

## Capital Preventive Maintenance Project Initiation Document

### To Request Programming in the 2016 SHOPP And Provide Project Approval

On Route 101 in Monterey County

From 1.2 miles North of North Gonzales OC (PM 73.8)

To East Market Street OC (PM 87.3)

I have reviewed the right of way information contained in this Project Initiation Document and the R/W Data Sheet attached hereto, and find the data to be complete, current and accurate:

  
for **JAMIE LUPO**  
*Acting CHIEF, CENTRAL REGION RIGHT OF WAY*

APPROVAL RECOMMENDED:

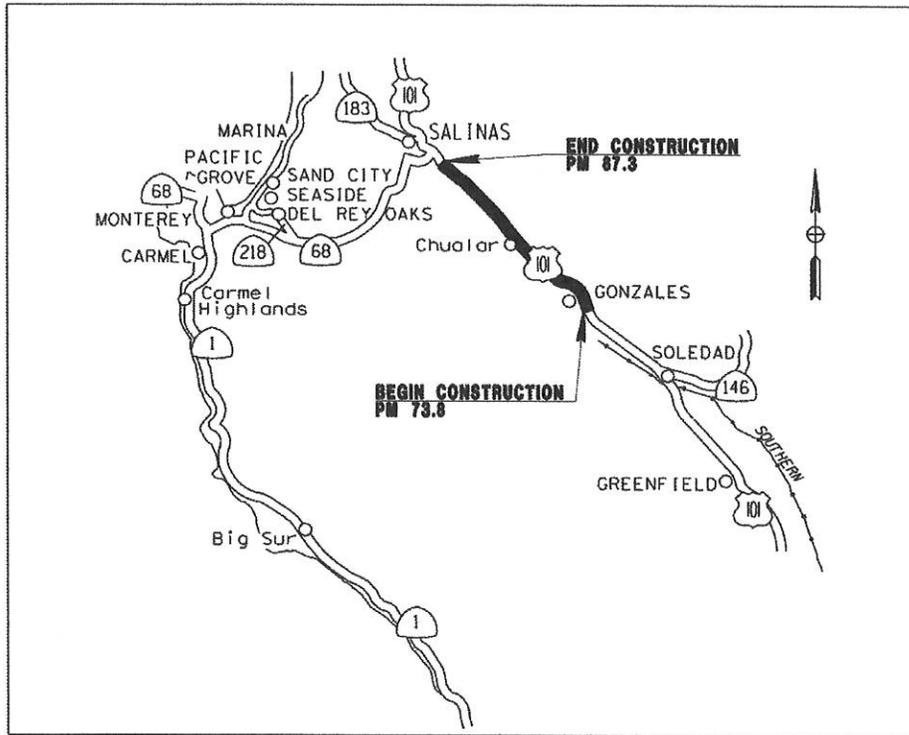
  
**DAVID M. SILBERBERGER**  
*PROJECT MANAGER*

APPROVED:

  
**TIMOTHY M. GUBBINS**  
*DISTRICT 5 DIRECTOR*

6/10/15  
DATE

## Vicinity Map



On Route 101 in Monterey County

From 1.2 miles North of North Gonzales OC (PM 73.8)

To East Market Street OC (PM 87.3)

This Capital Preventive Maintenance 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.

  
**GILBERTO BACA**  
REGISTERED CIVIL ENGINEER

4/30/15  
DATE



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## 1. INTRODUCTION AND BACKGROUND

### Project Description:

This project is located on State Route 101, in Monterey County, from 1.2 Miles north of the North Gonzales Overcrossing to the East Market Street Overcrossing. The existing highway consists of both dense graded Asphalt Concrete (AC) lanes and shoulders for the majority of the southbound and parts of northbound. The majority of the northbound and some sections of southbound contain a combination of Portland Concrete Cement (PCC) travel lanes and AC shoulders. All of the ramp lanes and shoulders consist of AC. This project proposes to overlay the existing AC lanes and adjacent AC shoulders with a 0.20' thick layer of Rubberized Hot Mix Asphalt Concrete (RHMA). Along the PCC travel lanes, where failed sections are present, slab replacements will be performed, followed by diamond grinding of all of the PCC lanes. AC shoulders adjacent to PCC lanes will be cold planed 0.20' before placing a 0.20' RHMA overlay. All ramps except for Airport Boulevard ramps will be cold planed 0.20' before placing a 0.20' of RHMA overlay. At grade intersections and turning lanes along Route 101 will be overlaid with 0.20' of RHMA. Heavily distressed AC pavement locations on traveled lanes and shoulders will be repaired by cold planning and replacing with 0.33' of thick dense graded Hot Mix Asphalt (HMA-Type A) prior to the 0.20' RHMA overlay. The new Pavement Safety Edge Treatment will be implemented in this project.

Throughout the project length, the Midwest Guardrail System (MGS) and associated End Treatments will be upgraded to current standards. Vegetation control-minor concrete will be placed at the MGS locations as a permanent vegetation control treatment. AC Dike will be reconstructed to current standard and shoulder backing will be applied along the project. Curb ramps adjacent to proposed work not up to standards of the Americans with Disabilities Act (ADA) will be upgraded to current standard. Where applicable, existing drainage inlets will be raised to the new finish grade. As per HQ mandate, this project will replace/upgrade all the warning signs, within the project limits, with Type 11 Retro-reflective Sheeting.

The current construction capital cost is \$15,954,000. No additional Right of Way will be required for this project. Potholing to identify existing utilities maybe required during the PS&E phase. Current cost associated with potholing is \$56,250. This project is proposed for programming in the 2016 SHOPP Pavement Preservation Program 20.XX.201.121. No design exceptions are required for this project.

See the Cost estimate for specific work items included in this project.

<b>Project Limits</b>	05-Mon-101 PM 73.8-87.3
<b>Current Capital Outlay Support Estimate</b>	\$3,600,000
<b>Current Capital Outlay Construction Estimate</b>	\$15,954,000
<b>Current Capital Outlay Right-of-Way Estimate</b>	\$56,250
<b>Funding Source</b>	20.XX.201.121
<b>Funding Year</b>	2018/2019
<b>Type of Facility</b>	4-Lane Expressway and 4-Lane Freeway
<b>Number of Structures</b>	N/A
<b>Environmental Determination or Document</b>	CE/CE: CEQA/NEPA CEQA February 17, 2015 NEPA Target July 2016
<b>Legal Description</b>	In Monterey County In and Near Salinas From 1.2 Miles North of North Gonzales OC to the East Market Street OC
<b>Project Development Category</b>	5

## 2. RECOMMENDATION

It is recommended that this project be approved and authorization be granted to proceed to the design phase using RHMA.

## 3. PURPOSE AND NEED

### **Purpose:**

The purpose of this project is to improve the ride quality and extend the service life of the existing pavement.

### **Need:**

State Route 101 is classified as a Principal Arterial in Monterey County. State Route 101 runs north and south, and sustains high traffic volumes throughout the year. The pavement within the project limits is exhibiting distress and unacceptable ride quality, which, if left uncorrected, will continue to deteriorate.

**4. EXISTING FACILITY, DEFICIENCIES AND TRAFFIC DATA**

**4A. Roadway Geometric Information**

Facility Location	Minimum Curve Radius	Through Traffic Lanes			Paved Shoulder Width		Median Width	Additional Paved Width for Bicycle Lane or Other
		Number of Lanes	Lane Width (ft)	Type Flexible, Rigid, or Composite	Left (ft)	Right (ft)		
73.8/87.3	1500	4	12	Flexible, Rigid	3-5	8'-10	40- 48	N/A

Remarks:

This Project has been identified and developed as a Capital Preventive Maintenance (CAPM) candidate per Design Information Bulletin 81-01. As such, the scope of the project does not intend to change and/or upgrade existing geometric features.

**4B. Condition of Existing Facility (Repeat for each homogeneous segment):**

**1) Traveled Way Data**

PMS Category (1-29) 9 Priority Classification (.1-.4) 0.3

International Roughness Index (IRI) 83

**\*Rigid Pavement:**

**\*Flexible Pavement:**

\* From latest PMS-Pavement Condition Inventory Survey Data.

3rd Stage Cracking % 2% Alligator B Cracking % 3%

Faulting Minimal Patching % None

Joint Spalls N/A Rutting None

Pumping N/A Bleeding None

Corner Breaks % 0.3% Raveling None

Locations(s) of subsurface or ponded surface-water problem:

Possible ponding beneath the Main Street overcrossing in Chualar, will be addressed by grinding the asphalt shoulders and matching the grade to the adjacent PCC lanes.

**2) Pedestrian Facility Data**

<b>Facility Type and Location(s)</b> <i>(Station, post mile or other reference point)</i>	<b>Meets ADA Standards?</b> <i>(Yes or No for each listed location)</i>	<b>If Facility does not meet ADA Standards, what feature(s) are not ADA compliant?</b> <i>(List features per location)</i>	<b>Status of Each Noncompliant Location</b> Use the following statements, as appropriate: <ul style="list-style-type: none"> <li>• <i>Will be corrected as part of this project;</i></li> <li>• <i>Will not be corrected because it is technically infeasible to correct; an ADA exception has been processed.</i></li> </ul>
<b>Sidewalks:</b> <i>(List locations as appropriate)</i>	N/A	N/A	N/A
<b>Curb Ramps:</b> <b>6 locations along Airport Blvd</b>	No	Slopes	Will be corrected as part of this project.

**4C. Structures Information**

There are no structure vertical clearances within the project limits that will be affected. For Abbott Undercrossing Bridge (Br. No. 44-0119L), Airport Overcrossing Bridge (Br. No. 44-0124) and Route 68/101 Separation Bridge (Br. No. 44-0121), the existing asphalt concrete will be cold planed 0.20' and replaced with a 0.20' overlay. No other structure has asphalt concrete on the deck.

**4D. Vehicle Traffic Data**

Construction Year AADT 77,212 (For 2016)

DHV 6,901 % Trucks 18.4%

Remarks: None

Safety Review Date: 5/15/14

Remarks: None

## 5. CORRIDOR AND SYSTEM COORDINATION

This project will be coordinated with other adjacent Monterey County State Route 101 projects. One project, a CAPM project (EA 05-1F69U) is currently in the PS&E Design phase and is funded for construction in the 2015/2016 Fiscal Year. The project limits of this project are PM 55.2 to PM 73.8. The remaining segments of the Mon-101 Corridor will be programmed in the future as funding becomes available. There is a project (05-0E100) that will construct right turn and acceleration lane but is currently suspended. This CAPM project is compatible with the future concept of this route.

## 6. ALTERNATIVES

### 6A. CAPM strategy:

This project proposes to overlay the existing AC travel lanes and adjacent AC shoulders with a 0.20' thick layer of RHMA. Heavily distressed pavement locations on the traveled lanes and shoulders will be repaired by cold planing and replacing with a 0.33' thick dense graded HMA-Type A, followed by a 0.20' RHMA overlay. Existing PCC travel lanes containing failed PCC slab sections that show 3<sup>rd</sup> stage and corner cracking will be replaced with pre-cast from PM 82.5 to 84.0 on lanes 1 & 2 in the southbound direction. After slab replacement is completed, the entire PCC lanes will be diamond grinded to provide a smooth ride and extend the life of the pavement. AC shoulders adjacent to PCC lanes will be cold planed 0.20' before placing the 0.20' RHMA overlay. All ramps, except for Airport Boulevard ramps, will be cold planed 0.20' before placing the 0.20' RHMA overlay in order to match existing flowlines along the existing concrete gutters. AC located behind concrete will be cold planed 0.20' before placing a 0.20' RHMA overlay. Existing rumble strips along inside and outside shoulders will be replaced and where rumble is missing, new rumble strip will be added. This project does not create any deviations from design standards. No design exceptions are required for this project.

#### Life Cycle Cost analysis

No Life Cycle Cost Analysis was performed as per HQ Pavement Program.

#### Enhancements

The Design Information Bulletin (DIB) 81-01 and Traffic Operations recommended the following enhancements to be incorporated into this project:

- MGS and associated End Treatments will be reconstructed as necessary to meet current standards.
- AC Dike, where necessary, will be reconstructed to meet current standards.
- Replace existing traffic stripe, pavement markings and signs to meet current standards. See attachment L for a list of signs to be replace/upgrade.

- Place asphalt Safety Edge and shoulder backing at the Edge of Pavement where curb or dike is not present or being placed to eliminate drop-offs.
- Reconstructing existing curb ramps to meet current ADA standards.
- Replace and or add rumble strip to all inside and outside shoulders throughout project limits.
- Provide anchor block with WB connections at all bridge railing and concrete barrier locations.
- Remove concrete curb at gore points, where not being utilized for drainage.
- At the Chular NB Off-Ramp (PM 76.7), replace existing barrier with MGS.
- At the Chular Overcrossing (PM 76.98) and Route 68/101 Separation (PM 86.82), on the NB and SB shoulders, place MGS connections to Abutments and Walls, Revised Standard Plans A77U3, and buried post end anchor.
- At the NB right shoulder (PM 85.8), remove 15 feet of standalone AC dike.
- Replace/upgrade all the warning signs, within the project limits, with Type 11 Retro-reflective Sheeting.

**6B. Environmental compliance:**

The Categorical Exemption document for the California Environmental Quality Act (CEQA) was received on February 17, 2015. The National Environmental Policy Act (NEPA) Compliance will be obtained after this project is programmed and included in the Federal Transportation Improvement Program (FTIP). See Attachment D for the conditions of the environmental clearance.

**6C. Hazardous waste disposal site required? If yes, where are sites?**

No hazardous waste disposal site is required for this project.

**6D. Other agencies involved (permits/approvals from Fish and Game, Corps of Engineers, Coastal Commission, etc.):**

There is no anticipated involvement by other state or federal agencies for this project.

**6E. Material and/or disposal site need and availability?**

Not applicable for this project.

**6F. Roadside design and management:**

The project is within existing State Right of Way. Appropriate roadside management will be implemented and specification for the project will contain provisions that will ensure worker protection.

**6G. Right of way and utility issues:**

Additional Right of Way is not required. Due to the nature of the proposed work, no utility conflicts are anticipated. Potholing to identify existing utilities, maybe required during the PS&E phase. Current cost associated with potholing is \$56,250 (Attachment E).

**6H. Railroad involvement:**

There is no railroad involvement in this project.

**6I. Recycled materials:**

Not applicable to this project.

**6J. Local and regional input:**

Not applicable to this project.

**6K. What are the consequences of not doing this entire project?**

We would anticipate higher pavement preservation costs in the future in addition to unacceptable ride quality if this project is not completed.

**7. TRANSPORTATION MANAGEMENT**

**7A. Transportation Management Plan (TMP)**

This project will require a TMP to minimize and manage traffic delays during construction operations of the project. Lane closures will be necessary. Signing, including portable changeable message signs and a Public Awareness Campaign will be used to inform the public of current and upcoming construction activities. Construction Zone Enhanced Enforcement Program (COZEEP) will be used for this project.

Bike use in this location of Route 101 is a shared roadway. During construction roadway bike use will be maintained through traffic control.

**7B. Vehicle Detection Systems**

There are several vehicle detection systems on Route 101 within the post mile limits of this project. Traffic counting loops located along AC pavement should not be affected, unless they are positioned within a digout or grinding location. Pull boxes adjacent to the edge of shoulder will be replaced due to the newly placed shoulder backing.

**8. PROJECT ESTIMATE**

	<b>Lane- miles/Number</b>	<b>Estimate</b>
<b>Pavement Work</b>		
Total Lane-Miles of CAPM Work	<u>54</u>	<u>                    </u>
RHMA Pavement	<u>62,500 Tons</u>	<u>\$6,590,000</u>
Tack Coat	<u>109 Tons</u>	<u>\$86,000</u>
Cold Planing (0.2')	<u>131,760 SQ Yd</u>	<u>\$531,000</u>
Slab Replacement	<u>89,500 SQ Yd</u>	<u>\$1,704,000</u>
PCC Grinding	<u>199,000 SQYD</u>	<u>\$1,227,000</u>
Digouts	<u>LS</u>	<u>\$1,318,000</u>
AC Price Fluctuation Index	<u>LS</u>	<u>\$310,000</u>
Other (Shoulder Backing, New Dike, & Minor Concrete-Vegetation Control & Signs Replacement/Upgrade)	<u>LS</u>	<u>\$367,000</u>
	<b>COSTS SUBTOTAL</b>	<u>\$12,133,000</u>
<b>Non-pavement Work</b>		<b>Estimate</b>
<b>Does the Project Include:</b>	<b>(Yes/No)</b>	
Railroad Agreements (List work required.)	<u>No</u>	<u>                    </u>
Traffic Control	<u>Yes</u>	<u>\$170,000</u>
Rumble Strips	<u>Yes</u>	<u>\$43,000</u>
Correct Superelevation/ Cross slope Correction	<u>No</u>	<u>                    </u>
Traffic Stripes and Pavement Markings		
Paint	<u>No</u>	<u>                    </u>
Thermoplastic	<u>Yes</u>	<u>\$827,000</u>
Upgrade MBGR to MGS	<u>Yes</u>	<u>\$190,000</u>
Terminal End Sections	<u>Yes</u>	<u>\$39,000</u>
Pavement Markers	<u>Yes</u>	<u>\$18,000</u>
Loop Detectors	<u>Yes</u>	<u>\$68,000</u>
ADA Curb Ramps	<u>Yes</u>	<u>\$60,000</u>
Stormwater	<u>Yes</u>	<u>\$32,000</u>
Other (RE Office, Partnering, Supplemental Work, COZEEP, State Furnished, & Misc)	<u>Yes</u>	<u>\$293,000</u>
	<b>COSTS SUBTOTAL</b>	<u>\$1,740,000</u>
	<b>SUM OF SUBTOTALS</b>	<u>\$13,873,000</u>
	<b>15% Contingency</b>	<u>\$2,081,000</u>
	<b>TOTAL PROJECT COST</b>	<u>\$15,954,000</u>

## 9. FUNDING/PROGRAMMING

It has been determined that this project is eligible for federal-aid funding.

### Capital Outlay Support and Project Estimates

Project Cost Component	Fiscal Years				Total
	2016/17	2017/18	2018/19	2019/20	
R/W Capital	70				70
Constr. Capital			19,400		19,400
PS&E Support	2,100				2,100
R/W Support	90				90
Constr. Support			2,300		2,300
<b>Total Project Cost</b>	<b>2,260</b>		<b>21,700</b>		<b>23,960</b>

*Note: All costs X \$1,000. Support categories are the same as those identified by SB 45. Support Costs are escalated at 8.4% (15/16), 2.0% (16/17) and at 3% per year thereafter. Construction Capital escalated at 5% per year. Support Cost ratio: 23.3% (All escalated Support Costs divided by the sum of the escalated Construction Capital and escalated R/W Capital).*

## 10. SCHEDULE

Project Milestones		Scheduled Delivery Date
PROGRAM PROJECT	M015	05/02/2016
PA&ED	M200	07/01/2016
PROJECT PS&E	M377	05/03/2018
RIGHT OF WAY CERTIFICATION	M410	04/04/2018
READY TO LIST	M460	10/29/2018
AWARD	M495	04/24/2019
APPROVE CONTRACT	M500	05/08/2019
CONTRACT ACCEPTANCE	M600	07/01/2020
END PROJECT	M800	07/01/2022

Note: This project will use AADD and will not be sent to HQ until Funds Certification.

**11. RISKS**

A Risk Management Plan has been developed by the Project Team. The primary risk to this project is increase in RHMA prices. The majority of the estimate for this project is RHMA. An increase in this item could greatly increase the project cost. A summary of the risks are listed in the Risk Register (Attachment J).

**12. FHWA COORDINATION**

This project is considered to be an Assigned Project under Caltrans assumption of responsibility pursuant to 23 USC 327.

**13. PROJECT REVIEWS**

Scoping team field review Date 4/8/14  
 Scoping team field review attendance roster attached.  
 District Program Advisor Kelly McClain Date 4/8/14  
 Headquarters SHOPP Program Advisor Leo Mahserelli Date 4/8/14  
 District Maintenance \_\_\_\_\_ Date \_\_\_\_\_  
 Headquarters Design Coordinator \_\_\_\_\_ Date \_\_\_\_\_  
 Project Manager David Silberberger Date \_\_\_\_\_  
 District Environmental Kristen Merriman Date \_\_\_\_\_  
 District Safety Review Mark Ballentine Date 5/15/14  
 District Storm Water Pete Riegelhuth Date 5/22/14  
 District Traffic Operations Paul McClintic Date 5/15/14  
 Other \_\_\_\_\_ Date \_\_\_\_\_

**14. PROJECT PERSONNEL****CALTRANS PERSONNEL**

Name	Position	Phone Number
David Silberberger	Project Manager	805-549-3798
Roberto Banda	Design Senior	559-243-3526
Gilberto Baca	Project Engineer	559-243-3524
Kirsten Helton	Senior Environmental Planner	559-445-6461
Kristen Merriman	Associate Environmental Planne	559-445-6462
Marshall Garcia	Right of Way	805-549-3471

**15. ATTACHMENTS (26 pages)**

- A. Strip Map (Title Sheet)
- B. Typical Cross Sections
- C. Pavement Condition Survey Inventory Data
- D. Environmental Determination/Document
- E. Right of Way Data Sheet
- F. Scoping Team Field Review Attendance Roster
- G. Storm Water Data Report
- H. Transportation Management Plan
- I. Document Distribution List
- J. Risk Register
- K. Sign Replacement Recommendation