

ADDENDUM No. 2

ITB No. 4754

Fiber and Conduit Construction for the Ann Arbor/Ypsilanti Broadband Project

Bids Due: February 27, 2025, by 11:00 AM (Local Time)

The information contained herein shall take precedence over the original documents and all previous addenda (if any) and is appended thereto. **This Addendum includes nine (9) pages.**

Bidder is to acknowledge receipt of this Addendum No. 2, including all attachments (if any) in its Bid by so indicating on page ITB-1 of the Invitation to Bid Form. Bids submitted without acknowledgment of receipt of this addendum may be considered nonconforming.

The following forms provided within the ITB document should be included in submitted bids:

- City of Ann Arbor Prevailing Wage Declaration of Compliance
- City of Ann Arbor Living Wage Ordinance Declaration of Compliance
- Vendor Conflict of Interest Disclosure Form
- City of Ann Arbor Non-Discrimination Ordinance Declaration of Compliance

Bids that fail to provide these forms listed above upon bid opening may be rejected as non-responsive and may not be considered for award.

I. CORRECTIONS/ADDITIONS/DELETIONS

Changes to the Bid document which are outlined below are referenced to a page or Section in which they appear conspicuously. The Bidder is to take note in its review of the documents and include these changes as they may affect work or details in other areas not specifically referenced here.

Section/Page(s) Change

BF-1 As provided in ITB No. 4754 Bid Document:
Bid Form, Section 1 – Schedule of Prices as Page BF-1

As updated herein:
Bid Form, Section 1 – Schedule of Prices as Page BF-1

*Comment: Additional fiber cable of approximate 8,700 ft plus slack loops and installation service from where the **new** fiber/conduit intersects the existing conduit. Plans and Bid Form updated to reflect this change.*

II. QUESTIONS AND ANSWERS

The following Questions have been received by the City. Responses are being provided in accordance with the terms of the ITB. Bidders are directed to take note in their review of the documents of the following questions and City responses as they affect work or details in other areas not specifically referenced here.

Question 1: What are the specifications for splice enclosures?

Answer 1: Corning Optics Splice Closure Fiber (SCF) or equivalent, preloaded splice trays that are aerial and underground rated allowing up to 576 single fiber splices. Corning has recommended SCF Dome Closure SCF-8C28-02-F with SCF Splice Tray, 48F SCF-ST-077. The closure must provide ports for uncut feeder cables and ports for drop cables. The closure, in canister configuration, with a quick-seal mechanical seal port, must allow for rapid and easy addition of cables after initial installation is complete.

Question 2: Is it possible to provide the required performance bond in segments or phases that align with the project's construction stages, rather than as a single bond for the entire project scope?

Answer 2: Terms are subject to negotiation with the selected contractor.

Question 3: As the project spans multiple jurisdictions (COA2, COY, Ypsi Township, Pittsfield Township, WCC), what wage requirements must the contractor follow?

Answer 3: Please refer to pages 10 ("IB-7") to page 45 ("IB-42) of the ITB document. Additional information can be found in Appendix 4 and ATTACHMENTS sections.

Question 4: Where is the termination Point?

Answer 4: Both ends of the 432ct cable will be terminated in the City's data center. The ITB calls for CORNING-C CTXCPP24-A9-2RH000 CENTRIX SPLICE CASSETTE WITH 24. We do have concerns that all the panels needed won't fit into the cabinet so this might need to be altered. We only have 8U of space that needs to hold both ends of the cable. Corning recommended Centrix 4U housing with (12) LC/UPC pigtail splice cassettes CX4WWP36-A9-2RJ000.

Question 5: What are the Labeling and Identification requirements?

Answer 5: Identification labels must be supplied by the Contractor and installed by the Contractor(s) on the fiber in each hand-hole and at every point of attachment on utility poles per specifications from the pole owner, per the utility pole attachment agreements, and the City of Ann Arbor requirements listed below.

i. Aerial Cables – The Contractor is responsible for supplying and installing aerial cable markers per Utility company specifications and/or pole attachment agreements.

ii. Underground Cables and Splice Cables – The Contractor is responsible for supplying and installing underground cable markers identical to the City’s original fiber network construction

Question 6: What is the estimated square footage for the concrete work, and which code must be followed for the repairs?

Answer 6: Please follow all local permitting agency codes regarding the concrete repairs for the public R.O.W within each jurisdiction (City of Ann Arbor, City of Ypsilanti; Ypsilanti Township; Pittsfield Township, MDOT, Washtenaw County Road Commission).

Question 7: Are there any Schedule Restrictions (ex. weekend hours)?

Answer 7: Please refer to the Contract Time on page 9/IB-6 “INSTRUCTION TO BIDDERS” Time is of the essence in the performance of the work under this Contract. The available time for work under this Contract is indicated on page C-2, Article III of the Contract. If these time requirements cannot be met, the Bidder must stipulate on Bid Form Section 3 - Time Alternates

Question 8: How many conduits and what type of fiber cable does the City require?

Answer 8: Please refer to Instructions to Bidders - General Project Requirements IB-2 Conduit configuration consists of (2) 2” HDPE SDR11 duct. In one of the two ducts, a single 432-count loose-tube fiber-optic cable will be installed and spliced.

Please refer to Instructions to Bidders - General Project Requirements IB-3

The City requires the use of Corning ALTOS® Lite Gel-Free, Single-Jacket, Single-Armored Cables, 6-432 Optical Fiber that is compliant with the new International Telecommunication Union (ITU) standards for low water-peak fibers, ITU G.652.C, as well as Telecommunications Industry Association and Electronic Industries Alliance (TIA/EIA) standards.

Question 9: What should the 4U fiber panels be loaded with, and what specific connectors are required?

Answer 9: Please refer to Question #4.

Question 10: What is the process for depth and run line (R/L) changes, including whether inspectors will handle them in the field, what documentation is required, and the estimated approval time?

Answer 10: Please refer to the General Conditions, Section 11 – Inspection of Work, and DETAILED SPECIFICATIONS, Section O – Documentation (page 96/DS-7).

Question 11: Regarding the bore depth changes identified in the project prints: Will bore logs be required for these depth changes? If bore logs are required, what format should be used for documentation?

Answer 11: Bore logs are to be provided using Contractors standard forms and to be

provided at project close-out. Reference DETAILED SPECIFICATIONS, Section O – Documentation (page 96/DS-7) and GENERAL CONDITIONS, Section 11.

Question 12: How should the run line be determined—does the job require a survey to establish accurate right-of-way (R/W), or will the MDOT R/W on the prints be used to determine the R/L offset footage?

Answer 12: All Red-line drawings, field notes, documentation, submitted to City of Ann Arbor in a format acceptable to the City of Ann Arbor (e.g., Spatially- referenced AutoCAD files, GIS shapefile, etc.). Additionally, Schematics and detailed circuit diagrams of all splice locations shall be provided in an acceptable format to the City of Ann Arbor. All fiber testing documentation must be provided to the City and Corning. Reference DETAILED SPECIFICATIONS, Section O – Documentation (page 96/DS-7).

Question 13: Regarding handhole (HH) and vault identification: Will all handholes and vaults at splice points be marked with either marker posts (MP) or locate marker posts (LMP)? The project prints appear inconsistent in identifying which handholes will receive these markers. Can you provide clarification on the marking requirements for each handhole or vault?

Answer 13: Handholes are to include marker posts (“MP”) at each splice point.

Question 14: How many total existing handhole (HH) locations will be intercepted for the new fiber build, and how many of these locations will require upgrades to accommodate the new ducts?

Answer 14: The new conduit system will intercept each handhole and utilize existing conduit back to the data center. The handholes and conduit was installed within the last 2 years. See attached map on page Addendum-1-8.

Question 15: What are the requirements for contractor field notes, including the format needed and the frequency of reporting (e.g., daily, weekly, or by project milestones)?

Answer 15: Project Manager will work with Contractor to upload/add/edit any field notes using City SmartSheets Project Management platform.

Question 16: What are the approved methods for fiber placement in this project? Are jetting, hand pulling, and mechanical pulling (using a hydraulic wheel) all acceptable, or is there a preferred method?

Answer 16: Hand pulling is preferred but will be left up to the installer based on the location and what works best as to not damage fiber when installing.

Question 17:

What are the approved methods for sealing conduits in this project?

Specifically:

1. For vacant conduits, what temporary sealing method should be used before installing fiber, tracer, and mule tape? Is duct tape acceptable?

2. For occupied conduits containing fiber, tracer, and mule tape, what permanent sealing methods are approved? Are split plugs acceptable?
3. Please provide examples of approved plugs or sealing systems for both temporary and permanent use.

Answer 17: Conduit may be temporarily sealed with duct tape prior to installation of fiber, tracer, and mule tape. Conduit with fiber can be permanently sealed using Polywater Foam Sealant FST-250KIT1 or equivalent to prevent water or debris from entering the conduit system. Empty conduits can be plugged with a Kwikie blank duct plug or equivalent.

Question 18: Identify splice point locations. If there is a need for additional locations. Process to approve added location?

Answer 18: Additional locations will be reviewed and approved through Change Control. Work shall not commence until a written approval is given. Contractor is responsible for providing quotes/estimates as well as providing documentation justifying the cost associated with the change order.

Question 19: MDOT permits for review. Spec sheets on cutting and replacing cores with approved back fill aggregate (original material, approved replacement material, flowable fill)?

Answer 19: All ASTM and local building codes shall be applicable for compaction requirements, testing procedures, and quality control measures for each stage of the process. Please reference the "NOTES" section of the Construction Drawings "EDA Project Number: 06-79-06299" - M-DOT Notes.

Question 20: Can you confirm that the bid documents specify a Corning OSP armored SASJ 432 loose tube cable, not a ribbon cable?

Answer 20: Correct, loose tube. See Question #8

Question 21: The bid documents specify a CommScope 450D splice case, which holds up to 144 splices. Given that we're working with higher fiber counts, was this a clerical error? Did you intend to specify the CommScope 600D splice case, which can accommodate up to 864 splices?

Answer 21: Any mention of Commscope in the ITB should be disregarded as the City uses Corning products end to end for the 25yr warranty. The splice cases must be able to accommodate all splices. Please see Question #1

Question 22: Bid doc's call out for corning product with a corning warranty, we are a corning preferred installer and the only way to get a corning tip to tip warranty is to use a 100% of their product including splice cases and pig tails.

Answer 22: This is correct, there are some errors in the ITB that we didn't catch. This network must utilize all corning products from end to end.

Question 23: The bid documents specify #12 AWG tracer wire, while the drawings indicate #6 AWG. Which gauge should be installed?

Answer 23: #6AWG solid tracer wire

Question 24: Will the city of Ann Arbor be providing fiber tags and stickers for the marker posts and hand holes?

Answer 24: Please see Question #5

Question 25: Do we have drawings of where the fibers are going from last handholes at each end?

Answer 25: Yes, please see attached map on page Addendum-1-8

Question 26: What are the permitted working hours for this project? Specifically: Are there any restrictions on regular weekday working hours? Is weekend work allowed? Can work be performed during evenings, particularly after rush hour?

Answer 26: Refer to the General Conditions, Section 41 – GC-16 (page 86):
No Night, Saturday or Sunday Work (without prior written City approval) will be permitted except in the case of an emergency and then only to the extent absolutely necessary. The City may allow night work which, in the opinion of the Supervising Professional/City Project Manager, can be satisfactorily performed at night. Night work is any work between 8:00 p.m. and 7:00 a.m. No Saturday work will be permitted unless the Contractor gives the Supervising Professional at least 48 hours but not more than 5 days notice of the Contractor's intention to work the upcoming Saturday.

Question 27: Who is responsible for the city of Ann arbor permits & Bonds?

Answer 27: Refer to General Conditions, Section 9 – Permits and Regulations: The Contractor must secure all permits and licenses necessary for the prosecution of the work. These include but are not limited to City building permits, right-of-way permits, lane closure permits, right-of-way occupancy permits, and the like. The City shall pay for such permits and such permit or plan review fees. The City shall secure and pay for easements shown on the plans unless otherwise specified.

The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the contract documents are at variance with those requirements, it shall promptly notify the Supervising Professional/Project Manager in writing, and any necessary changes shall be adjusted as provided in the Contract for changes in the work.

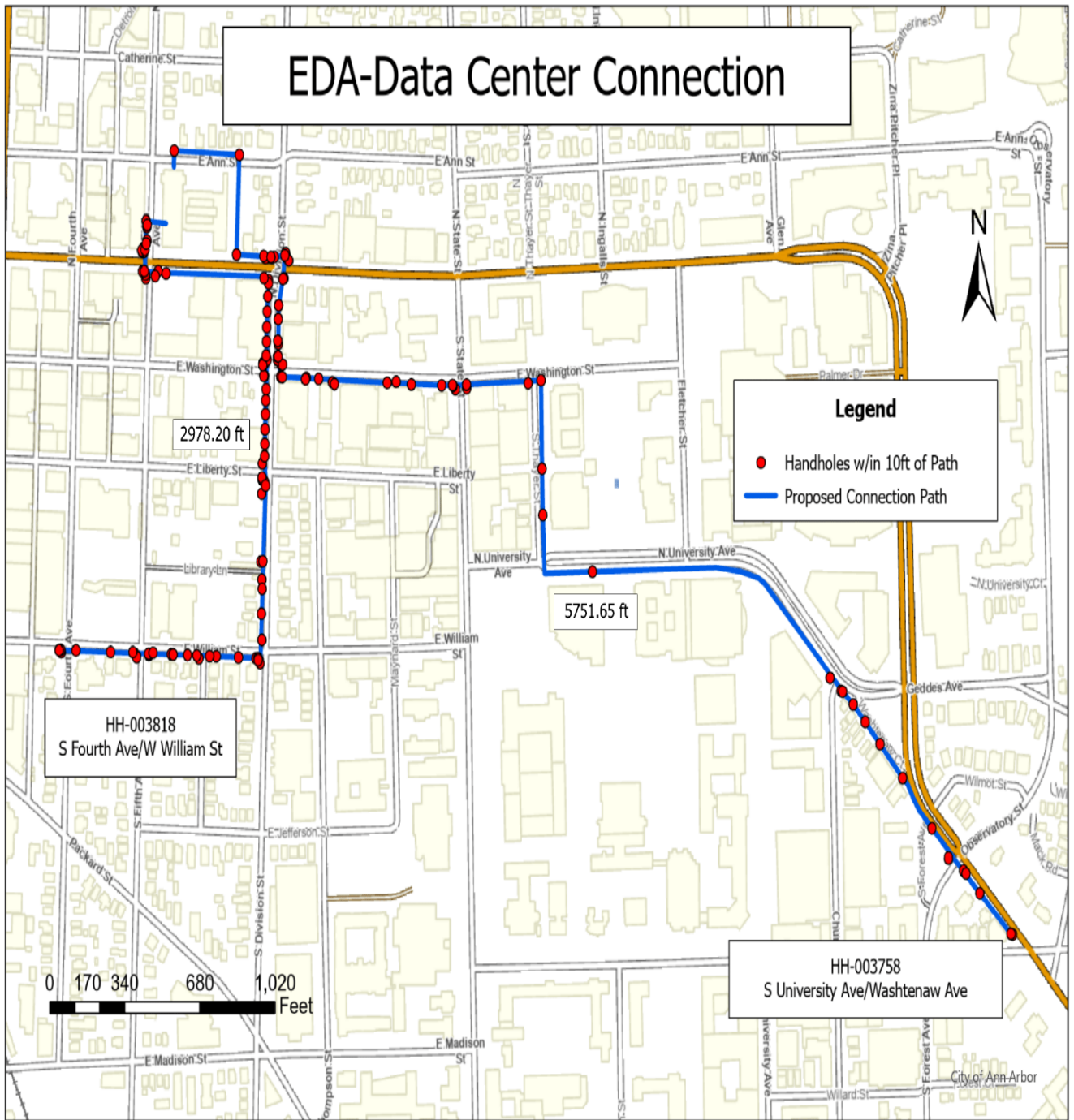
Question 28: What is the Drop-Dead Date on Liquidated damages?

Answer 28: The entire work to be completed under the Contract shall begin immediately on the date specific in the Notice to Proceed (“NTP”) issued by the City. The entire work for this Contract shall be completed within 280 consecutive calendar days. Liquidated damages are for the non-quantifiable aspect of any of the previously identified event and do not cover actual damages that can be shown or quantified nor are they intended to preclude recovery of actual damages in the addition to the recovery of liquidated damages.

Question 29: What is the proposed kick off date for project?

Answer 29: The entire work to be completed under the Contract shall begin immediately on the date specific in the Notice to Proceed (“NTP”) issued by the City.

Map showing connection points and path to Data Center.



Bidders are responsible for any conclusions that they may draw from the information contained in the Addendum.

BID FORM

Section 1 – Schedule of Prices

Company: _____

Project: ITB# 4754 - **Fiber and Conduit Construction for the Ann Arbor/Ypsilanti Broadband Project**

Item	Unit	Estimated Quantity	Unit Price	Total Price
Directional Bore 2 2" Conduits	Per Foot	81,564		
Furnish & Install Muletape in New duct	Per Foot	81,564		
Install #12 Tracer wire	Per Foot	81,564		
Install Fiber Cable in Duct - Including All Slack	Per Foot	90,364		
Remove & Restore Concrete	Sq Ft	2,150		
Install Handhole	Each	86		
Install New Splice Case & Prep Cable	Each	9		
Ground Splice Case	Each	9		
Prep Cable in Panel	Each	3		
Splice Fibers	Each	7,776		
Install Loaded 4u Panel	Each	3		
Terminate Fibers	Each	432		
Test Network	All	1		
Install Marker Post	Each	86		
Install Marker Post with Test Station	Each	28		
Mule tape	Per Foot	81,564		
432 Count Fiber	Per Foot	94,464		
Splice Trays	Each	599		
Splice Cases	Each	9		
Handholes	Each	86		
#12 Tracer Wire	Per Foot	81,564		
Ground Rods	Each	9		
Marker Post	Each	86		
Marker Post with Test Station	Each	28		
2" HDPE Pipe	Per Foot	163,128		
4u Fiber Panels - Loaded	Each	3		
NEW Fiber cable to include slack loops from New fiber/conduit intersects to existing conduit.	Per Foot	10,000		

BID TOTAL \$ _____

BID TOTAL (Written) _____

Total bid amount shall be shown in both words and numbers. In case of discrepancies, the amount shown in words shall govern.