

APPENDIX A
EXHIBITS

EXHIBIT 1: PROJECT LOCATION

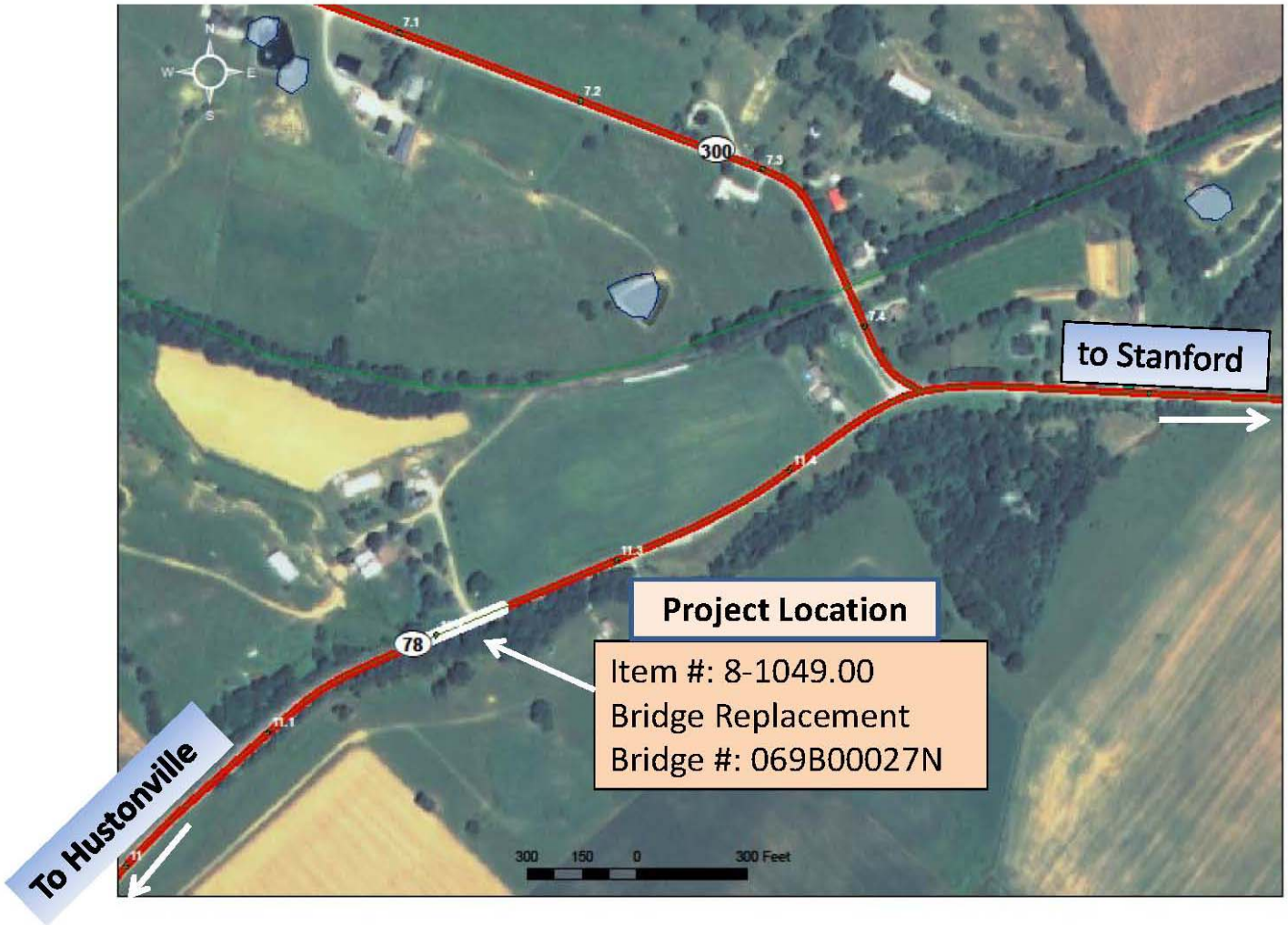
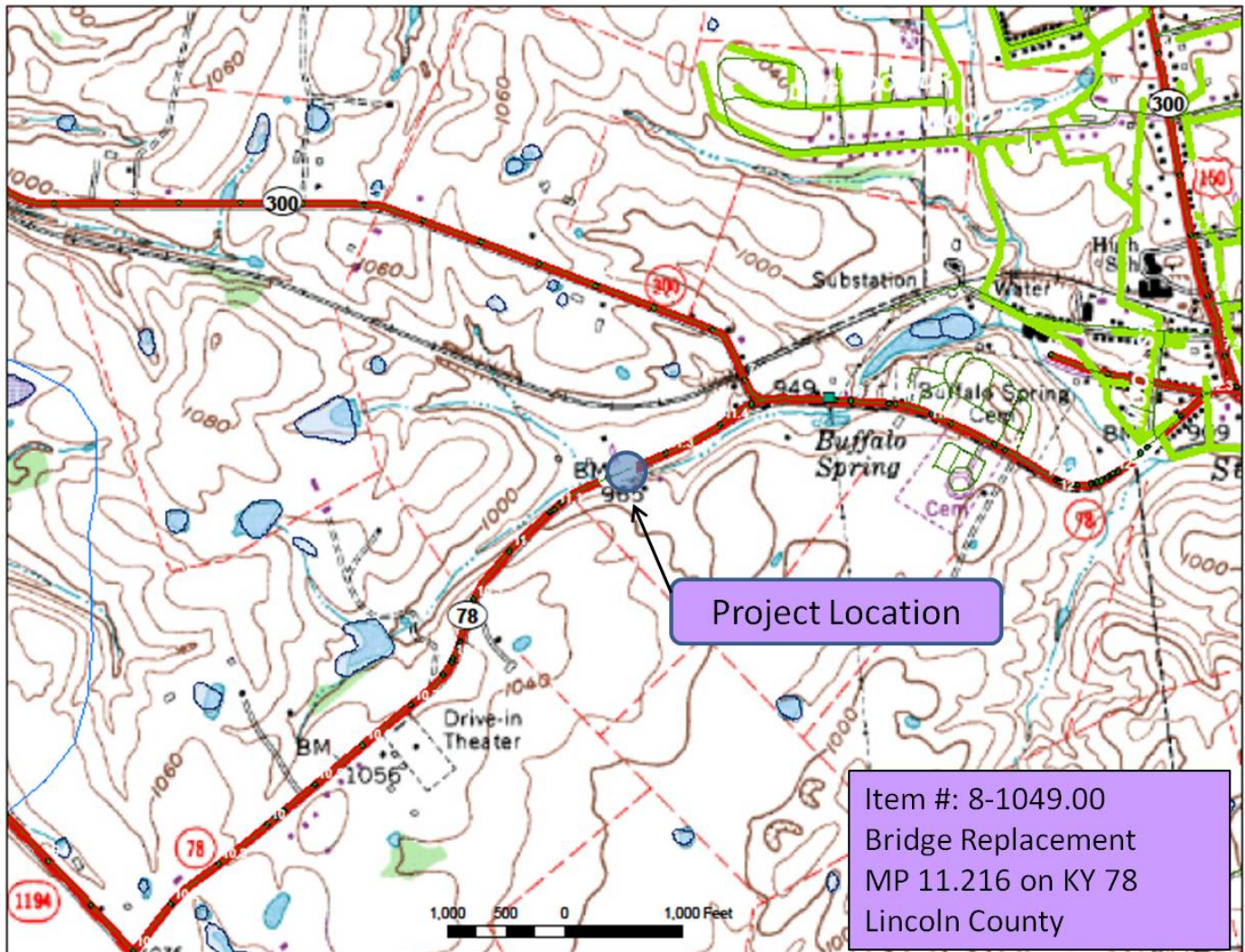


EXHIBIT 2: TOPOGRAPHIC MAP



HIS
12/8/2010

Kentucky Transportation Cabinet
Official DMI Route Log

Exhibit 3 KY 78 Route Log

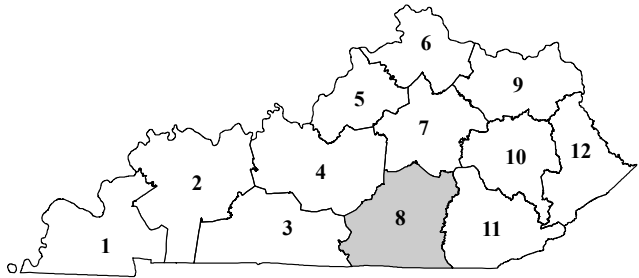
County: LINCOLN

<u>ROUTE</u>	<u>DIR</u>	<u>JCT</u>	<u>FUNCT</u>	<u>SYS</u>	<u>MILEPOINT</u>	<u>DESCRIPTION</u>
KY 78	E		RUR MJ C	SS	5.263	MURPHY RD
	E		RUR MJ C	SS	5.719	SOUTH ELLIOTT RD
	E		RUR MJ C	SS	5.762	HANGING FORK CR. BRIDGE
	E		RUR MJ C	SS	7.058	PEYTON CREEK BRIDGE
	E		RUR MJ C	SS	7.089	KY 198
	E		RUR MJ C	SS	7.095	PEYTON WELL RD
	E		RUR MJ C	SS	7.185	MCCORMICKS BRANCH CULVERT
	E		RUR MJ C	SS	8.618	THORNHILL LN
	E		RUR MJ C	SS	8.647	Project Location BLUE LICK CR. BRIDGE
	E		RUR MJ C	SS	9.991	SPOONAMORE LN
	E		RUR MJ C	SS	10.102	KY 1194
	E		RUR MJ C	SS	11.216	PEVYHOUSE BRANCH CULVERT
	E		RUR MJ C	SS	11.479	KY 300
	E		RUR MJ C	SS	12.168	ST. ASAPH CREEK BRIDGE
	E		RUR MJ C	SS	12.193	MOON ST
	E		RUR MJ C	SS	12.309	KY 2319
	E		RUR MJ C	SS	12.343	KY 300
	E		RUR MJ C	SS	12.395	MCKINNEY CT
	E		RUR MJ C	SS	12.482	KY 1247/MILL ST
	E		RUR MJ C	SS	12.520	S DEPOT ST/N DEPOT ST
	E		RUR MJ C	SS	12.557	S LANCASTER ST/KY 1247
	E		RUR MJ C	SS	12.609	S 3RD ST/N 3RD ST
	E		RUR MJ C	SS	12.661	S 2ND ST/N 2ND ST
	E		RUR MJ C	SS	12.705	S 1ST ST/N 1ST ST
	E		RUR MJ C	SS	12.746	CUT OFF ST
	E		RUR MJ C	SS	12.803	LOGAN AV
	E		RUR MJ C	SS	12.938	WHITLEY AV
	E		RUR MJ C	SS	13.041	HARRIS CT
	E		RUR MJ C	SS	13.091	POWELL ST
	E		RUR MN C	RS	13.135	US 27
	E		RUR MN C	RS	13.364	INDUSTRIAL PARK DR
	E		RUR MN C	RS	13.518	DARST ST
	E		RUR MN C	RS	13.723	JOHN LOGAN TR
	E		RUR MN C	RS	13.781	LOGANS CREEK BRIDGE
	E		RUR MN C	RS	13.961	CORDIER RD
	E		RUR MN C	RS	14.442	EAST ST
	E		RUR MN C	RS	14.491	SHANKS LN
	E		RUR MN C	RS	14.499	RICE LN
	E		RUR MN C	RS	14.562	SOUTH ST
	E		RUR MN C	RS	14.681	CUT OFF PKE
	E		RUR MN C	RS	15.448	US 150
KY 198	N		RUR MN C	RS	0.000	CASEY - LINCOLN COUNTY LINE

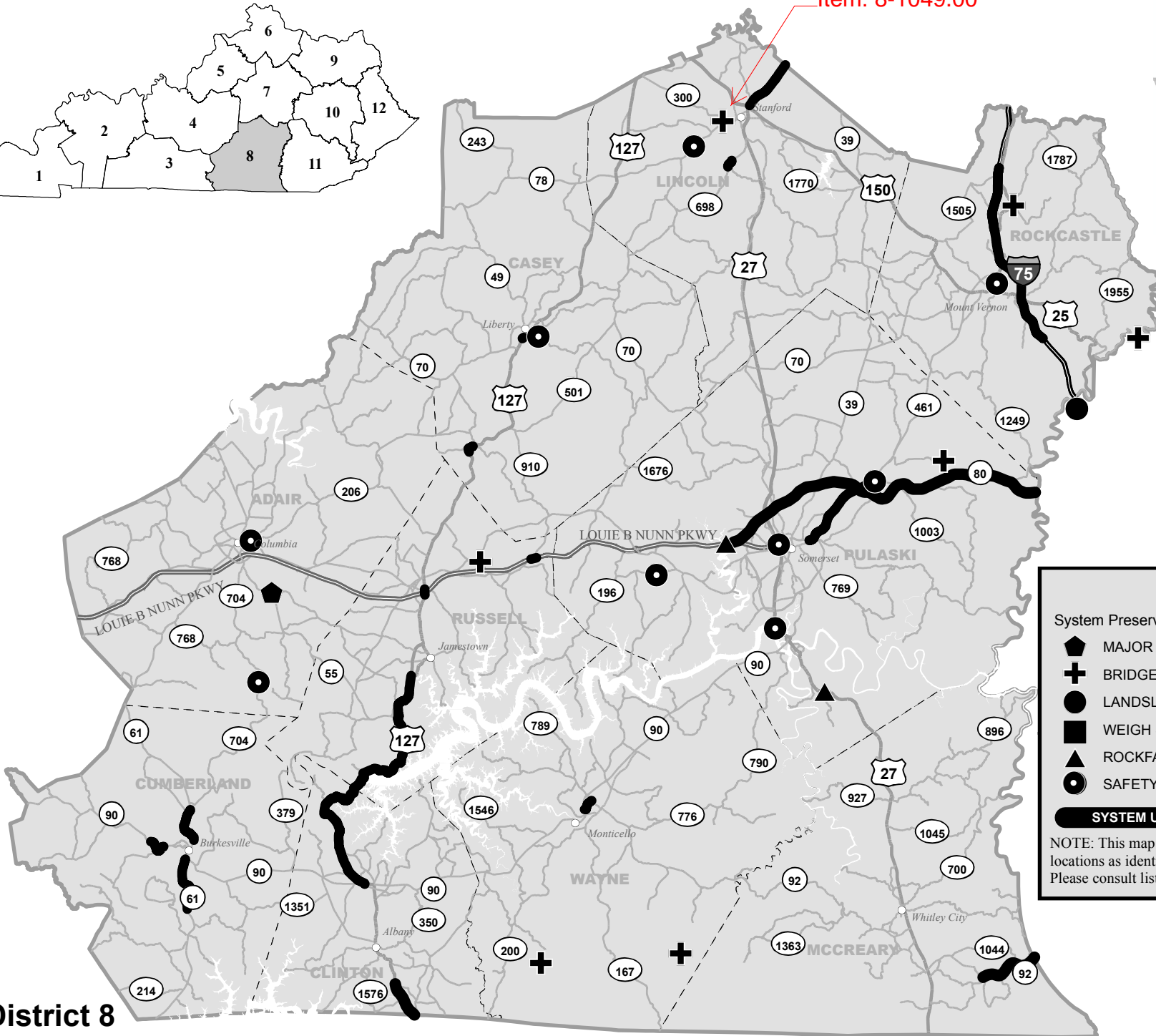
APPENDIX B

2010 General Assembly's Enacted Roadway Plan

District 8 Projects & Lincoln County Projects



Item: 8-1049.00



Legend

System Preservation

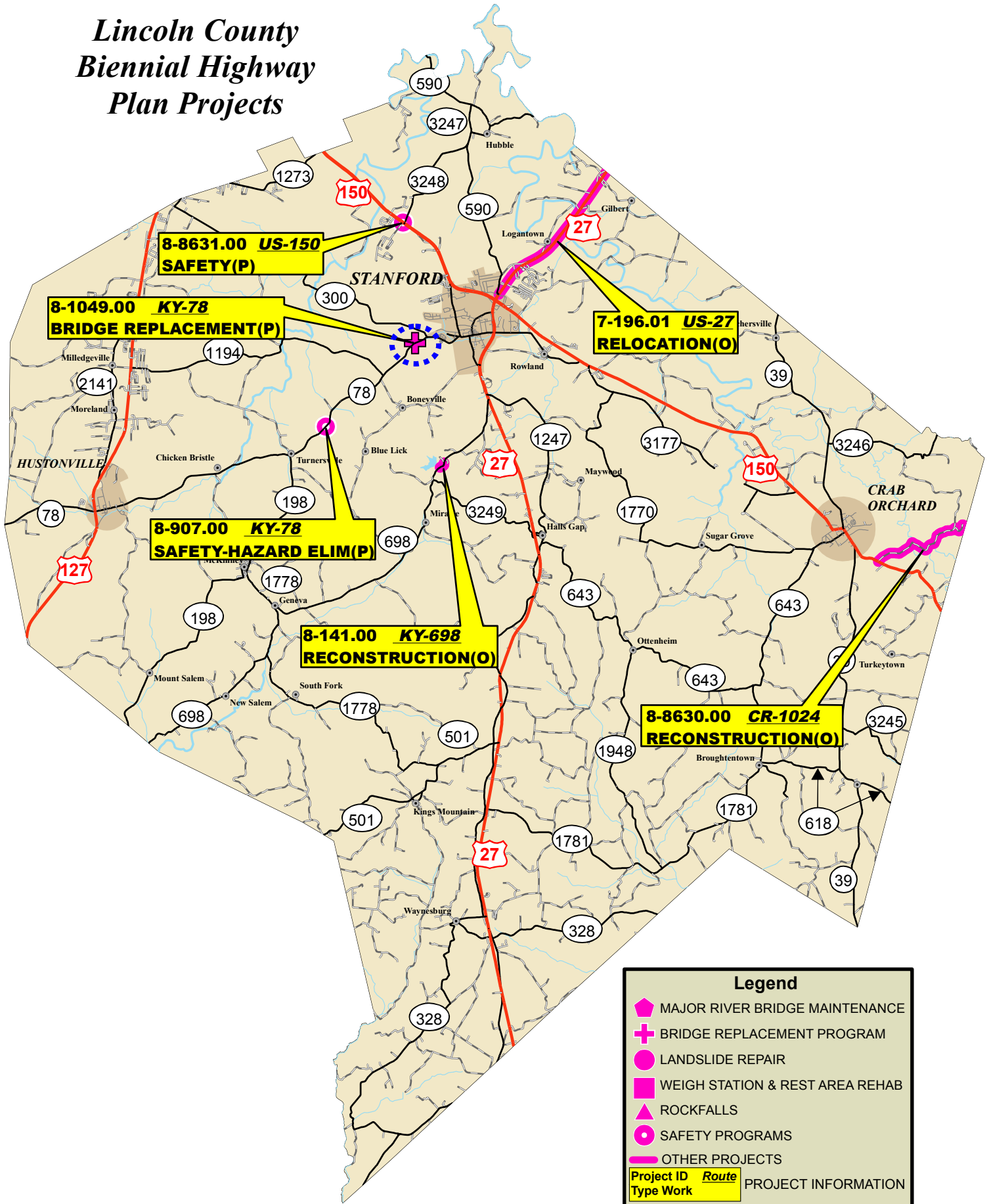
- MAJOR RIVER BRIDGE MAINTENANCE
- BRIDGE REPLACEMENT PROGRAM
- LANDSLIDE REPAIR
- WEIGH STATION & REST AREA REHAB
- ROCKFALLS
- SAFETY PROGRAMS

SYSTEM UPGRADES & ADDITIONS

NOTE: This map is a representation of the project locations as identified in the Six Year Highway Plan. Please consult listing for actual project descriptions.

**District 8
Location Map**

Lincoln County Biennial Highway Plan Projects



APPENDIX C

UPL Project Information Forms

KYTC Project Identification Form

Cycle Year: 2005
 Priority: L: Med R: Low D: Med
 Tier: 3
 Tier Rank: R: n/a D: n/a
 Overall Top Ten: R: n/a D: n/a

Section I – General Information

Requested by: <u>Unknown</u>
Title/Organization: Date:
Form Completed by: <u>B.Duncan/T.Clouse</u>
Title/Organization: Date:
Revision 1 by:
Title/Organization: Date:
Revision 2 by:
Title/Organization: Date:

UPL Control #: <u>08 069 D0078 22.00</u> Co. #: <u>069</u>		
Parent Control #: _____		
RSE Unique Number: <u>069 KY-78</u>		
District: <u>8</u>	County: <u>Lincoln</u>	Route: <u>KY 78</u>
ADD: <u>BGADD</u>	MPO: _____	SUA: _____
Mode: <u>Highway</u>	State System: <u>State Secondary</u>	
Type: <u>Reconstruction</u>	Funct'l Class: <u>Rural Mjr Coll</u>	
Project Length: <u>10.118</u>	Total Cost Estimate: <u>\$ 41650</u>	
	(P:150 D:4000 R:3500 U:3500 C:30500)	
Possible Funding Sources (Check all that apply):		
<input type="checkbox"/> IM <input type="checkbox"/> NH <input type="checkbox"/> HES <input type="checkbox"/> BR <input checked="" type="checkbox"/> STP <input checked="" type="checkbox"/> SP <input type="checkbox"/> TE <input type="checkbox"/> CMAQ <input type="checkbox"/> PLH <input type="checkbox"/> Other: _____		
Highway Networks (Check all that apply):		
<input type="checkbox"/> NN <input type="checkbox"/> Scenic Byway <input type="checkbox"/> Coal Haul <input checked="" type="checkbox"/> Non NHS <input type="checkbox"/> NHS <input type="checkbox"/> Defense <input type="checkbox"/> Strahnet <input type="checkbox"/> Ext. Wt. <input type="checkbox"/> ADHS () <input type="checkbox"/> Bike <input type="checkbox"/> Forest		
Existing Project Studies (Year):		

Section II – Problem Statement

Route Number: <u>KY 78</u>	(Use Report Year)	Original	Rev. 1	Rev. 2
Beginning MP: <u>2.225</u>	Adequacy Rating:	80.55: (03)	84.5: (05)	: ()
Ending MP: <u>12.343</u>	• CRF: (Year)	0.69: (03)	.56: (05)	: ()
Total Length: <u>10.118</u>	• IRI: (Year)	92: (03)	136: (05)	: ()
	• V/SF: (Year)	0.23: (03)	.11: (05)	: ()
Primary Purpose: <u>Upgrade Existing System(Major)</u>	Current ADT: (Year):	2,160: (05)	2,160: (05)	: ()
	Percent Trucks: (Year):	14.8%: (03)	: ()	: ()
	Projected ADT (HDO): Year:	2025	%Growth: 2.05	ADT: 3,243

Please provide a clear problem statement for this project:

This project involves reconstructing KY 78 from Hustonville to Stanford (MP. 2.225 to MP. 12.343). KY 78 is a classified as a Rural Major Collector that runs East-West connecting US 27 to US 127. This segment of KY 78 consists primarily of 9' driving lanes and 3' shoulders (8.38 of 10.118 miles. The Composite Ratings vary from 65.50 to 98.00, and the Accident Critical Rate Factor ranges from 0.29 to 1.09. Horizontal Alignment rating varies from 1 to 3, indicating there are infrequent curves with design speeds less than the prevailing speed limit.

Section III – Project Description

Project Description Narrative:

Improve connectivity and safety on KY 78 from US 127 in Hustonville to KY 300 in Stanford.

Regional Goals/Objectives Addressed: **To promote the safe and efficient movement of people, goods and services to benefit all of the residents of the region.**

Section IV – Project Area Information:

1. Miscellaneous Roadway Conditions	Access Control:	Existing: <u>Permit</u> Proposed: <u>Permit</u>	Median Type:	Existing: <u>N/A</u> Proposed: <u>N/A</u>	Width: _____ Width: _____
	Lane No./Width:	Existing: <u>2/9-20'</u> Proposed: <u>2/12'</u>	Shoulders:	Existing: <u>DGA</u> Proposed: <u>Asphalt</u>	Width: <u>3'-5'</u> Width: <u>8'</u>
	No. of Bridges:	Existing: <u>9</u> Proposed: <u>9</u>	Other Improvement Projects in Area:	<input type="checkbox"/> None <input checked="" type="checkbox"/> SYP <input type="checkbox"/> Resurface <input type="checkbox"/> Other <u>8-1024</u>	
	Comments:	Existing Bridges at MP 2.275, 3.193, 4.608, 5.762, 7.058, 7.134, 8.647, 11.228, &12.156.			

2. Right of Way	Avg. Width:	Existing: <u>40-50</u>	Source:	<input checked="" type="checkbox"/> HIS <input type="checkbox"/> Plans <input type="checkbox"/> Microfilm <input type="checkbox"/> Other _____	
	Current Primary Use:	<input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Farmland <input type="checkbox"/> Other: _____			
	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Project may require additional R/W.	Possible Relocations :	Homes: _____	Businesses: _____
	Comments:	Estimate requires further study			

3. Utilities	Existing Utilities:	<input checked="" type="checkbox"/> Power <input checked="" type="checkbox"/> Gas <input checked="" type="checkbox"/> Telephone <input checked="" type="checkbox"/> Cable <input checked="" type="checkbox"/> Sewer <input checked="" type="checkbox"/> Water <input type="checkbox"/> ITS <input type="checkbox"/> None <input type="checkbox"/> Other: _____			
	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Project may require Utility Relocations.	Comments: Estimate requires further study		

4. Environmental Impacts	(Check all that apply):				
	<input checked="" type="checkbox"/> Blueline Streams	<input type="checkbox"/> Wetlands	<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Wildlife Managed Areas	<input type="checkbox"/> Historic Properties
	<input checked="" type="checkbox"/> Cemeteries	<input type="checkbox"/> Schools	<input checked="" type="checkbox"/> Churches	<input type="checkbox"/> Endangered Species	<input type="checkbox"/> Public Land/Park
<input type="checkbox"/> Noise Impact	<input type="checkbox"/> Arch. Sites	<input type="checkbox"/> NR Properties	<input checked="" type="checkbox"/> Potential NR Properties	<input type="checkbox"/> Other:	
<input checked="" type="checkbox"/> Potential Contaminated sites:	<input checked="" type="checkbox"/> Gas Stations	<input type="checkbox"/> Landfills	<input type="checkbox"/> Auto Repair	<input type="checkbox"/> Junkyards	<input type="checkbox"/> Other
Comments:	Requires further environmental review				

5. Air Quality	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Project is located in a Maintenance or Nonattainment Area	<input type="checkbox"/> Ozone	<input type="checkbox"/> PM 2.5
	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Project adds through lane capacity		
	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Project results from a Congestion Management Plan		
	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Project is included in TIP/STIP	TIP Page #	STIP Page #
	Comments:			

6. Economic Impacts	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Planning/Zoning Regulations exist in Community	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Project may affect established Business, Commercial or Industrial Districts.
	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	This project has economic impacts on regional/local economy: <input type="checkbox"/> Development <input type="checkbox"/> Tax Revenues <input type="checkbox"/> Employment Opportunity <input type="checkbox"/> Retail Sales <input checked="" type="checkbox"/> Other		
	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Please Describe: Could enhance development opportunities		
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	This project provides direct access to major points of interest: <input type="checkbox"/> Nat'l/State Parks <input type="checkbox"/> Monuments <input checked="" type="checkbox"/> Historic Sites <input type="checkbox"/> Amusement Parks <input type="checkbox"/> US Public Land <input type="checkbox"/> Other			
Comments:	Please Describe: Downtown Stanford attractions			

UPL #: **08 069 D0078 22.00**

County: Lincoln Co. #: 069 Route: KY 78

	<input type="checkbox"/> No <input type="checkbox"/> Yes This project provides direct access to major traffic generators: <input checked="" type="checkbox"/> Shopping Centers <input checked="" type="checkbox"/> Schools <input checked="" type="checkbox"/> Industries <input type="checkbox"/> Military Installations <input type="checkbox"/> Other Please Describe: Various traffic generators
--	--

7. Multimodal Opportunities	This project is a candidate for: (check all that apply)		<input checked="" type="checkbox"/> Bicycle Paths	<input checked="" type="checkbox"/> Sidewalks	<input checked="" type="checkbox"/> Shared-Use Paths
			<input type="checkbox"/> Park/Ride Lots	<input type="checkbox"/> N/A	
	This project improves direct access to: (check all that apply)		<input type="checkbox"/> Airports	<input type="checkbox"/> Railways	<input type="checkbox"/> Riverports
			<input checked="" type="checkbox"/> Trucking Routes	<input type="checkbox"/> N/A	
Type of Public Transportation available:		<input type="checkbox"/> Fixed Route	<input checked="" type="checkbox"/> Demand Response		
Comments:					

8. Social Impacts	This project may affect: (Check all that apply)		<input type="checkbox"/> Neighborhood or Community Cohesion
			<input type="checkbox"/> Travel Patterns (Vehicular, commuter, bicycle, pedestrian)
		<input type="checkbox"/> Household Relocations	
		<input type="checkbox"/> Elderly, disabled, nondrivers, minorities, low-income persons	
		<input checked="" type="checkbox"/> No adverse effects to neighborhoods apparent.	
Comments/Impact Descriptions:			

Section V – Cost Estimate Information (to be completed by Hwy District Office):

Cost Estimate by Phase:

Phase	Original Estimate	By:	Revision 1	Date	By:	Revision 2	Date	By:
Planning	\$150,000	T.C.						
Design	\$4,000,000	T.C.						
ROW	\$3,500,000	T.C.						
Utilities	\$3,500,000	T.C.						
Construction	\$25,300,000	T.C.	\$30,500,000	2/20/07	T.C.			
Total Cost	\$36,450,000	T.C.	\$41,650,000	2/20/07	T.C.			

Estimate Procedure Used:

Original Estimate:	Revision 1:	Revision 2:
<input type="checkbox"/> Per Mile@ \$ _____ Terrain: Rolling	<input type="checkbox"/> Per Mile@ \$ _____ Terrain: Rolling	<input type="checkbox"/> Per Mile@ \$ _____ Terrain: _____
<input type="checkbox"/> Detailed Estimate with Calculations Attached	<input type="checkbox"/> Detailed Estimate with Calculations Attached	<input type="checkbox"/> Detailed Estimate with Calculations Attached

<p><u>Estimate Assumptions:</u> Assumptions used: Design \$400,000/mile, R/W - used attached detailed cost estimate, Utilities \$350,000/mile, Construction \$2,500,000/mile</p>	<p><u>Estimate Assumptions:</u> Construction \$3,000,000/mile</p>	<p><u>Estimate Assumptions:</u></p>
<p>Estimate Class: E-Requires further study</p>	<p>Estimate Class: _____</p>	<p>Estimate Class: _____</p>

Section VI – Attachments:

The following items are attached to this document: Location Map Photograph(s) Other:

Comments:

Lincoln County KY-78
08 069 D0078 22.00

Boyle County

Garrard County

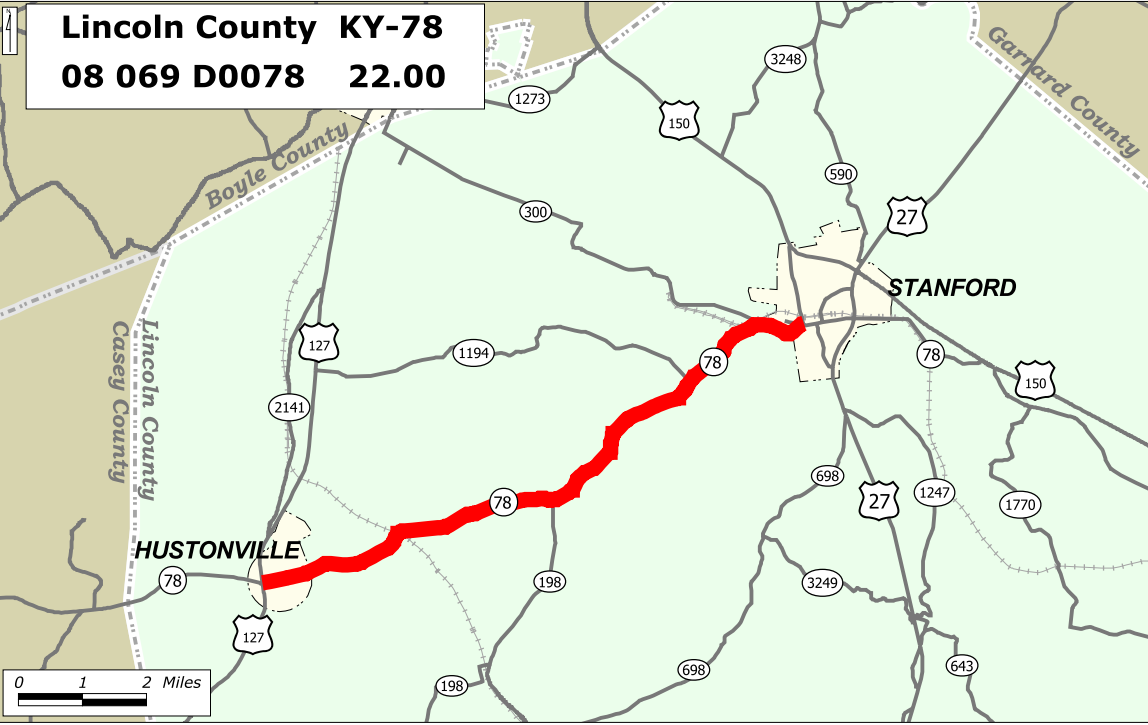
Casey County
Lincoln County

STANFORD

HUSTONVILLE

0 1 2 Miles

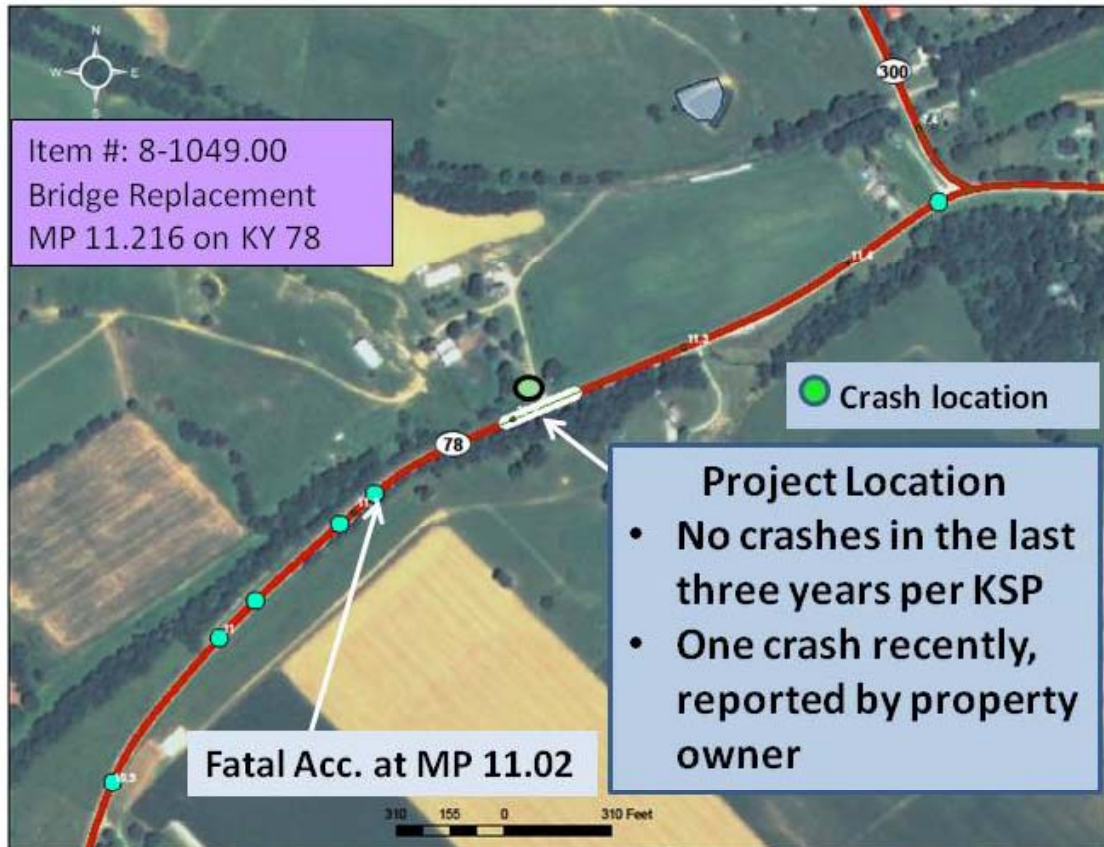
7



APPENDIX D
CRASH DATA

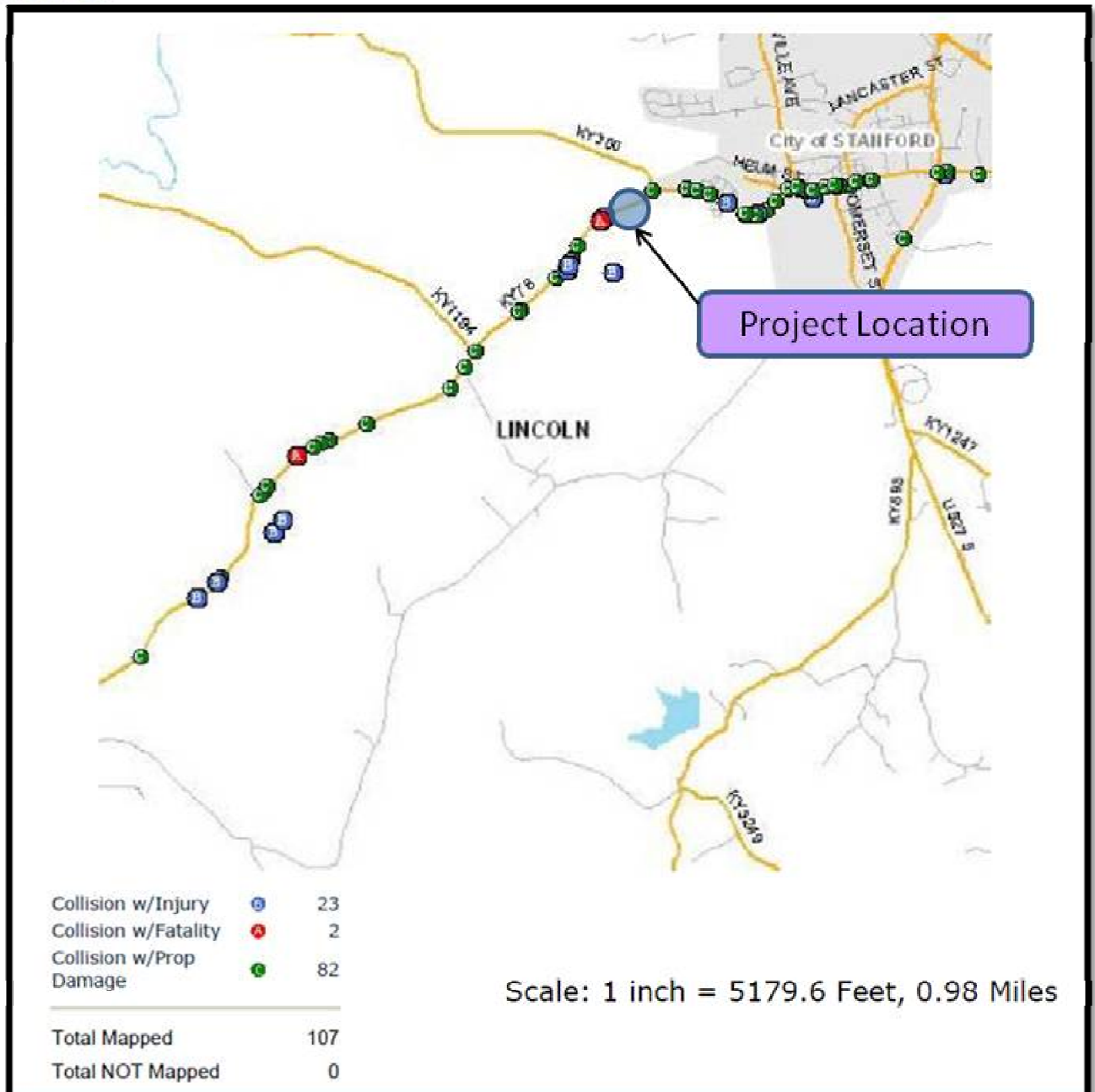
Safety – KY 78

Collision Locations (August 1, 2007 to July 29, 2010 data)



KY 78 CRASH DATA (8/07 to 7/10)

Criteria: Collision Date is between 8/1/2007 and 7/29/2010 **And** Roadway Number is ky0078 **And** County Name of: LINCOLN



APPENDIX E

KYTC COMMON GEOMETRIC PRACTICE GUIDELINES

Project Location

**COMMON GEOMETRIC PRACTICES
RURAL ARTERIAL ROADS (OTHER THAN FREEWAYS) ④**

		TRAFFIC VOLUME										
		UNDER 400 A.D.T.			400-1500 A.D.T.			1500-2000 A.D.T.			OVER 2000 A.D.T.	
DESIGN SPEED ⑥		40-50 M.P.H.			40-70 M.P.H.			40-70 M.P.H.			40-70 M.P.H.	
PAVEMENT WIDTH (FEET)	40 MPH	22			22			22			24	
	45 MPH											
	50 MPH											
	55 MPH	24			24			24				
	60 MPH											
	65 MPH											
70 MPH												
MINIMUM GRADED SHOULDER WIDTH (FT) ⑤	ALL SPEEDS	4			6			6			8	
MINIMUM CLEAR ROADWAY WIDTH OF NEW AND RECONSTRUCTED BRIDGES	ALL SPEEDS	APPROACH ROADWAY WIDTH										
MINIMUM RADIUS (FEET)	DESIGN SPEED	eMAX. 4%			eMAX. 6%			eMAX. 8%				
	30 MPH	300			275			250				
	35 MPH	420			380			350				
	40 MPH	565			510			465				
	45 MPH	730			660			600				
	50 MPH	930			835			760				
	55 MPH	1190			1065			965				
	60 MPH	1505			1340			1205				
	65 MPH	—			1660			1485				
70 MPH	—			2050			1820					
NORMAL PAVEMENT CROSS SLOPES ③	RATE OF CROSS SLOPE = 2%											
NORMAL SHOULDER CROSS SLOPES	EARTH = 8%						PAVED = 4%					
MAXIMUM GRADE (PERCENT)	M.P.H.	30	35	40	45	50	55	60	65	70	75	80
	LEVEL	-	-	5	-	4	-	-	3	-	-	-
	ROLLING	-	-	6	-	5	-	-	4	-	-	-
	MOUNTAIN	-	-	8	7	-	6	-	-	5	-	-
MINIMUM STOPPING SIGHT DISTANCE ①	(FEET)	200	250	305	360	425	495	570	645	730	820	910
MINIMUM PASSING SIGHT DISTANCE ②	(FEET)	1090	1280	1470	1625	1835	1985	2135	2285	2480	2580	2680

- ① MINIMUM STOPPING SIGHT DISTANCES ARE BASED ON HEIGHT OF EYE OF 3.5 FT AND HEIGHT OF OBJECT OF 2.0FT. BOTH HORIZONTAL AND VERTICAL ALIGNMENTS ARE CONSIDERED.
- ② MINIMUM PASSING SIGHT DISTANCES ARE BASED ON HEIGHT OF EYE 3.5 FT AND HEIGHT OF OBJECT OF 3.5 FT. BOTH HORIZONTAL AND VERTICAL ALIGNMENTS ARE CONSIDERED.
- ③ NORMAL PAVEMENT CROSS SLOPES ON BRIDGES SHALL BE 2%.
- ④ FOR GUIDANCE ON FREEWAYS, REFER TO AASHTO, "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS", CURRENT EDITION.
- ⑤ WIDEN 3 FT FOR GUARDRAIL.
- ⑥ JUSTIFICATION FOR A DESIGN SPEED LESS THAN THE REGULATORY OR POSTED SPEED MUST BE DOCUMENTED AND AVAILABLE FOR REVIEW IN THE PROJECT FILES.

APPENDIX F
EXISTING ROADWAY PLANS

COMMONWEALTH OF KENTUCKY
STATE HIGHWAY DEPARTMENT

COUNTY OF	STATE ROUTE	SECTION	YEAR	SHEET NO.	TOTAL SHEETS
LINCOLN	23	C-5	1928	7	40

1-11-11
A-15-2

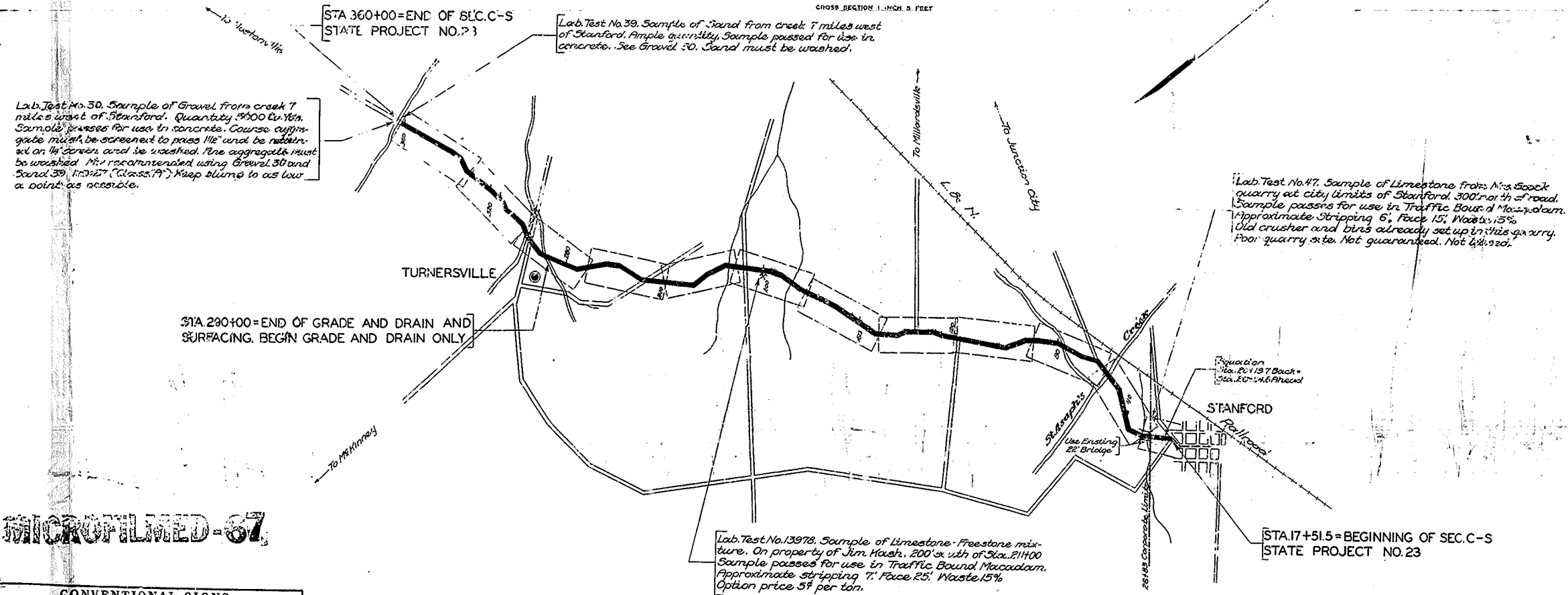
SHEET NO.	DESCRIPTION
1	LAYOUT SHEET
2	TYPICAL SECTIONS—SUMMARY OF QUANTITIES
3	STANDARD DRAWING SHEET
4 TO 15	PLAN AND PROFILE SHEETS
16 TO 18	REFERENCE SHEETS
19 TO 20	GENERAL SECTION SHEETS
21	BRIDGE SHEETS

PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY

STATE PROJ. NO. 23 SEC. C-5

LINCOLN CO.

SCALES
PLAN 1 INCH 100 FEET
PROFILE VIEW 1 INCH 10 FEET
GROSS SECTION 1 INCH 5 FEET



MICROFILMED - 87

CONVENTIONAL SIGNS	
COUNTY LINE	1" = 100'
CORPORATE LIMITS	1" = 100'
SURVEY LINE	1" = 100'
PROPOSED RIGHT OF WAY	1" = 100'
GRADE LINE	1" = 100'
GROUND LINE	1" = 100'
TRAVELED WAY	1" = 100'
RAILROAD	1" = 100'
FENCES (EXCEPT STONE & HEDGE)	1" = 100'
STONE FENCE	1" = 100'
WEDGE FENCE	1" = 100'
TREES & STUMPS	1" = 100'
PIPE LINE	1" = 100'
TELEPHONE POLES	1" = 100'
PIPE CULVERT	1" = 100'
CONCRETE CULVERT & BRIDGE	1" = 100'
LARGE STREAM	1" = 100'
SMALL STREAM	1" = 100'
BENCH MARKS	1" = 100'
ROAD INTERSECTIONS	1" = 100'
HARBOR	1" = 100'
BUILDINGS	1" = 100'

LAYOUT MAP	
SCALE 1 INCH	2000 FEET
GROSS LENGTH	34,243.6 LIN. FT. 6.482 MILES
DEEMED FOR EQUALITY	4.8 LIN. FT.
NET LENGTH	34,221.6 LIN. FT. 6.481 MILES
NOT INCLUDED	
RAILROAD CROSSINGS No.	220 LIN. FT.
BRIDGE	220 LIN. FT.

NO SECT'S.

KENTUCKY STATE HIGHWAY DEPARTMENT
COUNTY OF LINCOLN
STANFORD-HUSTONVILLE ROAD

STATE PROJECT	SECTION	DATE
No. 23	C-5	1928

SURVEYED	1927 BY L. B. Tyson	FIELD ENGINEER
PLANS CHECKED	9-17 1928 BY T. B. Brown	CHIEF DRAFTSMAN
SURVEY AND PLANS APPROVED	19 BY	LOCATING ENGINEER
SURVEY AND PLANS APPROVED	19 BY	ENGINEER OF CONSTRUCTION
APPROVED	19 BY	STATE HIGHWAY ENGINEER
APPROVED	19 BY	CHAIRMAN STATE HIGHWAY COMMISSION

RECOMMENDED FOR APPROVAL
DISTRICT ENGINEER—BUREAU OF PUBLIC ROADS

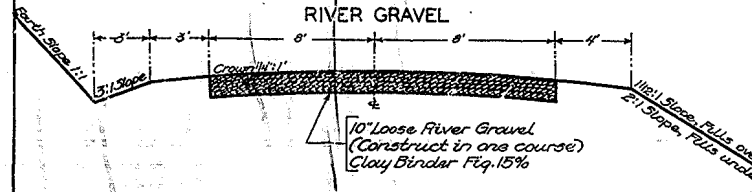
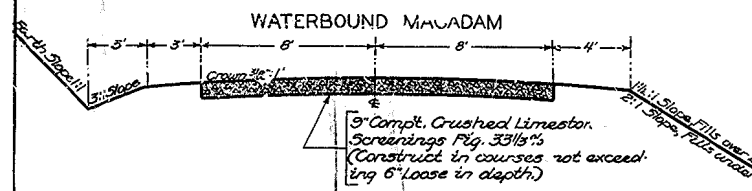
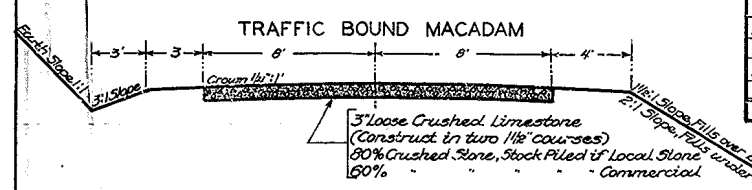
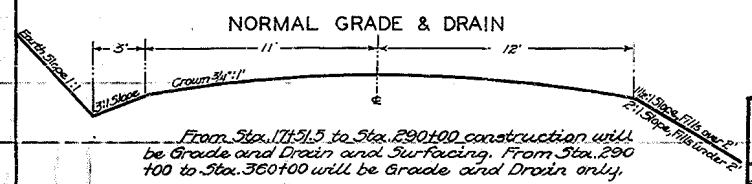
RECOMMENDED FOR APPROVAL
CHIEF ENGINEER—BUREAU OF PUBLIC ROADS

APPROVED
DIRECTOR—BUREAU OF PUBLIC ROADS

SP 23 - 0 - 8

TYPICAL SECTION AND SUMMARY SHEET

COUNTY: Lincoln
 STATE: Neb.
 SECTION: C-3
 LOCAL DISTRICT: 1928
 SHEET NO.: 2
 TOTAL SHEETS: 2



GENERAL NOTES

The Department's 1926 Standard Specifications will govern on this project.
 All curves to be banked and widened according to Standards.
 The contractor is not to order materials for drainage structures until the quantities have been checked by the Engineer.
 Options on local quarries or pits are secured by the State Highway Department for the protection of the Contractor. Payment of the option price for materials from such quarries or pits will be made by the Contractor.
 For typical sections in solid rock cuts see drawings Nos. 1 & 2 for Grade and Drain, and Nos. 3, 3.4 for Grade, Drain and Surfacing on Standard Drawings Sheet No. 3.
 Quantities for this project have been computed using a template designed for surfacing as shown on the cross sections. The actual construction will be Grade, Drain and Surfacing from Sta. 171+5 to Sta. 290+00, and Grade and Drain only from Sta. 290+00 to Sta. 360+00 as shown on the Typical Section Sheet and the grade line shown on these plans must be shifted slightly to properly balance the quantities.

GENERAL SUMMARY

Station To Station	Clear And Grubb. Acres	EXCAVATION			Overhaul Excav. Yd. Sta.	Rip Rap Cu. Yds.	Scarify And Reshape Sq. Yds.	Final Dressing 100 Sq. Yds.	Remove Pipe Lin. Ft.	Relaid Pipe Lin. Ft.	Remove Stone Fence Cu. Yds.	Class 'A' C.M.R. for Pav. Ent.			
		Common	Solid Rock	For Struct.								18"	24"		
Unit To Bid On			Cubic	Yards								Lin. Ft.	Lin. Ft.		
4 171+5 - 32+50	1.72	357		424	1419	1600									
5 32+50 - 62+00	3.39	3415	195	435	1470	2100									
6 62+00 - 91+15	4.03	1509	1664	434	369	2660									
7 91+15 - 122+00	3.54	1237			287	3300									
8 122+00 - 150+00	3.21	963		55	436	3300									
9 150+00 - 181+50	3.96	732		814	533	3500									
10 181+50 - 20+00	4.71	762		1083		2470									
11 20+00 - 240+00	4.02	774		800	581	3470				138					
12 240+00 - 273+00	3.79	923		164	24	3500									
13 273+00 - 301+20	3.53	1595		1296	1177	260				25					
14 301+20 - 330+75	4.55	6772	5932	337	756					218					
15 330+75 - 360+00	3.63	2936	675	583	2807					409					
Totals	44.08	22075	6466	6425	483	9859	100	26180	342	50	290	790	300	702	26

Estimated 100 Cu. Yds. Removing Stone Masonry.

PIPE SUMMARY

Station	Diameter	Length	Class 'A' Conc. For H. Walls	Structure Excav. Cubic Yards	Remarks
Unit Bid On					
4 31+00	30	30	3.14		1-ELL HDW
5 36+00	30	30	3.14		
6 62+50		30	4.00		2-Std. HWs
6 69+50		27	3.49		1-Rsd. H.W.
6 71+43**		30	3.02		2-Std. HWs
6 81+00	30	30	3.14		1-ELL H.W.
6 85+00	30	30	3.14		
6 89+00	30	30	3.14		
7 99+00		30	4.00		2-Std. HWs
8 147+00		27	4.54		1-Rsd. H.W.
9 152+50		27	3.02		2-Std. HWs
9 176+21		27	4.54		1-Rsd. H.W.
9 181+00		27	3.49		
10 193+43		27	4.54		
10 203+00		27	3.02		2-Std. HWs
11 227+00	30	33	3.14		1-ELL H.W.
11 225+00	30	30	3.14		
12 263+00		27	3.02		2-Std. HWs
12 268+00		27	3.49		1-Rsd. H.W.
12 271+50		27	3.49		
13 275+40		27	3.02		2-Std. HWs
13 279+30		27	4.54		1-Rsd. H.W.
13 282+00		27	3.49		
13 294+00		27	3.49		
14 308+00		54	3.02		2-Std. HWs
14 310+43		36	3.02		
14 316+53		66	4.00		
14 327+50	30	30	3.14		1-ELL H.W.
15 332+00		34	3.02		2-Std. HWs
15 337+00		30	3.02		
15 344+00	30	30	3.14		1-ELL H.W.
15 349+00	30	30	3.14		
15 354+00	30	30	3.14		
Totals	50'	234	112.82	113 *	

* Included in General Summary.
 ** This pipe is to be eliminated on construction.

BRIDGE & CULVERT SUMMARY

Final Quantities Noted 11-5-28

Station	Size	Concrete			Reinf. Steel	Class 'B' Concrete	Struct. Excav. Cu. Yds.	Foundation Excav.				Remove Exist. Struct. Each	Grade	Draw-ing No.	Std. or Spcl.
		'A'	'D'	'F'				Common	Rock	Dry	Wet				
Unit To Bid On		Cu. Yds	Lbs.	Cu. Yds	Cu. Yds	Cu. Yds	Cubic	Yards							
5 54+50	10x9x26	62.1	4710		30							934.58	3554	Spcl.	
6 71+50	10x8x26	63.8	4140		150							950.24	3555	"	
11 212+6.5	2-16' Deck G.I.	93.7	3571	12550			100	50	10			936.00	3556	"	
13 289+00	2-18' Deck G.I.	54.7	4980		140							933.00	3597	"	
13 295+84.5	2-18' Deck G.I.	81.8	27	16580			110	70	10			931.00	3558	"	
14 321+50	8x6x49	52.1	6120		50							950.19	3558	Std.	
Totals		408.2	5.2	883	46080		370 *	210	120	20		3			

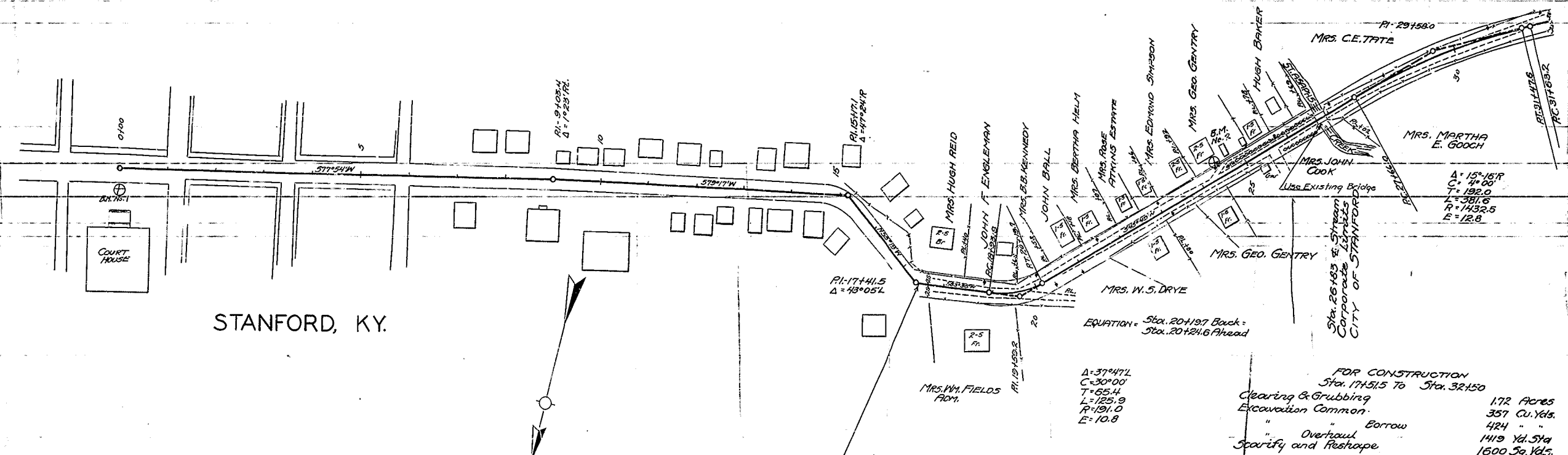
* Included in General Summary.

	Lin. Ft.	Miles	Sq. Yds.
Gross Length	272436	5.159	
Deduct For Equalizer	49		
Net Length	271472	5.141	48262.4
Deduct For Bridge	96.0		
Add For Curve Widening	275.8		482.1
Total Surfacing			48744.5

TRAFFIC / BOUND MACADAM		
3" Loose Crushed Limestone *	18500 Tons	300 Tons
Construct in Two 1 1/2" Courses	4871 Tons	
80% Additional Crushed Limestone Stock Piled (Local)	3897 Tons	
60% (Commercial)	2922 "	
WATERBOUND MACADAM		
3" Comp. Crushed Limestone *	21959 Tons	300 Tons
Construct in Courses not to exceed 6" Loose in depth		
Screenings Fig. 33 1/3%	2318 Tons	
RIVER GRAVEL		
10" Loose River Gravel	16958 Tons	300 Tons
Construct in one course		
Clay Binder Fig. 15%	2031 Cu. Yds	

* Stripping Excavation Common Solid Rock
 T.B.M. 2300 Cu. Yds. 63000 Yds.
 500 1500

COUNTY NAME	STATE PROJ. NO.	SECTION NO.	YEAR	SHEET TOTAL	SHEET NO.
LINCOLN	23	C-5	1928	4	4

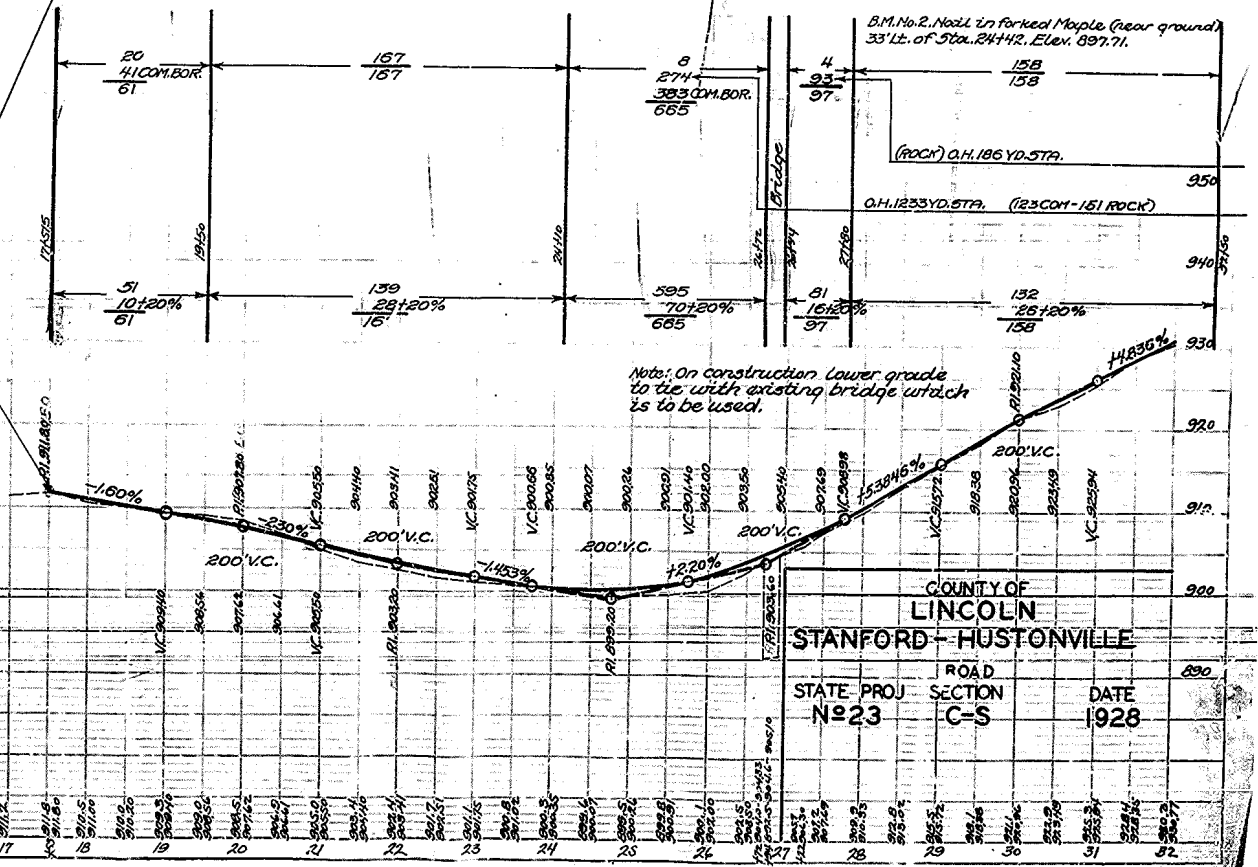


STANFORD, KY.

B.M. No. 1, U.S.G.S. B.M. about 75' N. of Court House, Marker in stone block at edge of sidewalk, Elev. 912.00

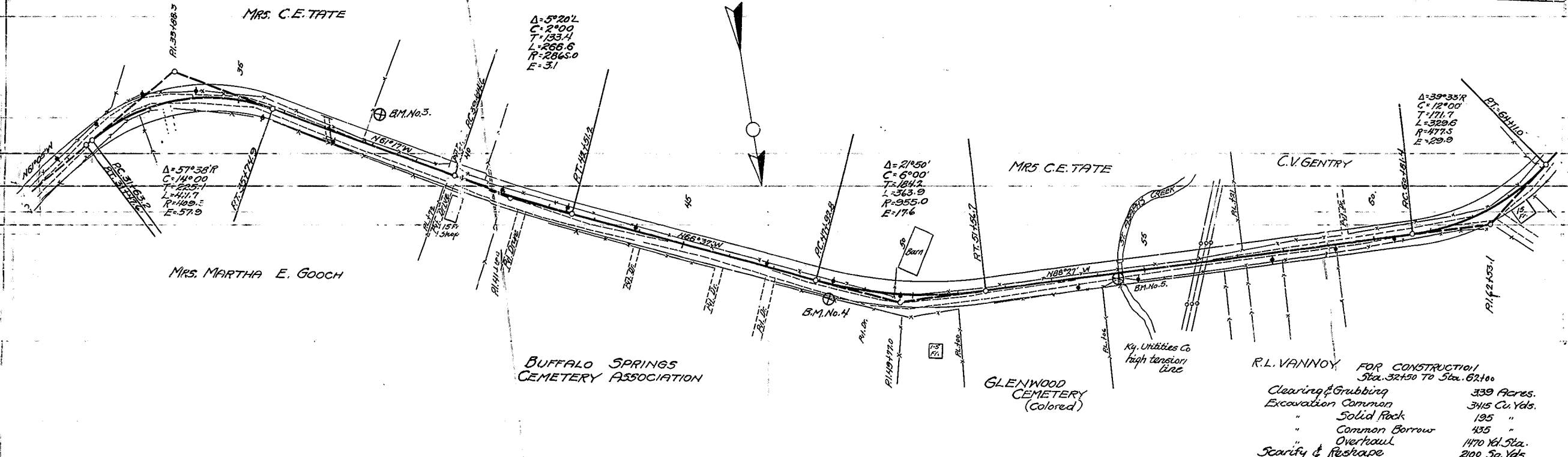
Note: Quantities for this project have been computed using a template designed for surfacing as shown on the cross sections. The vertical construction will be Grade and Drain and Surfacing from Sta. 17+51.5 to Sta. 29+100 and Grade and Drain only from Sta. 29+100 to Sta. 350+00 as shown on the typical section sheet and the grade line shown on these plans must be shifted slightly from Sta. 29+100 to Sta. 350+00 to properly balance the quantities.

STA. 17+51.5 BEGIN
S.P. No. 23. SECC-S.



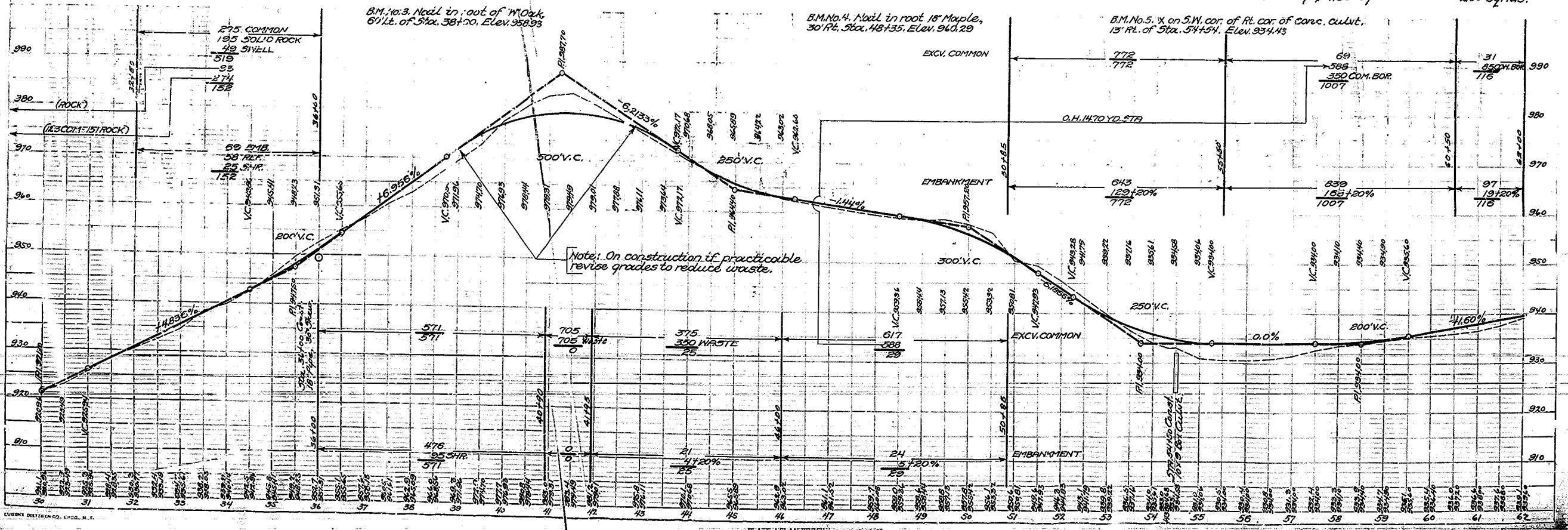
COUNTY OF
LINCOLN
STANFORD - HUSTONVILLE
ROAD
STATE PROJ. NO. 23 SECTION C-S DATE 1928

COUNTY NAME	STATE	SECTION NO.	YEAR	SHEET NO.	TOTAL SHEETS
LINCOLN	23	C-5	1928	5	10



R.L. VANNOY FOR CONSTRUCTION
Sta. 32+50 TO Sta. 62+00

Clearing & Grubbing	339 Acres.
Excavation Common	3415 Cu. Yds.
Solid Rock	195 "
Common Borrow	435 "
Overhaul	1470 Vol. Sta.
Scarify & Reshape	200 Sq. Yds.



PROFILE
ROUTE BOOK
L. S. W. 1928

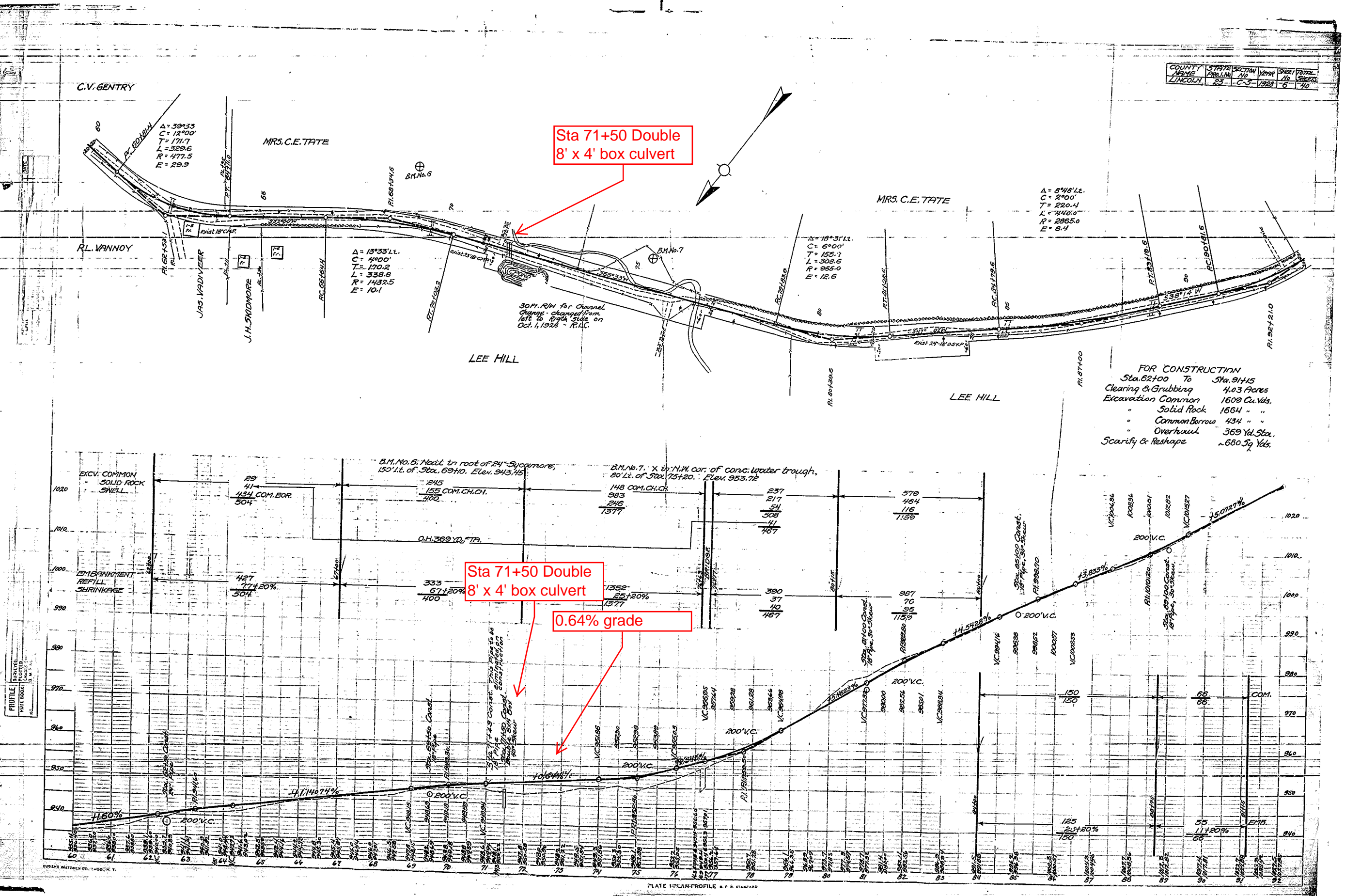
COUNTY NAME	STATE	SECTION	YEAR	SHEET NO.	TOTAL SHEETS
LINCOLN	25	C-5	1928	6	40

Sta 71+50 Double 8' x 4' box culvert

Sta 71+50 Double 8' x 4' box culvert

0.64% grade

FOR CONSTRUCTION
 Sta. 62+00 To Sta. 91+15
 Clearing & Grubbing 4.03 Acres
 Excavation Common 1608 Cu. Yds.
 " Solid Rock 1664 " "
 " Common Borrow 434 " "
 " Overhaul 369 Yd. Sta.
 Scarify & Reshape ~680 Sq Yds.



PROFILE: BURNED
 PROFILE: UNBURNED
 PROFILE: UNBURNED



APPENDIX G
INVENTORY AND INSPECTION REPORTS

NATIONAL BRIDGE INVENTORY

KENTUCKY INVENTORY AND APPRAISAL REPORT

(8) STRUCTURE NUMBER: 069B00027N

*******IDENTIFICATION*******

(1) STATENAME: **KENTUCKY**
 (5) INVENTORY ROUTE (ON/UNDER): **131000780**
 (2) DISTRICT AGENCY DISTRICT: **8**
 (3) COUNTY CODE: **69** (4) PLACECODE: **0000**
 (6) FEATURES INTERSECTED: **PEVYHOUSE BRANCH**
 (9) LOCATION: **.30 MI WEST OF JCT KY 300**
 (11) MILE POINT: **11.22**
 (7) FACILITY CARRIED: **KY-78**
 (12) BASE HIGHWAY NETWORK:
 (13) LRS INVENTORY ROUTE & SUBROUTE:
 (16) LATITUDE: **37.527151935 N DEGREES**
 (17) LONGITUDE: **-84.685301465 W DEGREES**
 (98) BORDER BRIDGE STATECODE: **- %SHARED:**
 (99) BORDER BRIDGE STRUCTURE NUMBER:

*******STRUCTURE TYPE AND MATERIAL*******

(43) STRUCTURE TYPE MAIN: **119 - Concrete Culvert**
 (44) STRUCTURE TYPE APPR: **I-2 -Not Coded**
 (45) NUMBER OF SPANS IN MAIN UNIT: **2**
 (46) NUMBER OF APPROACH SPANS: **0**
 (107) DECK STRUCTURE TYPE: **N - Not Applicable**
 (108) WEARING SURFACE/PROTECTIVE SYSTEM
 (108A) TYPE OF WEARING SURFACE: **6 - Not Applicable**
 (108B) TYPE OF MEMBRANE: **8 - Unknown**
 (108C) TYPE OF DECK PROTECTION: **8 - Unknown**

*******AGE AND SERVICE*******

(27) YEAR BUILT: **1930**
 (106) YEAR RECONSTRUCTED: **0**
 (42A) TYPE OF SERVICE-ON: **1 - Highway**
 (42B) TYPE OF SERVICE-UNDER: **5 - Waterway**
 (28) LANES ON STRUCTURE: **2** UNDER STRUCTURE: **0**
 (29) AVERAGE DAILY TRAFFIC: **3230**
 (30) YEAR OF ADT: **2009** (109) TRUCK ADT%: **7**
 (19) BYPASS DETOUR LENGTH: **5 mi.**

*******GEOMETRIC DATA*******

(48) LENGTH OF MAXIMUM SPAN: **8.0 ft.**
 (49) STRUCTURE LENGTH: **27.0 ft.**
 (50) CURB OR SIDE WALK LEFT: **0.0 ft.** RIGHT: **0.0 ft.**
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB: **0.0 ft.**
 (52) DECK WIDTH OUT TO OUT: **0.0 ft.**
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS): **20.0**
 (33) BRIDGE MEDIAN: **No**
 (34) SKEW: **45** STRUCTURED FLARED: **No**
 (10) INVENTORY ROUTE MIN VERT CLEAR: **100.0 ft.**
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR: **22 ft.**
 (53) MIN VERT CLEAR OVER BRIDGE RDWY: **99.99 ft.**
 (54) MIN VER UNDER CLEAR REF: **N (b) 0 ft.**
 (55) MIN LAT UNDER CLEAR RT REF: **N (b) 0 ft.**
 (56) MIN LAT UNDER CLEAR LEFT: **0 ft.**

*******NAVIGATION DATA*******

(38) NAVIGATION CONTROL: **0 - No navigation control on waterway**
 (111) PIER PROTECTION: **1 - Navigation protection not required**
 (39) NAVIGATION VERTICAL CLEARANCE: **0.0 ft.**
 (116) VERT-LIFT BRIDGE NAV MIN VERT CLEARANCE: **0.0 ft.**
 (40) NAVIGATION HORIZONTAL CLEARANCE: **0.0 ft.**
SUFFICIENCY RATING: 43.20
STATUS: 1 - Structurally Deficient

*******CLASSIFICATION*******

(112) NBIS BRIDGE LENGTH: **Yes**
 (104) HIGHWAY SYSTEM: **0 - Inventory Route is not on the NHS**
 (26) FUNCTIONAL CLASS: **07 - Major Collector**
 (100) STRAHNET HIGHWAY: **0 - The inventory route is not a STRAHNET route**
 (101) PARALLEL STRU: **N - No parallel structure exists**
 (103) TEMPORARY STRUCTURE: **Not Applicable**
 (102) DIRECTION OF T: **2 - 2-way traffic**
 (105) FEDERAL LANDS HIGHWAYS: **0 - Not applicable**
 (110) DESIGNATED NATIONAL NETWORK: **0 - The inventory route is not part of the national network for trucks**
 (20) TOLL: **3 - On Free Road**
 (21) MAINTAIN: **1 - State Highway Agency**
 (22) OWNER: **01 - State Highway Agency**
 (37) HISTORICAL SIGNIFICANCE: **5 - Bridge is not eligible for the National Register of Historic Places**

*******CONDITION*******

(58) DECK: **N**
 (59) SUPERSTRUCTURE: **N**
 (60) SUBSTRUCTURE: **N**
 (61) CHANNEL AND CHANNEL PROTECTION: **6**
 (62) CULVERTS: **4**

*******LOAD RATING AND POSTING*******

(31) DESIGN LOAD: **2 - H 15**
 (63) OPERATING RATING METHOD: **1 - Load Factor**
 (64) OPERATING RATING: **#COMPUTATION 25.100**
 (65) INVENTORY RATING METHOD: **1 - Load Factor**
 (66) INVENTORY RATING: **15.0 Tons**
 (70) BRIDGE POSTING: **5 - Equal to or above the legal loads**
 (41) STRUCTURE OPEN, POSTED OR CLOSED: **A - Open, no restriction**

*******APPRAISAL*******

(67) STRUCTURAL EVALUATION: **4**
 (68) DECK GEOMETRY: **N**
 (69) UNDERCLEARANCE, VERTICAL & HORIZONTAL: **N**
 (71) WATERWAY ADEQUACY: **7**
 (36) TRAFFIC SAFETY FEATURES: **NNNN**
 (113) SCOUR CRITICAL BRIDGES: **8**

*******PROPOSED IMPROVEMENTS*******

(75) TYPE OF WORK:
 (76) LENGTH OF STRUCTURE IMPROVEMENT: **0 ft.**
 (94) BRIDGE IMPROVEMENT COST: **\$0.00**
 (95) ROADWAY IMPROVEMENT COST: **\$0.00**
 (96) TOTAL PROJECTION COST: **\$0.00**
 (97) YEAR OF IMPROVEMENT COST ESTIMATE:
 (114) FUTURE ADT: **3876**
 (115) YEAR OF FUTURE ADT: **2029**

*******INSPECTIONS*******

(90) INSPECTION DATE: **4/8/2010**
 (92) CRITICAL FEATURE INSPECTION:
 (92A) FRACTURE CRITICAL DETAIL: **N**
 (92B) UNDERWATER INSPECTION: **N**
 (92C) OTHER SPECIAL INSP: **N**
 (91) FREQUENCY: **24 months**
 (93) CFI DATE:
 (93A): **1/1/1901**
 (93B): **1/1/1901**
 (93C): **1/1/1901**

069B00027N

KYTC Bridge Inspection Report

Summary:

Inspection Date: 4/8/2010
 Inspector: LLINKES (135)
 Primary Type: Standard (24 Months)

Types of Inspections Performed:

National Bridge Inventory: Y
 Element: Y
 Fracture Critical: N
 Underwater: N
 Other Special: N

Inspector Signature: _____

District Review Date: 4/8/2010

District Reviewer: EDICK (134)

IDENTIFICATION

Bridge ID (8):	069B00027N	MAP BRIDGE	District Number:	8
Route Carried (7):	KY-78		County (3):	69 Lincoln
Mile Point:	11.216		Feature Intersected (6):	PEVYHOUSE BRANCH
Location (9):	.30 MI WEST OF JCT KY 300		Road Name:	KY HIGHWAY 78
Structure Description:	27 Foot - 2 Span Concrete Culvert (includes frame culverts)			

NBI CONDITION

SCHEDULE TAB

Deck (58):	N	Schedule:	Required (Y/N)	Last Date	Frequency	Next Date
Superstructure (59):	N	NBI (90):		4/8/2010	(91): 24 mos	4/8/2012
Substructure (60):	N	Fracture Critical (92A):	N	(93A): 1/1/1901	(92A): mos	1/1/1901
Culverts (62):	4	Underwater (92B):	N	(93B): 1/1/1901	(92B): mos	1/1/1901
Channel/Protection (61):	6	Other Special (92C):	N	(93C): 1/1/1901	(92C): mos	1/1/1901
		Elemental:	NA		24 mos	4/8/2012

Load Rating and Posting

WATERWAY

Truck Type	Typ I	Typ II	Typ III	Typ IV	Gross	Scour Critical (113):	8
Recomm. Posting:	-1	-1	-1	-1	-1	Observed 113 Rating:	6
Field Posting:	-1	-1	-1	-1	-1	Waterway Adeq. (71):	7
Posting Status (41):	A Open, no restriction						
Signs Posted:	Cardinal:	N	Non-Cardinal:	N			

DECK/WEARING SURFACE

Deck Type (107):	N N/A (NBI)						
Wearing Surface/Protective System (108):	Type:	6	Membrane:	8	Protection:	8	
Traffic Safety Features (36):	Bridge Rail:	N	Transition:	N	Appr. Rail:	N	Rail Ends: N
Overlay:	N						
Overlay Type:	-1						
Overlay Thickness:	-1.00						

Vertical Clearances

Minimum Vertical Overclearance (53):	99.99
Minimum Vertical Underclearance (54):	0.00
Maximum Vertical Clearance (10):	99.99
Minimum Vertical Clearance:	99.99

Sufficiency Ratings

SR:	43.20	SD/FO:	1 Structurally Deficient
-----	-------	--------	--------------------------

Element Condition State Data

Elm/Env	Description	Units	Total Qty.	Qty. CS1	Qty. CS2	Qty. CS3	Qty. CS4	Qty. CS5
241/1	Concrete Culvert	LF	74.00	0.00	0.00	74.00	0.00	0.00
334/1	Metal Rail Coated	LF	28.00	28.00	0.00	0.00	0.00	0.00
361/1	Scour Smart Flag	EA	1.00	0.00	1.00	0.00	0.00	0.00

KYTC Bridge Inspection Report

Summary:

Inspection Date: 4/8/2010
 Inspector: LLINKES (135)
 Primary Type: Standard (24 Months)

Types of Inspections Performed:

National Bridge Inventory: Y
 Element: Y
 Fracture Critical: N
 Underwater: N
 Other Special: N

Element Condition State Data

Elm/Env	Description	Units	Total Qty.	Qty. CS1	Qty. CS2	Qty. CS3	Qty. CS4	Qty. CS5
500/1	RC Culv Wing	LF	30.00	0.00	0.00	30.00	0.00	0.00
501/1	RC Culv Head	LF	48.00	0.00	0.00	48.00	0.00	0.00
612/1	Chan Algn	EA	1.00	0.00	1.00	0.00	0.00	0.00
613/1	Vegetation	EA	1.00	1.00	0.00	0.00	0.00	0.00

Element Condition State Data

Str	Unil	Elm/Env	Description	Description
1		241/1	Concrete Culvert	Concrete in barrels has advanced deterioration with vertical cracking. large amount of scaling in top of barrels 1/2" to 1" deep
1		334/1	Metal Rail Coated	< none >
1		361/1	Scour Smart Flag	Local scour at the NE. wing on the upstream side.
1		500/1	RC Culv Wing	Concrete wings are scaled, cracked and spalled.
1		501/1	RC Culv Head	Concrete headwalls are spalled on top with heavy deterioration and scale on the face.
1		612/1	Chan Algn	Flow is all in barrel 2. Alignment is poor also in part to heavy build up of sediment and drift in the channel that is diverting the stream flow.
1		613/1	Vegetation	< none >

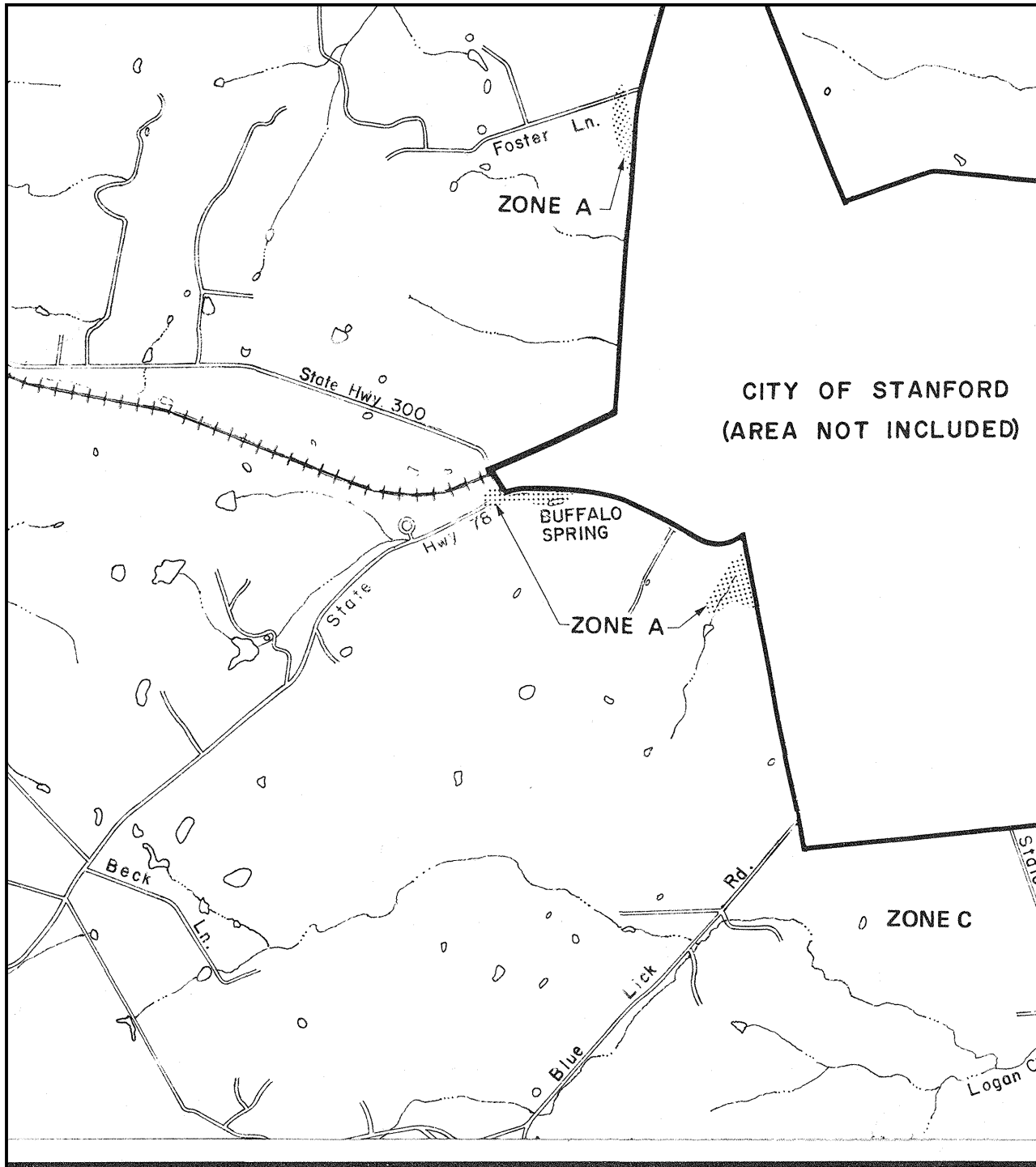
BRIDGE.Notes

Work Candidates

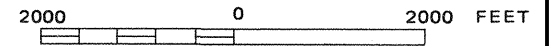
Inspector Candidates:

Candidate ID:	Status	Priority	Assigned	Action	Elem	Date Recommended
A-KYTC-0F961220-00000043	Approved	Medium	Unassigned	31	241	4/10/2008
A-KYTC-0F961220-00000045	Approved	High	Unassigned	31	612	4/10/2008
A-KYTC-0F961220-00000047	Approved	High	Unassigned	31	609	4/10/2008

APPENDIX H
FIRM MAPS OF THE STUDY AREA



APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

LINCOLN COUNTY,
KENTUCKY
(UNINCORPORATED AREAS)

PANEL 25 OF 125

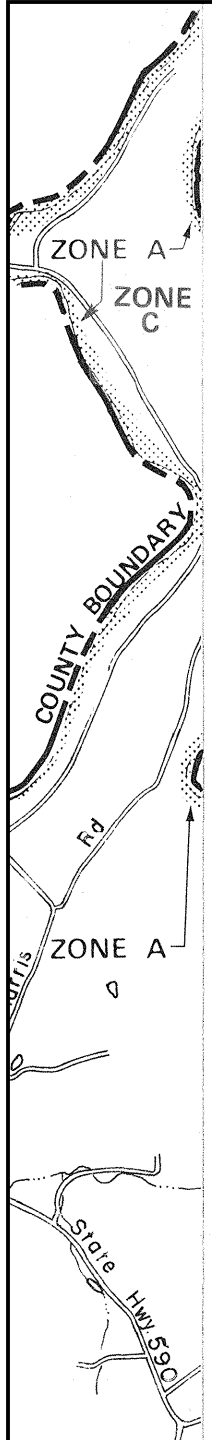
COMMUNITY-PANEL NUMBER
210325 0025 B

EFFECTIVE DATE:
JULY 3, 1986



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



ZONE C

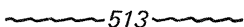


ZONE A

ZONE C

Zone Designations*

Base Flood Elevation Line
With Elevation In Feet**



Base Flood Elevation in Feet
Where Uniform Within Zone**

(EL 987)

Elevation Reference Mark

RM7x

Zone D Boundary



River Mile

•M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

***EXPLANATION OF ZONE DESIGNATIONS**

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.



APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

**FIRM
FLOOD INSURANCE RATE MAP**

**LINCOLN COUNTY,
KENTUCKY
(UNINCORPORATED AREAS)**

PANEL 25 OF 125

**COMMUNITY-PANEL NUMBER
210325 0025 B**

**EFFECTIVE DATE:
JULY 3, 1986**

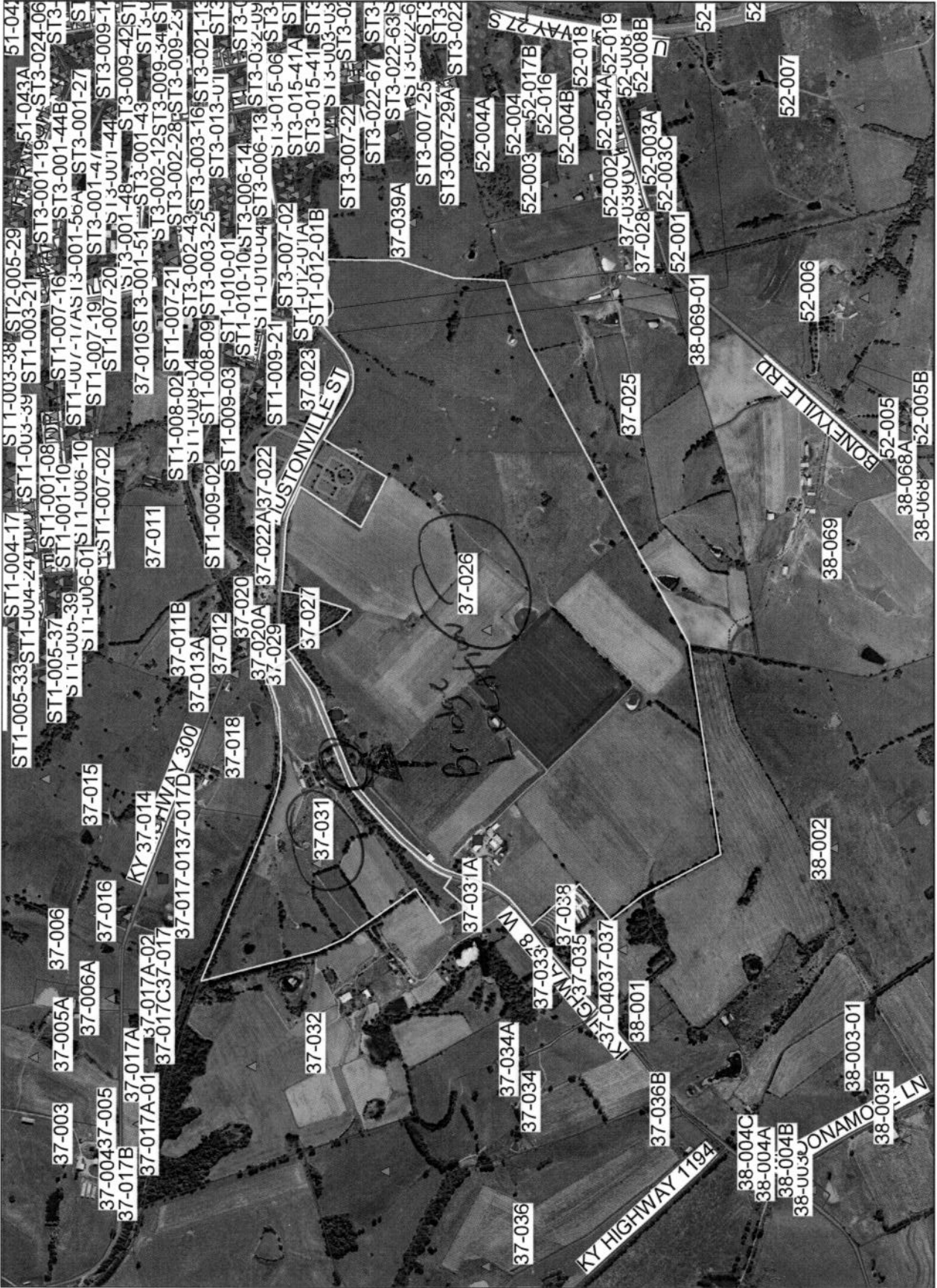


Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

APPENDIX I

PVA MAP



PVA mapping for 8-1049.00 Lincoln Co.

APPENDIX J
PROJECT TEAM MEETING MINUTES

Meeting Minutes
Project Team Meeting
Item 8-1049.00, Bridge Replacement

Meeting Date: September 8, 2010
Meeting Location: District 8, Somerset
In Attendance:

Danny Anderson	District 8 Planning
Marshall Carrier	CO Highway Design - Drainage
Morgan Wilson	District 8 Utilities
Tom Clouse	District 8 TEBM Project Development
Jami West	District 8 Environmental
Tammy Wilson	District 8 TEBM Engineering Support
Jason Coe	District 8 Support Structures
Joe Gossage	District 8 Design
Charles Hale	District 8 Right of Way
Rodney Little	CO Design – QA Branch
Keith Damron	KYTC Central Office Division of Planning
Steve Ross	KYTC Central Office Division of Planning
Tonya Higdon	KYTC Central Office Division of Planning
Jill Asher	KYTC Central Office Division of Planning
Sreenu Gutti	KYTC Central Office Division of Planning

INTRODUCTION: The meeting started just after 10 a.m. local time. Attendees were requested to “Sign-In” in the sheet provided. Presentation Handouts were distributed. A Power Point presentation was started by Sreenu Gutti. The goals for the meeting were two fold - understanding DNA Pre-Design Scoping Studies and discussing the Pre-Design Scoping Study for Item 8-1049.00. It was explained to the group that DNA stands for Data, Needs and Analysis. It was also explained why these studies are conducted, how they are helpful and the process involved in developing a Study. A “Purpose and Need” statement will be developed in a DNA study to better define the intent of the Project. FHWA suggested nine elements for Purpose and Need will be considered in developing a Purpose and Need statement.

DNA Pre-Design Scoping Studies are conducted for Design projects which do not have prior Planning Studies. They are usually completed within a 4-6 week timeline with actual work involved of about 2-3 weeks. They are conducted to document existing data of the project and its vicinity. These studies help initiate early project requests such as Traffic Forecasting/Modeling, preliminary environmental overviews and they initiate early agency coordination such as SHPO. Such activities conducted early will help develop a good project schedule and help keep scope creep to a minimum.

PRE-DESIGN SCOPING STUDY FOR ITEM 8-1049.00: Following the introduction of the concepts of Pre-Design Scoping Study, the Study for Item 8-1049.00 was discussed. A site video was played and the Project location was defined. The project is located at MP 11.216 on KY 78 in Lincoln County and is 0.3 mile from the Junction of KY 300 & KY 78. The bridge has an ID 069B00027N. FHWA recommended nine elements to define Purpose and Need statement for this project can be described as follows.

Legislation: The project is listed in the 2010 Highway Plan and has a total estimated cost of \$565,000 (combined D,R,U and C).

Project Status: Design funds are not authorized at this time. The group was informed that the District Office can request funds for conducting a DNA Study.

System Linkage: KY 78 connects the Cities of Stanford and Hustonville. A PIF exists for a UPL project # 08 069 D0078 22.00 for the reconstruction of KY 78 between these two cities. The priority level as listed in the PIF was listed as low (regional) to medium (local and district).

A question was asked if there is truck traffic that may create special interest in the bridge project 8-1049.00. It was mentioned that this segment of KY 78 is not on a National Truck Network. Mostly grain trucks, tractors and local delivery traffic are known to operate on this segment. A towing company operates from the home next to the project site currently. Shoulders do not indicate any weight issues. Tom indicated that the shoulder width may be increased in future design. It was suggested by Keith that Bridge design criteria should follow the future project design criteria on KY 78 as established in the Highway Design Guidance Manual.

Modal Interrelationship: There is no public transit currently on this route. An unknown rail road that existed just north of the site is currently abandoned.

Social Demands or Economic Development: The group was informed that the Director of Economic Development in Stanford informed that there are no particular plans at least in the immediate future for significant economic development in this area.

Transportation Demand: Current and future traffic data was presented. The reconstruction of US 150, closure of factories in Hustonville and KY 127 improvements may have been factors in reduction of traffic. Traffic data and trends will be consulted with the Traffic forecast group for the project area.

Capacity: Volume to Service flow ratio on this segment is 0.18 meaning that there is no congestion at this time.

Safety: Crash history of this segment was studied using Kentucky State Police data. There was one fatal crash involving two vehicles and two deaths at MP 11.09 in June, 2010, about 600 ft west of the project site. Sight distance of the horizontal curve at this location was discussed. Measured sight distance to the bridge is 500 ft. In the past three years, Kentucky State Police did not report any crashes in the immediate vicinity of the bridge site. The property owner of the home next to the bridge site reported some minor accidents.

Roadway Deficiencies: Current roadway data at the project site was presented. The current roadway is a two-lane undivided roadway with 9 ft lanes. Measured shoulder width at the site is +/- 1 ft. Guardrail exists on the north side only. The Composite Adequacy Rating of the roadway is 51.5. The rating is a composite of roughness, safety and service of the roadway.

A video was shown on the side without guardrail depicting the elevation difference close to the edge of the roadway. The existing culvert is skewed at 45 degrees to the roadway. Bridge Inventory and Inspection reports were shown. Bridge inspection reports recorded advanced deterioration of concrete in the barrels. Vertical cracks in the barrels, scaling and spalling in wing walls, and headwalls were also noted. Project photos were shown along with structural damage on the bridge.

There are no reported flooding issues and roadway overtopping at this location. The Sufficiency Rating of the bridge is 43.2. KYTC policy is to consider replacing the bridge when the Sufficiency Rating is below 50.

A question was asked if the area was identified as a flood zone in the flood insurance rate maps (FIRMS). The bridge site is not identified to be in a flood zone. Also, Tom informed that the bridge will be designed in-house by KYTC.

POSSIBLE ALTERNATIVES & CONSTRUCTION ISSUES: Bridge alternatives were discussed. The “No Build” alternate was discussed. Steve pointed out that the slide which said that a no build is not a consideration, should be corrected. He added that the bridge appears to have a few more years of service. Keith and Tom added the fact that while “No Build” is to be always be considered an alternative, there are large disadvantages to select this alternative that makes it undesirable, and it is unlikely once a structure makes it to the list.

Other alternates considered were replacing the existing structure with a bridge or replacing with a box culvert. Hydraulic issues of the structure were questioned. Hydraulic Analysis will be conducted during the Phase 1 Design. Marshall mentioned that on the downstream side of the bridge, there are known ponding issues at the entrance culverts to the hill side home.

On the upstream side of the structure, sedimentation is filling up the channel. The walls of the double barrel culvert cause obstruction to flow and may be the reason for sedimentation. Another reason for the sedimentation may be due to the alignment of the channel with respect to the culvert and the flat grade. The problem can be minimized by replacing the box culvert with a single span bridge. Keith added that if a double barrel culvert is installed, then a low flow diverter wall may be helpful in avoiding sedimentation.

CON/SPAN culvert systems were discussed. Use of CON/SPAN culverts can minimize construction time and thereby shorten road closure duration. Minimum cover for these culverts is 1-1/2 ft not including pavement structure. Hydraulic analysis conducted in Phase 1 should also investigate the required opening and will allow for confirming or denying CON/SPAN as an option. However, there could be guardrail issues with CON/SPAN culverts.

Other issues such as replacing the bridge in-place or realigning were discussed. Realigning the structure by placing the new structure to the north is not desirable due to possible historic significance of the home. Realigning the structure on the downstream may be costly due to the expensive involved cutting into the hill side. Both alternatives will involve realigning the roadway. Other disadvantages of realignment are a possible channel realignment and associated permits required. Also, significant amount of cut & fill will be required. With both an upstream

alternative or downstream alternative, matching the roadway with the realigned bridge would require adding new curves and super elevation in the roadway and will further increase the cost.

Replacing the bridge in-place with a new structure will require a temporary detour at the site or detouring traffic along an alternate route. The detour at site will involve the same issues discussed in the previous paragraph such as possible historic property on the north and hill side on the south.

Closing this segment of KY 78 during construction was also discussed. Detour options were discussed. There is no simple detour available unless one is constructed on site around the construction area. A question was asked if CR 1314 could be used. Tom informed that State roads should be used for detour and not County roads. Tom also mentioned that closing the road is the optimum choice to replace bridge.

The road is planned to be closed down for another roadway improvement project (Item 8-907.00) a few miles west of the current project. Public Officials were already informed and an approval is in place to close the road. Right of Way has not been obtained on that project. The project may go to construction in summer 2011. It was also mentioned that the road improvement project has more issues compared to the bridge project. It is possible that the bridge project can be completed earlier than road improvement project.

Keith added that road closure is considered as primary solution in practical solutions approach. The group discussed if both the projects can take place at the same time and therefore the road closure can be combined. The Project Team recommended that this project be let to construction at the same time as 8-907.00. Tom added that the Judge may need to be consulted again for the road closure for both projects. District will investigate. District will get public opinion in this regard.

UTILITIES: Slides showing existing utilities at the project site were presented. Existing utilities present at the site are water, electric, telephone and cable. Recently estimated cost which is same as the cost listed in the 2010 Highway Plan is \$50,000. District Utilities informed that 300 ft of length was used in the estimate. It was discussed that utilities involved due to a traffic detour at site will be more and therefore additional costs should be included. Additionally \$30,000 to \$40,000 may be added to the cost of a detour at site alternate.

Sreenu asked a question whether one lane operation during construction is a possibility. The group decided against the option.

ENVIRONMENTAL ISSUES: Jamie informed that the house is not currently listed on the historic register. However, the house is 150 years old. It will be considered eligible for listing on the National Register for Historic Places, and therefore would be afforded protection as a 4f resource. It is unknown if the entrance stone walls are as old as the house. Jason informed the group that a picture of the property and project site from the 70's does not show the existence of the stone fence. It appears that the stone walls were recently built. Also, the stone walls seem to be built in the Highway Right of Way. District 8 Permits section may issue a notice to the property owner asking that the walls should be removed.

TYPICAL SECTION: Jill asked a question about the proposed typical section for the project. Current geometric standards recommend two lanes 12 ft in width with 8 ft shoulders for the speed and ADT of this segment of KY 78. Tom answered that 8 ft shoulders will not be considered, instead 11 ft lanes and 4 ft shoulders may be recommended. The typical will be finalized during Phase I Design.

OTHER ISSUES: Some issues regarding the adjacent property on the upstream side were discussed. The owner operates a towing company out of his home. During a recent site visit, he informed KYTC of the two crashes he was involved in, due to the difficulties entering and leaving his driveway. When he stops to take a left turn into his property from east bound KY 78, his vehicle is in danger of being rear-ended. He mentioned that he encounters problems leaving his driveway to get on KY 78 because of poor turning radius.

One recent crash damaged his stone wall fence which was seen at the time of the site visit. The entrance is also too close to the guardrail at the bridge site. Tom suggested that the funding of the bridge replacement project does not allow for the scope of the project to increase because of inclusion of a private entrance issue created by the property owner. The property owner can make a permit request to KYTC to construct a new entrance or relocate his current entrance. Keith added that this project will not worsen the effects of the entrance. Turning radius may be improved with any alternative.

Sreenu informed the group that the horizontal curve south west of the project site on KY 78 has visual obstruction due to the hill side and trees. Based on the site visit, if the hill side can be cut and trees cleared, it can enhance the sight distance to the bridge. Tom informed that the bridge project funding is strictly for bridge replacement and to include this work would exceed the scope and intent of this Federal funding source. The improvements may be eligible for HSIP funds. Danny will investigate. Keith suggested that any information pertaining to roadway improvement should not be included in the bridge project report.

Funding for the project in the 2010 Highway Plan was discussed. Keith asked Tom if \$130,000 for Design was adequate. It will be investigated.

PURPOSE AND NEED STATEMENT: The Purpose and Need statement was discussed. It was agreed that the word “scenic Cumberland Cultural Heritage Highway” should be deleted. The second paragraph supporting the problem should be eliminated. The Purpose and Need may be defined as follows:

The purpose of the project is to eliminate the structural deficiency of the bridge which has a Sufficiency Rating of 43.2, to provide safety, mobility and connectivity between the cities of Stanford and Hustonville.

NEXT STEPS: At the end of the meeting, the following items were summarized:

- Cost estimates will be developed for a bridge and a box culvert options for three alternatives: upstream, in place, and downstream.
- Cost estimates will be developed for a detour on existing routes and detour at the site.

- District 8 will get input from Public Officials & Public regarding road closure during construction.

The following is a summary of the cost estimates that will be developed:

OPTION 1: COST ESTIMATE - INPLACE WITH DETOUR USING EXISTING ROUTES

	CONSTRUCTION	DETOUR	DESIGN	RIGHT OF WAY	UTILITIES	TOTAL
BRIDGE						
CULVERT						

OPTION 2: COST ESTIMATE - INPLACE WITH TEMPORARY DETOUR AT SITE

	CONSTRUCTION	DETOUR AT SITE	DESIGN	RIGHT OF WAY	UTILITIES	TOTAL
BRIDGE						
CULVERT						

OPTION 3: COST ESTIMATE - NEW STRUCTURE ON UPSTREAM SIDE*^a

	CONSTRUCTION	DESIGN	RIGHT OF WAY	UTILITIES	TOTAL
BRIDGE					
CULVERT					

OPTION 4: COST ESTIMATE - NEW STRUCTURE ON DOWNSTREAM SIDE*^a

	CONSTRUCTION	DESIGN	RIGHT OF WAY	UTILITIES	TOTAL
BRIDGE					
CULVERT					

* existing roadway functional during construction

^a including roadway realignment

Possible culvert options are regular box culvert, CONSPAN & BEBO types.

SITE VISIT: No truck traffic was noticed during the two site visits that were conducted. When the Project team visited the site, as many as 11 School Buses were seen traveling the project site just after the school dismissal time around 3 pm. It is recommended that construction should begin immediately after the School closes for the summer months to avoid any inconvenience to School traffic. Considering this important issue, an incentive per day should be added to the construction contract to finish the project early and open to traffic with a penalty if the deadline is not met.

The deck of the existing double box culvert was measured as 2 ft deep. Some erosion was noticed behind the northeast wing wall. The stonewalls were observed at the project site in order to estimate their life. It seems that the concrete on the stone walls is relatively new indicating the walls may not be as old as the home itself.

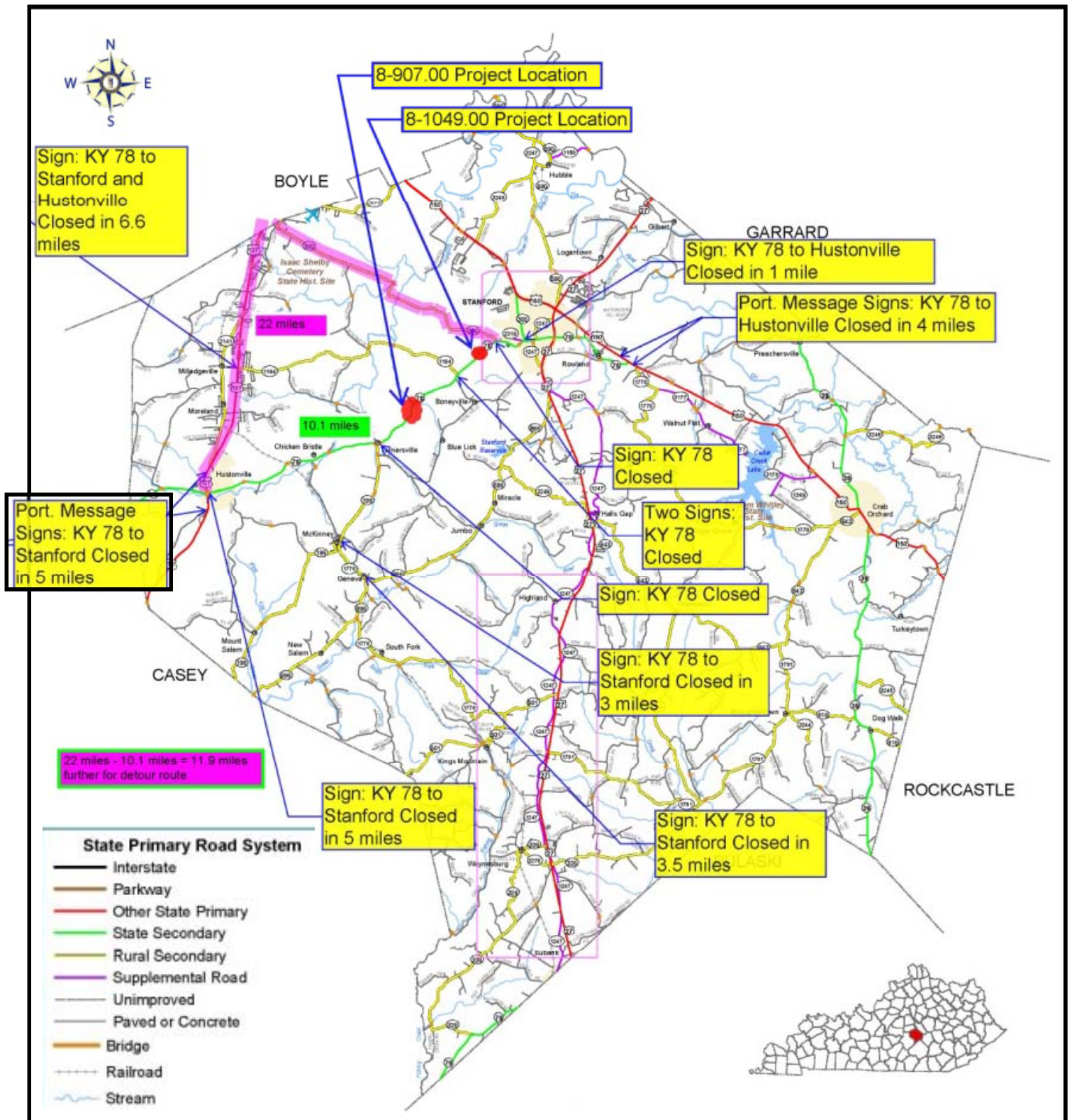
The downstream drainage structures at the entrance to the hill side home were investigated. Pictures were collected on both ends of the structures. The structures are double 18" circular concrete culverts. There was a lot of erosion seen on the downstream side of the culverts.

Feasibility of detour at site was investigated in the field. Constructing a wall along the outer banks of the channel to redirect the channel flow and prevent erosion may be considered during design.

END OF MINUTES

APPENDIX K
DETOUR MAP

Preliminary Detour Plan for Items 8-1049 & 8-907



APPENDIX L
PROJECT PHOTOS

Bridge photo taken in 2002



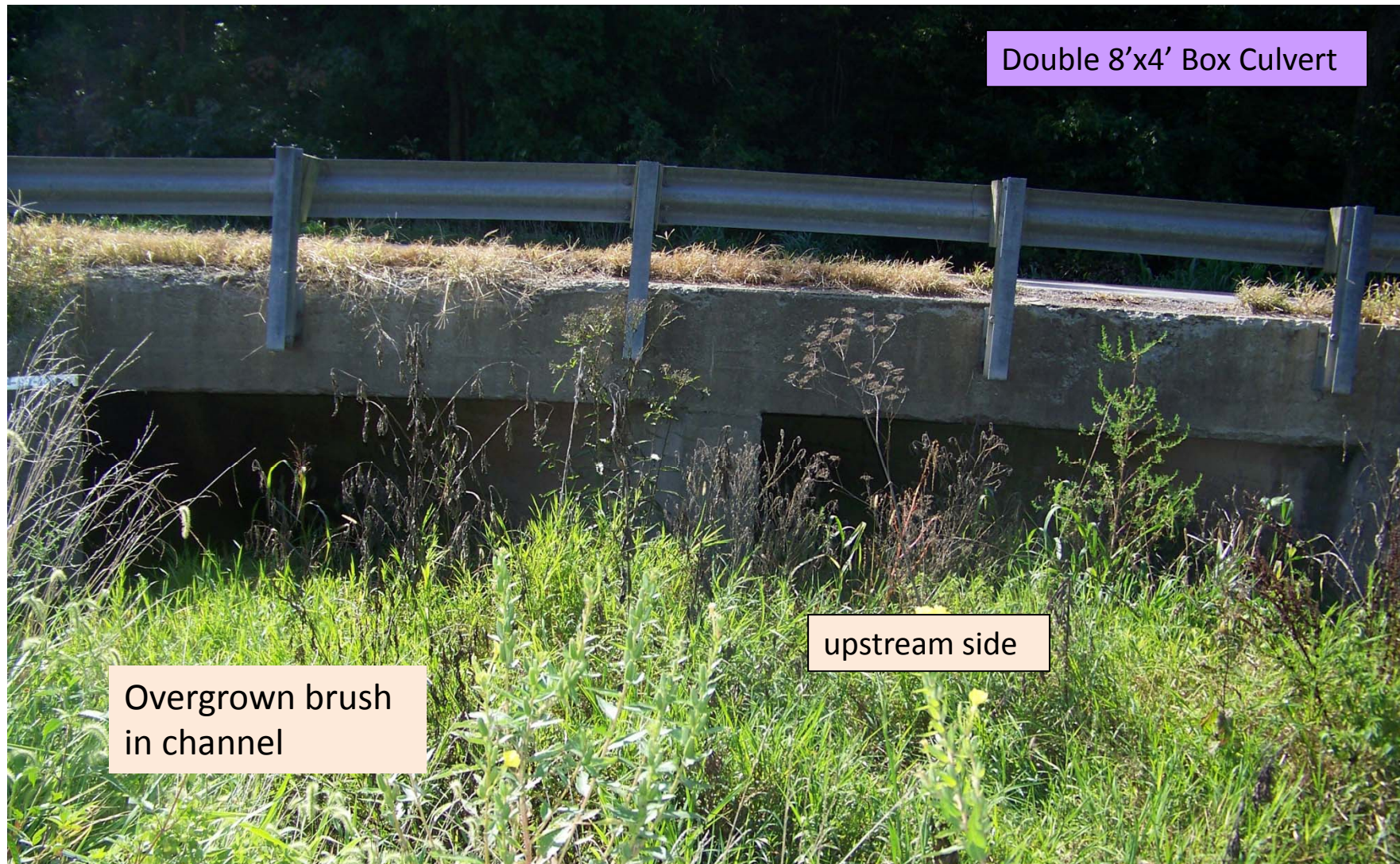
Bridge location and Roadway on the west



Bridge location and Roadway on the east



Upstream side of the Bridge (Aug, 2010)



Double 8'x4' Box Culvert

Overgrown brush
in channel

upstream side

Downstream side of Bridge



Hill side & Trees on Downstream side of the Bridge



Culverts at entrance on downstream side



Downstream side features – hill side, trees, home



APPENDIX M
COST ESTIMATION TABLES

Option 1: Replace in-place and close road

APPROACH PAVEMENT	ITEM CODE	ITEM	UNIT	QUANTITY	UNIT PRICE	ITEM COST
		DGA BASE-4"		TON	130	\$16.00
	ASPH BASE-8"		TON	220	\$65.00	\$14,300.00
	ASPH SURF-1.25"		TON	46	\$65.00	\$2,990.00
	PAVE STRIPING-PERM PAINT-4 IN		LF	1200	\$0.20	\$240.00
	PAVE STRIPING-TEMP PAINT-4 IN		LF	1200	\$0.20	\$240.00
	ASPHALT PAVE MILLING & TEXTURING		TON	25	\$25.00	\$625.00
	MOB. FOR MILLING & TEXTURING		LS	1	\$2,500.00	\$2,500.00
	LEVELING & WEDGING		TON	25	\$70.00	\$1,750.00
	EDGE KEY		LF	60	\$50.00	\$3,000.00
	REMOVE PAVEMENT		SY	375	\$20.00	\$7,500.00
ESTIMATED PAVEMENT COST (\$)					\$35,225.00	

APPROACH PAVEMENT	ITEM CODE	ITEM	UNIT	QUANTITY	UNIT PRICE	ITEM COST
		DGA BASE-4"		TON	130	\$16.00
	ASPH BASE-8"		TON	220	\$65.00	\$14,300.00
	ASPH SURF-1.25"		TON	46	\$65.00	\$2,990.00
	PAVE STRIPING-PERM PAINT-4 IN		LF	1200	\$0.20	\$240.00
	PAVE STRIPING-TEMP PAINT-4 IN		LF	1200	\$0.20	\$240.00
	ASPHALT PAVE MILLING & TEXTURING		TON	25	\$25.00	\$625.00
	MOB. FOR MILLING & TEXTURING		LS	1	\$2,500.00	\$2,500.00
	LEVELING & WEDGING		TON	25	\$70.00	\$1,750.00
	EDGE KEY		LF	60	\$50.00	\$3,000.00
	REMOVE PAVEMENT		SY	375	\$20.00	\$7,500.00
ESTIMATED PAVEMENT COST (\$)					\$35,225.00	

APPROACH PAVEMENT	ITEM CODE	ITEM	UNIT	QUANTITY	UNIT PRICE	ITEM COST
		DGA BASE-4"		TON	130	\$16.00
	ASPH BASE-8"		TON	220	\$65.00	\$14,300.00
	ASPH SURF-1.25"		TON	46	\$65.00	\$2,990.00
	PAVE STRIPING-PERM PAINT-4 IN		LF	1200	\$0.20	\$240.00
	PAVE STRIPING-TEMP PAINT-4 IN		LF	1200	\$0.20	\$240.00
	ASPHALT PAVE MILLING & TEXTURING		TON	25	\$25.00	\$625.00
	MOB. FOR MILLING & TEXTURING		LS	1	\$2,500.00	\$2,500.00
	LEVELING & WEDGING		TON	25	\$70.00	\$1,750.00
	EDGE KEY		LF	60	\$50.00	\$3,000.00
	REMOVE PAVEMENT		SY	375	\$20.00	\$7,500.00
ESTIMATED PAVEMENT COST (\$)					\$35,225.00	

ROADWAY/DOUBLE BOX CULVERT	ITEM CODE	ITEM	UNIT	QUANTITY	UNIT PRICE	ITEM COST
		CLEARING AND GRUBBING		LS	1	\$2,000.00
	EXCAVATION		CY	425	\$20.00	\$8,500.00
	STAKING		LS	1	\$3,500.00	\$3,500.00
	REMOVE STRUCTURE		LS	1	\$10,000.00	\$10,000.00
	CLASS A CONCRETE		CY	120	\$500.00	\$60,000.00
	REINF. STEEL		LB	13600	\$0.90	\$12,240.00
	GRAN. BACKFILL		CY	60	\$25.00	\$1,500.00
	CLASS III CHANNEL LINING		TON	40	\$30.00	\$1,200.00
	GUARDRAIL		LF	200	\$40.00	\$8,000.00
	GUARDRAIL END TREATMENT TYPE 1		EA	2	\$2,200.00	\$4,400.00
	GUARDRAIL TERMINAL SECTION NO. 1		EA	1	\$65.00	\$65.00
	TEMP DITCH		LF	300	\$1.50	\$450.00
	TEMPORARY SILT FENCE		LF	600	\$2.50	\$1,500.00
	CLEAN TEMPORARY SILT FENCE		LF	600	\$0.40	\$240.00
	SILT TRAP - TYPE A		EA	1	\$333.00	\$333.00
	SILT TRAP - TYPE B		EA	4	\$216.00	\$864.00
	CLEAN SILT TRAPS		EA	5	\$30.00	\$150.00
	SEEDING & PROTECTION		SQ YD	3000	\$0.70	\$2,100.00
	REGRADE EXISTING DITCH		LF	300	\$7.00	\$2,100.00
	BARRICADES		EA	6	\$250.00	\$1,500.00
	SIGNS		SQ FT	576	\$6.00	\$3,456.00
	PORT. MESSAGE SIGN		EA	4	\$2,500.00	\$10,000.00
	EROSION CONTROL BLANKET		SQ YD	750	\$2.00	\$1,500.00
	MAINTAIN AND CONTROL TRAFFIC		LS	1	\$5,000.00	\$5,000.00
ESTIMATED ROADWAY COST (\$)					\$140,598.00	
ESTIMATED PROJECT COST (\$)					\$175,823.00	
ESTIMATED CONTINGENCY COST @ 15% (\$)					\$26,373.45	
	Demobilization (2%)		LS	1	\$3,516.00	
ESTIMATED PROJECT TOTAL (\$)					\$205,712.45	
			round up		\$210,000.00	

ROADWAY BRIDGE	ITEM CODE	ITEM	UNIT	QUANTITY	UNIT PRICE	ITEM COST
		CLEARING AND GRUBBING		LS	1	\$2,000.00
	EXCAVATION		CY	425	\$20.00	\$8,500.00
	STAKING		LS	1	\$3,500.00	\$3,500.00
	REMOVE STRUCTURE		LS	1	\$10,000.00	\$10,000.00
	BRIDGE STRUCTURE		SF	1440	\$100.00	\$144,000.00
	GUARDRAIL		LF	200	\$40.00	\$8,000.00
	CLASS III CHANNEL LINING		TON	40	\$30.00	\$1,200.00
	GUARDRAIL BRIDGE CONNECTOR		EA	4	\$1,200.00	\$4,800.00
	GUARDRAIL END TREATMENT TYPE 1		EA	2	\$2,200.00	\$4,400.00
	GUARDRAIL TERMINAL SECTION NO. 1		EA	1	\$65.00	\$65.00
	TEMP DITCH		LF	300	\$1.50	\$450.00
	TEMPORARY SILT FENCE		LF	600	\$2.50	\$1,500.00
	CLEAN TEMPORARY SILT FENCE		LF	600	\$0.40	\$240.00
	SILT TRAP - TYPE A		EA	1	\$333.00	\$333.00
	SILT TRAP - TYPE B		EA	4	\$216.00	\$864.00
	CLEAN SILT TRAPS		EA	5	\$30.00	\$150.00
	SEEDING & PROTECTION		SQ YD	3000	\$0.70	\$2,100.00
	REGRADE EXISTING DITCH		LF	300	\$7.00	\$2,100.00
	BARRICADES		EA	6	\$250.00	\$1,500.00
	SIGNS		SQ FT	576	\$6.00	\$3,456.00
	PORT. MESSAGE SIGN		EA	4	\$2,500.00	\$10,000.00
	EROSION CONTROL BLANKET		SQ YD	750	\$2.00	\$1,500.00
	MAINTAIN AND CONTROL TRAFFIC		LS	1	\$5,000.00	\$5,000.00
ESTIMATED ROADWAY COST (\$)					\$215,658.00	
ESTIMATED PROJECT COST (\$)					\$250,883.00	
ESTIMATED CONTINGENCY COST @ 15% (\$)					\$37,632.45	
	Demobilization (2%)		LS	1	\$5,018.00	
ESTIMATED PROJECT TOTAL (\$)					\$293,533.45	
			round up		\$300,000.00	

ROADWAY/PRE-CAST ARCH	ITEM CODE	ITEM	UNIT	QUANTITY	UNIT PRICE	ITEM COST
		CLEARING AND GRUBBING		LS	1	\$2,000.00
	EXCAVATION		CY	425	\$20.00	\$8,500.00
	STAKING		LS	1	\$3,500.00	\$3,500.00
	REMOVE STRUCTURE		LS	1	\$10,000.00	\$10,000.00
	14'X6'X24' PRE-CAST CONC ARCH STRUCTURE		LF	24	\$3,500.00	\$84,000.00
	SITE PREP.		LS	1	\$20,000.00	\$20,000.00
	GUARDRAIL		LF	200	\$40.00	\$8,000.00
	CLASS III CHANNEL LINING		TON	40	\$30.00	\$1,200.00
	GUARDRAIL BRIDGE CONNECTOR		EA	0	\$1,200.00	\$0.00
	GUARDRAIL END TREATMENT TYPE 1		EA	2	\$2,200.00	\$4,400.00
	GUARDRAIL TERMINAL SECTION NO. 1		EA	1	\$65.00	\$65.00
	TEMP DITCH		LF	300	\$1.50	\$450.00
	TEMPORARY SILT FENCE		LF	600	\$2.50	\$1,500.00
	CLEAN TEMPORARY SILT FENCE		LF	600	\$0.40	\$240.00
	SILT TRAP - TYPE A		EA	1	\$333.00	\$333.00
	SILT TRAP - TYPE B		EA	4	\$216.00	\$864.00
	CLEAN SILT TRAPS		EA	5	\$30.00	\$150.00
	SEEDING & PROTECTION		SQ YD	3000	\$0.70	\$2,100.00
	REGRADE EXISTING DITCH		LF	300	\$7.00	\$2,100.00
	BARRICADES		EA	6	\$250.00	\$1,500.00
	SIGNS		SQ FT	576	\$6.00	\$3,456.00
	PORT. MESSAGE SIGN		EA	4	\$2,500.00	\$10,000.00
	EROSION CONTROL BLANKET		SQ YD	750	\$2.00	\$1,500.00
	MAINTAIN AND CONTROL TRAFFIC		LS	1	\$5,000.00	\$5,000.00
ESTIMATED ROADWAY COST (\$)					\$170,858.00	
ESTIMATED PROJECT COST (\$)					\$206,083.00	
ESTIMATED CONTINGENCY COST @ 15% (\$)					\$30,912.45	
	Demobilization (2%)		LS	1	\$4,122.00	
ESTIMATED PROJECT TOTAL (\$)					\$241,117.45	
			round up		\$250,000.00	

Option 3: Replace Upstream and keep Existing Facility Operable During Construction

ITEM CODE	ITEM	UNIT	QUANTITY	UNIT PRICE	ITEM COST
	DGA BASE-4"	TON	1086	\$16.00	\$17,376.00
	ASPH BASE-8"	TON	1833	\$65.00	\$119,145.00
	ASPH SURF-1.25"	TON	286	\$65.00	\$18,590.00
	PAVE STRIPING-PERM PAINT-4 IN	LF	5200	\$0.20	\$1,040.00
	PAVE STRIPING-TEMP PAINT-4 IN	LF	5200	\$0.20	\$1,040.00
	ASPHALT PAVE MILLING & TEXTURING	TON	25	\$25.00	\$625.00
	MOB. FOR MILLING & TEXTURING	LS	1	\$2,500.00	\$2,500.00
	LEVELING & WEDGING	TON	25	\$70.00	\$1,750.00
	EDGE KEY	LF	60	\$50.00	\$3,000.00
	REMOVE PAVEMENT	SY	3125	\$20.00	\$62,500.00
ESTIMATED PAVEMENT COST (\$)					\$227,566.00

ITEM CODE	ITEM	UNIT	QUANTITY	UNIT PRICE	ITEM COST
	DGA BASE-4"	TON	1086	\$16.00	\$17,376.00
	ASPH BASE-8"	TON	1833	\$65.00	\$119,145.00
	ASPH SURF-1.25"	TON	286	\$65.00	\$18,590.00
	PAVE STRIPING-PERM PAINT-4 IN	LF	5200	\$0.20	\$1,040.00
	PAVE STRIPING-TEMP PAINT-4 IN	LF	5200	\$0.20	\$1,040.00
	ASPHALT PAVE MILLING & TEXTURING	TON	25	\$25.00	\$625.00
	MOB. FOR MILLING & TEXTURING	LS	1	\$2,500.00	\$2,500.00
	LEVELING & WEDGING	TON	25	\$70.00	\$1,750.00
	EDGE KEY	LF	60	\$50.00	\$3,000.00
	REMOVE PAVEMENT	SY	3125	\$20.00	\$62,500.00
ESTIMATED PAVEMENT COST (\$)					\$227,566.00

ITEM CODE	ITEM	UNIT	QUANTITY	UNIT PRICE	ITEM COST
	DGA BASE-4"	TON	1086	\$16.00	\$17,376.00
	ASPH BASE-8"	TON	1833	\$65.00	\$119,145.00
	ASPH SURF-1.25"	TON	286	\$65.00	\$18,590.00
	PAVE STRIPING-PERM PAINT-4 IN	LF	5200	\$0.20	\$1,040.00
	PAVE STRIPING-TEMP PAINT-4 IN	LF	5200	\$0.20	\$1,040.00
	ASPHALT PAVE MILLING & TEXTURING	TON	25	\$25.00	\$625.00
	MOB. FOR MILLING & TEXTURING	LS	1	\$2,500.00	\$2,500.00
	LEVELING & WEDGING	TON	25	\$70.00	\$1,750.00
	EDGE KEY	LF	60	\$50.00	\$3,000.00
	REMOVE PAVEMENT	SY	3125	\$20.00	\$62,500.00
ESTIMATED PAVEMENT COST (\$)					\$227,566.00

ITEM CODE	ITEM	UNIT	QUANTITY	UNIT PRICE	ITEM COST
	CLEARING AND GRUBBING	LS	1	\$3,500.00	\$3,500.00
	EXCAVATION	CY	425	\$0.00	\$0.00
	STAKING	LS	1	\$9,650.00	\$9,650.00
	EMBANKMENT IN PLACE	CY	6944	\$12.00	\$83,333.33
	REMOVE STRUCTURE	LS	1	\$10,000.00	\$10,000.00
	CLASS A CONCRETE	CY	120	\$500.00	\$60,000.00
	REINF. STEEL	LB	13600	\$0.90	\$12,240.00
	GRAN. BACKFILL	CY	60	\$25.00	\$1,500.00
	CLASS III CHANNEL LINING	TON	40	\$30.00	\$1,200.00
	CULVERT PIPE-24"	LF	60	\$60.00	\$3,600.00
	REMOVE GUARDRAIL	LF	500	\$2.00	\$1,000.00
	GUARDRAIL	LF	700	\$40.00	\$28,000.00
	GUARDRAIL END TREATMENT TYPE 1	EA	2	\$2,200.00	\$4,400.00
	GUARDRAIL TERMINAL SECTION NO. 1	EA	1	\$65.00	\$65.00
	GUARDRAIL BRIDGE CONNECTOR	EA	4	\$1,200.00	\$4,800.00
	KPDES PERMIT AND EROSION CONTROLS	LS	1	\$10,000.00	\$10,000.00
	SEEDING & PROTECTION	SQ YD	9000	\$0.70	\$6,300.00
	REGRADE EXISTING DITCH	LF	300	\$7.00	\$2,100.00
	BARRICADES	EA	6	\$250.00	\$1,500.00
	SIGNS	SQ FT	192	\$6.00	\$1,152.00
	PORT. MESSAGE SIGN (2)	EA	2	\$2,500.00	\$5,000.00
	EROSION CONTROL BLANKET	SQ YD	5000	\$2.00	\$10,000.00
	MAINTAIN AND CONTROL TRAFFIC	LS	1	\$5,000.00	\$5,000.00
ESTIMATED ROADWAY COST (\$)					\$259,540.33

ITEM CODE	ITEM	UNIT	QUANTITY	UNIT PRICE	ITEM COST
	CLEARING AND GRUBBING	LS	1	\$3,500.00	\$3,500.00
	EXCAVATION	CY	425	\$0.00	\$0.00
	STAKING	LS	1	\$9,650.00	\$9,650.00
	EMBANKMENT IN PLACE	CY	6944	\$12.00	\$83,333.33
	REMOVE STRUCTURE	LS	1	\$10,000.00	\$10,000.00
	BRIDGE STRUCTURE	SF	1440	\$100.00	\$144,000.00
	CLASS III CHANNEL LINING	TON	40	\$30.00	\$1,200.00
	CULVERT PIPE-24"	LF	60	\$60.00	\$3,600.00
	REMOVE GUARDRAIL	LF	500	\$2.00	\$1,000.00
	GUARDRAIL	LF	700	\$40.00	\$28,000.00
	GUARDRAIL END TREATMENT TYPE 1	EA	2	\$2,200.00	\$4,400.00
	GUARDRAIL TERMINAL SECTION NO. 1	EA	1	\$65.00	\$65.00
	GUARDRAIL BRIDGE CONNECTOR	EA	4	\$1,200.00	\$4,800.00
	KPDES PERMIT AND EROSION CONTROLS	LS	1	\$10,000.00	\$10,000.00
	SEEDING & PROTECTION	SQ YD	9000	\$0.70	\$6,300.00
	REGRADE EXISTING DITCH	LF	300	\$7.00	\$2,100.00
	BARRICADES	EA	6	\$250.00	\$1,500.00
	SIGNS	SQ FT	192	\$6.00	\$1,152.00
	PORT. MESSAGE SIGN (2)	EA	2	\$2,500.00	\$5,000.00
	EROSION CONTROL BLANKET	SQ YD	5000	\$2.00	\$10,000.00
	MAINTAIN AND CONTROL TRAFFIC	LS	1	\$5,000.00	\$5,000.00
ESTIMATED ROADWAY COST (\$)					\$334,600.33

ITEM CODE	ITEM	UNIT	QUANTITY	UNIT PRICE	ITEM COST
	CLEARING AND GRUBBING	LS	1	\$3,500.00	\$3,500.00
	EXCAVATION	CY	425	\$0.00	\$0.00
	STAKING	LS	1	\$9,650.00	\$9,650.00
	EMBANKMENT IN PLACE	CY	6944	\$12.00	\$83,333.33
	REMOVE STRUCTURE	LS	1	\$10,000.00	\$10,000.00
	14'X6'X24" PRE-CAST CONC ARCH STRUCTURE	LF	24	\$3,500.00	\$84,000.00
	SITE PREP.	LS	1	\$20,000.00	\$20,000.00
	CLASS III CHANNEL LINING	TON	40	\$30.00	\$1,200.00
	CULVERT PIPE-24"	LF	60	\$60.00	\$3,600.00
	REMOVE GUARDRAIL	LF	500	\$2.00	\$1,000.00
	GUARDRAIL	LF	700	\$40.00	\$28,000.00
	GUARDRAIL END TREATMENT TYPE 1	EA	2	\$2,200.00	\$4,400.00
	GUARDRAIL TERMINAL SECTION NO. 1	EA	1	\$65.00	\$65.00
	GUARDRAIL BRIDGE CONNECTOR	EA	4	\$1,200.00	\$4,800.00
	KPDES PERMIT AND EROSION CONTROLS	LS	1	\$10,000.00	\$10,000.00
	SEEDING & PROTECTION	SQ YD	9000	\$0.70	\$6,300.00
	REGRADE EXISTING DITCH	LF	300	\$7.00	\$2,100.00
	BARRICADES	EA	6	\$250.00	\$1,500.00
	SIGNS	SQ FT	192	\$6.00	\$1,152.00
	PORT. MESSAGE SIGN (2)	EA	2	\$2,500.00	\$5,000.00
	EROSION CONTROL BLANKET	SQ YD	5000	\$2.00	\$10,000.00
	MAINTAIN AND CONTROL TRAFFIC	LS	1	\$5,000.00	\$5,000.00
ESTIMATED ROADWAY COST (\$)					\$289,800.33

ESTIMATED PROJECT COST (\$)					\$487,106.33
ESTIMATED CONTINGENCY COST @ 15% (\$)					\$73,065.95
Demobilization (2%)	LS	1		\$9,742.00	
ESTIMATED PROJECT TOTAL (\$)					\$569,914.28
	round up			\$570,000.00	

ESTIMATED PROJECT COST (\$)					\$562,166.33
ESTIMATED CONTINGENCY COST @ 15% (\$)					\$84,324.95
Demobilization (2%)	LS	1		\$11,243.00	
ESTIMATED PROJECT TOTAL (\$)					\$657,734.28
	round up			\$660,000.00	

ESTIMATED PROJECT COST (\$)					\$517,366.33
ESTIMATED CONTINGENCY COST @ 15% (\$)					\$77,604.95
Demobilization (2%)	LS	1		\$10,347.00	
ESTIMATED PROJECT TOTAL (\$)					\$605,318.28
	round up			\$610,000.00	

COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET
DIVISION OF RIGHT OF WAY
UTILITY ESTIMATE

COUNTY Lincoln ITEM NO. _____
STATE NO. _____ FED. NO. _____
ROAD NAME Stanford - Hustonville Road (KY 78)
TC-10 NO. _____ 6 YEAR PLAN EST _____

ALTERNATE <u>1</u> \$50,000.00	ALTERNATE <u>0</u>	ALTERNATE <u>0</u>	ALTERNATE <u>0</u>
-----------------------------------	--------------------	--------------------	--------------------

Estimate sheet must be attached for each alternate.

PLANS USED:

NONE XX TOPO MAP _____ PREL. INSPEC. _____ FINAL INSPEC. _____ FINAL PLANS _____

ESTIMATE:

PRE-STUDY XX UPDATE FOR INSPEC. _____ REQUEST FUNDS _____ REQUEST ADD'L FUNDS _____

ARE RAILROADS INVOLVED ON THIS PROJECT? YES _____ NO XX

IF YES, ARE RAILROAD COSTS REFLECTED IN YOUR ESTIMATE? YES _____ NO _____

This estimate is based on the 6 Year Plan scheduled authorization date of FY _____

SECTION 2 (COMPLETE IF ADDITIONAL FUNDS ARE REQUESTED. USE BACK IF ADDITIONAL SPACE IS NEEDED TO THOROUGHLY EXPLAIN THE INCREASE.)

AMOUNT AUTHORIZED (THIS SECTION)-----	-----	\$0.00
ADDITIONAL FUNDS NEEDED-----	-----	
TOTAL FUNDS NEEDED-----	-----	\$0.00

WHAT SPECIFICALLY CAUSED THE COST INCREASE _____

Bridge located approx. 1000 feet west of intersection of KY 300 and KY 78. Estimate prepared without any plans.

Estimate reflects a total wipe out of all utilities around bridge.

WHY WAS THE WORK REQUIRING ADDITIONAL FUNDS NOT ORIGINALLY ANTICIPATED _____

- CC: C.O. RIGHT OF WAY
- C.O. UTILITIES
- DIST PRECONSTRUCTION
- DIST DESIGN
- DIST PLANNING


UTILITY AGENT SIGNATURE

12-4-09
DATE

