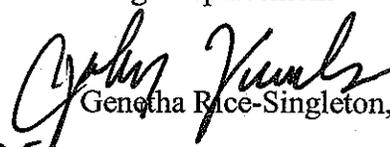


ORIGINAL TO GENERAL FILES

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 0007076, Rockdale County **OFFICE** Preconstruction
CSBRG-0007-00(076)
CR 442/Irvin Bridge Road over Yellow River-
Bridge Replacement **DATE** February 18, 2008

FROM  Genotha Rice-Singleton, Assistant Director of Preconstruction

TO  SEE DISTRIBUTION

SUBJECT APPROVED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

Attachment

DISTRIBUTION:

Brian Summers
Glenn Bowman
Ken Thompson
Michael Henry
Keith Golden
Bryant Poole
Angela Alexander
Paul Liles
Mike Lobdell
BOARD MEMBER

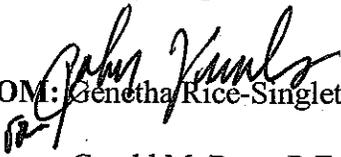
**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE: P.I. No. 0007076, Rockdale County
CSBRG-0007-00(076)
CR 442/Irwin Bridge Road at Yellow River-
Bridge Replacement

OFFICE: Preconstruction

DATE: December 11, 2007

FROM:  Genetha Rice-Singleton, Assistant Director of Preconstruction

TO: Gerald M. Ross, P.E., Chief Engineer

SUBJECT: PROJECT CONCEPT REPORT

This project is the replacement of a structurally deficient bridge on CR 442/Irwin Bridge Road over Yellow River, 2.5 miles north of Conyers, Georgia.. The existing bridge, constructed in 1962, is a 333' x 30.1' concrete structure with a sufficiency rating of 40. County Road CR 442 at this location is a rural two lane roadway with 12' lanes with variable width grass shoulders with a posted speed of 45 MPH. County Road CR 442 is classified as a urban minor collector. The base year traffic (2010) along this section of CR 442 is 6136 VPD. The design year (2030) volumes are projected to be 10,390 VPD. The proposed speed design is 45 MPH.

The project proposes to construct a new 350' x 44' concrete bridge over Yellow River offset 45' from the existing alignment. The approaches will consist of two, 12' lanes with 10' rural shoulders. Traffic will be maintained on the existing bridge while the new parallel offset structure is built.

Environmental concerns include requiring a COE 404 permit; Categorical Exclusion will be prepared; a Public hearing is not required; Time saving procedures is appropriate.

The estimated costs for this project are:

	PROPOSED	APPROVED	FUNDING	PROG DATE
Construction (includes E&C)	\$ 3,080,000	\$ 3,573,000	L110	LR
Right-of-way & Utilities	Local	Local	Local	

P.I. No. 0007076, Rockdale County

Page 2

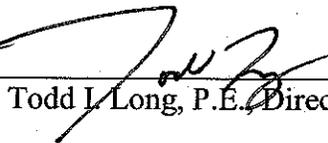
December 11, 2007

* Rockdale County signed PFA for PE and utilities; CST to be done by future agreements.

I recommend this project concept be approved.

GRS
GRS: JDQ
Attachment

CONCUR

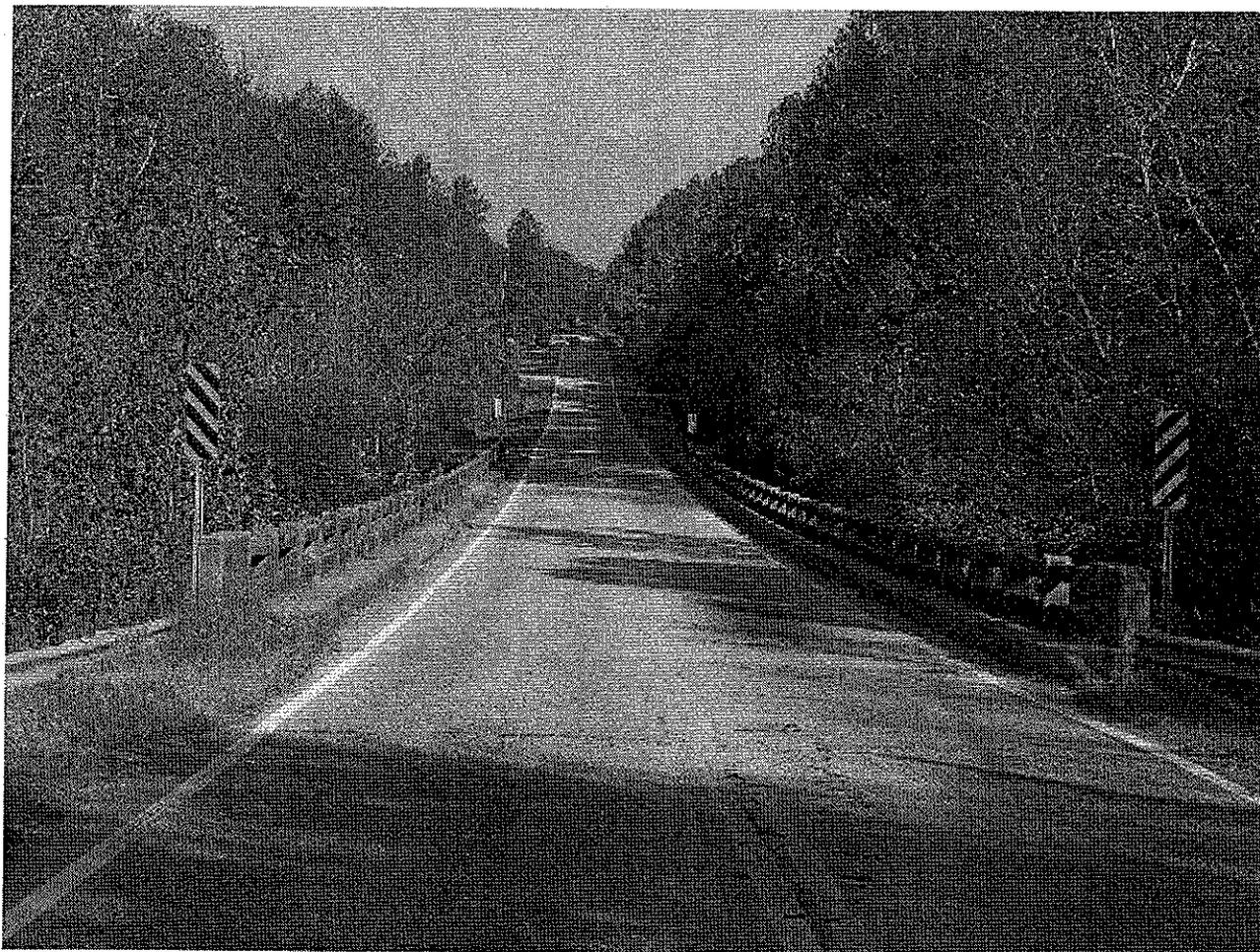


Todd L. Long, P.E., Director of Preconstruction

APPROVED



Gerald M. Ross, P.E., Chief Engineer



LOOKING NORTH



LOOKING @ LEFT SIDE

Bridge Inventory Data Listing
Georgia Department of Transportation.

Structure ID: 247-5015-0

Rockdale

SUFF. RATING: 41.08

Location & Geography		Signs & Attachements			
* Structure ID:	247-5015-0	* 104 Highway System:	0	225 Expansion Joint Type:	02
200 Bridge Information:	06	* 26 Functional Classification:	17	242 Deck Drains:	1
* 6A Feature Int:	YELLOW RIVER	* 204 Federal Route Type:	M No. 09334	243 Parapet Location:	0.00
* 6B Critical Bridge:	0	105 Federal Lands Highway:	0	Height:	0.00
* 7A Route Number Carried:	CR00442	* 110 Truck Route:	0	Width:	0.00
* 7B Facility Carried:	IRWIN BRIDGE ROAD	206 School Bus Route:	1	238 Curb Height:	1.2
* 9 Location:	2.5 MI N OF CONYERS	217 Benchmark Elevation:	0000.00	Curb Material:	1
2 DOT District:	7	218 Datum:	0	239 Handrail:	1 1
207 Year Photo:	2007	* 19 Bypass Length:	03	* 240 Median Barrier Rail:	0
* 91 Inspection Frequency:	24 Date: 11/14/2007	* 20 Toll:	3	241 Bridge Median Height:	0.0
92A Fract Crit Insp Freq:	00 Date: 2/1/1901	* 21 Maintenance:	02	* Bridge Median Width:	0.0
92B Underwater Insp Freq:	00 Date: 2/1/1901	* 22 Owner:	02	230 Guardrail Loc. Dir. Rear:	3
92C Other Spc. Insp Freq:	00 Date: 2/1/1901	* 31 Design Load:	2	Fwrd:	3
* 4 Place Code:	00000	37 Historical Significance:	5	Oppo. Dir. Rear:	0
* 5 Inventory Route (O/U):	1	205 Congressional District:	04	Oppo. Fwrd:	0
Type:	4	27 Year Constructed:	1962	244 Approach Slab:	0
Designation:	1	106 Year Reconstructed:	0000	224 Retaining Wall:	0
Number:	00442	33 Bridge Median:	0	233 Posted Speed Limit:	45
Direction:	0	34 Skew:	00	236 Warning Sign:	0
* 16 Latitude:	33 - 42.1670 HMMS Prefix:	35 Structure Flared:	0	234 Delineator:	0
* 17 Longitude:	84 - 01.3480 HMMS Suffix: MP:0.00	38 Navigation Control:	0	235 Hazzard Boards:	1
98 Border Bridge:	000 % Shared: 00	213 Special Steel Design:	0	237 Utilities - Gas:	00
99 ID Number:	0000000000000000	267 Type of Paint:	1	Water:	00
* 100 STRAHNET:	0	* 42 Type of Service on:	1	Electric:	21
12 Base Highway Network:	1	Type of Service under:	5	Telephone:	22
13A LRS Inventory Route:	2472044200	214 Movable Bridge:	0	Sewer:	00
13B Sub Inventory Route:	0	203 Type Bridge:	O N N O	247 Lighting - Street:	0
101 Parallel Structure:	N	259 Pile Encasement:	2	Navigation:	0
* 102 Direction of Traffic:	2	* 43 Structure Type Main:	3 02	Aerial:	0
* 264 Road Inventory Mile Post:	002.06	45 No. Spans Main:	002	* 248 County Continuity No.:	00
* 208 Inspection Area:	07 Initials: DAS	44 Structure Type Appr:	1 04		
Engineer's Initial:	sgm	46 No. Spans Appr:	0005		
		226 Bridge Curve Horz:	0 Vert: 1		
		111 Pier Protection:	0		
		107 Deck Structure Type:	1		
* Location I.D. No.:	247-09334M-002.06N	108 Wearing Surface Type:	6		
		Membrane Type:	0		
		Deck Protection:	0		

Structure ID: 247-5015-0

Programming Data		Measurements		Ratings	
201 Project No.:	S-2174 (1)	* 29 ADT:	005000 Year: 2006	65 Inventory Rating Method:	1
202 Plans Available:	4	109 % Trucks:	0	63 Operating Rating Method:	1
249 Prop. Proj. No.	BRG-0007-00(076)	* 28 Lanes On:	02 Under: 00	66 Inventory Type:	2 Rating: 12
250 Approval Status:	0 0 0 0	210 No. Tracks On:	00 Under: 00	64 Operating Type:	2 Rating: 20
251 P.I. No.:	0007076	* 48 Max. Span Length:	0066	231 Calculated Loads	
252 Contract Date:	2/1/1901	* 49 Structure Length:	332	H-Modified:	12 1
260 Seismic No.:	00000	51 Br. Rwdy. Width:	24.10	HS-Modified:	13 1
75 Type Work:	34 1	52 Deck Width:	30.10	Type 3:	12 1
94 Bridge Imp. Cost:	\$357	* 47 Tot. Horiz. Cl:	24.10	Type 3s2:	15 1
95 Roadway Imp. Cost:	\$293	50 Curb / Sidewalk Width:	2.10 / 2.10	Timber:	14 1
96 Total Imp Cost:	\$825	32 Approach Rdwy. Width:	021	Piggyback:	00 0
76 Imp. Length:	001653	* 229 Shoulder Width:		261 H Inventory Rating:	12
97 Imp. Year:	1990	Rear Lt:	7.0 Type: 8 Rt: 8.0	262 H Operating Rating:	20
114 Future ADT:	007500 Year: 2026	Fwrd Lt:	7.0 Type: 8 Rt: 8.0	67 Structural Evaluation:	2
		Pavement Width:		58 Deck Condition:	6
		Rear:	21.0 Type: 2	59 Superstructure Condition:	6
Hydraulic Data			21.0 Type: 2	* 227 Collision Damage:	0
215 Waterway Data		Intersection Rear:	1 Fwrd: 1	60A Substructure Condition:	7
Highwater Elev.:	0000.0 Year: 1900	36 Safety Features Br. Rail:	2	60B Scour Condition:	8
Flood Elevation:	0000.0 Freq.: 00	Transition:	2	60C Underwater Condition:	N
Avg. Streambed Elev.:	0000.0	App. G. Rail:	2	71 Waterway Adequacy:	9
Drainage Area:	00000	App. Rail End:	2	61 Channel Protection Cond.:	8
Area of Opening:	000000	53 Minimum Cl. Over:	99' 99 "	68 Deck Geometry:	2
113 Scour Critical:	U	Under:	N 00' 00 "	69 UnderClr. Horz/Vert:	N
216 Water Depth:	7.6 Br. Height: 22.3	* 228 Minimum Vertical Cl		72 Appr. Alignment:	6
222 Slope Protection:	1	Act. Odm Dir.:	99' 99 "	62 Culvert:	N
221 Spur Dikes Rear:	0 Fwrd: 0	Oppo. Dir:	99' 99 "		
219 Fender System:	0	Posted Odm. Dir:	00' 00 "	Posting Data	
220 Dolphin:	0	Oppo. Dir:	00' 00 "	70 Bridge Posting Required:	1
223 Culvert Cover:	000	55 Lateral Undercl. Rt:	N 0.0	41 Struct Open, Posted, CL:	P
Type:	0	56 Lateral Undercl. Lt:	0.0	* 103 Temporary Structure:	0
No. Barrels:	0	* 10 Max Min Vert Cl:	99' 99 " Dir: 0	232 Posted Loads	
* Width:	0.00 Height: 0.00	39 Nav Vert Cl:	000 Horiz: 0000	H-Modified:	12
* Length:	0 Apron: 0	116 Nav Vert Cl Closed:	000	HS-Modified:	13
265 U/W Insp. Area:	0 Diver: ZZZ	245 Deck Thickness Main:	6.50	Type 3:	12
		Deck Thick. Approach:	6.50	Type 3s2:	15
		246 Overlay Thickness:	2.00	Timber:	14
		212 Year Last Painted:	Sup: 1962 Sub: 1962	Piggyback:	00
Location I.D. No.:	247-09334M-002.06N			253 Notification Date:	2/1/1901
				258 Fed Notify Date:	2/1/1901

PRECONSTRUCTION STATUS REPORT

PROJ ID	COUNTY	DESCRIPTION	MGMT. ROW DATE	SCHED DATE	MGMT. LET DATE
0007076	Rockdale	CR 442/IRWIN BRIDGE RD @ YELLOW RIVER	Jul-08	Jan-10	Jul-09

CSBRG-0007-00(076) **FIELD DIST: 7**
TIP #: RO-249 **TWIN:** **US:**
MPO: Atlanta TMA **EST DATE: 11/20/07**
MODEL YR: 2010
PROJ MGR: Lobdell, Mike **PROJ LENGTH: 0.40**
PROG Replacement **TYPE WORK: Bridges**
TYPE:
CONCEPT: LET RESP: DOT **Congressional Districts: 4**

Phase	Approved	Proposed	Cost	Fund	Status
PE	2009	2009	50,000.00	L110	PRECST
ROW	LOCL	LOCL	250,000.00	LOC	PRECST
CST	2010	2010	3,573,000.00	L110	PRECST

SCHED START	SCHED FINISH	ACTIVITY	ACTUAL START	ACT/EST FINISH	PCT	DISTRICT COMMENTS
		Define Project Concept	12/8/06	2/3/07	18	ROCKDALE (1/11/06) CONCEPT DEVELOPMENT TO BEGIN
12/26/07	12/26/07	Concept Meeting			0	SOON. 9-14-06: ROCKDALE IS SCOPING PROJECT WITH THEIR CONSULTANT (EJC). (3/15/07)
12/31/07	1/18/08	Concept Submittal and Review			0	NO ACTIVITY.
1/21/08	2/1/08	Receive Preconstruction Concept Approval			0	
2/1/08	2/1/08	Management Concept Approval Complete			0	
2/25/08	2/25/08	Public Information Open House Held			0	
2/4/08	8/25/08	Environmental Approval			18	
2/26/08	3/24/08	Field Surveys/SDE			0	
3/26/08	11/24/08	Preliminary Plans			0	
4/23/08	10/9/08	Preliminary Bridge Design			0	
2/4/08	3/10/08	Underground Storage Tanks			0	
6/10/08	8/25/08	404 Permit Obtainment			0	
12/16/08	12/16/08	PFPR Inspection			0	
12/17/08	12/23/08	R/W Plans Preparation			0	
1/7/09	1/12/09	R/W Plans Final Approval			0	
1/7/09	1/9/09	L & D Report Development and Approval			0	
1/13/09	10/22/09	R/W Acquisition			0	
6/2/09	6/15/09	Stake R/W			0	
1/7/09	1/19/09	Soil Survey			0	
1/7/09	2/12/09	Bridge Foundation Investigation			0	
1/12/09	10/7/09	Final Design			0	
2/13/09	9/24/09	Final Bridge Plans Preparation			0	
10/29/09	10/30/09	FFPR Inspection			0	
11/16/09	11/20/09	FFPR Response			0	

BIKE PROVISIONS INCLUDED?: N **MEASUREMENT** **CONSULTANT: C** **UT EST:**

Bridge: BRIDGE REQUIRED
Design: DR/AJ
EIS: CW | RF | CHEVES
LGPA: PMA SGN ROCKDALE DO PE & UTIL|ROW & CST TO BE DONE BY FUTURE AGREEMENTS 6-27-06.
Prog. Develop: 6-07 Ross CST back to 2010 fm LR
EMG: BRIDGE REPLACEMENT

R/W INFORMATION:

PREL PARCEL CT: **TOTAL PARCEL CT:** **ACQUIRED BY: LOC** **ACQ MGR:**
UNDER-REVIEW CT: **RELEASED** **OPT-PEND CT:** **DEEDS CT:** **COND-PEND CT:** **COND-FILED CT:**
RW CERT DT: **ACQUIRED CT:** **RELOCATION CT:**

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

District 7 Preconstruction
Project Number: CSBRG-0007-00(076)
County: Rockdale
P.I. Number: 0007076

Federal Route Number: N/A
State Route Number: N/A

Bridge replacement for Irwin Bridge Road/CR 442 over the Yellow River.

Recommendation for approval:

DATE 11/26/07

Neil L. Smith
Project Manager

DATE 11/20/07

Bry H. Hoke
District Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and the State Transportation Improvement Program (STIP).

DATE _____

State Transportation Planning Administrator

DATE _____

Office of Financial Management

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety & Design Engineer

DATE 11/25/07

Paul V. Tilden, Jr.
State Bridge Engineer

DATE _____

Project Review Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: P.I. No. 0007076

OFFICE: Environment/Location

DATE: November 30, 2007

FROM: 
Glenn Bowman, P.E., State Environmental/Location Engineer

TO: Genetha Rice-Singleton, Assistant Director of Preconstruction

SUBJECT: **PROJECT CONCEPT REPORT**
CSBRG-0007-00(076) / Rockdale County
Bridge Replacement for Irwin Bridge Rd. / CR 442 over the Yellow River

The above subject Concept Report has been reviewed and appears satisfactory subject to the following comment:

- 1) This bridge was built in 1962 and, therefore, is not listed in the GHBS.

If you have any questions, please contact me at (404) 699-4401.

GB/lc

Attachment

cc: Brian Summers
Bryant Poole
Keith Golden
Angela Alexander
Jamie Simpson
Paul Liles

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

District 7 Preconstruction
Project Number: CSBRG-0007-00(076)
County: Rockdale
P.I. Number: 0007076

Federal Route Number: N/A
State Route Number: N/A

Bridge replacement for Irwin Bridge Road/CR 442 over the Yellow River.

Recommendation for approval:

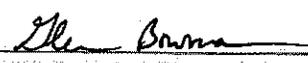
DATE 11/20/07 
Project Manager

DATE 11/20/07 
District Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and the State Transportation Improvement Program (STIP).

DATE _____
State Transportation Planning Administrator

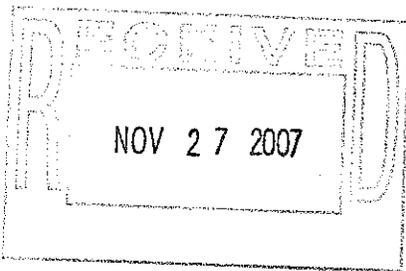
DATE _____
Office of Financial Management

DATE 11/29/07 
State Environmental/Location Engineer

DATE _____
State Traffic Safety & Design Engineer

DATE _____
State Bridge Engineer

DATE _____
Project Review Engineer



DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

District 7 Preconstruction
Project Number: CSBRG-0007-00(076)
County: Rockdale
P.I. Number: 0007076

Federal Route Number: N/A
State Route Number: N/A

Bridge replacement for Irwin Bridge Road/CR 442 over the Yellow River.

Recommendation for approval:

DATE 11/26/07 Mark Hood
Project Manager

DATE 11/20/07 Ben Hood
District Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and the State Transportation Improvement Program (STIP).

DATE 11/26/07 Angela S. Alford
State Transportation Planning Administrator

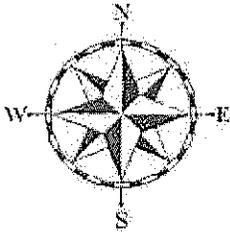
DATE _____
Office of Financial Management

DATE _____
State Environmental/Location Engineer

DATE _____
State Traffic Safety & Design Engineer

DATE _____
State Bridge Engineer

DATE _____
Project Review Engineer



Dekalb
County



Location Map

CSBRG-0007-00(076), P.I. 0007076
Rockdale County, Ga.

Bridge replacement for Irwin Bridge Road/CR 442 over the Yellow River.

Need and Purpose:

The existing bridge carrying Irwin Bridge Road over the Yellow River, in north central Rockdale County, was built in 1962 and currently has a sufficiency rating of 40.13. Bridges with a sufficiency rating less than 50 are considered structurally deficient. The existing bridge is load rated and trucks are required to take an alternate route. ~~Two accidents have occurred in the last three years at the project site, resulting in one injury and no fatalities.~~ *see 1/31/08* The current posted speed limit is 45 mph. The logical terminus south of the bridge is 40 feet south of the existing intersection with Farmer Road. The logical north terminus is 500 feet beyond the existing bridge.

Proposed Project Description:

This project involves replacing the existing bridge over the Yellow River on Irwin Bridge Road and improving the approaches on either side of the bridge.

The proposed road improvements begin on Irwin Bridge Road approximately 40 feet south of the existing intersection with Farmer Road and 500 feet north of the existing bridge on Irwin Bridge Road. The proposed road section for Irwin Bridge Road will consist of (2) 12'-0" lanes with 10'-0" rural shoulders. The bridge will be replaced with a structure offset 45 feet from the existing alignment that is 47'-3" wide to allow for (2) 12'-0" travel lanes and (2) 10'-0" rural shoulders and standard bridge barriers on both sides.

The proposed construction method that allows for the least amount of required right of way and the shortest construction time is an offsite detour. However, the shortest route for the detour has substandard vertical and horizontal curves. The detour route will also have to be repaired after the new bridge is in place. The preferred construction method is to construct a new bridge at a permanent offset parallel to the existing bridge to be posted at 45 MPH. Emergency services are not adversely affected by the permanent offset since access in the project area will be allowed throughout the entire construction schedule.

Is this Project in the Non-Attainment Area? Yes No

This project is air quality exempt because it does not increase capacity.

PDP Classification: Major Minor

Federal Oversight: Full Oversight (), Exempt (), State Funded (), Other ()

Functional Classification: Irwin Bridge Road - Minor Collector

US Route Number(s) N/A State Route Number(s) N/A

Traffic (AADT):
Irwin Bridge Rd. ~~Current~~ ^{BASE} Year: (2010) 6,136 Design Year: (2030) 10,390
%Trucks: 3.2 5.8

Existing Roadway Features:

Irwin Bridge Road

- Typical Sections: (1) 12'-0" Wide Travel Lane in each Direction
4'-0" Shoulders
- Posted Speed Limit: 45 mph Minimum radius for curve: N/A
- Maximum Super-elevation rate for curve: N/A
- Maximum Grade: 5.95%
- Width of Right of Way: 100 Ft. corridor
- Major Structures: Irwin Bridge Rd over the Yellow River - 333'x30.1'
Suff. Rating: 40.13
- Major Interchanges and Intersections: None

Proposed Design Features:

Irwin Bridge Road

- Proposed typical section(s): (1) 12'-0" Wide Travel Lane in each Direction
10'-0" Shoulders
- Proposed Design Speed Mainline 45 mph
- Proposed Maximum Grade Mainline 4.74 % Maximum Grade Allowable 7.0 %
- Proposed Minimum Radius for Curve 650 ft. Minimum radius allowable 587 ft.
- Proposed Maximum super-elevation rate for curve: 6.0%
- Proposed Maximum degree of curve 8.80 Maximum degree allowable 9.76
- Right of Way
 - Width 200 ft max.
 - Easements: Temporary (X), Permanent (X), Utility (), Other ()
 - Type of access control: Full (), Partial (), By Permit (X), Other ()
 - Number of parcels: 4 Number of displacements: 0
- Structures:
 - Bridges: Irwin Bridge Rd over the Yellow River - The bridge will be replaced with a 350' x ~~47~~⁴⁴ 3' structure 2000 - 11/28/07
- Traffic Control during construction: Traffic will be retained on the existing bridge while the new parallel offset structure is built. Some flagging will be required during reconstruction of tie-ins at the beginning and ending of the alignment shift.

- Design Exceptions to controlling criteria anticipated:

	UNDETERMINED	YES	NO
HORIZONTAL ALIGNMENT:	()	()	(X)
ROADWAY WIDTH:	()	()	(X)
SHOULDER WIDTH:	()	()	(X)
VERTICAL GRADES:	()	()	(X)
CROSS SLOPES:	()	()	(X)
STOPPING SIGHT DISTANCE:	()	()	(X)
SUPERELEVATION RATES:	()	()	(X)
HORIZONTAL CLEARANCE:	()	()	(X)
SPEED DESIGN:	()	()	(X)
VERTICAL CLEARANCE:	()	()	(X)
BRIDGE WIDTH:	()	()	(X)
BRIDGE STRUCTURAL CAPACITY:	()	()	(X)

- Design Variances: none anticipated
- Environmental Concerns: Yellow River and riparian wetlands impacts
- Level of Environmental Analysis: Categorical Exclusion
- Utility Involvement:
 - Georgia Power
 - AT&T
 - Comcast
 - Atlanta Gas Light
 - Rockdale County Water Resources

Project Responsibilities:

- Design: Rockdale County PS & E/Heath-Lineback Engineers, Inc.
- Right of Way Acquisition: Rockdale County PS & E
- Relocation of Utilities: Utility companies/Rockdale County
- Letting Contract: GDOT
- Supervision of Construction: GDOT
- Providing Materials pits: Contractor
- Providing detours: Contractor

Coordination:

- Concept Team Meeting date: July 12, 2007
- VE Study: No ✓
- PAR meetings, dates and results: None
- FEMA, USCG, and / or TVA: FEMA
- Public Involvement: PIOH
- Local Government comments: None
- Other Projects: Farmer Road
- Railroads: None
- ~~VE STUDY~~: NO

Scheduling – Responsible Parties' Estimate:

- Time to complete the environmental process: 12 months
- Time to complete the Section 404 Permits: 12 months
- Time to complete preliminary construction plans: 3 months
- Time to complete right of way plans: 1 months
- Time to complete final construction plans: 3 months
- Time to purchase right of way: 9 months
- List other major items that will effect the project schedule: Conditional Letter Of Map Revision (CLOMR)

Other alternates considered:

Off-Site Detour

This alternate consists of rerouting local traffic onto surrounding local roads. The required right of way impacts are much less than the proposed alternate; however, the safety issues on the closest detour route make this alternate undesirable. This alternate will cost less than the proposed solution, but the detour route needs to be improved to meet current guidelines and that task is not in the scope of this project.

Staged Construction On-Site

This alternate requires that the proposed bridge replacement be partially constructed to a width that would allow (1) 11'-0" lane in either direction on the first stage of construction with approaches that would be the same length and have the same impact as the on-site detour. Construction time for this alternate would be considerably longer and the required right of way impacts would be less than the preferred offset alignment alternate. This alternate will result in a slight final alignment offset from the existing alignment. ←

Another option for staged construction would be to place two temporary traffic signals on either side of the bridge site and keep 1 lane open for both directions being controlled by the traffic signal. This option would reduce right of way impacts but increase construction costs.

Onsite detour

As with the alternate above, this one has the same issues as the staged construction and the preferred offset alignment. The environmental impact would be about the same as the offset alignment except that the impacts would be temporary for this alternate. This alternate was not chosen because of the increased construction costs due to the temporary structure.

No Build

Attachments:

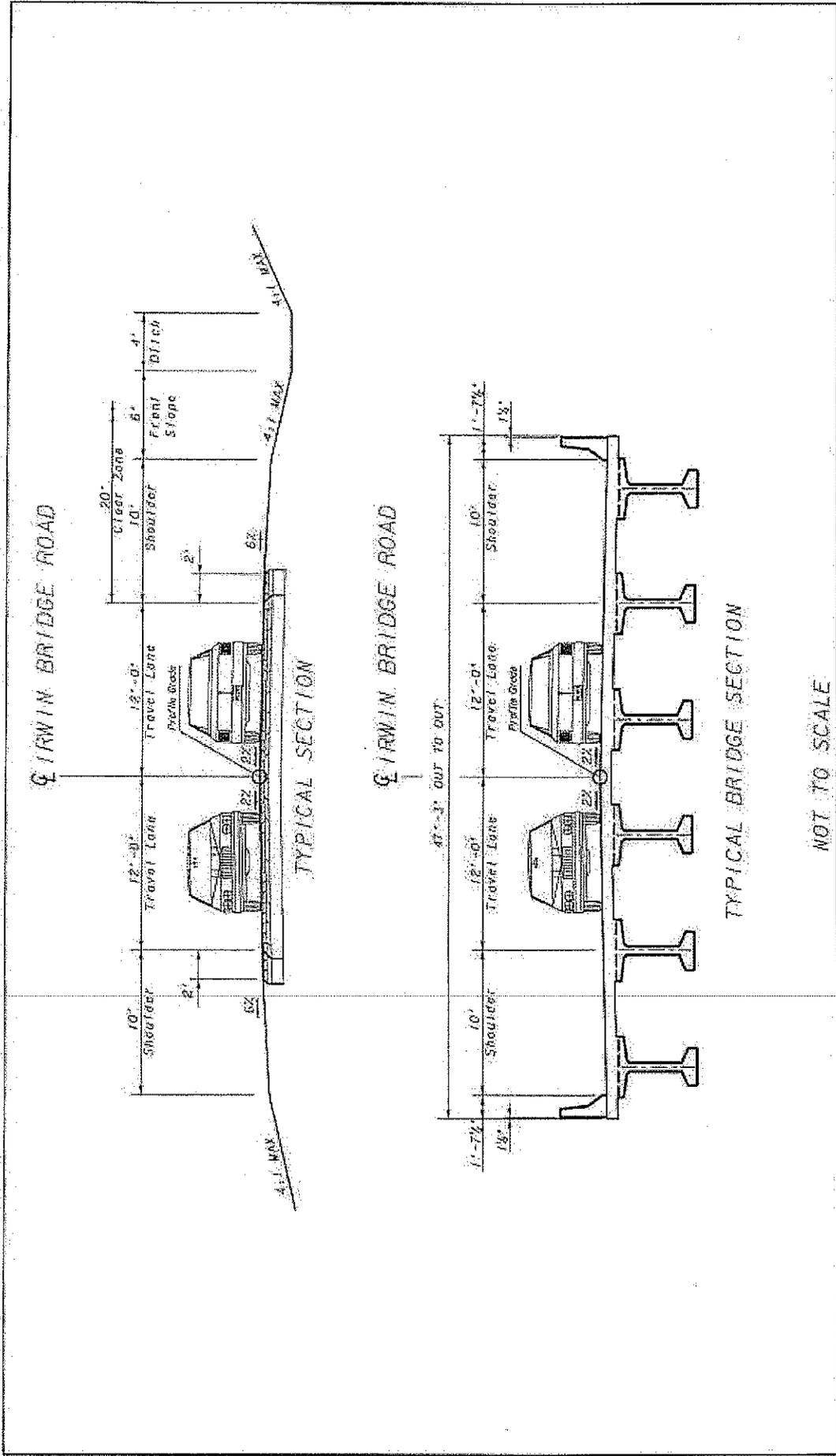
- Preliminary Cost Estimates
- Typical Sections: Roadway Typical and Bridge Typical
- Concept Team Meeting minutes
- Detour Report
- L&D Notice

PRELIMINARY CONSTRUCTION AND RIGHT OF WAY COST ESTIMATE - PREFERRED ALTERNATE (Permanent Offset)

PROJECT NUMBER: CSBRG-5007-00(075) COUNTY: ROCKDALE
 DATE: 10/18/2007 LIFTING DATE: AUGUST 2010
 PREPARED BY: Hel Inc.
 PROGRAMMING PROCESS CONCEPT DEVELOPMENT

PROJECT COST

1. MAJOR STRUCTURES					
a. Twin Bridge Road Over the Yellow River	16538	SF	0	100.00	\$1,653,800
b. Demolition of existing bridge		Lump	\$	250,000.00	\$250,000
SUBTOTAL 1:					\$1,903,800
2. BASE AND PAVING					
a. GRADED AGGREGATE BASE	4530	TW	\$	24.32	\$102,674
b. 12.5mm SUPERPAVE	140	TW	\$	85.00	\$11,900
c. 19.5mm SUPERPAVE	185	TW	\$	80.00	\$14,800
d. 25.5mm SUPERPAVE	370	TW	\$	80.00	\$29,600
e. LEVELING	25	TW	\$	90.00	\$2,250
f. BITUM TACK COAT	400	GU	\$	2.05	\$820
SUBTOTAL 2:					\$164,094
3. LUMP ITEMS					
a. TRAFFIC CONTROL	1	LS	\$	590,000	\$590,000
b. GRABING COMPLETE	1	LS	\$	430,000	\$430,000
c. EROSION CONTROL	1	LS	\$	100,000	\$100,000
d. SIGNING AND MARKING	1	LS	\$	470,000	\$470,000
SUBTOTAL 3:					\$490,000
4. MISCELLANEOUS					
a. GUARD RAIL TP F	84	LF	\$	32.25	\$2,711
b. GUARD RAIL TP W	400	LF	\$	17.11	\$6,844
c. TP1 ANCHORS	3	EA	\$	513.01	\$1,527
d. TP12 ANCHORS	3	EA	\$	1,713.30	\$5,127
e. REIN CONC APPROACH SLAB	315	SY	\$	146.16	\$46,040
f. Field Office	1	EA	\$	75,300.00	\$75,300
SUBTOTAL 4:					\$132,836
5. GRADING AND DRAINAGE					
a. EARTHWORK - IN PLACE EMBANKMENT (TOTAL CUT/FILL 8400 CY @ \$9.94/CY)					\$84,000
b. DRAINAGE Detention Facilities for bridge drainage incl.					\$25,000
					\$109,000
ESTIMATE SUMMARY					
SUBTOTAL CONSTRUCTION COST					\$2,799,732
E. & C. (0%)					\$279,973
INFLATION (NOT INCLUDED)					
TOTAL CONSTRUCTION COST					\$3,079,705
RIGHT OF WAY - Required Right of Way / Construction Easements					\$250,000
REIMBURSABLE UTILITIES					\$60,000
GRAND TOTAL PROJECT COSTS					\$3,389,705



IRWIN BRIDGE ROAD

IRWIN BRIDGE ROAD

TYPICAL SECTION

TYPICAL BRIDGE SECTION

NOT TO SCALE

Memorandum

Date: 7/18/2007

Re: CSBRG-0007-00(076) Rockdale, PI No. 0007076
Minutes of Initial Team Concept Meeting; 7/12/2007

Meeting Attendees:

Dave Robbins, GDOT
Vern Wilburn, Focus Engineering
Gerald Ford, GDOT
Tom Barwick, Heath and Lineback
Kristen Kasmire, Heath and Lineback
Shannon Hebb, Jacobs Engineering, Rockdale SPLOST Manager
Wade Woddard, GDOT
Scott Lee, GDOT
Michelle Cheves, GDOT, OEL
Mike Murdoch, GDOT, OEL

Project Overview – This project will replace the bridge carrying Irwin Bridge Road over the Yellow River in Rockdale County.

Utilities:

- o GDOT Utilities expressed concern about maintaining the utilities if the bridge were stage constructed. The bridge is not proposed to be stage constructed.
- o Power and telephone lines are currently attached to the bridge. They will likely want to attach to new bridge as well.
- o The location of the water main is in some doubt. It may be attached to the bridge or under the river.
- o Rockdale County will check with utility companies about attaching to the new bridge, ask about hangers, and will check on location of water line.

GDOT representatives gave their comments on the draft concept report, summarized below.

Cover Sheet:

- o GDOT indicated to add more space for signatures and add a signature line for State Bridge Engineer
- o Include CR 422 when referring to Irwin Bridge Road (throughout report).
- o Fix project number throughout report.
- o Project will now be let by GDOT.

Map:

- o GDOT would prefer to zoom out the map to more easily locate the project.
- o Add north arrow.
- o Highlight/show detour route, if used.

Need and Purpose:

- o Indicate what part of the county the project is located in.
- o Include the sufficiency rating of the bridge (40.13) and state that it is structurally deficient.
- o GDOT indicated some concern about the substandard crest curve south of the bridge. They would like to see accident data.
- o Discussion followed about whether to include fixing the curve in the scope of work for this project, but it was explained that the cost was very high (about \$1M) and Rockdale County would fix the curve in a separate project.

Project Description:

- o There was much discussion of the proposed off-site detour.
- o The proposed detour route has sight distance issues, both horizontal and vertical.
- o There was concern about putting additional traffic, especially truck traffic, on the proposed detour route.
- o GDOT encouraged Rockdale County to re-consider using an on-site detour in the form of either a temporary detour bridge or stage constructing the new bridge.
- o We will need to hold a detour meeting. It was decided to do so early in the process and in conjunction with the PIOH.
- o Take out the statement about widening Sigman Road.
- o Add "This project is Air Quality exempt because it does not increase capacity" following the line regarding project location in non-attainment area.
- o Bridge Sufficiency Rating is 40.13.
- o Remove Farmer Road from list of Major Intersections.
- o Change project responsibility for design to Rockdale County.
- o Time to complete Environmental: 12 months OK

- If we go with a temporary bridge, we will need a 404 Permit for disturbed area.
- Change responsibility for Letting and Construction Supervision to GDOT.
- Change meeting date to 7/12/07.
- Add detour to PIOH meeting under public involvement.
- Project will be let in August/September 2010.
- Spell out CLOMR.

Cost Estimate:

- Money to fix the detour route is not usually included in project. Can keep in the cost estimate; just indicate it is a local cost.
- If we keep the cost to repair the detour, we will have to include the detour in the environmental document.

PFA has been signed.

Once the concept report is revised, H+L will send a check copy to Shannon Hebb and Dave Robbins to look over. H+L will make any needed corrections, and will send to Dave Robbins for district review.

After addressing any additional district comments, the report will go downtown for signature.

Take out traffic report and add L & D notice to concept report.

Take the March 28th minutes out and add today's minutes instead.

NOTICE OF LOCATION AND DESIGN APPROVAL

CSBRG-0007-00(076) ROCKDALE COUNTY

P.I. Number 0007076

Notice is hereby given in compliance with Georgia Code 22-2-109 that the Georgia Department of Transportation has approved the Location and Design of this project.

The date of location approval is FEBRUARY 18, 2008

The existing bridge carrying Irwin Bridge Road over the Yellow River, in north central Rockdale County, was built in 1962 and currently has a sufficiency rating of 40.13. Bridges with a sufficiency rating less than 50 are considered structurally deficient. The existing bridge is load rated and trucks are required to take an alternate route. This project proposes replacing the existing bridge and improving the approaches on either side of the bridge. The project lies within land lots 276-278 and 289-290.

The proposed road improvements begin on Irwin Bridge Road approximately 40 feet south of the existing intersection with Farmer Road and 500 feet north of the existing bridge on Irwin Bridge Road. The proposed road section for Irwin Bridge Road will consist of (2) 12'-0" lanes with 10'-0" rural shoulders. The bridge will be replaced with a structure offset 45 feet from the existing alignment that is 47'-3" wide to allow for (2) 12'-0" travel lanes and (2) 10'-0" rural shoulders and standard bridge barriers on both sides.

Drawings or maps or plats of the proposed project, as approved, are on file and are available for public inspection at the Georgia Department of Transportation:

Thomas C. Parker
Thom.Parker@dot.state.ga.us
805 George Luther Drive, Decatur, GA 30032
(404) 299-4386

Any interested party may obtain a copy of the drawings or maps or plats or portions thereof by paying a nominal fee and requesting in writing to:

Mike Lobdell
Georgia DOT - District 7
Mike.Lobdell@dot.state.ga.us
5025 New Peachtree Road, Chamblee, GA 30341
(770) 986-1257

Any written request or communication in reference to this project or notice SHOULD include the Project and P. I. Numbers as noted at the top of this notice.

Quarles, Johnny

From: Jackson, Adrian
Sent: Tuesday, January 15, 2008 2:59 PM
To: Quarles, Johnny
Cc: Lobdell, Mike; Lee, Scott
Subject: Rockdale-0007076-Concept-1/15/08
Attachments: 0007076.pdf

Johnny,

Attached is the original cost estimate for the off-site detour on this project. The total detour is 7.3 miles, approximately 4 of which are on county roads which have deficient horizontal and vertical curves. These roads are not suitable for the traffic which will be on them during construction of the bridge. The county roads involved have speed limits of 40 and 45 mph and certainly were not built for truck traffic. Line 1b of the cost estimate shows \$200,000 per mile for repairing the detour after the project. This just brings the detour back to its original condition and does nothing to correct the horizontal or vertical curves. No study has been done for this cost.

This cost estimate shows a total cost of \$3,234,583 while the cost estimate for using the existing bridge while building a parallel structure cost \$3,389,705.

Adrian Jackson
Adjackson@dot.ga.gov
Civil Engineering Technologist
GDOT District 7 Preconstruction
Direct: 770-986-1110
Office: 770-986-1257



Please consider the environment before printing this email.

PRELIMINARY CONSTRUCTION AND RIGHT OF WAY COST ESTIMATE - PREFERRED ALTERNATE (Off-site Detour)

PROJECT NUMBER: CSBRG-0007-09(76) COUNTY: ROCKDALE
 DATE: 5/16/2007 LETTING DATE: MARCH 2009
 PREPARED BY: H&L INC.
 () PROGRAMMING PROCESS (x) CONCEPT DEVELOPMENT

PROJECT COST

1. MAJOR STRUCTURES					
a. Irwin Bridge Road over the Yellow River	16539	SP	\$	80.85	\$1,323,840
b. Detour Road Improvements/Mile *		Lump	\$	200,000.00	\$200,000
				SUBTOTAL 1:	\$2,123,840
2. BASE AND PAVING					
a. GRADED AGGREGATE BASE	540	TN	\$	34.32	\$18,533
b. 12.5mm SUPERPAVE	66	TN	\$	85.20	\$5,610
c. 19.0mm SUPERPAVE	83	TN	\$	90.20	\$7,427
d. 25.0mm SUPERPAVE	176	TN	\$	80.00	\$14,080
e. LEVELING	27	TN	\$	30.00	\$810
f. BITUM TACK COAT	120	TN	\$	2.05	\$246
				SUBTOTAL 2:	\$43,379
3. TIME ITEMS					
a. TRAFFIC CONTROL		1.0E		\$150,000	\$150,000
b. CLEARING AND GRUBBING		1.0E		\$150,000	\$150,000
c. EROSION CONTROL		1.0E		\$50,000	\$50,000
d. SIGNING AND MARKING		1.0E		\$50,000	\$50,000
				SUBTOTAL 3:	\$400,000
4. MISCELLANEOUS					
a. GUARD RAIL TP E	38	LF	\$	32.22	\$1,224
b. GUARD RAIL TP W	400	LF	\$	17.11	\$6,844
c. TP1 ANCHORS	3	EA	\$	613.61	\$1,841
d. TP12 ANCHORS	7	EA	\$	1,213.39	\$8,494
e. REINFC CONC APPROACH SLAB	315	SY	\$	146.16	\$46,050
f. Field Office	1	EA	\$	75,300.00	\$75,300
				SUBTOTAL 4:	\$132,833
5. GRADING AND DRAINAGE					
a. EARTHWORK - IN PLACE EMBANKMENT (TOTAL CUT/FILL 1425 CY @ \$9.94/CY)					\$14,140
b. DRAINAGE (Detention Facilities for bridge drainage fac.)					\$100,000
					\$114,140
ESTIMATE SUMMARY					
SUBTOTAL CONSTRUCTION COST					\$2,811,257
E. S.C. (10%)					\$281,126
INFLATION (NOT INCLUDED)					
TOTAL CONSTRUCTION COST					\$3,092,383
RIGHT OF WAY - Construction Easements					\$100,000
RENEWABLE UTILITIES					\$45,000
GRAND TOTAL PROJECT COSTS					\$3,237,383

* - Improvements to restore detour road to pre-detour conditions.