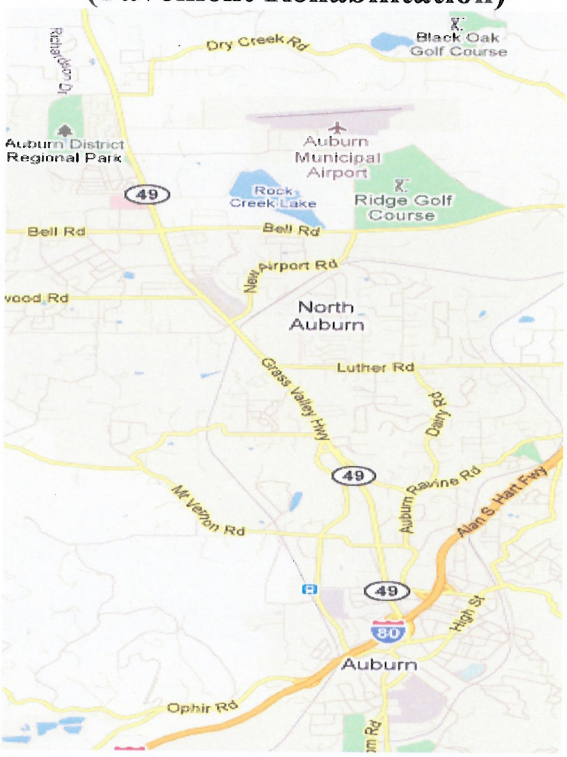
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DISTRICT 03 – DIVISION OF ENGINEERING
DESIGN BRANCH M5

03-Pla-49
PM 3.1/7.5
EA 03-2F340
EFIS 0300020616
20.10.201.120 Program
June 2011

PROJECT SCOPE SUMMARY REPORT
(Pavement Rehabilitation)



On Route 49 - In Placer County from 0.1 Miles South of Route 80/49 Separation Bridge 19-72 in Auburn to 0.1 Miles North of Dry Creek Road

I have reviewed the right of way information contained in this document and the attached R/W data sheet attached hereto, and find the data to be complete, current, and accurate.

Brenda Schimpf
BRENDA SCHIMPF, CHIEF, NORTH REGION RIGHT OF WAY

APPROVAL RECOMMENDED:

Ali Kiani
ALI KIANI, PROJECT MANAGER

APPROVED:

Jody Jones
JODY JONES, DISTRICT DIRECTOR

6/27/11
Date

03-Pla - 49
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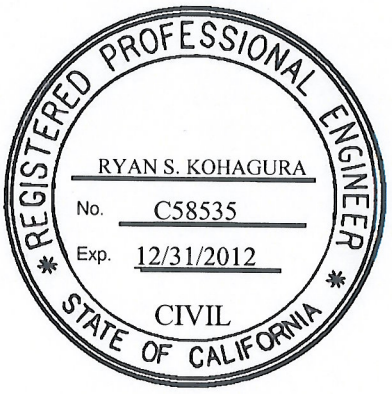
This Project Scope Summary Report has been prepared under the direction of the following Registered Engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

Ryan S Kohagura, *Registered Civil Engineer*

6/1/2011
Date



PROJECT SCOPE SUMMARY REPORT
(Pavement Rehabilitation)

1. Introduction and Background

The project is located in Placer County on Route 49 between PM 3.1 and 7.5, which is approximately 0.1 miles south of the 80/49 separation bridge (Bridge number 19-72) and 0.1 miles north of Dry Creek Road. Within the project a limit, State Highway 49 varies between a 4-lane and 6-lane divided highway separated by a two way left turn lane. The highway also contains multiple signalized intersections with left and right turn lanes.

The project scope includes:

- Cold Plane existing pavement (0.2') from edge of pavement to edge of pavement and replace with 0.2' of RHMA-G.
    - End Cold plane at the Stop Bar for the South-Western off-ramp.
    - End Cold plane at the end of the island located on the South-Eastern On-Ramp.
    - End Cold plane at the End of the Gore and add a pullout apron for the North-West On-Ramp.
    - End Cold plane at the limits of the concrete section for the North-West Off-Ramp.
- Repairing locations of severe failure identified by rutting greater than 0.5" and/or loose and spalling pavement.
- Sealing cracks wider than 0.25".
- Restriping in kind except for the following locations:
    - Increase the length of the right-turn lane on the northbound approach of Route 49 at eastbound Elm Avenue. Existing pocket starts at PM 3.39 to 3.44.
    - Increase the length of the left-turn lane on the northbound approach of Route 49 at westbound Dry Creek Road. Existing pocket starts at PM 7.34 to 7.40.
    - Luther Road (PM 5.18), Part 1: The existing east leg of Luther Road has separate lanes: #1-Left-turn (southbound), #2-Through (westbound), and #3-Right-turn (northbound). In order to improve overall operations at this intersection, restripe this leg with: #1-Left-turn (southbound), #2-Combined Left/Through (southbound & westbound), and #3-Right-turn (northbound). No widening is necessary for this improvement, but changes to signs, pavement markings, and signal operations will be required.

  - Luther Road (PM 5.186), Part 2: Remove the existing crosswalk across the southern leg of Route 49 and install a new crosswalk across the western leg of Luther Road. This will require changes to the curb ramps, signs, pedestrian push buttons, and signal operations. Both of these changes were requested by Caltrans Signal Operations Engineers, who will assist the Electrical Design Branch as needed.
- Widen the existing eastern shoulder from Edgewood (PM 4.65) to Ivy Lane (PM 4.78) from approximately 4 feet to 8 feet.
- Remove existing unpaved western shoulder between Edgewood (PM 4.63) and Nevada Street (PM 4.60) and add a right turn lane and 4 foot shoulder.
- Widen the existing western shoulder into a south-bound right turn lane and 4 foot shoulder from Nevada Way (PM 4.57) to Nevada Street (4.52).
- Widen the existing western shoulder into a south-bound right turn lane and 4-foot shoulder from Fulweiler Avenue (PM 3.28) to the Route 80 on-ramp (PM 3.23) for the south-bound traffic.
- Widen the existing western shoulder into a south-bound right-turn lane and four foot shoulder from Palm Avenue (PM 3.74) to the existing school driveway (PM 3.56). This will separate school traffic from the south-bound traffic.
- Bring all existing curb ramps within project limits to current standard and install all missing curb ramps per DIB 81-01.

  It is also recommended that the project use surface applied thermoplastic traffic stripes and pavement markings, raised retroreflective pavement markers and Class 1 delineators.

2. Recommendation

It is recommended that the PID PSSR be approved and proceed to the next phase.

3. Purpose and Need Statement

The pavement within the project limits is exhibiting need for resurfacing with signs of pumping. This project proposes to rehabilitate the existing pavement, restore ride quality and upgrade operational improvement of this segment of Route 49.

4. EXISTING FACILITY, DEFICIENCIES AND TRAFFIC DATA

State Highway 49 within the project limits is mainly a 4-lane highway separated by a two way left turn lane with multiple signalized intersections. Between post mile

5.18 and post mile 6.35, State Highway 49 becomes a 6-lane highway separated by a two way left turn lane.

4A. ROADWAY GEOMETRIC INFORMATION

Location	No. of Lanes	Through Traffic Lanes		Shoulder		Median Width
		Lane Width	Pavement Type	Left	Right	
PM 3.1 to 3.37	4	12'	AC	8'	8'	12'
PM 3.37 to 3.43	4	12'	AC	4'	4'	15'
PM 3.43 to 5.18	4	12'	AC	4'	4'	12'
PM 5.18 to 6.35	6	12'	AC	4'	4'	12'
PM 6.35 to 7.50	4	12'	AC	8'	8'	12'

4B. CONDITION OF EXISITNG FACILITY

See the Attachment for the 2008 Pavement Summary for Route 49 in Placer County from post mile 2.72 to 7.69.

4C. Structures Information

There are two structures within the project limits. The existing vertical clearance under each structure will remain the same since the project will cold plane the existing pavement surface under each structure.

Structure Name	Bridge Number	Post Mile	Route Over/Under Structure	Existing Vertical Clearance
Route 80/49 Separation	19-0072	3.21	Under	16'-11"
W80 & 49 Connector	19-0157E	3.25	Over	N/A
Auburn Ravine	19-0155	3.33	Over	N/A
Wise Canal	19-0017	5.02	Over	N/A
North Auburn UP	19-0068	5.53	Under	15'-00"
Rock Creek	19-0019	6.93	Over	N/A

4D. Vehicle Traffic Data

The traffic data for this portion of Route 49 is listed in the table below.

County		Placer
Highway		49
Post Mile		3.1/7.5
Annual ADT		
Base Year	2009	50,000
	2015	54,500
	2025	62,000
	2035	69,500
Peak Hour		
Base Year	2009	5,800
	2015	6,320
	2025	7,190
	2035	8,060
Directional %		57
DH Truck %		2.0
10-year TI		9.5
20-year TI		10.0

The latest collision rate for Route 49 from January 1, 2007 to December 31, 2009 is listed below.

County	Route	Beg PM	End PM	Tot	Fat	Inj	F+I	Actual			Average		
								Fat	F&I	Total	Fat	F+I	Total
Placer	049	3.10	7.50	443	3	163	166	0.016	0.90	2.40	0.014	0.46	1.19

During the three-year period there were 443 collisions within the project limits resulting in 163 injuries and one fatality. The primary factors for collisions are speeding (59.8%), other violations (16.7%), failure to yield (11.1%), alcohol (4.1%), improper turn (3.2%), and follow too close (2.5%). Most of the collisions occurred during the day (82.6%) and under clear (77.4%) weather conditions. Rear end collisions (66.1%) accounted for the majority of the collision.

The project proposes to add 4 right turn lanes at several heavily congested locations and lengthen the left turn pocket near Dry Creek Road to help reduce the number of collisions within the project limits.

The District Traffic Safety Branch reviewed the project and sent the following statement on April 4, 2011 "There are no Traffic Safety issues in this area. The main

contributing factor in the majority of collisions in this area is congestion, and there are no feasible alternatives for improvement."

5. Corridor and System Coordination

There are several projects listed in the North Region Workplan Status document in the vicinity of this project.

03-0E960– This project proposes to realign Route 49 from Pleasant Valley Road to Bradley Drive (Post Mile 11.7/12.4) RTL is scheduled for April 2012 and CCA is projected to be completed on September 1, 2013.

03-4E970– This project proposes to widen the inside curve on Route 49 at Post Mile 0.90. RTL is scheduled for September 2011 and CCA is projected to be completed on December 1, 2012.

03-3M930– This project proposes to replace the asphalt surface on Route 49 from Post Mile 3.1 to 7.6. RTL is scheduled for January 15, 2012 and CCA is projected to be completed on June 1, 2013.

6A. Rehabilitation Strategy

The pavement preservation strategy is to cold plane the existing pavement a depth of 0.2' and replace with 0.2' of RHMA-G. The project will also repair locations of severe failure identified by rutting greater than 0.5" and/or loose and spalling pavement and sealing cracks wider than 0.25". A deflection study will be required during the design phase of this project.

6B. Environmental Compliance

A Mini-Preliminary Environmental Analysis Report (PEAR) was prepared for this project (see Attachment). It is anticipated a Categorical Exemption and Categorical Exclusion will apply to this project. It will take approximately 12 months to complete the environmental process.

6C. Hazardous Waste

An Initial Site Assessment was prepared for this project. The potential for hazardous waste exists within the project limits. The following contaminants have been identified: Aerially Deposited Lead (ADL), Naturally Occurring Asbestos

(NOA), and lead and chromium in the yellow color traffic stripes. A Site Investigation will be required for this project.

6D. Other Agencies Involved (Permits/Approvals from Fish & Games, etc.)

No permits are expected for this project.

6E. Highway Planting and Irrigation

Highway planting is not warranted for this project. The Route is not designated as a scenic highway and there are no foreseen issues with highway aesthetics at this time.

6F. Stormwater Compliance

In a March 3, 2011 meeting with Heath Hathway (Storm Water Coordinator), it was determined that due to the scope of the project a SWDR was not needed for the PID phase. Soil disturbance would be minimal for this pavement rehabilitation project and would require only construction BMPs. A SWDR will be done for the PA&ED phase.

6G. Right of Way Issues

A Right of Way Data Sheet was prepared for this project. All work is expected to be performed within the State right of way and no utility relocation is anticipated.

6H. Staging Area

The contractor will be required to arrange for construction storage areas in close proximity to the project site and be responsible for obtaining any relevant permits and approvals for the use of any staging areas.

6I. Consequences of Not Doing this Project

The condition of the pavement will continue to deteriorate, which will result in higher operational and maintenance cost and increase the need for major rehabilitation.

7A. TMP

A Traffic Management Plan (TMP) Datasheet was created for this project to outline the traffic impacts and the appropriate mitigation measures that will be implemented. See the Attachment.

7B. Vehicle Detection Systems

This project proposes to replace the traffic management loop detectors at the existing locations if they are damaged during pavement rehabilitation operations.

8A. Project Cost Estimate

The project construction cost is estimated to be $17,320,000 as of June 2011 (see Attachment). New right of way or utility relocation is not anticipated.

8B. Project Support Costs

The project is programmed in and funded out of the SHOPP 201.120 program. See the attachments for the project support costs.

8C. Project Schedule

Approval PID	M010	06/27/2011
PA & ED	M200	08/01/2013
PS&E to DOE	M377	03/01/2014
Project PS&E	M380	05/01/2014
R/W Certification	M410	05/01/2014
Ready to List (RTL)	M460	07/01/2014
Approve Construction Contract	M500	01/15/2015
Contract Acceptance (CCA)	M600	11/15/2015
End Project	M800	11/15/2017

10. Other Considerations

Materials and/or Disposal Site Needs and Availability

Surplus material or grindings generated by this project will become the property and responsibility of the contractor. The Asphalt grinding material shall be handled and disposed of in accordance with all local, state and federal law.

Salvaging and Recycling of Hardware and other Non-Renewable Resources

The contractor should salvage and recycle hardware when that option is available. The Caltrans area maintenance supervisor should have the option of selecting salvage and recycled material for their use.

Drainage

There will be no work performed that will alter existing drainage patterns or result in an increase in runoff. There will be no impact on and therefore no modifications required to existing storm-water runoff conveyance facilities. The project will not change existing drainage profiles, flow paths, create new slopes, change runoff channels or drains. All work will occur within the existing roadway prism and State right of way. The proposed project work will have no effect on the drainage flow quantities, flow patterns and existing drainage culvert systems. The nature of this project is such that the components of a Drainage Report do not apply.

The encroachment of runoff into the travel way along the north-bound lanes near the Edgewood location and the water pumping issues in the south bound number 2 lane at PM 4.0 just north of the Funeral home driveway should be considered in the next phase.

Design Exceptions

Mandatory and Advisory Design Exception fact sheets will be required for geometric design features during the PA&ED phase of this 3R project per DIB 79-3.

12. Project Development Team Roster

Mastri Alvandi	Design Senior	530-741-4593
Ryan Kohagura	Project Engineer	530-741-5110
Tam Cao	Transportation Engineer	530-741-5107
Ali Kiani	Project Manager	530-741-4587
Rex Hervey	Program Advisor	530-741-4119
Tim Ellison	Construction Engineer	530-741-4126
Crystal Ortiz	Right of Way	530-740-4908
Gary Dossey	Traffic Safety	530-926-5722
Rick Montre	Traffic Operation	530-741-5745
Marty Earles	Traffic Operation	530-741-5744

13. List of Attachments

A Title Sheet and Typical Cross Section
B Traffic Data and Designation Request
C TASAS Table B
D Preliminary Cost Estimate
E Right of Way Data Sheet
F Environmental Document
G TMP Data Sheet
H Programming Sheet and Project Support Cost
I Landscape Architecture Assessment Sheet
J Pavement Summary
K Initial Site Assessment
L Preliminary Structural Section Recommendation