



MEMORANDUM

Missouri Department of Transportation Design District 4

TO: Jay Bestgen-de 
FROM: Lisa Stupps 
Transportation Project Designer
DATE: December 13, 2007
SUBJECT: Route 40, Jackson County
From Hocker Road to East of Lee's Summit Road
Job No. J4S1776
Practical Design 2007 Awards for Excellence

The purpose and need of this project was to provide safety improvements by widening Route 40 at several locations between Hocker Road and Lee's Summit Road where the roadway currently alternates between a 4 and 5 lane facility. A uniform roadbed width was proposed through the project limits that would allow 4 – 10' lanes with a 14' two-way-left-turn-lane for dedicated turning movements. Prior to this project, this location had an accident rate of 10 times the statewide average and also included a high severity location at Phelps and Brentwood. This project was originally scheduled to be let in the same construction year as the Noland Road Bridge Replacement project. It was moved to a 2007 letting so that it did not interfere with the traffic control for the Noland Road to be let in 2008. Moving this project up gave us less than a year to go from approved conceptual plans to final plans and to acquire any right of way needed for the project. Any practical design suggestions were not only to reduce the cost but also mainly to reduce the right of way impacts and speed up the acquisition process.

The original STIP amount for this project, which came from our preliminary plan cost estimate, was a total of \$2.35 million based on widening to the south, buying a 20' width of new right of way, and building a median in several locations. The original right of way estimate was \$2,100,000.

The Core Team was concerned that any substantial right of way purchases along this corridor would delay the project for this year's letting. Therefore, during the design phase, they looked at minimizing any impacts to the existing right of way as possible. The team also looked at ways to reduce the cost of the project knowing that adding retaining walls would increase the overall construction cost. Design solutions included:

- Adding retaining walls where possible to reduce permanent right of way takings
- Using 2.5 to 1 slopes when possible which was the steepest recommended by the soil report
- Using 10' lanes to match what was out there
- Using 3' curb and gutter instead of matching the existing U2 shoulder adjacent to the project

- Allowing some gutter spread in the driving lane as there are two lanes available if water is in the outside lane. This reduced the need for as many drop inlets and drainage structures and also reduced the gutter width needed to contain the spread
- Excepted out 2100 feet of the project where we already had a 10' two-way-left-turn-lane with curb and gutter

Once the right of way plans were complete, our construction estimate was \$2,200,000. The right of way impacts were reduced to permanent and temporary construction easements. The right of way cost was estimated at \$146,000.

By working with the property owners, we were able to get all the right of way easements that we needed donated. We met with all the property owners, explained the design plan, and worked with them to make minor modifications that met their development needs better. These changes included moving the driveways to match future planned development plans, removing a retaining wall in front of the property, grading the slope back further onto the property, and adjusting the timing of construction to accommodate one property owner's business. Most of these changes did not add to the cost of the project and several actually reduced the cost in the areas where we removed retaining walls. After meeting with one property owner, we made some adjustments to our design, eliminating the need for a right of way easement on his property.

Because of 100% donations, we were able to clear the right of way for this property on schedule and let the project in July 2007. The construction costs were reduced to \$1,905,000. The project will be completed in time to have drivers re-routed onto Route 40 for the Noland Road Bridge replacement project. These drivers will have a safer road to use that can handle the increase in traffic efficiently.

**MoDOT PROJECTS
2008 APPLICATION FORM**
(required for each entry)

Job No. J4S1776 Route 40 County Jackson

STIP Description (Scoping or Construction, state which STIP) Construction STIP - Safety improvements from Hocker Road to east of Lee's Summit Road in the City of Kansas City.

Is the submittal for the entire project or just a portion of the project? Please explain: There are various areas along Route 40 within the limits of this project that were included in the practical design consideration.

Project Manager (could have both) MoDOT Mary Miller Consultant Michele Keal

Key core team members as approved by the MoDOT PM (may include consultants) (limit of 9)

<u>Lisa Stupps (Design)</u>	<u>Eric Thompson (R/W)</u>	<u>RonTemme (Bridge)</u>
<u>Jodie Puhr (Design)</u>	<u>Michele Keal (consultant)</u>	
<u>Shari Severeid (R/W)</u>	<u>Brian Wrisinger (consultant)</u>	

Project Contacts: District Lisa Stupps Consultant Michele Keal

Project Budget:

Conceptual budget \$ 1,856,000 Initial STIP Budget \$ 2,350,000

Final STIP budget \$ 1,705,000 Award amount \$ 1,704,693.35

Other : Initial Right of Way Cost estimate: \$2,100,000. Final Right of Way Costs: \$0

Value Engineering study during design? yes no (if yes) Project Stage _____

Total VE savings implemented \$ _____ VE Contact Person _____

Construction-stage VE (VECP)? yes no (if yes) Explain _____

Total VECP savings \$ _____ VECP Contact Person _____

What would make this entry stand out from the rest of the entries when considering MoDOT's practical design philosophy? (In layman's terms - 100 words or fewer) By working extensively with property owners during the appraisal phase, we were able to make minor changes to our plans and eliminate expensive walls and easements. Some of these involved changing the locations of the driveways, removing a retaining wall and grading the property owner's land to a 3:1 slope (he donated the extra land for this as a permanent easement), and eliminating drainage structures due to future development planned by the property owner. We also excepted out a little less than 2100 feet of the project that already had an 10' middle TWLTL and curb and gutter. We felt this adequately met the needs of the safety project by providing a typical that was similar to the one we were proposing immediately adjacent to each end.

Send entries to: MoDOT Design Division, ATTN: Jay Bestgen
1320 Creek Trail Dr., Jefferson City, Missouri 65109

ALL ENTRIES MUST BE RECEIVED NO LATER THAN CLOSE OF BUSINESS ON DECEMBER 15, 2007.



MEMORANDUM

Missouri Department of Transportation Right of Way District 4

TO: Beth Wright-4ao

CC: Tim Holman-4rw
Scott Humphrey-4de

FROM: Joseph G. Donner, Jr.
Assistant Right of Way Manager-Certified

DATE: July 11, 2007

SUBJECT: Nomination for High Achiever Award

I nominate the following for a High Achiever Award for their outstanding work on Job No. J4S1776, Route 40, Jackson County.

Shari Severeid (Certified Appraiser)
Eric Thompson (Senior Right of Way Specialist)
Lisa Stupps (Transportation Project Designer)

It had been strongly emphasized that construction on this project had to be complete before the publicly promised early-2008 removal of the Noland Road bridge over I-70 (Job No. J4I1402). Right of Way received approved plans on April 11, 2007, and cleared the right of way on June 27, 2007. The project is scheduled to be let July 27, 2007.

Shari quickly realized the affected properties would benefit from the project and after explaining the improvements to the owners felt that many would donate. Other owners indicated they would consider donating land or easements if MoDOT would make some concessions.

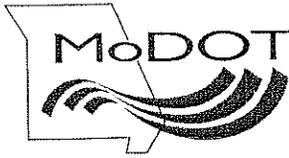
She took the lead seeking advise from Eric on the correct way to prepare documents to obtain donations. Eric unselfishly provided much assistance knowing he would not receive formal credit for obtaining the donations.

Many of the donations would not have become reality without agreement from Design. Lisa met with and actively listened to the owners' concerns and suggestions. She quickly found solutions that both satisfied MoDOT's needs and the owners' sensitivities. Plans were altered.

Obtaining donations eliminated the time needed to write and review appraisals and the possibility of extended negotiations or possibly condemnation proceedings. Thus not only did donations save the department money in right of way and construction but also time.

Shari herself has written a detailed account of the events. I have attached it to the nomination. In my estimation Shari, Eric, and Lisa are deserving of the High Achievement Award.

approved _____ not approved _____ date _____



MEMORANDUM

Missouri Department of Transportation Right of Way Lee's Summit

TO: Tim Holman-4rw

CC: Lisa Stupps-4de
Eric Thompson-4rw
Walt Wiercinski-4rw
Dan Hastings-4rw
Steve Holloway-4tr
Greg Woods-Field Liaison Officer r/w

FROM: Shari P. Severeid
Certified Appraiser

DATE: June 20, 2007

SUBJECT: County Jackson
Route 40
Job No. J4S1776

As per your request I have summarized the recent completion of the right of way appraisal/negotiation process for the 40 Highway Project in writing, as there may be some possible tools for future projects. The following was compiled by me with assistance from Eric Thompson, 4rw and Lisa Stupps, 4de.

The Appraiser began contacting owners on this project on April 18, 2007, and the final donation deed was received June 20, 2007. Most of the 60-day letters were sent out during the period of May 15-17, 2007.

The uses of the improved parcels on this project included a service station, car sales/pawnshop, and a retail building. All remaining properties were vacant commercial land currently offered for sale. One parcel was zoned R-4, Apartments.

After studying the plans for this project and viewing the project area, it was obvious that this project would have a positive effect on all affected properties. I felt this would benefit all and believed after explaining the improvements to the owners it would be possible to get them to donate.

The appraiser met individually with the property owners and thoroughly explained the benefits of the project. It was at this critical juncture that the appraiser focused on donations rather than valuation of the necessary easements. It was explained that the original project design required a significant amount of right of way, and that our current proposal, requiring only temporary and permanent easements, was an attempt to accomplish our roadway improvement goals while minimizing the effects on adjacent private property. The MoDOT team listened to each owner's comments, and did some brainstorming to arrive at consensus solutions that involved, in most cases, exchanging minor construction features for donations of the required easements. Five of

Tim Holman-4rw
June 20, 2007
Page 2

the owners wanted a new or wider driveway approach or a larger drainage pipe. Of these five parcels No. 8 was willing to donate 13,189 SF of permanent slope easement, which eliminated a long, costly crib wall. Three of the ten properties asked for no concessions at all in exchange for their donation. Two retail business tracts located at the extreme east end of the project asked only that the improvements along their frontage be scheduled at the end of the project. In some cases, it was necessary to meet several times on-site or at the District 4 office with our consultant, designer, permit staff, and right of way personnel in order to resolve each particular issue. Using our collective MoDOT/consultant resources to promptly come up with solutions helped pave the way for donations. The appraiser would not have been able to procure donations for all the parcels without the involvement of the consultant and other MoDOT employees.

I would like to thank Lisa Stupps in Design, Brian Wrisinger & Michele Keal our Consultants, Eric Thompson R/W, Walt Wiercinski, Dan Hastings R/W Staff and Steve Holloway, Permits.

Tangible Savings, but not limited to the following:

Crib Wall	\$178,000 eliminated
Easements	\$ 76,000, but would have been higher as plans changed to include 13,189 SF Permanent Slope easements
Fence from Tract 2 (DND)	

We were also able to eliminate Parcel 1 from the project.

The original right of way estimate for this project in December of 2005 was \$2.1 million.

Other savings are difficult to calculate, which would involve additional staff salaries, time, and the absence of condemnation costs. Our prompt, concise communication with the public on this project, coupled with quick decision-making and results, helped to present MoDOT as a professional, transparent, concerned, and helpful organization. The reward for this teamwork was a project that was fully donated and ready for letting ahead of the proposed schedule.

Not every project will have all of these benefits to obtain donations. I feel it is very important to have appraisers crossed-trained in negotiations, as they are the first to talk to the owners and listen to possible solutions.

AMERICAN STERLING BANK



After
Retaining wall and guardrail was used to minimize impacts to stream and wooded wetland. Property was donated.



Before

BLISS PROPERTY



After

Worked extensively with this property owner to locate entrance according to planned development. Eliminated short retaining wall by grading back into property. Eliminated large drainage structure by using existing crossroad structure and running another parallel to it. All property donated.



Before

EXCEPTED OUT AREA



Section excepted out of project. It has an 11' twlth and curb and gutter.



GAS STATION AND PAWN SHOP



After

Connected pipes and filled in Ditch to minimize impacts to property



Before

SUTCLIFFE PROPERTY



After

Eliminated small retaining wall and used a 3:1 slopes from curb. Property owners Donated.



Before



Before

Redesigned Sutcliffe driveway and 3:1 slopes here to eliminate need for right of way from this Property owner