

CONSTRUCTION VALUE ENGINEERING CHANGE PROPOSAL
MISSOURI DEPARTMENT OF TRANSPORTATION

Date 6/18/08

Contract ID 071221-701 Job No. J7P0769 & J7O2146
County Barry Route 60 Original Bid Cost \$7,236,141.72
Contractor APAC-Missouri, Inc. By David Wilkins
Designed By APAC-Missouri, Inc. Phone 417-868-6700

VECP 08-74

1. Description of existing requirements and proposed change(s). Advantages/Disadvantages

The original design on the above referenced project calls for removing the existing asphalt shoulders on Rt. 60, and constructing 13" asphalt widening at variable widths. While removing the shoulders June 9th through June 10th, 8" concrete pavement was discovered under the asphalt shoulders from approximate Sta. 60+00 to 78+95 (right and left approximately 3005 SY). We propose to leave the concrete pavement in place and overlay it with asphalt. This pavement typical would be the same as what existing Rt. 60 (8" of concrete with an asphalt overlay). A new asphalt tonnage item would have to be established on the project for overlaying the concrete that is to be left in place. The new asphalt item would be subject to the asphalt index even though it is less than 1000 wet tons (i.e. MoDOT will reimburse APAC-Missouri, Inc. for the difference in MoDOT asphalt index price of December 2007 to when the asphalt tonnage item is laid).

Note: No engineering fees were included in the above proposal. We are requesting that if any engineering is required, MoDOT perform the engineering at no cost to APAC-Missouri, Inc or this proposal. Superpave bonuses/deducts are not part of the cost savings and will be solely retained by APAC-Missouri, Inc.

The primary advantage is overlaying the existing concrete will serve the same propose as the original design at a lower cost to the taxpayers.

APAC-Missouri, Inc. does not foresee any disadvantages to the above proposal.

This is a conceptual value engineering proposal. The net savings is yet to be determined until we develop a tonnage asphalt item. The attached sheet shows the items to be under-run with and dollars saved with exception to the asphalt tonnage item.

2. Estimate of reduction in construction costs.

$-\$101,830.29 + ?$ ~~2791.8 Sq.Yd.~~ 3.75" or 4.25" see a/d.

3. Prediction of any effects the proposed change(s) will have on other department costs, such as maintenance and operations.

APAC-Missouri, Inc. foresees no additional costs for MODOT.

4. Anticipated date for submittal of detailed change(s) of items required by Section 104.6 of the Specifications.

6/23/08

(date)

5. Deadline for issuing a change order to obtain maximum cost reduction, noting the effect of contract completion time or delivery schedule.

July 7, 2008

(date)

No change to completion date or schedule.

(effect)

6. Dates of any previous or concurrent submission of the same proposal.

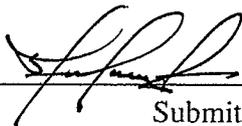
N/A

(date and/or dates)

Additional Comments:

**** Portion Below This Line To Be Filled Out by MoDOT ****

Comments: *See attached sheet "J7P0769... Shots on Existing Concrete - Savings"*



Submitted By Resident Engineer

7-21-08

Date

Comments:

Value Engineering Proposal. dot

- Approval Recommended
- Rejection Recommended

Becky Bath
District Engineer

7-30-08
Date

Comments:

CONCEPTUAL APPROVAL IN ACCORDANCE WITH DISTRICT'S RECOMMENDATION

- Approval
- Rejection

David D. Coover
State Construction and Materials Engineer

9-8-08
Date

Distribution: Resident Engineer, Project Manager, District Operations Engineer, State Construction and Materials Engineer
*Value Engineering Administrator - *MoDOT, P.O. Box 270, Jefferson City, MO 65102

RT. 60 BARRY VE SUMMARY SHEET

Original Contract

Item Number	Item Description	Bid Quantity	Units	Unit Price	Total
130	TACK	3650	GAL	\$1.40	\$5,110.00
1050	TYPE 1 AGGERGATE FOR BASE (4" THICK)	30021	SQYD	\$5.35	\$160,612.35
1060	13 IN, ASPH CONC PAVE SP125C	28641	SQYD	\$37.40	\$1,071,173.40
Total					\$1,236,895.75

VE Proposal

Item Number	Item Description	Bid Quantity	Units	Unit Price	Total
120	SP125C 70-22	3005	SQYD	\$6.20	\$18,631.00
130	TACK	3800	GAL	\$1.40	\$5,320.00
1050	TYPE 1 AGGERGATE FOR BASE (4" THICK)	27016	SQYD	\$5.35	\$144,535.60
1060	13 IN, ASPH CONC PAVE SP125C	25636	SQYD	\$37.40	\$958,786.40
xx1	*TONNAGE ASPHALT ITEM FOR OVERLAY	661	TONS	xxxx	xxxx
Total					\$1,127,273.00

Total Savings

\$109,622.75

*Price for tonnage item to be submitted later if conceptual VE is approved.

J7P0769 - Rte. 60 Monett, MO
 071221-701
 Shots on Existing Concrete - Savings

<u>Line No:</u>	<u>Desc:</u>	<u>Qty:</u>	<u>Units:</u>	<u>Unit Price:</u>	<u>Savings:</u>	
120	SP125C Overlay Qty (1.75")	2791.8	SQYD	\$6.20	\$17,309.16	
1060	SP125C (13")	2791.8	SQYD	-\$37.40	-\$104,413.32	
130	Tack	150	GAL	\$1.40	\$210.00	**Applied at .05 GAL/SQYD
1050	Type 1 Agg. For Base	2791.8	SQYD	-\$5.35	-\$14,936.13	
500X	*SQYD Asphalt item for Overlay (4.25" or 3.75")	2791.8	SQYD	xxx	\$0.00	**SP250C - Approx. 645 Tons if placed at 4.25"
Total:					-\$101,830.29	

Comments by RE: Approval recommended for this Value Engineering Proposal (75/25) as a concept only for the following reasons. APAC has requested to lay this asphalt on a wet ton basis. I would like to see it administered on square yards. The original plans depicted these areas receiving 13" of asphalt per the square yard. Note - consideration is also being made to lessen the 13" asphalt typical by 0.5". Additionally, the above table represents only approx costs as APAC has not submitted a proposed cost on the line no 500X.

by Steve Campbell 07/21/08

NEOSHO PROJECT OFFICE COST SAVINGS INITIATIVE

COPY

#1 - Opportunity

Report to work at closest maintenance facility and commute to project from the Maintenance facility. This is for active projects.

1) Fuel consumption from maintenance facility to project is cost effective. The difference in distance should not just be a couple of miles shorter.

a) Distance from residence to project office	<input type="text"/>	Est. Savings per week	<input type="text"/>
b) Distance from project office to middle of project	<input type="text"/>	Show Calc below	
c) Distance from residence to maintenance facility	<input type="text"/>		
d) Provide a map with anticipated route of travel (Y/N)	<input type="text" value="Y/N"/>	(Get map using http://maproom.missouri.edu/ - approved MoDOT Link)	

#2 - Opportunity

Allowing more state equipment to be driven home at night.

1) Fuel consumption from residence to project is cost effective. The difference in distance should not just be a couple of miles shorter.

a) Distance from residence to project office	<input type="text" value="29.46mi"/>	Est. Savings per week	<input type="text" value="\$47.68/wk"/>
b) Distance from project office to middle of project	<input type="text" value="31.66mi"/>	Show Calc below	
c) Distance from residence to middle of project	<input type="text" value="3.35mi"/>		
d) Provide a map with anticipated route of travel (Y/N)	<input type="text" value="Y/N"/>	(Get map using http://maproom.missouri.edu/ - approved MoDOT Link)	

Narrative: Please provide brief narrative explaining what time/ where you will be required to report to work. Any adjustments in weekly schedule will be reported to the RE via email.

Report on project @ 7:30am / Leave @ 4:00pm - J7P0769 - RTE. 60 MONETT, MO

The undersigned employee understands that the MoDOT vehicle will only be used for the purpose of conducting state business, and will not be used for any purpose that violates MoDOT policy. The employee further understands that this is a trial period being conducted in an effort to save MoDOT money, that this program may be stopped at any time if evidence suggests it is not working. The employee will be responsible for keeping a daily mileage log that tracks the usage.

Form Completed by	<input type="text" value="GREGG R. CHAPMAN"/>	Date	<input type="text" value="7-2-08"/>
Approved by	<input type="text" value="Steve Campbell"/>	Date	<input type="text" value="7-3-08"/>
Effective Date for Approval Expires		Date	<input type="text" value="9-3-08"/>

Calcs:

* Assume truck gets 15mi/gal

① Driving from Office to Jobsite:

$$31.66mi \times 2 \text{ trips/day} = 63.32 \text{ mi/day} \times 5 \text{ days/wk} = 316.6 \text{ mi/wk} \Rightarrow \frac{316.6 \text{ mi/wk}}{15 \text{ mi/gal}} = 21.11 \text{ gal} \times 3.79 \text{ /gal} = \$80.00 \text{ /wk}$$

② Driving from Home to Jobsite:

$$8.35mi \times 2 \text{ trips/day} = 16.7 \text{ mi/day} \times 4 \text{ days/wk} = 66.8 \text{ mi/wk}$$

$$\text{(Trip to office)} \quad 30.56mi \times 2 \text{ trips/day} = 61.12 \text{ mi/day} \times 1 \text{ day/wk} = 61.12 \text{ mi/wk} > 127.92 \text{ mi/wk} \Rightarrow 15 \text{ mi/gal}$$

Home to office (29.46mi)
(29.46 + 31.66) / 2

* STATE SAVINGS: \$80.00 - \$32.32 = \$47.68/wk

= 30.56mi

MAPQUEST

A: 1501 Malcolm Mosby Dr, Neosho, MO 64850-7798

-  1: Start out going WEST on MALCOLM MOSBY DR toward MO-59 N/US-71 BR N. 0.5 mi
-  2: Turn RIGHT onto US-71 BR N/MO-59 N. 0.6 mi
-  3: Turn RIGHT onto US-60/MO-59. 5.1 mi
-  4: Turn RIGHT onto MO-86. 7.1 mi
-  5: Turn LEFT onto MO-M. 3.0 mi
-  6: Turn RIGHT onto US-60. 15.3 mi
-  7: Turn RIGHT onto S KYLER ST. 0.0 mi
-  8: End at E Us Highway 60 & S Kyler St Monett, MO 65708

Estimated Time: 38 minutes Estimated Distance: 31.66 miles

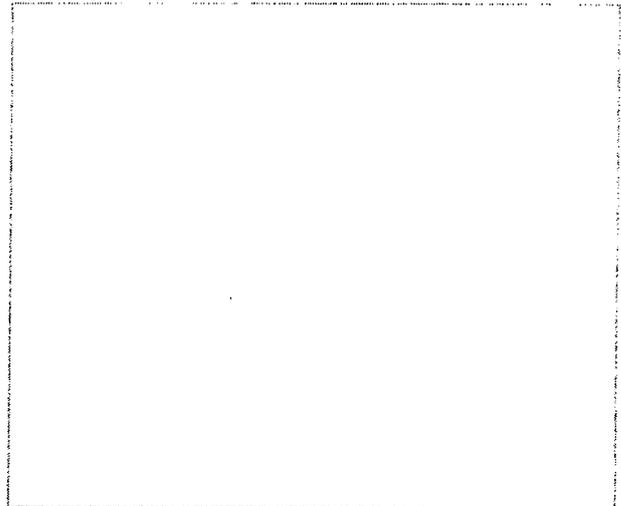
B: E Us Highway 60 & S Kyler St, Monett, MO 65708

Total Time: 38 minutes Total Distance: 31.66 miles



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MAPQUEST



A: 1501 Malcolm Mosby Dr, Neosho, MO 64850-7798

- | | | |
|---|--|---------|
|  | 1: Start out going WEST on MALCOLM MOSBY DR toward MO-59 N/US-71 BR N. | 0.5 mi |
|  | 2: Turn RIGHT onto US-71 BR N/MO-59 N. | 0.6 mi |
|  | 3: Turn RIGHT onto US-60/MO-59. | 5.1 mi |
|  | 4: Turn RIGHT onto MO-86. | 7.1 mi |
|  | 5: Turn LEFT onto MO-M. | 3.0 mi |
|  | 6: Turn RIGHT onto US-60. | 10.0 mi |
|  | 7: Turn LEFT onto MO-97. | 2.1 mi |
|  | 8: Turn RIGHT onto MO-37/MO-97/W COMMERCIAL ST. | 0.2 mi |
|  | 9: Turn LEFT onto MO-97/N ELM ST. Continue to follow MO-97. | 0.8 mi |
|  | 10: End at 800 Linzee Blvd Pierce City, MO 65723-1305 | |

Estimated Time: 38 minutes Estimated Distance: 29.46 miles

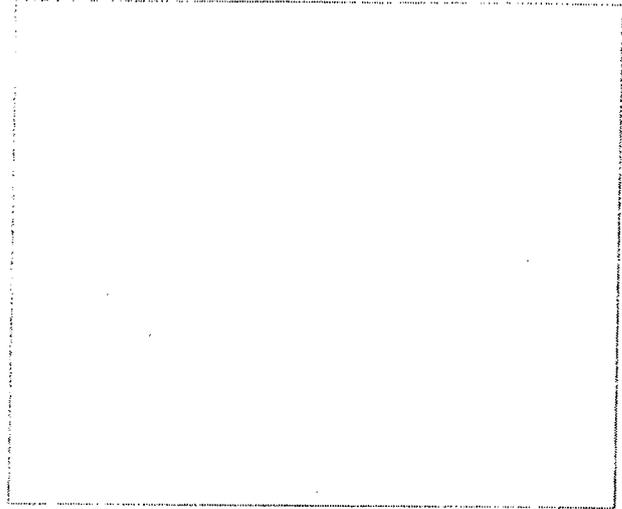
B: 800 Linzee Blvd, Pierce City, MO 65723-1305

Total Time: 38 minutes Total Distance: 29.46 miles



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MAPQUEST.



A: 800 Linzee Blvd, Pierce City, MO 65723-1305

- | | | |
|---|---|--------|
|  | 1: Start out going SOUTH on E MADISON ST/MO-97 toward N MYRTLE ST.
Continue to follow MO-97. | 0.8 mi |
|  | 2: Turn RIGHT onto MO-37/MO-97/E COMMERCIAL ST. | 0.2 mi |
|  | 3: Turn LEFT onto MO-97/FORD ST. Continue to follow MO-97. | 2.1 mi |
|  | 4: Turn LEFT onto US-60. | 5.3 mi |
|  | 5: Turn RIGHT onto S KYLER ST. | 0.0 mi |
|  | 6: End at E Us Highway 60 & S Kyler St Monett, MO 65708 | |

Estimated Time: 13 minutes Estimated Distance: 8.35 miles

B: E Us Highway 60 & S Kyler St, Monett, MO 65708

Total Time: 13 minutes Total Distance: 8.35 miles



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MEMORANDUM

Missouri Department of Transportation
Construction & Materials
District 7

TO: Dave Ahlvers
State Construction & Materials Engineer

FROM: Michael C. Middleton *M.C.M.*
District Construction & Materials Engineer

DATE: July 30, 2008

SUBJECT: Contract 071221-701
Job No. J7P0769 & J7O2146
Route 60, Barry County
Value Engineering Proposal

RECEIVED
JUL 31 2008
Construction & Materials - ECR

Attached you will find three copies of a Value Engineering Proposal from APAC-Missouri, Inc. on the above referenced project for your review and signature. I recommend approval of this Value Engineering Proposal.

Please return two copies to my attention, retaining the third copy for your records.

Thank you.

VALUE ENGINEERING CHECK SHEET

TYPE OF WORK

(Check one that applies)

- Bridge/Structure/Footings
- Drainage Structures (RCP, RCB, CMP's, ect.)
- TCP/MOT
- Paving (PCCP, ect.)
- Grading/MSE Walls
- Signal/Lighting/ITS
- Misc. _____

SUMMARY OF PROPOSAL

(If needed, condense summary to a couple of lines)

_____ Use in place existing concrete pavement in widening area.

SCANNING OF DOCUMENT

If the proposal is large, please mark or make note, which pages need to be scanned into the database. If there are special instructions, make note of them here.

_____ No need to scan plan
sheets _____