

October 18, 2017

Mr. Thomas Clements, P.E.
Senior Municipal Engineer
Lexington-Fayette Urban County Government
Division of Engineering
104 East Vine Street, 4th Floor
Lexington, KY 40507

RE:

Item 7-3223 Citation Trail Shared Use Path

Proposal for Engineering Services

Mr. Clements:

Banks Engineering is pleased to submit this proposal to provide professional engineering services for the Citation Trail Project. Based on our recent scoping and negotiations discussions, we have prepared manhour estimates and fee proposals for our team. Attached please find:

- TC 40-2, KYTC fee proposal forms for Banks Engineering and Integrated Engineering
- KYTC Production-hour worksheets for Banks Engineering and Integrated Engineering
- Fee proposal from 2020 Land Surveying

As summarized on our form TC 40-2, the proposed base fee for this project is a total of **one hundred six thousand four hundred sixty-eight dollars (\$106,468)**. In addition to the base fees, and as discussed subsequent to our negotiations meeting, we also request that allowances be established in the event that certain additional services are required. The allowances described below, totaling \$10,633, will not be invoiced unless they are specifically authorized by you in writing prior to the work being performed.

- \$7,291 if a Conditional Letter of Map Amendment (CLOMR) is required due to potential floodplain impacts
- \$3,342 for geotechnical engineering services if rock soundings are required for a potential retaining wall

Thank you again for selecting us for this project. If you have any questions or need additional information, please contact me at (859) 881-0020 or by email at isteinmetz@banksengineering.net.

Very truly yours,

Banks Engineering, Inc.

B. Stemmet

John B. Steinmetz, P.E.

Senior Engineer

17093

KENTUCKY TRANSPORTATION CABINET

Department of Highways

Rev.

TC 40-2 06/2017

DIVISION OF PROFESSIONAL SERVICES

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ENGINEERING AND RELATED SERVICES FEE PROPOSAL

SECTION 1: PROJECT INFORMATION						
DATE: October 16, 2017 COUNTY:	Fayet	te	ITEM #	:	. 7	7-3223
PROJECT: Citation Trail Shared Use Path						
SECTION 2: BUDGET INFORMATION		-				
FEE CONSIDERATIONS	PROPOSED	NEGOTIATED	AVE	RAGE		ESTIMATED
	MAN HOURS	MAN HOURS		ATE		COST
Survey	13		\$	28.85	\$	375.05
Preliminary Line and Grade	128		\$	51.92	\$	6,645.76
Utility Coordination	4		\$	50.00	\$	200.00
Right of Way Plans	0		\$	48.08	\$	_
Final Plans	319		\$	50.50	\$	16,109.50
Meetings	64		\$	57.69	\$	3,692.16
Public Involvement	28		\$	53.85	\$	1,507.80
QA/QC	40				\$	-
					\$	-
					\$	-
TOTAL PRODUCTION HOURS	596					
		TOTAL DIR		YROLL	\$	28,530.27
		OVERHEAD	(126	5.00 %)	\$	35,948.14
	-4	PROFIT		.00 %)	\$	9,671.76
	C	OST OF MONEY	' (%)	\$	-
DIRECT COST	TS					AMOUNT
DIRECT COS	TS					AMOUNT
DIRECT COS	TS					AMOUNT
DIRECT COS	TS					AMOUNT
DIRECT COS	TS	TOTAL D	PIRECT	COSTS	. \$	AMOUNT
		TOTAL D	DIRECT	COSTS		-
SUBCONSULTA		TOTAL D	DIRECT	COSTS		AMOUNT -
SUBCONSULTA Integrated Engineering		TOTAL D	PIRECT	COSTS	\$	- AMOUNT
SUBCONSULTA		TOTAL D	PIRECT	COSTS		- AMOUNT
SUBCONSULTA Integrated Engineering					\$	- AMOUNT 24,854.00 7,464.00
SUBCONSULTA Integrated Engineering		TOTAL D			\$	- AMOUNT 24,854.00
SUBCONSULTA Integrated Engineering			DNSULT	TANTS	\$ \$	- AMOUNT 24,854.00 7,464.00
SUBCONSULTA Integrated Engineering				TANTS	\$	- AMOUNT 24,854.00 7,464.00
SUBCONSULTA Integrated Engineering 2020 Land Surveying			DNSULT	TANTS	\$ \$ \$	- AMOUNT 24,854.00 7,464.00 32,318.00
SUBCONSULTA Integrated Engineering 2020 Land Surveying SECTION 3: SIGNATURE			DNSULT	TANTS	\$ \$ \$	- AMOUNT 24,854.00 7,464.00 32,318.00
SUBCONSULTA Integrated Engineering 2020 Land Surveying	NTS		DNSULT	TANTS L FEE *Rou	\$ \$ \$ nded t	- AMOUNT 24,854.00 7,464.00 32,318.00
SUBCONSULTA Integrated Engineering 2020 Land Surveying SECTION 3: SIGNATURE	NTS	TOTAL SUBCO	DNSULT	TANTS L FEE *Rou	\$ \$ \$ \$ mded t	- AMOUNT 24,854.00 7,464.00 32,318.00
SUBCONSULTA Integrated Engineering 2020 Land Surveying SECTION 3: SIGNATURE FIRM NAME: Banks Engineering, Inc.	.NTS Senior	TOTAL SUBCO	DNSULT	TANTS L FEE *Rou	\$ \$ \$ \$ mded t	- AMOUNT 24,854.00 7,464.00 32,318.00 106,468 to the nearest dollar
SUBCONSULTA Integrated Engineering 2020 Land Surveying SECTION 3: SIGNATURE FIRM NAME: Banks Engineering, Inc.	.NTS Senior	TOTAL SUBCO	DNSULT	TANTS L FEE *Rou	\$ \$ \$ \$ mded t	- AMOUNT 24,854.00 7,464.00 32,318.00 106,468 to the nearest dollar
SUBCONSULTA Integrated Engineering 2020 Land Surveying SECTION 3: SIGNATURE FIRM NAME: Banks Engineering, Inc.	Senior	TOTAL SUBCO	DNSULT	TANTS L FEE *Rou	\$ \$ \$ mded t	- AMOUNT 24,854.00 7,464.00 32,318.00 106,468 to the nearest dollar

		PRODUCTION	N-HOUR V			(revised 7/14)		
COL	JŅTY	Fayette	PROJECT			Design		
ROL	JTE	Citation Trail	CONSULT		E	<u>Banks Engine</u>	ering	
DES	C	Shared use path design	REVIEWEI					
			PREPARE	D BY		ohn Steinme	tz	
ITEN	/ NO.	07-3223	DATE		1	0/16/17		
		SURVEY						
No.		ITEM		CREW	UNIT	AMOUNT	HRS/UNIT	HOURS
		RECONNAISSANC	E					
1		- (existing)		1	Mile	0.55	1	
2		- (data gathering, identification & con	tact)	1	No.	5	0.5	
3	Drainag	ge - (sink holes, streams, pipes, etc.)		1	Mile	0.55	2	
		CONTROL						
4	Horizon			2	Mile	0.55	0	
5	Vertical			2	Mile	0.55	0	
6	Process			1	Mile	0.55	0	
	ъ.	PLANIMETRIC SURV	EY		Ta. 411			
7		etric location (complete)		2	Mile	0.55	0	
8		face Utility Engineering, Quality Level		2	Mile	0.55	2	
9		face Utility Engineering, Quality Level			LS			
10	Process	face Utility Engineering, Quality Level	A	4	LS	0.55	0	
11	Process	TERRAIN SURVEY	/	1	Mile	0.55	0	
12	DTM da	ata collection (Items 11-18 not required		2	Acre	7.5	0	
13		errain model accuracy	u II useu)	2	Mile	7.5	U	
14	Tie-ins	ciraii inodei accuracy			No.			
15		ge situations survey (Bridge)			No.			
16		ge situations survey (Culvert)			No.			
17		ge pipe section (non-situation size)			No.			
18		lain data			No.			
19		d Surveys			No.			
20		nal necessary DTM data (specify pick	(up or update)		Acre			
21	Process	s data	,	1	Mile	0.55	0	
		ESTABLISH PROPERTY LINES (& OWNERSHIP	•			•	
22	Contact	t & Interview Property Owners - Miche	elle Park	1	Parcel	12	0.5	
23	Field tie	e property lines/corners		2	Parcel	55	0	
		STAKING						
24		enterlines, approaches, detours		2	Mile	0.55	0	
25		ore holes - structures (unit is per struc			No.			
26	Stake c	ore holes - roadway (unit is per core h			No.			
	1	SURVEY MISCELLANE					1	
27		ine roadway elevations (Crown and E	P)		Mile			
28	Environ	mental areas			No.			
29								
		SURVEY TOTAL	L					1

	PRODUCTION-HOUR WORKSHEET (revised 7/14)					
COUNTY	Fayette	PROJECT TYPE	Design			
ROUTE	Citation Trail	CONSULTANT	Banks Engineering			
DESC	Shared use path design	REVIEWED BY				
		PREPARED BY	J <u>ohn Steinmetz</u>			
ITEM NO.	07-3223	DATE	10/16/17			
ı	PRELIMINARY LINE AND	GRADE				

No.	ITEM	UNIT	AMOUNT	HRS/UNIT	HOURS
30	Computer setup	LS	0	0	0
31	Prepare existing manuscripts	Mile	0.55	29	16
32	Establish approximate property lines and ownership	Parcel	55	0.25	14
33	Study and develop typical sections	No.	2	2	4
34	Study and develop horizontal alignments	Mile	0.55	76	42
35	Study and develop vertical alignments	Mile	0.55	16	9
36	Create and evaluate proposed roadway models	Mile	0.55	16	9
37	Design entrances	No.			0
38	Pre-size pipes (all alternates)	No.			0
39	Pre-size culverts (all alternates)	No.	4	0	0
40	Pre-size bridges (all alternates)	No.			0
41a	Conduct Traffic Engineering Analysis (Basic; Highway Capacity Manual Proce	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.			0
44	Study and develop maintenance of traffic plan	LS			0
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	8	8
47	Revise plans and estimates	LS	1	8	8
48	Preliminary Right of Way with taking areas	Parcel			0
49	Prepare Design Executive Summary	LS			0
50	Develop/document "Avoidance Alternatives to Water Related Impacts"	LS			0
	PRELIMINARY LINE & GRADE MISCELLANEOUS				
51	Preliminary KDOW permitting	LS	1	2	2
52	Mid-block crossing evaluation	LS	1	12	12
53					0
54					0
55					0
	PRELIMINARY LINE AND GRADE TOTAL				128

10/17/2017

		PRODUCTIO	N-HOUR	WORKS	HEET	(revised 7/14)		
COL	JNTY		PROJEC	T TYPE		Design		
ROL	•	Citation Trail	CONSUL	TANT	В	Banks Engine	eering	
DES	C	Shared use path design	REVIEW	ED BY		•		
			PREPAR	RED BY	J	ohn Steinme	etz	
ITEN	/ NO.	07-3223	DATE		<u>1</u>	0/16/17		
		UTILITY COORDIN	NOITAN					
No.		ITEM		PERSONS	UNIT	AMOUNT	HRS/UNIT	HOURS
56		ordination Meeting		2	No.	1	2	4
57		Utility Relocation Layout Sheets (1"	'=200')		Mile			0
58	Develop	Utility Relocation Plans (1"=50')			Mile			0
		UTILITY COORDINATION MISC	ELLANEOUS			_		
59								
		UTILITY COORDINATION	TOTAL					4
		0112111 0001121111111111						
		RIGHT OF WAY F						
No.		RIGHT OF WAY F			UNIT	AMOUNT	HRS/UNIT	HOURS
60	Deed res	RIGHT OF WAY F			Parcel	AMOUNT	HRS/UNIT	0
60 61	Establish	RIGHT OF WAY F ITEM Bearch Item			Parcel Parcel	AMOUNT	HRS/UNIT	0
60 61 62	Establish Calculate	RIGHT OF WAY F ITEM Bearch Item			Parcel Parcel Parcel	AMOUNT	HRS/UNIT	0 0
60 61 62 63	Establish Calculate Prepare I	RIGHT OF WAY F ITEM Rearch In property and ownership Re Right of Way Regal descriptions			Parcel Parcel Parcel Parcel	AMOUNT	HRS/UNIT	0 0 0
60 61 62 63 64	Establish Calculate Prepare I Complete	RIGHT OF WAY F ITEM Rearch In property and ownership Re Right of Way Regal descriptions Re Right of Way summary sheet	PLANS		Parcel Parcel Parcel Parcel Parcel	AMOUNT	HRS/UNIT	0 0 0 0
60 61 62 63 64 65	Establish Calculate Prepare I Complete Generate	RIGHT OF WAY F ITEM search a property and ownership e Right of Way legal descriptions e Right of Way summary sheet e Right of Way strip map (scale 1" =	PLANS		Parcel Parcel Parcel Parcel Parcel Sheet	AMOUNT	HRS/UNIT	0 0 0 0 0
60 61 62 63 64 65 66	Establish Calculate Prepare I Complete Generate Prepare	RIGHT OF WAY F ITEM Rearch Property and ownership Right of Way Right of Way summary sheet Right of Way strip map (scale 1" = Right of Way Plans Submittal	PLANS = 100')		Parcel Parcel Parcel Parcel Parcel Sheet LS	AMOUNT	HRS/UNIT	0 0 0 0 0 0
60 61 62 63 64 65	Establish Calculate Prepare I Complete Generate Prepare	RIGHT OF WAY F ITEM Bearch In property and ownership Iterative Right of Way Iterative Right of Way summary sheet Iterative Right of Way Plans Submittal Iterative Right of Way strip map (scale 1" = Right of Way Plans Submittal Iterative Right of Way summary sheet Iterative Right of Way Plans Submittal Iterative Right of Way summary sheet Iterative Rindow Right of Way Summary sheet Iterative Right of Way Summary sh	PLANS = 100') bmittal		Parcel Parcel Parcel Parcel Parcel Sheet	AMOUNT	HRS/UNIT	0 0 0 0 0 0
60 61 62 63 64 65 66 67	Establish Calculate Prepare Complete Generate Prepare Right of \	RIGHT OF WAY F ITEM Bearch I property and ownership Re Right of Way Regal descriptions Re Right of Way summary sheet Re Right of Way strip map (scale 1" = Right of Way Plans Submittal Reversions after Right of Way summary sheet RIGHT OF WAY SUMMITTER RIGHT OF WAY FLANS MISCELLAN	PLANS = 100') bmittal		Parcel Parcel Parcel Parcel Parcel Sheet LS LS	AMOUNT	HRS/UNIT	0 0 0 0 0 0 0
60 61 62 63 64 65 66 67	Establish Calculate Prepare Complete Generate Prepare Right of \ Deed Re	RIGHT OF WAY F ITEM Bearch I property and ownership Re Right of Way Regal descriptions Re Right of Way summary sheet Right of Way strip map (scale 1" = Right of Way Plans Submittal Way revisions after Right of Way su R/W PLANS MISCELLAN Search for Existing Alignments	PLANS = 100') bmittal		Parcel Parcel Parcel Parcel Parcel Sheet LS LS	AMOUNT	HRS/UNIT	0 0 0 0 0 0 0
60 61 62 63 64 65 66 67	Establish Calculate Prepare Complete Generate Prepare Right of V	RIGHT OF WAY F ITEM Bearch I property and ownership Right of Way Regal descriptions Right of Way summary sheet Right of Way strip map (scale 1" = Right of Way Plans Submittal Way revisions after Right of Way su R/W PLANS MISCELLAN Search for Existing Alignments search for Existing Parcels	PLANS = 100') bmittal NEOUS		Parcel Parcel Parcel Parcel Parcel Sheet LS LS Parcel	AMOUNT	HRS/UNIT	0 0 0 0 0 0 0 0
60 61 62 63 64 65 66 67 68 69 70	Establish Calculate Prepare Complete Generate Prepare Right of V	RIGHT OF WAY F ITEM Bearch I property and ownership Re Right of Way Regal descriptions Re Right of Way summary sheet Right of Way strip map (scale 1" = Right of Way Plans Submittal Way revisions after Right of Way su R/W PLANS MISCELLAN Search for Existing Alignments	PLANS = 100') bmittal NEOUS		Parcel Parcel Parcel Parcel Parcel Sheet LS LS	AMOUNT	HRS/UNIT	0 0 0 0 0 0 0 0
60 61 62 63 64 65 66 67 68 69 70	Establish Calculate Prepare Complete Generate Prepare Right of V	RIGHT OF WAY F ITEM Bearch I property and ownership Right of Way Regal descriptions Right of Way summary sheet Right of Way strip map (scale 1" = Right of Way Plans Submittal Way revisions after Right of Way su R/W PLANS MISCELLAN Search for Existing Alignments search for Existing Parcels	PLANS = 100') bmittal NEOUS		Parcel Parcel Parcel Parcel Parcel Sheet LS LS Parcel	AMOUNT	HRS/UNIT	0 0 0 0 0 0 0 0
60 61 62 63 64 65 66 67 68 69 70	Establish Calculate Prepare Complete Generate Prepare Right of V	RIGHT OF WAY F ITEM Bearch I property and ownership Right of Way Regal descriptions Right of Way summary sheet Right of Way strip map (scale 1" = Right of Way Plans Submittal Way revisions after Right of Way su R/W PLANS MISCELLAN Search for Existing Alignments search for Existing Parcels	PLANS = 100') bmittal NEOUS transfer		Parcel Parcel Parcel Parcel Parcel Sheet LS LS Parcel	AMOUNT	HRS/UNIT	HOURS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

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	PRODUCTION-HOUR WORKSHEET (revised 7/14)					
COUNTY	Fayette	PROJECT TYPE	Design			
ROUTE	Citation Trail	CONSULTANT	Banks Engineering			
DESC	Shared use path design	REVIEWED BY	9			
		PREPARED BY	J <u>ohn Steinmetz</u>			
ITEM NO.	07-3223	DATE	10/16/17			

FINAL PLAN PREPARATION

	TINAL PLAN FILL ARATION				
No.	ITEM	UNIT	AMOUNT	HRS/UNIT	HOURS
80	Computer setup	LS			0
81	Update existing topography and terrain model	Mile			0
82	Refine alignments (horizontal & vertical)	Mile	0.55	24	13
83	Develop pavement design	No.	1	2	2
84	Finalize templates & transitions	No.	1	4	4
85	Develop final roadway model	Mile	0.55	12	7
86	Develop proposed design	Mile	0.55	24	13
87	Generate plan sheets (scale 1" = 20')	Sheet	6	8	48
88	Generate profile sheets (scale 1" = 5')	Sheet	6	8	48
89	Detail cross sections (scale 1" = 5')	No.	60	0.5	30
90	Design entrances	No.			0
91	Revise roadway plans from soils report	Mile			0
	DRAINAGE				
92	Develop pipe sections (< 54")	No.			0
93	Develop drainage system map	Mile	0.55	0	0
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.	4	0	0
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
	Drainage analysis (A = > 1.0 sq. mile) level 3 analysis	No.			0
	Special drainage studies	No.			0
	Roadway ditches and channels	Mile			0
105	Develop Erosion Control Plan	Mile	0.55	0	0
106	Inlet spacing calculations	No.			0
107	Storm sewers calculations	No.			0
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
	DRAINAGE MISCELLANEOUS				
	CLOMR / LOMR or No Rise Certification	LS	1	0	0
113					0
114					0
115					0

10/17/2017

		PRODUCTIO	N-HOUR WORK	SHEET	(revised 7/14)		
COL	JNTY	Fayette	PROJECT TYPE		Design		
ROL	JTE	Citation Trail	CONSULTANT	E	Banks Engine	eering	
DES	C	Shared use path design	REVIEWED BY				
	,		PREPARED BY		John Steinme	etz	
ITEN	Į NO.	07-3223	DATE	1	10/16/17		
	FINA	AL PLAN PREPARAT	ION (Continued)				
No.		ITEM		UNIT	AMOUNT	HRS/UNIT	HOURS
116	Prepare	layout sheet		LS	1	4	4
117	Prepare	typical sections		No.	2	4	8
		Interchange geometric approval		No.			0
		intersection geometric approval		No.	1	8	8
		coordinate control sheet		Mile			0
121		elevation developments		No.			0
		striping plan		No.	1		0
123		te final quantities		Mile	0.55		11
124		te general summary		LS	1	8	8
125		te paving summary		LS	1	4	4
		te drainage summary		LS	1	0	0
		te pavement under-drain summary		LS			0
		cost estimate		LS	1	8	8
		t copies of plans		LS	1	- 1	4
130	Plan rev			Mile	0.55		22
131	Prepare	final construction plans submittal		LS	1	8	8
		MAINTENANCE OF TR	RAFFIC				
		aintenance of traffic notes (TCP)		LS			0
		construction phasing plans		Mile	0.55	2	1
		diversion plan sheets		Sheet			0
135		diversion profile sheets		Sheet			0
136		diversion cross sections		No.			0
137	Develop	temporary drainage		No.			0
		FINAL PLANS MISCELL	ANEOUS				
		ndscape Plan		LS	1	-	0
		Stream Construction Permit		LS	1	_	0
140		ations and contract documents		LS	1		40
141		and construction administration ass	istance	LS	1		12
142	LPA cod	ordination		LS	1	16	16
143							0
		FINAL PLANS TO	TAL				319

No. ITEM PERSONS UNIT AMOUNT HRS/UNIT HOURS		PRODUCTION-						
CONSULTANT REVIEWED BY PREPARED BY DATE D	COUNTY	Favette	PROJECT TYP	PE		Design		
TEM NO. Q7-3223 DATE John Steinmetz 10/16/17 MEETINGS MEETINGS DATE DATE DATE 10/16/17 MOUNT MRS/UNIT HOURS DATE		•	CONSULTANT	Γ			eering	
No.	DESC	Shared use path design	REVIEWED BY	Y	-			
No. ITEM			PREPARED B	Υ	J	ohn Steinme	etz	
No. ITEM	ITEM NO.	07-3223	DATE		1	0/16/17		
150		MEETINGS						
151 Drainage inspection	No.	ITEM	F	PERSONS	UNIT	AMOUNT	HRS/UNIT	HOURS
151 Drainage inspection	150 Review	meetings		2	No.	2	4	16
152 Final inspection				2			4	
153 Misc. project coordination meetings 2 No. 2 4 16 154 Project team meetings 2 No. 2 4 16 MEETINGS MISCELLANEOUS LS CO 155 Value Engineering Study LS CO MEETINGS TOTAL LS CO MEETINGS TOTAL G4				2	No.	1	4	
MEETINGS MISCELLANEOUS				2	No.	2	4	16
155 Value Engineering Study		team meetings		2	No.	2	4	16
156 Constructability Review			US					
No. ITEM PERSONS UNIT AMOUNT HRS/UNIT HOURS								C
No. ITEM PERSONS UNIT AMOUNT HRS/UNIT HOURS	156 Constru	ctability Review			LS			0
No. ITEM		MEETINGS TOTAL						64
No. ITEM								
160 Develop and Maintain Mailing List								
161 Prepare for Advisory Committee/Officials Meeting 2 No. 0 6 0 0 162 Attend Advisory Committee/Officials Meeting 3 No. 0 4 0 0 163 Prepare for Public Meetings/Hearings 2 No. 1 4 8 8 164 Attend Public Meetings/Hearings 2 No. 2 3 12 165 Prepare and Distribute Newsletter No. 12 0.5 6 166 Property owner coordination - Michelle Park 1 No. 12 0.5 6 168		PUBLIC INVOLVEM	ENT					
Attend Advisory Committee/Officials Meeting 3 No. 0 4 0 0 163 Prepare for Public Meetings/Hearings 2 No. 1 4 8 8 164 Attend Public Meetings/Hearings 2 No. 2 3 12 165 Prepare and Distribute Newsletter No. 12 0.5 6 166 Property owner coordination - Michelle Park 1 No. 12 0.5 6 167	-	ITEM		PERSONS	_	AMOUNT	HRS/UNIT	HOURS
163	160 Develop	ITEM o and Maintain Mailing List	F	1	LS	-	2	2
164	160 Develop	ITEM o and Maintain Mailing List e for Advisory Committee/Officials Meeting	F	1 2	LS No.	1	2 6	2
165 Prepare and Distribute Newsletter	160 Develop 161 Prepare 162 Attend A	ITEM o and Maintain Mailing List e for Advisory Committee/Officials Meeting Advisory Committee/Officials Meeting	F	1 2 3	LS No. No.	1 0 0	2 6	2 0 0
166 Property owner coordination - Michelle Park	160 Develop 161 Prepare 162 Attend A 163 Prepare	ITEM o and Maintain Mailing List o for Advisory Committee/Officials Meeting Advisory Committee/Officials Meeting of for Public Meetings/Hearings	F	1 2 3 2	LS No. No. No.	1 0 0	2 6 4 4	2 0 0
PUBLIC INVOLVEMENT MISCELLANEOUS	160 Develop 161 Prepare 162 Attend A 163 Prepare 164 Attend B	ITEM D and Maintain Mailing List De for Advisory Committee/Officials Meeting Advisory Committee/Officials Meeting De for Public Meetings/Hearings Public Meetings/Hearings	F	1 2 3 2	No. No. No.	1 0 0	2 6 4 4	2 0 0 8 12
167	160 Develop 161 Prepare 162 Attend A 163 Prepare 164 Attend B 165 Prepare	ITEM D and Maintain Mailing List of for Advisory Committee/Officials Meeting Advisory Committee/Officials Meeting of for Public Meetings/Hearings Public Meetings/Hearings of and Distribute Newsletter	F	1 2 3 2	No. No. No. No. No. No. No.	1 0 0 1 1	2 6 4 4 3	2 0 0 8 12
168	160 Develop 161 Prepare 162 Attend A 163 Prepare 164 Attend B 165 Prepare	ITEM Do and Maintain Mailing List of for Advisory Committee/Officials Meeting Advisory Committee/Officials Meeting of for Public Meetings/Hearings Public Meetings/Hearings of and Distribute Newsletter of wowner coordination - Michelle Park	g F	1 2 3 2	No. No. No. No. No. No. No.	1 0 0 1 1	2 6 4 4 3	2 0 0 8 12
169 PUBLIC INVOLVEMENT TOTAL 28 28 28 28 28 28 28 2	160 Develop 161 Prepare 162 Attend A 163 Prepare 164 Attend B 165 Prepare 166 Propert	ITEM Do and Maintain Mailing List of for Advisory Committee/Officials Meeting Advisory Committee/Officials Meeting of for Public Meetings/Hearings Public Meetings/Hearings of and Distribute Newsletter of wowner coordination - Michelle Park	g F	1 2 3 2	No. No. No. No. No. No. No.	1 0 0 1 1	2 6 4 4 3	2 0 0 8 12 0
PUBLIC INVOLVEMENT TOTAL 28 QA/QC No. ITEM UNIT AMOUNT HRS/UNIT HOURS 180 Plan review LS 1 40 40	160 Develop 161 Prepare 162 Attend A 163 Prepare 164 Attend B 165 Prepare 166 Property	ITEM Do and Maintain Mailing List of for Advisory Committee/Officials Meeting Advisory Committee/Officials Meeting of for Public Meetings/Hearings Public Meetings/Hearings of and Distribute Newsletter of wowner coordination - Michelle Park	g F	1 2 3 2	No. No. No. No. No. No. No.	1 0 0 1 1	2 6 4 4 3	2 0 0 8 12 0 6
QA/QC No. ITEM UNIT AMOUNT HRS/UNIT HOURS 180 Plan review LS 1 40 40	160 Develop 161 Prepare 162 Attend A 163 Prepare 164 Attend B 165 Prepare 166 Property	ITEM Do and Maintain Mailing List of for Advisory Committee/Officials Meeting Advisory Committee/Officials Meeting of for Public Meetings/Hearings Public Meetings/Hearings of and Distribute Newsletter of wowner coordination - Michelle Park	g F	1 2 3 2	No. No. No. No. No. No. No.	1 0 0 1 1	2 6 4 4 3	2 0 0 8 12 0 6
No. ITEM UNIT AMOUNT HRS/UNIT HOURS 180 Plan review LS 1 40 40	160 Develop 161 Prepare 162 Attend A 163 Prepare 164 Attend B 165 Prepare 166 Property	ITEM D and Maintain Mailing List of for Advisory Committee/Officials Meeting Advisory Committee/Officials Meeting of for Public Meetings/Hearings Public Meetings/Hearings of and Distribute Newsletter of owner coordination - Michelle Park PUBLIC INVOLVEMENT MISCELL	g ANEOUS	1 2 3 2	No. No. No. No. No. No. No.	1 0 0 1 1	2 6 4 4 3	2 C C 8 12 C 6
No. ITEM UNIT AMOUNT HRS/UNIT HOURS 180 Plan review LS 1 40 40	160 Develop 161 Prepare 162 Attend A 163 Prepare 164 Attend B 165 Prepare 166 Property	ITEM D and Maintain Mailing List of for Advisory Committee/Officials Meeting Advisory Committee/Officials Meeting of for Public Meetings/Hearings Public Meetings/Hearings of and Distribute Newsletter of owner coordination - Michelle Park PUBLIC INVOLVEMENT MISCELL	g ANEOUS	1 2 3 2	No. No. No. No. No. No. No.	1 0 0 1 1	2 6 4 4 3	2 0 0 8 12 0 6
180 Plan review LS 1 40 40	160 Develop 161 Prepare 162 Attend A 163 Prepare 164 Attend B 165 Prepare 166 Property	ITEM D and Maintain Mailing List of for Advisory Committee/Officials Meeting Advisory Committee/Officials Meeting of for Public Meetings/Hearings Public Meetings/Hearings of and Distribute Newsletter of owner coordination - Michelle Park PUBLIC INVOLVEMENT MISCELL	g ANEOUS	1 2 3 2	No. No. No. No. No. No. No.	1 0 0 1 1	2 6 4 4 3	2 C C 8 12 C 6
	160 Develop 161 Prepare 162 Attend A 163 Prepare 164 Attend B 165 Prepare 166 Property	D and Maintain Mailing List of and Maintain Mailing List of for Advisory Committee/Officials Meeting Advisory Committee/Officials Meeting of for Public Meetings/Hearings Oublic Meetings/Hearings of and Distribute Newsletter of owner coordination - Michelle Park OUBLIC INVOLVEMENT MISCELL OUBLIC INVOLVEMENT TO	g ANEOUS	1 2 3 2	No. No. No. No. No. No. No.	1 0 0 1 1	2 6 4 4 3	2 ((8 12 (6
181 Structure review	160 Develop 161 Prepare 162 Attend A 163 Prepare 164 Attend B 165 Prepare 166 Property 167 168 169	ITEM Do and Maintain Mailing List De for Advisory Committee/Officials Meeting Advisory Committee/Officials Meeting De for Public Meetings/Hearings Dublic Meetings/Hearings Dublic Meetings/Hearings De and Distribute Newsletter De owner coordination - Michelle Park DUBLIC INVOLVEMENT MISCELL DUBLIC INVOLVEMENT TO QA/QC	g ANEOUS	1 2 3 2	No. No. No. No. No. No.	1 0 0 1 1 2	2 6 4 4 3 0.5	2 0 0 8 12 0 6
101 0.0.00.01.01.01.	160 Develop 161 Prepare 162 Attend A 163 Prepare 164 Attend B 165 Prepare 166 Property 167 168 169	ITEM Do and Maintain Mailing List Do and Maintain Meeting De for Advisory Committee/Officials Meeting De for Public Meetings/Hearings De and Distribute Newsletter Do and Distribute Newsletter Do and Distribute Newsletter Do and Meetings/Hearings De and Distribute Newsletter Do and Meetings/Hearings De and Meetings/Hearings De and Meeting De and	g ANEOUS	1 2 3 2	No. No. No. No. No. No. Unit	1 0 0 1 1 2 12	2 6 4 4 3 0.5	22 (C) (E) (C) (C) (C) (D) (D) (D) (D) (D) (D) (D) (D) (D) (D
QA/QC TOTAL 40	160 Develop 161 Prepare 162 Attend / 163 Prepare 164 Attend F 165 Prepare 166 Propert 167 168 169 No.	ITEM D and Maintain Mailing List D and Maintain Mailing List D for Advisory Committee/Officials Meeting Advisory Committee/Officials Meeting D for Public Meetings/Hearings D and Distribute Newsletter D owner coordination - Michelle Park PUBLIC INVOLVEMENT MISCELL PUBLIC INVOLVEMENT TO QA/QC ITEM View	g ANEOUS	1 2 3 2	No. No. No. No. No. No. Unit	1 0 0 1 1 2 12	2 6 4 4 3 0.5	22 00 00 88 12 00 00 00 28 HOURS
	160 Develop 161 Prepare 162 Attend A 163 Prepare 164 Attend B 165 Prepare 166 Property 167 168 169 No. Plan rev	ITEM D and Maintain Mailing List D and Maintain Mailing List D for Advisory Committee/Officials Meeting Advisory Committee/Officials Meeting D for Public Meetings/Hearings D and Distribute Newsletter D owner coordination - Michelle Park PUBLIC INVOLVEMENT MISCELL PUBLIC INVOLVEMENT TO QA/QC ITEM View	g ANEOUS	1 2 3 2	No. No. No. No. No. No. Unit	1 0 0 1 1 2 12	2 6 4 4 3 0.5	22 00 88 12 00 60 00 28

Page 6 of 7 10/17/2017

	PRODUCTION	-HOUR WORKSH	EET (revised 7/14)	
COUNTY	Fayette	_ PROJECT TYPE	D <u>esign</u>	
ROUTE	Citation Trail	_ CONSULTANT	Banks Engineering	
DESC	Shared use path design	_ REVIEWED BY		
,		_ PREPARED BY	John Steinmetz	
ITEM NO.	07-3223	_ DATE	10/16/17	
	PRODUCTION-HOUR	SUMMARY		
SUR	RVEY TOTAL			13
LINE	E AND GRADE TOTAL			128
UTIL	LITY COORDINATION TOTAL			4
RIGI	HT OF WAY PLANS TOTAL			0
FINA	AL PLANS TOTAL			319
MEE	TINGS TOTAL			64
PUB	BLIC INVOLVEMENT TOTAL			28
QA/	QC TOTAL			40
GRA	AND TOTAL			596

KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS CONSULTING ENGINEERING FEE PROPOSAL

COUNTY: PROJECT: UPN: FED.NO: ITEM NO:	Fayette Citation Trail Shared Use Path Design 7-3223		DATE: PROJECT TYPE: CONSULTANT: PREPARED BY:	Design Integrated Eddie Mes	10/17/20 Engineering, sta, PE	
	FEE CONSIDERATIONS		PRODUCTION HOURS	AVERAC	GE RATE	LABOR
SURVEY TOTA	L		4	\$	38.52	\$154.08
LINE AND GRA	DE TOTAL		24	\$	40.87	\$980.88
UTILITY COOR	DINATION TOTAL		0	\$	46.27	\$0.00
RIGHT OF WAY	Y PLANS TOTAL		0	\$	46.27	\$0.00
FINAL PLANS T	TOTAL		180	\$	46.27	\$8,328.60
MEETINGS TO	TAL		0	\$	58.86	\$0.00
PUBLIC INVOL	VEMENT TOTAL		0	\$	58.86	\$0.00
STRUCTURES	TOTAL		0	\$	44.37	\$0.00
				\$	-	\$0.00
	Т	OTALS:	208			\$9,463.56
MILEAGE AND LODGING EXP SURVEY TRAV		\$0 \$0 \$0 \$0	TOTAL DIRECT PATOVERHEAD PROFIT SUBCONSULTANTS FACILITIES COST (S	127.70% 15% 0.78%	\$9,464 \$12,084 \$3,232 \$0 \$74
PRINTING EXP	ENSES	\$0	OTHER DIRECT CO	OST	_	\$0
SUBCONSULTA	TOTAL = ANTS	\$0				
			TOTAL PROPOSED	FEE		\$24,854
			SHOP PLANS		_	\$0
-						
FIRM NAME:	Integrated Engineering, PLLC		SIGNATURE		lead H Me	la_
DATE :	10/17/17		TITLE	Eddie Mes Vice Presi		

	PRODUCTION-HOUR W	ORKS	HEE'	Γ		
COUNTY:	Fayette					
PROJECT:	Citation Trail	PROJECT	TYPE :	Design		
UPN:	Shared Use Path Design	CONSULT	ANT :	Integrated	Engineerin	a. PLLC
FED.NO:	onanca coo i aan booigir	PREPARE		Eddie Mes		
ITEM NO :	7-3223	DATE:		10/17/2017		
	1 0220			10,11,2011		
	SURVEY					
No.	ITEM	CREW	UNIT	AMOUNT	HRS/UNIT	HOURS
	RECONNAISSANCE					
1	Control - (existing)		Mile			
2	Utilities - (data gathering, identification & contact)		No.			C
3	Drainage - (sink holes, streams, pipes, etc.)	1	Mile	0.55	7	4
	CONTROL					
4	Horizontal		Mile			C
5	Vertical		Mile			C
6	Process data		Mile			C
	PLANIMETRIC SURVEY			•		
7	Planimetric location (specify complete, pickup or update)		Mile			C
8	Subsurface Utility Engineering, Quality Levels C & D		Mile			С
9	Subsurface Utility Engineering, Quality Level B		LS			C
10	Subsurface Utility Engineering, Quality Level A		LS			C
11	Process data		Mile			0
	TERRAIN SURVEY					
12	DTM data collection (Items 11-18 not required if used)		Acre			C
13	Verify terrain model accuracy		Mile			0
14	Tie-ins		No.			0
15	Drainage situations survey (Bridge)		No.			0
16	Drainage situations survey (Culvert)		No.			0
17	Drainage situations survey (Curvert) Drainage pipe section (non-situation size)		No.			0
17	Flood plain data		No.			0
19	Railroad Surveys		No.			0
20	Additional necessary DTM data (specify pickup or update)) T	Acre			0
21	Process data		Mile			C
	ESTABLISH PROPERTY LINES & OWNERSHIP					
22	Contact & Interview Property Owners		Parcel			0
23	Field tie property lines/corners		Parcel			C
	STAKING					
24	Stake centerlines, approaches, detours		Mile			C
25	Stake core holes - structures (unit is per structure)		No.			C
26	Stake core holes - roadway (unit is per core hole)		No.			C
	SURVEY MISCELLANEOUS					
27	Determine roadway elevations (Crown and EP)		Mile			C
28	Environmental areas		No.			C
29						C
	SURVEY TOTAL					4

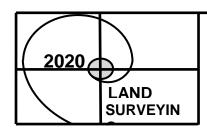
No.	ITEM	UNIT	AMOUNT	HRS/UNIT	T
30	Computer setup	LS	1		Т
31	Prepare existing manuscripts	Mile	0.55		
32	Establish approximate property lines and ownership	Parcel	55		
33	Study and develop typical sections	No.	2		
34	Study and develop horizontal alignments	Mile	0.55		
35	Study and develop vertical alignments	Mile	0.55		
36	Create and evaluate proposed roadway models	Mile	0.55		
37	Design entrances	No.			
38	Pre-size pipes (all alternates)	No.			T
39	Pre-size culverts (all alternates)	No.	4	4	
40	Pre-size bridges (all alternates)	No.			
41a	Conduct Traffic Engineering Analysis (Basic; Highway Capacity Man	u Intersec	tion		T
41b	Conduct Traffic Engineering Analysis (Advanced; Micro-simulation)	Intersec	tion		T
42	Study and development of interchange	No.			T
43	Study and development of intersection	No.			T
44	Study and develop maintenance of traffic plan	LS			T
45	Plot/print copies of plans for team meeting and inspections	LS	1		T
46	Calculate preliminary quantities and develop cost estimates	Alt.	1		T
47	Revise plans and estimates	LS	1		T
48	Preliminary Right of Way with taking areas	Parcel			T
49	Prepare Design Executive Summary	LS			T
50	Develop/document "Avoidance Alternatives to Water Related Impact	sLS			T
	PRELIMINARY LINE & GRADE MISCELLANEOUS	'	'		
51	Preliminary KDOW Permitting	LS	1	8	П
52	Mid-Block Crossing Evaluation	LS	1	0	
53	-				
54					Т
55					I
					1

	UTILITY COORDINATION					
No.	ITEM	PERSONS	UNIT	AMOUNT	HRS/UNIT	HOURS
56	Utility Coordination Meeting		No.			(
57	Develop Utility Relocation Layout Sheets (1"=200')		Mile			C
58	Develop Utility Relocation Plans (1"=50')		Mile			C
	UTILITY COORDINATION MISCELLANEOUS					
59						
	UTILITY COORDINATION TOTAL					0
	RIGHT OF WAY PLANS					
No.	ITEM		UNIT	AMOUNT	HRS/UNIT	HOURS
60	Deed research		Parcel			C
61	Establish property and ownership		Parcel			C
62	Calculate Right of Way		Parcel			C
63	Prepare legal descriptions		Parcel			C
64	Complete Right of Way summary sheet		Parcel			C
65	Generate Right of Way strip map (scale 1" = 50')		Sheet			C
66	Prepare Right of Way Plans Submittal		LS			C
67	Right of Way revisions after Right of Way submittal		LS			C
	R/W PLANS MISCELLANEOUS					
68	Deed Research for Existing Alignments		LS			C
69	Deed Research for Existing Parcels		Parcel			C
70	Prepare Legal Descriptions for Right of Way transfer		Parcel			C
71						
72						
	RIGHT OF WAY PLANS TOTAL					0

No.	ITEM	UNIT	AMOUNT	HRS/UNIT	НС
80	Computer setup	LS			
81	Update existing topography and terrain model	Mile			
82	Refine alignments (horizontal & vertical)	Mile	0.55		
83	Develop pavement design	No.	1		
84	Finalize templates & transitions	No.	1		
85	Develop final roadway model	Mile	0.55		
86	Develop proposed design	Mile	0.55		
87	Generate plan sheets (scale 1" = 20')	Sheet	6		
88	Generate profile sheets (scale 1" = xxx')	Sheet	6		
89	Detail cross sections (scale 1" = xxx')	No.	60		
90	Design entrances	No.			
91	Revise roadway plans from soils report	Mile			
	DRAINAGE	'	'		
92	Develop pipe sections (< 54")	No.			
93	Develop drainage system map	Mile	0.55	22	
94	Develop drainage situation (bridge)	No.			
95	Develop drainage situation (culvert)	No.			
96	Develop blue line stream channel change (=> 200')	No.			
97	Drainage analysis (entrance pipes)	No.			
98	Drainage analysis (A < = 200 acres)	No.	4	8	
99	Drainage analysis (200 acres < A < 1.0 sq. mile)	No.			
100	Drainage analysis (A = > 1.0 sq. mile) level 1 analysis	No.			
101	Drainage analysis (A = > 1.0 sq. mile) level 2 analysis	No.			
102	Drainage analysis (A = > 1.0 sq. mile) level 3 analysis	No.			
103	Special drainage studies	No.			
104	Roadway ditches and channels	Mile			
105	Develop Erosion Control Plan	Mile	0.55	22	
106	Inlet spacing calculations	No.			
107	Storm sewers calculations	No.			
108	Perform scour analysis	No.			
109	Assemble preliminary and final drainage folders	LS			
110	Prepare advanced situation folder - bridge	No.			
111	Prepare advanced situation folder - culvert	No.			
	DRAINAGE MISCELLANEOUS	·			
112	No Rise Certification	LS	1	100	
113					
114					
115					

116	No.	ITEM	UNIT	AMOUNT	HRS/UNIT	HOL
118	116	Prepare layout sheet	LS	1		
119	117	Prepare typical sections	No.	2		
120	118	Prepare Interchange geometric approval	No.			
121	119	Prepare intersection geometric approval	No.	1		
122	120	Prepare coordinate control sheet	Mile			
123	121		No.			
124	122	Prepare striping plan	No.	1	0	
125	123	Calculate final quantities	Mile	0.55		
126 Complete drainage summary 127 Complete pavement under-drain summary 128 Prepare cost estimate 129 Plot/print copies of plans 130 Plan revisions 131 Prepare final construction plans submittal 132 Write maintenance of traffic notes (TCP) 133 Prepare construction phasing plans 134 Develop diversion plan sheets 135 Develop diversion profile sheets 136 Develop diversion cross sections 137 Develop temporary drainage 138 Final Landscape Plan 139 KDOW Stream Construction Permit 140 Specifications and contract documents 141 Bidding and construction administration assistance 142 LPA coordination 15 LS 1 1 8 16 LS 1 1 8 17 8 18 19 INDIVIDUAL SIDE SIDE SIDE SIDE SIDE SIDE SIDE SIDE	124	Complete general summary	LS	1		
127 Complete pavement under-drain summary 128 Prepare cost estimate 129 Plot/print copies of plans 130 Plan revisions 131 Prepare final construction plans submittal 132 Write maintenance of traffic notes (TCP) 133 Prepare construction phasing plans 134 Develop diversion plan sheets 135 Develop diversion profile sheets 136 Develop diversion cross sections 137 Develop temporary drainage 138 Final Landscape Plan 139 KDOW Stream Construction Permit 140 Specifications and contract documents 141 Bidding and construction administration assistance 142 LPA coordination	125	Complete paving summary	LS	1		
128 Prepare cost estimate LS 1 129 Plot/print copies of plans LS 1 130 Plan revisions Mile 0.55 131 Prepare final construction plans submittal LS 1 MAINTENANCE OF TRAFFIC 132 Write maintenance of traffic notes (TCP) LS 1 133 Prepare construction phasing plans Mile 0.55 134 Develop diversion profile sheets Sheet 135 Develop diversion profile sheets Sheet 136 Develop diversion cross sections No. 137 Develop temporary drainage No. FINAL PLANS MISCELLANEOUS 138 Final Landscape Plan LS 1 8 139 KDOW Stream Construction Permit LS 1 8 140 Specifications and contract documents LS 1 8 141 Bidding and construction administration assistance LS 1 1 142 LPA coordination 1	126	Complete drainage summary	LS	1	8	
Plot/print copies of plans	127	Complete pavement under-drain summary				
130 Plan revisions Mile 0.55 131 Prepare final construction plans submittal LS 1	128	Prepare cost estimate		1		
MAINTENANCE OF TRAFFIC	129	Plot/print copies of plans	LS	1		
MAINTENANCE OF TRAFFIC 132 Write maintenance of traffic notes (TCP) LS 133 Prepare construction phasing plans Mile 0.55 134 Develop diversion plan sheets Sheet 135 Develop diversion profile sheets Sheet 136 Develop diversion cross sections No. 137 Develop temporary drainage No. FINAL PLANS MISCELLANEOUS 138 Final Landscape Plan LS 1 8 139 KDOW Stream Construction Permit LS 1 8 140 Specifications and contract documents LS 1 141 Bidding and construction administration assistance LS 1 142 LPA coordination 1 143	130	Plan revisions	Mile	0.55		
Write maintenance of traffic notes (TCP)	131	Prepare final construction plans submittal	LS	1		
Prepare construction phasing plans Develop diversion plan sheets Develop diversion profile sheets Develop diversion cross sections Develop diversion cross sections No. FINAL PLANS MISCELLANEOUS Final Landscape Plan KDOW Stream Construction Permit LS KDOW Stream Construction Permit LS Specifications and contract documents LS Bidding and construction administration assistance LPA coordination LPA coordination Mile 0.55 Sheet Develop diversion profile sheets No. LS 1 8 LS 1 8 LS 1 1 1 1 1 1 1 1 1 1 1 1 1		MAINTENANCE OF TRAFFIC				
134 Develop diversion plan sheets 135 Develop diversion profile sheets 136 Develop diversion cross sections 137 Develop temporary drainage No. FINAL PLANS MISCELLANEOUS 138 Final Landscape Plan LS 1 8 139 KDOW Stream Construction Permit LS 1 8 140 Specifications and contract documents 141 Bidding and construction administration assistance 142 LPA coordination 1 1 143	132	Write maintenance of traffic notes (TCP)	LS			
Develop diversion profile sheets Develop diversion cross sections Develop temporary drainage No. FINAL PLANS MISCELLANEOUS Secondary of the profile sheets No. FINAL PLANS MISCELLANEOUS Secondary of the profile sheets No. LS Secondary of the profile sheets No. Secondary of	133	Prepare construction phasing plans	Mile	0.55		
Develop diversion cross sections No.	134	Develop diversion plan sheets	Sheet			
TINAL PLANS MISCELLANEOUS Tinal Landscape Plan KDOW Stream Construction Permit Specifications and contract documents LS Specifications and construction administration assistance LPA coordination LPA coordination LS LS LS LS LS LS LS LS LS L	135	Develop diversion profile sheets	Sheet			
FINAL PLANS MISCELLANEOUS 138 Final Landscape Plan LS 1 8 139 KDOW Stream Construction Permit LS 1 8 140 Specifications and contract documents LS 1 141 Bidding and construction administration assistance LS 1 142 LPA coordination 1 143	136	Develop diversion cross sections	No.			
Final Landscape Plan KDOW Stream Construction Permit Specifications and contract documents Bidding and construction administration assistance LS Bidding and construction administration assistance LS LPA coordination 1 LS 1 8 LS 1 1 1 1 1 1 1 1 1 1 1 1 1	137	Develop temporary drainage	No.			
139 KDOW Stream Construction Permit LS 1 8 140 Specifications and contract documents LS 1 141 Bidding and construction administration assistance LS 1 142 LPA coordination 1 143		FINAL PLANS MISCELLANEOUS				
140 Specifications and contract documents 141 Bidding and construction administration assistance 142 LPA coordination 143	138	Final Landscape Plan	LS	1	8	
140 Specifications and contract documents 141 Bidding and construction administration assistance 142 LPA coordination 143 144 LPA coordination 15 LPA coordination 16 LPA coordination 17 LPA coordination 18 LPA coordination 19 LPA coordination 10 LPA coordination	139	KDOW Stream Construction Permit	LS	1	8	
142 LPA coordination 1 1 143		Specifications and contract documents	LS	1		
142 LPA coordination 1 1 143	141	Bidding and construction administration assistance	LS	1		
	142			1		
	143					

	MEETINGS				
No.	ITEM	PERSONS	UNIT	AMOUNT HRS/UN	IT HOURS
150	Prelim. line and grade inspection		No.	2	0
151	Drainage inspection		No.		0
152	Final inspection		No.	1	0
153	Misc. project coordination meetings		No.	2	0
154	Project team meetings		No.	2	0
455	MEETINGS MISCELLANEOUS		1.0		
155	Value Engineering Study		LS LS		0
156	Constructability Review		LO		U
	MEETINGS TOTAL				0
	PUBLIC INVOLVEMENT				
No.	ITEM	PERSONS	UNIT	AMOUNT HRS/UN	IT HOURS
160	Develop and Maintain Mailing List		LS	1	0
161	Prepare for Advisory Committee/Officials Meeting		No.	1	0
162	Attend Advisory Committee/Officials Meeting		No.	1	0
163	Prepare for Public Meetings/Hearings		No.	1	0
164	Attend Public Meetings/Hearings		No.	2	0
165	Prepare and Distribute Newsletter		No.	10	0
166	Property owner coordination PUBLIC INVOLVEMENT MISCELLANEOUS		No.	12	0
167	PUBLIC INVOLVEMENT MISCELLANEOUS				0
168					0
169					0
	PUBLIC INVOLVEMENT TOTAL	1	1		0
	QA/QC				
No.	ITEM		UNIT	AMOUNT HRS/UN	
180	Plan Review		LS	1	0
181	Structure Review				0
	QA/QC TOTAL				0
	PROPUCTION HOUR CHAMARY				
01	PRODUCTION-HOUR SUMMARY	<u> </u>			A
	JRVEY TOTAL				- 4
	NE AND GRADE TOTAL				24
	TILITY COORDINATION TOTAL				0
	GHT OF WAY PLANS TOTAL				0
	NAL PLANS TOTAL				180
M	EETINGS TOTAL				0
PU	JBLIC INVOLVEMENT TOTAL				0
ST	RUCTURES TOTAL				0
GI	RAND TOTAL				208



2020 Land Surveying2216 Young Drive

Suite 7-B

Lexington Ky 40505

OFFICE: 859-268-1044
FAX: 859-268-1044
CELL: 859-351-2171

EMAIL: jdd75@msn.com

TO: BANKS EGINEERING

- > SUPPORTING SURVEY SERVICES
- > PROJECT: CITATION TRAIL
- ➤ PROPOSED SERVICE: AS PER items listed on PRODUCTION HOUR WORKSHEET (revised 7-14-17), supplied to 2020 Land Surveying, via email, by Banks Engineering on 9-14-17.
- > FIELD DATA COLLECTION (TOPO, UTILITY & CONTROL ITEMS) = 48hrs @ 95/hr = 4,560.00
- ➤ BOUNDARY LINE LOCATIONS = 8hrs @ 95/hr = 760.00
- > CAD DRAFTING = 16hrs @ 45/hr = 720.00
- ➤ CENTERLINE LAYOUT (ONE TIME STAKING EVERY 50FT) = 15hrs @ 95/hr = 1,425.00

TOTAL COST FOR SURVEY: 7,464.00

-This is a lump sum cost including all survey work, travel time, equipment costs.

**Agreement: I (we) agree to the cost and requirements of the above mentioned services.

Client Date