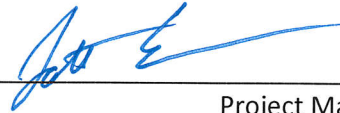


## PROJECT STUDY REPORT LOCAL REHABILITATION

Responsible Agency: City of Eureka  
Project Name: Hawthorne, Felt, and Fourteenth Streets Rehabilitation

APPROVAL RECOMMENDED:



Project Manager

APPROVED:



City Engineer

12.13.2017

Date

### Transportation Problem

Weathering, aging, and loading have led to structurally deficient asphalt and poor ride-ability. Routine maintenance is no longer adequate to preserve or extend the pavement life.

### Location

The project is located in the City of Eureka on Hawthorne, Felt, and Fourteenth Streets. Hawthorne and Felt Streets join together and carry traffic between the State Highway (Broadway) and Del Norte (0.32 miles) which services the waste management/recycling facility. The project limits on Fourteenth Street are from "M" Street to West Avenue (0.45 miles). Net road mileage is 0.77 miles. See attached vicinity map.

### Project Scope/ Pavement Rehabilitation

The proposed project includes removal and replacement of failed surface asphalt and/or subsurface material and hot mix asphalt overlay. Overlay thickness will be determined by study of existing subgrade, surface condition, and traffic loading. Sidewalks will be repaired and/or replaced in compliance with ADA standards, filling sidewalk gaps when possible, including truncated dome mats being installed at intersection curb returns. Class III bike route signage and markings will be considered for 14<sup>th</sup> Street per the City's bike plan. This work is expected to extend the service life for at least fifteen to twenty years. The consequence of not doing the project is further deterioration of the roadway which will lead to a much higher cost requiring future reconstruction.

### Functional Classification/Traffic Data

Hawthorne Street is a two lane, two way street, classified as an urban local street, with an average daily traffic volume of 1,134 vehicles, with 20% trucks. Hawthorne Street is 44' wide with parking on both sides, left turn median striping, and sidewalk on the south side. Felt Street is a two lane, two way street, classified as an urban local street, with an average daily traffic volume of 722 vehicles. Felt Street is 34' wide with parking on both sides, and sidewalk on the west side. These streets are located in an industrial zone, are linked, and connect to State Highway 101. The City's transfer station and recycling facility are located on Hawthorne Street.

Fourteenth Street is a two lane, two way street, is 40' wide with parking on both sides with intermittent sidewalk on each side. 14<sup>th</sup> Street is classified as an urban minor arterial, with an average daily traffic volume of 4,000 vehicles. This section of 14<sup>th</sup> Street is zoned single family residential, is a major

east/west route through Eureka, and is recommended for a Class III bike route in the City's Bicycle Transportation Plan Update 2012.

**Environmental Status/ Roadway Geometrics**

Due to the scope of work being primarily asphalt paving, with minimal subsurface excavation, and all work being within the City's right-of-way in the previously disturbed roadway prism, this project is expected to be categorically exempt from the environmental clearance process. Construction will occur during dry summer months, the project will not change the existing geometrics, so there will be no increase in capacity for any of the streets, and this project does not include any bridge rehabilitation.

**Condition of Existing Facility**

The City of Eureka maintains a pavement management program, StreetSaver, which contains the pavement condition index (PCI) for all city streets. This program was implemented through HCAOG to help prioritize the pavement needs of the region to maximize the efficient use of limited resources available. PCI's per StreetSaver (as determined in 2017) for the roadway segments proposed are as listed:

Roadway Section	PCI
Hawthorne Street (Broadway to Felt)	5
Felt Street (Hawthorne to Del Norte)	20
Fourteen Street ("M" to West Ave)	29

Pavement Condition	PCI Category
Good to Excellent	71 - 100
Fair	51 - 70
Poor	26 - 50
Very Poor/Failed	0 - 25

**Cost Estimate Breakdown**

Work Description	Unit	Quantity	Unit Price	Total
Mobilization	LS	1	\$25,000.00	\$25,000
Traffic Control	LS	1	\$25,000.00	\$25,000
AC Overlay	TON	1,800	\$130.00	\$234,000
Remove & replace localized failed areas	SY	7,175	\$30.00	\$215,000
Concrete sidewalk replacement	SF	2,275	\$22.00	\$50,050
Thermoplastic striping	LF	4,100	\$2.00	\$8,200
Thermoplastic marking	SF	500	\$5.00	\$2,500
Truncated dome mats	EA	24	\$500.00	\$12,000
Adjust manhole cover to grade	EA	5	\$600.00	\$3,000
Adjust water valve cover to grade	EA	18	\$500.00	\$9,000
SUBTOTAL				\$584,000
Contingency				\$66,000
TOTAL CONSTRUCTION COST				\$650,000

**Scheduling**

Project Component	Start Date	Estimated Completion
Environmental Signoff	August 2018	February 2019
Plans, Specifications, and Estimate	August 2018	February 2019
Construction	February 2019	October 2019

**Other Agencies**

No permits or approvals should be required.

**Proposed Funding**

	Local Commitment*	STIP Request†	Total
Environmental	\$1,000		\$1,000
Plans, Specifications, and Estimate	\$15,000		\$15,000
Construction		\$584,000	\$584,000
Contingencies and Supplemental Work		\$66,000	\$66,000
Total		\$650,000	\$666,000

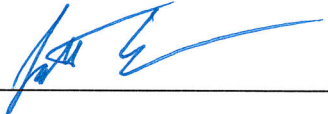
\*Gas tax and general fund

†State-only funding

**Attachments**

A. Vicinity Map

**Report Preparation**

Prepared by  Date 12/13/2017

This Project Study Report (Local Rehabilitation) 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.

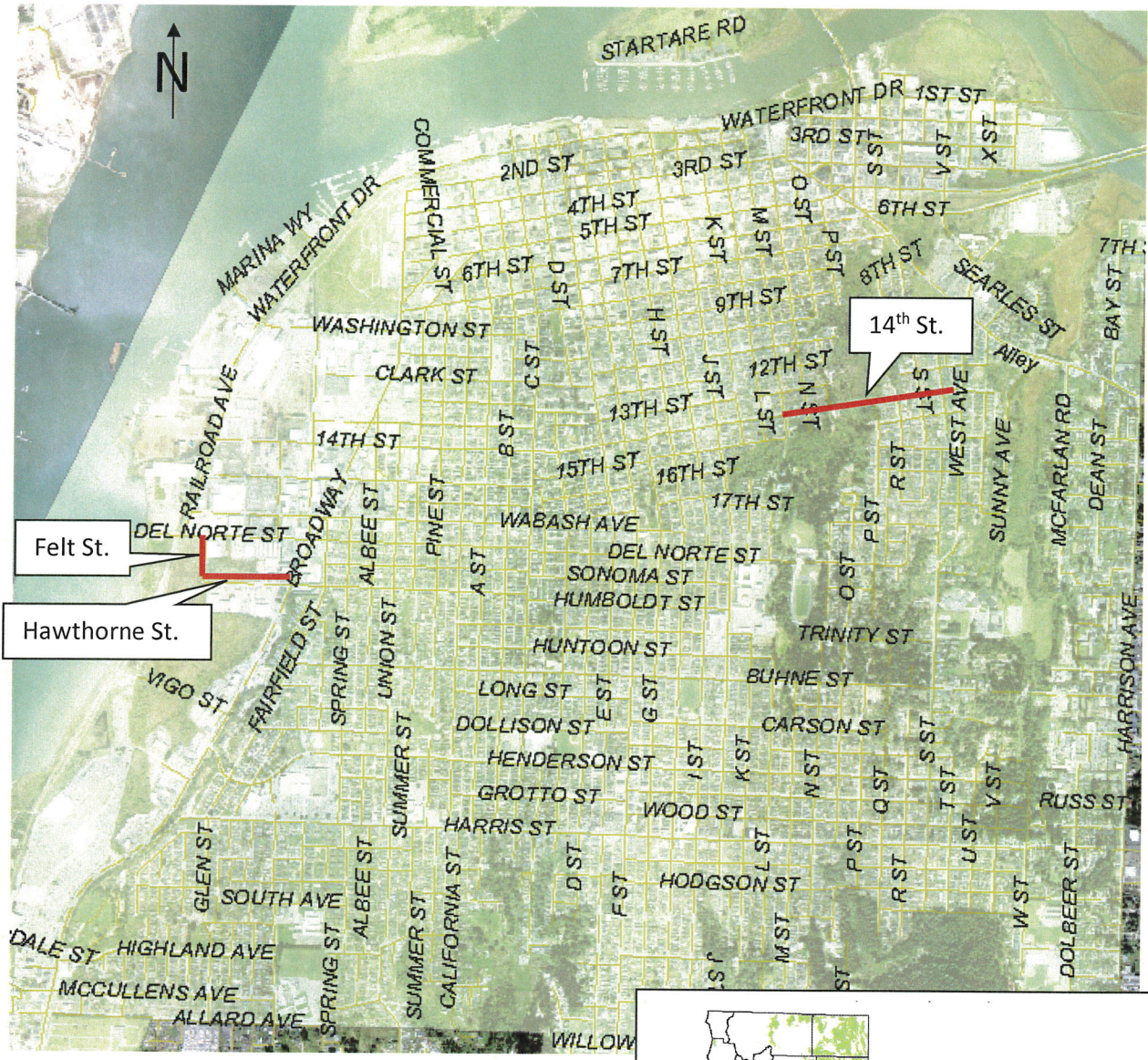
  
Registered Civil Engineer

12.13.2017  
Date



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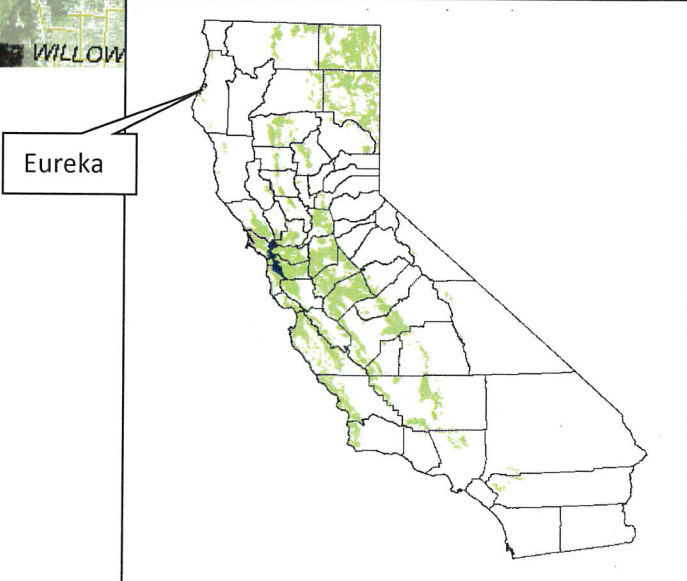
# Hawthorne, Felt, and Fourteenth Streets Rehabilitation



Felt St.

Hawthorne St.

14th St.



Project Location Map