#### **ADDENDUM COVER SHEET**

## Addendum No. 2

Cobbs Creek Playground (700 Cobbs Creek Parkway)

**Philadelphia Redevelopment Authority** 

Issue Date: August 22, 2022

Items:

The following items are to be issued as part of Addendum 02 for **Cobbs Creek Playground**:

- 1. Specifications:
  - a. 000110 Table of Contents
    - i. Added: "265600 Exterior LED Lighting"
  - b. 265600 Exterior LED Lighting
    - i. Added section.

Bidders must acknowledge receipt of Addendum No 1. The signed acknowledgement must be included in your bid proposal. Please sign and date below:

Acknowledgement of Addendum No.1

# **SECTION 000110** TABLE OF CONTENTS

# DIVISION 0 - BIDDING AND CONTRACT REQUIREMENTS:

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002113	Instructions to Sellers
002114	Diesel Engine Emissions Controls for PW Bids
002115	Notice to Sellers ONLY-Mayor's Executive Order 7-14
004109	Pricing
004112	Performance of Work
004312	Public Works LBE Language
004313	Bid Bond
007200	Standard Contract Requirements
007201	Act 127 Verification Form Addendum
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011100	Summary of the Work
012100	Allowances
012200	Unit Prices
012300	Alternates
012500	Substitution Procedures
012600	Contract Modification Procedures
	- Change Order Form
012900	Payment Procedures
012973	Schedule of Values
013113	Project Coordination
013119	Project Meetings
013216	Construction Scheduling
013226	Progress Reports
013233	Construction Photographs
013330	Submittals
013513.18	Special Requirements for Work Within the Philadelphia Parks & Recreation System
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015000	Temporary Facilities and Controls
015719	Environmental Controls
015639	Temporary Tree and Plant Protection
015800	Project Identification and Signs
016001	Products and Materials
017123	Field Engineering
017329	Cutting, Patching, Sleeves and Inserts
017419	Construction Waste Management and Disposal
017423	Cleaning
017700	Closeout Procedures
	-Certificate of Substantial Completion Form
017823	Operation and Maintenance Manuals
017836	Warranties
017839	Project Record Documents

# **DIVISIONS 02 – EXISTING CONDITIONS**

022310 Tree Protection, Trimming and Relocation

024119 Selective Demolition

# **DIVISION 03 - CONCRETE**

033053 Cast in Place Concrete

# **DIVISION 10 - SIGNAGE**

100610 Exterior Signage

# **DIVISION 11 - EQUIPMENT**

116800 Play Equipment

Sprayground System

## **DIVISION 12 - FURNISHINGS**

129300 Site Furnishings

# **DIVISION 26 - ELECTRICAL**

260519 Low-Voltage Electrical Power Conductors and Cables

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260533	Raceways and Boxes for Electrical Systems
260543	Underground Ducts and Raceways for Electrical Systems
260552	Identification for Electrical Systems
260923	Lighting Control Devices
262416	Panelboards
262726	Wiring Devices
262816	Enclosed Switches and Circuit Breakers
265600	Exterior LED Lighting

# **DIVISION 28 – ELECTRONIC SAFETY AND SECURITY**

282300 Video Surveillance

# **DIVISION 31 - EARTHWORK**

311000	Site Clearing
312000	Earth Moving
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# **DIVISION 32 – EXTERIOR IMPROVEMENTS**

321216	Asphalt Paving
321313	Concrete Paving
321723	Pavement Markings
321816.13	Playground Protective Surfacing
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329113	Soil Preparation
329200	Turf and Grasses
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# **DIVISION 33 - UTILITIES**

331417 Site Water Service Utility Laterals

# **END OF SECTION 000110**

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#### SECTION 265600 - EXTERIOR LED LIGHTING

# PART 1 - GENERAL

## 1.1 SCOPE

- A. This section includes all labor, equipment and materials required for the following:
  - Exterior LED light fixtures and poles.
  - 2. Installation and connections
  - 3. Tests
  - Spare parts.

## 1.2 RELATED SECTIONS

A. All work included in this section shall be coordinated with the requirements of the contract drawings, Division 0, Division 1, Division 3, and Division 26 specifications. Any discrepancies between sections shall be brought to the attention of the Owner.

#### 1.3 GENERAL REQUIREMENTS

- A. All materials and equipment furnished by this Contractor shall be new, the best in grade and quality, and manufactured in the United States of America with standards and ratings as specified herein. No substitution or deviation from the materials and equipment specified herein will be allowed except by written permission from the Engineer.
- B. All materials and equipment shall be of the latest type and design and, where applicable, shall bear the label, stamp or seal of UL, NFPA, IEEE, NEMA, ASME, ASTM, ASA, IESNA, and other industry regulatory groups.
- C. All items of the same kind shall be of the same make throughout the work.
- D. All luminaires shall be controlled via photocell, however contractor shall verify with Philadelphia Parks and Recreation (PPR) relative to lighting controls, lighting times, and security lighting. PPR may choose to have certain lights within a facility or site on a separate security circuit.

#### 1.4 CODES AND STANDARDS

A. The light fixtures shall comply with the latest applicable standards including, but not limited to the following:

- 1. ANSI/IEC 60529 Degrees of Protection Provided by Enclosures
- ANSI/IEEE C62.41.2 IEEE Recommended Practice for Surge Voltages in Low-Voltage AC Power Circuits.
- 3. IESNA LM-79-08 Electrical and Photometric Measurements of Solid-State Lighting Products
- NEMA SSL 1-2010: Electronic Drivers for LED Devices, Arrays, or Systems
- UL 8750 Outline of Investigation for LED Light Sources for Use in Lighting Products.
- 6. ANSI C136.31-2010 Standard for Roadway and Area Lighting Equipment—Luminaire Vibration.
- 7. Codes and Standards referenced in Section 01410 shall also apply to this section.

#### 1.5 SUBMITTALS

- A. Completely detailed working drawings and descriptive literature for all lighting fixtures, wiring devices and appurtenances shall be submitted by the Contractor for approval.
- B. Submittals shall be complete with catalog sheets, distribution curves, coefficients of utilization tables, and details of construction, assembly and installation. Electronic IES files of the fixture proposed if different from the fixture specified.
- C. Prior to ordering all lighting fixtures, order one sample fixture for the Owner to inspect on site and approve. Upon approval of the fixtures, order the remaining fixtures.

# 1.6 SUBSTITUTIONS

- A. Substitutions are not normally permitting. Substitutions must be approved by Philadelphia Parks and Recreation prior to bid.
- B. The lighting design shown on the drawings are based on the fixtures selected on the fixtures schedule. If substitutions are approved by PPR, contractor shall provide complete design drawings and photometric using the design basis specified on contract drawings at no additional cost.
- C. PPR will only approve substitutions if lighting design proves of equal or better design and the quality of product is equivalent to the products shown on the fixture schedule and meets all requirements of the contract.

## PART 2 - PRODUCTS

#### 2.1 LIGHT FIXTURES

A. All lighting fixtures shall be energy efficient solid state LED as shown on the drawings.

- B. All light fixtures shall operate at 120/240 volts and furnished as described in the fixture schedule on the drawings.
- C. All light fixtures shall be UL listed and manufactured in accordance with the latest applicable industry codes.
- D. Where shown on drawings, provide accessories and mounting options.
- E. All LED fixtures must appear on the Energy Star qualified product list or Design Lights Consortium products list to be eligible for rebates from PECO.

## 2.2 APPROVED FIXTURES

- A. Following are approved manufacturers and model for LED light fixtures, pole, and accessories:
  - 1. DISCERA 4 LED by Selux or approved equal.
  - Valmont Poles or approved equal.

## 2.3 CONSTRUCTION AND MATERIALS

- A. Luminaire housing shall be constructed of rugged cast aluminum with integral heat sink specifically designed for LED.
- B. The finish shall be durable, colorfast with excellent resistance to corrosion, ultraviolet degradation and abrasion. Preferred finish color shall be black or bronze. Designer may choose another color from the manufacturer's standard color palette with approval from Philadelphia Parks and Recreation.

# 2.4 MOUNTING AND ACCESSORIES

- A. Pole: 3 1/2 Inch diameter straight steel pole with powder coat finish. Mounting heights/pole lengths shall be the following:
  - 1. Pedestrian walkways, plazas, etc.: 14 feet from finished grade.
  - 2. Parking areas and drives: 20 feet from finished grade.
- B. Mounting Brackets: Single or double long arm mounts.
- C. Photo Cell: Manufacturer's provided photocell.
- D. Ground Fault Circuit Interrupter (GFCI) Receptacle: Where requested provide GFCI that is integrated into the pole by the manufacturer. Contractor/design shall confirm which poles receive GFCI outlets. The GFCI outlet shall meet the following criteria:
  - 1. GFCI shall be 120V 15A GFCI duplex receptacle with NEC approved weatherproof enclosure, self-closing cover; located 36 inches from base of pole, in-line with handhole. For use with 120V applications only.

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2. GFCI shall be wired on a separate circuit from the luminaire.

#### 2.5 RATINGS

#### E. Electrical:

- 1. Voltage and Frequency. 120V 277V, 50/60Hz
- 2. System power factor shall be greater than 0.9
- 3. Total Harmonic Distortion (THD) less than 20%
- 4. Class "A" Sound rating
- 5. Electromagnetic Interference (EMI) per Title 47 CFR 15 Class A
- 6. Surge protection of 10Kv IEEE C62.41.2-002 Scenario 1, Location Category C

# F. Enclosure Ratings

- 1. UL/cUL Listed, suitable for wet locations per UL 1598 when pendant mount.
- 2. IP66 rated optical enclosure per ANSI C136.25-2009
- 3. Temperature rated at -40° to 40°C.

#### 2.6 OPTICS

- A. Structured LED array for optimized under canopy photometric distribution
- B. Symmetric photometric distribution suitable for mounting at 14 or 20 feet (see plans).
- C. Lenses produce Type I, II, III, or V distributions per IESNA. See lighting schedule.
- D. Reflective technology designed to optimize application efficiency and minimize glare.
- E. Utilizes high brightness LEDs with color rendition index (CRI) of 70. Acceptable color temperature may range from 4000K to 5100K. Standard LM-79 tests and reports shall be performed in accordance with IESNA standards

#### 2.7 WARRANTY

- A. Provide Manufacturer's warranty on all LED light fixtures and all its components for a period of 5 years based on fixture operation for 24 hours/ 7days or 50,000 hours.
- B. Contractor shall include 1 year of labor for lighting repairs, etc.
- C. The electrical contractor shall provide all warranty documents to the Owner along with original receipts.
- D. In the event any fixture(s) are not functional due to sole failure of the fixture during the

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warranty period of 5 years, the manufacturer shall ship upon request a new equivalent replacement fixture at no additional cost to arrive within 6 weeks. These replacement fixtures shall be covered under the original warranty and shall continue the remaining warranty period.

# 2.8 SPARE PARTS (AT PPR REQUEST IN WRITING ONLY)

- A. The Contractor shall furnish five percent (5%) spare light fixtures for each type fixture listed on the fixture schedule.
- B. All parts shall be delivered neatly wrapped or boxed, indexed and tagged with complete information for use and reordering.

#### PART 3 - EXECUTION

## 3.1 INSTALLATION AND CONNECTIONS

- A. The scheme of installation, connections, arrangement, and location of equipment and outline dimensions shall be as shown and specified. Contractor shall verify all locations with designer prior to installation.
- B. All installation shall meet the requirements of the National Electric code and Philadelphia Code where applicable.
- C. Lighting fixtures shall be installed as indicated on the drawings and as per manufacturer's instructions.
- D. Fixtures shall be clear of pipes, mechanical equipment, structural openings, and other obstructions.
- E. The exact mounting of lighting fixtures shall be approved on the job before installation.
- F. Pole based shall be installed relative to finish grade. Contractor shall verify top of footing elevations relative to finished grade elevation for conformance with the details and specifications prior to installation of concrete. Refer to pole base details for concrete and reinforcing information. Contractor shall use manufacturer's anchor bolt template for proper positioning of light pole base anchor bolts. Anchor bolts are to be cast into the footing.

# 3.1 TESTS

- A. The contractor shall test for continuity and balance after installation and prior to acceptance the entire lighting system. All lighting shall be tested for proper operation.
- B. The Contractor shall submit all foot-candle data along with a test report upon completion of all tests performed.

END OF SECTION 265600