HCAOG
2022 REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP) – PROJECT CANDIDATE FORM

RTIP programming background:
If the project is on a State Highway, a Project Study Report (PSR) is required. If not, a PSR equivalent is required. The PSR equivalent at a minimum must be adequate to define and justify the project scope, cost and schedule. The PSR or PSR equivalent must be submitted with this programming request.

PSR equivalent is attached

Applicant Agency:

County of Humboldt

Project Title:

Surface Rehabilitation on Redwood Drive (6B105).

Project Purpose: What transportation deficiency will this project address (safety, congestion, operations, plan implementation, etc.)? If a safety project, will the project reduce fatalities or number and severity of injuries?

Redwood Drive in Garberville is subject to premature failure due to the unstable subgrade, high ADT, and high truck use.

Redwood Drive has the highest average daily traffic load in Southern Humboldt. Current counts in the reach addressed by this project study report are approximately 9,800 vehicles per day.

An average of 5 accidents occurs annually on this stretch of road, making it one of the higher accident zones in the County road system.

The County has completed improvements on other nearby sections of Redwood Drive including a bridge project over Bear Gulch which replaced a narrow, functionally obsolete concrete arch bridge with a wider bridge and capable of handling the growth of motorist, pedestrian and bicyclist usage. The Garberville portion of Redwood Drive is characterized by pedestrian and vehicular congestion, deteriorating roadway surface, insufficient pedestrian facilities, higher speeds due to on/off ramps, and a budding business hub for much of the greater southern Humboldt area.

Project Location (community name, corridor, street name, etc.):

Redwood Drive (6B105) from the southerly terminus (Post Mile 0.00) at SH101 to the SH101 on-ramp at the north end of Garberville (Post Mile 0.50).

Project Description:

This project consists of the preliminary engineering, environmental documentation, right of way, plans, specifications, and estimate, and construction of pavement repair on Redwood Drive from the southerly terminus (Post Mile 0.00) at SH101 to the SH101 on-ramp at the north end of Garberville (Post Mile 0.50). This Project Study Report (PSR) establishes the schedule and budget for the preliminary design, project development, environmental documentation, and right of way, and construction needed to rehabilitate the asphalt surfacing of Redwood Drive in the growing community of Garberville.

Is the project in the 2017 RTP?

Yes.

Are you requesting State only funding?

Yes.

If a rehabilitation project, is it located on a federal-aid eligible road (higher than a local or minor collector road? Link to Caltrans maps: http://www.dot.ca.gov/hq/tsip/hseb/crs_maps

Yes.

Provide Project Component funding needs:

Project Component	Cost Estimate	STIP Funding Request	Other fund contribution	Allocation Schedule
Environmental Studies & Permits	$5,000	$5,000	$	04/01/2024
Plans, Specifications & Estimates	$28,000	$28,000	$	09/01/2024
Right of Way	$5,000	$5,000	$	10/01/2024
Construction & CM	$803,000	$803,000	$	04/01/2025
Total	$841,000	$841,000	$	

Please describe any other relevant information about this project you feel will be useful in project selection. Additional attachments (i.e. maps, photos) may also be included with the submittal.

Project Study Report (PSR)

To

Request Programming for Capital Support Project Approval, Environmental Document, Right of Way, PS&E, and Construction in the 2021 STIP

On Route: Redwood Drive (6B105)
Between PM 0.00 to 0.50 (Garberville)

APPROVAL RECOMMENDED:

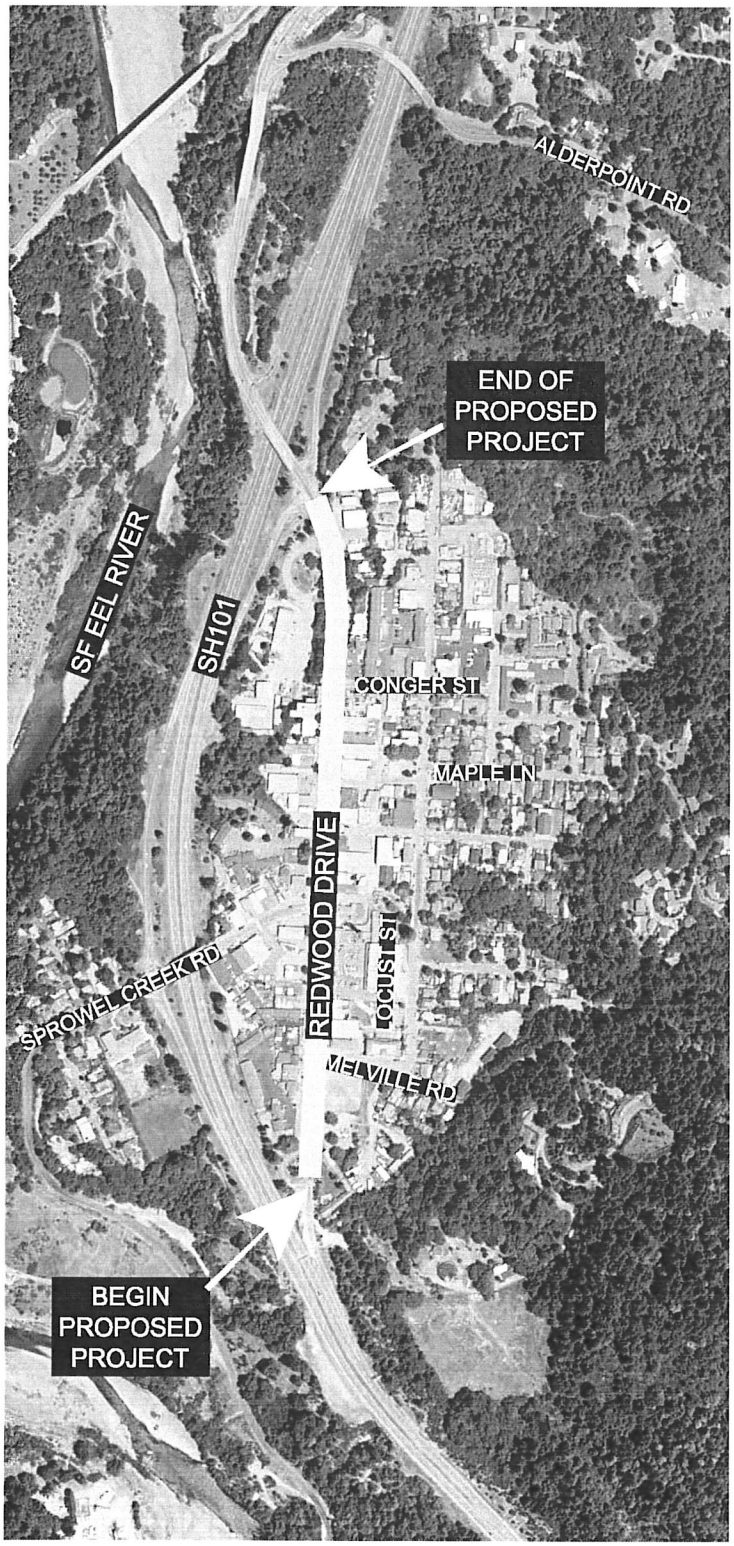
Tony Seghetti
Project Manager

APPROVED:

Public Works Director

9/15/21
Date

Vicinity Map



This project study report-project development support 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.

Tony Seghetti — 9/15/2021

Registered Civil Engineer — *Date*

1. INTRODUCTION

This project consists of the preliminary engineering, environmental documentation, right of way, plans, specifications, and estimate, and construction of pavement repair on Redwood Drive from the southerly terminus (Post Mile 0.00) at SH101 to the SH101 on-ramp at the north end of Garberville (Post Mile 0.50). This Project Study Report (PSR) establishes the schedule and budget for the preliminary design, project development, and environmental studies needed to address the growing community of Garberville.

This PSR seeks state funding through the RTIP program.

2. BACKGROUND

Redwood Drive is the old Highway 101 corridor. Highway usage was discontinued in the 1960's when the freeway alignment was constructed on an alternate alignment. The community of Garberville has grown, and the use of Redwood Drive has become congested with all modes of users. The Complete Streets Act requires that California cities and counties adopt transportation plans that accommodate all users of roadways including pedestrians, public transit, bicyclists, the elderly, motorists, and the disabled. The aim of the Garberville project is to repair the roadway which will complement other proposed projects such as the complete streets and ADA long term plans.

3. PURPOSE AND NEED

Redwood Drive in Garberville is subject oo premature failure due to the unstable subgrade, high ADT, and the truck use.

Redwood Drive has the highest average daily traffic load in Southern Humboldt. Current counts in the reach addressed by this project study report are approximately 9,800 vehicles per day.

An average of 5 accidents occurs annually on this stretch of road, making it one of the higher accident zones in the County road system.

The County has completed improvements on all other sections of Redwood Drive including a bridge project over Bear Gulch which replaced a narrow, functionally obsolete concrete arch bridge with a wider bridge and capable of handling the growth of motorist, pedestrian and bicyclist usage. The Garberville portion of Redwood Drive is characterized by pedestrian and vehicular congestion, deteriorating roadway surface, insufficient pedestrian facilities, higher speeds due to on/off ramps, and a budding business hub for much of the greater southern Humboldt area.

4. TRAFFIC ENGINEERING PERFORMANCE ASSESSMENT

Collision Analysis:

Collision summary – SWITRS (Attachment 3)

ADT of 9850 on September 9th, 2011, at Post Mile 0.48 (Attachment 4).

Peak Period (Hourly) of 907 Veh/Hour at 15:01-16:00, September 9th, 2011, at Post Mile 0.48 (Attachment 4)

5. DEFICIENCIES

Lane striping is worn out and does not meet current standards. Northbound and southbound travel lanes have several areas with failed surfacing.

6. CORRIDOR AND SYSTEM COORDINATION

Coordination with road users, commuters and emergency vehicles is necessary. Public notifications through various medias, including radio, local newspapers, county website, and changeable message signs will be implemented once the project is advertised and awarded for construction.

7. ALTERNATIVES

The project development phase will consider the complete streets objectives and develop alternatives, but the main purpose will be to provide much needed repairs to the asphalt surfacing of the travelled lanes.

8. RIGHT-OF-WAY

Permanent and temporary easements will not be required for staging or stockpiling. All work will be within existing right of way.

Utilities such as water valves, gas valves, and communication vaults do not need to be adjusted to final grade since this project does not change the grade of the roadway.

9. STAKEHOLDER INVOLVEMENT

GCSD is the owner of the water system and sewer system that runs within the county right of way with several valves and other related facilities. PG&E has underground gas system with valves and other underground facilities. Communication corridor, companies such as SuddenLink and AT&T have underground and above ground fiber optics. Public road is used by commuters and emergency vehicles. County DPW roadway maintenance.

10. ENVIRONMENTAL COMPLIANCE

The proposed project is in urbanized area so impacts to the environment will be limited. The proposed project does not increase the motorist capacity of the roadway.

Environmental documents will be prepared in compliance with the California Environmental Quality Act (CEQA). Preliminary indications are that this project would qualify for Categorical Exemption, but contingencies are in place to prepare

Initial Study documentation as necessary. Public meetings and public input will be recorded and included in environmental documentation.

11. FUNDING

This project seeks state only funding. The following is a summary of the estimate of project costs:

Environmental Studies	$ 5,000
Design (PS&E) Phase	$ 28,000
Right of Way	$ 5,000
Construction Phase	$ 803,000
Requested Allocation Total	**$ 841,000**

12. DELIVERY SCHEDULE

This proposal seeks sufficient **state-only** funds to cover the project costs. The following is a tentative milestone schedule for the completion of the design phase project:

Project Study Report Approved			12/31/21
Environmental Document	**Document Type**	CE	04/01/24
Design (PS&E) Complete			09/01/24
Right of Way Clearance			10/01/24
Construction			04/01/25

13. RISKS

Low Risk since the project complies with current standards.

14. EXTERNAL AGENCY COORDINATION

California Department of Transportation

15. PROJECT REVIEWS

Maintenance _____ Freshwater PW Date _____
Project Manager _____ Engineering PW Date _____
Constructability Review _____ Construction PW Date _____

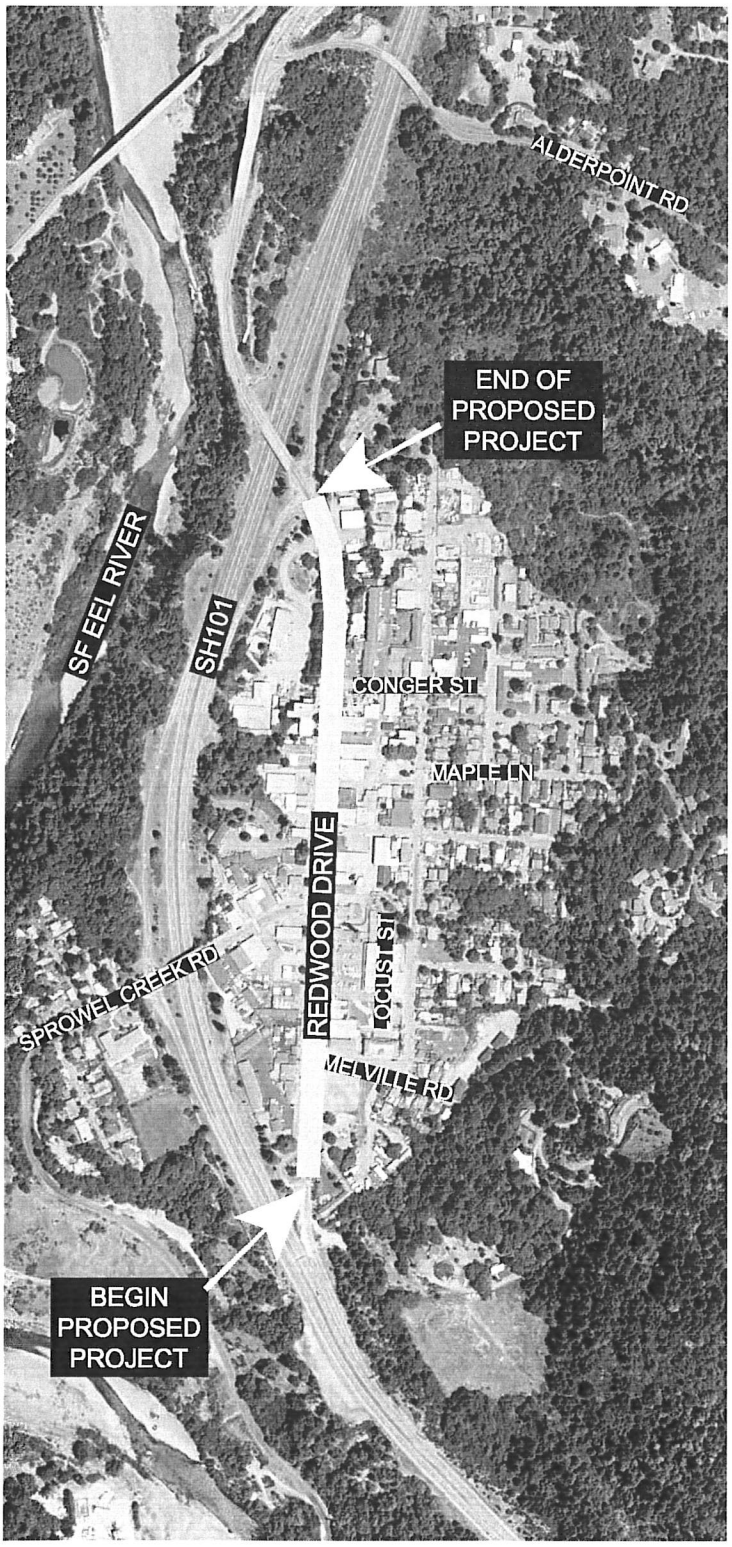
16. PROJECT PERSONNEL

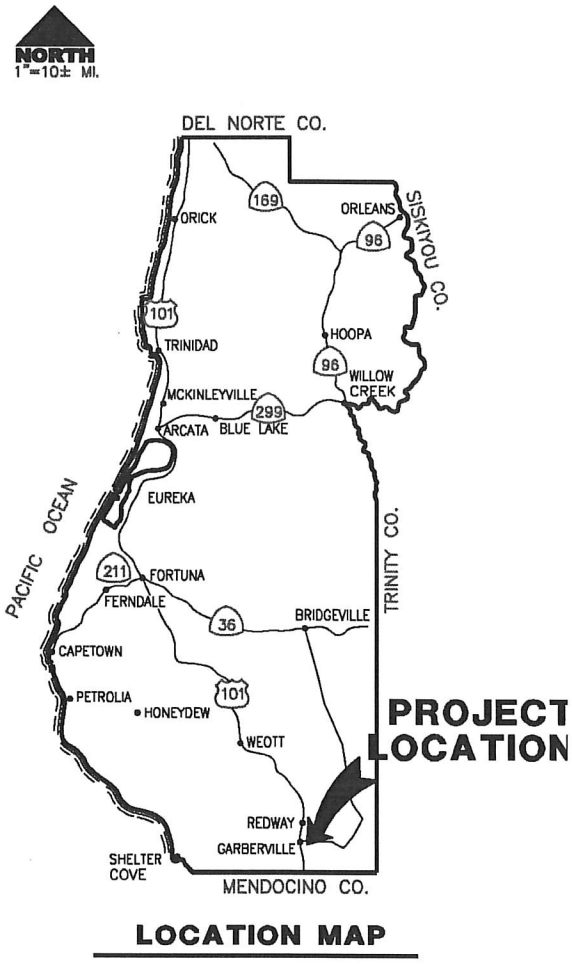
Agency:	Humboldt County Department of Public Works
Contact Person:	Tony Seghetti
Phone No.:	(707) 445-7377
Address:	1106 Second Street Eureka, CA 95501

17. ATTACHMENTS (NUMBER OF PAGES)

Attachment 1	Project Location Map (1)
Attachment 2	Cost Estimate (1)
Attachment 3	SWITRS Collision Mapping (2)
Attachment 4	Traffic Counts (1)

ATTACHMENT 1 PROJECT LOCATION MAP





LOCATION MAP

ATTACHMENT 2 COST ESTIMATE

HUMBOLDT COUNTY ~~ DEPARTMENT OF PUBLIC WORKS

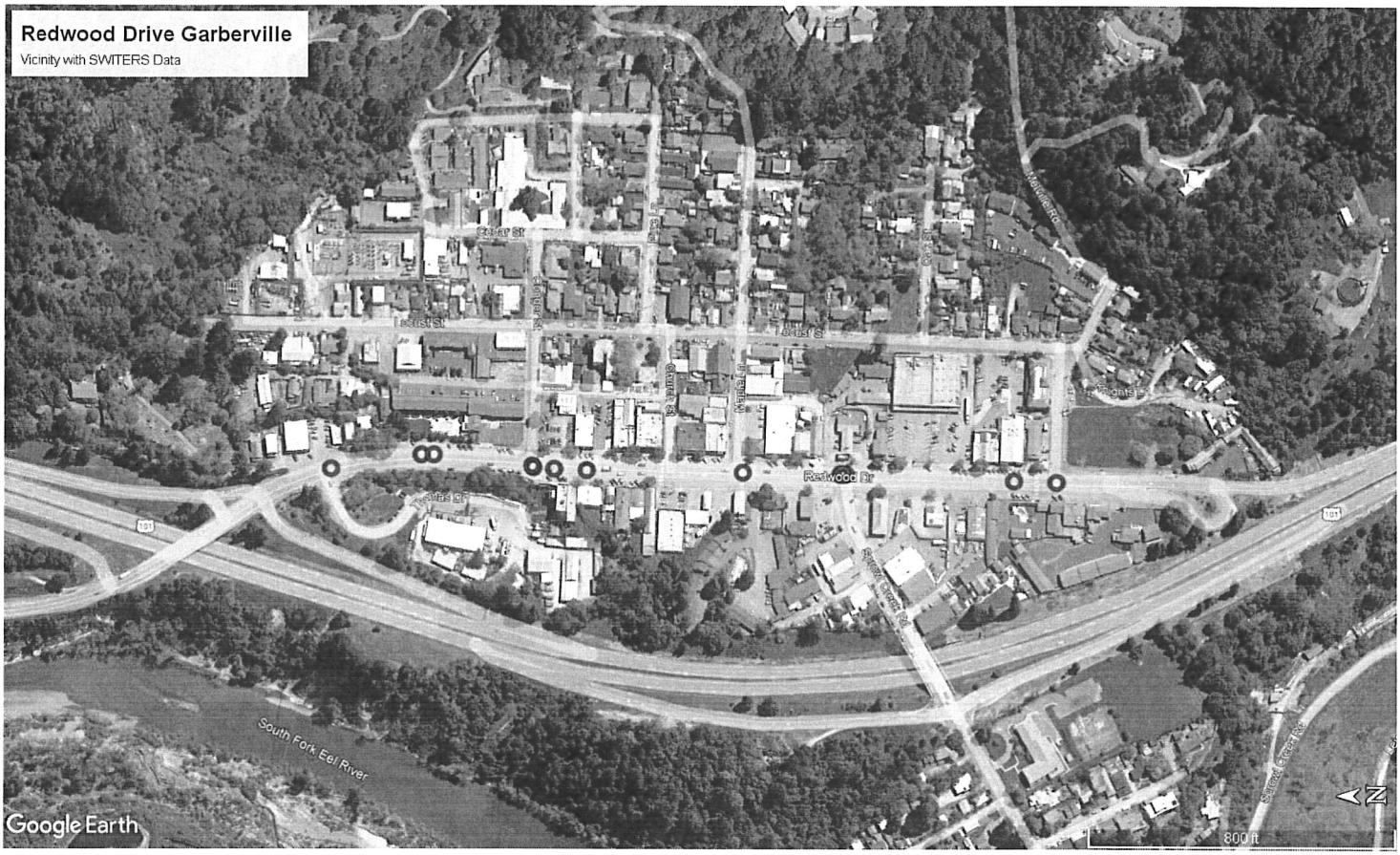
2021 PSR PROJECT ESTIMATE OF COST

Project No. RTIP PSR 2021 Date: 09/14/21
Description: Redwood Drive (6B105) - Garberville By: JAB
Contract No. NA Check:

ITEM NO.	ITEM CODE	F/P	ITEM DESCRIPTION	UNIT PAY	QUANTITY	UNIT PRICE	TOTAL
1	120090		CONSTRUCTION AREA SIGNS	LS	1	$ 10,000.00	$ 10,000
2	120100		TRAFFIC CONTROL SYSTEM	LS	1	$ 40,000.00	$ 40,000
3	130100		JOB SITE MANAGEMENT	LS	1	$ 5,000.00	$ 5,000
4	130200		PREPARE WATER POLLUTION CONTROL PROGRAM	LS	1	$ 2,000.00	$ 2,000
5	390132		HOT MIX ASPHALT (TYPE A)	TON	1,320	$ 250.00	$ 330,000
6	398200		COLD PLANE ASPHALT CONCRETE PAVEMENT	SQYD	7,800	$ 40.00	$ 312,000
7	840501		THERMOPLASTIC TRAFFIC STRIPE	LF	2,500	$ 5.00	$ 12,500
8	840515		THERMOPLASTIC PAVEMENT MARKING	SQFT	990	$ 15.00	$ 14,850
9	810230		PAVEMENT MARKER (RETROREFLECTIVE)	EA	5	$ 100.00	$ 500
10	999990		MOBILIZATION	LS	1	$ 38,150.00	$ 38,150

Construction	$ 765,000
PE (5%)	$ 38,000
CM(5%)	$ 38,000
Total	**$ 841,000**

ATTACHMENT 3 SWITRS COLLISION MAPPING



COLLISION DATA

COLLISION_DATE	PRIMARY_RD	SECONDARY_RD	DISTANCE	COLLISION_SEVERITY	NUMBER_KILLED	NUMBER_INJURED	TYPE_OF_COLLISION	LATITUDE	LONGITUDE
4/3/2009	REDWOOD DR	CONGER ST	145	2	0	1	G	40.1011	-123.79495
11/18/2009	REDWOOD DR	CONGER ST	0	3	0	1	G		
3/31/2012	REDWOOD DR	CONGER ST	6	3	0	1	G		
3/30/2012	REDWOOD DR	MELVILLE RD	8	3	0	1	F		
9/10/2012	REDWOOD DR	BEAR CREEK RD	272	3	0	1	C		
3/11/2013	REDWOOD DR	BEAR CREEK RD	228	3	0	1	C	40.10234	-123.79471
2/1/2013	REDWOOD DR	CONGER ST	60	4	0	1	C		
10/21/2014	REDWOOD DR	BEAR CREEK RD	0	3	0	1	G	40.10324	-123.7949
1/18/2017	REDWOOD DR	MAPLE LANE	6	3	0	1	G	40.10003	-123.79505
4/30/2017	REDWOOD DR	SPROWEL CREEK ROAD	0	3	0	1	E	40.09922	-123.79522
10/21/2017	REDWOOD DR	SPROWEL CREEK ROAD	9	3	0	1	G	40.09931	-123.79501
10/31/2018	REDWOOD DR	MELVILLE RD	120	3	0	1	D	40.0982399	-123.7951736
6/11/2019	REDWOOD DR	SPROWEL CREEK ROAD	15	4	0	1	C	40.09952164	-123.79496

ATTACHMENT 4 TRAFFIC COUNTS

Weekly Volumes

Unit ID: HUMBOLT COUNTY

Location: Redwood dr. # 6B105 pm. 0.48

Week of 09/07/2011

Start Time	09/07 Wednesday		09/08 Thursday		09/09 Friday		09/10 Saturday		09/11 Sunday		09/12 Monday		09/13 Tuesday		Daily Average	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
00:00	-	-	0	0	12	11	33	27	27	60	14	12	14	11	17	20
01:00	-	-	0	0	5	12	23	8	18	20	8	5	8	5	10	8
02:00	-	-	0	0	12	11	11	18	15	16	6	6	7	4	9	9
03:00	-	-	0	0	11	14	10	1	4	2	9	4	15	12	8	6
04:00	-	-	0	0	14	12	7	3	3	4	2	11	5	9	5	7
05:00	-	-	0	0	11	17	12	11	9	7	23	18	16	32	12	14
06:00	-	-	0	0	60	90	27	44	13	29	56	58	67	64	37	48
07:00	-	-	112	112	140	178	88	94	63	74	132	143	132	166	111	128
08:00	-	-	255	327	255	298	142	155	99	86	246	286	109	114	184	211
09:00	-	-	302	361	274	366	208	228	132	166	289	358	-	-	241	296
10:00	-	-	297	315	339	413	266	300	210	219	333	361	-	-	289	322
11:00	-	-	355	383	390	416	267	310	208	287	348	400	-	-	314	359
12:00	-	-	388	418	403	403	276	307	242	291	363	424	-	-	334	369
13:00	-	-	398	421	427	442	281	262	222	265	424	391	-	-	350	356
14:00	-	-	415	413	414	417	279	257	221	254	398	416	-	-	345	351
15:00	-	-	406	430	452	451	227	240	236	251	415	408	-	-	347	356
16:00	0	0	399	338	433	380	234	273	213	228	390	337	-	-	278	259
17:00	0	0	359	333	357	325	225	232	157	161	369	317	-	-	245	228
18:00	0	0	276	247	282	239	211	190	150	190	216	196	-	-	189	177
19:00	0	0	174	192	188	182	174	187	144	138	158	157	-	-	140	143
20:00	0	0	131	149	133	153	145	119	92	114	115	113	-	-	103	108
21:00	0	0	115	79	101	99	124	69	69	70	81	61	-	-	82	63
22:00	0	0	42	40	66	67	41	41	40	43	42	37	-	-	39	38
23:00	0	0	23	26	38	37	46	42	16	10	32	33	-	-	26	25
Lane Total	0	0	4447	4584	4817	5033	3357	3418	2603	2985	4469	4552	373	417	3715	3901
Day Total		0		9031		9850		6775		5588		9021		790		7616
AM Peak	-	-	10:57	11:00	10:54	10:12	10:12	09:43	10:42	10:52	09:52	11:00	07:31	07:29	11:00	11:00
AM Count	-	-	358	383	400	437	290	309	219	290	352	400	187	214	314	359
PM Peak	-	-	15:32	14:28	15:43	14:15	12:48	12:00	12:11	12:01	13:27	14:07	-	-	13:00	12:00
PM Count	-	-	449	452	460	450	295	305	254	291	439	432	-	-	350	369