab (Type N)	CY	545	$ 475.00	$ 258,875
135	510090	(F)	Structural Concrete (Box Culvert)	CY	252	$ 670.00	$ 168,974
136	510092	(F)	Structural Concrete (Headwall)	CY	128	$ 113.00	$ 14,408
137	510502		Minor Concrete (Minor Structure)	CY	358	$ 670.00	$ 239,860
138	510526		Minor Concrete (Backfill)	CY	705	$ 165.00	$ 116,325
139	511035	(B)	Architectural Treatment	SQFT	1,510	$ 14.00	$ 21,140
140	511056A	(B)	Dry Stack Rock Texture	SQFT	2,300	$ 14.00	$ 32,200
141	511064		Fractured Rib Texture	SQFT	32,866	$ 9.50	$ 312,227
142	511106		Drill and Bond Dowel	LF	422	$ 25.00	$ 10,550
143	512277A		Furnish PC PS Concrete Bulb-Tee Girder (80'-90') (Abutment Segment)	EA	11	$ 24,750.00	$ 272,250
144	512277B		Furnish PC PS Concrete Bulb-Tee Girder (80'-90') (Pier Segment)	EA	44	$ 44,500.00	$ 1,958,000
145	512278A		Furnish PC PS Concrete Bulb-Tee Girder (90'-100') (Typical Segment)	EA	11	$ 23,500.00	$ 258,500
146	512281A		Furnish PC PS Concrete Bulb-Tee Girder (120'-130') (Abutment Segment)	EA	11	$ 34,500.00	$ 379,500
147	512281B		Furnish PC PS Concrete Bulb-Tee Girder (120'-130') (Pier Segment)	EA	22	$ 35,500.00	$ 781,000
148	512500		Erect Precast Prestressed Concrete Girder	EA	99	$ 3,800.00	$ 376,200
149	518051		PTFE Spherical Bearing	EA	55	$ 5,600.00	$ 308,000
150	519099		Joint Seal Assembly (MR 6")	LF	141	$ 800.00	$ 112,800
151	519100	(B)	Joint Seal (MR 2")	LF	160	$ 65.00	$ 10,400
152	519118		Joint Seal Assembly (MR 9")	LF	141	$ 1,400.00	$ 197,400
153	520102	(F) (B)	Bar Reinforcing Steel (Bridge)	LB	4,942,287	$ 0.65	$ 3,212,487
154	520103	(F) (B)	Bar Reinforcing Steel (Retaining Wall)	LB	325,435	$ 0.70	$ 227,805
155	520107	(F)	Bar Reinforcing Steel (Box Culvert)	LB	46,478	$ 1.30	$ 60,421
156	520108	(F)	Bar Reinforcing Steel (Headwall)	LB	2,395	$ 1.30	$ 3,114
157	530100	(F) (B)	Shotcrete	CY	46	$ 375.00	$ 17,250
158	560218		Furnish Sign Structure (Truss)	LB	89,100	$ 4.20	$ 374,220
159	560219		Install Sign Structure (Truss)	LB	89,100	$ 0.50	$ 44,550
160	560233		Furnish Formed Panel Sign (Overhead)	SQFT	777	$ 20.00	$ 15,540
161	560235		Furnish Laminated Panel Sign (1" - Type B)	SQFT	44	$ 20.00	$ 880
162	560248		Furnish Single Sheet Aluminum Sign (0.063"-Unframed)	SQFT	460	$ 17.50	$ 8,050
163	560249		Furnish Single Sheet Aluminum Sign (0.080"-Unframed)	SQFT	350	$ 19.00	$ 6,650
164	560251		Furnish Single Sheet Aluminum Sign (0.063"-Framed)	SQFT	88	$ 17.50	$ 1,540
165	560252		Furnish Single Sheet Aluminum Sign (0.080"-Framed)	SQFT	340	$ 18.00	$ 6,120
166	561014		54" Cast-In-Drilled-Hole Concrete Pile (Sign Foundation)	LF	19	$ 1,100.00	$ 20,900
167	561016		60" Cast-In-Drilled-Hole Concrete Pile (Sign Foundation)	LF	75	$ 1,200.00	$ 90,000
168	562002		Metal (Barrier Mounted Sign)	LB	1,065	$ 10.00	$ 10,650
169	566011		Roadside Sign - One Post	EA	56	$ 250.00	$ 14,000
170	566012		Roadside Sign - Two Post	EA	12	$ 350.00	$ 4,200
171	568001		Install Sign (Strap And Saddle Bracket Method)	EA	20	$ 180.00	$ 3,600
172	592525A		Paint Postmile Markings	EA	26	$ 54.00	$ 1,404
173	620101		18" Alternative Pipe Culvert (Type A)	LF	4,961	$ 40.00	$ 198,440
174	620102		18" Alternative Pipe Culvert (Type B)	LF	3,724	$ 65.00	$ 242,060
175	620141		24" Alternative Pipe Culvert (Type A)	LF	2,129	$ 85.00	$ 180,965
176	620142		24" Alternative Pipe Culvert (Type B)	LF	1,028	$ 95.00	$ 97,660
177	620181		30" Alternative Pipe Culvert (Type A)	LF	171	$ 100.00	$ 17,100
178	620182		30" Alternative Pipe Culvert (Type B)	LF	240	$ 120.00	$ 28,800
179	620220		36" Alternative Pipe Culvert	LF	140	$ 130.00	$ 18,200
180	620300		48" Alternative Pipe Culvert	LF	120	$ 300.00	$ 36,000
181	620380		60 " Alternative Pipe Culvert	LF	42	$ 270.00	$ 11,340
182	641107		18" High Density Polyethylene Plastic Pipe	LF	570	$ 80.00	$ 45,600
183	641113		24" High Density Polyethylene Plastic Pipe	LF	150	$ 110.00	$ 16,500
184	641119		30" High Density Polyethylene Plastic Pipe	LF	70	$ 130.00	$ 9,100
185	650026		36" Reinforced Concrete Pipe	LF	458	$ 230.00	$ 105,340
186	650034		48" Reinforced Concrete Pipe	LF	297	$ 240.00	$ 71,280
187	657213A		24"x38" Oval Shaped Reinforced Concrete Pipe (Class III)	LF	32	$ 200.00	$ 6,400
188	665005		8" Corrugated Steel Pipe (0.064" Thick)	LF	10	$ 150.00	$ 1,500

SCHEDULE OF PRICES AND QUANTITIES FOR
EA# 264081. PM (0.9/3.6)
101 Marin-Sonoma Narrows (MSN) Contract B2: Petaluma Boulevard South Interchange & Petaluma River Bridge
July 28, 2011

Item No.	Item Code		Item Description	Unit	Total Quantity	Unit Price	Item Total
189	665018		18" Corrugated Steel Pipe (0.064" Thick)	LF	347	$ 150.00	$ 52,050
190	665024		24" Corrugated Steel Pipe (0.064" Thick)	LF	547	$ 170.00	$ 92,990
191	680905		8" Perforated Plastic Pipe Underdrain	LF	3,954	$ 20.00	$ 79,080
192	680906A		8" Plastic Pipe Underdrain	LF	151	$ 25.00	$ 3,775
193	682041		Class 2 Permeable Material	CY	755	$ 90.00	$ 67,950
194	700617		Drainage Inlet Marker	EA	68	$ 70.00	$ 4,760
195	703239		36" Corrugated Steel Pipe Riser (0.109" Thick)	LF	89	$ 580.00	$ 51,620
196	703450	(B)	Welded Steel Pipe Casing (Bridge)	LF	160	$ 120.00	$ 19,200
197	703530		12" Welded Steel Pipe (0.105" Thick)	LF	26	$ 130.00	$ 3,380
198	703533		12" Welded Steel Pipe (0.25" Thick)	LF	29	$ 200.00	$ 5,800
199	703555		18" Welded Steel Pipe (0.25" Thick)	LF	193	$ 240.00	$ 46,320
200	705011		18" Steel Flared End Section	EA	2	$ 500.00	$ 1,000
201	705015		24" Steel Flared End Section	EA	4	$ 550.00	$ 2,200
202	705311		18" Alternative Flared End Section	EA	46	$ 500.00	$ 23,000
203	705312A		18" High Density Polyethylene Flared End Section	EA	5	$ 510.00	$ 2,550
204	705315		24" Alternative Flared End Section	EA	12	$ 550.00	$ 6,600
205	705316A		24" High Density Polyethylene Flared End Section	EA	1	$ 560.00	$ 560
206	705319		30" Alternative Flared End Section	EA	2	$ 750.00	$ 1,500
207	705320A		30" High Density Polyethylene Flared End Section	EA	1	$ 760.00	$ 760
208	705321		36" Alternative Flared End Section	EA	4	$ 775.00	$ 3,100
209	711702A		1" PVC Water Pipe (Water System)	LF	32	$ 40.00	$ 1,280
210	711703A		2" PVC Water Pipe (Water System)	LF	25	$ 50.00	$ 1,250
211	719201A		Water Quality Weir	EA	4	$ 3,500.00	$ 14,000
212	721007		Rock Slope Protection (1/4 Ton, Method B)	CY	96	$ 140.00	$ 13,440
213	721008		Rock Slope Protection (Light, Method B)	CY	465	$ 120.00	$ 55,800
214	721012		Rock Slope Protection (Backing No. 3, Method B)	CY	6	$ 150.00	$ 900
215	721013A		Rock Slope Protection (Backing No. 3, Method A)	CY	42	$ 120.00	$ 5,040
216	727901		Minor Concrete (Ditch Lining)	CY	707	$ 290.00	$ 205,030
217	729010		Rock Slope Protection Fabric	SQYD	1,439	$ 20.00	$ 28,780
218	731502		Minor Concrete (Miscellaneous Construction)	CY	293	$ 460.00	$ 134,780
219	731517	(B)	Minor Concrete (Gutter)	LF	260	$ 25.00	$ 6,500
220	731530		Minor Concrete (Textured Paving)	SQFT	15,200	$ 8.00	$ 121,600
221	750001	(F)	Miscellaneous Iron And Steel	LB	49,556	$ 1.75	$ 86,723
222	750501		Miscellaneous Metal (Bridge)	LB	28,858	$ 4.00	$ 115,432
223	750505		Bridge Deck Drainage System	LB	62,186	$ 4.00	$ 248,744
224	017801		Sonoma County Water Agency (SCWA) Water Line Relocation	LS	2,750,000	$ 2,750,000.00	$ 2,750,000
225	017802		City of Petaluma Water Line Relocation	LS	350,000	$ 350,000.00	$ 350,000
226	017803		North Marin Water District (NMWD) Temporary Water Line Relocation	LS	260,000	$ 260,000.00	$ 260,000
227	800052		Fence (Type WM, Wood Post)	LF	12,700	$ 15.00	$ 190,500
228	800053A		Deer Fence (Type WM, Wood Post)	LF	110	$ 20.00	$ 2,200
229	800320	(C)	Chain Link Fence (Type CL-4)	LF	2,870	$ 10.00	$ 28,700
230	800360	(C)	Chain Link Fence (Type CL-6)	LF	13,218	$ 20.00	$ 264,360
231	801190		12' Wire Mesh Gate	EA	6	$ 550.00	$ 3,300
232	802580		12' Chain Link Gate (Type CL-6)	EA	9	$ 1,800.00	$ 16,200
233	820101A		Concrete Median Barrier Marker	EA	160	$ 25.00	$ 4,000
234	820107		Delineator (Class 1)	EA	150	$ 40.00	$ 6,000
235	832001		Metal Beam Guard Railing	LF	1,553	$ 30.00	$ 46,590
236	832070		Vegetation Control (Minor Concrete)	SQYD	1,322	$ 65.00	$ 85,930
237	833032	(B)	Chain Link Railing (Type 7)	LF	450	$ 50.00	$ 22,500
238	833080		Concrete Barrier (Type K)	LF	420	$ 45.00	$ 18,900
239	833142	(B)	Concrete Barrier (Type 26 Modified)	LF	450	$ 120.00	$ 54,000
240	839310		Double Thrie Beam Barrier	LF	1,710	$ 45.00	$ 76,950
241	839541		Transition Railing (Type WB)	EA	9	$ 2,600.00	$ 23,400
242	839542		Transition Railing (Type DTB)	EA	1	$ 2,500.00	$ 2,500
243	839554A		Terminal Section (Type K)	EA	1	$ 2,500.00	$ 2,500
244	839565		Terminal System (Type SRT)	EA	6	$ 3,300.00	$ 19,800
245	839581		End Anchor Assembly (Type SFT)	EA	6	$ 1,000.00	$ 6,000
246	839584		Alternative In-Line Terminal System	EA	6	$ 3,400.00	$ 20,400
247	839585		Alternative Flared Terminal System	EA	7	$ 3,000.00	$ 21,000
248	839591		Crash Cushion, Sand Filled	EA	1	$ 4,000.00	$ 4,000

SCHEDULE OF PRICES AND QUANTITIES FOR
EA# 264081. PM (0.9/3.6)
101 Marin-Sonoma Narrows (MSN) Contract B2: Petaluma Boulevard South Interchange & Petaluma River Bridge
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Item No.	Item Code		Item Description	Unit	Total Quantity	Unit Price	Item Total
249	839701		Concrete Barrier (Type 60)	LF	3,296	$ 60.00	$ 197,760
250	839702		Concrete Barrier (Type 60A)	LF	1,018	$ 55.00	$ 55,990
251	839702A		Concrete Barrier (Type 60R)	LF	1,286	$ 340.00	$ 437,240
252	839703		Concrete Barrier (Type 60C)	LF	2,160	$ 95.00	$ 205,200
253	839704		Concrete Barrier (Type 60D)	LF	710	$ 45.00	$ 31,950
254	839715		Concrete Barrier (Type 26B Modified)	LF	110	$ 200.00	$ 22,000
255	839716	(B)	Concrete Barrier (Type 60D Modified)	LF	260	$ 60.00	$ 15,600
256	839726		Concrete Barrier (Type 736A)	LF	1,068	$ 55.00	$ 58,740
257	839726A		Concrete Barrier (Type 736A Modified)	LF	1,182	$ 70.00	$ 82,740
258	839727	(B)	Concrete Barrier (Type 736 Modified)	LF	3,538	$ 65.00	$ 229,970
259	839731		Concrete Barrier (Type 736B)	LF	490	$ 170.00	$ 83,300
260	839731A		Concrete Barrier (Type 736B Modified)	LF	75	$ 170.00	$ 12,750
261	840504		4" Thermoplastic Traffic Stripe	LF	123,340	$ 0.40	$ 49,336
262	840505		6" Thermoplastic Traffic Stripe	LF	12,000	$ 0.70	$ 8,400
263	840506		8" Thermoplastic Traffic Stripe	LF	4,878	$ 0.80	$ 3,902
264	840508		8" Thermoplastic Traffic Stripe (Broken 12-3)	LF	3,457	$ 0.80	$ 2,766
265	840515		Thermoplastic Pavement Marking	SQFT	6,937	$ 3.00	$ 20,811
266	840521		4" Thermoplastic Traffic Stripe (Broken 6-1)	LF	220	$ 0.30	$ 66
267	840525		4" Thermoplastic Traffic Stripe (Broken 36-12)	LF	25,132	$ 0.35	$ 8,796
268	840526		4" Thermoplastic Traffic Stripe (Broken 17-7)	LF	2,291	$ 0.50	$ 1,146
269	840660		Paint Pavement Marking	SQFT	50	$ 15.00	$ 750
270	850101		Pavement Marker (Non-Reflective)	EA	1,811	$ 2.00	$ 3,622
271	850111		Pavement Marker (Retroreflective)	EA	2,459	$ 3.70	$ 9,098
272	860090		Maintain Existing Traffic Management System Elements During Construction	LS	5,000	$ 5,000.00	$ 5,000
273	860091A		Navigation Lighting System	LS	100,000	$ 100,000.00	$ 100,000
274	860251		Signal And Lighting (Location 1)	LS	115,000	$ 115,000.00	$ 115,000
275	860252		Signal And Lighting (Location 2)	LS	130,000	$ 130,000.00	$ 130,000
276	860298		Signal and Lighting (Stage Construction)	LS	5,000	$ 5,000.00	$ 5,000
277	860303		Signal And Lighting (County Street - Location 3)	LS	110,000	$ 110,000.00	$ 110,000
278	860402		Lighting (County Street)	LS	99,000	$ 99,500.00	$ 99,500
279	860413A		Lighting And Sign Illumination (Stage Construction)	LS	56,000	$ 56,000.00	$ 56,000
280	860415		Lighting (Stage Construction)	LS	34,000	$ 34,000.00	$ 34,000
281	860460		Lighting And Sign Illumination	LS	162,500	$ 162,500.00	$ 162,500
282	860505A		Traffic Operations System	LS	280,900	$ 280,900.00	$ 280,900
283	860510A		Traffic Operations System (Stage Construction)	LS	10,000	$ 10,000.00	$ 10,000
284	860520		Highway Advisory Radio System	EA	1	$ 20,000.00	$ 20,000
285	860536A		Extinguishable Message Sign Panel (LED)	EA	2	$ 15,000.00	$ 30,000
286	860537A		Long Lead-In Cable Loop Detector (LLLD) Sensor Unit	EA	1	$ 500.00	$ 500
287	860538A		Vehicle Sensor Node	EA	8	$ 450.00	$ 3,600
288	860603A		Flashing Beacon and Lighting (County)	LS	50,000	$ 50,000.00	$ 50,000
289	861750		Integrated Camera Unit	EA	3	$ 4,000.00	$ 12,000
290	861752		Camera Control Unit (CCU)	EA	3	$ 1,600.00	$ 4,800
291	861753		Video Encoder Unit (VEU)	EA	3	$ 4,000.00	$ 12,000
292	861762A		Power Strip	EA	1	$ 100.00	$ 100
293	861764A		Shelf	EA	2	$ 100.00	$ 200
294	861759		General Packet Radio System (GPRS) Wireless Modem Assembly	EA	2	$ 1,600.00	$ 3,200
295	999990		Mobilization (8%)	LS		$ 4,880,000.00	$ 4,880,000

CONSTRUCTION TOTAL $ 65,915,623

SCHEDULE OF PRICES AND QUANTITIES FOR
EA# 264081. PM (0.9/3.6)
101 Marin-Sonoma Narrows (MSN) Contract B2: Petaluma Boulevard South Interchange & Petaluma River Bridge
July 28, 2011

SUPPLEMENTAL WORK ITEMS

Item No.	Item Code		Item Description	Unit	Total Quantity	Unit Price	Item Total
1	066015		Federal Trainee Program	LS	25,000	$ 25,000.00	$ 25,000
2	066041		Bird Protection	LS	200,000	$ 200,000.00	$ 200,000
3	066060		Additional Traffic Control	LS	350,000	$ 400,000.00	$ 350,000
4	066070		Maintain Traffic	LS	400,000	$ 400,000.00	$ 350,000
5	066072		Maintain Detour	LS	200,000	$ 250,000.00	$ 250,000
6	066083		Repair Temporary Crash Cushion Modules	LS	10,000	$ 20,000.00	$ 20,000
7	066084A		Repair and Replacement of unmarked existing facilities	LS	10,000	$ 20,000.00	$ 20,000
8	066094		Value Analysis	LS	35,000	$ 35,000.00	$ 35,000
9	066101		Dust Palliative	LS	35,000	$ 35,000.00	$ 35,000
10	066103		Maintain Existing Planted Areas	LS	6,000	$ 6,000.00	$ 6,000
11	066140		Abandon Water Well	LS	5,000	$ 5,000.00	$ 5,000
12	066150		Remove Unsuitable Materials	LS	100,000	$ 150,000.00	$ 150,000
13	066150A		Repair Pavement	LS	300,000	$ 300,000.00	$ 300,000
14	066178		Additional Excavation and Backfill	LS	40,000	$ 40,000.00	$ 40,000
15	066208		Repair Existing Irrigation System	LS	20,000	$ 20,000.00	$ 20,000
16	066595		Water Pollution Control Maintenance Sharing	LS	150,000	$ 200,000.00	$ 200,000
17	066596		Additional Water Pollution Control	LS	250,000	$ 250,000.00	$ 250,000
18	066597		Storm Water Sampling and Analysis	LS	150,000	$ 150,000.00	$ 150,000
19	066597A		Sampling and Analysis of Surplus Material	LS	15,000	$ 15,000.00	$ 15,000
20	066600		Disposal Of Yellow Painted Traffic Stripe	LS	10,000	$ 10,000.00	$ 10,000
21	066600A		Disposal of Treated Wood	LS	8,000	$ 8,000.00	$ 8,000
22	066610		Partnering	LS	20,000	$ 20,000.00	$ 20,000
23	066670		Payment Adjustments For Price Index Fluctuations	LS	200,000	$ 200,000.00	$ 200,000
24	066845		Incentive for Asphalt Concrete (QC/QA)	LS	150,000	$ 150,000.00	$ 150,000
25	066860		Maintain Existing Electrical System	LS	50,000	$ 50,000.00	$ 50,000
26	66866		Operation Of Existing Traffic Management System Elements During Construction	LS	5,000	$ 5,000.00	$ 5,000
27	66919		Dispute Resolution Board	LS	10,000	$ 10,000.00	$ 10,000
28	066920		Disputes Review Board	LS	30,000	$ 30,000.00	$ 30,000
						Total Supplemental Work Items	**$ 2,910,000**

STATE FURNISHED MATERIALS AND EXPENSES

1	066062		COZEEP Contract	LS	700,000	$ 700,000.00	$ 700,000
2	066063		Traffic Management Plan - Public Information	LS	25,000	$ 25,000.00	$ 25,000
3	066065		Tow Truck Service Patrol	LS	150,000	$ 150,000.00	$ 150,000
4	066068		Public Awareness Campaign	LS	25,000	$ 25,000.00	$ 25,000
5	066105		Resident Engineer Office	LS	600,000	$ 540,000.00	$ 540,000
6	066842		Model 170 Controller Unit	LS	6,000	$ 6,000.00	$ 6,000
7	066843		Model 170/2070 Controller Assembly	LS	42,000	$ 42,000.00	$ 42,000
8	066847A		Highway Advisory Radio Antenna and Lighting Arrestor	LS	3,000	$ 3,000.00	$ 3,000
9	66874		AC Sealant for Inductive Loop	LS	10,000	$ 10,000.00	$ 10,000
10	861763A		Router For Camera Station	LS	3,400	$ 3,400.00	$ 3,400
11	861764A		Model 303/8 Controller Cabinet and Mounting Bracket	LS	4,000	$ 4,000.00	$ 4,000
12	018352		Model 500 Changeable Message Sign System	LS	59,500	$ 59,500.00	$ 59,500
13	066863		Electrical Energy Expenses	LS	10,000	$ 10,000.00	$ 10,000
14	066871		Electrical Service Connection	LS	20,000	$ 20,000.00	$ 20,000
						Total State Furnished Materials and Expenses	**$ 1,600,000**

TOTAL	**$**	**70,426,000**
CONTINGENCY (5%)	**$**	**3,521,300**
GRAND TOTAL	**$**	**73,900,000**

65% Construction Cost Estimate for Contract B3

STATE ROUTE 101 SEGMENT B3 CURVE CORRECTION

IN MARIN AND SONOMA CO□NTIES ON □S 101
FROM 0.3 MILES NORTH OF SAN ANTONIO ROAD
TO 2.0 MILES NORTH OF MARIN □ SONOMA CO□NTY LINE

EA No. 04-264091

Date□ □□LY 27, 2011
Prepared by Mark Thomas □ Co. Inc.

BEES LIST - 65% ESTIMATE

ITEM NO.	ITEM CODE	ITEM DESCRIPTION	□NIT	QTY	□nit Price	Amount $
1	070012	Progress Schedule (Critical Path Method)	LS	1	$5,500.00	$5,500.00
2	071325	Temporary Fence (Type ESA)	LF	5,023	$3.00	$15,069.00
3	074016	Construction Site Management	LS	1	$70,000.00	$70,000.00
4	074018	Health and Safety Plan	LS	1	$4,000.00	$4,000.00
5	074019	Prepare Storm Water Pollution Prevention Plan	LS	1	$10,000.00	$10,000.00
6	074028	Temporary Fiber Roll	LF	17,830	$3.25	$57,947.50
7	074029	Temporary Silt Fence	LF	18,768	$3.00	$56,304.00
8	074032	Temporary Concrete Washout Facility	EA	6	$1,500.00	$9,000.00
9	074033	Temporary Construction Entrance	EA	13	$2,500.00	$32,500.00
10	074034	Temporary Cover	SY	2,744	$4.00	$10,976.00
11	074037	Move-In/Move-Out (Temporary Erosion Control)	EA	13	$600.00	$7,800.00
12	074038	Temporary Drainage Inlet Protection	EA	73	$250.00	$18,250.00
13	074051	Temporary Hydraulic Mulch	SY	31,191	$0.50	$15,595.50
14	120090	Construction Area Signs	LS	1	$25,000.00	$25,000.00
15	120100	Traffic Control System	LS	1	$100,000.00	$100,000.00
16	120120	Type III Barricade	EA	10	$100.00	$1,000.00
17	120159	Temporary Traffic Stripe (Paint)	LF	83,415	$0.50	$41,707.50
18	120165	Channelizer (Surface Mounted)	EA	299	$40.00	$11,960.00
19	120199	Traffic Plastic Drum	EA	15	$80.00	$1,200.00
20	120300	Temporary Pavement Marker	EA	1,444	$3.00	$4,332.00
21	128650	Portable Changeable Message Sign	EA	1	$6,500.00	$6,500.00
22	129000	Temporary Railing (Type K)	LF	62,170	$10.00	$621,700.00
23	129100	Temporary Crash Cushion Module	EA	168	$150.00	$25,200.00
24	141103	Remove Yellow Thermoplastic Traffic Stripe (Hazardous Waste)	LF	30,432	$1.50	$45,648.00
25	150605	Remove Fence	LF	18,645	$6.00	$111,870.00
26	150662	Remove Metal Beam Guard Railing	LF	483	$10.00	$4,830.00
27	1506□□	Remove 18" Flared End Section	EA	2	$400.00	$800.00
28	1506□□	Remove 24" Flared End Section	EA	2	$400.00	$800.00
29	1506□□	Remove 36" Flared End Section	EA	2	$400.00	$800.00
30	150711	Remove Painted Traffic Stripe	LF	59,416	$0.60	$35,649.60
31	150714	Remove Thermoplastic Traffic Stripe	LF	57,075	$0.50	$28,537.50
32	150722	Remove Pavement Marker	EA	2,550	$1.00	$2,550.00
33	150742	Remove Roadside Sign	EA	23	$100.00	$2,300.00
34	150760	Remove Sign Structure	EA	1	$5,500.00	$5,500.00
35	1508□□	Remove 8" PMP	LF	610	$50.00	$30,500.00
36	1508□□	Remove 12" RCP	LF	119	$50.00	$5,950.00
37	1508□□	Remove 12" CMP	LF	296	$50.00	$14,800.00
38	1508□□	Remove 18" APC	LF	462	$50.00	$23,100.00
39	1508□□	Remove 24" APC	LF	71	$50.00	$3,550.00
40	1508□□	Remove 24" CMP	LF	1,532	$50.00	$76,600.00
41	1508□□	Remove 48" RCP	LF	29	$50.00	$1,450.00
42	1508□□	Remove Wingwall	CY	4	$110.00	$385.00
43	150820	Remove Inlet	EA	10	$725.00	$7,250.00
44	150821	Remove Headwall (18")	EA	1	$850.00	$850.00
45	150860	Remove Base and Surfacing	CY	18,890	$11.00	$207,790.00
46	152386	Relocate Roadside Sign - One Post	EA	14	$225.00	$3,150.00
47	152387	Relocate Roadside Sign - Two Post	EA	5	$350.00	$1,750.00
48	153103	Cold Plane Asphalt Concrete Pavement	SY	4,747	$10.00	$47,470.00
49	157550	Bridge Removal	LS	1	$72,000.00	$72,000.00
50	160101	Clearing and Grubbing	LS	1	$450,000.00	$450,000.00
51	170101	Develop Water Supply	LS	1	$100,000.00	$100,000.00
52	190101	Roadway Excavation	CY	448,543	$10.00	$4,485,430.00
53	190107	Road Excavation (Type Y-1)(Aerially Deposited Lead)	CY	4,566	$25.00	$114,150.00
54	190110	Lead Compliance Plan	LS	1	$5,000.00	$5,000.00
55	194001	Ditch Excavation	CY	2,308	$25.00	$57,700.00
56	197021	Earth Retaining Structure (MSE Ret Wall)	SF	24,870	$70.00	$1,740,911.42
57	203002	Erosion Control (Compost Blanket)	CY	267	$75.00	$20,025.00

BEES LIST - 65% ESTIMATE

ITEM NO.	ITEM CODE	ITEM DESCRIPTION	□NIT	QTY	□nit Price	Amount $
58	203021	Fiber Rolls	LF	71,456	$2.50	$178,640.00
59	203025	Compost (Incorporate)	SY	2,164	$5.50	$11,902.00
60	203026	Move-In/Move-Out (Erosion Control)	EA	6	$700.00	$4,200.00
61	203031	Erosion Control (Hydroseed)	SF	1,117,180	$0.30	$335,154.00
62	203034	Rolled Erosion Control Product (Netting)	SF	98,890	$0.50	$49,445.00
63	204013	(Plant Group M)	EA	21,640	$2.50	$54,100.00
64	250401	Class 4 Aggregate Subbase	CY	33,483	$17.00	$569,211.00
65	260201	Class 2 Aggregate Base	CY	18,257	$28.00	$511,196.00
66	280000	Lean Concrete Base	CY	24,562	$120.00	$2,947,440.00
	374207	Crack Treatment				
67	390106	Asphalt Concrete (Open Graded)	TON	7,311	$105.00	$767,655.00
68	390132	Hot Mix Asphalt (Type A)	TON	61,047	$75.00	$4,578,525.00
69	390137	Rubberized Hot Mix Asphalt (Gap-Graded)	TON	15,163	$105.00	$1,592,115.00
70	394048	Place Hot Mix Asphalt Dike (Type E)	LF	5,340	$3.00	$16,018.80
71	394049	Place Hot Mix Asphalt Dike (Type F)	LF	4,413	$3.50	$15,444.10
72	397005	Tack Coat	TON	6	$700.00	$4,200.00
73	510090	Structural Concrete, Box Culvert	CY	369	$600.00	$221,640.00
74	510502	Minor Concrete (Minor Structure)	CY	146	$1,100.00	$160,270.00
75	520107	Bar Reinforcing Steel (Box Culvert)	LB	87,590	$0.80	$70,072.00
76	560248	Furnish Single Sheet Aluminum Sign (0.063" □nframed)	SF	13	$14.00	$175.00
77	560249	Furnish Single Sheet Aluminum Sign (0.080" □nframed)	SF	198	$16.00	$3,168.00
78	560251	Furnish Single Sheet Aluminum Sign (0.063" Framed)	SF	108	$15.00	$1,616.25
79	560252	Furnish Single Sheet Aluminum Sign (0.080" Framed)	SF	85	$18.00	$1,530.00
80	566011	Roadside Sign - One Post	EA	30	$200.00	$6,000.00
81	566012	Roadside Sign - Two Post	EA	3	$300.00	$900.00
82	620100	18" Alternative Pipe Culvert	LF	8,299	$50.00	$414,950.00
83	620140	24" Alternative Pipe Culvert	LF	3,388	$60.00	$203,280.00
84	620180	30" Alternative Pipe Culvert	LF	418	$95.00	$39,710.00
85	620220	36" Alternative Pipe Culvert	LF	2,380	$125.00	$297,500.00
86	620260	42" Alternative Pipe Culvert	LF	1,068	$150.00	$160,200.00
	680905	8" Perforated Plastic Pipe □nderdrain	LF			
87	682049	Class 3 Permeable Material (Blanket)	CY	17,309	$55.00	$951,995.00
88	705311	18" Alternative Flared End Section	EA	20	$400.00	$8,000.00
89	705315	24" Alternative Flared End Section	EA	7	$500.00	$3,500.00
90	705319	30" Alternative Flared End Section	EA	2	$525.00	$1,050.00
91	705321	36" Atlernative Flared End Section	EA	5	$600.00	$3,000.00
92	705323	42" Alternative Flared End Section	EA	1	$650.00	$650.00
93	707051	Drainage Manhole	EA	19	$5,000.00	$95,000.00
94	721011	Rock Slope Protection (Backing No. 2, Method B)	CY	227	$250.00	$56,750.00
95	727901	Minor Concrete (Ditch Lining)	CY	463	$400.00	$185,040.00
96	729010	Rock Slope Protection Fabric	SY	454	$5.50	$2,497.00
97	750001	Miscellaneous Iron and Steel	LB	27,570	$2.00	$55,140.00
98	800320	Chain Link Fence (Type CL-4)	LF	9,729	$11.00	$107,013.50
99	800705	Wire Mesh and Wood Fence	LF	16,565	$15.00	$248,472.00
100	820107	Delineator (Class 1)	EA	59	$40.00	$2,360.00
101	820118	Guard Railing Delineator	EA	32	$30.00	$960.00
102	820134	Object Marker (Type P)	EA	16	$50.00	$800.00
103	820141	Object Marker (Type K-1)	EA	4	$70.00	$280.00
104	832003	Metal Beam Guard Railing (Wood Post)	LF	7,725	$25.00	$193,125.00
105	832070	Vegetation Control (Minor Concrete)	SY	4,421	$55.00	$243,155.00
106	839311	Double Thrie Beam Barrier (Wood Post)	LF	1,682	$30.00	$50,457.00
107	839541	Transition Railing (Type WB)	EA	4	$3,300.00	$13,200.00
108	839581	End Anchor Assembly (Type SFT)	EA	2	$900.00	$1,800.00
109	839585	Alternative Flared Terminal System	EA	11	$2,200.00	$24,200.00
110	839701	Concrete Barrier (Type 60)	LF	11,142	$55.00	$612,793.50
111	839703	Concrete Barrier (Type 60C)	LF	1,653	$105.00	$173,523.00
112	839727	Concrete Barrier (Type 736 Modified)	LF	1,550	$100.00	$155,000.00
113	840504	4" Thermoplastic Traffic Stripe	LF	83,469	$0.50	$41,734.50
114	840515	Thermoplastic Pavement Marking	SF	413	$4.00	$1,652.00
115	840525	4" Thermoplastic Traffic Stripe (Broken 36-12)	LF	27,485	$0.50	$13,742.50
116	850101	Pavement Marker (Non-Reflective)	EA	2,290	$2.50	$5,725.00
117	850111	Pavement Marker (Retroreflective)	EA	583	$3.50	$2,040.50
118	850112	Pavement Marker (Retroflective-Special Type G)	EA	807	$3.50	$2,824.50
119	850113	Pavement Marker (Retroflective-Special Type H)	EA	584	$3.50	$2,044.00
120	15066□	Remove Double Thrie Beam Barrier	LF	11,080	$15.00	$166,192.50
121	15082□	Remove Storm Drain Manhole	EA	2	$1,500.00	$3,000.00
122	153220	Remove Concrete Lined Channel	CY	11	$110.00	$1,210.00

BEES LIST - 65% ESTIMATE

ITEM NO.	ITEM CODE	ITEM DESCRIPTION	□NIT	QTY	□nit Price	Amount $
123	203018A	Biofiltration Swale	SF	18,759	$5.50	$103,174.50
124	□□□□□□	Abandon Cattle Crossing	LS	1	$40,000.00	$40,000.00
125	□□□□□□	Remove 30" NMWD Water Line	LF	12000	$100.00	$1,200,000.00
126	□□□□□□	Hillside Stabalization	LS	1	$500,000.00	$500,000.00
127	□□□□□□	San Antonio Creek Bridge	LS	1	$8,150,000.00	$8,150,000.00
128	999990	Mobilization	LS	1	$4,400,000.00	$4,400,000.00

SUBTOTAL - STANDARD ITEMS	**$39,900,000**
CONTIGENCY (10% - CONSTRUCTION ITEMS ONLY)	**$3,990,000**
SUPPLEMENTAL WORK (5%)	**$1,995,000**
STATE FURNISHED MATERIALS (1%)	**$399,000**
TOTAL OPINION OF PROBABLE CONSTRUCTION COSTS	**$46,300,000**

Six-page Estimate for Contract A2

PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE PM: 04-MRN-101, KP 30.0/44.5 (PM 18.6/27.6)
04-SON-101, KP 0.0/11.5 (PM 0.0/7.1)
EA: 04-240-2640xx

PROJECT DESCRIPTION: **MARIN/SONOMA NARROWS**
MSN Contract A2

Limits: Novato Creek Bridge to 1.0 Mile North of the North Navoto Overhead

Proposed Improvement:

ROADWAY ITEMS:	**$18,500,000**
STRUCTURE ITEMS:	**$6,800,000**
SUBTOTAL CONSTRUCTION:	**$25,300,000**
RIGHT-OF-WAY:	**$300,000**
TOTAL PROJECT COST:	**$25,600,000**

Prepared by Project Engineer
Phone No: 530-225-2787

Robert Nixon — Date: 12-1-2010

Approved by Design Branch Chief
Phone No: 530-225-3476

John Martin — Date: 12/1/10

PROJECT COST ESTIMATE SUMMARY

MARIN-SONOMA NARROWS (MSN) CONTRCT A2
DIST-CO-RTE PM□ 04-MRN-101, KP 30.0/44.5 (PM 18.6/27.6)
04-SON-101, KP 0.0/11.5 (PM 0.0/7.1)
EA□04-240-2640xx

I. ROADWAY ITEMS

Section 1 Earthwork

	Quantity	□nit	□nit Price	Cost
Clearing □ Grubbing	1	LS	$25,000	$25,000
Roadway Excavation	11100	CY	$25	$277,500
Shoulder Backing	400	TON	$35	$14,000
Develop Water Supply	1	LS	$20,000	$20,000
			Total Earthwork:	**$336,500**

Section 2 Structural Section

Class 4 Aggregate Subbase	13650	CY	$30	$409,500
Lean Concrete Base	7060	CY	$125	$882,500
Seal Random Cracks	26.1	LNMI	$1,500	$39,150
Place Asphalt Concrete Ac(Dike)	1000	FT	$8	$8,000
Hot Mix Asphalt	10170	TON	$90	$915,300
RHMA (Type G)	27300	TON	$90	$2,457,000
RHMA (Type O)	16013	TON	$110	$1,761,430
Replace Asphalt Concrete Surfacing	1200	CY	$320	$384,000
Remove Asphalt Concrete Surfacing	14722	SQYD	$40	$588,880
Asphalt Emulsion (Paint Binder)	20	TON	$500	$10,000
Comp.Adj. for Price Ind.Fluct. of Pav.Asp.	1	LS	$550,000	$550,000
			Total structural Section:	**$8,005,760**

Section 3 Drainage

Temporary DI Protection	22	EA	$650	$14,300
Removals	1	LS	$450,000	$450,000
Adjust Inlet	19	EA	$2,000	$38,000
Modify Inlet	3	EA	$1,500	$4,500
Highway Planting	1	LS	$200,000	$200,000
Pipes	1	LS	$850,000	$850,000
Overside Downdrain	3	EA	$1,900	$5,700
Rock Slope Protection	10	CY	$300	$3,000
Inlet Frame And Grate	25000	LB	$1	$25,000
Hydromodification	1	LS	$1,200,000	$1,200,000
			Total Drainage:	**$2,790,500**

PROJECT COST ESTIMATE SUMMARY

MARIN-SONOMA NARROWS (MSN) CONTRCT A2
DIST-CO-RTE PM 04-MRN-101, KP 30.0/44.5 (PM 18.6/27.6)
04-SON-101, KP 0.0/11.5 (PM 0.0/7.1)
EA 04-240-2640xx

Section 4 Specialty Items

Progress Schedule (Critical Path)	1	LS	$10,000	$10,000
Time -Related Overhead	1	LS	$250,000	$250,000
Health And Safety Plan	1	LS	$26,000	$26,000
Temporary Pavement Marking(Paint)	250	SQFT	$40	$10,000
Temporary Traffic Stripe (Paint)	151000	FT	$1	$113,250
Temporary Pavement Marker	1720	EA	$6	$10,320
Temporary Railing (Type K)	17500	FT	$25	$437,500
Temporary Crash Cushion Module	20	EA	$300	$6,000
Remove Metal Beam Guard Railing	7750	FT	$10	$77,500
Remove Pavement Marker	8000	EA	$2	$16,000
Remove Roadside Sign	270	EA	$125	$33,750
Erosion Control	1	LS	$250,000	$250,000
Lead Compliance Plan	1	LS	$26,000	$26,000
Post Construction Treatment BMPs	1	LS	$200,000	$200,000
Chain Link Fence(Type CL-1.8)	350	FT	$65	$22,750
Milepost Marker	16	EA	$50	$800
Object Marker (Type K)	18	EA	$70	$1,260
Metal Beam Guard Railing	320	FT	$120	$38,400
Transition Railing (Type WB)	4	EA	$2,600	$10,400
Terminal System (Type SRT)	4	EA	$2,000	$8,000
Concrete Barrier (Type 60)	2250	FT	$50	$112,500
Concrete Barrier (Type 60C)	5500	FT	$65	$357,500
SWPP And Implementation	1	LS	$250,000	$250,000
			Total Specialty Items:	**$2,267,930**

PROJECT COST ESTIMATE SUMMARY

MARIN-SONOMA NARROWS (MSN) CONTRCT A2
DIST-CO-RTE PM□ 04-MRN-101, KP 30.0/44.5 (PM 18.6/27.6)
04-SON-101, KP 0.0/11.5 (PM 0.0/7.1)
EA□04-240-2640xx

Section 5 Traffic Items:				
Traffic Control System	1	LS	$350,000	$350,000
Construction Area Sign	1	LS	$40,000	$40,000
Portable Changeable Message Sign	1	LS	$240,000	$240,000
Cozeep Contract	1	LS	$250,000	$250,000
TMP Public Information	1	LS	$50,000	$50,000
Resident Engineer Office	1	LS	$72,000	$72,000
Partnering	1	LS	$50,000	$50,000
Thermoplastic Pavement Marking	250	SQFT	$45	$11,250
Thermo. Traffic Stripe Stripe	151200	FT	$1	$151,200
Pavement Marker (Retroreflective)	4010	EA	$5	$20,050
TOS Elements	1	LS	$350,000	$350,000
Traffic Lighting	1	LS	$150,000	$150,000
			Total Traffic Items:	**$1,734,500**
				$13,120,000
Section 6 Minor Construction Items :				
Subtotal Construction	$13,120,000		x 5□	$656,000
	Total Minor Construction Items :			**$656,000**
Section 7 Roadway Mobilization :				
Subtotal Construction	$13,120,000			
Minor Construction Items	$2,400,000			
Sum	$15,520,000		x10□	$1,552,000
Total Roadway Mobilization				**$1,552,000**
Section 8 Roadway Additions				
Supplemental Items (5□-10□)				
Subtotal Construction	$13,120,000			
Minor Construction Items	$2,400,000			
Sum	$15,520,000		x 5□	$776,000
	Total Roadway Addition			**$776,000**
	ROADWAY SUBTOTAL (SECT. 1-8) :			**$16,104,000**
	CONTINGENCY 15%			**$2,415,600**
	TOTAL ROADWAY ITEMS :			**$18,519,600**
	TOTAL STRUCTURE ITEMS :			**$6,800,000**
	TOTAL R/W ITEMS :			**$300,000**
	TOTAL PROJECT :			**$25,619,600**

PROJECT COST ESTIMATE SUMMARY

MARIN-SONOMA NARROWS (MSN) CONTRCT A2
DIST-CO-RTE PM 04-MRN-101, KP 30.0/44.5 (PM 18.6/27.6)
04-SON-101, KP 0.0/11.5 (PM 0.0/7.1)
EA 04-240-2640xx

II. STRUCTURES ITEMS

Bridge	Scope of Work	Total
Franklin OH 27-0090L	Widening	$1,395,000
N Novato OH 27-0094R/L	Widening	$4,336,000
Novato Creek 27-0089	Widening	$442,000
Olive UC 27-0092L	Widening	$509,000
South Novato OC	EQ Retrofit	$136,000
	Subtotal Structure Items	**$6,800,000**
	Railroad Related Cost:	**$0**
	Total Structure Items	**$6,800,000**

PROJECT COST ESTIMATE SUMMARY

MARIN-SONOMA NARROWS (MSN) CONTRCT A2
DIST-CO-RTE PM: 04-MRN-101, KP 30.0/44.5 (PM 18.6/27.6)
04-SON-101, KP 0.0/11.5 (PM 0.0/7.1)
EA: 04-240-2640xx

III. RIGHT-OF-WAY

Acquisition (Includes excess lands and damages)	
Utility Relocation(State Share)	$50,000
Clearance/ Demolition	$0
Rap	$0
Title and Escrow Fees	$0
Environmental Mitigation	$250,000
Subtotal Right of Way Items	**$300,000**
Construction Contract Work	
Total Right of Way	**$300,000**

Six-page Estimate for Contract B1 – Phase II

Project Estimate Cost Summary

District-County-Route 04-Mrn-101

PM R23.3/27.6

EA 04-2640xx

Program Code

PROJECT DESCRIPTION: **Marin-Sonoma Narrows (MSN) Contract B1-Phase II**

Limits

In Marin County, on Route 101 from Atherton Ave. to 0.3 miles North of San Antonio Road

Proposed Improvement (Scope)

HOV Lane, Widening, Mainline Vert. Realignment/Reprofiling, & Ramp Ent./Exit Mods. Widening of N. Novato OH (NB Only)

Alternate

#3 - MSN B1 - Phase II (Hold Mainline Horizontal, but Reprofile Vertical Alignment)

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS:	$	61,888,000
TOTAL STRUCTURE ITEMS:	$	5,320,000
SUBTOTAL CONSTRUCTION COSTS:	**$**	**67,208,000**
TOTAL R/W ACQUISITION ITEMS:	$	938,300
TOTAL UTILITY ITEMS:	$	1,515,000
TOTAL ENVIRONMENTAL MITIGATION ITEMS:	$	669,700
TOTAL RIGHT OF WAY ITEMS (Current Value):	**$**	**3,123,000**
TOTAL PROJECT CAPTIAL OUTLAY COSTS	**$**	**70,331,000**

Prepared By:

Project Engineer: *Gordon C. Sweet, PE* — (925)396-7700 *Phone* — October 7, 2010 *Date*

BKF Engineers

Approved By:

Project Manager *Natalina V. Bernardi, PE* — (925)396-7700 *Phone* — October 7, 2010 *Date*

BKF Engineers

District-County-Route	04-Mrn-101
PM	R23.3/27.6
EA	04-2640xx

I. ROADWAY ITEMS

Section 1 Earthwork	Quantity	Unit	Unit Price	Item Cost	Section Cost
Roadway Excavation	290000	CY	$ 10	$ 2,900,000	
Imported Borrow	0	CY	$ 15	$ -	
Clearing & Grubbing	1	LS	$ 125,000	$ 125,000	
Develop Water Supply	1	LS	$ 125,000	$ 125,000	
				$ -	
Roadway Excavation (Type Y-1) ADL	43000	CY	$ 15	$ 645,000	
				$ -	
				Subtotal Earthwork	$ 3,795,000

Section 2 - Pavement Structural Section*	Quantity	Unit	Unit Price	Item Cost	Section Cost
RHMA (O)	16200	TON	$ 95	$ 1,539,000	
RHMA (G)	39400	TON	$ 100	$ 3,940,000	
HMA (A)	98300	TON	$ 90	$ 8,847,000	
LCB	63400	CY	$ 125	$ 7,925,000	
AB CL3	1700	CY	$ 45	$ 76,500	
AS CL4	143600	CY	$ 20	$ 2,872,000	
HMA Dike	18600	LF	$ 8	$ 148,800	
Remove Base and Surfacing	14700	CY	$ 20	$ 294,000	
Comp.Adj. for Price Ind.Fluct. of Pav.As	1	LS	$ 1,333,859	$ 1,333,859	
Shoulder Rumble Strip	48200	LF	$ 2	$ 96,400	
					$ 27,072,559
				Subtotal Pavement Structural Section	

Section 3 - Drainage	Quantity	Unit	Unit Price	Item Cost	Section Cost
Drainage Facilities	1	LS	$ 2,900,000	$ 2,900,000	
Storm Drains				$ -	
Pumping Plants				$ -	
Project Drainage				$ -	
					$ 2,900,000
				Sutotal Drainage	

* See Typicals for Pavement Structural Structural Section

District-County-Route	04-Mrn-101
PM	R23.3/27.6
EA	04-2640xx

I. ROADWAY ITEMS

Section 4 - Specialty Items	Quantity	Unit	Unit Price	Item Cost	Section Cost
Concrete Barrier (60C)	24100	LF	$ 65	$ 1,566,500	
Chain Link Fence (CL-4)	0	LF	$ 10	$ -	
Water Pollution Control	1	LS	$ 500,000	$ 500,000	
Hazardous Waste Investigation and/or Mitigation Work				$ -	
Metal Beam Guard Rail	700	LF	$ 35	$ 24,500	
Resident Engineer Office Space	1	LS	$ 200,000	$ 200,000	
Fence (Type BW)	48200	LF	$ 8	$ 385,600	
				Subtotal Specialty Items	$ 2,676,600

Section 5 - Traffic Items	Quantity	Unit	Unit Price	Item Cost	Section Cost
Traffic Control Systems	1	LS	$ 1,500,000	$ 1,500,000	
Lighting	1	LS	$ 300,000	$ 300,000	
Ramp Metering	1	LS	$ 100,000	$ 100,000	
Traffic Management Plan	1	LS	$ 275,000	$ 275,000	
Traff.Delineation & Roadside Signs	1	LS	$ 225,000	$ 225,000	
				$ -	
				$ -	
				Subtotal Traffic Items	$ 2,400,000

District-County-Route	04-Mrn-101
PM	R23.3/27.6
EA	04-2640xx

I. ROADWAY ITEMS

Section 6 - Planting and Irrigation	Quantity	Unit	Unit Price	Item Cost	Section Cost
Highway Planting				$ -	
Replacement Planting				$ -	
Irrigation Modification				$ -	
Relocate Existing Irrigation				$ -	
Facilities				$ -	
Irrigation Crossovers				$ -	
			Subtotal Planting and Irrigation Section		$ -

Section 7 - Roadside Management and Safety Section	Quantity	Unit	Unit Price	Item Cost	Section Cost
Vegetation Control Treatments	1	LS	$ 225,000	$ 225,000	
Gore Area Pavement				$ -	
Pavement beyond the Gore Area				$ -	
Miscellaneous Paving				$ -	
Erosion Control	1	LS	$ 1,700,000	$ 1,700,000	
Slope Protection				$ -	
Side Slopes/Embankment Slopes				$ -	
Maintenance Vehicle Pullouts				$ -	
Roadside Facilities				$ -	
Relocating Roadside Facilities				$ -	
			Subtotal Traffic Items		$ 1,925,000

District-County-Route	04-Mrn-101
PM	R23.3/27.6
EA	04-2640xx

I. ROADWAY ITEMS

Section 8 - Minor Items

$ 40,769,159	x	10%	=	$ 4,076,916
Subtotal (Sections 1 thru 7)				TOTAL MINOR ITEMS

Section 9 - Roadway Mobilization

$ 44,846,075	x	8%	=	$ 3,587,686
Subtotal (Sections 1 thru 8)				TOTAL ROADWAY MOBILIZATION

Section 10 - Roadway Additions

Supplmental Work

$ 44,846,075	x	10%	=	$ 4,484,607
Subtotal (Sections 1 thru 8)				

Contingencies

$ 44,846,075	x	20%	=	$ 8,969,215
Subtotal (Sections 1 thru 8)				

TOTAL ROADWAY ADDITIONS $ 13,453,822

TOTAL ROADWAY ITEMS $ 61,887,583
(Subtotal Sect. 1 thru 10)

Estimate Pepared By

Gordon C. Sweet, PE	(925)396-7700	10/7/2010
(Print Name)	Phone Number	Date

Estimate Reviewed By

Natalina V. Bernardi	(925)396-7700	10/7/2010
(Print Name)	Phone Number	Date

District-County-Route	04-Mrn-101
EA	R23.3/27.6
PM	04-2640xx

II. STRUCTURE ITEMS

	Structure (1)	Structure (2)	Structure (3)
Bridge Name	Ret Wall	N. Novato OH (Northbound)	N. Novato OH (Southbound)
Structure Type			
Width (out to out) - (ft)			
Span Lengths - (ft)			
Total Area - (sf)	7000	7700	7700
Footing Type (pile/spread)			
Cost Per Square Foot**	$ 100	$ 300	$ 300
Total Cost for Structure	$ 700,000	$ 2,310,000	$ 2,310,000

SUBTOTAL STRUCTURE ITEMS $ 5,320,000

Railroad Related Costs

SUBTOTAL RAILROAD ITEMS $ -

District-County-Route	04-Mrn-101
EA	R23.3/27.6
PM	04-2640xx

II. STRUCTURE ITEMS

	Structure (4)	Structure (5)	Structure (6)
Bridge Name			
Structure Type			
Width (out to out) - (ft)			
Span Lengths - (ft)			
Total Area - (sf)			
Footing Type (pile/spread)			
Cost Per Square Foot**			
Total Cost for Structure			

SUBTOTAL STRUCTURE ITEMS $ -

Railroad Related Costs

SUBTOTAL RAILROAD ITEMS $ -

TOTAL STRUCTURE ITEMS $ 5,320,000

Estimate prepared by

Name	Phone No.	Date
Anthony Notaro, PE (Biggs Cardosa Associates)	(408) 296-5515	10/7/2010

Six-page Estimate for Contract B2 – Phase II

Route 101 Marin Sonoma Narrow - Preliminary Project Cost Estimate

DIST - CO - RTE:	04-SON-101
Type of Estimate:	Preliminary
Program Code:	
PM:	1.7/2.9
EA:	04-2640xx
PP No. :	

Project Description: **MARIN-SONOMA NARROWS (MSN) Contract B2-Phase II**

Limits: **On Route 101, In Sonoma County, From Kastania Rd. to Petaluma Blvd South OC**

Proposed Improvements: **Reconstruct and widen Route 101 to 6 lanes from Kastania Road to Petaluma Boulevard South Overcrossing**
Re-stripe Route 101 to 6 lanes from Petaluma Blvd OC to Petaluma River Bridge

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	$	17,860,000.00
TOTAL STRUCTURE ITEMS	$	-
SUBTOTAL CONSTRUCTION COSTS	**$**	**17,900,000.00**
TOTAL CONSTRUCTION COSTS	**$**	**17,900,000.00**
TOTAL RIGHT OF WAY ITEMS	$	-
TOTAL CAPITAL COST	**$**	**17,900,000.00**
TOTAL PROJECT COST	**$**	**17,900,000.00**

Note 1 Project cost not escalated

Prepared by Project Engineer:	Tyson Tano, URS Corporation	408-297-9585 (Phone)	4/22/10 (Date)
Approved by Project Manager:	Ramsey Hissen, URS Corporation	408-297-9585 (Phone)	4/22/10 (Date)

Route 101 Marin Sonoma Narrow - Preliminary Project Cost Estimate

DIST - CO - RTE:	04-SON-101
PM:	1.7/2.9
EA:	04-2640xx
PP No. :	

	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Section 1 - Earthwork					
Roadway Excavation	60,000	CY	$ 15.00	$ 900,000.00	
Roadway Excavation (Type Y1)	5,000	CY	$ 20.00	$ 100,000.00	
Imported Borrow	0	CY	$ 15.00	$ -	
Clearing & Grubbing	10	Ac	$ 2,500.00	$ 25,000.00	
Develop Water Supply	1	LS	$ 10,000.00	$ 10,000.00	
Remove Curb and Gutter	0	FT	$ 3.00	$ -	
Remove Concrete Islands	0	SF	$ 35.00	$ -	
Remove Fence	0	LF	$ 5.00	$ -	
Remove Roadside Sign	1	LS	$ 10,000.00	$ 10,000.00	
Remove MBGR	5,000	LF	$ 10.00	$ 50,000.00	
				Total Earthwork	$ 1,095,000.00
Section 2 - Structural Section					
RHMA-G	6,800	Ton	$ 115.00	$ 780,000.00	
HMA (Type A)	23,400	Ton	$ 90.00	$ 2,110,000.00	
Lean Concrete Base	16,600	CY	$ 125.00	$ 2,080,000.00	
Class 4 Aggregate Subbase	31,300	CY	$ 18.00	$ 560,000.00	
Place Asphalt Concrete Dike	5,310	LF	$ 5.00	$ 30,000.00	
Tack Coat	30	CY	$ 800.00	$ 20,000.00	
				Total Structural Section	$ 5,580,000.00
Section 3 - Drainage					
Drainage Work	1	LS	$ 1,500,000.00	$ 1,500,000.00	
				Total Drainage	$ 1,500,000.00

Route 101 Marin Sonoma Narrow - Preliminary Project Cost Estimate

DIST - CO - RTE:	04-SON-101
PM:	1.7/2.9
EA:	04-2640xx
PP No. :	

	Quantity	Unit	Unit Price	Unit Cost	Section Cost
Section 4 - Specialty Items					
Sound Walls	0	SF	$ 50.00	$ -	
Retaining Walls (Std)	13,000	SF	$ 60.00	$ 780,000.00	
Highway Planting		LS	$ 500,000.00	$ -	
New Fence	0	LF	$ 18.00	$ -	
Biofiltration Strip	0	SQYD	$ 20.00	$ -	
Biofiltration Swale	500	SQYD	$ 20.00	$ 10,000.00	
Hydromodification	1	LS	$ 100,000.00	$ 100,000.00	
Erosion Control	1	LS	$ 300,000.00	$ 300,000.00	
Prepare SWPPP & HSP	1	LS	$ 20,000.00	$ 20,000.00	
Time-Related Overhead	200	WDAY	$ 5,000.00	$ 1,000,000.00	
Concrete Barriers	8,500	LF	$ 80.00	$ 680,000.00	
Crash Cushion	2	EA	$ 25,000.00	$ 50,000.00	
MBGR	0	LF	$ 40.00	$ -	
Minor Concrete	1	LS	$ 100,000.00	$ 100,000.00	
Environmental Mitigation	1	LS	$ 200,000.00	$ 200,000.00	
Maintenance Vehicle Pullouts	1	LS	$ 50,000.00	$ 50,000.00	
RE office	1	LS	$ 100,000.00	$ 100,000.00	
Temporary Retaining Walls	1	LS	$ 200,000.00	$ 200,000.00	
				Total Specialty Items	$ 3,590,000.00

Note 2 Design Phase cost uses 12% non-escalated construction cost.

Section 5 - Traffic Items					
Lighting	1	LS	$ 300,000.00	$ 300,000.00	
Traffic Operation Systems	1	LS	$ 400,000.00	$ 400,000.00	
Sign & Sign Structure	1	LS	$ 100,000.00	$ 100,000.00	
Traffic Signal Modification	1	LS	$ 100,000.00	$ 100,000.00	
New Signal at S. Petaluma IC	0	LS	$ 250,000.00	$ -	
Portable CMS	1	LS	$ 150,000.00	$ 150,000.00	
Traffic Management Plan	1	LS	$ -		
Construction Area Sign	1	LS	$ 70,000.00	$ 70,000.00	
Temporary Lighting & Sign Illumin	1	LS	$ 60,000.00	$ 60,000.00	
Temporary Railing (Type K)	1	LS	$ 300,000.00	$ 300,000.00	
Temporary Traffic Striping	1	LS	$ 50,000.00	$ 50,000.00	
Striping	1	LS	$ 60,000.00	$ 60,000.00	
				Total Traffic Items	$ 1,590,000.00

Design Phase cost uses 12% non-escalated construction cost. Change in B45.

SUBTOTAL SECTIONS 1 - 5: $ 13,360,000.00

Route 101 Marin Sonoma Narrow - Preliminary Project Cost Estimate

DIST - CO - RTE:	04-SON-101
PM:	1.7/2.9
EA:	04-2640xx
PP No. :	

					Unit Cost	Section Cost
Section 6 - Minor Items						
Subtotal Sections 1 - 5	$ 13,360,000.00	X	5%		$ 700,000.00	
					TOTAL MINOR ITEMS:	$ 700,000.00
Section 7 - Roadway Mobilization						
Subtotal Sections 1 - 6	$ 14,060,000.00	X	10%		$ 1,400,000.00	
					TOTAL ROADWAY MOBILIZATION	$ 1,400,000.00
Section 8 - Roadway Additions						
Subtotal Sections 1 - 6	$ 14,060,000.00	X	5%		$ 700,000.00	
Contingencies						
Subtotal Sections 1 - 6	$ 14,060,000.00	X	10%		$ 1,400,000.00	
					TOTAL ROADWAY ADDITIONS	$ 2,100,000.00
					TOTAL ROADWAY ITEMS (Total of Sections 1 - 8)	$ 17,560,000.00
Section 9 - Supplemental Work						
Maintain Traffic	1	LS	$	100,000.00		$ 100,000.00
Plant Establishment	1	LS	$	100,000.00		$ 100,000.00
					TOTAL SUPPLEMENTAL WORK	$ 200,000.00
Section 10 - State Furnished						
CHP Enhanced Enforcement (COZEEP)	1	LS	$	100,000.00		$ 100,000.00
TMP - Public Awareness	1	LS	$	25,000.00		$ -
					TOTAL STATE FURNISHED	$ 100,000.00
					TOTAL ROADWAY ITEMS (Total of Sections 1 - 10)	$ 17,860,000.00

Estimate Prepared By:	Tyson Tano	408-297-9585	4/22/2010
	(Print Name)	(Phone)	(Date)

Route 101 Marin Sonoma Narrow - Preliminary Project Cost Estimate

DIST - CO - RTE:	04-SON-101
PM:	1.7/2.9
EA:	04-2640xx
PP No. :	

II. STRUCTURES [1]	#1	#2	#3	#4	#5
Bridge Name					
Structure Type					
Width (Ft) - New Construct.					
Width (Ft) - Widening					
Width (Ft) - Retrofit					
Span Lengths (Ft)					
Total New Construct. Area (SF)					
Total Widening Area (SF)					
Total Retrofit Area (SF)					
Footing Type (pile/spread)					
Cost per SF New Construct.					
Cost per SF Widening					
Cost per SF Retrofit					
Cost for New Construction					
Cost for Widening					
Cost for Retrofit					
Cost for Removal					
Pretotal Cost for Structures					
Cost of 10% Mobilization					
Cost of 25% Contingency					
Railroad Related Costs					
Subtotal Cost for Structures					
				Structures Subtotal	**$ -**

Note 1 No structure cost anticipated in MSN B2 Phase II.

Special Retaining Walls Subtotal	**$ -**
Total Structures	**$ -**

Estimate Prepared By: Tyson Tano (Print Name) 408-297-9585 (Phone) 4/22/2010 (Date)

Route 101 Marin Sonoma Narrow - Preliminary Project Cost Estimate

DIST - CO - RTE:	04-SON-101
PM:	1.7/2.9
EA:	04-2640xx
PP No. :	

III. RIGHT OF WAY ITEMS

Right-of-Way estimates should consider the probable highest and best use and type and intent of improvements at the time of acquisition. Assume acquisition including utility relocation occurs at the right of way certification milestone as shown in the Funding and Scheduling Section of the PSR. For further guidance see Chapter 1, Caltrans Right of Way Procedural Handbook.

	Current Values (Future Use)	Escalation Rate (%/yr)	Escalated Value (2011)
Acquisition, including excess lands and damages to remainders	$ -	0.00%	$ -
Utility Relocation (SCTA share)*	$ -	0.00%	$ -
Relocation Assistance (RAP)	$ -	0.00%	$ -
Clearance / Demolition		0.00%	$ -
R/W Services - Title and Escrow Fees	$ -	0.00%	$ -
TOTAL RIGHT OF WAY	$ -		$ -

* - Cost to relocate Elect, Phone, Gas and water

Note 1 Right of Way and Utility Items to be provided by Caltrans.

Estimate Prepared By:	Tyson Tano	408-297-9585	4/22/2010
	(Print Name)	(Phone)	(Date)

Six-page Estimate for Contract B3 – Phase II

TAM - Preliminary Cost Estimate - MSN B3, Phase 2

District-County-Route 04 - SON - 101

Date: 4/20/10

PM

EA

Program Code

PROJECT DESCRIPTION:

Limits: Route 101 Segment B3 "Curve Correction" from south of San Antonio Creek to Kastania Road.

Proposed Improvement (Scope): Widening of Hwy 101 (from 4-lane Phase I to 6 lane with 10 foot shoulders Phase II). Removal & replacement of existing median maintenance pavement with full pavement section and restriping of Hwy 101, construct new San Antonio Road Bridge (B6). Portions of San Antonio Road (B6)

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	$	10,800,000
TOTAL STRUCTURE ITEMS	$	1,700,000
TOTAL UTILITY ITEMS	$	500,000
SUBTOTAL CONSTRUCTION COSTS	$	13,000,000
TOTAL RIGHT OF WAY ITEMS (EXCLUDING UTILITIES)	$	1,300,000
ENVIRONMENTAL MITIGATION	$	500,000
TOTAL COST	$	**14,800,000**

District-County-Route _____

PM _____

EA _____

I. ROADWAY ITEMS

Section 1 Earthwork	Quantity	Unit	Unit Price	Item Cost	Section Cost
Clearing & Grubbing	1	LS	$ 75,000	$ 75,000	
Roadway Excavation	51,000	CY	$ 10	$ 510,000	
Roadway Excav. (local road)	18,480	CY	$ 20	$ 369,600	
Shoulder Backing	50	CY	$ 1,400	$ 70,000	
Ditch Excavation	100	CY	$ 75	$ 7,500	
Develop Water Supply	1	LS	$ 18,000	$ 18,000	
				Subtotal Earthwork	$ 1,050,000

Section 2 Pavement Structural Section*					
HMA (Type A)	21,951	TON	$ 80	$ 1,756,100	
RHMA-O	3,047	TON	$ 95	$ 289,465	
RHMA-G	4,571	CY	$ 95	$ 434,245	
Lean Concrete Base	11,285	CY	$ 125	$ 1,410,625	
Class 2 AB	0	CY	$ 30	$ 0	
Class 4 AS	18,206	CY	$ 30	$ 546,180	
Class 3 Permeable Material	2,509	CY	$ 40	$ 100,360	
Class 4 AB	5,130	CY	$ 25	$ 128,250	
Class 3 AS	3,550	CY	$ 25	$ 88,750	
Seal Random Cracks	2.4	LNKM	$ 1,500	$ 3,600	
				Subtotal Pavement Structural Section	$ 4,665,000

Section 3 Drainage					
Highway Planting	1	LS	$ 50,000	$ 50,000	
Pipes	1	LS	$ 250,000	$ 250,000	
Rock Slope protection	50	CY	$ 300	$ 15,000	
				Subtotal Drainage	$ 315,000

*Reference sketch showing typical pavement structural section elements of the roadway. Include (if available) T.I., R-Value and date when tests were performed.

NOTE: Extra lines are provided for items not listed, use additional lines as appropriate.

District-County-Route _____

PM _____
EA _____

Section 4 Specialty Items	Quantity	Unit	Unit Price	Item Cost	Section Cost
Progress Schedule (Critical Path)	1	LS	$ 6,500	$ 6,500	
Time-Related Overhead	1	LS	$ 50,000	$ 50,000	
Temp. Pavement Marking (paint)	50	SQFT	$ 15	$ 750	
Temp. Traffic Stripe (paint)	6300	LS	$ 2	$ 12,600	
Temp. Pavement Marker	200	EA	$ 6	$ 1,200	
Temp. Railing (Type K)	27,923	LS	$ 13	$ 363,000	
Temp. Crash Cushion Module	8	EA	$ 300	$ 2,400	
Remove Fence	1600	FT	$ 15	$ 24,000	
Remove MBGR	250	FT	$ 5	$ 1,250	
Remove Pavement Marker	500	EA	$ 2	$ 1,000	
Remove Roadside Sign	150	EA	$ 75	$ 11,250	
Remove AC Dike	5250	FT	$ 1	$ 5,250	
Remove Thermoplastic Stripe	6300	FT	$ 2	$ 12,600	
Terminal System (Type SRT)	4	EA	$ 4,500	$ 18,000	
SWPPP and Implementation	1	LS	$ 150,000	$ 150,000	
				Subtotal Specialty Items	$ 660,000
Section 5 Traffic Items					
Traffic Control	1	LS	$ 250,000	$ 250,000	
Construction Area Signs	1	LS	$ 5,000	$ 5,000	
Portable Changeable Msg Sign	1	LS	$ 50,000	$ 50,000	
Maintain Traffic	1	LS	$ 25,000	$ 25,000	
Traffic Management Plan	1	LS	$ 15,000	$ 15,000	
Resident Engineer Office	1	LS	$ 50,000	$ 50,000	
Signal & Lighting	1	LS	$ 50,000	$ 50,000	
Thermoplastic Pav't Marking	200	SQFT	$ 45	$ 9,000	
Striping	1	LS	$ 68,800	$ 68,800	
Pavement Marker (Reflective)	200	EA	$ 5	$ 1,000	
COZEEP	1	LS	$ 25,000	$ 25,000	
				Subtotal Traffic Items	$ 548,800

TOTAL SECTIONS 1 thru 5 $ 7,239,000
$0

NOTE: Extra lines are provided for items not listed, use additional lines as appropriate.

District-County-Route _____

PM _____
EA _____

Section 6 Minor Items

		Item Cost	Section Cost
$ 7,239,000 (Subtotal Sections 1 thru 5)	x (10%) =	$ 723,900	
		TOTAL MINOR ITEMS	$ 724,000

Section 7 Roadway Mobilization

$ 7,962,900 (Subtotal Sections 1 thru 6)	x (10%) =	$ 796,290	
		TOTAL ROADWAY MOBILIZATION	$ 796,000

Section 8 Roadway Additions

Supplemental Work

$ 7,962,900 (Subtotal Sections 1 thru 6)	x (5%) =	$ 398,145	

Contingencies

$ 7,962,900 (Subtotal Sections 1 thru 6)	x (20%) =	$ 1,592,580	
		TOTAL ROADWAY ADDITIONS	$ 1,991,000
		TOTAL ROADWAY ITEMS (Subtotal Sections 1 thru 8)	$ 10,750,000

Estimate Prepared By Tom Connell (Print Name) Phone# 925.938.0383 Date 5/7/2010

Estimate Checked By Sasha Dansky (Print Name) Phone# 925.938.0383 Date 5/7/2010

** Use appropriate percentage per Chapter 20.

District-County-Route _____

PM _____
EA _____

II. STRUCTURES ITEMS

	Structure 0
Bridge Name	San Antonio Road Bridge
Structure Type	
Width (out to out) - (ft)	
Span Lengths - (ft)	
Total Area - (sf)	0
Footing Type (pile/spread)	
Cost Per sf (incl. 10% mobilization and 20% contingency)	$
Total Cost for Structure	$ 1,700,000

TOTAL STRUCTURES ITEMS $ 1,700,000

III. UTILITY ITEMS	Quantity	Unit	Unit Price	Item Cost	Section Cost
			$	$	
			$	$	
			$	$	

TOTAL UTILITY ITEMS $ 0

COMMENTS:

Estimate Prepared By Tom Connell (Print Name) Phone# 925.938.0383 Date 5/7/2010

NOTE: If appropriate, attach additional pages and backup.

District-County-Route _____

PM _____
EA _____

IV. RIGHT OF WAY ITEMS

A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	$ 1,285,000
B. Utility Relocation	$ 0
C. Relocation Assistance	$ 0
D. Clearance/Demolition	$ 0
E. Title and Escrow Fees	$ 0

TOTAL RIGHT OF WAY ITEMS $ 1,285,000

Anticipated Date of Right of Way Certification _____
(Date to which Values are Escalated)

F. Construction Contract Work

Brief Description of Work:

_____
_____
_____
_____

Right of Way Branch Cost Estimate for Work * $ _____

* This dollar amount is to be included in the Roadway and/or Structures Items of Work, as appropriate. Do not include in Right of Way Items.

COMMENTS:

Estimate Prepared By Mark Thomas & Co. — (Signature) — Tom Connell (Print Name) — Phone# 925.938.0383 — Date 4/20/2010

Estimate Approved By Mark Thomas & Co. — (Signature) — Sasha Dansky (Print Name) — Phone# 925.938.0383 — Date 4/20/2010

NOTE: If appropriate, attach additional pages and backup.

Six-page Estimate for Contract C2

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE PM: 04-SON-101, PM 3.6/7.1
EA: 04-2640xx

PROJECT DESCRIPTION: MARIN-SONOMA NARROWS (MSN)
Contract C2

Limits: North of 116/101 Seperation to North of Corona Road

Proposed Improvement: Widen Route 101 to construct HOV lanes in the median, construct soundwalls

ROADWAY ITEMS:	**$49,000,000**
STRUCTURE ITEMS:	**$10,780,000**
SUBTOTAL CONSTRUCTION:	**$59,780,000**
RIGHT-OF-WAY:	**$3,510,000**
TOTAL PROJECT COST:	**$63,290,000**

Prepared by Project Engineer
Phone No: 530-225-2787

Robert Nixon — Date: 4-10-2010

Approved by Design Branch Chief
Phone No: 530-225-3476

John Martin — Date: 4/10/10

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

MARIN-SONOMA NARROWS (MSN) CONTRACT C2

I. ROADWAY ITEMS

Section 1 Earthwork	Quantity	Unit	Unit Price	Cost
Clearing & Grubbing	1	LS	$430,000	$430,000
Roadway Excavation	77900	CY	$20	$1,558,000
Shoulder Backing	12	CY	$1,400	$16,800
Roadway Ex.(Type Y)(ADL)	7,700	CY	$40	$308,000
Roadway Ex.(Type Z-3)(ADL)	700	CY	$150	$105,000
Ditch Excavation	100	CY	$75	$7,500
Develop Water Supply	1	EA	$18,000	$18,000
			Total Earthwork:	**$2,443,300**

Section 2 Structural Section				
Class 4 Aggregate Subbase	20300	CY	$25	$507,500
Lean Concrete Base	22740	CY	$125	$2,842,500
Seal Random Cracks	19.2	LNKM	$1,500	$28,800
Asphalt Concrete Dike	600	TON	$90	$54,000
Hot Mix Asphalt	32740	TON	$90	$2,946,600
RHMA (Type G)	25000	TON	$100	$2,500,000
RHMA (Type O)	12500	TON	$110	$1,375,000
Replace Asphalt Concrete Surfacing	960	CY	$300	$288,000
Place AC (Misc. Area)	3760	SQYD	$25	$94,000
Asphalt Emulsion (Paint Binder)	20	TON	$500	$10,000
Comp.Adj. for Price Ind.Fluct. of Pav.Asp.	1	LS	$430,000	$430,000
			Total Structural Section:	**$11,076,400**

Section 3 Drainage				
Temporary DI Protection	22	LS	$650	$14,300
Removals	1	LS	$350,000	$350,000
Modifiy Inlet	1	LS	$350,000	$350,000
Highway Planting	1	LS	$1,030,000	$1,030,000
Pipes	1	LS	$1,200,000	$1,200,000
Overside Downdrain	5	EA	$250	$1,250
Rock Slope Protection	20	CY	$300	$6,000
Inlet Frame And Grate	50000	LB	$1	$50,000
Alternative Flared End Section	1	LS	$23,000	$23,000
Minor Concrete(DI; Headwall)	1	LS	$300,000	$300,000
Junction Chamber	5	EA	$2,000	$10,000
Hydromodification	1	LS	$900,000	$900,000
			Total Drainage:	**$4,234,550**

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

MARIN-SONOMA NARROWS (MSN) CONTRACT C2

Section 4 Specialty Items				
Progress Schedule (Critical Path)	1	LS	$6,500	$6,500
Time -Related Overhead	1	LS	$750,000	$750,000
Health And Safety Plan	1	LS	$26,000	$26,000
Temporary Pavement Marking(Paint)	2000	SQFT	$15	$30,000
Temporary Traffic Stripe (Paint)	149400	FT	$2	$298,800
Temporary Pavement Marker	1290	EA	$6	$7,740
Temporary Railing (Type K)	74800	FT	$10	$748,000
Temporary Crash Cushion Module	36	EA	$300	$10,800
Temporary Retaining Walls	77500	SQFT	$15	$1,162,500
Remove Fence	1600	FT	$15	$24,000
Remove Metal Beam Guard Railing	8300	FT	$5	$41,500
Remove Pavement Marker	46100	EA	$2	$92,200
Remove Roadside Sign	150	EA	$75	$11,250
Remove Asphalt Concrete Dike	5250	FT	$1	$5,250
Remove Yellow Thermo.Traffic Stripe	2000	FT	$5	$10,000
Remove Thermoplastic Traffic Stripe	8000	FT	$2	$16,000
Lead Compliance Plan	1	LS	$26,000	$26,000
Retaining Wall	23570	SQFT	$50	$1,178,500
Sound Wall (Masonry Block)	81700	SQFT	$35	$2,859,500
Treatment BMPs	1	LS	$900,000	$900,000
Milepost Marker	7	EA	$50	$350
Object Marker (Type K)	18	EA	$100	$1,800
Metal Beam Guard Railing	700	FT	$25	$17,500
Transition Railing (Type WB)	26	EA	$2,600	$67,600
Terminal System (Type SRT)	26	EA	$2,000	$52,000
Concrete Barrier (Type 60)	18600	FT	$50	$930,000
Fiber Optic Trunk Line	1	LS	$750,000	$750,000
SWPP And Implementation	1	LS	$900,000	$900,000
Highway Advisory Radio	1	EA	$85,000	$85,000
Contrasting Treatment (gore)	100	CY	$650	$65,000
			Total Specialty Items:	**$11,073,790**
Section 5 Traffic Items:				
Traffic Control System	1	LS	$1,250,000	$1,250,000
Construction Area Sign	1	LS	$80,000	$80,000
Portable Changeable Message Sign	1	LS	$300,000	$300,000
Maintain Traffic	1	LS	$60,000	$60,000
Sign Structure	1	LS	$320,000	$320,000
Cozeep Contract	1	LS	$540,000	$540,000
Traffic Management Plan-Public Information	1	LS	$78,000	$78,000
Partnering	1	LS	$100,000	$100,000

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

MARIN-SONOMA NARROWS (MSN) CONTRACT C2

Traffic Items (Continued)				
Resident Engineer Office	1	LS	$110,000	$110,000
Sign Panel	1	EA	$90,000	$90,000
Electrical Service Connections	1	EA	$140,000	$140,000
Signal and Lighting	1	LS	$900,000	$900,000
Extinguishable Message Sign Systems	4	EA	$50,000	$200,000
Lighting Conduit (Bridge)	1	LS	$46,000	$46,000
Traffic Monitoring Station	1	LS	$1,040,000	$1,040,000
Closed Circuit Television System	5	EA	$90,000	$450,000
Thermoplastic Pavement Marking	1350	SQFT	$45	$60,750
Thermo.Plastic Stripe(Sprayable)	77500	FT	$1	$77,500
Pavement Marker (Retroreflective)	2770	EA	$5	$13,850
Ramp Metering System	1	LS	$600,000	$600,000
			Total Traffic Items:	**$6,456,100**

		CONSTRUCTION SUBTOTAL (SECT. 1-5):	**$35,284,140**
Section 6 Minor Construction Items :			
Subtotal Construction	$35,284,140	x 5%	$1,764,207
	Total Minor Construction Items :		**$1,764,000**
Section 7 Roadway Mobilization :			
Subtotal Construction	$35,284,140		
Minor Construction Items	$1,764,000		
Sum	$37,048,140	x 10%	$3,704,814
Total Roadway Mobilization			**$3,705,000**
Section 8 Roadway Additions			
Supplemental Items (5%-10%)			
Subtotal Construction	$35,284,140		
Minor Construction Items	$1,764,000		
Sum	$37,048,140	x 5%	$1,852,407
	Total Roadway Addition		**$1,852,000**
	ROADWAY SUBTOTAL (SECT. 1-8) :		**$42,605,140**
	CONTINGENCY 15%		**$6,390,771**
		TOTAL ROADWAY ITEMS :	**$48,995,911**
		TOTAL STRUCTURE ITEMS :	**$10,780,000**
		TOTAL R/W ITEMS :	**$3,510,000**
		TOTAL PROJECT :	**$63,285,911**

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

MARIN-SONOMA NARROWS (MSN) CONTRACT C2

II. STRUCTURES ITEMS

Bridge Name	Scope of Work	Area	Cost/ sqm	Total
Caulfield Lane OC 20-0245	Maintenance			$42,600
Corona Rd OC 20-0160	Maintenance			$33,900
Washington Creek 20-0163R/L	Widening			$965,000
Lynch Creek 20-0162L/R	Widening			$798,000
North Petaluma OH 20-0158L/R	Replacing/Removal			$8,941,000

Subtotal Structure Items	**$10,780,000**
Railroad Related Cost:	**$0**
Total Structure Items	**$10,780,000**

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

MARIN-SONOMA NARROWS (MSN) CONTRACT C2

III. RIGHT-OF-WAY

Acquisition (Includes excess lands and damages)	$1,628,000
Utility Relocation(State Share)	$47,000
Clearance/ Demolition	$0
Rap	$0
Title and Escrow Fees	$35,000
Environmental Mitigation	$1,800,000
Subtotal Right of Way Items	**$3,510,000**
Construction Contract Work	
Total Right of Way	**$3,510,000**

95% Construction Cost Estimate for Contract C3

PRELIMINARY SCHEDULE OF PRICES AND QUANTITIES FOR
MSN Contract C3 (In Sonoma County In Petaluma From North Of The
Petaluma River Bridge To 0.2 Mile North Of Caulfield Lane Overcrossing)
95% PS&E (116 Separation Bridges - HOV Lanes)
8/12/2011

Item No.	Item Code		Item Description	Unit	Quantity	Unit Price	Item Total
1	070012		Progress Schedule (Critical Path Method)	LS	1	$ 25,000.00	$ 25,000
2	070018		Time-Related Overhead	LS	1	$1,030,000.00	$ 1,030,000
3	071325		Temporary Fence (Type ESA)	LF	1,830	$ 3.00	$ 5,490
4	073006		18" Temporary Culvert	LF	282	$ 90.00	$ 25,380
5	073101A		18" Temporary Slotted Corrugated Steel Pipe (0.079" Thick)	LF	191	$ 100.00	$ 19,100
6	074016		Construction Site Management	LS	1	$ 100,000.00	$ 100,000
7	074019		Prepare Storm Water Pollution Prevention Plan	LS	1	$ 15,000.00	$ 15,000
8	074028		Temporary Fiber Rolls	LF	3,100	$ 3.00	$ 9,300
9	074029		Temporary Silt Fence	LF	2,590	$ 1.80	$ 4,662
10	074033		Temporary Construction Entrance	EA	4	$ 2,500.00	$ 10,000
11	074037		Move-in/Move-Out (Temporary Erosion Control)	EA	8	$ 950.00	$ 7,600
12	074038		Temporary Drainage Inlet Protection	EA	15	$ 300.00	$ 4,500
13	074040		Temporary Hydraulic Mulch (Bonded Fiber Matrix)	SQYD	6,650	$ 0.85	$ 5,653
14	074041		Street Sweeping	LS	1	$ 20,000.00	$ 20,000
15	074042		Temporary Concrete Washout (Portable)	LS	2	$ 5,000.00	$ 10,000
16	074056		Rain Event Action Plan	EA	1	$ 500.00	$ 500
17	074057		Storm Water Annual Report	EA	2	$ 2,000.00	$ 4,000
18	074058		Storm Water Sampling and Analysis Day	EA	40	$ 1,040.00	$ 41,600
19	120090		Construction Area Signs	LS	1	$ 30,000.00	$ 30,000
20	120100		Traffic Control System	LS	1	$ 150,000.00	$ 150,000
21	120120		Type III Barricade	EA	2	$ 90.00	$ 180
22	120149		Temporary Pavement Marking (Paint)	SQFT	2,217	$ 5.50	$ 12,194
23	120159		Temporary Traffic Stripe (Paint)	LF	71,077	$ 1.00	$ 71,077
24	120165		Channelizer (Surface Mounted)	EA	15	$ 40.00	$ 600
25	120300		Temporary Pavement Marker	EA	2,421	$ 3.75	$ 9,079
26	128650		Portable Changeable Message Sign	LS	1	$ 50,000.00	$ 50,000
27	129000		Temporary Railing (Type K)	LF	24,020	$ 13.00	$ 312,260
28	129100		Temporary Crash Cushion Module	EA	222	$ 240.00	$ 53,280
29	129510		Temporary Retaining Wall	SQFT	10,155	$ 20.00	$ 203,100
30	148005		Noise Monitoring	LS	1	$ 10,000.00	$ 10,000
31	150206		Abandon Culvert	LF	796	$ 30.00	$ 23,880
32	150242A		Abandon Sanitary Sewer Pipe	LF	211	$ 4.00	$ 844
33	150608		Remove Chain Link Fence	LF	1,770	$ 1.80	$ 3,186
34	150662		Remove Metal Beam Guard Railing	LF	513	$ 10.00	$ 5,130
35	150667A		Remove Double Thrie Beam Barrier	LF	650	$ 13.50	$ 8,775
36	150668		Remove Flared End Section	EA	1	$ 450.00	$ 450
37	150712		Remove Pavement Marking	SQFT	995	$ 2.20	$ 2,189
38	150714		Remove Thermoplastic Traffic Stripe	LF	24,062	$ 0.50	$ 12,031
39	150722		Remove Pavement Marker	EA	995	$ 1.50	$ 1,493
40	150742		Remove Roadside Sign	EA	28	$ 200.00	$ 5,600
41	150760		Remove Sign Structure	EA	1	$ 10,000.00	$ 10,000
42	150805		Remove Culvert	LF	1,107	$ 30.00	$ 33,210
43	150820		Remove Inlet	EA	11	$ 852.00	$ 9,372
44	150821		Remove Headwall	EA	0	$ 1,200.00	$ -
45	150826		Remove Manhole	EA	0	$ 1,600.00	$ -
46	150860		Remove Base and Surfacing	CY	1,545	$ 15.00	$ 23,175
47	152387		Relocate Roadside Sign-Two Post	EA	1	$ 385.00	$ 385
48	152394		Relocate Sign Structure	EA	0	$ 6,000.00	$ -
49	152430		Adjust Inlet	EA	1	$ 1,500.00	$ 1,500
50	152432		Adjust Frame and Cover to Grade	EA	0	$ 1,500.00	$ -
51	153103		Cold Plane Asphalt Concrete Pavement	SQYD	1,099	$ 5.50	$ 6,045
52	153210		Remove Concrete	CY	1,265	$ 45.00	$ 56,925
53	153221		Remove Concrete Barrier	LF	1,250	$ 20.00	$ 25,000
54	157554		Bridge Removal, Location D	LS	1	$ 744,000.00	$ 744,000
55	157560		Bridge Removal (Portion)	LS	1	$ 69,000.00	$ 69,000
56	170101		Develop Water Supply	LS	1	$ 10,000.00	$ 10,000
57	190101		Roadway Excavation	CY	13,958	$ 15.00	$ 209,370
58	190107		Roadway Excavation (Type Y-1) (Aerially Deposited Lead)	CY	1,495	$ 20.00	$ 29,900
59	190110		Lead Compliance Plan	LS	1	$ 5,000.00	$ 5,000
60	190111		ADL Burial Location Report	LS	1	$ 5,000.00	$ 5,000
61	192003	(F)	Structure Excavation (Bridge)	CY	1,042	$ 70.00	$ 72,940
62	192008	(F)	Structure Excavation (Type A)	CY	476	$ 200.00	$ 95,200
63	192037A		Structure Excavation (Type D) (Crash Wall)	CY	43	$ 70.00	$ 3,010
64	193003	(F)	Structure Backfill (Bridge)	CY	794	$ 55.00	$ 43,670
65	193013		Structure Backfill (Retaining Wall)	CY	1,093	$ 35.00	$ 38,252
66	193013A		Structure Backfill (Crash Wall)	CY	24	$ 55.00	$ 1,320

PRELIMINARY SCHEDULE OF PRICES AND QUANTITIES FOR
MSN Contract C3 (In Sonoma County In Petaluma From North Of The
Petaluma River Bridge To 0.2 Mile North Of Caulfield Lane Overcrossing)
95% PS&E (116 Separation Bridges - HOV Lanes)
8/12/2011

Item No.	Item Code		Item Description	Unit	Quantity	Unit Price	Item Total
67	193114		Sand Backfill	CY	93	$ 200.00	$ 18,600
68	194001		Ditch Excavation	CY	738	$ 43.00	$ 31,734
69	198001		Imported Borrow	CY	27,996	$ 15.00	$ 419,940
70	200101A		Imported Biofiltration Soil	CY	175	$ 50.00	$ 8,750
71	203018		Plant (Group M)	EA	2,702	$ 8.00	$ 21,616
72	203021		Fiber Rolls	LF	1,872	$ 3.00	$ 5,616
73	203025		Compost, Incorporate	SQYD	8,464	$ 5.50	$ 46,554
74	203026		Move-in/Move-Out (Erosion Control)	EA	3	$ 1,500.00	$ 4,500
75	203031		Erosion Control (Hydroseed)	SQFT	127,016	$ 0.17	$ 21,593
76	203034		Rolled Erosion Control Product (Netting)	SQFT	58,344	$ 0.69	$ 40,257
77	208738		8" Corrugated High Density Polyethylene Pipe Conduit	LF	74	$ 55.00	$ 4,070
78	208808		8" Welded Steel Pipe Conduit (0.25" Thick)	LF	133	$ 100.00	$ 13,300
79	250401		Class 4 Aggregate Subbase	CY	13,464	$ 18.00	$ 242,352
80	260201		Class 2 Aggregate Base	CY	2,994	$ 36.00	$ 107,784
81	260301		Class 3 Aggregate Base	CY	46	$ 30.00	$ 1,380
82	280000		Lean Concrete Base	CY	6,809	$ 125.00	$ 851,125
83	390131		Hot Mix Asphalt	TON	17,315	$ 90.00	$ 1,558,350
84	390137		Rubberized Hot Mix Asphalt (Gap Graded)	TON	3,956	$ 110.00	$ 435,160
85	394074		Place Hot Mix Asphalt Dike (Type C)	LF	66	$ 19.00	$ 1,254
86	394076		Place Hot Mix Asphalt Dike (Type E)	LF	1,287	$ 2.00	$ 2,574
87	394077		Place Hot Mix Asphalt Dike (Type F)	LF	37	$ 12.00	$ 444
88	394090		Place Hot Mix Asphalt (Miscellaneous Area)	SQYD	7	$ 15.00	$ 105
89	397005		Tack Coat	TON	18	$ 800.00	$ 14,400
90	490605		36" Cast-In-Drilled-Hole Concrete Piling	LF	666	$ 400.00	$ 266,400
91	490742A		Furnish Piling (Class 90) (Alternative "X")	LF	5,111	$ 30.00	$ 153,330
92	490743A		Drive Pile (Class 140) (Alternative "X")	EA	71	$ 2,000.00	$ 142,000
93	490746A		Furnish Piling (Class 140) (Alternative "X")	LF	3,110	$ 30.00	$ 93,300
94	490747A		Drive Pile (Class 140) (Alternative "X")	EA	39	$ 2,000.00	$ 78,000
95	490782A		Furnish Piling (Class 200) (Alternative "X")	LF	20,494	$ 40.00	$ 819,760
96	490783A		Drive Pile (Class 200) (Alternative "X")	EA	313	$ 2,000.00	$ 626,000
97	498016		16" Cast-In-Drilled-Hole Concrete Piling (Sound Wall)	LF	16,295	$ 80.00	$ 1,303,600
98	500001		Prestressing Cast-In-Place Concrete	LS	0	$ 250,000.00	$ -
99	510053	(F)	Structural Concrete, Bridge	CY	4,824	$ 675.00	$ 3,256,200
100	510060	(F)	Structural Concrete, Retaining Wall	CY	458	$ 450.00	$ 206,280
101	510060A		Structural Concrete, Crash Wall	CY	81	$ 450.00	$ 36,450
102	510086		Structural Concrete, Approach Slab (Type N)	CY	215	$ 600.00	$ 129,000
103	510502		Minor Concrete (Minor Structure)	CY	91	$ 700.00	$ 63,700
104	510524		Minor Concrete (Sound Wall)	CY	12	$ 580.00	$ 7,018
105	510526		Minor Concrete (Backfill)	CY	391	$ 175.00	$ 68,425
106	512277		Furnish PC PS Concrete Bulb-Tee Girder (80'-90')	EA	33	$ 42,500.00	$ 1,402,500
107	512278		Furnish PC PS Concrete Bulb-Tee Girder (90'-100')	EA	11	$ 27,750.00	$ 305,250
108	512281		Furnish PC PS Concrete Bulb-Tee Girder (120'-130')	EA	22	$ 37,000.00	$ 814,000
109	512500		Erect Precast Prestressed Concrete Girder	EA	0	$ 4,000.00	$ -
110	517961		Sound Wall (Barrier) (Masonry Block)	SQFT	27,349	$ 14.00	$ 382,890
111	518002	(F)	Sound Wall (Masonry Block)	SQFT	6,418	$ 15.00	$ 96,270
112	519095		Joint Seal Assembly (MR 4")	LF	70	$ 215.00	$ 15,050
113	519099		Joint Seal Assembly (MR 6")	LF	68	$ 700.00	$ 47,600
114	520102	(F)	Bar Reinforcing Steel (Bridge)	LB	1,447,200	$ 0.80	$ 1,157,760
115	520103	(F)	Bar Reinforcing Steel (Retaining Wall)	LB	47,709	$ 0.80	$ 38,167
116	520103A		Bar Reinforcing Steel (Crash Wall)	LB	11,159	$ 0.80	$ 8,927
117	520120		Headed Bar Reinforcement	EA	267	$ 20.00	$ 5,340
118	560218	(F)	Furnish Sign Structure (Truss)	LB	23,500	$ 5.50	$ 129,250
119	560219	(F)	Install Sign Structure (Truss)	LB	23,500	$ 0.50	$ 11,750
120	560233	(F)	Furnish Formed Panel Sign (Overhead)	SQFT	187	$ 20.00	$ 3,740
121	560235		Furnish Laminated Panel Sign (1" - Type B)	SQFT	193	$ 20.00	$ 3,860
122	560248		Furnish Single Sheet Aluminum Sign (0.063"-Unframed)	SQFT	179	$ 17.50	$ 3,133
123	560249		Furnish Single Sheet Aluminum Sign (0.080"-Unframed)	SQFT	133	$ 18.00	$ 2,394
124	561016		60" Cast-In-Drilled-Hole Concrete Pile (Sign Foundation)	LF	50	$ 1,800.00	$ 90,000
125	566011		Roadside Sign - One Post	EA	16	$ 250.00	$ 4,000
126	566012		Roadside Sign - Two Post	EA	3	$ 350.00	$ 1,050
127	568001		Install Sign (Strap and Saddle Bracker Method)	EA	11	$ 300.00	$ 3,300
128	620101		18" Alternative Pipe Culvert (Type A)	LF	975	$ 40.00	$ 39,000
129	620102		18" Alternative Pipe Culvert (Type B)	LF	2,185	$ 100.00	$ 218,500
130	620142		24" Alternative Pipe Culvert (Type B)	LF	1,594	$ 150.00	$ 239,100
131	680905		8" Perforated Plastic Pipe Underdrain	LF	255	$ 21.00	$ 5,355
132	680906A		8" Plastic Pipe Underdrain	LF	35	$ 25.00	$ 875

PRELIMINARY SCHEDULE OF PRICES AND QUANTITIES FOR
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8/12/2011

Item No.	Item Code		Item Description	Unit	Quantity	Unit Price	Item Total
133	682041		Class 2 Permeable Material	CY	116	$ 100.00	$ 11,600
134	703239		36" Corrugated Steel Pipe Riser (0.109" Thick)	LF	3	$ 560.00	$ 1,680
135	703450A		Jacked 54" Welded Steel Pipe Casing	LF	67	$ 1,000.00	$ 67,000
136	703533		12" Welded Steel Pipe (0.25" Thick)	LF	771	$ 200.00	$ 154,200
137	705311		18" Alternative Flared End Section	EA	6	$ 550.00	$ 3,300
138	705315		24" Alternative Flared End Section	EA	1	$ 650.00	$ 650
139	717055A		36" Concrete Cylinder Sewer Pipe	LF	294	$ 170.00	$ 49,980
140	719201A		Water Quality Weir	EA	0	$ 3,500.00	$ -
141	721008		Rock Slope Protection (Light, Method B)	CY	31	$ 200.00	$ 6,200
142	721012		Rock Slope Protection (Backing No. 3, Method B)	CY	1	$ 150.00	$ 150
143	729010		Rock Slope Protection Fabric	SQYD	114	$ 45.00	$ 5,130
144	731502		Minor Concrete (Miscellaneous Construction)	CY	115	$ 350.00	$ 40,250
145	731530		Minor Concrete (Textured Paving)	SQFT	5,820	$ 10.00	$ 58,200
146	750001		Miscellaneous Iron And Steel	LB	14,720	$ 3.00	$ 44,160
147	800360		Chain Link Fence (Type CL-6)	LF	308	$ 24.00	$ 7,392
148	802580		12' Chain Link Gate (Type CL-6)	EA	3	$ 2,000.00	$ 6,000
149	820101A		Concrete Median Barrier Marker	EA	0	$ 25.00	$ -
150	820107		Delineator (Class 1)	EA	84	$ 40.00	$ 3,360
151	832070		Vegetation Control (Minor Concrete)	SQYD	108	$ 65.00	$ 7,020
152	833033		Chain Link Railing (Type 7 Modified)	LF	234	$ 50.00	$ 11,700
153	833080		Concrete Barrier (Type K)	LF	200	$ 180.00	$ 36,000
154	839310		Double Thrie Beam Barrier	LF	0	$ 50.00	$ -
155	839521		Cable Railing	LF	109	$ 25.00	$ 2,725
156	839541		Transition Railing (Type WB)	EA	2	$ 4,000.00	$ 8,000
157	839581		End Anchor Assembly (Type SFT)	EA	2	$ 1,200.00	$ 2,400
158	839584		Alternative In-Line Terminal System	EA	3	$ 2,700.00	$ 8,100
159	839585		Alternative Flared Terminal System	EA	1	$ 3,400.00	$ 3,400
160	839591		Crash Cushion, Sand Filled	EA	1	$ 3,200.00	$ 3,200
161	839604		Crash Cushion (REACT 9CBB)	EA	2	$ 52,000.00	$ 104,000
162	839701		Concrete Barrier (Type 60)	LF	413	$ 60.00	$ 24,780
163	839703		Concrete Barrier (Type 60C)	LF	2,069	$ 110.00	$ 227,590
164	839709		Concrete Barrier (Type 60GE)	LF	66	$ 180.00	$ 11,880
165	839726A		Concrete Barrier (Type 736A Modified)	LF	818	$ 75.00	$ 61,350
166	839727		Concrete Barrier (Type 736 Modified)	LF	687	$ 75.00	$ 51,525
167	839731		Concrete Barrier (Type 736B)	LF	212	$ 170.00	$ 36,040
168	839734		Concrete Barrier (Type 736SV)	LF	1,585	$ 190.00	$ 301,150
169	839736A		Concrete Barrier (Type 736S)	LF	384	$ 200.00	$ 76,800
170	840504		4" Thermoplastic Traffic Stripe	LF	19,902	$ 0.40	$ 7,961
171	840506		8" Thermoplastic Traffic Stripe	LF	2,462	$ 0.80	$ 1,970
172	840525		4" Thermoplastic Traffic Stripe (Broken 36-12)	LF	6,862	$ 0.35	$ 2,402
173	840526		4" Thermoplastic Traffic Stripe (Broken 17-7)	LF	2,564	$ 0.80	$ 2,051
174	840660		Paint Pavement Marking	SQFT	4,895	$ 4.00	$ 19,580
175	850101		Pavement Marker (Non-Reflective)	EA	511	$ 2.00	$ 1,022
176	850111		Pavement Marker (Retroreflective)	EA	338	$ 4.00	$ 1,352
177	860201		Signal and Lighting	LS	1	$ 28,000.00	$ 28,000
178	860298		Signal And Lighting (Stage Construction)	LS	1	$ 10,000.00	$ 10,000
179	860402		Lighting (City Street)	LS	1	$ 10,000.00	$ 10,000
180	860413A		Lighting And Sign Illumination (Stage Construction)	LS	1	$ 25,000.00	$ 25,000
181	860460		Lighting And Sign Illumination	LS	1	$ 50,000.00	$ 50,000
182	860505A		Traffic Operations System	LS	1	$ 100,000.00	$ 100,000
183	860510A		Traffic Operations System (Stage Construction)	LS	1	$ 25,000.00	$ 25,000
184	860535A		General Packet Radio System (GPRS) Wireless Modem Assembly	EA	2	$ 1,600.00	$ 3,200
185	860536A		Extinguishable Message Sign Panel (LED)	EA	2	$ 15,000.00	$ 30,000
186	860538A		Vehicle Sensor Node	EA	4	$ 450.00	$ 1,800
187	999990		Mobilization (10%)	LS	0	$2,170,000.00	$ -

CONSTRUCTION TOTAL **$ 21,681,636**

SUPPLEMENTAL WORK ITEMS

1	066015		Federal Trainee Program	LS	1	$ 10,000.00	$ 10,000
2	066041		Bird Protection	LS	1	$ 75,000.00	$ 75,000
3	066060		Additional Traffic Control	LS	1	$ 30,000.00	$ 30,000
4	066070		Maintain Traffic	LS	1	$ 125,000.00	$ 125,000
5	066072		Maintain Detour	LS	1	$ 50,000.00	$ 50,000
6	066094		Value Analysis	LS	1	$ 25,000.00	$ 25,000
7	066101		Dust Palliative	LS	1	$ 25,000.00	$ 25,000

PRELIMINARY SCHEDULE OF PRICES AND QUANTITIES FOR
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95% PS&E (116 Separation Bridges - HOV Lanes)
8/12/2011

Item No.	Item Code		Item Description	Unit	Quantity	Unit Price	Item Total
8	066150		Remove Unsuitable Materials	LS	1	$ 50,000.00	$ 50,000
9	066150A		Repair Pavement	LS	1	$ 100,000.00	$ 100,000
10	066178		Additional Excavation and Backfill	LS	1	$ 20,000.00	$ 20,000
11	066595		Water Pollution Control Maintenance Sharing	LS	1	$ 20,000.00	$ 20,000
12	066596		Additional Water Pollution Control	LS	1	$ 10,000.00	$ 10,000
13	066597		Storm Water Sampling and Analysis	LS	1	$ 10,000.00	$ 10,000
14	066598A		Sampling and Analysis Of Surplus Material	LS	1	$ 5,000.00	$ 5,000
15	066600A		Disposal of Treated Wood	LS	1	$ 8,000.00	$ 8,000
16	066610		Partnering	LS	1	$ 10,000.00	$ 10,000
17	066670		Payment Adjustments for Price index Fluctuations	LS	1	$ 50,000.00	$ 50,000
18	066845		Incentive for Asphalt Concrete (QC/QA)	LS	1	$ 25,000.00	$ 25,000
19	066919		Dispute Resolution Board	LS	1	$ 10,000.00	$ 10,000
20	668666		Operation Of Existing Traffic Management System Elements During Construction	LS	1	$ 5,000.00	$ 5,000
			Total Supplemental Work Items				**$ 663,000**

STATE FURNISHED MATERIALS AND EXPENSES

1	066062		COZEEP Contract	LS	1	$ 300,000.00	$ 300,000
2	066063		Traffic Management Plan - Public Information	LS	1	$ 25,000.00	$ 25,000
3	066065		Tow Truck Service Patrol	LS	1	$ 30,000.00	$ 30,000
4	066105		Resident Engineer Office	LS	1	$ 200,000.00	$ 200,000
5	066863		Electrical Energy Expenses	LS	1	$ 5,000.00	$ 5,000
6	066871		Electrical Service Connections	LS	1	$ 10,000.00	$ 10,000
			Total State Furnished Materials and Expenses				**$ 570,000**

TOTAL	**$ 23,000,000**
CONTINGENCIES (7%)	**$ 1,610,000**
GRAND TOTAL	**$ 24,610,000**

Preliminary Estimate for Contract L1 (On-site)

Marin-Sonoma Narrows (MSN) - Contract L1 (Phase 1)

On-Site Landscape/Mitigation Cost Estimate (8/17/11)

Highway Planting and Irrigation Phase 1 Estimate on-site acres:	29	(11/12 FY base) $39,300/ac	$1,139,700
Cultivate		(included)	(included)
3-year Plant Establishment Period	lump sum	(included)	(included)
Mulch (m3)		(included)	(included)
Mulch (Plant Establishment) (m3)		(included)	(included)
Water Meters and Water Cost (Truck Watering)	9 meters +truck watering		$765,000
Backflow Preventer Assemblies	10	$2,000	$20,000
Backflow Preventer Assembly Enclosures	10	$2,500	$25,000
Irrigation Valves, Sprinklers, Pipe, Conductors		(included)	(included)
Irrigation crossovers (linear foot)	240	$300	$72,000
Irrigation Controllers	11	$2,000	$22,000
Irrigation Controller Enclosure	11	$2,500	$27,500
Roadside Clearing	lump sum	$120,000	$120,000
Erosion Control	lump sum	(included)	(included)
Storm Water Pollution Prevention Plan	lump sum	$3,000	$3,000
Storm Water Treatment Control Measures	lump sum	$43,000	$43,000
Water Pollution Control	lump sum	$24,000	$24,000
Electric Service to Irrigation Controllers	lump sum	$40,000	$40,000
Lead Compliance Plan	lump sum	$8,000	$8,000
Lead Soil Handling	lump sum	$20,000	$20,000
Construction Area Signs	lump sum	$20,000	$20,000
Traffic Control System	lump sum	$85,000	$85,000
Sub Total:			$2,434,200
15% contingencies			$365,130
Total			$2,799,330
Call			$2,800,000

Preliminary Estimate for Contract L2 (On-site)

Marin Sonoma Narrows (MSN) - Contract L2 (Phase 2)

On-Site Landscape/Mitigation Cost Estimate (8/17/11)

Highway Planting and Irrigation Phase 2 Estimate – On-site	55	(11/12 FY base) $39,300/ac	$2,161,500
Cultivate		(included)	(included)
3-year Plant Establishment Period	lump sum	(included)	(included)
Mulch (m3)		(included)	(included)
Mulch (Plant Establishment) (m3)		(included)	(included)
Water Meters and Water Cost (Truck Watering)	8 meters +truck watering		$705,000
Backflow Preventer Assemblies	8	$2,000	$16,000
Backflow Preventer Assembly Enclosures	8	$2,500	$20,000
Irrigation Valves, Sprinklers, Pipe, Conductors		(included)	(included)
Irrigation crossovers (linear foot)	300	$300	$90,000
Irrigation Controllers	8	$2,000	$16,000
Irrigation Controller Enclosure	8	$2,500	$20,000
Roadside Clearing	lump sum	$120,000	$120,000
Erosion Control	lump sum	(included)	(included)
Storm Water Pollution Prevention Plan	lump sum	$3,000	$3,000
Storm Water Treatment Control Measures	lump sum	$30,000	$30,000
Water Pollution Control	lump sum	$20,000	$20,000
Electric Service to Irrigation Controllers	lump sum	$80,000	$80,000
Lead Compliance Plan	lump sum	$8,000	$8,000
Lead Soil Handling	lump sum	$20,000	$20,000
Construction Area Signs	lump sum	$20,000	$20,000
Traffic Control System	lump sum	$85,000	$85,000
Sub Total:			$3,414,500
15% contingencies			$512,175
Total			$3,926,675
Call			$4,000,000

Preliminary Estimate for Contract L2 (Off-site)

MSN 101 Contract L2 (Phase 2)

Offsite Mitigation Cost Estimate (8/17/11)

Highway Planting and Irrigation Phase 2 Estimate - Offsight	EA		
Trees	2500	$1,800	$4,500,000
3-year Plant Establishment Period		(included)	(included)
Mulch (m3)		(included)	(included)
Mulch (Plant Establishment) (m3)		(included)	(included)
Water Cost (Truck Watering)		(included)	(included)
Roadside Clearing		(included)	(included)
Erosion Control		(included)	(included)
Storm Water Pollution Prevention Plan		(included)	(included)
Storm Water Treatment Control Measures		(included)	(included)
Water Pollution Control		(included)	(included)
Lead Compliance Plan		(included)	(included)
Lead Soil Handling		(included)	(included)
Construction Area Signs		(included)	(included)
Traffic Control System		(included)	(included)
Sub Total:			$4,500,000
15% contingencies			$675,000
Total			$5,175,000
Call			$5,200,000

Appendix D Marin-Sonoma Narrows Funding Plan and Cash Flow

Table D1 – MSN Project Funding Plan and Cash Flow

Table D1. Marin-Sonoma Narrows (MSN) Funding Plan and Cash Flow (dollars in thousands and escalated)

Phase	Contract	Fund Type	Component	Prior	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	Total	Fund Source
1	A1	CMIA	CON SUP		$136	$1,998	$1,998	$218								$4,350	1. State
1	A1	CMIA	CON CAP			$19,067	$6,356									$25,423	1. State
1	A1	STIP-IIP	PA&ED	$2,000												$2,000	1. State
1	A1	STIP-IIP	CON SUP		$83	$1,217	$1,217	$133								$2,650	1. State
1	A1	STIP-RIP Mrn	R/W SUP	$17	$48											$65	1. State
1	A1	STIP-RIP Mrn	ENV MITG		$130											$130	1. State
1	A1	STIP-RIP Mrn	R/W CAP	$4	$143											$147	1. State
1	A1	STIP-RIP Mrn	CON CAP			$1,850	$617									$2,467	1. State
1	A1	TCRP	PA&ED	$7,520												$7,520	1. State
1	A1	TCRP	PS&E	$923	$3,077											$4,000	1. State
1	A1	STIP-RIP	PS&E		$507											$507	1. State
Contract A1 Total				$10,464	$4,124	$24,133	$10,188	$350								$49,259	
1	B1	NMWD	CON CAP					$2,492								$2,492	3. Local
1	B1	CMIA	CON CAP				$6,535	$6,535	$3,268							$16,338	1. State
1	B1	STIP-RIP Mrn	R/W CAP			$2,422	$415	$415	$208							$3,460	1. State
1	B1	SAFETEA-LU-2444-Mrn	R/W CAP			$5,548	$951	$951	$476							$7,926	2. Federal
1	B1	SAFETEA-LU-3736-Son	R/W CAP			$208	$36	$36	$18							$297	2. Federal
1	B1	STIP-IIP	PA&ED	$7,600												$7,600	1. State
1	B1	STIP-IIP	CON SUP				$1,577	$1,577	$892	$104						$4,150	4. Federal (NHS)
1	B1	STIP -RIP Mrn	PS&E		$975	$4,035	$25									$5,035	1. State
1	B1	STIP-RIP Mrn	R/W SUP	$91	$287	$1,439	$311	$311	$156							$2,595	1. State
1	B1	STIP-RIP Mrn	ENV MITG		$794	$279	$107	$107	$54							$1,341	1. State
1	B1	SAFETEA-LU-2444 -Mrn	ENV MITG		$2,038	$260	$230	$230	$115							$2,872	2. Federal
1	B1	SAFETEA-LU-3736-Son	ENV MITG		$86		$9	$9	$4							$108	2. Federal
1	B1	DEMO TEA21	ENV MITG		$975	$112	$109	$109	$54							$1,359	2. Federal
1	B1	DEMO TEA21	R/W CAP			$2,625	$450	$450	$225							$3,750	2. Federal
1	B1	STIP-RIP Mrn	CON CAP				$3,978	$3,978	$1,989							$9,945	4. Federal (NHS)
1	B1	STIP-RIP Mrn	CON SUP				$266	$266	$151	$18						$700	1. State
1	B1	TCRP	PS&E	$1,544	$994											$2,538	1. State
1	B1	TCRP	PA&ED	$1,222												$1,222	1. State
1	B1	NMWD	CON SUP					120								$120	3. Local
1	B1	Marin Appropriation	PA&ED	$562												$562	2. Federal
Contract B1 Total				$11,019	$6,149	$16,927	$14,999	$17,586	$7,608	$121						$74,409	
					$3,893												
1	B2	CMIA	CON SUP				$3,497	$3,497	$3,497	$552						$11,042	1. State
1	B2	CMIA	CON CAP				$20,558	$20,558	$20,558							$61,675	1. State
1	B2	DEMO TEA21	PA&ED	$3,100												$3,100	2. Federal
1	B2	SAFETEA-LU-3736-Son	R/W CAP			$32	$5	$5	$5							$45	2. Federal
1	B2	SAFETEA-LU-1767	R/W CAP			$252	$36	$36	$36							$360	2. Federal
1	B2	MEA. Son M	PS&E	$5,249	$2,365	$2,203										$9,817	3. Local
1	B2	MEA. Son M	R/W SUP	$166	$523	$641	$190	$190	$190							$1,900	3. Local
1	B2	MEA. Son M	CON CAP				$1,851	$1,851	$1,851							$5,552	3. Local
1	B2	MEA. Son M	R/W CAP			$1,152	$165	$165	$165							$1,646	3. Local
1	B2	STIP-IIP	PA&ED	$4,500												$4,500	1. State
1	B2	STIP-RIP Aug – Son	ENV MITG		$170	$1,698	$141	$141	$141							$2,292	1. State
1	B2	MEA. Son M	ENV MITG		$438											$438	3. Local
1	B2	STIP-RIP Aug – Son	R/W CAP			$5,599	$800	$800	$800							$7,999	1. State
1	B2	STIP-RIP Aug – Son	CON CAP				$2,465	$2,465	$2,465							$7,395	4. Federal (NHS)
1	B2	TCRP	PS&E	$703	$228	$289										$1,220	1. State
1	B2	MEA. Son M	CON SUP				$364	$364	$364	$57						$1,148	3. Local
1	B2	SLPP	CON CAP				$622	$622	$622							$1,865	1. State
Contract B2 Total				$13,718	$3,724	$11,866	$30,692	$30,692	$30,692	$610						$121,994	

Table D1. Marin-Sonoma Narrows (MSN) Funding Plan and Cash Flow (dollars in thousands and escalated)

Phase	Contract	Fund Type	Component	Prior	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	Total	Fund Source
1	B3	STIP-IIP	PS&E	$65	$37	$380	304		14							$800	1. State
1	B3	STIP-IIP	R/W SUP				$133	$133								$265	4. Federal (NHS)
1	B3	STIP-IIP	R/W CAP					$3,641	$520	$780	$260					$5,202	4. Federal (NHS)
1	B3	STIP-IIP	CON SUP						$2,426	$3,639	$1,341	255				$7,660	4. Federal (NHS)
1	B3	STIP-IIP	CON CAP						$17,111	$25,667	$8,556					$51,334	4. Federal (NHS)
1	B3	STIP-RIP Mrn	PS&E	$655	$457	$429	343		16							$1,900	1. State
1	B3	TCRP	PS&E	$612	$703	$499	399		18							$2,232	1. State
1	B3	TCRP	PA&ED	668												$668	1. State
1	B3	Marin Appropriation	PS&E				280									$280	2. Federal
1	B3	STIP-RIP Mrn	R/W CAP					$2,417	$345	$518	$173					$3,453	1. State
Contract B3 Total				$2,000	$1,197	$1,308	$1,459	$6,191	$20,451	$30,604	$10,329	$255				$73,794	
2	A2	RTP	PS&E						$1,905	$2,286	$474					$4,665	5. Other
2	A2	RTP	R/W SUP						$16	$19	$5	$5	$5	$5		$53	5. Other
2	A2	RTP	CON SUP								$633	$1,899	$1,899	$233		$4,665	5. Other
2	A2	RTP	R/W CAP						$17	$21	$6	$8	$8			$59	5. Other
2	A2	RTP	CON CAP								$4,443	$13,329	$13,329			$31,100	5. Other
2	A2	RTP	ENV MITG							$30	$89	$89	$89			$297	5. Other
Contract A2 Total									$1,938	$2,355	$5,650	$15,329	$15,329	$238		$40,840	
2	B1-Phase II	RTP	PS&E						$5,060	$6,072	$1,260					$12,392	5. Other
2	B1-Phase II	RTP	R/W SUP						$162	$195	$49	$50	$50	$50		$556	5. Other
2	B1-Phase II	RTP	CON SUP								$1,682	$5,045	$5,045	$620		$12,392	5. Other
2	B1-Phase II	RTP	R/W CAP						$850	$1,020	$295	$375	$375			$2,913	5. Other
2	B1-Phase II	RTP	CON CAP								$11,802	$35,407	$35,407			$82,616	5. Other
2	B1-Phase II	RTP	ENV MITG							$80	$239	$239	$239			$796	5. Other
Contract B1-Phase II Total									$6,072	$7,366	$15,327	$41,116	$41,116	$670		$111,666	
2	B2-Phase II	RTP	PS&E						$1,348	$1,617	$336					$3,301	5. Other
2	B2-Phase II	RTP	R/W SUP						$0	$0	$0	$0	$0	$0		$0	5. Other
2	B2-Phase II	RTP	CON SUP								$448	$1,344	$1,344	$165		$3,301	5. Other
2	B2-Phase II	RTP	R/W CAP						$0	$0	$0	$0	$0			$0	5. Other
2	B2-Phase II	RTP	CON CAP								$3,143	$9,430	$9,430			$22,004	5. Other
2	B3-Phase II	RTP	ENV MITG							$0	$0	$0	$0			$0	5. Other
Contract B2-Phase II Total									$1,348	$1,617	$3,927	$10,774	$10,774	$165		$28,605	
2	B3-Phase II	RTP	PS&E						$934	$1,121	$233					$2,288	5. Other
2	B3-Phase II	RTP	R/W SUP						$0	$0	$0	$0	$0	$0		$0	5. Other
2	B3-Phase II	RTP	CON SUP								$311	$932	$932	$114		$2,288	5. Other
2	B3-Phase II	RTP	R/W CAP						$624	$748	$216	$275	$275			$2,138	5. Other
2	B3-Phase II	RTP	CON CAP								$2,179	$6,538	$6,538			$15,255	5. Other
2	B3-Phase II	RTP	ENV MITG							$59	$178	$178	$178			$594	5. Other
Contract B3-Phase II Total									$1,558	$1,929	$3,117	$7,923	$7,923	$114		$22,563	
2	C2	MEA. Son M	PS&E		$2,084	$2,084	$521			$96						$4,784	3. Local
2	C2	MEA. Son M	R/W SUP			$665				$48	$95	$95	$48			$950	3. Local
2	C2	RTP	CON SUP								$1,496	$4,488	$4,488	$551		$11,023	5. Other
2	C2	RTP	R/W CAP							$1,422	$87	$261	$261			$2,031	5. Other
2	C2	RTP	CON CAP								$10,498	$31,494	$31,494			$73,485	5. Other
2	C2	RTP	ENV MITG							$1,710	$61	$183	$183			$2,138	5. Other
Contract C2 Total					$2,084	$2,749	$521			$3,275	$12,237	$36,521	$36,473	$551		$94,410	
2	C3	RTP	PS&E						$500							$500	5. Other
2	C3	RTP	R/W SUP						$0	$0	$0	$0	$0	$0		$0	5. Other
2	C3	RTP	CON SUP							$1,976	$2,155	$407				$4,538	5. Other
2	C3	RTP	R/W CAP						$0	$0	$0	$0	$0			$0	5. Other
2	C3	RTP	CON CAP							$13,865	$15,126	$1,260				$30,252	5. Other
2	C3	RTP	ENV MITG							$0	$0	$0	$0			$0	5. Other
Contract C3 Total									$500	$15,841	$17,281	$1,667	$0	$0		$35,290	

Table D1. Marin-Sonoma Narrows (MSN) Funding Plan and Cash Flow (dollars in thousands and escalated)

Phase	Contract	Fund Type	Component	Prior	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	Total	Fund Source
1	L1	STIP-RIP Mrn	PS&E						$175	$175						$350	4. Federal (NHS)
1	L1	STIP-RIP Aug – Son	PS&E						$55	$55						$110	4. Federal (NHS)
1	L1	STIP-RIP Mrn	CON SUP							$118	$163	$45	$25	$4		$355	4. Federal (NHS)
1	L1	STIP RIP Aug – Son	CON SUP							$38	$53	$15	$8	$1		$115	4. Federal (NHS)
1	L1	STIP-RIP Mrn	CON CAP							$828	$828	$355	$355			$2,365	4. Federal (NHS)
1	L1	STIP RIP Aug – Son	CON CAP							$297	$297	$127	$127			$848	4. Federal (NHS)
Contract L1 Total									$230	$1,511	$1,340	$541	$514	$6		$4,143	
2	L2	RTP	PS&E								$623	$140				$763	5. Other
2	L2	RTP	CON SUP									$40	$242	$242	$240	$763	5. Other
2	L2	RTP	CON CAP									$509	$3,053	$833	$694	$5,089	5. Other
2	L2	RTP	ENV MITG									$6,176				$6,176	5. Other
Contract L2 Total											$623	$6,865	$3,295	$1,074	$934	$12,792	
PROJECT TOTAL				**$37,201**	**$17,277**	**$56,983**	**$57,859**	**$54,819**	**$70,397**	**$65,229**	**$69,832**	**$120,991**	**$115,424**	**$2,819**	**$934**	**$669,765**	
CUMMULATIVE TOTAL					**$54,478**	**$111,461**	**$169,321**	**$224,140**	**$294,536**	**$359,766**	**$429,597**	**$550,589**	**$666,013**	**$668,832**	**$669,765**		

Appendix E Marin-Sonoma Narrows Miscellaneous Documents

1) Memorandum of Understanding (MOU)
2) Historical Cost Analysis Capital Outlay Support (COS) FYs 1998-2002
    a. Table 6.3 – 1998 to 2002 Major Project Quartiles Ranked By Total Capital (STIP Only)
    b. Table 7 – Major Projects by Environmental Document
3) Construction Cost Indices and Forecast
4) Draft North Marin Water District (NMWD) Cooperative Agreement
5) F-TIP
    a. Marin TIP
    b. Sonoma TIP
6) State Transportation Improvement Plan (STIP)
7) Relevant Portion of MTC 2035 Regional Transportation Plan (RTP)

Memorandum of Understanding (MOU)

MEMORANDUM OF UNDERSTANDING
for
THE MARIN-SONOMA NARROWS PROJECT
between
California Department of Transportation,
the Sonoma County Transportation Authority
and the Transportation Authority of Marin

July 2008

I. INTENT

This Memorandum of Understanding (MOU), entered into on September 04, 2008, is between the State of California, Department of Transportation (Department), the Sonoma County Transportation Authority (SCTA), and the Transportation Authority of Marin (TAM) and solely constitutes a guide to the respective intentions and policies of the parties involved for the Marin Sonoma Narrows (MSN) Project, herein called CORRIDOR PROJECT. It is not intended to authorize funding or project effort nor is it a legally binding contract. Funding commitments providing for the deposit of funds for specific work phases or project effort committing resources will be covered by one or more separate cooperative agreements as may be outlined herein.

The intent of this MOU is to define how the three agencies will work together in cooperation to successfully deliver the CORRIDOR PROJECT. It constitutes a guide to the intentions and strategies of the parties involved and provides the overall framework, including outlining their respective roles, responsibilities and funding strategy for the CORRIDOR PROJECT.

This MOU covers project development activities, including the environmental document, preparing the Plans, Specification and Estimate (PS&E), completing right-of-way acquisition and construction of the CORRIDOR PROJECT, which is comprised of several individual projects as identified in Section IV and as further amended by the Executive Steering Committee (see Section V). Department, SCTA and TAM will work cooperatively, using staff, consultants and resources interchangeably, as part of the Project Team in a commitment to deliver the CORRIDOR PROJECT. Cooperative agreements will be required for each individual project requiring the expenditure of funds and/or staff services provided by Department, SCTA, and TAM.

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III. ABREVIATIONS AND SELECT DEFINITIONS

- Agency Assignments – The three stakeholder agencies have agreed to share in the staffing of the work. This documents indicates the agreed upon agency responsibilities on each of the individual projects. The first version of this list is attached as Appendix D. It will be modified as work progresses.
- CTC – California Transportation Commission
- CMIA – Corridor Mobility Improvement Account
- CORRIDOR PROJECT – The project that is the subject of this MOU and which consists of multiple individual projects that will be managed collectively as defined herein.
- CPMT – Corridor Project Management Team
- Department – California Department of Transportation
- Discipline Team – The work on each Individual Project will be grouped logically in similar and/or related tasks and the responsibility for this work assigned to an individual with the requisite knowledge and experience to manage it. The Discipline Team consists of the Discipline Manager and the Task Mangers responsible for the discipline's tasks. The Project Manager provides direction to each Discipline Manager and Team.
- EIR – Environmental Impact Report
- EIS – Environmental Impact Statement
- ESC – Executive Steering Committee
- IP – Individual Project
- MSN – Marin-Sonoma Narrows
- NOD – Notice of Determination
- PA&ED – Project Approval and Environmental Document
- PDT – Project Development Team
- PLT – Project Leadership Team

- PS&E – Plans, Specifications and Estimate
- ROD – Record of Decision
- SCTA – Sonoma County Transportation Authority
- Staffing Plan – Based upon the Agency Assignments, the Corridor Project Management Team, with approval from the Project Leadership Team, will assign agency and consulting staff to perform work on both the CORRIDOR PROJECT and the Individual Projects. These assignments will be reflected in an organization chart format as staffing plans.
- TAM – Transportation Authority of Marin
- Task Team – The scope, schedule and cost of each Discipline Team is divided into deliverables and assigned to a responsible Task Team. Caltrans uses a Work Breakdown Structure to identify and monitor each task assigned to a Task Team. Each Task Team consists of a Task Manager and the necessary qualified staff to accomplish the work of the assigned deliverable. The Discipline Manger will provide direction to the Task Manager responsible for each specific task within his/her Discipline Team.
- Work Plan – The Department budgets and allocates its funds for payment of work through the annual development of work plans on each project. There will be a Department Work Plan for each Individual Project and as appropriate, an equivalent method of estimating staff and consultant costs for each Individual Project will be utilized by SCTA and TAM.

IV. PROJECT DESCRIPTION

State Highway 101 (SR 101) is a nationally and regionally significant highway linking the San Francisco Bay Area and Oregon and is the only continuous north/south route through Marin and Sonoma Counties. The "Narrows" is the portion of SR 101 from Route 37 in Novato (Marin County) to Old Redwood Highway in Petaluma (Sonoma County). The State has designated the Narrows as an inter-regional route of significance, and the CORRIDOR PROJECT is listed as a Focus Route in California's 1998 Interregional Transportation Strategic Plan. As a result of these designations, the CORRIDOR PROJECT has been the recipient of state discretionary funding on four separate occasions. The CORRIDOR PROJECT is also included in the 2005 Regional Transportation Plan and the 2002 Key Transportation Corridors in the Bay Area Region.

Existing SR 101, from Route 37 in Novato (Marin County) to Old Redwood Highway in Petaluma (Sonoma County), has two lanes in each direction, with sections that do not meet current freeway standards and as such, consistently experiences a poor level of service in many sections. This CORRIDOR PROJECT will widen approximately 17 miles of SR 101 from four to six lanes by adding one high occupancy vehicle (HOV) lane in each direction and upgrading the highway to current standards. In addition, the CORRIDOR PROJECT will provide a continuous bicycle/pedestrian facility, parallel to the highway, consisting of a mix of Class I pathways and Class II bicycle lanes. It is part of the overall regional plan to provide continuous HOV lanes through Marin and Sonoma Counties.

The CORRIDOR PROJECT consists of the following Individual Projects (IPs) shown in Appendix H plus the balance of improvements as defined in the EIS/EIR:

A1: HOV Lanes in Marin
B1: Southerly Interchange
B2: Petaluma Boulevard South Interchange
B3: Curve Correction
B4: Petaluma River and SR 116 Separation Bridges
C1: East Washington Interchange

The A, B, and C designations above refer to segments defined in the Draft EIS/EIR. The SR 116 Separation Bridge is located within Segment C, but is included as part of IP B4 for design and construction efficiency.

IPs A1, B1 and B2 constitute the Corridor Mobility Improvement Account (CMIA) Project (CMIA PROJECT). The CMIA PROJECT must be accounted for and reported on separately to the California Transportation Commission (CTC). The reporting requirements for the CMIA PROJECT are on the CTC web site.

A number of these individual projects were combined into a single study area for a comprehensive EIS/EIR of the Marin-Sonoma Narrows (MSN). To accelerate the

East Washington Interchange Project (C1), a separate Initial Study (IS) was prepared for that project. These documents have the following key milestone dates:

East Washington Final Environmental Document – March 2008

MSN Final Environmental Document – November 2008

MSN Project Approval with ROD/NOD – November 2008

V. OVERALL MANAGEMENT STRATEGY

The collective management of the IPs as the CORRIDOR PROJECT is intended to facilitate faster, more cost effective delivery of the entire project using a mix of resources made available by the sponsoring agencies. Each of the IPs will contribute some amount of funding to be approved by the ESC to pay for CORRIDOR PROJECT management and support services as described below.

Each of the IPs may be designed, advertised, awarded and administered separately or together with others as approved by the ESC.

The ESC may decide to identify other IPs as part of the CORRIDOR PROJECT for efficient and effective delivery. Each time this occurs, some funding from the added contract will be required to pay for the CORRIDOR PROJECT project management and support activities as defined below.

The key CORRIDOR PROJECT tasks, detailed in Appendix A, may be modified by written recommendation of the PLT, with the approval of the ESC, without formally amending this MOU.

Department, SCTA, or TAM may arrange for consultant services to perform the key project tasks described in Appendix A.

Since the constructed CORRIDOR PROJECT will be owned and operated by the Department, CORRIDOR PROJECT details must conform to Department design and construction standards and requirements. Design exceptions will be considered based on specific circumstances and constraints of specific locations.

All cooperative efforts and reviews through completion of the CORRIDOR PROJECT construction are intended to deliver the CORRIDOR PROJECT as a collaborative team comprised of Department, TAM, SCTA and consultant staff in a manner that minimizes standard Department oversight activities whenever possible. The design of each IP will be managed as a separate project with a team comprised of some mix of Department, TAM and/or SCTA provided staff. The mix of staff assigned to each IP within the CORRIDOR PROJECT will be

reflected in the IP Staffing Plans. The staffing mix and the amount of oversight required by the Department will be reviewed and approved by the ESC. No work shall be performed nor expenditures incurred without the recommendation of the Corridor and Deputy Corridor Project Managers and approval of the PLT.

VI. PROJECT STAKEHOLDERS

A. California Department of Transportation (Department)

1. Role:

The Department is the owner and operator of the State Highway System.

2. Responsibilities:

As the owner and operator of the State Highway System, the Department develops policies and procedures to ensure proper safety, upkeep and throughput are achieved. The objective of these policies and procedures is captured in the Department's vision to improve mobility across California. The Department will ensure that the implementation of the CORRIDOR PROJECT is consistent with its policies and procedures while achieving the objectives for which it is being developed.

B. TAM & SCTA Boards of Directors

1. Role:

The TAM and SCTA Boards of Directors govern their respective agencies. They will provide guidance and direction and make policy decisions as it relates to that agency and the CORRIDOR PROJECT.

2. Responsibilities:

Each Board will approve policy, consultant contracts and proposed funding actions affecting the agency it governs as it relates to the CORRIDOR PROJECT. Each Board reserves the right to use a policy or technical advisory entity to advise the Board on CORRIDOR PROJECT issues or elements. As it pertains to each IP within the CORRIDOR PROJECT, each Board may solicit public input as appropriate for their respective projects. Each Board shall work cooperatively with Caltrans to determine the appropriate forum for public input. Cooperation on joint issues between the Boards and Caltrans shall be carried out as part of the regular duties of the ESC, the PLT and the Corridor Management Team. Additional mechanisms to discuss joint issues shall be considered as necessary.

VII. PROJECT DELIVERY ORGANIZATION – ROLES AND RESPONSIBILITIES

The development activities required for completion of the CORRIDOR PROJECT include finalizing the environmental documents and project approval, PS&E, right-of-way and construction. Listed below are the general areas of responsibility for each agency.

The Department is the lead for the preparation of the EIR/EIS, which is currently under development.

The complete delivery of the CORRIDOR PROJECT shall be the responsibility of the Executive Steering Committee (ESC). The ESC will be assisted by the Project Leadership Team (PLT) which will provide direct support to the Corridor and Deputy Corridor Project Managers and the IP Project Managers. The CORRIDOR PROJECT management structure is presented in Appendix B.

The IP lead agencies and project assignments for the Final Design Phase are reflected on the organization chart attached as Appendix C.

For the Construction Phase of each IP, the ESC will approve the lead agency, organization and the necessary support resources.

A. Executive Steering Committee (ESC)

1. Role:

The ESC will provide CORRIDOR PROJECT guidance and issue CORRIDOR PROJECT specific policies or policy determinations related to each CORRIDOR PROJECT phase, subject to TAM and SCTA board approval as appropriate. It will hold the PLT accountable for delivering the CORRIDOR PROJECT phases by approving scope, schedule and/or cost changes beyond the limits previously approved.

2. Members:

- Department's District 4 Director
- Executive Director of SCTA
- Executive Director of TAM

3. Responsibilities:

- Approve designation of the Corridor Project Manager, the Deputy Corridor Project Manager and the IP Project Managers
- Approve any changes to the Management Strategy and Structure as described herein
- Approve the list of IPs included as part of the CORRIDOR PROJECT
- Approve the lead agency and project assignments for each respective IP project phase
- Approve changes to the approved CORRIDOR PROJECT scope, schedule and budget, including the CORRIDOR PROJECT contingency.
- Approve scope, schedule and budget for each respective IP
- Approve scope, schedule and budget for CORRIDOR PROJECT corridor-wide assignments
- Agree on funding plan for each IP project phase
- Oversee overall CORRIDOR PROJECT progress
- Provide the PLT and CPMT, ,necessary feedback related to the CORRIDOR PROJECT and IPs

- Determine how and when to brief the SCTA and TAM Boards, CTC and other governmental agencies.
- Serve as the third and final level of review for unresolved CORRIDOR PROJECT issues (such issues may be within or between IP teams and members and/or agencies).

4. **Meetings:**

- Once per quarter or as needed.

B. Project Leadership Team (PLT)

1. **Role:**

This team reports to the ESC and provides direct agency support and input on the CORRIDOR PROJECT and the IPs. The ESC shall appoint the PLT members who will include at least one designated representative from SCTA, TAM and Department. The PLT will oversee the Corridor and Deputy Corridor Project Managers in delivering the CORRIDOR PROJECT and the IPs within scope, schedule and budget and provide the ESC with recommendations for those items requiring ESC approval per this MOU and subsequent Cooperative Agreements.

2. **Members:**

- Department Project Management Principal
- Deputy Director of SCTA
- Project Delivery Manager of TAM

3. **Responsibilities:**

- Monitor and review the CORRIDOR PROJECT and IPs progress
- Recommend changes to the CORRIDOR PROJECT and the IPs scope, schedule and/or budget to the ESC
- Provide direction on issues as requested by the Corridor and Deputy Corridor Project Managers
- Recommend changes to the Agency Assignments
- Approve staff assignments to the corridor-wide responsibilities
- Recommend the award of consultant contracts by the contracting agency as submitted by the Corridor and Deputy Corridor Project Managers
- Approve the CORRIDOR PROJECT and IP Staffing Plans
- Recommend the plan to use IP funds to cover the cost of the corridor-wide positions to the ESC
- Approve changes within the approved CORRIDOR PROJECT and IP scope, schedule and budget and notify the ESC of such changes
- Recommend the use of CORRIDOR PROJECT contingency
- Concur with appointments of the Discipline Managers based upon the recommendations from the Corridor and Deputy Corridor Project Managers
- Approve the IP cost estimates including the Capital Outlay Support, Right of Way Capital and Construction Capital
- Direct the development of and approve the Quality Assurance/Quality Control Plan for each individual project
- Serve as the second level of review for disputes

4. **Meetings:**

- Meet on an as needed basis as determined necessary by the members or by the Corridor Project Manager or the Deputy Corridor Project Manager.
- Meeting participants will typically include, but not be limited to the following participants:
  - Corridor Project Manager
  - Deputy Corridor Project Manager
  - Caltrans Design Principal
  - Project Controls Manager
  - Public Information Officer(s)
  - Facilitator (as necessary)
- Attend meetings of the ESC, PDT and other CORRIDOR PROJECT meetings as needed.

C. Corridor Project Management Team (CPMT)

1. **Role:**

The CPMT reports to the PLT and will deliver the IPs by overseeing day-to-day project activities impacting scope, schedule and cost.

2. **Members:**

- Corridor Project Manager
- Deputy Corridor Project Manager
- Department's Design Office Chief
- Project Controls Manager
- Public Information Officers
- IP Project Managers

3. **Responsibilities:**

- Recommend changes to the CORRIDOR PROJECT and/or IP scope, schedule and/or budget to the PLT
- Recommend staffing plans to the PLT
- Recommend the set-aside of IP funds for use in paying for corridor-wide staff
- Manage project progress in the areas of scope, schedule, and cost at the IP level (each Individual Project Manager will have specific controls for scope, schedule and cost)
- Prepare reports for the PLT and the ESC on progress
- Submit draft IP Staffing Plans to the PLT for approval
- Direct the implementation of a design change procedure
- Develop the Quality Assurance (QA) plan for each IP and recommend them to the PLT for approval
- Prepare and distribute agendas, minutes and reports from the various CORRIDOR PROJECT meetings
- Serve as the first level of review for disputes within and between IPs

4. **Meetings:**

- Meet on an as needed basis as determined necessary by the Corridor Project Manager or the Deputy Corridor Project Manager.

- Attend meetings of the ESC and other CORRIDOR PROJECT meetings as needed.

D. Corridor Project Manager

1. Role:

The ESC shall designate a Corridor Project Manager, who shall be a Department employee and whose overall responsibility is to deliver the CORRIDOR PROJECT. The Corridor Project Manager will oversee and coordinate the efforts of the various IP Project Managers in delivering each IP within scope, schedule and budget and will provide the PLT and ESC with recommendations for those items requiring their approval.

2. Responsibilities:

The Corridor Project Manager duties are defined in Appendix E and shall be shared with the Corridor Deputy Project Manager as agreed upon by the PLT.

3. Meetings:

Lead CPMT meetings and attend PDT and other individual project meetings as needed.

E. Deputy Corridor Project Manager

1. Role:

The ESC shall designate a Deputy Corridor Project Manager (DCPM) who shall work with the Corridor Project Manager in the delivery of the CORRIDOR PROJECT. TAM or SCTA shall provide the individual who will serve as the DPM.

2. Responsibilities:

The Corridor Project Manager duties are defined in Appendix E and shall be shared with the Deputy Corridor Project Manager as agreed upon by the PLT.

3. Meetings:

Attend CPMT and PDT and other individual project meetings as needed.

F. Project Managers

1. Role:

The IP Project Managers (PMs) can be an employee or agent of any of the three agencies. An IP reports to the Corridor Project Manager and is responsible for managing the work of the Discipline Managers on their project and is responsible for the delivery of their assigned IP.

2. Responsibilities:

- The IP PMs duties are defined in Appendix F.

3. Meetings:

- Attend CPMT Meetings
- Facilitate PDT and other project meetings as needed.

4. Source Agency for IP PMs:

- A1: Caltrans
- B1: TAM
- B2: SCTA
- B3: TAM
- B4: SCTA

- C1: Caltrans

G. Project Controls Manager

1. Role:

The Project Controls Manager (PCM) is responsible for the collection, documentation and reporting of progress and changes to the approved scope, schedule and cost of all IPs, the CORRIDOR PROJECT and the CMIA Project.

2. Responsibilities:

- Implement a data collection system to collect actual expenditures from all parties charging to each IP
- Establish a change control process for the IPs, the CORRIDOR PROJECT, and the CMIA Project
- Establish a detailed baseline schedule for the CORRIDOR PROJECT reflecting details for each of the IPs
- Create cost reports reflecting the original budget, any approved changes, current expenditures, and forecast to complete
- Document any variances to the approved baseline scope, schedule, and cost
- Provide summary schedules for use in reporting to the CPMT, PLT and the ESC
- Produce the CTC and other agency required reports on scope, schedule and cost

3. Meetings:

Attend CPMT and PDT and other IP meetings as needed.

H. Public Information Officer

1. Role:

The Public Information Officer (PIO) will be the focal point for all information provided to the media on the IPs, the CORRIDOR PROJECT, and the CMIA Project and will manage the responses to public inquiries. The PIO reports to the Corridor and Deputy Corridor Project Managers who will in turn secure feedback from the PLT and the ESC as appropriate.

2. Responsibilities:

- Develop and implement the communication plan for the CORRIDOR PROJECT
- Provide responses to public inquiries
- Plan for and facilitate public events
- Serve as the media contact for the CORRIDOR PROJECT
- Coordinate with the Caltrans Public Information Office, TAM and the SCTA on all releases of information on the CORRIDOR PROJECT

3. Meetings:

Attend CPMT and PDT and other IP meetings as needed.

I. Corridor Discipline Managers

1. Role:

The Corridor Discipline Managers will report to the Corridor and Deputy Corridor Project Managers and will manage the functional work that is applicable to two or

more of the IPs. These positions are reflected in Appendix C and include the PCM, the PIO, Traffic Management Planning, Utility Coordination, Right of Way Appraisals and Acquisition, Environmental Permits and Erosion Control, and Other Agreements.

2. Responsibilities:

They will deliver their assigned products as assigned by the Corridor and Deputy Corridor Project Managers within scope, schedule and budget.

3. Meetings:

Attend CPMT and PDT and other individual project meetings as needed.

J. Project Discipline Managers

1. Role:

May be either a Department Engineer/Planner or a SCTA or TAM consultant with the necessary qualifications to perform tasks such as PS&E, public relations, right-of-way, construction, project management etc.

2. Responsibilities:

- Delivery of the assigned scope of work within scope, schedule and both support and capital budgets
- Communicate with their respective IP Project Managers about progress and possible changes
- Identify any policy changes or functional area directives that will impact their respective IP and proceed once direction is received from the IP Project Manager
- Ensure that the Quality Control actions are taking place within the task work
- Each Project Discipline Manager will be responsible for the expenditures and performance on their assigned task

3. Source Agency for DMs:

The source agency for the Project Discipline Managers will be recommended by the Corridor and Deputy Corridor Project Managers and approved by the PLT. Generally, the Roadway Design Discipline Manager will be from the same agency as the IP PM listed above.

VIII. PROJECT FUNDING

TAM, SCTA and Department are CORRIDOR PROJECT co-sponsors and intend to jointly fund CORRIDOR PROJECT phases on the project in conjunction with the MTC and CTC. The three agencies have provided federal, state and local resources for the CORRIDOR PROJECT and will continue to seek additional funding in a cooperative manner.

TAM and SCTA have been advised that the CTC is encouraging cooperation between counties and the Department in the development of priorities related to the programming of State Transportation Improvement Program (STIP) funds for highway projects. The CTC has also provided direction that CMIA funds are to be expended only on the CMIA PROJECT approved scope and may not be used to fund any other scope.

Under this MOU, TAM and SCTA agree to pool Regional Transportation Improvement Program (RTIP) funds (county shares) and other local funds subject to local and regional approvals for the purpose of jointly delivering the CORRIDOR PROJECT.

TAM, SCTA and Department will jointly request that the CTC commit Interregional Transportation Improvement Program (ITIP) funding toward the joint sponsored CORRIDOR PROJECT and independent projects throughout the upcoming STIP cycles.

TAM, SCTA and Department agree to meet and confer upon the request of any party to this MOU to discuss proposed changes to scope, limits, cost and/or schedule. TAM, SCTA and the Department agree to not change scope, limits, cost and/or schedule without ESC approval.

The ESC must approve changes in the use of funds prior to requesting an allocation of such funds from the responsible Boards, MTC, CTC, Department and/or agency.

The three agencies understand that CORRIDOR PROJECT funding is dynamic and may change throughout the life of the CORRIDOR PROJECT. Individual funding plans will be developed for CORRIDOR PROJECT phases as part of the work plan or as needed for funding cycles and funding opportunities.

The initial CORRIDOR PROJECT Funding Plan is attached as Appendix G. All future Funding Plan changes must be approved by the PLT and ESC.

IX. ISSUE RESOLUTION

As issues arise in the CORRIDOR PROJECT life-cycle, time is of the essence and they need to be resolved as diligently as possible. To this end, a process has been built into the responsibilities described in this MOU.

Issues will arise in the midst of the IP Teams and Project Management effort to develop the CORRIDOR PROJECT. Many of these issues can be resolved within these teams, especially those that do not change the scope of the CORRIDOR PROJECT, require additional budget and that do not delay the approved schedule. The CPMT shall be the first level of review of the issues, which these teams cannot resolve. If the CPMT is unable to resolve the issue it will be elevated as follows:

Second-level of review and resolution: the PLT will review the issue, the options for resolution, the pros and cons to each option, and any advocate's reasons in support of specific options. Provided the resolution falls within the available CORRIDOR PROJECT contingency, then the PLT should determine the outcome. If the PLT either does not have sufficient authority to resolve the issue or is unable to agree, then they will elevate the issue resolution after a maximum of two

meetings (an initial meeting to hear the issue, and, if necessary, a second meeting to hear any additional information requested during the first meeting). The PLT will keep the ESC informed of issue resolution.

Third-level (and final) review and resolution: the ESC will review the issue, the options for resolution, the pros and cons to each option, and the advocate's reasons in support of specific options. Provided the resolution falls within the authority granted the ESC, then they will determine the outcome. If, for some reason, the issue cannot be fully resolved without approval from an agency board then the ESC will direct preparation of agenda items for any required action needed to ratify their agreed upon solution.

In the event that the Department believes that the implementation of a CORRIDOR PROJECT proposal may adversely affect:

i. The safety of the traveling public or Department employees,
ii. Future Department liability as respects operations and maintenance of the completed CORRIDOR PROJECT facility,
iii. Future operations and maintenance costs of the constructed CORRIDOR PROJECT facilities, and
iv. Future statutory obligations of the Department that may arise during the development of the CORRIDOR PROJECT and pertain to either the new or existing facility but are not yet identifiable at this time,

The Department expressly reserves the right to exercise its sovereign, constitutional and statutory police powers to direct the implementation of the appropriate responses to such issues affecting the CORRIDOR PROJECT until it is complete and operational. The ESC will be convened by the Department to develop resolutions to issues that are impacting the CORRIDOR PROJECT.

9-4-08

District Director — Date
Department of Transportation

Executive Director — Date
Sonoma County Transportation Authority

25 July 08

Executive Director — Date
Transportation Authority of Marin

Appendix A - Key CORRIDOR PROJECT Tasks

A. Project Management

- Recommend approval of CORRIDOR PROJECT and IP Staffing Plans
- Provide the following Project Controls:
  - Develop budget and schedule to complete the work down to the task level
  - Monitor progress, cost performance and schedule
  - Develop internal CORRIDOR PROJECT change control procedures
- Identify problem areas and recommend solutions
- Develop and compile flexible and adaptive Work Plans for each of the IPs during the last quarter of each calendar year for approval by the PLT
- Produce Staffing Plans for each IP
- Develop and maintain organization, project procedures and budget, securing necessary approvals as required for each IP
- Develop options available to the participating agencies to finance the design and construction of each IP
- Develop the Quality Assurance Plan for each IP to be recommended by the Corridor and Deputy Corridor Project Managers to the PLT for approval
- Develop and recommend approval of the Annual Work Plan

B. Project Estimate

- In the last quarter of each calendar year, the CPMT will produce a CORRIDOR PROJECT estimate update to serve as the basis of any budgetary changes.
- Throughout the year following each estimate update, any scope or cost impacts should be immediately reflected on a revised estimate and reported to the PLT and ESC.

C. Aesthetics

- With input from the local agencies and communities, the Corridor and Deputy Corridor Project Managers and PLT will ensure a coordinated approach for the aesthetics for the CORRIDOR PROJECT, particularly for new soundwalls and structures.

D. Environmental Approval

- Obtain Base Maps
- Prepare various studies
- Complete traffic forecast
- Provide traffic analysis of alternatives
- Evaluate Alternatives
- Prepare Environmental Assessment
- Recommend Preferred Alternative

E. Roadway Design

- Develop preliminary design and produce an approved Project Report
- Produce a biddable and buildable PS&E

F. Structure Design

- Conduct Geotechnical Investigation
- Produce a complete structure PS&E

G. Right of Way

- Provide mapping, appraisal, acquisition, encroachment permits, temporary construction easements, utility verification and relocation, etc.
- Certify the Project

H. Public Relations

- Develop a public relations/outreach plan
- Communicate with all stakeholders
- Prepare exhibits and presentations for use in internal and external meetings
- Ensure that a public information/outreach program for the CORRIDOR PROJECT be coordinated and implemented.

I. Construction Administration

- Complete independent project review
- Advertise, award and approve contract
- Administer contract and close out contract, including the settlement of all claims

Appendix B - Management Teams Organization

Executive Steering Committee

Caltrans Dist. Dir.
SCTA Exec. Dir.
TAM Exec. Dir.

Project Leadership Team

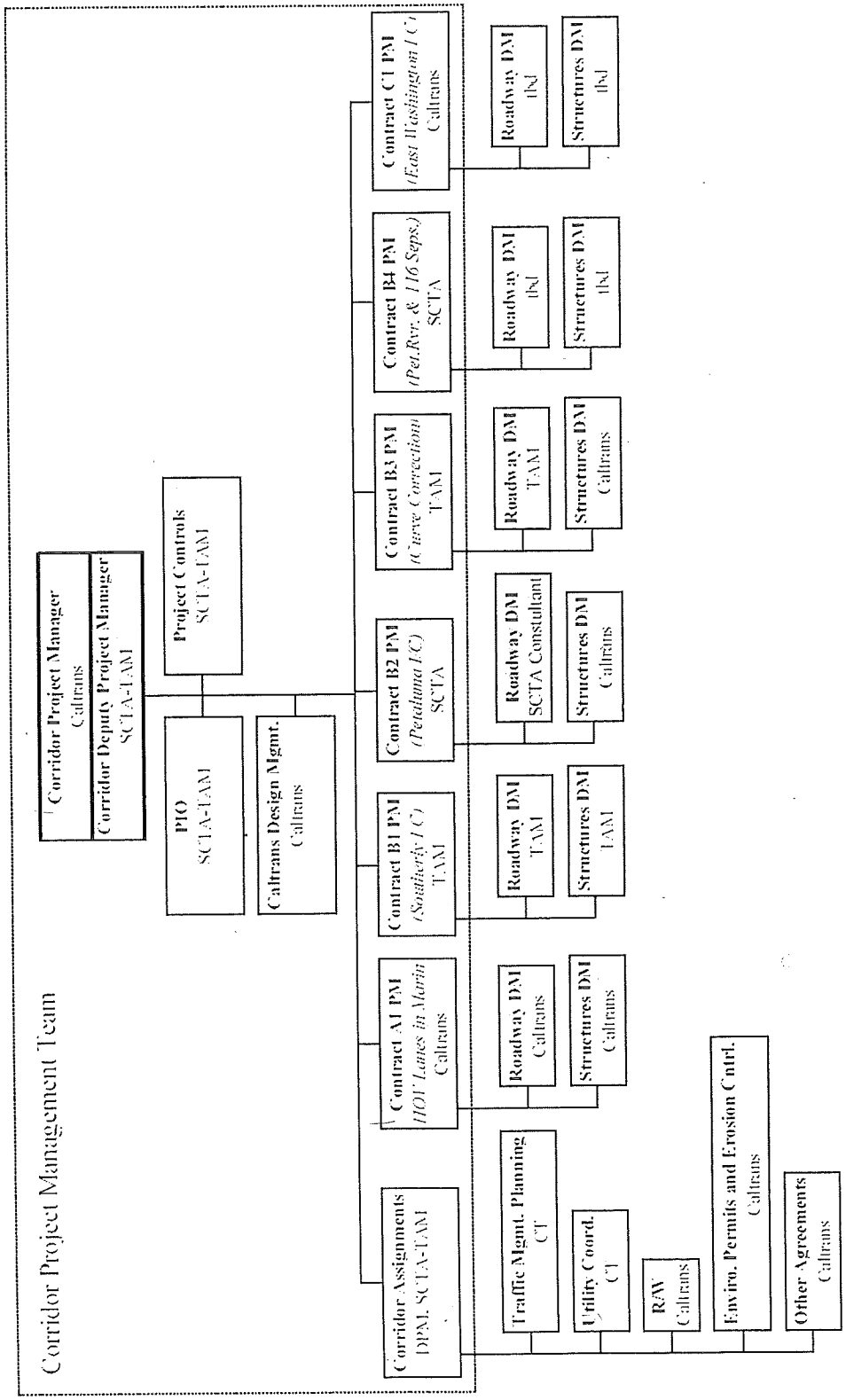
Caltrans PM Principal
SCTA Deputy Dir.
TAM Project Delivery Manager

Key participants:
Corridor PM (Caltrans)
Corridor DPM (SCTA-TAM)
Project Controls Mgr. (SCTA-TAM)
Design Principal (Caltrans)
Facilitator (SCTA-TAM)

Project Management Team

Corridor PM (Caltrans)
Corridor DPM (SCTA-TAM)
Project Controls Mgr. (SCTA-TAM)
PIO (SCTA-TAM)
Design Office Chief (Caltrans)
A1 HOV Lanes in Marin PM (Caltrans)
B1 Southerly Interchange PM (TAM)
B2 Petaluma Blvd. South Interchange PM (SCTA)
B3 Curve Correction PM (TAM)
B4 Petaluma River and SR 116 Separations PM (SCTA)
C1 East Washington Interchange PM (Caltrans)

Appendix C - Corridor Project Management Team Organization



Appendix D - Agency Assignments

	Work Task	A1 Segment A HOV Lanes	B1 Southerly Interchange & Frontage Roads	B2 Petaluma Blvd South Interchange & Frontage Roads	B3 San Antonio Creek Curve Correction	B4 Petaluma River Bridge
		Task Lead Agency				
1	Corridor Project Management	CT				
2	Deputy Corridor Project Management	TAM				
3	Individual Project Management Project Administration, Agency/Subconsultant Coordination, Meetings, QA/QC, Project Files/Distribution, Budget and Schedule Control, Invoices/Progress Reports.	CT	TAM	SCTA	TAM	SCTA
4	Project Control	SCTA				
5	Corridor PIO & Facilitator Public Outreach & PLT Facilitator	SCTA TAM				
6	Roadway Design (Engineer of Record) Title, Location Map, Typical Cross Section, Construction Staking Survey Control Sheet, R/W Requirements Maps, Key Map and Line Index, Layout, Profile and Superelevation Diagram, Construction Details, Contour Grading, Summary of Quantities, Miscellaneous Plans and Details, Details and Quantities, Cross Sections, Design Report, Design Checklist (DIB 78), Design Fact Sheets, Pavement Life Cycle Cost Analysis, Value Analysis Study, Constructability Review, Bidability Review, Bridge Site Submittals, Construction Cost Estimate (Civil), RE File (Civil), Value Analysis Study, Construction Schedule, Construction Cost Estimate (Independent Check), Roadway Design Services During Construction, Reproduction/Communication, Other Costs (Travel, Phones, etc.)	CT/NR	TAM	SCTA	TAM	SCTA
7	Survey Field Surveys (topo and conforms), Field Survey (R/W and utilities)	CT/NR	TAM	SCTA	TAM	SCTA
8	Drainage Drainage Plans, Drainage Profiles, Edge Drain Plans and Details, Drainage Details, Drainage Quantities, Drainage SSPs, Drainage Report, SWDR	CT/NR	TAM	SCTA	CT	SCTA
9	Utility (Corridor Wide) Utility Coordination	CT				
10	Utility (Project Specific) Potholes, Utility Coordination, Longitudinal Encroachment Exception, Utility Plan, Utility Details.	CT/NR	TAM	SCTA	TAM	SCTA
11	Erosion Control Erosion Control Plans & Details	CT/NR	TAM	SCTA	TAM	SCTA
12	Traffic Handling and Staging Construction area signs, Stage Construction/Traffic Handling	CT/NR	TAM	SCTA	TAM	SCTA
13	Signs and Pavement Delineation Sign Plan, Details, and Quantities, Pavement Delineation Plans, Pavement Delineation Details, and Quantities	CT/NR	TAM	SCTA	TAM	SCTA
14	Retaining Walls District Retaining Wall Plan & Profile, Retaining Wall Details and Quantities.	CT/NR	TAM	N/A	TAM	SCTA
15	Sound Walls Plans, quantities, estimate	CT/NR	N/A	N/A	N/A	SCTA
16	Landscape Planting Plans, Irrigation Plans and Details, Hard Scape Details	D4	TAM	CT	CT	CT
17	Electrical Lighting Plans and Details (Electroliers & Signs), Signal Plans & Details, TOS Plans and Details, Miscellaneous Electrical Plans and Details	CT/NR	TAM	SCTA	TAM	SCTA

	Work Task	A1 Segment A HOV Lanes	B1 Southerly Interchange & Frontage Roads	B2 Petaluma Blvd South Interchange & Frontage Roads	B3 San Antonio Creek Curve Correction	B4 Petaluma River Bridge
		Task Lead Agency				
18	Materials Materials Report, Materials Information Handout	CT D4	TAM	CT	TAM	CT
19	Structures Bridge Type Selection, General Plan & Index to Plans, Deck Contours, Foundation Plan, Abutment Layout and Details, Bent Layout and Details, Typical Section, Girder Layout, Girder Details, Girder Reinforcement, Miscellaneous Details, Bridge Hydraulics Report, Independent Check (Structures), Specifications (Structures), Construction Cost Estimate (Structures), Construction Cost Estimate Independent Check (Structures), Construction Cost Estimate (Independent Check), Design Services During Construction, Other Bridge Costs (Travel, Photos, etc.), Bridge Design Support during Construction.	CT DES	TAM	CT	CT	SCTA
20	Geotechnical Bridge Foundation Reports, Geotechnical Design Report, Retaining Wall LOTBs, Bridge Log of Test Boring, Drilling and Sampling, Laboratory Testing	DES	TAM	CT	CT	SCTA
21	Traffic Management (Corridor) Lane Closure Charts	CT				
22	Traffic Management (Project Specific) TMP, Prepare Lane Closure Report, Additional Traffic Studies	CT NR	TAM	SCTA	TAM	SCTA
23	Hazardous Waste (ADL, ACM, Gasoline Diesel) Soil Investigation Report - Haz Waste	CT D4	TAM	SCTA	TAM	SCTA
24	R/W Acquisitions LandNet Base Mapping, R/W Hard Copy Mapping, R/W Appraisal Maps, R/W Project Mgmt Admin ROW Cert, R/W Project Mgmt Admin/ROW Cert, R/W Title Reports, R/W Appraisal, R/W Second Appraisal (Properties $500,000+), R/W Appraisals Reviews, R/W Negotiation Acquisition, R/W Relocation Services	CT				
25	R/W Environmental Mitigation Environmental Mitigation Plan	SCTA/TAM/CT				
26	Environmental Permits (Corridor) Environmental Permits, Environmental Mitigation Plan	CT				
27	Environmental Permits (Individual Projects) Environmental Permits	D4	TAM	SCTA	TAM	SCTA
28	Railroad Coordination	D4	N/A	N/A	N/A	N/A
29	Other Agreements Revised Freeway Maintenance	D4	CT	CT	CT	CT
30A	Prepare Specifications, bid documents	CT NR	TAM	SCTA	TAM	SCTA
30	DOE Office Engineer Special Provisions (Civil)	CT NR	CT	CT	CT	CT
31	Advertise, Award, Approve Contract	CT				

Appendix E - Corridor and Deputy Corridor Project Managers Responsibilities

A. Develop Organization and Procedures

- Recommend Approval of the Discipline Managers on each IP to the PLT
- Recommend the extent to which consultant support is necessary and make recommendations to the PLT on consultant selection
- Provide vision for the entire CORRIDOR PROJECT Team
- Make sure that teamwork is occurring within the IP Teams
- Develop the CORRIDOR PROJECT Work Plan and Staffing Plan
- Lead the development and implementation of the Project Control procedures
- Develop a documented CORRIDOR PROJECT scope of work
- Process and make recommendations for changes in scope, schedule and budget

B. Communication Plan

- Oversee the preparation and distribution of agendas, minutes and reports for various CORRIDOR PROJECT meetings
- Ensure the establishment and operation of a document/correspondence management and distribution system
- Guide the implementation of the public relations plan for the CORRIDOR PROJECT
- Oversee the preparation of necessary exhibits
- Make presentations on behalf of the CORRIDOR PROJECT
- Make certain that meeting places are arranged and that necessary equipment is available
- Assist PLT and ESC in public hearings
- Oversee the preparation of quarterly progress reports for the PLT and ESC, TAM and SCTA Boards
- Make annual and as needed reports and presentations to the CTC, the SCTA and TAM Board, and other governmental agencies
- Review media releases

C. Budget Control

- Oversee the development of a funding plan for the CORRIDOR PROJECT and/or the IPs
- Oversee the annual compilation of the complete CORRIDOR PROJECT and IP estimates
- Lead the creation of the CORRIDOR PROJECT and the IPs budget down to the Discipline Level
- Review and approve the IP Work Plans
- Monitor CORRIDOR PROJECT and IP expenditures at the Discipline Level
- Oversee the preparation of a quarterly financial report showing the current approved budget and expenditures to date by fund source, and expected expenditures in the future.

- Report to the PLT and ESC on the CORRIDOR PROJECT and IPs financial status
- Recommend approval of any scope changes that are beyond the approved budget and independent project contingency to the PLT

D. Schedule Control

- Oversee the development and approve the CORRIDOR PROJECT and IP schedules
- Review the Discipline Manager schedules
- Monitor overall CORRIDOR PROJECT and IP schedules
- Oversee the implementation of methods to keep CORRIDOR PROJECT and the IPs on schedule
- Provide necessary direction to the CORRIDOR PROJECT Scheduler
- Report to the PLT and ESC on CORRIDOR PROJECT and IP progress
- Develop quarterly reports on progress and percent complete

E. Inter-agency Coordination

- Carry out communication per the Communication Plan
- Assure information moves agency to agency
- Monitor agency activities

F. Quality Assurance

- Ensure consistency between independent projects
- Hold the IP Project Managers accountable for implementing the QA plan

G. Technical Coordination

- Recommend selection of consultants along with other interview panel members
- Direct the development of Task Orders on contracts supplying corridor-wide staff
- Coordinate technical activities performed by the IP Teams

H. Legal Requirements

- Develop format for RFPs and technical agreements as needed
- Confirm that terms of agreements and contracts accomplish the purposes for which they are created

I. Contract Administration

- Provide overall coordination and management as assigned by the Cooperative Agreements
- Monitor progress on the contracts based upon information compiled by the Project Controls staff
- Approve changes to the CORRIDOR PROJECT scope, schedule and budget that remain within the approved scope and budget contingency within a specific CORRIDOR PROJECT phase
- Review and recommend payment of invoices

J. Aesthetics

- Coordinate aesthetics for the CORRIDOR PROJECT

K. Risk Management

- Identify potential risk issues.
- Minimize scope, cost and schedule changes
- Develop contingency plans for scope, cost and schedule changes

Appendix F - IP Project Manager Responsibilities

A. Develop Organization and Procedures

- Recommend Approval of the Discipline Managers for each respective IP
- Recommend the extent to which consultant support is necessary and make recommendations to the Corridor and Deputy Corridor Project Managers on consultant selection
- Provide vision for the entire IP Team
- Make sure that teamwork is occurring within their assigned Discipline and Task Teams
- Develop the Work Plan and Staffing Plan for each respective IP
- Implement the Project Control procedures for each respective IP
- Develop a documented IP scope of work
- Process and make recommendations for changes in scope, schedule and budget

B. Communication Plan

- Oversee the preparation and distribution of agendas, minutes and reports for various IP meetings
- Implement the document/correspondence management and distribution system
- Oversee the preparation of necessary exhibits
- Make presentations on behalf of the IP
- Make certain that meeting places are arranged and that necessary equipment is available for each respective IP
- Participate in the preparation of quarterly progress reports for the PLT, ESC, TAM and SCTA Boards
- Make annual and as needed reports and presentations to the CTC, the SCTA and TAM Board, and other governmental agencies

C. Budget Control

- Oversee the development of a funding plan for the assigned IP
- Oversee the annual compilation of the complete IP estimate
- Lead the creation of the IP budget down to the task level
- Develop the annual Work Plans
- Monitor IP expenditures at the task level
- Oversee the preparation of a quarterly financial report showing the current approved budget and expenditures to date by fund source, and expected expenditures in the future.
- Report to the Corridor and Deputy Corridor Project Managers on the IP financial status
- Recommend approval of any scope changes that are beyond the approved budget and independent project contingency to the Corridor and Deputy Corridor Project Managers

D. **Schedule Control**

- Oversee the development and approve the IP schedule
- Review the Discipline Managers' task-level schedules
- Monitor overall schedule progress and implement actions to keep the IP on schedule
- Develop quarterly reports on progress and percent complete

E. **Inter-agency Coordination**

- Carry out communication per the Communication Plan
- Assure information moves agency to agency
- Monitor agency activities

F. **Quality Assurance**

- Ensure consistency between independent projects
- Hold the Discipline Team members accountable for implementing the QA plan

G. **Technical Coordination**

- Participate in the development of Consultant Contract Task Orders
- Coordinate technical activities performed by the Discipline Teams

H. **Legal Requirements**

- Assist Corridor and Deputy Corridor Project Managers in preparing RFPs and technical agreements

I. **Contract Administration**

- Provide overall coordination and management as assigned by the Cooperative Agreements
- Monitor progress, as appropriate, on IP contracts based upon information compiled by the Project Controls staff
- Recommend changes to the Corridor and Deputy Corridor Project Managers for IP scope, schedule and budget that remain within the approved scope and budget contingency within a specific IP phase
- Review and recommend payment of invoices

J. **Aesthetics**

- Oversee the aesthetics design for the IP

K. **Risk Management**

- Identify potential risk issues.
- Minimize scope, cost and schedule changes
- Develop contingency plans for scope, cost and schedule changes

Appendix G - Funding Plan

Fund Type	PA&ED	PSE	R/W SUP	R/W CAP	CON SUP	CON	TOTAL
CMIA					10,000	74,000	84,000
RTIP Marin				2,000			2,000
RTIP Sonoma				2,000			2,000
ITIP - Aug	1,500				3,000		4,500
ITIP	12,500				3,500		16,000
DEVCO TEA21	2,100			5,650			7,750
TCRP	5,600	10,900					16,500
Sonoma Mea. M		3160	919	2,062		1,433	7,577
SAFETEA-LU-HPP - Marin				11,322			11,322
SAFETEA-LU 3743 Marin				425			425
SAFETEA-LU 3743 Sonoma				425			425
STP R/P Aug - Marin			2,210	2,423		27,117	33,100
STP R/P Aug - Sonoma				4,800		12,200	17,000
Total Programmed	**22,800**	**14,060**	**3,235**	**32,370**	**17,000**	**113,330**	**202,795**
Total Estimate	**22,800**	**14,060**	**3,235**	**32,370**	**17,000**	**113,330**	**202,795**
Variance	**0**	**0**	**0**	**0**	**0**	**0**	**0**

CMIA Packages

MARIN-SONOMA NARROWS FUNDING PLAN (CVIA) - PA&ED

Fund Type	PA&ED	PSE	R/W SUP	R/W CAP	CON SUP	CON	TOTAL
ITIP/RTIP	12,500						12,500
ITIP/RTIP Aug	1,500						1,500
DEVCO TEA21	2,100						2,100
TCRP	5,600						5,600
Total Programmed	**22,800**						**22,800**
Total Estimate	**22,800**						**22,800**
Variance	**0**						**0**

MARIN-SONOMA NARROWS FUNDING PLAN (CVIA) - Contract A-1 (HOV Lanes)

Fund Type	PA&ED	PSE	R/W SUP	R/W CAP	CON SUP	CON	TOTAL
CMIA					8,610	44,420	49,930
TCRP		5,520					5,520
STP R/P Aug - Marin			110	1,100		10,000	11,210
ITIP - Aug					2,550		2,550
Total Programmed		**5,520**	**110**	**1,100**	**8,160**	**54,420**	**69,710**
Total Estimate		**5,520**	**110**	**1,100**	**8,160**	**54,420**	**69,710**
Variance		**0**	**0**	**0**	**0**	**0**	**0**

MARIN-SONOMA NARROWS FUNDING PLAN (CVIA) - Contract B-1 (Southerly I/C)

Fund Type	PA&ED	PSE	R/W SUP	R/W CAP	CON SUP	CON	TOTAL
CMIA						10,443	10,443
RTIP Marin				2,000			2,000
ITIP - Aug					350		350
ITIP					3,550		3,500
DEVCO TEA21				5,650			5,650
TCRP		3,760					3,760
SAFETEA-LU-HPP - Marin				11,322			11,322
SAFETEA-LU 3743 Marin				425			425
STP R/P Aug - Marin			2,210	2,423		17,157	21,500
Total Programmed		**3,760**	**2,210**	**22,080**	**4,150**	**27,640**	**59,840**
Total Estimate		**3,760**	**2,210**	**22,080**	**4,150**	**27,640**	**59,840**
Variance		**0**	**0**	**0**	**0**	**0**	**0**

MARIN-SONOMA NARROWS FUNDING PLAN (CVIA) - Contract B-2 (Petaluma I/C)

Fund Type	PA&ED	PSE	R/W SUP	R/W CAP	CON SUP	CON	TOTAL
CMIA					4,690	17,337	22,027
RTIP Sonoma				2,000			2,000
TCRP		1,220					1,220
Sonoma Mea. M		3160	919	2,062		1,433	7,577
SAFETEA-LU 3743 Sonoma				425			425
STP R/P Aug - Sonoma				4,800		12,200	17,000
Total Programmed		**4,380**	**919**	**9,190**	**4,690**	**31,270**	**50,449**
Total Estimate		**4,380**	**919**	**9,190**	**4,690**	**31,270**	**50,449**
Variance		**0**	**0**	**0**	**0**	**0**	**0**

Non - CMIA Packages

MARIN-SONOMA NARROWS FUNDING PLAN - Contract B-3 (Curve Correction)

Fund Type	PA&ED	PSE	R/W SUP	R/W CAP	CON SUP	CON	TOTAL
RTIP		1,200					1,200
ITIP		400	1,333	5,270	7,660	51,050	66,040
TCRP		2,900					2,900
Total Programmed		**5,200**	**1,660**	**5,270**	**7,660**	**51,050**	**70,840**
Total Estimate		**5,200**	**1,660**	**5,270**	**7,660**	**51,050**	**70,840**
Variance		**0**	**0**	**0**	**0**	**0**	**0**

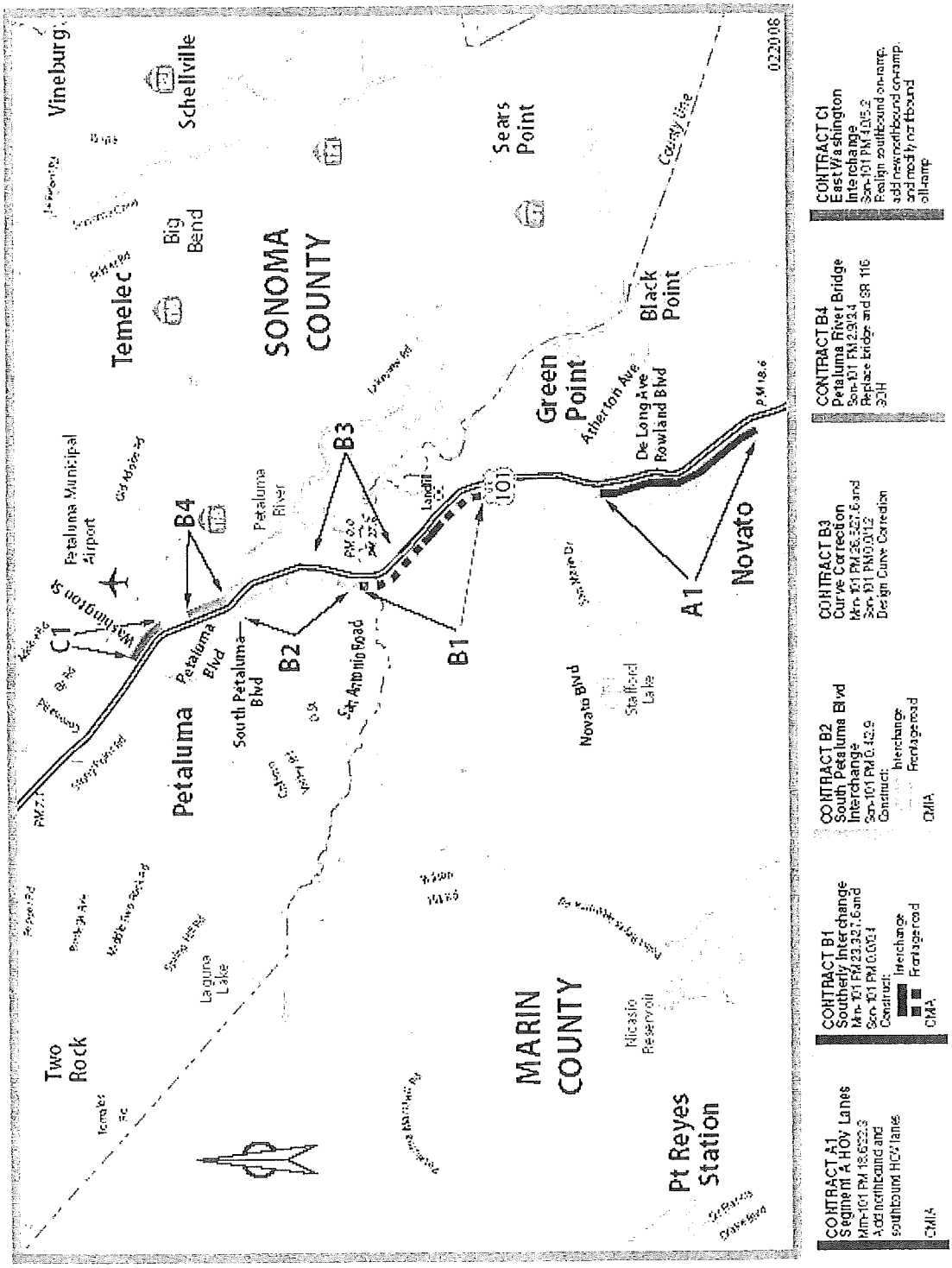
MARIN-SONOMA NARROWS FUNDING PLAN (CVIA) - Contract B-4 (Petaluma River Bridge)

Fund Type	PA&ED	PSE	R/W SUP	R/W CAP	CON SUP	CON	TOTAL
RTIP Sonoma							
ITIP							
Sonoma Mea. M		4,620					
Federal							
Total Programmed		**4,620**					
Total Estimate							
Variance							

MARIN-SONOMA NARROWS FUNDING PLAN (CVIA) - Contract C-1 (East Washington I/C)

Fund Type	PA&ED	PSE	R/W SUP	R/W CAP	CON SUP	CON	TOTAL
TCRP		1,500					1,500
Local - City of Petaluma	290	390	365	1,208	545	1,242	4,000
Sonoma Mea. M					900	2,010	2,900
Federal Earmark						13,500	13,500
Federal Demo					1,000		1,000
Total Programmed	**290**	**1,890**	**365**	**1,208**	**2,445**	**16,742**	**23,000**
Total Estimate	**290**	**1,890**	**365**	**1,208**	**2,445**	**16,742**	**23,000**
Variance	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Appendix H - Project Map



Historical Cost Analysis Capital Outlay Support (COS) FYs 1998-2002

a. Table 6.3 – 1998 to 2002 Major Project Quartiles Ranked By Total Capital (STIP Only)
b. Table 7 – Major Projects by Environmental Document

TABLE 6.3: 1998 to 2002 MAJOR PROJECT QUARTILES RANKED BY TOTAL CAPITAL
STIP ONLY

	Number of Projects	COS Phase 0. Proj Approval & Environ Docs	COS Phase 1. Plan, Spec & Estimate	COS Phase 2. ROW Support & Engin.	COS Phase 3. Const Mgmt & Engineering	Phase 2 as % of ROW Capital	Phase 0, 1, & 3 as % of Const. Capital	All Phases as % of Total Capital
MAJOR PROJECTS QUARTILE 1 (Capital = $0-$1,052,000)	64	$4,530,125	$11,191,384	$153,080	$10,187,514	49.86%	67.25%	67.12%
COS PHASE AS PERCENTAGE OF TOTAL COS		17.38%	42.94%	0.59%	39.09%			
COS PHASE AS PERCENTAGE OF TOTAL CAPITAL		11.67%	28.82%	0.39%	26.24%			
MAJOR PROJECTS QUARTILE 2 (Capital = $1,053,000-$2,482,000)	65	$6,569,199	$22,227,194	$3,131,620	$22,657,702	78.02%	50.12%	51.17%
COS PHASE AS PERCENTAGE OF TOTAL COS		12.03%	40.72%	5.74%	41.51%			
COS PHASE AS PERCENTAGE OF TOTAL CAPITAL		6.16%	20.84%	2.94%	21.24%			
MAJOR PROJECTS QUARTILE 3 (Capital = $2,483,000-$11,082,000)	65	$15,563,747	$43,695,293	$6,781,411	$53,752,589	31.68%	35.35%	35.12%
COS PHASE AS PERCENTAGE OF TOTAL COS		12.99%	36.48%	5.66%	44.87%			
COS PHASE AS PERCENTAGE OF TOTAL CAPITAL		4.56%	12.81%	1.99%	15.76%			
MAJOR PROJECTS QUARTILE 4 (Capital = $11,083,000-$171,111,000)	64	$47,832,749	$210,497,937	$65,139,243	$222,634,515	14.66%	32.89%	28.64%
COS PHASE AS PERCENTAGE OF TOTAL COS		8.76%	38.55%	11.93%	40.77%			
COS PHASE AS PERCENTAGE OF TOTAL CAPITAL		2.51%	11.04%	3.42%	11.67%			
MAJOR PROJECTS TOTAL	258	$74,495,820	$287,611,808	$75,205,354	$309,232,320	16.00%	34.90%	31.19%
COS PHASE AS PERCENTAGE OF TOTAL COS		9.98%	38.53%	10.07%	41.42%			
COS PHASE AS PERCENTAGE OF TOTAL CAPITAL		3.11%	12.02%	3.14%	12.92%			

TABLE 7: MAJOR PROJECTS BY ENVIRONMENTAL DOCUMENT

	Number of Projects	Proj Approval & Environ Docs	COS Phase 1. Plan, Spec & Estimate	2. ROW Support & Engin.	COS Phase 3. Const Mgmt & Engineering	Phase 2 as % of ROW Capital	& 3 as % of Const. Capital	All Phases as % of Total Capital
MAJOR PROJECTS CERTIFIED EXEMPTIONS	1,282	$57,866,312	$439,835,739	$26,971,270	$597,644,501	29.12%	26.25%	26.31%
COS PHASE AS PERCENTAGE OF TOTAL COS		5.16%	39.19%	2.40%	53.25%			
COS PHASE AS PERCENTAGE OF TOTAL CAPITAL		1.36%	10.31%	0.63%	14.01%			
MAJOR PROJECTS NEGATIVE DECLARATIONS	97	$42,199,567	$117,615,689	$42,202,840	$139,990,748	20.84%	32.51%	30.41%
COS PHASE AS PERCENTAGE OF TOTAL COS		12.34%	34.39%	12.34%	40.93%			
COS PHASE AS PERCENTAGE OF TOTAL CAPITAL		3.75%	10.46%	3.75%	12.45%			
MAJOR PROJECTS ENVIRONMENTAL IMPACT STATEMENTS	67	$30,939,588	$157,552,903	$39,759,790	$150,330,903	14.57%	37.02%	31.86%
COS PHASE AS PERCENTAGE OF TOTAL COS		8.17%	41.62%	10.50%	39.71%			
COS PHASE AS PERCENTAGE OF TOTAL CAPITAL		2.60%	13.26%	3.35%	12.65%			

Construction Cost Indices and Forecast

Construction Cost Indices and Forecast

Source >	DES-OE		DES-Structures OE		Global Insight (GI)[1]		ENR[2]		UCLA[3]	DOF[4]	UCLA[3]	GI[5]	UCLA[6]	GI[7]
Indices	CHCCI California Highway Construction Cost Index	% Change from previous year	Bridge Construction Cost Index	% Change from previous year	Highway & Street Construction Cost Index	% Change from previous year	Construction Cost Index	% Change from previous year	CPI CA % Change	CPI Urban CA % Change	CPI % Change	CPI All Urban % Change	PPI Finished Goods % Change	PPI Finished Consumer Goods % Change
Year	State		State		National		National		State		National		National	
2006	104.1	6.1	102.2	-8.0	0.94	6.9	0.97	4.1	3.9	3.9	3.2	3.2	4.7	3.4
2007	**100.0**	-3.9	**100.0**	-2.1	**1.00**	5.9	**1.00**	2.8	3.3	3.3	2.9	2.9	4.8	4.5
2008	95.0	-5.0	99.8	-0.2	0.81	-19.3	1.04	4.3	3.4	3.4	3.8	3.8	9.8	7.4
2009	78.4	-17.5	78.3	-21.5	0.78	-2.8	1.08	3.1	-0.3	-0.3	-0.3	-0.3	-8.7	-3.8
2010	76.8	-2.0	73.7	-5.9	0.82	4.1	1.10	2.7	1.3	1.3	1.6	1.6	6.9	5.6
2011*	86.4	12.5	88.2	19.7	0.84	2.6	1.13	2.7	2.2	1.5	2.1	2.8	5.7	6.9
2012F					*0.86*	*2.3*	*1.16*	*1.9*	*2.1*	*1.7*	*2.1*	*1.9*	*1.8*	*1.0*
2013F					*0.88*	*2.9*	*1.20*	*3.7*	*2.3*	*2.0*	*2.3*	*2.0*	*2.4*	*1.6*
2014F					*0.91*	*3.5*	*1.24*	*3.8*		*2.2*		*2.2*		*1.7*
2015F					*0.95*	*3.5*	*1.28*	*3.0*				*2.1*		*1.4*
2016F					*0.97*	*2.3*	*1.31*	*1.9*				*2.1*		*1.7*
2017F					*0.99*	*1.9*	*1.34*	*2.3*				*2.1*		*1.6*

Note: All cost indices are normalized to 2007 and are cumulative from the base year.

*Current year indices are based on the previous quarter or past 12 month data were available and are updated every quarter.

F: Forecast numbers are italicized.

(1) IHS Global Insight Highway and Street Construction Cost Index
(2) ENR Construction Cost Index, U.S. 20 City Average Source: ENR/Global Insight
(3) UCLA Anderson Forecast, Economic Outlook - The UCLA Anderson Forecast is a unit of The UCLA Anderson School of Management,
(4) California Department of Finance (DOF), Consumer Price Index. DOF also publishes Economic Outlook report once annually as part of May Revision.
(5) IHS Global Insight Consumer Price Index - All Urban, Source: BLS
(6) UCLA Anderson Forecast, Publications, Economic Outlook
(7) IHS Global Insight Producer Price Index - Finished Consumer Goods, Source: BLS

According to Bureau of Labor Statistics (BLS): (http://www.bls.gov)

Consumer Price Index (CPI)

A consumer price index is a measure of the average price of consumer goods and services purchased by households. A consumer price index measures a price change for a constant market basket of goods and services from one period to the next within the same area (city, region, or nation). The percent change in the CPI is a measure of inflation.

Producer Price Index (PPI)

A producer price index is a family of indexes that measure the average change over time in selling prices received by domestic producers of goods and services. PPIs measure price change from the perspective of the seller. This contrasts with other measures that measure price change from the purchaser's perspective, such as the Consumer Price Index (CPI). Sellers' and purchasers' prices may differ due to government subsidies, sales and excise taxes, and distribution costs.

Contract Escalation

Producer Price Index (PPI) data are commonly used in escalating purchase and sales contracts. These contracts typically specify dollar amounts to be paid at some point in the future. It is often desirable to include an escalation clause that accounts for changes in input prices. For example, a long-term contract for bread may be escalated for changes in wheat prices by applying the percent change in the PPI for wheat to the contracted price for bread. Consumer Price Index (CPI) data can also be used in escalation. For example, the CPI may be used to escalate lease payments or child support payments.

Draft NMWD Cooperative Agreement

04-Mrn-101 PM 23.2/27.1
Redwood Landfill Road Interchange
EA: 04-26407
Project ID: 0400000733
District Agreement No. 4-2398

COOPERATIVE AGREEMENT

THIS AGREEMENT, ENTERED INTO EFFECTIVE ON _____, 2012, is between the STATE OF CALIFORNIA, acting by and through its Department of Transportation, referred to herein as "STATE," and the

NORTH MARIN WATER DISTRICT, a public entity referred to herein as "DISTRICT."

RECITALS

1. STATE and DISTRICT, pursuant to Streets and Highways Code sections 114, 130 and 131 are authorized to enter into a Cooperative Agreement for improvements to State Highways within Marin County.

2. STATE has programmed a project (EA 26407) to construct a new interchange at Redwood Landfill Road along US 101 and frontage roads to access adjacent properties and Olompali State Park in Marin County, referred to herein as "IMPROVEMENTS." IMPROVEMENTS is also known as Contract B1 of the Marin-Sonoma Narrows Corridor. As part of IMPROVEMENTS, STATE will relocate approximately 10,885 feet of 30-inch DISTRICT waterline that is in conflict with the highway project. The relocation of the said waterline is hereinafter referred to as WATERLINE.

3. DISTRICT desires betterments to upsize a portion of said WATERLINE from 30-inch to 42-inch for approximately 8,215 feet to manage the water flow through gravity and avoid the cost of pumping, referred to herein as "BETTERMENTS," and has requested STATE to construct BETTERMENTS as a part of its IMPROVEMENTS project.

4. It is mutually beneficial to combine said IMPROVEMENTS, WATERLINE and BETTERMENTS into a single project, referred to herein as "PROJECT," and construct both under a single construction contract.

5. STATE agrees to combine BETTERMENTS, designed and provided by DISTRICT, into the contract plans for IMPROVEMENTS and DISTRICT is willing to pay all construction capital and support costs incurred by STATE for constructing BETTERMENTS on DISTRICT's behalf except for DISTRICT's inspector referred to in Section I, Article 17 and as shown in Exhibit A, attached to and made a part of this Agreement.

6. The parties have also entered into a separate UTILITY AGREEMENT NO. 1778.4 to define the terms and conditions of relocation of WATERLINE. However, the funding for WATERLINE will be provided under this Cooperative Agreement. The terms and conditions of the said Utility Relocation Agreement are hereby incorporated into this Agreement by this reference.

7. The parties now desire to specify hereinbelow the terms and conditions under which BETTERMENTS is to be financed, developed, constructed and maintained and as to how WATERLINE shall be relocated and financed therefore.

SECTION I

STATE AGREES:

1. To review and accept all plans prepared by DISTRICT for BETTERMENTS portion of PROJECT.

2. To comply with all environmental commitments contained in the PROJECT Environmental Impact Report/Environmental Impact Assessment (EIR/EIS) and the DISTRICT Aqueduct Energy Efficiency Project EIR.

3. To construct WATERLINE and BETTERMENTS in accordance with Plans, Specifications & Estimate (PS&E) prepared by DISTRICT.

4. To advertise, award, and administer the construction contract for BETTERMENTS as a part of the construction contract for PROJECT.

5. To establish separate accounts to accumulate charges for all WATERLINE and BETTERMENTS costs to be paid by DISTRICT pursuant to this Agreement.

6. To charge DISTRICT for the actual construction capital cost estimated at $2,492,000 including accrued depreciation for the abandoned waterline facility and a 30% contingency for BETTERMENTS. Said amount is shown in Exhibit A attached to and made a part of this Agreement. Of that amount, $2,430,000 is subject to and calculated using a Betterment Ratio (BR) and Engineers Estimate using methodology shown in Exhibit B, attached to and made a part of this Agreement. The BR will be revised at contract award and at construction contract acceptance (CCA) to determine the actual BETTERMENTS construction capital cost.

7. To submit a billing in the amount of $62,000 to DISTRICT for accrued depreciation for the abandoned waterline facility in accordance with Streets and Highways Code section 705 (relocation of utility facilities) at the start of construction for WATERLINE and BETTERMENTS for PROJECT. Said amount is shown in Exhibit A.

8. To charge DISTRICT 6.2% of the BETTERMENTS construction capital bid cost determined at contract award, the estimated amount of $120,000. Said amount represents the estimated lump sum fixed amount of construction support for BETTERMENTS to be performed by STATE including STATE's personnel resources and its equipment and all direct and indirect costs (functional and administrative overhead assessment) attributable to BETTERMENTS support applied in accordance with STATE's standard accounting practices and procedures. Said amount will be credited towards DISTRICT's inspection costs referred to in Section I, Article 17 as shown in Exhibit A.

9. To submit an initial billing in the amount of $300,000 to DISTRICT ninety (90) days prior to STATE's start of construction for WATERLINE and BETTERMENTS for PROJECT. Said initial billing represents DISTRICT's deposit for one month's estimated construction capital cost for BETTERMENTS.

10. Thereafter, to prepare and submit monthly billing statements for estimated expenditures for construction capital one month in advance to DISTRICT as construction of BETTERMENTS proceeds.

11. To consult with DISTRICT before implementation on all contract change orders (CCO's) related to BETTERMENTS with a cumulative cost over $10,000, except when the safety of motorists and/or pedestrians or the protection of property requires the immediate issuance of a CCO. STATE shall notify DISTRICT, either by phone or by fax, at least twenty-four (24) hours upon issuing an approved CCO or providing written direction to begin the CCO work.

12. To monitor actual construction capital expenditures and to provide notice to DISTRICT should the expected actual costs exceed the budgeted amount of $2,492,000. If said costs exceed $2,492,000 and DISTRICT fails to secure additional funding, STATE shall cease work on BETTERMENTS until such funds are forthcoming.

13. If HM-1 or HM-2 is found within PROJECT limits, STATE will immediately notify DISTRICT. HM-1 is defined as hazardous material (including, but not limited to, hazardous waste) that may require removal and disposal pursuant to federal or state law whether it is disturbed by PROJECT or not. HM-2 is defined as hazardous material (including, but not limited to, hazardous waste) that may require removal and disposal pursuant to federal or state law only if disturbed by PROJECT.

14. STATE, independent of PROJECT, is responsible for any HM-1 found within the existing state highway system (SHS) right of way. STATE will undertake or cause to be undertaken HM MANAGEMENT ACTIVITIES related to HM-1 with minimum impact to PROJECT schedule. HM MANAGEMENT ACTIVITIES is defined as management activities related to either HM-1 or HM-2 including, without limitation, any necessary manifest requirements and disposal facility designations.

15. If HM-1 is found within PROJECT limits and outside the existing SHS right of way, responsibility for HM MANAGEMENT ACTIVITIES will defer to the appropriate party identified in cooperative agreement 4-2210 between the STATE and Transportation Authority of Marin.

16. If HM-2 is found within PROJECT limits, STATE, as the public agency responsible for the advertisement, award, and administration of the PROJECT construction contract will be responsible for HM MANAGEMENT ACTIVITIES related to HM-2, except that DISTRICT's expense shall be 30% of the total cost for WATERLINE and BETTERMENTS HM MANAGEMENT ACTIVITIES related to HM-2 due to BETTERMENTS.

17. STATE will pay DISTRICT, as a PROJECT cost, for a DISTRICT representative to inspect the WATERLINE and BETTERMENTS construction portion of PROJECT and to perform the required field and source testing as it progresses in an amount that equals 10% of the actual WATERLINE and BETTERMENTS construction capital cost, which is estimated to be $695,000, as shown in Exhibit A. Upon completion of WATERLINE and BETTERMENTS construction, DISTRICT reserves the right to perform an independent final inspection of WATERLINE and BETTERMENTS.

18. To deposit with DISTRICT within twenty-five (25) days of receipt of billing therefore (which billing will be forwarded ninety days (90) days prior to start of WATERLINE and BETTERMENTS construction for PROJECT), the amount of $100,000. Said figure represents one month's estimated cost for DISTRICT's Scope of Services as shown in Exhibit C, attached to and made a part of this Agreement.

19. To make all necessary arrangements with the owners of public or other private utility facilities which could conflict with construction of PROJECT in accordance with applicable law, the provisions of any franchise, master contracts or other agreements in effect with the respective utility owners. STATE shall prepare the necessary notices and/or Utility Agreements to relocate and inspect the required utility relocation work.

20. To pay for other utility adjustments, including engineering and overhead costs, for that portion of PROJECT required for construction of IMPROVEMENTS only.

21. Upon receipt of a notice of monthly billing statement discrepancy from DISTRICT, if STATE disputes such notice, STATE shall notify DISTRICT within thirty (30) days. STATE shall credit undisputed notice to DISTRICT in its next current monthly billing statement. Any such dispute will be dealt with under Section III, Article 11 of this Cooperative Agreement. Upon final resolution of a disputed notice, STATE shall make the appropriate credit or debit to DISTRICT.

22. Upon completion of PROJECT and all work incidental thereto, to furnish DISTRICT with a detailed statement of the total actual WATERLINE and BETTERMENTS costs, including the costs of any change order and claims related to the WATERLINE and BETTERMENTS which have been allowed to the construction contractor pursuant to the construction contract administrative claims process or arbitration and all claims-related defense costs incurred by STATE. STATE thereafter shall refund to DISTRICT promptly after completion of STATE's final accounting of costs for BETTERMENTS any amount of DISTRICT's construction capital payments remaining after actual costs to be borne by DISTRICT have been deducted, or STATE shall invoice DISTRICT for any additional amounts required to complete DISTRICT's financial obligations assumed pursuant to this Agreement.

23. To submit a final report of expenditures to DISTRICT within one hundred twenty (120) days after completion of BETTERMENTS by STATE.

24. To retain, or cause to be retained for audit by DISTRICT's auditors, for a period of three (3) years from date of processing the final payment under this Agreement, all records and accounts relating to WATERLINE and BETTERMENTS, and make such materials available and copies thereof shall be furnished to DISTRICT, if requested by DISTRICT.

SECTION II

DISTRICT AGREES:

1. To submit to STATE final plans and specifications for BETTERMENTS signed by a civil engineer registered in the State of California, as well as the approved EIR for the DISTRICT Aqueduct Energy Efficiency Project which provides environmental clearance for the BETTERMENTS.

2. To credit STATE 6.2% of the BETTERMENTS construction capital bid cost at contract award in the estimated amount of $120,000, which credit shall be used towards DISTRICT's WATERLINE and BETTERMENT inspection costs. Said amount represents the DISTRICT's estimated lump sum fixed cost of construction support for BETTERMENTS to be performed by STATE on DISTRICT's behalf pursuant to this Agreement. Said amount will be revised based on the BR after bid opening to determine the true BETTERMENTS support cost. BETTERMENTS to be constructed by STATE is contingent upon receipt of STATE's notice of an award of a construction contract for PROJECT. Said BETTERMENTS support costs shall include costs of providing personnel resources and their equipment and all direct and indirect costs (functional and administrative overhead assessment)

attributable to BETTERMENTS support applied in accordance with STATE's standard accounting practices and procedures.

3. To pay 100% of the total actual BETTERMENTS construction capital cost estimated to be $2,492,000, including COZEEP (construction zone enhancement enforcement program), supplemental work, change orders, claims related to the construction contract paid to the construction contractor, including those paid as a result of STATE's administrative claims process and/or as an award in arbitration, and the cost of STATE's defense of all PROJECT-related claims due to BETTERMENTS which may be filed by said contractor. The actual construction capital costs of BETTERMENTS shall be determined using the BR calculation methodology shown in Exhibit B and only after completion of all work, the closure of all claims, and upon final accounting of all costs for PROJECT.

4. To pay STATE the accrued depreciation in the amount of $62,000 for the abandoned waterline facility in accordance with Streets and Highways Code section 705 (relocation of utility facilities). Said amount is shown in Exhibit A.

5. To deposit with STATE within twenty-five (25) days of receipt of billing therefore, (which billing will be forwarded ninety (90) days prior to start of construction of WATERLINE and BETTERMENTS), the amount of $300,000, which figure represents DISTRICT's deposit for one month's estimated construction capital cost for BETTERMENTS. Thereafter, to deposit with STATE within ten (10) working days preceding the beginning of each month, the estimated construction expenditures for that month and to continue making such advance deposits on a monthly basis until completion of BETTERMENTS. DISTRICT's total obligation for said anticipated BETTERMENTS construction capital cost shall not exceed the amount of $2,492,000, provided that DISTRICT may, at its sole discretion, in writing, authorize a greater amount.

6. To deposit with STATE not later than ten (10) working days preceding the beginning of each month, the estimated expenditures for that month, and to continue making such advance deposits on a monthly basis until BETTERMENTS completion.

7. To prepare all plans for BETTERMENTS, at DISTRICT expense, and to submit each to STATE for review and approval for compatibility with STATE's IMPROVEMENTS plans.

8. To identify and locate all other utility facilities within the BETTERMENTS area as part of its design responsibility. All facilities not relocated or removed in advance of PROJECT construction shall be identified on the PROJECT PS&E.

9. To pay for other utility adjustments made by STATE to accommodate construction of BETTERMENTS, including STATE's engineering and overhead costs.

10. If any additional or extra work is required, over and above that specifically provided for in this Agreement, such work shall be at DISTRICT's sole expense and be accomplished by an executed amendment to this Agreement and after receipt of deposit of funds by DISTRICT to cover the cost of such work.

11. STATE's construction contract administrative claims and dispute resolution process shall be used, with STATE acting as the lead agency in consultation with DISTRICT. DISTRICT shall abide by the outcome of said process. In the event that arbitration under the provisions of Public Contract Code Section 10240 et seq. results from the contract claims and dispute resolution process, STATE will act as lead agency in arbitration unless otherwise agreed by STATE and DISTRICT.

12. To pay STATE upon completion of all work and within twenty-five (25) working days of receipt of a detailed statement made upon final accounting of construction costs therefore, any amount over and above the aforementioned deposits and payments required to complete DISTRICT's financial obligation undertaken pursuant to this Agreement.

13. To provide a full time construction inspector to inspect the construction of the WATERLINE and BETTERMENTS and perform the required field laboratory and source testing for the WATERLINE and BETTERMENTS construction. DISTRICT's inspector will work under the general direction of the STATE Resident Engineer and shall have no direct contact with STATE's contractor, the public, other local agencies, etc., without prior consent of STATE's Resident Engineer. DISTRICT's representative can make recommendations, but the decisions of STATE's Resident Engineer shall prevail as final, binding and conclusive in all matters concerning the PROJECT construction contract as it relates to enforcement of the PROJECT PS&E. STATE's Resident Engineer shall not have the authority to deviate from approved WATERLINE AND BETTERMENTS PS&E without prior written consent of DISTRICT'S representative, except as stipulated in Section I, Article 11. The Scope of Services to be performed by DISTRICT is shown in Exhibit C.

14. To submit an initial billing in the amount of $100,000 to STATE ninety (90) days prior to STATE's start of construction for WATERLINE and BETTERMENTS. Said initial billing represents STATE's deposit for one month's estimated inspection cost for WATERLINE and BETTERMENTS.

15. Thereafter, to prepare and submit monthly billing statements to STATE for estimated expenditures for DISTRICT's WATERLINE and BETTERMENTS inspection cost one month in advance as construction of WATERLINE and BETTERMENTS proceeds.

SECTION III

IT IS MUTUALLY AGREED:

1. All obligations of STATE under the terms of this Agreement are subject to the appropriation of resources by the Legislature, State Budget Act authority, and the allocation of funds by the California Transportation Commission (CTC).

2. The parties have also entered into a separate UTILITY AGREEMENT NO. 1778.4 to define the terms and conditions of relocation of WATERLINE. The terms and conditions of the said Utility Relocation Agreement have been incorporated into this Agreement by reference.

3. DISTRICT's total obligation for the cost of BETTERMENTS is a portion of the actual WATERLINE construction capital and support costs estimated at $2,612,000 including accrued depreciation for the abandoned waterline facility. The total obligation for construction capital costs may be increased to cover actual costs in excess of the initial estimated capital costs of BETTERMENTS. Such increase in total capital costs obligation will be incorporated into this Agreement by a written amendment.

4. DISTRICT's total obligation for the accrued depreciation is $62,000 for the abandoned waterline facility in accordance with Streets and Highways Code section 705 (relocation of utility facilities). Said amount is shown in Exhibit A.

5. After opening bids for construction of PROJECT, STATE's estimate of the cost for construction capital of BETTERMENTS will be revised based on actual bid prices. DISTRICT's required deposit under Section II, Article 5 will be increased or decreased to match said revised estimate. If the deposit increase or decrease is less than $1,000, no refund or demand for an additional deposit will be made until final accounting.

6. If, after opening of bids for PROJECT, the BETTERMENT portion of the lowest responsible bid is more than Engineer's Estimate of the cost for construction capital of BETTERMENTS, STATE and DISTRICT will conduct a joint review of the bids immediately following opening of bids. After the joint review and within the time allowed for award, STATE may award the contract and DISTRICT shall have the option of either:

   (a) DISTRICT to provide written request within ten (10) days after notification in writing by STATE of the additional cost involved, that BETTERMENTS be deleted from the contract. DISTRICT shall assume all costs for expenses incurred by STATE to implement a change order with the construction contractor for deleting the work or rebidding the contract including all redesign and legal costs and damages resulting. Such costs shall be deducted from DISTRICT's deposit, referred to in Section II, Article 5 of this Agreement, and the balance shall be promptly refunded to DISTRICT.

   or

   (b) Assume the additional cost and deposit additional funds promptly upon demand from STATE, if option (a) above is not exercised within the specified time limit.

7. Construction of PROJECT referred to herein may require alterations, deviations, additions to or omissions from STATE's PS&E, including an increase or decrease of quantities in items of work that result in change orders. Change orders shall be accomplished in accordance with STATE's Standard Specifications and Special Provisions in STATE's construction contract. STATE shall proceed with all changes to BETTERMENTS as needed to construct PROJECT up to a cumulative amount of $10,000 without notifying DISTRICT's representative before authorizing contractor to begin work on these changes. STATE will notify DISTRICT's representative and solicit comments before authorizing contractor to begin work on changes above a cumulative amount of $10,000 and DISTRICT shall have all comments returned to STATE within three (3) working days for STATE to consider those comments, if any.

8. In the construction of PROJECT, DISTRICT will, as a PROJECT cost, furnish a full time construction inspector to inspect the construction of the WATERLINE and BETTERMENTS and perform the required field laboratory and source testing for the WATERLINE and BETTERMENTS construction DISTRICT's inspector will work under the general direction of the STATE's Resident Engineer and shall have no direct contact with STATE's contractor, the public, other local agencies, etc., without prior consent of STATE's Resident Engineer. DISTRICT's inspector can make recommendations, but the decisions of the STATE's Resident Engineer shall prevail as final, binding and conclusive in all matters concerning the PROJECT construction contract as it relates to enforcement of the PROJECT PS&E. STATE's Resident Engineer shall not have the authority to deviate from approved WATERLINE AND BETTERMENTS PS&E without prior written consent of DISTRICT'S representative, except as stipulated in Section I, Article 11. The Scope of Services to be performed by the DISTRICT is shown in Exhibit C.

9. STATE shall designate a Project Manager to represent STATE and DISTRICT shall designate in writing a representative through whom all communications between the two agencies shall be channeled.

10. STATE's construction contract claims process will be used, with STATE acting as the lead agency in consultation with DISTRICT. DISTRICT shall abide by the outcome of said claims process. In the event that arbitration under the provisions of Public Contract Code section

10240 et seq. results from the contract claims process, STATE will act as lead agency in arbitration unless otherwise agreed by STATE and DISTRICT.

11. In the event that there is a dispute between DISTRICT and STATE regarding the dollar amount, or portions of the dollar amount, on receipt of STATE's billing, DISTRICT agrees to place the disputed amount on deposit with STATE, within twenty (20) days of receipt of billing, until such time that dispute is resolved. Within sixty (60) days of receiving written notice of a billing dispute from DISTRICT, STATE's District Director for District 4 will provide DISTRICT with a written decision on resolution of the dispute. If DISTRICT is not satisfied with the District Director's decision, DISTRICT may appeal the District Director's decision to the State Local Programs Dispute Resolution Committee (LPDRC) for final resolution. The LPDRC will have sixty (60) days to make a final resolution after receiving DISTRICT's written appeal.

12. Upon completion of WATERLINE and BETTERMENTS, ownership, title, operation and maintenance, including materials, equipment, and appurtenances installed within and outside the SHS right of way will automatically be vested in DISTRICT. Real property rights for the WATERLINE and BETTERMENTS shall be provided to DISTRICT by STATE under the provisions of the UTILITY AGREEMENTNO. 1778.4. No further agreement will be necessary to transfer ownership as hereinbefore stated.

13. Nothing in the provisions of this Agreement is intended to create duties or obligations to or rights in third parties not parties to this Agreement or to affect the legal liability of either party to the Agreement by imposing any standard of care with respect to the development, design, construction, operation or maintenance of the SHS and the DISTRICT WATERLINE and BETTERMENTS different from the standard of care imposed by law.

14. Neither STATE nor any officer or employee thereof is responsible for any injury, damage, or liability occurring by reason of anything done or omitted to be done by DISTRICT and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon DISTRICT under this Agreement. It is understood and agreed that, DISTRICT will fully defend, indemnify, and save harmless STATE and all of its officers and employees from all claims, suits, or actions of every name, kind and description brought forth under, but not limited to, tortious, contractual, inverse condemnation, or other theories or assertions of liability occurring by reason of anything done or omitted to be done by DISTRICT and/or its agents under this Agreement.

15. Neither DISTRICT nor any officer or employee thereof is responsible for any injury, damage, or liability occurring by reason of anything done or omitted to be done by STATE and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon STATE under this Agreement. It is understood and agreed that, STATE will fully defend, indemnify, and save harmless DISTRICT and all of its officers and employees from all claims, suits, or actions of every name, kind and description brought forth under, but not limited to, tortious, contractual, inverse condemnation, or other theories or assertions of liability occurring by reason of anything done or omitted to be done by STATE and/or its agents under this Agreement.

16. No alteration or variation of the terms of this Agreement shall be valid unless made in writing and signed by the parties hereto by way of an amendment and no oral understanding or agreement not incorporated herein shall be binding on any of the parties hereto.

17. This Agreement may be terminated or provisions contained herein may be altered, changed, or amended by mutual consent of the parties hereto.

18. Except as otherwise provided in Articles 7 and 8 of this Section III, those portions of this Agreement pertaining to the construction of PROJECT shall terminate upon completion and acceptance of the construction contract for PROJECT by STATE, or on July 1, 2016, whichever is earlier in time; however, the ownership, operation, maintenance, liability, and claims clauses shall remain in effect until terminated or modified in writing, by mutual agreement. Should any construction-related claim arising out of WATERLINE or BETTERMENTS be asserted against STATE, DISTRICT agrees to extend the termination date of this Agreement and provide additional funding as required to cover DISTRICT's proportionate share of costs or execute a subsequent agreement to cover those eventualities.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

By:_____
Deputy District Director

Approved as to form and procedure:

_____
Attorney
Department of Transportation

Certified as to budgeting of funds:

_____
District Budget Manager

Certified as to financial terms and conditions:

_____
Accounting Administrator

NORTH MARIN WATER DISTRICT

By:_____
Chris DeGabriele
General Manager

Attest:_____
Renee Roberts
District Secretary

Approved as to form:

_____
Bold, Polisner, Maddow, Nelson and Judson, District General Counsel

Certified as to budgeting of funds:

_____
David Bentley
Auditor-Controller

EXHIBIT A
FUNDING SUMMARY

Fund Source (Use)	Fund Type	Construction Capital	Construction Support	Subtotal Fund Type
STATE (WATERLINE)	Bond - Corridor Mobility Improvement	$4,458,000	$0	$4,458,000
STATE (WATERLINE)	STIP-Regional Improvement Program	$0	$700,000	$700,000
DISTRICT (BETTERMENTS)	Local	$2,430,000	$120,000^	$2,550,000
DISTRICT (WATERLINE)	Local	$62,000*	$0	$62,000
	Subtotals by Component	$6,950,000	$820,000	$7,770,000

^ Not paid in cash but given credit towards DISTRICT's WATERLINE and BETTERMENT inspection costs.

SPENDING SUMMARY

Fund Source	Fund Type	Construction Capital (Use)		Construction Support (Use)		Total
		STATE	DISTRICT	STATE	DISTRICT**	
STATE	Bond – Corridor Mobility Improvement	$4,458,000 (WATERLINE)	$0	$0		$4,458,000
STATE	STIP-Regional Improvement Program	$0	$0	$125,000 (WATERLINE)	$575,000 (WATERLINE and BETTERMENTS)	$700,000
DISTRICT	Local	$2,430,000 (BETTERMENTS)	$0	$0	$120,000 (WATERLINE and BETTERMENTS)	$2,550,000
DISTRICT	Local	$62,000* (WATERLINE)	$0	$0	$0	$62,000
	Subtotals	$6,950,000	$0	$125,000	$695,000	
	TOTAL	$6,950,000		$820,000		$7,770,000

*Accrued Depreciation
**WATERLINE and BETTERMENTS Inspection

EXHIBIT B

WATERLINE SCHEDULE OF PRICES AND QUANTITIES AND COST SHARE METHODOLOGY

Item No.	Item Code	Item Description	Unit (Alt)	Quantity	Price*	Amount	Caltrans Responsibility	NMWD Responsibility
29	150227	Abandon Pipeline	LF	9,728		$ -	100%	
38	150806	Remove Pipe	LF	1,415		$ -	100%	
45	152351	Relocate Fire Hydrant	EA	2		$ -	100%	
90	208820A	Jacked 20" Welded Steel Pipe	LF	230		$ -	100%	
154	704281A	Cathodic Protection	LS	1		$ -	100%	
155	704282A	Pipe Disinfection Including Dechlorination and Disposal of Disinfection Water	LS	1		$ -	58%	42%
156	704283A	Water Service Connection	LS	1		$ -	100%	
		4" Air/Vacuum Valve	EA	1		$ -	100%	
157	704284A	6" Air/Vacuum Valve	EA	3		$ -	100%	
		8" Air/Vacuum Valve	EA	2		$ -	100%	
		10" Air/Vacuum Valve	EA	1		$ -	100%	
158	704285A	30" Butterfly Valve	EA	9		$ -	100%	
159	704286A	Telemetry System Wire and Conduit	LF	10,925		$ -	100%	
160	704287A(F)	12" Cement-Mortar Lined and Tape Wrapped Steel Pipe (0.134" Thick)	LF	168		$ -	100%	
161	704288A(F)	30" Cement-Mortar Lined and Tape Wrapped Steel Pipe (0.188" Thick)	LF	2,688		$ -	100%	
		30" Cement-Mortar Lined and Tape Wrapped Steel Pipe (0.375" Thick)	LF	12		$ -	100%	
		36" Cement-Mortar Lined and Tape Wrapped Steel Pipe (0.375" Thick)	LF	5		$ -	cost of 30" pipe	Δ between 30" and 36" cost
162	704289A	42" Butterfly Valve	EA	1		$ -	cost of 30" BV	Δ between 30" and 42" cost
163	704290A	36" Butterfly Valve	EA	1		$ -	cost of 30" BV	Δ between 30" and 36" cost
164	704291A	24" Gate Valve	EA	4		$ -	100%	
166	704294A(F)	42" Cement-Mortar Lined and Tape Wrapped Steel Pipe (0.188" Thick)	LF	8,203		$ -	cost of 30" pipe	Δ between 30" and 42" cost
167	704295A(F)	42" Cement-Mortar Lined and Tape Wrapped Steel Pipe (0.375" Thick)	LF	34		$ -	cost of 30" pipe	Δ between 30" and 42" cost
168	704296A	12" Gate Valve	EA	1		$ -	100%	
226	993002	Fire Hydrant	EA	5		$ -	100%	
??	??	COZEEP	LS			$ -	95%	5%
??	??	Time Realted Overhead (1.5%)	LS			$ -	(1-BR)*100*Amount	BR*100*Amount
227	999990	Mobilization (10%)	LS			$ -	(1-BR)*100*Amount	BR*100*Amount
					CONSTRUCTION SUBTOTAL	$ -	$ -	$ -

Betterment Ratio (BR) = Amount Subtotal (item cost excluding SPM, Mobilization & TRO)/NMWD Reponsibility Subtotal (item cost excluding SPM, Mobilization & TRO)

EXHIBIT C

SCOPE OF SERVICES

State and North Marin Water District (NMWD)
Marin-Sonoma Narrows Contract B1 (EA: 26407)

The Transportation Authority of Marin (TAM) in partnership with Caltrans proposes to upgrade US Route 101 in Marin County. This MSN B1 Project will focus a portion of the available funding to close off direct access to Route 101 by constructing a new interchange at Redwood Landfill Road and construct new frontage roads to access adjacent properties and Olompali State Park.

As part of this work, a portion of the existing North Marin Water District (NMWD) 30 inch aqueduct will be relocated and a portion of this aqueduct will be upgraded to 42 inch along frontage roads located on the west side of Route 101. The approximate length of aqueduct (pipe) to be replaced under Contract B1 is 10,855 LF and 8,815 LF of this pipe will be upgraded to 42 inch.

NMWD will provide Caltrans a full-time construction inspector to be involved in all aspects of the relocation and upgrade of the 30 inch aqueduct. The NMWD construction inspector will work under the general direction of the Caltrans Resident Engineer.

NMWD will perform all of the quality control and quality assurance testing, including field laboratory and source testing, needed for the construction of the aqueduct and upgrade. Construction is estimated to commence in April 2013. The aqueduct relocation work is expected to be accomplished within a period between 6 to 8 months.

The purpose of this Scope of Services is to address provisions for monitoring construction activities and quality control and assurance testing during the relocation and upgrade of NMWD's 30 inch aqueduct. The intent is to have NMWD participate in those construction and commissioning activities directly related to its facility being relocated under the State roadway contract in order to ensure that Federal and State regulatory requirements and NWMD operational and maintenance needs are being met and to minimize oversight by NMWD during construction.

A. NMWD Aqueduct Construction Inspector:

1. NMWD will provide a full time Construction Inspector whose duties and responsibilities shall include, but not be limited to, the following:
   - Act as a liaison between Caltrans, NMWD and other agencies
   - Participate in pipeline relocation submittal, RFI and schedule reviews
   - Perform field inspections to monitor pipeline contractor's compliance with contract documents
   - Prepare daily inspection reports (diaries) documenting field activities and recommend acceptance of work performed to the Caltrans Resident Engineer
   - Monitor record drawings
   - Perform inspections at pipe fabrication plant(s)
   - Attend project meetings
   - Coordinate and monitor materials testing, welding inspections and other testing and inspections

- Coordinate and monitor pipeline alignment staking and as-built survey work
- Participate in final inspections and NMWD punch list preparation
- Coordinate all related water service shutdowns, drainings and tie-ins
- Coordinate and witness pipeline, pressure testing, disinfecting, bacteriological testing and flushing activities
- Coordinate and monitor all pipeline testing, start-up and commissioning activities
- Plans and estimate review
- Conduct and participate in safety reviews and attend tailgate safety meetings
- Review, inspect and track storm water pollution protection plan (SWPPP) related to pipeline relocation work
- Participate in contract change order (CCO) reviews and negotiations relating to aqueduct relocation
- Review and recommend progress payments and extra work bill processing
- Assist Caltrans Resident Engineer in claims resolution
- Other general construction office administration tasks
- Work as directed by Caltrans' Resident Engineer

2. The NMWD Construction Inspector shall be equipped with the following:
   - A pick-up truck suitable for field inspection
   - A laptop computer with an air card
   - Cellular phone
   - Other necessary equipment and personal protective safety gear

3. Inspector qualifications, experience and selection:
   - The NMWD Construction Inspector shall have at least ten (10) years of experience as a resident engineer and/or construction inspector on large diameter (>30-inch) welded steel pipeline projects
   - NMWD shall be responsible for candidate selection and approval with STATE's concurrence

B. NMWD Aqueduct Quality Control and Assurance Support:

1. Under the general direction of Caltrans' Resident Engineer, NMWD Construction Inspector will be responsible for coordinating and monitoring all quality control and assurance activities to be performed by various specialty firms. This work includes all field, laboratory and source testing needed for the construction of the aqueduct. The testing will be performed as per procedures and test methods specified in the specifications. This work will be performed by qualified testing laboratories and agencies working under the general direction of Caltrans' Resident Engineer.

C. Caltrans agrees to the following:

1. Reimburse NMWD for all agreed and preapproved costs incurred in association with Construction Inspecting and other required quality control and assurance services provided for monitoring contract compliance during the relocation and upgrade of the 30-inch aqueduct.

2. Provide NMWD's Construction Inspector work space in the Caltrans field construction office, including a desk and chair and access to standard office equipment and supplies.

3. Provide adequate on the job training to the NMWD Construction Inspector in Caltrans construction administration and field safety procedures

4. Provide NMWD Construction Inspector with complete access to all waterline relocation related files and documents during business hours.

D. Conflict Resolution Process

The Caltrans Resident Engineer is the STATE representative on the construction project and is the sole person responsible for official communication with the contractor. The NMWD Construction Inspector will not direct the Contractor's workforce; any instructions to the contractor regarding performance of the work will come through the Caltrans Resident Engineer.

Relocation and upgrade of the NMWD aqueduct will follow the approved plans and specifications. To the extent possible, any disagreements will be resolved at the field and Resident Engineer level. In the event that NMWD and the Caltrans Resident Engineer do not agree on how to resolve an issue related to the aqueduct upgrade and relocation work, a conflict resolution process will be in place that includes elevating disputed items to a three person first line level management committee comprised of one representative each from NMWD, TAM and Caltrans management.

Any disputes pertaining solely to satisfying public health and safety regulatory requirements and meeting NMWD standards shall be referred to NMWD's Chief Engineer and Caltrans' Resident Engineer for resolution and shall not be subject to the aforementioned disputes process.

F-TIP

a. Marin TIP
b. Sonoma TIP

Project Listing Report

TIP ID: MRN050034

FMS ID: 1407.00 Version: 10 Revision: 2011-18 Status: ACTIVE RTP ID: 230701 RTP CYCLE: T-2035 CTIPS ID: 20600003807

County: MRN Sponsor: TAM Implementing Agency: TAM

Project Name: US 101 HOV Lanes - Marin-Sonoma Narrows (Marin) ITS Project: Yes Review: AA

Trans. System: STATE HWY Mode: STATE HIGHWAY Hwy Rte: 101 Project Type: WIDENING Purpose: EXPANSION

TIP Funding: (All Funding in Thousands)			Info Only						Funding Outside TIP (Info Only)		
Fund Code	Phase	Program Year	Prior	Carryover	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	Later	Total
EARMARK-T3-06-STP	ENV	2007	$842	-	-	-	-	-	-	-	$842
IIP-T3-04-ST	ENV	2006	$7,600	-	-	-	-	-	-	-	$7,600
IIP-T3-04-ST	ENV	2007	$1,000	-	-	-	-	-	-	-	$1,000
IIP-T3-04-ST	ENV	2008	$1,000	-	-	-	-	-	-	-	$1,000
RIP-T3-06A-ST-MRN	ENV	2008	-	-	-	-	-	-	-	-	-
TCRP	ENV	2005	$9,410	-	-	-	-	-	-	-	$9,410
IIP-T3-08-ST	PSE	2009	$400	-	-	-	-	-	-	-	$400
RIP-T3-06-ST-MRN	PSE	2015	-	-	-	-	-	-	$350	-	$350
RIP-T3-06A-ST-MRN	PSE	2007	$2,843	-	-	-	-	-	-	-	$2,843
RIP-T3-06A-ST-MRN	PSE	2008	-	-	-	-	-	-	-	-	-
RIP-T3-06A-ST-MRN	PSE	2009	$2,942	-	-	-	-	-	-	-	$2,942
RIP-T3-06A-ST-MRN	PSE	2009	$2,407	-	-	-	-	-	-	-	$2,407
TCRP	PSE	2007	$5,920	-	-	-	-	-	-	-	$5,920
TCRP	PSE	2008	$2,850	-	-	-	-	-	-	-	$2,850
EARMARK-T2-STP115	ROW	2009	$5,109	-	-	-	-	-	-	-	$5,109
EARMARK-T3-HPP-2444	ROW	2009	$10,798	-	-	-	-	-	-	-	$10,798
EARMARK-T3-HPP-3763	ROW	2009	$405	-	-	-	-	-	-	-	$405
IIP-T3-08-ST	ROW	2009	$10	-	-	-	-	-	-	-	$10
RIP-T3-06A-ST-MRN	ROW	2009	$7,128	-	-	-	-	-	-	-	$7,128
IIP-T3-08-ST	ROW-CT	2009	$20	-	-	-	-	-	-	-	$20
RIP-T3-06A-ST-MRN	ROW-CT	2009	$2,390	-	-	-	-	-	-	-	$2,390
IIP-T3-08-ST	CON	2015	-	-	-	-	-	-	$57,950	-	$57,950
PROP-1B-CMIA	CON	2011	-	-	$51,373	-	-	-	-	-	$51,373
RIP-T3-06A-ST-MRN	CON	2011	-	-	$16,285	-	-	-	-	-	$16,285
RIP-T3-06A-ST-MRN	CON	2015	-	-	-	-	-	-	$2,500	-	$2,500
RTP-LRP	CON	2015	-	-	-	-	-	-	-	-	-
RTP-LRP	CON	2015	-	-	-	-	-	-	$160,843	-	$160,843
IIP-T3-04-ST	CON-CT	2011	-	-	$6,800	-	-	-	-	-	$6,800
IIP-T3-08-ST	CON-CT	2015	-	-	-	-	-	-	$7,660	-	$7,660
PROP-1B-CMIA	CON-CT	2011	-	-	$5,510	-	-	-	-	-	$5,510
RIP-T3-06-ST-MRN	CON-CT	2015	-	-	-	-	-	-	$355	-	$355
Project Totals			$63,074	$0	$79,968	$0	$0	$0	$229,658	$0	$372,700

TIP Funding by Phase	
ENV:	$19,852
PSE:	$17,712
PE:	-
ROW:	$25,860
CON:	$309,276
TOTAL:	$372,700

TIP Funding by Fund Code	
EARMARK-T2-STP115	$5,109
EARMARK-T3-06-STP	$842
EARMARK-T3-HPP-2444	$10,798
EARMARK-T3-HPP-3763	$405
IIP-T3-04-ST	$16,400
IIP-T3-08-ST	$66,040
PROP-1B-CMIA	$56,883
RIP-T3-06-ST-MRN	$705
RIP-T3-06A-ST-MRN	$36,495
RTP-LRP	$160,843
TCRP	$18,180
TOTAL:	$372,700

End of Project Version: 10

End of TIP ID: MRN050034

(All Funding in Thousands)

Grand Total	Prior	Carryover	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	Later	Total
	$63,074	$0	$79,968	$0	$0	$0	$229,658	$0	$372,700

Project Listing Report

TIP ID: SON070004

FMS ID: 3372.00 Version: 10 Revision: 2011-15 Status: ACTIVE RTP ID: 230701 RTP CYCLE: T-2035 CTIPS ID: 20600003977

County: SON Sponsor: Son Co TA Implementing Agency: Son Co TA

Project Name: US 101 Marin/Sonoma Narrows (Sonoma) ITS Project: Yes Review: PR

Trans. System: STATE HWY Mode: STATE HIGHWAY Hwy Rte: 101 Project Type: HOV Purpose: EXPANSION

TIP Funding: (All Funding in Thousands)			Info Only						Funding Outside TIP (Info Only)		
Fund Code	Phase	Program Year	Prior	Carryover	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	Later	Total
EARMARK-T2-STP115	ENV	2005	$3,100	-	-	-	-	-	-	-	$3,100
EARMARK-T2-STP115	ENV	2005	-	-	-	-	-	-	-	-	-
IIP-T2-02-F/ST	ENV	2005	$3,500	-	-	-	-	-	-	-	$3,500
IIP-T2-02-F/ST	ENV	2005	$1,000	-	-	-	-	-	-	-	$1,000
IIP-T3-06A-ST	ENV	2005	-	-	-	-	-	-	-	-	-
IIP-T3-08-ST	PSE	2010	-	-	-	-	-	-	-	-	-
RIP-T4-10-ST-SON	PSE	2015	-	-	-	-	-	-	$110	-	$110
SALESTAX-MEASURE-SON	PSE	2008	$5,093	-	-	-	-	-	-	-	$5,093
SALESTAX-MEASURE-SON	PSE	2008	$4,724	-	-	-	-	-	-	-	$4,724
SALESTAX-MEASURE-SON	PSE	2010	$5,000	-	-	-	-	-	-	-	$5,000
TCRP	PSE	2008	$1,220	-	-	-	-	-	-	-	$1,220
EARMARK-T3-HPP	ROW	2012	-	-	-	$405	-	-	-	-	$405
RIP-T3-06A-ST-SON	ROW	2009	$10,810	-	-	-	-	-	-	-	$10,810
SALESTAX-MEASURE-SON	ROW	2009	$2,191	-	-	-	-	-	-	-	$2,191
SALESTAX-MEASURE-SON	ROW	2012	-	-	-	$53	-	-	-	-	$53
SALESTAX-MEASURE-SON	ROW-CT	2009	$1,900	-	-	-	-	-	-	-	$1,900
IIP-T3-08-ST	CON	2012	-	-	-	-	-	-	-	-	-
PROP-1B-CMIA	CON	2012	-	-	-	$61,675	-	-	-	-	$61,675
PROP-1B-SLPP	CON	2012	-	-	-	$1,865	-	-	-	-	$1,865
RIP-T2-02-F/ST-SON	CON	2011	-	-	-	-	-	-	-	-	-
RIP-T3-06A-ST-SON	CON	2012	-	-	-	$7,395	-	-	-	-	$7,395
RIP-T4-10-ST-SON	CON	2015	-	-	-	-	-	-	$770	-	$770
RTP-LRP	CON	2015	-	-	-	-	-	-	$243,519	-	$243,519
SALESTAX-MEASURE-SON	CON	2012	-	-	-	$6,065	-	-	-	-	$6,065
PROP-1B-CMIA	CON-CT	2012	-	-	-	$11,042	-	-	-	-	$11,042
RIP-T4-10-ST-SON	CON-CT	2015	-	-	-	-	-	-	$115	-	$115
SALESTAX-MEASURE-SON	CON-CT	2012	-	-	-	$1,148	-	-	-	-	$1,148
Project Totals			$38,538	$0	$0	$89,648	$0	$0	$244,514	$0	$372,700

TIP Funding by Phase	
ENV:	$7,600
PSE:	$16,147
PE:	-
ROW:	$15,359
CON:	$333,594
TOTAL:	$372,700

TIP Funding by Fund Code	
EARMARK-T2-STP115	$3,100
EARMARK-T3-HPP	$405
IIP-T2-02-F/ST	$4,500
IIP-T3-06A-ST	-
IIP-T3-08-ST	-
PROP-1B-CMIA	$72,717
PROP-1B-SLPP	$1,865
RIP-T2-02-F/ST-SON	-
RIP-T3-06A-ST-SON	$18,205
RIP-T4-10-ST-SON	$995
RTP-LRP	$243,519
SALESTAX-MEASURE-SON	$26,174
TCRP	$1,220
TOTAL:	$372,700

End of Project Version: 10

End of TIP ID: SON070004

(All Funding in Thousands)

Grand Total	Prior	Carryover	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	Later	Total
	$38,538	$0	$0	$89,648	$0	$0	$244,514	$0	$372,700

State Transportation Improvement Plan (STIP)

State Transportation Improvement Program

Marin County

Document Year 2010, Version Number 15

PPNO: 0360F

(Dollars in Thousands)

DIST:	PPNO:	EA:	CTIPS ID:	TCRP No.
04	0360F	26406	106-0000-1618	18.00

CT PROJECT ID: 04-0000-0732

COUNTY:	ROUTE:	PM:
Marin County	101	18.6 / 22.3

TITLE (DESCRIPTION):
Route 101 Marin-Sonoma Narrows-HOV Lane (In and near Novato on Route 101. Construct a NB HOV lane from Route 37 to Atherton and SB HOV lane from Route 34 to Rowland Blvd.)

ELEMENT: Capital Outlay
MPO ID: 6
SPONSOR: Caltrans
MPO: Metropolitan Transportation Commission
CORRIDOR:
PRJ MGR: Wajahat Nyaz
PHONE: (510) 286-5119
LAW: 08
EMAIL:

ASSEMBLY: 6
SENATE: 3
CONGRESS: 6

IMPLEMENTING AGENCIES:
PAED Caltrans
PSE Caltrans
RW Caltrans
CON Caltrans

PROJECT VERSION HISTORY *(Printed Version is Shaded)* **(Last 9 versions displayed)**

Version	Status	Date	Updated By	Change Reason	Amend No.	Vote	Cum Award	Prog Con	Prog RW	PA & ED	PS & E	RW Sup	Con Sup
								Programmed Dollars in Thousands - Total For Project					
15	Official	10/27/11	SDHILLON	Amendment - Other (Explain ==>)		44,343		28,473	277	9,520	4,507	65	7,000
14	Official	09/15/11	SDHILLON	Amendment - Cost/Scope/Sch. Change		44,343		28,473	277	9,520	4,507	65	7,000
13	Official	06/23/11	SDHILLON	Allocation - CTC Vote		44,343		28,473	277	9,520	4,507	65	7,000
12	Official	01/20/11	SDHILLON	Allocation - CTC Vote		50,353		34,483	277	9,520	4,507	65	7,000
11	Official	09/23/10	SDHILLON	Amendment - Cost/Scope/Sch. Change		11,520		34,483	730	9,520	4,507	110	7,000
10	Official	05/20/10	SDHILLON	Adoption - Carry Over	G-10-13	11,520		47,470	730	9,520	4,507	110	8,160
9	Official	09/10/09	SDHILLON	Allocation - CTC Vote		11,520		54,420	1,100	9,520	4,000	110	8,160
8	Official	08/13/09	SDHILLON	Allocation - CTC Vote		7,520		54,420	1,100	9,520	4,000	110	8,160
7	Official	08/13/09	SDHILLON	Amendment - Cost/Scope/Sch. Change		6,600		54,420	1,100	9,520	4,000	110	8,160

Fund Source 1 of 6 **State Bond**

20.XX.721.000 - Corridor Mobility Improvement Account

Fund Type:
Corridor Mobility Program

CON 01/20/2011 31,433

Funding Agency:
Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP		4,350							4,350
R/W									
CON		25,423							25,423
Total:		29,773							29,773

Fund Source 2 of 6 **RIP**

20.XX.075.600 - Regional Improvement Program

Fund Type:
STIP Augmentation

Extension

VOTE	DATE	AMOUNT
CON	01/20/2011	3,050

Funding Agency:
MTC

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP									
R/W									
CON		3,050							3,050
Total:		3,050							3,050

Fund Source 3 of 6 **RIP**

20.XX.075.600 - Regional Improvement Program

Fund Type:
State Cash

Extension

VOTE	DATE	AMOUNT

Funding Agency:
MTC

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E	507								507
R/W SUP	65								65
CON SUP									
R/W	277								277
CON									
Total:	849								849

Fund Source 4 of 6 **IIP**

20.XX.025.700 - Interregional Improvement Program

Fund Type:
STIP Augmentation

Extension

VOTE	DATE	AMOUNT

Funding Agency:
Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP		2,650							2,650
R/W									
CON									
Total:		2,650							2,650

State Transportation Improvement Program

Marin County

Document Year 2010, Version Number 15

PPNO: 0360F

(Dollars in Thousands)

Fund Source 5 of 6 **IIP**

20.XX.025.700 - Interregional Improvement Program

Fund Type:
State Cash

Extension

VOTE	DATE	AMOUNT

Funding Agency:
Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED	2,000								2,000
PS&E									
R/W SUP									
CON SUP									
R/W									
CON									
Total:	2,000								2,000

Fund Source 6 of 6 **TCRP (Committed)**

20.XX.710.870 - State Highway Improvements - TCRP

Fund Type:
Traffic Congestion Relief Fund

VOTE	DATE	AMOUNT
PAED	07/06/2001	2,000
PAED	05/14/2002	3,600
PAED	12/11/2008	1,000
PAED	08/13/2009	920
PSE	09/10/2009	4,000

Funding Agency:
Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED	7,520								7,520
PS&E	4,000								4,000
R/W SUP									
CON SUP									
R/W									
CON									
Total:	11,520								11,520

Project Total:

VOTE	TOTAL AMOUNT
PAED	7,520
PSE	4,000
RW	
CON	28,473

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED	9,520								9,520
PS&E	4,507								4,507
R/W SUP	65								65
CON SUP		7,000							7,000
R/W	277								277
CON		28,473							28,473
Total:	14,369	35,473							49,842

HQ Comments:

******** Version 15 - 10/27/2011 ********

CTC approved CMIA Baseline Agreement for the revised corrdior scope. -ssd

******** Version 14 - 09/16/2011 ********

CTC approved a CMIA amendment to add project project scope to the overall Marin-Sonoma Narrows (MSN) Corridor. But there was no change to this contract i.e PPNO 0360F. -ssd

******** Version 13 - 06/14/2011 ********

CTC approved an allocation adjustment to reduce CMIA CON from $31,433k to $25,423k to reflect award savings. -db

******** Version 12 - 01/20/2011 ********

CTC allocated $4,350k CMIA Const Support, $31,433k CMIA Const Capital and $3,050 RIP Const Capital. R/W RIP programming updated to reflect Final R/W Estimate amounts. .-ssd

******** Version 11 - 10/04/2010 ********

CTC approved a CMIA baseline and a STIP amendment to

1) Program $507 RIP to PS&E.

2) Reduce RIP CON from $10,000k to $3,050k.

3) Reduce RIP R/W Capital from $1,100k to $730k.

4) Reduce CMIA CON Support from $5,510k to $4,350k.

5) Reduce CMIA CON from $44,420k to $31,433k.

-ssd

******** Version 10 - 06/15/10 ********

Adoption carryover with following changes:

1) $507k RIP programmed to PS&E.

2) R/W RIP reduced from $1,100k to $730k.

3) Construction RIP reduced from $10,000k to $3,050k.

No changes to IIP programming. In addition, changes to the CMIA and local funds will be made as part of the baseline amendment that will follow.

-as/ ssd

******** Version 9 - 09/17/2009 ********

9/17/09 - CTC approved allocation of $4,000k TCRP to PS&E per Resolution TFP-09-07 on 09/10/09 -sk

******** Version 8 - 08/13/2009 ********

08/13/09 - CTC approved allocation of $920k TCRP PA&ED, per Resolution TFP-09-05 on 08/13/09 -sk

******** Version 7 - 08/12/2009 ********

08/12/09 - CTC approved a CMIA baselline and a TCRP amendment to redistribute $920k TCRP from PS&E to PA&ED and also to update the project delivery schedule, per Resolutions CMIA-PA-0910-009 and TAA-09-09

on 08/13/09 -sk/ssd.

******** Version 6 - 01/15/2009 ********

01/15/09 - CTC approved CMIA Resolution CMIA-PA-0809-007 to amend CMIA baseline to make it consistent with previously approved TCRP changes made in December 2008 -sk

******** Version 5 - 12/16/2008 ********

01/06/09 -

a) CTC allocated $1,000k TCRP funds to PA&ED per Resolution TFP-08-05 on 12/11/08.

b) $5,600k TCRP funds had been previously allocated to PA&ED under prior delegated allocations (TCPD-01-09-18)

c) Updated project description to align it better with the baseline.

d) Added Performance Measure data for the combined/original project.

-sk/ssd

******** Version 4 - 12/12/2008 ********

12/16/08 - CTC approved TCRP amendment to reprogram $1,000k TCRP funds from PS&E to PA&ED, per Resolution TAA-08-07 on 12/11/08 -sk/ssd.

******** Version 3 - 06/24/2008 ********

11/18/08 - Added Environmental Document type and corrected "Begin Design Phase" to match the Corrective Action Plan (CAP) -ssd

6/24/08 - CTC approved 2008 STIP Technical Adjustment to add $110k RIP R/W Sup, $1,100k RIP R/W, $10,000k RIP CON, $2,000k IIP PA&ED and $2,650k IIP CON Sup per Resolution G-08-11 on 6/26/08-mt/ssd

The funding code for CMIA funds has been corrected -ssd

******** Version 2 - 06/13/08 ********

6/12/08 -Adoption carryover with no changes-mt/ssd

6/2/08-New project (PPNO 0360F, Contract A1; split from A0360F per CMIA Project Baseline Amendment, Resolution CMIA-PA-0708-005, approved on 5/29/08. Only non-STIP funding is shown at the time of carry over to 2008 STIP. The STIP funding revisions are scheduled to be addressed at the June 2008 CTC meeting. -mt/ssd

State Transportation Improvement Program

Marin County

Document Year 2010, Version Number 18

PPNO: 0360J

(Dollars in Thousands)

DIST:	PPNO:	EA:	CTIPS ID:	TCRP No.
04	0360J	26407	106-0000-1619	18.00

CT PROJECT ID: 04-0000-0733

COUNTY:	ROUTE:	PM:
Marin County	101	23.3 / 27.6

TITLE (DESCRIPTION):
Route 101 Marin-Sonoma Narrows-Southerly Interchan (Near Petaluma, at intersection of San Antonio Road and Route 101. Construct new interchange and frontage roads for San Antonio Road.)

ELEMENT: Capital Outlay — MPO ID: 6
SPONSOR: Caltrans
MPO: Metropolitan Transportation Commission
CORRIDOR:
PRJ MGR: Wajahat Nyaz
PHONE: (510) 286-5119 — LAW: 06
EMAIL:

ASSEMBLY: 6
SENATE: 3
CONGRESS: 6

IMPLEMENTING AGENCIES:
PAED Caltrans
PSE Transportation Authority of Marin
RW Caltrans
CON Caltrans

PROJECT VERSION HISTORY *(Printed Version is Shaded)* **(Last 9 versions displayed)**

Version	Status	Date	Updated By	Change Reason	Amend No.	Vote	Cum Award	Prog Con	Prog RW	PA & ED	PS & E	RW Sup	Con Sup
								Programmed Dollars in Thousands - Total For Project					
18	Official	02/23/12	SDHILLON	Amendment - Technical Correction		5,252		32,156	24,566	8,822	7,573	2,595	4,970
17	Official	01/25/12	SDHILLON	Amendment - Cost/Scope/Sch. Change		5,252		32,156	24,566	8,822	7,573	2,595	4,970
16	Official	10/27/11	SDHILLON	Amendment - Other (Explain ==>)		5,252		29,664	24,566	8,822	7,573	2,595	4,850
15	Official	09/15/11	SDHILLON	Amendment - Cost/Scope/Sch. Change		5,252		29,664	24,566	8,822	7,573	2,595	4,850
14	Official	08/10/11	RWILLIAM	Allocation - CTC Vote		5,252		29,664	24,566	8,822	7,573	2,595	4,850
13	Official	06/23/11	SDHILLON	Allocation - CTC Vote - Moved to Pending		5,252		29,664	24,566	8,822	7,573	2,595	4,850
12	Official	06/23/11	SDHILLON	Amendment - Cost/Scope/Sch. Change		3,760		29,664	24,566	8,822	7,573	2,595	4,850
11	Official	09/23/10	SDHILLON	Amendment		3,760		29,664	24,566	8,822	6,081	2,595	4,850
10	Official	05/20/10	SDHILLON	Adoption - Carry Over	G-10-13	3,760		26,620	23,795	8,822	5,381	2,280	4,150

Fund Source 1 of 11 **State Bond**

20.XX.721.000 - Corridor Mobility Improvement Account

Fund Type: Corridor Mobility Program

Funding Agency: Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP									
R/W									
CON			18,550						18,550
Total:			18,550						18,550

Fund Source 2 of 11 **RIP**

20.XX.075.600 - Regional Improvement Program

Fund Type: National Hwy System

Extension		
CON	06/30/2012	11114

VOTE	DATE	AMOUNT

Funding Agency: MTC

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP									
R/W									
CON		11,114							11,114
Total:		11,114							11,114

Fund Source 3 of 11 **RIP**

20.XX.075.600 - Regional Improvement Program

Fund Type: State Cash

Extension

VOTE	DATE	AMOUNT
PSE	08/10/2011	1,492

Funding Agency: MTC

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E		5,035							5,035
R/W SUP	2,595								2,595
CON SUP		700							700
R/W	8,254								8,254
CON									
Total:	10,849	5,735							16,584

Fund Source 4 of 11 **IIP**

20.XX.025.700 - Interregional Improvement Program

Fund Type: National Hwy System

Extension

VOTE	DATE	AMOUNT

Funding Agency: Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP		4,150							4,150
R/W									
CON									
Total:		4,150							4,150

State Transportation Improvement Program

Marin County

Document Year 2010, Version Number 18

PPNO: 0360J

(Dollars in Thousands)

Fund Source 5 of 11 IIP

20.XX.025.700 - Interregional Improvement Program

Fund Type: State Cash

Extension

VOTE	DATE	AMOUNT

Funding Agency: MTC

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED	7,600								7,600
PS&E									
R/W SUP									
CON SUP									
R/W									
CON									
Total:	7,600								7,600

Fund Source 6 of 11 TCRP (Committed)

20.XX.710.870 - State Highway Improvements - TCRP

Fund Type: Traffic Congestion Relief Fund

VOTE	DATE	AMOUNT
PAED	12/11/2008	600
PAED	08/13/2009	622

Funding Agency: Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED	1,222								1,222
PS&E									
R/W SUP									
CON SUP									
R/W									
CON									
Total:	1,222								1,222

Fund Source 7 of 11 TCRP (Committed)

20.XX.710.870 - State Highway Improvements - TCRP

Fund Type: Traffic Congestion Relief Fund

VOTE	DATE	AMOUNT
PSE	09/10/2009	2,538

Funding Agency: Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E	2,538								2,538
R/W SUP									
CON SUP									
R/W									
CON									
Total:	2,538								2,538

Fund Source 8 of 11 Demo

20.30.010.680 - High Priority Project / Demonstration Projects

Fund Type: High Priority Projects Program

Funding Agency: Marin County

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP									
R/W	405								405
CON									
Total:	405								405

Fund Source 9 of 11 Demo

20.30.010.680 - High Priority Project / Demonstration Projects

Fund Type: Demonstration - TEA21

Funding Agency: Marin County

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP									
R/W	5,109								5,109
CON									
Total:	5,109								5,109

Fund Source 10 of 11 Demo

20.30.010.680 - High Priority Project / Demonstration Projects

Fund Type: High Priority Projects Program - Adv. Const. Conver

Funding Agency: Marin County

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP									
R/W	10,798								10,798
CON									
Total:	10,798								10,798

Fund Source 11 of 11 Local Funds

20.10.400.100 - Locally Generated Funds

Fund Type: Local Transportation Funds

Funding Agency: Transportation Authority of Marin

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP			120						120
R/W									
CON			2,492						2,492
Total:			2,612						2,612

State Transportation Improvement Program

Marin County

Document Year 2010, Version Number 18

PPNO: 0360J

(Dollars in Thousands)

Project Total:

VOTE	TOTAL AMOUNT
PAED	1,222
PSE	4,030
RW	
CON	

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED	8,822								8,822
PS&E	2,538	5,035							7,573
R/W SUP	2,595								2,595
CON SUP		4,850	120						4,970
R/W	24,566								24,566
CON		11,114	21,042						32,156
Total:	38,521	20,999	21,162						80,682

HQ Comments:

******** Version 18 - 02/10/2012 ********

Technical correction to change funding source for $1,492k FY 10/11 allocation from federal funds to state-only funds. -as

******** Version 17 - 01/10/2012 ********

CTC approved baseline amendment to increase project scope and revise the funding plan. -ssd

******** Version 16 - 10/27/2011 ********

CTC approved CMIA Baseline Agreement for the revised corridor scope. -ssd

******** Version 15 - 09/16/2011 ********

CTC approved a CMIA amendment to add project project scope to the overall Marin-Sonoma Narrows (MSN) Corridor. But there was no change to this contract i.e PPNO 0360J. -ssd

******** Version 14 - 08/04/2011 ********

8/26/11 - Backdoor correction to add vote date for RIP PSE - rw

CTC allocated $1,492k RIP PS&E FY 10/11 (from Delivered List) on 8/10/11. -db

CTC approved a 12 month Time Extention for $11,114k RIP CON FY 10/11 funds per Waiver 11-46 on 08/10/11. lh

******** Version 13 - 06/30/2011 ********

Allocation Pending. CTC accepted delivery of the project, but deferred of $1,492k RIP PS&E FY 10/11 and moved it to the Delivered List. -db

******** Version 12 - 05/13/2011 ********

CTC approved CMIA baseline and STIP amendments to program additional $1,492k CMIA to CON and then reprogram equal amount of RIP from CON to PS&E, to transfer a portion of R/W scope to San Antonio Curve Correction project (PPNO 0360G), and to update the project schedule. -ssd

******** Version 11 - 10/04/2010 ********

CTC approved a CMIA baseline and a STIP amendment to

1) Clarify project scope by updating project name to: Southerly Interchange at the Redwood Landfill Road project.

2) Update project funding plan for RIP, CMIA, and Demo funds. The RIP changes have previously been adopted as part of 2010 STIP adoption. Some of those changed amounts are again being updated as part of this amendment.

3) Update the project schedule.

-ssd

******** Version 10 - 06/15/10 ********

Adoption carryover with following changes:

1) $2,843k RIP programmed to PS&E.

2) R/W Support RIP increased from $2,210k to $2,280k.

3) R/W RIP increased from $4,683k to $6,398k.

4) Construction RIP reduced from $17,197k to $16,177k.

Changes to the CMIA and local funds will be made as part of the baseline amendment that will follow.

-as/ ssd

******** Version 9 - 09/17/2009 ********

9/22/09 - CTC approved allocation of $2,538k TCRP to PS&E per Resolution TFP-09-07 on 09/10/09 -sk

Also

CTC approved Future Consideration of Funding per Resolution E-09-70 on 09/10/09.. -ssd

******** Version 8 - 08/13/2009 ********

08/12/09 - CTC approved allocation of $622k TCRP to PA&ED per Resolution TFP-09-05 on 08/13/09. -sk

******** Version 7 - 08/12/2009 ********

08/12/09 - CTC approved a CMIA baselline and a TCRP amendment to redistribute $622k TCRP from PS&E to PA&ED and also to update the project delivery schedule, per Resolutions CMIA-PA-0910-009 and TAA-09-09 on 08/13/09 -sk/ssd

******** Version 6 - 01/14/2009 ********

01/14/09 - CTC approved CMIA Resolution CMIA-PA-0809-007 to amend CMIA baseline to make it consistent with previously approved TCRP changes made in December 2008. -sk

01/14/09 - CTC approved Resolution TAA-08-08 designating the Transportation Authority of Marin as implementing agency for PS&E (for the allocated TCRP funds) to make it consistent with the previously approved CMIA baseline -sk

******** Version 5 - 12/17/2008 ********

12/17/08 - CTC allocated $600k TCRP funds to PA&ED per Resolution TFP-08-05 on 12/11/08. Also updated Demo fund type, added Performance Measure data for the combined original project. -sk/ssd

******** Version 4 - 12/12/2008 ********

12/11/08 - CTC approved TCRP amendment to reprogram $600k TCRP funds from PS&E to PA&ED, per Resolution TAA-08-07 on 12/11/08 -sk/ssd

******** Version 3 - 06/24/2008 ********

11/18/08 - Added Environmental Document type and corrected "Begin Design Phase" to match the Corrective Action Plan (CAP) -ssd

6/24/08 - CTC approved 2008 STIP Technical Adjustment to add $2,210k RIP R/W Sup, $4,683k RIP R/W, $17,197k RIP CON, $7,600k IIP PA&ED and $4,150k IIP CON Sup per Resolution G-08-11 on 6/26/08. TRCP funding code corrected.

- mt/ssd

******** Version 2 - 06/13/08 ********

6/5/08-Adoption carry over with no changes-mt

6/2/08-New project (PPNO 0360J, Contract B1); split from A0360F per CMIA Project Baseline Amendment, Resolution CMIA-PA-0708-005, approved on 5/29/08. Only non-STIP funding is shown at the time of carry over to 2008 STIP. The STIP funding revisions are scheduled to be addressed at the June 2008 CTC meeting. -mt/ssd

State Transportation Improvement Program

Sonoma County

Document Year 2010, Version Number 12

PPNO: 0360H

(Dollars in Thousands)

DIST:	PPNO:	EA:	CTIPS ID:	TCRP No.
04	0360H	2640U	106-0000-1620	18.00

CT PROJECT ID: 04-0000-0734

COUNTY:	ROUTE:	PM:
Sonoma County	101	0.9 / 3.6

TITLE (DESCRIPTION):
Rte 101 MSN - Petaluma Blvd S IC/ Petaluma River B (Near Petaluma, at Petaluma Boulevard South and Route 101. Construct new interchange, frontage roads, and equipment for ramp metering. Also contruct a new bridge structure over Petaluma River Bridge.)

ELEMENT: Capital Outlay
MPO ID: 6
SPONSOR: Caltrans
MPO: Metropolitan Transportation Commission
CORRIDOR:
PRJ MGR: Betcy Joseph
PHONE: (510) 286-5097
LAW: 08
EMAIL:

ASSEMBLY: 6
SENATE: 3
CONGRESS: 6

IMPLEMENTING AGENCIES:
PAED Caltrans
PSE Sonoma County Transportation Authority
RW Caltrans
CON Caltrans

PROJECT VERSION HISTORY *(Printed Version is Shaded)* **(Last 9 versions displayed)**

Version	Status	Date	Updated By	Change Reason	Amend No.	Vote	Cum Award	Prog Con	Prog RW	PA & ED	PS & E	RW Sup	Con Sup
								Programmed Dollars in Thousands - Total For Project					
12	Official	10/27/11	SDHILLON	Amendment - Other (Explain ==>)		1,220		77,000	13,406	7,600	11,037	1,900	12,190
11	Official	09/15/11	SDHILLON	Amendment - Cost/Scope/Sch. Change		1,220		77,000	13,406	7,600	11,037	1,900	12,190
10	Official		SDHILLON	Time Extension - Project Allocation		1,220		30,820	12,630	7,600	5,584	1,400	4,690
9	Official	06/23/11	SDHILLON	Amendment - Cost/Scope/Sch. Change		1,220		30,820	12,630	7,600	5,584	1,400	4,690
8	Official	09/23/10	SDHILLON	Amendment - Cost/Scope/Sch. Change		1,220		30,820	13,280	7,600	4,934	1,400	4,690
7	Official	05/20/10	SDHILLON	Adoption - Carry Over	G-10-13	1,220		28,165	11,300	7,600	4,380	919	4,690
6	Official	09/10/09	SDHILLON	Allocation - CTC Vote		1,220		31,270	9,190	7,600	4,380	919	4,690
5	Official	08/13/09	SDHILLON	Amendment - Other (Explain ==>)				31,270	9,190	7,600	4,380	919	4,690
4	Official	01/14/09	SDHILLON	Amendment - Cost/Scope/Sch. Change				31,270	9,190	7,600	4,380	919	4,690

Fund Source 1 of 8 **State Bond**

20.XX.721.000 - Corridor Mobility Improvement Account

Fund Type: Corridor Mobility Program

Funding Agency: Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP			11,042						11,042
R/W									
CON			61,675						61,675
Total:			72,717						72,717

Fund Source 2 of 8 **RIP**

20.XX.075.600 - Regional Improvement Program

Fund Type: State Cash

Extension

VOTE	DATE	AMOUNT

Funding Agency: MTC

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP									
R/W	10,810								10,810
CON									
Total:	10,810								10,810

Fund Source 3 of 8 **IIP**

20.XX.025.700 - Interregional Improvement Program

Fund Type: State Cash

Extension

VOTE	DATE	AMOUNT

Funding Agency: Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED	4,500								4,500
PS&E									
R/W SUP									
CON SUP									
R/W									
CON									
Total:	4,500								4,500

Fund Source 4 of 8 **TCRP (Committed)**

20.XX.710.870 - State Highway Improvements - TCRP

Fund Type: Traffic Congestion Relief Fund

VOTE	DATE	AMOUNT
PSE	09/10/2009	1,220

Funding Agency: Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E	1,220								1,220
R/W SUP									
CON SUP									
R/W									
CON									
Total:	1,220								1,220

State Transportation Improvement Program

Sonoma County

Document Year 2010, Version Number 12

PPNO: 0360H

(Dollars in Thousands)

Fund Source 5 of 8 Demo

20.30.010.680 - High Priority Project / Demonstration Projects

Fund Type:
Demonstration - TEA21

Funding Agency:
Sonoma County

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED	3,100								3,100
PS&E									
R/W SUP									
CON SUP									
R/W	405								405
CON									
Total:	3,505								3,505

Fund Source 6 of 8 Local Funds

LOCAL FUNDS - Locally Generated Funds

Fund Type:
Measure M

Funding Agency:
Sonoma County

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E	4,364		5,453						9,817
R/W SUP	1,200		700						1,900
CON SUP			1,148						1,148
R/W	1,415		776						2,191
CON			6,065						6,065
Total:	6,979		14,142						21,121

Fund Source 7 of 8 RIP

20.XX.075.600 - Regional Improvement Program

Fund Type:
National Hwy System

Extension		
CON	06/30/2012	7395

VOTE	DATE	AMOUNT

Funding Agency:
MTC

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP									
R/W									
CON		7,395							7,395
Total:		7,395							7,395

Fund Source 8 of 8 State Bond

20.30.210.200 - State-Local Partnership Program - Bond Funds

Fund Type:
State and Local Partnership Program

Funding Agency:
Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP									
R/W									
CON			1,865						1,865
Total:			1,865						1,865

Project Total:

VOTE	TOTAL AMOUNT
PAED	
PSE	1,220
RW	
CON	

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED	7,600								7,600
PS&E	5,584		5,453						11,037
R/W SUP	1,200		700						1,900
CON SUP			12,190						12,190
R/W	12,630		776						13,406
CON		7,395	69,605						77,000
Total:	27,014	7,395	88,724						123,133

HQ Comments:

******** Version 12 - 10/27/2011 ********

Corrected the Post-Mile Ahead value via a backdoor entry to make it consistent with the approved baseline amendment. -ssd

CTC approved CMIA Baseline Agreement for the revised corridor scope. -ssd

******** Version 11 - 09/07/2011 ********

CTC approved a CMIA amendment to add project project scope to the overall Marin-Sonoma Narrows (MSN) Corridor. All the additional scope and the associated funding was added to this contract i.e PPNO 0360H. The project limits for the revised scope were also updated. -ssd

******** Version 10 - 08/04/2011 ********

CTC approved a 12-month Time Extension for $7,395k RIP CON FY 10/11 funds per Waiver 11-46. lh

******** Version 9 - 05/13/2011 ********

CTC approved CMIA baseline and STIP amendments to update the project funding plan and the delivery schedule. -ssd

******** Version 8 - 10/04/2010 ********

CTC approved a CMIA baseline and a STIP amendment to:

1) Update project funding plan for RIP, CMIA, Demo, and local funds. The RIP changes have previously been adopted as part of 2010 STIP adoption. Some of those changed amounts are again being updated as part of this amendment.

2) Update the project schedule.

-ssd

******** Version 7 - 06/15/10 ********

Adoption carryover with following changes:

1) R/W RIP changed from $6,700k to $8,810k

2) Construction RIP changed from $12,500k to $9,395k.

Changes to the CMIA and local funds will be made as part of the baseline amendment that will follow.

-db/ ssd

******** Version 6 - 09/17/2009 ********

9/22/09 - CTC approved allocation of $1,220k TCRP to PS&E per Resolution TFP-09-07 on 09/10/09 -sk

Also, CTC approved Future Consideration of Funding per Resolution E-09-70 on 09/10/09. -ssd

******** Version 5 - 08/12/2009 ********

08/12/09 - CTC approved a CMIA baselline amendment to update the project delivery schedule, per Resolution CMIA-PA-0910-009 and TAA-09-09 on 08/13/09 -sk/ssd

******** Version 4 - 01/14/2009 ********

01/14/09 - CTC approved Resolution TAA-08-08 designating the Sonoma County Transportation Authority as implementing agency for PS&E (for the allocated TCRP funds) to make it consistent with the CMIA baseline -sk/ssd

******** Version 3 - 06/24/2008 ********

11/18/08 - Added Environmental Document type and corrected "Begin Design Phase" to match the Corrective Action Plan (CAP) -ssd

07/07/08 - Corrected the Program Code for the CMIA funds -ssd

6/24/08 - CTC approved 2008 STIP Technical Adjustment to add $6,700k RIP R/W, $12,500k RIP CON and $4,500k IIP PA&ED per Resolution G-08-11 on 6/26/08. TRCP funding code corrected -mt/ssd

******** Version 2 - 06/13/08 ********

6/5/08-Adoption carry over with no changes-mt

6/3/08-New project (PPNO 0360H, Contract B2) ; split from A0360F per CMIA Project Baseline Amendment, Resolution CMIA-PA-0708-005, approved on 5/29/08. Only non-STIP funding is shown at the time of carry over to 2008 STIP. The STIP funding revisions are scheduled to be addressed at the June 2008 CTC meeting. -mt/ssd

State Transportation Improvement Program

Marin County

Document Year 2010, Version Number 13

PPNO: 0360G

(Dollars in Thousands)

DIST:	PPNO:	EA:	CTIPS ID:	TCRP No.
04	0360G	26409	106-0000-1473	18.20

CT PROJECT ID: 04-0000-0735

COUNTY:	ROUTE:	PM:
Marin County	101	26.5 / 27.6

TITLE (DESCRIPTION):
San Antonio Road Curve Correction (At Marin/Sonoma County line, north of Novato at San Antonio Curve. Curve correction (TCRP 18.2))

ELEMENT: Capital Outlay
MPO ID: 6
SPONSOR: Caltrans
MPO: Metropolitan Transportation Commission
CORRIDOR:
PRJ MGR: Betcy Joseph
PHONE: (510) 286-5097
LAW: 07
EMAIL:

ASSEMBLY: 34
SENATE: 18
CONGRESS: 21

IMPLEMENTING AGENCIES:
PAED Caltrans
PSE Transportation Authority of Marin
RW Caltrans
CON Caltrans

PROJECT VERSION HISTORY *(Printed Version is Shaded)* **(Last 9 versions displayed)**

Version	Status	Date	Updated By	Change Reason	Amend No.	Vote	Cum Award	Prog Con	Prog RW	PA & ED	PS & E	RW Sup	Con Sup
								Programmed Dollars in Thousands - Total For Project					
13	Official	08/10/11	SDHILLON	Allocation - CTC Vote		5,526		52,113	5,202	668	4,932	265	7,660
12	Official	06/23/11	SDHILLON	Allocation - CTC Vote - Moved to Pending		5,526		52,113	5,202	668	4,932	265	7,660
11	Official	06/23/11	SDHILLON	Amendment - Cost/Scope/Sch. Change		5,126		52,113	5,202	668	4,932	265	7,660
10	Official	05/20/10	SDHILLON	Adoption - Carry Over	G-10-13	5,126		57,950	10	668	4,532	20	7,660
9	Official	09/10/09	SDHILLON	Allocation - CTC Vote		5,126		51,050	5,270	668	4,532	1,660	7,660
8	Official	09/10/09	SDHILLON	Amendment - Cost/Scope/Sch. Change		668		51,050	5,270	668	4,532	1,660	7,660
7	Official	08/14/09	SDHILLON	Allocation - CTC Vote		668		51,050	5,270	668	4,532	1,660	7,660
6	Official	08/13/09	SDHILLON	Amendment - Cost/Scope/Sch. Change		400		51,050	5,270	668	4,532	1,660	7,660
5	Official	12/11/08	SDHILLON	Allocation - CTC Vote		400		51,050	5,270	400	4,800	1,660	7,660

Fund Source 1 of 7 **RIP**

20.XX.075.600 - Regional Improvement Program

Fund Type: State Cash

Extension

VOTE	DATE	AMOUNT

Funding Agency: MTC

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E	61								61
R/W SUP									
CON SUP									
R/W									
CON									
Total:	61								61

Fund Source 2 of 7 **RIP**

20.XX.075.600 - Regional Improvement Program

Fund Type: State Cash

Extension

VOTE	DATE	AMOUNT
PSE	09/10/2009	1,839

Funding Agency: MTC

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E	1,839								1,839
R/W SUP									
CON SUP									
R/W									
CON									
Total:	1,839								1,839

Fund Source 3 of 7 **IIP**

20.XX.025.700 - Interregional Improvement Program

Fund Type: National Hwy System

Extension

VOTE	DATE	AMOUNT

Funding Agency: Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP		265							265
CON SUP						7,660			7,660
R/W			5,202						5,202
CON						52,113			52,113
Total:		265	5,202			59,773			65,240

Fund Source 4 of 7 **IIP**

20.XX.025.700 - Interregional Improvement Program

Fund Type: State Cash

Extension

VOTE	DATE	AMOUNT

Funding Agency: Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E	13								13
R/W SUP									
CON SUP									
R/W									
CON									
Total:	13								13

State Transportation Improvement Program

Marin County

Document Year 2010, Version Number 13

PPNO: 0360G

(Dollars in Thousands)

Fund Source 5 of 7 **IIP**

20.XX.025.700 - Interregional Improvement Program

Fund Type:
State Cash

Extension

VOTE	DATE	AMOUNT
PSE	09/10/2009	387
PSE	08/10/2011	400

Funding Agency:
Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E	387	400							787
R/W SUP									
CON SUP									
R/W									
CON									
Total:	387	400							787

Fund Source 6 of 7 **TCRP (Committed)**

20.XX.710.870 - State Highway Improvements - TCRP

Fund Type:
Traffic Congestion Relief Fund

VOTE	DATE	AMOUNT
PSE	09/20/2007	2,900
PAED	12/11/2008	400
PAED	08/14/2009	268
PSE	09/10/2009	80

Funding Agency:
Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED	668								668
PS&E	80								80
R/W SUP									
CON SUP									
R/W									
CON									
Total:	748								748

Fund Source 7 of 7 **TCRP (Committed)**

20.XX.710.870 - State Highway Improvements - TCRP

Fund Type:
Traffic Congestion Relief Fund

VOTE	DATE	AMOUNT
PSE	09/10/2009	2,152

Funding Agency:
Caltrans

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E	2,152								2,152
R/W SUP									
CON SUP									
R/W									
CON									
Total:	2,152								2,152

Project Total:

VOTE	TOTAL AMOUNT
PAED	668
PSE	4,858
RW	
CON	

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED	668								668
PS&E	4,532	400							4,932
R/W SUP		265							265
CON SUP						7,660			7,660
R/W			5,202						5,202
CON						52,113			52,113
Total:	5,200	665	5,202			59,773			70,840

HQ Comments:

******** Version 13 - 08/12/2011 ********

CTC allocated $400k IIP PS&E 10/11 (from Delivered List) on 8/10/11. -db

******** Version 12 - 06/30/2011 ********

Allocation Pending. CTC accepted delivery of the project, but deferred of $400k IIP PS&E FY 10/11 and moved it to the Delivered List. -db

******** Version 11 - 05/12/2011 ********

CTC approved STIP amendment to reprogram $5,837k IIP from CON to $400k (PS&E), $245k (R/W Support), and $5,192k (R/W Capital) and to update the project scope. -ssd

******** Version 10 - 06/15/10 ********

Adoption carryover with following changes:

1) R/W Sup IIP reduced from $1,660k to $20k.

2) R/W IIP reduced from $5,270k to $10k.

3) CON IIP increased from $51,050k to $57,950 and delayed from FY 12/13 to FY 14/15.

No changes to RIP and TCRP programming.

-as/ ssd

******** Version 9 - 09/17/2009 ********

9/17/09 - CTC approved allocation of $80k TCRP for PS&E to the Department (sunk costs), and $2,152k TCRP to PS&E to Transportation Authority of Marin per Resolution TFP-09-08 on 09/10/09.

In addition, CTC approved allocation of $1,839k RIP and $387k IIP for PS&E to Transportation Authority of Marin per Resolution FP-09-09 on 09/10/09.

-sk/ssd.

******** Version 8 - 08/26/2009 ********

08/26/09 - CTC approved amendment to change the implementing agency for PS&E from the Department to the Transportation Authority of Marin per Resolutions TAA-09-10 and 08S-056 on 09/10/09 -sk

******** Version 7 - 08/13/2009 ********

08/13/09 - CTC approved allocation of $268k TCRP to PA&ED per Resolution TFP-09-06 on 08/14/09-sk

******** Version 6 - 08/12/2009 ********

08/13/09 - CTC approved TCRP amendment to redistribute $268k TCRP from PS&E to PA&ED per Resolution TAA-09-09 on 08/13/09-sk

******** Version 5 - 12/17/2008 ********

12/17/08 - The CTC allocated $400k in TCRP funds to PA&ED per Resolution TFP-08-05 on 12/11/08 -sk

******** Version 4 - 12/17/2008 ********

12/17/08 - The CTC de-allocated $2,900k in TCRP funds from PS&E per Resolution TFP-08-05 and reprogrammed $400k TCRP funds from PS&E to PA&ED, per Resolution TAA-08-07 on 12/11/08 -sk/ssd.

******** Version 3 - 06/16/2008 ********

6/12/08 - Adoption carryover project with following changes:

1) Added new IIP funding to PS&E, R/W Support, R/W Capital, Construction Support and and Construction Capital.

2) Added new RIP funding to PS&E.

3) Changed PPNO from generic TCRP PPNO # to 0360G. Updated information about project title, location and description.

Other Comments:

This project was originally split-off from TCRP #18 (PPNO A0360F) as a sub-project TCRP #18.2 (PPNO T0182) as per Resolution TAA-07-33 on 09/27/07.

-ssd

******** Version 2 - 09/28/2007 ********

CTC approved allocation in the amount of $2,900,000 in TCRP funds to PS&E FY 07/08 per Resolution TFP-07-03 on 9/20/2007 -sk/ssd

^^^^^^^^ Version 1 - 09/26/2007 ^^^^^^^^

09/28/2007 Amendment designated new TCRP sub-project TCRP Project #18.2 (PPNo. T0182) - Route 101; San Antonio Curve Correction and to receive a transfer of $2,900,000 in TCRP funds from TCRP Project #18 (PPNo. A0360F). This amendment also established the project scope, schedule per Resolution TAA-07-33 on 9/20/2007 -sk/ssd

State Transportation Improvement Program

Marin CountySonoma County

Document Year 2010, Version Number 2

PPNO: 0360L

(Dollars in Thousands)

DIST:	PPNO:	EA:	CTIPS ID:	TCRP No.
04	0360L	2640H	106-0000-1750	

CT PROJECT ID:

COUNTY:	ROUTE:	PM:
Marin County	101	18.6 / 30.0
Sonoma County	101	0.0 / 4.0

TITLE (DESCRIPTION):
MSN Landscape/Mitigation & Sound Wall (In Marin and Sonoma Counties from Route 37 in Novato to Corona Road in Petaluma. Construct follow-up landscape and soundwall (selected locations only).)

ELEMENT: Capital Outlay — MPO ID: 6
SPONSOR: Caltrans
MPO: Metropolitan Transportation Commission
CORRIDOR:
PRJ MGR: Wajahat Nyaz
PHONE: (510) 286-5199 — LAW: 10
EMAIL: wajahat_nyaz@dot.ca.gov

ASSEMBLY: 6
SENATE: 3
CONGRESS: 6

IMPLEMENTING AGENCIES:
PAED Caltrans
PSE Caltrans
RW Caltrans
CON Caltrans

PROJECT VERSION HISTORY *(Printed Version is Shaded)* **(Last 9 versions displayed)**

Version	Status	Date	Updated By	Change Reason	Amend No.	Vote	Cum Award	Prog Con	Prog RW	PA & ED	PS & E	RW Sup	Con Sup
								Programmed Dollars in Thousands - Total For Project					
2	Official	10/27/11	SDHILLON	Amendment - Other (Explain ==>)				3,270			460		470
1	Official	05/20/10	SDHILLON	Adoption - New Project	G-10-13			3,270			460		470
											0		

Fund Source 1 of 2 **RIP** Marin

20.XX.075.600 - Regional Improvement Program

Fund Type: National Hwy System

Extension

VOTE	DATE	AMOUNT

Funding Agency: MTC

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E						350			350
R/W SUP									
CON SUP						355			355
R/W									
CON						2,500			2,500
Total:						3,205			3,205

Fund Source 2 of 2 **RIP**

20.XX.075.600 - Regional Improvement Program

Fund Type: National Hwy System

Extension

Sonoma

VOTE	DATE	AMOUNT

Funding Agency: MTC

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E						110			110
R/W SUP									
CON SUP						115			115
R/W									
CON						770			770
Total:						995			995

Project Total:

VOTE	TOTAL AMOUNT
PAED	
PSE	
RW	
CON	

	PRIOR	10/11	11/12	12/13	13/14	14/15	15/16	FUTURE	TOTAL
PA&ED									
PS&E						460			460
R/W SUP									
CON SUP						470			470
R/W									
CON						3,270			3,270
Total:						4,200			4,200

HQ Comments:

******** Version 2 - 10/27/2011 ********

CTC approved CMIA Baseline Agreement for the revised corridor scope. -ssd

******** Version 1 - 06/15/10 ********

^^^^^^^^ Version 1 - 02/09/2010 ^^^^^^^^

Adoption new project. -as/ ssd

Relevant Portion of MTC 2035 Regional Transportation Plan (RTP)

Transportation 2035 Plan for the San Francisco Bay Area

FINAL

April 2009

CHANGE IN MOTION

TRANSPORTATION 2035

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Bay Area Air Quality Management District

Bay Conservation and Development Commission

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Appendix 1 — Projects by County

Bay Area Region/Multi-County

Reference Number	Project/Program	Total Project Cost (In millions of year-of-expenditure dollars)	Committed Funds[1]	Discretionary Funds[2]	Project Notes
21002	Implement Freeway Service Patrol, Call Box and Incident Management programs (includes incident detection equipment and incident management systems)	$ 219.9	$ 0.0	$ 219.9	
21005	Fund and implement TransLink®	$ 408.0	$ 0.0	$ 408.0	
21006	Fund and implement Regional Transportation Marketing Program	$ 27.5	$ 0.0	$ 27.5	
21008	Fund and implement 511 Traveler Information	$ 453.7	$ 0.0	$ 453.7	
21011	Transportation for Livable Communities (TLC): provide planning and capital funds to improve pedestrian, bicycle and transit access; and support station development areas and FOCUS Priority Development Areas (PDAs)	$ 2,200.0	$ 0.0	$ 2,200.0	
21012	Golden Gate Bridge seismic retrofit (completes Phase 3)	$ 699.6	$ 523.4	$ 176.2	Phases 1 and 2 complete
21013	Rehabilitate state-owned toll bridges in the Bay Area	$ 309.5	$ 309.5	$ 0.0	
21015	Fund Toll Bridge Seismic Retrofit Program	$ 8,685.0	$ 8,685.0	$ 0.0	
21017	Small transit operators in Alameda, Contra Costa, Marin, Napa, Solano and Sonoma counties — transit operating and capital improvement program (including replacement, rehabilitation and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)	$ 5,769.2	$ 4,608.9	$ 187.7	Shortfall remains
21154	Procure buses for AC Transit transbay, express and local services	$ 22.0	$ 0.0	$ 22.0	
21320	Construct Golden Gate Bridge moveable median barrier	$ 26.9	$ 26.9	$ 0.0	
21342	Extend Caltrain to Transbay Terminal and replace Transbay Terminal, including the construction of the new Transbay Transit Center building and rail foundation (Phase 1)	$ 1,189.0	$ 1,189.0	$ 0.0	Resolution 3434 Regional Transit Expansion Program and Regional Measure 2 Toll Bridge Program; for phases 2a and 2b, see Bay Area Region/Multi-County projects #22008 and #230290
21618	Implement commuter rail service on the Dumbarton Bridge (environmental, design and right-of-way phases)	$ 301.0	$ 301.0	$ 0.0	Resolution 3434 Regional Transit Expansion Program; shortfall remains for construction phase

1 Committed Funds have been reserved by law for specific uses, or allocated by MTC action prior to the development of the Transportation 2035 Plan.

2 Discretionary Funds are flexible funds available to MTC (and not already programmed in Committed Funds) for assignment to projects via the Transportation 2035 Plan planning process.

Bay Area Region/Multi-County

(In millions of year-of-expenditure dollars)

Reference Number	Project/Program	Total Project Cost	Committed Funds[1]	Discretionary Funds[2]	Project Notes
230290	Extend Caltrain to Transbay Terminal and replace Transbay Terminal, including construction phase (Phase 2b)	$ 2,047.0	$ 656.7	$ 0.0	Resolution 3434 Regional Transit Expansion Program and Regional Measure 2 Toll Bridge Program; for phases 1 and 2a, see Bay Area Region/Multi-County projects #21342 and #22008; shortfall remains
230336	Implement recommendations from MTC's Transit Connectivity Plan	$ 32.8	$ 0.0	$ 32.8	
230419	Freeway Performance Initiative (FPI): maximize performance and reliability using technology and limited expansions at essential locations; includes Traffic Operations System (TOS) infrastructure, TOS maintenance and replacement, arterial coordination and management, and performance monitoring	$ 1,600.0	$ 0.0	$ 1,600.0	
230550	Transportation Climate Action Campaign: implement a campaign to reduce greenhouse gas emissions; includes funding for a comprehensive outreach and education campaign, Safe Routes to School, Safe Routes to Transit, and Transit Priority Measures (TPM)	$ 400.0	$ 0.0	$ 400.0	
230649	High-Speed Rail: fund infrastructure for ACE, BART, Caltrain, MUNI and VTA	$ 408.0	$ 408.0	$ 0.0	
230701	Widen U.S. 101 (adding an HOV lane in each direction) from Route 37 to Marin/Sonoma County line (Marin County portion) and from Marin/Sonoma County line to Old Redwood Highway in Petaluma	$ 745.4	$ 569.4	$ 176.0	
230710	Funding reserve to implement High-Speed Rail and related corridor improvements	$ 2,130.0	$ 2,130.0	$ 0.0	
230712	Install suicide barrier on Golden Gate Bridge	$ 50.0	$ 50.0	$ 0.0	
	Bay Area Express Lane Network	**$ 7,600.0**	**$ 7,600.0**	**$ 0.0**	Total Project Cost is cost to construct, finance, operate and maintain regionwide network. Committed Funds represent estimated toll revenues needed to implement the Express Lane Network. Total capital cost to construct the network is $3.7 billion. Individual corridors and capital costs are listed below.
	Route 4 Corridor	**$ 37.2**	**$ 37.2**	**$ 0.0**	
230654	Route 4 in Contra Costa County from Route 160 to Port Chicago Highway — convert HOV lanes to express lanes				
	I-80 Corridor	**$ 768.1**	**$ 768.1**	**$ 0.0**	
230656	I-80 in Alameda County from Alameda-Contra Costa County line to Bay Bridge — convert HOV lanes to express lanes				