

A d d e n d u m

Iowa Department of Transportation
Contracts & Specifications Bureau

Date of Letting: February 18, 2025
Date of Addendum: January 29, 2025

C.O.	Proposal ID	Proposal Work Type	County	Project Number	Addendum
157	41-0184-030	HMA PAVEMENT WIDENING / HMA RESURFACING	HANCOCK	NHSX-018-4(30)--3H-41 NHSX-018-4(041)--3H-41	18FEB157A01

Make the following change to the NHSX-018-4(30)--3H-41 plans:

Replace plan sheet N.1 with the attached.

Revise General Notes on Sheet N.1 as follows:

11. Relocate and reinstall existing McCain ATC traffic signal controller in new cabinet. Cabinet shall be a 16 channel HV ATC cabinet with 16 channel CMU, switchpacks, and auxiliary equipment. Cabinet and cabinet equipment shall be fully-compatible with the existing controller.
22. Detection system shall be hybrid video/radar to provide reliable advance and stop line detection. Detection system shall include 5 years of remote access and a 5-year warranty.
23. Emergency vehicle preemption (EVP) system shall be siren-activated.

ESTIMATE OF TRAFFIC SIGNAL QUANTITIES			
ITEM	DESCRIPTION	UNITS	TOTAL
CONTROLLER AND CABINET	ATC OR NEMA CONTROLLER, CABINET, 18" RISER, AND ACCESSORIES	LS	1
	UNINTERRUPTABLE POWER SUPPLY (BATTERY BACK-UP)	LS	1
DETECTION	VIDEO DETECTION SYSTEM	LS	1
	EMERGENCY VEHICLE PREEMPTION SYSTEM	LS	1
	APS PEDESTRIAN PUSHBUTTON WITH SIGN	EACH	2
TRAFFIC SIGNAL HEADS	12" <R,<Y,<FY,<G (ALL LED) W/ BACKPLATE, MAST-ARM MOUNTED	EACH	2
	12" R,Y,G (ALL LED) W/ BACKPLATE, MAST-ARM MOUNTED	EACH	6
	12" R,Y,G (ALL LED), SIDE-OF-POLE MOUNTED	EACH	3
	12" R,Y,G,Y>,G>, (ALL LED) W/ BACKPLATE, MAST-ARM MOUNTED	EACH	1
	12" R,Y,G,Y>,G>, (ALL LED), SIDE-OF-POLE MOUNTED	EACH	1
	16" PEDESTRIAN HEAD, HAND/PERSON, COUNTDOWN, SIDE-OF-POLE MOUNTED	EACH	2
POWER SUPPLY	POWER SUPPLY	EACH	1
HANDHOLES	TYPE I - PRE-CAST CONCRETE HANDHOLE, 24" DIAMETER	EACH	3
	TYPE III - 24" X 36" PRE-CAST POLYMER-CONCRETE HANDHOLE	EACH	1
WIRE AND CABLE	SIGNAL CABLE - 12c #14 AWG	LIN FT	530
	SIGNAL CABLE - 7c #14 AWG	LIN FT	70
	SIGNAL CABLE - 5c #14 AWG	LIN FT	580
	SIGNAL CABLE - 2c #14 AWG	LIN FT	170
	EMERGENCY VEHICLE PREEMPTION CABLE	LIN FT	70
	VIDEO DETECTION CABLE(S)	LIN FT	780
	LUMINAIRE CABLE - 1c #8 AWG	LIN FT	60
	LUMINAIRE CABLE - 1c #10 AWG	LIN FT	120
	POWER CABLE - 1c #6 AWG	LIN FT	130
	GROUND WIRE - 1c #6 BARE	LIN FT	430
	TRACER WIRE - 1c #10	LIN FT	430
	PULL TAPE	LIN FT	430
CONDUIT	2" PVC, TRENCHED / BORED	LIN FT	20
	3" PVC, TRENCHED / BORED	LIN FT	370
CONCRETE FOOTINGS	CONTROLLER FOOTING	EACH	1
	POLE FOOTING, 3' DIA x 14' DEPTH	EACH	2
	POLE FOOTING, 3' DIA x 12' DEPTH	EACH	2
	POLE FOOTING, 2' DIA x 4' DEPTH	EACH	1
TRAFFIC SIGNAL POLES	ALUMINUM PEDESTAL POLE - HEIGHT 5'	EACH	1
	STEEL COMBINATION SIGNAL/DUAL LIGHTING POLE - 42' MAST ARM	EACH	1
	STEEL SIGNAL POLE - 45' MAST ARM - BLACK	EACH	1
	STEEL SIGNAL POLE - 28' MAST ARM - BLACK	EACH	1
	STEEL SIGNAL POLE - 24' MAST ARM - BLACK	EACH	1
LUMINAIRE	LUMINAIRE FIXTURE	EACH	1
	CONNECTOR - L-1, FUSED	EACH	2
MISC.	STREETNAME SIGN - 78" x 18", MAST-ARM MOUNTED	EACH	2
	STREETNAME SIGN - 72" x 18", MAST-ARM MOUNTED	EACH	2
	STREETNAME SIGN - 54" x 18", MAST-ARM MOUNTED	EACH	2
	TRAFFIC SIGN - R3-5L, 30" x 36", MAST-ARM MOUNTED	EACH	4
	TRAFFIC SIGN - R3-5R, 30" x 36", MAST-ARM MOUNTED	EACH	3

GENERAL NOTES:

- ALL QUANTITIES SHOWN IN THE TRAFFIC SIGNAL PLANS ARE FOR INFORMATIONAL AND ESTIMATING PURPOSES ONLY. THE CONTRACTOR'S LUMP SUM BID SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIAL NECESSARY TO PROVIDE A COMPLETE AND FUNCTIONAL TRAFFIC SIGNAL INSTALLATION IN CONFORMANCE WITH THE PLANS AND SPECIFICATIONS.
- PROVIDE TRAFFIC CONTROL DEVICES (INCLUDING THOSE REQUIRED TO FACILITATE CONSTRUCTION OF TRAFFIC SIGNALS) IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR THE STREETS AND HIGHWAYS, AS ADOPTED BY THE IOWA DEPARTMENT OF TRANSPORTATION PER 761 OF THE IOWA ADMINISTRATIVE CODE (IAC), CHAPTER 130.
- TRAFFIC SIGNAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT IOWA DOT STANDARD SPECIFICATIONS 8, EXCEPT AS MODIFIED BY THE PLANS.
- THE CONTRACTOR SHALL HAVE AN EMPLOYEE ON THE PROJECT WITH A LEVEL II INTERNATIONAL MUNICIPAL SIGNAL ASSOCIATION (IMSA) TRAFFIC SIGNAL TECHNICIAN CERTIFICATION.
- THE CONTRACTOR SHALL FURNISH A SCHEDULE OF UNIT PRICES FOR ESTIMATED TRAFFIC SIGNAL QUANTITIES. PAYMENT WILL BE BASED ON PLAN QUANTITIES. QUANTITIES WILL NOT BE FIELD MEASURED.
- ROADWAY GEOMETRICS REPRESENT PROPOSED FEATURES.
- THE PLAN LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION ON THE PROJECT TO ESTABLISH LOCATIONS.
- SECONDARY SERVICE LOCATION IS APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR COORDINATING POWER SERVICE LOCATIONS WITH POWER SERVICE PROVIDER PRIOR TO CONDUIT/CIRCUIT INSTALLATION. CONTRACTOR SHALL COIL 50 FEET OF POWER SERVICE CABLE AT THE BASE OF THE SECONDARY SERVICE POLE. POWER SERVICE PROVIDER TO INSTALL SECONDARY SERVICE RISER.
- THE PLAN LOCATIONS OF ALL HANDHOLES ARE APPROXIMATE ONLY AND ARE SUBJECT TO ADJUSTMENT IN THE FIELD BY THE ENGINEER. OBTAIN ENGINEER'S APPROVAL PRIOR TO PLACING HANDHOLES AND CONSTRUCTING FOOTINGS.
- PROVIDE ONE WEEK NOTICE TO IOWA DOT DISTRICT OFFICE BEFORE PLACING THE TRAFFIC SIGNAL INTO OPERATION.
- RELOCATE AND REINSTALL EXISTING MCCAIN ATC TRAFFIC SIGNAL CONTROLLER IN NEW CABINET. CABINET SHALL BE A 16 CHANNEL HV ATC CABINET WITH 16 CHANNEL CMU, SWITCHPACKS, AND AUXILIARY EQUIPMENT. CABINET AND CABINET EQUIPMENT SHALL BE FULLY-COMPATIBLE WITH THE EXISTING CONTROLLER.
- INSTALL ONE SIGNAL CABLE FROM EACH SIGNAL HEAD TO THE BASE OF THE POLE. A 7-CONDUCTOR CABLE SHALL BE USED IN THE POLE FOR EACH 5-SECTION VEHICLE SIGNAL HEAD, AND A 5-CONDUCTOR CABLE SHALL BE USED IN THE POLE FOR EACH 3-SECTION OR 4-SECTION VEHICLE SIGNAL HEAD AND EACH PEDESTRIAN SIGNAL HEAD. ALL SIGNAL CABLE SHALL BE #14 AWG UNLESS OTHERWISE NOTED ON THE PLANS.
- IN COMBINATION SIGNAL/ LIGHTING POLES, INSTALL TWO 1-CONDUCTOR #10 CABLES FROM THE LUMINAIRE TO THE BASE OF THE POLE. UTILIZE Y AND L CONNECTORS AS NEEDED.
- PROVIDE A GROUND ROD IN EACH HANDHOLE. PROVIDE TWO GROUND RODS IN THE HANDHOLE NEAREST THE SIGNAL CABINET. INSTALL A #6 BARE COPPER GROUND WIRE BETWEEN THE GROUND RODS IN THE SIGNAL FOOTINGS AND HANDHOLES TO FORM A CONTINUOUSLY GROUNDED SYSTEM. PROVIDE SEPARATE GROUNDING SYSTEM FOR THE SIGNAL CABINET.
- ABOVE GROUND RISERS SHALL BE RIGID STEEL CONDUIT. ALL OTHER CONDUIT SHALL BE RIGID P.V.C. CONDUIT OR DIRECTIONAL BORED HDPE CONDUIT.
- UNLESS OTHERWISE DIRECTED, TRAFFIC SIGNAL HEADS ON MAST ARMS ARE TO BE ALIGNED OVER THE CENTER OF INTERSECTION APPROACH LANES. APPROXIMATE LOCATIONS ARE AS SHOWN IN THE TRAFFIC SIGNAL POLE DATA TABLE. CONTRACTOR SHALL FIELD VERIFY SIGNAL HEAD LOCATIONS.
- TRAFFIC SIGNAL MOUNTING BRACKETS SHALL UTILIZE STAINLESS STEEL BANDING FOR SIDE OF POLE MOUNTING AND GALVANIZED STEEL CABLE FOR MAST ARM MOUNTING.
- SIGNAL HEADS SHALL HAVE BLACK FACES, VISORS, BACKPLATES (WHERE INDICATED) AND BODIES.
- PEDESTRIAN PUSHBUTTONS SHALL BE ACCESSIBLE PEDESTRIAN SIGNAL (APS) COMPLIANT. INSTALL PEDESTRIAN PUSHBUTTON SIGN ABOVE EACH PEDESTRIAN PUSHBUTTON.
- STREET NAME SIGNS SHALL BE GREEN WITH WHITE LETTERING AND BORDER. LETTERING SHALL BE SERIES C WITH 12-INCH UPPER CASE AND LOWER CASE LETTERS.
- PULL TAPE SHALL BE FLAT WOVEN POLYESTER TAPE WITH MINIMUM TENSILE STRENGTH OF 1,250 POUNDS AND WIDTH OF 0.5 INCH.
- DETECTION SYSTEM SHALL BE HYBRID VIDEO/RADAR TO PROVIDE RELIABLE ADVANCE AND STOP LINE DETECTION. DETECTION SYSTEM SHALL INCLUDE 5 YEARS OF REMOTE ACCESS AND A 5-YEAR WARRANTY.
- EMERGENCY VEHICLE PREEMPTION (EVP) SYSTEM SHALL BE SIREN-ACTIVATED.
- THE SIGNAL CABINET ADDRESS WILL BE THE SAME AS THE CURRENT SIGNAL CABINET.
- UNINTERRUPTABLE POWER SUPPLY (UPS) SYSTEM SHALL BE HOUSED IN THE SIGNAL CABINET OR AN EXTERNAL CABINET MOUNTED TO THE SIGNAL CABINET. UPS SHALL PROVIDE AT LEAST 4 HOURS OF NORMAL SIGNAL OPERATION AND 8 HOURS OF FLASHING OPERATION.
- LUMINAIRES SHALL BE LED, 18,000 LUMENS (+/- 5%), 100 LUMENS/WATT EFFICACY, 4000 K COLOR TEMPERATURE, TYPE III DISTRIBUTION, MEDIUM, B3-U0-G3, L70 > 70,000 HOURS WITH AT LEAST 5-YEAR WARRANTY, GRAY FINISH AND PHOTOCELL CONTROL.
- TRAFFIC SIGNAL REMOVAL INCLUDES REMOVAL OF EXISTING TRAFFIC SIGNAL HEADS, POLES, CABINET AND EQUIPMENT, AND CABLE IN CONDUITS. CONTRACTOR TO SALVAGE ALL EQUIPMENT AND CABLE. ABANDON CONDUITS IN PLACE. COMPLETELY REMOVE EXISTING SIGNAL POLE AND CABINET FOOTINGS AND HANDHOLES.

TRAFFIC SIGNAL LEGEND			
EXISTING		PROPOSED	
			TRAFFIC SIGNAL
			TRAFFIC SIGNAL WITH BACKPLATE
			PEDESTRIAN SIGNAL
			MAST ARM SUSPENDED TRAFFIC SIGNAL (XX = LENGTH OF MAST ARM)
			METAL TRAFFIC SIGNAL PEDESTAL
			TRAFFIC SIGNAL HEAD NUMBER
			POLE NUMBER
			STREET LIGHT ON SIGNAL POLE
			CONDUIT TRENCHED, PUSHED, JACKED, OR BORED
			HANDHOLE
			CONTROLLER CABINET WITH FOOTING
			SECONDARY SERVICE POINT
			INDUCTIVE LOOP DETECTOR (XX = NUMBER DESIGNATION)
			DETECTION ZONE (XX = NUMBER DESIGNATION)
			VIDEO DETECTION CAMERA
			EMERGENCY VEHICLE DETECTOR
			POLE MOUNTED SIGN

IOWA DOT STANDARD ROAD PLANS	
NUMBER	IDENTIFICATION
LI - 103	Conduit and Precast Handholes
TS - 102	Traffic Signal Pole Foundation

FILE NO.	ENGLISH	DESIGN TEAM Snyder & Associates, Inc.	Hancock COUNTY	PROJECT NUMBER NHSX-018-4(30)--3H-41	SHEET NUMBER N.1	REVISED
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