

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE:** CSSTP-0007-00(691) Douglas Paulding      **OFFICE:** Engineering Services  
 STP00-0186-01(011) CSSTP-0006-00(900)(901)  
 P.I. Nos.: 0007691/720970/0006900/0006901  
 SR 92 Widening and Reconstruction      **DATE:** August 7, 2009

**FROM:** Ronald E. Wishon, Project Review Engineer *REW*

**TO:** James B. Buchan, PE, State Urban Design Engineer  
 Attn.: Neal O'Brien

**SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES**

The VE Study for the above projects was held May 5-9, 2008. Responses were received on August 6, 2009. Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. The Project Manager shall incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

<b>REALIGNMENT PROJECT</b>				
<b>TYPICAL SECTION (TS-R)</b>				
<b>ALT #</b>	<b>Description</b>	<b>Potential Savings/LCC</b>	<b>Implement</b>	<b>Comments</b>
TS-R-1	Construct Multiuse trail with asphalt in lieu of PCC	\$239,639	Yes	This will be done.
TS-R-2	Reduce inside lanes from Plaza Ninety Two Drive to Malone Drive to 11 ft. wide	\$290,347	No	Since TS-R-5 will be done, this cannot be done.
TS-R-4	Use 6 in. x 24 in. curb and gutter in lieu of 8 in. x 30 in. curb and gutter	Proposed = \$170,130  Actual = <i>(\$-66,975)</i> <i>Cost increase</i>	No	Reduction in the width of the gutter will increase gutter spread requiring additional inlets and cross drains. This will result in a cost increase.
TS-R-5	Reduce all lanes from Plaza Ninety Two Drive to Malone Drive to 11 ft. wide	\$871,639	Yes	This will be done.

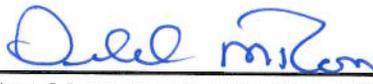
TS-R-7	Use rural shoulder in lieu of urban shoulder from Hawthorne Community Center to Malone Road.	(\$-109,064) Cost increase	No	This recommendation was included in the report to provide a comparison for the designer. The VE Study Report contains more potential disadvantages than advantages. The recommendation will not be implemented due to the increase in cost.
<b>HORIZONTAL ALIGNMENT (HA-R)</b>				
HA-R-1	Modify horizontal alignment at North end tie-in	\$793,600	Yes	This will be done.
HA-R-2	Consolidate the SR 92 realignment broken back curve under the railroad bridge to a single curve	Design Suggestion	Yes	This will require additional study during preliminary engineering, but if feasible, it will be implemented.
HA-R-3A	Reconfigure Old SR 92 and Realigned SR 92 intersection	Proposed = \$271,006 Actual = \$124,390	No	This alternative would increase the NEPA footprint, delaying environmental approval. Calculations by the Designer indicate actual savings to be less than half of what was proposed by the VE Team.
HA-R-3B	Reconfigure Old SR 92 and Realigned SR 92 intersection and Malone Street/Davis Street intersection	Proposed = \$437,174 Actual = \$281,590	No	This alternative would impact Jesse Davis Park, resulting in a section 4(f) evaluation and delaying environmental approval.
HA-R-5	Connect Hospital Drive only to SR 92 and cul-de-sac Fairburn Road	\$1,732,490	No	This recommendation was proposed early in the design process; however, this resulted in unacceptable LOS at the SR 92/Hospital Drive intersection. Combined traffic volumes (32,000 vpd in 2035) are relatively high.
HA-R-9	Reconstruct Cooper Street only between SR 92 and Dorsett Street	\$449,799	No	Cooper Street westbound is anticipated to have queue lengths of 280 ft in the AM peak hour and 400 ft in the Project Manager peak hour.

HA-R-10	Reduce Cross Roads north of Cooper Street to 11 ft. lanes	\$33,884	Yes	This will be done.
HA-R-11	Eliminate median opening at Brown Street and make Brown Street Right-in Right-out	\$85,723	Yes	The final determination of median openings and access will be determined after public involvement is complete.
HA-R-13	Hammerhead both ends of Brown Street and connect it to SR 92 opposite Colquitt Street	\$185,270	Yes	The final determination of median openings and access will be determined after public involvement is complete.
<b>RETAINING WALL (RW-R)</b>				
RW-R-2A	Eliminate the SR 92/Railroad/US 78 Grade Separation retaining walls in the SW quadrant	Proposed = \$604,587 Actual = \$3,893	Yes	A revised cost savings was calculated because the VE Study recommendation had an incorrect wall length and placed the proposed wall in the wrong location.
RW-R-2B	Eliminate the SR 92/Railroad/US 78 Grade Separation retaining walls in the NE quadrant	Proposed = \$53,162 Actual = <b>(\$-189,593)</b> <b>Cost increase</b>	Yes	A revised cost savings was calculated because the VE Study recommendation used the incorrect wall length.
<b>BRIDGES (B-R)</b>				
B-R-1	Use retaining walls in lieu of longer spans at the bridges	\$672,672	No	The Office of Bridge Design has stated that the railroad will not allow this alternative.
B-R-2	Build US 78 bridge for current lane requirements and widen in the future	Proposed = \$1,116,720 Actual = \$167,508	Yes, with modifications	A future project along US 78 proposes four 11-foot lanes, two 4-foot bike lanes, a 19-foot raised median and a 5-foot sidewalk. The proposed typical section for the SR 92 project will be reduced to match what is proposed in the future project along US 78.

BRIDGE CONSTRUCTION (BC-R)				
BC-R-3	Build US 78 permanently at current detour location	Proposed = \$239,635  Actual = \$141,006	No	Building US 78 permanently at the current detour location will require the purchase of permanent ROW which was not shown in the VE Study report. This would reduce the proposed savings. This would require acquisition of a historic parcel, resulting in a section 4(f) evaluation and delaying environmental approval.
BC-R-5	Jack and bore twin precast boxes under railroad	Design Suggestion	Yes	This will require additional study during preliminary engineering, but if feasible, it will be implemented.
VERTICAL ALIGNMENT (VA-R)				
VA-R-1	Flatten SR 92 mainline grades under railroad	Design Suggestion	Yes	This will require additional study during preliminary engineering, but if feasible, it will be implemented.
VA-R-2	Realign SR 92 to US 78 ramp	<b>(-\$442,410) Cost increase</b>	No	This recommendation was included in the report to provide validation of the originally proposed design. The VE Study Report contains more potential disadvantages than advantages. The recommendation will not be implemented due to the increase in cost.
WIDENING PROJECT				
TYPICAL SECTION (TS-W)				
ALT #	Description	Potential Savings/LCC	Implement	Comments
TS-W-1	Reduce the median width from 24 ft. to 20 ft.	\$279,862	Yes	This will be done.

TS-W-3	Use 6 in. x 24 in. curb and gutter in lieu of 8 in. x 30 in. curb and gutter in median	Proposed = \$236,149  Actual = <b>(-\$961,741)</b> <b>Cost increase</b>	No	Reduction in the width of the gutter will increase gutter spread requiring additional inlets and cross drains. This will result in a cost increase.
TS-W-5	Overlay existing SR 92 pavement and widen	\$5,414,545	No	Based on a Life Cycle Cost Analysis done by the Office of Materials and Research, PCC Pavement will be utilized along this section of SR 92.
TS-W-7	Build a four lane divided highway now and widen to six lanes in the future	\$7,560,467	No	Traffic analysis indicates the roadway will operate with an acceptable LOS in 2015 with a 4-lane roadway; however, a 6-lane facility is needed to accommodate design year 2035 traffic.
TS-W-10	Reduce through lanes from 12 ft. wide to 11 ft. wide	\$2,348,908	Yes	This will be done.
TS-W-12	Reduce inside lanes from 12 ft. wide to 11 ft. wide	\$782,969	No	Since TS-W-10 will be done, this cannot be done.
<b>BRIDGES (B-W)</b>				
B-W-3	Retain existing bridge over Lick Log Creek and widen for new typical section	\$412,637	Yes	This will require additional study during preliminary engineering, but if feasible, it will be implemented.

The Office of Engineering Services concurs with the Project Manager's responses.

Approved:  Date: 8/10/09  
 Gerald M. Ross, PE, Chief Engineer

REW/LLM

Attachments

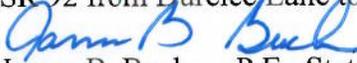
c: Genetha Rice Singleton  
Paul Liles/Bill Duvall/Bill Ingalsbe  
Chuck Hasty/Neal O'Brien/Jill Franks/Keith Collins  
Mickey McGee/Loren Bartlett  
Kenny Beckworth  
Ken Werho  
Laura Rish  
Lisa Myers  
Matt Sanders

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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**INTERDEPARTMENT CORRESPONDENCE**

**FILE** CSSTP-0006-00(900), CSSTP-0006-00(901) **OFFICE** Urban Design  
STP00-0186-01(011) Douglas County  
P.I.'s 0006900, 0006901, and 720970  
CSSTP-0007-00(691) Douglas & Paulding Counties  
P.I. 0007691  
SR 92 from Durelee Lane to Nebo Road **DATE** August 5, 2009

**FROM**   
James B. Buchan, P.E., State Urban Design Engineer

**TO** Ron Wishon, State Project Review Administrator  
Attention: Lisa Myers

**SUBJECT** **Value Engineering Study Report Response**

This office has received and reviewed the recommendations of the Value Engineering (VE) Study Workshop Report dated May 22, 2008. The above projects are being designed under a local government agreement with the City of Douglasville. The City put their consultant, Croy Engineering, on hold after the VE Report was submitted. Croy was not given a notice to proceed from the City to begin addressing the VE recommendations until April 1, 2009. Attached are the responses to the VE report recommendations provided by Croy Engineering. This office has reviewed and concurs with the attached responses.

If there are any questions or comments concerning these recommendations, please contact Neal O'Brien at (404) 631-1725.

JBB:WNO  
Attachment

cc: Director of Preconstruction  
Paul Liles, State Bridge Engineer

# Value Engineering Study Report RESPONSE

SR 92 Realignment and Widening

Project No. CSSTP-0007-00(691), STP-186-1(11), CSSTP-0006-00(900), CSSTP-0007-00(901)

PI No. 0007691/720970/0006900/0006901

Douglas and Paulding County

## REALIGNMENT PROJECT

SR 92 Realignment from Duralee Lane to Malone Road (P.I. No.720970/0006900/0006901)

## TYPICAL SECTION (TS-R) – REALIGNMENT PROJECT

### Alternative TS-R-1

**Description:** Use asphalt concrete in lieu of precast concrete for the multi-use trail.  
**Cost Savings:** \$239,639  
**Response:** Agree.

**The recommendation of the Office of Urban Design is to implement this request.**

### Alternative TS-R-2

**Description:** Reduce inside lane width from Plaza Ninety Two Drive to Malone Drive to 11 ft.  
**Cost Savings:** \$290,347  
**Response:** Will not implement this alternative. This request is included in TS-R-5 which will be implemented. Savings for this alternative have been included in TS-R-5.

**The recommendation of the Office of Urban Design is not to implement this request.**

### Alternative TS-R-4

**Description:** Use 6 in. x 24 in. curb and gutter in lieu of 8 in. x 30 in.  
**Cost Savings:** \$170,130 *Revised Cost Savings: (-\$66,975)*  
**Response:** Disagree. Reduction in the width of the gutter will increase gutter spread requiring additional inlets and additional cross drains along the project corridor. This alternative would require 32 additional inlets and 1,520 LF of additional cross drain. An additional inlet and storm drain analysis has been provided in the appendix. The right of way cost savings would only be at a one foot width along the length of the project resulting in a right of way savings of 11,450 square feet. The use of 6 in. x 24 in. curb and gutter along the median would not change the overall width of the typical section; the median width of 20 feet is measured from edge of pavement to edge of pavement. This alternative would result in a cost increase of \$66,975. A revised cost savings worksheet is provided in the Appendix.

**The recommendation of the Office of Urban Design is not to implement this request.**

### **Alternative TS-R-5**

**Description:** Reduce all lanes from Plaza Ninety Two Drive to Malone Drive to 11 ft.  
**Cost Savings:** \$871,039  
**Response:** Agree.

**The recommendation of the Office of Urban Design is to implement this request.**

### **Alternative TS-R-7**

**Description:** Use rural shoulder in lieu of urban shoulder from Hawthorne Community Center to Malone Road – NOT RECOMMENDED.  
**Cost Savings:** (\$109,064)  
**Response:** Disagree. This alternative was not recommended by the VE Team due to its increase in cost.

**The recommendation of the Office of Urban Design is not to implement this request.**

## **HORIZONTAL ALIGNMENT (HA-R) – REALIGNMENT PROJECT**

### **Alternative HA-R-1**

**Description:** Modify horizontal alignment at north end tie in.  
**Cost Savings:** \$793,600  
**Response:** Agree.

**The recommendation of the Office of Urban Design is to implement this request.**

### **Alternative HA-R-2**

**Description:** Consolidate the SR 92 realignment broken back curve under the railroad bridge to a single curve.  
**Cost Savings:** N/A. This was a design suggestion.  
**Response:** Agree, although this suggestion will require additional study during Preliminary Engineering to verify its feasibility for final implementation.

**The Office of Urban Design will further study this suggestion during Preliminary Design.**

### **Alternative HA-R-3A**

**Description:** Reconfigure the old SR 92 and realigned SR 92 intersection.  
**Cost Savings:** \$271,006     *Revised Cost Savings: \$124,390*  
**Response:** Disagree. The majority of traffic movements heading south on old SR 92 to the existing neighborhood would create undue congestion at the proposed T- intersection. A revised cost savings has been calculated to show a cost savings of \$124,390. The current configuration preserves much of the mainline pavement alignment resulting in a savings of less than half of the proposed alternative savings. The right of way areas have been revised showing a right of way reduction of 19,930 SF. The revised cost savings

worksheet along with a revised exhibit are provided in the Appendix. This alternative would modify (increase) the NEPA footprint; therefore is not recommended.

**The recommendation of the Office of Urban Design is not to implement this request.**

**Alternative HA-R-3B**

**Description:** Reconfigure the old SR 92 and realigned SR 92 intersection and the Malone Street/Davis Street intersection.

**Cost Savings:** \$437,174      *Revised Cost Savings: \$281,590*

**Response:** Disagree. When alternative HA-R-1 is implemented, implementation of this alternative would result in an intersection angle of 64° 53' at the intersection of Old SR 92 and realigned SR 92. The minimum intersection angle permitted by GDOT is 70° only if constraints dictate.

Implementation of this alternative would impact the Jesse Davis Park on the southwest quadrant of the intersection. Public parks receive special protection under section 4(f) of the Department of Transportation Act (recodified in 49 U.S.C. 303 and 23 U.S.C 138). If the official having jurisdiction over the park deems the facility "significant," a section 4(f) evaluation must be approved by the FHWA. This evaluation, which typically takes over a year to prepare and review for legal sufficiency, must demonstrate the impacts to the facility have been minimized and there is no prudent nor feasible alternative to use of the park.

Cost savings have been revised per the updates made to the estimate for HA-R-3A. The revised cost savings is \$281,590. A revised cost savings worksheet is provided in the Appendix.

**The recommendation of the Office of Urban Design is not to implement this request.**

**Alternative HA-R-5**

**Description:** Connect Hospital Drive only to SR 92 and cul-de-sac Fairburn Road.

**Cost Savings:** \$1,732,490

**Response:** Disagree. Hospital Drive connects SR 92 to the hospital and Douglas County Administration Center; Fairburn Road connects SR 92 to downtown Douglasville. These two intersecting roads are anticipated to carry a combined volume of 32,000 vpd in year 2035, with most of the volume along Hospital Drive. Closing Old Fairburn Road from Hospital Drive to SR 92 was considered early in the study; however, this resulted in unacceptable LOS at the SR 92 at Hospital Drive intersection. The reason inclusion of both intersections with SR 92 works so well is based on the heavy turning movements at SR 92. Since nearly 95% of the volume on these roads does not cross north of SR 92, efficiency is gained by separating the north and south turning movements. The Old Fairburn Road intersection has a heavy northbound left turn (from SR 92) with an overlapping eastbound right turn movement (onto SR 92). The Hospital Drive intersection has a heavy eastbound left turn movement (onto SR 92) with an overlapping southbound right turn movement (from SR 92). These movements indicated above can be served at the same time with a traffic signal, resulting in more efficient operations than occur with a single intersection.

**The recommendation of the Office of Urban Design is not to implement this request.**

### **Alternative HA-R-9**

**Description:** Reconstruct Cooper Street only between SR 92 and Dorsett Street.

**Cost Savings:** \$449,799

**Response:** Disagree. Cooper Street westbound is anticipated to experience queue lengths of 280 feet during the AM peak hour and 400 feet in the PM peak hour. To accommodate the queues and allow right turning traffic to bypass the queue, the storage for left turning vehicles would need to extend past Dorsett Street for the lengths indicated.

**The recommendation of the Office of Urban Design is not to implement this request.**

### **Alternative HA-R-10**

**Description:** Reduce cross roads lanes north of Cooper Street to 11 ft. wide.

**Cost Savings:** \$33,884

**Response:** Agree.

**The recommendation of the Office of Urban Design is to implement this request.**

### **Alternative HA-R-11**

**Description:** Eliminate median opening at Brown Street to make Brown Street right-in right-out only.

**Cost Savings:** \$85,723

**Response:** Agree. Implementation of this alternative may result in additional environmental impacts to the neighborhood along Brown Street. Eliminating the median opening would reduce connectivity for the seven homes along Brown Street and the adjacent minority/low income neighborhood to the north. This alternative will be discussed as part of the public involvement process with the adjacent communities. A final determination of median openings and access will be determined after public involvement is complete.

**The recommendation of the Office of Urban Design is to implement this request.**

### **Alternative HA-R-13**

**Description:** Hammerhead both ends of Brown Street and connect it to SR 92 opposite Colquitt Street.

**Cost Savings:** \$185,270

**Response:** Agree. This alternative along with HA-R-11 will be considered. This alternative will be discussed as part of the public involvement process with the adjacent communities. A final determination of median openings and access will be determined after public involvement is complete.

**The recommendation of the Office of Urban Design is to implement this request.**

## RETAINING WALL (RW-R) – REALIGNMENT PROJECT

### Alternative RW-R-2A

- Description:** Eliminate the SR 92/railroad/US 78 grade separation retaining walls in the southwest quadrant.
- Cost Savings:** \$604,587      *Revised Cost Savings: \$3,893*
- Response:** Agree. Although a revised cost savings has been calculated for this alternative, the wall location in the southwest quadrant is located along the corner of the proposed bridge. (the location shown in the alternative exhibit is incorrect.) The length of the proposed wall is only 74 LF and the location of the wall is not within the commercial displacement; it is adjacent to the parcel at the corner of US 78 and Hagin Street which is currently planned to be retained. Placement of fill material in this parcel would result in increased R/W costs associated with the purchase of an additional parcel. An exhibit displaying the original location has been added to the appendix. Based on the original length of wall compared to the additional cost of the parcel, a revised cost savings has been created showing the alternative to be a cost savings of only \$3,893.45. A revised cost savings worksheet is provided in the Appendix.

**The recommendation of the Office of Urban Design is to implement this request.**

### Alternative RW-R-2B

- Description:** Eliminate the SR 92/railroad/US 78 grade separation retaining walls in the northeast quadrant.
- Cost Savings:** \$53,162      *Revised Cost Savings: (-\$189,593)*
- Response:** Agree. Although a revised cost savings has been calculated for this alternative, the length of the proposed wall is only 195 LF. An exhibit displaying the original wall location has been added to the appendix. Based on the original length of wall, a revised cost savings has been created showing the alternative to be a cost increase of \$189,593. Although this is a cost increase, further evaluation of the proposed wall indicates that it may not be a feasible solution. The tie backs for the proposed wall would come too close to the existing home creating a displacement. A revised cost savings worksheet is provided in the Appendix.

**The recommendation of the Office of Urban Design is to implement this request.**

## BRIDGES (B-R) – REALIGNMENT PROJECT

### Alternative B-R-1

- Description:** Use retaining walls in lieu of longer spans at the bridges.
- Cost Savings:** \$672,672
- Response:** Disagree. The railroad will not allow this alternative. This recommendation was presented as part of the first Value Engineering Study conducted for this project on March 1, 2004. GDOT correspondence from the Office of Bridge Design on May 24, 2004 states that the railroad will not allow shortening the bridge spans by using MSE walls. Please see the following email excerpt from the VE Report Response:

-----Original Message-----

**From:** Tiernan, John  
**Sent:** Monday, May 24, 2004 10:57 AM  
**To:** O'Brien, Neal  
**Cc:** Liles, Paul; Clements, Lyn; Mulling, David; Myers, Lisa  
**Subject:** STP-186-1(11)Douglas, P.I. No. 720970

VE Study - Relocation of SR 92

Neal,

I have reviewed the recommendations made in the VE study for the above project and have the following comments:

**NS Railway bridge over SR 92:** The railroad will not accept MSE walls supporting their tracks. Any walls built to support the tracks or the ends of the bridge will have to be cast-in-place concrete.

**US 78 (SR 5, 8) bridge over SR 92:** MSE walls should be used only if cast-in-place walls are used at the railroad bridge. Pile end bents will not work if the rock elevation is above the elevation of the bottom of the MSE walls.

**Strickland Street bridge over SR 92:** Same comments as for the US 78 bridge.

Due to the need to use cast-in-place walls at the railroad bridge, the Bridge Office recommends that the longer spans with end slopes be used as originally proposed.

John P. Tiernan, P.E.  
Assistant State Bridge Engineer  
Office of Bridge Design  
Georgia Department of Transportation  
404-656-5284

On July 1, 2004, GDOT's Office of Urban design concluded the following in the Value Engineering Study Report Response:

Alternative #2 of the VE report is also not feasible. The Bridge Office has reviewed this alternative and stated that the railroad will not accept MSE walls supporting their tracks. Any walls for the railroad bridge would have to be cast-in-place walls. The U.S. 78 and Strickland Street bridges can have MSE walls only if cast-in-place is used on the railroad bridge. The Bridge Office also stated that pile end bents will not work if the rock elevation is above the elevation of the bottom of the MSE walls. The Bridge Office recommends that the longer spans with end slopes be used as proposed in the concept.

**The recommendation of the Office of Urban Design is not to implement this request.**

#### Alternative B-R-2

**Description:** Build US 78 bridge for current requirements and widen in the future.  
**Cost Savings:** \$1,116,720 *Revised Cost Savings: \$167,508*  
**Response:** Disagree. This alternative states that the proposed typical section consists of eight lanes totaling 114'-5" in width. This is inaccurate as the proposed typical section consists of six lanes totaling 98' in width. The proposed alternative cost savings would actually be \$818,928. A revised cost savings worksheet is added to the Appendix.

We would like to recommend a new proposed alternative. The revised Concept for GDOT PI No. 721590 – Bankhead Highway from SR 92 to Sweetwater Road is showing a typical section along Bankhead Highway/US 78 consisting of four 11-foot travel lanes, two 4-foot bike lanes, a 19 foot raised median, and a 5-foot sidewalk. We recommend reducing our proposed 6 lane typical section to match the 4 lane section proposed for the upcoming project. A revised typical section has been added to the appendix. Based

on this revised typical section, we have included a revised cost savings worksheet in the Appendix of this document. The new recommendation cost savings is \$167,508.

**The recommendation of the Office of Urban Design is not to implement the alternative from the VE Study report but to implement the proposed alternative listed above..**

#### BRIDGES CONSTRUCTION (BRC) – REALIGNMENT PROJECT

##### Alternative BRC-3

**Description:** Build US 78 permanently at current detour location.

**Cost Savings:** \$239,635      *Revised Cost Savings: \$141,006*

**Response:** Disagree. Building US 78 permanently at the current detour location would also require the purchase of Permanent Right of Way which has been omitted from the cost savings estimate. A new cost savings worksheet is included in the Appendix of this document showing a revised cost savings of \$141,006. This alternative would require additional environmental impacts by requiring a permanent Right of Way take on a parcel in a Historic District eligible for the National Register. Historic sites eligible for the National Register receive special protection under section 4(f) of the Department of Transportation Act (recodified in 49 U.S.C. 303 and 23 U.S.C 138). This evaluation, which typically takes over a year to prepare and review for legal sufficiency, must demonstrate that the impacts to the facility have been minimized and there is no prudent nor feasible alternative to use of the historic property.

**The recommendation of the Office of Urban Design is not to implement this request.**

##### Alternative BRC-5

**Description:** Jack and bore twin precast boxes under the railroad and roads at the grade separation locations.

**Cost Savings:** N/A. This was a design suggestion.

**Response:** Agree that this suggestion should be passed along for additional study during Preliminary Engineering.

**The Office of Urban Design will further study this suggestion during Preliminary Design.**

#### VERTICAL ALIGNMENT (VA-R) – REALIGNMENT PROJECT

##### Alternative VA-R-1

**Description:** Flatten the SR 92 mainline grades under the railroad.

**Cost Savings:** N/A. This was a design suggestion.

**Response:** Agree, although this suggestion will require additional study during Preliminary Engineering to verify its feasibility for final implementation.

**The Office of Urban Design will further study this suggestion during Preliminary Design.**

### Alternative VA-R-2

**Description:** Realign SR 92 to the US 78 Ramp – NOT RECOMMENDED.  
**Cost Savings:** (\$442,410)  
**Response:** Disagree. This alternative was not recommended by the VE Team due to its increase in cost.

**The recommendation of the Office of Urban Design is not to implement this request.**

### WIDENING PROJECT

SR 92 Widening from Malone Road to Nebo Road (P.I. No.0007691)

### TYPICAL SECTION (TS-W) – WIDENING PROJECT

#### Alternative TS-W-1

**Description:** Reduce the median width from 24 ft. to 20 ft.  
**Cost Savings:** \$279,862  
**Response:** Agree.

**The recommendation of the Office of Urban Design is to implement this request.**

#### Alternative TS-W-3

**Description:** Use 6 in. x 24 in. median side curb and gutter in lieu of 8 in. x 30 in.  
**Cost Savings:** \$236,149      *Revised Cost Savings: (-\$961,741)*  
**Response:** Disagree. Reduction in the width of the gutter will increase gutter spread requiring additional inlets and additional cross drains along areas of super elevation within the project corridor. This alternative would require 13 additional inlets. An additional inlet analysis has been provided in the appendix. The right of way cost savings would not actually apply given that the use of 6 in. x 24 in. curb and gutter along the median would not change the overall width of the typical section; the median width of 24 feet is measured from edge of pavement to edge of pavement. Costs of curb and gutter have also been updated per the 2008 GDOT Mean Summary. The cost of 6 in. x 24 in. curb and gutter is now higher than the cost of 8 in. x 30 in. curb and gutter. This alternative would actually result in a cost increase of \$961,741. A revised cost savings worksheet has been provided in the Appendix.

**The recommendation of the Office of Urban Design is not to implement this request.**

#### Alternative TS-W-5

**Description:** Overlay existing SR 92 and widen.  
**Cost Savings:** \$5,414,545  
**Response:** Disagree. For this alternative, OMR conducted a Life Cycle Cost Analysis (LCCA). The recommendation, based on the LCCA, was for the use of PCC Pavement along SR 92. This alternative proposes the use of Asphalt Concrete in lieu of the PCC Paving.

**The recommendation of the Office of Urban Design is not to implement this request.**

**Alternative TS-W-7**

**Description:** Build a four-lane divided highway now and widen to six lanes in the future.

**Cost Savings:** \$7,560,467

**Response:** Disagree. The arterial traffic analysis performed for the SR 92 concept report indicates the corridor will operate at acceptable level of service (LOS) in year 2015 with a 4-lane divided typical section. However, a six-lane divided typical section is needed to accommodate design year 2035 traffic. The need for a six-lane section extends from west of I-20 to the East Hiram Parkway intersection. The table below indicates the years at which traffic volumes exceed the capacity of a 4-lane divided facility. The table shows the average volume along the corridor will experience conditions lower than LOS D in year 2024 (9 years after opening) with a four-lane divided road. The section of SR 92 widening in Paulding County, indicated by the locations south of Brownsville Road, south of Ridge Road, and South of East Hiram Parkway, are forecast to experience conditions lower than LOS D in year 2023.

As this table shows, high traffic volumes are predicted to extend past the more developed Douglasville section into the suburban Paulding County portions of the corridor. This traffic volume growth is due in part to traffic shifting to the SR 92 corridor when the restrictive at-grade rail crossing and two-lane section in downtown Douglasville is replaced with a multilane grade-separation. The travel demand model originally indicated a higher growth may be possible for year 2015 than is shown in the traffic flow diagrams. The combined effect of background growth and rerouting due to improvements in downtown Douglasville, suggested twice the growth in traffic in the years immediately following opening of SR 92 widening with growth slowing towards the design year. This would result in the same 2035 volumes, but would shift the year at which conditions deteriorate from LOS D to LOS E earlier.

Following discussions with GDOT OEL in August 2006, the growth rate for the opening year 2015 was established to match the population and employment growth rates predicted along the corridor (4.2% per year). Thus, the growth along SR 92 immediately following opening of the grade separation in Douglasville is likely to be at least as high as indicated in the year 2015 projections.

Evaluation of SR 92 - Year in which 6-Lane Section is Needed

Section	2015	2035	Difference	Added Vol. per yr	Year when Vol >35,000 vpd
West of I-20	31,480	51,790	20,310	1,016	2018
South of Bankhead Hwy.	25,880	40,940	15,060	753	2027
North of Bankhead Hwy.	19,980	38,440	18,460	923	2031
North of Dallas Hwy.	24,880	47,850	22,970	1,149	2024
South of Brownsville Rd.	26,620	51,330	24,710	1,236	2022
South of Ridge Rd.	21,870	43,250	21,380	1,069	2027
South of East Hiram Pkwy.	28,740	49,970	21,230	1,062	2021
Average	25,636	46,224	20,589	1,029	2,024

**The recommendation of the Office of Urban Design is not to implement this request.**

**Alternative TS-W-10**

**Description:** Reduce through lanes from 12 ft. wide to 11 ft. wide.  
**Cost Savings:** \$2,348,908  
**Response:** Agree.

**The recommendation of the Office of Urban Design is to implement this request.**

**Alternative TS-W-12**

**Description:** Reduce inside lanes from 12 ft. wide to 11 ft. wide.  
**Cost Savings:** \$782,969  
**Response:** Will not implement this alternative. This request is included in TS-W-10 which will be implemented. Savings for this alternative have been included in TS-W-10.

**The recommendation of the Office of Urban Design is not to implement this request.**

**BRIDGES (B-W) – WIDENING PROJECT**

**Alternative B-W-3**

**Description:** Retain existing bridge over Lick Log Creek and widen for new typical section.  
**Cost Savings:** \$412,637  
**Response:** Agree. Although this suggestion will require additional study during Preliminary Engineering to verify its feasibility.

**The recommendation of the Office of Urban Design is to implement this request.**

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**APPENDIX**

**Alternative TS-R-4**

PROJECT ITEM		ORIGINAL ESTIMATE			PROPOSED ESTIMATE		
ITEM	UNITS	NO. OF UNITS	COST/UNIT	TOTAL	NO. OF UNITS	COST/UNIT	TOTAL
TYPE 2 6x24	LF				20000	\$15.43	\$308,600.00
TYPE 7 6x24	LF				20000	\$11.46	\$229,200.00
TYPE 2 8X30	LF	20000	\$15.69	\$313,800.00			
TPYE 7 8x30	LF	20000	\$13.26	\$265,200.00			
CATCH BASIN	EA				32	\$2,515.00	\$80,480.00
STORM DRAIN PIPE	LF				1520	\$40.58	\$61,681.60
	total			\$579,000.00			\$679,961.60
	Markup 10 %			\$57,900.00			\$67,996.16
	<b>Subtotal</b>			<b>\$636,900.00</b>			<b>\$747,957.76</b>
R/W COST PHASE 1,2,3	SF	11450	\$3.50	\$40,075.00			
	total			\$40,075.00			\$0.00
	Markup 10 %			\$4,007.50			\$0.00
	<b>Subtotal</b>			<b>\$44,082.50</b>			<b>\$0.00</b>
	<b>TOTAL</b>			<b>\$680,982.50</b>			<b>\$747,957.76</b>

TYPE 2 8X30 AND TYPE 7 8X30 COST UPDATED PER GDOT ITEM MEAN SUMMARY 1/2008-12/2008  
 R/W SQUARE FOOTAGE REVISED PER RESPONSE COMMENTS  
 CATCH BASINS AND STORM DRAINAGE ADDED PER RESPONSE COMMENTS

**TS-R-4: Additional Inlet and Storm Drain Analysis**

Using the Manning's Equation for Gutter Flow Rate:

$$Q = [0.56/n] (S_x)^{2/3} (S)^{1/2} (T)^{8/3}$$

Average cross slope ( $S_x$ ) = 0.02 ft/ft (2%)

Average longitudinal slope ( $S$ ) = 0.03 ft/ft (3%)

Manning's roughness coefficient ( $n$ ) = 0.013 (concrete gutter with smooth asphalt pavement)

Width of flow or spread ( $T$ ) = 8.0 ft (for 8 x 30 inch Curb & Gutter)

Width of flow or spread ( $T$ ) = 7.5 ft (for 6 x 24 inch Curb & Gutter)

For 8 in. x 30 in. Curb & Gutter:

$$Q = [0.56/.013] (.02)^{2/3} (.03)^{1/2} (8)^{8/3} = 2.815 \text{ cfs}$$

For 6 in. x 24 in. Curb & Gutter:

$$Q = [0.56/.013] (.02)^{2/3} (.03)^{1/2} (7.5)^{8/3} = 2.370 \text{ cfs}$$

Using the Rational Formula for Flow Rate:

$$Q = C \times I \times A$$

Average Runoff Coefficient ( $C$ ) =  $[(98 \times 0.95) + (21 \times 0.30)] / 119 = 0.835$

Intensity ( $I$ ) = 6.105 in/hr (10 year Frequency – 10 minute  $T_c$ )

Phase 1 Drainage Area ( $A$ ) = 23.2 AC

Phase 2 Drainage Area ( $A$ ) = 32.6 AC

Phase 3 Drainage Area ( $A$ ) = 37.6 AC

$$Q_{\text{PHASE 1}} = 0.835 \times 6.105 \times 23.2 = 118 \text{ cfs}$$

$$Q_{\text{PHASE 2}} = 0.835 \times 6.105 \times 32.6 = 166 \text{ cfs}$$

$$Q_{\text{PHASE 3}} = 0.835 \times 6.105 \times 37.6 = 192 \text{ cfs}$$

Required Inlets:

For 8 in. x 30 in. Curb & Gutter:

$$\text{Phase 1} = 118 \text{ cfs} / 2.815 \text{ cfs} = 42 \text{ Inlets}$$

$$\text{Phase 2} = 166 \text{ cfs} / 2.815 \text{ cfs} = 59 \text{ Inlets}$$

$$\text{Phase 3} = 192 \text{ cfs} / 2.815 \text{ cfs} = 68 \text{ Inlets}$$

$$\text{Total Inlets} = 169 \text{ Inlets}$$

For 6 in. x 24 in. Curb & Gutter:

$$\text{Phase 1} = 118 \text{ cfs} / 2.370 \text{ cfs} = 50 \text{ Inlets}$$

$$\text{Phase 2} = 166 \text{ cfs} / 2.370 \text{ cfs} = 70 \text{ Inlets}$$

$$\text{Phase 3} = 192 \text{ cfs} / 2.370 \text{ cfs} = 81 \text{ Inlets}$$

$$\text{Total Inlets} = 201 \text{ Inlets}$$

**6 in. x 24 in. Curb & Gutter would require 32 additional Inlets.**

Additional Storm Drain

- 32 additional Inlets
  - Approximately 16 on left side of roadway
  - Approximately 16 on right side of roadway
- Half of the inlets would run on the opposite side of roadway from longitudinal storm drain.
- Roadway typical section face of curb to face of curb is 95 LF.
- Additional Cross Drains on Roadway = 16 x 95 = 1520 LF

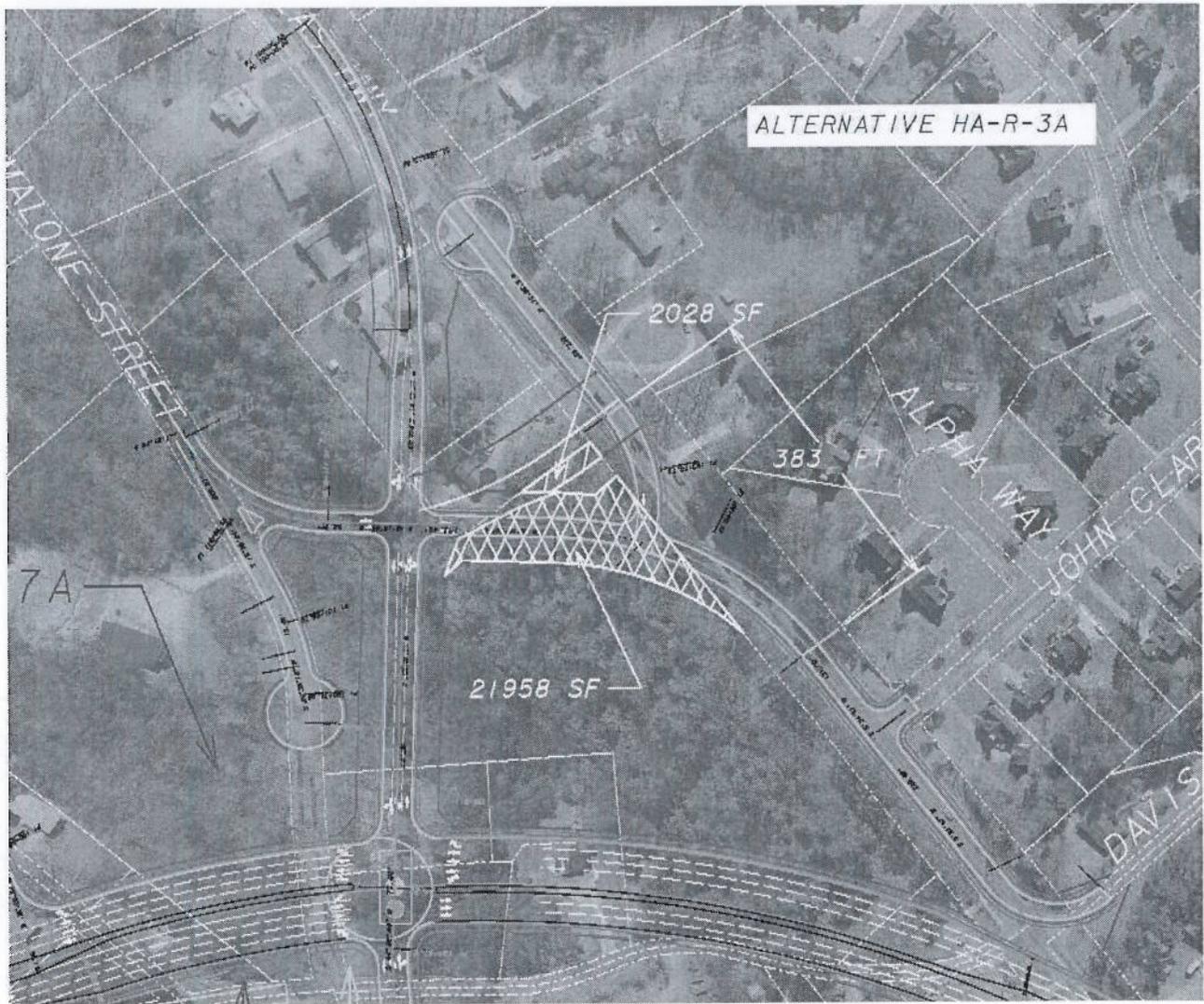
**6 in. x 24 in. Curb & Gutter would require 1520 LF of additional 18 inch RCP.**

**Alternative HA-R-3A**

PROJECT ITEM		ORIGINAL ESTIMATE			PROPOSED ESTIMATE		
ITEM	UNITS	NO. OF UNITS	COST/UNIT	TOTAL	NO. OF UNITS	COST/UNIT	TOTAL
MAINLINE PAVEMENT	SY	1021	\$75.10	\$76,677.10			\$0.00
CROSS RD PAVEMENT	SY	400	\$20.08	\$8,032.00			
total				\$84,709.10			\$0.00
Markup (%) 10				\$8,470.91			\$0.00
Subtotal				\$93,180.01			\$0.00
RIGHT OF WAY	SF	19930	\$0.45	\$8,968.50			\$0.00
total				\$8,968.50			\$0.00
Markup (%) 148				\$13,273.38			\$0.00
Subtotal				\$31,210.38			\$0.00
<b>TOTAL</b>				<b>\$124,390.39</b>			<b>\$0.00</b>

PAVEMENT OUSTSIDE EXIST OLD 92: 383 LF x (24/9) = 1021 SY (See attached exhibit)

REDUCTION IN RIGHT OF WAY: 21958 SF – 2028 SF = 19930 SF (See attached exhibit)



**Alternative HA-R-3B**

PROJECT ITEM		ORIGINAL ESTIMATE			PROPOSED ESTIMATE		
ITEM	UNITS	NO. OF UNITS	COST/UNIT	TOTAL	NO. OF UNITS	COST/UNIT	TOTAL
OLD SR 92	SY	1021	\$75.10	\$76,677.10			\$0.00
MALONE ST CONN	SY	400	\$20.08	\$8,032.00			
MALONE ST EAST	SY	1067	\$20.08	\$21,425.36			
total				\$106,134.46			\$0.00
Markup (%) 10				\$10,613.45			\$0.00
Subtotal				\$116,747.91			\$0.00
RESIDENTIAL - RIGHT OF WAY	SF	19930	\$0.45	\$8,968.50			\$0.00
COMMERCIAL - RIGHT OF WAY	SF	10000	\$5.75	\$57,500.00			\$0.00
total				\$66,468.50			\$0.00
Markup (%) 148				\$98,373.38			\$0.00
Subtotal				\$164,841.88			\$0.00
<b>TOTAL</b>				<b>\$281,589.79</b>			<b>\$0.00</b>

PAVEMENT OUTSIDE EXIST OLD 92: 383 LF x (24/9) = 1021 SY (See HA-R-3A)  
 REDUCTION IN RIGHT OF WAY: 21958 SF – 2028 SF = 19930 SF (See HA-R-3A)

**Alternative RW-R-2A**

PROJECT ITEM		ORIGINAL ESTIMATE			PROPOSED ESTIMATE		
ITEM	UNITS	NO. OF UNITS	COST/UNIT	TOTAL	NO. OF UNITS	COST/UNIT	TOTAL
TIE BACK WALL	SF	1073	\$80.00	\$85,840			\$0.00
EMBANKMENT	SY	0	\$0.00	\$0.00	999	\$4.50	\$4,495.50
total				\$85,840			\$4,495.50
Markup (%) 10				\$8584.00			\$449.55
Subtotal				\$94,424.00			\$4945.05
RIGHT OF WAY	SF	0	\$0.00	\$0.00	22230	\$3.50	\$77,805.00
total				\$0.00			\$77,805.00
Markup (%) 10				\$0.00			\$7780.50
Subtotal				\$0.00			\$85,585.50
<b>TOTAL</b>				<b>\$94,424.00</b>			<b>\$90,530.55</b>

Length of Wall: 74'

Wall Area =  $((2+27)/2) \times (74) = 1073$  SF

The highest point the embankment end area is 27 ft; Embankment End Area =  $.5(27) \times (54) = 729$  SF

Volume of Embankment =  $(729/2) \times (74)/27 = 999$  SY



**Alternative RW-R-2B**

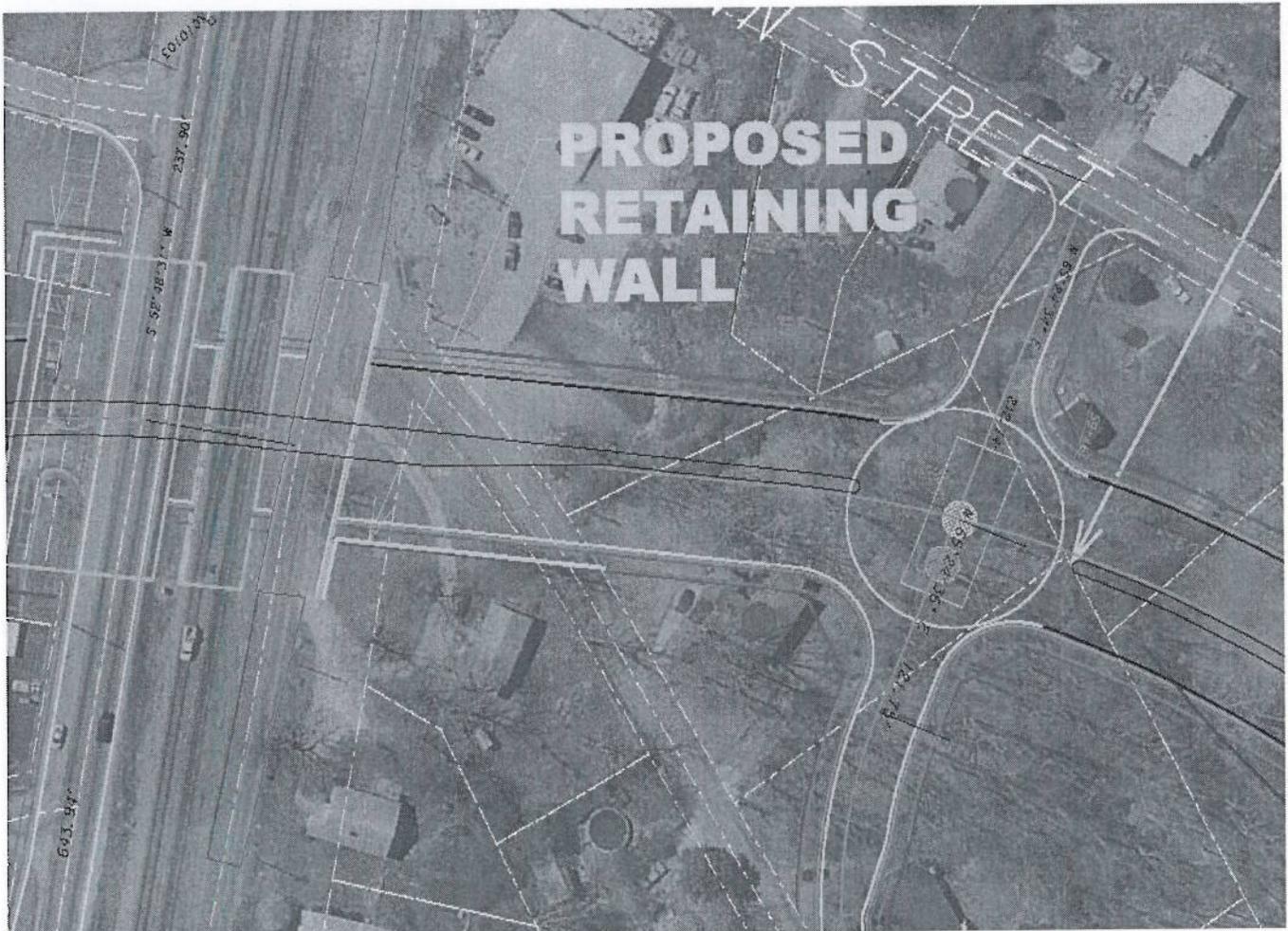
PROJECT ITEM		ORIGINAL ESTIMATE			PROPOSED ESTIMATE		
ITEM	UNITS	NO. OF UNITS	COST/ UNIT	TOTAL	NO. OF UNITS	COST/ UNIT	TOTAL
TIE BACK WALL	SF	2827.5	\$80.00	\$226,200.00			\$0.00
EMBANKMENT	SY	0	\$0.00	\$0.00	2632.5	\$4.50	\$11,846.25
total				\$226,200.00			\$11,846.25
Markup (%) 10				\$22,620.00			\$1,184.63
Subtotal				\$248,820.00			\$13,030.88
RIGHT OF WAY	SF	0	\$0.00	\$0.00	14500	\$0.45	\$6,525.00
DISPLACEMENT	EA			\$0.00	1	\$40,000.00	\$40,000.00
HOUSE	EA			\$0.00	1	\$125,000.00	\$125,000.00
total				\$0.00			\$171,525.00
Markup (%) 148				\$0.00			\$253,857.00
Subtotal				\$0.00			\$425,382.00
<b>TOTAL</b>				<b>\$248,820.00</b>			<b>\$438,412.88</b>

Beginning of Wall: STA 54+95; End of Wall: STA 56+55; Along Bridge: 35 ft

Wall Area =  $((2+27)/2) \times [(5655- 5495)+35] = 2827.5$  SF

The highest point the embankment end area is 27 ft; Embankment End Area =  $.5(27) \times (54) = 729$  SF

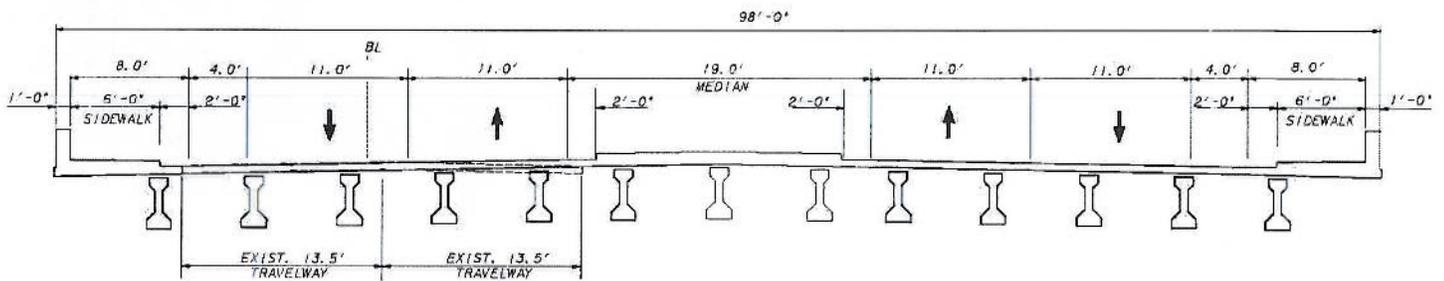
Volume of Embankment =  $(729/2) \times [(5655-5495)+35]/27 = 2632.5$  SY



## Alternative B-R-2

PROJECT ITEM		ORIGINAL ESTIMATE			RECOMMENDED ESTIMATE		
ITEM	UNITS	NO. OF UNITS	COST/ UNIT	TOTAL	NO. OF UNITS	COST/ UNIT	TOTAL
BRIDGE AREA	SF	18502	\$90.00	\$1,665,180.00	16810	\$90.00	\$1,512,900.00
Subtotal				\$1,665,180.00			
Markup 10%				\$166,518.00			
<b>TOTAL</b>				<b>\$1,831,698.00</b>	<b>\$1,664,190.00</b>		

	Original			Proposed		
Wall	2 x	1.2083' =	2.4166'	2 x	1.2083' =	2.4166'
Sidewalk	2 x	6' =	12'	2 x	6' =	12'
Gutter	4 x	2' =	8'	4 x	2' =	8'
Bike Lane	0 x	0' =	0'	2 x	4' =	8'
Lane	6 x	12' =	72'	4 x	11' =	44'
Concrete Median	1 x	4' =	4'	1 x	15' =	15'
Sub Total	98.4166'			89.4166'		
Bridge Length	188'			188'		
Area	188' x	98.4166' =	18502.32 sf	188' x	89.4166' =	16810.32 sf

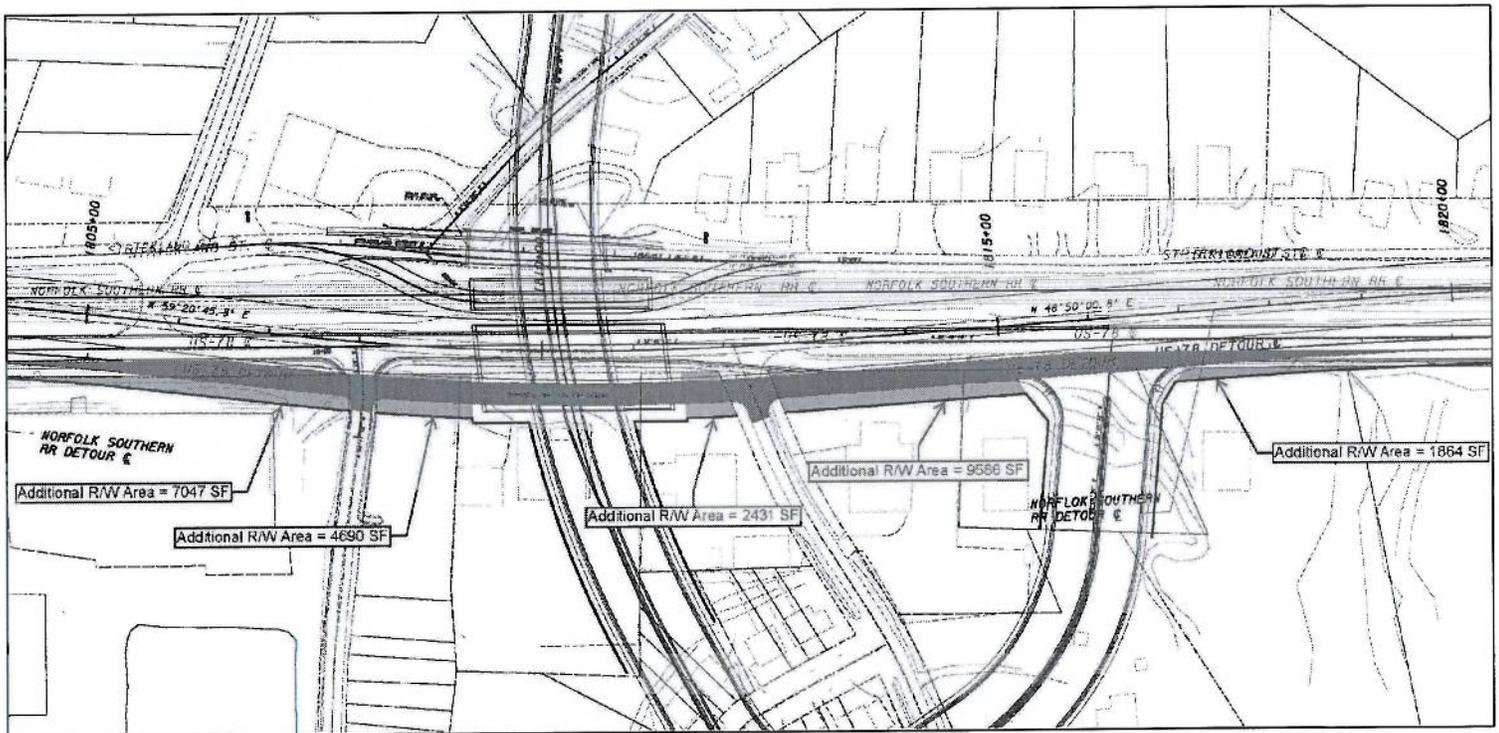


ALTERNATIVE NO B-R-2

BRIDGE  
TYPICAL SECTION  
EAST BROAD STREET/US 78  
OVER SR 92 REALIGNMENT

# Alternative BRC-3

PROJECT ITEM		ORIGINAL ESTIMATE			PROPOSED ESTIMATE		
ITEM	UNITS	NO. OF UNITS	COST/ UNIT	TOTAL	NO. OF UNITS	COST/ UNIT	TOTAL
Rebuild Existing US 78							
PAVEMENT	SY	3200	\$78.32	\$250,630			
GRADING	CY	6000	\$4.50	\$27,000			
RESTRIPING	LS	1	\$5000.00	\$5,000			
RECONSTRUCT CATCH BASIN	EA	4	\$1850.00	\$7,400			
18" PIPE	LF	400	\$36.80	\$14,720			\$0.00
total				\$304,750			\$0.00
Markup (%) 10				\$30,475			\$0.00
Subtotal				\$335,225			\$0.00
Build Detour to Permanent Stds.							
4" - 25MM ASPHALTIC CONCRETE	SY				3333	\$17.60	\$58,660
CATCH BASINS	EA				4	\$2460.00	\$9,840
18" PIPE	LF				500	\$36.80	\$18,400
PERMANENT RIGHT OF WAY	SF				25618	\$3.50	\$89,663
total				\$0.00			\$176,563
Markup (%) 10				\$0.00			\$17,656
Subtotal				\$0.00			\$194,219
<b>TOTAL</b>				<b>\$335,225</b>			<b>\$194,219</b>



**TS-W-3**

PROJECT ITEM		ORIGINAL ESTIMATE			PROPOSED ESTIMATE		
ITEM	UNITS	NO. OF UNITS	COST/ UNIT	TOTAL	NO. OF UNITS	COST/ UNIT	TOTAL
TYPE 7 6x24	LF				71,000	\$27.25	\$1,934,750.00
TYPE 7 8X30	LF	71,000	\$15.29	\$1,085,590.00			
CATCH BASIN	EA				10	\$2,515.00	\$25,150.00
total				\$1,085,590.00			\$1,959,900.00
Markup 10 %				\$108,559.00			\$195,990.00
<b>Subtotal</b>				<b>\$1,194,149.00</b>			<b>\$2,155,890.00</b>
R/W COST	SF	0	\$0.74	\$0.00			
total				\$0.00			\$0.00
Markup 148 %				\$0.00			\$0.00
<b>Subtotal</b>				<b>\$0.00</b>			<b>\$0.00</b>
<b>TOTAL</b>				<b>\$1,194,149.00</b>			<b>\$2,155,890.00</b>

6 X 24 C&G AND TYPE 7 8X30 C&G COST UPDATED PER GDOT ITEM MEAN SUMMARY 1/2008-12/2008  
 R/W SQUARE FOOTAGE REVISED PER RESPONSE COMMENTS  
 CATCH BASINS ADDED PER RESPONSE COMMENTS

**TS-W-3: Additional Inlet and Storm Drain Analysis**

Using the Manning's Equation for Gutter Flow Rate:

$$Q = [0.56/n] (S_x)^{2/3} (S)^{1/2} (T)^{8/3}$$

Average cross slope ( $S_x$ ) = 0.02 ft/ft (2%)

Average longitudinal slope ( $S$ ) = 0.03 ft/ft (3%)

Manning's roughness coefficient ( $n$ ) = 0.013 (concrete gutter with smooth asphalt pavement)

Width of flow or spread ( $T$ ) = 8.0 ft (for 8 x 30 inch Curb & Gutter)

Width of flow or spread ( $T$ ) = 7.5 ft (for 6 x 24 inch Curb & Gutter)

For 8 in. x 30 in. Curb & Gutter:

$$Q = [0.56/.013] (.02)^{2/3} (.03)^{1/2} (8)^{8/3} = 2.815 \text{ cfs}$$

For 6 in. x 24 in. Curb & Gutter:

$$Q = [0.56/.013] (.02)^{2/3} (.03)^{1/2} (7.5)^{8/3} = 2.370 \text{ cfs}$$

Using the Rational Formula for Flow Rate:

$$Q = C \times I \times A$$

Average Runoff Coefficient ( $C$ ) =  $[(40 \times 0.95) + (35 \times 0.30)] / 75 = 0.65$

Intensity ( $I$ ) = 6.105 in/hr (10 year Frequency – 10 minute  $T_c$ )

Drainage Area ( $A$ ) =  $(75 \text{ ft} \times 22,000 \text{ LF}) / 43560 \text{ (sf/ac)} = 37.9 \text{ AC}$

\*Approximately 22,000 LF in Superelevation, assumed drainage width of 75 ft.

$$Q = 0.65 \times 6.105 \times 37.9 = 150.4 \text{ cfs}$$

Required Inlets:

For 8 in. x 30 in. Curb & Gutter:

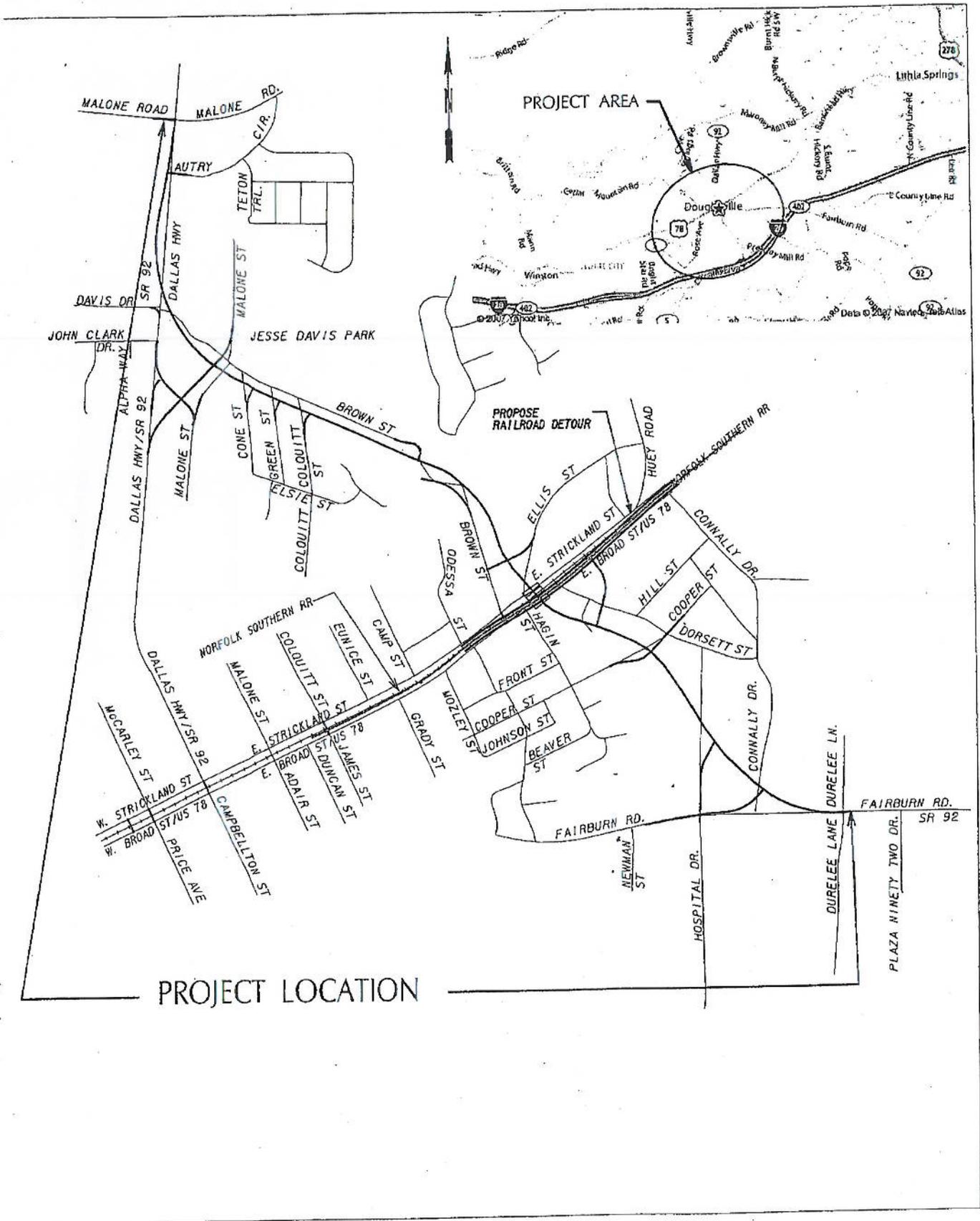
$$\text{Median Inlets} = 150.4 \text{ cfs} / 2.815 \text{ cfs} = 54 \text{ Inlets}$$

For 6 in. x 24 in. Curb & Gutter:

$$\text{Median Inlets} = 150.4 \text{ cfs} / 2.370 \text{ cfs} = 64 \text{ Inlets}$$

**6 in. x 24 in. Curb & Gutter would require 10 additional Inlets.**

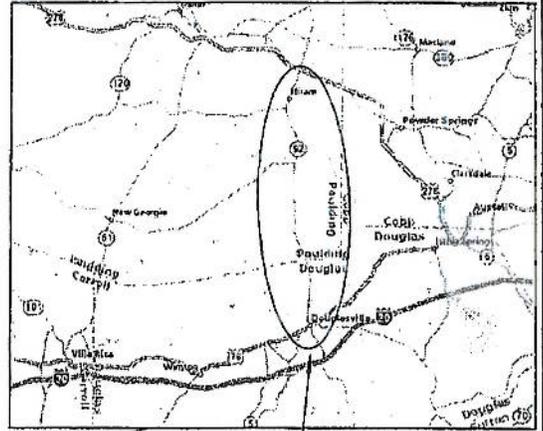
Project Concept Report page 2  
 Project Numbers: CSSTP-0006-00(900), CSSTP-0006-00(901), STP-186-1(11)  
 P.I. Numbers: 0006900, 0006901, 720970  
 County: Douglas



Project Concept Report Page 2  
Project Number: CSSTP-0007-00(691)  
P.I. Number 0007691  
Counties: Douglas and Paulding

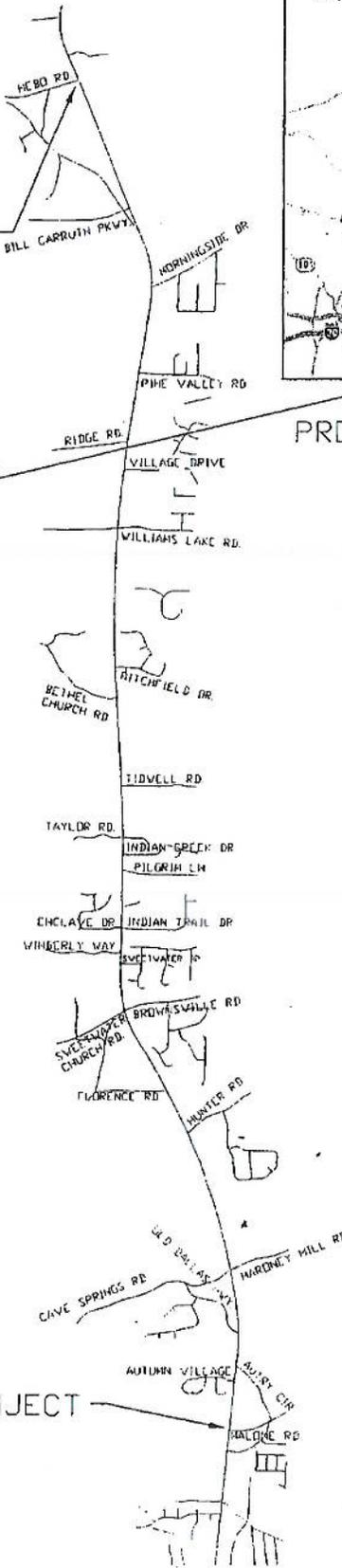


END PROJECT



PROJECT AREA

COLONIAL PIPELINE  
APPROX. LOCATION



BEGIN PROJECT

### S.R. 92 - PAULDING COUNTY LOCATION MAP

**PRECONSTRUCTION STATUS REPORT FOR PI:0007691,0006900,0006901,720970-**

SR 92 RELOC FM STRICKLAND ST TO MALONE RD - PHASE III

PROJ ID: 720970-  
 COUNTY: Douglas  
 LENGTH (MI): 1.27  
 PROJ NO.: STP00-0186-01(011)  
 PROJ MGR: Emmanuel, Peter B.  
 AOHD Initials: MAH  
 OFFICE: Program Delivery  
 CONSULTANT: Local Design, Local PE funds  
 SPONSOR: GDOT  
 DESIGN FIRM: Croy Engineering, LLC.

MGMT LET DATE: 04/15/2010  
 MGMT ROW DATE: 04/15/2010  
 SCHED LET DATE: 11/13/2015  
 WHO LETS?: GDOT Let  
 LET WITH:

DOT DIST: 7  
 CONG. DIST: 13  
 BIKE: Y  
 MEASURE: E  
 NEEDS SCORE: 4  
 BRIDGE SUFF:

SCHED START	SCHED FINISH	TASKS	ACTUAL START	ACTUAL FINISH	%
		Concept Development	2/10/2001	2/23/2003	82
		Concept Meeting	10/1/2001	10/1/2001	100
		PM Submit Concept Report	2/27/2002	2/28/2002	100
		Receive Preconstruction Concept Approval	3/12/2002	3/26/2002	100
		Management Concept Approval Complete	3/27/2002	4/2/2002	100
		Value Engineering Study	3/28/2008		71
		Public Information Open House Held	5/30/2006	5/30/2006	100
		Environmental Approval	1/1/2000		22
		Pub Hear Held/Comm Resp (EA/FONSI, GEPA)			0
		Mapping			0
		Field Surveys/SDE			0
		Preliminary Plans	2/23/2003		10
		Preliminary Bridge Design			0
		Underground Storage Tanks			0
		404 Permit Obtainment			0
		PFPR Inspection			0
		R/W Plans Preparation			0
		R/W Plans Final Approval			0
		L & D Approval			0
		R/W Acquisition			0
		Stake R/W			0
		Soil Survey			0
		Bridge Foundation Investigation			0
		Final Design			0
		Final Bridge Plans Preparation			0
		FFPR Inspection			0
		Submit FFPR Responses (OES)			0

PROGRAMMED FUNDS	Proposed	Approved	Activity	Cost	Fund	Date Auth
	2005	2005	PE	55,000.00	H660	4/15/2005
	2010	2009	PE	928,928.00	H660	
	2010	2009	PE	1,035,893.93	L240	
	2011	2009	ROW	11,031,512.21	L240	
	2016	LR	CST	18,117,825.04	L230S	

STIP AMOUNTS	Activity	Cost	Fund
Date: 5/19/2000	PE	928,928.00	H660
Date: 5/19/2000	PE	773,000.00	L240
Date: 5/19/2000	PE	773,000.00	H660
Date: 5/12/2008	ROW	928,928.00	H660
Date: 1/6/2009	CST	10,000,000.00	L240
		0.00	L230S

**PPDD:** Logical termini issues for multilane 11/15/04.  
**Bridge:** BRIDGE REQUIRED  
**Design:** CROY PREPARING RESPONSES TO VE STUDY (5-6-09)  
**EIS:** EA/NotAval/NotOnSched/RW/Risk(8-6-09)  
**L.G.P.A.:** PMA SGN CITY DO PE & UTIL 8-24-98.  
**Planning:** Portions of the project are included in the Douglas Co Bike/Ped Plan (p 34) and ARC Bike Trans/Ped Walkways Plan (p 94)  
**Programming:** #1 11-06  
**Traffic Op:** SEND CONSULTANT PLANS FOR REVIEW - \*  
**Utility:** YPFINEED PLANS 12/04;OCD SUE  
**EMG:** Fly 6677'09; PE BY LOCAL

**District Comments**  
 COUNTY REQUESTS THAT ROW FUNDS FROM 721590 BE MOVED TO THIS PROJECT(FY-07 Conventional Consultant Project(CAH))Prjct removed from FY-07 CAP-Local PE/CITY OF DOUGLASVILLE HAS CROY ON HOLD FOR ALL ACTIVITIES, CITY DOES NOT AGREE WITH OEL/FHWA REVIEW COMMENTS OF PUBLIC INVOLVEMENT PLAN IN EA. (12/16/08)  
 CROY ENG PREPARING VE RESPONSES TO BE SUBMITTED 5/15/09 TO URBAN DES. AFTER VE RESPS APPRD WILL HOLD BEGIN PUBLIC INV W BROWN COMMUNITY / DATABASE CHECK DID NOT MEET DEPT ACCURACY STDS NOTIFICATION TO CITY TO CORRECT & PROVIDE DATABASE(5-6-09)

**Acquired by:** DOT  
**Acquisition MGR:**  
**R/W Cert Date:**

**Cond. Filled:**  
**Relocations:**  
**Acquired:**

**Prel. Parcel CT:** 43  
**Under Review:**  
**Released:**

**Total Parcel in ROW System:**  
**Options - Pending:**  
**Condemnations- Pend:**

**DEEDS CT:**

**PRECONSTRUCTION STATUS REPORT FOR PI:0007691,0006900,0006901,720970-**

SR 92 BRIDGE OVERPASS @ SR 5/US 78 INCLUDING RR - PHASE I

PROJ ID: 0006900  
 COUNTY: Douglas  
 LENGTH (MI): 0.25  
 PROJ NO.: CSSTP-0006-00(900)  
 PROJ MGR: Emmanuel, Peter B.  
 AOH Initials: MAH  
 OFFICE: Program Delivery  
 CONSULTANT: Local Design, Local PE funds  
 SPONSOR: Douglasville  
 DESIGN FIRM: Croy Engineering, LLC.

MGMT LET DATE: 04/15/2010  
 MGMT ROW DATE: 04/15/2010  
 SCHED LET DATE: 3/25/2013  
 WHO LETS?: GDOT Let  
 LET WITH:

MPO: Allamita TMA  
 TIP #: DO-282A  
 MODEL YR: 2020  
 TYPE WORK: Realignment  
 CONCEPT: ADD 6U(MED 20)  
 PROG TYPE: New Construction  
 Prov. for ITS: N  
 BOND PROJ:

SCHED START	SCHED FINISH	TASKS	ACTUAL START	ACTUAL FINISH	%	PROGRAMMED FUNDS						
						Activity	Approved	Proposed	Cost			
		Concept Development	3/27/2002	2/23/2003	82	PE	2009	2010	1,967,855.00	H660	PRECST	
		Concept Meeting	10/1/2001	10/1/2001	100	ROW	2009	2012	9,738,000.00	L230S	PRECST	
		PM Submit Concept Report	2/27/2002	2/28/2002	100	UTL	NONE	2015	489,684.00	L230S	PRECST	
		Receive Preconstruction Concept Approval	3/12/2002	3/26/2002	100	CST	LR	2015	10,838,000.00	L230S	PRECST	
		Management Concept Approval Complete	3/27/2002	4/2/2002	100							
		Value Engineering Study	3/28/2008	8/8/2006	71							
		Public Information Open House Held	8/8/2006	8/8/2006	100							
		Environmental Approval	1/1/2000		47							
		Pub Hear Held/Comm Resp (EA/FONSI, GEPA)			0							
		Mapping			0							
		Field Surveys/SIDE			0							
		Preliminary Plans	2/23/2003		1							
		Preliminary Bridge Design			0							
		Underground Storage Tanks			0							
		404 Permit Obtainment			0							
		PFPR Inspection			0							
		R/W Plans Preparation			0							
		R/W Plans Final Approval			0							
		L & D Approval			0							
		R/W Acquisition			0							
		Stake R/W			0							
		Soil Survey			0							
		Bridge Foundation Investigation			0							
		Final Design			0							
		Final Bridge Plans Preparation			0							
		FFPR Inspection			0							
		Submit FFPR Responses (OES)			0							

SCHED START	SCHED FINISH	TASKS	ACTUAL START	ACTUAL FINISH	%	STIP AMOUNTS			
						Activity	Cost	Fund	Date
		PE Cost Est Amt	1,967,855.00	Date: 5/12/2008	PE	1,967,855.00	H660		
		ROW Cost Est Amt	9,738,000.00	Date: 9/30/2008	ROW	6,400,000.00	L230S		
		Utility Cost Est Amt	489,684.00	Date: 1/6/2009	UTL	0.00	L230S		
		CST Cost Est Amt	10,838,000.00	Date: 1/6/2009	CST	0.00	L230S		

**Bridge:** BRIDGE REQUIRED  
**Design:** CROY ENG PREPARING VE RESPONSES (5-6-09)  
**EIS:** EA\NotApyd\OnSchedRW\ris\8-26-08  
**LOGPA:** NOTIFICATION LETTER SENT TO DOUGLASVILLE 2-29-08/PMA NEEDED  
**Planning:** Bridge requires bicycle accommodations, Title 23 Section 217(e)  
**Prog. Develop:** PROGRAMMED AT THE REQUEST OF ARC - FY05  
**Programming:** PE H660 \$ MOVED FROM PI# 0008847  
**Utility:** OCD SUE  
**EMG:** Fly 6674/09; REALIGNMENT; PE BY LOCAL

**District Comments:**  
 FY-07 Conventional Consultant Project(CAH)Pjct removed from FY-07 CAP-Local PE| CITY OF DOUGLASVILLE HAS CROY ON HOLD FOR ALL ACTIVITIES, CITY DOES NOT AGREE WITH OEL/FHWA REVIEW COMMENTS OF PUBLIC INVOLVEMENT PLAN IN EA (12/16/08) CROY ENG PREPARING VE RESPONSES TO BE SUBMITTED 5/15/09 TO URBAN DES. AFTER VE RESPS APPRD WILL HOLD BEGIN PUBLIC INV W BROWN COMMUNITY / DATABASE CHECK DID NOT MEET DEPT ACCURACY STDS NOTIFICATION TO CITY TO CORRECT & PROVIDE DATABASE(5-6-09)

**Acquired by:** DOT  
**Acquisition MGR:**  
**R/W Cert Date:** 8/4/08

**Cond. Filed:**  
**Relocations:**  
**Acquired:**

**Prel. Parcel CT:** 24  
**Total Parcel in ROW System:**  
**Options - Pending:**  
**Condemnations- Pend:**

**DEEDS CT:**

**PRECONSTRUCTION STATUS REPORT FOR PI:0007691,0006900,0006901,720970-**

**PROJ ID:** 0006901  
**COUNTY:** Douglas  
**LENGTH (MI):** 0.61  
**PROJ NO.:** CSSTP-0006-00(901)  
**PROJ MGR:** Emmanuel, Peter B.  
**AOHD Initials:** MAH  
**OFFICE:** Program Delivery  
**CONSULTANT:** Local Design, Local PE funds  
**SPONSOR:** GDOT  
**DESIGN FIRM:** Croy Engineering, LLC.

**MGMT LET DATE:**  
**MGMT ROW DATE:** 04/15/2010  
**SCHED LET DATE:** 3/25/2013  
**WHO LETS?:** GDOT Let  
**LET WITH:**

**DOT DIST:** Atlanta TMA  
**CONG. DIST:** DO-282B  
**BIKE:** 2020  
**MEASURE:** Roadway Project  
**NEEDS SCORE:** ADD 6U(MED 20)  
**BRIDGE SUFF:** New Construction

**MPO:** Atlanta TMA  
**TIP #:** DO-282B  
**MODEL YR:** 2020  
**TYPE WORK:** Roadway Project  
**CONCEPT:** ADD 6U(MED 20)  
**PROG TYPE:** New Construction  
**Prov. for ITS:** N  
**BOND PROJ.:**

SCHED START	SCHED FINISH	TASKS	ACTUAL START	ACTUAL FINISH	%	PROGRAMMED FUNDS						
						Activity	Approved	Proposed	Cost	Fund	Status	Date Auth
		Concept Development	3/27/2002	2/23/2003	100	PE	2009	2010	1,100,000.00	LY10S	PRECST	
		Concept Meeting	10/1/2001	10/1/2001	100	ROW	2009	2012	15,349,800.00	L230S	PRECST	
		PM Submit Concept Report	2/27/2002	2/28/2002	100	ROW	2009	2012	6,099,200.00	LY10S	PRECST	
		Receive Preconstruction Concept Approval	3/12/2002	3/26/2002	100	CST	LR	2015	10,137,800.00	L230S	PRECST	
	8/25/2009	Management Concept Approval Complete	3/27/2002	4/2/2002	100							
		Value Engineering Study	3/28/2008	8/8/2006	86							
		Public Information Open House Held	8/8/2006	8/8/2006	100							
	8/13/2009	Environmental Approval	1/1/2000		22							
	4/29/2010	Pub Hear Held/Comm Resp (EA/FONSI, GEPA)			0							
	10/22/2009	Mapping			0							
	11/27/2009	Field Surveys/SDE			0							
	2/22/2010	Preliminary Plans	2/23/2003		10							
	2/5/2010	Preliminary Bridge Design			0							
	12/24/2009	Underground Storage Tanks			0							
	11/26/2009	404 Permit Obtainment			0							
	11/4/2010	PFPR Inspection			0							
	11/3/2010	R/W Plans Preparation			0							
	1/27/2011	R/W Plans Preparation			0							
	3/16/2011	R/W Plans Final Approval			0							
	12/15/2010	L & D Approval			0							
	1/25/2013	R/W Acquisition			0							
	8/22/2011	Stake R/W			0							
	8/17/2010	Soil Survey			0							
	1/5/2011	Bridge Foundation Investigation			0							
	1/13/2012	Final Design			0							
	11/14/2011	Final Bridge Plans Preparation			0							
	5/8/2012	PFPR Inspection			0							
	5/7/2012	Submit PFPR Responses (OES)			0							
	6/4/2012				0							

**Bridge:** BRIDGE REQUIRED

**Design:** CROY PREPARING VE RESPONSE (5-6-09)

**EIS:** EAINotApvd/OnSchedRW/Risk(8-26-08)

**PLANNING:** NOTIFICATION LETTER SENT TO DOUGLASVILLE 2-29-08/PMA NEEDED

**Prog. Develop:** Bridge Requires Bicycle Accommodations, Title23, Section 217(e)

**Programming:** PROGRAMMED AT THE REQUEST OF ARC - FY05

**Utility:** PE LY10 \$ MOVED FROM PI# 0008848

**EMG:** OCID SUE

Fly 66/76/09; PE BY LOCAL

**Acquired by:** DOT  
**Acquisition MGR:**  
**R/W Cert Date:**

**Cond. Filed:** 38

**Relocations:**

**Acquired:**

**Total Parcel in ROW System:**

**Options - Pending:**

**Condemnations- Pend:**

**DEEDS CT:**

**PRECONSTRUCTION STATUS REPORT FOR PI:0007691,0006900,0006901,720970-**

**SR 92 FM CS 502/BROWN ST TO CS 519/NEBO RD - SEGMENT 1**

MGMT LET DATE : 12/15/2012  
 MGMT ROW DATE : 12/15/2010  
 SCHED LET DATE : 12/18/2012  
 WHO LETS?: GDOT Let  
 LET WITH :

DOT DIST: 6, 7  
 CONG. DIST: 11, 13  
 BIKE: Y  
 MEASURE: E  
 NEEDS SCORE: 6  
 BRIDGE SUFF:

MPO: Atlanta TMA  
 TIP #: PA-092A  
 MODEL YR : 2020  
 TYPE WORK: Widening  
 CONCEPT: ADD 6R(MED 20)  
 PROG TYPE: Reconstruction/Rehabilitation  
 Prov. for ITS: N  
 BOND PROJ :

0007691 Douglas, Paulding  
 COUNTY : 7.14  
 LENGTH (MI): CSSTP-0007-00(691)  
 PROJ NO.: Emmanuel, Peter B.  
 PROJ MGR: MAH  
 AOH Initials: Program Delivery  
 OFFICE : Local Design, Local PE funds  
 CONSULTANT: GDOT  
 SPONSOR : Carter & Burgess, Inc.

SCHED START	SCHED FINISH	TASKS	ACTUAL START	ACTUAL FINISH	%	PROGRAMMED FUNDS				Date Auth		
						Activity	Approved	Proposed	Cost		Fund	Status
8/27/2009	8/27/2009	Concept Development	9/13/2006		64	PE	2007	2007	1,000,000.00	L240	AUTHORIZED	8/28/2006
8/13/2009	8/13/2009	Concept Meeting	3/5/2008	3/5/2008	100	ROW	2011	2012	12,054,080.11	L240	PRECST	
8/27/2009	8/27/2009	PM Submit Concept Report			0	CST	2013	2016	66,931,545.80	L240	PRECST	
8/27/2009	8/27/2009	Receive Preconstruction Concept Approval			0							
8/27/2009	8/27/2009	Management Concept Approval Complete	3/28/2008		71							
3/5/2010	8/13/2009	Value Engineering Study	8/8/2006	8/8/2006	100							
9/11/2009	4/29/2010	Public Information Open House Held	1/1/2000		22							
10/5/2009	10/1/2009	Pub Hear Held/Comm Resp (EA/FONSI, GEPA)			0							
11/1/2009	11/6/2009	Mapping			0							
2/17/2010	12/28/2010	Field Surveys/SDE			0							
8/28/2009	8/17/2010	Preliminary Bridge Design			0							
8/14/2009	1/7/2010	Underground Storage Tanks			0							
3/14/2011	11/26/2009	404 Permit Obtainment			0							
3/16/2011	3/15/2011	FFPR Inspection			0							
7/6/2011	7/5/2011	R/W Plans Preparation			0							
4/21/2011	8/22/2011	R/W Plans Final Approval			0							
8/23/2011	4/25/2011	L & D Approval			0							
2/17/2010	10/22/2012	R/W Acquisition			0							
6/12/2012	1/24/2012	Stake R/W			0							
6/12/2012	2/21/2011	Soil Survey			0							
6/12/2012	5/23/2011	Bridge Foundation Investigation			0							
6/17/2011	6/12/2012	Final Design			0							
7/4/2012	3/22/2012	Final Bridge Plans Preparation			0							
7/19/2012	7/5/2012	FFPR Inspection			0							
	8/1/2012	Submit FFPR Responses (OES)			0							

STIP AMOUNTS		Activity	Cost	Fund
PE Cost Est Amt:	9,196,000.00	PE		L240
ROW Cost Est Amt:	47,567,000.00	ROW	12,180,000.00	L240
CST Cost Est Amt:		CST	0.00	L240

**Bridge:** BRIDGE REQUIRED  
**Design:** JACOBS/CROY - CONCEPT/NEPA/DESIGN INHOUSE (6-5-09)  
**EIS:** EAINotApvd|OnSchedRW|sr(8-26-08)  
**LGPA:** NOTIFICATION LETTER SENT TO HIRAM|DOUGLASVILLE|DOUGLASVILLE|PAULDING7-26-06.  
**Planning:** Project is on the Douglas Co Bike/Ped Plan, pg. 34  
**Programming:** NO ROW PROVIDED WHEN SUBMITTED FOR PROGRAMMING FROM PLANNING  
**EMG:** Fly 6682/09; RECST/REHAB; PROJ PUSHED TO LR/PM 2/07.

**District Comments**  
 Project will not be a FY-07 Turnkey Project (CAH) 051606| CITY OF DOUGLASVILLE HAS CROY ON HOLD FOR ALL ACTIVITIES. CITY DOES NOT AGREE WITH DELPHWA REVIEW COMMENTS OF PUBLIC INVOLVEMENT PLAN IN EA. CARTER BURGESS PRIME W/CROY SUB. CROY DOING NEPA FOR 0006900, 0006901, 0007691 & 720970. (1/6/09)  
 PROJECT FLOWN REQUESTING MAPPING & FIELD SURVEYS (5-6-09)

**Acquired by:** DOT  
**Acquisition MGR:**  
**R/W Cert Date:**

**DEEDS CT:**