

# Planning & Engineering Office of Project Development

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March 19, 2024

#### **ADDENDUM NO. 4**

RE: Item #1, March 20, 2024 Letting - NH-CR 0037(158)126, PCN 06A2, Beadle County - Urban Grading, PCC Surfacing, Storm Sewer, Curb & Gutter, Sidewalk, Lighting, Signals, Crossing Surface

#### TO WHOM IT MAY CONCERN:

The following addenda to the plans shall be inserted and made a part of your proposal for the referenced project.

**SPECIAL PROVISIONS:** NO CHANGE

**SDEBS BID PROPOSAL:** NO CHANGE

PLANS: Please destroy sheet L3 and replace with enclosed sheet L3 dated "3/19/24 – Addendum 4."

**Sheet L3:** DECORATIVE LUMINAIRE POLES note was revised to clarify product requirements.

Sincerely,

Sam Weisgram
Engineering Supervisor

SW/cj

CC: Mark Peterson, Aberdeen Region Engineer

Brad Letcher, Huron Area Engineer

#### SALVAGE SIGNAL EQUIPMENT

The existing signal equipment identified on the plans will be salvaged and delivered to the City of Huron by the Contractor. The Contractor will notify the city 5 days before the delivery of the salvaged signal equipment for a time and location of delivery. The city contact is Brett Runge at (605) 530-9607.

Any equipment damaged during salvaging or delivery will be repaired or replaced by the Contractor at no cost to the State.

All costs for work involved in the salvage and delivery of the existing signal equipment will be incidental to the contract lump sum price for "Salvage Signal Equipment".

### **SIGNAL POLES**

The signal poles and arms from 5<sup>th</sup> to Market Street will be galvanized and have a painted or powder coated black finish.

Cantilever traffic signal supports, including anchor bolts, will be designed for fatigue in accordance with Fatigue Importance Category III without galloping and truck induced gusts.

The pole fabricator will be responsible for the determining the diameter, length, and number of anchor bolts.

Signal poles will have rotatable mast arms.

Luminaire extension(s) will have a 50-foot mounting height with 8-foot arm.

## **DECORATIVE LUMINAIRE POLES**

Luminaire poles DL1 to DL24 will be decorative street lighting using fluted poles with a lower-level back/pedestrian luminaire. The poles will have a height of 35-feet with twin arms, the arm orientated towards the street will have a mounting height of 35-feet with a 6-feet arm, and the arm orientated away from the street (towards the sidewalk) will have a mounting height of 15-feet with a 3-feet arm. Poles and arms will have a painted or powder coated black finish. Pole, arms, and base will be incidental to the contract unit price per each "Decorative Luminaire Pole with Twin Arms". The following decorative pole or an approved equivalent meets requirements:

-Pole: Millerbernd Contemporary (DTA) Part # DTA-B-095-350-F-

C.

-Pole Base: Burlington (BBNF), BBNF4424

-6' Front Arm: Decorative Mast Arm with Decorative Scroll Brace, DN6

-3' Back Arm: Decorative Luminaire Arm, DN3-1BS-001

The pole fabricator will be responsible for the determining the diameter, length, and number of anchor bolts.

Decorative Luminaire poles will be designed to include loadings created by banners that are 30 inches wide by 80 inches long, mounted 15 feet from the top of footing to the bottom of the banner and will be able to support decorations that are 30lbs and 5'x5' dimensions.

Luminaire poles DL1-DL24 will have a convenience duplex festoon outlet receptacle (15-amp, 3 wire) suitable for outdoor use. Festoon will be placed 90° counterclockwise to the pole arm. All costs associated with making the festoon receptacles operational including but not limited to, the necessary hardware and

#14 AWG wiring, will be incidental to the contract unit price per each "Decorative Luminaire Pole with Twin Arms".

## **LUMINAIRE POLES**

Luminaire poles L1-L11 will have a mounting height of 50-feet with a 8-foot arm.

The pole fabricator will be responsible for the determining the diameter, length, and number of anchor bolts.

Luminaire poles will be designed to include loadings created by banners that are 30 inches wide by 80 inches long, mounted 15 feet from the top of footing to the bottom of the banner and will be able to support decorations that are 30lbs with 5'x5' dimensions.

Luminaire poles L1-L11 will have a convenience duplex festoon outlet receptacle (15-amp, 3 wire) suitable for outdoor use. Festoon will be placed 90° counterclockwise to the pole arm. All costs associated with making the festoon receptacles operational including but not limited to, the necessary hardware and #14 AWG wiring, will be incidental to the contract unit price per each "Breakaway Base Luminaire Pole with Arm, 50' Mounting Height".

#### PEDESTAL SIGNAL POLES

Pedestal signal poles may be aluminum. Aluminum poles will conform to the following requirements:

Aluminum will conform to ASTM B221, Alloy 6061, and Temper T6.

Poles will be round with a minimum outside pole diameter of 4 inches, and the pole assembly will have a square, cast aluminum base with aluminum access door. The base will conform to the breakaway requirements of NCHRP 350 or MASH. A grounding lug will be provided in the base.

The pole to base connection will be a threaded connection; threads will be 8 TPI, NPT. A collar (integral or non-integral) to prevent wind-induced loosening of pole will be provided. All bolt and connection threads will be coated with a commercially available anti-seize compound intended for use in aluminum-to-aluminum and steel-to-aluminum connections.

The pole finish will either be brushed satin or spun. The top of the pole will be sealed by the traffic signal head mounting hardware or by an aluminum cap.

Measurement and payment for aluminum poles will be as specified in Specifications Section 635.

## **DECORATIVE LUMINAIRES**

The lighting design used the following parameters and provides 1.1 and greater average maintained foot-candles and uniformity ratios of 3:1 (average maintained to minimum maintained foot-candles) and 6:1 (maximum to minimum maintained foot candles):

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-CR 0037(158)126	L3	L54

Revised 3/19/2024 - RR - Addendum 4

Pole Setback: 2 Ft. Lamp Loss Factor (LLF): 8.0 Width of Lighted Area: 65 Ft. Luminaire Cycle Length: Varies. Configuration: Staggered Mounting Height: 35 Ft./15 Ft. Arm Length 6 Ft. / 3 Ft. Light Source: LED

The following LED luminaires meet the requirements for this design:

Roadside/Forward facing luminaire at 35' will be a:

Holophane: ESL3-P35S-40K-MVOLT-BG3-BK-PR7

Sidewalk/Rear facing arm at 15' will be a:

Holophane: GVD3-P10-40K-MVOLT-CLF-GL3-TBK

## **LUMINAIRES**

The lighting design used the following parameters and provides 1.1 and greater average maintained foot-candles and uniformity ratios of 3:1 (average maintained to minimum maintained foot-candles) and 6:1 (maximum to minimum maintained foot candles):

Pole Setback: 2 Ft.
Lamp Loss Factor (LLF): 0.8
Width of Lighted Area: Varies
Luminaire Cycle Length: Varies
Configuration: Staggered
Mounting Height: 50 Ft.

Arm Length 8Ft. Light Source: LED

The following LED luminaires or approved equivalents meet the requirements for this design:

GE Evolve: ERL2-0-30-C5-40-A

AEL Autobahn: ATB2-P602-MVOLT-R3-P7