



MEMORANDUM

Missouri Department of Transportation
Construction & Materials
District 2

TO: Dave Ahlvers-cm

FROM: Dennis Brucks *DB*
District Construction & Materials Engineer

DATE: March 11, 2008

SUBJECT: VE Proposal #1 (Revised)
J2P0771 / J2P0773, Rte. 63, Randolph/Macon/Adair

Attached is a VE proposal that I have revised from the original proposal from APAC. The APAC proposal called for a no-cost change from Hot-in-Place Recycle (HIR) to a 2" cold mill, with 2" SP190C overlay. That proposal was designated as acceptable, contingent on some cost savings being shown as a result of the change.

I submitted a revised proposal to APAC that substitutes the overlay in lieu of HIR, but also eliminates the 1-foot strip of HIR on both shoulders. My proposal also changes the surfacing on that 1-foot strip from SP125C to BP-1.

The revised proposal saves approximately \$97,000, with APAC receiving \$27,702.69. MoDOT's share is approximately \$70,000. APAC has agreed to this revised proposal.

Attachment



APAC-Missouri, Inc.

1591-A East Prathersville Road
Columbia, MO 65202
P.O. Box 1117
Columbia, MO 65205
Tel: 573 449-0886, Fax: 573 449-2980

Monday, March 03, 2008

Jeff Gander, R.E.
MoDOT Macon Project Office
P.O. Box 254
26824 US. Hwy 63 North
Macon, MO 63552

Re: Rte. Randolph/Adair/Macon Co., Job No. J2P0771 J2P0773, Contract I.D. No. 071130-202

Dear Mr. Gander:

Attached is the Value Engineering proposal that was revised and discussed at the meeting in Columbia, MO. We have reviewed the quantities and prices listed for each individual item and are submitting it for final approval.

Please let us know if there are any questions.

Sincerely,
APAC-Missouri, Inc.

A handwritten signature in black ink, appearing to read 'Jason Backues', written over a white background.

Jason Backues
Superintendent

Cc: Job File

RECEIVED

MAR 10 2008

 **Safety First** *Always*

VE #1 (Revised)

CONSTRUCTION VALUE ENGINEERING CONCEPT PROPOSAL
MISSOURI DEPARTMENT OF TRANSPORTATION

Date 01/28/2008

Contract ID 071130-202
County Randolph/Adair/Macon Route 63
Contractor APAC
Designed By MoDOT

Job No. J2P0771 / J2P0773
Original Bid Cost \$9,769,580.61
By Chad Girard
Phone (573) 449-0886

VE # 08-08

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

Substitute a 24' wide, 2" cold mill, with 2" SP190C overlay, in lieu of the planned 26' wide Hot-in-Place recycling. Eliminate the 1' wide Hot-in-Place recycling on each shoulder - the contractor would share in 25% of the savings from this underrun. Overlay the 1' strip on each shoulder with BP-1 in lieu of SP125C - the contractor would share in 50% of the savings from using a lower cost mix. See attached spreadsheet and typical section for more detail.

2. Estimate of reduction in construction costs. \$70,004.65

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

This proposal gives MoDOT a proven treatment (3.75" Superpave overlay) that is commonly used for rehabilitation of major routes such as Route 63. The superpave overlay requires a higher level of quality control and should provide a higher quality product that will outperform the hot-in-place recycle.

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

01/28/2008

(date)

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

(date)

(effect)

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

12/17/2007

(date and/or dates)

Additional Comments:

In addition to providing a higher quality product, we believe this proposal will provide a smoother surface. APAC is willing to accept standard smoothness requirements (403.20.2) for the 2" SP190C, including incentive and deduct payments specified in 502.15, based on the profilograph results of the surface course.

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

Comments: *I recommend approval of this proposal.*

[Signature]
Submitted By Resident Engineer

3-10-08
Date

Comments:

Approval Recommended
 Rejection Recommended

[Signature]
District Engineer *DHB*

3/10/08
Date

Comments:

Approval
 Rejection

[Signature]
State Operations Engineer *DMG*

3/11/2008
Date *3/11/2008*

VE Proposal #1 - Revised

J2P0771/J2P0773, Rte. 63, Randolph, Macon, Adair Co.

VE Savings - Eliminate HIR from the Shoulder (1' on each side)

Item	Quantity	Unit Price	Amount
Misc. Emulsified Asphalt (gal.)	6018.00	2.12	\$12,758.16
2" Hot in Place Recycling (sq. yd.)	17696.00	4.06	\$71,845.76
Value Engineering Savings:			\$84,603.92
Value Engineering Savings for Contractor (25%):			\$21,150.98
Value Engineering Savings for MoDOT (75%):			\$63,452.94

VE Savings - Use BP-1 in Lieu of SP125 on the Shoulder (1' on each side)

Line No.	Item	Quantity	Unit Price	Amount
0040	Bituminous Pavement Mix (BP-1)	771.00	37.87	\$29,197.77
0050	Asph Conc Mix (SP125C)	-771.00	45.88	-\$35,373.48
0380	Bituminous Pavement Mix (BP-1)	949.00	45.15	\$42,847.35
0400	Asph Conc Mix (SP125C)	-949.00	52.45	-\$49,775.05
Value Engineering Savings:				\$13,103.41
Value Engineering Savings for Contractor (50%):				\$6,551.71
Value Engineering Savings for MoDOT (50%):				\$6,551.71

Total Value Engineering Savings for Contractor:	\$27,702.69
Total Value Engineering Savings for MoDOT:	\$70,004.65

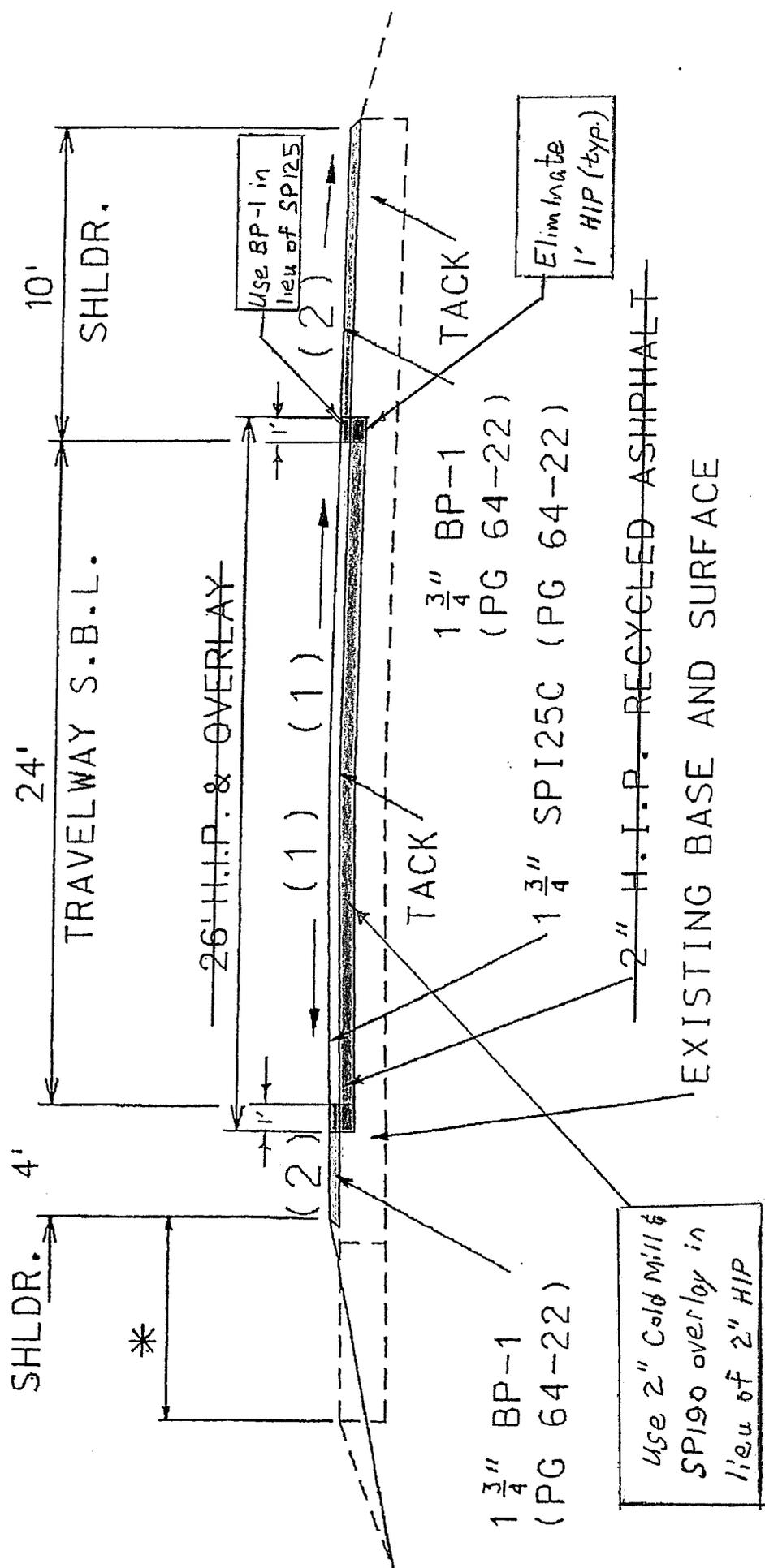
Underrun of HIR Bid Items in Contract

Line No.	Item	Quantity	Unit Price	Amount
0080	Misc. Emulsified Asphalt (gal.)	35,070.00	2.12	\$74,348.40
0100	2" Hot in Place Recycling (sq. yd.)	103,117.00	4.06	\$418,655.02
0270	Cold Milling Conc Pavement (sq. yd.)	4,400.00	8.12	\$35,728.00
0430	Misc. Emulsified Asphalt (gal.)	43,157.70	2.12	\$91,494.32
0450	2" Hot in Place Recycling (sq. yd.)	126,934.00	4.06	\$515,352.04
Total of all HIR items in contract:				\$1,135,577.78
Less HIR items in VE Savings:				\$84,603.92
Total cost of HIR items eliminated from travel lanes:				\$1,050,973.86

Add Items for Conventional Cold Mill and 2" Overlay

Line No.	Item	Quantity	Unit Price	Amount
5001	Asph Conc Mix PG 64-22 (SP190C)	10,576.00	39.84	\$421,347.84
5002	Cold Milling Bit Pvmt 3" or Less (sq.yd.)	✓ 95,185.00	0.17	\$16,181.45
5101	Asph Conc Mix PG 64-22 (SP190C)	13,019.00	45.59	\$593,536.21
5102	Cold Milling Bit Pvmt 3" or Less (sq.yd.)	✓ 117,170.00	0.17	\$19,918.90
Total cost of items added to contract for conventional cold mill and 2" overlay:				\$1,050,984.40

Note: Cost of conventional overlay does not exactly match HIR cost due to rounding of unit prices.



SECTION ON TANGENT
 TYPICAL SECTION RTE. 63

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)

This involves milling and placement of virgin hot mix asphalt, instead of the hot recycling in-place that was designated by the contract.

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.
