

## Request Programming in 2012 SHOPP

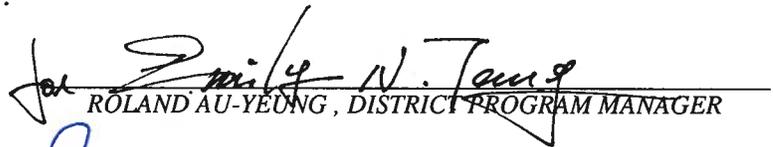
PROJECT LOCATION:

In Alameda County & Contra Costa County, on Route 580 & 680 at PM various locations.

APPROVAL RECOMMENDED:

  
PATRICK PANG, PROJECT MANAGER

APPROVAL RECOMMENDED:

  
ROLAND AU-YEUNG, DISTRICT PROGRAM MANAGER

APPROVED:

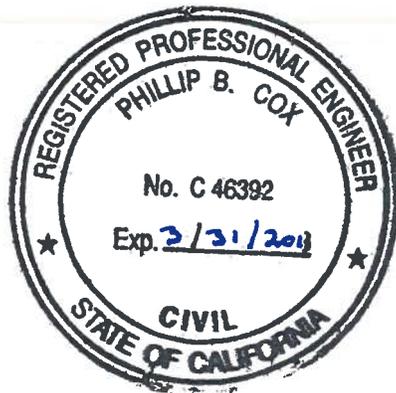
  
BIJAN SARTIPI, DISTRICT DIRECTOR

9-27-11  
DATE

This project initiation document has been prepared under the direction of the following Registered Civil Engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

  
PHILLIP COX, REGISTERED CIVIL ENGINEER

9/15/2011  
DATE



## **1. INITIATING OFFICE/INITIATOR:**

The District 4 Program Manager for the Office of Traffic Safety Bridge Transition Railing Program has established that a project is needed that meets the qualification as a Collision Severity Reduction Project (201.015) for the State Highway Operation and Protection Program (SHOPP).

This small capital value project (SCVP) project initiation document (PID) provides conceptual approval of the proposal and a recommendation to program the project into the 2012 SHOPP. A project report will serve as final approval of the proposal.

## **2. PURPOSE AND NEED:**

Purpose:

The purpose of the project is to improve the safety of motorists by reducing the potential and severity of run-off-road type accidents by upgrading existing nonstandard metal beam guard rail (MBGR) transition railing to meet the current Caltrans standard.

Need:

The current existing MBGRs connected to bridges, walls or concrete barriers do not meet the current standard. In order to improve safety, the bridge transition railing needs to be upgraded to meet current standards.

## **3. DEFICIENCY SUMMARY:**

District 4 has identified locations in Alameda County and Contra Costa County where existing bridge transition railing does not meet the current Caltrans standard. The project proposed in this SCVP PID covers 193 locations where bridge transition railing will be replaced. These locations are listed in Attachment A Project Description and Quantity Sheet.

## **4. PROJECT PROPOSAL:**

This project will install standard Type W Beam (WB) and Single Thrie Beam (STB) at various locations. This includes MBGRs connected with bridge approach railing, concrete barriers, bridge abutments, retaining walls, and sound walls. The project will also replace some MBGR end treatments with the current standard. Details regarding these locations are included in Attachment A Project Description and Quantity Sheet.

The capital cost estimate provided in this SCVP PID is included in Attachment B and is intended for programming purposes only. It is recommended that the proposed improvements be programmed at the estimated capital construction cost and right of way cost of 2014/2015 fiscal year of \$6,650,000.

Right of Way:

The proposed project will remove existing MBGR and install new WB or STB that meet Caltrans most recent standard. All construction work including traffic control operations will be performed within the State right of way.

Disposal Site:

As the amount of material to be disposed of is expected to be minimal the need for disposal site is not anticipated.

Utilities:

Since all of the proposed project work is on State highways or highway ramps, it is assumed that existing utilities will not need to be removed or relocated.

Environmental:

Environmental impacts associated with this bridge transition rail project are expected to be minimal and a Categorical Exemption is the anticipated environmental clearance for this project. The appropriate environmental clearance will be determined during the next project phase.

**5. PROGRAMMING:**

Project capital and support cost estimates, including key assumption used to prepare the estimates, are shown below:

PROJECT CAPITAL COST		
Fiscal Year	Right of Way Capital	Construction Capital
FY 2011/2012	10,000	\$5,820,000
FY 2014/2015	10,000	\$6,650,000
FY 2015/2016	10,000	\$6,920,000

Key assumptions for the project cost estimate as percentage of total construction capital:

- TMP 1%
- SWDR 2%
- Contingency 30%

PROJECT SUPPORT COMPONENTS									
	PA&ED 0 Phase		Design 1 Phase		Right of Way 2 Phase		Construction 3 Phase		Total
	Dist	DES	Dist	DES	Dist	DES	Dist	DES	
Estimated PY's	5.82	1.94	4.85	0.97	0.19		4.85	0.78	19.4

Key assumption(s) for the cost estimate as percentage of total construction capital:

- Support cost 50%

## 6. SCHEDULE:

HQ Milestones	Delivery Date (Month, Day, Year)
PA & ED	7/2013
Regular Right of Way	11/2013
Project PS&E	5/2014
Right of Way Certification	5/2014
Ready to List	8/2014
Approve Contract	10/2014
Contract Acceptance	10/2015
End Project	12/2015

## 7. CONTACTS:

Roland Au-Yeung	Program Manager	(510) 286-4560
Patrick Pang	Project Manager	(510) 286-5566
William B. Wong	Project Engineer	(510) 286-4881

## 8. ATTACHMENTS:

- Location Map
- Project Description and Quantity Sheet
- Preliminary Project Cost Estimate for five highest cost items

Preliminary Project Cost Estimate for five highest cost items:

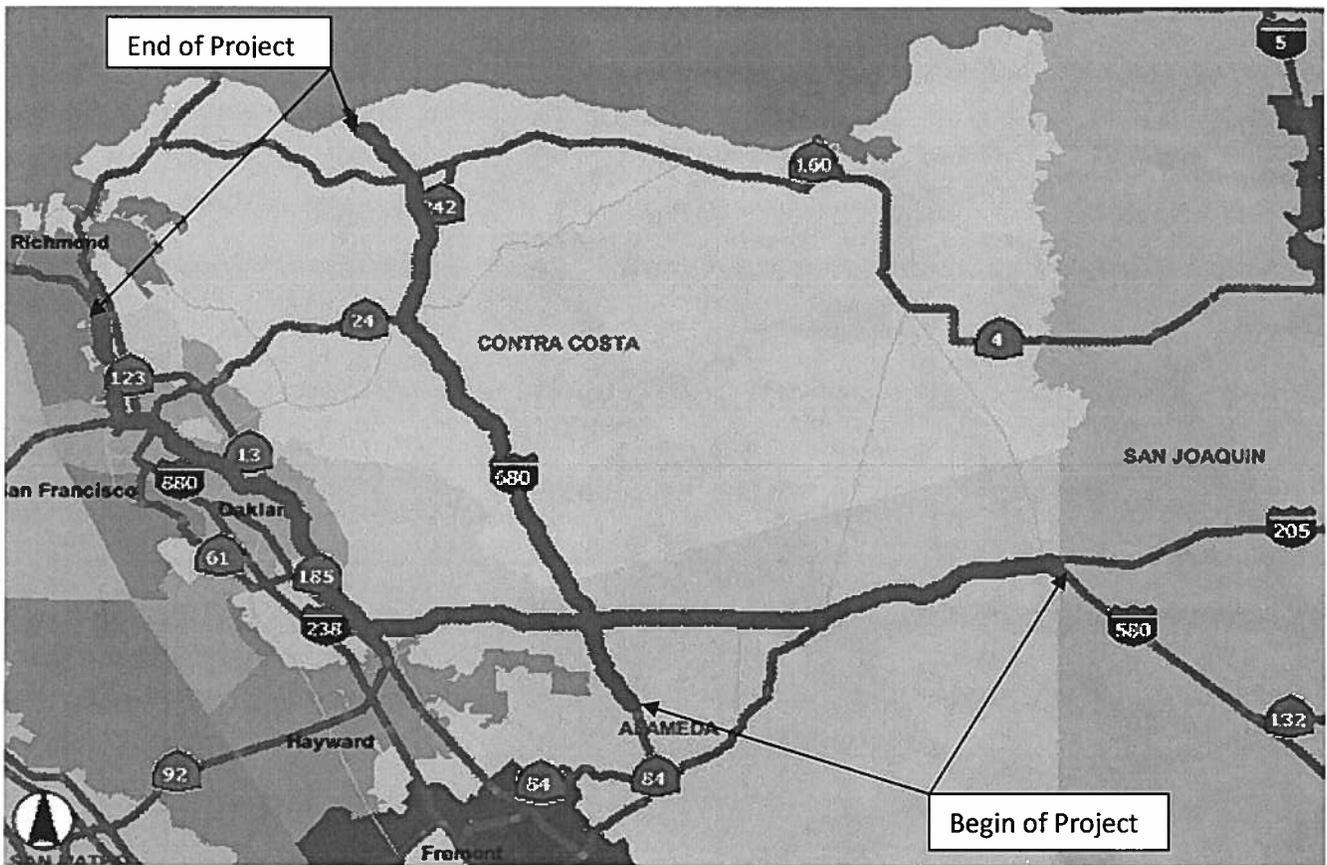
Traffic Control Systems	\$714,750
Transportation Management Plan	\$418,000
Alternative Flared Terminal System	\$230,000
Transition Railing -Type WB	\$578,930
Minor Concrete (Minor Structure) – Anchor	\$960,000

Upgrade Type W beam (WB) or Single Thrie

Beam (STB) Transition Railing

04-ALA-580 at various locations  
04-ALA & CC-680 at various locations  
EA 04-2G520K  
September 2011

## ATTACHMENT A - LOCATION MAP



ATTACHMENT B - PROJECT DESCRIPTION AND QUANTITY SHEET

ID #	County	Rte	PM	Direction	Highway (H) or Ramp (R)	Left side (L) or Right Side (R)	Description	Connecting Structure			Transition Railing Type	Minor Concrete (Minor Structure) For 10-foot Concrete Anchor Block (LF)	Vegetation Control (Minor Concrete) (SQYD)	MBGR (LF)		Existing Features/ Notes/ Remarks
								Concr. Barrier (Abutment)	Wall	Bridge Rail				Remove	Install	
1	Ala	580	0.393	WB	R	L	Rte 580/ 205 SEP 33-346			2	2	20	33.3	81.0	56.0	Upgrade L & R WB of WB direction
2	Ala	580	1.037	WB	H	L/R	Midway Rd UC 33-345				2	20	33.3	81.0	56.0	Upgrade L & R WB of WB direction
3	Ala	580	0.917	EB	H	R	Midway Rd UC 33-195			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of EB direction
4	Ala	580	1.476	WB	H	R	Grand Line Rd UC 33196R			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of WB direction
5	Ala	580	1.483	EB	H	R	Grand Line Rd UC 33196L			1	1	10	16.7	40.5	15.5	Upgrade LEFT & RIGHT WB of EB direction
6	Ala	580	3.909	EB	H	L/R	Remond OH 33-124 LT			2	2	20	33.3	81.0	56.0	Upgrade LEFT & RIGHT WB of EB direction Remond OH 33-124 LT
7	Ala	580	6.925	WB	H	R	Altamont Sidetill			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of WB direction
8	Ala	580	8.00	WB	H	R/L	Greenville OH 33-121 LT			2	2	20	33.3	81.0	56.0	Upgrade R & L single TBB connection to bridge railing in WB direction
9	Ala	580	8.294	WB	H	R/L	Greenville Rd UC 3326 L			2	2	20	33.3	81.0	56.0	Upgrade RIGHT & LEFT of WB direction Greenville Rd UC 3326 L
10	Ala	580	14.98	EB	R	R	EB On fr Airway Blvd.			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB connect to retaining wall
11	Ala	580	15.151	EB	R	R	EB Off to Airway Blvd			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB connect to concrete barrier
12	Ala	580	19.39	EB	H	R	END BR 33-150 LT			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of EB END BR 33-150 LT (Demarcus Bive UC)
13	Ala	580	19.621	WB	R	R	WB Off to Douerty/Topyrd			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB connect to existing conc. barrier with CLF on top
14	Ala	580	20.481	WB	R	R	WB Off to Rte 680					10	16.7	40.5	15.5	Upgrade RIGHT WB of WB off to RTE 680
15	Ala	580	20.555	WB	H	R	Alamo Canal 33-16			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of WB Rte 580 Alamo Canal 33-16
16	Ala	580	21.316	WB	R	R	WB Off to NB San Harmon			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB connect to existing conc. barrier with CLF on top
17	Ala	580	23.863	WB	H	R	SCHAFFER RCH RDUC33-192			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of WB direction
18	Ala	580	23.884	EB	H	R	EB 33-192			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of EB direction
19	Ala	580	26.228	WB	H	R	Eden Cym Rd UC33-225 L/R			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of WB direction
20	Ala	580	26.254	EB	H	R	End BR 33-225 L/R			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of EB direction
21	Ala	580	27.001	WB	H	R	E CSTRO VLY UC33-235 L/R			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of WB direction E CSTRO VLY Blvd UC 33-235/L/R
22	Ala	580	27.139	EB	H	R	END BR 33-235 L/R			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of EB direction END BR 33-235 L/R
23	Ala	580	27.534	WB	H	R	LRNZO Cr. 33-228R&33-230L			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of WB direction connect to Bridge concrete barrier
24	Ala	580	27.624	EB	H	R	End Br 33-228R (LT LNS)			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of EB direction connect to Bridge concrete barrier
25	Ala	580	27.754	EB	H	R	End Br 33-230 L/R			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of EB direction connect to Bridge concrete barrier
26	Ala	580	28.464	EB	H	R	End Br 33-233 L/R			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of EB direction connect to Bridge concrete barrier
27	Ala	580	28.55	EB	H	R	EB On fr SB Crow CYN RD			2	2	20	33.3	81.0	56.0	Upgrade L & R WB of EB On From SB Crow Canyon Road
28	Ala	580	28.571	WB	H	R	Crow Cr. Br 33-232 L/R			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB WB direction connect to Bridge concrete barrier
29	Ala	580	28.622	EB	H	R	END BR 33-232 L/R			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of EB direction END BR 33-232 L/R (Crow Cr BR)
30	Ala	580	29.397	EB	H	R	End Br 33-193 L/R			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of EB direction connect to Bridge concrete barrier
31	Ala	580	30.155	EB	R	R	EB On fr Strobridge Ave			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB EB ON from Strobridge Ave

ATTACHMENT B - PROJECT DESCRIPTION AND QUANTITY SHEET

ID #	Location				Description	Connecting Structure			Transition Railing Type	Minor Concrete (Minor Structure) For 10-foot Concrete Anchor Block (LF)	Vegetation Control (Minor Concrete) (SQYD)	MBGR (LF)		Existing Features/ Notes/ Remarks		
	County	Rte	PM	Direction		Highway (H) or Ramp (R)	Left side (L) or Right Side (R)	Concr. Barrier (Abutment)				Wall	Bridge Rail		WB	STB
32	Ala	580	30.354	WB	H	L/R	Stobridge UC 33-189/LR			2	2	20	33.3	81.0	56.0	Upgrade L & R WB of WB direction connect on concrete barrier
33	Ala	580	30.388	EB	H	L	END BR 33-189 LR			1	1	10	16.7	40.5	15.5	Upgrade LEFT WB of EB direction
34	Ala	580	30.553	WB	H	R	Castro VLY Biv UC33-202R			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of WB direction connect to Bridge concrete barrier
35	Ala	580	30.589	WB	H	L	580/238 SEP 33-214L			1	1	10	16.7	40.5	15.5	Upgrade LEFT WB of NB230/580 SEP NB 238
36	Ala	580	31.343	WB	H	R	167 Ave UC Br 33-396			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of WB 580 167 Ave. UC BR 33-396
37	Ala	580	31.376	EB	H	L/R	End Br 33-396			2	2	20	33.3	81.0	56.0	Upgrade L & R WB of EB direction END BR 33-396 (167 Ave UC)
38	Ala	580	31.631	EB	R	L/R	EB On fr Liberty St			2	2	20	33.3	81.0	56.0	Upgrade L & R WB of EB ON from Liberty St (164th UC)
39	Ala	580	31.753	EB	H	L/R	End Br 33-395			2	2	20	33.3	81.0	56.0	Upgrade L & R WB of EB 164th Ave UC BR 33-395
40	Ala	580	32.717	WB	H	R	Plaza Drive OC 33-337			1	1	10	16.7	40.5	15.5	Upgrade Right WB of WB pass (Plaza Dr. OC 33-337) connect to retaining
41	Ala	580	33.943	WB/EB	H	R	Grand Ave OC 33-330			2	2	20	33.3	81.0	56.0	Upgrade Right WB of WB & EB 580 Grand Ave OC coilium
42	Ala	580	34.396	WB/EB	H	R	Joacuin Ave UC 33-331			2	2	20	33.3	81.0	56.0	Upgrade RIGHT WB of WB & EB 580 Joacuin Ave UC
43	Ala	580	34.815	WB/EB	H	R	Dutton Ave UC 33-333			2	2	20	33.3	81.0	56.0	Upgrade RIGHT WB of WB & EB Dutton Ave UC
44	Ala	580	34.881	EB	R	L/R	EB On fr SB Foothill Blvd			2	2	20	33.3	81.0	56.0	Upgrade Right & LEFT WB of EB On fr SB Foothill Blvd
45	Ala	580	35.048	WB/EB	H	R	Foothill Blvd UC 33-335			2	2	20	33.3	81.0	56.0	Upgrade RIGHT WB of WB & EB 1-580 Foothill Blvd UC 33-335
46	Ala	580	35.713	WB/EB	H	R	106th Ave UC 33-355			2	2	20	33.3	81.0	56.0	Upgrade RIGHT WB of WB & EB 1-580 106th Ave. UC 33-355
47	Ala	580	36.343	WB	H	R	Golf Links Rd UC 33-354			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of WB 1-580 Golf Links Rd UC 33-354
48	Ala	580	36.375	EB	H	R	EB 33-343			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of EB 1-580 END 33-355 (Golf Links Rd UC)
49	Ala	580	36.764	EB	H	R	Oak Knoll Blvd OC 33353			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of EB 1-580 END Oak Knoll Blvd OC
50	Ala	580	38.309	WB/EB	H	R	Edwards Ave UC 33-341			2	2	20	33.3	81.0	56.0	Upgrade RIGHT WB of WB & EB Edwards Ave UC 33-341
51	Ala	580	38.915	WB/EB	H	R	Kuhnie Ave UC 33-342			2	2	20	33.3	81.0	56.0	Upgrade RIGHT WB of WB & EB Kuhnie Ave UC
52	Ala	580	39.37	WB	H	R	Davenport Ave UC 33-0343			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of WB Davenport Ave UC 33-0343
53	Ala	580	39.391	EB	H	R	EB 33-0343			1	1	0	0.0	0.0	-25.0	Upgraded WB by EA 0A8001-Need conc. Block and adjust WB
54	Ala	580	39.451	WB	R	R	Mount Blvd/SB 13, WB On			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of WB On from Mount Blvd/SB13
55	Ala	580	39.766	WB	H	R	Mac Arthur Blvd			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of WB Mac Arthur Blvd
56	Ala	580	39.851	EB	H	R	EB On fr SB Mac Arthur Blvd			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of EB ON FR SB MACARTHUR BLV
57	Ala	580	39.933	WB	H	R	Birdsall Ave POC 33 328			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of WB Birdsall Ave POC 33 328 connect to cool wall
58	Ala	580	39.951	EB	R	R	EB Off to SB Mac Arthur Blvd			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of EB off to SB Mac Arthur BL connect to Ret. Wall
59	Ala	580	40.078	WB/EB	H	R	High St UC 33-318			2	1	10	16.7	40.5	116	Upgrade RIGHT WB of EB & WB High St UC (EB extend MBGR 100')
60	Ala	580	40.931	WB	H	R	Maple Ave UC 33 321			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of WB Maple Ave UC 33 321
61	Ala	580	41.328	WB/EB	H	R	Boston Ave OC 33 323			2	2	20	33.3	81.0	56.0	Upgrade RIGHT WB of WB & EB Boston Ave OC
62	Ala	580	41.671	WB	R	R	EB Off to Fruitvale Ave			1	1	10	16.7	40.5	15.5	Upgrade RIGHT WB of EB off to Fruitvale Ave. connect to wall

**ATTACHMENT B - PROJECT DESCRIPTION AND QUANTITY SHEET**

ID #	Location					Description	Connecting Structure			Transition Railing Type	Minor Concrete (Minor Structure) For 10-foot Concrete Anchor Block (LF)	Vegetation Control (Minor Concrete) (SQYD)	MBGR (LF)		Existing Features/ Notes/ Remarks	
	County	Rte	PM	Direction	Highway ( H ) or Ramp ( R )		Left side ( L ) or Right Side ( R )	Concr. Barrier (Abutment)	Wall				Bridge Rail	Remove		Install
156	ALA	680	19,808	NB	R	NB Off to EB Rte 580 / Hopyard	1			WB	STB	10	16:7	40.5	15.5	Concrete barrier, approaching end, right side, middle of ramp
157	ALA	680	20,026	NB	R	St 680/580 Sep 33-371			1			10	16:7	40.5	15.5	Bridge rail, approaching end, right side
158	ALA	680	20,281	NB	R	NB on from WB Rte 580			1			10	16:7	40.5	15.5	Bridge rail, approaching end, right side, middle of ramp
159	ALA	680	20,361	NB	R	NB On from Village Pkwy			2			20	33.3	81.0	56.0	Bridge rail, approaching end, both sides, middle of ramp
160	ALA	680	20,727	NB	H	Amador Valley Blvd UC 33-356			1			10	16:7	40.5	15.5	Bridge rail, approaching end, right side
<b>TOTAL UPGRADES</b>							<b>31</b>	<b>17</b>	<b>92</b>	<b>190</b>	<b>2</b>	<b>1920</b>	<b>3167</b>	<b>7776</b>	<b>3876</b>	

Total 193 locations.

# ATTACHMENT C - PRELIMINARY PROJECT COST ESTIMATE

District-County-Route: 04-ALA & CC-580 & 680

PM: Various

EA: 2G520K

Project ID: 0400020999

Program Code: SHOPP 201.015

## PROJECT DESCRIPTION:

### Project Limits:

In Alameda County and Contra Costa County at various locations on Route 580 and 680.

### Proposed Improvement (Scope):

To install Type W Beam (WB) or Single Thrie Beam (STB) transition railing at existing metal beam guard railing (MBGR) that is connected to bridge approach railing or concrete barrier at various locations on Instate State Routes 580 and 680 in Alameda and Contra Costa County.

### Alternative:

Build Alternative

## SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	<u>\$ 5,810,000</u>
TOTAL STRUCTURE ITEMS	<u>\$ -</u>
SUBTOTAL CONSTRUCTION COSTS	<u>\$ 5,810,000</u>
TOTAL RIGHT OF WAY ITEMS	<u>\$ 10,000</u>
<b>TOTAL PROJECT CAPITAL OUTLAY COSTS</b>	<b><u>\$ 5,820,000</u></b>

Reviewed by District Program Manager

  
\_\_\_\_\_  
(Signature)

Approved by Project Manager

  
\_\_\_\_\_  
(Signature)

9/15/11  
\_\_\_\_\_  
Date

Phone No. \_\_\_\_\_

District-County-Route: 04-ALA & CC-580 & 680

PM: Various

EA: 2G520K

Project ID: 0400020999

Program Code: SHOPP 201.015

**I. ROADWAY ITEMS**

Section 1 Earthwork

	<u>Section Cost</u>		
<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
Roadway Excavation			
Imported Borrow			
Clearing & Grubbing	1	LS	\$ 80,000
Develop Water Supply			
Top Soil Reapplication			
Stepped Slopes and Slope Rounding (Contour			
Remove Concrete			
<b>Subtotal Earthwork:</b>			<b>\$ 80,000</b>

Section 2 Pavement Structural Section

	<u>Section Cost</u>		
<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
PCC Pavement (___Depth)			
PCC Pavement (___Depth)			
Hot Mix Asphalt (Type A)			
Lean Concrete Base			
Cement-Treated Base			
Aggregate Base (Class 3)			
Treated Permeable Base			
Aggregate Sub base			
Pavement Reinforcing Fabric			
Minor Concrete (Minor Construction)			
Edge Drains			
<b>Subtotal Pavement Structural Section:</b>			<b>0</b>

Section 3 Drainage

	<u>Section Cost</u>		
<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
Large Drainage Facilities			
Storm Drains			
Pumping Plants			
Project Drainage(X-Drains, overside, etc.)			
<b>Subtotal Drainage:</b>			_____

Section 4: Specialty Items

	<u>Section Cost</u>		
	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u> <u>Item Cost</u>
Retaining Walls			
Noise Barriers			
Barriers and Guardrails			
Aerially Deposited Lead (ADL) Soil	264	CY	\$ 250    \$ 65,972
Water Pollution Control	1	LS	\$ 67,637    \$67,636.70
Hazardous Waste Investigation and/or Mitigation	1	LS	\$ 33,818    \$33,818.35
Temporary K-Rail			\$ -
Temporary Crash Cushion			\$ -
Environmental Compliance	1	LS	\$ 33,818    \$33,818.35
Resident Engineer Office Space			
<b>Subtotal Specialty Items:</b>			<b><u>201,246</u></b>

Section 5: Traffic Items

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u> <u>Item Cost</u>
Lighting			
Traffic Delineation Items			
Traffic Signals			
Overhead Sign Structures			
Roadside Signs			
Traffic Control Systems	1	LS	\$714,750    \$ 714,750
Transportation Management Plan	1	LS	\$418,000    \$ 418,000
Temporary Detection System Staging			
Thermoplastic Traffic Stripe			\$ -
Remove Channelizer			\$ -
Remove Traffic Stripe			\$ -
Remove Pavement Marker			
<b>Subtotal Traffic Items:</b>			<b><u>\$ 1,132,750</u></b>

Section 6 Planting and Irrigation

	<u>Section Cost</u>			
	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
Highway Planting				
Replacement Planting				
Irrigation Modification				
Relocate Existing Irrigation Facilities				
Irrigation Crossovers				

**Subtotal Planting and Irrigation Section: \$ -**

Section 7: Roadside Management and Safety Section

	<u>Section Cost</u>			
	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
Vegetation Control-Minor Concrete	3167	SQYD	\$ 49.5	\$ 156,767
Minor Concrete (Minor Structure) -Anchor	1920	LF	\$ 500.0	\$ 960,000
Remove existing MBGR	7776	LF	\$ 6.5	\$ 50,544
Metal Beam Guard Rail-Wood Post	3876	LF	\$ 30.0	\$ 116,280
Alternative Flared Terminal System	96	EA	\$ 2,300.0	\$ 220,800
Transition Railing -Type WB	190	EA	\$ 3,047.0	\$ 578,930
Transition Railing -Type STB	2	EA	\$ 5,000.0	\$ 10,000
Single Thrie Beam Barrier				
Gore Area Pavement				
Pavement beyond the gore area				
Miscellaneous Paving				
Erosion Control	12	CY	\$ 820	\$ 9,792
Slope Protection				
Side Slopes/Embankment Slopes				
Relocating roadside facilities/features				

**Subtotal Roadside Management and Safety Section: \$ 2,103,113**

**Subtotal Sections: (1 thru 7) \$ 3,517,108**

Section 8: Minor Items

\$3,517,108 X 10% = \$ 351,711  
(Subtotal Sections 1 thru 7)

**TOTAL MINOR ITEMS: \$ 351,711**

Section 9: Roadway Mobilization

\$3,868,819 X 10% = \$ 386,882  
(Subtotal Sections 1 thru 8)

**TOTAL ROADWAY MOBILIZATION: 386,882**

Section 10 Roadway Additions

Supplemental Work

\$3,868,819 X 10% = \$ 386,882  
(Subtotal Sections 1 thru 8)

Contingencies

3,868,819 X 30% = \$ 1,160,646  
(Subtotal Sections 1 thru 8)

**TOTAL ROADWAY ADDITIONS: 1,547,528**

**TOTAL ROADWAY ITEMS \$ 5,803,229**

(Subtotal Sections 1 thru 10)

**USE \$5,810,000**

Prepared By: William B. Wong Phone # (510) 286-4881 Date 9/12/2011  
(Print Name)

Checked By: Phillip Cox Phone # (510) 286-5584 Date 9/15/2011  
(Print Name)

PM: Various

EA: 2G520K

Project ID: 0400020999

Program Code: SHOPP 201.015

II. STRUCTURES ITEMS

	Structure (1)	Structure (2)	Structure (3)
Bridge Name	_____	_____	_____
Structure Type	_____	_____	_____
Width (out to out) - (ft)	_____	_____	_____
Span Lengths - (ft)	_____	_____	_____
Total Area - (ft2)	_____	_____	_____
Footing Type (pile/spread)	_____	_____	_____
Cost Per ft2	_____	_____	_____
(incl. 10% mobilization and 25% contingency)	_____	_____	_____
Total Cost for Structure	_____	_____	_____

**SUBTOTAL STRUCTURES ITEMS**  
(Sum of Total Cost for Structures)

Railroad Related Costs:

_____
_____
_____

**SUBTOTAL RAILROAD ITEMS** 0

**TOTAL STRUCTURES ITEMS** 0  
(Sum of Structures Items plus Railroad Items)

COMMENTS:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Prepared By: William B. Wong Phone # (510) 286-4881 Date 9/12/2011  
(Print Name)

Checked By: Phillip Cox Phone # (510) 286-5584 Date 9/15/2011  
(Print Name)

NOTE: If appropriate, attach additional pages and backup.

District-County-Route: 04-ALA & CC-580 & 680

PM: Various

EA: 2G520K

Project ID: 0400020999

Program Code: SHOPP 201.015

III. RIGHT OF WAY ITEMS

ESCALATED VALUE

A. Acquisition, including excess lands, damages to remainder(s) and Goodwill

Project Permit Fees

Grantor's Appraisal Cost

B. Utility Relocation (State share: \$5000)

(Escalated Value to 6/13)

10,000

C. Relocation Assistance

D. Clearance/Demolition

E. Title and Escrow Fees

**TOTAL RIGHT OF WAY ITEMS: 10,000**

(Escalated Value)

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 \*

\$

0

\* 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:

Prepared By: William B. Wong Phone # (510) 286-4881 Date 9/12/2011  
(Print Name)

Checked By: Phillip Cox Phone # (510) 286-5584 Date 9/15/2011  
(Print Name)

NOTE: If appropriate, attach additional pages and backup.