ADDENDUM NO. 2

TO THE

DRAWINGS AND SPECIFICATIONS

FOR THE

Adams Street Sidewalk and Intersection Improvements

Issued From:

The City of Bloomington

Planning and Transportation Department

Post Office Box 100

401 North Morton Street, Suite #130

Bloomington, Indiana 47402

Issue Date:

November 25th, 2019

Letting Date:

December 2nd, 2019

This Addendum No.2 to the drawings and specifications shall supplement, amend and become a part of the Bid documents, plans, and specifications for the Adams Street Sidewalk and Intersection Improvements project. All bids and construction contracts shall be based on these modifications to the original contract documents. Bidders shall acknowledge receipt of this Addendum on the Bid Form. Failure to do so may subject the Bidder to disqualification.

Item No. 1: A revised plan set dated 11/22/2019 has been uploaded to the project website at https://bloomington.in.gov/engineering/projects/adams-kirkwood-old. Bidders shall review the revised plans and base all Bids on the revised plan set.

Item No. 2: An updated Schedule of Pay Items (Unit Price Sheet) has been attached to this addendum. Bidders shall base all Bids on the revised Schedule of Pay Items.

Item No. 3: Additional Special Provisions and Unique Special Provisions have been attached to this addendum. Bidders shall review and base all Bids with consideration of these additional Special Provisions and Unique Special Provisions.

Item No. 4: Questions and Answers

- (Q) There is mention of colored concrete in the spec but no pay item for such. Could you clarify if and where colored will be required?
 - (A) See revised Special Provisions and Unique Special Provisions attached to this document.
- (Q) Also, if we elect to start prior to April 1st will our 120 days to complete begin or does the 120 days not start until April 1?

- (A) The Contractor will have 120 calendar days from the Notice-to-Proceed (NTP) to complete the project. We anticipate issuing the NTP shortly after the execution of the contract. However, and in accordance with SS 101.73, no work days will be charged during the months of December, January, February, or March. Work days will be charged starting April 1st 2020. The contractor may start early if they choose to do so.
- (Q) Could a different pavement design be used in the K pavement area within the bike lane? The minimal width in these locations between the two curbs doesn't provide enough room for paving equipment? This would have to be placed and compacted by hand.
 - (A) It is assumed that an area of existing pavement will be removed to make room for curb forms or for use of a curb machine. If a contractor is able to saw cut the existing pavement and install curb next to it, then the K pavement widening within the bike lane would not be necessary. Alternate pavement designs may be considered as a change during construction if approved by the City.
- (Q) How will rock excavation be handled, if encountered?

See revised Special Provisions and Unique Special Provisions attached to this document. The undistributed quantity for EXCAVATION, FOUNDATION, UNCLASSIFIED is included for rock excavation encountered during signal pole installations. Other rock excavation is not anticipated.

- (O) Materials testing requirements?
 - (A) Materials testing is required with this contract and further detailed as follows:

TESTING LABORATORY SERVICES AND MATERIAL APPROVALS PART 1 GENERAL

1.01 PERFORMANCE REQUIREMENTS

- A. Employ and pay for services of independent testing laboratory approved by OWNER to perform testing as described in Specifications. Employment of laboratory shall, in no way, relieve CONTRACTOR's obligations to perform Work of Contract. The cost of Testing will not be paid separately but will be included in the cost of the pay items in the contract.
- B. Testing Requirements and Frequency of Tests:
 - 1. The testing and material approval requirements for the work included in the Contract are as follows:
 - a. Concrete for Pavements, Curbs, Sidewalks and Drives:
 - Concrete Mixes sourced from a plant pre-approved by INDOT.
 Mix Design, Admixtures, Aggregates and Cement from INDOT pre-approved list and/or certified aggregate producers
 - 2) Liquid Membrane Curing Materials Type C Certification or INDOT preapproved list.
 - 3) Per week of concrete pouring, one each air test and slump test for each mix design used (separate for colored mix and uncolored concrete mixes). One yield test for the project for each mix design used (separate for colored mix and uncolored concrete mixes).
 - b. Compacted Aggregate Base

 Gradation – Material from an INDOT Certified Aggregate Producer, or provide certified material gradation test demonstrating compliance with INDOT material requirements.

Topsoil and Sodding

- For every source of topsoil to be used on site, including in-situ materials, provide certified laboratory test of topsoil that identifies soil amendment needed to meet specifications.
- 2) Sodding shall come with a tag or written certification showing compliance with INDOT Standard Specifications for Nursery Sod.

d. Asphalt Pavement Materials

1) Source must be an INDOT-certified producer of HMA materials.

e. Other Materials

1) Where this Section is silent, approval of other materials will be in accordance with other Sections of these Technical Specifications or with the applicable City or INDOT Standard Specifications.

* * * END OF SECTION * * *

- (Q) PAY ITEM #85 CONTROLLER AND CABINET, P1. Does the City of Bloomington want this pay item to be Black in color, or plain aluminum finish?
 - (A) Plain aluminum finish.
- (Q) PAY ITEM #87 EMERGENCY VEHICLE PREEMPTION DETECTOR TWO CHANNEL TWO DIRECTION. Is this material to work with existing City of Bloomington preemption equipment?
 - (A) This equipment shall conform to the City of Bloomington equipment, as noted on the plans, referencing the Standard Specification Memorandum 18-03. A copy of this memo is available at https://bloomington.in.gov/engineering/resources
- (Q) PAY ITEM #97 PEDESTRIAN PUSH BUTTON, APS. Does the City of Bloomington want to use an APS button that has in the associated ped head, or one central control unit located in the controller cabinet?
 - (A) The APS buttons shall utilize a control unit in the associated ped head.
- (Q) PAY ITEM #97 PEDESTRIAN PUSH BUTTON, APS. Does the City prefer to use a particular brand of APS button?
 - (A) General Note 3 of the signalization plan requires traffic signal equipment to comply with the City's Standard Specifications Memorandum 18-03. Memo 18-03 includes a requirement for Polara Enterprises APS button.
- (Q) PAY ITEM #98 UNINTERRUPTIBLE POWER SUPPLY. Does the City of Bloomington want the cabinet for the pay item to be Black in color, or plain aluminum finish?
 - (A) Plain aluminum finish

Proposal Schedule of Items (Unit Prices)

Letting Date: December 2, 2019

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Project Title: Adams Street Sidewalk and Intersection Improvements

LINE	ITEM	DESCRIPTION	Approximate Quantity and Units	UNITS	UNIT PRICE	BID AMOUNT
001	105-06845	CONSTRUCTION ENGINEERING	1.00	LS	<u>-</u>	
002	110-01001	MOBILIZATION AND DEMOBILIZATION	1.00	LS	<u> </u>	<u>.</u>
003	201-02255	TREE 18 IN., REMOVE	8.00	EACH	<u>.</u>	_
004	202-02273	CENTER CURB, CONCRETE, REMOVE	11.00	SYS	<u></u>	<u>-</u>
005	202-02278	CURB, CONCRETE, REMOVE	118.00	LFT	<u> </u>	environ a como provincia
006	202-02279	CURB AND GUTTER, REMOVE	653.00	LFT	<u>-</u>	<u></u>
007	202-52710	SIDEWALK CONCRETE, REMOVE	1919.00	SYS		<u>-</u>
800	202-91385	INLET, REMOVE	3.00	EACH		
009	202-93741	GUARDRAIL, END TREATMENT, REMOVE	2.00	EACH	-	
010	202-96133	PIPE, REMOVE	50.00	LFT		<u> </u>
011	203-02000	EXCAVATION, COMMON	1080.00	CYS		
012	203-02070	BORROW	354.00	CYS	<u> </u>	
013	205-12108	STORM WATER MANAGEMENT BUDGET SWQCP PREPARATION AND	3096.00	DOL	-	-
014	205-12109	IMPLEMENTATION, LEVEL 1	1.00	LS		<u>-</u>
015	206-51230	EXCAVATION, FOUNDATION, UNCLASSIFIED	15.00	CYS		
016	207-08264	SUBGRADE TREATMENT, TYPE II	100.00	SYS	-	<u> </u>
017	207-09935	SUBGRADE TREATMENT, TYPE IC	2096.00	SYS	_	windstates size -
018	211-02050	B BORROW	50.00	CYS		10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -
019	211-09264	STRUCTURE BACKFILL, TYPE I	40.00	CYS	_	
020	301-12234	COMPACTED AGGREGATE NO 53	110.00	CYS		
021	304-07493	WIDENING WITH HMA, TYPE B	613.00	TON	-	with them to be an extra the same theory and the same the same transfer.
022	306-08034	MILLING, ASPHALT, 1 1/2 IN.	7033.00	SYS	<u>-</u>	
023	401-10258	JOINT ADHESIVE, SURFACE	6828.00	LFT .		trataste i recorde de la construcción de la construcción de la cons
024	401-10259	JOINT ADHESIVE, INTERMEDIATE	3332.00	LFT		<u> </u>
025	401-11785	LIQUID ASPHALT SEALANT	6828.00	LFT		
026	402-07433	HMA SURFACE, TYPE B	584.00	TON	<u>-</u>	
027	402-07451	HMA WEDGE AND LEVEL, TYPE B	15.00	TON		grande konstruiro Torresono (Torresono (Tor
028	406-05520	ASPHALT FOR TACK COAT	3.00	TON		<u> </u>
029	502-11564	PCCP, 7 IN.	35.00	SYS		

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 ${\tt Project\,Title:} \ \underline{{\tt Adams\,\,Street\,\,Sidewalk\,\,and\,\,Intersection\,\,Improvements}}$

LINE	ITEM	DESCRIPTION	Approximate Quantity and Units	UNITS	UNIT PRICE	BID AMOUNT
0030	503-05240	D-1 CONTRACTION JOINT	21.00	LFT	·-	_
0031	601-02241	GUARDRAIL, REMOVE	83.00	LFT		
0032	604-06070	SIDEWALK, CONCRETE	918.00	SYS		
0033	604-08086	CURB RAMP, CONCRETE	168.00	SYS		
0034	604-12083	DETECTABLE WARNING SURFACES	23.00	SYS		
0035	605-06120	CURB, CONCRETE	1597.00	LFT		
0036	605-06125	CURB, CONCRETE, MODIFIED	93.00	LFT	_	-
0037	605-06125{1}	CURB, CONCRETE, MODIFIED {PLANTER}	1125.00	LFT		- -
0038	605-06140	CURB AND GUTTER, CONCRETE	483.00	LFT		-
0039	605-06215	CENTER CURB, D CONCRETE	10.00	LFT		
0040	605-52807	CURB AND GUTTER, COMBINED (SLOPING)	99.00	LFT	-	-
0041	610-09108	PCCP FOR APPROACHES, 9 IN.	100.00	SYS		- <u>- 1</u>
0042	615-06505	MONUMENT, B	7.00	EACH	-	-
0043	618-03659	BUS SHELTER RESET MOBILIZATION AND DEMOBILIZATION FOR	1.00	EACH	-	<u>-</u>
0044	621-01004	SEEDING	8.00	EACH	-	<u> </u>
0045	621-06545	FERTILIZER	1.00	TON	<u>-246</u>	<u> </u>
0046	621-06560	MULCHED SEEDING U	810.00	SYS	_	<u>-</u>
0047	621-06567	WATER	6.00	kGAL	<u></u>	<u> </u>
0048	621-06570	TOPSOIL	155.00	CYS	<u>-</u>	<u>-</u>
0049	621-06575	SODDING, NURSERY PLANT, DECIDUOUS TREE, SINGLE STEM,	1269.00	SYS	<u>- 1981</u>	<u></u>
0050	622-05650	OVER 2 IN. TO 2.5 IN	18.00	EACH		igra su l esse este se vez es
0051	715-05048	PIPE, TYPE 4, CIRCULAR, 6 IN.	1214.00	• LFT		
0052	715-05053	PIPE, UNDERDRAIN, OUTLET 6 IN.	84.00	LFT	<u>-</u>	<u>-</u>
0053	715-05149	PIPE, TYPE 2, CIRCULAR, 12 IN.	96.00	LFT		-
0054	718-12305	GEOTEXTILES FOR UNDERDRAIN, TYPE 1A	1518.00	SYS	and the state of the second se	-
0055	718-52610	AGGREGATE FOR UNDERDRAINS	108.00	CYS	<u> </u>	-
0056	720-44000	CASTING, ADJUST TO GRADE (INLET)	1.00	EACH		_
0057	720-44000{1}	CASTING, ADJUST TO GRADE {MANHOLE}	1.00	EACH		

Project Title: Adams Street Sidewalk and Intersection Improvements

LINE	ITEM	DESCRIPTION	Approximate Quantity and Units	UNITS	UNIT PRICE	BID AMOUNT
0058	720-45005	INLET, A2	1.00	EACH	-	-
0059	720-45045	INLET, J10	1.00	EACH .		<u> </u>
0060	720-45410	MANHOLE, C4	2.00	EACH	-	man to comment to the contract of the contract
0061	720-45605	STRUCTURE, MANHOLE, RECONSTRUCTED	2.00	LFT		<u> </u>
0062	720-98174	INLET, B15	1.00	EACH .		
0063	732-11770	AGGREGATE FOR DRAINAGE FILL	42.00	CYS	7	<u> </u>
0064	732-11810	MODULAR BLOCK WALL	1280.00	SFT	<u>-</u>	<u>-</u>
0065	732-11811	MODULAR BLOCK WALL ERECTION	1280.00	SFT		<u> </u>
0066	801-04308	ROAD CLOSURE SIGN ASSEMBLY TEMPORARY PAVEMENT MARKING,	1.00	EACH	<u>-</u>	-
0067	801-06207	REMOVABLE, 4 IN. TEMPORARY PAVEMENT MARKING,	17985.00	LFT _	-	-
0068	801-06209	REMOVABLE, 6 IN.	562.00	LFT .	<u>-</u>	-
0069	801-06211	TEMPORARY PAVEMENT MESSAGE MARKING, REMOVABLE, LANE INDICATION ARROW TEMPORARY TRANSVERSE PAVEMENT	5.00	EACH	<u>-</u>	-
0070	801-06218	MARKING, REMOVEABLE, 24 IN.	119.00	LFT		
0071	801-06640	CONSTRUCTION SIGN, A	22.00	EACH	-	
0072	801-06645	CONSTRUCTION SIGN, B	21.00	EACH	-	-
0073	801-06775	MAINTAINING TRAFFIC	1.00	LS	<u> </u>	
0074	801-07118	BARRICADE, III-A	30.00	LFT _		
0075	801-07119	BARRICADE, III-B	12.00	LFT		5
0076	802-04089	SIGN, SHEET, REMOVE SIGN POST, SQUARE TYPE 1 REINFORCED	5.00	EACH .	-	
0077	802-05701	ANCHOR BASE	219.00	LFT	<u> </u>	<u>-</u>
0078	802-07059	SIGN, SHEET, AND SUPPORTS, REMOVE	9.00	EACH .	AND THE RESIDENCE OF THE PROPERTY OF THE PROPE	_
0079	802-07060	SIGN, SHEET, RELOCATE	5.00	EACH	-, -,	<u> </u>
0800	802-09838	SIGN, SHEET, WITH LEGEND, 0.080 IN.	59.00	SFT		
0081	802-09840	SIGN, SHEET, WITH LEGEND, 0.100 IN.	26.00	SFT		
0082	802-09842	SIGN, SHEET, WITH LEGEND, 0.125 IN.	60.00	SFT		-
0083	805-01300	TRAFFIC SIGNAL EQUIPMENT, REMOVE TRANSPORTATION OF SALVAGEABLE SIGNAL	6.00	EACH _	-	<u>-</u> -
0084	805-02087	EQUIPMENT PEDESTRIAN SIGNAL HEAD, COUNTDOWN, 18	1.00	LS .	-	-
0085	805-02150	IN.	8.00	EACH	<u> </u>	<u> </u>

Proposal Schedule of Items (Unit Prices)

City of Bloomington Planning and Transportation Department

Proposal Schedule of Items (Unit Prices)

Letting Date: <u>December 2, 2019</u>

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Project Title: Adams Street Sidewalk and Intersection Improvements

LINE	ITEM	DESCRIPTION	Approximate Quantity and Units	UNITS	UNIT PRICE	BID AMOUNT
0087	805-02645	SIGNAL POLE FOUNDATION 24 IN. X 24 IN. X 36 IN.	7.00	EACH	<u>-</u>	_
0088	805-03979	EMERGENCY VEHICLE PREEMPTION DETECTOR, TWO CHANNEL, TWO DIRECTION	2.00	EACH _	<u></u>	
0089	805-03985	DETECTOR CABLE 3C 20GA.	733.00	LFT _	_	erreservatore de la francia faren el como de la como de
0090	805-04782	VIDEO VEHICLE DETECTOR SYSTEM	1.00	EACH		
0091	805-06600	CONDUIT, PVC, 3 IN. SIGNAL CANTILEVER STRUCTURE, SINGLE ARM	24.00	LFT -		
0092	805-11375	25 FT. SIGNAL CANTILEVER STRUCTURE, SINGLE ARM	1.00	EACH	-	
0093	805-11376	30 FT. SIGNAL CANTILEVER STRUCTURE, SINGLE ARM	1.00	EACH	-	-
0094	805-11377	35 FT. SIGNAL CANTILEVER STRUCTURE, SINGLE ARM	1.00	EACH _	-	<u>-</u>
0095	805-11379	45 FT.	1.00	EACH _		<u>-</u>
0096	805-11744	HANDHOLE SIGNAL TYPE 2	8.00	EACH		<u> </u>
0097	805-11815	CONDUIT, HDPE, 2 IN. SCHEDULE 80	554.00	LFT _	_	
0098	805-11817	PEDESTRIAN PUSH BUTTON, APS	8.00	EACH	-	_
0099	805-12016	UNINTERRUPTIBLE POWER SUPPLY	1.00	EACH	<u>-</u>	-
0100	805-78205	TRAFFIC SIGNAL HEAD, 3 SECTION, 12 IN.	8.00	EACH	<u>-</u>	, <u>,</u>
0101	805-78225	TRAFFIC SIGNAL HEAD, 4 SECTION, 12 IN.	2.00	EACH		-
0102	805-78485	SIGNAL CABLE, CONTROL, COPPER, 5C/14 GA	2437.00	LFT	<u></u>	
0103	805-78490	SIGNAL CABLE, CONTROL, COPPER, 7C/14 GA	120.00	LFT		No territori un proprio
0104	805-78495	SIGNAL CABLE, CONTROL, COPPER, 9C/14 GA	508.00	LFT	<u> </u>	
0105	805-78925	CONTROLLER CABINET FOUNDATION, P1	1.00	EACH		· -
0106	805-90005	SIGNAL POLE, PEDESTAL, 10 FT	7.00	EACH		
0107	805-99999	SIGNAL CANTILEVER STRUCTURE, DRILLED SHAFT FOUNDATION, SPECIAL	4.00	EACH _	- -	<u>-</u>
0108	808-02977	PAVEMENT MESSAGE MARKING, THERMOPLASTIC, BIKE SYMBOL TRANSVERSE MARKING, THERMOPLASTIC	5.00	EACH _	-	<u> </u>
0109	808-03439	TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK LINE, WHITE, 24IN. PAVEMENT MESSAGE MARKING, PAINT, BIKE	295.00	LFT -	-	<u>-</u>
0110	808-03442	SYMBOL	1.00	EACH	epakan eta en a kan	
0111	808-05866	PAVEMENT MESSAGE MARKING, REMOVE LINE, THERMOPLASTIC, BROKEN, WHITE, 4	13.00	SYS		_
0112	808-06701	IN.	117.00	LFT _		
0113	808-06703	LINE, THERMOPLASTIC, SOLID, WHITE, 4 IN.	963.00	LFT _		
0114	808-06716	LINE, REMOVE	2988.00	LFT _	182 11 - 144 1	
0115	808-11482	LINE, THERMOPLASTIC, DOTTED, WHITE, 4 IN.	214.00	LFT _	-	



City of Bloomington Planning and Transportation Department

Proposal Schedule of Items (Unit Prices)

Letting Date: <u>December 2, 2019</u>

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Project Title: Adams Street Sidewalk and Intersection Improvements

LINE	ITEM	DESCRIPTION	Approximate Quantity and Units	UNITS	UNIT PRICE	BID AMOUNT
0116	808-12032	GROOVING FOR PAVEMENT MARKINGS	5337.00	LFT .		_
0117	808-75043	LINE, THERMOPLASTIC, SOLID, WHITE, 6 IN.	192.00	LFT	<u>-</u>	-
0118	808-75245	LINE, THERMOPLASTIC, SOLID, YELLOW, 4 IN.	3851.00	LFT		
0119	808-75260	TRANSVERSE MARKING, THERMOPLASTIC, CROSSHATCH LINE, WHITE, 12 IN.	108.00	LFT		<u> </u>
0120	808-75278	TRANSVERSE MARKING, THERMOPLASTIC, CROSSHATCH LINE, YELLOW 12 IN.	138.00	LFT	-	
0121	808-75297	TRANSVERSE MARKING, THERMOPLASTIC, STOP LINE, WHITE, 24 IN.	75.00	LFT		
0122	808-75320	PAVEMENT MESSAGE MARKING, THERMOPLASTIC LANE INDICATION ARROW	21.00	EACH		_
0123	808-75996	SNOWPLOWABLE RAISED PAVEMENT MARKER, REMOVE	52.00	EACH	-	
0124	808-75998	SNOWPLOWABLE RAISED PAVEMENT MARKER	52.00	EACH		_
0125	808-99999	SHADE, THERMOPLASTIC, SOLID, GREEN	842.00	SFT	,	

TOTAL PROJECT	BID:	

Bidder acknowledges that:

^{1.} Each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contactor's overhead and profit for each separately identified item, and

^{2.} Estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities determined as provided in the Contract Documents.

		CERTIFIED BY:	NEIL KOPPER SENIOR PROJECT ENGINEER CITY OF BLOOMINGTON, IN
		endum by representing our bid proposal.	it on the Bid Form in Section B and
RECEIVED BY:	CONTRACTOR (FIRM AND ADDRESS)	
SIGNATURE:			DATE:
PRINTED NAME:			
TITLE:			

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS

(Revised 05-02-19)

The Standard Specifications are revised as follows:

SECTION 107, AFTER LINE 767, INSERT AS FOLLOWS:

107.26 Existing Conditions of Utilities, Additional Right-of-Way, and Encroachments

Such existing conditions are as described below.

(a) Utilities

The status of all utility companies and organizations potentially involved with the work to be performed are described below as know at the time this contract was prepared. The active engagement of the Utility Coordinator does not minimize nor negate the responsibility of the Contractor to perform duties per the Standard Specifications.

The facilities of <u>City of Bloomington Utilities</u> exist within the project limits, but are not expected to be affected by the proposed construction. The facilities consist of 6", 8", and 12" water mains and appurtenances as indicated on the plans. 8" and 12" sanitary sewer lines and manholes as indicated on the plans. Storm sewer inlet and manholes as indicated on the plans. A storm manhole at approximate station 178+15 36' RT will need to be adjusted to grade per City of Bloomington Utility Specifications. If questions arise, <u>Jane Fleig</u> of the utility may be contacted at <u>812-349-3631</u>. Work plan approved 11/11/19.

The facilities of <u>Duke Energy Distribution</u> exist within the project limits, but are not expected to be affected by the proposed construction. The facilities consist of an overhead 3 phase electric line along the south side of Adams St. This line crosses Adams St. and continues north. An underground single phase electric line runs along the east side of Adams St. from Sta. 178+10 and feeds existing street lights. If questions arise, <u>Jared Dickey</u> of the utility may be contacted at <u>812-375-2111</u>. Work plan approved on 11/11/19.

The facilities of <u>Duke Energy Lighting</u> exist within the project limits. The facilities consist of existing street lights along the east side of Adams St. The poles at approximate stations 182+25 and 184+05 will be relocated as indicated on the exhibit attached to Duke Lighting's work plan. It is requested Duke Energy Lighting be invited to the preconstruction meeting for scheduling and coordination purposes. It is anticipated preconstruction activities will take approximately 120 days and approximately 60 days for relocation activities. If questions arise, <u>Craig Barker</u> of the utility may be contacted at <u>812-277-3134</u>. Work plan approved 11/11/19.

The facilities of <u>Vectren</u> exist within the project limits, but are not expected to be affected by the proposed construction. The facilities consist of a 6" gas main along the north side of 3rd Street, a 4" gas main along the west side of Adams Street form Patterson to Kirkwood Avenue, a 6" gas main crossing Adams St. near station 174+45, a 2" gas main along the west side of Adams St from Kirkwood Avenue to the end of the project limits, a 2" gas main crossing Kirkwood Avenue near station 332+79, and a 2" gas main on the south side of Kirkwood Avenue ending just before station 332+80. If questions arise, <u>Mostafa Khallad</u> of the utility may be contacted at <u>765-287-2150</u>. Work plan approved 11/11/19.

The facilities of <u>Bloomington Digital Underground</u> exist within the project limits. The facilities consist of conduits and manholes along the east side of Adams St. The manhole located at approximate station 181+75 shall be adjusted by the contractor. If questions arise, <u>Rick Routon</u> of the utility may be contacted at 812-349-3856. No work plan necessary for work in contract.

(b) Right-of-Way

There is no involvement of additional right-of-way for the contract.

(c) Encroachments

There is no involvement of encroachments for the contract.

(d) Other Noteworthy Conditions

There are no other noteworthy conditions which may affect the prosecution and progress of the contract.

(e) Preconstruction Conference Notification

The Contractor shall provide notification during the preconstruction conference about known corrections to or omissions of the information presented in 107.26(a) through 107.26(d) above. Otherwise, notification shall be provided as required in 105.06. Notifications regarding such corrections or omissions shall not alleviate the Contractor's inquiry or interpretation obligations as contained in 105 IAC 11-3-7.

108-C-091 FAILURE TO COMPLETE ON TIME FOR RESTRICTION

(Revised 05-02-19)

The Standard Specifications are revised as follows:

SECTION 108, AFTER LINE 590, INSERT AS FOLLOWS:

The work specified shall be arranged and prosecuted such that traffic is restricted on <u>Adams Street and Kirkwood Avenue</u> for not longer than the number of calendar days shown on the Proposal sheet.

If the necessary work is not completed and <u>Adams Street and Kirkwood Avenue</u> is not reopened to unrestricted traffic within the number of calendar days for restriction shown on the Proposal sheet, \$500.00 will be assessed as liquidated damages, not as a

penalty, but as damages sustained for each calendar day for which traffic on Adams Street and Kirkwood Avenue remains restricted in excess of the number shown on the Proposal sheet.

Extension of restriction time, if required, shall be in accordance with 108.08.

108-C-095 FAILURE TO COMPLETE ON TIME FOR CALENDAR COMPLETION DATE

(Revised 05-02-19)

The Standard Specifications are revised as follows:

SECTION 108, DELETE LINES 580 THROUGH 582.

SECTION 108, AFTER LINE 582, INSERT AS FOLLOWS:

If the contract is not completed on or before the contract completion date shown on the Proposal sheet, \$500.00 will be assessed as liquidated damages, not as a penalty, but as damages sustained, for each calendar day that the contract is not complete.

Extension of contract time, if required, shall be in accordance with 108.08.

202-T-161 REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

(Adopted 11-30-06)

The following existing traffic signal installations shall be removed. The removal shall be in accordance with 105.03 and shall include the partial removal of existing traffic signal foundations in accordance with 805.03 that are not to be utilized in the finished project.

LOCATIONS

Adams St. and Kirkwood Ave.

UNDISTRIBUTED QUANTITIES

Undistributed quantities shown on the schedule of pay items will be deleted from the lump sum contract price if they are not directed by the Engineer to be used during construction.

If an undistributed quantity item is called for in addition to that quantity which is known to be necessary to construct the project as shown on the plans, the item will be field-measured by the Engineer to determine the additional quantity. Payment will then be as per the unit price indicated on the schedule of pay items.

The schedule of pay items contains the following undistributed quantities in addition to known plan quantities: 15 CYS of excavation, foundation, unclassified.

Payment will be made under:

Pay Item Pay Unit Symbol

EXCAVATION, FOUNDATION, UNCLASSIFIED......CYS

undistributed quantity shown above for EXCAVATION, FOUNDATION, UNCLASSIFIED is included for rock excavation encountered during signal pole installations.

The exact location of the undistributed quantity, if required, will be determined by the Engineer during the time of construction.

HMA PAVEMENT

SECTION 402, AFTER LINE 360, INSERT AS FOLLOWS

Pay Item Pay Unit Symbol HMA Surface, Type *TON HMA Intermediate, Type *______TON HMA Base, Type *TON HMA Transverse Rumble Strips.....LFT HMA for Temporary Pavement, Type *______TON HMA Wedge and Level, Type *_____TON *Mixture Type

PORTLAND CEMENT CONCRETE PAVEMENT, PCCP, 7 INCH, WITH INTEGRAL COLOR

Description

This work shall consist of Portland Cement Concrete Pavement, PCCP, 7 Inch, with Integral Color, mixed, handled, placed on a prepared subgrade and subbase and finished in accordance with the plans and 502.

Material

Materials shall be in accordance with 502.02.

Submit batch sample for PCCP, 7 Inch, with Integral Color, Federal Standard 595 Color Number 31136. Contractor to supply mockup of not less than one square yard, tooled and finished representative of the final product, for Engineer's review and acceptance prior to placement of PCCP.

Color admixtures will be allowed in addition to those identified in 912.03. Color admixtures shall be Federal Standard 595, Color Number 31136.

The Engineer may conduct visual inspection of the concrete to verify adequate color of PCCP, 7 Inch, with Integral Color.

Construction Requirements

PCCP, 7 Inch, with Integral Color shall be cured per color additive manufacturer's recommendation and is subject to approval by the Engineer. Curing shall be in accordance with 504 where not conflicting with the color additive manufacturer's recommendation. For formed PCCP, 7 Inch, with Integral Color, immediately after the forms are removed, the sides of the PCCP, 7 Inch, with Integral Color, shall be cured.

The textured surface of PCCP shall be jointed in a pattern as shown on the plans. The textured surface shall be applied uniformly using consistent finishing practices. All surfaces shall be finished within reasonably the same time after placing. After tooling joints, a clear curing material per 504.04 shall be applied.

D-1 Contraction Joints shall be in accordance with 503.

Measurement

PCCP, 7 Inch, with Integral Color will be measured per 502.22.

Basis of Payment

PCCP, 7 Inch, with Integral Color will be paid for in accordance with 502.23. The cost of color additive, batch sample, and jointing pattern shall be included in the cost of PCCP, 7 Inch.

DETECTABLE WARNING SURFACES

The Standard Specifications are revised as follows:

SECTION 905, BEGIN LINE 37, DELETE AND INSERT AS FOLLOWS:

Detectable warning surfaces for concrete curb ramps shall be constructed using materials from the City of Bloomington's approved list of Detectable Warning Surfaces, which is maintained by the City of Bloomington Planning and Transportation Department Engineering Division. A surface manufacturer wishing to add a product to the approved list shall contact the City of Bloomington Planning and Transportation Department Engineering Division.

BUS SHELTER RESET

Description

This work shall consists of the removal, storage, and resetting of the existing bus shelter along Adams St.

Materials

Materials shall be in accordance with the manufacturer's specifications.

Construction Requirements

Removal of the existing bus shelter shall be done with care, making an effort to remove the bus shelter with minimum damage. The bus shelter shall remain in good, reusable condition.

Store and protect the bus shelter during construction to prevent damage, theft, or vandalism.

Any parts that are damaged from the removal and storage of the bus shelter shall be replaced with similar parts in accordance with the manufacturer's specifications.

If the bus shelter is damaged and unable to be reset, the Contractor shall contact Bloomington Transit to coordinate replacing the existing bus shelter with a new bus shelter.

Bus shelters shall be reset with the opening facing to the north. The bus shelter shall be located 6 inches north of the southern edge of the sidewalk area and 6 inches west of the east joint of the sidewalk area.

Method of Measurement

Removal and resetting of bus shelters will be measured by the number of bus shelters removed.

Basis of Payment

The accepted quantity of Bus Shelter Reset will be paid for at the contract unit price per each bus shelter.

Pay Item Symbol

Pay Unit

BUS SHELTER RESET.....EACH

The cost of removing and storing the bus shelter, placing the bus shelter, and equipment, labor, materials, tools and incidentals are included in the cost of this work.

The cost of sidewalk will be paid for in accordance with 604.

EMERGENCY VEHICLE PREEMPTION SYSTEM

The emergency vehicle preemption detection supplied for this project shall be the Opticom two-way, two channel, paid for at the unit price for Emergency Vehicle Preemption Detector, Two Channel, Two Direction EACH.

The confirmation light kit shall be paid for at the unit price for Emergency Vehicle Confirmation Light Kit EACH.

Any substitution of products must be approved by the $\ensuremath{\mathsf{OWNER}}$ and $\ensuremath{\mathsf{ENGINEER}}.$

Installation shall be per manufacturers specifications. All material, labor, and installation is incidental to the unit price of Emergency Vehicle Preemption Detector, Two Channel, Two Direction EACH and Emergency Vehicle Confirmation Light Kit EACH. Required wiring shall be included in the cost of the pay items.

Payment will be made under:

Pay Item Pay Unit

Symbol

Emergency Vehicle Preemption Detector, Two Channel, Two Direction. EACH Emergency Vehicle Confirmation Light Kit..... EACH

SIGNAL TIMING IMPLEMENTATION

The Contractor shall input the signal timings, provided by the Engineer, upon the completion of signal equipment installation. The Contractor shall coordinate with the City of Bloomington to obtain temporary signal timings for each phase of construction. Implementation shall be included in the cost of Controller and Cabinet, P1 (EACH).

Payment will be made under:

Pay Item Pay Unit Symbol

Controller and Cabinet, P1..... EACH

805-T-123 VIDEO VEHICLE DETECTOR SYSTEM

The video vehicle detector system is comprised of CCD video image sensors (cameras) and a machine vision processor as separate units. The system shall be capable of monitoring vehicles on a roadway via processing of video images and shall provide detector outputs to a traffic signal controller.

Only models from the Department's list of approved Traffic Signal Control Equipment shall be used. Video vehicle detector systems will be placed and maintained on the Department's approved list after being evaluated and approved by the Department. Manufacturers wishing to have their system considered should contact the Highway Support Manager, Operations Support Division.

The video vehicle detector system shall include a minimum of 4 CCD video image sensors (cameras), the machine vision processor, set-up and operating software, all connectors, $all\ cables$, and miscellaneous equipment necessary for the installation and operation of the system.

The video vehicle detector system shall be compatible with Econolite traffic signal controllers. The system shall be installed and maintained during all construction phases at each intersection. The Contractor shall be required to adjust the detection zones as necessary for each phase of construction.

A 10 year operational warranty or standard manufacturer's warranty, whichever is longer, shall be provided for each Machine Vision Processor.

A 5 year operational warranty or standard manufacturer's warranty, whichever is longer, shall be provided for each CCD Video Image Sensor.

The effective date for the beginning of the warranty shall be the traffic signal turn-on date as noted on Traffic Signal Completion Report Form (IC 636A). A written copy of the warranty shall be presented to the Engineer prior to final acceptance of the contract.

The warranty shall service all defects in material or workmanship of the equipment. The manufacturer shall not be responsible for damage caused by negligence, severe weather acts such as lightning, flood, etc., or use of the equipment in a manner not originally intended. Temperatures between -30°F and +165°F will not be considered severe weather acts. The vendor or manufacturer shall be responsible, during the warranty period, for transportation costs of items requiring warranty service to and from the Operations Support Division, Highway Support Section. A maximum turn-around time for service of all defects in material and workmanship of equipment shall be no longer than 60 calendar days. Continued failure, repeated malfunctions, or exceeding the maximum turn-around time for warranty service will be cause to remove that model from the Department's list of approved models.

The system will be measured and paid for at the contract unit price per each for video vehicle detector system, complete in place.

The CCD video image sensors (cameras), machine vision processor, set-up and operating software, all connectors, all cables, miscellaneous equipment necessary for the installation and operation of the system, and the warranty shall be included in the cost of the video vehicle detector system. The cost of detection zone adjustments during construction shall be included in the cost of the video vehicle detector system.

The $\frac{\text{coaxial lead-in cable}}{\text{and the}}$ mounting structure will be measured in accordance with 805.15 and paid for in accordance with 805.16.

SIGNAL PEDESTAL FINISHING

All signal pedestal poles on the project shall be painted black. The paint application process shall be in accordance with 909, the applicable portions of 805.04, and per manufacturer recommendations.

The cost of all material, manufacturing, transportation, packaging, labor, equipment, and all necessary incidentals to perform this work shall be included in the cost of the signal pole in accordance with 805.

SIGNAL POLE POWDER COATING

All traffic signal mast arms, signal poles, and mounting brackets shall be hot-dip galvanized both inside and outside, then powder coated black. This work shall not be measured for payment, but shall be included in the cost of Signal Cantilever Structure, Single Arm.

UNINTERRUPTIBLE POWER SUPPLY

The power supply unit shall be capable of handling surges and spikes present in normal utility power. Battery backup of up to 12 hours should be provided for power outages. The power supply unit shall have remote monitoring capabilities. The power supply unit and battery backup shall be housed in a separate cabinet mounted to the side of the traffic signal cabinet. An automatic transfer switch shall be included.

All equipment shall be compatible with the Econolite Cobalt TS2 controller. The cost of any additional equipment or labor to install this equipment shall be included in the cost of the controller and cabinet.

TRAFFIC SIGNAL CONTROL EQUIPMENT

SECTION 922, BEGIN LINE 9, INSERT AS FOLLOWS:

Models shall be *Econolite Cobalt TS2* selected from the Department's list of approved Traffic Signal and ITS Control Equipment, unless otherwise specified.

SIGNAL CANTILEVER STRUCTURE, DRILLED SHAFT FOUNDATION, SPECIAL

All signal cantilever structures and foundations shall be designed by the Structure Manufacturer and approved by the Engineer. The design shall meet Indiana Design Manual criteria.

All traffic signal cantilever structures shall be hot-dip galvanized both inside and outside, then powder coated black.

The cost of all material, manufacturing, transportation, packaging, labor, equipment, and all necessary incidentals to perform this work shall be included in the cost of Signal Cantilever Structure, Single Arm and Signal Cantilever Structure, Drilled Shaft Foundation, Special.

Payment will be made under:

Pay Item				Pay U	nit
Symbol			•		
Signal Cantilever	Structure,	Single Arm XX	FT		EACH
Signal Cantilever	Structure,	Drilled Shaft	Foundation,	Special	EACH