SIGNATURE PAGE

P-41-2020

To the Monmouth County Board of County Commissioners:

THE UNDERSIGNED HEREBY DECLARES THAT I (WE) HAVE CAREFULLY EXAMINED THE SPECIFICATIONS. I (WE) HEREBY CERTIFY PRICES QUOTED ARE IN ACCORDANCE WITH YOUR REQUIREMENTS.

Company Name:	Traffic Planning and Design, Inc.	
	(PRINT)	
Preparer's Name:	Gregory Bitsko, PE, PP, New Jersey Regional Struc	tures Leader
Signature:	My BW (PRINT)	October 22, 2021
Address:	303 West Main Street, Suite 330, Freehold, NJ 0772	(DATE)
Telephone No.:	Office: 848.444.6105 Direct:	ell:
Fax No.:	610.326.9410	
E-Mail Address:	GBitsko@TrafficPD.com	
	(This should be the email where Contracts wou	ld be sent)
Contact Person:	Gregory Bitsko, PE, PP, New Jersey Regional Struc	tures Leader
FEIN:		
(Federal Employee ID)		

(Revised 2/2017)

Traffic Planning & Design inc.
PROJECT COST AND WORK HOUR PROPOSAL FORM
Professional Engineering Services Regarding intersection improvements at Phalanx Road and Campus Drive, and Replacement of Bridge MT-61 over the Tributary to Swamming River in the Tewnship of Middletown,
Moammouth County NJ

Yask Description	Project Manager PVIII	Project Engineer PVII	Associate Engineer PVI	Senior Engineer PV	Engineer PIV	Assistant Engineer Pil	Assistant Engineer Pi	Project Surveyor PV	CADD Technician ETIII	CAPD Technician ETII	Total Hours	Labor Cost by Task
Task 1: Field Survey (BANC3)	ט	6		0 .		C	0.	0	0	0	a	\$0.00
Task 2: Deed Research & ROW Documents (BANC3)	0	e ·	o-	. ۋ	Ó	0	0	O	٠.	0	ç	\$0.00
Task 3: Traffic Design & Contract Documents	22	C	100	139	0	76	0	.0	56	24	417	\$17,074.35
Task 4: Highway Design & Contract Documents	ь	161	224	519	15	BD .	0	Ð	32	0	1,033	\$46,257.86
Task 5: Bridge Besign & Contract Documents	28	45	٥	40	162	٥	2 .	0	J£.	6	275	\$12,566,74
Task 6: Geotechnical Services (AGES)	D	0	0] 0	0	0	0 21		C	0	[C	\$0.00
Task 7: Environmental Study & Parmits (VHB)			١	1	J	[0		0	L.	0	U.	\$0.00
Task 8: Utility Coordination & Contract Documents	0	. 6	18	1, 2	1 0	<u> </u>	1 7	0		, 0	24	\$1,141.50
Task 9: Meetings & Community Involvement		30	<u>, , , , , , , , , , , , , , , , , , , </u>	1 20	, v	<u> </u>	<u> </u>	<u>, , , , , , , , , , , , , , , , , , , </u>	, <u>24</u>	'	.80	\$3,529.74
Task 10: Project Management	·20	72	V			<u></u>	<u></u>	<u> </u>	<u> </u>		32	
Task 11: Construction Support	0	8.	0	. 8	. 0	0	. 0	- O	C	. 0	16	\$799.60
Wan-Hours	75	262	340	734	174	156	D	0	112	24	1,877	<u> </u>
Olrect Salary Rate (See Note 1)	574.29	\$56.48	\$44.73	\$43.47	538.31	\$35.18	\$33.59	\$43.47	\$29.38	\$25.30	[
Multiplier (See Note 2)					\$2.	60						
TOTALSUABORICOST	\$14,488,55	\$38,474.18	\$39,541.32	\$82,958.15	\$17,331.44	\$14,250.90	\$0.00	\$0.00	\$8,555.46	\$1,578.72		\$217,186,71

DIRECT EXPENSES	
SUBCONSULTANTS	
Field Survey (BANC3)	\$13,663,04
Ceed Research & ROW Documents (BANC3)	\$5,939.20
Geolochnical Services (AGES)	\$23,087,34
Hydrofogic and Hydraulic Analysis (SWM)	\$30,300.00
Cultural Resources (HRI)	58,753.26
Environmental Study & Permits (VHB)	\$13,836.55
SUBTOTAL-Sub-Consultants	\$95,579.41
Reproduction	\$1,000.00
Postage/Delivery	
Transportation:	
Out-of-Pocket Expenses	\$500.00
SUBTOTAL-Misc. Expenses	\$1,500,00
TOTAL DIRECT EXPENSES	\$97,079,41

NOTES: 1. Direct Salary Rate does not include employee benefits.
2. Muliptier includes overhead, profit, and employee benefits.
3. Labor Cost By Task — (Man-hour) x (Direct Salary Rate) x (Muliptier).
4. Direct expenses billed at invoice costs (no profit or overhead).
5. Overhaad Includes communication, lodging, meals, and indirect expenses.

\$217,186.71
\$97,079.41
\$314,266.12

Excluded Services From the Cost Above						
Traffic Control for Burings (2 days) assume will be performed by County forces			1			\$4,000
	 	•	 			

Traffic Planning & Design Inc.
PROJECT COST AND WORK HOUR PROPOSAL FORM
Professional Engineering Services Regarding Intersection Improvements at Phalanx Road and Campus Drive, and Replacement of Bridge MT-51 over the Tributary to Swimming River in the Yownship of Middletown,
Monmouth County NJ

Task 1: Field Survey (BANC3) Research Data sheer's, Establish Hor. & Vert. Control Research Data sheer's, Establish Hor. & Vert. Control Road Cross Sections & Locations (Utilizes (14) & Existing Borings (4) Bridge Location, Stream Sections (5) & Wotlands (4) Adjust data, create TIN surface, baseline Prepare Base Map Task 2: Daed Research & ROW Documents (BANC3) Deed and Map Research Deed Pigting Property Line and ROW Line analysis Label property owners	0		D		0	0	3	0	0	0	0 0 0	\$0.00 \$0.00 \$0.00 \$0.00
Run Traverse, Set RM's, Tie out control Road Cross Sections & Locations Utilities (4) & Existing Borrings (4) Bridge Location, Stream Sections (5) & Wotlands (4) Adjust datu, create TIN surface, baseline Prepare Base Map Task 2: Deed Research & ROW Documents (BANC3) Deed and Map Research Deed Plotting Properly Line and ROW Line analysis	0	0	0								0	30.00
Road Cross Sections & Locations Unificial (4) & Existing Borings (4) Bridge Location, Stream Sections (6) & Wetlands (4) Adjust data, create TIN surface, baseline Prepare Base Map Task 2: Deed Research & ROW Documents (BANC3) Deed and Map Research Deed Plotting Properly Line and ROW Line analysis	0	0								_	Ö	
Utilities (4) & Exising Borings (4) Bridge Location, Stroam Sections (5) & Wetlands (4) Adjust data, create TIN surface, baseline Prepare Base Map Task 2: Deed Research & ROW Documents (BANC3) Deed and Map Research Deed Picting Properly Line and ROW Line analysis	0	0	0									\$0.00
Bridge Location, Stream Sections (5) & Wotlands (4) Adjust data, create TIN surface, baseline Prepare Base Map Task 2: Daed Research & ROW Documents (BANC3) Deed and Map Research Deed Plotting Property Line and ROW Line analysis	0	o ·	0									
Adjust data, create TIN surface, baselina Prepare Base Map Task 2: Deed Research & ROW Documents (BANC3) Deed and Map Research Deed Plotting Properly Line and ROW Line analysis	0	0	0	-							0	\$0.00
Adjust data, create TIN surface, baselina Prepare Base Map Task 2: Deed Research & ROW Documents (BANC3) Deed and Map Research Deed Plotting Properly Line and ROW Line analysis	0	0									ò	\$0.00
Tack 2: Deed Research & ROW Documents (BANC3) Deed and Map Research Deed Plotting Properly Line and ROW Line analysis	0	0.									O.	\$0.00
Deed and Map Research Deed Plotting Properly Line and ROW Line analysis	0	0.	0		Ţ		1				a	\$D.D0
Deed and Map Research Deed Plotting Properly Line and ROW Line analysis	0	0.					1		1			
Deed Plotting Property Line and ROW Line analysis				0	o. ·	0		0		٠.	0	. \$0.00
Property Line and ROW Line analysis												\$0.00
	,										o	\$0.00
Label property owners					l]		0	\$0.00
											. 0	\$0.00
Prepare GPPM Plan sheet (1)											a	\$0.00
Prepare IPM and M&B desc's (assume 6 parcels)				Γ							0	\$0.00
Task 3: Traffic Design & Contract Documents	22	0	100	139	0	76	0	.0 .	- 56	. 24	417	\$17,074.35
Roundabout Lighting	12	· · i	64			64	."				140	\$6,004.44
Brookdale Sign Coordination and Design	4		04		1	V	 		24		28	\$1,002.28
Security Camera Coordination	6		16		 	12					34	\$1,583,34
Counts and Analysis	- 		20	139	 	<u>'-</u>	 	1	32	24	215	38,484.29
Courts and Anjarysis											-,-	00,101120
Task 4: Highway Design & Contract Documents	. 5	. 161	224	519	(12	80	0	0	32	. 0	1.033	\$46,257.86
Preliminary Ocsion	ĺ					i					à	\$0.00
Key Sheet		1		4							5	\$230.36
Typica. Sections including roadway and bridge		- 2		В							10	\$460.72
Construction Plans (1" =20"), or an approved	4	20	80	1₿	i						120	\$5,700.68
Profiles (1*=20"H & 1" = 2"V")		2		1,6	1						18	\$808.46
Existing Cross Sections (1°=5°H & 1°=5°V)		2		12						<u> </u>	14	\$634.60
Conceptual Construction Staging Plans		4		16							20	\$921.44
Topographic Plan of Existing Conditions		1		4							5	\$230.36
Right-of-Way and Utility Conflict and Potential					1			l				
Accommodation Plan		2		4				l			6	\$286.84
Preliminary Engineer's Estimate	1	10	12	- 4 —			_				31	81,523.61
Interim Design					 			-			0	\$0.00 \$0.00
Key Sheet	1	1	4	2	1			<u> </u>			7	\$322.34
Typical Section (1° = 5°)		2	12	4	1		Ì	İ	1		18	\$823.60
Plan Sheet Layout - Including Survey ties					t	1	i e				9	\$0.00
Construction Plans		18	16	80	1	i	i	.	İ		114	\$5,209.92
Profiles		3	4	4	1						11	\$522.24

Task Description	Project Manager PVIII	Project Engineer PVII	Associate Engineer PVI	Senior Engineer PV	Engineer PIV	Assistant Engineer Pit	Assistant Engineer Pl	Project Surveyor PV	CADD Technickan ETIII	ÇADD Technician ETII	Total Hours	Labor Cost by Task
Orainage Design		4			12	80		-	32		_128 B	\$4,438.60
Gulde Rall Design	T"	2		6			1					\$373.7B
Grading Plans/ADA Ramp Plans		12	30	40			i				82	\$3,758.46
Signing & Striping Plans	i	4	16	16							3 6	\$1,637.12
Lighting and Electrical Plans					i		i		I		0	50.00
Oetour Plans		1		4			Ĭ		T.		5	\$230.36
SESC Plans							j]	0	\$0.00
Cross Sections (Assume 10 Sheets)		2		16							18	\$808.48
Construction Details		. 4	4.	6			<u> </u>				14	\$665.66
Quantities		1		8			L		i		9	\$404,24
Engineer's Estimate		2		6					<u> </u>		В	\$373.78
Specifications							j				D	\$0.00
Landscape Plans (1"=20")		1		30			<u>i</u>				31	\$1,360.58
Lighting/Electrical Plans (1"=20")							<u> </u>		1		D .	\$0.00
Construction Staging/Traffic Control Plans (1"=20")	_	4		40			<u> </u>		<u> </u>		44	\$1,964.72
							<u> </u>		1		0	\$0.00
						!	i		<u> </u>		0	\$0.00
-		2		B.		<u> </u>	l 		<u> </u>		8	\$373.78
Final Design						i		I	<u>1 </u>	Ι.	Û	\$0.00
Key sheet (with list of anticipated final sheets)	1	1		2					1		3	\$143.42
Estimate of Quantities	_	3	6	4			i .		1		13	\$611.70
Typical Sections		2	4	2	<u> </u>]	1		l		8	\$378.82
Construction Plans (1" =20"), or an approved		9	₽	24		1	I	1	1		41	\$1,909.44
Sol! Erosion and Sediment Control Plans							I	1	<u> </u>	I	0	\$0.00
Tie shoct		2		8							10	\$460.72
Profiles (1"=20"H & 1" = 2" V)	I	3	4	2]			1		9	\$435.30
Grading Plans (1" = 20")		5	16	В				_	<u> </u>		29	\$1,345.84
Landscape Pians (1"=20")				37							37	\$1,608.39
Lighting/Electrical Plans (1"=20")					1	1			1		0	\$D.00
Construction Staging/Traffic Control Plans (1"=20")		4		18	· ·	1			i .		20	\$921.44
Detour Plan (1"=100")								I	1		0	\$0.03
Proposed Cross Sections (1"=5"H & 1"=5"V).		2		24			I		Í	I	26	\$1,156.24
Construction Details		3	8	4]		15	\$7D1.18
Stream Cross Sections		2		16	•]			<u> </u>		18	\$808.43
Spesial Provisions	L	1.6		В	1]			!		24	\$1,251,44
Engineer's Estimate		2		B]	· .		1		10	\$460.72
						<u> </u>						
						<u> </u>	<u> </u>	ļ <u></u>	<u> </u>	<u> </u>	Ļ	
Task 5: Bridge Design & Contract Documents	. 28	45	D	4D	162	0	0	0	C	0.	275	\$12,566.74
Preliminary Design		4		40					1		44	\$1,964.72
Recommended Structure General Plan, elevation, and									1			
section		2			8						10	\$419,44
Architectural Treatments											0	\$0.00
Preliminary Engineer's Estimate		2			4						6	\$266.20
									L		a	\$D.CD
Interim Design	Γ΄										0	\$0.00
General Plan and Elevation		2			6			1			8	\$3 42.82
Demolition Plan		2			6			1			8	\$342.82
Bridge Section and Working Points		2			6						8	\$342.82
Pile Plans							l				٥	\$0,00

Yask Description	Project Manager PVIII	Project Engineer PVII	Associate Engineer PVI	Senior Engineer PV	Engineer PIV	Assistant Engineer Pil	Assistant Engineer PI	Project Surveyor PV	CADD Technician ETIII	CADD Technician ETII	Total Hours	Labor Cost by Task
Footing Plans	_	2		 	В		 				10	\$419,44
Abutment Design	- 1 -	i		1							0	\$0.00
Abutment Plans and Sections	1		1 ·				i				3	\$0.00
Wingwall Design		2			10		i		1		12	\$496.06
Wingwall Plans and Sections		2			10	İ	i				12	\$496.Db
Bearing Design							i				0	\$0.00
Bearing Plans and Details											D	\$0.00
Beam Design		2		1	10	i e			1		12	\$496.06
Framing Plans						i e	.		1		D	\$0.00
Beam Details		2			1D				t		12	\$495.06
Deck Design		- "							1		0	\$0.00
Deck Plan and Section						1			 	1	Ó	\$0.00
Parapet / Railing Details		<u>-</u> <u>-</u> 2		†	10	1		-	· —	†	12	\$496.06
Miscellaneous Details		2			8	 			 		10	\$419.44
Quantities				 	20	 		 	 	t	24	\$992.12
Sheeting Wall Design		<u> </u>		—		t	t		 		0	\$0.00
Sheeting Wall Plans						t	 		 		ŏ	\$0.00
Special Provisions	10	-				1	-		1	 	10	\$742.90
Engineer's Estimate	2	2			8	_			-	†	12	\$568.02
Chighizer's Establiate		} ~··		†	_ <u> </u>	 		_	1		Ö	\$0.00
Final Design	- +	i]	t		 				-	<u> </u>	\$0.00
General Plan and Elevation		1	-	 	4	 		-	-		5	\$209.72
Demolition Plan		 	!		4		 	-	 		5	\$209.72
Bridge Section and Working Points	+	<u> </u>					_		 		Ö	\$0.00
Pile Plans	— †	-	-			1				+-	ő	\$0.00
Footing Plans		1	-	t .	4						- 5	5209.72
Abulment Plans and Sections				-	- '			+	t	†	0	\$0.00
Windwall Plans and Sections		- 1			4	· -· -		- -	+	1	5	\$209.72
Bearing Plans and Details		} <u>'</u>	+	1							- <u>č</u>	\$0.00
Framing Plans and Details			<u> </u>		-	+	-	-			ŏ	\$0.00
Beam Details		 	-		+ 4	ł		 		-	5	\$209.72
Dock Plan and Section		 '						-	+	t	ö	\$0.00
Parapet / Railing Details		٠, -		 	4			<u> </u>		 	5	\$209.73
Miscellaneous Delails	——— 			 	1 4						- 5	\$209.73
		2		 	6		-	! 		-	- <u>8</u>	\$342.82
Quantities				-	-					 	ő	\$0.00
Sheeting Wall Plans Quality Assurance	8	ļ	 	 			-	-		-	, v	\$594.32
Quality Assurance Special Provisions	- B	!		-	-				-	1	6	\$445.74
	2	2		 	4					 		\$414.78
Engineer's Estimate		 		 	 		 	 	t	 	 	9414.70
Task 6: Geolechnical Services (AGES)	0	0	6 .	╁┈┲┈	- 6	0 -	0. ::	0 .	0	0.	1 0	\$0.0
Geolechnical Investigation		1		1	T —						0	\$0.00
Foundation Report		i					 		Î .		0	\$0.00
		i		1	1			1	·			
		· ·	1	 	1		i	1	ì	1	1	<u> </u>

Task Description	Project Manager PVIII	Project Engineer PVII	Associate Engineer PVI	Senior Engineer PV	Engineer PIV	Assistant Englneer Pil	Assistant Engineer Pl	Project Surveyor PV	CADD Technician ETIII	CADD Technician ETII	Total Hours	Labor Cost by Task
Task 7: Environmental Study & Permits (VHB)	0	· 0	0 .		0	0	ο.	0	. 0	0		\$0.03
NJDEP Freshwater Wetlands Delineation	i	· · · · · ·									0	\$0.00
Environmental Report	i										0	\$0.00
NJDEP Applications - GP 10A		1				Ī					0	\$0.00
Permit Plans	1						·	<u> </u>	I	Ι	Ü	\$0.00
Coordination with County											- 0	\$0.00
Task 8: Utility Coordination & Contract Documents		6	16	. 2	0.	В	1 . 0		. 0	1	24	\$1,143.50
Prepare and Maintain Contact List	 "		10	2	· · · · ·	<u> </u>	+ ° '''	ľ	ł <u>°</u>	-	2 .	\$86.94
Verify Existing Facilities	+							_	+-		† 	\$0.00
Utility Coordination & Field Meeting (2)		-	4	-							 - 	\$291.88
Evaluate Utility Relocations	+	2	\ · }- —				 			·	10	\$470.80
Prepare Utility Relocation Plans	+			 							0.	\$0.00
Document Utility Relocation/Coordination	+	2	4	 			<u> </u>		 		ř	\$291.88
Document Control Reseason Cool Gination	+	-	-						i		Ť	4.000
	1		-	1			i 		ĺ	 	 	
Task 9: Meetings & Community involvement	1 0	30	0	26	0	0	j · 0	C ·	24	0	80	. \$3,529.74
Kick-off Meeting		4		4					 `	1	В	\$399.80
Meeting with Municipal Traffic Safety Officer	1	2		2							4	\$199.90
Meetings w/ Local Authorities (assume 2)	1	16		12			i		24		52	\$2,130.44
Pre-Application Meeting	1			1			1		1		۵	\$0.00
Project Status/Submission Meetings		8		8				i			16	\$799.60
		I	[.	1		:				1	I	
Task 10: Project Management	20	12		1 0	0	0	į ō	- 0	0.	. 0	32	\$2,163.56
Progress Reports (12)				<u> </u>			<u> </u>				1 0	\$0.00
Project Coordination	16	В					Į .		L	1	24	\$1,840.48
Organize Correspondence		l					!				C	\$0.DD
Quality Assurance	4	4					1				В	\$523.0B
							į					

Task Description	Project Menager PVIII	Project Engineer PVII	Associate Engineer PVI	Senior Englneer PV	Engineer PIV	Assistant Engineer Pil	Assistant Engineer Pl	Project Surveyor PV	CADD Technician ETIII	CADD Technician ETII	Total Hours	Labor Cost by Task
Task 11: Construction Support	0 .	8 _	D	8	. 0	û ·	. 0	0	0	0	16	\$799.60
Shop Drawings		_									٥	\$0.00
Requests for Information (RFIs)		В		В							16	\$799.60
Substitutions	I										q	\$0.00
ļ	 				4-4	1-4						
Man-Hours	75	262	340	734	174	156	Ð	a	112	24	1,877	
Direct Salary Rate (See Note 1)	\$74.29	\$56.48	\$44.73	\$43.47	\$38.31	\$35.16	\$33.59	\$43.47	\$29.38	\$25.30		
Multiplier (See Note 2)	Γ				\$2.							
HOMAL PARORIGEST	IS14.486.55	F\$38/47.4\183	\$39,541,32	[\$82]958[15]	\$17/391144	\$\$14,260,90 8	\$0,000	12150:00 Ba	屋\$8,555.46声	\$1,578:72		\$4\$217/186.71

4.00% #REFI 13,96% #REF! 18.11% #REF! 39.10% #REF! 9.27% #REF! 8.31% #REF! 0.00% #REF! 0.00% #REFI 5.97% #REF! 1.26% #REFI

DIRECT EXPENSES	
SUBCONSULTANTS	
Field Survey (BANC3)	\$13,663.04
Deed Research & ROW Documents (BANC3)	\$5,939.20
Geotechnical Services (AGES)	\$23,087.34
Hydrologic and Hydraulic Analysis (SWM)	\$30,300,00
Cultural Resources (HRI)	\$8,753.28
Environmental Study & Permits (VHB)	\$13,836.55
SUBTOTAL-Sub-Consultants	\$95,579.41
Reproduction	\$1,000.00
Postage/Delivery	
Transportation	
Out-of-Pocket Expenses	\$500.00
SUBTOTAL-Misc, Expenses	\$1,500.00
TOTAL DIRECT EXPENSES	\$97,079,41

- NOTES: 1. Direct Salary Rate does not include employee benefits.

 2. Multiplier includes overhead, profit, and employee benefits.

 3. Lator Cost By Task = (Man-hour) x (Direct Salary Rate) x (Multiplier).

 4. Direct expenses billed at invoice costs (no profit or overhead).

 5. Overhead includes communication, lodging, meals, and indirect expenses.

TOTAL LABOR COST	\$217,186.71
TOTAL DIRECT EXPENSES	\$97,079.41
TOTAL PROJECT COST	\$314,266.12

Excluded Services From the Cost Above						
Traffic Control for Borings (2 days) assume will be performed by County forces						\$4,000