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Village of Hinsdale 19 E. Chicago Avenue Hinsdale, IL 60521-3489 (630)789-7000 Village Website: www.villageofhinsdale.org

PUBLIC SERVICES UTILITY	Y PERMIT APPLICATION				
Date of Application: 9/25/20 Permit No: VEP-0013	Permit Expiration Date: 12-31-20				
Utility Company Information:	Contractor Information:				
Company Name: MCImetro Access Transmission Services Corp. Address: 600 Hidden Ridge City, State, Zip: Irving, TX 75038 Contact Person: Adam Higham Phone Number: 312-894-3116 Email Address: adam.higham@ledcor.com Cell Number: 312-989-0351 Project/Work Order Number: Chicago13608	Contractor Information: Company Name: LTS Technical Services LLC. Address: 723 N. Oaklawn Ave City, State, Zip: Elmhurst, IL 60126 Contact Person: Allan Brotherson Phone Number: 630-464-1590 Email Address: Allan.Brotherson@ledcor.com Cell Number: 630-464-1590				
Description of work covered under this permit: Place (1) 2.5'X5'	X2.5' Handhole, Place 642' of 1-2" HDPE as per plans.				
Site Plan/Details/Specifications (3 sets) included with application Certificate of Insurance included with application?	on? O YES O NO O YES O NO				
Type of Utility: ComEd Nicor Image: Communication in the second se	Comcast Water Sewer				
Applicant Information:					
Print Name: Joshua Pathammavong	Phone Number: 312-625-9977				
Company: LTS Technical Services LLC	Email Address: <u>Joshua.Pathammavong@Ledcor.com</u> Date: <u>7/10/20</u>				
Signature:					
ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE LATE THE FOLLOWING: STANDARD SPECIFICATIONS FOR ROAD AND BRIDGI RECURRING SPECIAL PROVISIONS BY THE ILLINOIS DEPARTMENT OF CONTROL DEVICES FOR STREETS AND HIGHWAYS, STANDARD SPECI ILLINOIS, AND THE VILLAGE OF HINSDALE SUBDIVISION ORDINANCE A	EST EDITION IN EFFECT ON THE DATE OF PERMIT APPLICATION OF E CONSTRUCTION & SUPPLEMENTAL SPECIFICATIONS AND TRANSPORTATION, ILLINOIS MANUAL ON UNIFORM TRAFFIC FICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ND ENGINEERING STANDARDS.				

		Village Us	e Only				
Permit Approved:	TES	NO					
Conditions for Approval/Reas	ions for Denial: A Completion TOFW	Midsshubed NoTIFY	Date:	must be (estored wi ESIDENTS 020	Hum 48	14 <u>Hou</u> rs

MSA *MUNICIPAL SERVICES ASSOCIATES, INC.*

October 16, 2020

Mr. Daniel Deeter, P.E. Village Engineer Village of Hinsdale 19 East Chicago Avenue Hinsdale, Illinois 60521

Dear Mr. Deeter:

At the direction of the Village of Hinsdale, Municipal Services Associates, Inc. (MSA) has reviewed the plans submitted by Ledcor Group ("Ledcor") on behalf of MCImetro for installation of fiber optic cable conduit and tracer wire in the Village of Hinsdale Rights-of-Way along Harrison Place, West 1st Street, and Lincoln Street. The conduit segment will begin underground near the intersection of Harrison Place and Hinsdale Avenue. The conduit will be buried by directional boring from an existing handhole on the east side of Harrison Place that is 74' (22.56 meters) north of the northwest corner of an alley intersecting the west side of Harrison Place. The fiber conduit will extend from that point south on Harrison Place to West 1st Street, then west along West 1st Street to a point 126' (38.41 meters) south of the intersection of Lincoln Street and West 1st Street where the conduit will connect with a fiber conduit run which will start at this point and terminate in the Right-of-Way on the northeast corner of 55th Street and Madison Street.

Ledcor and MCImetro intend to utilize directional boring for the entire distance of the project. The total distance of the project is 642' (195.73 meters). No aerial plant is proposed. The project and the recommendations of MSA are described below.

Existing Facilities: The project will utilize underground Right-of-Way by way of underground boring. The trench and conduit will be located beneath sidewalks along West 1st Street and Lincoln Street, and beneath the west side of the Right-of-Way along Harrison Place. Project plans do not indicate the presence of other utilities that are likely to be located in the Right-of-Way including AT&T, ComEd and Comcast. Nor do the plans identify aerial plant located along Harrison Place which contain power, telephone, and cable television lines. Visual observation of the proposed route shows aerially installed plant present along Harrison Place, however, there is significant congestion from existing cables, and placement of a fiber optic line would be unfeasible. MCImetro stated in the plans that it will be the responsibility of the project's General Contractor, LTS Technical Services, to mark and identify specific utilities in the Rights-of-Way along Lincoln Street, West 1st Street, and Harrison Place. Electrical, cable, and communications lines are typically buried at a depth of 48" (1.22 meters). The proposed MCImetro conduit will be buried at a depth of 36" (.916 meters).

3 Golf Center, # 311 ● Hoffman Estates, Illinois 60169 TEL-847-882-7773 FAX-847-310-9275 MOBILE-847-867-6117 E-Mail: <u>MSASchapman@cs.com</u> www.msatelecom.com

FCC 2014 Authorization Order "Shot Clock" Period of Review: MCImetro's proposed conduit burial is intended to house fiber optic cables which will eventually be used as a backhaul network for small cells that have not yet been constructed. Until the small cells are activated, the fiber optic cables, could be utilized for alternative purposes, including extension of an existing telecommunications data network for businesses within the central business district located near the network. Currently, the project is planned as a stand-alone fiber optic conduit and tracer wire installation that does not yet support wireless facilities, therefore, it is not subject to the FCC 2014 Authorization Order and is not subject to a "Shot Clock" period of review.

Proposed Project and Description

MCImetro proposes to install a three (3) segment run of conduit and tracer wire utilizing a single 2.0" High-Density Polyethelene (HDPE) pipe to carry the tracer wire and, ultimately, fiber optic cable. The installation will start 253' (77.13 meters) north of the intersection of Harrison Place and West 1st Street. At the starting point, MCImetro proposes to connect fiber optic cable to previously installed plant at an existing handhole. The handhole was installed under Permit No. 4738 issued by the Village.

The first leg of the project begins from the handhole. MCImetro proposes to extend directional boring and install conduit and tracer wire for a distance of 253' (77.13 meters), crossing West 1st Street, to the southwest corner of Harrison Place and West 1st Street. Directional boring will be at a depth of 36" (.916 meters). The directional bore will intersect with a utility inlet located in the center of the intersection of Harrison Place and West 1st Street. Telephone utilities are located within the utility inlet. At that location, MCImetro will excavate a bore pit in the Right-of-Way measuring 4' (1.22 meters) in length by 4' in width (1.22 meters) to a depth of 48" (1.22 meters). The directional bore will be directed at a depth of 36" (9.16 meters).

The second leg of the project is a directional bore will continue in the Right-of-Way along the south side of West 1st Street for a distance of 263' (80.18 meters) and will proceed in a diagonal direction across the intersection of West 1st Street and Lincoln Street. The directional bore will intersect three (3) utility inlets: An inlet located under West 1st Street near the southeast corner of West 1st Street and Lincoln Street; a second inlet located at the centerline of Lincoln Street where it intersects with West 1st Street, and; a third inlet in the Right-of-Way at the southwest corner of Lincoln Street and West 1st Street. Each of the inlets houses telephone utilities.

A second bore pit will be excavated in the Right-of-Way at the southwest corner of West 1st Street and Lincoln Street. The bore pit proposed for excavation will be extended downward to a depth of 48" (1.22 meters). The final leg of the project begins from the location of the bore pit. At this point, directional boring will continue and the conduit line will run in a southerly direction for a distance of 126' (38.41 meters) along the west side of Lincoln Street. At the end of the conduit run, MCImetro proposes excavation of a handhole measuring 60" (1.53 meters) in length, 30" (.763 meters) in width, and 36" (.916 meters) in depth.

The handhole will be installed on the west side of Lincoln Street. A conduit and tracer wire run proposed by MCImetro under Permit No. 1812BTLK-PE-MCA-9923A will connect to the proposed handhole, continuing the fiber optic network southbound on Lincoln Street to West 9th Street.

The proposed project requires the closing of sidewalks. MCImetro has included a sidewalk diversion plan to redirect pedestrian traffic during the project to include appropriate warning signs. The project also will entail construction under the intersections of Harrison Place at West 1st Street, and West 1st Street at Lincoln Street. Slow Traffic and Stop signs will be used by flaggers as traffic control measures. Arrow boards that are mounted either on a trailer or on the roof of a vehicle will be used to direct traffic where lanes will be blocked by construction equipment. Road Construction Ahead, Road Work Ahead, and Road Closed signs are proposed for installation where construction is planned at intersections. Sidewalk Closed signs will be placed where construction will necessitate the excavation of sidewalks.

Property restoration will include replacement of grass parkways along the south side of West 1st Street and the west side of Lincoln Street with sod. Concrete and asphalt restorations will be performed to meet Village of Hinsdale standards for concrete pavements, pavements with an aggregate base and bituminous surfaces, or concrete pavements with bituminous overlays.

Project Purpose

The primary purpose of the proposed installation of MCImetro's conduit project is to link segments of its network together and provide protection for fiber optic cables that will be installed upon completion of the conduit installation and its connection to the larger network of conduit and fiber optic cables. With this project, and two (2) fiber optic conduit projects that MSA reported on earlier this year, MCImetro will create a network that extends from Hinsdale's downtown business district beginning near the intersection of Harrison Place and Hinsdale Avenue, to the western edge of Hinsdale Central High School at 57th Street. Coverage of the fiber network will include West 1st Street south to West 9th Street, then west to Madison Street and south to 57th Street.

The proposed conduit project is part of a backhaul system that will be used to link existing macrocell antennas to small cells and to other macrocell installations. A macrocell installation is located on a water tower at 333 West 57th Street, however, plans to install a fiber conduit to the macrocell have not been submitted to the Village.

MSA's previous reports concerning a MCIMetro fiber conduit installation along Lincoln Street, West 9th Street, 55th Street, and Madison Street, indicated that Verizon intended for its macrocell network to support small cells. The small cells would be mounted on utility poles or street lights located in Village Right-of-Ways. Since MSA's previous reports submitted to the Village on July 30, 2020 and September 2, 2020, the status of Verizon's plans remain unchanged, and at the date of preparation of this report, neither MCImetro, nor Verizon Wireless, has proposed installation of small cells along the proposed conduit route.

It should be noted that Verizon has proposed installation of small cells in the neighboring communities of Oak Brook and Clarendon Hills. These proposed installations are along separate fiber networks which have not yet been determined to be connected to any networks serving Hinsdale.

Grounding: No grounding for the conduit pipe was proposed by MCImetro and grounding of the conduit and tracer wire is not necessary. However, should fiber optic cables are installed within the conduit, such cabling will need to be connected to equipment that will require grounding at, or adjacent to, its location.

Requested Information of Applicant

After review of the plans by MSA, no further information was required to be provided by the applicant. Information concerning restoration of the Right-of-Way, a sidewalk diversion plan, and trenching specifications were provided by MCImetro within its plan documents. MCImetro has indicated that specific locations of utilities buried in the Rights-of-Way will be the responsibility of the General Contractor for the project. That contractor was identified as LTS Technical Services, LLC. MSA recommends that the Village notify and require LTS Technical Services, LLC to identify such utilities prior to excavation and provide the Village with plans showing the location of the proposed conduit along with that of the utilities, and to specify any relocation of such utilities that may be necessitated by the project.

FCC OET Bulletin 65 Appendix A Checklist: The proposed project does not include erection of an antenna array or construction of a cell tower or other similar structure. Therefore, the requirements for RF exposure and safety under FCC Office of Engineering and Technology (OET) Bulletin 65 Appendix A do not apply to the proposed project.

Structural Evaluation: No structural evaluation was required for this project as the proposed activities do not involve installation of the conduit on a pole, or other wireless support structure to the extent that such installation would necessitate an analysis of wind and ice on the installation, or resistance from wind shear.

Radio Frequency Interference Issues: The proposed project does not include the installation of radios or antennas that would emit frequencies that would possibly interfere with radio frequencies used by the Village. Therefore, no statement of "Good faith efforts" to avoid radio frequency interference with Village radio frequencies was requested for the proposed project.

Section 6409(a) - Spectrum Act - Applicability:

MSA has reviewed the MCImetro application for the following scope of work along Harrison Place, West 1st Street and Lincoln Street within the Village of Hinsdale stated earlier in this report:

- Installation of one (1) handhole in the Right-of-Way along Lincoln Street 126' (38.41 meters) south of the intersection of Lincoln Street and West 1st Street.
- Excavation of two (2) bore pits in the Right-of-Way along West 1st Street at its intersections with Harrison Place and Lincoln Street.
- Installation of 642' (195.73 meters) of 2" HDPE conduit pipe and tracer wire capable of carrying strands of fiber optic cable connected to a fiber optic network to be constructed by MCImetro for Verizon Wireless. The conduit pipe will be installed underground in the Right-of-Way along Harrison Place, West 1st Street and Lincoln Street.

MSA has reviewed the proposed project and plans in light of Section 6409(a), also known as the "Spectrum Act," contained within the Middle Class Tax Relief and Job Creation Act of 2012. Section 6409(a), codified at 47 CFR §1.6100, and examined whether the proposed project is subject to the requirements of the Spectrum Act.

As stated earlier in this report, based on the proposed Scope of Work, the proposed project does involve a wireless facilities operator, however, it does not, at the present time, constitute a Wireless Facility Modification as described within 47 CFR §1.6100. The proposed project does not involve the installation of an antenna array, small cell, base station, or collocation.

Although the proposed project does involve the installation of transmission equipment, (i.e., fiber optic conduits) the project does not include collocation, removal, or replacement of transmission equipment on an existing tower or base station(1).

Having reviewed the current project plans for this site, MSA's opinions as the Village's technology expert are as follows:

1. The instant project is <u>not</u> a "collocation of new transmission equipment" within the meaning of 47 CFR 1.6100(b)(2); and

2. The instant project <u>does not</u> include an "Eligible Support Structure" as defined by the Spectrum Act, and while the proposed project <u>does</u> incorporate the use of "Transmission Equipment" defined by the Act, it <u>does not</u> propose connection to an Eligible Support Structure in a manner that would place the project under the purview of the Act.

^{(1) 47} CFR §1.6100(b)(3)(i-iii). "(3) *Eligible Facilities Request*. Any request for modification of an existing tower or base station that does not substantially change the physical dimensions of each such tower or base station, involving: (i) collocation of new transmission equipment; (ii) removal of transmission equipment; or (iii) replacement of transmission equipment."

For the reasons discussed above and based on these conclusions, it is MSA's recommendation that the Village recognizes that the Spectrum Act rules indicate that the proposed project *is not* subject to the timeframes, requirements and conditions of the Spectrum Act. Therefore, the Village may either deny or approve the proposed project.

Recommendations

MSA recommends that the Village allow Ledcor and MCImetro to proceed with the proposed project. The project is focused on the central business district and is intended to link the business district into a larger network serving the southern section of the Village. When the conduit installation is completed and fiber optic cables are placed in it and activated, businesses south of Hinsdale Avenue will be able to connect, giving businesses an additional choice for communications and data services. The project is an essential segment of a fiber optic network that is planned to support small cells, as well as to improve signal speeds for 4G/LTE users along with 5G users.

5G Applicability: The proposed project will ultimately house fiber optic cables that will likely be used to serve the central business district. Installation of small cells in the central business district has not been proposed, and it is not yet clear if small cells will be installed there, however, the presence of a fiber optic network south of Hinsdale Avenue will enable small cell installation if it should become needed.

Previous reports prepared by MSA earlier this year point out that Verizon has not offered a timetable for when fiber optic cables along its conduit routes will be installed. Verizon Wireless has not yet submitted any specific plans or locations for such small cells along the fiber conduit routes that it has submitted to the Village for review. However, as noted previously, the proposed conduits are a key part of the infrastructure needed to provide the network linking macrocells and small cells together.

Plans submitted by Verizon Wireless in nearby communities, such as Oak Brook and Clarendon Hills, showed that it is installing 5G radios and antennas to complement other cell sites that incorporate 4G/LTE antennas, radios, and signal processors that serve the vast majority of cellular users currently. MSA continues to be unable to opine as to when the fiber optic cables that will serve the 5G small cell and macrocell networks in Hinsdale will be installed. MSA can opine that future branches of fiber conduits will be very likely to be connected to the backbone of Verizon's fiber network in Hinsdale. The fiber conduit segments proposed for West 1st Street, Lincoln Street, West 9th Street, and Madison Street appear to create a future fiber optic backbone for Hinsdale.

Verizon's 5G network design shown on plans in other communities indicates that it may deploy antennas and radios that are capable of operating at millimeter wave frequencies (\geq 30 GigaHertz). At the present time, MSA has not seen evidence of Verizon proposing to install radios and antennas capable of operating at \geq 30 GHz, although it has proposed installation of antennas and radios operating in the 27.5 - 28.35 GHz range, which are sub-millimeter wave frequencies.

It remains unclear for now as to whether Verizon will install sub-millimeter wave antennas and radios on small cells in Hinsdale once the fiber network can accommodate them.

Permit Compliance: Contingent upon receiving its permit to proceed with construction, MSA recommends that Ledcor or MCImetro provides a statement indicating that it will comply with the insurance and security fund requirements found in the Village's Right-of-Way Ordinance (Ord. O2007-73, enacted November 6, 2007). If Ledcor or MCImetro elects to self-insure, it should provide evidence of its financial ability to self insure the insurance coverages and limits requirements of the ROW ordinance.

In addition, if it has not already done so, Ledcor should indicate if any JULIE location marking has been conducted for installation of the underground conduit and its proposed handholes and bore pits. If marking has not yet been performed, Ledcor should indicate when locate marking will be performed by the general contractor, LTS Technical Services, LLC. The plans indicate that LTS will identify utilities 48 hours prior to construction, however, it is recommended that LTS provide a longer advance period of no less than fourteen (14) days for JULIE marking in the business district in order to provide adequate notice to affected businesses.

MSA recommends that the Village work with Ledcor and MCImetro to assure compliance with the Right-of-Way Ordinance, with special emphasis on property restoration that will result from the excavation of the handholes, bore pits and trenching into the parkways, sidewalks, and streets. MSA also recommends that Ledcor and MCImetro follow Village guidelines and regulations regarding the installation and maintenance of handholes in the Right-of-Way.

Should the Village have any questions concerning this report, or if any additional background is needed, please contact me at your first opportunity.

Sincerely,

Stuart Chapman

Stuart Chapman, President Municipal Services Associates, Inc.

 cc: Kathleen Gargano, Village Manager, Village of Hinsdale George Peluso, Director of Public Services, Village of Hinsdale Rob McGinniss, MCP, Director of Community Development, Building Commissioner, Village of Hinsdale Al Diaz, Assistant Village Engineer, Village of Hinsdale



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GENERAL NOTES

1 VOICOMPRISES THE FOLLOWING OPERATING ENTITIES WO COMMUNICATIONS SERVICES INC
 WO COMMUNICATIONS SERVICES INC
 WO MERRO ACCESS TRANSMISSION SERVICES CORP
 WO MERRO ACCESS TRANSMISSION SERVICES
 OF URDANA INC
 WO MERRO ACCESS TRANSMISSION SERVICES
 WO MERRO ACCEST TRANSMISSION SERVICES
 WETROPOLITIAN PIBER SYSTEMS OF NEW YORK INC

2 ALL MORK TO BE DONE WITH EXTREME CAUTION I HIBER OPTIC CABLE IS CARRYING TRAFFIC AND LOSS OF SERVICE MILL RESULT IN LOSS OF REVENUE CONTACTOR DALL YOUT MORK IN A WANNET THAT WAY AFFECT TRAFFIC-CARRYING ACULTIES IN THE ABSENCE OF AN INCI EMPLOYEE OR CERTIFIED CONTRACTOR

3 ALL WORK TO BE PERFORMED IN STRICT ACCORDANCE WITH THE APPLICABLE CODES OR REQUIREMENTS OF ANY REGULATING GOVERNMENTAL AGENCY MCI BUSINESS, OR THE RIGHT-OF-WAY- GRANTOR BOVERWEINTAL ADRECY MOLEJANESS. OT FER ENDLOCKAWA CRAVING IN FER ENDLOCKAWA CRAVING IN CONTRACT STATUS STATUS STATUS STATUS ALL CONTRACT STATUS STATUS STATUS STATUS AND WISH STATUS STATUS STATUS STATUS STATUS AND WISH STATUS STATUS STATUS STATUS IN CRAVE STATUS IN CRAVE STATUS STATUS STATUS STATUS IN CRAVE STATUS STATUS STATUS STATUS IN CRAVE STATUS STATUS STATUS IN CRAVE STATUS STATUS STATUS IN CRAVE STATUS STATUS STATUS STATUS IN CRAVE STATUS STATUS STATUS STATUS STATUS IN CRAVE STATUS STATUS STATUS STATUS STATUS IN CRAVE STATUS STATUS STATUS STATUS STATUS IN STATUS STATUS STATUS STATUS STATUS STATUS STATUS STATUS IN STATUS STATUS STATUS STATUS STATUS STATUS STATUS STATUS STATUS IN STATUS IN STATUS STATUS

PROJECT CONTACTS OWNERS

ENGINEER: OSCAR GUERRERO PHONE: (312) 453-8106 EWAIL OSCAR GUERRERO(BONE VERIZON COM

NAVE OF FIRM: VCI VETRO TRANSMISSION SERVICES CORP D B.A. VERIZON ACCESS TRANSMISSION SERVICES

ENGINEERING CONTRACTOR NAVE OF FIRM: LEDCOR TECHNICAL SERVIC PROJECT WANAGER, DENNIS CLARK EVAIL, DENNIS CLARK@LEDCOR COM PHONE (312) 809-8183

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CONSTRUCTION CONTRACTOR AVE OF FIRM LEDGOR TECHNIK CONSTRUCTION MANAGER WAYNE SMITH PHONE: (312) 971-1488

CITY GOVERNMENT

VILLAGE OF HINSDALE 19 E. CHICAGO AVENUE HINSDALE, IL 80621 PHONE: (630) 789-7000

CONSTRUCTION NOTES

1 ALL CONDUIT WILL BE 2" HOPE 2. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY

3 ALL UNDERGROUND OBSTRUCTIONS, WHEN LOCATED, MILL REQUIRE THE PLACEVENT OF A BURIED CABLE WARKER AND THE PLACEVENT OF 41 WANUFACTURED SPLIT PVC BSPIGSP OVER OR UNDER EACH OBSTRUCTION 4. SHORING WAY BE REQUIRED AND SHALL COMPLY TO O S H A, STANDARDS

5 ALL BURIED CONDUITICABLE WILL BE PLACED AT 36" WNIWLY COVER UNLESS SPECIFIED OTHERWISE ON THE CONSTRUCTION DRAWINGS

6 VECHANICAL PROTECTION SHALL BE REQUIRED ANYTIME A 36" WINIMUM COVER IS UNDBTAINABLE UNLESS SPECIFIED OTHERMISE ON THE CONSTRUCTION DRAWINGS

⁷ VERIZON BUSINESS PERSONNEL TO SE CONTACTED BY THE CONTRACTOR 48 HOURS PRIOR TO CONSTRUCTION SEE CONTACT SHEET FOR CONTACT VAME AND TELEPHONE NUMBER

8 ALL STATIONING IS BASED ON AS-BUILT INFORMATION. THEREFORE SOME VARIANCE SHOULD BE ANTICIPATED ADJUST AS NEEDED.

9 RAL ROAD COMMUNICATION AND SIGNAL CABLES TO BE LOCATED PRICE TO CONSTRUCTION ACTIVITY RAL ROAD TO BE GIVEN 48 HOURS NOTICE PRICE TO CONSTRUCTION

10 ALL BURIED CABLE MARKER POSTS AND HARDWARE PLACED AND/CR REMOVED ON ALL NEW AND EXISTING BOOMTES SHALL BE IMPLEMENTED AS FOLLOWS

A ON THOSE ROUTES THAT ARE CONSIDERED TO BE IN A NORTH TO SOUTH GEOGRAPHICAL CRIENTATION. THE SOUTHERN-MOST SIGN AND POST SHOULD BE REVOKED FOR NEW ROUTES BEING CONSTRUCTED OVE SIGN POST WILL BE PLACED AT THE NORTH END OF EACH HANDHOLE

3 ON THOSE ROUTES THAT ARE CONSIDERED TO BE IN AN EAST TO WEST GEOGRAPHICAL ORIENTATION. THE MESTERN-WOST SIGN AND POST SHOLLD BE REMOVED IF OR NEW ROUTES BEING OPERSTRUCTED ONE SIGN POST WILL BE PLACED AT THE EAST END OF EACH HANDHOLE



MCI Outside Plant FOCUS Fiber Optic Cable Uncovering System

- The title of this program, <u>FOCUS</u>, an acronym for <u>Fiber Optic Cable Uncovering System</u> was selected to remind everyone involved with working near MCI's active fiber optic systems to focus on protecting the facilities. If during the course of the project, VOU source any activity which may jeopardize the MCI OSP facilities, it is your duty to stop the work and re-POCUS
- FOCUS rules must be followed on all MCI projects involving work on or near MCI OSP facilities. Safety is MCI's number one priority; everyone must refrain from unsafe and improper practices. 2)
- Review of FOCUS is mandatory at every Pre-bid, Pre-construction, site meeting and daily tailgate meeting. FOCUS discussion must include site-specific history, insque problems, facility configurations that may be eccountered, and past errors. "Those who do not learn from history we doomed to repeat it" Do not let this happen to you. 3)
- Any work near or requiring bandling of MCI Outside Plant facilities can only be performed with an MCI simplayee or constact representative present -- THIS MEANS OUT OF HIS OR HER VEHICLE AND DIRECTLY MONITORING THE WORK. The representative must have a properly operating cable locator checked for accuracy every day prior to commencement of work (comparison of line and depth readings to actual line and depth of the cable). 4)
- Locate and Pothole Requirements. 51
 - Prior to any excavation, the MCI employee or constact representative must verify the initial locate marks completed by MCI Operations. Do not trust locate results completed by others? The MCI or contract representative must locate the salth running line by making at least not pass in each direction. Locate results must then be compared with previous marks and the abuilts.
 - If the proposed work involves digging or excavating within 3 feer of the cable, the cable route will be marked continually with orange paint and supplemented by marker flags placed every 10 ft. The excavation contractor main planks (all potnoles must be completed by hand digging or vacuum excavation) a minimum of every 15 ft., then expose the entire length of the cable by hand digging or acuum excavation.
 - If the proposed work involves digging or excavating within 5 feet (but not closer than 3 feet) of the cable, the cable route will be marked continuitly with orange paint and supplemented by marker flags placed every 10ft. The excavation contractor must pothole the cable a minimum of every 15 ft.
 - If the proposed work involves digging or excavating within 15 feet (but not closer than 5 feet) of the cable, the cable route will be marked continually with orange paint and supplemented by marker flag placed every 10 ft. The excavation contractor must pothole the table a minimum of every 30 ft. arker flags
 - The cable will also be portholed at any change in the running line of more than 1 ft in any direction, anytime the accuracy of the electronic locate is questioned, or the marked running line does not match the as-builts
- Exposing Requirements 5)
 - No mechanical excavanion within 3 fl. of OSP facilities will be allowed unless the facilities have first been properly located, potholed, positively identified, continuously exposed by hand digging or vacuum excavation, and the facilities are clearly visible.
 - In addition, mechanical excavation within three feet of OSP facilities requires onsite prior approval from MCI's employee or contract representative
 - Please refer to the latest edition of the MCI OSP Handbook for additional details. Know it and follow it

Rejease 1.0

18128TUX-PE-HCA-13608-0 HINSDALE. IL CATION NO. QUANTIT MCI Outside Plant Construction General Requirements All Federal. State and local safety regulations must be followed without exception. Personal protective equipment appropriate for the specific work site shall be used at all times. At a minimum, bard hat, safety shoes/steel toed boots and florescent orange or green work vest are required upon entering any MCI work site. Use of intoxicants, drugs, inhalants or any other substances that may impair alertness are strictly prohibited. Contractors are NOT allowed to cut any cable. Cables scheduled for removal well be cut by MCI Operations personnel, and only after verification that all traffic has been off-loaded. OUTSIDE PLANT CONSTRUCTION 99096-0 Extreme caution must be used at all times when working on or near active tables. An MCI employee or contract representative must approve and be present prior to and finning all table handling activities. SERVI MCA MCImetro MISSION SF BIZBILK-PE Tools and equipment specifically designed for the job at hand are required. USE THE PROPER TOOL FOR THE JOB. TRANS TITLE ACCESS Conduct work involving active cables requires specialized tools specifically designed to access ducts with active cables. 9/21/2020 ER: LEDCOR GROUP Protecting MCI facilities IS EXTREMELY important; however. SAFETY regarding yourself and others is the most important part of any project. AWN BY: A TRIGG REVISIONS INT Signature: ____ PT-M HAY M DT-ERNER PROVIDE IN CONTRACT R DRAWNER HE BRE OFFICIENTS SHALL REAVE TH TRETT OF HE COMMANDA THIS SERVICE, HC 1001 0 ESALE IN STRETT CONTRACT HIS SERVICE, HC 1001 0 ESALE IN STRETT CONTRACT HIS HOUSE, HC 1001 ODUCED COPED DR LISED FOR ANY PURPOSE OUT STRETTS ANY THIS HOUSE. Release 1.0 AN HUB VZB DOWNERS GROVE RMIT ID: 13608

SCALE ORIZONTAL: NTS VERTICAL:

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CLARIFICATION NOTES (CONTINUED)								PRO	HINSDALE	13608-0 IL
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	20	CONCRETE ENCASE								
	222	REMOVE CONCRETE CAP						_		+
	240	PLACE HANDHOLE REMOVE EXISTING HANDHOLE						_		+
	245	RELOCATE HANHOLE								
	246	EXCAVATE SPLICE PIT								+
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	281	REMOVE AND RESTORE SIDEWALK	CLARIFICATION	CLARIFICATION NUMBER AND ALPHA	DESCRIPTION	QUANTITY	UNIT		ERV THI	
	282	REMOVE AND RESTORE CURBING							N SINC	
8	810	ATTACH CONDUIT TO WALL OR STRUCTURE	200	2*2	PLACE HIGH DENSITY POLYETHYLENE (HDPE)	642	UF		SIO SIO	10
	\$20	CORE BORE	600	630	DIRECTIONAL BORE	642	LF		MIS	10
	550	ATTACH PULUSPUCE SOX TO WALL OR STRUCTURE	200	240	PLACE HANDHOLE		EA		ANS	
00	10	PULL CABLE PULL THROUGH DUCT (INVERDUCT)	-				1		AT 15	
	15	REMOVE CABLE FROM CONDUIT							SS	
	-23	REPUSITION ACTIVE CABLE SCACK							CCE	
x0	510 515	DIRECT BURY CABLE EXPOSE DIRECT BURIED CABLE							٩	
	16	EXPOSE DIRECT BURIED CABLE AND RELOCATE						DAT	E: 9/21/202	0
	520	PLACE AERIAL CABLE						DES	GNER: LED	OR
	25	RELOCATE AERIAL CABLE DELASH AERIAL CABLE						DR/	AWN BY: A 1	RIG
	27	RELASH AERIAL CABLE						047	REVISIO	iS ~
	30	PLACE POLE/PUSH BRADE						-		-
	35	REMOVE POLE/PUSH BRACE								_
0	01	JETTING CONDUIT						-		_
	30	DRECTIONAL BORE								_
	40	OPEN TRENCH						0.25	AS HAR DE OTHERNEL PR	9322 215-
								E NG B CACO STOCI	SALD IN STREET CONFORM UDED COPY IS DRUGGED IN SPECIFIC WRITTEN FROM	1 401
0	10	PLACE BURIED CABLE WARKERS AND SIGNS/WWCOW WATER CROSSING SIGNS						CRA	N HUB:	_
		PLACE ISOLATOR/PROTECTION SYSTEM AT EXISTING						CH	VZB DOWNER	S G
	12	REVOVE BURIED CABLE WARKER POST/HARDWARE						PER	RMIT ID: 1360	6
	14	REWOVE CONCRETE BURIED CABLE VARKER POST							SCAL	ŝ.
								HOP	RIZONTAL:	N

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EXISTING PROPOSED SYMBOLS KEY STEEL WARKER AND SIGN (A) ALUMINUM HUB-STYLE WARKER (B) FLAT WARKER (C) TUBULAR WARKER (C) TUBULAR WARKER, & ISOLATOR PROTECTOR (E) e de la constante de la const Y → Man. . A man. . A man. . A man. . A man. EXISTING PROPOSED BURIED CABLE PROPOSED 18128TUX-PE-4CA-13608-0 AERIAL CABLE WLE POST WARKER NOTE DASHED = NOT FOUND IN FIELD \$ \$ HINSDALE, IL SUBMARINE CABLE SUBV FICATION NO. QUANTIT . FOGWIRE CABLE PERMIT TRACKING FORM IDENTIFIER □ 3 + (a) (=) DRECT BURIED HOPE PVC OR SPLIT PVC CONDUIT -----ROCK PROBE (DEPTH AS INDICATED) _ ع BSPIGSPIOR SPLIT BSPIGSPICONCUIT AM MAN ~~~~~~ UTILITY COVER CEPTH HANDHOLE MANHOLE OR PULLBOX STEEL CASING POLE 0 • REMOVE AND RESTORE ASPHALT OR CONCRETE (W 0 TH AS INDICATED) ANCHOR ONLY ۷ ٩ ____ ---GUY ONLY CORE BORE C:::::: <u>0+6 371</u>04 0-5 210V OVERHEAD GUY (ARROW INDIRECTION OF PULL) JACK AND BORE ---∢ ANCHOR AND GUY DIRECTIONAL BORE Z____ ď. ----- ac ----эе -SIDEWALK ANCHOR AND GUY CORP. RENCHING ----∢ FOREIGN ANCHOR AND GUY FUTURE CABLE == == == => OUTSIDE PLANT CONSTRUCTION 3608-0 27-564 P3 MCImotro MISSION SERVICES <u>x + 4</u> PUSH BRACE (EXISTING POLE) REMOVE CABLE • ACCOUNT CODE CHANGE (BURIED TO AFRIA.) -MCA TO BE REMOVED OR ABANDONED (SHOWN FOR HOPE) ~~~ CULVERT (SIZE AS INDICATED) ×-----< 1612BILK-PE AERIAL UTILITY (ELECTRIC) \square BRIDGE UNDERGROUND UTILITY (TELEPHONE) \square TRANS MAIN TRACKS TITLE La Carter Carter RAUROAD SIGNAL CONTROL BOX ACCESS 1 AUXILLARY TRACKS + singer of AURILIARY TRACKS SULDING DENTERUNE RIGHT OF WAY EDGE OF PAVEWENT DIRECTIONAL BORE INDERGROUND SOEWALK EXISTING VCI DICKLINE CAUTION NOTE - 8.00 - IL 30 CL NOW IOP 38 UO 98 98 98 99 DATE: 9/21/2020 DESIGNER: LEDCOR GROUP DRAWN BY: A. TRIOG CATCH BASIN . . TREES 0 STREET LIGHT * . REVISIONS ۲ WANHOLE ۲ DICHUNE - 04 -_ TAX DISTRICT RRE HYD ٠ * OTY COUNTY OR STATE BOUNDARY UNE STREET SIGN <u>_</u> PROPERTY LINE ----STRUCTURE BELOW GROUND FENCE LINE GUARDRAIL TOP OF SLOPE TOE OF SLOPE EA BORDER FA EA BORDONN SEP143 MAY N. CHARACE PROVIDE IF CONTRACT MEDIC SAMPLES AND SPECIFICATIONS SHALL REMAIN INVESTION OF DOCUMENTATIONS INVALIDATIONS ENGLISHED AN ENGLISHOOD AND SHALL NOT ME ENGLISHED AN ENGLISH CONTRACTOR AND SHALL NOT ME ENGLISHED CONTRACT, INVESTIGATION INFOLUTION CONTENT PROVIDED. STRUCTURE ABOVE GROUND TRAFFIC LIGHTS WIEXTENDED ARM ora ъ RAN HUB: H VZB DOWNERS GROVE SEWER INF RAFFIC LIGHT STUMP . RMIT ID: 13608 NATERUNE w • SCALE JAWN BASIN • STORM DRAIN UNE SD IORIZONTAL: SD M /ALVE 9 9 ELECTRIC UNE ----- E ------VERTICAL: NTS EDEDE IP _____ TO MP _____ HEET _____ OF _____ GASLINE _____ G _____



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1112010-10-10-1000-0 HINSDALE, IL ARIFICATION NO TYPICAL DETAIL DIRECTIONAL BORE CROSS SECTION 1-2" HDPE AT 36" DEPTH -EXISTING GRADE 36" WIN COVER i. L NOTE: DEPTH WILL VARY AND WILL BE ADJUSTED TO A GREATER DEPTH AS EXISTING UTILITIES ARE LOCATED AND DEPTHS ARE PROVIDED BY LOCATOR Q RP 1-2" HDPE OUTSIDE PLANT CONSTRUCTION SERVICES 0-8099 MCA MCImutro MISSION S 1812B1LK-Pt TYPICAL DETAIL ACCESS TRAN TRENCH AND PLACE CONDUIT 1-2" HDPE AT 36" DEPTH TITLE % MIN. R.C. REPLACEMENT AC PAVEMENT TO BE 0.25 MIN AND INCLUDE IN REPAIR EXISTING GRADE IF 2" OR LESS FROM EDGE OF PAVEMENT, REMOVE AND INCLUDE IN REPAIR DATE: 9/21/2020 DESIGNER: LEDCOR GROUP Ser. Ì 95% MIN. R.C. CLASS II BASE - (IF EXISTING) MATCH EXISTING THICKNESS OR 6* MIN AWN BY: A TRIGG ł REVISIONS BURIED CABLE MARKER TAPE 36" MIN 95% MIN R.C. 12" WIDE OR LESS USE 1-1/2 SACK CEMENT SLURRY Z HDPE Contract we concerned income on contract the Desired and SM procedure seals. Allower the protect of the Contract on Electrons and the State of the Contract on the State of the Module contract on the Contract, with the Module contract and the Markson AN HUB: 1 VZB DOWNERS GROVE RMIT ID: 13608 SCALE RIZONTAL: NTS VERTICAL NTS

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- ADDITIONAL NOTES: 1. EXCEPT AS OTHERWISE NOTED. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 24 INCHES OF SEPARATION FROM EXISTING UTILITIES 2. CONTRACTOR SHALL POTHOLE EACH UTILITY TO DETERMINE SIZE, LOCATION, AND DEPTH PRIOR TO CROSSING. 3. CONTRACTOR IS CAUTIONED TO PROTECT SEWER MANHOLES, CATCH BASINS, LATERALS AND INLETS. 4. CONTRACTOR WILL PROVIDE BARRICADING TO INSURE CORRECT TRAFFIC CONTROL WHILE MAINTAINING VEHICULAR TRAFFIC AT ALL TIMES. 5. RESTORATION TO BE IN COMPLIANCE WITH MCI AND APPLICABLE PERMITTING AGENCIES. 6. BONDING AND GROUNDING PER NESC.

PUBLIC UTILITY NOTE: CONTRACTOR SHALL NOTIFY ALL PUBLIC UTILITY COMPANIES (GAS, ELECTRIC, TELEPHONE, SEWER, WATER, ETC) PRIOR TO COMMENCING ANY CONSTRUCTION. THESE COMPANIES WILL LOCATE, ON THE GROUND, THESE COMPANIES WILL LOCATE, ON THE GROUND, THE LOCATION OF ALL CONDUITS, DUCTS, UNDERGROUND PIPING, ETC, ADJOINING & CROSSING PROPOSED CONSTRUCTION.



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