

KNOXVILLE UTILITIES BOARD

**Addendum No. 1**

Project: **Lonsdale (LN) Substation 131-13kV 2B Site Prep and Earthwork**

Control No: **624**

Issued: **To all listed Plan holders**

Date: **October 18, 2016**

This addendum forms a part of the Contract described above. The original Contract Documents and any prior addenda remain in full force and effect except as modified by the following which shall take precedence over any contrary provisions in prior documents.

See attached sheet for specifics of this addendum.

Each Bidder shall acknowledge receipt of this addendum by affixing his signature below, by noting this addendum on his Bid Form, and by attaching this addendum to his Bid. **Failure to acknowledge this addendum could be cause for bid rejection.**

**ACKNOWLEDGMENT**

The undersigned acknowledges receipt of this addendum and the Bid submitted is in accordance with information, instructions and stipulations set forth here in.

BIDDER \_\_\_\_\_

AUTHORIZED SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

**ADDENDUM 1 – Lonsdale (LN) Substation 131-13kV 2B Site Prep and Earthwork,  
Control No: 624**

**Clarifications to Specifications**

**Item 1.** Delete the following Part 7, Transformer Fire Protection Walls, of Section 01110, Scope of Work, in its entirety, as this work will no longer be included in this contract.

Additionally, if there are any references to this work in any of the drawings or plans, the same language to delete this work would apply.

**PART 7.        *Transformer Fire Protection Walls***

7.01    *The Contractor shall dismantle, remove and properly dispose of two (2) concrete transformer fire protection walls.*

7.02    *The wall removals shall include the removal of each wall foundation.*

7.03    *The Contractor shall not remove or damage the nearby 161 kV steel structure, its foundations or the former power transformer foundations when dismantling each wall.*

7.04    *The Contractor shall consult with the KUB field representative to certify job completion.*

**END OF ADDENDUM 10/16**



**SECTION 01110  
SCOPE OF WORK**

**PART 1. GENERAL**

**1.1 SUMMARY**

The Work is entitled **Lonsdale (LN) Substation 131-13kV 2B Site Prep & Earthwork, Control Number: 624.**

This work shall include all labor, tools, equipment, and incidentals as required to construct this Project, complete in every detail, and make the electrical facilities as specified herein and/or indicated on the Drawings ready for the OWNER's beneficial use.

**PART 1. GENERAL**

1.01 This specification applies to Site Preparation and Earthwork necessary for the installation of new electric substation facilities at the Knoxville Utilities Board (KUB) Lonsdale (LN) Substation.

1.02 The substation Site is located at the following address:

612 North Concord Street  
Knoxville, TN 37919

1.03 Site Preparation and Earthwork activities will include, but not be limited to, the following activities:

- a) Installation of Storm Water Protection Systems,
- b) Installation of Temporary Security Fencing,
- c) Removal of Railway Components,
- d) Removal of Transformer Fire Protection Walls,
- e) Removal of Duct Work,
- f) Removal of Steel Structure Foundations
- g) Preparation of Earthen Pads

1.04 The Contractor shall furnish ALL labor, equipment and/or materials necessary to complete the requirements of this specification.

**PART 2. SAFETY**

2.01 Electric substations are inherently dangerous places to occupy. The proximity of personnel to utility power supply sources and the equipment used to operate electric systems place them at risk of being shocked or electrocuted.

2.02 All Contractors accessing the Site shall complete and pass KUB's Job Safety Training Course: Substation Entry Training for Qualified Non-Electrical Workers, Course #19059.

- 2.03 This Training Course consists of an hour long class and it includes a PASS/FAIL test administered at the end of the training session.
- 2.04 A onetime training session will be provided to the Contractor free of charge at the Site at a mutually agreeable time between the Contractor and KUB Safety personnel administering the Course.
- 2.05 All Contractors entering the Site shall, as a minimum, wear the following Personal Protective Equipment (PPE):
- a) Hard Hat,
  - b) Safety Glasses, and
  - c) Safety Toed Footwear.
- Special PPE (fall restraint equipment, traffic vests, hearing protection, respirators, gas suits, high or low voltage gloves, etc.) shall be worn when hazards are present.
- 2.06 To protect KUB equipment and personnel, KUB has installed temporary protective grounds (TPG's) on, separated and or cleared the 161 kV 2B Yard Steel Structure from its power supply sources.
- 2.07 KUB TPG's are to remain in place throughout the duration of all Site activities.
- 2.08 Only KUB may remove or reposition KUB TPG's.
- 2.09 The Contractor shall furnish and install any and all other equipment and personnel temporary grounds necessary to manage and mitigate shock hazards that may be present on ungrounded equipment in the proximity of electric supply sources.
- 2.10 The Contractor shall immediately contact the KUB field representative if the station ground grid is encountered or damaged.
- 2.11 Under no circumstance is the Contractor to touch, repair or the remove the station ground grid without explicit instruction from the KUB field representative.
- 2.12 All local 69,000 Volt subtransmission overhead electric lines are to remain in service for the duration of the Site Preparation and Earthwork efforts.
- 2.13 The Contractor must contact and notify the KUB Systems Operations Dispatch Center of their presence prior to entering and after leaving the Site.
- 2.14 Working hours will be limited to daylight hours, Monday through Friday. Saturday work hours by request and KUB approval only. Sunday work is not permitted.



### **PART 3. LEAD BASED PAINT AND ASBESTOS**

- 3.01 Be advised that the Project Site has been found to contain limited amounts of Lead-Based Paint (LBP) and Asbestos.
- 3.02 The Contractor shall read and become familiar with KUB's *Lonsdale Electrical Substation Limited Lead-Based Paint and Asbestos Containing Survey Report* dated May 24, 2016.
- 3.03 Only very limited amounts of LBP coated materials are expected to be managed by the Contractor during Site Preparation and Earthwork activities.
- 3.04 The Contractor shall execute the Survey Report LBP recommendations, as well as, the abatement requirements found in Appendix D.
- 3.05 Any paint removal or abatement must be conducted by a certified abatement contractor.
- 3.06 The Contractor shall obtain an Email or Letter of Acknowledgement from any and all scrap metal companies, recyclers, repurposers and/or end users receiving materials found in our Survey Report to have LBP.
- 3.07 The Acknowledgement must demonstrate their receipt and review of the Survey Report, as well as, their acceptance of the lead levels for the materials being received.
- 3.08 The Contractor shall read and become familiar with KUB's *Lonsdale Substation Asbestos (Transite Duct) Removal Requirements Document*.
- 3.09 The Contractor shall execute ALL handling recommendations, permitting, labeling and other abatement requirements of the Transite Duct Removal Document.
- 3.10 Any Transite duct removal and/or abatement must be conducted by a certified abatement contractor.
- 3.11 KUB will furnish the waste roll-off used by the Contractor to temporarily store the Transite duct prior to its disposal.
- 3.12 KUB will manifest and coordinate the disposal of the Transite duct with the Contractor.
- 3.13 Except for temporarily stored Transite duct, the Contractor is not expected to handle or manage asbestos containing materials found in the station's City Control Building.

### **PART 4. STORM WATER PROTECTION SYSTEMS**

- 4.01 The Contractor shall read and become familiar with KUB's *Erosion & Sediment Control Plan* drawing D-16316.

- 4.02 Although the Site's disturbed area is less than one (1) acre, the Contractor is expected to manage the Site and its specified Best Management Practices (BMP's) in a manner that is consistent with the requirements of an approved Storm Water Pollution Prevention Plan (SWPPP) permit from the City of Knoxville or the Tennessee Department of Environment and Conservation.
- 4.03 The Contractor shall install all required BMP's.
- 4.04 The Contractor shall consult with the KUB field representative and/or Engineering Consultant to certify BMP installation completion.
- 4.05 The Contractor shall not allow construction materials, sediment or silt to enter into the nearby East Third Creek.
- 4.06 The Contractor shall, at KUB's direction, modify and/or add BMP's necessary to ensure that construction materials, sediment or silt do not leave the Site. **TEMPORARY SECURITY FENCING**

**PART 5. TEMPORARY SECURITY FENCING**

- 5.01 The Contractor shall install temporary security fencing necessary to secure the station during their Site Preparation and Earthwork efforts, as well as, the Site's additional construction phases for other KUB improvement work.
- 5.02 The fence installation and construction shall comply with KUB Specification K99-793 *Fence, Chain-Link, 8 Feet High Overall.*
- 5.03 The proposed location of the temporary security fencing is not exacting and may be adjusted to suit the Contractor's equipment and construction needs.
- 5.04 The location of the temporary security fencing shall not inhibit ingress or egress to the northern perimeter of the station using the current overhead line and sanitary sewer access roadway.
- 5.05 The fence installation shall include at least one (1) sixteen (16) foot wide double swing gate with padlocking provisions for Contractor and KUB ingress or egress.
- 5.06 Padlocking provisions shall permit the interlocking of the Contractor's lock(s) with a KUB furnished lock.
- 5.07 The Contractor shall consult with the KUB field representative and/or Security Office to certify temporary security fencing installation completion.



## **PART 6. RAILWAY COMPONENTS**

- 6.01 The Contractor shall remove all railway components that impact the station area being improved.
- 6.02 Components include, but may not be limited to the following:
- a) Spur track intersection concrete foundation(s),
  - b) Any remaining rails, and
  - c) Creosote treated railroad ties and timbers
- 6.03 Refer to KUB Sketch SK-RRREM for proposed railway component removal.
- 6.04 The Contractor shall manage all creosote treated railroad ties and timbers, as well as, any creosote contaminated soils associated with their removal as a separate waste stream.
- 6.05 The Contractor shall segregate, store, manifest and dispose of all ties, timbers and creosote contaminated soils separately from other Site materials.
- 6.06 The Contractor shall provide their own roll-off container and/or other storage and delivery equipment to manage the creosote components and materials.
- 6.07 The Contractor shall deliver all ties, timbers and creosote contaminated soils to the following landfill:
- Waste Management – Heiskell Landfill  
140 Fleenor Mill Road  
Heiskell, TN 37754  
(865) 457-7810
- 6.08 The Contractor shall not remove or damage the nearby 161 kV steel structure, the overhead ground wire support structure, or their foundations.
- 6.09 The Contractor shall consult with the KUB field representative to certify job completion.

## **PART 7. DUCT WORK**

- 7.01 The Contractor shall remove all existing duct work that will impact the station area being improved.
- 7.02 Duct work includes, but may not be limited to the following:
- a) 4” diameter Transite power cable ducts,
  - b) 2” x 12” power cable duct protective creosoted pine plank coverings,
  - c) 4”, 3” and 2” diameter Transite electric service cable ducts,



- d) 2" and 1-1/2" diameter Transite control cable ducts,
- e) Miscellaneous PVC ducts,
- f) Miscellaneous tile ducts,
- g) All duct concrete pedestals, and
- h) Miscellaneous storm water and sanitary sewer infrastructure: catch basins, manholes, etc.

- 7.03 Refer to KUB Sketch SK-DUCTREM for proposed duct work to be removed.
- 7.04 The Contractor shall manage all Transite duct as a separate waste stream.
- 7.05 The Contractor shall segregate and store all Transite duct separately from other Site materials.
- 7.06 KUB will furnish the Contractor with a roll-off container to be used to store the Transite duct for later KUB manifesting and disposal.
- 7.07 The Contractor shall manage all creosoted pine plank protective coverings, as well as, any creosote contaminated soils associated with their removal as a separate waste stream.
- 7.08 The Contractor shall segregate, store, manifest and dispose of all coverings and creosote contaminated soils separately from other Site materials.
- 7.09 The Contractor shall provide their own roll-off container and/or other storage and delivery equipment to manage the creosote coverings and soils.
- 7.10 The Contractor shall deliver all coverings and creosote contaminated soils to the following landfill:
- Waste Management – Heiskell Landfill  
140 Fleenor Mill Road  
Heiskell, TN 37754  
(865) 457-7810
- 7.11 The Contractor shall cap, seal and physically identify all ducts extending outside the area being improved, especially those leading to nearby manholes or proposed foundations.
- 7.12 The Contractor shall not remove or damage nearby steel structures or foundations.
- 7.13 The Contractor shall consult with the KUB field representative to certify job completion.

## **PART 8. STEEL STRUCTURE FOUNDATIONS**

- 8.01 The Contractor shall remove all foundations that impact the station area being improved.





8.02 Foundations include, but may not be limited to the following Site features:

- a) Communications Tower, four (4) total,
- b) Gantry “Hoist” Tower, eight (8) total,
- c) Reactor Platform, two (2) total,
- d) 13 kV 2B Yard Support Steel Structure, fourteen (14) maximum,
- e) 13 kV 2B Yard Type “E” Riser Pier, two (2) total,
- f) 13 kV 2B Yard Type “B” Circuit Breaker Pier, two (2) total,
- g) 13 kV 2B Yard Type “C” Relay House Pier, one (1) total, and
- h) 13 kV 2B Yard 3-Phase Regulator, two (2) total

8.03 Refer to KUB Sketch SK-FDNREM for proposed foundations to be removed.

8.04 The Contractor shall manifest and dispose of all specified foundations.

8.05 The Contractor shall deliver all foundations to the following landfill:

Waste Management – Heiskell Landfill  
140 Fleenor Mill Road  
Heiskell, TN 37754  
(865) 457-7810

8.06 The Contractor shall not remove or damage nearby unspecified foundations.

8.07 The Contractor shall consult with the KUB field representative to confirm foundation removal status prior to its removal.

8.08 The Contractor shall consult with the KUB field representative to certify job completion.

## **PART 9. EARTHEN PADS**

9.01 The Contractor shall read and become familiar with KUB’s *Grading Plan* drawing D-16317.

9.02 The Contractor shall read and become familiar with the Foundation Systems Engineering (FSE) Lonsdale (LN) Electrical Substation Subsurface Exploration Report, Project No. 316112, dated June 9, 2016.

9.03 The Contractor shall remove and import all materials as required in the Grading Plan, the Subsurface Exploration Report recommendations, and the specifications to prepare the Site for the installation of new electric substation facilities.

9.04 The Contractor shall test to KUB’s satisfaction all import materials to ensure that they are suitable for the required application, as well as, to ensure that no hazardous substances are brought in to contaminate the Site.



9.05 The Contractor shall take every precaution to protect the station’s “in-service” control ducts and infrastructure during their excavation efforts.

WARNING: The existing control ducts for the 13 kV 2B Yard must remain in service during all aspects of the Site Preparation and Earthwork efforts. These ducts contain cables that permit KUB to protect & serve our two largest electric customers, as well as, multiple distribution stations serving thousands of electric customers.

9.06 Refer to KUB Sketch SK-CABLEPORTECT for approximate locations of “in-service” control ducts.

9.07 The Contractor shall consult with the KUB field representative and/or Engineering Representative to certify pad installation completion.

**PART 10. HOUSEKEEPING**

10.01 Good job Site housekeeping is mandatory.

10.02 The Contractor shall maintain a clean job Site and ensure that it is free of all trash and construction debris. Job materials and equipment must be stored orderly and in compliance with all applicable health or other regulations.

**PART 11. SITE RESTORATION**

11.01 The Contractor shall restore to its original condition any Site locations affected by their efforts.

**PART 2. PRODUCTS**

NOT USED

**PART 3. EXECUTION**

NOT USED

END OF SECTION

[HOME](#)