



REQUEST FOR PROPOSALS

Fiber Optic Network Construction

A project funded by Finney County Commission

RFP # FIBER

Finney County
311 N. 9th St.
Garden City, KS 67846

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1 Introduction

Finney County seeks proposals from qualified respondents to construct a fiber optic network in the community of Garden City as discussed below. Respondents shall include in their response their approach and cost proposal for building the fiber optic network described in Section 4 and Exhibits A & B. It is expected that the selected respondent will operate as a General Contractor. The General Contractor shall be responsible for network construction and materials purchasing. A full enumeration of the General Contractor's responsibilities is contained herein.

2 Background

The network infrastructure will be realized in one deployment, with total project completion by 12/30/20. The network backbone will be designed and built such that full coverage of the commercial and developed residential areas of both communities can ultimately be served. The deployment will be a gauge of take rates and the effect of gigabit or higher symmetric connectivity on economic development and initial success will fuel continued growth of the network.

About the Network

It is the objective of this project to build the first phase of a complete fiber loop round the city of Garden City, a network backbone of approximately five and a half road-miles in the community, in a variety of neighborhoods, along or near the path. The network has been designed with the following characteristics:

- Entirely underground in the public right of way;
- Utilizes 2" HDPE conduit;
- Fiber Concentration Points (FCP) located strategically throughout the community;
- Generally, home-run fibers to the FCP;
- Network head-end to be located at 311 N. 9th St.
- Stainless Steel Access Pedestals to be placed throughout;
- Finney County has been approved to use existing Garden City easements; awarded contractor will be responsible for procuring permits from the city.

Finney County IT has completed a preliminary routing design of the network included in Exhibits A & B.

3 General Information

RFP Contact Information

All questions and comments should be directed via email to Doug Peters, Director of IT, Finney County, at DPeters@FinneyCounty.Org. Responses should be mailed to:

Robert Reece / Doug Peters
Finney County
311 N. 9th st.
Garden City, KS 67846

Notification of Intent to Respond

Finney County requests that prospective bidders who intend to respond to this RFP by the date noted in Section 3.6 of this RFP. Notifications should be sent via email to Doug Peters at DPeters@FinneyCounty.Org.

Questions and Inquiries

An optional pre-bid conference call will be held on the date noted. All prospective bidders who have notified Finney County of their intent to respond will be provided with details on how to participate no later than 3 days before the conference call. Please note that the mandatory deadline for notification of intent to respond is after the pre-bid conference call. To accommodate bidders who have not yet responded, participation details will also be posted on [*Finney County RFP Site*](#) no later than 3 days before the conference call.

Prospective respondents should email questions to the designated contact by the dates noted in the below table. Responses to questions that involve a change or interpretation to the RFP will be issued in writing and emailed to all parties that have expressed an intent to respond to the RFP. Only written responses to questions will be considered binding.

Materials submitted in response to this request become the property of the Finney County and may become a part of any resulting contract. Respondents agree that they will bear all costs associated with responding to this RFP.

If any changes are made to this RFP, e-mail notification will be provided to all bidders who have notified Finney County of their intent to bid.

Response Delivery

Please email digital copies of the complete response, including all relevant attachments, to the designated contact in Section 3.

Schedule

| Event | Date |
|--|------------------|
| RFP Released | 8/11/2020 |
| Pre-Bid Meeting/Conference Call (Optional) | <u>9/20/2020</u> |
| Questions due by 5 PM CST | <u>8/19/2020</u> |
| Notification of Intent to Respond (Mandatory) | <u>8/19/2020</u> |
| RFP Responses due by 5 PM EST | <u>8/21/2020</u> |
| Award Announced (Estimated) | <u>9/30/2020</u> |

Evaluation Criteria

Finney County seeks firms that:

- Can meet the project's timeline.
- Can demonstrate past performance and experience on similarly sized fiber builds.
- Are flexible and can efficiently work around the kinds of issues that often arise in municipal construction projects.
- Are stable and well-capitalized enough to meet the insurance and bonding requirements mandated by this project.
- Must maintain Bicsi RCDD on staff
- Provide minimum of 1 Bicsi Technician to oversee installation
- Certified by manufacturers to install and warranty products to be utilized on this project

Respondents shall describe in their responses to this RFP their project understanding and approach, experience building similar networks, regulatory plan, financial wherewithal, warranty, and firm, fixed price bid for constructing the full scope detailed herein. For bids consisting of teams of firms, one firm should identify itself as the General Contractor. The General Contractor shall be responsible for the scope of work detailed in this RFP, insurance, and bonding.

Respondents that address the entire RFP will be evaluated by the evaluation criteria in the below table:

| Item | Points Possible |
|--|-----------------|
| Project Understanding and Approach | 30 |
| Respondent's Experience Building Similar Networks | 20 |
| Respondent's Timeline to Completion | 10 |
| Warranties, Documentation, and Demonstrated Financial Wherewithal | 15 |
| Bid Price | 25 |
| Total | 100 |

- **Project Understanding and Approach.** Finney County seeks to partner with a contractor that understands the goals for the project. Respondents should demonstrate their understanding of the project and its goals and provide a project plan in sufficient detail to provide a high degree of confidence they will successfully construct the project as scoped, scheduled, and budgeted.
 - Method of Points Award
 - Project schedule that conforms with the RFP requirements: 0-15 points
 - Clearly articulated project plan supporting the schedule: 0-10 points
- **Experience Building Similar Networks.** The ideal respondent will have at least five years of experience successfully deploying municipal-scale or similar fiber optic networks on time and on budget. Respondents should demonstrate ability to provide sufficient manpower and equipment rapidly enough to achieve the project's construction objectives.
 - Method of Points Award
 - Experience building similar networks: 0-15 points
- **Timeline to Completion.** Respondents should include a timeline for the construction of the project. In addition, respondents should demonstrate experience constructing similar projects on time and in budget.
 - Method of Points Award
 - Detailed construction timeline that meets OTO Fiber's timeline: 5 points
 - Demonstrated experience building fiber optic networks within original timeline: 0-5 points
- **Warranties, Documentation, and Demonstrated Financial Wherewithal.** Respondents should demonstrate ability to warranty their design and work products and to generate documentation, such as as-builts, CAD drawings, and the like in accordance with industry standards. In addition, respondents should provide assurance (confidentially if desired by so noting in their response) of their ability to secure the required performance, payment, and bid bonds, as well as insurance requirements.
 - Method of Points Award
 - Warranty specifications included in response: 0-5 points
 - Confirmation of ability to comply with required documentation aspects: 0-5 points
 - Demonstrated ability (e.g., bank letter or other confirmation) of ability to secure required bonding and insurance: 5 points
- **Bid Price.** The bid pricing should include the following items:
 - Firm, fixed-price bid for the primary/core networks in routes, including the

- purchase and installation of the access pedestals.
- Firm fixed-price bids for each extension to identified buildings, labeled as:
 - Health Department
 - EMS
 - Future EMS
 - Administration Building
 - Fair Grounds (Multiple Buildings)

Proposal Acceptance

Finney County reserves the right to accept or reject any or all proposals as deemed to be in the best interest of Finney County.

Costs of Preparation

The Respondent shall be solely responsible for all expenses it incurs in responding to this RFP. This includes any presentations or demonstrations associated with the RFP.

4 Project

Overall Design

Health Department to Finney County Fair Grounds

The project's fiber routing has some flexibility but must maintain routing to identified pedestals locations and buildings along route. Route plans must be presented to Finney County in contractors' proposal. Installation shall be comprised of the following:

- Contractor to provide and install (1) 2" HDEP conduit, housing (1) 144-count OS2 fiber, non-gel filled, single armor, single jacket cable installed along accepted route. (See Appendix A)
- Contractor to provide and install (1) 2" HDPE Conduit housing (1) minimum 4-count fiber to provide a single pair loop in, and a single pair loop out to the 144-count back bone cable. (See Appendix A)
- Contractor to provide and install (1) 2" HDEP conduit, housing (1) 48-count OS2 fiber, non-gel filled, single armor, single jacket cable from identified new pedestal access location, to Finney County Fairgrounds. (See Appendix A and B)
- Contractor to provide and install hand holes at a minimum of every 1,000' with a 100' of slack loop to be placed in each. Locations of hand holes shall be identified in bid
- Contractor to provide and install 4-post enclosed racks, with 1RU rack mount patch panels, at each identified building
- Contractor to provide and install outdoor rated splice enclosures to accommodate necessary splicing at each hand hole serving each identified building
- Contractor to provide and install LC/UPC fusion spliced connectors or pigtails

- Contractor to identify planned splice points in 144-count fiber and present this information in the bid
- Contractor is responsible for all concrete patching and replacement as need to complete installation
- Contractor to provide and install locate wires in all installed conduits

Health Department to Jennie Barker Road

The project's fiber routing has some flexibility but must maintain routing to identified pedestals locations and buildings along route. Route plans must be presented to Finney County in contractors' proposal. Installation shall be comprised of the following:

- Contractor to provide and install (1) 2" HDEP conduit, housing (1) 144-count OS2 fiber, non-gel filled, single armor, single jacket cable installed along accepted route. (See Appendix A)
- Contractor to provide and install hand holes at a minimum of every 1,000' with a 100' of slack loop to be placed in each. Locations of hand holes shall be identified in bid
- Contractor to provide and install LC/UPC fusion spliced connectors or pigtails as needed
- Contractor to identify planned splice points in 144-count fiber and present this information in the bid
- Contractor is responsible for all concrete patching and replacement as need to complete installation
- Contractor to provide and install locate wires in all installed conduits

Installation Materials

Contractor will be responsible for submitting on and procuring all materials and providing a warranty on all materials.

The Contractor is held responsible for all materials through Finney County acceptance of the fiber test results. If the materials supplied by the Contractor are found to be defective, or do not conform to the specifications upon testing, Finney County reserves the right to have the Contractor immediately replace the materials at the contractor's expense and through its procurement process.

Staging Area

If the Respondent determines that a staging area is necessary to meet the project requirements, it should clearly indicate this in its response. If the proposed staging area is on City, or County property, or its access is otherwise controlled by the City or the county the

Respondent should make clear its requirements for access to the proposed staging area, including but not limited to desired term, hours, and space needed.

Proposed staging areas should be located within the geographic Project area. Respondents shall warrant that their use of the area for staging purposes will follow applicable regulations and laws.

Permitting

The fiber routes are in the Garden City right-of-way or on Railroad owned private property for which easements and agreements will need to be acquired by the awarded contractor.

Construction Scopes

This section outlines the scopes of construction for the project. Respondents are required to respond to all scopes outlined; they are separated here only for convenience's sake.

Construction Scope

Finney County seeks respondents to perform the following:

1. Provide a viable construction plan that satisfies the scheduling requirements outlined in this document.
2. Identify any probable constructability issues or concerns in the network design, and work with Finney County to arrive at suitable remedies.
3. Procure adequate amounts of fiber optic cable conforming to the project's specifications to build the network as specified.
4. Install fiber optic cable and pathways underground, per the project design specifications and submitted design drawings.
5. Develop and execute a traffic management plan in coordination with the municipal Public Works Directors and in compliance with applicable regulations of the State of Kansas.
6. Perform ongoing quality control checks of the as-built network throughout the construction period. Escalate issues to Finney County as needed.
 - a. Submit weekly quality control report with the weekly progress/status report.
 - b. Perform OTDR testing on each fiber strand installed.
7. For all terminated strands, report true span loss not to exceed 0.35 dB/km.
8. Perform final testing after construction is completed.
9. Finney County will schedule a final inspection after construction has been completed. Any defects identified must be remedied before final project acceptance and payment.
10. Document and deliver all close out documents in PDF format.
11. Complete outstanding issues and close the project.

Other Installation Requirements

- All construction is to be per industry and Bicsi standards including, but not limited to, TIA/EIA, IEEE, NFPA 70e, local guidelines.
- All fiber optic cable shall be installed per manufacturer's best practices.
- The Contractor is responsible to install all necessary handholes for proper access during installation.
- High visibility cable tags or markings containing the Owner's information shall be installed at every splice enclosure, and riser guard, and be visible while standing on the ground.
- Labeling of the cable sizes and direction is required. All fiber strands spliced into ports will be tagged and identified per contractor provided terminal splice design.
- At each hand hole splice location, a minimum of 30 feet of cable will be left for splicing, or as otherwise indicated on the construction drawing.
- At a minimum of every 1,000 feet a 100 foot slack loop will be placed in a hand hole for future repairs

Splicing Requirements

- All splicing shall be completed as per splice details provided prior to the start of construction for each identified splice location.
 - Any changes shall be approved prior to completion.
- All fibers and connector assemblies (pigtailed) shall be fusion spliced.
 - All splices are to be organized and secured within an approved fiber optic splice closure.
 - The Contractor shall follow the manufacturer's recommended cable preparation and routing procedures for cable entry into the provided fiber optic splice closure.
- The Contractor shall maintain a Splice Log Book for each splice enclosure.
 - Each splice enclosure will have a unique identifier. The splice enclosure identifier shall also be referenced on the Splice Log Book cover.
 - The Splice Log Book shall include a copy of the original splice detail sheet, a red-lined copy of the as-built detail, LID readings from the fusion splicer, Optical Time Domain Reflectometer (OTDR) Test results of the fibers spliced at that location, pictures of the organization and layout of the interior of the enclosure, and pictures of the enclosure on the cable or strand.
 - The Splice Log Book shall also include any additional pertinent information not listed.
 - The Splice Log Book shall be delivered to the OPM electronically upon request and at the end of the project.
- Labeling of the cable sizes and direction is required. All fiber strands spliced into ports will be tagged and identified per terminal splice design. All labeling is expected to meet applicable standards and recognized best practices.
- All tools and equipment used shall be in excellent working order and all splicing equipment shall have been calibrated within 1 year prior to use on this project.
- Certificates of calibration for splice equipment shall be submitted to Finney County for review and approval.

Testing Requirements

Contractor shall provide passing test results on all fibers. OTDR and OLTS are acceptable

Change Orders

If a need arises to change the scope of the project in a reasonably significant way, a change order shall be requested in writing prior to starting work or incurring costs. Change orders shall clearly state the Contractor's expected profit and overhead accruing from the associated change in scope.

All change orders shall be subject to approval by Finney County.

Documentation Requirements

Detailed as-built drawings including any and all changes implemented will be provided upon completion of project

Detailed splicing report consisting of:

- Rack mount enclosures
 - Splice cases
 - Terminals
- Fiber footages
- Splice locations
- Strand grounding locations
- Slack loop locations
- Routes of all cables installed
- Test results for optical fiber testing
- Warranty Package to include dates (Product Warranty)
- Certificate of Acceptance (pre- and post-installation)
- Summary sheet of test results for quick reference

Job Completion

Job completion occurs when the following conditions are satisfied:

1. Contractor submits last invoice.
2. Contractor notifies Finney County that construction is complete.
3. Final inspection has occurred.
4. All punch list items have been completed.
5. All material warranties have been transferred to Finney County.
6. All remaining construction materials have been removed from staging areas and or city/county property
7. All the Documentation for the Fiber Project is submitted:
 - Design As-Builts
 - Fiber Organization Drawing
 - Fiber testing results end to end for attenuation and continuity
 - OTDR/OLTS results, including each individual Splice Enclosure Log Book.

Warranty Requirements

1. The Contractor shall warrant that all materials furnished shall be new, and free from defects.
2. The Contractor shall warrant that the materials and workmanship used in this installation are as herein specified and shall provide all material and labor required to make good any defects due to faulty materials or workmanship which become apparent within a one-year period from substantial completion.
3. The equipment and materials manufacturers are expected to recognize that they are responsible for the failure of their products to perform in accordance with data furnished by them or their authorized representatives, as well as misrepresentations of such data.
 - When the products have been installed in accordance to the manufacturer's published or written instructions and recommendations, and such products fail, then the Contractor and the manufacturers are responsible for replacement of the products and all associated work and materials without additional cost to the Owner.
4. Warranty information is required for all materials supplied by the Contractor.
5. Damage by vandals, fire, traffic accidents or "acts of God" is excluded from warranty

5 General Conditions

The following are required of General Contractors responding to this solicitation.

Bid Submission

Final responses are due via email by the date and time specified in Section 3.6 to the RFP point of contact. Finney County reserves the right to reject any bids that fail to meet this deadline.

Proposal Life

Respondents shall assert that their proposals are valid for 120 days post bid deadline. If the deadline is extended, proposals shall remain valid for 120 days post the extended deadline. This includes all equipment costs, labor costs, and other costs associated with the network construction.

Disclosure of Proprietary Records

Bidders may preserve proprietary rights as to confidential or business process information provided that: (i) Bidder shall inform Finney County upon submission of its Bid, in writing, that such records are going to be furnished, are proprietary and are not to be disclosed; and (ii) said records shall be sufficiently identified; and (iii) Bidder shall state the reasons why the information should be exempted from disclosure; and (iv) designation of said records as exempt from disclosure is reasonable and accepted by Finney County. Acceptance of the claimed materials does not constitute a determination on the exemption request, which determination will be made in accordance with statutory procedures.

Bonding Requirements

6 Response Format and Content

Cover Letter

Respondent(s) must submit a cover letter signed by an authorized representative with power to legally bind the respondent. The cover letter must include the following:

- The number of years the entity has been in business.
- An overview of the experience and background of the entity and its key personnel.
- Identify the legal name of the entity, its headquarters address, its principal place of business, and its legal form (i.e. corporation, joint venture, limited partnership, etc.).
- Identify the name, address, and telephone number(s) of the principal contact for all communications pertaining to the RFP.

Executive Summary

Respondents shall provide an executive summary, that explains the respondent's understanding of the Finney County's objectives. This summary should discuss the respondent's approach to implementing their solution, their approach to project management, strategies, tools, and safeguards for ensuring performance of all required services.

Respondents should include any additional factors they wish considered in the summary.

Professional Qualifications and Experience

The Respondent shall provide a detailed description of its experience building fiber optic networks and working on projects funded by government grants. The Respondent shall provide names and resumes of key personnel to be involved in the project. Respondent shall also provide required certifications of on staff RCDD and Technician overseeing installation.

Past Performance

The Respondent shall list relevant past performance building fiber optic networks. In their description of past performance, the respondent shall list:

- Description of the technology employed
- The number of premises served
- Description of the physical environment (urban, rural)
- Dates of performance
- Project size (in cost)
- Customer contact information (name, title, phone, email, physical address)

References

Respondent shall provide at least three references for similar projects completed within the last five years. Similar projects include construction of municipal-scale fiber networks, projects involving Federal grants, or both.

Timeline for Completing Work

The Respondent shall discuss its proposed timeline and how it will meet the deadlines cited in this RFP. Specifically, construction should be performed and completed by **12/30/20 with no exceptions**.

Capital Cost Proposal

The bidder shall use the attached spreadsheet for providing their capital cost proposal for building the network in compliance with the specification outlined in Appendix A. All bids shall be either not-to-exceed or flatfee.

In addition, bidders shall demonstrate that they have access to all materials required in order to complete the project within the project schedule.

7 Fiber Testing

Finney County requires OTDR or OLTS testing that verifies an end-to-end signal on the network that meets future performance requirements.

Required Equipment

Equipment required for testing will consist of OTDR utilizing launch and landing cables or OLTS, utilizing certified test leads

Contractor test equipment will be within manufactures required re-calibration period, usually one years' time.

Acceptance Test

The following tests shall be performed as part of the Acceptance Test:

Optical Time Domain Reflectometer Tests (OTDR) Continuity Uniformity Tests:

Each fiber shall be tested end-to-end, bi-directionally at 1310 nm and 1550 nm using an OTDR. The test will include fiber loss, splice loss, and connector loss. Test results are to be saved and provided to client electronically for review.

Splices within spec (bi-directional average of $\leq 0.15\text{dB}$ per splice and $\leq 0.08\text{dB}$ average for the entire span) or documented on the out of spec splice form with appropriate OTDR Re-burn traces.

Fiber connectors shall meet fiber loss requirements no greater than .3 db loss per connector, measured with a 1km pulse suppression box. If connectors do not meet these standards and new

connector shall be installed.

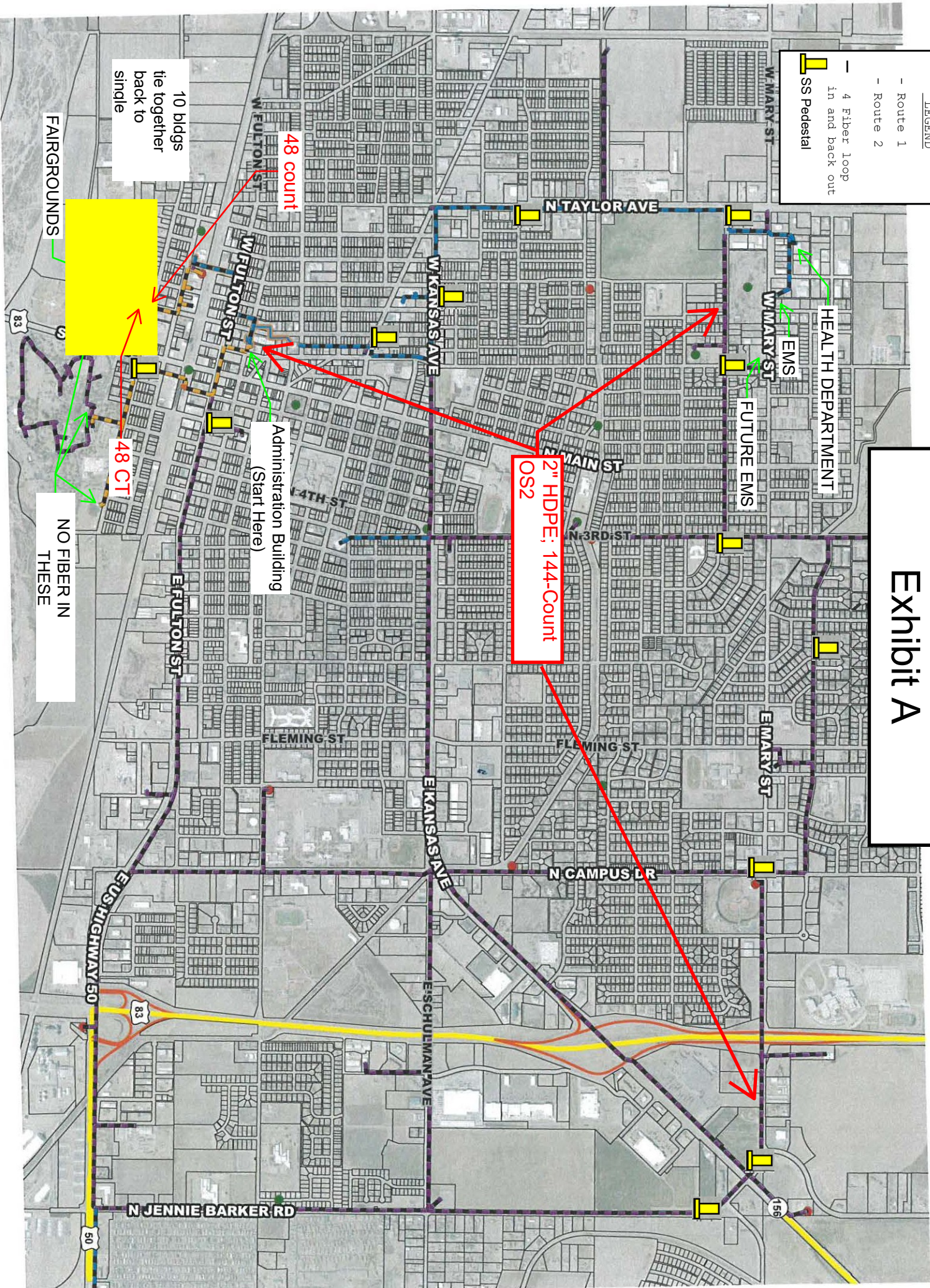
All connectors shall be fiber scoped and screen shot to prove that connector passed software test. Results will be labeled, saved and provided to client electronically

Optical Length and Loss:

The OTDR will be used to determine the end-to-end optical length and loss of the cable. True span loss is not to exceed 0.35 dB/km.

Exhibit A

- LEGEND**
- Route 1
 - Route 2
 - 4 Fiber loop in and back out
 - SS Pedestal



2" HDPE; 144-Count OS2

48 count

10 bldgs tie together back to single

Administration Building (Start Here)

48 CT

NO FIBER IN THESE

FAIRGROUNDS

HEALTH DEPARTMENT

EMS

FUTURE EMS

Exhibit B

