



KENTUCKY TRANSPORTATION CABINET
 Department of Highways
 DIVISION OF PROFESSIONAL SERVICES
ENGINEERING AND RELATED SERVICES FEE PROPOSAL

TC 40-2
 Rev. 12/2022
 Page 1 of 1

SECTION 1: PROJECT INFORMATION

DATE:	Jun 21, 2023	COUNTY:	Fayette	ITEM #:	07-00448
PROJECT:	Armstrong Mill Shared Use Path				
DESC:	Surveys, designs, bidding, and construction administration services				

SECTION 2: BUDGET INFORMATION

FEE CONSIDERATIONS	PROPOSED HOURS	NEGOTIATED HOURS	AVERAGE RATE	ESTIMATED COST
Survey	210		\$ 36.75	\$ 7,717.50
Preliminary Line & Grade	316		\$ 56.50	\$ 17,854.00
Utility Coordination	28		\$ 70.00	\$ 1,960.00
Right of Way Plans	92		\$ 56.00	\$ 5,152.00
Final Plans	454		\$ 60.00	\$ 27,240.00
Meetings	64		\$ 70.00	\$ 4,480.00
Public Involvement	20		\$ 64.50	\$ 1,290.00
QA / QC	9		\$ 70.00	\$ 630.00
Construction Services	0		\$ 66.00	\$ -
				\$ -
TOTAL PRODUCTION HOURS & PAYROLL	1193			\$ 66,323.50

	OVERHEAD (147.83 %)	\$ 98,046.03
	PROFIT (15.00 %)	\$ 24,655.43
	COST OF MONEY (%)	\$ -

DIRECT COSTS	AMOUNT
TOTAL DIRECT COSTS	\$ -

SUBCONSULTANTS	AMOUNT
	\$ -
Geotechnology, LLC - geotechnical	\$ 6,700.00
Leak Eliminators (vacuum excavations)	\$ 3,600.00
TOTAL SUBCONSULTANTS	\$ 10,300.00

	TOTAL FEE	\$ 199,325
--	------------------	-------------------

*Rounded to the nearest dollar

SECTION 3: SIGNATURE

FIRM NAME: Banks Engineering, Inc.		SIGNED BY: John B. Steinmetz	
	Senior Engineer	6/26/2023	
_____ CONSULTANT SIGNATURE	_____ TITLE	_____ DATE	
_____ PROFESSIONAL SERVICES SIGNATURE	_____ TITLE	_____ DATE	

COUNTY <u>Fayette</u>		PROJECT TYPE <u>Shared Use Path Design</u>				
ROUTE <u>Armstrong Mill Road</u>		CONSULTANT <u>Banks Engineering, Inc.</u>				
DESC <u>Shared Use Path Connections</u>		REVIEWED BY _____				
_____		PREPARED BY <u>John Steinmetz</u>				
_____		_____				
SURVEY						
No.	ITEM	CREW	UNIT	AMOUNT	HRS/UNIT	HOURS
RECONNAISSANCE						
1	Control - (existing)	1	Mile	1.33	2	3
2	Utilities - (data gathering, identification & contact)	1	No.	6	1	6
3	Drainage - (sink holes, streams, pipes, etc.)	1	Mile	1.33	2	3
CONTROL						
4	Horizontal	2	Mile	1.33	3	8
5	Vertical	2	Mile	1.33	3	8
6	Process data	1	Mile	1.33	2	3
PLANIMETRIC SURVEY						
7	Planimetric location <i>(complete)</i>	2	Mile	1.33	12	32
8	Subsurface Utility Engineering, Quality Levels C & D	1	Mile	1.33	8	11
9	Subsurface Utility Engineering, Quality Level B	1	LS			0
10	Subsurface Utility Engineering, Quality Level A	1	Mile	0.1	80	8
11	Process data	1	Mile	1.33	20	27
TERRAIN SURVEY						
12	DTM data collection <i>(Items 11-18 not required if used)</i>	2	Acre	8	2	32
13	Verify terrain model accuracy	2	Mile			0
14	Tie-ins	2	No.			0
15	Drainage situations survey (Bridge)	2	No.			0
16	Drainage situations survey (Culvert)	2	No.			0
17	Drainage pipe section (non-situation size)	2	No.			0
18	Flood plain data	2	No.			0
19	Railroad Surveys	2	No.			0
20	Additional necessary DTM data <i>(specify pickup or update)</i>	2	Acre			0
21	Process data	1	Mile	1.33	20	27
ESTABLISH PROPERTY LINES & OWNERSHIP						
22	Contact & Interview Property Owners	1	Parcel	64	0.1	6
23	Field tie property lines/corners	2	Parcel	64	0.25	32
STAKING						
24	Stake centerlines, approaches, detours	2	Mile			0
25	Stake core holes - structures <i>(unit is per structure)</i>	2	No.			0
26	Stake core holes - roadway <i>(unit is per core hole)</i>	2	No.	6	0.3	4
SURVEY MISCELLANEOUS						
27	Determine roadway elevations (Crown and EP)	2	Mile			0
28	Environmental areas	2	No.			0
29						0
SURVEY TOTAL						210

COUNTY	<u>Fayette</u>	PROJECT TYPE	<u>Shared Use Path Design</u>
ROUTE	<u>Armstrong Mill Road</u>	CONSULTANT	<u>Banks Engineering, Inc.</u>
DESC	<u>Shared Use Path Connections</u>	REVIEWED BY	
		PREPARED BY	<u>John Steinmetz</u>

PRELIMINARY LINE AND GRADE						
No.	ITEM	UNIT	AMOUNT	HRS/UNIT	HOURS	
30	Computer setup	LS	1	4	4	
31	Prepare existing manuscripts	Mile	1.33	9	12	
32	Establish approximate property lines and ownership	Parcel	64	0.63	40	
33	Study and develop typical sections	No.	2	4	8	
34	Study and develop horizontal alignments	Mile	1.33	24	32	
35	Study and develop vertical alignments	Mile	1.33	24	32	
36	Create and evaluate proposed roadway models	Mile	1.33	30	40	
37	Design entrances	No.	1	8	8	
38	Pre-size pipes (all alternates)	No.	9	1	9	
39	Pre-size culverts (all alternates)	No.			0	
40	Pre-size bridges (all alternates)	No.			0	
41a	Conduct Traffic Engineering Analysis (Basic; Highway Capacity Manual Proc	Intersection			0	
41b	Conduct Traffic Engineering Analysis (Advanced; Micro-simulation)	Intersection			0	
42	Study and development of interchange	No.			0	
43	Study and development of intersection	No.	7	1	7	
44	Study and develop maintenance of traffic plan	LS	1	32	32	
45	Plot/print copies of plans for team meeting and inspections	LS	1	4	4	
46	Calculate preliminary quantities and develop cost estimates	Alt.	1	12	12	
47	Revise plans and estimates	LS	1	20	20	
48	Preliminary Right of Way with taking areas	Parcel	8	1	8	
49	Prepare Design Executive Summary	LS	1	8	8	
50	Develop/document "Avoidance Alternatives to Water Related Impacts"	LS	1	8	8	
PRELIMINARY LINE & GRADE MISCELLANEOUS						
51	Drainage studies to assess impacts of placing fill in "basins"	No.	3	8	24	
52	Develop / assess alternatives at existing retaining wall	No.	2	4	8	
53		LS			0	
54					0	
55					0	
PRELIMINARY LINE AND GRADE TOTAL						316

UTILITY COORDINATION						
No.	ITEM	PERSONS	UNIT	AMOUNT	HRS/UNIT	HOURS
56	Utility Coordination Meeting	2	No.	6	2	24
57	Develop Utility Relocation Layout Sheets (1"=200')		Mile	0		0
58	Develop Utility Relocation Plans (1"=50')		Mile	0		0
UTILITY COORDINATION MISCELLANEOUS						
59	BUD and utility coordination for locates		LS	1	4	4
UTILITY COORDINATION TOTAL						28

COUNTY	<u>Fayette</u>	PROJECT TYPE	<u>Shared Use Path Design</u>
ROUTE	<u>Armstrong Mill Road</u>	CONSULTANT	<u>Banks Engineering, Inc.</u>
DESC	<u>Shared Use Path Connections</u>	REVIEWED BY	
		PREPARED BY	<u>John Steinmetz</u>

RIGHT OF WAY PLANS

No.	ITEM	UNIT	AMOUNT	HRS/UNIT	HOURS
60	Deed research	Parcel	64	0.12	8
61	Establish property and ownership	Parcel	64	0.25	16
62	Calculate Right of Way	Parcel	4	1	4
63	Prepare legal descriptions	Parcel	4	3	12
64	Complete Right of Way summary sheet	Parcel	4	1	4
65	Generate Right of Way strip map <i>(scale 1" = 100')</i>	Sheet	5	8	40
66	Prepare Right of Way Plans Submittal	LS	1	4	4
67	Right of Way revisions after Right of Way submittal	LS	1	4	4
R/W PLANS MISCELLANEOUS					
68		LS	0		0
69		Parcel	0		0
70		Parcel	0		0
71					
72					
RIGHT OF WAY PLANS TOTAL					92

FINAL PLAN PREPARATION

No.	ITEM	UNIT	AMOUNT	HRS/UNIT	HOURS
80	Computer setup	LS			0
81	Update existing topography and terrain model	Mile	1.33	8	11
82	Refine alignments (horizontal & vertical)	Mile	1.33	9	12
83	Develop pavement design	No.	1	2	2
84	Finalize templates & transitions	No.	4	2	8
85	Develop final roadway model	Mile	1.33	4	5
86	Develop proposed design	Mile	1.33	30	40
87	Generate plan sheets <i>(scale 1" = 20')</i>	Sheet	12	1	12
88	Generate profile sheets <i>(scale 1" = 20')</i>	Sheet	12	2	24
89	Detail cross sections <i>(scale 1" = 5')</i>	No.	140	0.5	70
90	Design entrances	No.	1	4	4
91	Revise roadway plans from soils report	Mile			0
DRAINAGE					
92	Develop pipe sections (< 54")	No.	9	1.6	14
93	Develop drainage system map	Mile	1.33	6	8
94	Develop drainage situation (bridge)	No.			0
95	Develop drainage situation (culvert)	No.			0
96	Develop blue line stream channel change (=> 200')	No.			0
97	Drainage analysis (entrance pipes)	No.			0
98	Drainage analysis (A <= 200 acres)	No.	9	2.2	20
99	Drainage analysis (200 acres < A < 1.0 sq. mile)	No.			0
100	Drainage analysis (A => 1.0 sq. mile) level 1 analysis	No.			0
101	Drainage analysis (A => 1.0 sq. mile) level 2 analysis	No.			0
102	Drainage analysis (A => 1.0 sq. mile) level 3 analysis	No.			0
103	Special drainage studies	No.	1	16	16
104	Roadway ditches and channels	Mile	0.67	16	11
105	Develop Erosion Control Plan	Mile	1.33	12	16
106	Inlet spacing calculations	No.			0
107	Storm sewers calculations	No.	4	2	8
108	Perform scour analysis	No.			0
109	Assemble preliminary and final drainage folders	LS			0
110	Prepare advanced situation folder - bridge	No.			0
111	Prepare advanced situation folder - culvert	No.			0

COUNTY	<u>Fayette</u>	PROJECT TYPE	<u>Shared Use Path Design</u>
ROUTE	<u>Armstrong Mill Road</u>	CONSULTANT	<u>Banks Engineering, Inc.</u>
DESC	<u>Shared Use Path Connections</u>	REVIEWED BY	
		PREPARED BY	<u>John Steinmetz</u>

FINAL PLAN PREPARATION (Continued)

No.	ITEM	UNIT	AMOUNT	HRS/UNIT	HOURS
116	Prepare layout sheet	LS	1	4	4
117	Prepare typical sections	No.	2	2	4
118	Prepare Interchange geometric approval	No.			0
119	Prepare intersection geometric approval	No.			0
120	Prepare coordinate control sheet	Mile	1.33	8	11
121	Prepare elevation developments	No.			0
122	Prepare striping plan	No.	1	8	8
123	Calculate final quantities	Mile	1.33	9	12
124	Complete general summary	LS	1	4	4
125	Complete paving summary	LS	1	4	4
126	Complete drainage summary	LS	1	4	4
127	Complete pavement under-drain summary	LS			0
128	Prepare cost estimate	LS	1	6	6
129	Plot/print copies of plans	LS	1	4	4
130	Plan revisions	Mile	1.33	12	16
131	Prepare final construction plans submittal	LS	1	4	4

MAINTENANCE OF TRAFFIC

132	Write maintenance of traffic notes (TCP)	LS	1	8	8
133	Prepare construction phasing plans	Mile	1.33	12	16
134	Develop diversion plan sheets	Sheet			0
135	Develop diversion profile sheets	Sheet			0
136	Develop diversion cross sections	No.			0
137	Develop temporary drainage	No.			0

FINAL PLANS MISCELLANEOUS

138	Document available rock quantities	LS	1	4	4
139	Geotechnical - assume 20 rock soundings plus boring at existing wall	LS	1	8	8
140	Environmental investigations	LS	1	16	16
141	SUP Signage Plan	LS	1	8	8
142	Prepare specifications	LS	1	32	32
143					0

FINAL PLANS TOTAL

454

MEETINGS

No.	ITEM	PERSONS	UNIT	AMOUNT	HRS/UNIT	HOURS
150	Prelim. line and grade inspection	2	No.	1	3	6
151	Drainage inspection	2	No.	1	3	6
152	Final inspection	2	No.	2	4	16
153	Misc. project coordination meetings	2	No.	4	2	16
154	Project team meetings	2	No.	4	2	16

MEETINGS MISCELLANEOUS

155	Value Engineering Study		LS			0
156	Constructability Review		LS	1	4	4

MEETINGS TOTAL

64

COUNTY	<u>Fayette</u>	PROJECT TYPE	<u>Shared Use Path Design</u>			
ROUTE	<u>Armstrong Mill Road</u>	CONSULTANT	<u>Banks Engineering, Inc.</u>			
DESC	<u>Shared Use Path Connections</u>	REVIEWED BY				
		PREPARED BY	<u>John Steinmetz</u>			
PUBLIC INVOLVEMENT						
No.	ITEM	PERSONS	UNIT	AMOUNT	HRS/UNIT	HOURS
160	Develop and Maintain Mailing List	1	LS	0	2	0
161	Prepare for Advisory Committee/Officials Meeting	2	No.	0	2	0
162	Attend Advisory Committee/Officials Meeting	3	No.	0	3	0
163	Prepare for Public Meetings/Hearings	2	No.	2	2	4
164	Attend Public Meetings/Hearings	2	No.	2	4	16
165	Prepare and Distribute Newsletter	1	No.			0
166	Property owner coordination	1	No.	0	1	0
PUBLIC INVOLVEMENT MISCELLANEOUS						
167						0
168						0
169						0
PUBLIC INVOLVEMENT TOTAL						20
QA/QC						
No.	ITEM		UNIT	AMOUNT	HRS/UNIT	HOURS
180	Plan review		No.	3	3	9
181	Structure review		LS	0		0
QA/QC TOTAL						9
CONSTRUCTION PHASE SERVICES						
No.	ITEM		UNIT	AMOUNT	HRS/UNIT	HOURS
182	Engineering Services		LS	0	120	0
183	Construction Inspection		LS	0		0
CONSTRUCTION SERVICES TOTAL						0
PRODUCTION-HOUR SUMMARY						
SURVEY TOTAL						210
LINE AND GRADE TOTAL						316
UTILITY COORDINATION TOTAL						28
RIGHT OF WAY PLANS TOTAL						92
FINAL PLANS TOTAL						454
MEETINGS TOTAL						64
PUBLIC INVOLVEMENT TOTAL						20
QA/QC TOTAL						9
CONSTRUCTION SERVICES TOTAL						0
GRAND TOTAL						1193