



# PROJECT PROSPECTUS

Part 1 — Project Request (Page 1 of 2)

Key Number:	Jurisdiction:
-------------	---------------

Section:	Luckiamute River (Buena Vista Rd) Br #10307A (53C048)	Region:	Area:	District:
		2	3	3

State Highway No.:	Highway Name:	Mile Point	Length: (mi)	(km)
		From: 8.85 To: 8.96	0.11	

<input type="checkbox"/> Urban	City:	MPO:	Within UGB	<input type="checkbox"/> Yes	County:	Road/Street Name:
<input checked="" type="checkbox"/> Rural			<input checked="" type="checkbox"/> No		Polk	Buena Vista Road

Route No.:	NHS	<input type="checkbox"/> YES	HPMS:	FC:	Applicant (if other than State):
		<input checked="" type="checkbox"/> NO			Polk County

US Congressional District:	State Senate District:	State Representative District:
5	12	20

Cost Estimates ( x \$ 1,000)		Project Components		Right Of Way	
Preliminary Engineering	\$224	Grading	X	Files (#)	4
Right Of Way	\$20	Paving	X	Hectares (#)	1
Utility Reimbursement		Structures	X	Relocations (#)	0
		Signing		Acquisitions (#)	4
Roadway	\$116	Signals		Easements (#)	
Structures	\$724	Illumination		Work By: State / Consultant / Applicant	
Signals	\$0			Preliminary Engineering (S,C,A)	C
Illumination	\$0			Construction Engineering (S,C,A)	C
Tamp. Protection	\$22			Right of Way Descriptions (S,C,A)	C
Const. Contingencies	\$267			Right Of Way Acquisitions (S,C,A)	C

Const. Engineering		Project Categories		Constructed By	
Remove Exist Bridge	\$80	Environmental Class (1, 2, 3, PCE)	2	<input checked="" type="checkbox"/> Contract	<input type="checkbox"/> County Force
Other	\$125	Design Category (1-7)	7	<input type="checkbox"/> State Force	<input type="checkbox"/> Other
Total CE and Construction:	\$1,494	Work Type Code (1-13)	5	<input type="checkbox"/> City Force	
Total Estimate:	\$ 1,738	Primary STIP Work Type:			

PE Fund:	R/W Fund:	UR Fund:	CE-CN Fund:
PE EA:	R/W EA:	UR EA:	CE-CN EA:

Item	Existing	Proposed	Define The Problem:
Travel Lanes (#)	2	2	The Buena Vista Road Bridge has shear cracking in the upstream outside deck girders. ODOT has notified the County to provide an access hole through the fender boards for additional inspection of the interior timber piling. A recent load rating has identified this structure to be load posted for 5-7-6 tons (Oregon Legal Loads).
Structures (#)	1	1	
Signale (#)	0	0	
Bike Way (#)	0	0	
Average Daily Traffic	900	1260	
Year of ADT	2003	2023	
Throughway Y/N	Y	Y	

Describe Proposed Solution: - Attach Sketch Map

Construct a precast prestressed girder bridge on the same alignment.

Prepared By:	Date:	OTC Approval Date:	Program Year:	Funding Amount:
X				



# PROJECT PROSPECTUS

Part 1 Project Request (Page 2 of 2)

Key Number:

Jurisdiction:

Section: Lucklamute River (Buena Vista Rd) Br #10307A (53C048)

Region:  
2

Area:  
3

District:  
3

## Project Justification

The existing bridge is structurally deficient and functionally obsolete. All spans of this reinforced concrete deck girder bridge are showing shear cracks in the girders. The roadway width on the bridge is narrow with no provisions for bike lanes. Bridge rails are also substandard for vehicle and bicycle traffic.

Buena Vista Road is a major trucking route for grain and grass seed farming near US-20 between Albany and Corvallis to the south and local industries located in Polk County including the communities of Monmouth, Independence and Dallas to the north.

2003 traffic counts have indicated that 10.0% of the traffic using this route is from trucks.

## Additional Information For Project Requested By Local Jurisdictions

Responsible Local Office To Be Contacted For The Following Activities:

- |  |                      |          |                       |         |
|--|----------------------|----------|-----------------------|---------|
| 1. Public Hearing /<br>Citizen Involvement | <u>Aaron Geisler</u> | (Office) | <u>(503) 623-9287</u> | (Phone) |
| 2. Environmental / Planning                | <u>Jim Allen</u>     | (Office) | <u>(503) 623-9237</u> | (Phone) |
| 3. Pre-Engineering                         | <u>Aaron Geisler</u> | (Office) | <u>(503) 623-9287</u> | (Phone) |

This Official Request is From:

City of: \_\_\_\_\_ and/or POLK \_\_\_\_\_ County

By: \_\_\_\_\_ By: Tom Richey, Commissioner Commissioner

By: \_\_\_\_\_ By: Greg Hansen, Administrator

By: \_\_\_\_\_ By: Ron Dodge, Commissioner

Applicable Intergovernmental Agreements:

IGA Number:	Jurisdiction Name:	Agreement Date:
_____	_____	_____
_____	_____	_____
_____	_____	_____

## Administrative Recommendation

## Bridge Prospectus Cost Estimate

		NBIS			
Applicant:	Polk County	Bridge No.	10307A		
Project / Section	Luckiamute River (Buena Vista Rd) Br #10307A (53C048)	Region:	2	Area:	3
		District:	3		
<u>New Bridge / Roadway Configuration:</u>		<u>Existing Bridge:</u>			
Left Side Rail	1.5 feet	Bridge Length	221 feet		
Left Sidewalk	0 feet	Bridge Width	28 feet		
Shoulder	5 feet	Area	6188 square ft.		
Lane 2	0 feet	New AC Top Width	37 feet		
Lane 1	12 feet	New AC Depth	4 inches		
—CL—	0 feet	New Base Depth	12 inches		
Lane 1	12 feet	Project Length	825 feet		
Lane 2	0 feet	Net Road Work Length	600 feet		
Shoulder	5 feet	X-Sect Side Slope	3 :1		
Right Sidewalk	0 feet	AC Avg Width	38 feet		
Right Side Rail	1.5 feet	Base Avg Width	42 feet		
Bridge Length	225 feet	Asphalt Density	150 pounds/ cu ft		
Bridge Width	37 feet	Base Density	120 pounds/ cu ft		
New Area	8325 square ft.	New AC Received	570 tons		
		New Base Required	1512 tons		
<b>COST ESTIMATE:</b>		<b>Price</b>			
	<b>Quantity</b>	<b>Unit</b>	<b>per unit</b>	<b>Cost ( \$x1000s)</b>	
Right-of-Way	1	Acre	\$ 20,000	\$20	
==Roadway==					
Clear & Grub	\$ 18,407	lump sum		\$18	
General Excavation	220	cubic yards	\$ 12.00	\$3	
Embankment in Place	1,090	cubic yards	\$ 12.00	\$13	
Pavement Removal	-	square feet	\$ 0.45	\$0	
Aggregate Base	1,512	tons	\$ 16.00	\$24	
Asphalt Concrete	570	tons	\$ 56.00	\$32	
Riprap	199	cubic yards	\$ 50.00	\$10	
Guardrail, Type 2A	100	feet	\$ 11.50	\$1	
Guardrail, Type 3	50	feet	\$ 38.00	\$2	
Guardrail Trans	4	each	\$ 1,600.00	\$6	
Flared Terminals	4	each	\$ 1,600.00	\$6	
<b>Subtotal Roadway</b>				<b>\$118</b>	
Structures	8,325	square feet	\$ 87.00	\$724	
Signals	\$ -	lump sum		\$0	
Illumination	\$ -	lump sum		\$0	
Temporary Protection	\$ 21,500	lump sum		\$22	
Remove Existing Bridge	6,188	square feet	\$ 13.00	\$80	
Mobilization	\$ 106,700	lump sum		\$107	
Erosion Ctrl / Restoration	\$ 18,000	lump sum		\$18	
Construct/Remove Detour		square feet	\$ 25.00	\$0	
<b>Subtotal Structures</b>				<b>\$951</b>	
<b>Subtotal Construction</b>				<b>\$1,067</b>	
==Engineering==					
Construction Engineering	15	percent of construction		\$160	
Contingency	25	percent of construction		\$267	
<b>Subtotal Const. Eng.</b>				<b>\$427</b>	
Preliminary Engineering Consultant	18	percent of construction		\$192	
State	1	percent of construction		\$11	
County	2	percent of construction		\$21	
<b>Subtotal PE</b>				<b>\$224</b>	
<b>Total Estimate</b>				<b>\$1,738</b>	



## Bridge Project Prospectus

### Requested Changes to National Bridge Inventory System (NBIS) Data

(Form Optional)

Applicant: Polk County	Bridge Number: 10307A		
Project Name / Section: Luckiamute River (Buena Vista Rd) Br #10307A (53C048)	Region: 2	Area: 3	District: 3

This form must be completed if an agency is proposing a change to the data in the existing National Bridge Inventory System data. The information must be in conformance with the Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges, Report No. FHWA-PD-96-001, December 1995.

Changes proposed to the Detour Length, Average Daily Traffic and Truck Average Daily Traffic will be acquired from other parts of this application and used to compute updated Federal Sufficiency Ratings and in the calculation of the Technical Ranking Score.

The data listed below are used in the calculations of the Technical Ranking Score and proposed changes will be considered. For any changes proposed, attach backup data as to the reason for the change.

Item 26	Functional Classification	
Item 28	A Lanes on Structure	
Item 32	Approach Roadway Width	
Item 43	Structure Type, Main	
Item 51	Bridge Roadway Width	
Item 53	Vertical Clearance over Deck	
Item 54	Underclearance	
Item 55	Minimum Left	
Item 58	Minimum Right	
Item 100	Defense Highway Designation	

Items 58, 59, 60, 62, 67, 68, 69, 71 and 72 are used in the calculation of the Federal Sufficiency Rating. These data elements are supplied by ODOT and are not subject to corrections at this time.

The Inventory Rating (Item 66) must be provided by a Licensed Professional Engineer, based on calculations following ODOT's Load Rating Guidelines. The engineer's calculations must be included.

Item 66	Inventory Rating	5.8
---------	------------------	-----

I  
N  
S  
P  
E  
C  
T  
I  
O  
N  
  
R  
E  
P  
O  
R  
T

MAR 26 2003

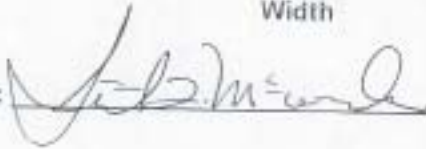
**OREGON DEPT OF TRANSPORTATION  
BRIDGE INSPECTION REPORT**

District 4  
 Bridge Name LUCKIAMUTE RIVER  
 Local Name  
 Local ID 48  
 Suff Rating 50.80  
 AC Depth 1.0 in

Owner County  
 County Highway Agency Polk  
 Record Type 1  
 Insp Freq 12 Months  
 Insp Date 01/09/03  
 Bridge Length 221.0 ft

Bridge ID 10307A  
 Fac Carried BUENA VISTA RD  
 Mile Post 8.85  
 Inspector 1 McCormack, Stewart (CU001)  
 Inspector 2 Way, Tim (C0039)  
 Bridge Width 28.8 ft

53048

Signature: 

**ELEMENT CONDITION STATES**

Elem	Description	Env	Qty	Units	Element Condition States					Temp
					1	2	3	4	5	
13	Conc Deck Unprt w/AC Olay	Moderate	6300	sqft	100%	0%	0%	0%	0%	N
110	Conc Open Girder	Moderate	880	ft	34%	33%	33%	0%	0%	N
206	Timber Column/Pile Extn	Moderate	48	ea	98%	2%	0%	0%	0%	N
234	Conc Cap	Moderate	4	ea	100%	0%	0%	0%	0%	N
331	Conc Bridge Railing	Moderate	452	ft	100%	0%	0%	0%	0%	N
359	SF - Deck Soffit	Moderate	1	ea	100%	0%	0%	0%	0%	N

**APPRAISAL**

Appraisal	NBI #	Rating
Scour	113	U Unknown foundation / No eval
Bridge Rail	36A	0 Does not meet standards
Transitions	36B	0 Does not meet standards
Approach Rail	36C	0 Does not meet standards
Rail Ends	36D	0 Does not meet standards
Structural	67	4 Meets minimum tolerable limits to be left in place as is
Deck Geometry	68	4 Meets minimum tolerable limits to be left in place as is
Clearance	69	N Not Applicable
Waterway	71	5 Somewhat better than minimum adequacy to tolerate being left in place as is
Approach Alignment	72	8 Equal to present desirable criteria

**NBI CATEGORY**

Category	NBI #	Rating
Approach Condition	7	Good
Deck Wearing Surface	8	Very good
Deck	58	8 Very good
Superstructure	59	4 Poor
Substructure	60	7 Good
Channel	61	6 Bank beginning to slump
Culvert/Retaining Walls	62	N Not Applicable

**IMPORTANT INFORMATION:** The NBIS data has not been updated to reflect the new load rating which was recently performed by OBEC Consulting Engineers. Please refer to the enclosed OBEC load rating report and update the database accordingly.

### REMARKS

Element #	Bent/Span	Member ID	Deficiency Description
13	ALL	DRAINS	HALF OF DRAINS PLUGGED. S2 RT. HAS MISSING DOWNSPOUT. B1 LT CATCH BASIN LINE UNATTACHED.
110	S2	GIR.#4	MINOR SPALLS/COLLISION DAMAGE ALONG BOTTOM EDGE.
110	S2&3	GIRDERS	CRACK INSPECTIONS REVEALED .030" SHEAR CRACKS IN S2 BEAMS AND .020" CRACKS IN S3 ON BOTH SIDES OF BT.2.
206	B3	PILE	UPSTREAM FENDER BOARDS ARE LOOSE & NOSE PIECES MISSING.
206	B2A	PILE #1	4"CTR.ROT IN PILE.
234	B2	CAP	HAIRLINE CRACK IN CAP.
359	S1-3	SOFFIT	SOME TRANSVERSE HAIRLINE CRACKS IN O'HANGS W/EFFLOR.
990	B1,4	APPR.	SLIGHT SETTLEMENT, & CRACKED AC.
990	B1,4	BKWALL	HAIRLINE CRACKS W/EFFLOR.
990	B2,3	CHANNEL	STEEP BANK EROSION US/DS @ S1 & S3. SUBMERGED LOGS S2. S1,3 BANKS COVERED W/STICKS. DRIFT ON CAPS & STUCK IN FENDER BOARDS.
990	S1-3	DRIFT	SETTLEMENT @ B4 W/6" +/- OF THE PILE EXPOSED.
990	B4	EMBANK	SHOULDER EROSION @ ALL 4 CORNERS FROM DECK WATER RUNOFF & EROSION UNDER BRIDGE @ SPAN 1.
990	B1,4	SHLDRS.	THICK BERRY GROWTH IN BOTH SPANS.
990	S1&3	VEGET.	HIGH WATER IN 1996 TO BOTTOM OF DECK.
990	S1-3	WTRWAY	

### MAINTENANCE RECOMMENDATIONS

Crew #	Work Order	Priority	Elem #	Bent/ Span	Member	Work	Est Cost	Comp Date
	Routine/Schedule	13		ALL	DRAINS	CLEAN DRAINS/CATCH BASINS & RECONNECT DRAIN LINES.	500	
	Monitor		110	S2&3	GIRDERS	MONITOR BEAM CRACKS.	400	
	Routine/Schedule	206		B2,3	PILE	REMOVE 2 FENDER BOARDS ON BACK SIDE FOR PILE INSPECTION.	500	
	Routine/Schedule	990		S1-3	DRIFT	REMOVE SUBMERGED LOGS.	2000	
	Routine/Schedule	990		B1,4	APPRO.	FILL IN SHOULDER EROSION & SEAL CRACKS IN ACWS.	1500	
	Routine/Schedule	990		S1&3	VEGET.	CUT & CONTROL BLACKBERRIES.	400	

### LOAD RATING

Rating Date 04/17/90 Posting Req (5) = or > legal  
 Design Load HS20 OR Method Allowable Stress (AS)

Operating Rating 64.0 ton      IR Method      Allowable Stress (AS)  
 Inventory Rating 37.0 ton

Truck	Operating Rating	Inventory Rating	% Below	Posting Required	Controlling Member	Actual Posting	Posting Date
Type 3	60.0		(5) = or > legal	No	CONC BEAM BENDING	ton	
Type 3S-2	89.200000000000003		(5) = or > legal	No	CONC BEAM BENDING	ton	
Type 3-3	81.200000000000003		(5) = or > legal	No	CONC BEAM BENDING	ton	

### LOAD RATING CONDITION COMPARISON CHART

Category	NBI #	Rating Condition	Current Condition
Approach Condition			7 Good
Deck Wearing Surface			8 Very good
Deck	58		8 Very good
Superstructure	59		4 Poor
Substructure	60		7 Good
Temporary Repairs	103	No	No
Wearing Surface Thickness		0 in	1.0 in

### INSPECTION SCHEDULE

Activity	Conducted On	Frequency	Next Inspection
Routine Inspection	01/09/03	Every 1 yr	01/01/05
Timber/Boring Underwater Inspection	10/13/96	Every 2 yr	10/07/98
X-Channel Profile	09/13/99	Every 4 yr	09/13/03
	10/13/96	Every 10 yr	10/13/06

50.8 SUFF RATING	Structurally Deficient	STRUCTURE AND INVENTORY APPRAISAL		BRIDGE NO 10307A	INSP DATE 01/03
(122) HIGHWAY/CO-RD (2) HIGHWAY DISTRICT	000017 4	(43) STRUCT MAIN	2 Concrete continuous 04 Tee Beam	(92) CRITICAL FEAT INSP	DATE (93) DATE
(3) COUNTY	53	(44) STRUCT APPR	0 Other 00 Not Applicable	(A) FRACTURE CRIT INSP	n 00 2000
(4) CITY	00000	(45) NUMBER MAIN SPANS	3	(B) UNDERWATER INSP	y 48 1999
(5) INVENTORY ROUTE	141000000	(46) NUMBER APPR SPANS	0	(94) COST OF IMPROVEMENT	
(6) FEATURES INT	LUCKIAMUTE RIVER	(47) HORIZONTAL CLEARANCE	24.0	(95) ROADWAY IMPROVEMENT	
(7) FACILITY CARRIED	BUENA VISTA RD	(48) MAXIMUM SPAN LENGTH	84.0	(96) PROJECT COST	
(8) STRUCTURE NUMBER	10307AGD1700885	(49) STRUCTURE LENGTH	221.0	(97) YR OF IMPROVEMENT	
(9) LOCATION	007 N. BENTON CO. LINE	(50) SIDEWALK WIDTH	LT 1.3 RT 1.3	(98) BORDER BR ST-CODE	%
(10) VERT CLEARANCE	100.0 ft	(51) BRIDGE ROADWAY WIDTH	24.0	(99) BORDER STRUCTURE NO	
(11) MILEPOINT	8.85	(52) DECK WIDTH	28.8	(100) DEFENSE HIGHWAY	0
(16) LATITUDE	44.7297 N	(53) VERT CLEAR OVER DECK	100.0 ft	(101) PARALLEL STRUCTURE	N
(17) LONGITUDE	123.1633 W	(54) VERT CLEAR UNDER DECK CD	0.00 ft	(102) DIRECTION OF TRAFFIC	2
(19) BYPASS DETOUR	8.0	(55) MIN LAT UNDERCLEAR CD	N RT 0.0	(103) TEMPORARY STRUCTURE	0
(20) TOLL	3 On free road	(56) MIN LAT UNDERCLEAR	LT 0.0	(104) HIGHWAY SYSTEM	0
(21) CUSTODIAN	02 County Highway Agency	*** CONDITION ***			
(22) OWNER	02 County Highway Agency	(106) YEAR RECONSTRUCTED			
(26) FUNC CLASS	07 Rural Major Collector	(58) DECK	8	(107) DECK STRUCTURE	1
(27) YEAR BUILT	1957	(59) SUPERSTRUCTURE	4	(108) WEARING SURFACE	600
(28) LANES ON	2 LANES UNDER 0	(60) SUBSTRUCTURE	7	(109) TRUCK ADT	10.0%
(29) AVERAGE DAILY TRAFFIC	900	(61) CHANNEL	6	(110) DESIGNATED NATIONAL NETWORK	0
(30) YEAR OF ADT	2003	(62) CULVERT	N	(111) PIER PROTECTION	
(31) DESIGN LOAD	5 HS20	(64) OPERATING RATING	54.0	(112) NBIS BRIDGE LENGTH	Y
(32) APPROACH ROADWAY	32.0 ft	(65) INVENTORY RATING	37.0	(113) SCOUR CRITICAL BRIDGE	U
(33) BRIDGE MEDIAN	0 None	*** APPRAISAL ***			
(34) SKEW	39	(67) STRUCTURE CONDITION	4	(114) FUTURE ADT	1260.0
(35) STRUCTURE FLARED	0	(68) DECK GEOMETRY	4	(115) YEAR OF FUTURE ADT	2023
(36) TRAFFIC SAFETY FEATURE	0000	(69) UNDERCLEARANCE	N	(116) VERT-LIFT CLEARANCE	
(37) HISTORICAL SIGNIFICANCE	5	(70) POSTING	5	*** STATE INFORMATION ***	
(38) NAVIGATION CONTROL	0	(71) WATERWAY ADEQUACY	8	(117) EST MAINT COST	6000.0
(39) NAVIGATION VERT CLEAR	0.0	(72) APPR RDWY ALIGNMENT		(118) CULVERT LENGTH	#
(40) NAVIGATION HORZ CLEAR	0.0	(75) TYPE OF WORK		(119) CULVERT INSIDE HEIGHT	#
(41) OPEN STATUS	A	(78) IMPROVEMENT LENGTH		(120) INSPECTOR NUMBER	McCornack, Stewart (CU001)
(42) TYPE SERVICE	1 Highway 5 Waterway	(80) INSPECTION DATE	0103	(121) MAINTENANCE NOTES	
(12) BASE HIGHWAY NETWORK	0	(91) INSPECTION FREQUENCY	12 MO		
(13) LRS INVENTORY ROUTE		(93) OPER RATING METHOD	2		
(105) FEDERAL LANDS		(95) INV RATING METHOD	2		

L  
O  
A  
D

R  
A  
T  
I  
N  
G

Buena Vista Rd



### Oregon Department of Transportation

### Technical Services Branch

Bridge Engineering Section  
Local Agency Bridge Load Rating  
Posting Summary Sheet

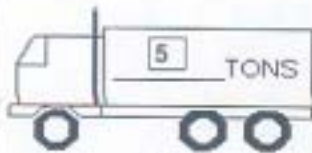
Local Agency: POLK

NBIS Bridge Number: 10307A

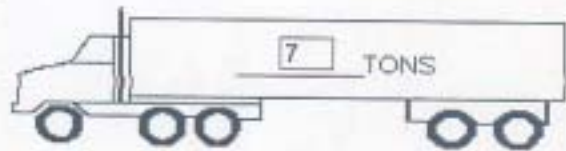
Date: 4/29/03

Truck	Inventory	Operating	Posting Required
HS Equivalent	HS 3	HS 5	N/A
HS 20 (36 Ton)	5.8 Tons	9.7 Tons	N/A
Type 3 (25 Ton)	Tons	5.5 Tons	YES
Type 3S2 (40 Ton)	Tons	7.2 Tons	YES
Type 3-3 (40 Ton)	Tons	6.4 Tons	YES
Permit 5 (60.25 Ton)	Tons	8.4 Tons	N/A
Permit 6 (75.25 Ton)	Tons	8.3 Tons	N/A
Permit 7 (92.5 Ton)	Tons	10.2 Tons	N/A

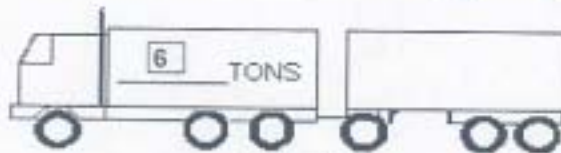
#### OREGON LEGAL LOADS RECOMMENDED POSTING



TYPE 3



TYPE 3S2



TYPE 3-3

#### COMMENTS:

Bridge has shear cracking (maximum of 0.030") in the reinforced concrete deck girders beams. Concrete strength value has been reduced accordingly for the crack sizes. Posting is required



EXPIRES: 06/30/04



# OREGON D.O.T. BRIDGE SECTION

## LOAD RATING SUMMARY REPORT (PAGE 1)

For local agency bridges: Label Revision 9/13/95

**BRIDGE DATA...**

BRIDGE # 18307A    MAIN FEATURE: LUCKWALUTE RIVER  
 BRIDGE NAME: LUCKWALUTE RIVER BRIDGE  
 HIGHWAY NAME: BLEREA VISTA ROAD    DIST: 4    COUNTY: POLK    HIGHWAY # 818B  
 REGION: 2    CITY MILEPOST: 8.88

YEAR BUILT: 1967    DESIGN LOADING: H20    OWNER: POLK COUNTY  
 SPAN DESCOR: 3-SPANS REINFORCED CONCRETE DECK GIRDERS  
 OTHER DESCR:

**LOAD RATING ENGINEER DATA...**

RATING DATE: 4/26/03    FIRM: OSBEC CONSULTING ENGINEERS    ENGINEER: PBM/TCW    CALCULATION BOOK: \_\_\_\_\_

**LATEST INSPECTION DATA...**

INSP. DATE: 1/30/03    ADT: 300    ADTT: 225    YEAR of ADT (2 digit): 03    A.C. DEPTH, INCHES: 1.0  
 DECK: \_\_\_\_\_    SUPERSTR: \_\_\_\_\_    SUBSTR: \_\_\_\_\_    APPROACH REMF: \_\_\_\_\_    WEARING SURFACE: \_\_\_\_\_

**RATING DATA...**

LRFD FACTORS:  
 LOAD FACTOR LOAD RATINGS FOR N.B.L.: INVENTORY HS: 5.3    OPERATING HS: 7.1    DISTRB. FACTORS: Operational Status (Item 413): A  
 TYPE 3-3 (R9K): INVENTORY CODE: (2+000): 205    OPR. CODE: (2+000): \_\_\_\_\_    BRIDGE Posting Status (Item 704): 0  
 TYPE 3-3 (R9K): COMMENTS: \_\_\_\_\_    OPER. CODE: (2+000): \_\_\_\_\_    MULTIPLE Lanes: 1.107    Temporary Status (Item 103): \_\_\_\_\_

LOAD:	← 1st rating control →				← 2nd rating control →							
	R.F.	Limit State	+/-M or V	MEMBER	SPAN	LOCATION	R.F.	Limit State	+/-M or V	MEMBER	SPAN	LOCATION
DESIGN & LEGAL VEHICLES H20 (72K) TYPE 3 (55K) TYPE 322 MAX (89K) TYPE 3-3 (R9K)	0.15	Sr	V	0.75 INT. GIRDER	2 OF 3	0.95L	0.23	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L
	0.22	Sr	V	0.75 INT. GIRDER	2 OF 3	0.95L	0.33	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L
	0.18	Sr	V	0.75 INT. GIRDER	2 OF 3	0.95L	0.29	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L
	0.18	Sr	V	0.75 INT. GIRDER	2 OF 3	0.95L	0.26	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L
PERMIT VEHICLES, MULTIPLE LANES, FULL IMPACT	0.14	Sr	V	0.75 INT. GIRDER	2 OF 3	0.05L	0.22	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L
	0.11	Sr	V	0.75 INT. GIRDER	2 OF 3	0.05L	0.18	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L
PERMIT VEHICLES, SINGLE LANE, FULL IMPACT	0.15	Sr	V	0.75 INT. GIRDER	2 OF 3	0.05L	0.24	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L
	0.12	Sr	V	0.75 INT. GIRDER	2 OF 3	0.05L	0.20	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L
PERMIT VEHICLES, SINGLE LANE, 15% IMPACT	0.12	Sr	V	0.75 INT. GIRDER	2 OF 3	0.05L	0.17	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L
	0.15	Sr	V	0.75 INT. GIRDER	2 OF 3	0.05L	0.24	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L
PERMIT-5 (120.5K) PERMIT-6 (150.5K) PERMIT-7 (185.0K) SPECIAL-1 SPECIAL-2	0.12	Sr	V	0.75 INT. GIRDER	2 OF 3	0.05L	0.20	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L
	0.12	Sr	V	0.75 INT. GIRDER	2 OF 3	0.05L	0.17	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L
PERMIT-5 (120.5K) PERMIT-6 (150.5K) PERMIT-7 (185.0K) SPECIAL-1 SPECIAL-2	0.15	Sr	V	0.75 INT. GIRDER	2 OF 3	0.05L	0.24	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L
	0.12	Sr	V	0.75 INT. GIRDER	2 OF 3	0.05L	0.20	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L
PERMIT-5 (120.5K) PERMIT-6 (150.5K) PERMIT-7 (185.0K) SPECIAL-1 SPECIAL-2	0.12	Sr	V	0.75 INT. GIRDER	2 OF 3	0.05L	0.17	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L
	0.15	Sr	V	0.75 INT. GIRDER	2 OF 3	0.05L	0.24	Sr	V	0.75 INT. GIRDER	2 OF 3	0.13L

**OREGON D.O.T. BRIDGE SECTION  
LOAD RATING WORKSHEET (PAGE 2)**

BRIDGE NO: 10307A  
BRIDGE NAME: LUCKIAMUTE RIVER BRIDGE  
RATING DATE: 4/28/03

SECTION EVALUATED	1st	2nd	3rd	4th	5th	6th	7th	8th
LRFD Bress. OUT File Name: FORCE TYPE (+/-M or V): PHI (Resistance Factor): MEMBER (eg. Int. girder): SPAN (eg. 1 of 4): LOCATION (eg. 0.1L): AASHTO Impact (1+1) P/S Only.	INTG0_T_OUT M 0.75 INT. GIRDER 1 OF 3 0.4L	INTG0_T_OUT M 0.75 INT. GIRDER 1 OF 3 0.5L	INTG0_T_OUT -M 0.75 INT. GIRDER 2 OF 3 0.0L	INTG0_T_OUT M 0.75 INT. GIRDER 2 OF 3 0.5L	INTG0_T_OUT V 0.75 INT. GIRDER 1 OF 3 0.0L	INTG0_T_OUT V 0.75 INT. GIRDER 1 OF 3 1.0L	INTG0_T_OUT V 0.75 INT. GIRDER 2 OF 3 0.05L	INTG0_T_OUT V 0.75 INT. GIRDER 2 OF 3 0.13L
NBI RATINGS (HS20 VEHICLE) INVENTORY (HS20) OPERATING (HS20)	1.19 1.98	1.31 2.16	2.02 3.37	1.48 2.47	0.78 1.30	0.07 1.45	0.16 0.27	0.21 0.35
DESIGN & LEGAL VEHICLES HS20 (72K) TYPE 3 (50K) TYPE 3S2 MAX. (80K) TYPE 3-3 (80K) AASHTO LANE LOAD	1.42 Str 1.92 Str 1.00 Str 1.64 Str 1.50 Str	1.58 Str 2.15 Str 2.19 Str 1.82 Str 2.08 Str	2.02 Str 3.23 Str 2.33 Str 2.33 Str 1.65 Str	1.77 Str 2.40 Str 2.30 Str 1.97 Str 2.39 Str	1.00 Str 1.37 Str 1.31 Str 1.16 Str 1.29 Str	1.10 Str 1.59 Str 1.31 Str 1.17 Str 1.31 Str	0.15 Str 0.22 Str 0.18 Str 0.16 Str 0.18 Str	0.23 Str 0.33 Str 0.29 Str 0.35 Str 0.28 Str
PERMIT VEHICLES, MULTIPLE LANES, FULL IMPACT PERMIT-5 (120.5K) PERMIT-6 (150.5K) PERMIT-7 (185.0K) SPECIAL-1 SPECIAL-2	1.51 Str 1.19 Str 1.23 Str	1.71 Str 1.35 Str 1.34 Str	1.55 Str 1.22 Str 0.99 Str	1.78 Str 1.48 Str 1.81 Str	1.00 Str 0.82 Str 0.83 Str	0.87 Str 0.80 Str 0.77 Str	0.14 Str 0.11 Str 0.11 Str	0.22 Str 0.18 Str 0.16 Str
PERMIT VEHICLES, SINGLE LANE, FULL IMPACT PERMIT-5 (120.5K) PERMIT-6 (150.5K) PERMIT-7 (185.0K) SPECIAL-1 SPECIAL-2	1.64 Str 1.29 Str 1.33 Str	1.85 Str 1.46 Str 1.45 Str	1.71 Str 1.32 Str 1.07 Str	1.93 Str 1.61 Str 1.75 Str	1.08 Str 0.89 Str 0.90 Str	1.05 Str 0.87 Str 0.84 Str	0.15 Str 0.12 Str 0.12 Str	0.24 Str 0.20 Str 0.17 Str
PERMIT VEHICLES, SINGLE LANE, 10% IMPACT PERMIT-5 (120.5K) PERMIT-6 (150.5K) PERMIT-7 (185.0K) SPECIAL-1 SPECIAL-2	1.64 Str 1.29 Str 1.33 Str	1.85 Str 1.46 Str 1.45 Str	1.71 Str 1.32 Str 1.07 Str	1.93 Str 1.61 Str 1.75 Str	1.08 Str 0.89 Str 0.90 Str	1.05 Str 0.87 Str 0.84 Str	0.15 Str 0.12 Str 0.12 Str	0.24 Str 0.20 Str 0.17 Str

**OREGON D.O.T. BRIDGE SECTION**  
**LOAD RATING WORKSHEET (PAGE 3)**

BRIDGE NO: 10307A  
 BRIDGE NAME: LUCKIAMIUTE RIVER BRIDGE  
 RATING DATE: 4/28/03

9th	10th	11th	12th	13th	14th	15th	16th	17th
INTGD_T_OUT V 0.75 INT. GIRDER 2 OF 3 1.1L	INTGD_T_OUT V 0.75 INT. GIRDER 3 OF 3 0.21L	INTGD_T_OUT V 0.75 INT. GIRDER 3 OF 3 .32L						
0.95 1.58	0.40 0.67	0.36 0.60						
1.19 Str 1.08 Str 1.40 Str 1.26 Str 1.30 Str	0.40 Str 0.69 Str 0.65 Str 0.58 Str 0.62 Str	0.46 Str 0.63 Str 0.60 Str 0.57 Str 0.58 Str						
1.03 Str 0.84 Str 0.82 Str	0.48 Str 0.38 Str 0.35 Str	0.45 Str 0.36 Str 0.34 Str						
1.12 Str 0.91 Str 0.89 Str	0.52 Str 0.41 Str 0.38 Str	0.49 Str 0.39 Str 0.37 Str						
1.12 Str 0.91 Str 0.89 Str	0.52 Str 0.41 Str 0.38 Str	0.49 Str 0.39 Str 0.37 Str						



## LOCAL AGENCY - PROJECT SCOPING NOTES

Date: 17-Sept-03      Name: OBEC Consulting Engineers      Phone: 541-683-6090

Project Name: **Luckiamute River (Buena Vista Rd) Bridge #53C048**

Road Name: **Buena Vista Road**      Local Agency Road Number: **8420**

Agency: **Polk County**      Mile Post / Length: **8.85 / 0.11**

**PRELIMINARY COST ESTIMATE:** Information taken from approved project prospectus

COST ELEMENTS	FUNDING TYPE	DOLLARS
Preliminary Engineering Cost		
Right-of-Way Cost		
Safety Cost		
Roadway Cost		
Bridge Cost		
Const. Engr & Contingencies		
Construction Cost		
<b>TOTAL ESTIMATE</b>		

**PROPOSED SCHEDULE:**

STIP Year	Quarter
Begin Survey Work	Begin Prelim. Design work
Begin Environ. Work	Begin R/W Acquisition

**TRAFFIC DATA:**

Functional Classification:	Major Collector	Current ADT (Year):
Accident History (Injuries - Fatalities)	Yes / No	Design ADT (Year):
Accident Location Proximity: Mile Point		

**GEOMETRIC DESIGN STANDARDS**

Type of Project:	Bridge Replacement
Design Standards:	County/AASHTO
Type of Terrain:	Flat

DESIGN ELEMENTS	Existing	Standard	Proposed	Exception
Design Speed (kph or mph)	Basic Rule	55	55	
Lane Width (m / ft)	12'	11'	12'	
Shoulder Width (m / ft)	1'	5'	5'	
Bike Lane Width (m / ft)	0'	-	-	
Sidewalk Width (m / ft)	N/A	N/A	N/A	
Bridge Length & Width (m / ft)	221' L x 28' W		225' L x 37' W	
Horizontal Curvature (min. radius)				
Vertical Curvature (crest) (K value = L/A)				
Vertical Curvature (sag) (K value = L/A)				
Grade (max. percent)				
Stopping Sight Distance (min)				
Cross Slope (min. percent)				
Superelevation (max. percent)				
Vertical Clearance				
Superelevation runoff (@ max. e)				
Run-out Length & Taper Rate				

**☑ - COST ESTIMATE IS BASED ON THE WIDEST IDENTIFIED TYPICAL SECTION**

**PROBLEM IDENTIFICATION:**

The Buena Vista Road Bridge has shear cracking in the upstream outside deck girders. ODOT has notified the County to provide an access hole through the fender boards for additional inspection of the interior timber piling.

**PROPOSED ALTERNATIVES (SCOPE):**

Construct a precast prestressed girder bridge on the same alignment.

- **CHECK PROJECT LIMITS (PRIOR PROJECT LIMITS, MISSED SECTIONS, APPROPRIATE START & END, SAFETY, FUNDING LIMITS):**  
±300' in each direction from the end of the bridge.
- **ACCIDENT LOCATIONS (ACCIDENT PROBLEMS, SEE TRAFFIC ACCIDENT REPORTS, SIGHT DISTANCE):**  
None
- **TYPICAL SECTION, DESIGN SPEED & PAVEMENT NEEDS (LANE WIDTH VS. DESIGN STANDARDS, WIDENING / LEVELING / SUBGRADE REPAIR / PAVEMENT DESIGN) SEE TABLE ON FIRST PAGE FOR ADDITIONAL INFORMATION:**  
1.5'-5'-12'-12'-5'-1.5' (rail-shld-lane-lane-shld-rail), bridge width of 37' o-o,  
Polk Co pavement standard is 4" AC on 12" aggregate base.
- **SHOULDERS / DITCHES (ADEQUATE WIDTH / SLOPES / SHOULDER ROCK / DITCH WORK):**  
The roadway has shoulders at all 4 corners. Roadway runoff flows out into adjacent fields.
- **DRAINAGE NEEDS (FISH CULVERTS, DAMAGED OR PLUGGED CULVERTS, EXTENSIONS, OFFSITE DRAINAGE, FLOODING PROBLEMS, CATCH BASINS, DITCHES):**  
There are scuppers on the bridge with catch basins located at the corners. The new bridge will carry the runoff to the ends of the bridge and into a vegetated ditch.
- **ROAD APPROACHES / ACCESSES (PAVE OR GRAVEL / CLOSURE? / SIGHT DISTANCE PROBLEMS?):**  
Driveway approach ±180' to the SE of the bridge. At NE corner of the bridge there is a field access that will be relocated further north beyond the guardrail.
- **DESIGN EXCEPTIONS AND CONCURRENCES (VERTICAL/HORIZONTAL CLEARANCES, ALIGNMENTS, BRIDGE WIDTHS & RAIL, SHOULDER & LANE WIDTHS, SIDE SLOPES, CLEAR ZONE, ETC.):**  
None anticipated.
- **SPECIAL DESIGN FEATURES TO BE ADDRESSED (EXISTING SLOPES VS. DESIGN STANDARDS -HORIZONTAL & VERTICAL ALIGNMENT VS. DESIGN STANDARDS):**  
None anticipated.
- **BRIDGE/STRUCTURE NEEDS (NUMBER OF SPANS PROPOSED, BRIDGE RAILING, END TREATMENTS):**  
The existing bridge is 3-spans, 221' long x 28' wide. Possible replacement options include 225' long x 37' wide 2-span bulb-T or bulb-I girders, or 3-span 26" slabs.
- **BRIDGE APPROACH NEEDS (IMPACT PANELS, EXPANSION JOINTS):**  
This is a heavily used truck route; therefore, Polk County wants impact panels included.
- **GUARDRAIL NEEDS (REPAIR / REPLACE / EXTEND / ADD / DELETE / APPROPRIATE LENGTH / END TYPE):**  
There is no guardrail on the existing bridge. Standard guardrail runs at all 4 corners.
- **TRAFFIC CONTROL (DETOUR / STAGE CONSTRUCTION / TRAFFIC, ROAD CLOSURE, TEMPORARY BRIDGE):**  
County anticipates closing the road with Corvallis Road as the designated detour route for north-south traffic and Springhill Road and Prather Road used as the east-west connections during construction.

- FOUNDATION / GEOTECHNICAL / GEOLOGY CONSIDERATIONS / PH & RESISTIVITY (DRILLING NEEDED? / SURCHARGE? / OTHER?):  
The existing bridge is housed on treated timber piling. Anticipate pile foundations for the new bridge. Recommend drilling 2-3 holes for geotechnical explorations. Perform soil pH & resistivity testing. Perform testing for a pavement design.

---

- HYDRAULICS CONSIDERATIONS (SCOUR / EROSION / RIPRAP / FEMA?):  
Perform USGS regression analysis for hydrology with standard HEC-RAS backwater analysis and ODOT scour analysis.

---

- SIGNING REQUIREMENTS / PAVEMENT STRIPING / OTHER PAVEMENT MARKINGS (REPLACE OR REINSTALL / SIGNING PLANS? / SHOULDER DELINEATORS? / STRIPING PLANS? [DURABLE STRIPE PRODUCT? ]):  
Curve Right sign w/ 20-mph rider ±200' north of bridge.

---

- ADA NEEDS (RAMPS, DRIVEWAYS, CURBS & SIDEWALKS):  
N/A

---

- MAILBOX NEEDS (REPLACE, MOVE OR COMBINE MAILBOXES):  
None

---

- UTILITY CONFLICTS (UNDERGROUND AND OVERHEAD CONFLICTS):  
OH – Power across the roadway ±100' north of the bridge.

---

- SURVEYING NEEDS:  
Topo – r/w retracement – hydraulic x-sections, survey needs to extend ±300' north and south of the bridge ends.

---

- RIGHT-OF-WAY NEEDS:  
Existing r/w = 60' per county. The project will likely need a construction easement. Anticipate 2 r/w files.
  - How will additional R/W be paid for, if required? HBRR / OTIA  
(if federal funds are available, need a letter from Local Agency requesting programming with an estimating cost.)
  - Who will prepare R/W Descriptions & Maps? Consultant
  - Who will perform R/W Appraisals & Negotiations work? Consultant

---

- **ENVIRONMENTAL ISSUES:**
  - Hazmat:  
Treated timber piling and fender boards.

---

  - Historical (BRIDGES, STRUCTURES, BUILDINGS, ETC.) [SECTION 106]:  
None

---

  - Archaeological SITES (KNOWN OR POSSIBLE SITES) [SECTION 106]:  
Need to perform a Phase I survey (literature search & pedestrian survey).

---

  - WETLANDS (KNOWN OR POSSIBLE WETLANDS / MITIGATION SITES):  
Potential wetlands are located along the banks, need wetland delineation.

---

  - SPECIAL EROSION / RIPARIAN NEEDS (RIPRAP / SEEDING AND MULCHING / TREE PLANTINGS / ETC.):  
Riprap is present at the end bents and will likely be required for the new bridge. Mitigation for riparian impacts will also likely be required due to construction impacts.

- THREATENED & ENDANGERED SPECIES:

The Luckiamute River has salmon, steelhead, & cutthroat trout. A biological assessment will be required for fish species. A plant survey may also be required.

- LAND USE:

A conditional use floodplain permit will be required. No other land use issues anticipated.

- WATER QUALITY ISSUES AND/OR CONCERNS:

Runoff from bridge into vegetated ditches.

- 4(f) (PARK LANDS, RECREATION AREAS, WILDLIFE REFUGES, SCHOOL GROUNDS, ETC.)

N/A

- 6(f):

N/A

- NOISE:

N/A

- IN-WATER WORK PERIOD:

July 1 – September 30

- NON-LISTED WILDLIFE ISSUES (MIGRATORY BIRD TREATY ACT, WILDLIFE PASSAGE, ETC.):

Swallow nests present, probably bats. There are ducks and geese present during the winter months.

- OTHER ENVIRONMENTAL ISSUES:

None identified at this time.

- FEDERAL AGENCY COORDINATION (USFS, BLM, BIA, ETC.) [EASEMENTS AND/OR PERMITS]:

N/A

- PERMITS (RAILROAD, CORPS OF ENGINEERS, DSL, FLOODPLAIN, FEDERAL, STATE AND LOCAL PERMITS NEEDED):

COE/DSL, County Floodplain w/ No-Rise Certification. Biological Assessment with need for Biological Opinion.

- POLITICAL OR CONTROVERSIAL ISSUES (THAT COULD DELAY PROJECT, CONSTRUCTION TIMING, RAILROAD CROSSINGS, APPROVED / PLANNED DEVELOPMENT):

Road closure and detour length is the only issue identified.

- OTHER:

Work bridge likely on upstream (NW corner) where there are blackberries taking over the vegetation. This will minimize riparian impacts.

ATTENDEES:

(Polk County) – Aaron Geisler, Fred Lowe, (OBEC) – Kevin Boyle, Bill Hall





# POLK COUNTY

820 S.W. ASH STREET • DALLAS, OREGON 97338-2112 • 503-623-9287 / FAX 503-623-0897

Public Works

## HBRR/OTIA III APPLICATION

**Bridge No. 53C048  
Buena Vista Road**

**October 10, 2003**

**IMPORTANT INFORMATION:** The NBIS data has not been updated to reflect the new load rating which was recently performed by OBEC Consulting Engineers. Please refer to the enclosed OBEC load rating report and update the database accordingly.

**This County will accept either funding source**

# POLK COUNTY

Bridge No. 53C048  
Buena Vista Rd.



VICINITY MAP



LOCATION MAP



APPROACH



DOWNSTREAM

Date 07/11/03

# BUENA VISTA ROAD BRIDGE 26 MILE DETOUR



## UNDERWATER INSPECTION REPORT

BRIDGE NAME:	Luckiamute River			REGION:		BRIDGE NUMBER:	10307A
RIVER NAME:	Luckiamute River	OWNER:	County	DISTRICT:	4	INSPECTION DATE:	5/08/2003
STATE HWY #:		ROUTE NUMBER:		MILE POINT:	8.85	CURRENT:	Moderate
COUNTY:	Polk	ROAD NAME:	Buena Vista Road			VISIBILITY (FC):	2
FOUNDATION TYPE:	Treated Timber Pile			ACCESS:	3	WATER TEMP:	48
DIVERS:	Shorb, James, Ottosen			INS. INTERVAL:	4	MAXIMUM DEPTH:	13-ft.

UNDERWATER ELEMENT CONDITION STATES:				CONDITION STATES						
Elem.	Description:	Environment	Qty	Units	1	2	3	4	5	Temp
206	Timber Column/Pile Extn.	Moderate	48	each	48	0	0	0	0	N

## NBI Ratings

Item	Description:	Condition State
60	Substructure Condition Assessment	7
61	Channel and Channel Protection Condition Assessment	6
113	Scour	U

## GENERAL NOTES:

This is a 3-span concrete structure founded on double row 24 Timber piling at each interior bent. It was constructed in 1957. The water surface elevation was measured up 4-ft. from the bottom the timber sheets at bent #2.

## ELEMENT REMARKS:

Elem. Description:

- 206 Bent #2: The upstream pile was in 7-ft. of water and the downstream pile was in 13-ft. of water. The bottom of the sheeting was 4-ft. below the water surface. There are two rows of treated timber pile, for a total of 24-piling. The piling have 4 x 12 treated sheeting all around them. The sheeting, bracing and piling are in good condition. The streambed is sand/silt.
- 206 Bent #3: The upstream pile was in 13-ft. of water and the downstream pile was in 11-ft. of water. There are two rows of treated timber pile, for a total of 24-piling. The piling have 4 x 12 treated sheeting all around them. The sheeting, bracing and piling are in good condition. There are 3 or 4 trees and some smaller drift. The streambed is sand/silt.

## Maintenance Recommendations:

Elem. Description:

- 206 Remove the drift lodged around bent #3. No other maintenance work is required at this time.



Rick Shorb, P.E.  
Underwater Operations Engineer  
(503) 986-2979

Polk County  
Bridge Operations - Steve Tuttle



Bent 1

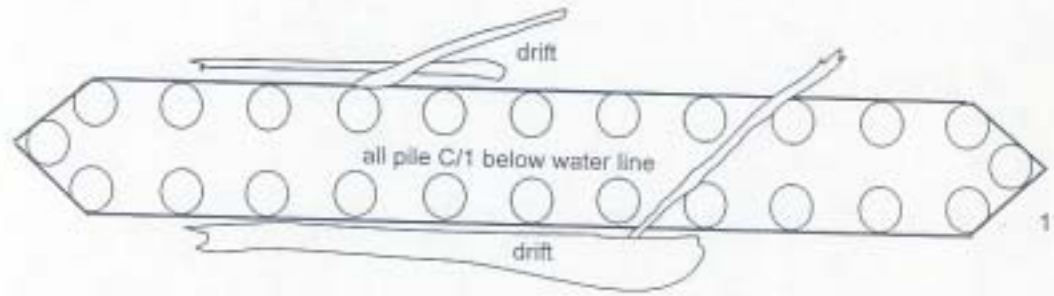
edge of water



Bent 2



streambed silty/sand



Bent 3

edge of water



Bent 4

Buena Vista Rd.  
53C048



Approach



Approach



Upstream

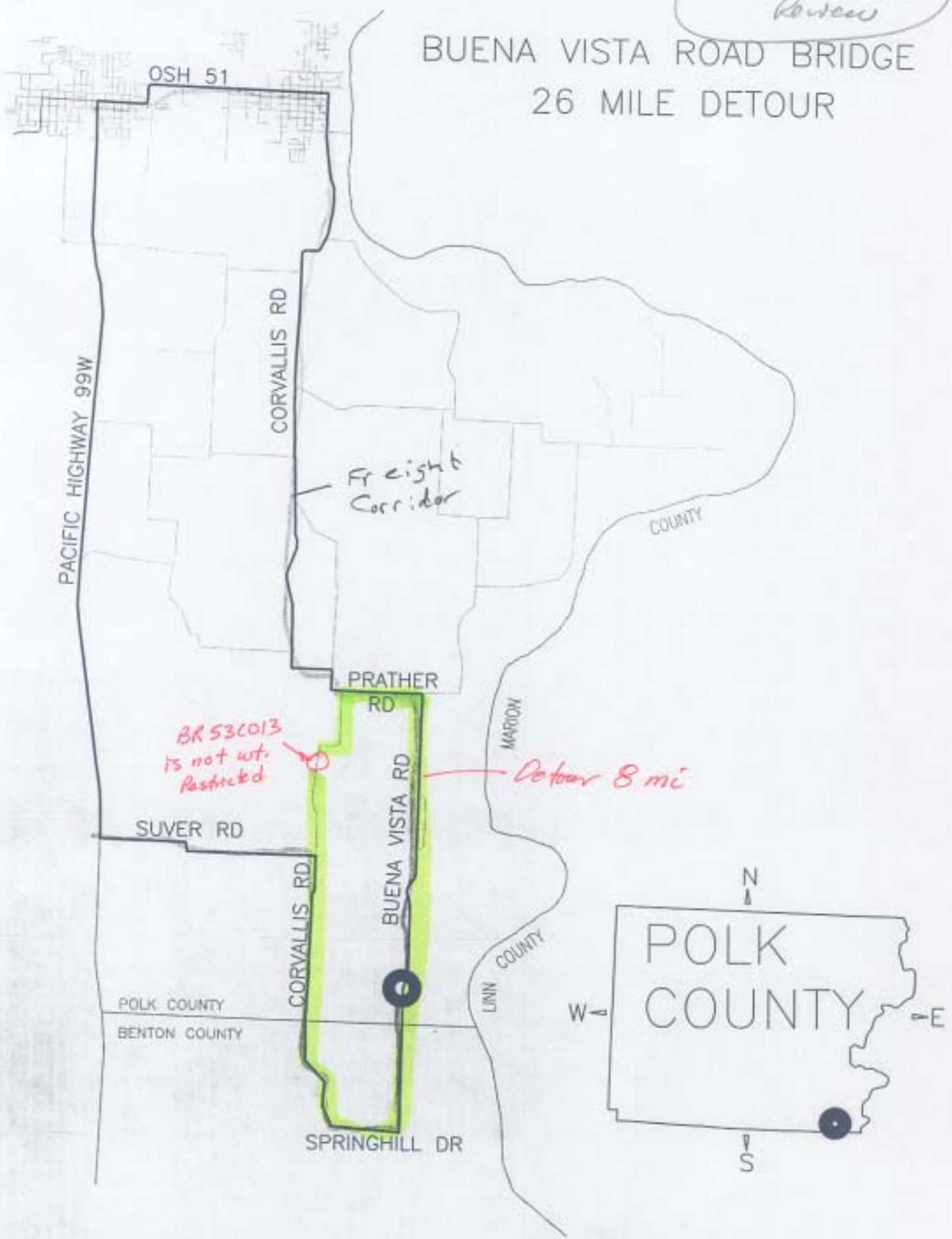


Downstream



J680 11/20/03  
Review

# BUENA VISTA ROAD BRIDGE 26 MILE DETOUR



# Bridge # 10307A

## LUCKIAMUTE RIVER, BUENA VISTA ROAD CROSSES LUCKIAMUTE RIVER, MP 8.85



LEGEND	
Not Weight Restricted Bridge	Restricted Bridge
Not in STIP / Application Submitted <span style="display: inline-block; width: 15px; height: 10px; background-color: #cccccc; border: 1px solid black;"></span>	In STIP / No Application Submitted <span style="display: inline-block; width: 15px; height: 10px; background-color: #000000; border: 1px solid black;"></span>
Other Bridges <span style="display: inline-block; width: 15px; height: 10px; border-bottom: 1px dashed black;"></span>	Not in STIP / Application Submitted <span style="display: inline-block; width: 15px; height: 10px; background-color: #808080; border: 1px solid black;"></span>
<b>Freight Route</b> <span style="display: inline-block; width: 15px; height: 10px; background-color: #808080; border: 2px solid black;"></span>	In STIP / Application Submitted <span style="display: inline-block; width: 15px; height: 10px; background-color: #404040; border: 1px solid black;"></span>
	Not in STIP / No Application Submitted <span style="display: inline-block; width: 15px; height: 10px; background-color: #c0c0c0; border: 1px solid black;"></span>

STIP : Statewide Transportation Improvement Program

FUNCTIONAL CLASSIFICATION	
STATE HWY	OTHER ARTERIAL
<span style="display: inline-block; width: 15px; height: 10px; background-color: #000000; border: 2px solid black;"></span>	<span style="display: inline-block; width: 15px; height: 10px; background-color: #000000; border: 1px solid black;"></span> INTERSTATE
<span style="display: inline-block; width: 15px; height: 10px; background-color: #000000; border: 1px solid black;"></span>	<span style="display: inline-block; width: 15px; height: 10px; background-color: #000000; border: 1px solid black;"></span> PRINCIPAL ARTERIAL
<span style="display: inline-block; width: 15px; height: 10px; background-color: #000000; border: 1px solid black;"></span>	<span style="display: inline-block; width: 15px; height: 10px; background-color: #000000; border: 1px solid black;"></span> MAJOR ARTERIAL
<span style="display: inline-block; width: 15px; height: 10px; background-color: #000000; border: 1px solid black;"></span>	<span style="display: inline-block; width: 15px; height: 10px; background-color: #000000; border: 1px solid black;"></span> URBN COLLECTOR / (RURAL MAJOR) COLLECTOR
<span style="display: inline-block; width: 15px; height: 10px; background-color: #000000; border: 1px solid black;"></span>	<span style="display: inline-block; width: 15px; height: 10px; background-color: #000000; border: 1px solid black;"></span> MINOR COLLECTOR
<span style="display: inline-block; width: 15px; height: 10px; background-color: #000000; border: 1px solid black;"></span>	<span style="display: inline-block; width: 15px; height: 10px; background-color: #000000; border: 1px solid black;"></span> LOCAL