LEAVENWORTH COUNTY Information Systems Department

CONTRACT DOCUMENTS

Fiber Optic Network Upgrades

RFP DATE: 4/22/2022

300 Walnut Street, Suite 021 Leavenworth, KS 66048 Tel: 913-684-0788

TABLE OF CONTENTS

| Notice to Bidders | NB-1 - NB6 |
|-----------------------------------|-------------|
| Bid Form | BF-1 - BF-4 |
| Bid Bond | BB-1- BB-2 |
| Notice of Award | NA-1- NA2 |
| Notice to Proceed | NP-1 |
| Release | RE-1 |
| Affidavit | AF-1 |
| Contract | CA-1 - CA-3 |
| Performance Bond | PB-1 - PB-2 |
| Payment Bond | PA-1 - PA-3 |
| Statutory Bond | SB-1 - SB-2 |
| Maintenance Bond | MB-1 - MB-2 |
| Contractual Provisions Attachment | CP-1 - CP-6 |
| Technical Specifications | TS - 1 |

NOTICE TO BIDDERS

SEALED BIDS will be received by **Leavenworth County Kansas**

(Herein called the OWNER), at: Leavenworth County Kansas

300 Walnut Street, Suite 106 Leavenworth, KS 66048

until 10:00 am on 05/26/2022. Said bids will be publicly opened and read aloud.

Each BID must be submitted in a sealed envelope, addressed to: Leavenworth County Clerk's Office, 300 Walnut Street, Suite 106, Leavenworth, KS 66048

Each sealed envelope containing a BID must be plainly marked on the outside as:

"BID FOR: Leavenworth County Project: Fiber Optic Network Upgrades"

and the envelope should bear on the outside the name of the BIDDER, his address, his license number if applicable and the name of the project for which the BID is submitted. If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to the OWNER at <u>Leavenworth County Clerk's Office</u>, 300 Walnut Street, Suite 106, <u>Leavenworth</u>, KS 66048

All BIDS must be made on the required BID Form. All blank spaces for BID prices must be filled in, in ink or typewritten, and the BID Form must be fully completed and executed when submitted. Only one copy of the BID Form is required.

Copies of plans and specifications can be seen or purchased for a Non-Refundable fee on-line at www.drexeltech.com in their eDistribution plan room, additional assistance is available at distribution@drexeltech.com. Information regarding this project can be found in the "Public Jobs" link on the website. Contractors desiring the Contract Documents for use in preparing bids may also obtain a set of such documents from Drexel Technologies; 10840 West 86th Street, Lenexa, KS 66214, telephone number is 913-371-4430. Bidding documents will be shipped only if the requesting party assumes responsibility for all related charges. Corporate, certified, or cashier's checks shall be made payable to Drexel Technologies, Inc.

CONTRACTORS SHOULD READ AND BE FULLY FAMILIAR WITH ALL CONTRACT DOCUMENTS BEFORE SUMBITTING A BID. IN SUBMITTING A BID, THE BIDDER WARRANTS THAT IT HAS READ THE CONTRACT DOCUMENTS AND IS FULLY FAMILIAR THEREWITH AND THAT IT HAS VISITED THE SITE OF THE WORK TO FULLY INFORM ITSELF AS TO ALL THE EXISTING CONDITIONS AND LIMITATIONS AND SHALL INCLUDE IN ITS BID A SUM TO COVER COSTS OF ALL THE ITEMS OF THE WORK.

All bidders shall verify that they have considered all written addenda. Neither the County nor the Consulting Engineer shall be responsible for oral instructions.

Any written addenda issued during the time of bidding shall be covered and included in the Bid. There will be no clarifications or exceptions allowed on the Bid. Bids are for a total bid package, total contract price.

Bids shall be made upon the form provided in ink or typewritten. Numbers shall be stated both in writing and in figures; the signature shall be long hand; and the complete form shall be without alteration or erasure. On alternate items for which a bid is not submitted, a written indication of "no bid" on the bid form is required.

No oral, emailed, facsimile or telephone bids or alterations will be considered.

The following items must be included in the sealed envelope with the bid:

- a. Bid
- b. 5% Bid Security- Bid Bond, Cashier's Check or Certified Check (see below)

Each bidder shall file with its bid a bid bond, a cashier' check or a certified check drawn on any acceptable bank, made payable to Leavenworth County, Kansas, in the amount if not less than five percent (5%) of the total bid, which shall be retained by Leavenworth County until a Contract for the project has been executed. Bid bonds will be returned to the unsuccessful bidders, with the exception of the second qualifying bidder, at such timed as their bids are rejected. The bid deposit of the successful bidder and the second qualifying bidder will be returned when satisfactory bonds in the amount equal to 100% of the Contract amount, required insurance certificates, and other required documents shall have been furnished and the Contract Documents have been executed.

In the event the successful bidder is unable to execute the Contract for whatever reason, the County may exercise its legal prerogatives, including, but not limited to, enforcement of its rights as to the bid security.

The County reserves the right to accept or reject any and all bids and to waive any technicalities or irregularities therein. Bids may be modified or withdrawn by written request of the bidder, received in the Leavenworth County Purchasing Office, prior to the time and date for bid opening; provided, however, that no bidder may withdraw its bid for a period of thirty (30) days from the date set for the opening thereof.

ALL BIDDERS AGREE THAT REJECTION SHALL CREATE NO LIABILITY ON THE PART OF THE COUNTY BECAUSE OF SUCH REJECTION, AND THE FILING OF ANY BID IN RESPONSE TO THIS INVITATION OF THE BIDDER TO THIS SHALL CONSTITUTE AN AGREEMENT OF THE BIDDER TO THESE CONDITIONS

The OWNER may waive any informalities or minor defects or reject any and all BIDS. Any BID may be withdrawn prior to the above scheduled time for opening of BIDS or authorized postponement thereof. Any BID received after the time and date specified shall not be considered.

No BIDDER may withdraw a BID within 30 days after the actual date of the opening thereof should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual AGREEMENT between the OWNER and the BIDDER.

BIDDERS must satisfy themselves of the accuracy of the estimated quantities in the BID Form by examination of the site and a review of the drawings and specifications including ADDENDA. After BIDS have been submitted, the BIDDER shall not assert that there was a misunderstanding concerning the quantities of WORK or of the nature of the WORK to be done.

The OWNER shall provide to BIDDERS prior to BIDDING, all information which is pertinent to, and delineates and describes, the land owned and right-of-way acquired or to be acquired.

The CONTRACT DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the OWNER or any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve him from fulfilling any of the conditions of the contract.

Each BID must be accompanied by a BID BOND payable to the OWNER for <u>five percent</u> of the total amount of the BID. As soon as the BID prices have been compared, the OWNER will return the BONDS of all except the three lowest responsible BIDDERS. When the Agreement is executed the bonds of the two remaining unsuccessful BIDDERS will be returned. The BID BOND of the successful BIDDER will be retained until the payment BOND and PERFORMANCE BOND have been executed and approved, after which it will be returned. A certified check may be used in lieu of a BID BOND.

A PERFORMANCE BOND and a PAYMENT BOND, each in the amount of 100 percent of the CONTRACT PRICE, with a corporate surety approved by the OWNER, will be required for the faithful performance of the contract.

Attorneys-in-fact who sign PAYMENT BONDS and PERFORMANCE BONDS must file with each BOND a certified and effective dated copy of their power of attorney.

The party to whom the contract is awarded will be required to execute the AGREEMENT and obtain the PERFORMANCE BOND and PAYMENT BOND within ten (10) calendar days from the date when NOTICE OF AWARD is delivered to the BIDDER. The NOTICE OF AWARD shall be accompanied by the necessary AGREEMENT and BOND forms. In case of failure of the BIDDER to execute the AGREEMENT, the OWNER may at his option consider the BIDDER in default, in which case the BID BOND accompanying the proposal shall become the property of the OWNER.

The OWNER within ten (10) days of receipt of the acceptable PERFORMANCE BOND, PAYMENT BOND and AGREEMENT signed by the party to whom the AGREEMENT was awarded shall sign the AGREEMENT and return to such party an executed duplicate of the AGREEMENT. Should the OWNER not execute the AGREEMENT within such period, the BIDDER may by WRITIEN NOTICE withdraw his signed AGREEMENT. Such notice of withdrawal shall be effective upon receipt of the notice by the OWNER.

The NOTICE TO PROCEED shall be issued within ten (10) days of the execution of the AGREEMENT by the OWNER. Should there be reasons why the NOTICE TO PROCEED cannot be issued within such period, the time may be extended by mutual AGREEMENT between the OWNER and CONTRACTOR. If the NOTICE TO PROCEED has not been issued within the ten (10) day period or within the period mutually agreed upon, the CONTRACTOR may terminate the AGREEMENT without further liability on the part of either party.

The OWNER may make such investigations as he deems necessary to determine the ability of the BIDDER to perform the WORK, and the BIDDER shall furnish to the OWNER all such information and data for this purpose as the OWNER may request. The OWNER reserves the right to reject any BID if the evidence submitted by, or investigation of, such BIDDER fails to satisfy the OWNER that such BIDDER is properly qualified to carry out the obligations of the AGREEMENT and to complete the WORK contemplated therein.

A conditional or qualified BID will not be accepted. Award will be made to the lowest responsible BIDDER.

Unbalanced proposals in which the prices for some items are out of proportion to the prices of other items will be considered sufficient for disqualification of BIDDER and the rejection of his proposal.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the PROJECT shall apply to the contract throughout.

Each BIDDER is responsible for inspecting the site and for reading and being thoroughly familiar with the CONTRACT DOCUMENTS. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to his BID.

BASIS OF PAYMENT

- 1. General: Payment for work performed by the Contractor under these Contract Documents will be made at the unit price as shown in the Bid and measured as hereinafter specified. Such payment shall compensate the Contractor for all costs in connection with furnishing all labor, equipment, and material required and performing the operations necessary to complete the several items in accordance with the Drawings and other Contract Documents. All incidental work essential to the completion of the Project in a workmanlike manner, including cleanup and disposal of waste or surplus material, shall be accomplished by the Contractor without additional cost to the Owner.
- 2. <u>Sales Tax Exemption</u>: Materials and equipment incorporated into this Project are exempt from payment of sales tax under the laws of the State of Kansas.
 - a. <u>Exemption Certificate:</u> The Owner will provide the Contractor with a proper exemption certificate number within ten (10) days after the Contract date. The Contractor is not authorized to order any materials before the proper exemption certificate number is issued by the Department of Revenue, State of Kansas. If the Contractor becomes liable for any sales tax hereunder, the Owner assumes no liability therefore.
 - b <u>Use:</u> Upon issuance of a proper exemption certificate number to the Contractor, he shall resume full responsibility for his own proper use of the number and shall pay all costs of any legally assessed penalties relating to his improper use of the exemption certificate number.

- c. <u>Release</u>: Upon completion of the Project, the Contractor shall submit a "Sales Tax Exemption Project Completion Certificate" upon a form provided by the Engineer. Such Certificate must be filed with the Engineer in conjunction with submitting the Final Estimate for payment. Final Estimates shall not be paid until such Certificate has been completed and filed as provided herein.
- 3. <u>Unit Designations</u>: The designations for method of measurement of the various items of construction used in this Project, and as set forth in the Bid, shall be as follows:

| AC | Designates measurement as | | Acres | |
|----------|---------------------------|---|-------|----------------|
| BF | " | " | " | Board Feet |
| CF | 66 | " | " | Cubic Feet |
| Cu. Yd. | " | " | " | Cubic Yards |
| Pc | " | " | " | Each or Pieces |
| Gal | " | " | " | Gallons |
| LS | 66 | " | " | Lump Sum |
| Lbs. | " | " | " | Pounds |
| Lin. Ft. | " | " | " | Lineal Foot |
| SF | " | " | " | Square Foot |
| Sq. Yd. | " | " | " | Square Yard |

Further, the BIDDER agrees to abide by the requirements under Executive Order No.11246, as amended, including specifically the provisions of the equal opportunity clause set forth in the CONTRACTUAL PROVISIONS ATTACHMENT.

The low Bidder shall supply the names and addresses of major material SUPPLIERS and SUBCONTRACTORS when requested to do so by the OWNER.

The ENGINEER is: Olsson, Inc.

7301 W 133rd Street

Overland Park, KS 66213

PRE-BID MEETING

A non-mandatory pre-bid meeting will be held on <u>05/05/2022 at 1:00 p.m</u>. at the Leavenworth County Courthouse, 300 Walnut Street, Leavenworth, KS, in the conference room located in the basement of the courthouse, west wing.

BID DELIVERY

Bids may be delivered in hand to the County Courthouse or submitted by postal service.

BID OPENING

Bids will be opened <u>05/26/2022 at 10:00 a.m.</u> in the County's Clerk's Office at 300 Walnut Street, Leavenworth, KS.

BID FORM

| Project Name: Fiber Optic Network Upgrades |
|--|
| |
| Name of BIDDER: |
| |
| Contact Personnel: |
| Contact 1 discinion. |
| Address of BIDDER |

TO: The County of Leavenworth, KS

The undersigned, as bidder, declares that he has visited the site of the Work and determined the amount and character of the proposed Work, and is familiar with all the requirements of the Specifications and Plans.

The undersigned proposes and agrees, if this proposal is accepted, to furnish all labor, materials, tools, equipment, supplies and machinery of every description necessary for the proper construction and completion of the Work contemplated in the documents of the Contract in the manner therein specified for the following unit prices and lump sums.

The undersigned agrees, if this proposal is accepted, to fully complete the Work by $\underline{12/31/2022}$, otherwise to be governed by the stipulations of the accompanying articles of the Contract. The work shall commence with the following timeframe:

Earliest Start Date: <u>07/1/2022</u>
Latest Start Date: <u>08/31/2022</u>

Liquidated damages shall be assessed against Contractor, at a rate of <u>\$ 500.00/day</u> for each and every calendar day the work remains incomplete over the specified completion time.

It is understood and agreed that if this proposal is accepted, the prices quoted include all applicable state sales taxes and use taxes, and that said taxes shall be paid by the Contractor.

The undersigned, as Bidder, hereby declares that the only persons or firms interested in the proposal as principal or principals is or are named herein and that no other persons or firms than herein mentioned have any interest in this proposal or in the Contract to be entered into; and this proposal is made without connection with any other person, company or parties making a bid or proposal; and that it is in all respects fair and in good faith, without collusion or fraud.

BID FORM (CONT'D) <u>ITEMIZED PROPOSAL</u> Project Name: <u>Fiber Optic Network Upgrades</u> Leavenworth County, Kansas

| | TOTAL QUANTITIES | | |
|------|---|----------|-------------|
| ITEM | ITEM DESCRIPTION | UNITS | QUANTITY |
| 1. | ROD & PROOF EXISTING DUCT | LF | 537 |
| 2. | SUPPLY & INSTALL 1-2" HDPE DUCT | LF | 26182 |
| 3. | SUPPLY & INSTALL 2" RIGID STEEL ON A STRUCTURE | LF | 179 |
| 4. | SUPPLY & INSTALL TRACER WIRE | LF | 26182 |
| 5. | SUPPLY & INSTALL 24"X36"X36" HANDHOLE | EACH | 37 |
| 6. | SUPPLY & INSTALL 30"X48"X36" HANDHOLE | EACH | 1 |
| 7. | SUPPLY & INSTALL UNDERGROUND SPLICE ENCLOSURE | EACH | 8 |
| 8. | PROPOSED FUSION SPLICES | EACH | 212 |
| 9. | INSTALL 48CT ARMORED FIBER OPTIC CABLE - UNDERGROUND | LF | 30202 |
| 10. | BORE PROPOSED CONDUIT | LF | 26182 |
| 11. | SUPPLY & INSTALL 2" EMT CONDUIT | LF | 12 |
| 12. | SUPPPLY & INSTALL 1" PLENUM RATED INNERDUCT | LF | 595 |
| 13. | SUPPLY & INSTALL FIBER DISTRIBUTION PANEL | EACH | 4 |
| 14. | SUPPLY & INSTALL LB | EACH | 2 |
| 15. | PROPOSED WALLCORE | EACH | 2 |
| 16. | INSTALL 48CT INDOOR/OUTDOOR RATED FIBER OPTIC CABLE - UNDERGROUND | LF | 2547 |
| *17. | TRAFFIC PERMIT | AGENCIES | 1 |
| *18. | RIGHT OF WAY PERMIT | AGENCIES | 3 |
| 19. | TEMPORARY TRAFFIC CONTROL | EACH | 1 |
| 20 | FORCE ACCOUNT | COST | \$75,000.00 |

^{*} CITY, COUNTY, AND STATE.

| Total Bid in Words | Total Bid in Figures |
|---------------------------------------|----------------------|
| Bidder's Signature | Date |
| The undersigned as a bidder declares: | |
| | |

BID FORM (CONT'D)

The undersigned agrees that the accompanying bid deposit shall become the property of the Owner, should he fail or refuse to execute the Contract or furnish Bond as called for in the Specifications within the time provided.

If written notice of the acceptance of this bid is mailed, emailed, facsimiled or delivered to the undersigned within thirty (30) days after the date of opening of the bids, or any time thereafter before this bid is withdrawn, the undersigned will, within ten (10) days after the date of such mailing, emailing, facsimiled or delivery of such notice, execute and deliver a Contract in the form of Contract attached.

| The undersigned her emailed, facsimiled | reby designates as his office to which such notice or delivered: | of acceptance may be mailed, |
|---|--|---------------------------------|
| | reed that this bid may be withdrawn at any time por any authorized postponement thereof. | orior to the scheduled time for |
| Attached hereto is a | Bid Bond for the sum of | |
| Certified Ch | eck | |
| | | (\$ |
| Dollars made payab | le to: Leavenworth County, Kansas | |
| ADDENDUM REC | CIEPT | |
| Addendum No | , Date , Date, Date | |
| Signature of Bidder | : | |
| If and Individual: | | , doing |
| | Business as | |
| If a Partnership: | | |
| | By | , member of firm |
| If a corporation: | | |
| | _ | |

BID FORM (CONT'D)

| , | Title | | |
|------------------------|-------|------------------------|--------------|
| | | | |
| | | State in which incorpo | orated |
| Corporation President: | | | |
| | | Name and business ad | ldress |
| | | | |
| Corporation Secretary: | | | |
| Corporation Secretary: | | Name and business ad | ldress |
| | | | |
| | | | |
| Date: | | _ | |
| Address: | | | |
| | | | - |
| | | | - |
| | | | |

BID BOND

| KNOW MEN BY THESE PRESENTS, that we, the undersigned, | |
|---|----------------------------------|
| | as Principal, and |
| held and firmly bound unto Leavenworth County, Kansas, as OWNER | _ as Surety, are hereby |
| in a penal sum of for the payment of which, well and truly to be made, we hereby jointly and | l severally bind |
| ourselves, successors and assigns. Signed this day of, 20 | |
| The Condition of the above obligation is such that whereas the Principal ha | as submitted to |
| attached hereto and hereby made a part hereof to enter into a contract in w | _ a certain BID, rriting for the |
| PROJECT: Fiber Optic Network Upgrade | |
| NOW, THEREFORE, | |

- a. If said BID shall be rejected, or
- b. If said BID shall be accepted and the principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said BID) and shall furnish a BOND for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulated and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by an extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

BID BOND (Continued)

| IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, |
|---|
| and such of the then as are corporations have caused their corporate seals to be hereto affixed |
| and these presents to be signed by their proper officers, the day and year first set forth above. |
| |
| |
| |

| | Principal |
|-----|-----------|
| | |
| | |
| | |
| | |
| | Surety |
| | |
| By: | |
| • | · |

IMPORTANT- Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

NOTICE OF AWARD

| DATED: |
|---|
| TO:Bidder) ADDRESS: |
| PROJECT: Fiber Optic Network Upgrades |
| You are notified that your Bid datedfor the above Contract has been considered. You are the apparent successful bidder and have been awarded a contract for |
| Fiber Optic Network Upgrades (Indicate total Work, alternates or sections of Work awarded) |
| The Contract Price of your contract is as follows: |
| Base Bid: |
| Three (3) copies of each of the proposed Contract Documents (except Drawings) accompany this Notice of Award. |

You must comply with the following conditions precedent within twelve days of the date of this Notice of Award that is by:

- 1. You must deliver to the OWNER three (3) fully executed counterparts of the Agreement. You must deliver with the executed Agreement the required Bonds and Certificate(s) of Insurance as specified in the Insurance Requirements included in the Contract Documents.
- 2. (List other conditions precedent).
 - A) Initial all pages of the Bid Form since they are copies.
 - B) Sign page CA-3 of the Contract Agreement.
 - C) Complete the Performance Bond.
 - D) Complete the Statutory Bond.
 - E) Complete the Maintenance Bond.
 - F) Complete the Payment Bond.
 - G) Provide Insurance Certificates as outlined in the Insurance Requirements.
 - H) Sign the appropriate line of the Notice of Award.

Failure to comply with these conditions within the time specified will entitle OWNER to consider your Bid abandoned, to annul this Notice of Award and to declare your Bid Security forfeited.

Within ten days after you comply with those conditions, OWNER will return to you one fully signed counterpart of the Agreement with the Contract Documents attached.

| Leavenworth County, Kansas |
|--|
| (OWNER) |
| |
| By: |
| Mike Smith, Chairman, Fourth District Commissioner |
| Commissioner |
| |
| |
| |
| ACCEPTANCE OF AWARD |
| |
| |
| (CONTRACTOR) |
| |
| By:(AUTHORIZED SIGNATURE) |
| (AUTHORIZED SIGNATURE) |
| |
| - |
| (TITLE) |
| |
| (D. ATTE) |
| (DATE) |

NOTICE TO PROCEED

| DATED: |
|--|
| TO:(Contractor) |
| ADDRESS: |
| PROJECT: Fiber Optic Network Upgrades |
| You are notified that the Contract Time under the above contract will commence to run on [DATE TBD]. By that date, you are to start performing your obligations under the Contract Documents. In accordance with Article 3 of the Agreement the dates of Substantial Completion and Final Completion are: |
| Final Completion: |
| Before you may start Work at the site, Insurance Requirements included in the Contract Documents provides that you must deliver certificates of insurance which you are required to purchase and maintain in accordance with the Contract Documents. |
| Also before you may start any Work at the site, you must (add other requirements) |
| Complete all forms within the contract documents. |
| |
| Leavenworth County, Kansas (OWNER) |
| By: Larry Malbrough |
| Director, Information Systems |

RELEASE

The following release is to be executed by the Contractor after final payment is made by the Owner for work described in the accompanying contract:

| State of: () | | |
|--|-----------------------------|---|
| State of: () : SS County of: () | | |
| County of: () | | |
| WHEREAS,, 20 enter into a written contract w | , Contractor, did | don theday of |
| , 20 enter into a written contract w | with Leavenworth Cou | nty Kansas, Owner, for the |
| performance of the following work: Fiber O | ptic Network Upgrade | S |
| WHEREAS, on thisday of_ | | , final |
| WHEREAS, on thisday of_payment in the amount of \$ | has bee | n made by |
| , Owner, under said Contract. | | |
| NOW THEREFORE, in consideration of said is hereby acknowledged, the said hereby release, Leavenworth County, Kans whatever kind of nature arising under or out of | sas Owner, from any fo | e stated, the receipt of which, Contractor, does arther claims or liabilities o |
| Contractor | | Position |
| By | | |
| | | Address |
| Subscribed and sworn before methis | day of | 20 |
| | | Seal |
| Notary Public | | |

AFFIDAVIT

The following is to be executed by the Contractor after the completion of all work and prior to final

payment for work described in the accompanying contract: State of: (______) County of: (_____ I, _____ of lawful age, being first duly sworn on oath, deposes and states that his is _____ of ___ Contractor, which company did on the ____ day of Enter into written contract with Leavenworth County, Kansas, owner For the performance of the following work PROJECT: Fiber Optic Network Upgrades Affiant further states that all work to be performed by the above-named Contractor under said contract has been fully paid. Affiant further states that he makes this affidavit for the purpose of enabling the Owner to make final payment to _____ under the terms of said contract. Contractor By:_____ Position Address Subscribed and sworn before methis day of 20 Seal Notary Public

AGREEMENT BETWEEN Leavenworth County, Kansas and Contractor

For

| WITNESSET | TI. | | | |
|----------------|--|----------------------|--------------|-------|
| | | , hereinafter the "C | Contractor"; | |
| by and between | en Leavenworth County, Kansas, hereina | • | | |
| THIS AGREE | EMENT is made and entered into this | day of | | 2022, |
| PROJECT: | Fiber Optic Network Upgrade | | | |

WITNESSETH:

WHEREAS, the County has caused to be prepared, in accordance with the law, Notice to Bidders, Instructions to Bidders, Bid, this Agreement, General and Special Conditions, Plans, Specifications and other Contract Documents, as defined in the General Conditions, for the work herein described, and has approved and adopted these said Contract Documents and has caused to be published, in the manner and for the time required by law, an advertisement inviting sealed Bids for furnishing construction materials, labor, tools, equipment and transportation necessary for, and in connection with, the construction of public improvements in accordance with the terms of this Agreement; and

WHEREAS, the Contractor, in response to the Notice to Bidders, has submitted to the County, in the manner and at the time specified, a sealed Bid in accordance with the terms of this Agreement; and

WHEREAS, the County, in the manner prescribed by law, has publicly opened, examined and canvassed the Bids submitted, and as a result of this canvass has, in accordance with the law, determined and declared the Contractor to be the lowest and best responsible bidder for the construction of the public improvements, and has duly awarded to the Contractor a contract therefor upon the terms and conditions set forth in this Agreement and for the sum or sums named in the Bid attached to and made a part of this Agreement.

NOW, THEREFORE, in consideration of the compensation to be paid the Contractor, and of the mutual agreements herein contained, the parties hereto have agreed, and hereby agree, the County for itself and its successors, and the Contractor for itself, himself/herself or themselves, its, his/her or their successors and assigns, or its, his/her or their executors and administrators, as follows:

ARTICLE I. The Contractor will furnish at its own cost and expense all labor, tools, equipment, materials and transportation required to construct and complete the work as designated, described and required by the Contract Documents, to wit:

Fiber Optic Network Upgrades, all in accordance with the Notice to Bidders, Instructions to Bidders, Bid, this Agreement, General, Supplementary and Special Conditions, Plans, Specifications and other Contract Documents as defined in Article 1 of the General Conditions of the Contract for Construction, on file with Leavenworth County, Kansas, all of which Contract Documents form the Contract, and are as fully a part hereof as if repeated verbatim herein; all work to be done in a good, substantial and workmanlike manner to the entire satisfaction of the County, and in accordance with the laws of the State of Kansas and the United States of America. All terms used herein shall have the meanings ascribed to them in the General Conditions unless otherwise specified.

ARTICLE II. The County shall pay to the Contractor for the performance of the work embraced in this Contract, and the Contractor will accept in full compensation therefor, the sum of

| DOLLARS (\$ |) | |
|-------------|---|--|
|-------------|---|--|

(subject to adjustment as provided by the Contract Documents) for all work covered by and included in the Contract award and designated in the foregoing Article I, payment thereof to be made in cash or its equivalent and in the manner provided in the Contract Documents.

ARTICLE III. The Contractor shall commence work upon the date stated in the Notice to Proceed, and will be complete with all work covered by this Contract and be ready for final payment **[DATE TBD]**. Time is of the essence. Accordingly, liquidated damages shall be assessed against Contractor, at a rate of \$500.00/day for each and every calendar day the work remains incomplete over the specified completion date.

ARTICLE IV. The Contractor shall not subcontract, sell, transfer, assign or otherwise dispose of the Contract or any portion thereof without previous written consent of the County. In case such consent is given, the Contractor shall be permitted to subcontract a portion thereof, but shall self perform not less than forty percent (40%) of the total Contract Price based upon the unit prices within the Bid submitted to the County by the Contractor. No subcontracts, or other transfer of Contract, shall release the Contractor of its liability under the Contract and Bonds applicable thereto.

ARTICLE V. Contractor specifically acknowledges and confirms that:

- 1.) it has visited the site, made all inspections it deems appropriate and has read and fully understands the Contract Documents, including all obligations and responsibilities undertaken by it as specified herein and in the other Contract Documents and knowingly accepts same;
- 2.) it has furnished copies of all Contract Documents to its insurance carrier(s) and its surety(ies); and
- 3.) its insurance carrier(s) and surety(ies) agree to be bound as specified herein, in the Contract Documents and in the insurance policy(ies) and bonds as to liability and surety coverage.

ARTICLE VI. It is specifically agreed between the parties executing this Agreement that the Contract Documents are not intended to create any third party beneficiary relationship nor to authorize anyone not a party to this Agreement to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this Agreement. The duties, obligations and responsibilities of the parties to this Agreement with respect to third parties shall remain as imposed by law.

ARTICLE VII. This Agreement, together with the other Contract Documents, constitutes the entire agreement between the parties and supersedes all prior agreements, whether oral or written, covering the same subject matter. This Agreement may not be modified or amended except as provided herein or in the other Contract Documents.

ARTICLE VIII. This Agreement is entered into, under and pursuant to, and is to be construed and enforceable in accordance with, the laws of the State of Kansas.

ARTICLE IX. Should any provision of this Agreement or the other Contract Documents be determined to be void, invalid, unenforceable or illegal for whatever reason, such provision(s) shall be null and void; provided, however, that the remaining provisions of this Agreement and/or the other Contract Documents shall be unaffected thereby and shall continue to be valid and enforceable.

IN WITNESS WHEREOF, Leavenworth County, Kansas, has caused this Agreement to be executed on its behalf, thereunto duly authorized, and the said Contractor has executed <u>Three (3)</u> counterparts of this Contract in the prescribed form and manner, the day and year first above written.

| ATTEST: | Leavenworth County, Kansas | | |
|-------------------------------|--|--|--|
| | By: | | |
| Janet Klasinski, County Clerk | Mike Smith, Fourth District and Chairman | | |
| ATTEST: | Contractor: | | |
| | By: | | |
| Title: | | | |
| | CORPORATE SEAL | | |

If Contractor is not an individual, authority for signing contract must be shown or attached.

PERFORMANCE BOND

| undersigned, |
|---|
| _as principal, hereinafter referred to as |
| |
| and authorized to |
| and firmly bound unto Leavenworth |
| n of: |
| Dollars, |
| of America, for the payment of which |
| neirs, executors, administrators, nts: |
| N IS SUCH THAT: |
| day of, |
| Owner for furnishing in a good, |
| , materials, equipment, tools, |
| ssories for Fiber Optic Network |
| ent and the Contract Documents, and in |
| tract Documents therefor; a copy of |
| of; |
| |

NOW, THEREFORE, if said Contractor shall in all particulars promptly and faithfully perform each and every covenant, condition, and part of the Agreement, and the Conditions, Specifications, Plans and other Contract Documents thereto attached or by reference made a part thereof, according to the true intent and meaning in each case, and the improvements shall be constructed so as to endure without defect and need of repair for a period of two years from the date of final payment, then this obligation shall be and become null and void; otherwise it shall remain in full force and effect.

PROVIDED, that said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Agreement or the work to be performed thereunder or the Specifications, Plans and other Contract Documents accompanying same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Agreement or to the work or to the Specifications, Plans and other Contract Documents.

PROVIDED, FURTHER, that it is expressly agreed that the bond shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Agreement not increasing the contract price more than 50 percent, so as to bind the Contractor and the Surety to the full and faithful performance of the Agreement so amended. The term "amendment," wherever used in this bond, and whether referring to this bond or the Agreement, shall include any alteration, addition, extension, or modification of any character whatsoever. Whenever Contractor is declared by Owner to be in default under the Contract, the Owner having performed Owner's obligations thereunder, the surety may promptly remedy the default or shall within fourteen (14) days from the date of notice from the Owner:

1. Commence completing the Agreement in accordance with its terms and conditions; or

2. Commence the process of obtaining a bid or bids for completing the Agreement in accordance with its terms and conditions, and upon determination by the Owner and the surety jointly of the lowest and best responsive, responsible bidder, arrange for an Agreement between such bidder and the Owner, and make available as work progresses sufficient funds to pay the cost of completion less the balance of the Contract Price, including other costs and damages for which the surety maybe liable hereunder, which sum shall not exceed the amount set forth in the first paragraph hereof. The term "balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by Owner to Contractor under the Agreement and any amendments thereto, less the amount properly paid by Owner to Contractor. No right of action shall accrue on this bond to or for the use of any person or corporation other than the Owner or successors of the Owner.

| , | on this, the | day of | , 20 |
|---------|--------------|---------------------|-----------|
| • | | | |
| | | Contractor/Principa | al |
| ATTEST: | Е | У | (SEAL) |
| Sec | retary | | Title |
| | | Surety | y Company |
| | Е | yAttori | (SEAL) |
| | r | dy_ | |

NOTE:

- 1. Date of bond must not be prior to date of contract.
- 2. If Contractor is partnership, all partners should execute bond.
- 3. Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state of Kansas.
- 4. Accompany this bond with Attorney-in-Fact's Authority from the surety company certified to include the date of the bond.

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS: That

(Name of Contractor) (Address of Contractor) hereinafter called PRINCIPAL, and (Corporation, Partnership or Individual) (Name of Surety) (Address of Surety) hereinafter called SURETY, are held and firmly bound unto: Leavenworth County, Kansas hereinafter called "owner", and unto all persons, firms, and corporations or which may furnish labor, or who furnish materials to perform as described under the contract and to their successors and assigns in the total aggregate penal sum of Dollars. (\$) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents. THE CONDITION OF THIS OBLIGATION is such that whereas the PRINCIPAL entered into a certain contract with the Owner, dated the day of, a copy of which is hereto attached and made apart hereof for the construction of:

PROJECT: Fiber Optic Network Upgrades

NOW, THEREFORE, if the PRINCIPAL shall promptly make payment to all persons, firms, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extensions or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and for all labor cost incurred in such WORK including that by a SUBCONTRACTOR, and to any mechanic or materialman lienholder whether it acquires its lien by operation of State or Federal law; then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, that beneficiaries or claimants hereunder shall be limited to the SUBCONTRACTORS, and persons, firms and corporations having a direct contract with the PRINCIPAL or its SUBCONTRACTORS.

PROVIDED, FURTHER, that the said SURETY for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of this contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no suit or action shall be commenced hereunder by any claimant:

- (a) Unless claimant, other than one having a direct contract with the PRINCIPAL, shall have given written notice to any two of the following: The PRINCIPAL, the OWNER, or the SURETY above named within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail, or certified mail, postage prepaid, in an envelope addressed to the PRINCIPAL, OWNER, or SURETY, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer;
- (b) After the expiration of one (1) year following the date of which PRINCIPAL ceased work on said CONTRACT, it being understood, however, that if any limitation embodied in the BOND is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

PROVIDED, FURTHER, that it is expressly agreed that this BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto upon amendment to the CONTRACT not increasing the contract price more than 20 percent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term "Amendment", wherever used in this BOND and whether referring to this BOND or the CONTRACT, shall include any alteration, addition, extension or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

| WITNESS WHEREOF, this instrument is executed in <u>3 (Three)</u> counterparts, each (Number) | | |
|--|--------|------------------|
| of which shall be deemed an original, the | day of | , 20 . |
| ATTEST: | | |
| | | Principal |
| (Principal) Secretary | | |
| (SEAL) | Ву | (s) |
| | | (Address) |
| Witness as to Principal | | |
| (Address) | | |
| | | Surety |
| ATTEST: | | |
| Witness as to Surety Attorney-in-Fact | By | Attorney-in Fact |
| | | |
| (Address) | | (Address) |
| | | |

NOTE: Date of BOND must not be prior to date of Contract.

If CONTRACTOR is partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570) as amended) and be authorized to transact business in the State where the Project is located.

STATUTORY BOND

| KNOW ALL MEN BY THESE PRESENTS, that weas Contractor and principal, and <u>Leavenworth County, Kansas</u> . |
|---|
| a corporation organized under the laws of the State of and authorized to transact business in the State of Kansas, as surety, are held and firmly bound unto the State of Kansas, in the penal sum of Dollars (\$) lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, and our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents: |
| THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH THAT: |
| WHEREAS, the said Contractor has on the day of, 20, entered into an Agreement with Fiber Optic Network Upgrades, a copy of which is attached hereto and incorporated herein for furnishing all tools, equipment, materials, transportation and supplies, performing all labor, and constructing public improvements described in the Agreement and the Contract Documents, all in accordance with Specifications, Plans and other Contract Documents on file with Leavenworth County, Kansas. |
| NOW, THEREFORE, if the Contractor or the subcontractors of the Contractor shall pay all indebtedness incurred for supplies, materials, transportation or labor furnished, or equipment used or consumed in connection with or in or about the construction or making of the improvements described in the above-mentioned Contract Documents, then this obligation shall be void; otherwise, it shall remain in full force and effect. |

The said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Agreement and the Contract Documents to the work to be performed thereunder, or the Plans and Specifications accompanying the same, shall in anyway affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Agreement, Contract Documents or to the Plans and Specifications.

PROVIDED, that it is expressly agreed that this bond shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Agreement not increasing the contract price more than 50 percent, so as to bind the Contractor and the Surety to the full and faithful performance of the Agreement as so amended. The term "amendment," wherever used in this bond and whether referring to this bond or the Agreement shall include any alteration, addition, extension or modification of any character whatsoever.

The said Surety further agrees that any person to whom there is due any sum for labor furnished, transportation, materials, equipment or supplies used or consumed in connection with or in or about the construction of said public improvement, as hereinbefore stated or said person's assigns, may bring action on this bond for the recovery of said indebtedness within six (6) months from the completion of said public improvement.

IN TESTIMONY WHEREOF, the said Contractor has hereunto set his/her hand, and the said surety has caused these presents to be executed in its name, and its corporate seal to be hereunto affixed, by its attorney-in-fact

| duly authorized | thereunto so to do, at _ | | | | |
|-----------------|--------------------------|----|------|----------------------|--------|
| on this, the | day of | | , 20 | | |
| ATTEST: | | | | Contractor/Principal | |
| | Secretary | By | | | (SEAL) |
| | | | | Title | |
| | | | | Surety Company | |
| | | | Ву | | (SEAL) |
| | | | Ву | Attorney-in-Fact | |
| | | | Ву | Kansas Agent | |

NOTE:

- 1. A Statutory Bond is required only in connection with a Contract exceeding forty thousand dollars (\$40,000.00) in accordance with K.S.A. 60-1111 as amended.
- 2. Contractor shall be responsible for seeing to it that this Statutory Bond is filed with the Clerk of the District Court for Johnson County, Kansas.
- 3. Date on bond must not be prior to date of contract.
- 4. If Contractor is partnership, all partners should execute bond.
- 5. Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state of Kansas.
- 6. Accompany this bond with Attorney-in-Fact's Authority from the surety company certified to include the date of the bond.

MAINTENANCE BOND

| KNOW ALL PERSONS BY THESE PRESENTS: That |
|--|
| (Name of Contractor) |
| (Address of Contractor) |
| and Leavenworth County, Kansas (Fiber Optic Network Upgrades) |
| hereinafter called Principal, and (Corporation, Partnership, or Individual) |
| (Name of Surety) |
| hereinafter called SURETY, are held and firmly bound unto |
| Leavenworth County, Kansas |
| (Name of Owner) |
| 300 Walnut Street, Leavenworth, KS 66048 |
| (Address of Owner) |
| hereinafter called OWNER, and unto all persons, firms, and corporations who or which may furnish labor, or who furnish materials to perform as described under the contract and to their successors and assigns in the total aggregate penal sum of |
| payment of which sum well and truly to made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents. |
| THE CONDITIONS OF THIS FOREGOING OBLIGATION IS SUCH THAT, Whereas, on the day of, 20, the Principal entered into a written agreement with the Owner for the construction, reconstruction or repair of certain public improvements as designated and described in the said agreement; and |
| Whereas, it was a condition of the contract award by the Owner that these presents be executed by the Principal and Surety aforesaid, and |
| Whereas, the Principal agrees to guarantee the work hereinabove described, including all materials and workmanship, for the period of One (1) year(s) beginning on the date the Owner so accepts said Work, said date being the formal acceptance date. |

NOW, THEREFORE, if the Principal shall and will, in all particulars, well, duly, and faithfully observe, perform and abide by each and every covenant, condition and part of said written agreement and other Contract Documents and shall protect the Owner against all damages, losses and expenses which may occur to Owner, by reason of defective materials used, or by reason of defective workmanship done, and for the construction, reconstruction or repair of said public improvements, and settlement of backfill excavated areas.

| IN WITNESS WHEREOF, this instrument is exe (3) which shall be deemed an original, this the | cuted in three (3 | 3) counterparts, each one of three, 20 |
|--|-------------------|--|
| ATTEST: | | |
| | | Principal |
| (Principal) Secretary (SEAL) | | |
| (32.12) | By | (s) |
| | | |
| | | |
| (Witness as to Principal) | | (Address) |
| (Address) | | (Surety) |
| ATTEST: | | |
| | By | |
| (Witness to Surety) | | Attorney-in-Fact |
| (Address) | | (Address) |
| _ | | |

NOTE:

- 1. Date of BOND must not be prior to day of contract.
- 2. If CONTRACTOR is partnership, all partners should execute BOND.
- 3. Surety companies executing BONDS must appear on the Treasury Department's
- 4. most current list (Circular 570 as amended) and be authorized to transact business in the state where the Project is located.
- 5. Accompany this bond with Attorney-in-Fact's Authority from the Surety Company certified to Include the date of the bond.

CONTRACTUAL PROVISIONS ATTACHMENT

The undersigned parties agree that the following provisions are hereby incorporated into the contract to which it is attached and made a part thereof.

- 1. <u>TERMS HEREIN CONTROLLING PROVISIONS:</u> It is expressly agreed that the terms of each and every provision in this attachment shall prevail and control over the terms of any other conflicting provision in the contract and any other document relating to and a part of the contract in which this attachment is incorporated. All terms hereof survive termination of the contract.
- 2. AGREEMENT WITH KANSAS LAW: It is agreed by and between the undersigned that all disputes and matters whatsoever arising under, in connection with or incident to the contract shall be litigated, if at all, in and before a state Court located in the State of Kansas, County of Leavenworth, to the exclusion of the Courts of any other states or country. All contractual promises shall be subject to, governed by, and construed according to the laws of the State of Kansas, without reference to its conflict of laws principles. Both parties submit to venue and jurisdiction in these courts. In the event an action or claim arises outside of the exclusive jurisdiction specified herein which names County as a party, Contractor agrees to initiate, consent to and/or cooperate with any and all efforts to remove the matter to the exclusive jurisdiction named herein and otherwise to take any and all reasonable actions to achieve County's objectives of this provision.

3. <u>COMPLIANCE WITH APPLICABLE LAWS, SERVICE STANDARDS AND REQUIRED PROCEDURES.</u>

- 3.1 Service Standards & Procedures Contractor shall perform the services set forth in the Contract in compliance with applicable standards and procedures specified in the Contract. All the work done under this Contract shall be done under the Articles and Sections of the 2015 Edition of the "Standard Specifications" for State Road and Bridge Construction" as published by the Kansas Department of Transportation, plus Supplemental Specifications, and any addenda thereto/ In the event of conflict, the Special provisions included in this attachment shall prevail.
- **3.2** Compliance with Law. Contractor shall comply with all applicable local, state and federal laws and regulations, in carrying out the Contract, regardless of whether those legal requirements are specifically referenced in the Contract.
- 4. <u>CASH BASIS AND BUDGET LAWS:</u> The right of the County to enter into the Contract is subject to the provisions of the Cash Basis Law (K.S.A. 10-1112 and 10-1113), the Budget Law (K.S.A. 79-2935), and other laws of the State of Kansas. The Contract shall be construed and interpreted so as to ensure that the County shall at all times stay in conformity with such laws, and as a condition of the Contract the County reserves the right to unilaterally terminate the Contract at any time if, in the opinion of its legal counsel, the Contract may be deemed to violate the terms of such laws. Any Contract for a term of more than one year shall be interpreted by the parties to provide County the sole option to renew that Contract before the end of each one year term.

5. TERMINATION DUE TO LACK OF FUNDING APPROPRIATION: If, in the judgment of the Leavenworth County Commissioners, after consultation with their Budget and Finance Officer or other county officials, sufficient funds are not appropriated to continue the function performed in the contract and for the payment of the charges hereunder, County may terminate the contract at the end of its current fiscal year. Termination shall be effective 30 days after County mails written notice to Contractor. In the event of such termination, County agrees to give written notice of termination to contractor. The termination of the contract pursuant to this paragraph shall not cause any penalty to be charged to the County or the Contractor.

6. <u>ANTI-DISCRIMINATION CLAUSE:</u>

- 6.1 In carrying out the Contract, Contractor shall comply with K.S.A. 44-1001 et seq.
- 6.2 Contractor shall observe the provisions of the Kansas act against discrimination and the Kansas age discrimination in employment act, and shall not discriminate against any person in the performance of work under the Contract because of race, religion, color, sex, disability, national origin, ancestry, or age.
- 6.3 In all solicitations or advertisements for employees, Contractor shall include the phrase "equal opportunity employer" or a similar phrase to be approved by the Kansas Human Rights Commission.
- 6.4 If Contractor fails to comply with the provisions of K.S.A. 44-1031, requiring reports to be submitted to the Kansas Human Rights Commission when requested by that Commission, Contractor shall be deemed to have breached the Contract and it may be canceled, terminated or suspended, in whole or in part, by County.
- 6.5 If Contractor is found guilty of a violation of the Kansas act against discrimination under a decision or order of the Kansas Human Rights Commission which has become final, Contractor shall be deemed to have breached the Contract and it may be canceled, terminated or suspended, in whole or in part by County.
- 6.6 Contractor shall include the provisions of paragraphs 6.1 through 6.5 inclusively of this section in every subcontract or purchase order so that such provisions will be binding upon such subcontractor of Contractor.
- 6.7 Parties to the contract understand that this paragraph number 6 is not applicable if Contractor employs fewer than four employees or if Contractor's contracts with the County cumulatively total \$5,000 or less during the County's fiscal year.
- 7. <u>ACCEPTANCE OF CONTRACT:</u> The contract shall not be considered accepted, approved or otherwise effective until the required approvals and certifications have been given and this Contractual Provisions Attachment is signed by the Board of County Commissioners of Leavenworth County, Kansas.

8. ARBITRATION, DAMAGES, WARRANTIES: Notwithstanding any language to the contrary, no interpretation shall be allowed to find the County has agreed to binding arbitration, or the payment of damages or penalties upon the occurrence of a contingency. Further, the County does not agree to pay attorney fees and late payment charges; and no provisions will be given effect that attempts to exclude, modify, disclaim or otherwise attempt to limit implied warranties of merchantability and fitness for a particular purpose.

9. REPRESENTATIVE'S AUTHORITY TO CONTRACT/REQUIRED DOCUMENTATION: By signing the Contract, the representative of Contractor thereby represents that such person is duly authorized by Contractor to execute the document on behalf of Contractor and Contractor agrees to be bound by the provisions thereof. Contractor shall furnish evidence of authority to transact business in Kansas, in the form of a certificate signed by the Kansas Secretary of State.

- **10. RESPONSIBILITY FOR TAXES:** The County shall not be responsible for, nor indemnify Contractor for, any federal, state or local taxes that may be imposed or levied upon the subject matter of the contract. See Tax Exempt Status outlined in the Information for Bidders.
- 11. NO INSURANCE PROVIDED BY COUNTY: The County shall not be required to purchase, any insurance against loss or damage to any personal property to which the contract relates, nor shall the contract require the County to establish a "self-insurance" fund to protect against any such loss or damage. Subject to any applicable provisions of the Kansas Tort Claims Act (K.S.A. 75-6101 et seq.), Contractor shall bear the risk of any loss or damage to any personal property to which Contractor holds title.

12. TERM AND TERMINATION:

- **12.1 Term.** This Contractual Provisions Attachment shall be effective as of its date of execution by the parties and shall remain in effect during the term of the Contract, or until terminated either for convenience, breach or default, as set out herein. Thirty (30) days written notice to the breaching party is required.
- 12.2 Termination for Cause. If Contractor shall fail to fulfill in a timely and proper manner its obligations under the Contract, or if Contractor shall violate any of the terms, covenants, conditions, or stipulations of the Contract, County shall thereupon have the right to terminate the Contract by promptly giving written notice to Contractor of such termination and specifying the reasons for the termination and the effective date thereof. A breach shall include, but not be limited to, failure to comply with any or all items contained in the Contract and any appendices, exhibits or amendments thereto, if any.
- **12.3** Notwithstanding the above, Contractor shall not be relieved of liability to County by virtue of any breach of the Contract by Contractor.
- **12.4 Termination for Convenience.** County may terminate the Contract in whole or in part, upon thirty (30) days written notice to Contractor, stating the effective date of the termination for convenience.

- 12.5 Payment Calculation upon Termination. In the event of termination under the Contract by either party, any amount owed Contractor will be calculated based solely upon payment for fair value of acceptable services provided by Contractor to the point of termination, which fair value is not the subject of a good faith dispute. That determination of fair value of acceptable services shall be made solely by County.
- 13. <u>INDEPENDENT CONTRACTOR RELATIONSHIP:</u> It is agreed that the legal relationship between Contractor and County is of a contractual nature. Both parties assert and believe that Contractor is acting as an independent contractor in providing the services and performing the duties required by County hereunder. Contractor is at all times acting as an independent contractor and not as an officer, agent, or employee of County. As an independent contractor, Contractor, and employees of Contractor will not be within the protection or coverage of County's worker's compensation insurance, nor shall Contractor and employees of Contractor be entitled to any current or future benefits provided to employees of County. Further, County shall not be responsible for withholding of social security, federal, and/or state income tax, or unemployment compensation from payments made by County to Contractor. Contractor shall supply all labor, equipment, supplies and materials necessary to complete the required services at Contractor's sole expense.

14. PERSONNEL

- **14.1 Qualified Personnel.** Contractor represents that it has, or shall secure at its own expense, all personnel required in performing the services under the Contract. Such personnel shall not be employees of or have any other contractual relationship with County. All personnel engaged in the work shall be fully qualified according to the laws of the State of Kansas and the provisions of this Contract.
- **14.2 Minimum Wages.** Contractor will comply with the minimum wage and maximum hour's provisions of the Federal Fair Labor Standards Act.
- **14.3 Employee Conflict of Interest.** Contractor shall establish safeguards to prohibit employees from using their positions for a purpose that is or gives the appearance of being motivated by a desire for private gain for themselves or others, particularly those with whom they have family, business, or other ties.

15. PROHIBITION OF CONFLICTS OF INTEREST

- 15.1 Interest of Public Officials and Others. No officer or employee of Leavenworth County, no member of its governing body, and no other public official who exercises any functions or responsibilities in the review or approval of the undertaking or carrying out of the Contract shall participate in any decision relating to the Contract which affects such person's personal interest or the interest of any corporation, partnership, or association in which such person is directly or indirectly interested; nor shall any officer or employee of Leavenworth County or any member of its governing body or other public official have any interest, direct or indirect, in the Contract or the proceeds thereof.
- **15.2 Interest of Contractor.** Contractor covenants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under the Contract.

- 15.3 Notice to Bidders. Requests for proposal or invitations for bid issued by Contractor to implement the Contract will provide notice to prospective bidders that Riley County's conflict of interest provision is applicable and that prospective bidders who develop or draft specifications, requirements, statements of work and/or RFPs for a proposed procurement shall be excluded from bidding or submitting a proposal to compete for the award of such procurement.
- **16. ASSIGNMENT:** Neither the Contract nor any rights or obligations hereunder shall be assigned or otherwise transferred by either party without the prior written consent of the other.
- 17. <u>SUBCONTRACTING:</u> None of the work or services covered by the Contract shall be subcontracted without the prior written approval of County. All approved subcontracts must conform to all terms set forth in the Contract and the Contractual Provisions Attachment.

18. RECORDS, REPORTS AND INSPECTION

- **18.1 Documentation of Costs.** All costs incurred by Contractor for which Contractor purports to be entitled to reimbursement under the express terms of the Contract shall be supported by properly executed payrolls, time records, invoices, contracts or vouchers, or other official documentation evidencing in proper detail the nature and propriety of charges. All checks, payrolls, invoices, contracts, vouchers, orders or other accounting documents pertaining in whole or in part to the Contract shall be clearly identified and readily accessible to both parties to the Contract.
- **18.2 Maintenance of Records.** Except as otherwise authorized by County, Contractor shall retain such documentation for a period of three (3) years after receipt of any applicable final expenditure report under the Contract, unless action, including but not limited to litigation or audit resolution proceedings, necessitate maintenance of records beyond this three (3) year period.
- **18.3 Reports.** During the term of this contract, Contractor shall furnish to County, in such form, as County may require, such statements, records, reports, data and information as County requests pertaining to matters covered by this contract. Payments to Contractor will be withheld by County if Contractor fails to provide all required reports in a timely and accurate manner, until such time as all reports are furnished to County. Incomplete reports may be considered a breach of this contract.
- 19. <u>LICENSES AND PERMITS:</u> Contractor shall maintain all licenses, permits, certifications, bonds, and insurance required by federal, state or local authority for carrying out the Contract. Contractor shall notify County immediately if any required license, permit, bond or insurance is canceled, suspended or is otherwise ineffective. Such cancellation, suspension, or other ineffectiveness may form the basis for immediate revocation or cancellation of the Contract by County, in County's sole discretion.
- **20. PUBLIC DOCUMENTS:** It is agreed that the Contract, and all subsequent agreed amendments or addenda thereto are public documents which will be filed with the Leavenworth County Clerk, and will be open to public inspection.

- **21. LIMITATION OF LIABILITY:** It is agreed that notwithstanding any language in the Contract to the contrary, County waives no defense, immunity or limitation of liability otherwise available to County under the terms of the Kansas Tort Claims Act or other applicable law.
- 22. MERGER/SALE/TRANSFER OF CONTRACTOR ASSETS: Contractor will notify County in writing at least thirty (30) calendar days in advance of Contractor's merger with any other business entity, or of any sale or other transfer of Contractor's assets to any other business entity. In the event of any such merger, sale or other transfer of Contractor assets, Contractor will reasonably cooperate with County in assuring that provision of all products and services under this Contract are not disrupted before, during and after such merger, sale or other transfer of Contractor assets. After such merger, sale or other transfer of Contractor assets, Contractor will reasonably cooperate with County in providing any documents or information necessary to establish any prior payments made by County to Contractor under this Contract.
- 23. <u>LIABILITY INSURANCE:</u> Contractor agrees to maintain the minimum limits of Insurance coverage throughout the term of the agreement, as outlined below. Liability insurance coverage must be considered as primary and not as excess insurance. Contractor shall furnish a certificate evidencing such coverage, with County named as an additional insured, which shall be delivered to the Office of the Leavenworth County Counselor for approval. Such certificate shall contain a provision that coverage afforded under the policies will not be canceled, reduced, modified, limited, or restricted until thirty (30) days after County receives notice of such change by registered mail.

Commercial General Liability:

| \$2,000,000 | General Aggregate |
|-------------|--|
| \$2,000,000 | Products/Completed Operations Aggregate |
| \$1,000,000 | Personal & Advertising Injury |
| \$1,000,000 | Each Occurrence |
| \$ 100,000 | Fire Damage (Any one fire) |
| \$ 5,000 | Medical Expense (Any one person) Automobile Liability: Including Hired |
| | & Non-Owned Autos |
| \$1,000,000 | Combined Single Limit Worker's Compensation: Statutory Employers |
| | Liability |
| \$ 100,000 | Bodily Injury by Accident (Each Accident) |
| \$ 500,000 | Bodily Injury by Disease (Policy Limit) |
| \$ 100,000 | Bodily Injury by Disease (Each Employee) Excess Liability: |
| \$1,000,000 | Each Occurrence |
| \$1,000,000 | Aggregate |

- **24. REMOVAL OF REPRESENTATIVE:** Should County reasonably object to an individual employed or engaged by Contractor to perform the services hereunder, Contractor agrees to promptly replace that person with an individual approved by County.
- **25. MODIFICATION:** This agreement may not be modified except in writing signed by the parties hereto.
- **26. SURVIVABILITY:** All terms of this Contractual Provisions Attachment shall survive termination of the Contract.

TECHNICAL SPECIFICATIONS

TECHNICAL SPECIAL PROVISIONS

FOR

LEAVENWORTH COUNTY FIBER OPTIC RING

| SECTION 1 | - SCOPE OF PROJECT | 1 |
|---------------------|--|----|
| 1.1 GE | NERAL REQUIREMENTS | 1 |
| | E-CONSTRUCTION VIDEO SURVEY | |
| 1.2.1 | Description | 1 |
| 1.2.2 | Construction Requirements | 1 |
| 1.2.3 | Measurement and Payment | 2 |
| SECTION 2 | – MATERIALS AND EQUIPMENT | 2 |
| 2.1 Ma ⁻ | TERIAL AND EQUIPMENT LIST | 2 |
| | BMITTALS | |
| _ | NSTRUCTION APPROVAL | |
| | CUMENTATION | _ |
| 2.4.1 | Red-lines/As-Builts | 3 |
| | NDUIT | |
| 2.5.1 | General Requirements | |
| 2.5.2 | Conduit Installation into existing Handholes | |
| 2.6 TRA | ACER WIRE | |
| | NDHOLES | |
| 2.8 FIBI | ER OPTIC CABLE SPECIFICATIONS | 7 |
| 2.8.1 | Packaging and Shipping Requirements | |
| 2.8.2 | Color Coding | |
| 2.8.3 | Cable Construction | 9 |
| 2.8.4 | Fiber Optic Distribution Panel / Building Drop Cable | 11 |
| 2.8.5 | Fiber Optic Connectors | |
| 2.8.6 | Fiber Optic Splice Materials | |
| 2.9 Uni | DERGROUND SPLICE ENCLOSURES | 12 |
| | DERGROUND SPLICE ENCLOSURE LOCATIONS | |
| 2.11 Soi | DDING | 13 |
| SECTION 3 | CONSTRUCTION REQUIREMENTS | 15 |
| 3.1 ORI | DER OF WORK | 15 |
| 3.1.1 | Excavations | 15 |
| 3.1.2 | Underground Conduits | |
| 3.1.3 | Conduit on Bridge Structure | 16 |
| 3.1.4 | Tracer Wire | 16 |
| 3.1.5 | Fiber Optic Cable | 16 |
| 3.1.6 | Rod and Proofing | 16 |
| 3.1.7 | Fusion Splices | |
| 3.1.8 | EMT | |
| 3.1.9 | Plenum Rated Innerduct | |
| 3.1.10 | Fiber Distribution Panel | |
| 3.1.11 | LB Condulet (LB) | |
| 3.1.12 | Wall Cores | |
| 3.1.13 | Installation of Handholes | |
| 3.1.14 | Sidewalk And ADA Ramp | 19 |

TECHNICAL SPECIAL PROVISIONS

FOR

LEAVENWORTH COUNTY FIBER OPTIC RING

| 3.1.15 | Sodding | 19 |
|-----------|---|----|
| 3.2 TES | STING, INSPECTION AND ACCEPTANCE PROCEDURES | 20 |
| 3.2.1 | Inspection | 20 |
| 3.2.2 | Test Procedures and Documentation | 21 |
| 3.2.3 | Fiber Optic Communications Cable Tests | 21 |
| 3.2.4 | Final Inspection | |
| 3.3 CH | IANGES IN WORK/FORCE ACCOUNT | 22 |
| 3.3.1 | Description | 22 |
| 3.3.2 | Measurement and Payment | 22 |
| SECTION 4 | - TRAFFIC CONTROL | 24 |
| 4.1 TR | AFFIC CONTROL | 24 |
| APPENDIX | A | 26 |

SECTION 1 - SCOPE OF PROJECT

The work under this Contract consists of furnishing and installing all equipment and materials necessary for the installation of the Leavenworth County Fiber Optic Ring. The primary functions of the system are to provide redundant fiber connectivity for communications between county facilities. All components of this complete fiber optic communications network are to be furnished and installed by the Contractor and shall include all conduit and fiber infrastructure for both inside & outside plant to the point of demarcation which is considered the Fiber Distribution Panels (FDP) in each building.

The Contractor shall assume full responsibility for ensuring the successful construction and proper operation of the system components. The Contractor shall be fully responsible for all construction testing and documentation as detailed in this Technical Special Provision.

This Technical Special Provision provides detailed technical requirements for specific elements of the network necessary to satisfy the objective of this project. Elements of the network include but, are not limited to the following:

- Communications conduits and handholes
- Fiber optic cable and termination equipment
- Fiber optic splice enclosures and splicing
- Testing and documentation

All special features that are required by this Technical Special Provision and the Counties additional requirements at the time of bid letting shall be complied with by the Contractor

1.1 General Requirements

Throughout the entire project, all units of any one item shall be made by the same manufacturer unless otherwise approved by the Engineer, or his authorized representative. The equipment, including all parts and accessories, shall be constructed in a thoroughly competent manner and in accordance with best commercial practices.

Electrical materials shall conform to the applicable standards of the National Electrical Code (NEC), the National Electrical Manufacturer's Association (NEMA), the National Safety Code (NSC), the Electronic Industries Alliance (EIA) and the American National Standards Institute (ANSI) in every case where a standard has been established for the particular article, material or equipment. Where specific standards and serial numbers are stipulated, the reference shall be construed to be the most recent standard specifications in force and in existence on the date of advertisement.

1.2 Pre-Construction Video Survey

1.2.1 Description

The Contractor shall furnish a Pre-Construction video survey of the entire running line as indicated on the plans or as designated by the Engineer. All videos shall be conducted by a disinterested third-party video documentation firm qualified and experienced in performing Pre-Construction videos.

1.2.2 Construction Requirements

At least 10 days prior to the commencement of construction, the videographer shall complete video documentation of the entire proposed running line from the right of way line up to and including the pavement of the roadway. The videographer shall conduct an interior and exterior inspection of the structures for each building entry where proposed construction will be completed. The videographer shall record existing conditions along the proposed path from the right of way to and inside the structure and shall document any existing damage or other physical factors that could be reasonably

Leavenworth County Fiber Loop Design County Project number April 8, 2022 A19-28310-100-100004 claimed as induced by physical contact by construction equipment. The video surveyor shall promptly prepare a digital report and submit it for review by the engineer prior to construction. This work shall be conducted by means of high-resolution video methods and at a minimum full 1080P resolution. The video record and content shall be approved by the Engineer prior to the commencement of construction activities. Videos shall not contain unstable images or ones that do not provide usable views.

1.2.3 Measurement and Payment

Payment for" Pre-Construction Video Survey" is subsidiary to the other units in the contract and no direct payment will be made for this required documentation.

SECTION 2 – MATERIALS AND EQUIPMENT

2.1 Material and Equipment List

Prior to the approval of any components or material related to the project items listed in Table 2, and no more than 30 days after contract award, the Contractor shall submit to the Engineer an electronic copy of a Material and Equipment List. The Material and Equipment List shall identify the quantity, manufacturer, description, catalog number or other identification, and options and special features for each item furnished. A unique identification number shall be indicated for each item on the Material and Equipment List.

TABLE 2: MATERIALS AND EQUIPMENT LIST

- Conduit
- Duct Plugs
- Tracer Wire
- Locate Posts
- Curb Route Markers
- Handholes
- Ground Rods
- Ground Rod Clamps
- Grounding Conductor
- Fiber Optic Cable
- Fiber Distribution Panel Equipment
- Underground Splice Enclosures

2.2 Submittals

All Contractor submittals shall be directed to the Engineer. If necessary, the Engineer may direct the submittals to other parties for review. However, the Contractor must obtain written approval of the submittal from the Engineer prior to using the equipment being reviewed. For all submittals, the Engineer's review of the material will be completed within 15 days from the date of receipt of the submission unless otherwise specified. The Engineer will advise the Contractor, in writing, as to the acceptability of the material submitted. The Engineer may determine that the item is approved, in which case no further action is required by the Contractor; or the item may be partially or totally rejected, in which case the Contractor shall be required to modify the submittal as required by the Engineer and resubmit the item within 15 days. At this time, the review and approval cycle described above shall begin again.

The costs of Contractor submittals shall be included within the price paid for individual items and no additional compensation will be made. Copies of catalog cuts and manufacturers' descriptive literature shall be submitted with each copy of the Material and Equipment List for all manufactured items. Submittal data shall be adequate to determine if the equipment and material meet the requirements of the Plans and this Technical Special Provision. Catalog cuts shall have highlighted the submittal data to be reviewed. If the catalog cuts are not highlighted, the submittal will be automatically rejected. The Contractor shall clearly note any deviations, changes, additions, or other modifications to the submittal data, which are appropriate to reflect the exact equipment, and/or material intended for use. Approval by the Engineer of the Materials and Equipment List and submittal data shall not relieve the Contractor of any of his responsibility under the Contract for the successful completion of the work in conformity with the requirements of the Plans and this Technical Special Provision.

2.3 Construction Approval

Construction approval will be given by the County based on information submitted by the Contractor for all materials utilized on the project. Construction approval shall be obtained before any material is shipped to the project.

2.4 Documentation

The contractor shall provide documentation required as a part of the project at no additional cost.

2.4.1 Red-lines/As-Builts

The contractor shall supply a complete set of Redline drawings, in electronic or hard copy format highlighting any and all deviations from the original plans. As a part of the redline drawings, the contractor shall provide X, Y, Z coordinates of the installed conduit at 50' intervals, except for curves and bends in conduit that will need shorter intervals. The contractor shall also supply X, Y, Z coordinates of the center of each handhole. These coordinates shall be by GPS and in the "NAD_1983_StatePlane_Kansas_North_FIPS_1501_Feet" Coordinate System. Once submitted, the engineer will create as-builts for the project.

2.5 Conduit

2.5.1 General Requirements

The Contractor shall furnish and install underground conduit as specified in the Plans. Quantities shown in the Plans for conduit installation include all quantities of each installation type (Trenched/Bored), as determined by the contractor, necessary to install the conduit as shown in the Plans. All underground conduit used on this project shall be a minimum of 2" SDR 11 Orange HDPE conduit. All EMT used on this project shall be a minimum of 2" EMT.

The conduit shall be installed at a typical depth of 36 inches below finished grade. The conduit depth shall be adjusted only in areas of the conflict. It is the intention of this contract to avoid existing underground utilities by routing deeper when they are encountered. The Contractor may be allowed to reroute proposed conduit and/or adjust proposed conduit depth to a minimum of 24 inches from grade when proposed conduit installation is near and/or in conflict with an existing underground utility line but only as directed by the Engineer.

All new conduit installed, and all existing conduit used under this Contract shall be blown and/or rodded clean to the satisfaction of the Engineer prior to the installation of any cable or wire in that conduit. Underground conduit shall generally be installed in non-pavement areas if possible. The Contractor shall install underground conduit in the grass utility strip if such a strip is available.

Quantities shown for under-pavement conduit installation shall generally mean that non-pavement installation is not possible, such as under roadways, driveways, sidewalks, etc. In these cases the installation method shall be by directional bore.

The Contractor is responsible for sizing the conduit to be used on all installations in accordance with the minimum conduit size requirements in the Plans and this Technical Special Provision. The conduit shall be of sufficient size to allow the conductor to be installed without any damage. The conduit sizes and fill requirements shall conform to the requirements of the National Electric Code.

The Contractor shall furnish and install conduit on the bridge structure as specified in the Plans. The conduit shall be 2" Galvanized Rigid Conduit (GRC) and all components used for attachment shall be either hot dipped galvanized or 304 stainless steel minimum. Conduit shall be supported by hangers as shown in the plans at spacing to fully support the conduit without sag, typical hanger spacing not to exceed 10' on center. Additional support shall be required for bends, and off- sets. One expansion joint shall be installed at any bridge expansion or per every 100' of installed conduit.

All building risers shall be 2" EMT conduit and shall be hot galvanized steel O.D. with an organic corrosion resistant I.D. coating and shall be listed to UL Safety Standard 797 and manufactured in accordance with ANSI C80.3.

The contractor shall furnish and install curb route markers at every street crossing on both sides of the street.

2.5.2 Conduit Installation into existing Handholes

All conduits shown in the Plans to be installed into existing handholes shall be installed in accordance with the requirements for conduit installation into new handholes. The Contractor shall maintain the existing handhole and shall restore the surrounding area to a condition equivalent to that prior to when work began. The Contractor shall immediately notify the Engineer if the Contractor determines that the existing handhole is unacceptable for reuse. If the existing handhole needs to be temporarily removed or otherwise disturbed for the new conduit installation, new gravel shall be installed in the base of the reinstalled existing handhole as required for new handholes.

The costs of all labor, materials and equipment necessary to complete the installation of new conduit into existing handholes as required in this Technical Special Provision shall be included in the quantities shown in the Plans for conduit.

The cost of pavement, base, sub-base, restoration of sidewalk, driveway and curb restoration shall be included in the under-pavement conduit.

2.6 Tracer Wire

All conduit installed shall have a tracer wire and pull string installed. The tracer wire shall be an orange, #10 AWG, stranded USE copper locating cable. This cable will be used in all new conduits, as well as all existing conduit with new fiber being installed. The tracer wire installed is considered incidental to the installation of the fiber and conduit.

2.7 Handholes

The contractor shall furnish a manufacturer's certification showing typical test results representative of the materials used in manufacture of handholes and covers and certifying that the material supplied conforms to all specified requirements.

A. MATERIAL REQUIREMENTS:

- All materials used in the manufacture of the enclosures shall be new, of the highest quality.
 Polymer concrete shall be manufactured from one of the general types and grades defined
 in Polymers in Concrete Structural Applications State of the Art Report, ACI 548.6R-96 for
 structural uses. Thermoplastics will not be acceptable.
- 2. Enclosure assemblies shall be designed for ASTM C857, Minimum Structural Design Loading for Underground Pre-cast Concrete Utility Structures, load designation A8 with a minimum safety factor of 1.7 for vertical loads and 3.0 for soil pressures.
- 3. Binding polymers used in the manufacture of the PC and the FRP shall be of the same formulation or from formulations with demonstrated chemical compatibility to assure complete chemical bonding of all components. FRP wall sections must be cast integrally into and chemically bonded within the upper polymer concrete casting.
- 4. Enclosure walls shall be made from pattern cut structural fiberglass cloths to assure uniform, pre-measurable fiberglass content on all areas. All manufacture shall be from pre-approved construction meeting the specified structural requirements.
- 5. The materials used for making the enclosures shall be non-biodegradable when buried underground, exposed to water, and when exposed to ambient temperatures of -20 deg. F to 120 deg. F. Manufacturers shall submit test reports indicating that materials meet or exceed the requirements of Western Underground Committee Guide 3.6 Non-Concrete Enclosures for durability and chemical resistance.
- 6. The life expectancy of the finished product shall be at least 25 years. Satisfactory performance of similar products of the vendor for a period of at least 10 years shall be accepted as reasonable proof of achieving the 25- year requirement. A written statement is required. Accelerated service tests in accordance with ASTM D 756-56, procedure E, shall be accepted as a satisfactory alternative.

B. TESTING AND ACCEPTANCE:

- 1. The purchaser retains the option of conducting product and material tests to verify compliance with the specifications. Purchaser reserves the rights to randomly select product from delivered stock and return it to the producer for witnessed compliance testing.
- 2. Proof of design compliance will be based on the following tests and test loads:
 - i. A vertical test load of 20,000 lb. applied to a 10x10-inch area at any position on the cover surface shall cause no signs of distress during or after testing. Cover deflection at 10,400 lb. working load shall not exceed 0.25-inch per foot of cover width.

ii. Horizontal design loads calculated according to ASTM C857. Test loads shall be uniformly applied to the largest wall of the box. Minimum failure load shall be at least the load given in the table. The cover shall be fastened in place during the test. Deflection shall not exceed 0.25-in per foot of wall length at the design load. Design and test loads for the sizes given are:

| Nominal Size | , , | Test (lbs) |
|-----------------|------|---------------|
| 24x36x30 | 900 | 2,200 |
| 30x48x36 | 1200 | 3,740 |

- iii. Impact Load. Any point on the cover surface shall withstand a 72 ft-lb. impact administered with a C-type according to ASTM D- 2444 without penetration or cracking. Minor damage at the point of impact is acceptable.
- 3. Fatigue Testing: Vendor shall provide test results showing ability of box covers and cover bearing areas to withstand a minimum of 20,000 cycles of loading that varies between 8,000 lb. (100%) and 800 lb.(10%) or less. Sufficient data shall be on file to verify load cycles in the prescribed range and that at least 50% of the cover stiffness has been retained.
- 4. Submittals: Vendors shall submit drawings that describe all of the particulars and the key dimensions, including applicable tolerances, of all products to be supplied for approval. Information included shall be adequate to assure conformance to structural requirements. Vendors shall also submit test data certified by a licensed professional engineer showing compliance with all requirements of this specification when requesting product approval. Vendors must be approved by the purchaser prior to supplying any products covered by this specification.
- 5. Vendor shall not make any changes in design or manufacture of the product as shown on the approved shop drawings. After award of the contract, all material sent may be checked against the drawings and specifications. Material not meeting these specifications shall be rejected. Vendor shall, at his own expense, replace rejected material with material that complies with the specifications and the said expense to include costs for: replacement parts, transportation, handling and testing.

Type III shall be fiberglass reinforced polymer boxes with reinforced polymer concrete covers, of the size and shape as shown on the Standard Detail sheet in the accompanying plans. Handhole material shall be an aggregate consisting of sand and gravel bound together with a polymer and reinforced with continuous woven glass strands. Material shall be non-conductive and unaffected by UV light, moisture, freezing, high temperatures and sub-soil chemicals. Hardware shall be stainless steel to prevent corrosion. It must have the following minimum mechanical properties:

| Compressive Strength | 11,000psi (75845kPa) |
|----------------------|----------------------|
| Tensile Strength | 1,700psi (11,722kPa) |
| Flexural Strength | 7,500psi (51,713kPa) |

Lids shall be bolt down type and designed to prevent them from slipping into the round box. Handholes with adjustable top ring may be permitted if approved by the Engineer. Handhole Covers shall have the city logo as shown in the drawings. Handholes shall be light duty (Non-Traffic) or Heavy Duty (Traffic Rated) as specified in the drawings.

2.8 Fiber Optic Cable Specifications

All fiber optic cable furnished and installed shall conform to these special provisions. The fiber optic cables shall provide connectivity between field networks. The Single Mode Fiber Optic (SMFO) fibers shall contain single mode (SM) window (at 1310 nm, 1383 nm and 1550 nm) fibers. Fiber optic cable shall be all dielectric cable, gel-free, with loose buffer tubes, single jacketed, single armored, single mode supplied by the same manufacturer. All fiber optic cable shall be OFNR rated indoor/outdoor loose tube cable. No splices shall be permitted within the fiber jacket. Fiber optic cable shall be imprinted with "County of Leavenworth (913.684.0790)" and shall be labeled with permanent, non-fading tags affixed to the cable in each handhole or rack. These labels shall state the cable origination and or destination at every point in the system where it is accessible.

All fiber optic cable on this project shall be from the same manufacturer, who is regularly engaged in the production of this material. The fiber optic cable shall be qualified as compliant with Chapter XVII, Title 7, Part 1755.900 of the Code of Federal Regulations, "REA specification for dry blocked fiber optic cables".

The fiber optic cable shall withstand water penetration when tested with a one-meter static head or equivalent continuous pressure applied at one end of a one-meter length of filled cable for one hour. No water shall leak through the open cable end. Testing shall be done in accordance with EIA-455-82B, "Fluid Penetration Test for Fluid-Blocked Fiber Optic Cable."

A representative sample of cable shall be tested in accordance with EIA-455-81B (FOTP-81), "Compound Flow (Drip) Test for Filled Fiber Optic Cable". No preconditioning period shall be conducted. The cable shall exhibit no flow (drip or leak) at 176° F as defined in the test method. Crush resistance of the finished fiber optic cables shall be 220 N/cm applied uniformly over the length of the cable without showing evidence of cracking or splitting when tested in accordance with EIA-455-41A (FOTP-41), "Compressive Loading Resistance of Fiber Optic Cables". The average increase in attenuation for the fibers shall be ≤ 0.10 dB/km at 1550 nm for a cable subjected to this load. The cable shall not exhibit any measurable increase in attenuation after removal of load. Testing shall be in accordance with EIA-455-41A (FOTP-41), except that the load shall be applied at the rate of 3 mm to 20 mm per minute and maintained for 10 minutes.

The cable shall withstand 25 cycles of mechanical flexing at a rate of 30 ± 1 cycles/minute. The average increase in attenuation for the fibers shall be ≤ 0.20 dB/km at 1550 nm at the completion of the test. Outer cable jacket cracking or splitting observed under 10x magnification shall constitute failure. The test shall be conducted in accordance with EIA-455-104A (FOTP-104), "Fiber Optic Cable Cyclic Flexing Test," with the sheave diameter a maximum of 20 times the outside diameter of the cable. The cable shall be tested in accordance with Test Conditions I and II of (FOTP-104). Impact testing shall be conducted in accordance with EIA-455-25B (FOTP-25) "Impact Testing of Fiber Optic Cables and Cable Assemblies." The cable shall withstand 20 impact cycles. The average increase in attenuation for the fibers shall be ≤ 0.20 dB/km at 1550 nm. The cable jacket shall not exhibit evidence of cracking or splitting.

The finished cable shall withstand a tensile load of 2669 N (600 lbs.) without exhibiting an average increase in attenuation of greater than 0.20 dB. The test shall be conducted in accordance with EIA-455-33A (FOTP-33), "Fiber Optic Cable Tensile Loading and Bending Test." The load shall be applied for one-half hour in Test Condition II of the EIA-455-33A (FOTP-33) procedure.

2.8.1 Packaging and Shipping Requirements

Documentation of compliance to the required specifications shall be provided to the Engineer prior to ordering the material.

The completed cable shall be packaged for shipment on reels. The cable shall be wrapped in weather and temperature resistant covering. Both ends of the cable shall be sealed to prevent the ingress of moisture.

Each end of the cable shall be securely fastened to the reel to prevent the cable from coming loose during transit. Six feet of cable length on each end of the cable shall be accessible for testing. The complete outer jacket marking shall be visible on this six feet of cable length.

Each cable reel shall have a durable weatherproof label or tag showing the manufacturer's name, the cable type, the actual length of cable on the reel, the Contractor's name, the contract number, and the reel number. A shipping record shall also be included in a weatherproof envelope showing the above information and also include the date of manufacture, cable characteristics (size, attenuation, bandwidth, etc.), factory test results, cable identification number and any other pertinent information.

The minimum hub diameter of the reel shall be at least thirty times the diameter of the cable. The F/O cable shall be in one continuous length per reel with no factory splices in the fiber. Each reel shall be marked to indicate the direction the reel should be rolled to prevent loosening of the cable.

Installation procedures and technical support information shall be furnished at the time of delivery.

The individual fiber coating shall be a dual layered, UV cured acrylate. The coating shall be mechanically or chemically strippable without damaging the fiber.

The cable shall comply with the optical and mechanical requirements over an operating temperature range of -40° F. to +158° F. The cable shall be tested in accordance with EIA-455- 3A (FOTP-3), "Procedure to Measure Temperature Cycling Effects on Optical Fiber, Optical Cable, and Other Passive Fiber Optic Components." The attenuation shall be measured at 1310nm and 1550nm. Fibers within the finished cable shall meet the requirements in the following table:

FIBER CHARACTERISTICS TABLE

| Parameters | Value |
|---|--|
| Mode | Single |
| Туре | Step Index |
| Core diameter | 8.2 µm (nominal) |
| Cladding diameter | 125 μm ± 0.7μm |
| Core to Cladding Offset | ≤ 0.5 µm |
| Coating Diameter | 242 μm ± 5 μm |
| Cladding Non-circularity defined as: | - ≤ 0.7% |
| [1-(min.cladding dia./max. cladding dia)] * 100 | S 0.1 /0 |
| Proof/Tensile Tes | 100 kpsi, min. |
| Attenuation @ 1,310 nm | ≤ .32dB/km |
| Attenuation @ 1,550 nm | ≤ .18dB/km |
| Attenuation at the Water Peak | ≤ 0.32 dB/km @ 1383 ± 3nm |
| Chromatic Dispersion: | |
| Zero Dispersion Wavelength | 1304 to 1324 nm |
| Zero Dispersion Slope at zero dispersion wavelength | ≤ 0.092 ps/(nm2*km) |
| Maximum Dispersion: | ≤18 ps/(nm*km) for 1550 nm |
| Cut-off Wavelength | ≤ 1260 nm |
| Mode Field Diameter (Petermann II) | 9.2 ± 0.4 μm at 1310 nm 10.4 ± 0.5 μm at 1550 nm |

2.8.2 Color Coding

Optical fibers shall be distinguishable from others in the same buffer tube by means of color coding. The colors shall be targeted in accordance with the Munsell color shades and shall meet EIA/TIA-598A "Color Coding of Fiber Optic Cables." The color formulation shall be compatible with the fiber coating and the buffer tube filling compound and be heat stable. It shall not fade or smear or be susceptible to migration and it shall not affect the transmission characteristics of the optical fibers and shall not cause fibers to stick together.

2.8.3 Cable Construction

The fiber optic cable shall consist of 48 fibers as shown in the Plans, arranged in 6 color-coded buffer tubes. The fiber optic cable shall consist of, but not be limited to, the following components:

- A. Buffer tubes
- B. Central member
- C. Filler rods if needed
- D. Stranding
- E. Core and cable flooding
- F. Tensile strength member
- G. Ripcord
- H. Outer jackets
- I. Glass fibers as described above

2.8.3.1 Buffer Tubes: Loose buffer tubes shall provide clearance between the fibers and the inside of the tube to allow for expansion without constraining the fiber. The fibers shall be loose or suspended within the tubes and shall not adhere to the inside of the tube.

The loose buffer tubes shall be extruded from a material having a coefficient of friction sufficiently low to allow free movement of the fibers. The material shall be tough and abrasion resistant to provide mechanical and environmental protection of the fibers yet designed to permit safe intentional "scoring" and breakout, without damaging or degrading the internal fibers.

Buffer tubes shall be wrapped in a water-swellable tape. It shall prevent water intrusion and migration. The tape compound shall be non-toxic and dermatologically safe to exposed skin. It shall be chemically and mechanically compatible with all cable components, non-nutritive to fungus, non-hydroscopic and electrically non-conductive. The tape compound shall be free from dirt and foreign matter and shall be readily removable with conventional nontoxic solvents.

Buffer tubes shall be stranded around a central member by a method, such as the reverse oscillation stranding process that will prevent stress on the fibers when the cable jacket is placed under strain.

Each buffer tube shall be distinguishable from other buffer tubes in the cable by using the same color coding as specified above for fibers.

- **2.8.3.2 Central Member:** The central member, which functions as an anti-buckling element, shall be an all dielectric, glass reinforced plastic rod with similar expansion and contraction characteristics as the optical fibers and buffer tubes. To provide the proper spacing between buffer tubes during stranding, a symmetrical linear overcoat of polyethylene may be applied to the central member to achieve the optimum diameter.
- **2.8.3.3 Filler Rods:** Fillers may be included in the cable cross-section. Filler rods shall be solid medium or high-density polyethylene. The diameter of filler rods shall be the same as the outer diameter of the buffer tubes.
- **2.8.3.4 Stranding:** Completed buffer tubes shall be stranded around the overcoated central member using stranding methods, lay lengths and positioning such that the cable shall meet mechanical, environmental and performance specifications. A polyester binding shall be applied over the stranded buffer tubes to hold them in place. Binders shall be applied with sufficient tension to secure the buffer tubes to the central member without crushing the buffer tubes. The binders shall be non-hydroscopic, non-wicking and dielectric with low shrinkage.
- **2.8.3.5 Tensile Strength Member:** Tensile strength shall be provided by high tensile strength aramid yarns and/or fiberglass which shall be helically stranded evenly around the cable core and shall not adhere to other cable components.
- **2.8.3.6 Ripcord:** The cable shall contain at least one ripcord under the jacket for easy sheath removal.

2.8.3.7 Outer Jackets: The 2 outer jackets shall be free of holes, splits, and blisters and shall be with minimum nominal jacket thickness of 37 mils. Jacketing material shall be applied directly over the tensile strength members and shall not adhere to the aramid yarn strength material. The outside jacket shall be flame-retardant, shall contain carbon black to provide ultraviolet light protection, and shall not promote the growth of fungus. The jacket or sheath shall be marked with the manufacturer's name, the words "Optical Cable" or "Fiber Optic Cable", the number of fibers, "SM" or "Single Mode", year of manufacture, and sequential measurement markings in feet, every 3 feet. The actual length of the cable shall be within 1 percent of the length marking. The marking shall be in a contrasting color to the cable jacket (Yellow or White are preferred). The height of the marking shall be approximately 2.5 mm (.098 inch).

2.8.3.8 Armour: The cable shall have a single layer of corrugated steel tape armor.

2.8.4 Fiber Optic Distribution Panel / Building Drop Cable

A Fiber Optic Distribution Panel (FDP) shall be used any time that a fiber optic cable termination is made in a cabinet or rack. The FDP shall be rack mounted and shall house a minimum of 4 connector panels. The drop cable shall be manufactured to the same specifications as the branch/trunk fiber supplied, with an OFNR-rated, all-dielectric cable that is UV-resistant, double jacketed and fully water-blocked. The drop cable shall have four color coded 3.0 mm buffer tubes each with 12 color coded fibers. The contractor shall mount the FDP in an organized manner to meet the requirements of the county. The building drop cable shall be secured in the cabinet using reusable velcro cable wraps. The contractor will have the option to use either a pre-terminated pigtail or a standard bulk cable and fan out kit. The building drop cable shall meet the following specifications:

Fiber type: Single mode (1310/1383/1550 nm)

Cable length: > 150' (Installed minimum)

Cable rating: Plenum
Cable type: Loose Tube

Cable bend radius: 4.49" (Installed minimum)

Maximum attenuation: 0.4 dB/km at 1310 nm, 0.4 dB/km at 1383 nm and 0.3 dB/kmat 1550 nm

Maximum insertion loss: 0.5 dB
Reflectance: <-55 dB
Operating temperature: -40 °C to 70
C Connector type: LC/UPC
Number of connectors: 12 (minimum)

Connector tensile strength: 50 Lb

| Brittle Temp | < -103° F (<-75° C) | ASTM D-746 |
|---------------------|---------------------|---------------|
| ESCR (Bell Test) | >1500 F50 hrs | ASTM D-1693C) |
| Rockwell Hardness L | 49 | ASTM D-785 |
| Shore Hardness D | 61 | ASTM D-2240 |

2.8.5 Fiber Optic Connectors

All fiber optic connectors shall be LC/UPC type and shall conform to the NTT-SC and Telcordia 326 specifications for LC/UPC connectors. Any marks on the fiber core or on the cladding within a core diameter from the core shall be cause for rejection and re-termination of the fiber. The fiber strength member shall be affixed to the connector by crimp ring or by epoxy. If a crimp ring is used, it shall be crimped with a ratcheting tool that ensures correct crimp pressure. The connector reflectance shall be less than -55 Db. The completed termination shall exhibit a loss of no more than 0.5 dB per mated pair when tested with an OTDR and a standard test cable.

Each optical fiber shall be made of glass that consists of a doped silica core surrounded by concentric silica cladding. All fibers in the buffer tube shall be usable fibers and shall be sufficiently free of surface imperfections and inclusions to meet the optical, mechanical, and environmental requirements of these specifications.

2.8.6 Fiber Optic Splice Materials

At each splice point, splice organizer trays shall be provided to contain and protect the bare fibers and splices. All splices shall be protected with a heat-shrink sleeve containing a stainless-steel strength rod or with a plastic enclosure with integral adhesive. The splice trays shall have a means to affix the buffer tube rigidly in place, and space and guides to allow "race tracking" of the fiber and guides to locate the splice protectors. Completed splice protectors shall be held in place with RTV silicone or adhesive tape. No more than 12 splices shall be placed in one tray.

A clear plastic cover shall be put in place on the completed tray.

2.9 Underground Splice Enclosures

Underground splice enclosures will be used for cable splicing. Splice enclosures shall be designed to be easily accessible for testing and maintenance with the necessary vehicles and equipment to perform the task. The fiber optic splice enclosures shall be capable of accommodating splice organizers to facilitate fiber management and accept fiber fusion splices. The splice locations have been identified in the plans and additional splices for contractor convenience will not be accepted. It is the intention of these specifications to have continuous cable from building to building using expressed cable entry everywhere possible. Additional splices will degrade the signal carrying capability of the cable and are not acceptable.

The splice closure shall be 6 inches in diameter and 22 inches in dome length with 4 drop ports and split end caps for easy installation of uncut cables. The splice tray stacker configuration will have a 0.2 inch tray height (single fiber). The splice closure shall provide fiber optic cable penetration end caps on one end, to accommodate at least two 96 count fiber optic cables, two 24 count fiber optic cable and two 12 count fiber optic cable. Water blocking techniques shall be used to ensure that the closure and cable entry locations do not leak when immersed in 19 feet of water for 30 days. The closure end caps should be factory drilled to the proper diameter to accept and seal the fiber optic cable entry(ies). Cable entry locations shall accommodate an assortment of fiber optic cable outer diameters ranging from 0.45 inches to 0.55 inches (± 10 percent) without jeopardizing its waterproof characteristics.

Tubular/cylindrical splice enclosures with non-corrosive metallic materials shall be utilized. All fiber optic splice enclosures shall meet the requirements of Telcordia Technologies (formerly Bellcore) GR-771-CORE and shall comply with all applicable NEC requirements. The splice closure will be free of

hazardous substances according to RoHS 2011/65/EU.

Splice enclosures may encounter high water table conditions. Splice enclosures shall be non-filled (no encapsulate), airtight and prevent water intrusion, able to maintain a minimum pressurization of 3 psi and have the capability to be reentered without requiring specialized tools or equipment. Splice enclosures shall also be supplied with all hardware necessary to provide solid mounting to wall structures. All enclosures and associated facilities provided under this Contract shall include a quality assurance/quality control inspection for materials, workmanship and compliance of the product to meet these specifications. The Contractor shall provide to the Engineer a Certificate of Compliance from the manufacturer indicating that the splice enclosures meet the requirements included herein.

All splice enclosures must employ a complete fiber management system consisting of splice trays and a stress relief system. Fiber shall be secured in the splice enclosures using reusable velcro cable wraps. Each closure shall be designed to accommodate future expansion and contain modular splice organizers/trays capable of handling splices in a neat and distinguishable fashion.

Spare splicing trays shall be provided to allow for an additional 120 splices in the enclosure. At the end of the reel splice location additional splice capacity is not required. Trays shall be easily attachable and accessible. Tray raceways shall include a raceway for excess fiber storage that accommodates the minimum bend radius of single-mode fiber without causing excessive signal losses due to bending or fiber damage. Splice enclosures shall have provisions for storing fiber splices and non-spliced fiber/buffer tubes.

The contractor shall be responsible for providing date and time stamped pictures of the completed splice tray and inside of the splice enclosure installed at each of the intersections.

2.10 Underground Splice Enclosure Locations

It shall be the responsibility of the Contractor to determine where underground splice enclosures are required for the termination of underground cable at the end of a cable reel. Underground splice enclosures shall not be spaced less than two miles unless otherwise approved by the Engineer. The cost of the enclosure used for this purpose shall be considered incidental to the installation of the communications cable network. Underground splice enclosures shall meet the requirements of Section 6.7 of this Technical Special Provision.

2.11 Sodding

- A. Sod: All grass sod shall be State Certified, nursery grown native mixture of Houndog, Rebel, Pride, Cochise, Coyote or other substitute, as may be approved. Sod shall be a Tall Turf type Fescue with 10 percent Bluegrass that is free of objectionable grassy and broadleaf weeds. Sod shall be considered free of such weeds if less than 5 such plants are present per 100 square feet of area. Sod will not be acceptable if it contains any of the following weeds: Common burmudagrass, (wiregrass), quackgrass, johnsongrass, poison ivy, nutsedge, mumblewill, Canada thistle, bindweed, wild garlic, ground ivy, perennial sorral and bromegrass, or as defined by current weed laws.
 - 1. Pad Size: The sod shall be cut to supplier's standard width and length but not less than 12 x 24 inches and not more than 24 x 72 inches or bigger sizes that are approved by the Owner. There shall not be broken pads, torn or uneven ends.
 - 2. Strength: Root development shall be such that standard size pieces will support their own weight and retain their shape when suspended vertically from a firm grasp on the uppermost 10% of area.
 - 3. Mowing Height: Before harvesting sod, it shall be mowed uniformly at a height of $2 2\frac{1}{2}$ inches. The sod shall be stripped or harvested by machine at a uniform thickness of $1\frac{1}{2}$ inches $\pm \frac{1}{4}$ inch. Measurement of thickness shall exclude top growth and thatch.

- B. Fertilizer: Fertilizer shall be inorganic 12-12-12 or 13-13-13 grade, uniform in composition, free flowing and suitable for application with approved equipment, delivered to the site in convenient containers, each fully labeled, conforming to applicable state fertilizer laws, bearing the name, trade name, or trademark and warranty of the producer.
- C. Top Soil: The Contractor shall make every reasonable effort to stockpile existing top soil prior to excavation and reuse it in the same general locations. No payment will be made for topsoil furnishing and placement necessary due to excessive hauling off of existing top soil on the project site.
- D. Qualifications of Workman: Provide at least one person, who shall be present at all times during the execution of this work, who is thoroughly familiar with all materials and installation procedures included in the Sodding and Seeding operations as specified herein.
- E. Delivery Containers: Deliver all items to the site in their original containers with all labels intact and legible at time of Owner inspection.
- F. Protection: Use all means necessary to protect all materials before, during and after installation, and to protect the installed work and materials of all other trades.
- G. Replacements: In the event of damage or rejection, immediately make all repairs and replacements to the approval of the Owner and at no additional cost to the Owner.
- H. Weather Conditions: All sodding and seeding shall be performed during favorable weather conditions and only during normal and acceptable planting seasons when satisfactory growing conditions exist. The planting operations shall not be performed during times of extreme drought, when ground is frozen or during times of other unfavorable climatic conditions unless otherwise approved by Owner. The Contractor assumes full and complete responsibility for all such plantings and operations.
- I. Planting Dates: Recommended dates for all seeding and planting shall be March 15 through October 15 unless otherwise approved by the Owner.
- J. Pre-planting Inspection: Prior to the work of this section, the Contractor shall carefully inspect the installed work of all other trades and verify that all such work is complete to the point where installation may properly commence.
- K. Discrepancies: Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

SECTION 3 CONSTRUCTION REQUIREMENTS

GENERAL:

3.1 Order Of Work

3.1.1 Excavations

The Contractor shall perform all excavations for installing underground conduits and handholes in whatever substances are encountered, to the depths indicated on the drawings or as otherwise approved. During excavation, material suitable for backfilling shall be piled in an orderly manner a sufficient distance from the excavation to avoid slides. Excavated materials shall be kept off sidewalks and out of the street where possible. All excavated material that is piled on sidewalks or in streets shall be removed by the end of the same working day. The Contractor shall pile excavated materials such that drivers' visibility will not be obstructed. All excavated materials not required or unsuitable for backfill shall be removed and wasted on a site obtained by the Contractor. Excavations and trenches shall not be larger or wider than necessary for the proper installation of the conduits and handholes. Excavation shall not be performed until immediately before the installation of conduit or handholes. All excess excavated material shall be removed at the earliest possible time or as directed by the Engineer.

All areas excavated shall be backfilled and compacted in accordance with these Specifications. Backfill shall be deposited in not over 6-inch layers and tamped to 95 percent density +3 percent of optimum moisture. The top 6-inches of backfill shall be select soil suitable for sodding. All areas excavated shall be backfilled at the earliest possible time or as directed by the Engineer.

After backfilling, all disturbed areas shall be kept well filled and maintained in a smooth and well drained condition until permanent repairs are made. Where trenches are excavated in established sod areas, the area shall be backfilled as above the same day excavation occurs by a method approved by the Engineer. Approved methods are intended to reduce damage to the established sod area.

3.1.2 Underground Conduits

It is the intent of this contract that all conduits be installed by directional bore. It is also recognized that trenching will be needed to tie in several areas. Trenches shall be excavated to the width and depth necessary for conduit installation. All trenches shall be backfilled as soon as practical after the installation of conduit. The bottom of the trench shall be free of Cinders; broken concrete and other hard or objectionable material which might cause mechanical damage to the conduit, such material shall be cleared before the conduit is placed. Where bored conduit is specified, the conduit shall be installed without disturbing the existing surface. Bored conduit shall be placed by directional bore. No conduit shall be placed without approval of the trench by the engineer. All disturbed areas shall be restored to the satisfaction of the engineer. The contractor shall proof all installed conduits by pulling the appropriately sized mandrel through the conduit after installation of conduit into handholes and completed backfilling. Proofing of the conduit is considered subsidiary to the conduit installation. A record of the proofing procedure shall be maintained by the contractor and inspector.

3.1.2.1 Method Of Measurement: Unless otherwise stated in the itemized proposal, all "Conduit" shall be measured by the linear foot of completed and accepted work, of the type indicated on the plans.

3.1.3 Conduit on Bridge Structure

All conduit on the bridge structure shall be installed per the plans and these specifications. It shall be galvanized rigid steel conduit supported by approved hardware.

3.1.3.1 Method of Measurement: Unless otherwise stated in the itemized proposal, "Conduit on Bridge Structure" shall be measured by lump sum of completed and accepted work, of the type indicated on the plans.

3.1.4 Tracer Wire

Tracer Wire meeting the requirements of these specifications shall be installed in all proposed and existing conduit where new fiber optic cable is installed. The tracer wire shall extend into the handholes and be joined in each handhole by use of a UL listed terminal block with one port for each wire. There shall be 6 feet of slack in each run of tracer wire at each handhole. Tracer wire slack shall be coiled separately from the fiber optic cable in the handholes so that either can be extended out of the handhole without the either being disturbed or tangled. Installation of tracer wire shall be subsidiary to the conduit installation.

3.1.5 Fiber Optic Cable

Contractor shall provide and install fiber optic cable as specified in the plans and these specifications. Type of cable and fiber count shall be per the plans. All fiber optic cable shall be labeled in every hand hole with the following information: Cable count and destination within 4 feet of the handhole wall. (i.e., 48 count, Courthouse, 1st floor, MPOE room) Each handhole will have a minimum of two labels, one for each conduit entry. Slack cable shall be neatly coiled from the center of the slack span by alternating the figure eight loops. Coils in each handhole shall be of equal coil diameters and at no time shall the coil violate the minimum bend radius of 11".

3.1.5.1 Method of Measurement: Unless otherwise stated in the itemized proposal, all "Fiber Optic Cable" shall be measured by the linear foot of completed and accepted work, of the type indicated on the plans.

3.1.6 Rod and Proofing

Contractor shall proof any existing conduits that will be used as part of this project with a fiberglass rodder, and mandrel appropriately sized for the conduit.

3.1.6.1 Method of Measurement: Unless otherwise stated in the itemized proposal, all "Rod and Proofing" shall be measured by the linear foot of completed and accepted work, of the type indicated on the plans.

3.1.7 Fusion Splices

The contractor shall furnish and install fusion splices according to these specifications and per the splice documents provided by the engineer. All testing and documentation shall be considered incidental to the fiber splicing.

3.1.7.1 Method of Measurement: Unless otherwise stated in the itemized proposal, all "Fusion Splices" shall be measured by quantity and shall be as called for on the plans and to specifications on the standard drawings.

3.1.8 EMT

The Contractor shall supply and install 2" EMT conduit from the transition at the above ground building entry locations to the LB and through the wall of the building. EMT shall be fastened to the building within one foot of the ground and one foot of the LB and at no greater than ten-foot intervals. All EMT shall be cut square and the ends shall be deburred prior to installation into all fittings. Appropriate fittings shall be used for transitions to threaded fittings and or HDPE conduit.

3.1.8.1 Method of Measurement: Unless otherwise stated in the itemized proposal, all "EMT" shall be measured by the linear foot of completed and accepted work, of the type indicated on the plans.

3.1.9 Plenum Rated Innerduct

The Contractor shall supply and install Plenum Rated Innerduct beginning at the interior wall of the building entry and continuing to the Fiber Distribution Panel (FDP). The innerduct shall be fastened as appropriate at no more than 4 feet on center spacing.

3.1.9.1 Method of Measurement: Unless otherwise stated in the itemized proposal, all "Plenum Rated Innerduct" shall be measured by the linear foot of completed and accepted work, of the type indicated on the plans.

3.1.10 Fiber Distribution Panel

The contractor shall supply and install Rack Mount Fiber Distribution Panels (FDP) at each location shown in the plans and per these specifications. Every port shall be labeled as to its destination using the specified nomenclature (Building, floor, room, rack, port).

3.1.10.1 Method of Measurement: Unless otherwise stated in the itemized proposal, all "FDPs" shall be measured by quantity and be of the type indicated on the plans.

3.1.11 LB Condulet (LB)

The contractor shall supply and install LB's for each above grade building entry location. The LB's shall be of the Hot dipped Galvanized Malleable Steel variety and shall be gasketed. Unless otherwise stated in the itemized proposal, all "LBs" shall be subsidiary to wall cores and no direct payment will be made.

3.1.12 Wall Cores

Contractor shall supply all labor and equipment to core the appropriately sized core hole in the exterior wall of buildings for building entries. The core hole shall be concentrically centered to the conduit and no more than 1/2" larger in diameter than the conduit. The core hole shall be sealed in an appropriate manner for the material being cored. Installation of wall cores shall be measured by the number of actual wall cores constructed.

3.1.13 Installation of Handholes

For construction details refer to plan sheet 53 (See Appendix A). All conduit openings in handholes shall be sealed with either "duct seal" or a foam type waterproofing sealer. No handholes will be accepted if the conduit openings have more than a 1/4" annular gap around the conduit. All conduits shall enter the handhole through the side and no conduits shall enter the handholes from the bottom.

Handholes shall be installed at locations shown on the plans. No handholes shall be installed in areas where traffic should be expected. Maximum distance between handholes should not exceed 1100 Feet. For construction details see the standard drawing on plan sheet 53. Conduit shall enter the boxes in the side of the box and shall extend a minimum of 2 inches (50 mm) and a maximum of 4 inches (100 mm) as shown on the plans. If it is necessary to increase the excavation depth and extend the box, no direct payment will be made. The excavated opening outside the box shall be wide enough to allow compaction of the backfill material. Cinders, broken concrete, broken rock or other hard or undesirable material shall not be used for backfilling. The backfill material shall be placed in layers not to exceed 6 inches deep and each layer shall be thoroughly compacted before the next layer is placed. Where preformed boxes are used, the holes for the conduit shall be drilled as recommended by the manufacturer. The holes shall be round and no more than 1/2 inch larger than the conduit.

3.1.13.1 Method of Measurement: Unless otherwise stated in the itemized proposal, all "Handholes" shall be measured by quantity and shall be as called for on the plans and to specifications on the standard drawings.

3.1.13.2 Street Cut restoration:

- A. All street cut restoration and backfill shall be in accordance with City of Leavenworth standards. (See Appendix A For Standard Drawings). All restoration work to be done under departmental supervision and to the approval of engineer.
- B. Trenches shall be excavated to the width and depth necessary for conduit installation. All trenches shall be backfilled as soon as practical after the installation of conduit. Cinders, broken concrete and other hard or objectionable material which might cause mechanical damage to the conduit shall not be used for backfilling within 6 inches of the top of the conduit. Backfill material shall be deposited in the trench in layers not exceeding 6 inches deep and each layer shall be compacted to the approximate density of the adjacent material by an approved method before the next layer is placed. All disturbed areas shall be restored to the satisfaction of the engineer.
- C. When it is necessary to cut a street pavement, driveway, or sodded area in order to install conduits, the contractor shall repair same in accordance with the Department of Public Works standard specifications adopted herein by reference. No cuts are to be made in curbs or side-walks or placement of conduit where pushed conduit is indicated on plan sheets.
- D. Aesthetic sidewalk and/or pavement (brick, brick paver, paver block, colored concrete, granite, slate, etc.) shall be replaced entirely by the Contractor and shall match color and texture in accordance with the City or Counties requirements.

3.1.14 Sidewalk And ADA Ramp

Sidewalk and ADA Ramps, new and restoration shall follow the latest revision of the City Specifications. (See Appendix A for Standard Drawings). Any deviations from the standards will have to be pre-approved by the Engineer in writing, prior to carrying out of said work. Unless otherwise called for, the mix used shall be as follows:

KCMMB 4K Granite for all concrete in the public R/W

When the ambient air temperature is 90 degrees or higher, a retarder shall be used in all concrete mixes.

3.1.14.1 Replacement of sidewalk / ADA ramps

A. RESIDENTIAL SIDEWALKS

Where transverse cuts are made in a standard or usual 5—foot residential sidewalk, in any area whatsoever, the entire square usually 5' x 5' shall be removed and replaced in accordance with applicable City standards.

Where a utility or other cut is made longitudinally down the sidewalk, the entire width of the sidewalk between the end blocks shall be removed and replaced for the full width of the sidewalk, in compliance with applicable City standards.

B. BUSINESS AND SIDEWALKS OTHER THAN THE USUAL 5-FOOT RESIDENTIAL WALK In cases where a cut is made in the sidewalk where the blocks or squares are readily definable, the entire block or square shall be removed and replaced. If necessary, or if the blocks are not jointed so as to facilitate easy removal, the joint shall be sawed with a concrete saw to full depth of the existing sidewalk and replaced in compliance with applicable City standards.

In cases where the existing walk is of a considerable width or extends from curb to building line and the blocks or squares are not cut into readily identifiable squares or blocks, an opening around the cut made in the existing sidewalk shall be sawed instead of removing a certain block. The full depth saw cut shall be made in the existing walk. It shall be outside of the cut as made in the sidewalk and there shall not be left a width of less than 3 feet from the edge of the saw cut to an existing readily identifiable construction or expansion joint in the existing sidewalk. The sidewalk area so removed shall be replaced in compliance with applicable City standards.

3.1.14.2 Method Of Measurement: All sidewalk and ADA ramp work shall be incidental to the conduit and handhole installations.

3.1.15 Sodding

- A. Sod shall not be harvested or delivered when excessively wet or dry. Sod shall be harvested, delivered and installed within a period of 36 hours. Protect sod from sun, wind, dehydration, and rain prior to installation that cannot be placed immediately on delivery. Sod showing visible signs of heating or dehydration will be rejected.
- B. Areas to be sodded shall be fertilized at the rates specified in Section 2401.3.F. The sod-bed shall be free of any irregularities in the surface resulting from fertilizing or other operations and shall be corrected in order to prevent the formation of water pockets. Freshly graded areas, which have set long enough to become dry and crusted over, shall be tilled as specified above, prior to placing the sod.

- C. The first row of sod should, if possible, be laid in a straight line with subsequent rows placed parallel and tightly against one another. Lateral joints shall be staggered as in brick laying to promote more uniform growth and strength. Care shall be exercised to ensure that the sod in not stretched or overlapped and that all joints are butted tight in order to prevent voids which would otherwise cause air drying of the roots. Where new sod meets existing grassed areas, a straight, vertical edge shall be cut to allow smooth match. Sod shall be watered and firmed in accordance with Section 2400.6.B. If it is necessary to walk excessively on newly laid sod or soil, walking boards should be laid for this purpose.
- D. Sod shall be laid with staggered joints and at right angles to direction of slope. Sod shall be secured by tamping or rolling. On slopes 4:1 or steeper and in drainage channels, all sod shall be anchored at minimum two-foot intervals to prevent movement under rainfall conditions.
- E. The Contractor shall be responsible for having adequate water available at the site prior to and during the installation of the sod and the areas to be seeded. The sod shall be watered immediately after installation to prevent drying during progress of the work. As sodding is completed on any one section, the entire area shall be thoroughly irrigated to a one inch depth below the new sod pad. After a short drying period, the sod shall be rolled with a roller weighing not less than 60 or more than 90 pounds per linear foot to firm the sod pad and smooth minor surface irregularities. Subsequent watering should maintain sod and soil moisture to a depth of at least four inches, supplement rainfall, to promote growth, promote proper rooting to insure sod survival, and to prevent dormancy.
- F. Apply second application of fertilizer at the rate of 300 pounds per acre two weeks after laying sod and prior to final acceptance.
- G. The sodded areas will be inspected for the acceptable grass coverage and will be acceptable when grasses designated are growing and are in good conditions, and no area more than ½ of one percent of the total area shall be bare or dead, of which no single area shall be more than one foot square in area. Any bare or dead area larger than this will not be acceptable, and shall be resodded.
- H. Maintenance Period The Contractor shall be responsible for maintaining the installed grass seed and sod until all areas are complete and accepted by the Owner.
- I. Maintenance of sodded areas shall include watering, weeding, mowing to a 2½ inch height after growth has exceeded 3 inches and prior to a 4 inch growth, replacement and installation of sod as originally specified for sodded areas failing to survive, and repair of rutting, should that occur. Clippings from mowing which mat on the grass are to be removed.
- J. Installation of sod shall be subsidiary to the conduit and handhole construction.
- K. All construction shall conform to the latest standards and specifications of the city of Leavenworth, KS, Leavenworth County, and other applicable jurisdictions. Most stringent standards and specifications apply. Notify engineer of discrepancies.

3.2 Testing, Inspection and Acceptance Procedures

3.2.1 Inspection

All equipment and material furnished and all work performed in connection with the project shall be subject to inspection by the Engineer. The Engineer, or his authorized representative, shall have free access during normal working hours to any local facility or area in which work associated with the project is occurring. The Contractor shall ensure that full and sufficient information concerning the character of materials and workmanship is made available to the Engineer or his representatives.

Inspection by the Engineer or his representative shall not relieve the Contractor of his obligation to comply with the requirements of the Plans and this Technical Special Provision. Any equipment or labor, which is found by the Engineer to be defective, damaged or unsuitable prior to Final Acceptance, shall be replaced or corrected at the Contractor's expense.

3.2.2 Test Procedures and Documentation

The Contractor shall demonstrate in the presence of the Engineer, and/or the Engineer's representative if the Engineer so desires, that the components supplied and installed as part of this project function in full compliance with this Technical Special Provision. The contractor shall notify the engineer 1 week prior to any testing of the schedule for testing so the engineer can witness the testing.

All fiber optic work shall be performed by a Contractor with proper installation qualifications on staff, which shall include at least the following: Building Industry Consulting Services International (BICSI) installation crew in which at least 10% of individuals contain BICSI Installer 2 (INSTF) certification. Before starting work, the Contractor shall provide the City Engineer with the names and certification credentials of the BICSI certified personnel assigned to perform fiber optic related work. If the BICSI certified designer(s) or installer(s) are dismissed from the project, all fiber optic installation work shall cease until the names and photocopies of certification cards for replacement personnel are provided to the City Engineer. The Engineer at his/her discretion has the option to accept alternate certifications.

3.2.3 Fiber Optic Communications Cable Tests

3.2.3.1 Pre-installation Test: If the fiber optic cable delivered to the job site does not have factory testing results delivered with it the Contractor shall test the fiber optic cable prior to installation. Cable delivered to the job site requiring testing shall be tested on the reels prior to installation. This test shall consist of a single direction sweep of each individual fiber with an Optical Time Domain Reflectometer (OTDR) that has been calibrated for the index of refraction of the fiber to be tested. Verification of the fiber length and attenuation shall be made. Attenuation shall not exceed 0.32 dB/km at 1310nm, and 0.18 dB/km at 1550nm. If the cable fails to meet these requirements, the Contractor shall replace the entire reel at no additional cost. Printouts of the OTDR trace with the identification of the fiber and the attenuation and length noted on the printout shall be provided to the engineer for review prior to installation of the cable.

3.2.3.2 Post-installation Test: After all the splices and terminations have been completed, test each fiber, including spares, with a power meter and OTDR as follows:

- Power Meter Tests: Conduct bi-directional power meter tests at 1310 nm, 1550 nm for each terminated fiber to demonstrate connectivity and attenuation from cabinet to cabinet, and from origin to destination by installing feed through LC connectors at all locations where an optical device is to be connected. Demonstrate that the attenuation for each fiber path including connectors, and splices as a whole, comply with the loss budgets required by these Specifications and the optical equipment being installed. Submit a test result summary sheet of each fiber to the Engineer for review and approval. Also, provide a spreadsheet with summary comparison of the loss for each of fiber tested by a Power Meter and an OTDR.
- OTDR Tests: Conduct bi-directional tests using an OTDR for each terminated fiber.
 Demonstrate that the attenuation for each fiber and splice, individually and as a whole comply with the loss budgets required by these Specifications. Test fibers at 1310 nm, 1550 nm, using a launch cable no less than three times the pulse width used to shoot the cable. Submit OTDR

traces to the Engineer for review and approval. Clearly annotate each splice and identify the measured loss. Also, calculate and document fiber length and cable length from FDP to FDP.

Those fibers that are not terminated at the time shall be uni-directional tested using a bare fiber adapter or a pigtail using a mechanical splice. The Contractor shall investigate any discontinuities and repair them or replace the cable section at no additional cost to the City. Failed splices may be remade and re-tested for compliance.

Following completion of all testing, and approval by the Engineer, the Contractor shall compile and submit organized electronic trace files electronically. Direct electronic printouts, in pdf format or approved equivalent format, of the power meter and OTDR tests shall also be supplied. The contractor shall also provide a test summary that includes the OTDR traces of each fiber strand, and the power meter test results of each fiber strand. All traces must be organized and arranged in logical directories with a printed list of directories and filenames referenced to the fiber location provided. The contractor shall provide a sample cable verification summary worksheet for review and approval by the Engineer. The cost of fiber testing and documentation associated with installation of a splice shall be subsidiary to the fiber optic cable splicing, and the cost of the fiber optic cable splicing.

3.2.4 Final Inspection

Upon completion of the burn-in period, the Engineer will make a final inspection. If all construction and all other aspects of the Plans and this Technical Special Provision are found complete, the Engineer may declare this project complete and inform the Contractor in writing of the final acceptance as of the date of final inspection.

If during the final inspection the Engineer deems any work unsatisfactory or not conforming with the Plans and this Technical Special Provision, the Engineer shall notify the Contractor in writing of any deficiencies. The Contractor shall correct these conditions within five working days, unless the Engineer grants additional time in writing. Upon completion of the Contractor's corrections, the Engineer shall conduct another final inspection. When the Engineer approves the final inspection, the Engineer shall send written notice to the Contractor of the final acceptance of the project

3.3 Changes in Work/Force Account

3.3.1 Description

This work shall cover miscellaneous extra work required during the course of construction. Construction adjustments requiring time or cost changes to the contract must be processed in two steps. The first step is execution of a Construction Field Directive form. A complete description of the changes along with backup documentation (if appropriate) shall be provided. Once signed by authorized Leavenworth County personnel, Contractor may commence with the work. Step two shall be formal incorporation of Field Directive changes into the contract by preparation and execution of a formal Change Order. Payments for Field Directive changes may be authorized as Force Account payments if a Force Account is part of the contract.

3.3.2 Measurement and Payment

Before the extra work is performed, the Contractor shall submit a proposed price in accordance with the "Construction Field Directive Form" described in this section for approval by the Engineer and shall have received the written approval of the Engineer prior to commencing the proposed extra work.

The Engineer will measure each Force Account item as defined in the proposed price approved in accordance with "Construction Field Directive Form" in this section.

| Payment for each Force Account item will be in accordance with the pre-approved proposed price however, it shall not to exceed the total contract price. |
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SECTION 4 - TRAFFIC CONTROL

4.1 Traffic Control

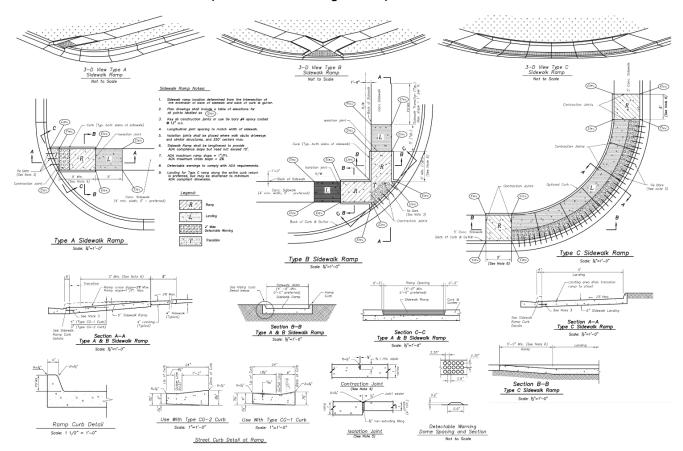
This work shall consist of furnishing, erecting, moving, cleaning, replacing, maintaining and removing signs, barricades, lights and other traffic control devices as shown on the plans, the Traffic Control Plan, or as required by the Engineer or as proposed by the Contractor and approved by the Engineer. The Contractor shall provide, erect, remove, relocate, clean, replace and maintain at all times during the progress or temporary suspension of the work, suitable signs, barricades, fences or other necessary traffic control devices in accordance with details shown on the plans, the Traffic Control Plan, or as directed by the Engineer.

- A. The traffic control requirements shown on the plans are minimum requirements only and do not attempt to address in depth the variety of situations that may occur once construction has begun. In no way do the requirements shown on the plans relieve the Contractor of his responsibility for selecting the proper traffic control devices and implementation procedures that will assure the safety of motorist, pedestrians, and workers at all times. Any additional quantities of traffic control devices necessary to complete the contract or as ordered installed by the Engineer shall be considered subsidiary to the lump sum bid item for temporary traffic control. The Contractor may develop an alternate Traffic Control Plan to be submitted to the Engineer for approval prior to its use. The Contractor who develops the alternate traffic control plan shall be properly trained in developing traffic control plans and shall be certified.
 - i. The safe and satisfactory movement of traffic through the project is of paramount importance and shall be the responsibility of the Contractor. At the onset of the project, the Contractor shall provide the Engineer with the name and telephone number of an individual who shall be available on a 24-hour basis to repair, replace, remove, relocate, clean and maintain any traffic control device required or as directed by the Engineer. The Contractor shall be responsible for maintaining all traffic control devices on an around- the-clock basis, whether or not work is actively being pursued and any deficiencies noted shall be corrected immediately.
 - ii. When the plans specifically provide that traffic be carried through construction, no detour will be provided for traffic during the construction of the project and the Contractor shall not route traffic on a detour without the written permission of the Engineer.
- B. The Contractor shall furnish all necessary posts, skids, easels and supports as may be required for proper installation of traffic control devices. The size, shape, color, and placement of all signs, barricades, mountings, and devices shall comply with the details shown on the plans, and/or the Traffic Control Plan, or the current edition of the Manual on Uniform Traffic Control Devices (MUTCD). The size and layout of the message on the signs shall comply with the latest edition of Standard Highway Signs and Standard Alphabets for Highway Signs as approved by the AASHTO and the FHWA, US DOT. On KDOT routes the traffic control should follow KDOT standard details and traffic control specification.
 - During non-working hours, all lanes of traffic in all directions shall be maintained.
 Working hours with lane closures are restricted to between 8:00 a.m. to 4:00 p.m.
 Monday through Friday. Work on Saturdays is possible with prior approval but not in residential areas.

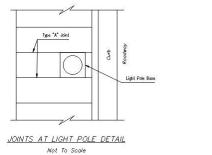
- C. During periods of inclement weather or during periods of unusually heavy traffic, the Engineer may require all operations to cease in order to adequately handle the traffic. The Engineer reserves the right to require the suspension or delay of certain operations, or the speeding up of other operations to ensure a proper sequence of operations and thus aid the satisfactory movement of traffic.
- D. The Engineer may require additional barricades, lights, flag persons, watch persons or other traffic control devices at any time or at any place that, in his opinion, are necessary for proper protection of traffic and workers. However, approval by the Engineer of the Contractor's method of operation shall not relieve the Contractor of the responsibility of protecting the traffic.
- E. Periodic checks of traffic control devices will be made at night by the Contractor in accordance with requirements determined by the Engineer.

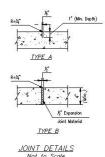
Appendix A

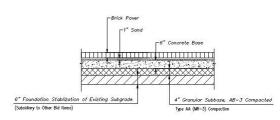
1. Sidewalk and ADA Ramp standard Drawings. See plan sheet 50 for construction details.



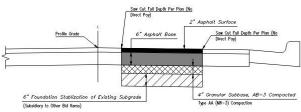
2. Street cut restoration standard drawings. See plan sheets 51-52 for construction details.



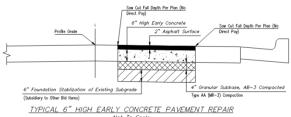




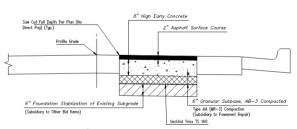
BRICK PAVEMENT REPAIR DETAIL (Not to Scale)



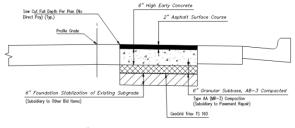
TYPICAL FULL DEPTH REPAIR FOR STREET CUTS OR POT HOLES
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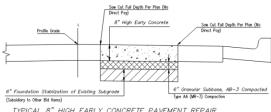
TYPICAL 6" HIGH EARLY CONCRETE PAVEMENT REPAIR
Not To Scale



TYPICAL 8" HIGH EARLY CONCRETE PAVEMENT REPAIR



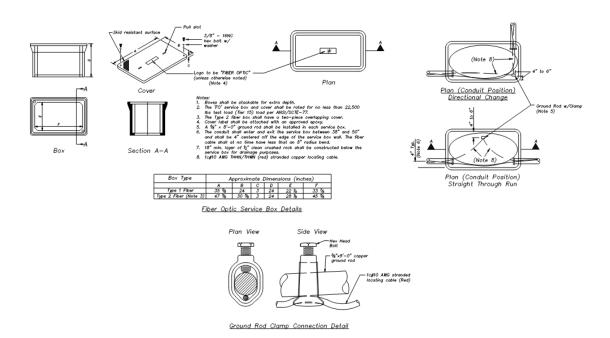
TYPICAL 6" HIGH EARLY CONCRETE PAVEMENT REPAIR
PARKING LOT

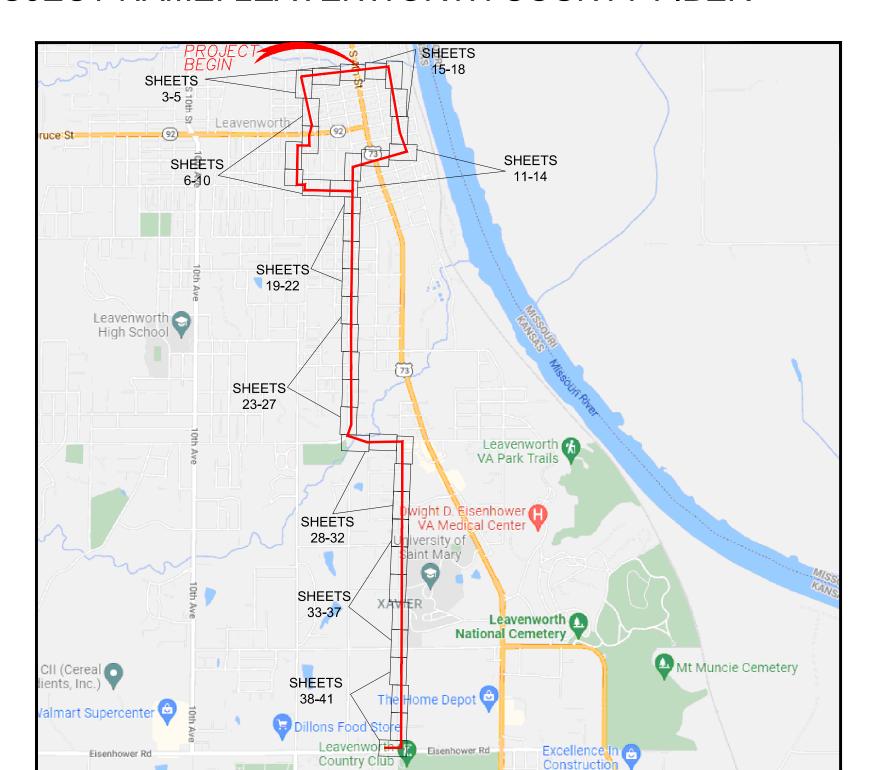


TYPICAL 8" HIGH EARLY CONCRETE PAVEMENT REPAIR

Not To Scale

3. Handhole standard drawings. See plan sheet 53 for construction details.





Vicinity Map

| <u>7</u> | VORK PLAN INDEX | | | | | |
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| SHEET | DESCRIPTION | | | | | |
| 1 | COVER SHEET | | | | | |
| 2-3 | GENERAL NOTES/LEGEND | | | | | |
| 4-42 | DESIGN PLAN SHEETS | | | | | |
| 43-47 | DETAIL SHEET | | | | | |
| 48-55 | TYPICAL DETAILS | | | | | |
| 56 | PLAT SHEET | | | | | |
| 57-58 | BORE PROFILES | | | | | |
| 59 | TRAFFIC CONTROL TYPICAL DETAILS | | | | | |
| 60 | FINAL QUANTITIES | | | | | |



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COVER SHEET
EAVENWORTH COUNTY FIBER
LEAVENWORTH, KS

drawn by: SPM
checked by: DAH
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QA/QC by:
project no.:
drawing no.: 019-2831
date: 4/25/22

SHEET 1 OF 60

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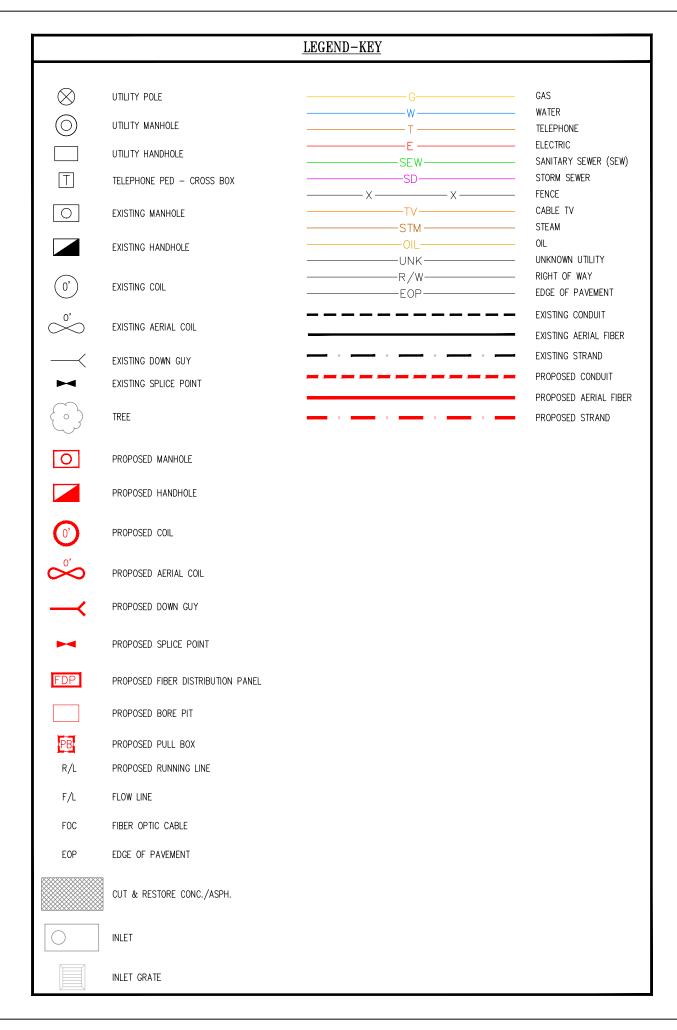
CONTACT INFO

LARRY MALBROUGH LMALBROUGH@LEAVENWORTHCOUNTY.GOV 913-683-9387

CC LARF LMAI

DWG: F:\2 DATE: Apr

-2831-a\40-design\AutoCAD\fin XREFS: Traffic Control Detalls



- NO TOPOGRAPHICAL SURVEY WAS COMPLETED FOR THE DESIGN OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL "1-800-DIG-SAFE", 1(800)344-7233 OR 811 AND COORDINATE FIELD LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. !!STOP!! CALL BEFORE YOU DIG!!
- 2. THE CONTRACTOR SHALL NOT CHANGE OR DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE OWNER AND ENGINEER.
- 3. ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
- 4. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST STANDARDS AND SPECIFICATIONS OF THE CITY OF LEAVENWORTH, KS, LEAVENWORTH COUNTY, AND OTHER APPLICABLE JURISDICTIONS. MOST STRINGENT STANDARDS AND SPECIFICATIONS APPLY. NOTIFY ENGINEER OF DISCREPANCIES.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, PAYING ALL FEES AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.
- 6. THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF KANSAS STATE LAW WHICH REQUIRES THAT ANY PERSON OR FIRM DOING EXCAVATION ON PUBLIC RIGHT-OF-WAY DO SO ONLY AFTER GIVING NOTICE TO AND **OBTAINING INFORMATION FROM UTILITY COMPANIES.**
- PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY ALL THOSE COMPANIES WHICH HAVE FACILITIES IN THE NEAR VICINITY OF THE CONSTRUCTION TO BE PERFORMED.
- ALL WASTE MATERIAL RESULTING FROM THE PROJECT SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR.
- ALL DISTURBED AREAS SHALL BE SODDED IMMEDIATELY AFTER CONSTRUCTION ACTIVITIES HAVE CEASED IN THE DISTURBED AREA. ACCEPTABLE TURF IS A MOWABLE GOOD STAND OF GRASS WITH A DENSITY OF 70% OVER 100% OF ALL DISTURBED AREAS AT THE TIME OF ACCEPTANCE. CONTRACTOR IS RESPONSIBLE FOR ALL REPLACEMENT OF TURF AND MAINTENANCE TO OBTAIN ACCEPTABLE VEGETATION.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROL OF SURFACE EROSION DURING CONSTRUCTION AND UNTIL THE OWNER ACCEPTS THE WORK AS COMPLETE. EROSION CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO, THE SILT FENCES AND GRAVEL FILTER BAGS SHOWN ON THE EROSION CONTROL PLAN SHALL BE IN PLACE FOR THE DURATION OF THE SITE IMPROVEMENTS.
- 11. THE CONTRACTOR SHALL, BY HIS OWN INVESTIGATION, AND PRIOR TO COMMENCING WORK. SATISFY HIMSELF AS TO THE SURFACE AND SUBSURFACE CONDITIONS TO BE ENCOUNTERED.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL BOUNDARY CORNERS AND SECTION CORNERS. ANY BOUNDARY CORNER AND/OR SECTION CORNER DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RESET BY A LAND SURVEYOR LICENSED IN THE STATE OF KANSAS, AT THE CONTRACTOR'S EXPENSE.
- 13. NO FEDERALLY OWNED MAILBOX MAY BE DISTURBED. THE CONTRACTOR SHALL GIVE AT LEAST TWENTY-FOUR (24) HOURS ADVANCE NOTICE TO THE MANAGER OF DELIVERY AND COLLECTIONS. TAMPERING WITH FEDERAL MAIL FACILITIES MAY SUBJECT THE CONTRACTOR TO PROSECUTION BY THE FEDERAL GOVERNMENT.
- 14. THE CONTRACTOR SHALL MAKE HIS OWN ASSUMPTIONS ON THE LOCATION AND CONSISTENCY OF ANY EXISTING ROCK LAYERS UNDERLYING THE PROJECT SITE. ALL ROCK EXCAVATION AND REMOVAL SHALL BE INCLUDED IN THE CONTRACTORS' BID AND IS SUBSIDIARY TO OTHER BID ITEMS. NO GEOTECHNICAL REPORT IS AVAILABLE.
- 15. ALL EXTERIOR CONCRETE SHALL BE KCMMB 4K AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI AND BE AIR ENTRAINED. FLYASH IS NOT A SUITABLE REPLACEMENT FOR PORTLAND CEMENT.
- 16. EXISTING UTILITY INFORMATION IS LIMITED. CONTRACTOR TO FIELD VERIFY ELEVATIONS AND LOCATIONS OF EXISTING UTILITIES AND INFRASTRUCTURE PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN PLANS AND FIELD CONDITIONS. CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.





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GENERAL NOTES

SHEET 2 OF 60 17. DESIGN PROFESSIONAL SHALL REVIEW SHOP DRAWINGS OR SAMPLES FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPTS ON THE PROJECT AND FOR COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS AND SHALL NOT EXTEND TO MEANS OR METHODS OF CONSTRUCTION. THE DESIGN PROFESSIONAL'S REVIEW SHALL NOT RELIEVE CONTRACTOR FROM RESPONSIBILITY FOR ANY VARIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS UNLESS CONTRACTOR HAS IN WRITING CALLED DESIGN PROFESSIONAL'S ATTENTION TO EACH SUCH VARIATION AT THE TIME OF SUBMISSION, AND DESIGN PROFESSIONAL HAS GIVEN WRITTEN APPROVAL OF EACH SUCH VARIATION BY SPECIFIC WRITTEN NOTATION THEREOF INCORPORATED INTO OR ACCOMPANYING THE SHOP DRAWING OR SAMPLE; NOR WILL ANY APPROVAL BY THE DESIGN PROFESSIONAL RELIEVE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS WITH CONFORMANCE TO CONTRACT DOCUMENTS.

BEFORE SUBMITTING EACH SHOP DRAWING OR SAMPLE, CONTRACTOR SHALL HAVE DETERMINED AND VERIFIED:

- A. ALL FIELD MEASUREMENTS, QUANTITIES, DIMENSIONS, SPECIFIED PERFORMANCE CRITERIA, INSTALLATION REQUIREMENTS, MATERIALS, CATALOG NUMBERS AND SIMILAR INFORMATION WITH RESPECT THERETO;
- B. ALL MATERIALS WITH RESPECT TO INTENDED USE, FABRICATION, SHIPPING, HANDLING, STORAGE, ASSEMBLY AND INSTALLATION PERTAINING TO THE PERFORMANCE OF THE WORK;
- C. ALL INFORMATION RELATIVE TO MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENT THERETO;
- D. CONTRACTOR SHALL ALSO HAVE REVIEWED AND COORDINATED EACH SHOP DRAWING OR SAMPLE WITH OTHER SHOP DRAWINGS AND SAMPLES, AND WITH THE REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS.
- E. ALL SUBMITTED SHOP DRAWINGS SHALL BEAR A STAMP OR SPECIFIC WRITTEN INDICATION AND SIGNATURE THAT CONTRACTOR HAS FULLY REVIEWED THE SUBMISSION AND CHECKED ALL DATA AND DETAILS. BY CONTRACTOR SIGNATURE, CONTRACTOR CERTIFIES SHOP DRAWING CONFORMANCE AND ACCURACY TO THE CONTRACT DOCUMENTS.
- 18. BY ACCEPTING AND UTILIZING ANY ELECTRONIC FILE OF ANY DRAWING, REPORT OR DATA TRANSMITTED BY OLSSON, THE RECIPIENT AGREES FOR ITSELF, ITS SUCCESSORS, ASSIGNS, INSURERS AND ALL THOSE CLAIMING UNDER OR THROUGH IT, THAT BY USING ANY OF THE INFORMATION CONTAINED IN THE ELECTRONIC FILE, ALL USERS AGREE TO BE BOUND BY THE FOLLOWING TERMS. ALL OF THE INFORMATION CONTAINED IN THIS ELECTRONIC FILE IS THE WORK PRODUCT AND INSTRUMENT OF SERVICE OF OLSSON, WHO SHALL BE DEEMED THE AUTHOR, AND SHALL RETAIN ALL COMMON LAW, STATUTORY LAW AND OTHER RIGHTS, INCLUDING COPYRIGHTS, UNLESS THE SAME HAVE PREVIOUSLY BEEN TRANSFERRED IN WRITING TO THE RECIPIENT. THE INFORMATION CONTAINED IN THE ELECTRONIC FILE IS PROVIDED FOR THE CONVENIENCE OF THE RECIPIENT AND IS PROVIDED IN "AS IS" CONDITION. THE RECIPIENT IS AWARE THAT DIFFERENCES MAY EXIST BETWEEN THE ELECTRONIC FILES AND THE PRINTED HARD-COPY ORIGINAL SIGNED AND SEALED DRAWINGS OR REPORTS. IN THE EVENT OF A CONFLICT BETWEEN THE SIGNED AND SEALED ORIGINAL DOCUMENTS PREPARED BY OLSSON AND THE ELECTRONIC FILES TRANSFERRED HEREWITH, THE SIGNED AND SEALED ORIGINAL DOCUMENTS SHALL GOVERN. OLSSON SPECIFICALLY DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ELECTRONIC FILES. IT SHALL BE THE RECIPIENT'S RESPONSIBILITY TO CONFIRM THE ACCURACY OF THE INFORMATION CONTAINED IN THE ELECTRONIC FILE AND THAT IF ACCURATELY REFLECTS THE INFORMATION NEEDED BY THE RECIPIENT. THE RECIPIENT SHALL NOT RETRANSMIT THE ELECTRONIC FILE, OR ANY PORTION THEREOF, WITHOUT INCLUDING THIS DISCLAIMER AS PART OF ANY SUCH TRANSMISSION. IN ADDITION, THE RECIPIENT AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD HARMLESS OLSSON, ITS OFFICERS, DIRECTORS, EMPLOYEES AND SUBCONSULTANTS AGAINST ANY AND ALL DAMAGES, LIABILITIES, CLAIMS OR COSTS, INCLUDING REASONABLE ATTORNEY'S AND EXPERT WITNESS FEES AND DEFENSE COSTS, ARISING FROM ANY CHANGES MADE BY ANYONE OTHER THAN OLSSON OR FROM ANY REUSE OF THE ELECTRONIC FILES WITHOUT THE PRIOR WRITTEN CONSENT OF OLSSON.

- 19. THE PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE KANSAS WATER POLLUTION CONTROL AND NPDES STORMWATER RUNOFF FROM CONSTRUCTION SITES GENERAL PERMIT, CITY OF LEAVENWORTH, AND LEAVENWORTH COUNTY. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION AND FEES.
- 20. EROSION AND SEDIMENT CONTROL SHALL BE PROVIDED FOR THE DURATION OF A PROJECT. ALL INSTALLED EROSION AND SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED IN A MANNER THAT PRESERVES THEIR EFFECTIVENESS. IF OWNER OR APPLICABLE JURISDICTION DETERMINES THAT THE BMPS IN PLACE DO NOT PROVIDE ADEQUATE EROSION AND SEDIMENT CONTROL AT ANY TIME DURING THE PROJECT, ADDITIONAL OR ALTERNATE MEASURES THAT PROVIDE EFFECTIVE CONTROL SHALL BE REQUIRED.
- 21. CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER EXISTING LINES NOT OF RECORD OR SHOWN ON THESE PLANS.
- 22. DO NOT DISRUPT UTILITY SERVICE TO ADJACENT BUSINESSES OR RESIDENCES WITHOUT PRIOR WRITTEN APPROVAL BY THE ENGINEER.
- 23. DO NOT DISRUPT TRAFFIC ON ADJACENT PUBLIC STREETS WITHOUT PRIOR WRITTEN APPROVAL BY THE CITY.
- 24. ALL SIDEWALK AND PAVEMENT TO REMAIN SHALL BE PROTECTED IN PLACE INCLUDING PROTECTION FROM DAMAGE CAUSED BY REMOVAL OF ABUTTING PAVEMENT. CONTRACTOR SHALL SAW CUT WHERE NECESSARY.
- 25. CONTRACTOR SHALL PROTECT THE PUBLIC AT ALL TIME WITH FENCING, BARRICADES, ENCLOSURES, ETC. TO THE BEST PRACTICES AND AS APPROVED BY CITY OF LEAVENWORTH, LEAVENWORTH COUNTY, AND OTHER APPLICABLE JURISDICTIONS.
- 26. DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 27. THE ENGINEER OR HIS AUTHORIZED REPRESENTATIVE SHALL APPROVE DRIVEWAY, STREET, AND SIDEWALK SAW CUT LOCATIONS AFTER MARKING BY THE CONTRACTOR, AND MAY ADJUST SAW CUT LOCATIONS TO FIT EXISTING INFRASTRUCTURE.
- 28. EXISTING IRRIGATION SYSTEMS ARE UNKNOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN AND RELOCATING ANY EXISTING IRRIGATION SYSTEMS IN CONFLICT WITH THE PROPOSED IMPROVEMENTS PRIOR TO CONSTRUCTION.
- 29. ALL WORK AREAS AND DAMAGED IMPROVEMENTS SUCH AS CURBS, DRIVEWAYS, SIDEWALKS, LIGHTING, ELECTRICAL SYSTEMS AND OTHER ITEMS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED, REPLACED, OR RE-MEDIATED TO THE OWNER'S SATISFACTION AT NO ADDITIONAL COST.
- 30. THE CONTRACTOR SHALL PROTECT ALL MAJOR TREES FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE ON THESE PLANS.
- 31. EXISTING ASPHALT PAVING AND/OR CONCRETE SHALL BE CUT TO A NEAT, STRAIGHT LINE. CONCRETE SHALL BE REMOVED IN COMPLETE PANELS
- 32. ALL PROPOSED WORK SHALL BE CONSTRUCTED WITHIN THE CONFINES OF THE PUBLIC RIGHT-OF-WAY. NO PROPERTY WILL BE ACQUIRED FOR THIS PROJECT.





West 133rd Street, Suite 200



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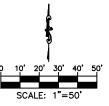
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GENERAL NOTES/LEGEND

LEAVENWORTH COUNTY

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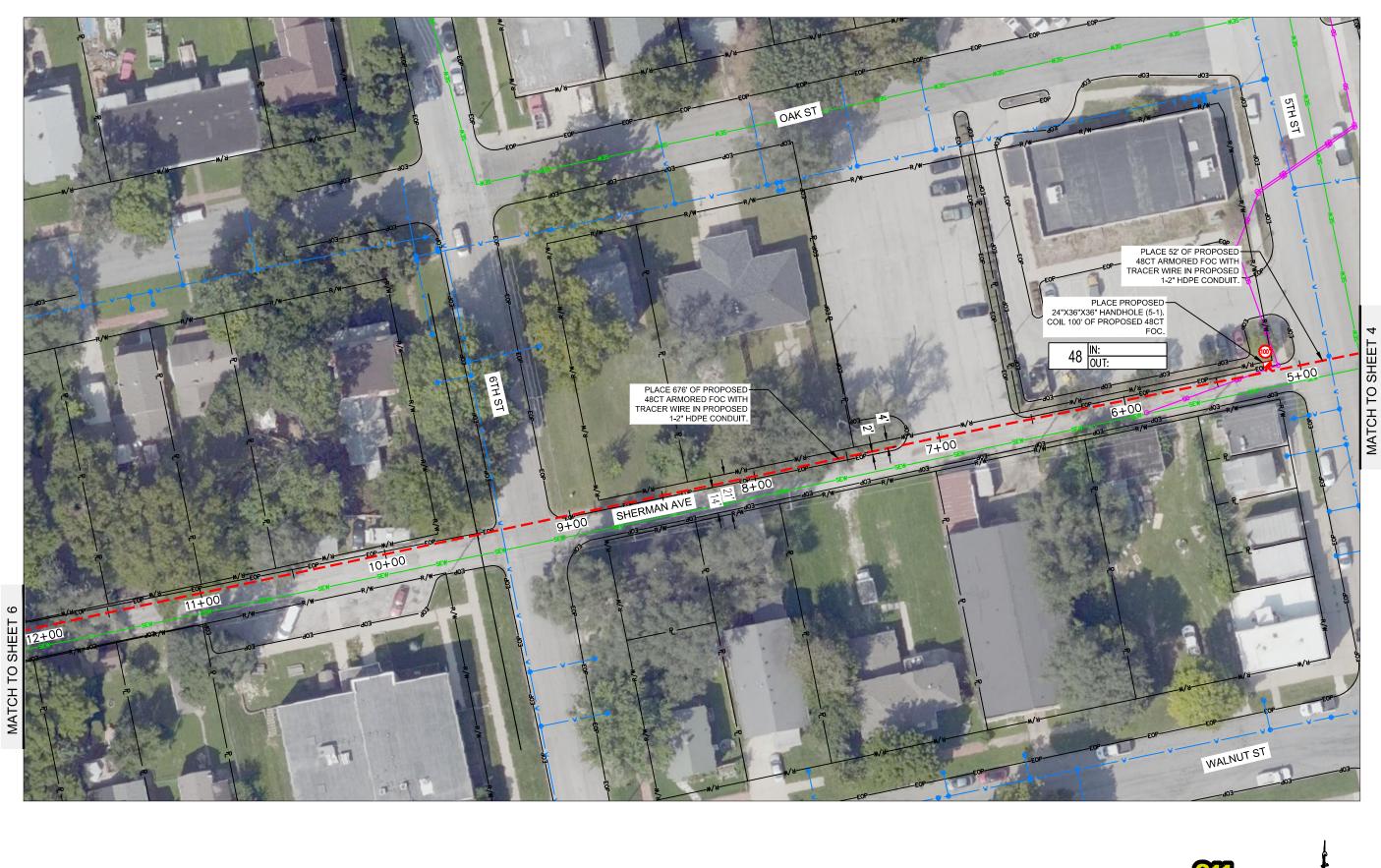
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checked by: DAH
approved by: CRG
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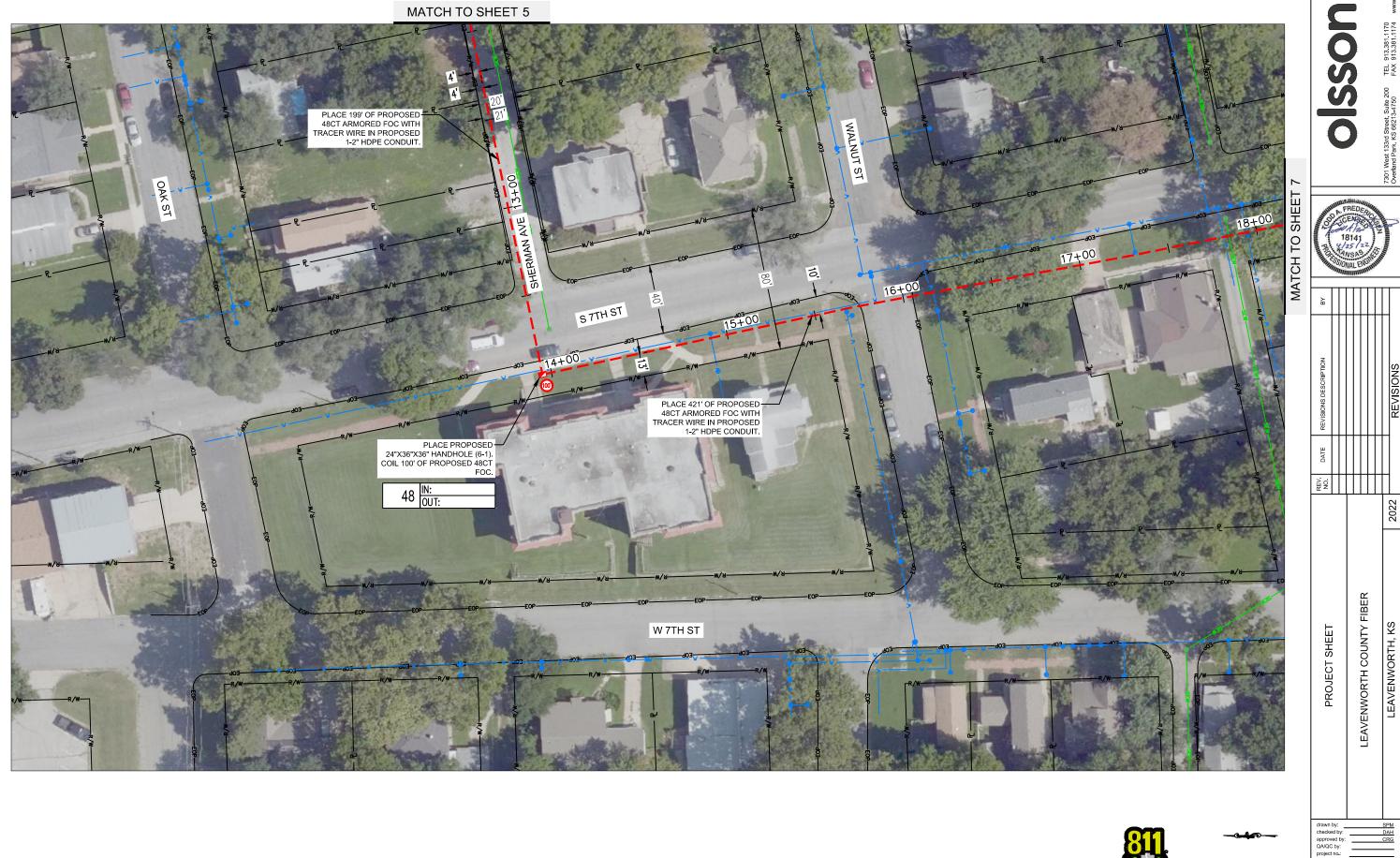
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LEAVENWORTH COUNTY FIBER

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LEAVENWORTH, KS



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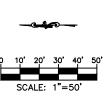
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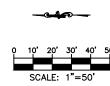
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LEAVENWORTH COUNTY FIBER

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LEAVENWORTH, KS





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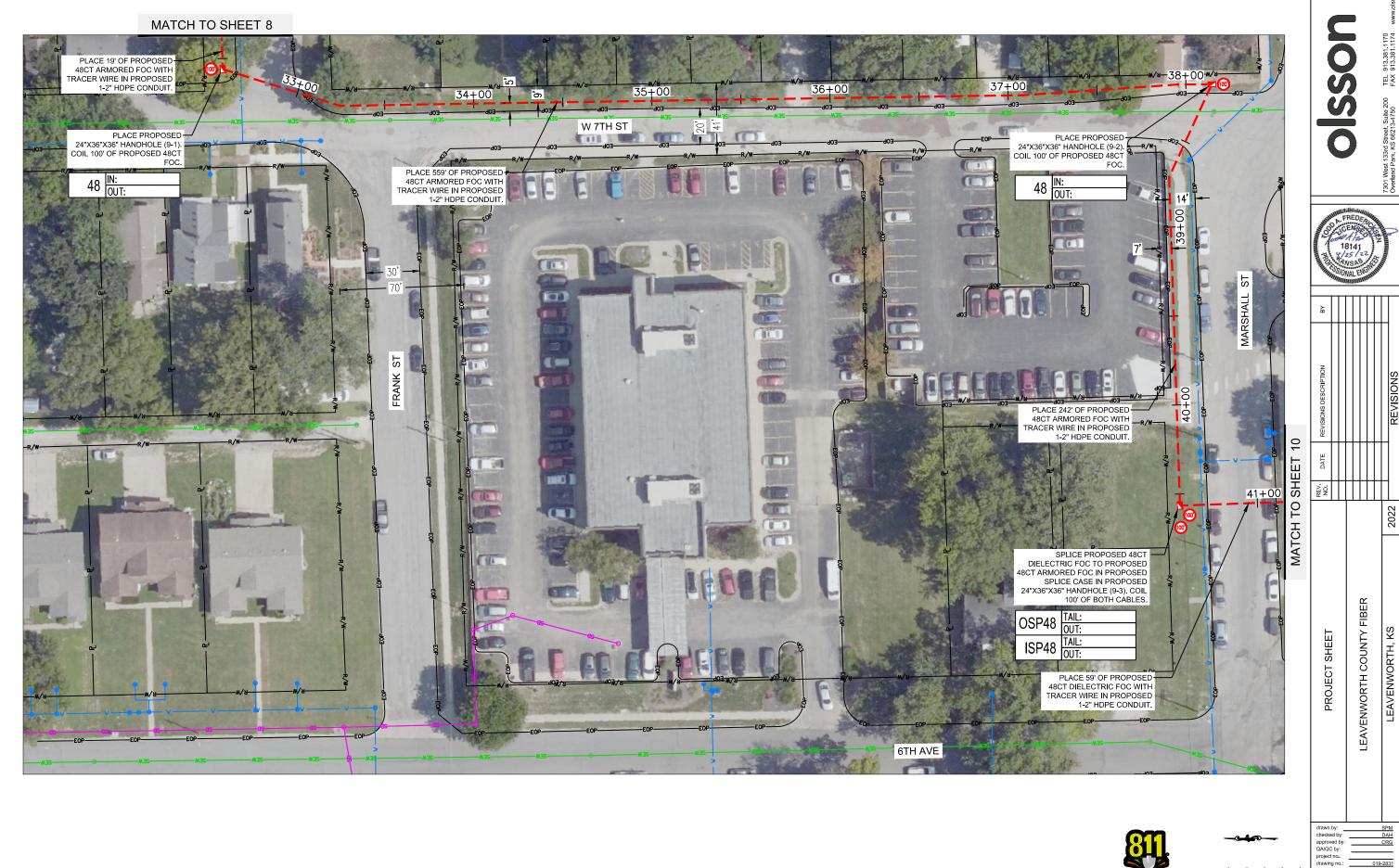
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LEAVENWORTH COUNTY FIBER

PROJECT SHEET

LEAVENWORTH, KS

7301 West 133rd Street, Suite 200 TEL 913.381.1170 Overland Park, KS 66213-4750 FAX 913.381.1174



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| LEAVENWORTH, KS | 2022 | | REVISIONS | |
| | | | | |

MATCH TO SHEET 11

AT BUILDING RISER UP 12' IN PROPOSED 2" EMT. WALLCORE AND LB TO ACCESS BUILDING. SEAL PENETRATION

PLACE 25' OF PROPOSED 48CT DIELECTRIC FOC WITH TRACER WIRE IN PROPOSED 1-2" HDPE CONDUIT.

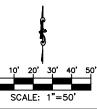
OSP48 TAIL: ISP48 TAIL: OUT:

SPLICE PROPOSED 48CT
DIELECTRIC FOC TO PROPOSED
48CT ARMORED FOC IN PROPOSED
SPLICE CASE IN PROPOSED
24"X36"X36" HANDHOLE (10-1), COIL
100' OF BOTH CABLES.

ACCORDINGLY.

MARSHALL ST



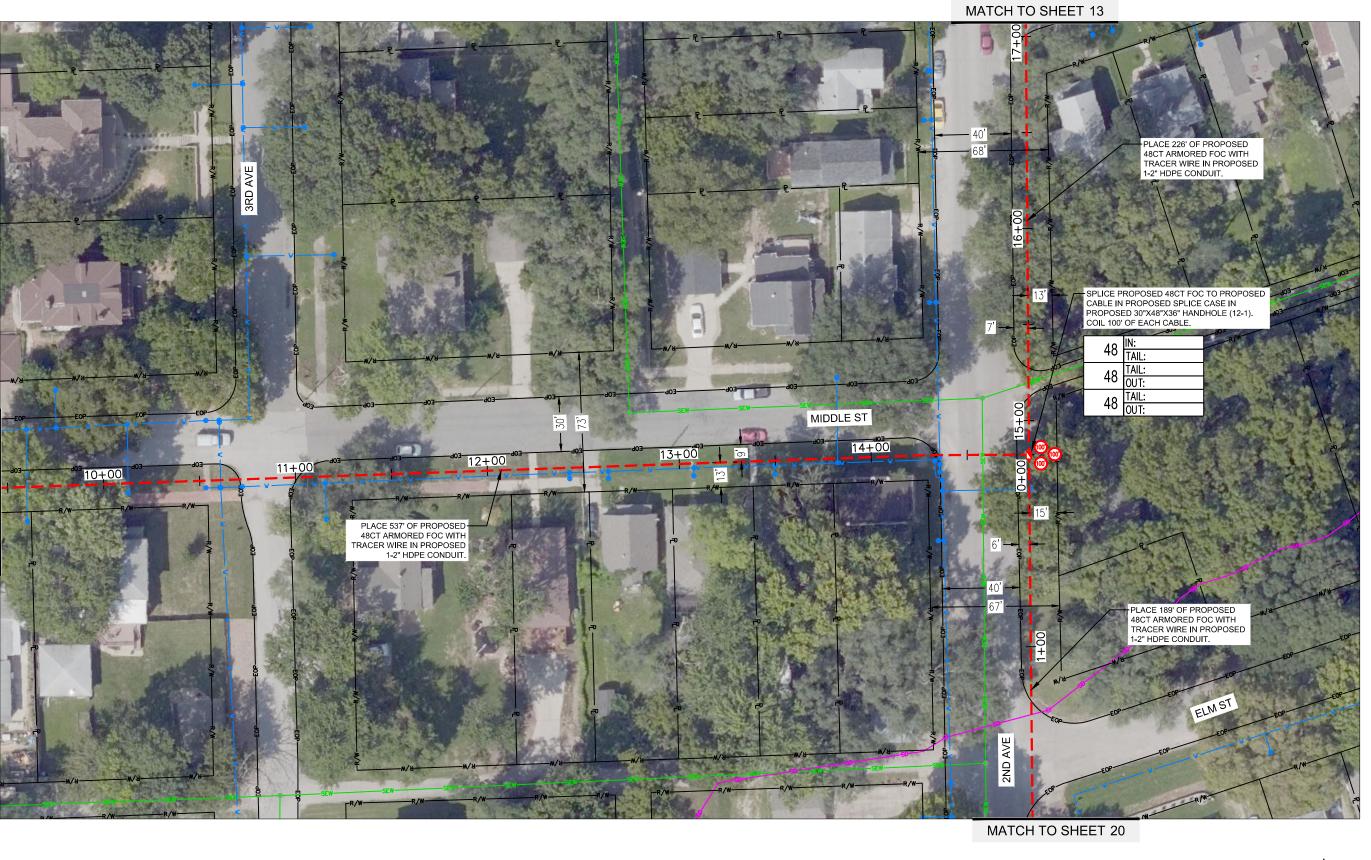


NO. NO. LEAVENWORTH COUNTY FIBER LEAVENWORTH, KS PROJECT SHEET

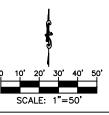
SCALE: 1"=50'

Know what's below. Call before you dig.

| SPM | Checked by: DAH | Approved by: CRG | CA/QC by: project no.: drawing no.: 019-2831 | CA/25/22 | CA/25/2 SHEET 11 OF 60



Know what's below. Call before you dig.



drawn by: __checked by: approved by: QA/QC by: project no.: rawing no.: 019-2831 late: 4/25/22 SHEET 12 OF 60

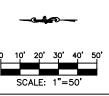
LEAVENWORTH COUNTY FIBER

PROJECT SHEET

LEAVENWORTH, KS

NO NO





Checked by: CRG
approved by: CRG
QA/QC by:
project no: drawing no: 019-2831
date: 4/25/22 SHEET 13 OF 60

LEAVENWORTH COUNTY FIBER

LEAVENWORTH, KS

PLACE 324' OF PROPOSED 48CT ARMORED FOC WITH TRACER WIRE IN PROPOSED 1-2" HDPE CONDUIT. TO SHEET 15 MATCH PLACE PROPOSED 24"X36"X36"— HANDHOLE (14-1). COIL 100' OF PROPOSED 48CT FOC. LEAVENWORTH COUNTY FIBER MATCH TO SHEET 13 PROJECT SHEET PLACE 421' OF PROPOSED 48CT ARMORED FOC WITH TRACER WIRE IN PROPOSED 1-2" HDPE CONDUIT.

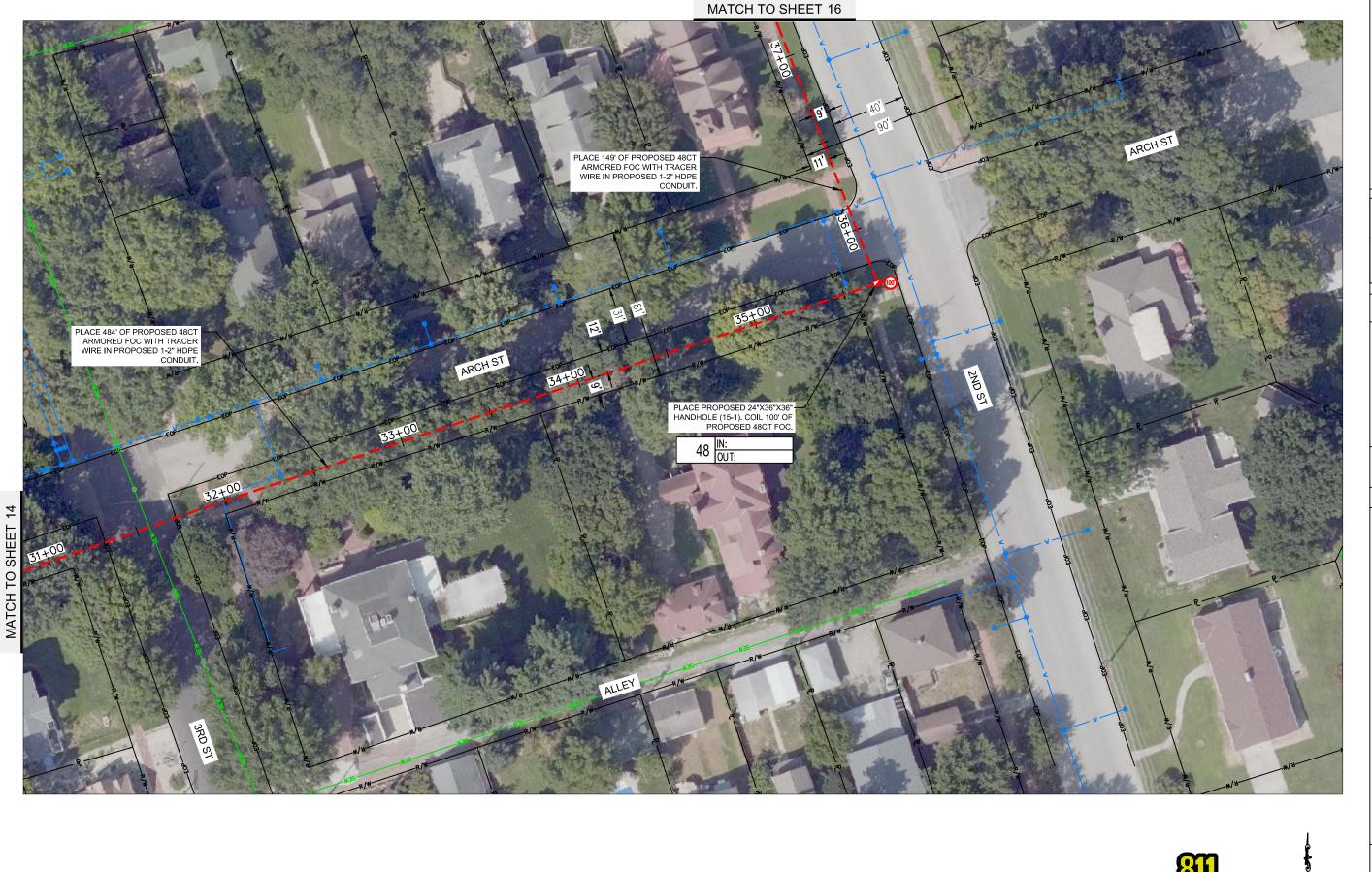
drawn by: checked by: approved by QA/QC by: project no: drawing no: date: 019-2831 4/25/22

LEAVENWORTH, KS

SHEET 14 OF 60

Know what's below.
Call before you dig.

SCALE: 1"=50'



F:\2019\2501-3000\019-2831-a\40-design\AutoCAD\final plans\Sheets\11CM\Final_Plans\Middle-2nd to Justice Center.dwg Apr 25, 2022 6:01pm XREFS: Leavenworth AlignmentFrames Leavenworth images Leavenworth EOP Leavenw

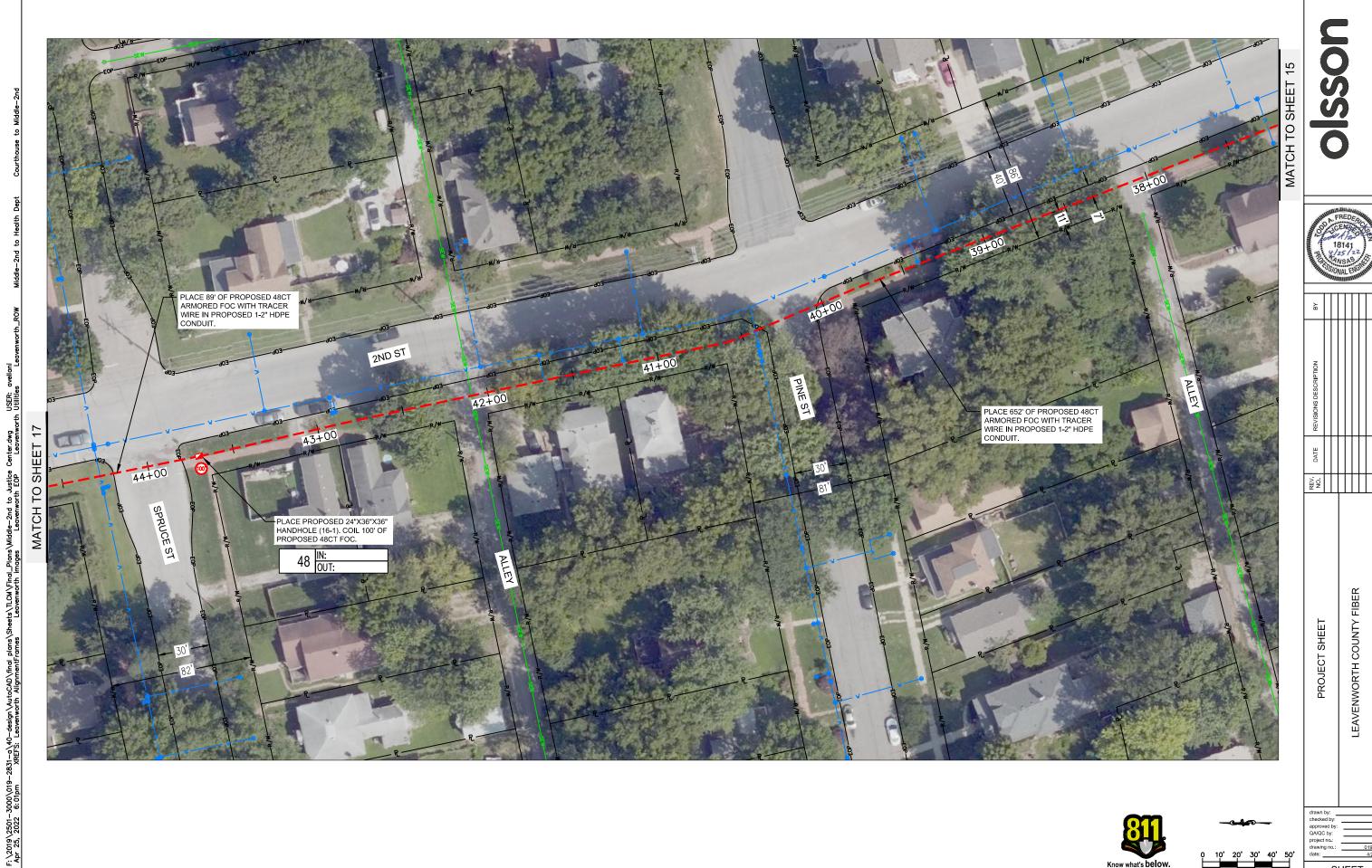
SCALE: 1"=50'

Know what's below. Call before you dig.

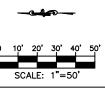
PROJECT SHEET

SHEET 15 OF 60

LEAVENWORTH COUNTY FIBER LEAVENWORTH, KS







 drawn by:
 SPM

 checked by:
 DAH

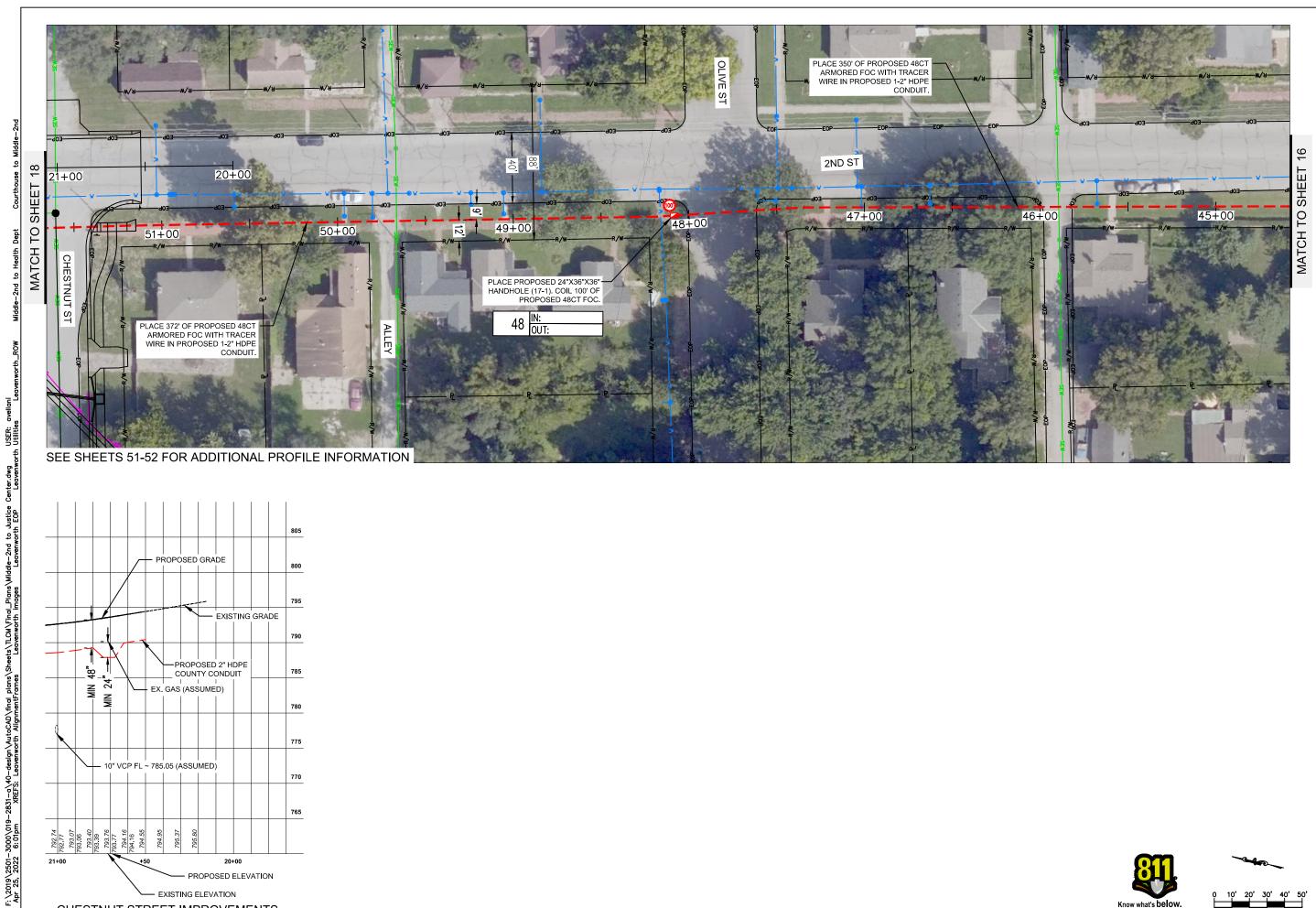
 approved by:
 CRG

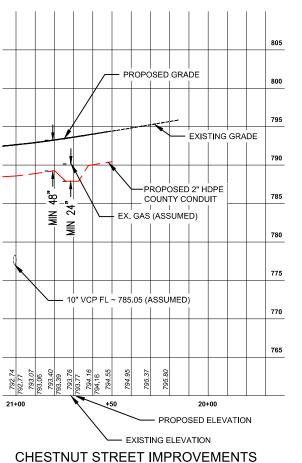
 QA/QC by:
 project no.:

 drawing no.:
 019-2831

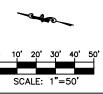
 date:
 4/25/22
 SHEET 16 OF 60

LEAVENWORTH COUNTY FIBER LEAVENWORTH, KS









drawn by: SPM
checked by: DAH
approved by: CRG
QA/QC by: project no.:
drawing no.: 019-2831
date: 4/25/22 SHEET 17 OF 60

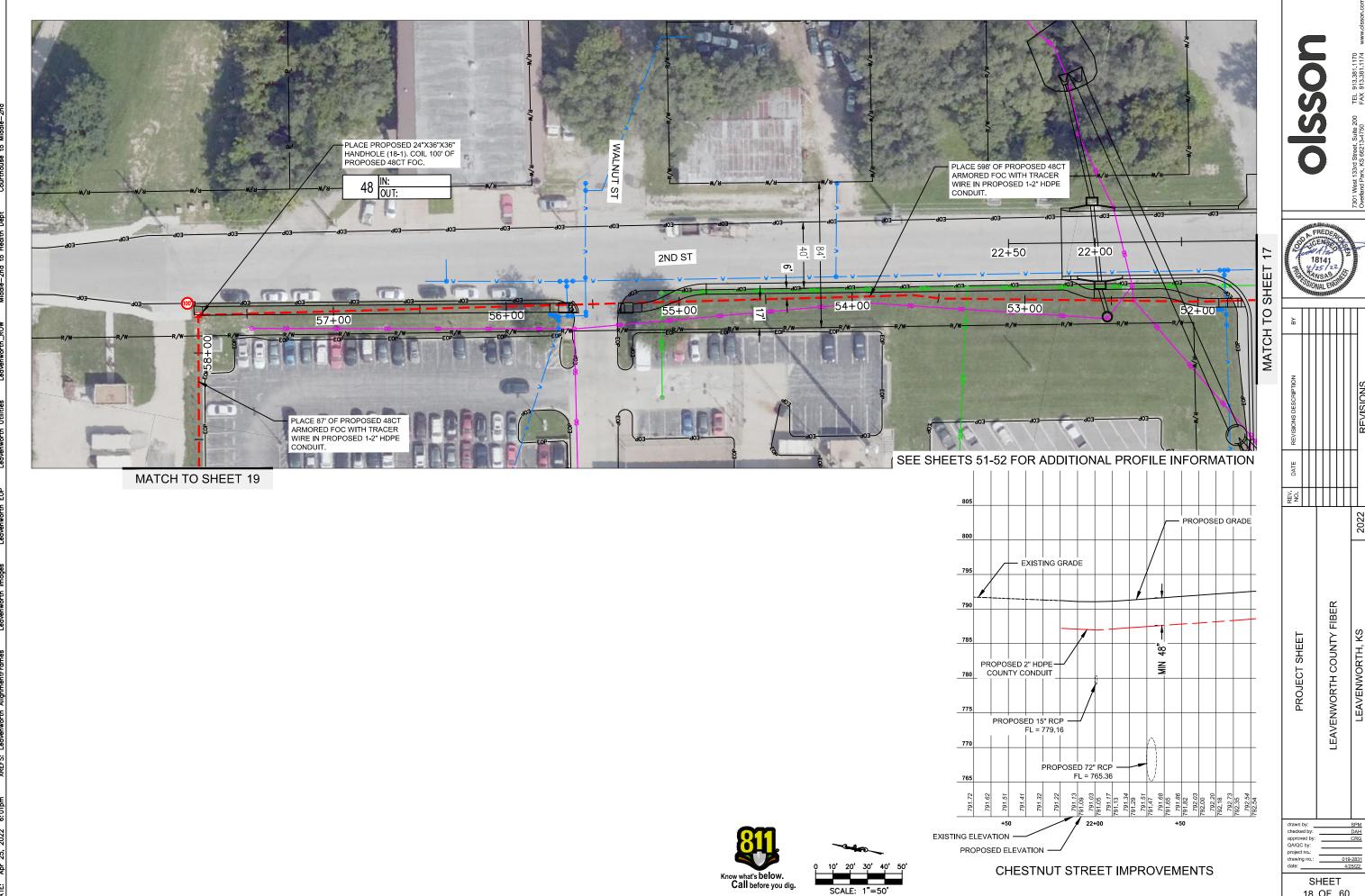
PROJECT SHEET

LEAVENWORTH COUNTY FIBER

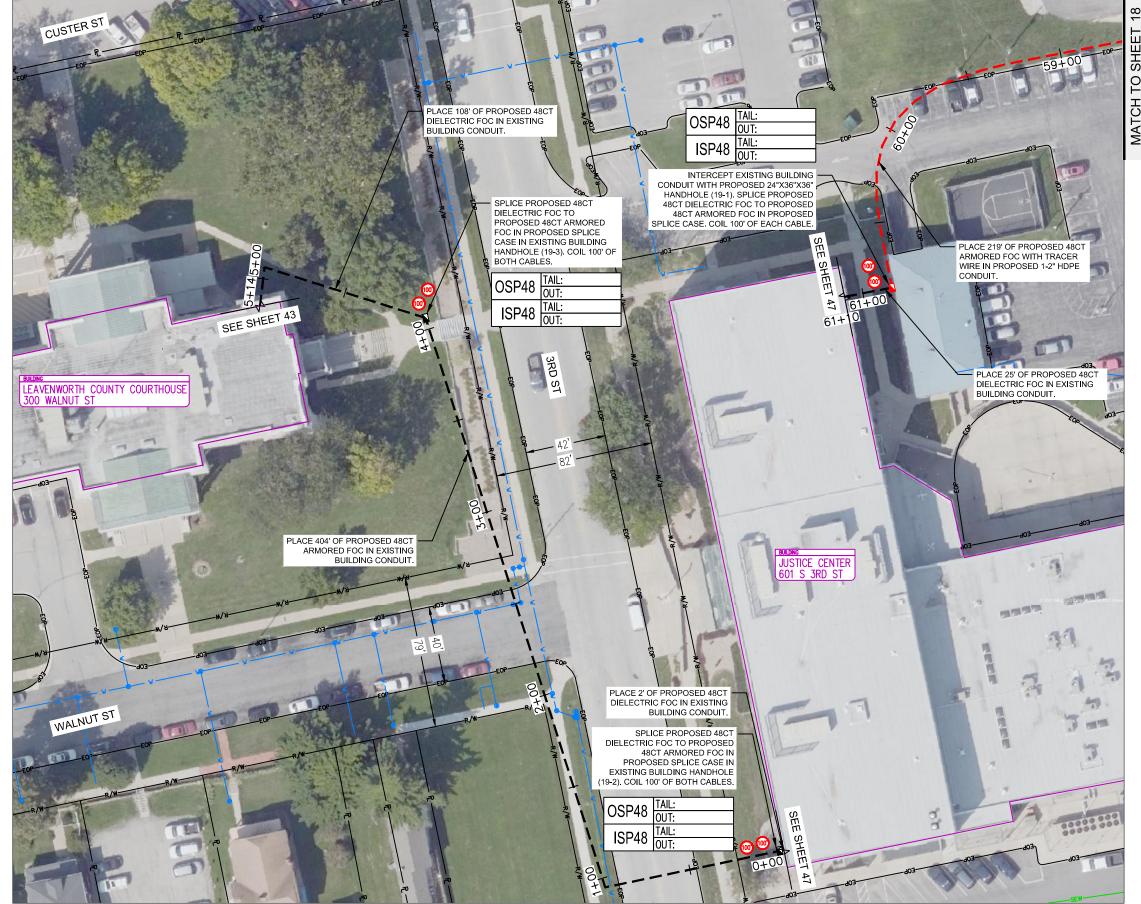
LEAVENWORTH, KS

TEL 913.381.1170 FAX 913.381.1174

18141 18141 4/25/2



18 OF 60



Know what's below. Call before you dig.

SCALE: 1"=50'

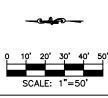
approved by: QA/QC by: rawing no.: 019-2831 late: 4/25/22

SHEET 19 OF 60

LEAVENWORTH COUNTY FIBER

MATCH TO SHEET 12





| -40- | | | | | |
|---------------|-----|-----|-----|-----|-----|
| _ | 10' | 20' | 30' | 40' | 50° |
| SCALE: 1"=50' | | | | | |

LEAVENWORTH COUNTY FIBER LEAVENWORTH, KS

| SPM | Checked by: DAH | Approved by: CRG | CA/QC by: project no.: drawing no.: 019-2831 | CA/25/22 | CA/25/2

SHEET 20 OF 60

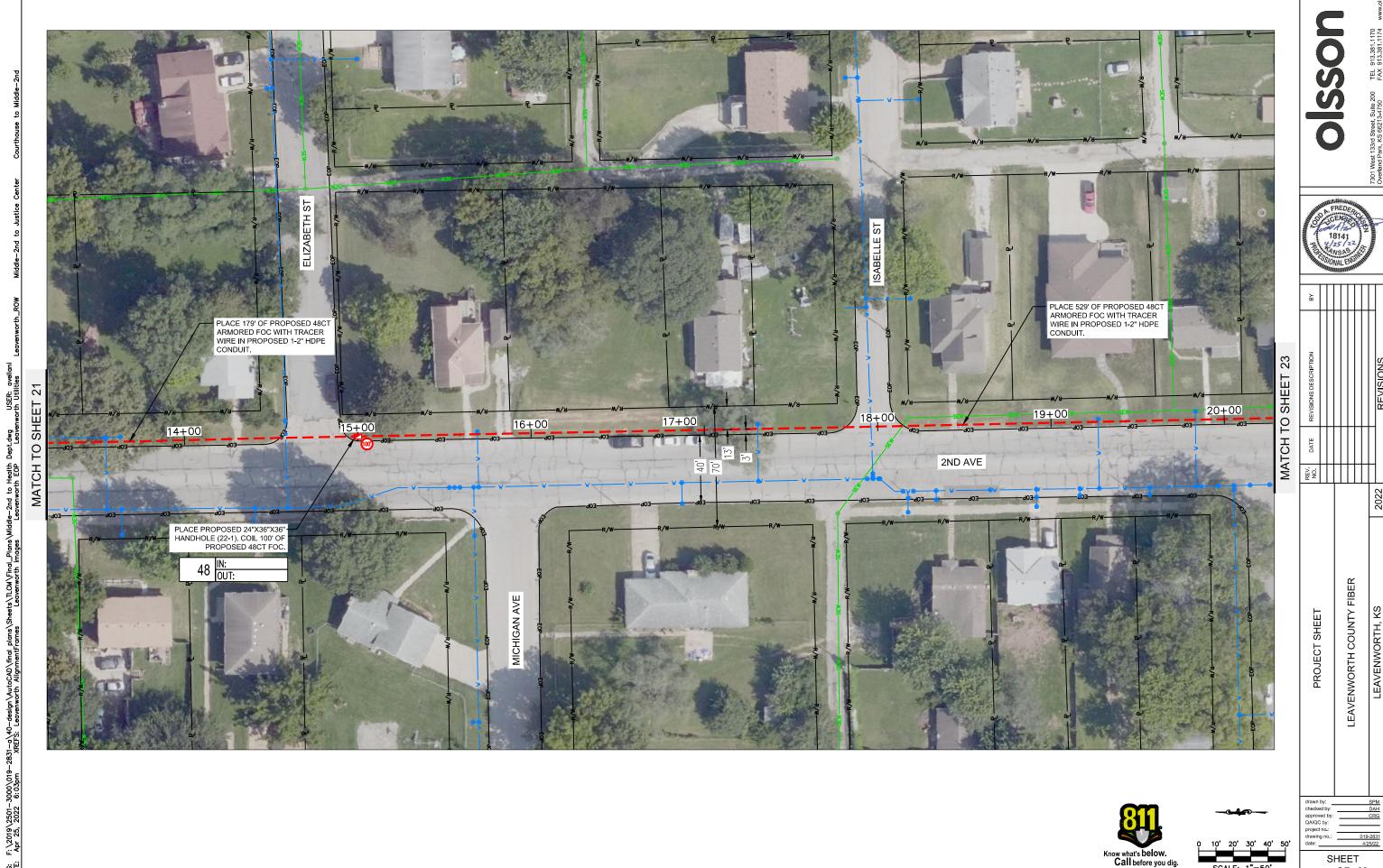


Know what's below. Call before you dig.

019-2831 4/25/22 SHEET 21 OF 60

LEAVENWORTH, KS

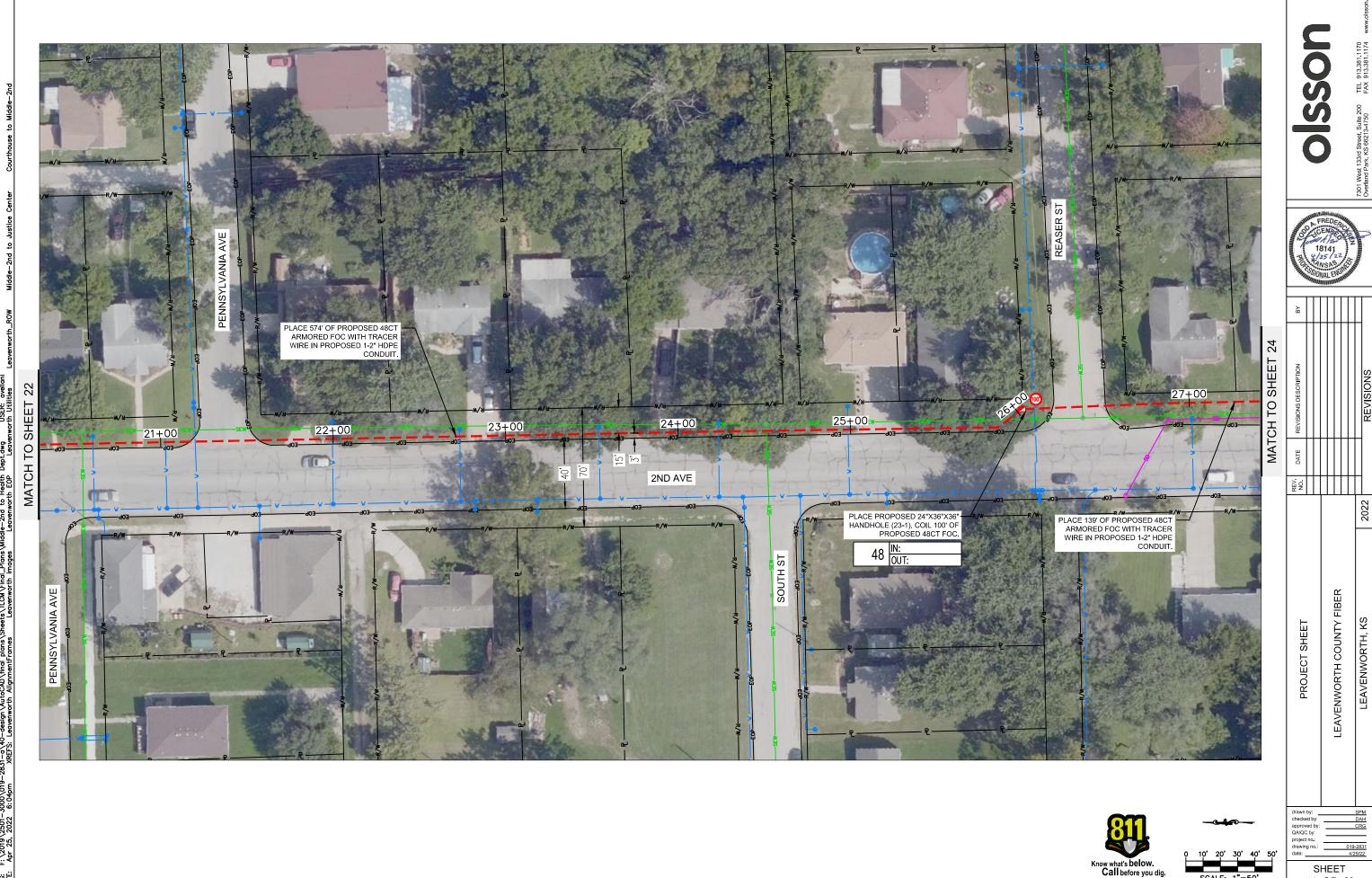
7301 West 133rd Street, Suite 200 TEL 913.381.1170 Overland Park, KS 66213-4750 FAX 913.381.1174



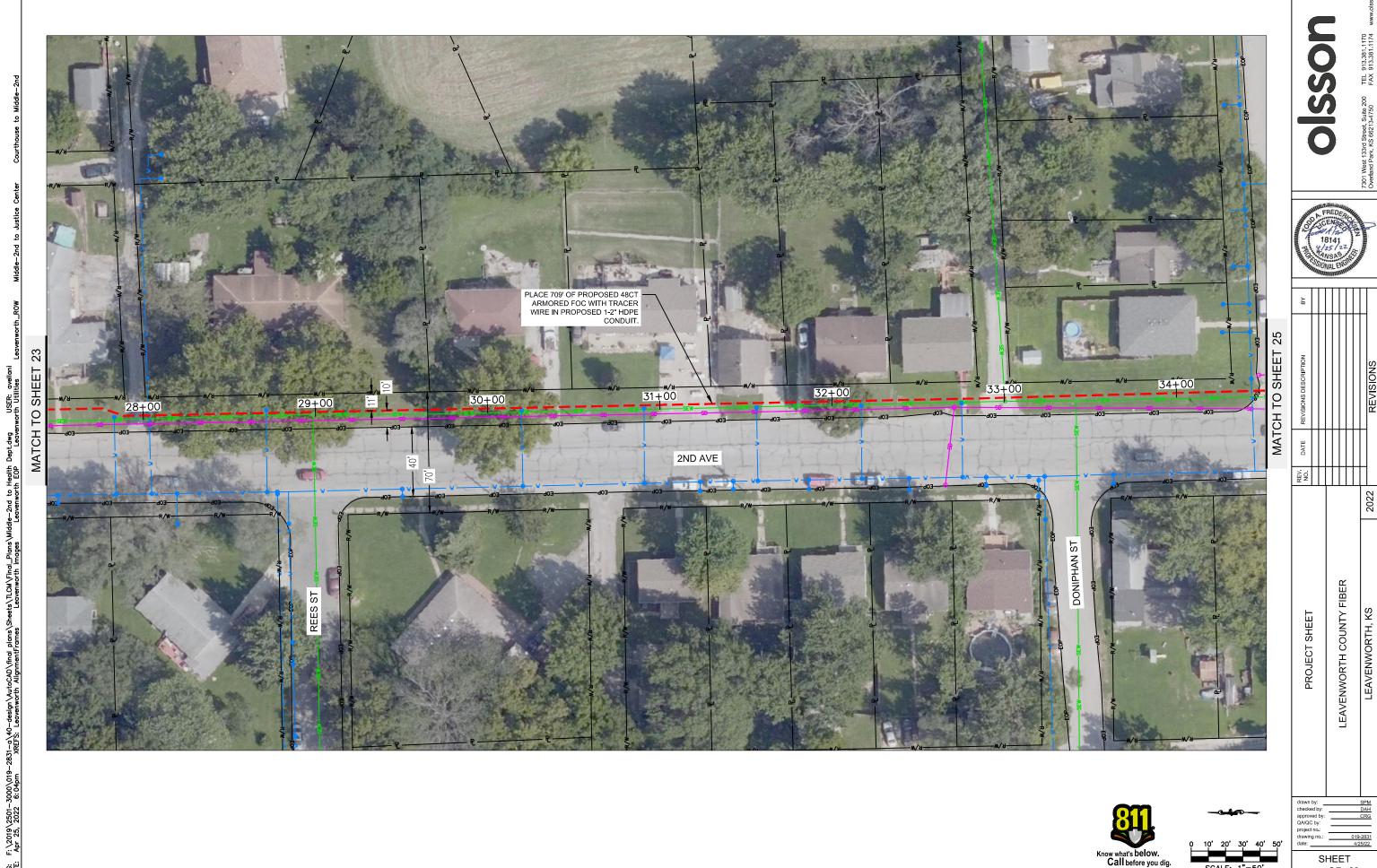
LEAVENWORTH, KS

SHEET 22 OF 60

SCALE: 1"=50'



SHEET 23 OF 60



 drawn by:
 SPM

 checked by:
 DAH

 approved by:
 CRG

 QA/QC by:
 project no:

 drawing no:
 019-2831

 date:
 4/25/22

SHEET 24 OF 60



REV NO

LEAVENWORTH COUNTY FIBER

LEAVENWORTH, KS

MATCH TO SHEET 26

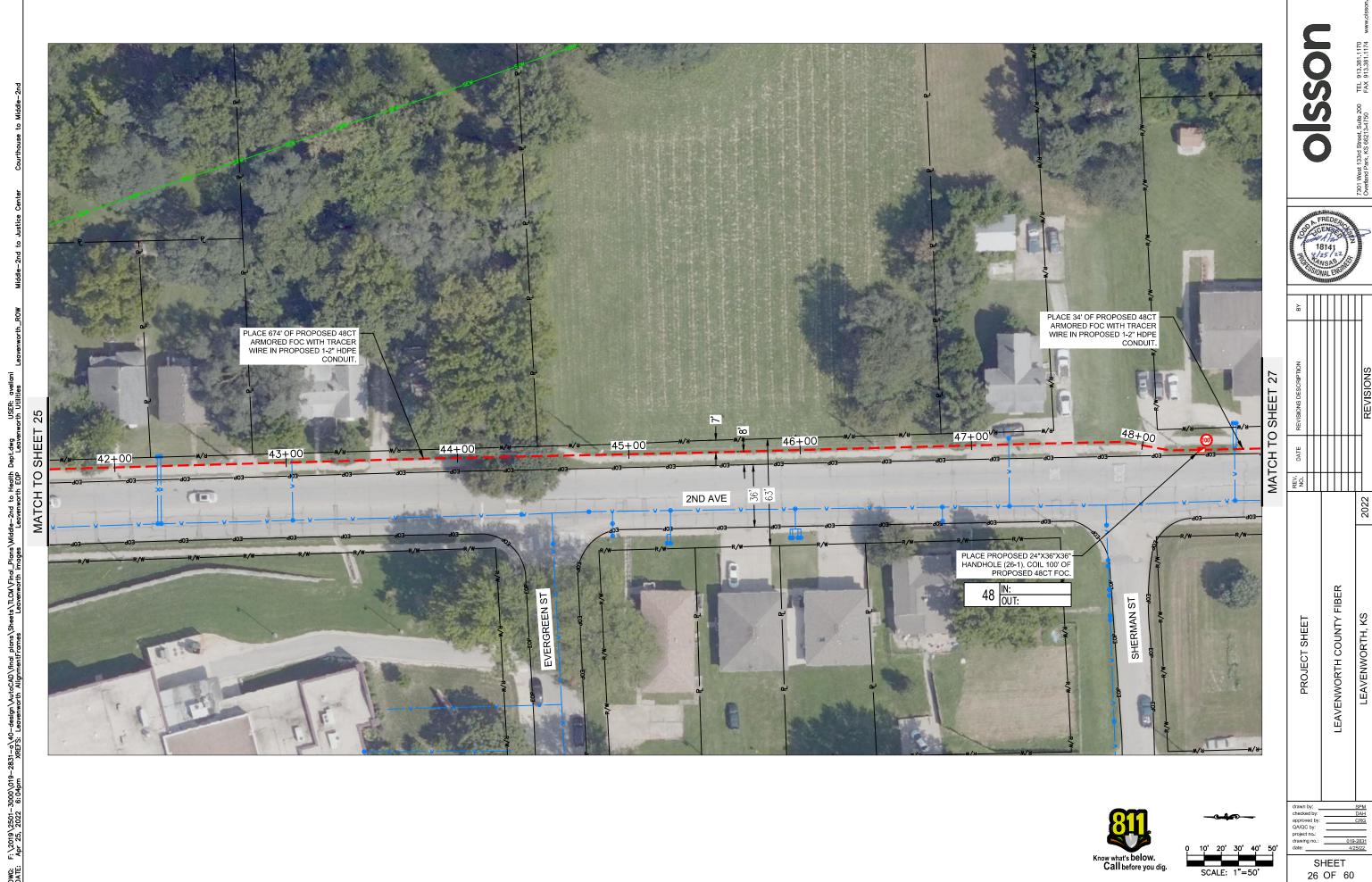
PLACE 409' OF PROPOSED 48CT ARMORED FOC WITH TRACER WIRE IN PROPOSED 1-2" HDPE CONDUIT.

| -4- | | | | | |
|-----|--|-------------|--|--|-----|
| Ë | | 20' ALE: | | | 50' |

Know what's below. Call before you dig.

| SPM | Checked by: DAH | Approved by: CRG | CA/QC by: project no.: drawing no.: 019-2831 | CA/25/22 | CA/25/2 SHEET 25 OF 60

PROJECT SHEET



 drawn by:
 SPM

 checked by:
 DAH

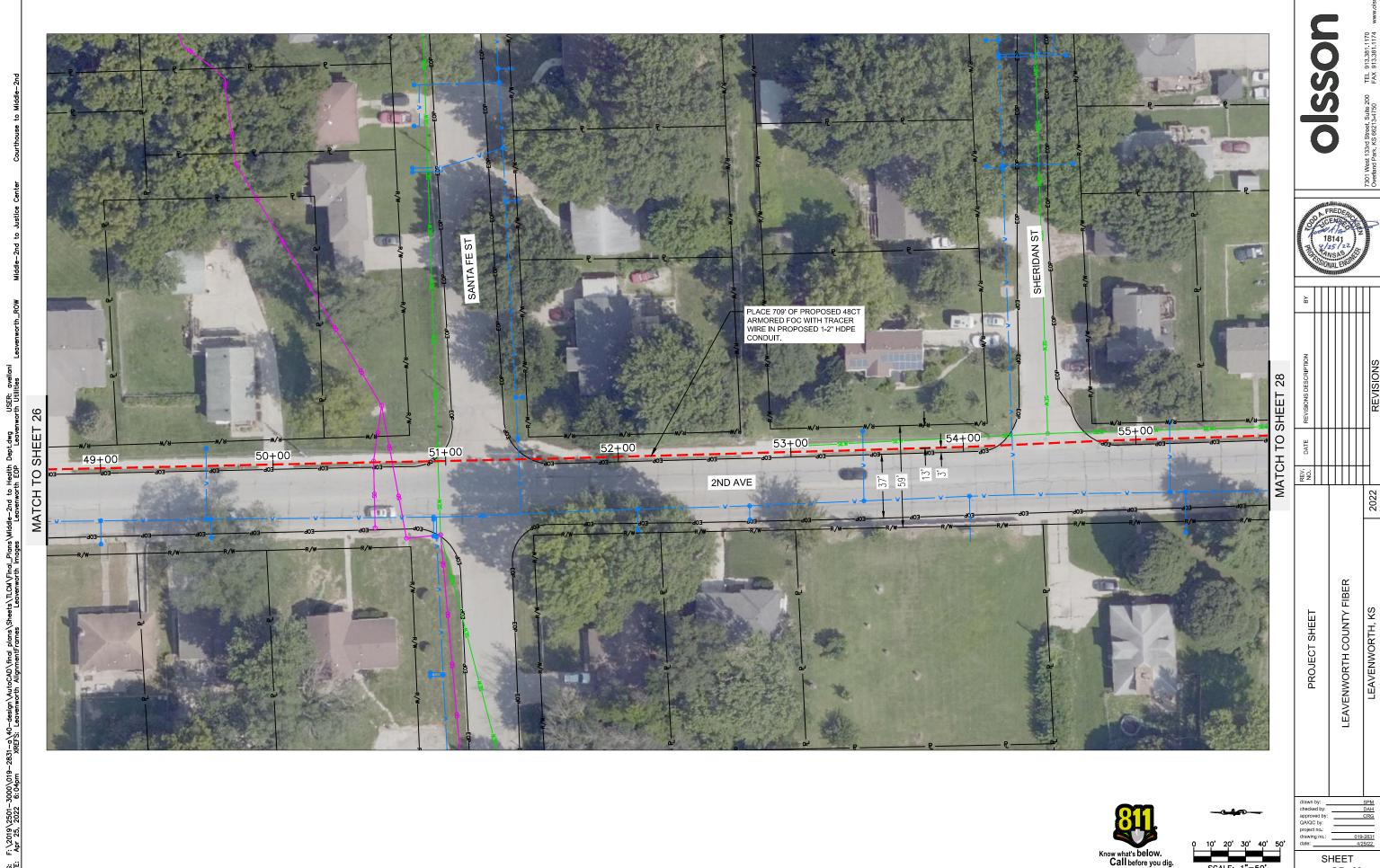
 approved by:
 CRG

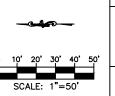
 QA/QC by:
 project no.:

 drawing no.:
 019-2831

 date:
 4/25/22
 SHEET

26 OF 60





SHEET 27 OF 60

LEAVENWORTH COUNTY FIBER LEAVENWORTH, KS

 drawn by:
 SPM

 checked by:
 DAH

 approved by:
 CRG

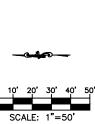
 QA/QC by:
 Project no.:

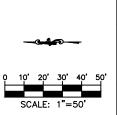
 drawing no.:
 019-2831

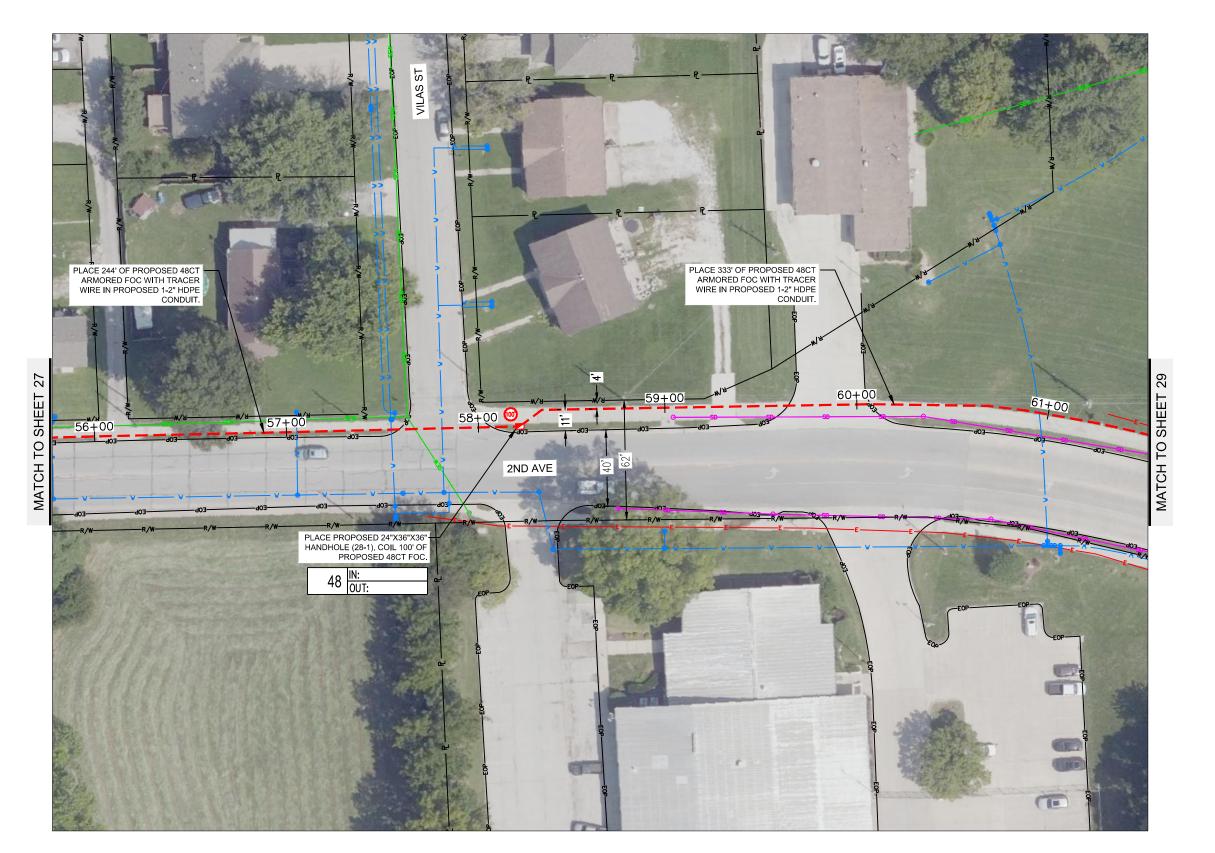
 date:
 4/25/22

SHEET

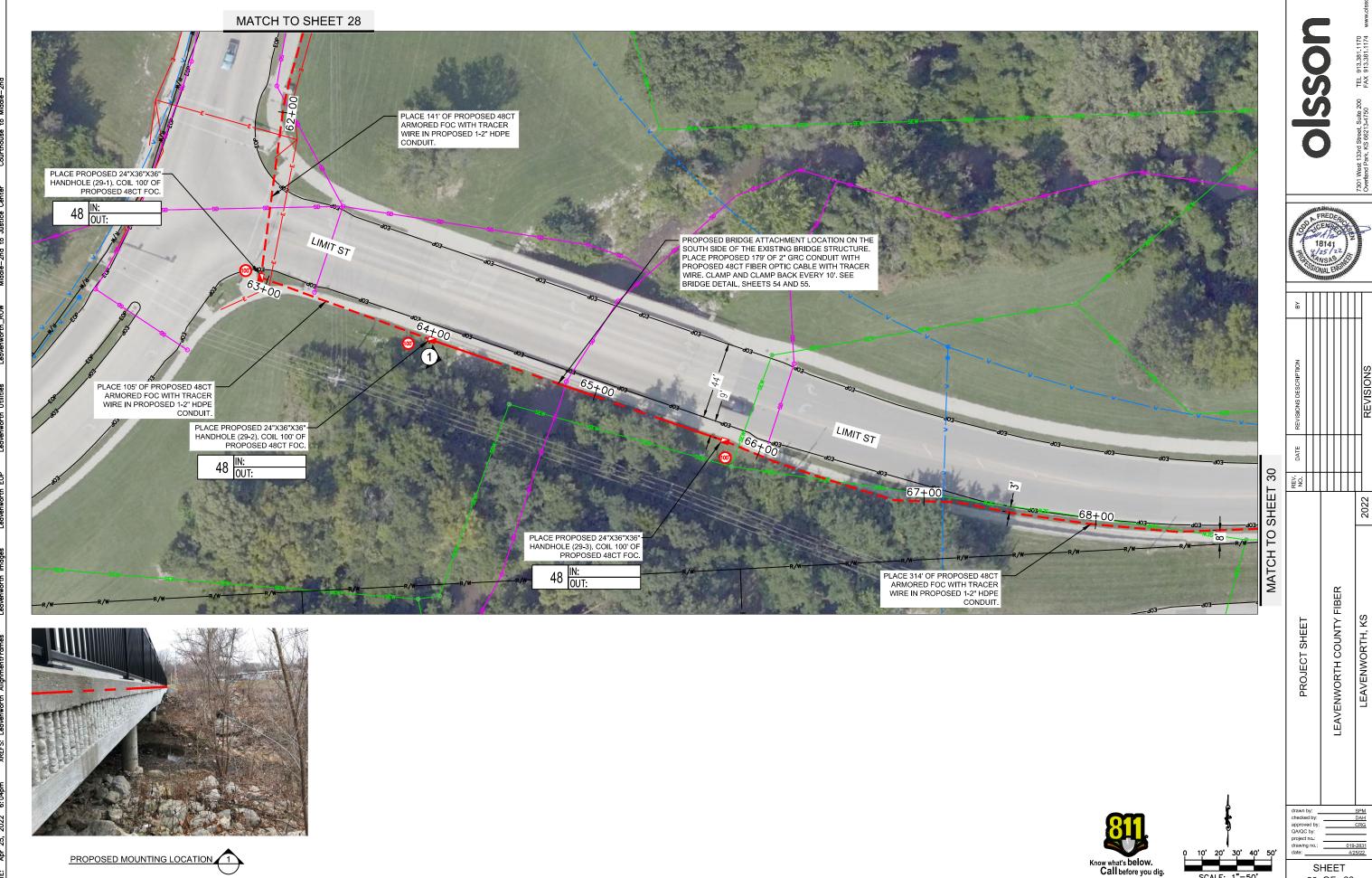
28 OF 60





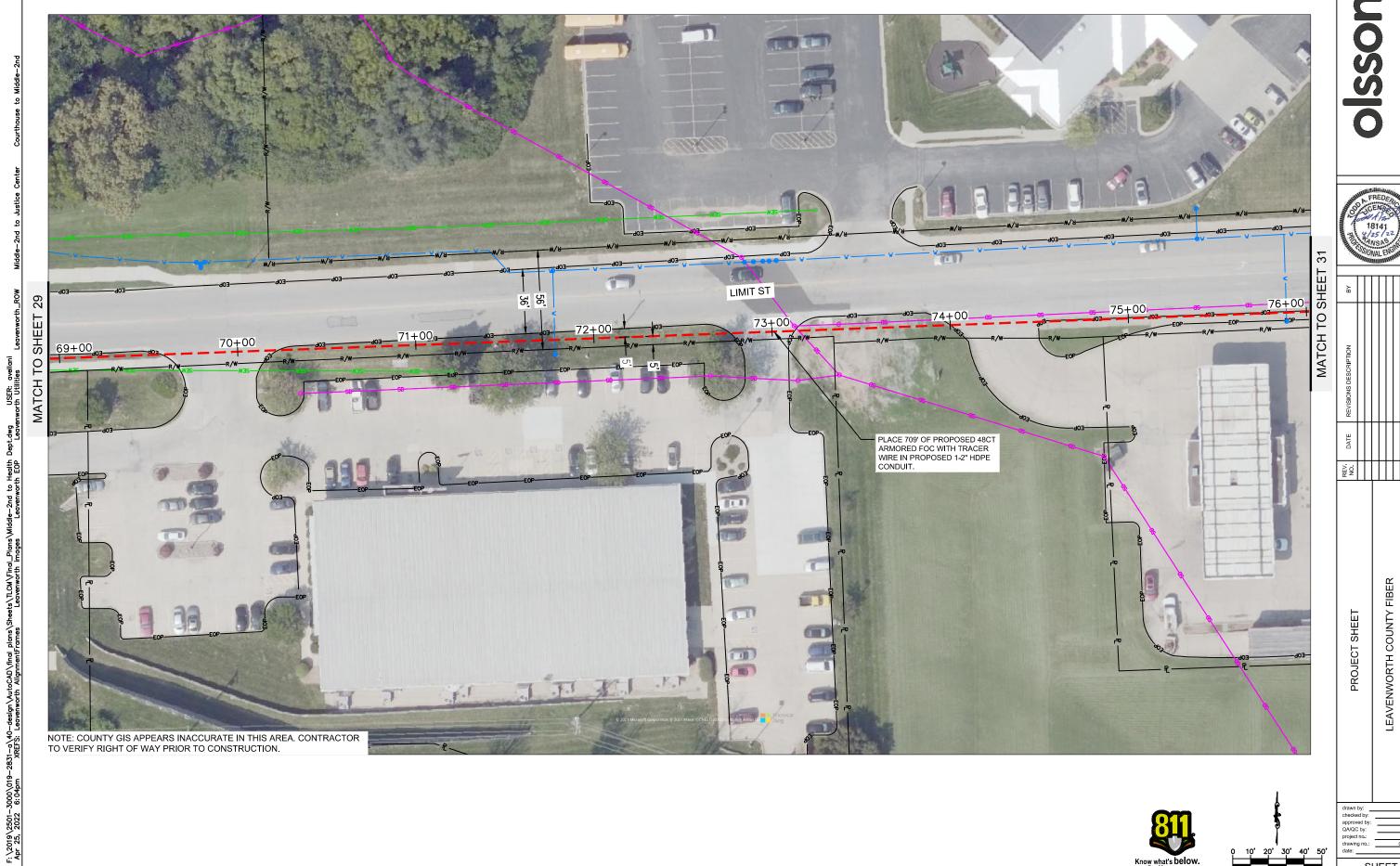




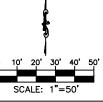


SHEET 29 OF 60

SCALE: 1"=50'

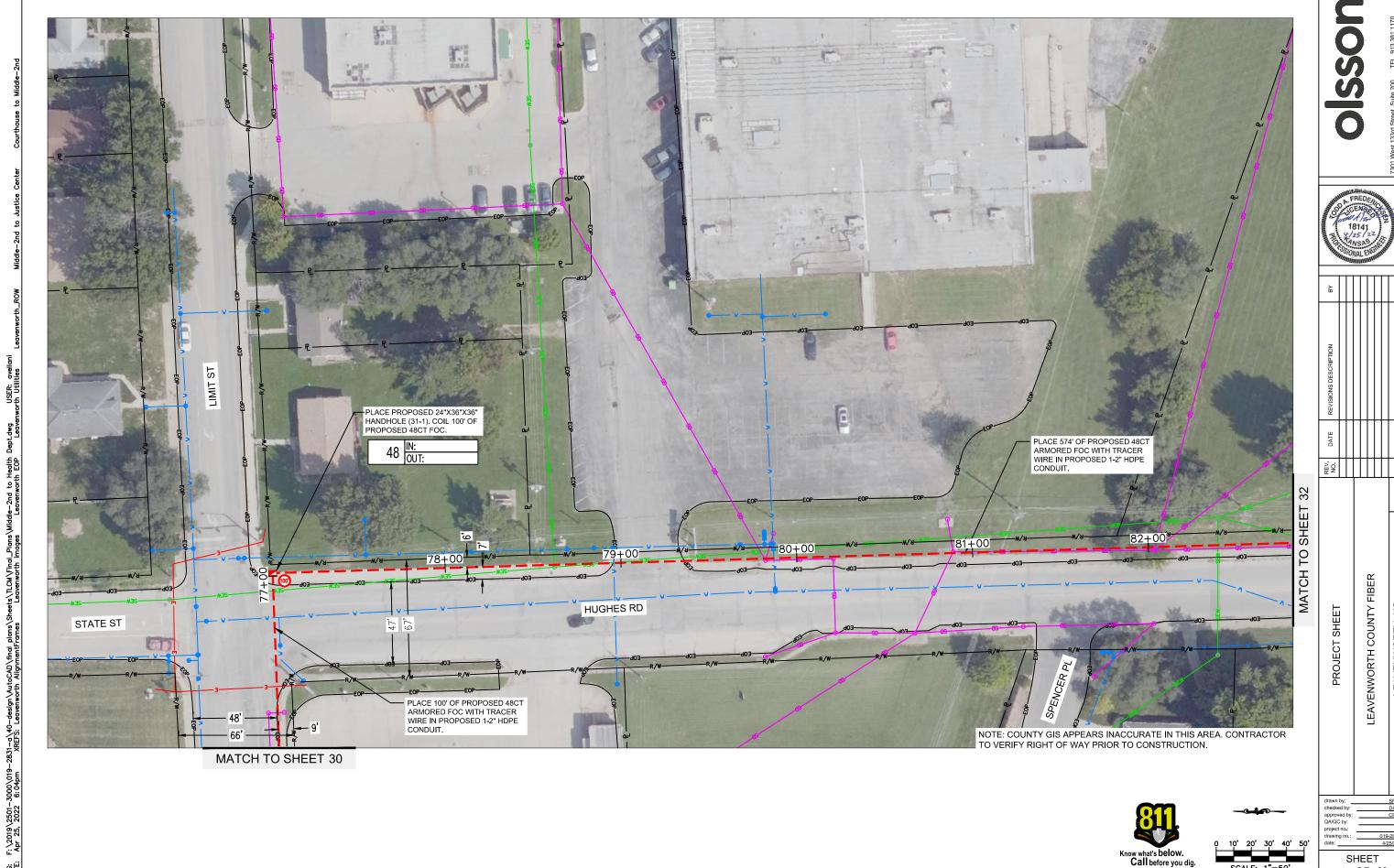






| 50' | drawn by: checked by: approved by: QA/QC by: project no.: drawing no.: date: | SPM DAH CRG 019-2831 4/25/22 | | | | |
|-----|--|--|--|--|--|--|
| | SHEET 30 OF 60 | | | | | |

LEAVENWORTH, KS



LEAVENWORTH, KS

 drawn by:
 SPM

 checked by:
 DAH

 approved by:
 CRG

 QA/QC by:
 project no.:

 drawing no.:
 019-2831

 date:
 4/25/22

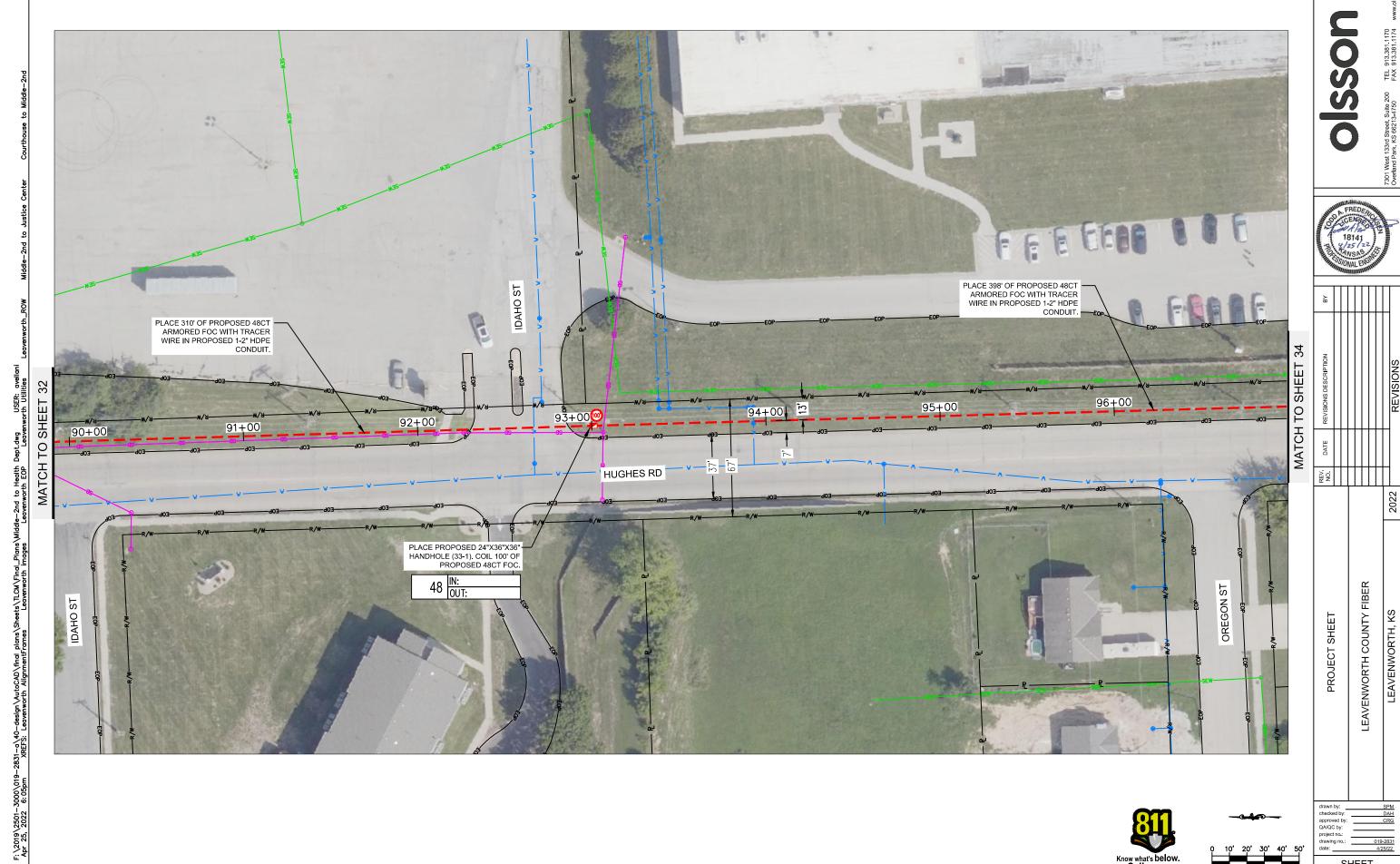
SHEET 31 OF 60

SCALE: 1"=50'



10' 20' 30' 40' 50' SCALE: 1"=50' 32 OF 60

SHEET



 drawn by:
 SPM

 checked by:
 DAH

 approved by:
 CRG

 QA/QC by:
 Project no.:

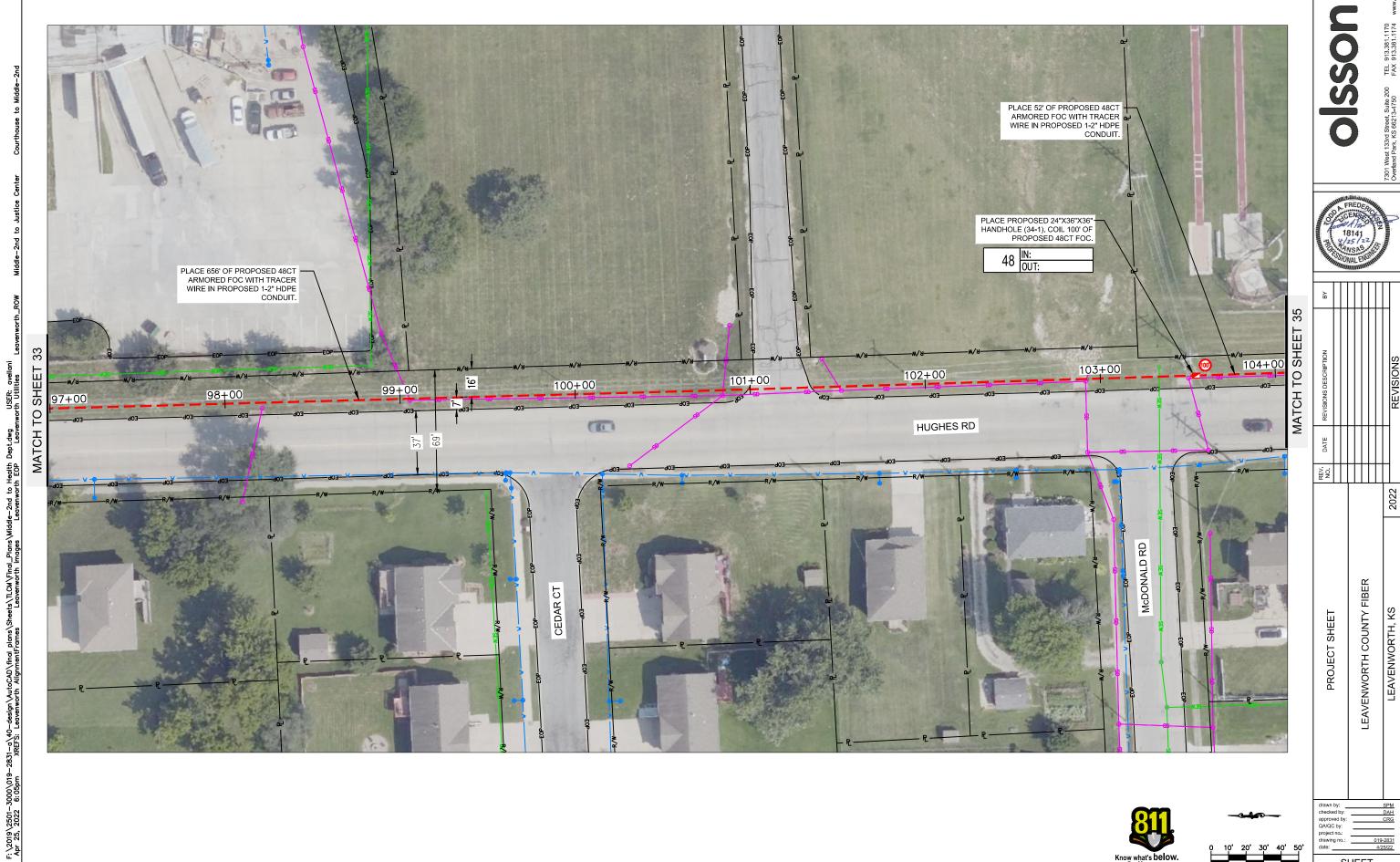
 drawing no.:
 019-2831

 date:
 4/25/22

SHEET 33 OF 60

SCALE: 1"=50'

Know what's below. Call before you dig.



 drawn by:
 SPM

 checked by:
 DAH

 approved by:
 CRG

 QA/QC by:
 Project no.:

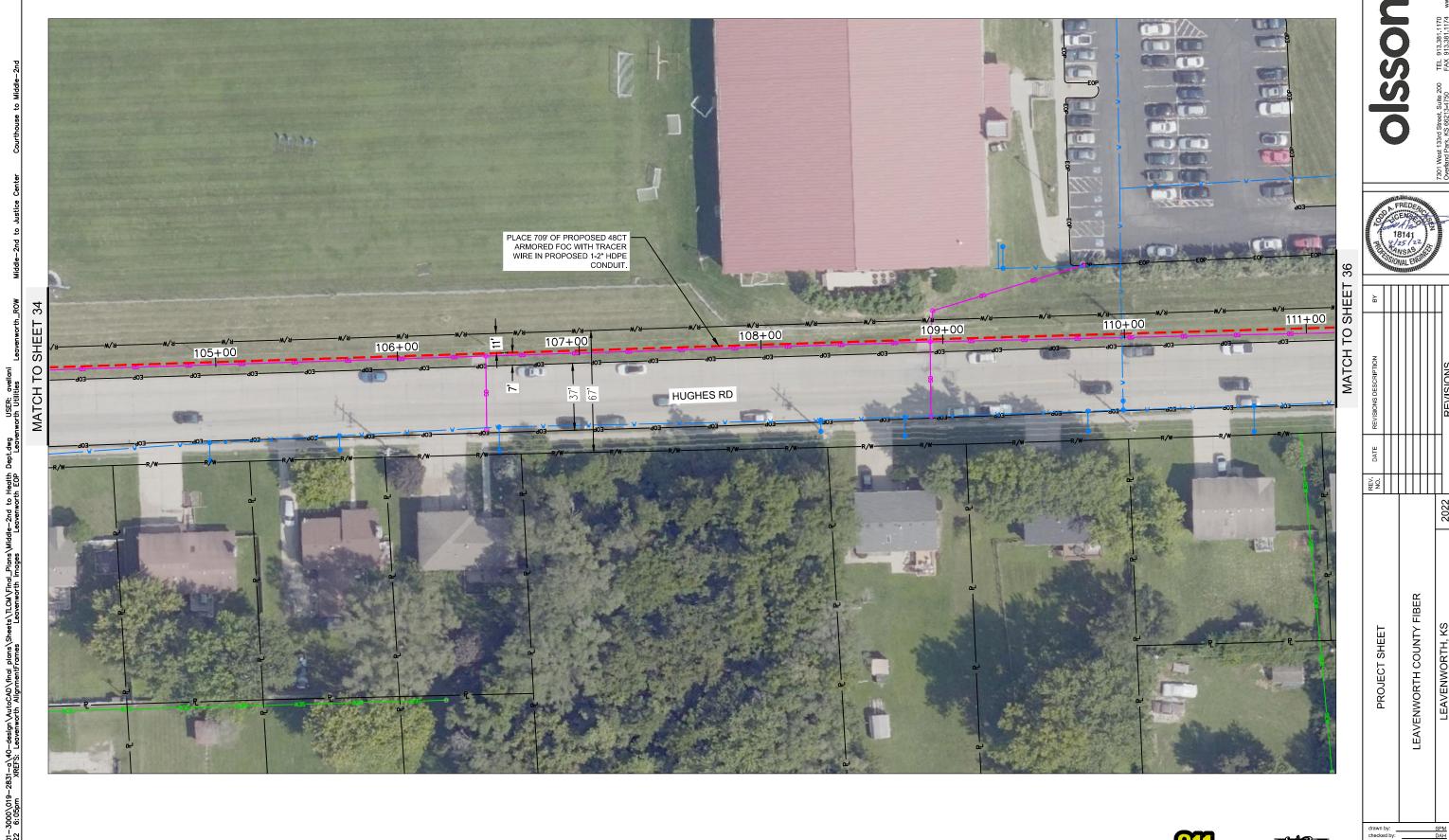
 drawing no.:
 019-2831

 date:
 4/25/22

SCALE: 1"=50'

Know what's below. Call before you dig.

SHEET 34 OF 60



Know what's below. Call before you dig.

SHEET 35 OF 60



Know what's below. Call before you dig.

 drawn by:
 SPM

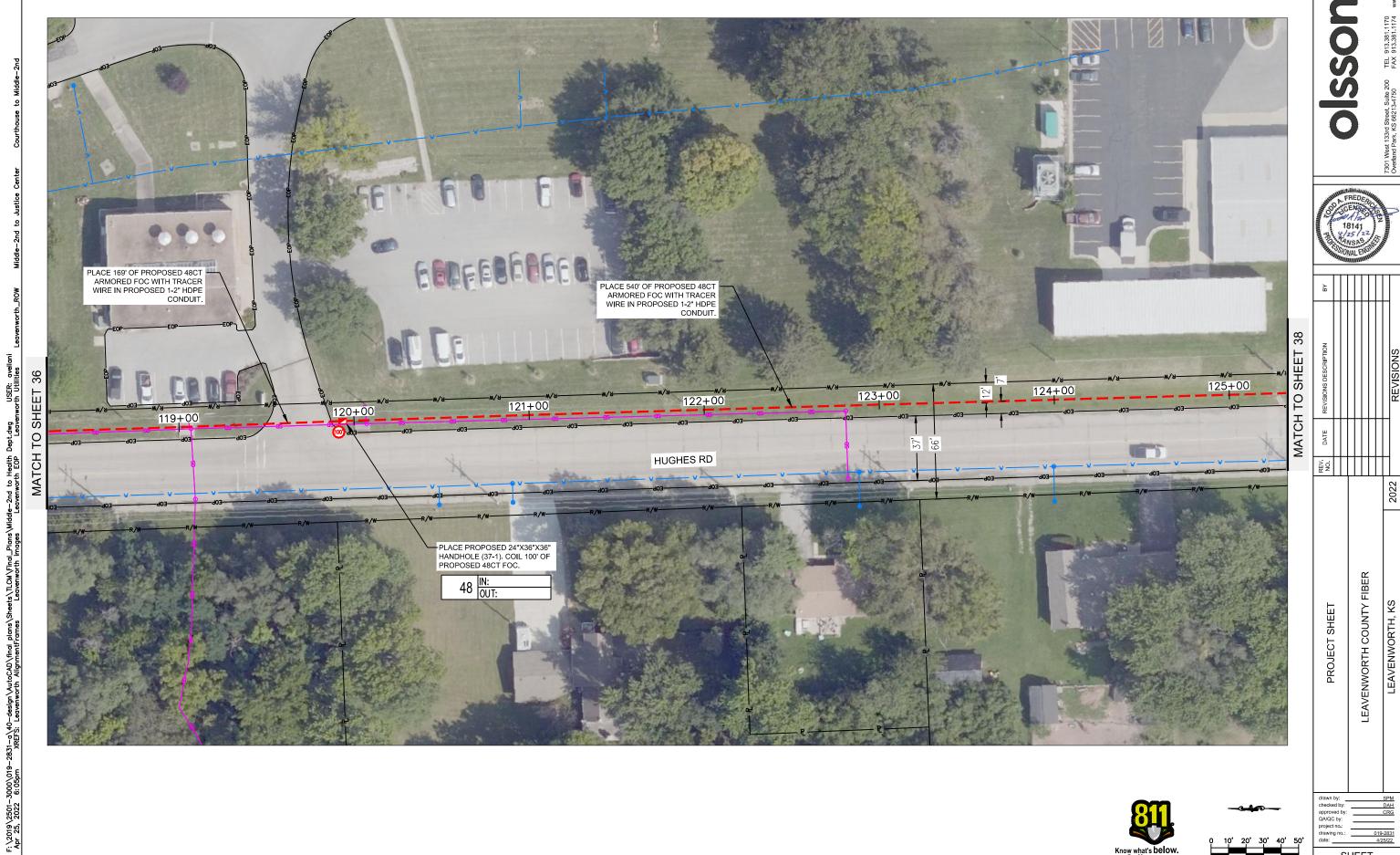
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 approved by:
 CRG

 QA/QC by:
 project no.:

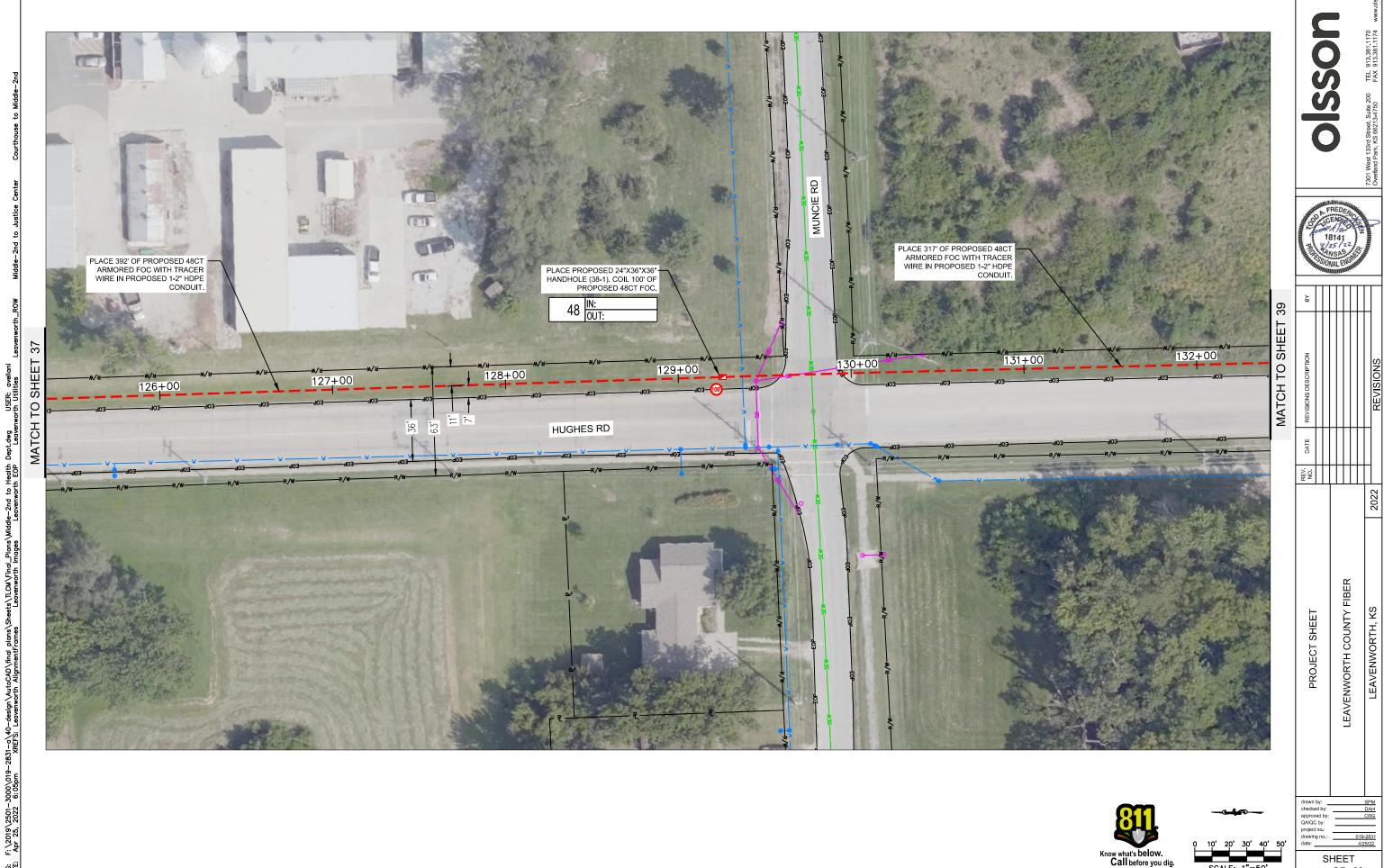
 drawing no.:
 019-2831

 date:
 4/25/22
 SHEET 36 OF 60



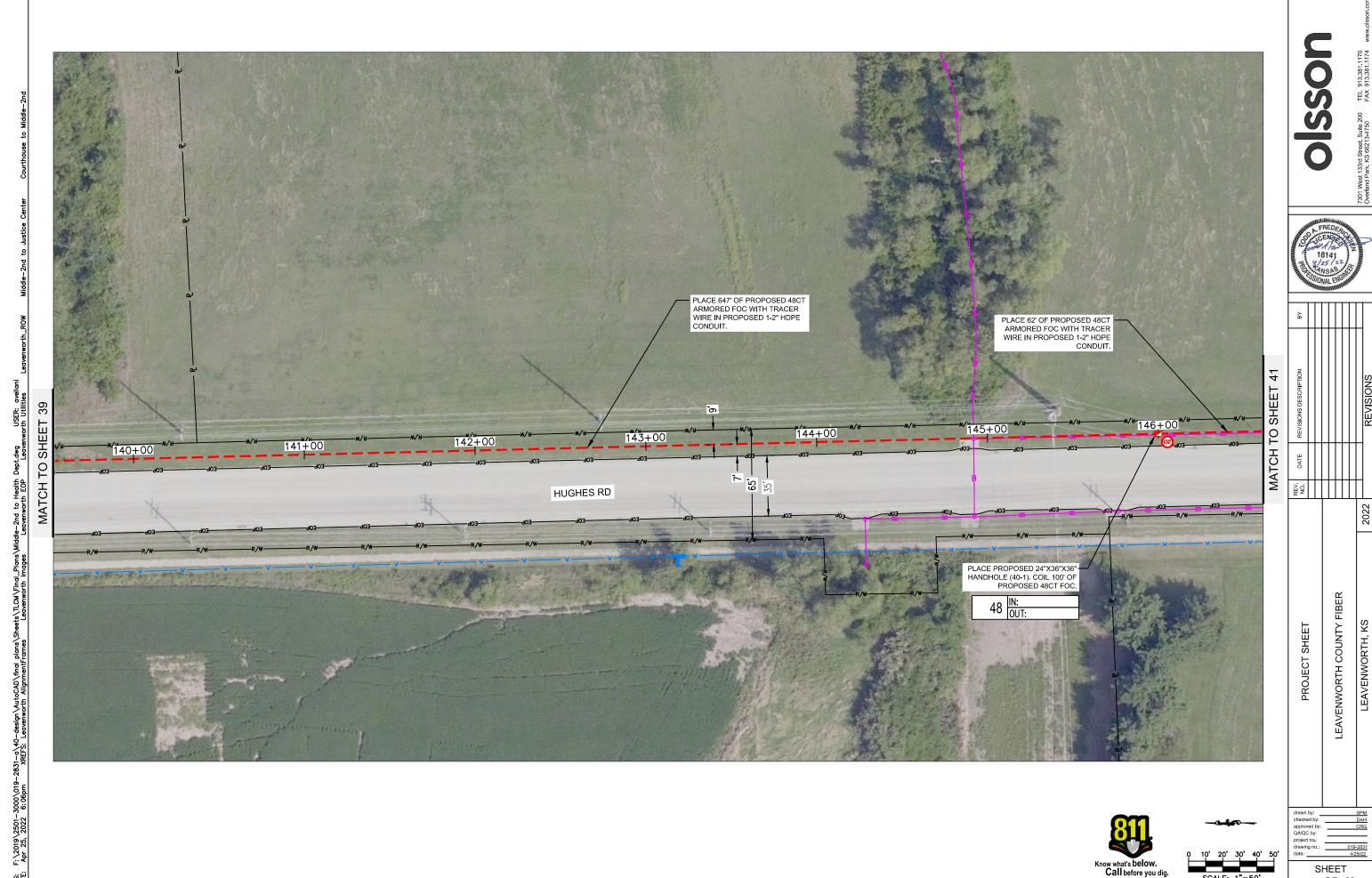
Know what's below. Call before you dig.

Cridected by: CRG
approved by: CRG
QA/QC by: project no.: drawing no.: 019-2831
date: 4/25/22 SHEET 37 OF 60



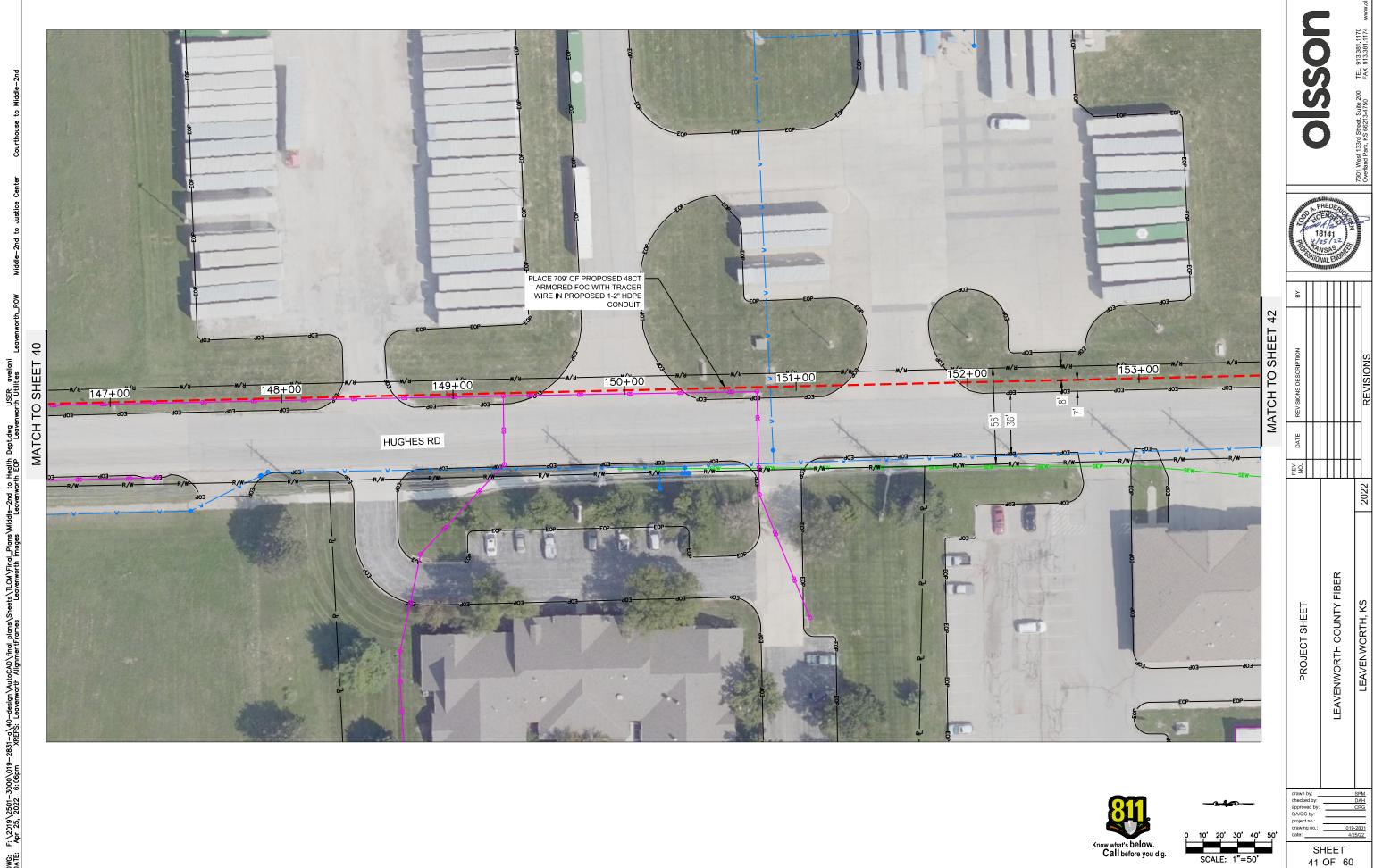
SHEET SCALE: 1"=50' 38 OF 60



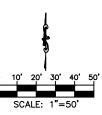


SHEET

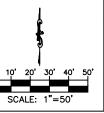
40 OF 60



SHEET 41 OF 60



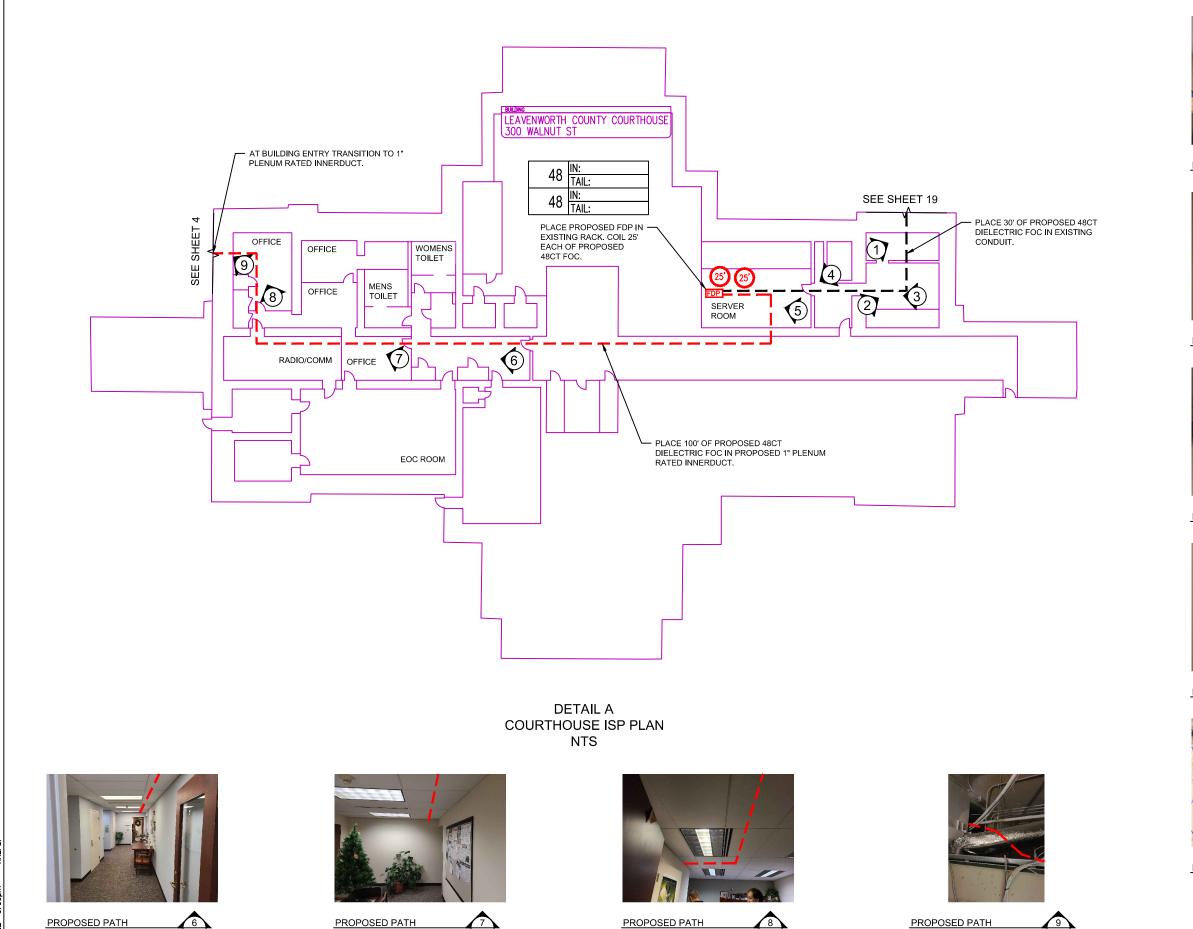
Know what's below. Call before you dig.



LEAVENWORTH COUNTY FIBER

PROJECT SHEET

drawn by: SPM
checked by: DAH
approved by: CRG
QA/QC by: project no.:
drawing no.: 019-2831
date: 4/25/22 SHEET





PROPOSED PATH



PROPOSED PATH



PROPOSED PATH



PROPOSED PATH



PROPOSED FDP LOCATION





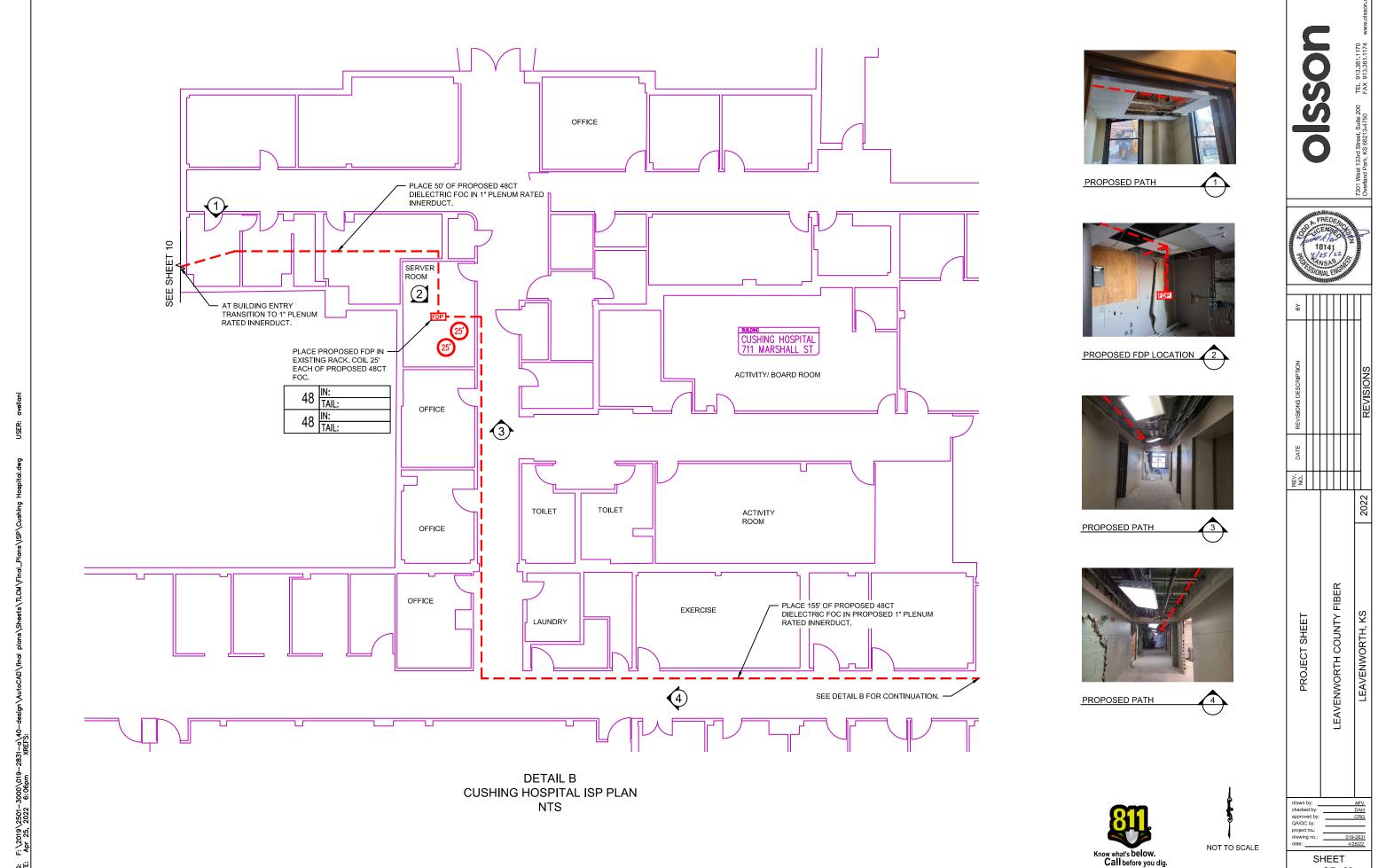
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LEAVENWORTH COUNTY FIBER LEAVENWORTH, KS

PROJECT SHEET

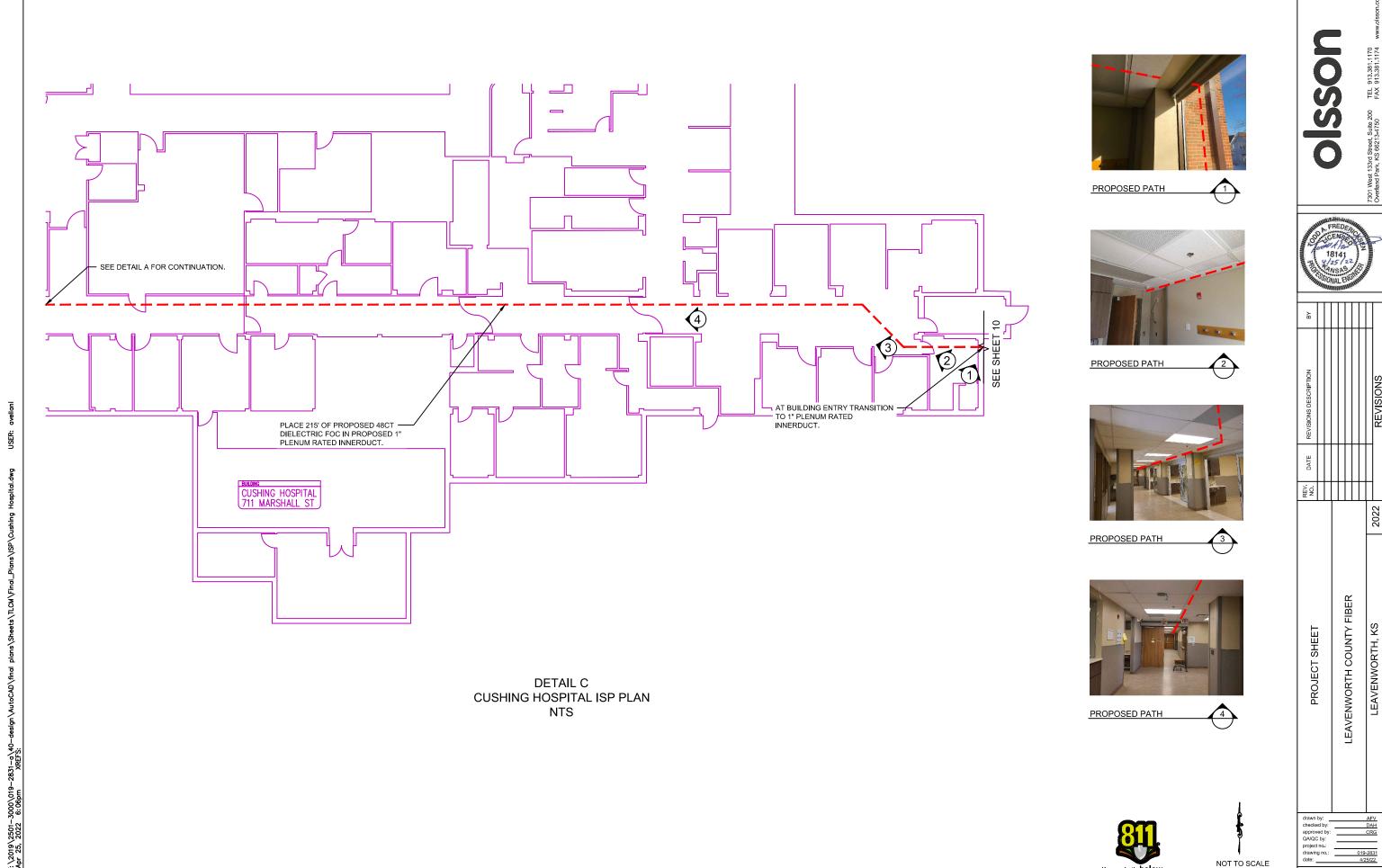
AFV DAH CRG

drawn by: AFV
checked by: DAH
approved by: CRG
QA/QC by:
project no:
drawing no.: 019-2831
date: 4/25/22 SHEET



LEAVENWORTH, KS

SHEET 44 OF 60





Know what's below. Call before you dig.

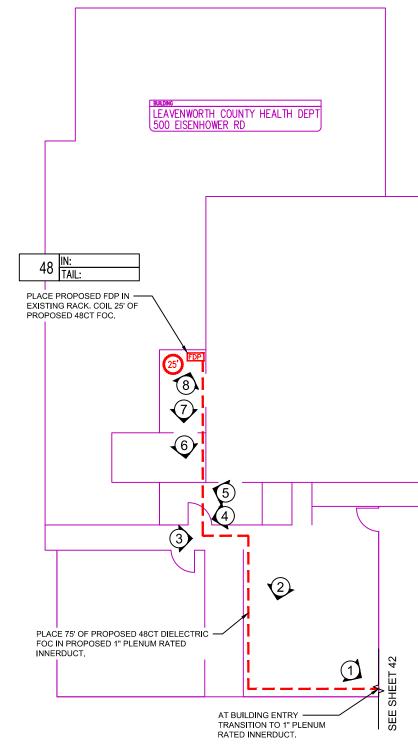
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SHEET 45 OF 60

LEAVENWORTH COUNTY FIBER

LEAVENWORTH, KS





DETAIL D HEALTH DEPARTMENT ISP PLAN NTS



PROPOSED PATH



PROPOSED PATH



PROPOSED PATH



PROPOSED PATH



PROPOSED PATH



PROPOSED PATH



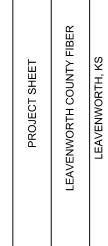
PROPOSED PATH



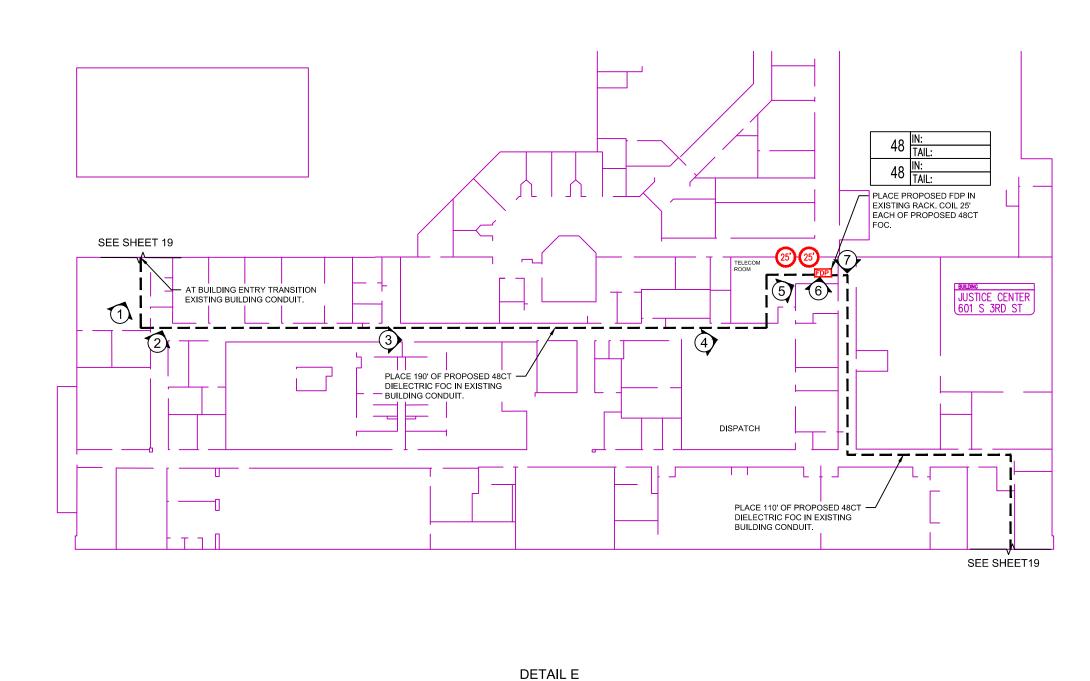
PROPOSED FDP LOCATION 8





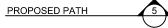


drawn by: AFV
checked by: DAH
approved by: CRG
QA/QC by:
project no:
drawing no.: 019-2831
date: 4/25/22 SHEET

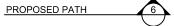


















PROPOSED PATH



PROPOSED PATH



PROPOSED PATH



PROPOSED PATH







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| REVISIONS DESCRIPTION | | | | | REVISIONS |
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LEAVENWORTH COUNTY FIBER LEAVENWORTH, KS

PROJECT SHEET

drawn by: AFV
checked by: DAH
approved by: CRG
QA/QC by:
project no:
drawing no.: 019-2831
date: 4/25/22

SHEET 47 OF 60 Inside Dimensions

Width

21 15/16"

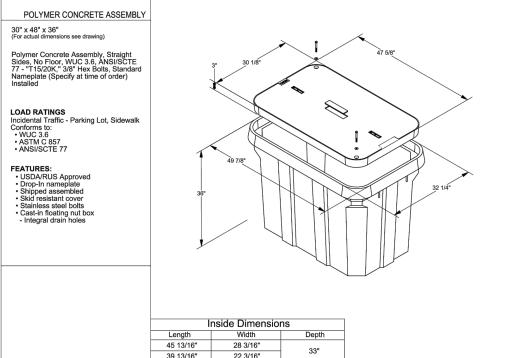
33"

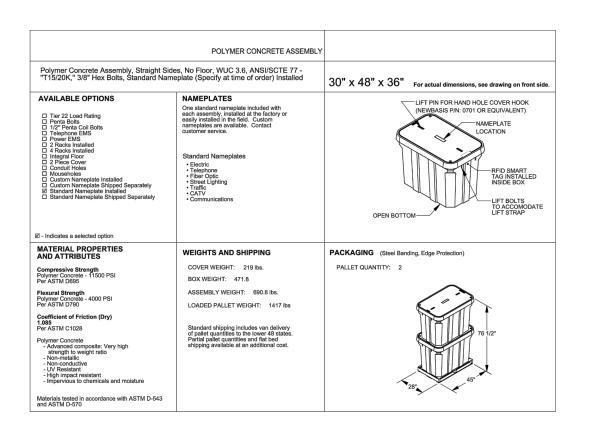
Length

33 9/16"

27 1/8"

| | POLYMER CONCRETE ASSEMBLY | |
|---|---|--|
| Polymer Concrete Assembly, Straight Side "T15/20K," 3/8" Hex Bolts, Standard Name | s, No Floor, WUC 3.6, ANSI/SCTE 77 - plate (Specify at time of order) Installed | 24" x 36" x 36" For actual dimensions, see drawing on front side. |
| AVAILABLE OPTIONS | NAMEPLATES | LIFT PIN FOR HAND HOLE COVER HOOK (NEWBASIS PIN: 0701 OR EQUIVALENT) |
| ☐ Tier 22 Load Rating ☐ Penta Bolts ☐ Telephone EMS ☐ Power EMS ☐ Power EMS ☐ Custom Nameplate Installed ☐ Custom Nameplate Shipped Separately ☑ Standard Nameplate Installed ☐ Standard Nameplate Installed ☐ Standard Nameplate Shipped Separately ☐ Standard Name Separately ☐ Standar | One standard nameplate included with each assembly, installed at the factory or easily installed in the field. Custom nameplates are available. Contact customer service. Standard Nameplates - Electric - Ielectric - Ielephone - Islephone - Islephone - Street Lighting - Broadband - Traffic - CATV - Traffic Signal - Communications | NAMEPLATE LOCATION LIFTING BOLTS TO ACCOMODATE LIFTING STRAPS OPEN BOTTOM OPEN |
| MATERIAL PROPERTIES AND ATTRIBUTES | WEIGHTS AND SHIPPING | PACKAGING (Steel Banding, Edge Protection) |
| Compressive Strength Polymer Concrete - 11500 PSI Per ASTM D695 | COVER WEIGHT: 98.0 lbs. BOX WEIGHT: 330.1 lbs. | PALLET QUANTITY: 4 |
| Flexural Strength Polymer Concrete - 4000 PSI Per ASTM D790 | ASSEMBLY WEIGHT: 428.1 lbs. LOADED PALLET WEIGHT: 1,775 lbs. | |
| Coefficient of Friction (Dry) 1,985 Per ASTM C1028 Polymer Concrete - Advanced composite: Very high strength to weight ratio - Non-metallic - Non-conductive - UV Resistant - High impact resistant - Impervious to chemicals and moisture Materials tested in accordance with ASTM D-543 | Standard shipping includes van delivery of pallet quantities to the lower 48 states. Partial pallet quantities and flat bed shipping available at an additional cost. | 76 1/2" |







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| I YPICAL DETAILS | | | | |
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| LEAVENWORTH COUNTY FIBER | | | | |
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| LEAVENWORTH, KS 2022 | 2 | | REVISIONS | |
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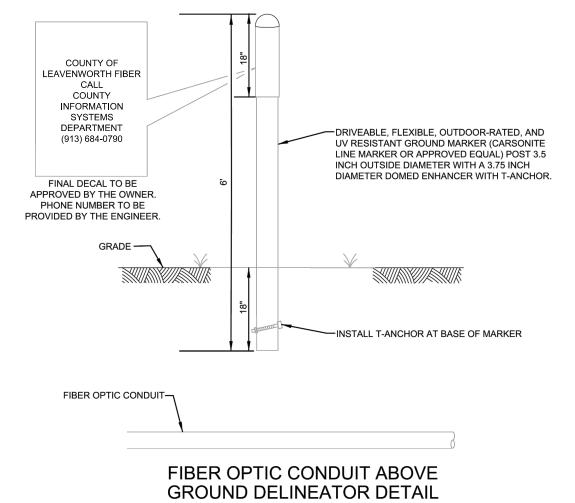
drawing no.: 019-2831 date: 4/25/22

SPM DAH CRG

drawn by: ____ checked by: approved by: QA/QC by:

project no :

TYPICALS



olsson



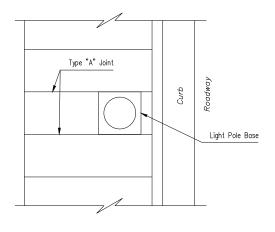
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LEAVENWORTH COUNTY FIBER

drawn by: SPM checked by: DAH approved by: CRG QA/QC by: project no: drawing no: 019-2831 date: 4/25/22

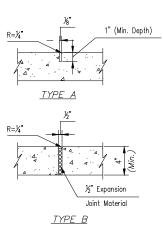
SHEET 49 OF 60

TYPICALS



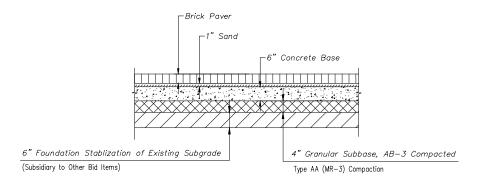
JOINTS AT LIGHT POLE DETAIL

Not To Scale

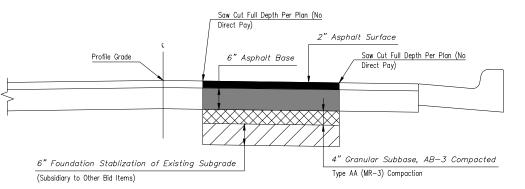


JOINT DETAILS

Not to Scale



BRICK PAVEMENT REPAIR DETAIL (Not to Scale)



TYPICAL FULL DEPTH REPAIR FOR STREET CUTS OR POT HOLES Not To Scale

| drawn by: SPM | Checked by: DAH | approved by: CRG | QA/QC by: project no: drawing no: 019-2831 | date: 4/25/22

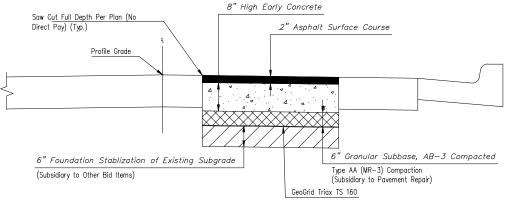
51 OF 60

SHEET

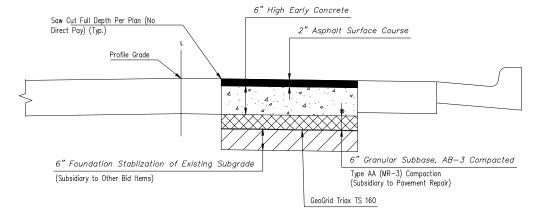
Type AA (MR-3) Compaction

TYPICAL 6" HIGH EARLY CONCRETE PAVEMENT REPAIR Not To Scale

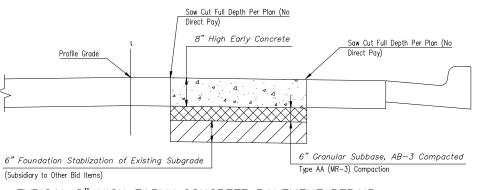
(Subsidiary to Other Bid Items)



TYPICAL 8" HIGH EARLY CONCRETE PAVEMENT REPAIR Not To Scale



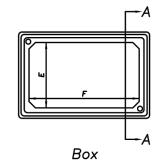
TYPICAL 6" HIGH EARLY CONCRETE PAVEMENT REPAIR PARKING LOT Not To Scale

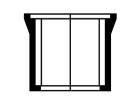


TYPICAL 8" HIGH EARLY CONCRETE PAVEMENT REPAIR Not To Scale

drawn by: ____ checked by: approved by: QA/QC by: drawing no.: 019-2831 date: 4/25/22

> SHEET 52 OF 60

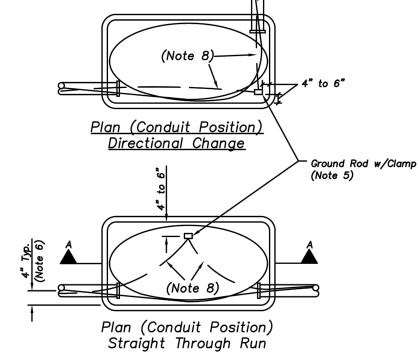




Cover

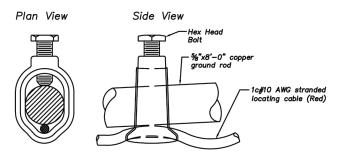
Section A-A

- otes:
 Boxes shall be stackable for extra depth.
 The 'FO' service box and cover shall be rated for no less than 22,500 lbs test load (Tier 15) load per ANSI/SCTE-77.
 The Type 2 fiber box shall have a two-piece overlapping cover.
 Cover label shall be attached with an approved epoxy.
 A %" x 8'-0" ground rod shall be installed in each service box.
 The conduit shall enter and exit the service box between 38" and 50" and shall be 4" centered off the edge of the service box wall. The fiber cable shall at no time have less that an 8" radius bend.
- 7. 18" min. layer of ½" clean crushed rock shall be constructed below the service box for drainage purposes.
 8. 1c#10 AWG THHN/THWN (red) stranded copper locating cable.



| Box Type | Α | pproxim | ate l | Dimen | sions (inc | hes) |
|-----------------------|-------------|-------------|-------|-------|------------|-------------|
| | Α | В | С | D | Ε | F |
| Type 1 Fiber | <i>35 %</i> | 24 | 3 | 24 | 22 1/4 | <i>33</i> % |
| Type 2 Fiber (Note 3) | 47 % | <i>30 %</i> | 3 | 24 | 28 1/8 | 45 % |

Fiber Optic Service Box Details



Ground Rod Clamp Connection Detail

NOT TO SCALE



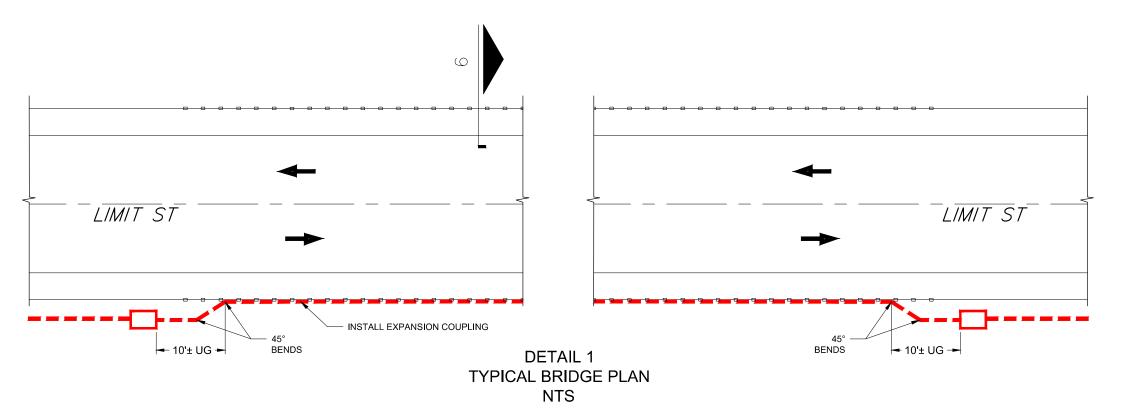
| | | **** | 214. | | | |
|-----------------------|--|------|------|--|--|-----------|
| ВУ | | | | | | |
| REVISIONS DESCRIPTION | | | | | | REVISIONS |
| DATE | | | | | | |
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| | | | | | | 2022 |
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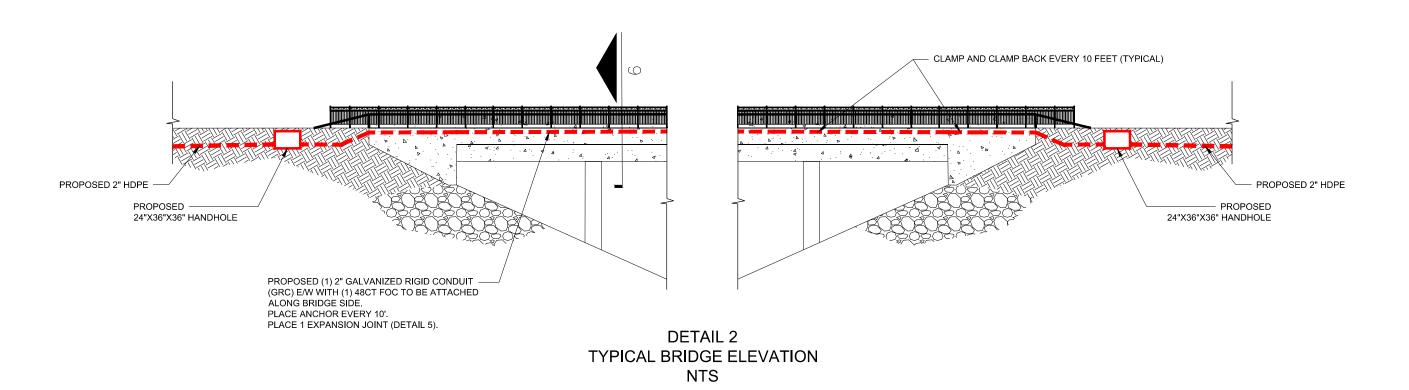
LEAVENWORTH COUNTY FIBER TYPICAL DETAILS

drawn by: __checked by: approved by: QA/QC by:

SHEET 53 OF 60

BRIDGE ATTACHMENT DETAILS





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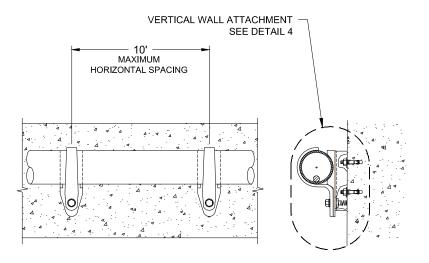
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LEAVENWORTH COUNTY FIBER

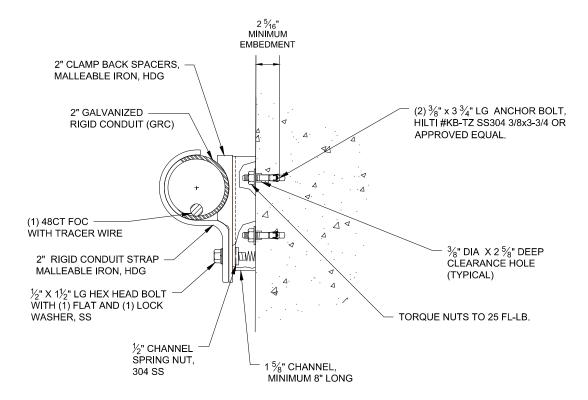
drawn by: SPM
checked by: DAH
approved by: CRG
QA/QC by:
project no.:
drawing no.: 019-2831
date: 4/25/22

SHEET 54 OF 60

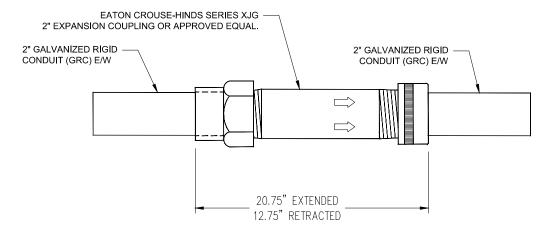
BRIDGE ATTACHMENT DETAILS



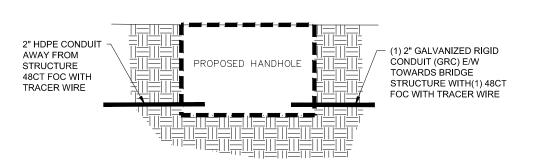
DETAIL 3
ABUTMENT WALL ATTACHMENT
NTS



DETAIL 4
ABUTMENT WALL ATTACHMENT
NTS



DETAIL 5
BRIDGE EXPANSION COUPLING
NTS



DETAIL 6 HANDHOLE PROFILE NTS

olsson



| | REVISIONS | | | 2022 | |
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| В | REVISIONS DESCRIPTION | DATE | <u>ک</u> کو | | S |

BRIDGE ATTACHMENT DETAILS
LEAVENWORTH COUNTY FIBEF

drawn by: SPM
checked by: DAH
approved by: CRG
QA/GC by:
project no:
drawing no.: 019-2831

SHEET 55 OF 60

An easement is hereby granted to the City of Leovenworth, Kansas to locate, construct, and maintain, or to authorize the location, construction, and maintanence of poles, wires, anchors, conduits, and/or structures for water, gas, sanitary sewer, storm sewer, surfoce drainage channel, electricity, telephone, cable television, or any other necessary public utility or services, any or all of them, upon, over, or under those areas outlined or designated upon this plot as "UE" or "utility essement", or within any street or thoroughtare dedicated to public use on this plot.

IN TESTIMONY WHEREOF, the undersigned have caused these presents to be signed as follows

STATE OF KANSAS

nission Expires: 10-31-22

BY: ZAM, LLC

My Commission Expires Of 022 c

This plat of LADDOS ASSOCIATION has been submitted to and approved by Commission this day of FEBRUARY 2021

Chairman Miles Source ORPORATE
CHILLER (SEAL) SEAL
CHYIN K. William SEAL

This is to certify that this plot was filed as Document No. $\frac{2024\,\text{Po0010}}{\text{day}}$ in the Office of the Register of Deeds of Leavenworth County, Kansas, on the $\frac{18^{74}}{}$ day of $\frac{704124}{}$ 20 $\frac{9}{}$ ATTEST: Deputy

Register of Deeds - Stacy R. Driscoll

Www. Mould PS#1599 3/16/2021 Stephan-C-Tufte, KS-PS-No.-1252 Leavenworth County Reviewer William Noll , PS# 1599

> CHRIS WOODS SECTION 12, T-09S; R-22E CITY OF LEAVENWORTH LEAVENWORTH COUNTY, KANSAS LAND SURVEYORS - PLANNERS MIDLAND

PREPARED FOR

4784 Frederick Blvd, St. Joseph, MO 64506 ph. (816) 233-7900 fax (816) 233-4852

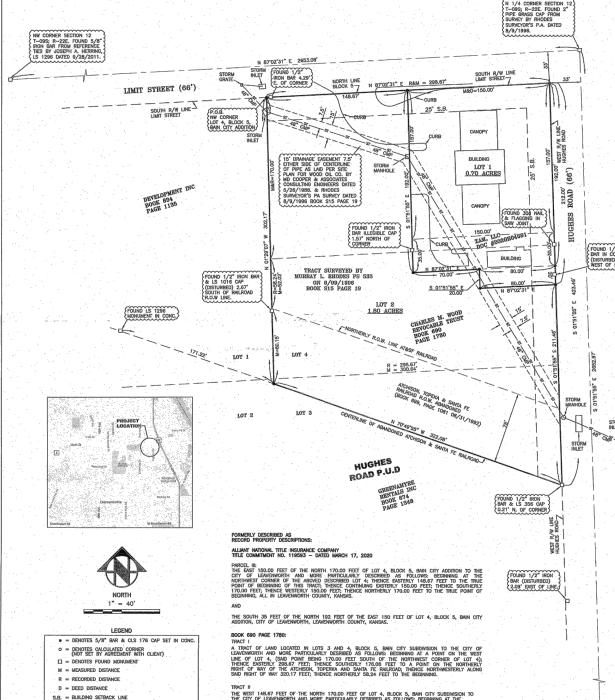
NTS

FIBER LEAVENWORTH COUNTY

NO K

DAH approved by: QA/QC by: CRG project no.: 019-283

> SHEET 56 OF 60



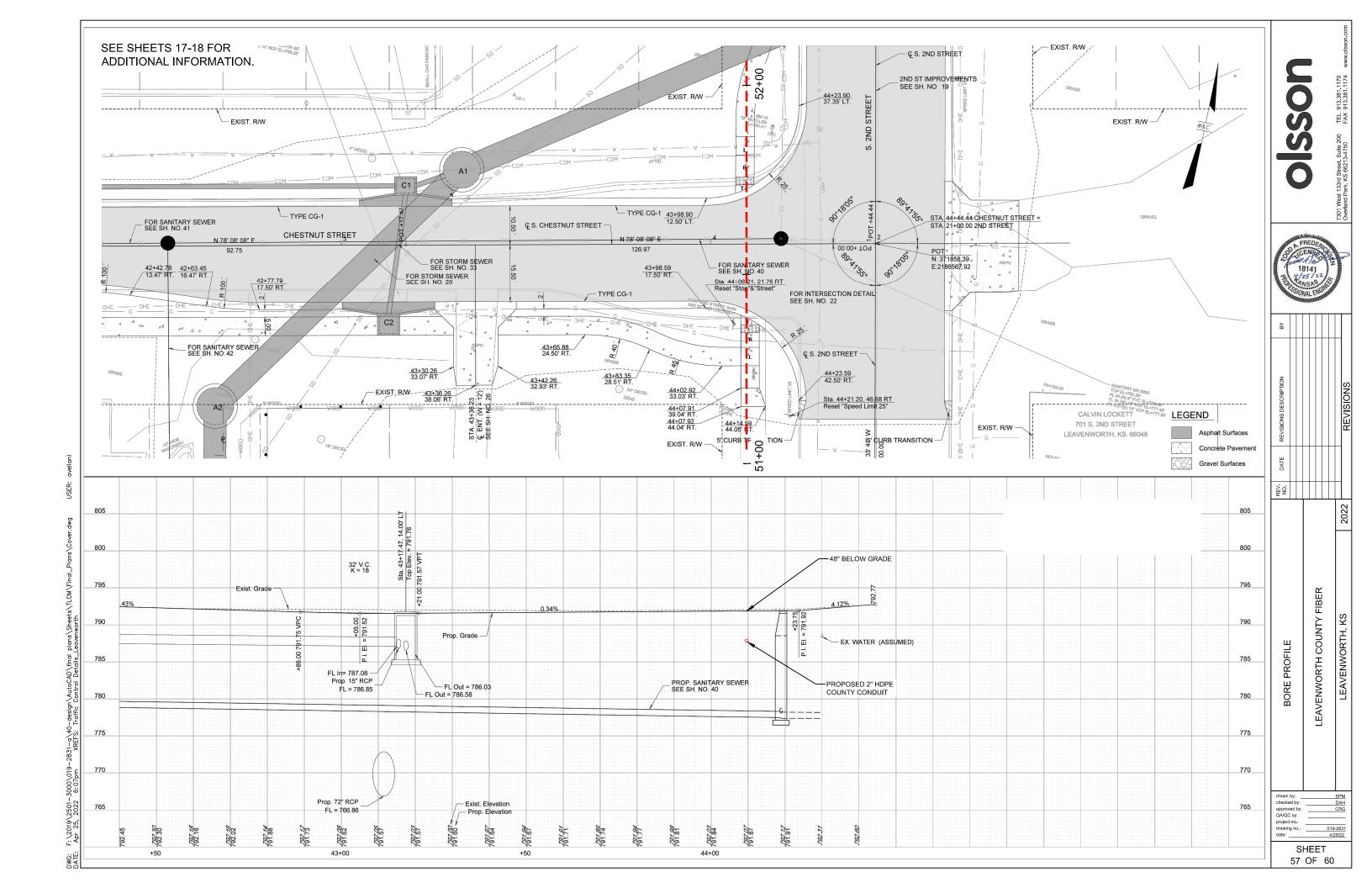
WITNESS hand and seal this Third (3rd) day of March, 2021.

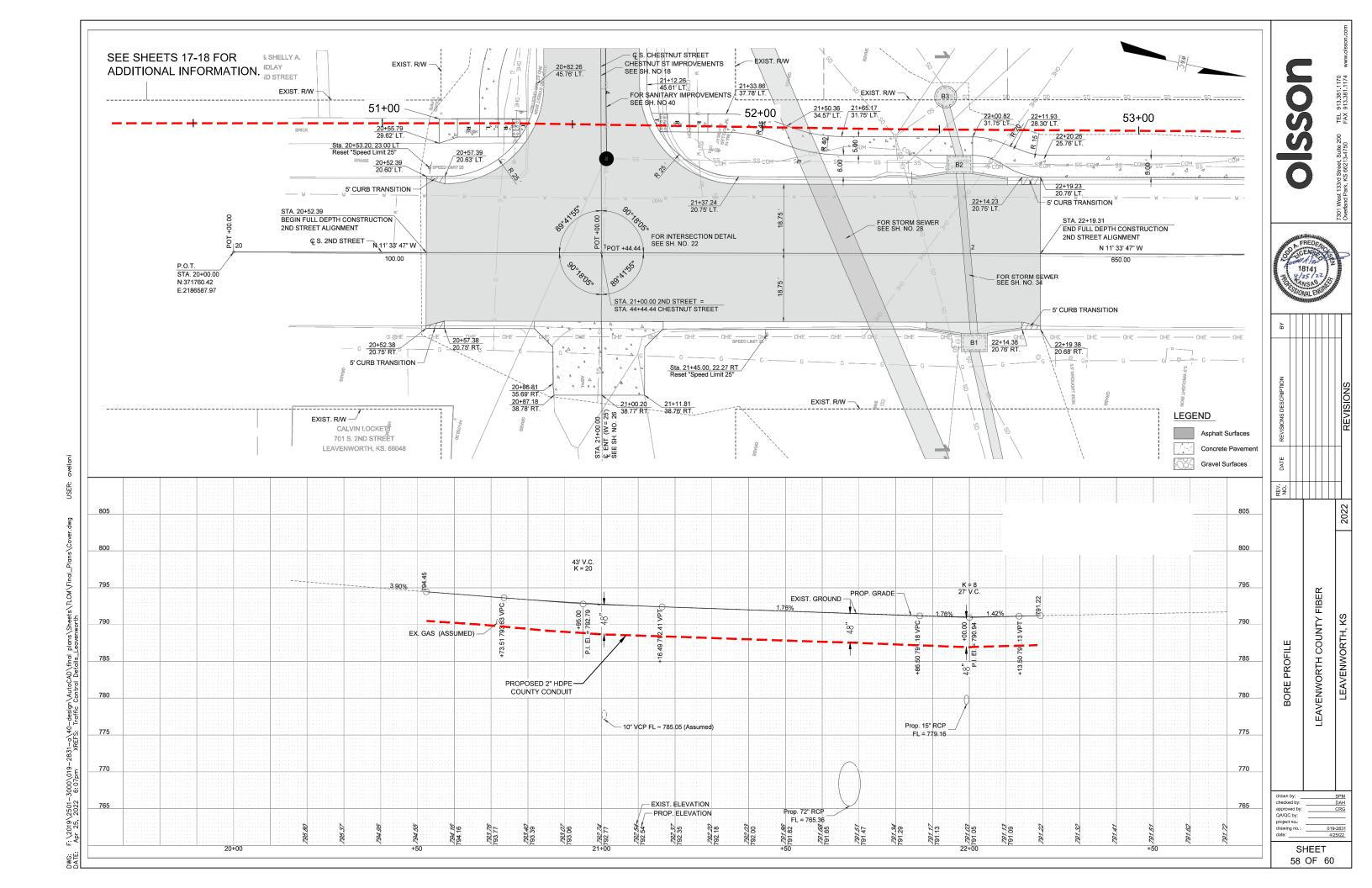
STATE OF KANSAS

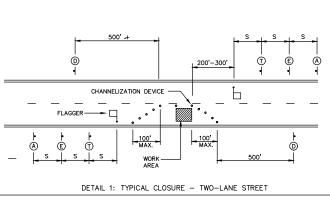
Territois G. MAShBurn

MARCH 3, 2021 1" = 40"

P.O.B. = POINT OF BEGINNING

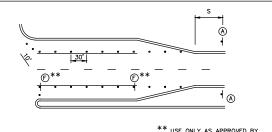




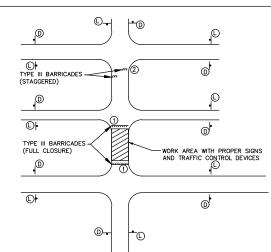


-WORK AREA

DETAIL 2: TYPICAL LANE CLOSURE - FOUR-LANE STREET



DETAIL 3: TYPICAL RIGHT-TURN LANE AND LEFT-TURN LANE CLOSURES



DETAIL 4: TYPICAL SIDE ROAD SIGNING FOR ROAD CLOSURE

SIGN LEGEND CENTER OR LEFT ROAD WORK AHEAD G20-2 $^{\mathsf{B}}$ © D E (A) W20-1 W20-5 W20-4 _ LANE KEEP

RIGHT ROAD CLOSED AHEAD MUST DETOUR AHEAD TURN __ N M4-9(L) N M4-9(R) G R3-7 (L) R3-7 (R) (H)M W20-2 N_{S}^{K} M4-9(S) END DETOUR ONE WAY ZONE (i) M4-8a (S) R6-1(L) M4-10(L) P_RM4-10(R) @ R1-1 (S) R6-1(R) (U) G20−5aP R W12-1 ① W20-7A ROAD CLOSED SIDEWALK CLOSED ROAD SIDEWALK SPEED SPEED LIMIT 20 LIMIT 20 CLOSED CLOSED THRU TRAFFIC (1) R11-2 (2) R11-4 (3) R9-11A (4) R9-9 √ R2−1 ₩R3-2 DETAIL 5: TYPICAL SIDEWALK CLOSURE (X) R3-8 SHOULDER WORK

- . All signs, barricades, drums, markings and other traffic control devices shall conform to the Manual on Uniform Traffic Control Devices (M.U.T.C.D.), most
- All signs, barricades, drums, markings and other traftic control devices shall controm to the Manual on Uniform Iraffic Control Devices (M.U.I.C.D.), most current edition.

 All traffic control devices shall be standard in size, shape, color and message, in good condition, and reflectorized. All signs and barricades in place at night shall be reflectorized with high intensity sheeting. All signs shall be securely mounted with height and lateral location as described in the M.U.T.C.D.

 Warning lights should be used on all channelization devices and warning signs per M.U.T.C.D. Type A Low-Intensity Flashing Warning lights should be mounted on warning signs as well as barricades where used in series to delineate the edge of the trovel way.

 Advance Warning Arrow Panels shall be used for all lane closures on multi-lone streets but should not be used in lieu of proper traffic control signs, barricades and channelization devices.

 Flaggers shall be used where indicated on the plans, where construction vehicles interact with normal traffic or where construction activities impose a restriction on traffic, as directed by the Engineer in charge of construction. Where flaggers are used, advance signing shall be erected as shown above or as specified in the M.U.T.C.D. Talogers shall meet the requirements in the M.U.T.C.D. in regard to character, training, attire and behavior.

 Channelization devices used in the street shall be either drums, cones or Trainine channelizes work area.

 The Contractor shall place as many barricades as needed to effectively shield pedestrians and traffic from exposed objects, excavations and construction activities. ADA Pedestrian Barricades shall be installed around all excavations left open during non-construction times or as directed by the Engineer in charge of construction.

- activities. ADA Pedestrian Barricades shall be installed around all excavations left open during non-construction times or as directed by the Engineer in charge of construction.

 9. Access shall be maintained to all driveways and side streets unless noted otherwise on the plans.

 10. Construction materials shall be kept off of sidewalks, consolidated in one location within City Right-Of-Way, and removed daily unless otherwise approved by the Engineer in charge of construction.

 11. Dirt, mud and other construction debris on streets and sidewalks shall be removed immediately.

 12. During non-working hours, all lanes of traffic in all directions shall be maintained. Working hours with lane closures are restricted to between 8:00 a.m. to 4:00 p.m. Monday through Friday. Work on Saturdays is possible with prior approval but not in residential areas.

 13. The Contractor shall be responsible for maintaining all traffic control devices on an around-the-clock basis, whether or not work is actively being pursued and any deficiencies noted shall be corrected immediately.

 14. The traffic control requirements shown on these plans are minimum requirements only and do not attempt to address in depth the variety of situations that may occur once construction has started. In no way do the requirements shown on these plans relieve the contractor of his responsibility for selecting the proper traffic control devices and implementation procedures that will assure the safety of motorist, pedestrians, and workers at all times. Any additional quantities of traffic control devices necessary to complete the contract or as ordered by the Engineer shall be considered subsidiary to the contract bid price.

 15. Construction vehicles parked along streets and construction signs shall not restrict sight distance for vehicles exiting at streets or any drives.

- quantities of traffic control devices necessary to complete the contract or as ordered by the Engineer shall be considered subsidiary to the contract bid price.

 15. Construction vehicles parked along streets and construction signs shall not restrict sight distance for vehicles exiting at streets or any drives.

 16. Should the contractor fail to enforce the traffic control plan or fail to clean, replace or otherwise maintain the traffic control devices when directed to do so by the Engineer or representative, the City/Controlling Jurisdiction may take one or more of the following actions:

 A) Employ another agency to correct deficiencies in signing or warning devices and deduct the cost from the contractor's pay estimate

 B) Suspend all pay Estimates until deficiencies are corrected.

 C) Stop the work until deficiencies are corrected.

 D) Place the contractor in default.

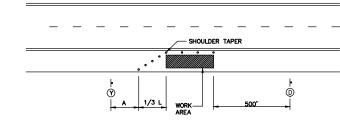
 17. The Contractor shall keep roadway closures due to construction activities to a minimum and provide advanced notice to affected users.

 18. The Contractor shall keep roadway closures due to construction activities to a minimum and provide advanced notice to affected users.

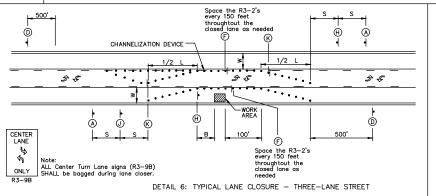
 18. The Contractor shall keep roadway closures due to construction activities to a minimum and provide advanced notice to affected users.

 19. The Contractor shall have furnished to the engineer of the status of incident managements in notification with enforcement and emergency agencies, a report shall be furnished to the engineer on the status of incident managements.

 19. The Contractor may, if need arises or at the request of the Engineer, place reduced speed limit signing and work zone speed limit signing in advance of all active work zone areas. Work zone speed limit reduction shall not be greater than 10 mpt throughout construction areas without advanced signing in place. Contractor shall cover or replace all speed limit signs in conflict with the work zone speed limit throughout the construction area.

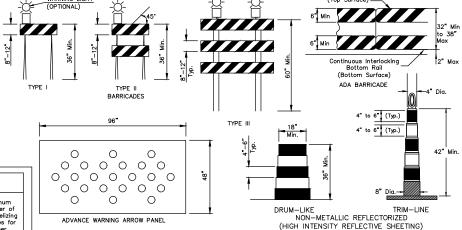


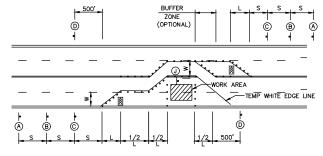
DETAIL 7: TYPICAL WORK ON SHOULDER - TWO-LANE STREET



NOTE: SIGNS SHALL BE MOUNTED TO ADA BARRICADE

| | | | | | | | | | | _ |
|----------------------|---------------------------------|----------------------|----------------------|------------------------|----------------------|--------------------------|--------------------------|--------------------------|--------------------------------------|---|
| | or length of uffer space (B) | | CHANNE | | | TAP | ER DE | ETAIL | | |
| Speed* (mph) | Length (Feet) | Speed Limit | Along Taper | After Taper | Speed Limit | | Taper | Length (L) | Minimum Number of Channelizing | |
| 20 25 30 | 35 55 85 | M.P.H. | | | M.P.H. | 10 | 11 | 12 | Devices for Taper | |
| 35 40 45 50 | 120 170 220 300 | 20 25 30 35 | 20 25 30 35 | 40 50 60 70 | 20 25 30 35 | 70 105 150 205 | 75 115 165 225 | 80 125 180 245 | 5 6 7 | |
| ted speed | 2400000 | 40 45 50 55 | 40 45 50 55 | 80 90 100 100 | 40 45 50 55 | 270 450 500 550 | 295 495 550 605 | 320 540 600 660 | 9 13 13 13 | |





DETAIL 8: TYPICAL LANE CLOSURE - FOUR-LANE STREET

SIGN SPACING(S) The maximum distance in feet between devices in a taper should not exceed 1.0 times the speed limit in MPH. (Feet) ≤ 30 35 - 45 100 350 500

TRAFFIC CONTROL

 \bigcirc

FIBER LEAVENWORTH COUNTY DAH CRG 019-283

QA/QC by:

SHEET 59 OF 60

| | TOTAL QUANTITIES | | |
|------|--|----------|-------------|
| ITEM | ITEM DESCRIPTION | UNITS | QUANTITY |
| 1. | ROD & PROOF EXISTING DUCT | LF | 537 |
| 2. | SUPPLY & INSTALL 1-2" HDPE DUCT | LF | 26182 |
| 3. | SUPPLY & INSTALL 2" GRC ON STRUCTURE | LF | 179 |
| 4. | SUPPLY & INSTALL TRACER WIRE | LF | 26182 |
| 5. | SUPPLY & INSTALL 24"X36"X36" HANDHOLE | EACH | 37 |
| 6. | SUPPLY & INSTALL 30"X48"X36" HANDHOLE | EACH | 1 |
| 7. | SUPPLY & INSTALL UNDERGROUND SPLICE ENCLOSURE | EACH | 8 |
| 8. | PROPOSED FUSION SPLICES | EACH | 212 |
| 9. | SUPPLY & INSTALL 48CT ARMORED FIBER OPTIC CABLE - UNDERGROUND | LF | 30202 |
| 10. | BORE PROPOSED CONDUIT | LF | 26182 |
| 11. | SUPPLY & INSTALL 2" EMT CONDUIT | LF | 12 |
| 12. | SUPPLY & INSTALL 1" PLENUM RATED INNERDUCT | LF | 595 |
| 13. | SUPPLY & INSTALL FIBER DISTRIBUTION PANEL | EACH | 4 |
| 14. | SUPPLY & INSTALL LB | EACH | 2 |
| 15. | PROPOSED WALL CORE | EACH | 2 |
| 16. | SUPPLY & INSTALL 48CT INDOOR/OUTDOOR RATED FIBER OPTIC CABLE - UNDERGROUND | LF | 2547 |
| 17. | TRAFFIC PERMIT | AGENCIES | 1 |
| 18. | RIGHT OF WAY PERMIT | AGENCIES | 3 |
| 19. | TEMPORARY TRAFFIC CONTROL | LS | 1 |
| 20. | FORCE ACCOUNT | COST | \$75,000.00 |

^{*} CITY, COUNTY, AND STATE.





drawn by: SPM
checked by: DAH
approved by: CRG
QA/QC by:
project no:
drawing no.: 019-2831
date: 4/25/22 SHEET 60 OF 60