ADDENDUM No. 1

RFP No. 973

Fiber Optic Network Construction Services

Due: August 18, 2016 at 2:00 P.M. (local time)

The following changes, additions, and/or deletions shall be made to the Request for Proposal for Fiber Optic Network Construction Services, RFP No. 973, on which proposals will be received on/or before August 18, 2016 at 2:00 P.M.

The information contained herein shall take precedence over the original documents and all previous addenda (if any), and is appended thereto. This Addendum includes 15 pages and an updated Attachment H provided as a separate electronic file.

The Proposer is to acknowledge receipt of this Addendum No. 1, including all attachments in its Proposal by so indicating in the proposal that the addendum has been received. Proposals submitted without acknowledgement of receipt of this addendum will be considered non-conforming.

The following forms provided within the RFP Document must be included in submitted proposal:

- Attachment C City of Ann Arbor Prevailing Wage Declaration of Compliance
- Attachment D City of Ann Arbor Living Wage Ordinance Declaration of Compliance
- Attachment E Contractor(s)Conflict of Interest Disclosure Form
- Attachment F City of Ann Arbor Non-Discrimination Declaration of Compliance

<u>Proposals that fail to provide these completed forms listed above upon proposal opening</u> will be rejected as non-responsive and will not be considered for award.

I. CORRECTIONS/ADDITIONS/DELETIONS

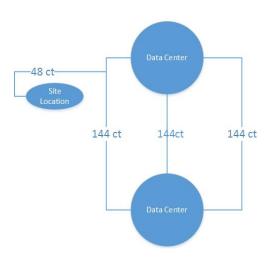
Changes to the RFP documents which are outlined below are referenced to a page or Section in which they appear conspicuously. Offerors are to take note in its review of the documents and include these changes as they may affect work or details in other areas not specifically referenced here.

Section/Page(s)	Change
Page 11	Add: A. Network Ring Construction "Approximately 22 miles of new aerial fiber, along with 17 miles of newly installed underground cable in pre-existing conduit and approximately 6 miles of newly bored conduit and fiber optic cable, will be required for completion of the network.
	The network rings (east and west) and network bi-sector each consist of 144-conductor single-mode fiber optic cables. Each site location will be connected to the ring using 48-conductor single-mode fiber optic cables. "

Page 12

Clarification: **Network Site Locations**. Each site location will be connected by 48-conductor single mode fiber optic cable. 3-pair (6 strands) will be terminated at each site location. The remaining strands will be left un-terminated for future use unless specified otherwise.

The network ring consists of an east and west ring, and a bisector, each comprised of 144-conductor single mode fiber optic cable. 144 strands (72-pair) will be terminated at each data center for each ring and for the bi-sector entering each data center. A total of 72-pair for east ring, 72-pair for west ring and 72-pair for the bi-sector will be terminated at the two (2) data centers, patch panel landed and acceptance tested. An illustrative example has been provided below.



Page 12

Remove: "Bidders must include maps & distances. All route engineering/as-built information and ad-hoc route changes must be submitted in a format that can be easily imported into ESRI GIS software.

Replace with: "Paper as-built drawings will be provided to the winning contractor(s) by the City of Ann Arbor.

Construction contractor(s) will submit paper redlines showing asbuilt drawings of final network construction and the City's Design and Engineering services contractor will provide the final as-built drawings electronically and submit to the City."

Page 20

Replace with: "All fiber buried with directional boring must be a minimum of three (3) feet below grade."

Page 20

Remove Item #4 Above-Ground Markers: "Above ground markers must be installed ~500 feet or a lesser line-of-site along burial path, depending on Network segment geography."

Page 21

Remove Item #3 Cable Risers: "Supply and Install FREEDOM tight-buffered cable, risers, 48F and 144F, single-mode (OS2), by Corning Optical Communications, or an approved equal."

Page 22

Remove Item #7 Above-Ground Cabinets: "Above-Ground Cabinets. Supply and install Corning Cross-Connect Cabinets according to manufactures and City of Ann Arbor's specifications identified in Table 1 on Print #160-278, #160-270 and #160-266...."

Replace with:

"Supply and install Corning Cross-Connect Cabinets according to manufactures and City of Ann Arbor's specifications identified in Attachment I on Print #148-284 and #169-292 (New Cabinet). Table 2 below provides the required specifications for the aboveground cabinets. There are three (3) cabinets specified in Table 2, the 3rd cabinet is a spare."

Attachment G

Remove Section 9 – Permits and Regulations: "The Contractor must secure and pay for all permits, permit or plan review fees 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 secure and pay for easements shown on the plans unless otherwise specified."

Replace with:

"The City will secure and pay for all permits, permit or plan review fees and licenses necessary for the prosecution of the work. These include but are not limited to City building permits, right-of-way permits, right-of-way occupancy permits, and the like. The contractor must secure and pay for all lane closure permits. The City will reimburse the contractor for all lane closure permit costs."

Attachment H

Attachment H has been replaced with an updated version. Refer to the updated Attachment H published with this Addendum that is available in MS Word format.

Attachment I

Attachment I - Site Locations Table, has been replaced with an updated version. Refer to the updated Attachment I provided on the next page.

ATTACHMENT I - SITE LOCATIONS

Location	Address	Print #	Entry Type	Interior Footage	48 ct Aerial Footage to Ring	Existing Conduit 48 ct UG Footage to Ring	New Underground 48 ct UG Footage to Ring	Rack/Wall Mount PP	Comments	Fiber Patch Panel	Qty	Fiber Inserts	Qty	Trip Lite Secure Wall Cabinet	Qty	Copper 5E Patch Panel	Qty
CITY HALL ¹	301 E. Huron St.	157- 284	Existing Duct					Rack	144 ct. fiber. 3 separate entries - all 3 entries enter from the West in existing duct	CCH- 04U	3	CCH- CP24- A9	18				
COUNTY ADMIN	220 N Main St	157- 284	Existing Duct	30	519	55		Wall	Enter into MDF	WCH- 02P	1	CCH- CP12- A9	1				
U of M HEAD END	610 E University	160- 282	Aerial	470	308			Rack	Interior thru tunnel from another building	CCH- 01U	1	CCH- CP12- A9	1				
SPARK CENTRAL	255 E Liberty St.	157- 284	New UG	100		717	350	Rack	Below Grade Entry - R/R Asphalt at Building - Interior EMT	CCH- 01U	1	CCH- CP12- A9	1				
FARMERS MARKET	315 Detroit St.	157- 286	New UG	100			18	Wall	R/R Bricks & 4 Sidewalk Flags - Interior EMT	WCH- 02P	1	CCH- CP12- A9	1				
AAATA HEADQUARTERS	2700 S Industrial	160- 272	New UG	490	2840	1222	250	Rack	Tall Ceilings - Interior EMT	CCH- 01U	1	CCH- CP12- A9	1				
AAATA BLAKE TRANSIT	331 S Fourth Ave	157- 284	Existing Duct			788		Rack	Existing Duct from Handhole to MDF	CCH- 01U	1	CCH- CP12- A9	1				
CENTRAL POLICE DEPT	324 Maynard St	157- 284	New UG	10		1313	88	Rack	Use existing pullbox if there is room	CCH- 01U	1	CCH- CP12- A9	1				
PARKING STRUCTURE	650 S. Forest Ave	160- 282	Aerial	105	3149	3120	375	Wall	Interior EMT	WCH- 02P	1	CCH- CP12- A9	1				
AA PUBLIC LIBRARY - MAIN BRANCH	343 S Fifth Ave	157- 284	New UG	65		220	52	Rack	Below Grade Entry/Use Existing 4" Entry - Interior EMT	CCH- 01U	1	CCH- CP12- A9	1				
AA PUBLIC LIBRARY - WEST BRANCH	2503 Jackson Rd	148- 284	New UG	160	2153		144	Wall	R/R Asphalt at Building - Interior EMT	WCH- 02P	1	CCH- CP12- A9	1				
NEW CABINET	Jackson/Maple Rd	148- 284	New UG				100		Un-terminated.								
AA PUBLIC LIBRARY - MALLET CREEK BRANCH	3090 Eisenhower Pkwy	166- 270	Existing Duct			253		Rack	Existing 4" duct from riser pole to MDF with Maxcell	CCH- 01U	1	CCH- CP12- A9	1				
AA PUBLIC LIBRARY - TRAVERWOOD BRANCH	3333 Traverwood Dr	166- 294	New UG	30			2694	Rack	Enter into MDF	CCH- 01U	1	CCH- CP12- A9	1				

Location	Address	Print #	Entry Type	Interior Footage	48 ct Aerial Footage to Ring	Existing Conduit 48 ct UG Footage to Ring	New Underground 48 ct UG Footage to Ring	Rack/Wall Mount PP	Comments	Fiber Patch Panel	Qty	Fiber Inserts	Qty	Trip Lite Secure Wall Cabinet	Qty	Copper 5E Patch Panel	Qty
FULLER POOL	1519 Fuller Road	163- 286	New UG	25		778	385	Wall	R/R 2 sidewalk flags - Enter into MDF	WCH- 02P	1	CCH- CP12- A9	1				
FIRESTATION #1 ¹	111 N. Fifth Ave	157- 284	Existing UG	148				Rack	Existing Duct Entry - Interior EMT	N/A							
FIRE STATION #2	1510 E Stadium Blvd.	163- 276	New UG	10	299		168	Wall	Enter into MDF	CCH- 01U	1	CCH- CP12- A9	1	SRWF4U	1	PHD5E6U48	1
FIRE STATION #3	2130 Jackson Rd	148- 284	Aerial	10	1071			Wall	Enter into MDF	CCH- 01U	1	CCH- CP12- A9	1	SRWF4U	1	PHD5E6U48	1
FIRE STATION #4	2415 Huron Parkway	169- 274	New UG	20			354	Wall	Enter into MDF - R/R Asphalt at Building	CCH- 01U	1	CCH- CP12- A9	1	SRWF4U	1	PHD5E6U48	1
FIRE STATION #5	1946 Beal	166- 292	Existing duct	10		952		Wall	Enter into MDF	CCH- 01U	1	CCH- CP12- A9	1	SRWF4U	1	PHD5E6U48	1
FIRE STATION #6	1881 Briarwood Circle	157- 270	New UG	35			600	Wall	Enter into MDF - Exterior EMT	CCH- 01U	1	CCH- CP12- A9	1	SRWF4U	1	PHD5E6U48	1
VETS MEM. PARK	2150 Jackson Rd	148- 284	New UG	220	488		198	Wall	Tall Ceilings - Interior EMT	CCH- 01U	1	CCH- CP12- A9	1	SRWF4U	2	PHD5E6U48	2
HOUSING COMMISSION/MAPLE - no building yet	NW Corner of Dexter/Maple	148- 286	N/A	0	0			N/A	No Building - storage left in closest handhole								
HOUSING COMMISSION/MILLER	726 Miller Rd	154- 286	New UG	32	478		85	Wall	Enter into MDF - R/R Sidewalk Flag	CCH- 01U	1	CCH- CP12- A9	1				
MACK POOL	715 Brooks St	154- 286	New UG	100	1188		425	Wall	R/R Asphalt at Building - Interior EMT	CCH- 01U	1	CCH- CP12- A9	1				
WATER TREATMENT PLANT ²	919 Sunset Rd	154- 290	2 Entries - UG & Aerial	331/50	N/A			2 Rack	144 ct fiber. 2 locations - Tall Ceilings - Interior EMT	CCH- 01U	2	CCH- CP12- A9	2				
SENIOR CENTER	1320 Baldwin Ave.	163- 278	New Aerial	15	1870			Wall	Enter into MDF	WCH- 02P	1	CCH- CP12- A9	1				
BUHR PARK	2751 Packard St.	166- 272	New UG	10			257	Wall	Enter into MDF	CCH- 01U	1	CCH- CP12- A9	1				
WATER UTILITIES FIELD OPS	2000 S. Industrial	160- 276	New UG	20		1920	85	Wall	Enter into MDF	WCH- 02P	1	CCH- CP12- A9	1				
MUNICIPAL AIRPORT	801 Airport Dr.	157- 264	New UG	10			1540	Wall	Enter into MDF - Below Grade Entry - R/R Sidewalk Flag	WCH- 02P	1	CCH- CP12- A9	1				

Location	Address	Print #	Entry Type	Interior Footage	48 ct Aerial Footage to Ring	Existing Conduit 48 ct UG Footage to Ring	New Underground 48 ct UG Footage to Ring	Rack/Wall Mount PP	Comments	Fiber Patch Panel	Qty	Fiber Inserts	Qty	Trip Lite Secure Wall Cabinet	Oty	Copper 5E Patch Panel	Qty
FIELD OPERATIONS CENTER/SDC (2 Entries) ¹	4251 Stone School Rd	166- 294	Existing Duct both Entries	20	7	Tung	· · · · · · · · · · · · · · · · · · ·	Rack	144 ct fiber. Existing Ducts into MDF	CCH- 04U	3	CCH- CP24- A9	18	Cubinet	- Qu	T uten T unter	40
WASTEWATER TREATMENT	49 Dixboro Road	178- 280	New UG	480	4875		115	Rack	Interior EMT	CCH- 01U	1	CCH- CP12- A9	1				
GALLUP CANOE LIVERY	3000 Fuller Road	169- 282	New UG	10		173	348	Wall	Enter into MDF	CCH- 01U	1	CCH- CP12- A9	1				
HURON HILLS GOLF COURSE CLUBHOUSE	3465 E Huron River Drive	172- 280	Existing Duct	10		161		Wall	Enter into MDF	CCH- 01U	1	CCH- CP12- A9	1				
LESLIE GOLF COURSE CLUBHOUSE	2120 Traver Rd	163- 292	Aerial	10	1579		35	Wall	Enter into MDF	CCH- 01U	1	CCH- CP12- A9	1				
AA-SALINE PARK & RIDE	Ann Arbor- Saline Rd	154- 272	New UG	0		487	365	N/A	Leave storage in new handhole								
MILLER RD PARK & RIDE	Miller Rd & M- 14	145- 290	New UG	0	8669		1487	N/A	Leave storage in new handhole								
PLYMOUTH RD PARK & RIDE	Plymouth Rd and US-23	172- 294	New UG	0		1380	51	N/A	Leave storage in new handhole								
GREEN RD PARK & RIDE	Green Rd	172- 292	New UG	0			100	N/A	Leave storage in new handhole								
STATE ST PARK & RIDE #1	State St	160- 272	New UG	0			385	N/A	Leave sp/storage in new handhole - 1 R/R Large Sidewalk								
STATE ST PARK & RIDE #2	State St	160- 272	New UG	0		1801	185	N/A	Leave storage in new handhole								
LIBERTY ST PUMP STATION	2675 W. Liberty St	148- 282	New duct	50		1818	120	Wall	Enter into MDF	WCH- 02P	1	CCH- CP12- A9	1				
CABINET AT STADIUM & HENRY		160- 278	Existing Duct	N/A	3214	70		N/A	Leave storage in existing handhole	WCH- 02P	1						
CABINET AT NE CORNER OF EISENHOWER & STATE		160- 270	New UG	N/A			488	N/A	Leave storage in new handhole	WCH- 02P	1						
CABINET AT SE CORNER OF STATE & ELLSWORTH ³		160- 266	New UG	N/A	N/A			N/A	144 ct fiber. Leave storage in existing handhole	CCH- 04U	3	CCH- CP24- A9	18				
MANCHESTER TANK	2111 Manchester Rd	166- 276	New UG	50	1956		130	Wall	Has existing handhole - Exterior EMT	WCH- 02P	1	CCH- CP12- A9	1				

Location	Address	Print #	Entry Type	Interior Footage	48 ct Aerial Footage to Ring	Existing Conduit 48 ct UG Footage to Ring	New Underground 48 ct UG Footage to Ring	Rack/Wall Mount PP	Comments	Fiber Patch Panel	Qty	Fiber Inserts	Qty	Trip Lite Secure Wall Cabinet	Qty	Copper 5E Patch Panel	Qty
NORTH CAMPUS TANK	3150 Plymouth Rd	169- 292	New UG	50	777		275	Wall	Has existing handhole - Exterior EMT	WCH- 02P	1	CCH- CP12- A9	1				
NEW CABINET	Plymouth Rd	169- 292					See N. Campus Tank		Un-terminated.								
NAP	3875 Huron River Dr	175- 278	New UG	35	505		505	Wall	Enter into MDF	WCH- 02P	1	CCH- CP12- A9	1				
HVA	1200 State Circle	157- 268	Existing Duct	50	630	512		Rack	Existing Duct into MDF	CCH- 01U	1	CCH- CP12- A9	1				

¹ Distances are provided in Network Segments.

²Terminate 6-strands of 144ct fiber optic cable

³Terminate all 144ct fiber optic cable

II. QUESTIONS AND ANSWERS

The following Questions have been received by the City. Responses are being provided in accordance with the terms of the RFP. Respondents are directed to take note in its 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: Does the following statement "Cable pre- and post-installation test data should be recorded in an orderly and logical fashion above suggest that reel testing be performed prior to installation or will a manufacturers test report prior to shipping be sufficient?"
- Answer 1: No. Manufacturers test report(s) are not sufficient. All cable must be tested before installation to ensure cable is acceptable, not damaged prior to and/or during shipment and meets applicable standards.
- **Question 2:** Please define: R/R SW Flags, in reference to RFP 973.
- Answer 2: Remove and replace sidewalk flag(s).
- **Question 3:** Please describe unit of measure for UG storage loop, in regards to attachment 1-Network segments, RFP 973.
- Answer 3: Each single (1) storage loop is specified as 150' (feet), for aerial and underground. The unit of measure specified in Attachment 1 is the total number of underground storage loops for that particular segment.
- **Question 4:** Can you please forward a list of the companies that attended the pre-bid meeting for the following project?
- Answer 4: The pre-bid meeting sign-in sheets are included herein.
- **Question 5:** Can we get a time extension on the question date? 48 hours is not sufficient time for questions on a project this size.
- Answer 5: The City of Ann Arbor will not provide an extension.
- **Question 6:** Do we need to install inner Duct inside all the underground fiber wire installation?
- Answer 6: No. Inner duct does not need to be installed for all underground installation.
- **Question 7:** Please provide additional explanation for short duct issue item? Do we dig up and extend duct?
- Answer 7: Yes. Short duct issues will require manual digging or trenching to extend duct.
- **Question 8:** In the areas defined as "no tape in conduit issues" the city has provided footages for each area. How does the contractor know what repairs will be needed within the footage provided?
- Answer 8: This is an area that is "unknown" to the City of Ann Arbor as well. Worst case-scenario would require parallel run be installed underground to bypass the blockage. Calculate costs based on distances provided in Attachment I and assume that the blockage can be cleared using compressed air and/or another non-invasive technique.

In the event that the conduit remains blocked, The City of Ann Arbor will work with the winning contractor(s) using a Change Order process to remedy existing underground conduit that is blocked.

- **Question 9:** Construction Requirements Page 17 Section G. Cable Pulling reviews the requirements for cable placement by pulling. Where conditions allow, is placement by blowing acceptable?
- Answer 9: Yes. Placement by blowing is acceptable where conditions allow.
- **Question 10:** Where or how do we obtain prints for this project?
- Answer 10: Due to regulations governing City of Ann Arbor assets and operations, The City of Ann Arbor is unable to provide prints. As stated in the RFP, engineering drawings and maps will be provided to the winning contractor(s).
- **Question 11:** Looking for some clarification in regards to the drop footages, where is the measurement from say the hand hole to the building? I see the footages for the interior, but nothing from building to splice point or hand hole or pole?
- Answer 11: The drop footages for each Site Location are contained in the Revised Attachment I along with this Addendum.
- **Question 12:** "Bids must include maps and distances" The RFP states that the network mapping is in process of being completed by another contractor how do we know what the routing is to submit maps and distances?
- Answer 12: Please disregard this statement. Maps and distances will not be required for RFP and bid submissions.
- **Question 13:** "As-builts are to be submitted in AutoCad format" should this be the completed by your contractor doing the initial mapping and CAD of the prints? The construction contractor submit paper redlines showing as-builts and the mapping contractor make the changes then submit them to the City?
- Answer 13: Please disregard this statement. Yes. The intent is for the construction contractor(s) to submit paper redlines showing as-built and the City's engineering and design services contractor will provide the final drawings and submit to the City. Refer to Corrections/Additions/Deletions section of this Addendum.
- **Question 14:** Page 20 Underground duct 4' deep is this a City requirement?
- Answer 14: No. Please assume 3 feet (36" deep). Refer to Corrections/Additions/Deletions section of this Addendum.
- Question 15: Page 21 Please clarify what is meant by "Cable Risers"
- Answer 15: Please disregard.
- **Question 16:** Page 24 Fiber Testing 48 fibers to each building site is required 6 to be terminated but all 48 need to be tested using mechanical spliced on pigtails can we use a Bare Fiber Tester to test the non-terminated fibers?
- Answer 16: Using a bare fiber testing on non-terminated fibers is acceptable.
- Question 17: If testing the non-terminated fibers with a Bare Fiber Tester is not acceptable, can all 48 fibers be terminated and left? The terminations are already being completed to test the fiber, why not leave them in place?
- Answer 17: Refer to Q/A #16. Bare fiber testing is acceptable.
- **Question 18:** Page 25 A. Document and Installation first paragraph states "Cable pre- and post- installation test data should be recorded in an orderly and logical fashion." Are you requesting that all fiber reels be OTDR tested before installation begins?
- Answer18: No. Manufacturer certification and test reports are not acceptable. All fiber reels must be tested before installation. Refer to Q/A #1 in this Addendum.

- **Question 19:** Page 24 all test results are to be Bi Directional are you only referring to the fibers that are terminated at each site? The non-terminated fibers will only be accessible at a splice case to test back to the building. Please clarify
- Answer 19: Non-terminated/spliced lateral fibers do not have the bi-directional test requirement.
- **Question 20:** Building sites get 6 fibers terminated will 3 fibers be spliced through from each building site to the Data Centers in each direction on the ring?
- Answer 20: Please refer to the Corrections/Additions/Deletions section of this Addendum for further clarification. Not all laterals will have a direct fiber connection to a data center. Some sites may only be connected to an adjacent site.
- **Question 21:** Page 19 Labels one of the items to be included on the labels is distance in feet please clarify
- Answer 21: Distance from point of closet termination and/or splice on both ends.
- **Question 22:** Page 25 "Schematic and detailed circuit diagrams of all splice locations shall be provided in an acceptable for to the City of Ann Arbor." Will the City of Ann Arbor provide the diagrams detailing how the splicing needs to be completed?
- Answer 22: Splicing diagrams will be provided by the City's Design and Engineering Services contractor.
- **Question 23:** Will the City of Ann Arbor require fiber cable manufacturers test results for each reel ordered upon delivery of cable?
- Answer 23: Yes.
- **Question 24:** Page 26 "All fiber testing documentation must be provided in Microsoft Excel and Microsoft Word." Please clarify. OTDR test results are normally printed with the OTDR provided software will Excel and PDF documentation be acceptable?
- Answer 24: Microsoft Excel and/or Adobe PDFs are acceptable.
- **Question 25:** Can the City provide the Attachment documents that need to be submitted with the Bids in digital form to easier fill in? Example Attachment H in Excel form
- Answer 25: Only Attachment H which is provided as a separate electronic MS Word file upon publication of this Addendum.
- **Question 26:** Will the contractor be required to pay the lane closure fees and reserve parking fees?
- Answer 26: No. The City will not cover these expenses. Refer to Corrections/Additions/Deletions section of this Addendum for further clarification.
- **Question 27:** We understand that Construction Drawings only be available to the successful bidder. However, route maps were referred during the pre-bid meeting. The route maps do not appear to be available from the website. How can we obtain them?

Also, has a desired date of completion been established for this project?

Answer 27: Route maps are not available. Please refer to Refer to Corrections/Additions/Deletions section of this Addendum as well as prior Q/A 10.

Yes. May 1, 2017 but that is dependent upon right-of-way permit approvals being received and pole attachment agreements being in-place.

- **Question 28:** Representatives of National Fiber Construction were unable to attend the preproposal meeting due to previous engagements with existing projects. Is a transcript available? Is there a list of attendees?
- Answer 28: A transcript is not available. All contractors were instructed to submit questions via email, per the RFP. A list of attendees is available on the City's website along with this Addendum.
- **Question 29:** How do we get a per foot price for network segments, if we are not receiving drawings ahead of time? The example given at the beginning of the RFP was a segmented drawing showing labor takeoffs of aerial and underground functions.
- Answer 29: Please refer to Refer to Corrections/Additions/Deletions section of this Addendum as well as prior Q/A 10. An updated Attachment I is available along with the Addendum providing distances and construction attributes required for completion of the network.
- Question 30: In the beginning of the SoW for the RFP there were noted 50 sites, and on each site 3 pair of fiber (6 strands). But throughout the body of the Sow, it states to install 144-ct fiber and install a 48-ct fiber, which totals 192 cts of fiber. In our calculations thus far, we are short 108 cts of fiber. Without having design prints, we will assume that from the hub, there is 144 ct fiber in either direction with a 48ct supplement, totaling 336 ct fiber single node (sn). Is this assumption correct?
- Answer 30: No. This is assumption is not correct. Please refer to Corrections/Additions/Deletions section of this Addendum for clarification which states the following:

 "The network rings (east and west) and network bi-sector each consist of 144-conductor single-mode fiber optic cables. Each site location will be connected to the ring using 48-conductor single-mode fiber optic cables. "Please also refer to Page 17 Section G Cable Pulling for further clarification.
- **Question 31:** Is it possible to get access to electronic copies of segmented drawings or copies of drawings, to give an accurate per foot price for labor, installation and materials?
- Answer 31: Refer to Q/A 10 in this Addendum and the revised Attachment I accompanying this Addendum that provides distances and materials required for construction estimates.
- **Question 32:** The RFP states that there is some unproven duct, are we required to bid to repair the possible blockages, or if the is a section that needs repair would that be a change order?
- Answer 32: No. Refer to Q/A #8. The City will use a change order process to remedy blockages.
- **Question 33:** On the interior work, can we use flexible plenum innerduct or do you specifically want metal EMT?
- Answer 33: Plenum is acceptable as long as it meets and/or exceeds all applicable codes and regulations.
- **Question 34:** In the buildings that have considerable footage from entry point to the MDF can we do a transition from OSP fiber to a plenum rated fiber with interlocking armor that is protected and doesn't need to be in a conduit?
- Answer 34: Yes this would be acceptable.

- **Question 35:** Will you provide the prevailing wage rates?
- Answer 35: No since each contractor's choice of personnel/job classifications to do the work requested in this RFP will vary.
- **Question 36:** How do we determine how much 144ct and 48ct fiber will be required?
- Answer 36: Please refer and review the revised Attachment I accompanying this Addendum. The revised Attachment I provides estimated 48 ct fiber optic cable drop distances from site locations back to the ring where splices will occur. Assume that Network Segments listed in Attachment I are 144 ct fiber optic cable.
- **Question 37:** How do we determine how much footage needed from the building to where the 48ct splices to the 144ct?
- Answer 37: Please refer and review the revised Attachment I accompanying this Addendum. The revised Attachment I provides drop distances from site locations back to the ring where splices will occur. Refer to Q/A #36 above.
- **Question 38:** Can we get a route map or an electronic copy of the prints?
- Answer 38: No. Please refer to Q/A 10 in this Addendum.
- **Question 39:** On attachment H Fee Proposal Form there are no separate line items for installation of 144ct and 48ct, how do you want this broken down?
- Answer 39: Please refer and review the revised Attachment H accompanying this Addendum. The revised Fee Proposal Form provides line items for cable costs, splice costs, labor and material costs for construction as well as 48 count and 144 count fiber. The breakdown of 48 count and 144 count smf, is identified in Attachment I. Please refer to Q/A 36 in this Addendum.
- **Question 40:** On attachment H Fee Proposal Form there are no separate line items for the cost of the cable, is the per foot price supposed to include the cable cost added to the construction cost?
- Answer 40: Please refer and review revised Attachment H. The Fee Proposal Form has line items for cable costs, splice costs, labor and material costs for construction.
- **Question 41:** How much of the aerial construction is rear easement?
- Answer 41: Unknown.
- **Question 42:** What are the footages between existing handholes?
- Answer 42: They vary based on location. Hand-hole distances in the downtown area are generally 500 feet or less. Most distances are 500 feet or less.
- **Question 43:** Will we be able to walk the buildings if so desired?
- Answer 43: Site walks and building walks cannot be accommodated.
- **Question 44:** Currently there is a very long lead time on obtaining Fiber, will this be taken into consideration on the construction completion dates?
- Answer 44: Yes. The City of Ann Arbor understands this, and will take this into consideration.
- Question 45: Attachment G, Section 9 states that the Contractor must secure and pay for all permits including right-of-way occupancy however it is noted in the General Information section that the City is acquiring all permitting and make-ready in Phase 1. Please confirm that the City is procuring and paying for all permits

including any make-ready payments to pole owners, right-of-way occupancy and pole attachment fees.

Answer 45: The City is procuring and paying for all permits including any make-ready payments to pole owners, right-of-way occupancy and pole attachment fees. Refer to Corrections/Additions/Deletions section of this Addendum for further clarification.

Question 46: Who is responsible for supplying the rack or wall mount patch panel?

Answer 46: Contractor(s) are responsible.

Question 47: If the interior Duct or EMT doesn't say existing are we to assume we will be providing the fiber path? And how are we to determine the size of the duct or conduit?

Answer 47: Yes. Assume a 3" interior conduit that is compliant.

Question 48: Would a building with a "tall Ceiling" require a lift?

Answer 48: Yes.

Question 49: Are these ceilings above a drop ceiling?

Answer 49: It varies. Assume that the ceilings are readily accessible for installation.

Question 50: Attachment 1 – Network Segments does not include a breakdown of 48ct fiber vs 144ct fiber. How are we to determine which segments require which cable size?

Answer 50: Please refer and review the revised Attachment I accompanying this Addendum. The revised Attachment I provides drop distances from site locations back to the ring where splices will occur. Assume that all Network Segments listed on Attachment I are 144 ct fiber and Site Locations are 48 ct fiber unless specifically stated otherwise.

Question 51: Page 12 Section A. Network Ring Construction states "Bids must include maps and distances." – The RFP notes that the route information will only be provided to the selected bidder. How are we expected to provide maps of the network? Please clarify what the City is requesting of the bidder by this statement.

Answer 51: Please disregard this statement. Maps and distances will not be required for RFP and bid submissions. Refer to Corrections/Additions/Deletions section and Q/A #12 and #13 in this Addendum for further clarification.

Question 52: Attachment H – Fee Proposal Form – The form does not provide for the pricing of the ISP work, such as aerial/underground/existing building entrances, placing the cable for the provided interior footage and providing panels or cabinets. Will a fee proposal form be provided for pricing the ISP work?

Answer 52: Please refer to the revised Attachment H accompanying this Addendum.

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



City of Ann Arbor Pre-Proposal Meeting



RFP# 973 – Fiber Optic Network Construction Services July 26, 2016 3:00PM

	First /Last Name	Department/Entity	Phone #	E-Mail Address
1.	Colon Spancer	A3-Purchasing	734-794-6500	Cspencer@adgov.org
2.	Russell Hanshue	AZ ITS	734-794-6550 ext	chanshue a a 2 gov. org
3.	Tom Shewchuk	AZITS	734-794-6550	TShowchuke 12gav.org
4.	DAVID Harris	A2 ITS	734.794-6285	DHAMIS@ AZGOVIORG
5.	CRAIG MeriTT	MoTor City Electric	313-957-3431	CMERITTO MEECO-COM
6.	Dake May), Ranck Electric	(989)725-7393	jmay@jranck.com
7.	Fic Shebestak	Integral Blue	(313)656-9890	richardshebestali@integral-blue.com
8.	Edi Demai	Baket Fiber	3135458904	et edidemaj @ roexettiber, com
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City of Ann Arbor Pre-Proposal Meeting



RFP# 973 – Fiber Optic Network Construction Services July 26, 2016 3:00PM

	First /Last Name	Department/Entity	Phone #	E-Mail Address
1.	Tom Glass	Turnkey	616.988-3344	TGASSE TKNS.net
2.	John BARNES	Amcomm	248-698-8868	jbarnes@ Amcommine. com
3.	Ryan Roth	Henkels McCon	514-849-9042	RROTh @ Henkels.com
4.	Karl Whestenberg	Fiber Link, Inc	810-667-2891	Karlu Ofiberlinkinc-com
5.	Doug Miller	Rockel Fiber	517 614 6212	Doug Miller C Rocket Fiber. cou
6.	RAY SIGNS	EARTHCOM INC	517 505 0396	ray-signs@ earthcom. US
7.	Ramby Rocker	Rockat Riber	313 545 8903	randy foster @ rocket fiber, con
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