Project Cost Estimating System
COMMENTS

	General / Miscellaneous Comments from CONST, RW, & UTILITY Worksheets:	Team Member and Section:	Date Entered:
1	Cost Estimates are for comparative purposes with regards to Tier 1	Gannet Fleming	10/27/04
2	needed for final project construction, such as rehabilitation of existing pavement.		
3	Unusual Construction Costs include: Noise Walls, MSE Walls and		
4	select fill, MB-7D, Lighting and landscaping.		
5	Drainage Adjustments provided for culvert extensions on I-81		
6	and storm water management ponds.		
7	Ad Date revised to 2005	Gannett Fleming	05/26/05
8			
9			
10			
11			
12			
13			
14			
15			

Bridges

Project Cost Estimating System

SUMMARY PAGE

DISTRICT	Bristol, Salem & Staunton
PROJECT NUMBER	I-81Study(3ln81Br.over Sec)
PPMS NUMBER	n/a
AD DATE	2005
PROJECT MANAGER / DESIGNER	Chris Collins/VHB
Data Source for Construction Estimate:	CES
Data Source for Right-of-Way Estimate:	CES
Data Source for Utilities Estimate:	CES
DATE	*11/16/2005*

THE FOLLOWING DATA WILL BE PROVIDED UPON COMPLETION OF THE REMAINDER OF THE WORKBOOK, WHICH IS ACCESSED BY SELECTING THE **CONST**, **RW**, & **UTIL** TABS BELOW

CONSTRUCTION ESTIMATE	*$871,000*
PRELIMINARY ENGINEERING ESTIMATE	*$83,000*
RIGHT-OF-WAY & UTILITIES ESTIMATE	*$0*
TOTAL PROJECT ESTIMATE	*$954,000*

Revised 12/08/03 RDW

Estimate Class: PFI

Version 2.0

Project Cost Estimating System
CONSTRUCTION / BRIDGE / PE

Project / PPMS #					
Interstate Project ?	YES				
Route Number	81		Interstate Highway		
Geometric Standard	Interstate	*	Principal Arterial - Freeway		
Ad Date	2005		Design Year =	2027	
Design Year ADT	30,000	*	Project Terrain	Rolling	
Box Must Be Empty			Approx. DHV = Minimum	4,500	
Enter Design Speed (MPH) (Enter 60 or 70)	70	*	Design Speed =	70 MPH	
Box Must Be Empty					
Box Must Be Empty					
Project Length (mi.)	0.00	*	*Number of Additional Lanes:*	*Length of Add'l. Lanes (mi.):*	
Total Length -Adding or Building Two Lanes (mi.)	0.00	*	*None*	*0.00*	
Total Length - Adding or Building Four Lanes (mi.)	0.00	*	*None*		
Total Length - Building Ramps and Loops (mi.)	0.00	*	*None*		
Box Must Be Empty					
Box Must Be Empty			Normal Lane Width (ft.)	12	
Box Must Be Empty			Total Alignment Miles Computed (Required for LD-430 Scoping Report)		
Box Must Be Empty				0.00	
Box Must Be Empty					
Box Must Be Empty					
Number of Right Turn Lanes - Left PLUS Right Side	0	*			
Box Must Be Empty					
Number of New Traffic Signals Required	0	*			
Number of Traffic Signals Requiring Adjustment	0	*	Base Estimate	$0	
Cost of Large Drainage Structures ($)	$0	*	*Constr. Engr.*	*$0*	
In-Plan Utility Costs	*$0*		Const. Est. (Today)	*$0*	
Adjustment for Unusual Construction Costs ($)	$0	*			

Examples - Add $'s for: Bicycle Facilities, Landscaping, Retaining Walls, Lighting, Wetlands Mitigation Sites, etc.

Construction Estimate in Mid- 2005 $0

Continued on Next Page

Continued from Previous Page

Additional (or Unusual) P. E. Costs ($)	$0	**Preliminary Engineering Cost**	$0
Select % of PE to be performed by Consultants	0%		

Note: Do Not Include Bridge P. E. Costs Here

Roadway P. E. $ / Roadway Const. $ = 0.0%

BRIDGE TOTALS

BRIDGE COUNT: 1

Bridge Estimate (Today)	$821,265
Total Bridge Estimate in Mid- 2005	$871,000
Total Bridge P. E. Costs	$83,000

CONSTRUCTION & PE TOTALS

Total Construction Estimate (Roadway plus Bridge)	$871,000
Total Preliminary Engineering Estimate (Roadway plus Bridge)	$83,000

Revised 12/08/03 RDW

Today's Date: 11/16/05

Version 2.0

BRIDGE CONSTRUCTION AND PRELIMINARY ENGINEERING COSTS

		BRIDGE CONSTRUCTION	BRIDGE P. E.
Proposed BRIDGE # 1 Length (ft.)	100	$644,765	% by Consultants: 100%
Width (ft.)	60		
Complexity / Type of New Bridge (C, M, S, WEB, or SRO)	M		
		Constr. Engr. Br. # 1 $110,000	P.E.Bridge # 1 $83,000
Removal of Existing Structure # 1:		17.1%	Misc. Cost Bridge # 1
Length of Existing Structure (ft.)	100	$66,500	
Width of Existing Structure (ft.)	50		
Proposed BRIDGE # 2 Length (ft.)		$0	% by Consultants: 100%
Width (ft.)			
Complexity / Type of New Bridge (C, M, S, WEB, or SRO)			
		Constr. Engr. Br. # 2 $0	P.E.Bridge # 2 $0
Removal of Existing Structure # 2:		0.0%	Misc. Cost Bridge # 2
Length of Existing Structure (ft.)		$0	
Width of Existing Structure (ft.)			
Proposed BRIDGE # 3 Length (ft.)		$0	% by Consultants:
Width (ft.)			
Complexity / Type of New Bridge (C, M, S, WEB, or SRO)			
		Constr. Engr. Br. # 3 $0	P.E.Bridge # 3 $0
Removal of Existing Structure # 3:		0.0%	Misc. Cost Bridge # 3
Length of Existing Structure (ft.)		$0	
Width of Existing Structure (ft.)			
Proposed BRIDGE # 4 Length (ft.)		$0	% by Consultants:
Width (ft.)			
Complexity / Type of New Bridge (C, M, S, WEB, or SRO)			
		Constr. Engr. Br. # 4 $0	P.E.Bridge # 4 $0
Removal of Existing Structure # 4:		0.0%	Misc. Cost Bridge # 4
Length of Existing Structure (ft.)		$0	
Width of Existing Structure (ft.)			
Proposed BRIDGE # 5 Length (ft.)		$0	% by Consultants:
Width (ft.)			
Complexity / Type of New Bridge (C, M, S, WEB, or SRO)			
		Constr. Engr. Br. # 5 $0	P.E.Bridge # 5 $0
Removal of Existing Structure # 5:		0.0%	Misc. Cost Bridge # 5
Length of Existing Structure (ft.)		$0	
Width of Existing Structure (ft.)			

BRIDGE CONSTRUCTION AND PE COSTS (continued)

	BRIDGE CONSTRUCTION	BRIDGE P. E.
Proposed BRIDGE # 6 Length (ft.)		% by Consultants:
Width (ft.)	$0	
Complexity / Type of New Bridge (C, M, S, WEB, or SRO)		
	Constr. Engr. Br. # 6	P.E.Bridge # 6
Removal of Existing Structure # 6:	$0	$0
Length of Existing Structure (ft.)	0.0%	Misc. Cost Bridge # 6
Width of Existing Structure (ft.)	$0	
Proposed BRIDGE # 7 Length (ft.)		% by Consultants:
Width (ft.)	$0	
Complexity / Type of New Bridge (C, M, S, WEB, or SRO)		
	Constr. Engr. Br. # 7	P.E.Bridge # 7
Removal of Existing Structure # 7:	$0	$0
Length of Existing Structure (ft.)	0.0%	Misc. Cost Bridge # 7
Width of Existing Structure (ft.)	$0	
Proposed BRIDGE # 8 Length (ft.)		% by Consultants:
Width (ft.)	$0	
Complexity / Type of New Bridge (C, M, S, WEB, or SRO)		
	Constr. Engr. Br. # 8	P.E.Bridge # 8
Removal of Existing Structure # 8:	$0	$0
Length of Existing Structure (ft.)	0.0%	Misc. Cost Bridge # 8
Width of Existing Structure (ft.)	$0	
Proposed BRIDGE # 9 Length (ft.)		% by Consultants:
Width (ft.)	$0	
Complexity / Type of New Bridge (C, M, S, WEB, or SRO)		
	Constr. Engr. Br. # 9	P.E.Bridge # 9
Removal of Existing Structure # 9:	$0	$0
Length of Existing Structure (ft.)	0.0%	Misc. Cost Bridge # 9
Width of Existing Structure (ft.)	$0	

***NOTE*: Structure Complexity is based upon Height, Difficulty of Construction, and other Factors**

***NOTE*: Projected Estimate Requires Route Number, Ad Date (Year), and other applicable data to be Entered / Selected previously on This Worksheet**

Bridge Estimate (Today)	***$821,265***
Total Bridge Estimate in Mid- 2005	***$871,000***
Total Bridge P. E. Costs	***$83,000***

Project Cost Estimating System
RIGHT-OF-WAY ESTIMATE

Project & PPMS Numbers :

VDOT Construction District :

Select Project Area Real Estate Costs : Average

Define Project Land Use Characteristics :

Agricultural :	50%
Residential :	40%
Industrial :	0%
Commercial :	10%
	100%

Instructions: Please fill-in all applicable White Boxes or make a choice from the Drop-down Lists

Enter the Approximate Number of Parcels on the Project : << Select *Computed* or User Defined Costs : ***Computed Costs***

1. LAND VALUE

Prop. Right-of-Way

Total Right-of-Way Project Length (ML + Connections)	5,280	ft	*Computed RW Cost per sq ft =*	***$0.57***
Average width of Existing RW	160	ft	Enter Right-of-Way Estimator's Right-of-Way Cost per sq ft :	
Average width of Proposed RW	160	ft		
Total area of all additional Prop. Right-of-Way	0	sf	0 sq ft = 0.000 Ac.	
Approx. % of Prop. CL within	0	ft of Exist. CL		100%
Approx. % of Prop. CL between	0	ft & 160 ft of Exist. CL		0%
Approx. % of Prop. CL greater than	160	ft from Exist. CL		0%

Temp. Ease.

Average Width of parallel Temporary Easements Left		ft	*Comp. Temp. Ease. Cost / sq ft =*	***$0.14***
Total Length of parallel Temporary Easements Left		ft	Enter Right-of-Way Estimator's Temp. Ease. Cost per sq ft :	
Average Width of parallel Temporary Easements Right		ft		
Total Length of parallel Temporary Easements Right		ft	0 sq ft = 0.000 Ac.	

Perm. Ease.

This Box Must Be Empty >		sf	*Comp. Utility Ease. Cost / sq ft =*	***$0.00***
This Box Must Be Empty >			RW Est's. Utility Ease. Cost per sq ft :	**$0.22**
OR			0 sq ft = 0.000 Ac.	
Total Number of Replacement Easements Required	0	ea	*Comp. Perm. Ease. Cost / sq ft =*	***$0.46***
Total area of All Permanent Easements		sf	RW Est's. Perm. Ease. Cost per sq ft :	
			0 sq ft = 0.000 Ac.	

COST OF LAND (Item # 1) ***$0*** ***(Computed Costs)***

2. BUILDING VALUE

Based upon comparison to similar, occupied **Residential Dwellings in the Project Area**, enter the Number of:

		Computed:
A. Low Cost Residential Dwellings :		*$0*
B. Moderately Low Cost Dwellings :		*$0*
C. Average Cost Residential Dwellings :		*$0*
D. Moderately High Cost Dwellings :		*$0*
E. High Cost Residential Dwellings :		*$0*
Computed Total Residential Dwelling Costs :		***$0***
Estimator's Total Residential Dwelling Costs :		

Enter the total estimated cost of ALL **COMMERCIAL & INDUSTRIAL BUILDINGS** to be taken:

Note: No Computed Costs Available. Use User Defined Costs Below:

Estimator's Total Commercial / Industrial Buildings Costs : <<

3. OTHER IMPROVEMENTS

Enter the estimated cost of ALL **OTHER IMPROVEMENTS** on the Project:

Computed Total Other Improvements Costs :	***$0***
Estimator's Total Other Improvements Costs :	

4. DAMAGES

Anticipated % of Parcels Affected by Damages to Remainder :	0%
Anticipated Relative Cost Impact of Damages to Remainder :	Moderate
Approximate Number of Parcels Affected :	0
Computed Cost of Damages to Remainder :	***$0***
Estimator's Total Cost of Damages to Remainder :	

TOTAL ACQUISITIONS (Items # 1 - 4) ***$0*** ***(Computed Costs)***

5. ADMINISTRATIVE SETTLEMENTS

Anticipated % of Parcels Affected by Administrative Settlements :	0%	
Anticipated Relative Cost Impact of Administrative Settlements :		
Approximate Number of Parcels Affected :	0	
Computed Cost of Administrative Settlements :	*$0*	<
Estimator's Total Cost of Administrative Settlements :		

6. CONDEMNATION INCREASES

Anticipated % of Parcels Affected by Condemnation Increases :	0%	
Anticipated Relative Cost Impact of Condemnation Increases :		
Approximate Number of Parcels Affected :	0	
Computed Cost of Condemnation Increases :	*$0*	<
Estimator's Total Cost of Condemnation Increases :		

7. ADMINISTRATIVE COSTS & INCIDENTAL EXPENSES

Anticipated Relative Cost Impact of Admin. Costs & Incidental Expenses :		
Computed Administrative Costs & Incidental Expenses :	*$0*	<
Estimator's Total Administrative Costs & Incidental Expenses :		

8. DEMOLITION CONTRACTS

Anticipated Relative Cost Impact of Demolition Contracts :		
Computed Costs of Demolition Contracts :	*$0*	<
Estimator's Total Cost of Demolition Contracts :		

9. HAZARDOUS MATERIALS REMOVAL

Anticipated Number of Demolished Buildings Requiring Asbestos Removal :		
Anticipated Relative Cost of Asbestos Removal from Demolished Buildings :		
Anticipated Number of Other Hazardous Materials Removal Sites :		
Anticipated Relative Cost Impact of Other Hazardous Materials Removal :		
Computed Cost of Hazardous Materials Removal :	*$0*	<
Estimator's Total Costs of Hazardous Materials Removal :		

10. PROPERTY MANAGEMENT

Anticipated Relative Cost Impact of Property Management :		
Computed Costs of Property Management :	*$0*	<
Estimator's Total Cost of Property Management :		

TOTAL OTHER ITEMS (Items # 5 - 10) *$0* *(Computed Costs)*

11. RELOCATION ASSISTANCE

Residential Relocation Costs:

Anticipated Relative Cost Impact of Residential Relocation Expenses :		
Computed Residential Relocation Costs :	*$0*	<
Estimator's Total Residential Relocation Costs :		

Commercial Relocation Costs:

Note: No Computed Costs Available. Use User Defined Costs Below:		
Estimator's Total Comm/Indust Relocation Costs :	$0	<<

Total Displacements:		Farms:	
Families:		Non-Profit:	
Businesses:		Personal Property Only:	

TOTAL RELOCATION ASSISTANCE (Item # 11) *$0* *(Computed Costs)*

12. YEAR OF RIGHT-OF-WAY AUTHORIZATION		2015	
SUB-TOTAL RIGHT-OF-WAY COSTS	*(Computed Costs)*	*$0*	*Totals*
UTILITY COSTS TO RIGHT-OF-WAY PROJECT *		*$0*	*Include*
TOTAL RIGHT-OF-WAY COSTS		*$0*	*Inflation*

*** Utility Data display requires completion of Utilities Estimate Worksheet (tab below)**

COMMENTS:

RW-238 Data :	Right-of-Way Estimate Date :	**07/28/04**
	Based on Approved / Unapproved Plans ? :	**Unapproved Plans**
	Participating Cost / Non-Participating Cost ? :	
	Today's Date :	**11/16/05**

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