

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 321880-, Meriwether County
STP00-0159-01(014)
SR 41 under CSX Railroad

OFFICE Preconstruction

DATE June 5, 2008

FROM  Genetha Rice-Singleton, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT APPROVED REVISED 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
Ben Buchan
Paul Liles
Thomas Howell
David Millen
BOARD MEMBER

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP00-0159-01(014) Meriwether OFFICE Thomaston
PI 321880
CSX Railroad over SR 41

FROM  Thomas B. Howell, P.E., District Engineer DATE **May 12, 2008**

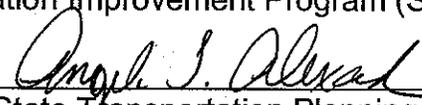
TO Genetha Rice-Singleton, Assistant Director of Preconstruction

SUBJECT **Revised Project Concept Report**

Attached is the original copy of the revised Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

To minimize historical and ecological impacts, the typical section has been revised to a two lane rural section with 100' of right-of-way. The design speed has been reduced to 45 mph, and a temporary railroad detour and temporary railroad bridge are proposed.

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

Date 5/16/2008 
State Transportation Planning Administrator

DBM:WJR:ags

C: Brian Summers, State Project Review Engineer
Glenn Bowman, State Environmental/Location Engineer
Keith Golden, State Traffic and Safety Design Engineer
Angela Alexander, State Transportation Planning Administrator
OFM Concept Reports Mailbox
Paul Liles, State Bridge Design Engineer
Debra Fowler Pruitt, District Environmentalist
Colandra Barron, Support Assistant

Revised Concept Report

For

STP-159-1(14)
SR 41 under CSX Railroad
Meriwether County
P.I. No. 321880

Prepared for



Prepared by:

PARSONS TRANSPORTATION GROUP INC.
5390 Triangle Parkway
Suite 100
Norcross, Georgia 30092

May 2008

REVISED PROJECT CONCEPT REPORT

SR 41 under CSX Railroad

Meriwether County

Project Number: STP-159-1(14)

P.I. No. 321880

Need & Purpose:

The existing railroad bridge over SR 41/US 27 Alt./Roosevelt Highway has both substandard horizontal and vertical clearance for the highway traffic below. The horizontal clearance is 23'-8" and the vertical clearance is 13'-8". In addition, the existing railroad bridge is located on curve, creating a sight distance issue.

The 2006 ADT for SR 41 is 3400 vehicles per day (vpd) with a 24 hour truck count of 8%. The ADT is estimated to increase 59 % by 2029 to 6100 vpd. The 2009 level of service for SR 41 is at a level "A". With a 58% increase in traffic by the year 2029 the level of service will remain at the same level of service "A". SR 41 experienced a total of 10 accidents during the three year period between 2004 and 2006. Of these, 4 accidents (40%) resulted in property damage only, while 6 accidents (60%) resulted in injury. 60% of all accidents did not involve collision with a motor vehicle and 20% of all accidents were rear end. A comparison between the accident rates and the statewide rates for all three years shows that the accident and injury rates along this Rural Minor Arterial section of SR 41 are higher than the statewide average.

The purpose of this project is to replace the existing substandard bridge carrying CSX Railroad over SR 41 and improve safety of both vehicular and railroad traffic. The existing railroad bridge substandard horizontal and vertical clearance results in an unsafe environment for the traffic on SR 41 as well as on CSX Railroad; hence, the need to replace the existing bridge.

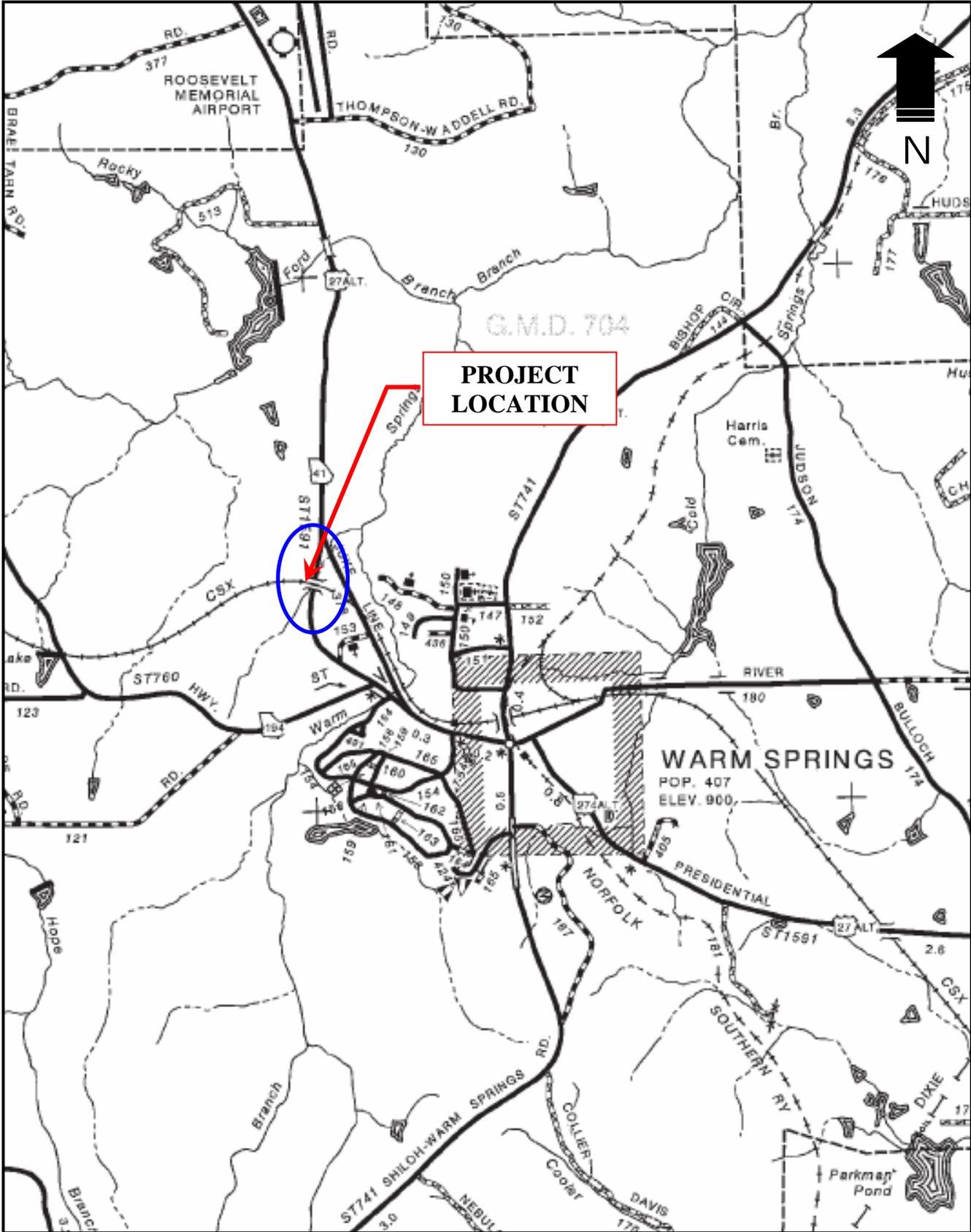
Project Location:

This project is located one mile north of Warm Springs, Georgia (See Figure 1.1: Project Location Map) beginning south of the existing CSX railroad bridge and ending north of the bridge. The proposed length of the project is 0.53 miles, beginning mile point 7.27 (Meriwether Co.) and ending mile point 7.80 (Meriwether Co.). The CSX Railroad realignment begins at mile point 794.95 west of SR 41, and ends at mile point 795.49 east of SR 41.

Description of the approved concept:

The approved concept report proposed a permanent railroad detour with a new railroad bridge, which is approximately 195 ft. long and requires the reconstruction of 4,700 linear feet of track. The new track work and bridge are proposed to be located just south of the existing site. State Route 41 must be lowered in order to provide adequate vertical clearance. This concept proposes on-site detour lanes for traffic during the reconstruction of the highway. It is proposed to reconstruct SR 41 as a two lane road on a five lane rural right-of-way width, which requires right-of-way width of 200 ft. Design speed is 55 mph.

FIGURE 1.1: PROJECT LOCATION MAP
STP-159-1(14) MERIWETHER COUNTY
P.I. NO. 321880



PDP Classification: Major X Minor _____

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

Functional Classification:

SR 41 - Rural Minor Arterial
Juke Line Road – Rural Local Road

US Route Number(s): 27 Alt. **State Route Number(s):** 41

Traffic (AADT) as shown in the approved concept:

Current Year: (1996) 3,250 Design Year: (2016) 5,050

Proposed features to be revised:

1. The approved Concept Report proposes a permanent railroad detour with a new railroad bridge, which is approximately 195' long and requires the reconstruction of 4,700 linear ft. of track.
2. The approved concept proposes to reconstruct SR 41 as a two lane road on a five-lane rural right-of-way width of 200' minimum.
3. The approved concept proposes a typical two-lane rural roadway section with 4:1 foreslope, 4-ft. ditch, and 2:1 back slopes.
4. The approved concept proposed a design speed of 55 mph for SR 41.
5. The approved concept proposes on-site detour lanes for the traffic during the reconstruction of the proposed SR 41 and construction of the proposed permanent railroad bridge.

Describe the revised feature(s) to be approved:

1. It is recommended to construct a temporary railroad detour with a 50 ft. long temporary bridge south of the existing railroad track, which would require 1,554 ft. of new track and shifting of 434 ft. of existing track on the east end and 408 ft. of existing track on the west end. A temporary railroad detour is recommended because the railroad is designated as a historic resource. The existing railroad bridge is individually eligible for listing as historic place, so its removal would be a Section 4(f) impact. However, GDOT and FHWA have a "Programmatic Section 4(f) for Historic Bridges" available for use. The Programmatic Section 4(f) does not require "legal sufficiency" review, and will not automatically elevate the environmental document to an Environmental Assessment the way that a regular Section 4(f) impact would. However, SHPO has set precedent and considers the permanent relocation of a historic railroad alignment as an adverse effect. This would trigger Section 4(f) and Department does not allow a project to be processed with a Categorical Exclusion if regular Section 4(f) Evaluation is required. Elevating the document to an Environmental Assessment can add approximately 12 to 18 months to the project schedule. In addition, there is no Programmatic Section 4(f) Agreement for historic railroads. Thus instead of permanent realignment of the railroad, a temporary detour has been proposed to

maintain railroad traffic during construction of the proposed bridge on the existing railroad alignment while minimizing impacts to the historic resource.

2. It is recommended to reduce the right-of-way width to that of a two lane rural roadway of 100'. Design year traffic projections do not warrant widening to a five lane rural section. The reduced scope will also avoid large scale property impacts and environmental impacts to the waters of the US. ←
3. It is recommended a combination of typical two-lane rural section and two-lane section with v-gutter to be used in the project. The revised typical sections will be used to minimize environmental impacts to open waters and streams and achieve a good drainage system. In addition, use of 2:1 foreslope where possible will avoid or minimize any right-of-way and environmental impacts.
4. It is recommended using a design speed of 45 mph in order to minimize required length of roadway to be constructed for tie-in of the proposed SR 41 with the existing alignment. The reduced scope will significantly reduced cost of construction, right-of-way impacts, and environmental impacts. ←
5. It is recommended using a combination of temporary construction staging and off-site detour of 5.50 miles to maintain traffic during construction. Since the proposed bridge is to be constructed on the existing alignment and the proposed SR 41 is to be lowered by approximately 6.5 ft. near the proposed bridge location, the existing roadway must be closed to through traffic during construction of that portion of the project.

Updated traffic data (AADT):

Current Year: (2006) 3,400

Design Year: (2029) 6,100

Programmed Schedule:

P.E.: 2009

R/W: Long Range

Construction: Long Range

VE Study Required Yes() No(X)

Revised Cost Estimates:

1. Construction cost including ~~inflation~~ & E&C: ~~\$6,426,387~~ **\$6,870,391**
2. Right-of-way: \$696,800
3. Reimbursable Utilities: \$32,000

*keep
5/19/08*

Is the project located in a Non-attainment area? No

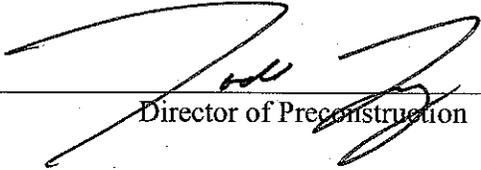
Recommendation:

We recommend that the proposed revisions to the concept be approved for implementation.

Attachments:

1. Detour Map
2. Typical sections
3. Preferred Detour Railroad Alternative
4. Preferred Roadway Alternative
5. Updated Traffic Flow Diagrams
6. Crash Analysis
7. Detail Cost Estimate
8. Initial Concept Team Meeting Minutes
9. Approved Concept Report (Dated June 1992)

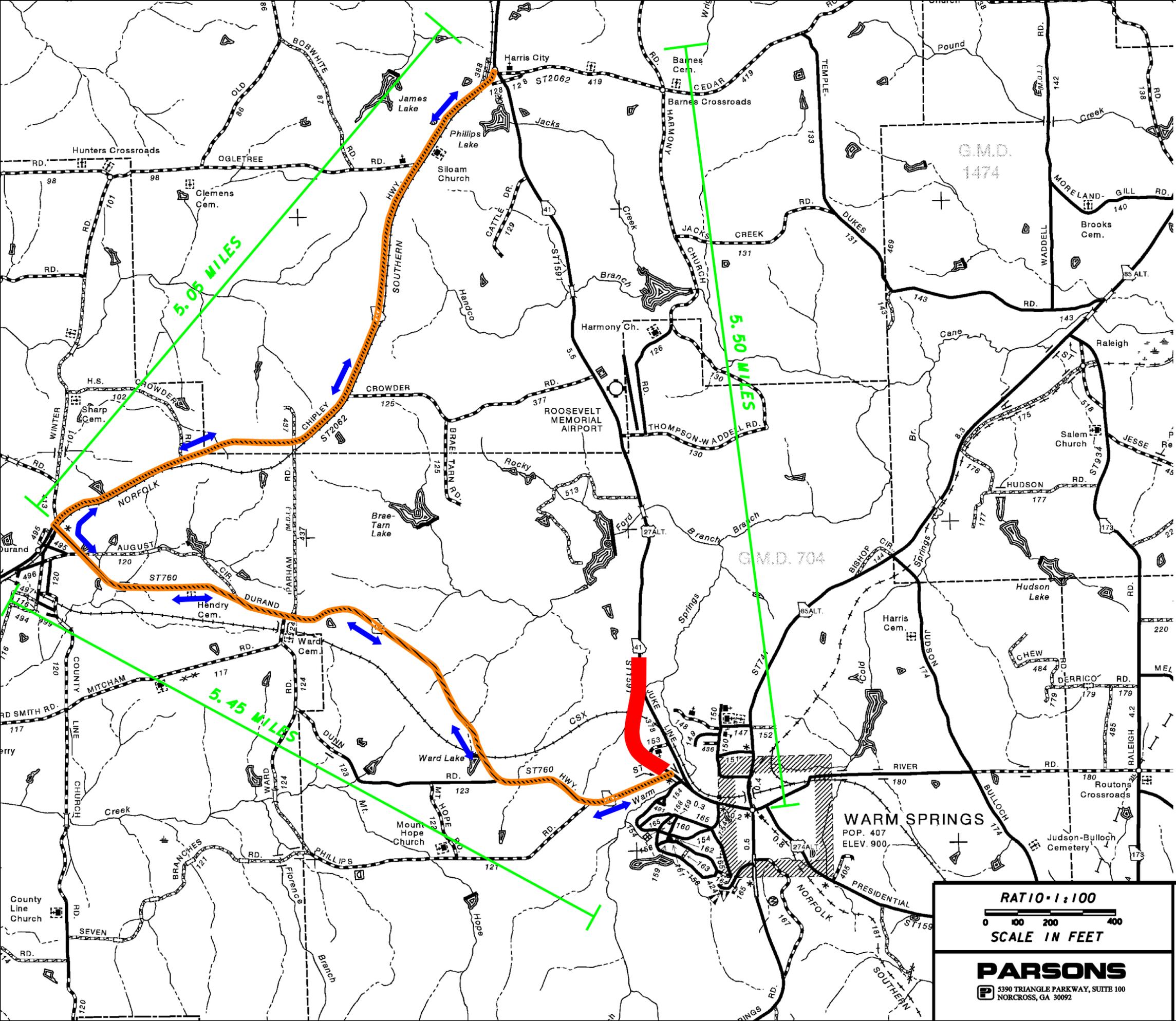
Concur: _____


Director of Preconstruction

Approve: _____

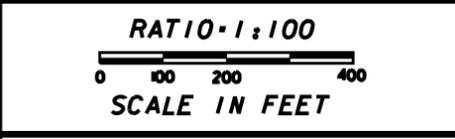

Chief Engineer

ATTACHMENT - 1
DETOUR MAP



	TRAFFIC FLOW
	DETOUR ROUTE
	PROJECT LIMITS

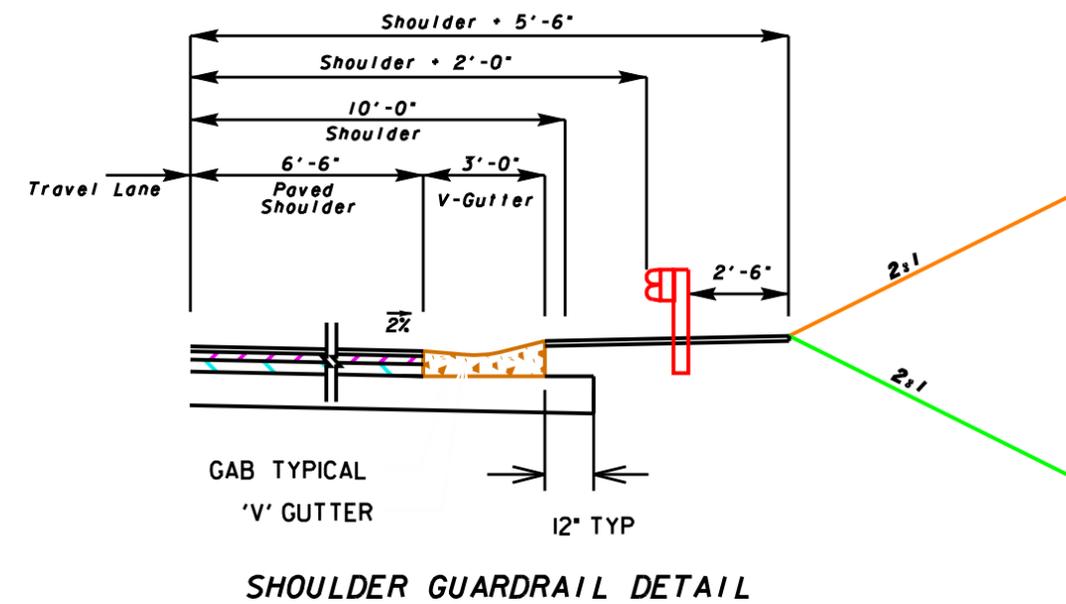
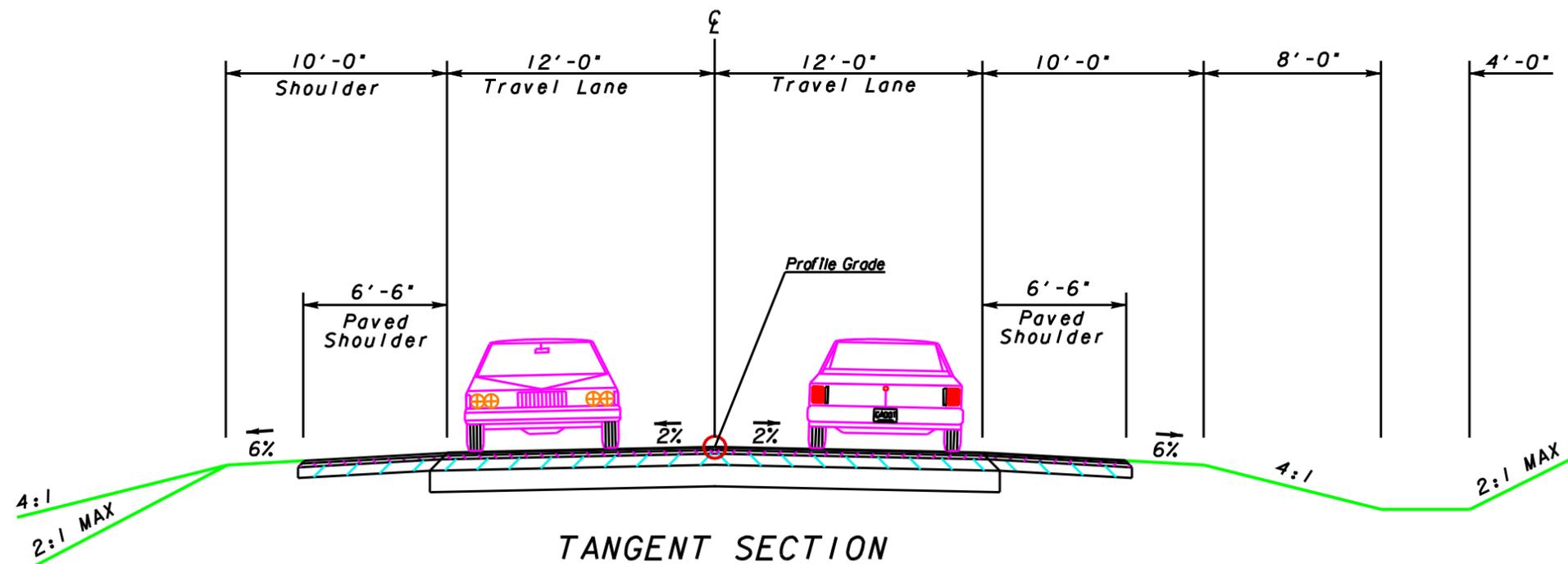
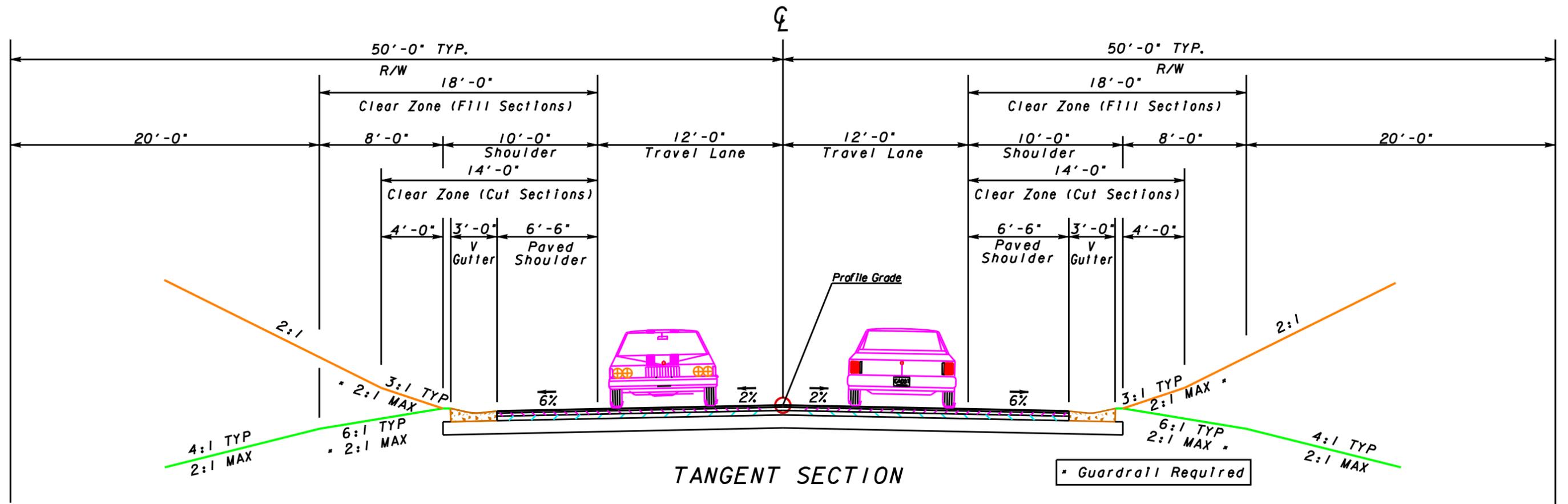
- NOTE:**
- DETOUR ROUTE • 5.45 (SR 194)
+ 5.05 (SR 18)
TOTAL DETOUR LENGTH • 10.50 MILES
 - SR 41 ROUTE TO BE DETOURED
LENGTH • 5.50 MILES



PARSONS
 5390 TRIANGLE PARKWAY, SUITE 100
 NORCROSS, GA 30092

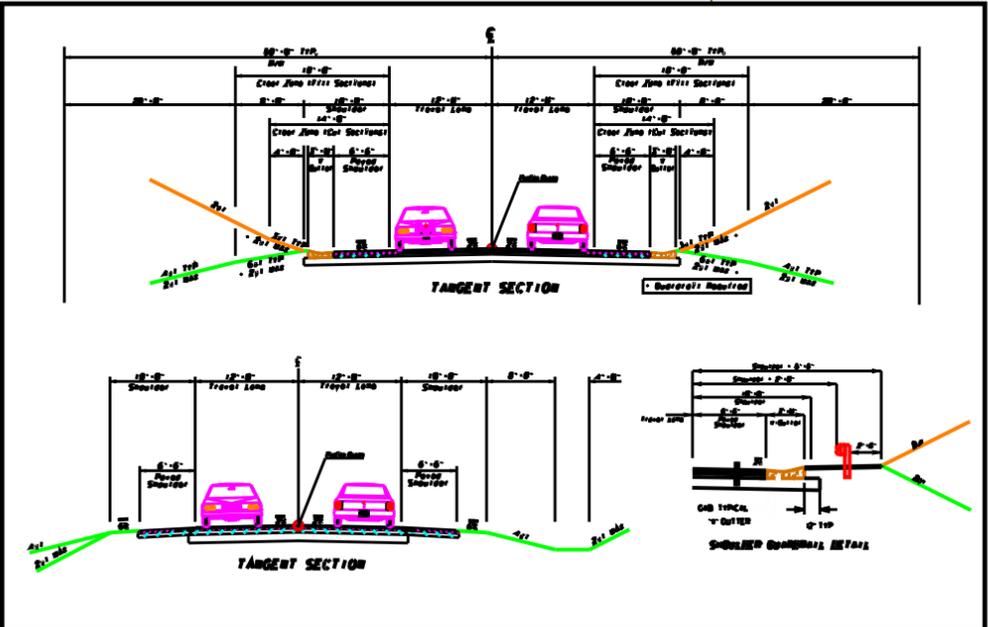
STATE OF GEORGIA
 DEPARTMENT OF TRANSPORTATION
SR 41 UNDER CSX RAILROAD
 DETOUR PLAN

ATTACHMENT - 2
TYPICAL SECTIONS



ATTACHMENT - 3
PREFERRED DETOUR RAILROAD ALTERNATIVE

ATTACHMENT - 4
PREFERRED ROADWAY ALTERNATIVE



LEGEND			
PROPOSED ROADWAY RIGHT OF WAY		ESA - HISTORICAL BOUNDARY	
PROPOSED TEMPORARY EASEMENTS		EXISTING BRIDGE RIGHT OF WAY	
EXISTING ROADWAY RIGHT OF WAY		POTENTIAL DISPLACEMENTS	
PROPOSED TRAVEL LANES		PROPOSED RAILROAD BRIDGE	
EXISTING TRAVEL LANES		PROPERTY LINE	
		CUT & FILL LIMITS	

CURVE 2
 PI STA. 29+30.00
 P 1054693.56
 E 2133903.45
 TAN 41° 03'
 Est. Dist. 70.96'
 Radius 1190.00'
 DEG 4° 48' 53.2"
 DELTA -30° 37' 30.9"
 LENGTH 602.22'

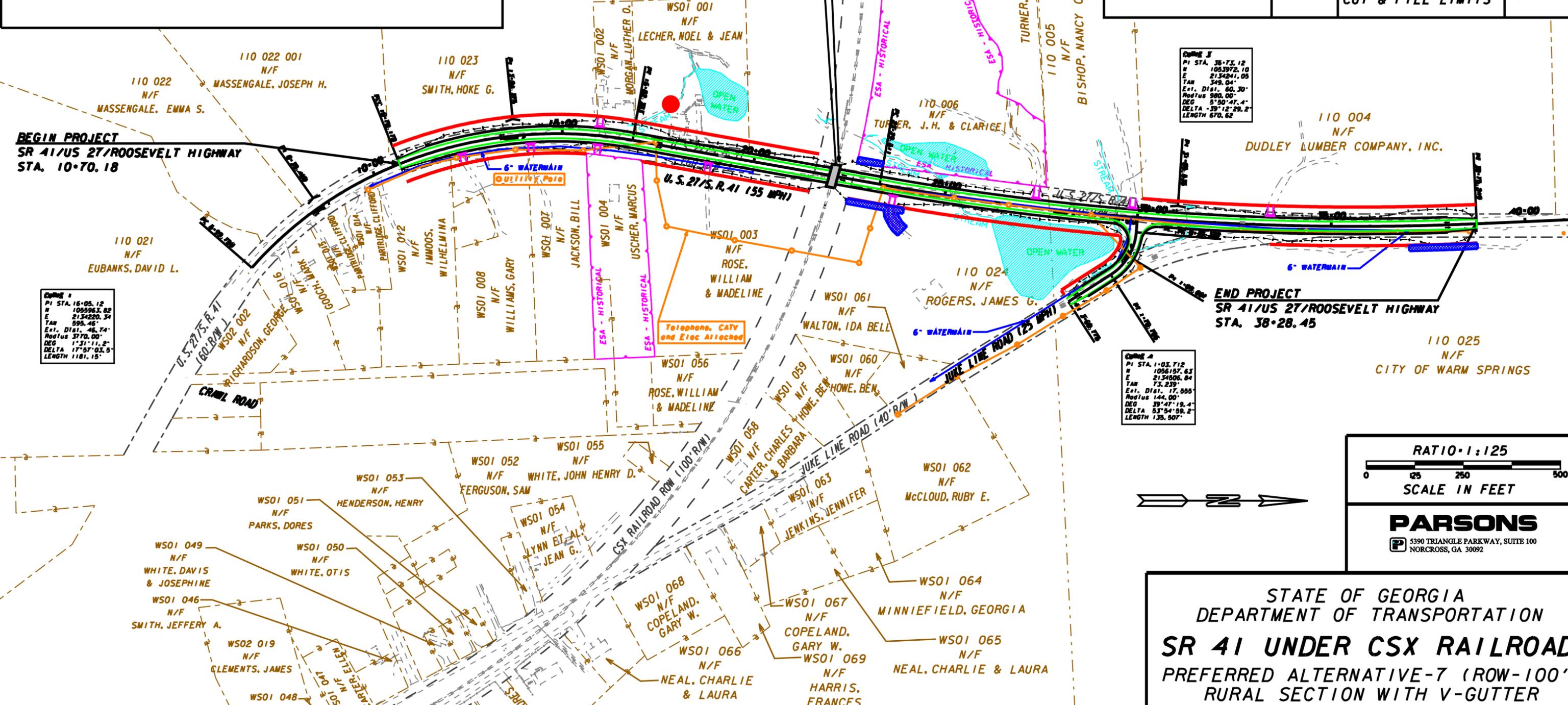
CURVE 3
 PI STA. 35+73.12
 P 1053972.10
 E 2134241.05
 TAN 349.04'
 Est. Dist. 60.30'
 Radius 980.00'
 DEG 5° 50' 47.4"
 DELTA -39° 12' 29.2"
 LENGTH 670.62'

CURVE 4
 PI STA. 1+03.712
 P 1056187.63
 E 2134806.84
 TAN 73.239'
 Est. Dist. 17.555'
 Radius 144.00'
 DEG 39° 47' 19.4"
 DELTA 53° 54' 59.2"
 LENGTH 138.907'

BEGIN PROJECT
 SR 41/US 27/ROOSEVELT HIGHWAY
 STA. 10+70.18

END PROJECT
 SR 41/US 27/ROOSEVELT HIGHWAY
 STA. 38+28.45

EXISTING RAILROAD BRIDGE
 PROPOSED RAILROAD BRIDGE
 STA. 22+08.50

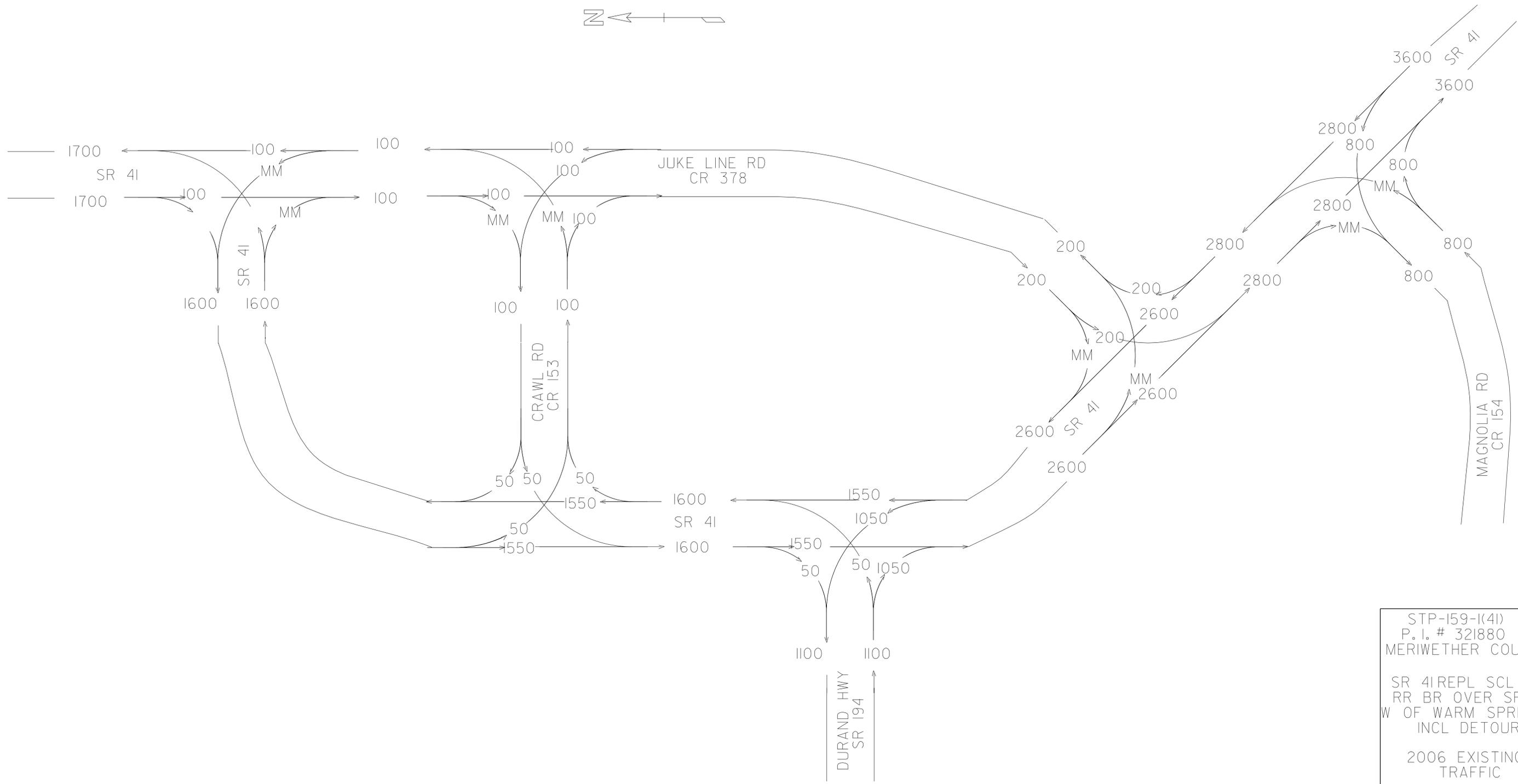


PARSONS
 5390 TRIANGLE PARKWAY, SUITE 100
 NORCROSS, GA 30092

STATE OF GEORGIA
 DEPARTMENT OF TRANSPORTATION
SR 41 UNDER CSX RAILROAD
 PREFERRED ALTERNATIVE-7 (ROW-100')
 RURAL SECTION WITH V-GUTTER

ATTACHMENT - 5
UPDATED TRAFFIC FLOW DIAGRAM

MERIWETHER COUNTY



STP-159-1(41)
 P.I. # 321880
 MERIWETHER COUNTY

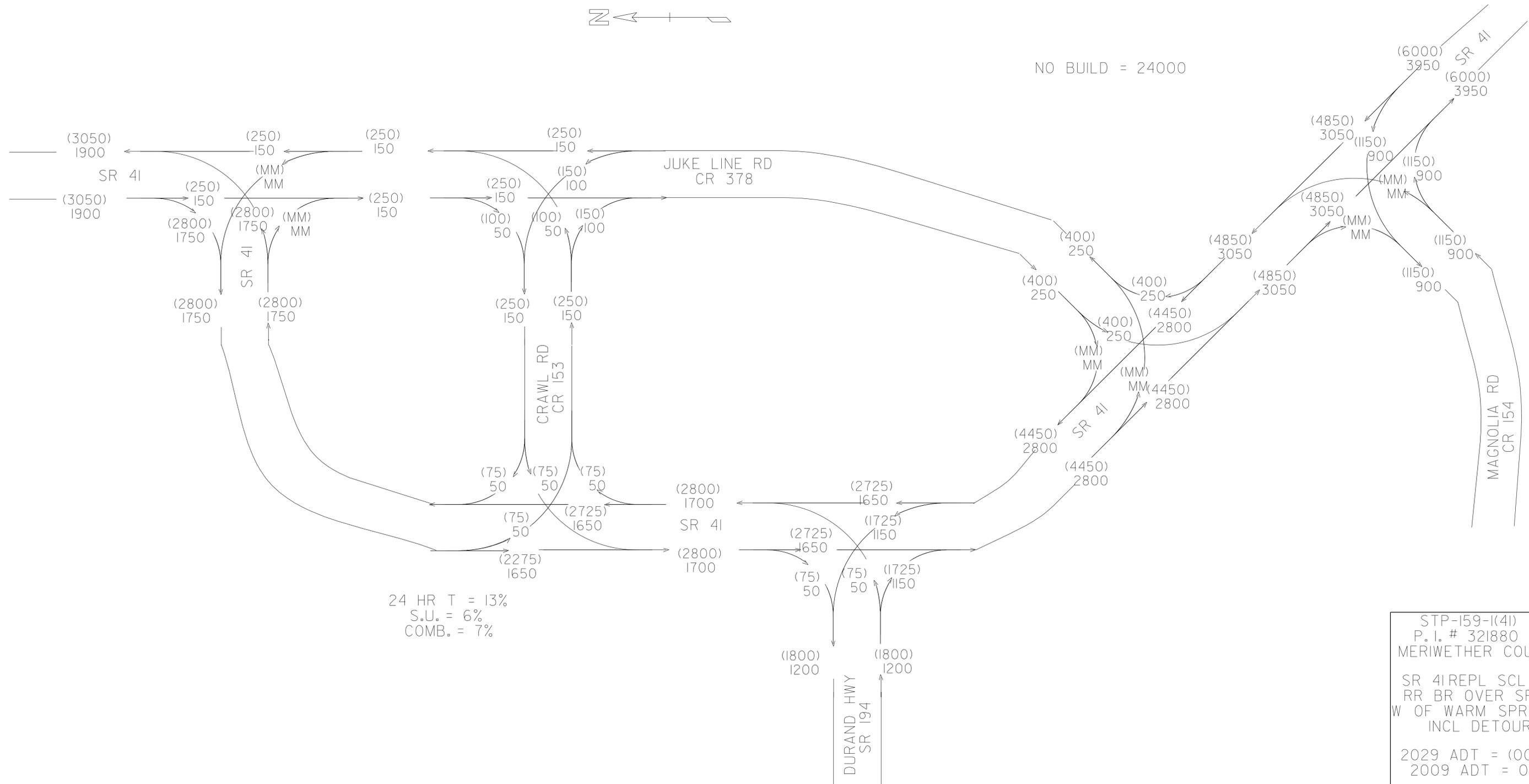
SR 41 REPL SCL
 RR BR OVER SR 41
 W OF WARM SPRINGS/
 INCL DETOUR

2006 EXISTING
 TRAFFIC

MERIWETHER COUNTY



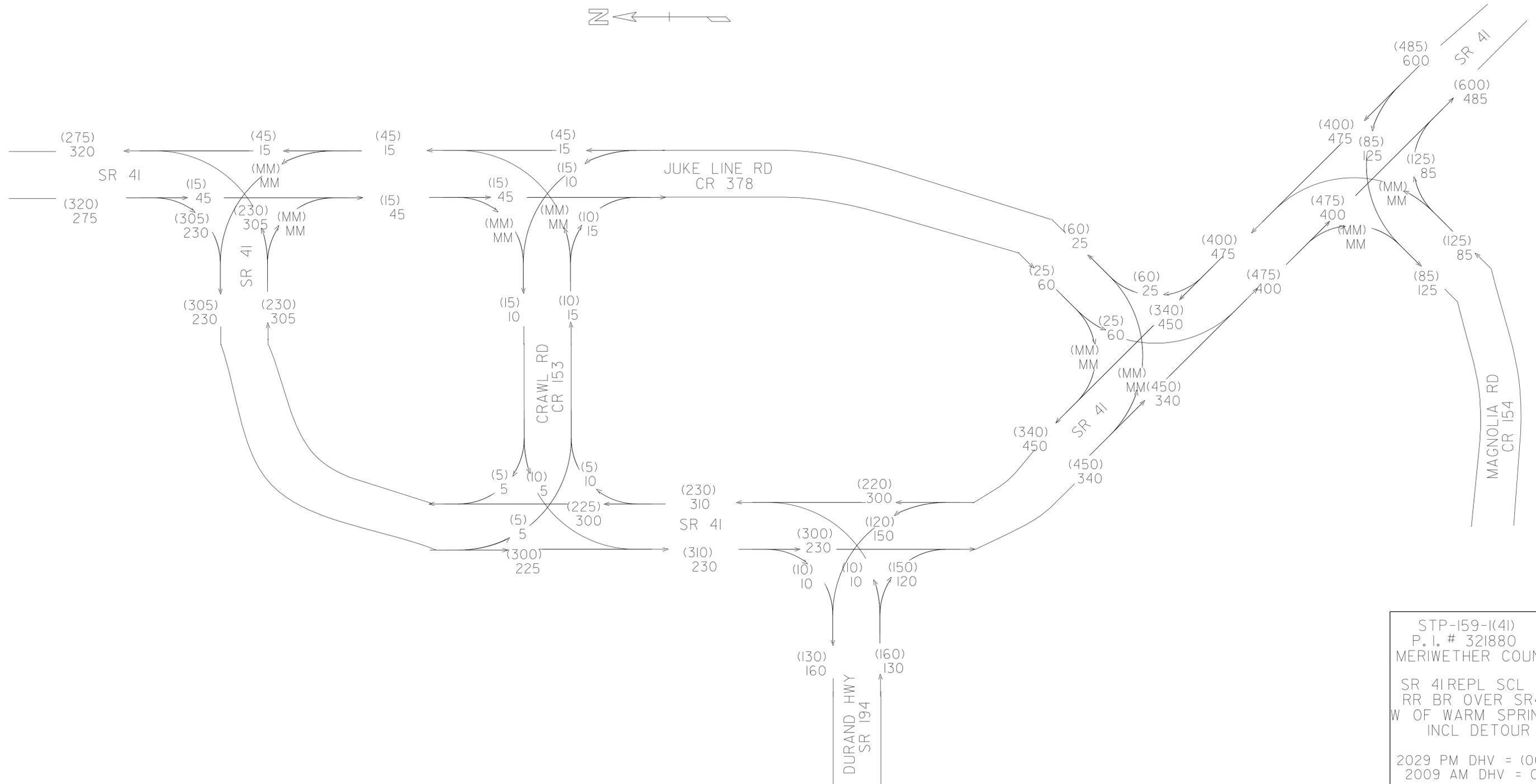
NO BUILD = 24000



24 HR T = 13%
S.U. = 6%
COMB. = 7%

STP-159-I(41)
P.I. # 321880
MERIWETHER COUNTY
SR 41 REPL SCL
RR BR OVER SR41
W OF WARM SPRINGS/
INCL DETOUR
2029 ADT = (000)
2009 ADT = 000

MERIWETHER COUNTY



STP-159-1(41)
 P. I. # 321880
 MERIWETHER COUNTY

SR 41 REPL SCL
 RR BR OVER SR 41
 W OF WARM SPRINGS/
 INCL DETOUR

2029 PM DHV = (000)
 2009 AM DHV = 000
 T=8%

RFN
03/06

ATTACHMENT - 6
CRASH ANALYSIS

MERIWETHER COUNTY, SR 41 from White House Parkway (SR 85AL) to Crowder Road (CR 377)

Accident No	Date	Time	County	Route Type	Route	Milelog	Intersecting Rt Type	Intersecting Rt	Injuries	Fatalities	Harmful Event	Collision	Location of Impact	Light	Surface	DirVeh1	DirVeh2	MnvrVeh1	MnvrVeh2
'41060546	1/24/2004	2:13 PM	Meriwether	State Route	'004100	7.37		'	0	0	Bridge Parapet End	Not A Collision With A Motor Vehicle	On Roadway	Daylight	Dry	N		Straight	
'44440270	11/19/2004	4:30 PM	Meriwether	State Route	'004100	7.01		'	1	0	Motor Vehicle in Motion	Rear End	On Roadway	Daylight	Snowy	N	N	Negotiating a Curve	Negotiating a Curve
'53520173	8/10/2005	6:20 PM	Meriwether	State Route	'004100	6.81	2	'015300	1	0	Motor Vehicle in Motion	Angle	On Roadway	Daylight	Dry	W	N	Turning Left	Straight
'54430238	10/19/2005	4:12 PM	Meriwether	State Route	'004100	7.19		'	0	0	Other Fixed Object	Not A Collision With A Motor Vehicle	On Roadway	Daylight	Dry	S		Straight	
'50210785	2/1/2005	1:50 PM	Meriwether	State Route	'004100	7.29		'	1	0	Overturn	Not A Collision With A Motor Vehicle	Off Roadway	Daylight	Dry	S		Straight	
'53520180	8/18/2005	8:03 AM	Meriwether	State Route	'004100	7.79		'	0	0	Tree	Not A Collision With A Motor Vehicle	Off Roadway	Daylight	Dry	N		Straight	
'52610028	6/28/2005	5:36 PM	Meriwether	State Route	'004100	8.28		'	1	0	Ditch	Not A Collision With A Motor Vehicle	Off Roadway	Daylight	Wet	N		Negotiating a Curve	
'63060284	8/16/2006	5:15 PM	Meriwether	State Route	'004100	6.81		'	2	0	Motor Vehicle in Motion	Head On	On Roadway	Daylight	Wet	S	N	Negotiating a Curve	Negotiating a Curve
'60280726	2/1/2006	1:55 AM	Meriwether	State Route	'004100	7.37		'	0	0	Bridge Parapet End	Not A Collision With A Motor Vehicle	On Roadway	Daylight	Dry	S		Straight	
'64170325	10/23/2006	4:41 PM	Meriwether	State Route	'004100	8.28		'	0	0	Motor Vehicle in Motion	Rear End	On Roadway	Daylight	Dry	N	N	Straight	Straight

Accident Data Analysis for Meriwether SR41 (from SR85AL to CR 37)

Collision Type			Accident Severity			Harmful Event			Location of Impact			Pavement Conditions			Lighting Conditions		
	Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage
2004																	
Rear End	1	50%	PDO	1	50%	Motor Vehicle in Motion	1	50%	On Roadway	2	100%	Wet	0	0%	Daylight	2	100%
Side Swipe	0	0%	Injury	1	50%	Animal	0	0%	Off Roadway	0	0%	Dry	1	50%	Dark-Not Lighted	0	0%
Angle	0	0%	Fatality	0	0%	Fixed Object	1	50%	On Shoulder	0	0%	Icy	1	50%	Dark-Lighted	0	0%
Not A Collision With A Motor Vehicle	1	50%				Ditch	0	0%	Median	0	0%				Dawn	0	0%
Head On	0	0%				Overturn	0	0%	Gore	0	0%				Dusk	0	0%
						Other Object (Not Fixed)	0	0%									
						Embankment	0	0%									
						Other Non-Collision	0	0%									
Total Number of Accidents:		2															

Collision Type			Accident Severity			Harmful Event			Location of Impact			Pavement Conditions			Lighting Conditions		
	Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage
2005																	
Rear End	0	0%	PDO	2	40%	Motor Vehicle in Motion	1	20%	On Roadway	2	40%	Wet	1	20%	Daylight	5	100%
Side Swipe	0	0%	Injury	3	60%	Animal	0	0%	Off Roadway	3	60%	Dry	4	80%	Dark-Not Lighted	0	0%
Angle	1	20%	Fatality	0	0%	Fixed Object	2	40%	On Shoulder	0	0%	Icy	0	0%	Dark-Lighted	0	0%
Not A Collision With A Motor Vehicle	4	80%				Ditch	1	20%	Median	0	0%				Dawn	0	0%
Head On	0	0%				Overturn	1	20%	Gore	0	0%				Dusk	0	0%
						Other Object	0	0%									
						Embankment	0	0%									
						Other Non-Collision	0	0%									
Total Number of Accidents:		5															

Collision Type			Accident Severity			Harmful Event			Location of Impact			Pavement Conditions			Lighting Conditions		
	Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage
2006																	
Rear End	1	33%	PDO	1	33%	Motor Vehicle in Motion	2	67%	On Roadway	3	100%	Wet	1	33%	Daylight	3	100%
Side Swipe	0	0%	Injury	2	67%	Animal	0	0%	Off Roadway	0	0%	Dry	2	67%	Dark-Not Lighted	0	0%
Angle	0	0%	Fatality	0	0%	Fixed Object	1	33%	On Shoulder	0	0%	Icy	0	0%	Dark-Lighted	0	0%
Not A Collision With A Motor Vehicle	1	33%				Ditch	0	0%	Median	0	0%				Dawn	0	0%
Head On	1	33%				Overturn	0	0%	Gore	0	0%				Dusk	0	0%
						Other Object (Not Fixed)	0	0%									
						Embankment	0	0%									
						Other Non-Collision	0	0%									
Total Number of Accidents:		3															

Collision Type			Accident Severity			Harmful Event			Location of Impact			Pavement Conditions			Lighting Conditions		
	Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage
2004 to 2006																	
Rear End	2	20%	PDO	4	40%	Motor Vehicle in Motion	4	40%	On Roadway	7	70%	Wet	2	20%	Daylight	10	100%
Side Swipe	0	0%	Injury	6	60%	Animal	0	0%	Off Roadway	3	30%	Dry	7	70%	Dark-Not Lighted	0	0%
Angle	1	10%	Fatality	0	0%	Fixed Object	4	40%	On Shoulder	0	0%	Icy	1	10%	Dark-Lighted	0	0%
Not A Collision With A Motor Vehicle	6	60%				Ditch	1	10%	Median	0	0%				Dawn	0	0%
Head On	1	10%				Overturn	1	10%	Gore	0	0%				Dusk	0	0%
						Other Object (Not Fixed)	0	0%	Ramp	0	0%						
						Embankment	0	0%									
						Other Non-Collision	0	0%									
Total Number of Accidents:		10															

ATTACHMENT - 7
COST ESTIMATE

Estimate Report for file "STP-159-1(14)"

Section ROADWAY ITEMS					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	Lump	LS	300000.00	TRAFFIC CONTROL - STP-154-1(14)	300000.00
153-1300	1	EA	75000.00	FIELD ENGINEERS OFFICE TP 3	75000.00
210-0100	Lump	LS	1000000.00	GRADING COMPLETE - STP-154-1(14)	1000000.00
310-5060	1000	SY	15.00	GR AGGR BASE CRS, 6 INCH, INCL MATL	15000.00
310-5120	8000	SY	22.50	GR AGGR BASE CRS, 12 INCH, INCL MATL	180000.00
318-3000	180	TN	25.00	AGGR SURF CRS	4500.00
402-1812	9000	TN	100.00	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	900000.00
402-3113	1250	TN	95.00	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	118750.00
402-3121	2000	TN	95.00	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	190000.00
402-3190	1000	TN	95.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	95000.00
413-1000	1500	GL	3.00	BITUM TACK COAT	4500.00
441-3999	5605	LF	26.00	CONCRETE V GUTTER	145730.00
446-1100	6000	LF	3.50	PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH	21000.00
634-1200	50	EA	110.00	RIGHT OF WAY MARKERS	5500.00
641-1200	6000	LF	26.50	GUARDRAIL, TP W	159000.00
641-5001	10	EA	650.00	GUARDRAIL ANCHORAGE, TP 1	6500.00
641-5012	10	EA	1850.00	GUARDRAIL ANCHORAGE, TP 12	18500.00
Section Sub Total:					\$3,238,980.00

Section PERMANENT EROSION CONTROL ITEMS					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
603-2181	55	SY	45.10	STN DUMPED RIP RAP, TP 3, 18 IN	2480.50
603-7000	55	SY	5.22	PLASTIC FILTER FABRIC	287.10
700-6910	4	AC	1054.05	PERMANENT GRASSING	4216.20
700-7000	9	TN	60.44	AGRICULTURAL LIME	543.96
700-7010	11	GL	21.65	LIQUID LIME	238.15
700-8000	4	TN	348.14	FERTILIZER MIXED GRADE	1392.56
700-8100	455	LB	2.55	FERTILIZER NITROGEN CONTENT	1160.25
715-2200	9381	SY	2.11	BITUMINOUS TREATED ROVING, WATERWAYS	19793.91
Section Sub Total:					\$30,112.63

Section TEMPORARY EROSION CONTROL ITEMS					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	6	AC	778.51	TEMPORARY GRASSING	4671.06
163-0240	67	TN	181.67	MULCH	12171.89
163-0300	3	EA	2872.37	CONSTRUCTION EXIT	8617.11
163-0503	10	EA	538.47	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	5384.70
163-0521	300	EA	200.00	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS	60000.00
163-0550	2	EA	308.76	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	617.52
165-0010	675	LF	0.80	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	540.00
165-0040	129	EA	104.09	MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS	13427.61
165-0087	10	EA	150.00	MAINTENANCE OF SILT CONTROL GATE, TP 3	1500.00
165-0088	10	EA	100.00	MAINTENANCE OF SILT CONTROL GATE, TP 4	1000.00
165-0105	5	EA	110.84	MAINTENANCE OF INLET SEDIMENT TRAP	554.20
167-1000	5	EA	1350.00	WATER QUALITY MONITORING AND SAMPLING	6750.00
167-1500	15	MO	1035.00	WATER QUALITY INSPECTIONS	15525.00
171-0010	1350	LF	1.80	TEMPORARY SILT FENCE, TYPE A	2430.00
Section Sub Total:					\$133,189.09

Section RAILROAD ITEMS					

Item Number	Quantity	Units	Unit Price	Item Description	Cost
800-1000	1700	SF	500.00	RAILROAD BRIDGE	850000.00
800-1001	700	SF	250.00	TEMPORARY RAILROAD BRIDGE	175000.00
800-2000	2850	LF	400.00	RAILROAD TRACKS	1140000.00
Section Sub Total:					\$2,165,000.00

Section DRAINAGE ITEMS

Item Number	Quantity	Units	Unit Price	Item Description	Cost
441-0204	500	SY	35.46	PLAIN CONC DITCH PAVING, 4 IN	17730.00
550-1180	491	LF	42.63	STORM DRAIN PIPE, 18 IN, H 1-10	20931.33
550-1240	37	LF	53.78	STORM DRAIN PIPE, 24 IN, H 1-10	1989.86
550-1360	65	LF	81.70	STORM DRAIN PIPE, 36 IN, H 1-10	5310.50
550-1480	100	LF	122.66	STORM DRAIN PIPE, 48 IN, H 1-10	12266.00
550-2180	1040	LF	28.20	SIDE DRAIN PIPE, 18 IN, H 1-10	29328.00
550-4118	44	EA	636.02	FLARED END SECTION 18 IN, SIDE DRAIN	27984.88
550-4218	10	EA	644.87	FLARED END SECTION 18 IN, STORM DRAIN	6448.70
550-4224	10	EA	882.93	FLARED END SECTION 24 IN, STORM DRAIN	8829.30
550-4236	10	EA	1221.96	FLARED END SECTION 36 IN, STORM DRAIN	12219.60
550-4248	2	EA	2555.36	FLARED END SECTION 48 IN, STORM DRAIN	5110.72
576-1018	500	LF	34.93	SLOPE DRAIN PIPE, 18 IN	17465.00
668-2100	20	EA	4407.97	DROP INLET, GP 1	88159.40
Section Sub Total:					\$253,773.29

Section SIGNING AND MARKING ITEMS

Item Number	Quantity	Units	Unit Price	Item Description	Cost
636-1020	64	SF	15.31	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	979.84
636-1033	78	SF	20.72	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	1616.16
636-1041	71	SF	42.01	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 9	2982.71
636-2070	353	LF	8.38	GALV STEEL POSTS, TP 7	2958.14
653-0120	8	EA	73.73	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	589.84
653-1501	5375	LF	0.51	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	2741.25
653-1502	6832	LF	0.52	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	3552.64
653-1704	162	LF	5.02	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	813.24
653-1804	1285	LF	2.15	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	2762.75
653-3501	405	GLF	0.50	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	202.50
653-6004	182	SY	3.07	THERMOPLASTIC TRAF STRIPING, WHITE	558.74
653-6006	274	SY	3.21	THERMOPLASTIC TRAF STRIPING, YELLOW	879.54
654-1001	100	EA	3.64	RAISED PVMT MARKERS TP 1	364.00
654-1003	30	EA	3.80	RAISED PVMT MARKERS TP 3	114.00
Section Sub Total:					\$21,115.35

Total Estimated Cost: \$5,842,170.36**Subtotal Construction Cost \$5,842,170.36**

E&C Rate 10.0 % \$584,217.04

Inflation Rate 0.0 % @ 0 Years \$0.00

Total Construction Cost \$6,426,387.40

Right Of Way \$696,800.00

ReImb. Utilities \$32,000.00

Grand Total Project Cost \$7,155,187.40

Department of Transportation State of Georgia

Interdepartmental Correspondence

FILE Preliminary R/W Cost Estimate **OFFICE** R/W
DATE April 18, 2008

FROM Phil Copeland, Right of Way Administrator

TO Debbie Gnuse Wilbur Smith Associates

SUBJECT **Preliminary Right of Way Cost Estimate**
Project: STP-159(1)Meriwether
P.I. No.:321880
Description: SR 41/US 27/Roosevelt Highway under CSX Railroad

Per your request, we have reviewed the Preliminary Right of Way Cost Estimate on the above referenced project.

Please note the Cost Estimate does conform to our current guidelines.

If you have any questions, please contact Jerry Milligan at District 7 Right of Way Office at (770) 986-1541.

PC:GAM

Attachments

Cc: Wes Brock, Chief of Appraisal & Review
File

Preliminary Right of Way Cost Estimate

Date: April 16, 2008
Project: STP-159 (1) Meriwether **P.I. Number:** 321880
Existing/Required R/W: Varies/Varies **No. Parcels:** 10
Project Termini: SR 41/US 27/Roosevelt Highway from Sta. 10+70. 18 to Sta. 38+28.45
Project Description: SR 41 Under CSX Railroad

Land:

Agricultural Required R/W	0.9363 Ac X \$30,000	=	\$28,089
Residential Required R/W	3.910 Ac X \$35,000	=	\$136,850
Total		=	\$ 164,939

Improvements:

One-1382 sf residence, fencing **\$ 76,000**

Relocation:

1 Residential Displacee @ \$ 40,000 / parcel = **\$ 40,000**

Damages:

None **\$ 0**

Total: **\$280,939**

Net Cost		\$ 280,939
Scheduling Contingency 55 %		\$ 154,516
Adm/Court Cost 60 %		\$ 261,273
		\$ 696,728

Total Cost \$ 696,800

Prepared By : Debbie Gnuse

Debbie Gnuse
Wilbur Smith Associates

Approved : Jerry Milligan

Jerry Milligan
GDOT R/W

Meriwether County Sales

<u>Highest & Best Use</u>	<u>Size (acres)</u>	<u>Value/ac</u>	<u>Sales price</u>
Residential	1 AC	\$ 30,000	\$119,000
	2 Ac	\$ 40,000	\$119,900
	2 Ac	\$ 35,000	\$107,920
Land	5.89 Ac	\$29,000	\$170,000
	36 Ac	\$10,528	\$379,000 (listing)
	1+ Ac	\$ 56,250	\$56,250 (listing, per lot)

NOTE: Duet to lack of vacant land sales in the immediate market area, improved residential sales were used and improvements were extracted. Land listings as indicated, were also used. The improvement value was based on Tax Assessment Value.

04-16-08

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE **STP-159-1(14), Meriwether County, P.I.#321880** OFFICE Thomaston
SR-41 Replace SCL Railroad Bridge over SR-41
DATE May 8, 2008

FROM Thomas B. Howell, P.E., District Engineer

TO David Millen, District Preconstruction Engineer **(via: e-mail)**

SUBJECT **UTILITY COST ESTIMATE**

The following is a ballpark utility cost estimate for facilities located within the scope of the above referenced project.

UTILITY OWNER	PUBLIC OR PRIVATE	TYPE OF UTILITY	REIMBURSABLE	NON-REIMBURSABLE
Charter Communications	Private	Cable TV	0	7,000
City of Warm Springs	Public	Water	0	25,000
Georgia Power Distribution	Private	Electric	32,000	0
Windstream	Private	Telecomm	0	6,000
TOTAL PROJECT COST			\$32,000	\$38,000

If you have any questions, please call Kim Brown at 706-646-6695.

KMG:KB:pls

cc: Jeff Baker, P.E., State Utilities Engineer *(via: e-mail)*
Terry Brigman, State Utilities Preconstruction Engineer *(via: e-mail)*
Bill Rountree, Project Manager *(via: e-mail)*
Rajeev Shah, Parsons *(via: e-mail)*

ATTACHMENT - 8
INITIAL CONCEPT TEAM MEETING MINUTES

Initial Concept Team Meeting Summary

February 8, 2008

TO: Meeting attendees (see attached list)

FROM: S. Sajid Iqbal, Parsons

SUBJECT: STP-159-1(14), PI NO. 321880, CSX Railroad Bridge over SR 41
Meriwether County
Initial Concept Team Meeting

An Initial Concept Team meeting was held on February 7, 2008 at the GDOT District Office, Conference Room 202 in Thomaston to review project progress to date, identify information needs for the project, and allow for railroad and local officials input. A list of meeting attendees is attached to these meeting minutes.

Purpose

The purpose of the meeting was:

- Present project need and purpose, and Concept Alternatives and preferred concept alternatives
- Obtain feedback and identify any issues,
- Determine next steps

Notes below summarize discussions and decisions from the meeting.

Bill Rountree conducted the meeting, and opened the meeting by stating the general project description and asking all present to introduce themselves. He then handed over the presentation to Parsons. Sajid Iqbal from Parsons then presented project need and purpose and various concept alternatives developed for the project.

The purpose of this project is to replace the existing substandard railroad bridge carrying the CSX Railroad over SR 41 and improve safety of vehicular traffic on SR 41. The existing RR Bridge creates a substandard horizontal and vertical clearance resulting in an unsafe environment for the traffic on SR 41.

Temporary Railroad Realignment Alternatives

All railroad realignment alternatives are based on temporary railroad alignment shifts. The new railroad will be built on the alignment of the existing railroad, and the tracks will be shifted back to their original location to connect to the new bridge. This approach is used to minimize environmental impacts to the railroad, which is considered historic.

Concept Alternative Alignment 1 – CL New DC 2⁰-25'

This concept connects the existing alignment on tangents and then spirals to a curve with a degree of curvature of 2 degrees 25 minutes. The alignment begins about 800-ft east of the grade crossing at Juke Line Road and maintains 44-ft of separation between the existing and proposed railroad centerlines. This alignment would provide 55 mph design speed and meet all CSX design criteria.

Impacts:

- Total amount of track work required = 4,335-ft.
- It impacts the grade crossing at Juke Line Road

*This alternative is deemed **feasible** as it meets all CSX design criteria.*

Concept Alternative Alignment 2 – CL New DC 2-50:

The tracks connect to the existing alignment with a combining spiral; sharpens up to a curve with a degree of curvature of 2 degrees 50 minutes and then a combining spiral to a 1 degree curve. It would maintain 40-ft of separation between the existing and proposed railroad centerlines. This alignment would provide 55 mph design speed and meet all CSX design criteria.

Impacts:

- Total amount of track work required = 2,824-ft.
- It does not impact the grade crossing at Juke Line Road

*This alternative is also deemed **feasible** as it meets all CSX design criteria.*

Concept Alternative Alignment 3 – CL New DC 3-00:

This alignment shows a departure from the existing curve using a combining spiral, then another curve with a degree of curvature of 3 degrees, then again a spiral, and finally a tangent where the track cross SR 41. This alignment would provide 55 mph design speed and maintain 35-ft of separation between the existing and proposed railroad centerlines. The spirals adjacent to the new tangent are shorter than required by CSX criteria and hence does not meet all CSX design criteria.

Impacts:

- Total amount of track work required = 2,125-ft.
- It does not impact the grade crossing at Juke Line Road

*This alternative is deemed **not feasible** as it does not meet CSX design criteria.*

Preferred Alternative - Concept Alternative Alignment 2 is being advanced as the preferred alternative as it does not impact the Juke Line grade crossing and due to its

shorter length of track work and construction duration. This alternative meets all CSX design criteria.

Roadway Alternatives

Concept Alternative 1 – This alternative maintains the existing centerline of SR 41 and widens the roadway equally on both sides. The proposed right-of-way width for future 5-lane rural section is 200-ft. However, the current improvement will include one 12-ft lane and 10-ft shoulder in each direction. It would also realign Juke Line Road to tie in with SR 41 at right angle.

Impacts:

- It will potentially displace 8 residential properties.
- Total right-of-way acquisition 14 acres
- It will impact Historic Turner House
- It will impact Historic Usher House
- It would require reconstruction of 3,222-ft of SR 41.
- Construction cost \$9.6 million

*This alternative is deemed **not feasible** due to its adverse impacts on the two historic properties.*

Concept Alternative 2 – This alternative retains the existing right-of-way line along the west side to avoid impact to the historic Turner house. All widening is done on the east side. The proposed right-of-way width for future 5-lane rural section is 200-ft. Similar to Alternative 1; the current improvement will include one 12-ft lane and 10-ft shoulder in each direction. It would also realign Juke Line Road to tie in with SR 41 at right angle.

Impacts:

- It will potentially displace 6 residential properties.
- Total right-of-way acquisition 15 acres
- It will impact Historic Usher House
- It would require reconstruction of 3,522-ft of SR 41.
- Construction cost \$10.5 million

*This alternative is deemed **not feasible** due to its adverse impacts on the Historic Usher House property.*

Concept Alternative 3 – This alternative shifts the alignment of SR 41 eastward north of the bridge to avoid impact on Historic Turner House and then shifts the alignment westward south of the bridge to avoid the impact on Historic Usher House. The proposed roadway would provide one 12-ft lane and 10-ft shoulder in each direction. The proposed right-of-way width is 200-ft for future 5-lane rural section.

Impacts:

- It will potentially displace 8 residential properties.
- Total right-of-way acquisition 16 acres
- It would still impact the historic Usher house owing to its driveway encroachment into the property.
- It would require reconstruction of 3,938-ft of SR 41.
- Construction cost \$11.8 million

*This alternative is deemed **not feasible** as a result of its adverse impacts on the Historic Usher House property due to the driveway limits encroaching into the property limits.*

Concept Alternative 4 – This alternative shifts the alignment of SR 41 further westward south of the bridge to avoid impact to the Historic Usher House. Similar to other alternatives this alternative would also provide one 12-ft lane and 10-ft shoulder in each direction. The proposed right-of-way width is reduced to 160-ft to decrease potential displacements. Like other alternatives it also ties in Juke Line Road at right angle to SR 41.

Impacts:

- It will potentially displace 4 residential properties.
- Total right-of-way acquisition 13 acres
- It does not impact any historic property.
- It would require reconstruction of 3,970-ft of SR 41.
- Construction cost \$12.0 million

*This alternative is deemed **feasible** as it does not adversely affect any historic property and has least potential displacements compared to other alternatives.*

Concept Alternative 5 – This alternative would carry SR 41 over the CSX Railroad. The proposed overpass would be wide enough to accommodate future 4-lane section of SR 41. The proposed bridge would be about 70-ft long and would provide 23-ft vertical under clearance over the top of high rail to the underside of the bridge. Retaining walls would be constructed on both sides of SR41 from Sta. 5+50 to Sta. 39+00 to avoid encroachment on to the historical properties.

Impacts:

- It will potentially displace 6 residential properties.
- Total right-of-way acquisition 14 acres.
- It would landlock 4 properties including the two historic properties
- The railroad would remain as is without any temporary or permanent railroad alignment shifts.
- The existing Railroad Bridge would eventually have to be replaced at some point in future.

- It would require reconstruction of 4,218-ft of SR 41.
- Construction cost \$22.8 million

*This alternative is **not feasible** because of its adverse impacts on the adjacent properties including landlocking of two historic properties. Additionally, the existing railroad bridge would eventually have to be replaced. This alternative would be very expensive due to very high and long bridge, retaining walls and length of SR 41 to be reconstructed.*

Preferred Alternative – Alternatives 1, 2, 3 and 5 are deemed not feasible due to their impact on historic properties and potential displacements. However, Alternative 4 would not impact historic properties and hence was deemed feasible. This alternative would have the least potential displacement as compared to other alternatives and hence is being recommended as Preferred Alternative Alignment.

Construction Staging and Detour

Two alternatives for construction staging were presented, both of which would involve detouring SR 41 through traffic for some time. Both staging alternatives were based on the Preferred Alternatives for both the railroad and roadway relocations. The Alternate 1 staging has three stages of construction. The first stage involves construction of portion of proposed SR 41 and temporary railroad detour without impacting the existing vehicular and railroad traffic. The second stage will close SR 41 to through traffic and construct the permanent bridge. The third stage will complete the remaining portion of SR 41. This alternative will impact the through traffic on SR 41 for a period of 12-18 months. The Alternate 2 also includes 3 stages of construction. In stage 1, temporary pavement is constructed south of the existing railroad bridge. In stage 2, construction of portion of proposed SR 41 and temporary railroad detour without impacting the existing vehicular and railroad traffic. And finally in stage 3, close SR 41 to through traffic, construct the permanent bridge, and complete the project. This alternative will impact the through traffic on SR 41 for a period of 3-6 months. Thus, Alternate 2 is the preferred staging scheme due to the shorter duration of construction. The construction duration is anticipated to be between 18 months to 24 months.

Comments and Responses

- GDOT commented on the railroad alignment having a temporary detour rather than a permanent one. *In response, the consultant design team replied that the existing railroad bridge is individually eligible to be listed as historic, so the removal of the bridge will be a Section 4(f) impact. However, the GDOT and FHWA have a “Programmatic Section 4(f) for Historic Bridges” available for use. The Programmatic Section 4(f) does not require “legal sufficiency” review, and will not automatically elevate the environmental document to an Environmental Assessment the way that a Regular Section 4(f) impact would. SHPO has set precedent and considers the permanent relocation of a historic railroad alignment as an adverse effect. This would trigger Section 4(f), and we*

are trying to avoid this. GDOT does not allow a project to be processed with a Categorical Exclusion if Regular Section 4(f) Evaluation is required. Elevating the document to an Environmental Assessment can add approximately 12 to 18 months to the project schedule. There is no Programmatic Section 4(f) Agreement for historic railroads, which is why we are trying to not have an adverse effect to the railroad..

- GDOT commented on whether a financial impact is not considered as an adverse impact? *In response to it, the consultant design team replied that financial impacts are not considered adverse impacts and FHWA will not approve the project if there is a viable alternative available, which does not impact any historic resources.*
- GDOT inquired whether the consultant design team has considered drainage requirements for the alternative. *The consultant design team responded that no drainage analysis has been performed at this initial concept stage. However, based on preliminary assessment and existing field conditions, positive drainage is anticipated. In addition, drainage structures and detention ponds may be required for efficient drainage of the water away from the roadway and bridge.*
- GDOT inquired if the new bridge would accommodate dual tracks warranted by CSX Railroad? *The consultant design team responded that current design of the bridge proposes one track only. An early coordination with CSX railroad is needed to resolve such issues.*
- GDOT indicated concern regarding proposed project impacts and suggested lowering the design speed from 55 mph to 45 mph to shorten of the project length and thereby reduce impacts. They also suggested considering an urban typical section with curb and gutter or a rural typical section with v-gutters at the shoulders to limit the right-of-way requirements for the preferred the alternative. *In response to recommendations, the consultant design team replied that they would investigate the above recommendations and submit a revised alternative.*
- Mayor of Warm Springs indicated her concerns about the total project construction duration and duration of closure of SR 41 affecting tourism to the City of Warm Springs. *In response, the consultant design team replied that milestone incentive schemes may be included in the contract to shorten the duration of the road closure as well as the total project construction duration.*
- Mayor of Warm Springs also pointed out her concerns about relocation of the utilities due to construction and payment for such relocations. *In response, the GDOT replied that it is the responsibility of the city to pay for the relocation of its utilities. Additionally, the work required for relocation of utilities can be a part of the GDOT contract to avoid future delay, but payment responsibility will be with the City of Warm Springs.*
- GDOT Office of Financial Management (OFM) had provided their following comments:

PI# 321880

⇒ PE - Authorized

- ⇒ RW - Long Range
- ⇒ CST - Long Range
- ⇒ CO SGN 12/14/88 FOR UTILITIES| OTHER SHARE = CSX RR.
- ⇒ The last cost estimates received by OFM on this project were RW 8/31/2006 and CST 10/05/2006.
- Overall recommendation from GDOT was to consider a revised alternative with the following:
 - ⇒ Urban Typical Section with Curb and Gutter or Rural Typical Section with V-Gutter to minimize right of way requirements
 - ⇒ 5-Lane Bridge Design with 5-Lane right-of-way footprint near the bridge.
 - ⇒ 2-Lane Roadway design with 2-Lane right-of-way footprint along the remainder of the project.
 - ⇒ Design Speed of 45 mph.
 - ⇒ Use of 6 % vertical grade assuming a rolling terrain.
 - ⇒ Reduce displacements.

Action Items

- Proceed with Concept Development incorporating applicable comments and recommendations.
- Schedule PIOH.
- Prepare for and schedule Concept Team Meeting.

Meeting Attendees:

Name	Organization	Phone	Email
Kim Brown	GDOT – Utilities	706-646-6695	KiBrown@dot.ga.gov
David Millen	GDOT – District 3	706-646-6987	dmillen@dot.ga.gov
Hazel Ramsey	City of Warm Springs – Mayor	706-655-9096	
Mike Rowe	City of Warm Springs	706-655-9096	
Kim Boyd	GDOT – Right of Way	706-646-6972	kboyd@dot.ga.gov
Glenn Tyson	GDOT – Right of Way	706-646-6971	gtyson@dot.ga.gov
Debra Pruitt	GDOT – Environmental	706-646-6984	dpruitt@dot.ga.gov
Mike England	GDOT – Traffic	706-646-6676	mengland@dot.ga.gov
Bill Rountree	GDOT – District 3	706-646-6990	brountree@dot.ga.gov
Susan Thomas	EPEI – Environmental	770-333-9484	stthomas@edwards-pitman.com
Alan Hunley	Parsons	678-969-2304	Alan.Hunley@parsons.com
Sajid Iqbal	Parsons	678-969-2368	Sajid.Iqbal@parsons.com
Rajeev Shah	Parsons	678-969-2481	Rajeev.Shah@parsons.com

ATTACHMENT - 9
APPROVED CONCEPT REPORT (1992)

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE STP-159(14) Meriwether County
P.I. No. 321880

OFFICE Preconstruction

CW Hutto

DATE April 9, 1992

FROM C. Wayne Hutto, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT PROJECT CONCEPT REPORT APPROVAL - REVISED

Attached for your files is the approval for subject project.

CWH/se

Attachment

DISTRIBUTION:

- John Lively
- Robert E. Humphrey
- David Studstill
- Herman Griffin
- Roland Hinners
- Darrell Elwell
- Winn Guthrie
- George Boulineau
- Paul Liles
- Van Etheridge
- Ron Colvin

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DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP-159(14) Meriwether County OFFICE Preconstruction
P.I. No. 321880 DATE April 2, 1992

FROM Hoyt J. Gively, Jr., P.E., Director of Preconstruction

TO Wayne Shackelford, Commissioner

SUBJECT PROJECT CONCEPT REPORT APPROVAL

This project proposes the replacement of a CSX Railroad bridge over SR 41/US 27 Alternate, one mile north of Warm Springs. The existing bridge has both substandard horizontal and vertical clearance for traffic. The horizontal clearance is 23' 8" and the vertical clearance is 13' 8". The existing roadway consists of two, 12' lanes and 6' graded shoulders. Base year traffic (1996) is 3,250 ADT and design year traffic (2016) is 5,050 ADT. The posted speed is 45 MPH. The major structure within the project limits is the CSX bridge.

This concept proposes a permanent railroad detour with a new railroad bridge which is approximately 195' long and requires the reconstruction of 4,700 linear feet of track. The new track work and bridge are proposed to be located just south of the existing site. State Route 41 must be lowered in order to provide adequate vertical clearance. This concept proposes on-site detour lanes for traffic during the reconstruction of the highway. It is proposed to reconstruct SR 41 as a two lane road on a five lane rural right-of-way width, which requires a minimum width of 200'. Design speed is 55 MPH.

The estimated costs for this project are:

	PROPOSED	APPROVED	PROG DATE
Construction (includes E&C and inflation)	\$2,500,000	\$2,300,000	FY 94 93-12
Right-of-Way	\$ 421,000	\$ 32,000	
Utilities	LGPA	LGPA	

The county signed the LGPA on 12-14-88 for utilities only.

Wayne Shackelford
Page 2
April 2, 1992

STP-159-1(14) Meriwether County

Environmental concerns include: no 404 permit anticipated; a Categorical Exclusion will be approved; a public hearing will be held; displacements include 4 residences. Engineering Services, in their review letter, stated that carrying SR 41 over the railroad should be considered. Road Design considered this alternate and found the estimated cost to be significantly more than the present alternate. Also, the fills along SR 41 would be so high that access rights to adjacent property would probably have to be acquired.

I recommend that this concept report be approved.

HJL:CWH/cj

Attachment

CONCUR

G. C. Lewis
G. C. Lewis, State Highway Engineer

APPROVE

Wayne Shackelford
Wayne Shackelford, Commissioner

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

RECEIVED
DEC 12 1991

INTERDEPARTMENT CORRESPONDENCE

FILE **STP**
FR-159-1 (14) Meriwether County OFFICE Atlanta, Georgia
P.I. No. 321880
Relocate RR Bridge Over SR 41 DATE December 12, 1991

FROM Robert E. Humphrey, Project Review Engineer *REH*

TO Hoyt J. Lively, Jr., Director of Preconstruction

SUBJECT PROJECT CONCEPT REPORT - Revised

We have reviewed the attached revised Concept Report for this Major project and have the following comment:

Revised cost estimate based on R/R over with no walls. Cost of SR 41 over R/R should also be considered. The no-build alternative should be strongly considered here. This is not a vital route and the project doesn't seem cost-effective.

We have received signed cover sheets from the following offices:

Bridge Design

Traffic and Safety

District Engineer

This report is satisfactory for approval subject to the above comment.

The combined estimated costs of these projects are as follows:

Construction	\$1,976,300
Inflation (5% per year) x 3 yrs.	296,445
E & C (10%)	227,275
Preliminary Engineering (5%)	98,815
Right of Way	420,600
Utilities	---

BDM/jmf

Attachments

c: Roland W. Hinners

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE

OFFICE Thomaston

DATE December 2, 1991

FROM

D. V. Etheridge, P.E., District Engineer *Juf*

TO

Robert E. Humphrey, P.E., Project Review Engineer

SUBJECT

FR-159-1 (14) Meriwether County
P.I. No. 321880
Project Concept Report

Attached for your use and further handling is the signed Project Concept Report on the subject project. The report is recommended for approval with the following comment. The stage construction to maintain an on-site detour needs to be coordinated closely. There is a possibility that an off-site detour might have to be considered.

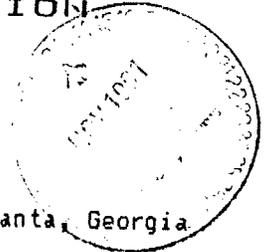
JAL:EJW

Attachment



DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE FR-159-1(14)-Meriwether County
P.I. No. 321880

OFFICE Atlanta, Georgia

DATE November 8, 1991

FROM *Roland W. Hinners*
Roland W. Hinners, P.E., State Road & Airport Design Engineer *JPB*

TO Robert E. Humphrey, P.E., Project Review Engineer

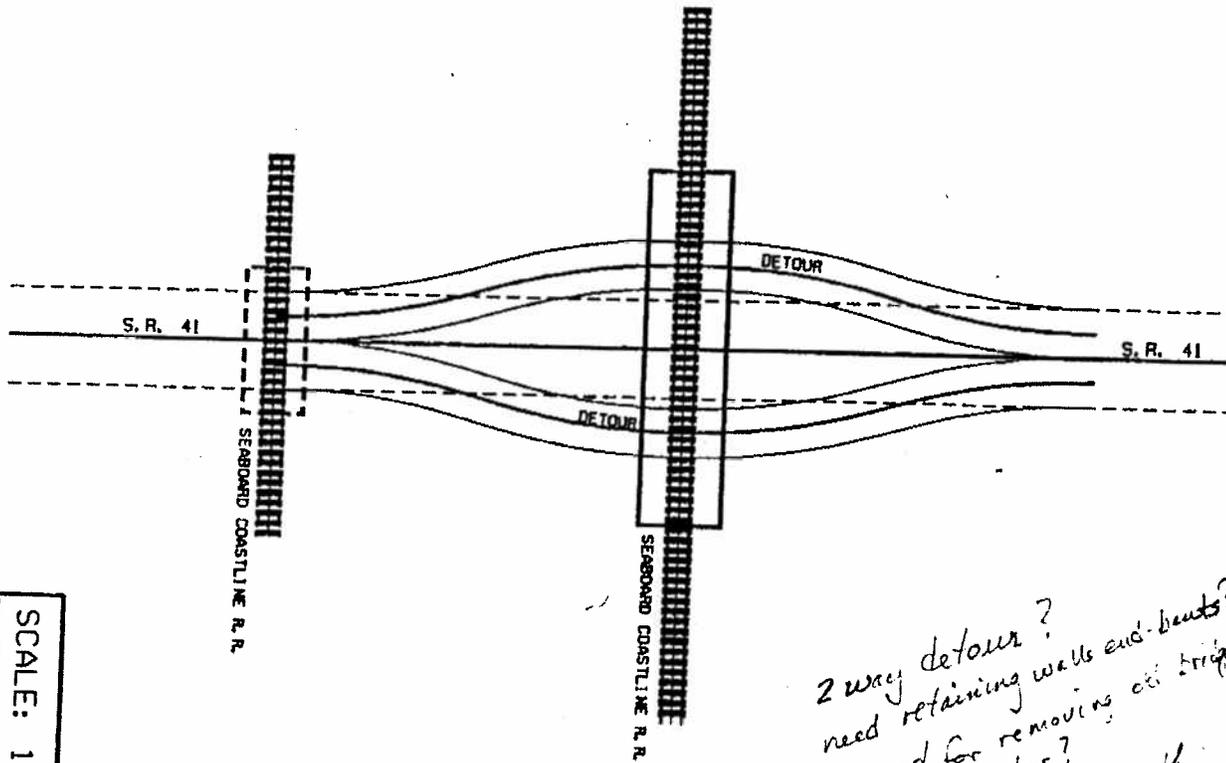
SUBJECT Concept Report

Attached is the concept report for the above project for your review and further handling.

RWH:jwh
Attachments

c: John Lively
David Studstill, w/att
Wayne Hutto, w/att
Van Etheridge, w/att
Ron Colvin, w/att
Paul Liles, w/att

ATTACHMENT "B"

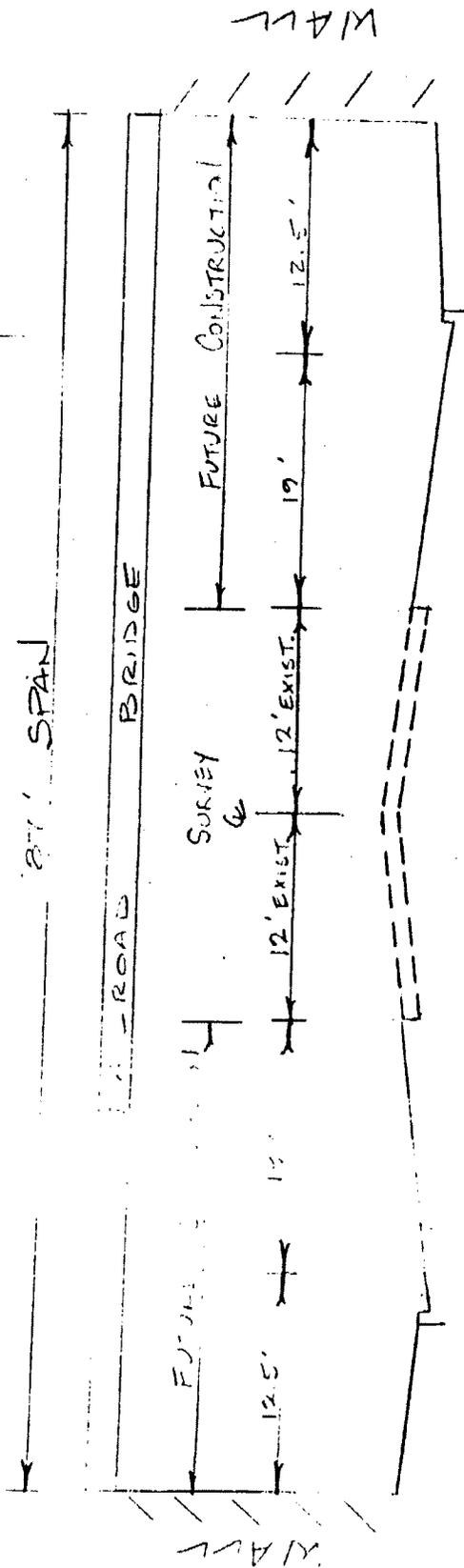


FR-159-1(14)
PL 151260

SCALE: 1" = 10'

2 way detour?
need retaining walls end-bents?
close rd for removing old bridge?
use state rd detour?
what will grade be south
of new bridge?

PROP. R.R. BRIDGE



TANGENT SECTION

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

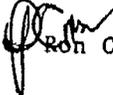
INTERDEPARTMENT CORRESPONDENCE



FILE FR-159-1 (14)
Meriwether County
P.I. No. 321880

OFFICE Atlanta, Ga.

DATE November 14, 1991

FROM  Ron Colvin, P.E., State Traffic & Safety Engineer

TO Robert E. Humphrey, P.E., Project Review Engineer

SUBJECT Project Concept Report Review

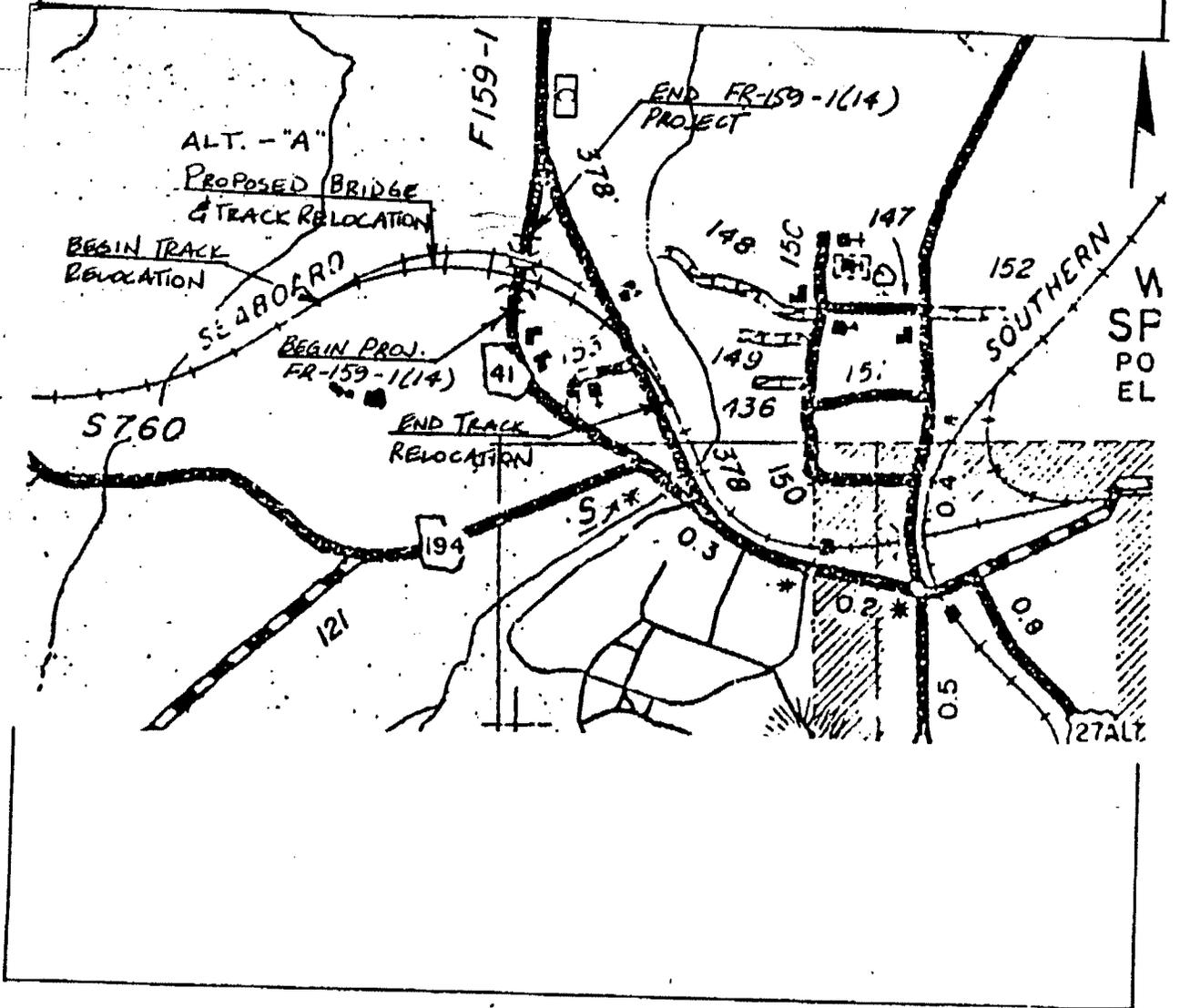
We have reviewed the concept report on the above project for the proposed replacement of a Seaboard Coastline Railroad Bridge over S.R. 41/U.S. 27 north of Warm Springs. We believe, due to the substandard horizontal and vertical clearance of the existing bridge, this concept will improve safety at this location. We, therefore, find this report satisfactory for approval.

RC:CKE:lw

Attachment (signature page)

cc: Roland Hinners; Van Etheridge - Thomaston

PROJECT MAP - Project No. : FR-159-1(14)



PROJECT CONCEPT REPORT

PAGE 3
P.I. NO: 321880

PROJECT NUMBER: FR-159-1(14)

PROJECT LOCATION & DESCRIPTION

RELOCATE RAILROAD AND RAILROAD BRIDGE AT S.R.41/U.S.27 ALT. APPROX 1 MILE NORTHWEST OF WARMS SPRINGS, GA.; RAILROAD LENGTH 0.7 MILES

PROJECT LENGTH: 0.900 MILES

TRAFFIC

CURRENT		PROJECTED	
YEAR	AADT	YEAR	AADT
<u>1996</u>	<u>3250</u>	<u>2016</u>	<u>5050</u>

PDP CLASSIFICATION

FUNCTIONAL CLASSIFICATION

MAJOR

RURAL FAP MINOR ARTERIAL

PROJECT NEED & PURPOSE

THE HORIZONTAL CLEARANCE (23'-8") AND THE VERTICAL CLEARANCE (13'-8") OF THE SEABOARD COASTLINE RAILROAD BRIDGE OVER U.S. 27/ S.R.41 INDICATES A NEED FOR THIS PROJECT. (SEE ATTACHMENT "A")

EXISTING ROADWAY

TYPICAL SECTION: 2 LANE RURAL

R/W WIDTH
60 FT

POSTED SPEED
45 MPH

MAX DEGREE OF CURVE
9.00 DEG.

MAX GRADE
5.00 %

MAJOR STRUCTURES:

1. SEABOARD COASTLINE RAILROAD BRIDGE (40'X15') +/-
- 2.
- 3.

PROPOSED ROADWAY

TYPICAL SECTION: 2 LANE RURAL ON 5 LANE RURAL R/W

DESIGN SPEED
55 MPH

MAX DEGREE OF CURVE;
ALLOWABLE: 6.00 DEG.
PROPOSED: 6.00 DEG.

MAX GRADE;
ALLOWABLE: 5.00 %
PROPOSED: 5.00 %

MAJOR STRUCTURES: SEABOARD COASTLINE RAILROAD BRIDGE (87'X20')

PROPOSED RIGHT OF WAY

R/W WIDTH
200 FT

DISPLACEMENTS

RES.: 004 BUS.: 000 M.H.: 000

TYPE OF ACCESS CONTROL: FREE ACCESS CONTROLLED BY D/W PERMIT

COORDINATION

CONCEPT TEAM MEETING DATE: JUNE 28, 1990

LOCATION INSPECTION DATE: NONE

PERMITS REQUIRED (4f, COE, 404, etc.): NONE

LEVEL OF PUBLIC INVOLVEMENT: PUBLIC HEARING

TIME SAVING PROCEDURES APPROPRIATE: YES

OTHER PROJECT IN THE AREA: FR-153-1(8) MERIWETHER COUNTY

MISCELLANEOUS

TRAFFIC CONTROL DURING CONSTRUCTION: ALL TRAFFIC TO BE MAINTAINED
DURING CONSTRUCTION

LEVEL OF ENVIRONMENTAL ANALYSIS: CATEGORICAL EXCLUSION

DESIGN VARIATIONS REQUIRED: NONE

UNDERGROUND STORAGE TANKS: NONE

HAZARDOUS WASTE SITES: NONE

ALTERNATIVES CONSIDERED

1. NO BUILD.

UTILIZE EXISTING 2 LANE SECTION BUT BUY R/W TO ACCOMODATE A FUTURE
4 LANE DIVIDED HWY. (RAILROAD BRIDGE-220'X20')

ESTIMATED COST

CONSTRUCTION: \$	1,446,800	RIGHT-OF-WAY: \$	420,600
E & C (10) :	\$ 144,680	ACQUIRED BY:	D.O.T.
INFLATION :	\$ 228,052	UTILITIES :	\$ 0
		ADJUSTED BY:	LGPA
TOTAL CONSTRUCTION COST: \$		1,819,532	

COMMENTS: DUE TO THE LACK OF VERTICAL CLEARANCE UNDER THE PROPOSED R.R. BRIDGE, S.R.41 WILL HAVE TO BE LOWERED. THEREFORE, TO MAINTAIN TRAFFIC WHILE THE PROPOSED BRIDGE IS UNDER CONSTRUCTION, WE WILL BUILD DETOUR LANES, AS SEEN ON ATTACHMENT "B", ON THE OUTSIDE OF THE EXISTING 2 LANES. THE DETOUR LANES AND EXISTING LANES WILL BE DIVIDED BY TEMP. BARRIER. OUR OFFICE WILL REQUEST FROM THE OFFICE OF CONSTRUCTION THE PROCEDURES TAKEN IN THE REMOVAL OF THE EXISTING R.R. BRIDGE TO SEE IF WE NEED TO PROVIDE AN ADDITIONAL DETOUR WHILE THE BRIDGE IS BEING REMOVED.

ATTACHMENTS: ATTACHMENT "A" & ATTACHMENT "B"

PRELIMINARY COST ESTIMATE

PROJECT NUMBER: FR-159-1(14)

COUNTY: MERIWETHER

DATE: NOV-08-1991

ESTIMATED LETTING DATE: DEC-01-1993

PREPARED BY: JIM HULLETT

PROJECT LENGTH (MILES): 0.900

() PROGRAMMING PROCESS (X) CONCEPT DEVELOPMENT () DURING PROJECT DEV.

PROJECT COST

A. RIGHT-OF-WAY:

1. PROPERTY (land & easement) 429000 S.F. @ \$0.06/S.F.	\$	25,700
2. DISPLACEMENTS: (RELOCATION) 4 RES. @ \$59500/RES.	\$	238,000
3. OTHER COST (adm./court, inflation) ADM. COURT FACTOR (45%) INFL. (10%)	\$	156,900
SUBTOTAL:A	\$	<u>420,600</u>

B. REIMBURSABLE UTILITIES:

1. RAILROAD	\$	0
2. TRANSMISSION LINES	\$	0
3. SERVICES	\$	0
SUBTOTAL:B	\$	<u>0</u>

C. CONSTRUCTION:

1. MAJOR STRUCTURES:

a. RETAINING WALLS	\$	0
b. BRIDGES ^{195' x 23'} (87' x 20') RAILROAD 1740 S.F. @ \$200/S.F.	\$	348,000 897,000
c. DETOUR BRIDGES	\$	0
d. BOX CULVERTS	\$	0
SUBTOTAL:C-1	\$	<u>348,000</u>

2. GRADING AND DRAINAGE:

a. EARTHWORK (RAILROAD)		
23000 C.Y. @ \$3/C.Y.	14	\$ 146,500
1750 S.F. @ \$45/S.F. (BRIDGE REMOVAL)	7000	
4700 L.F. @ \$15/L.F. (TRACK REMOVAL)	70,500	
b. DRAINAGE:		
1) Cross Drain Pipe (exc.box culverts)		\$ 0
2) Curb and Gutter		\$ 0
3) Longitudinal System(incl.catch basins)		\$ 0
	SUBTOTAL:C-2	\$ 166,000

3. BASE AND PAVING:

a. AGGREGATE BASE		\$ 0
(specify type of base)		
b. ASPHALT PAVING:		
Surface	\$ 0	
Binder	\$ 0	
Base	\$ 0	
	SUBTOTAL:C-3.b	\$ 0
c. CONCRETE PAVING		\$ 0
0.2 MILES @ \$750000/MILE		
	SUBTOTAL:C-3	\$ 150,000

4. LUMP ITEMS:

a. TRAFFIC CONTROL		\$ 0
b. CLEARING AND GRUBBING		\$ 26,000
6.5 ACRES @ \$4000/ACRE		
c. LANDSCAPING		\$ 0
d. EROSION CONTROL		\$ 38,000
9400 L.F. @ \$4/L.F. TYPE "C" SILT FENCE		
e. DETOURS		\$ 10,000
125 TONS @ \$40/TON 1500 C.Y. @ \$3/C.Y.		
	SUBTOTAL:C-4	\$ 74,000

5. MISCELLANEOUS:

a. LIGHTING		\$ 0
b. SIGNING - STRIPING - SIGNAL		\$ 0
c. GUARDRAIL		\$ 3,800
84 L.F. @ \$45/L.F.		
d. TRACK RELOCATION		\$ 705,000
4700 L.F. @ \$150/L.F.		
	SUBTOTAL:C-5	\$ 708,800

6. SPECIAL FEATURES

SUBTOTAL:C-6 \$ 0

ESTIMATE SUMMARY

A. RIGHT-OF-WAY	\$	<u>420,600</u>
B. REIMBURSABLE UTILITIES	\$	<u>0</u>
C. CONSTRUCTION		
1. MAJOR STRUCTURES	\$	348,000 ^{897,000}
2. GRADING AND DRAINAGE	\$	166,000 ^{146,500}
3. BASE AND PAVING	\$	<u>150,000</u>
4. LUMP ITEMS	\$	<u>74,000</u>
5. MISCELLANEOUS	\$	<u>708,800</u>
6. SPECIAL FEATURES	\$	<u>0</u>
SUBTOTAL CONSTRUCTION COST	\$	1,446,800 ^{1,976,300}
E. & C. (10%)	\$	<u>144,680</u>
INFLATION (5% PER YEAR)	\$	<u>228,052</u>
3 YEARS		
TOTAL CONSTRUCTION COST	\$	<u>1,819,532</u>
GRAND TOTAL PROJECT COST	\$	<u>2,240,132</u>

Need and Purpose
Replacement and Relocation of Railroad Bridge
SR 41 Meriwether County
FR-159-1(14)

The existing railroad bridge creates a substandard roadway with a horizontal clearance of 23'8" and vertical clearance of 13'8". The present structure is located in a curve, creating a sight distance problem. Traffic is in the 2500 VPD range, according to 1989 Department of Transportation coverage counts. The narrow roadway is used by large log trucks, creating a horizontal clearance problem for other traffic. The 13'8" vertical clearance prohibits many other large trucks, such as those which will serve the 90 acre industrial park under development in nearby Manchester.

SECTION 1 - Location & Geography

Screen 1
 * 200 Structure I.D. No.: 199-0066-0
 Bridge Information: 00
 * 6A Feature Int.: SR 41 (US 27)
 * 6B Critical Bridge:
 * 7A Route Number Carried:SR00041
 * 7B Facility Carried:CSX RAILROAD
 * 8 Location: 1 MI. N. OF WARM SPRINGS
 2 DOT District: 3
 *207 Year Photo: 87

* 91 Inspection Frequency: 24 Date: 11/90
 92A Fract Crit Insp Freq: 0 00 Date: 00/00
 92B Underwater Insp Freq: 0 00 Date: 00/00
 92C Other Spc. Insp Freq: 0 00 Date: 00/00
 * 4 Place Code: 00000

* 5 Inventory Route (O/U): 2
 Type: 2
 Designator: 2
 Number: 00027
 Direction: 0

* 16 Latitude: 32-54.0
 * 17 Longitude: 084-41.8

98 Border Bridge: 000 %Shared: 00
 99 ID. Number: 0000000000000000

*100 Defense Highway: 1
 *101 Parallel Structure: N
 *102 Direction of Traffic: 2
 264 Road Inventory Mile Post: 007.49

*208 Inspection Area: 03 Initials: T08

*Location I.D. No: 199-00041D-00749N
 *XReferen I.D. No: 000-000000-000000

SECTION 1 - CONTINUED

*104 Highway System: 2
 * 26 Functional Classification: 06
 *204 Federal Route Type: F No:159-1
 *110 Truck Route: 0
 206 School Bus Route: 0
 217 Benchmark Elevation: 0000.00
 218 Datum: 0
 Screen 2
 * 19 Bypass Length: 06
 * 20 Toll: 3
 * 21 Maintenance: 01
 * 22 Owner: 01
 31 Design Load: 0
 37 Historical Significance: 0
 205 Congressional District: 00
 27 Year Constructed: 1927

*106 Year Reconstructed: 0000
 33 Bridge Median: 0
 34 Skew: 0
 35 Structure Flared: 0
 38 Navigation Control: 0
 213 Special Steel Design: 0

* 42 Type Service On: 2 Under: 1
 214 Movable Bridge: 00
 203 Type Bridge: Z-0-A-0
 259 Pile Encasement: 0
 * 43 Structure Type Main: 1 01
 45 No. Spans Main: 000
 44 Structure Type Appr: 000
 46 No. Spans Appr: 0000
 226 Bridge Curve Horiz: 0 Vert: 0
 111 Pier Protection: 0
 107 Deck Structure Type: 0

108 Wearing Surface Type: 0
 Membrane: 0
 Protection: 0
 *248 County Continuity No: 00

SECTION 2 - Signs & Attachments

Screen 3
 225 Expansion Joint Type: 00
 242 Deck Drains: 0
 243 Parapet Location: 0
 Height: 00.0
 Width: 00.0

238 Curb: 0.0 0
 239 Handrail: 0 0
 *240 Median Barrier Rail: 0

241 Bridge Median Height: 0.0
 Width: 00.0

*230 Guardrail Loc Dir Rear: 3
 Frwd: 3
 Oppo Dir Rear: 0
 Frwd: 0

244 Approach Slab: 0
 224 Retaining Wall: 0

233 Posted Speed Limit: 00
 236 Warning Sign: 0
 234 Delineator: 0
 235 Hazard Boards: 0

237 Utilities Gas: 00
 Water: 00
 Electric: 00
 Telephone: 00
 Sewer: 00

247 Lighting Street: 0
 Navigation: 0
 Aerial: 0

