W. 8.a

### **AGENDA COVER MEMO**

DATE:

May 24, 2006

TO:

Lane County Board of Commissioners

FROM:

Public Works, Engineering Administration

PRESENTED BY:

Sonny P.A. Chickering, County Engineer

AGENDA

IN THE MATTER OF AWARDING A CONTRACT TO JAL

**ITEM TITLE:** 

CONSTRUCTION, INC., IN THE AMOUNT OF \$658,276.33, FOR GRADING & DRAINAGE, BERNHARDT HEIGHTS ROAD (M.P. 0.58 TO M.P. 1.25), PROSPECTIVE CONTRACT NO. 05/06-13

#### I. MOTION

THAT THE ATTACHED BOARD ORDER IS ADOPTED, AWARDING THE CONTRACT FOR GRADING & DRAINAGE, BERNHARDT HEIGHTS ROAD (M.P. 0.58 TO M.P. 1.25), PROSPECTIVE CONTRACT NO. 05/06-13, TO JAL CONSTRUCTION, INC., IN THE AMOUNT OF \$658,276.33; DIRECTING THAT THE CONTRACT BE EXECUTED IN ACCORDANCE WITH THE BID SPECIFICATIONS; AUTHORIZING THE COUNTY ADMINISTRATOR TO SIGN THE CONTRACT; AND REQUIRING THE CONTRACTOR TO PRESENT A PERFORMANCE BOND AND PAYMENT BOND IN THE FULL AMOUNT OF THE CONTRACT

### II. ISSUE OR PROBLEM

The Bernhardt Heights Road project was open to the public for bid April 10, 2006 and a bid opening was held on April 28, 2006. The bids received were over the CIP funded amount of \$350,000 with a low bid of \$658,276.33. The Engineer's Estimate was \$602,000.

#### III. DISCUSSION

#### A. Background

Bernhardt Heights is a Rural Local Road serving nine private residences with an Average Daily Traffic (ADT) of 70. Zoning in the area is Rural Residential and Impacted and Nonimpacted Forest Lands. Bernhardt Heights dead-ends and connects only to Highway 126. The existing road continues to have slope instability and edge erosion.

The Board held a public hearing on November 6, 2002 to consider the realignment of the subject road. On December 4, 2002 the Board amended the 03-07 Capital Improvement Program (CIP) to include the Bernhardt Heights Realignment project under the General Construction Category in the amount of

\$160,000 and in the Right-of-Way category for \$15,000. The Board also adopted a project design concept document and the project carried over to the 04-08 CIP document and was listed at the same cost.

In May of 2004, a revised project cost of \$350,000 for construction and \$35,000 for right-of-way acquisition was added to the 05-09 CIP and adopted by the Board. As staff surveyed and started to develop the project, it was recommended that a revised alignment be used that decreased the right-of-way impact to private property owners and reduced impacts to threatened and endangered species. The revised alignment also reduced the number of stream crossings and provided better access to the main BPA tower. In December 2004 a public hearing was held before the Board to review the revised project alternative and provide another opportunity for residents on Bernhardt Heights Road to make comment.

On January 12, 2005 the Board passed a resolution reaffirming the overall design concept adopted by the Board in Board Order 02-12-4-2, approving the above-mentioned modified alignment, and reaffirming the funding of \$350,000 for construction and \$35,000 for right-of-way.

At this meeting, the Board also approved a combination of CIP project (new road construction) and County Force work (improvements to existing BPA roadway section). County crews have been actively working on the BPA section with guardrail replacement and ditching. In addition, County crews will chip seal the entire roadway near the end of construction in late summer.

Based on the final plans and requirements from regulatory agencies, the Engineer's Estimate was \$602,000. The Analysis portion of this memo will go into more detail on the issues impacting the overall cost.

#### B. Analysis

Bids were opened on April 28, 2006 with JAL Construction, Inc. submitting the lowest bid at \$658,276.33. This amount is \$308,276 over the CIP amount and around \$56,000 higher than the Engineer's Estimate. A Bid Recap is attached to this memo, and shows that there were three (3) contractors offering bids on this project. The three bids ranged from the low of \$658,276.33 to a high of \$938,765.50.

In general, the project costs have continued to increase throughout the life of this project. Various items have contributed to this increase, with the bulk of it being a result of regulatory and safety requirements as well as increases in overall road construction material costs. A brief overview of some of the items contributing to the cost increases are as follows:

**Environmental** – Based on a determination by the Army Corps of Engineers (ACOE) and the Oregon Department of State Lands (ODSL), the stream contained native game fish, thereby requiring the culvert to be designed to be fish passable. This resulted in a 60-inch culvert and around a \$25,000 project cost increase. In addition, there are new permit

requirements effective January of 2006 to show a work isolation and dewatering plan, along with a storm water management plan to treat run off from the constructed facilities. These items probably increased the project by around \$10,000.

**Slope stability** – Providing for safe and adequate slope stability along Lane County roads is a very important goal in our projects. This has been more evident since this last winter's storm events, in addition to recent projects such as Stagecoach Road. In order to adequately provide for slope stability over the large fill area of the stream crossing, our Geotechnical Engineer has recommended Goecell slope protection and a rock buttress, which include class 200 riprap. These items are listed at \$87,000 in the bid by the contractor.

In addition to structural slope stability, there is a permit need to control erosion of the slopes until vegetation is established. Use of Bonded Fiber Matrix is listed at around \$21,500 in the low bid.

Material prices – The Public Works Director has been reporting to the Board and the budget committee regarding the increases in material costs for road projects. Based on these increases, we think the project costs in general increased 20 to 30 percent from our previous total project planning costs or about \$130,000 to \$150,000. This can probably account for around 20 to 30 percent of the cost increases. Delays in Right-of-Way acquisition and local permits have created a project schedule that was impacted by inflationary increase in material costs.

Costs for Utility work within the newly acquired Right-of-Way. Since the right-of-way for the new alignment is being purchased, the utility companies are allowed to charge the project for their relocation costs. This has increased the project cost by around \$24,000, as shown in bid items 31 through 33.

In summary, by adding up the above direct costs due to environmental permitting, slope stability, and utility costs, the price of the project has increased by \$167,500. Increases in material prices probably added about \$130,000 to \$150,000 to the cost of the project since the start of its project development in 2004. In total, all of the cost increases results in the low bid being over the previous CIP amount.

## C. <u>Alternatives/Options</u>

1. Award contract by funding the difference in the CIP overage amount of around \$308,000 by using Road Fund balance.

This alternative improves overall safety for Lane County residents, and meets minimum safety and design standards normal for road projects of this size and complexity.

2. Do not award the contract. Redesign and re-bid the Bernhardt Heights Road project with a revised design concept that: relaxes the road width requirements, allows grades up to but not to exceed 16%, develops other alignment options.

Based on a very preliminary analysis, this alternative may reduce the cost of the project by around \$50,000 to \$100,000, but we would further delay the project and would probably need to expend additional staff resources in design, right-of-way, and permit activities. Increases in material costs over the next year may erode the potential savings further.

3. Do not award the contract and direct staff to maintain the current road at its present condition.

As of last month, the existing portion of Bernhardt Heights Road has experienced further slope erosion and movement. It is estimated that around 300 feet of road is directly impacted by the slope instability, and any further slide may require closure of the road. The road width at these locations is about 13 feet wide, and there is a significant vertical drop adjacent to the road.

### D. Recommendation

Option 1. Award this contract to the low qualified bidder of JAL Construction, Inc., in the amount of \$658,276.33

#### IV. IMPLEMENTATION / FOLLOW-UP

Upon approval by the Board, this contract will be processed and all required security bonds will be obtained.

#### **ATTACHMENTS**

- Board Order
- Bid Recap
- Recent Existing Road (photo)

# IN THE BOARD OF COMMISSIONERS OF LANE COUNTY STATE OF OREGON

ORDER NO.	( IN THE MATTER OF AWARDING A ( CONTRACT TO JAL CONSTRUCTION, INC. IN ( THE AMOUNT OF \$658,276.33 FOR GRADING ( & DRAINAGE, BERNHARDT HEIGHTS ROAD ( (M.P. 0.58 TO 1.25), PROSPECTIVE ( CONTRACT NO. 05/06-13
County Department of Public Works, under	2006, Bill Morgan, Interim Design Engineer at Lane er authority of Lane Manual, <u>Chapter 21</u> , opened bids ghts Road (M.P. 0.58 To M.P. 1.25), Prospective
	N, INC., submitted the low bid of \$658,276.33, and the y Public Works recommends that the bid be accepted;
ORDERED that the bid receive recommended; and it is further	ed from JAL Construction, Inc, be accepted as
	oned bidder be awarded a contract for Grading & 0.58 To M.P. 1.25), in the amount of \$658,276.33, in this further
	xecuted in accordance with this Order and the bid sents a Performance Bond and a Payment Bond, each execution; and it is further
<b>ORDERED</b> that following receipt Bond, the County Administrator be authorities.	of the contractor's Performance Bond and Payment zed to sign the contract.
DATED this day of	, 2006.
	Bill Dwyer, Chair Lane County Board of Commissioners

APPROVED ACTION OF SOME CONTROL OF LEGISLES OF LEGISLE

# Lane County Department of Public Works

## **Bid Recap**

Description: Grading & Drainage

28 Loose Riprap, Class 200

Ton

1,450

\$25.50

County Site: Bernhardt Heights Road (M.P. 0.58 To M.P. 1.25)

Date of Opening: 10:00 a.m.

\$36,250.00

\$25.00

Friday, April 28, 2006

Contract: 05/06-13

#3 JAMES W. FOWLER CO. #1 JAL CONSTRUCTION. #2 LTM INC.:dba BRACELIN-#4 12775 Westview Drive YEAGER EXCAVATING & INC. Prepared By: scf Dallas, OR 97338 P. O. Box 6269 TRUCKING Bend, OR 97708 Checked By: bm 3055 Ocean Blvd. Coos Bay, OR 97420 Unit Unit Unit Unit ltem Price Amount **Price** Amount Price Amount No. Unit Price **Amount** Qtv Item \$93,000.00 \$59,600,00 \$59,600,00 \$93,000.00 1 Mobilization Lump Sum 1 \$65,900.00 \$65,900.00 \$1,000.00 \$1.000.00 \$10,000.00 \$10,000,00 2 Temporary Protection and Direction of Traffi Lump Sum 1 \$363.50 \$363,50 Sa. Ft. 200 \$14.24 \$2.848.00 \$16.00 \$3,200,00 \$22.00 \$4,400.00 3 Temporary Signs \$235.00 \$1,410.00 \$325.00 \$1,950.00 6 \$780.00 4 Temporary Barricades Each \$130.00 \$55.00 \$550.00 Each 10 \$57.00 \$570.00 \$65.00 \$650.00 5 Temporary Plastic Drums \$1,600.00 \$24,000.00 \$24,000.00 6 Erosion Control Lump Sum \$3.028.00 \$3.028.00 \$1,600.00 \$9,600.00 \$14,400.00 \$60.00 Each 160 \$40.00 \$6,400.00 \$90.00 7 Check Dams \$65.00 \$195.00 Each 3 \$82.00 \$246.00 \$60.00 \$180.00 8 Inlet Protection \$110.00 \$6.00 \$120.00 \$250.00 \$5.50 Each 20 \$12.50 9 Sand Bags \$7,200.00 Lin. Ft. 2,400 \$2.75 \$6,600,00 \$2.02 \$4.848.00 \$3.00 10 Sediment Fence, Unsupported \$25,024.00 \$8,750.00 \$23,800.00 \$9,200.00 11 Matting, Type C, Bonded Fiber Matrix Acre 2.72 \$7,900,00 \$21,488.00 \$1,700.00 . \$2,445.00 \$500.00 \$500.00 \$1,700.00 Lump Sum 1 \$2,445.00 12 Pollution Control Plan \$500.00 \$58,000.00 \$58,000.00 Lump Sum 1 \$3,090.00 \$3.090.00 \$500.00 13 Work Containment Plan \$0.00 \$0.00 XXX 0 \$0.00 14 NOT USED \$0.00 \$2,150.00 \$10,000.00 \$10,000.00 Lump Sum 1 \$4,230.62 \$4,230.62 \$2,150.00 15 Removal of Structures and Obstructions \$5.00 \$1,090.00 \$826.22 \$9.50 \$2,071.00 16 Removal of Surfacings Sa. Yd. 218 \$3.79 \$64,700.00 \$80,000.00 \$80,000.00 \$64,700.00 Lump Sum \$76.331.12 \$76,331.12 17 Clearing and Grubbing (4.4 +/- Acres) 1 \$184,600.00 Cu. Yd. 14,200 \$5.72 \$81,224.00 \$8.87 \$125,954.00 \$13.00 18 General Excavation \$55.00 \$65.00 \$3,575.00 \$1.00 M-Gal. 55 \$30.75 \$1.691.25 19 Watering 460 \$772.80 \$1.15 \$529.00 \$2.25 \$1,035.00 Sq. Yd. \$1.68 20 Riprap Geotextile, Type 1 \$1,620.00 \$2.75 \$2,227.50 21 Riprap Geotextile, Type 2 Sq. Yd. 810 \$2.00 \$1,620.00 \$2.00 \$2.00 \$2,000.00 1,000 \$1.07 \$1,070.00 Sq. Yd. \$1.38 \$1,380.00 22 Subgrade Geotextile, Type 1 \$5.00 \$4,625.00 Sq. Yd. 925 \$52.34 \$48,414.50 \$29.00 \$26,825.00 23 Geocell Slope Protection \$20,000.00 \$20,000.00 \$15,100.00 \$15,100.00 Lump Sum \$11.560.00 \$11,560.00 24 Finishing Roadbeds 1 \$875.00 \$42.76 \$1,069.00 \$35.00 Ton 25 \$38.00 \$950.00 25 Loose Riprap, Class 25 \$35.00 \$3,850.00 \$43.50 \$4,785.00 26 Loose Riprap, Class 50 Ton 110 \$36.50 \$4,015.00 \$35.00 \$875.00 \$1.069.00 Ton 25 \$38.00 \$950.00 \$42.76 27 Loose Riprap, Class 100

\$36,975.00

\$20.58

\$29,841.00

# **Lane County Department of Public Works**

# **Bid Recap**

Description: Grading & Drainage

County Site: Bernhardt Heights Road (M.P. 0.58 To M.P. 1.25)

Date of Opening: 10:00 a.m.

Contract: 05/06-13

Friday, April 28, 2006

Prepared By: scf Checked By: bm			#1 JAL CONSTRUCTION, INC. P. O. Box 6269 Bend, OR 97708		#2 LTM INC. dba BRACELIN- YEAGER EXCAVATING & TRUCKING 3055 Ocean Blvd. Coos Bay, OR 97420		#3 JAMES W. FOWLER CO. 12775 Westview Drive Dallas, OR 97338		#4	
Item No. Item	Unit	Qty	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
29 Keyed Riprap, Class 25	Ton	30	\$35.00	\$1,050.00	\$45.50	\$1,365.00	\$35.00	\$1,050.00	<del></del>	<del></del>
30 Keyed Riprap, Class 50	Ton	70	\$36.26	\$2,538.20	\$45.50	\$3,185.00	\$35.00	\$2,450.00		
31 Utility Bench Trench	Lin. Ft.	434	\$24.29	\$10,541.86	\$36.00	\$15,624.00	\$32.00	\$13,888.00		
32 Utility Conduit Trench	Lin. Ft.	284	\$29.72	\$8,440.48	\$27.00	\$7,668.00	\$25.00	\$7,100.00		
33 Utility Protection Trench	Lin. Ft.	142	\$33.22	\$4,717.24	\$31.00	\$4,402.00	\$40.00	\$5,680.00		
34 12-Inch Storm Sewer Pipe, 5 Feet Depth	Lin. Ft.	156	\$35.87	\$5,595.72	\$41.00	\$6,396.00	\$80.00	\$12,480.00		
35 18-Inch Storm Sewer Pipe, 5 Feet Depth	Lin. Ft.	48	\$47.37	\$2,273.76	\$57.50	\$2,760.00	\$80.00	\$3,840.00		
36 12-Inch Culvert Pipe, 5 Feet Depth	Lin. Ft.	174	\$36.65	\$6,377.10	\$43.00	\$7,482.00	\$80.00	\$13,920.00		
37 18-Inch Culvert Pipe, 5 Feet Depth	Lin. Ft.	254	\$37.52	\$9,530.08	\$58.00	\$14,732.00	\$85.00	\$21,590.00		
38 60-Inch Culvert Pipe, 5 Feet Depth	Lin. Ft.	200	\$221.50	\$44,300.00	\$185.00	\$37,000.00	\$225.00	\$45,000.00		
39 T.V. Inspection for Storm Sewer	Lin. Ft.	204	\$3.00	\$612.00	\$2.50	\$510.00	\$3.00	\$612.00		
40 Concrete Water Quality Inlet	Each	1	\$4,846.51	\$4,846.51	\$6,550.00	\$6,550.00	\$6,750.00	\$6,750.00		
41 Concrete Inlets, Type D	Each	1	\$1,041.57	\$1,041.57	\$1,950.00	\$1,950.00	\$1,800.00	\$1,800.00		
42 Drainage Curbs	Lin. Ft.	306	\$8.40	\$2,570.40	\$8.50	\$2,601.00	\$17.00	<b>\$5,20</b> 2.00		
43 3/4"-0 Aggregate Base	Ton	1,320	\$17.42	\$22,994.40	· \$27.00	\$35,640.00	\$23.00	<b>\$30,360</b> .00		
44 1 1/2"-0 Aggregate Base	Ton	7,400	\$17.42	\$128,908.00	\$19.25	\$142,450.00	\$22.00	<b>\$162,800</b> .00		
45 Guardrail, Type 2A	Lin. Ft.	437	\$20.00	\$8,740.00	\$22.00	\$9,614.00	\$22.00	\$9,614.00		
46 Guardrail Anchors, Steel (Type 1 Modified)	Each	2	\$450.00	\$900.00	\$518.00	\$1,036.00	\$500.00	\$1,000.00		
47 Guardrail End Pieces, Type B	Each	1	\$100.00	\$100.00	\$75.00	\$75.00	\$110.00	<b>\$1</b> 10.00		
48 Guardrail Terminals, Energy Absorbing (No	Each	1	\$2,750.00	\$2,750.00	\$2,600.00	\$2,600.00	\$3,000.00	\$3,000.00		
49 Guardrail Terminals, Energy Absorbing (Fla	a Each	2	\$2,250.00	\$4,500.00	\$2,300.00	\$4,600.00	\$2,500.00	\$5,000.00		
Total Amount of Bid:			\$658,276.33	*	\$698,100.00		\$938,763.50			

Engineer's Estimate:

\$602,000.00

<sup>\*</sup> Indicates a discrepancy between contractor's submitted totals and totals calculated from unit costs submitted.



