

City of Hilliard

3800 Municipal Way
Hilliard, Ohio 43026

Sealed bids will be accepted in the above office until
December 5th 2019 at 11:00 A.M.

Request for Proposals Fiber Optic Backbone, Implementation, Material, and Services

NOTICE

PREBID REVIEW: **Wednesday, November 13th, 2019 at 11:00 a.m. City Hall Lower Level Conference Room.**

PROPOSALS DUE: **Thursday, December 5th, 2019 at 11:00 a.m.**

PROJECT NAME: Fiber Optic Network

PROJECT LOCATION: Hilliard, Ohio

PROJECT DESCRIPTION: Engineering and construction of over 30 miles of fiber optic network (72,000' of underground and 83,792' of aerial) in the Western Corridor of Franklin County, which will be utilized to facilitate connectivity between the City of Hilliard, and community partners in Central Ohio.

Exhibit 1 for Fiber Map

Exhibit 2 for Fiber Network Routes.

Exhibit 3 for Fiber Termination points.

City of Hilliard Address:

3800 Municipal Way Hilliard, Ohio 43026
Franklin County

Main Contact:

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Main Phone Number: 614-334-2594

The City of Hilliard is seeking a Request for Proposal (RFP) for the purpose of, contracting with a qualified firm or firms to provide implementation of a single-mode fiber optic cabling network interconnecting multiple locations within the Western corridor of Franklin County as outlined within this document. See Exhibits.

This RFP is divided into two sections for bid responses. These sections are listed as follows –

Section 2A: Dark Fiber Construction,

Section 2B: Alternate Vendor Proposals.

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GENERAL REQUIREMENT:

This is a Request for Proposal. Proposal will be opened and evaluated in private and proposal information will be kept confidential until an award is made. **One (1) original and one (1) copy of the complete proposal are to be submitted. Two (2) copies of electronic version of the proposal should also be submitted in Adobe Acrobat or Microsoft Office readable format.**

Section 1: GENERAL INFORMATION

CRITERIA for SELECTION

The City desires to procure the professional services of an experienced fiber optic network construction firm or project team most qualified and best suited to provide the services described in this Request for Proposal. The vendor evaluation will be based on the following criteria:

Proposed Solution

Vendors must demonstrate their understanding and knowledge of the City's requirements and propose either a comprehensive solution for all components of the RFP or complete approaches to each RFP section addressed by the vendor proposal. The proposed solution should be based on a proven methodology and include a detailed and realistic project plan. (35 Points)

Network Construction and Technical Expertise

Vendors must present their qualifications and expertise with the engineering, construction and maintenance of comparable fiber networks for each component of the RFP to which you respond. (15 Points)

Cost Proposal

Vendors must provide a cost effective solution for the City, including initial construction and projected ongoing operational costs. (35 Points)

Prior Experience and References

Vendors must demonstrate proven experience with the City's requirements based on comparable reference sites in size and complexity as the City's project. (15 points)

Total 100 points

PreBid Review – There will be a prebid review meeting on **Wednesday November 13th, 2019** to go over any questions. This meeting will be held at Hilliard City Hall at 11:00 a.m. in the Council Chambers.

Section 2: SCOPE OF WORK

Executive Summary

The City of Hilliard (City) is requesting proposals from qualified Providers to build a next generation communications fiber network ("Network") that will provide first-rate internet access services and network connectivity for the City of Hilliard, and Community partners. A baseline of ten (10) Gbps symmetric service will serve as the definition of "next generation" services for this RFP.

The City is seeking to implement a fiber optic infrastructure between multiple secondary sites serving municipal, school, authority, and other local facilities. The City will implement an Ethernet distribution system across the established fiber network with a minimum of one (1) pair placed into service for an Ethernet Data Transport Backbone. Build ready drawings will be provided upon the award of this RFP.

Section 2A: Dark Fiber Construction

Fiber Backbone

The City desires to have a two hundred eighty-eight (288) strand single mode fiber optic network consistent with **FIBER SPECIFICATION** constructed. Twelve (12) and twenty-four (24) strand single mode fiber optic cables may be used for laterals and entrance cables. However, alternate strand counts will be considered if cost comparable. It is preferred that armoured cable be used in all but special situations approved by the City of Hilliard prior to deviation. One hundred fifty feet (150') slack loops will be installed along cable route every twelve-hundred to fifteen-hundred feet (1200-1500'). Aerial storage shall utilize snowshoes.

Secondary Fiber Laterals

Additionally the City desires to provide fiber connectivity to five (5) public sector locations. These additional locations will be served as laterals from the primary backbone cable with twenty-four (24) strand single-mode fiber optic cable. Two of the location City Hall and JSSB, will server as backbone core sites and be the primary termination points for the fiber network.

Public Private Partnership

The City may seek private investment or the lease of the fiber optic infrastructure to leverage available resources. The City seeks to serve the maximum number of commercial sites possible. In addition to municipal, and school locations, in order to lower the long term cost of maintenance and operations of the network, and establish the framework to expand the network to addition communities and sites as resources become available. This network must be designed and built with enough pairs to serve the city, and schools, on their own dedicated fiber networks as designed in final engineering. Proposed network must include twenty-four (24) pair (or strands overbuilt for future utilization.)

Project Management

Qualified Providers will provide a dedicated project manager to manage the engineering, and construction of the fiber network. The Project Manager will provide weekly updates throughout the engineering stage of the fiber network and identify all costs including any make ready work necessary prior to moving to the construction of the fiber network. The Project Manager will continue to provide updates on the construction of the dark fiber network and upon completion provide all as built drawings and fiber test results in electronic and paper form. The paper hardcopy of the network design and test results shall be included in a binder in a neat and professional manner.

Construct

The vendor shall construct fiber segments linking the identified sites. Qualified Providers will furnish all materials and labor necessary for the construction of the network. Aerial sections of the route will be built using five-sixteenths inch (5/16") galvanized strand. The cable will be double lashed to the strand. Underground sections of the route will be installed using directional boring. Two inch (2") or four inch (4") HDPE conduit will be installed and twenty-four inch (24") x thirty-six inch (36") x twenty-four (24") handholes will be place at regular intervals along the conduit path.

The backbone cable will be a two hundred eighty-eight (288) strand single mode fiber optic cable. However, alternate strand counts will be considered if cost comparable. Fiber must comply with ITU G.655 standards. Cut sheets must be provided with vendor proposal. Twelve (12) and twenty-four (24) strand single mode fiber optic cables will be used for laterals and entrance cables. Twelve (12) AWG coated copper tracer wire will be placed in all underground sections for locating purposes if armoured cable is deemed unnecessary by the City. One hundred fifty feet (150') slack loops will be installed along cable route every twenty-five hundred feet (2500'). Aerial storage will utilize snowshoes. Six feet (6') screw anchors will be installed as needed along aerial portion of cable route. Qualified Providers will restore all surfaces to like or better condition. All work must comply with all NEC, EIA/TIA, NFPA, OSHA, State of Ohio and Federal Codes and Regulations.

Splicing, Termination, Testing and Documentation

All cable will be terminated in rack mount splice housings using Corning SC APC unicom connectors or like product. Fusion splicing will be utilized for splicing the backbone and lateral cables. All splices will be contained in PLP COYOTE splice closures or like product with prior City approval. Dark Fiber Vendor needs to determine number of fusion splices necessary to construct network as shown in Exhibits. All fusion splicing costs will be included in vendor's proposal.

Qualified Providers will test the fiber after splicing is complete using both an OTDR as well as power meters.

Full test documentation is required for all fiber installed. Final OTDR test data must be provided for all un-terminated, terminated and/or connectorized fiber segments when spliced into final (project complete) configuration. Final construction as-builts must be provided for all fiber paths to include:

Location — GPS referencing on GIS mapping system required.

Depth — Mapping must include spot references. Electronic tabulation for directional boring activity preferred.

Map annotation on other critical infrastructure such as water, sewer and utilities, identified during construction should be included in final asbuilts.

FIBER SPECIFICATION STANDARD OPTICAL FIBER BACKBONE CABLING 27 13 23

PART 1: GENERAL

1.01 SCOPE OF WORK

A. Work covered by this Section shall consist of furnishing labor, equipment, supplies, materials, and testing unless otherwise specified, and in performing the following operations recognized as necessary for the installation, termination, and labeling of horizontal optical fiber infrastructure as described on the drawings and/or required by these specifications.

1. Installation, splicing, termination, testing, labeling and documentation of new inter building fiber optic communication cable between buildings as specified and on the drawings.
2. The installation environment could include tie in and coordination with existing underground duct banks, direct-buried conduit, and utility tunnel pathways.
3. The Contractor shall be responsible for: placement of cable, installation and attachment of cable to support devices within the utility tunnel system, underground structures, and pole lines, the placement of conduit, the installation of pull-boxes, the furnishings of fiber optic splice closures, and installation of termination hardware, and other as specified by UNM IT.
4. Contractor shall be responsible for providing and installing grounding and bonding materials, duct plugs, and fire stopping materials as required completing the installation.
5. Other incidental hardware and appliances, necessary for the proper performance and operation of the communication cable system, which are consistent with the practices of cable installation, are to be provided by the Contractor as required to complete the installation.
6. Contractor is responsible to ensure that utility locating has been performed as per the requirements of Ohio Utility Protection Services. The Contractor is responsible for any damages to any utility caused during construction. In any area where a utility has been located, work activity must be verified through pot holing.
7. Provide hardware bill of materials for project, to include minor materials (i.e. wire management, patch cords, and fiber jumpers). Provide and install all wire management assemblies and parts.

Communications Optical Fiber Backbone Cabling

General Requirements

A. All fiber optic cable, connectors, adapter panels, hardware, and fiber optic pre-terminated systems shall be of the same manufacturer to ensure network system compatibility, optimum performance, fit, function, appearance and warranty.

B. Specific requirements for each component of the infrastructure are included in the following sections contained within Division 27 13 23. Division 27 13 23.05 specifically address the requirements for the optical fiber performance. All cabling and connectivity components used shall comply with the specific requirements listed in 27 13 23.05 in addition to the specifications for the individual product. Additionally, the manufacturer's manufacturing plants shall be ISO9001, TL9000 and/or ISO14001 registered, for quality assurance.

- 27 13 23.05 Optical Fiber
- A. General Specifications
 - 1. All fiber shall be manufactured using the Outside Vapor Deposition (OVD) process to ensure bandwidth consistency.
 - B. Design Specification: The fiber type utilized in the cabling infrastructure shall be of those listed. OS2 shall be defined in project scope.
 - 1. Corning SMF-28e+® OS2 or CommScope CS-8W-LT TeraSPEED® OS2 Singlemode Fiber. If responding bidder would like to use a different fiber optic manufacture, the product must meet the following specifications. Any deviation from these specification must be noted and City of Hilliard reserves the right to reject the bidder’s response if it is deemed to not be equivalent to the Corning or CommScope product.
 - C. Single-mode fiber shall meet the specifications listed in Table 3
 - D. Single-mode fiber shall meet ITU G.652 (Table D), ITU G.657 (Table A1), IEC Specification 60793-2-50 Type B1.3

Table 3: Single-mode OS2 Fiber Geometry and Optical Performance

- 27 13 23.20 Outdoor Fiber Optic Cable
- A. General Specifications
 - 1. The cable shall meet all requirements stated in this specification.
 - 2. The cable shall be an accepted product of the United States Department of Agriculture Rural Utilities Service (RUS) 7 CFR 1755.900 (PE-90) and meet the requirements of ANSI/ICEA Standard for Fiber Optic Outside Plant Communications Cable, ANSI/ICEA S-87-640-2006 and GR-20-CORE.
 - B. Design Specifications: For outside plant installations, or those meeting the NEC requirements, Corning Cable Systems Outdoor cable shall be used or equivalent.
 - 1. ALTOS (all-dielectric)
 - 2. ALTOS Lite (armored)
 - C. Outside Plant Cable
 - 1. Cable Construction
 - a. Optical fibers shall be placed inside a loose buffer tube. The nominal outer diameter of the buffer tube shall be 2.5 mm. The buffer tube shall be polypropylene.
 - b. Each buffer tube shall contain up to 12 fibers
 - c. The fibers shall not adhere to the inside of the buffer tube.
 - d. The buffer tubes shall be resistant to external forces and shall meet the buffer tube cold bend and shrinkback requirements of 7 CFR 1755.900.
 - e. Fillers may be included in the cable core to lend symmetry to the cable cross-section where needed. Fillers shall be placed so that they do not interrupt the consecutive positioning of the buffer tubes. In dual layer cables, any fillers shall be placed in the inner layer. Fillers shall be nominally 2.5 mm in outer diameter.
 - f. The central member shall consist of a dielectric, glass reinforced plastic (GRP) rod (optional steel central member). The purpose of the central member is to provide tensile strength and prevent buckling of the cable. The GRP rod shall be overcoated with a thermoplastic, when required to achieve dimensional sizing to accommodate buffer tubes/fillers.
 - g. Each buffer tube shall contain water blocking material embedded in the inside wall of the buffer tube for water-blocking protection. The water blocking material shall be non-nutritive to fungus, electrically non-conductive, and homogeneous. It shall also be free from dirt or foreign matter. This element will preclude the need for other water-blocking material such as gels, yarns, foams, or tapes; the buffer tubes shall be gel-free.
 - h. The optical fibers shall not require cleaning before placement into a splice tray or fan-out kit.
 - i. Buffer tubes shall be stranded around the dielectric central member using the reverse oscillation, or "S-Z", stranding process.
 - j. Water swellable yarn(s) shall be applied longitudinally along the central member during stranding. Water blocking elements shall be applied uniformly throughout the buffer tube.

- k. Two polyester yarn binders shall be applied contrahelically with sufficient tension to secure each buffer tube layer to the dielectric central member without crushing the buffer tubes. The binders shall be non-hygroscopic, non-wicking, and dielectric with low shrinkage.
- l. For single layer cables, a water swellable tape shall be applied longitudinally around the outside of the stranded tubes/fillers. The water swellable tape shall be non-nutritive to fungus, electrically non-conductive, and homogenous. It shall also be free from dirt and foreign matter.
- m. For dual layer cables, a second (outer) layer of buffer tubes shall be stranded over the original core to form a two layer core. A water swellable tape shall be applied longitudinally over both the inner and outer layer. The water swellable tape shall be non-nutritive to fungus, electrically non-conductive, and homogenous. It shall also be free from dirt and foreign matter.
- n. Non-armored cables shall contain one ripcord under the sheath for easy sheath removal. Armored cables shall contain two ripcords under the steel armor for easy armor removal.
- o. All tensile strength shall be provided by the central member.
- p. Non-armored cables shall be sheathed with medium density polyethylene (MDPE). The minimum nominal jacket thickness shall be 1.3 mm. Jacketing material shall be applied directly over cable core and water swellable tape. The polyethylene shall contain carbon black to provide ultraviolet light protection and shall not promote the growth of fungus.
- q. Armored cables without an inner jacket shall have an armor layer applied directly over the cable core and water swellable tape. The armor shall be a corrugated steel tape, plastic-coated on both sides for corrosion resistance, and shall be applied around cable core and water swellable tape with an overlapping seam with the corrugations in register. The outer jacket shall be applied over the corrugated steel tape armor. The outer jacket shall be a MDPE with a minimum nominal jacket thickness of 1.3 mm. The polyethylene shall contain carbon black to provide ultraviolet light protection and shall not promote the growth of fungus.
- r. The MDPE jacket material shall be as defined by ASTM D1248, Type II, Class C, Category 4 and Grades J4, E7 and E8.
- s. The jacket or sheath shall be free of holes, splits, and blisters.

2. Identification

- a. Each fiber shall be distinguishable by means of color coding in accordance with TIA/EIA-598-B, "Optical Fiber Cable Color Coding." The fibers shall be colored with ultraviolet (UV) curable inks.
- b. Buffer tubes containing fibers shall be color coded with distinct and recognizable colors in accordance with TIA/EIA-598-B, "Optical Fiber Cable Color Coding."
- c. Buffer tube colored stripes shall be inlaid in the tube by means of co-extrusion when required. The nominal stripe width shall be 1 mm.
- d. For cables containing more than 12 buffer tubes, standard colors are used for tubes 1 through 12 and stripes are used to denote tubes 13 through 24. The color sequence applies to tubes containing fibers only, and shall begin with the first tube. If fillers are required, they shall be placed in the inner layer of the cable. The tube color sequence shall start from the inside layer and progress outward.
- e. Cable jackets shall be marked with the manufacturer's name, month and year of manufacture, sequential meter or foot markings, a telecommunication handset symbol as required by Section 350G of the National Electrical Safety Code® (NESC®), fiber count, and fiber type.

Manholes and Handholes Specifications

30" x 48" x 36" handhole as a minimum size and the use of 4' x 4' manholes where larger splices or when multiple cables are required.

Project Closeout

Qualified Providers will provide as-built documents upon project completion.

Qualified Providers will provide all fiber test results in an electronic format for customer inspection.

Emergency Maintenance

Qualified Providers will provide around the clock emergency restoration services for both the aerial and buried sections of the route. All emergency repair work will be billed at predetermined hourly rates. During construction and prior to final acceptance by the City of Hilliard, the selected vendor will provide on-call service as required to make emergency repairs to the fiber network. This emergency maintenance activity will be required for events that cut, damage, or make unusable, fiber duct or fiber support infrastructure on the fiber path. Vendor should include/provide a service level agreement to the City to show response time and time to make repairs.

Route Maintenance

Qualified Providers will provide an annual cost for inspection and maintenance services for the network after construction is complete. Qualified Providers will provide an estimate for utility locating services when the network is determined to be in conflict with future construction projects. A positive response will be sent for each locate request. All utility locating will be billed at predetermined hourly rates. Qualified providers will provide on going records and documentation of all fiber strands in use and splice points in a records management software tool. The City intends to brand and deploy the Network to serve as a development platform for innovation, economic development, workforce development and job creation, education, branding and tourism (international) for the entire Hilliard area.

Primary Fiber Construction:

See Attachment 1 (Fiber Map)

Please review the fiber map (.kmz Google Earth file) for detailed routes.

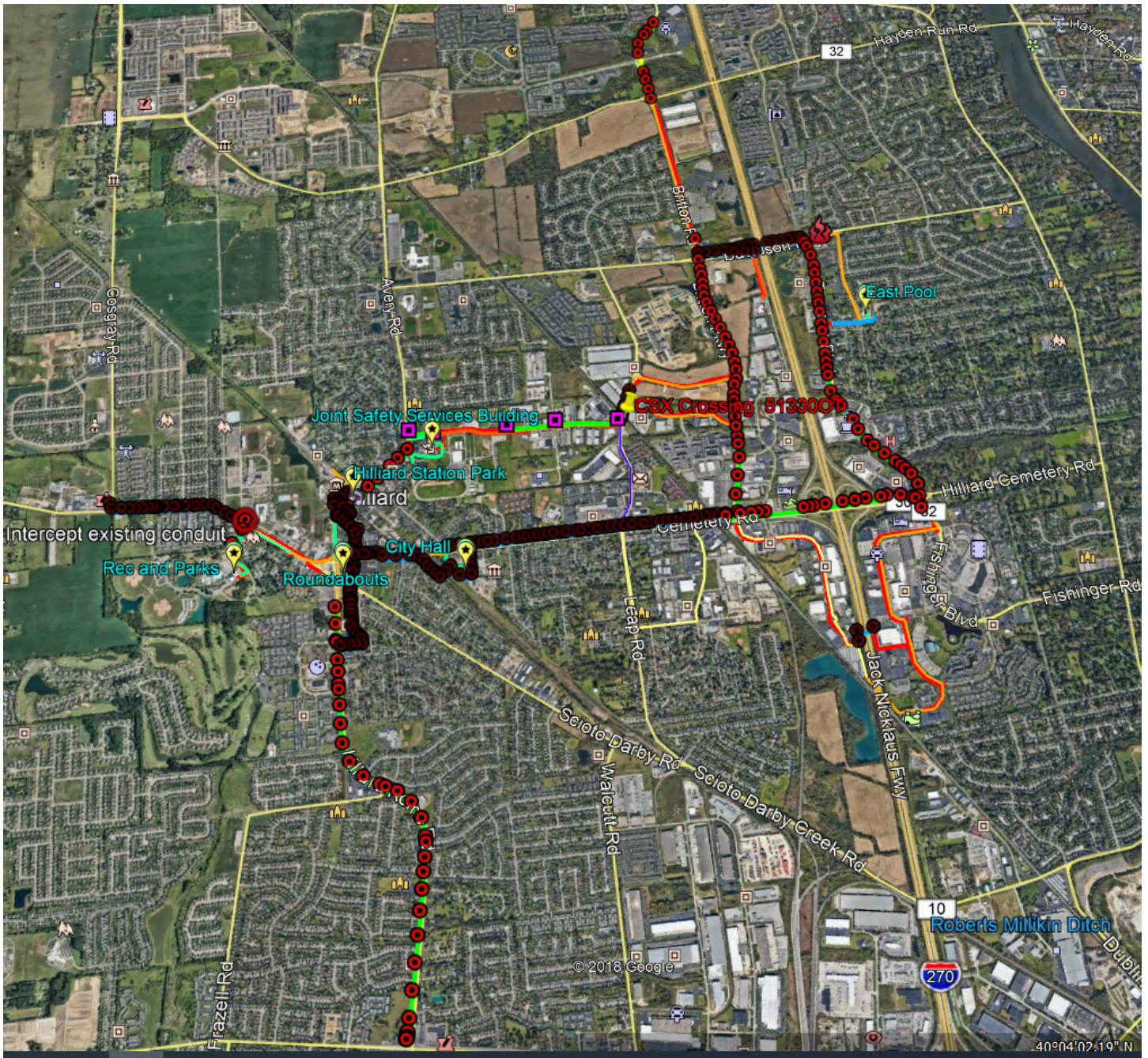
Start Point	End Point	Existing duct	New duct	New Aerial	Existing fiber	Overlap Fiber	Wreckout old fiber	New Fiber	288 Cnt	144 Cnt	6 Cnt.			
JSSB	40.03172, -83.154205	Handhole at N. Main	40.03663, -83.15632	785	436				1221	1221				
Handhole at N. Main	40.03663, -83.15632	Handhole at S. Main, South of Heritage Dr	40.02485, -83.16063	2063	36	3704			5803	5803				
Handhole at S. Main, South of Heritage Dr	40.02485, -83.16063	Handhole NE Corner of Roberts Rd and Hilliard Rome Rd	40.00393, -83.1541	8490					8490	8490				
Cemetery Rd and Lattimer St	40.03008, -83.15974	Pole #1812549740912	40.03240, -83.16927		2965				2965	2965				
Pole #1812549740912	40.03240, -83.16927	Pole at NW Corner of Cosgray and Scioto Darby	40.03155, -83.178454			2746			2746	2746				
Cemetery Rd and Lattimer St	40.03008, -83.15974	NE Corner of Cemetery and Norwich St	40.03057, -83.15292		210	3430		478	4118	4118				
JSSB	40.03172, -83.154205	NE Corner of Reynolds Dr, Pole #1820957743816	40.04048, -83.13933	2392	1746	780			4918	4918				
NE Corner of Reynolds Dr, Pole #1820957743816	40.04048, -83.13933	Handhole on Britton Dr and Reynolds Int	40.03862, -83.13117		2750				2750	2750				
NE Corner of Reynolds Dr, Pole #1820957743816	40.04048, -83.13933	Handhole on Britton Dr and Anson Dr Int	40.04197, -83.13098		2730				2730	2730				
Handhole at Cemetery and Britton Int	40.03263, -83.13100	Handhole at Britton and Davidson Int	40.05006, -83.13374	6551					6551	6551				
Handhole at Britton and Davidson Int	40.05006, -83.13374	Handhole at Britton and Hayden Int	40.08169, -83.13746		4375				4375	4375				
Handhole at Britton and Hayden Int	40.08169, -83.13746	Handhole on Britton South of Tuttle's Brooke Dr	40.08774, -83.13719	2412					2412	2412				
Britton Dr and Davidson Dr Pole #1822561747257	40.05001, -83.13372	Pole at NW Corner of Trueman Bl and Davidson	40.05116, -83.12540			2350			2350	2350				
Pole at NW Corner of Trueman Bl and Davidson	40.05116, -83.12540	Handhole at Cemetery and Trueman	40.03362, -83.1177	7200	30				7230	7230				
Handhole at Cemetery and Trueman	40.03362, -83.1177	Back Easement Pole on Mill Run Rd	40.025743, -83.121538		5720				5720	5720				
Mill Run Rd South of Spring Mill Dr	40.025014, -83.119062	End of Mill Meadow Dr.	40.021410, -83.119020		1980				1980	1980				
Back Easement Pole on Mill Run Rd	40.025743, -83.121538	Along Parkway Ln to Handhole at Cemetery and Britton Int	40.03263, -83.13100		4816	650			5466	5466				
Handhole at Cemetery and Trueman	40.03362, -83.1177	Handhole NW Corner of Britton and Cemetery	40.0325, -83.1321	3650	485				4135	4135				
Handhole NW Corner of Britton and Cemetery	40.0325, -83.1321	NE Corner of Cemetery and Norwich St	40.03057, -83.15292	45		5420		5420	5465	5465				
Hilliard Station, Pole#1814990741452	40.03374, -83.16070	Madison St, Pole#1814925740805	40.03241, -83.16117		1117				1117	1117				
Pool, Schirzinger Rd	40.04596, -83.11988	Handhole on Trueman Bl	40.04651, -83.1241		250	900		165	1150	1150				
Handhole at SW Corner of Trueman and Davidson	40.05084, -83.1281	Station 83	40.05100, -83.12396		500				500	500				
Handhole North Side of Scioto Darby at Vet Mem Dr	40.03219, -83.16818	Rec Center on Vet Mem Dr	40.029043, -83.168434	605	1050				1655	1655				
Cemetery Rd west of Leap Pole#1820509740608	40.03179, -83.14076	NE Corner of Lacon Rd and Cemetery	40.03233, -83.13451		3485	2410			5895	5900				
Hilliard Rome Rd and Roberts Rd	40.00393, -83.1541	SE Corner of Hilliard Rome Rd and Broad St	39.9512115, -83.146393		1106	23004			24110	24110				
Leap Rd at Cemetery Pole #1820960740672	40.03195, -83.13929	Leap Rd north of Northwest Pkwy Pole# 1829660643162	40.03872, -83.13994			2550			2550	24110				
Davidson Rd at Lyman-Pole #1823239747345	40.05027, -83.13097	Property Line in Easement	40.047375, -83.128580		1045	565			1610	1610				
Alternate Hilliard Rome-Alton Darby	40.00393, -83.1541	SE Corner of Hilliard Rome Rd and Broad St	39.9512115, -83.146393		2153	34166			36319	36319				
				Totals	34193	37868	83792	0	643	5420	156331	163984	13412	500
Cumulative Laterals-Trueman Bl					950									
Cumulative Laterals- Brittin Pky					700									
Cumulative Laterals-Mill Run Area					2370									
Cumulative Laterals Parkway Ln					900									
Cumulative Laterals-Reynolds Dr					575									
Cumulative Laterals- Anson Dr					475									
Cumulative Laterals- Northwest Pkwy					1100									
Cumulative Laterals-S Main/Hilliard Rome					50									
Cumulative Laterals- Scioto Darby					760									
Cumulative Laterals- Lacon/Edgewyn/Leap					668									
				Lateral Conduit Totals	8548									

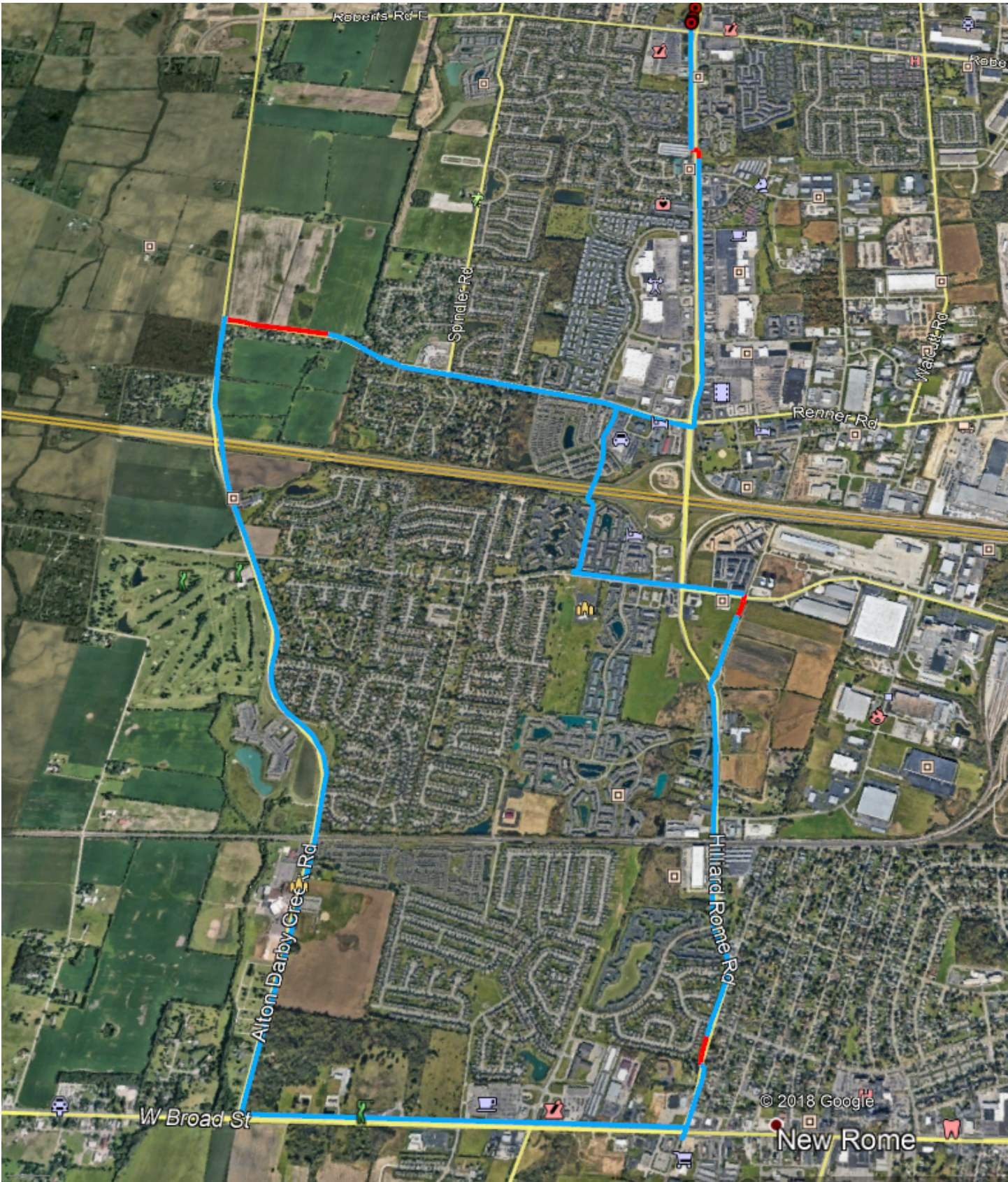
Total estimated length of two hundred eighty-eight (288) strand Back bone cable is twenty nine point six (29.6) miles. Total estimated lateral length is one point six (1.6) miles.

Fiber Optic and Wireless Network Map

The map below identifies the location of each of the primary and secondary sites to be priced for fiber connectivity in response to this RFP. The map indicates shortest path between locations using primary road structures for cable path routing. Other paths and routing may be required to avoid obstacles or barriers to fiber implementation. The City will entertain alternate routes. **Please view additional KMZ file for further details on Fiber counts.**

Exhibit 1





Fiber Optic and Wireless Network Map

The map identifies the location of each of the primary and secondary sites to be priced for fiber connectivity in response to this RFP. The map indicates shortest path between locations using primary road structures for cable path routing. Other paths and routing may be required to avoid obstacles or barriers to fiber implementation. **Please view additional KMZ file for further details.**

Section 2C: Alternate Vendor Proposals

Public Private Partnership

The City may seek private investment or the lease of the fiber optic infrastructure to leverage available resources. The City seeks to serve the maximum number of commercial sites possible. The City seeks to serve municipal, school, and other public locations in order to lower the long term cost of maintenance and operations of the network, and establish the framework to expand the network to additional communities and sites as resources become available.

Vendors having the business case and investment opportunity are encouraged to provide alternative proposals to the City of Hilliard including the use of alternative right of way paths and the use of existing conduit. Any alternate proposal must address fully, the services, needs and intent of the primary City of Hilliard RFP; providing bandwidth services and development opportunities to the City through the use of broadband infrastructure.

The alternative proposal must outline the value proposition presented by the respondent with the equipment, services and operational components identified and explained in detail appropriate for City to evaluate the benefit to the region, benefit to the proposer and, any risk assessment considerations from entry into a contract based on the alternative proposal.

With the stated goal of the City to extend fiber based broadband connectivity to anchor institution, both public and private, across the entire City, alternate proposals that provide revenue sharing or financial resources that can be reinvested in systems expansion, direct investment in network fiber expansion, or other partnership or relationship that will enhance the sustainability of the City Fiber Network are of great interest.

Section 3: Project Pricing

Please provide a total cost for all construction and documentation requirements included in this RFP as stated in the Scope of Work.

3.1 Cost by Segment for Proposed Primary Fiber Optic Network Routes

Starting Point	End Point	Existing Duct	New Duct	New Aerial	Cost
JSSB	Handhole at N. Main	785	436		
Handhole at N. Main	Handhole at S. Main, South of Heritage Dr	2063	36	3704	
Handhole at S. Main, South of Heritage Dr	Handhole NE Corner of Roberts Rd and Hilliard Rome Rd	8490			
Cemetery Rd and Lattimer St	Pole #1812549740912		2965		
Pole #1812549740912	Pole at NW Corner of Cosgray and Scioto Darby			2746	
Cemetery Rd and Lattimer St	NE Corner of Cemetery and Norwich St		210	3430	
JSSB	NE Corner of Reynolds Dr, Pole #1820957743816	2392	1746	780	
NE Corner of Reynolds Dr, Pole #1820957743816	Handhole on Britton Dr and Reynolds Int		2750		
NE Corner of Reynolds Dr, Pole #1820957743816	Handhole on Britton Dr and Anson Dr Int		2730		
Handhole at Cemetery and Britton Int	Handhole at Britton and Davidson Int	6551			
Handhole at Britton and Davidson Int	Handhole at Britton and Hayden Int		4375		
Handhole at Britton and Hayden Int	Handhole on Britton South of Tuttle Brooke Dr	2412			
Britton Dr and Davidson Dr Pole #1822561747257	Pole at NW Corner of Trueman Bl and Davidson			2350	
Pole at NW Corner of Trueman Bl and Davidson	Handhole at Cemetery and Trueman	7200	30		
Handhole at Cemetery and Trueman	Back Easement Pole on Mill Run Rd		5720		

Mill Run Rd South of Spring Mill Dr	End of Mill Meadow Dr.		1980		
Back Easement Pole on Mill Run Rd	Along Parkway Ln to Handhole at Cemetery and Britton Int		4816	650	
Handhole at Cemetery and Trueman	Handhole NW Corner of Britton and Cemetery	3650	485		
Handhole NW Corner of Britton and Cemetery	NE Corner of Cemetery and Norwich St	45		5420	
Hilliard Station, Pole#1814990741452	Madison St, Pole#1814925740805			1117	
Pool, Schirtzinger Rd	Handhole on Trueman Bl		250	900	
Handhole at SW Corner of Trueman and Davidson	Station 83		500		
Handhole North Side of Scioto Darby at Vet Mem Dr	Rec Center on Vet Mem Dr	605	1050		
Cemetery Rd west of Leap Pole#1820509740608	NE Corner of Lacon Rd and Cemetery		3485	2410	
Hilliard Rome Rd and Roberts Rd Int	SE Corner of Hilliard Rome Rd and Broad St		1106	23004	
Leap Rd at Cemetery Pole #1820960740672	Leap Rd north of Northwest Pkwy Pole# 1829669643162			2550	
Davidson Rd at Lyman-Pole #1823239747345	Property Line in Easement		1045	565	
Alternate Hilliard Rome-Alton Darby	SE Corner of Hilliard Rome Rd and Broad St		2153	34166	

3.2 Cost by Segment for Proposed Secondary Fiber Optic Network Routes

Location	Length	Cost
Cumulative Laterals-Trueman Bl	950	
Cumulative Laterals- Brittin Pky	700	
Cumulative Laterals-Mill Run Area	2370	
Cumulative Laterals Parkway Ln	900	
Cumulative Laterals-Reynolds Dr	575	
Cumulative Laterals- Anson Dr	475	
Cumulative Laterals- Northwest Pkwy	1100	
Cumulative Laterals-S Main/Hillard Rome	50	
Cumulative Laterals- Scioto Darby	760	
Cumulative Laterals- Lacon/Edgewyn/Leap	668	

4.0 Required Contract Terms

4.1. These are the required contract terms that a Successful Proposer shall agree to by submitting the Proposal for consideration. Any contract with the City of Hilliard shall include these provisions.

4.1.1 *Applicable laws:*

The Revised Code of the State of Ohio, the Charter of the City of Hilliard and all City ordinances and administrative rules insofar as they apply to the laws of competitive bidding, contracts and purchases are made a part hereof. Legal action to enforce this agreement shall only be brought in a court of competent jurisdiction in Franklin County, Ohio.

4.1.2 *Indemnification by Proposer:*

To the fullest extent allowed by law, the Proposer shall indemnify and hold harmless the City, its employees and agents, from any liability for claims, damages, losses and expenses, including reasonable attorney fees, resulting from the negligent performance of the contract, or any negligent act or omission, by Proposer, its employees, agents, subcontractors or assigns. Proposer's obligation to indemnify under this section shall not be construed to negate, abridge, or reduce other rights of indemnity or contribution to which the City, its agents or employees are legally entitled.

4.1.3 *No indemnification by City:*

The City does not agree to indemnify or hold harmless the Proposer, its employees and agents, from any liability for claims, damages, losses and expenses, including reasonable attorney fees, resulting from or arising under the contract.

4.1.4 *Insurance:*

The Proposer shall not commence work under this contract until he/she has obtained all insurance required under this paragraph and such insurance has been approved by the City nor shall the Proposer allow any subcontractors to commence work on this subcontract until all similar insurance required for coverage of the subcontractor has been so obtained and approved.

The Proposer shall take out and maintain during the life of this contract, Workers' Compensation Insurance for all of his/her employees employed on the project, and in case any work is sublet, the Proposer shall require the subcontractor similarly to provide Workers' Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Proposer. If the Proposer already maintains Worker's Compensation Insurance, Proposer shall submit proof of such coverage to the City with Proposer's submission and thereafter upon request. Proposer shall maintain such insurance throughout the life of any contract with the City.

4.1.5 *Municipal income tax:*

The Proposer shall withhold all City income taxes due or payable under the provisions of the Income Tax ordinance for wages, salaries, and commissions paid to its employees pursuant to Chapter 193 of the Codified Ordinances of the City of Hilliard, Ohio. The Proposer shall require its subcontractors to withhold any such City income taxes due for services performed under this Contract. The Proposer will be required to sign a tax affidavit as required under section 5719.042 of the Ohio Revised Code.

4.1.6 *Force majeure:*

For the purpose hereof, force majeure shall be any of the following events: acts of God or the public enemy; compliance with any order, rule, regulation, decree, or request of any governmental authority or agency or person purporting to act therefore; acts of war, public disorder, rebellion, terrorism, or sabotage; floods, hurricanes, or other storms; strikes or labor disputes; or any other cause, whether or not of the class or kind specifically named or referred to herein not within the reasonable control of the party affected. A delay in or failure of performance of either party shall not constitute a default hereunder nor be the basis for, or give rise to, any claim for damages, if and to the extent such delay or failure is caused by force majeure. The party who is prevented from performing by force majeure (i) shall be obligated, within a period not to exceed fourteen (14) days after the occurrence or detection of any such event, to give notice to other party setting forth in reasonable detail the nature thereof and the anticipated extent of the delay, and (ii) shall remedy such cause as soon as reasonably possible.

4.1.7 *Termination of contract for cause:*

If, through any cause, the Proposer shall fail to fulfill in a timely manner and proper manner its obligations

or if the Proposer shall violate any of the covenants, agreements or stipulations of the contract, the City shall thereupon have the right to terminate the contract by giving written notice to the Proposer of such termination and specifying the effective date of termination. The notice may be mailed, hand-delivered, or sent electronically. In that event, and as of the time notice is given by the City, all finished or unfinished services, reports or other materials prepared by the Proposer shall, at the option of the City, become its property, and the Proposer shall be entitled to receive compensation for any satisfactory work completed, prepared documents or materials as furnished. Notwithstanding the above, the Proposer shall not be relieved of liability to the City for damage sustained by the City by virtue of breach of the contract by the Proposer and the City may withhold any payments to the Proposer for the purpose of set off until such time as the exact amount of damages due the City from the Provider is determined.

4.1.8 Termination of contract for convenience:

The City may terminate the contract at any time by giving written notice to the Proposer of such termination and specifying the effective date thereof, at least thirty (30) working days before the effective date of such termination. The notice may be mailed, hand-delivered, or sent electronically. In that event, all finished or unfinished services, reports, material(s) prepared or furnished by the successful Proposer under the contract shall, at the option of the City, become its property. If the contract is terminated due to the fault of the successful Proposer, termination of contract for cause relative to termination shall apply. If the contract is terminated by the City as provided herein, the successful Supplier will be paid an amount as of the time notice is given by the City which bears the same ratio to the total compensation as the services actually performed or material furnished bear to the total services/materials the successful Proposer covered by the contract, less payments of compensation previously made.

4.1.9 Proposal and contract information is public:

The Proposer acknowledges that all documents submitted with any proposal may become public documents and shall be subject to Ohio Revised Code Section 149.43, which is otherwise known as the "Ohio Public Records Law". By submitting any document to the City of Hilliard in connection with a Proposal or Contract, the Proposer waives any claim against the City of Hilliard and any of its officers and employees relating to the release of any document or information submitted. Furthermore, the Proposer agrees to hold the City of Hilliard and its officers and employees harmless from any claims arising from the release of any document or information made available to the City of Hilliard arising from or related to the Proposal or Contract.

4.2 The terms and conditions of the RFP shall be incorporated and made part of the contract between the City and the successful Proposer. In case of any conflict between the term and conditions of the RFP and the Proposal, the RFP shall prevail unless otherwise agreed upon in writing by the City. The City reserves the right to incorporate terms and conditions contained in the Proposal provided it is not in conflict with the RFP.

4.3 The Proposal should include any proposed contractual terms that the Proposer intends to request the City to include in the contract. Such terms and conditions should not conflict with the required contract terms in this Section. If the proposed contractual terms conflict with the required contract terms, the City may reject the Proposal. The City reserves the right, but not the obligation, to negotiate additional terms with the Successful Proposer. **The Proposer shall provide on the front page of the proposal and titled as "Conflict with Required Contract Terms" all terms and conditions of the Proposal that conflict with the required contract terms.**

4.4 Acknowledgement:

The undersigned hereby acknowledges that:

The undersigned has read and understands the terms and conditions of the RFP, including the required contract terms.

The undersigned has the lawful authority to sign this document on behalf of the Proposer.

If the Proposal is selected, the undersigned's signature incorporates the required contract terms into the final contract and shall supersede any subsequent contract terms provided by the Proposer, unless otherwise agreed to by the City pursuant to Section 4.3.

Signature: _____

Print Name: _____

Date: _____

THIS PAGE IS MANDATORY.

	YES	NO
Does your company have a formal safety policy and your employees participate in safety training?		
Upon request, would you be able to provide the City with a copy of your safety policy?		

REFERENCES

AUTHORIZED NEGOTIATORS:

Name: _____

Title: _____

Phone #: _____

Name: _____

Title: _____

Phone #: _____

THIS PAGE IS MANDATORY.

List three (3) references that you have done similar work, service or supplied similar products to within the last twelve (12) months (Only correct contact names and phone numbers will be acceptable).

Entity:	
Address:	
City, State, Zip Code:	
Telephone Number:	
Contact Person:	
Title:	
Email:	

Entity:	
Address:	
City, State, Zip Code:	
Telephone Number:	
Contact Person:	
Title:	
Email:	

Entity:	
Address:	
City, State, Zip Code:	
Telephone Number:	
Contact Person:	
Title:	
Email:	

***State full names, titles and addresses of all responsible principles and/or partners below;**

Name: _____ Title: _____

Address _____

Name: _____ Title: _____

Address _____

Name: _____ Title: _____

Address _____

Name: _____ Title: _____

Address _____

Name: _____ Title: _____

Address _____

Name: _____ Title: _____

Address _____

THIS PAGE IS MANDATORY.

PROPOSER'S CERTIFICATION

I have carefully examined the Request for Proposal, Requirements for Statements of Qualifications, Scope of Services Background, and any other documents accompanying or made a part of this Request for Proposal.

I hereby propose to furnish the goods or services specified in the Request for Proposal. I agree that my proposal will remain firm for a period of up to one hundred twenty (120) days in order to allow the City adequate time to evaluate the qualifications submitted.

I verify that all information contained in this proposal is truthful to the best of my knowledge and belief. I further certify that I am duly authorized to submit this proposal on behalf of the firm as its act and deed and that the firm is ready, willing and able to perform if awarded the contract.

I further certify, under oath, that this proposal is made without prior understanding, agreement, connection, discussion, or collusion with any other person, firm or corporation submitting a proposal for the same product or service. No officer, employee or agent of the City of Hilliard or any other proposer is interested in said proposal and that the undersigned executed this Proposer's Certification with full knowledge and understanding of the matters therein contained and was duly authorized to do so.

*State of Incorporation _____

(Individual - Partnership - Company - Corporation)

(Business Address)

(City, State, and Zip Code)

(By Signature) (Title)

(Witness Signature) (Title)

(Telephone No.)

(Fax No.)

(Date)