

PERMIT APPLICATION REVIEW FORM FOR **CABLE, CONDUIT, AND POLE LINE ACTIVITY IN FORT BEND COUNTY**

Fort Bend County Engineering Department 301 Jackson Suite 401

Richmond, Texas 77469 281.633.7500 Permits@fortbendcountytx.gov

X	Right of Way Permit
	Commercial Driveway Permi
Perr	nit No: 2017-16356

The following "Notice of Proposed Cable, Cond attachments have been reviewed and the notic of Fort Bend County, Texas.	•	•	. , .
(1) COMPLETE APPLICATION FORM:			
X a. Name of road, street, and/or	r drainage ditch affect	ed.	
X b. Vicinity map showing course	of directions		
X c. Plans and specifications			
(2) BOND:			
County Attorney, approval whe applicable.	n		
X Perpetual bond currently posted.	Bond No:	Amount: \$150,000.00	
Performance bond submitted.	Bond No:	Amount:	
Cashier's Check	Check No:	Amount:	
(3) DRAINAGE DISTRICT APPROVAL (WHE	EN APPLICABLE):	Date	
We have reviewed this project and agree it r	neets minimum requ	irements.	
Charles O. Al		10/27/2	017
Permit Administrator		Date	;



REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT

Fort Bend County Engineering Department 301 Jackson Suite 401

Richmond, Texas 77469 281.633.7500

Permits@fortbendcountytx.gov

4	X Right of Way Commercial Permit No: 2017-1	Driveway Permit	
	licant: Verizon/Eagle Eye Permitting & Design, Location Site: Hagerson Road, Missouri City, 1		
Bond	d No. Date of Bond: 8/27	7/1981 Amount: \$150,000.00	
Layin Road Comi Texas	ng, Construction, Maintenance, and Repair of Buried ls, Streets, Highways, and Drainage Ditches in Fort E missioners Court of Fort Bend County, Texas," as pa	eassed by the Commissioners Court of Fort Bend Countrort Bend Country Texas, to the extent that such order is	r Along y,
Note. 1. 2.	Evidence of review by the Commissioners Court r grounds for job shutdown. Written notices are required: a. 48 hours in advance of construction	nd ready for final inspection, submit notification to Per tOnline.org portal.	
Comi notic		and carried, it is ORDERED, ADJUDGED AND DECREED to by the Commissioners Court of Fort Bend County, Texas	hat said
Signa	ature	Presented to Commissioners Court and approved.	
Ву:	Charly O. Aff County Engineer	Date Recorded Comm. Court No	
Ву:	N/A	Clerk of Commissioners Court By:	
-	Drainage District Engineer/Manager	Deputy	

MCImetro ACCESS TRANSMISSION SERVICES CORPORATION

OUTSIDE PLANT CONSTRUCTION FIBER OPTIC CABLE ROUTE

MCI ONE-FIBER MISSOURI CITY/SIENNA VILLAGE LATERAL MISSOURI CITY, TX

SITE NFID: 1706ANAY.013

PROJECT STATUS: CONSTRUCTION



LOCATION MAP MISSOURI CITY, TX FORT BEND COUNTY





MISSOURI CITY, TX

SIENNA VILLAGE/MISSOURI CITY LATERAL

NFID: 1706ANAY.013

MCImetro ACCESS TRANSMISSION SERVICES CORPORATION OUTSIDE PLANT CONSTRUCTION

DATE: 08-25-2017

NGINEER: EAGLE EYE RAWN BY: ROBERT SANTOS

REVISIONS

No.	DATE	DESCRIPTION	BY
1	8/25/17	1ST REVISION	

EXCEPT AS MAY BE OTHERWISE PROVIDED INCOMPACT. THESE DRAWINGS AND SPECIFICATION OF METALL REMAINS THE PROPERTY OF THE PROPERTY OF

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VERTICAL: 1"= N/A TO MP

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02 ILE: SIENNA VILLAGE.DWG

Lexington Blvd LEXINGTON POINT 42 41 1092 40 Ann St BRIGHTWATER 39 LEXINGTEN PLACE 38 Northpark Dr 37 KESHORE POINT Meedow Tuek Dr -Springhill Dr Green due of 36 Ashmont Dr. 3345 Larl artwright Rd PETABLE BEACH THE ENCLAYE 35 Grand Flanting mod to TEMES 4 Royal Plantation ER CREFK Hidrier Fart Ln 33 m # Dorado Byd Covey Trail 32 High Pine Di 31 30 **MAP LINE LEGEND** 29

28 Glenn L 27 RIVERSTONS Dewalt 26 25 Te Crossing Dr CCLOHY LAKES 23 Oillield Rd LI PKWS 21 20 19 STONE 18 16 15 13 12 11 10 9

CONTACT SHEET

MISSOURI CITY, TX FORT BEND COUNTY

PROJECT ENGINEER:		
PROJECT MANAGER:		
PROJECT COORDINATOR:		
OUTSIDE PLANT CONSTRU	JCTION:	
CONSTRUCTION CONTRACTOR:	ERVIN CABLE CONSTRUCTION	844-322-2
CONSTRUCTION MANAGER:	AURELIO MALLAMANCE	270-349-0
PROJECT COORDINATOR:		
AGENT: MANAGER:		
COORDINATOR: MANAGER:		
PROGRAM MANAGER: LIGHTWAVE ENGINEER: CIVIL ENGINEER: TERMINAL CONST. REP.: SPLICING MANAGER: TSO MANAGER:		
ENGINEERING CONTRACTO	<u>OR</u>	
:	OFFICE:	
PRESIDENT:	OFFICE: CELL: E-MAIL	
PROJECT MANAGER:	OFFICE: CELL: E-MAIL	
NAME OF FIRM: PROJECT COORDINATOR: PROJECT SUPERINTENDENT:		

RAILROADS

UNION PACIFIC RAILROAD DANIEL PETERS 402-544-8620

UTILITIES

MCI UTILITY LOCATE 1-800-624-9675

TEXAS ONE CALL SYSTEM (UTILITY LOCATES) 1-800-545-6005

NON MEMBERS:

CITY GOVERNMENT

CITY OF HOUSTON
- SANITARY SEWER

- TRAFFIC - ROAD & BRIDGE - STORM QUALITY - WATER

832-394-9123 832-394-9124 832-394-9128 832-394-9132 832-394-9134 832-394-9160 832-394-9161 MIKE NOWROOZI SAM HABIBI NAEEM HUSAIN RICK KOVACICH ZIA MOHAMMADI ROBERTO GOMEZ BILL CROUCH

COUNTY GOVERNMENT

HARRIS COUNTY

STATE GOVERNMENT

SAMIR GOEL 713-802-5321 TXDOT

FEDERAL GOVERNMENT

N/A

OTHER N/A



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ENGINEER: F	AGLE	FYF	

DATE:	08-25-2017

ORAWN BY: ROBERT SANTOS

REVISIONS

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EXCEPT AS MAY BE OTHERWISE PROVIDED BY CONTRACT, THESE DRAWINGS AND SPECIFICATIONS SHALL REMAIN THE PROPERTY OF MCI COMMUNICATIONS SERVICES INC. BOTH BEING ISSUED IN STRICT CONFIDENCE AND SHALL NOT BE REPRODUCED, COPIED, OR USED FOR ANY PURPOSE WITHOUT SPECIFIC WRITTEN PERMISSION.

SCALE

HORIZONTAL: 1"= N/A

VERTICAL: 1"= N/A TO MP

SHEET 03 OF 42

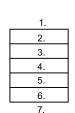
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GENERAL NOTES / CLARIFICATION NOTES

GENERAL NOTES

- 1. VERIZON BUSINESS COMPRISES THE FOLLOWING OPERATING ENTITIES:
 - MCI COMMUNICATIONS SERVICES, INC.
 - MCI METRO ACCESS TRANSMISSION SERVICES CORPORATION
 - MCI METRO ACCESS TRANSMISSION SERVICES OF VIRGINIA. INC.
 - MCI METRO ACCESS TRANSMISSION SERVICES OF MASSACHUSETTS, INC.
 - METROPOLITAN FIBER SYSTEMS OF NEW YORK, INC.
- 2. ALL WORK TO BE PERFORMED IN STRICT ACCORDANCE WITH THE APPLICABLE CODES OR REQUIREMENTS OF ANY REGULATING GOVERNMENTAL AGENCY, VERIZON BUSINESS AND THE RIGHT-OF-WAY GRANTOR.
- LOCATIONS OF SOME OF THE PHYSICAL FEATURES WERE OBTAINED FROM DATED RAILROAD EVALUATION MAPS OR OTHER DRAWINGS AND MAY NOT BE AS SHOWN OR DEPICTED ON THESE DRAWINGS.
- 4. UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS AND FIELD OBSERVATIONS BUT ARE NOT NECESSARILY EXACT. THEREFORE, UTILITY LOCATIONS WILL BE VERIFIED AT LEAST 100 FEET IN ADVANCE OF TRENCHING OR PLOWING, SO THAT CHANGES IN CABLE PLACEMENT CAN BE MADE IN THE EVENT OF CONFLICT.
- 5. ALL KNOWN BURIED OBSTRUCTIONS ARE SHOWN ON THE CONSTRUCTION DRAWINGS. ANY AND ALL OTHERS ENCOUNTERED ARE ALSO THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, PROTECT AND REPAIR IF DAMAGED.
- 6. ANY AND ALL IMPROVEMENTS, SUCH AS ASPHALT OR CONCRETE PAVEMENT, CURBS, GUTTERS, WALKS, DRAINAGE DITCHES, EMBANKMENTS, SHRUBS, TREES, GRASS SOD, ETC., IF DAMAGED, SHALL BE RESTORED TO ORIGINAL CONDITION.
- 7. EQUIPMENT TYPES SPECIFIED HEREIN (IE: "BACKHOE", SWAMP PLOW" ETC.) ARE SUGGESTIONS ONLY AND ARE NOT INTENDED AS REQUIREMENTS. CONTRACTOR WILL BE NOTIFIED AS TO EXPECTATIONS.
- 8. SHORING OF BORE PITS AND TRENCHES IN ACCORDANCE WITH OSHA REGULATIONS IS MANDATORY.
- BURIED CABLE MARKERS WILL BE PLACED AT ALL UNDERGROUND UTILITY LOCATIONS AND ALL OTHER LOCATIONS IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS AND THE OUTSIDE PLANT HANDBOOK.
- 10. ALL 4" ID CONDUIT WILL BE SCHEDULE 40 (EG.: PVC OR GSP/BSP), OR AS SPECIFIED.
- 11. UNDERGROUND CONDUIT WILL BE PLACED AT 48" MINIMUM COVER UNLESS OTHERWISE SPECIFIED ON THE CONSTRUCTION DRAWINGS.

CLARIFICATION NOTES



- . STATION
- 2. LOCATION
- . CLARIFICATION NO. AND MINIMUM COVER
- 4. QUANTITY LINEAR FOOTAGE/SQUARE FOOTAGE, SIZE OF MANHOLE/HANDHOLE SIZE OF PULL/SPLICE BOX, DIMENSION OF WALL, HEIGHT/CLASS/TYPE OF POLE
- 5. TYPICAL DRAWING NO. AND TYPICAL DETAIL DRAWING NUMBER
- 6. PLANT ACCOUNTING CODE
- 7. SPECIFIED CONDUIT, HANDHOLE/MANHOLE NO., SPECIFIED PURPOSE AND MATERIAL, BRIDGE NO. AND RAILROAD STATION, MATERIAL, POLE NO.

ADDENDUM NOTES: HARRIS COUNTY - 48 HOUR NOTICE

- CONTRACTOR SHALL NOTIFY HARRIS COUNTY (48 HOURS) PRIOR TO COMMENCING CONSTRUCTION AND/OR BACKFILLING ANY UTILITIES.
- 2. CONTRACTOR(S) ARE TO CONTACT HARRIS COUNTY "PUBLIC REVIEW DEPARTMENT" BY PHONE OR EMAIL. 713-274-3931
 - public.review@chpid.org

CLARIFICATION NOTES (CONTINUED)

100	110	JACK AND DRY BORE CONDUIT(S)
200	210	PLACE CONDUIT
	212	PLACE HIGH DENSITY POLYETHYLENE (HDPE)
	213	ROCK ADDER
	214	SLURRY BACKFILL ADDER
	215	EXPOSE CONDUIT
	216	EXPOSE CONDUIT AND RELOCATE
	217	EXPOSE CONDUIT AND REPLACE/SUBSTITUTE
	218	EXPOSE AND REMOVE CONDUIT
	219	EXPOSE AND REMOVE CONDUIT (ABANDONED)
	220	CONCRETE ENCASE
	221	REMOVE CONCRETE ENCASEMENT
	222	REMOVE CONCRETE CAP
	240	PLACE HANDHOLE
	244	REMOVE EXISTING HANDHOLE
	245	RELOCATE HANHOLE
	246	REPLACE/SUBSTITUTE HANDHOLE
	247	EXCAVATE SPLICE PIT
	250	PLACE MANHOLE
	252	REMOVE EXISTING MANHOLE
	255	RELOCATE PRECAST MANHOLE
	256	REPLACE/SUBSTITUTE PRECAST MANHOLE
	180	CONSTRUCT WALL
	270	REMOVE AND RESTORE ASPHALT
	280	REMOVE AND RESTORE CONCRETE
	281	REMOVE AND RESTORE SIDEWALK
	282	REMOVE AND RESTORE CURBING
	202	NEWS VE / NAS NESTONE SONSING
300	310	ATTACH CONDUIT TO WALL OR STRUCTURE
	315	DETACH CONDUIT FROM WALL OR STRUCTURE
	320	CORE BORE
	330	ATTACH PULL/SPLICE BOX TO WALL OR STRUCTURE
400	410	PULL CABLE
	411	PULL THROUGH DUCT (INNERDUCT)
	415	REMOVE CABLE FROM CONDUIT
	420	REPOSITION ACTIVE CABLE SLACK
500	E40	DIDECT DUDY CARLE
500	510	DIRECT BURY CABLE
	515	EXPOSE DIRECT BURIED CABLE
	516	EXPOSE DIRECT BURIED CABLE AND RELOCATE
	517	REMOVE AND DISPOSE OF CABLE
	520	PLACE AERIAL CABLE
	525	RELOCATE AERIAL CABLE
	518	DELASH AERIAL CABLE
	527	RELASH AERIAL CABLE
	528	REMOVE AERIAL CABLE
	530	PLACE POLE/PUSH BRACE
	535	REMOVE POLE/PUSH BRACE
600	610	JETTING CONDUIT
230	620	EMBEDMENT PLOW
	630	DIRECTIONAL BORE
700	710	PLACE BURIED CABLE MARKERS AND SIGNS/MWCOM
		WATER CROSSING SIGNS
	711	PLACE ISOLATOR/PROTECTION SYSTEM AT EXISTING
	713	HANDHOLES/MANHOLES
	712	REMOVE BURIED CABLE MARKER POST/HARDWARE
	714	REMOVE CONCRETE BURIED CABLE MARKER POST



PROJECT:			
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SCALE

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FILE: SIENNA VILLAGE. DWG

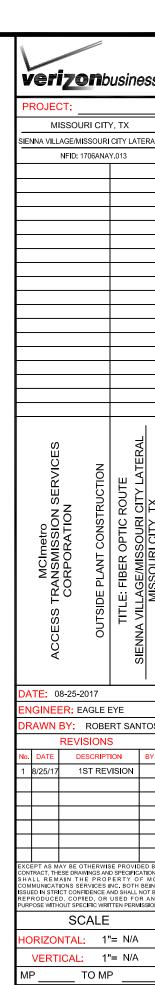
MCI OUTSIDE PLANT FOCUS

FIBER OPTIC CABLE UNCOVERING SYSTEM

- THE TITLE OF THIS PROGRAM, F.O.C.U.S., AN ACRONYM FOR "FIBER OPTIC CABLE UNCOVERING SYSTEM," 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, YOU NOTICE ANY ACTIVITY WHICH MAY JEOPARDIZE THE MCI OSP FACILITIES, IT IS YOUR DUTY TO STOP THE WORK AND RE-F.O.C.U.S.
- 2. F.O.C.U.S. 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.
- 3. REVIEW OF F.O.C.U.S. IS MANDATORY AT EVERY PRE-BID, PRE-CONSRUCTION SITE MEETING AND DAILY TAILGATE MEETING. F.O.C.U.S. DISCUSSION MUST INCLUDE SITE-SPECIFIC HISTORY, UNIQUE PROBLEMS, FACILITY CONFIGURATIONS THAT MAY BE ENCOUNTERED, AND PAST ERRORS. "THOSE WHO DO NOT LEARN FROM HISTORY ARE DOOMED TO REPEAT IT." DO NOT LET THIS HAPPEN TO YOU.
- 4. ANY WORK NEAR OR REQUIRING HANDLING OF MCI OUTSIDE PLANT FACILITIES CAN ONLY BE PERFORMED WITH AN MCI EMPLOYEE OR CONTRACT 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).
- 5. LOCATE AND POTHOLE REQUIREMENTS:
 - PRIOR TO ANY EXCAVATION, THE MCI EMPLOYEE OR CONTRACT 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 CABLE
 RUNNING LINE BY MAKING AT LEAST ONE PASS IN EACH DIRECTION. LOCATE RESULTS MUST THEN BE
 COMPARED WITH PREVIOUS MARKS AND THE AS-BUILTS.
 - IF THE PROPOSED WORK INVOLVES DIGGING OR EXCAVATING WITHIN 3 FEET 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 MUST POTHOLE (ALL
 POTHOLES 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 VACUUM
 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 CONTINUALLY WITH ORANGE PAINT AND SUPPLEMENTED BY MARKER FLAGS PLACED EVERY 10 FT. THE EXCAVATION CONTRACTOR MUST POTHOLE THE CABLE A MINIMUM OF EVERY 15 FT.
 - 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 CONTINUALLY WITH ORANGE PAINT AND SUPPLEMENTED BY MARKER FLAGS PLACED EVERY 10 FT. THE EXCAVATION CONTRACTOR MUST POTHOLE THE CABLE A MINIMUM OF EVERY 15 FT.
 - THE CABLE WILL ALSO BE POTHOLED 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.
- 6. EXPOSING REQUIREMENTS:
 - NO MECHANICAL EXCAVATION WITHIN 3 FT. 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 FACILITES ARE CLEARLY VISIBLE.
 - IN ADDITION, MECHANICAL EXCAVATION WITHIN 3 FT. OF OSP FACILITIES REQUIRES ON-SITE PRIOR APPROVAL FROM MCI'S EMPLOYEE OR CONTRACT REPRESENTATIVE.
- 7. PLEASE REFER TO THE LATEST EDITION OF THE MCI OSP HANDBOOK FOR ADDITIONAL DETAILS. KNOW IT AND FOLLOW IT.

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, HARD 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 WILL BE CUT BY MCI OPERATIONS PERSONNEL, AND ONLY AFTER VERIFICATION THAT ALL TRAFFIC HAS BEEN OFF-LOADED.
- * EXTREME CAUTION MUST BE USED AT ALL TIMES WHEN WORKING ON OR NEAR ACTIVE CABLES. AN MCI EMPLOYEE OR CONTRACT REPRESENTATIVE MUST APPROVE AND BE PRESENT PRIOR TO AND DURING ALL CABLE HANDLING ACTIVITIES.
- * TOOLS AND EQUIPMENT SPECIFICALLY DESIGNED FOR THE JOB AT HAND ARE REQUIRED. USE THE PROPER TOOL FOR THE JOB.
- * CONDUIT WORK INVOLVING ACTIVE CABLES REQUIRES SPECIALIZED TOOLS SPECIFICALLY DESIGNED TO ACCESS DUCTS WITH ACTIVE CABLES.
- PROTECTING MCI FACILITIES IS EXTREMELY IMPORTANT; HOWEVER, SAFETY REGARDING YOURSELF AND OTHERS IS THE MOST IMPORTANT PART OF ANY PROJECT.



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SILE: SIENNA VILLAGE.DWG

CLARIFICATION SUMMARY SHEET PROJECT SPECIFIC

PROJECT CLARIFICATION SUMMARY				
DESCRIPTION	QUANTITY	UNIT		
PLACE (30"x60"x30") HANDHOLE	42	EA		
PLACE 1-2" HDPE (SDR 11) CONDUIT	26,741	LF		
PLACE 2-2" HDPE (SDR 11) CONDUIT	3,293	LF		
PULL 1-96F CABLE (INCLUDES 830' IN COILS)	7,042	LF		
PULL 1-432F CABLE (INCLUDES 1760' IN COILS)	14,313	LF		
PULL 1-864F CABLE (INCLUDES 1930" IN COILS)	14,350	LF		
PULL 1-288F CABLE (INCLUDES 630' IN COILS)	3,970	LF		
ATTACH (25') 2" U-GUARD RISER	4	EA		
(PLACE) DOWN GUY & ANCHOR LEAD	7	EA		
PLACE 1-6M AERIAL STRAND (INCLUDES ALL HARDWARE, LOOP EQUIPMENT, & 175' IN GUYS)	4,307	LF		
LASH 1-96F CABLE (INCLUDES 200' IN SLACK LOOPS & RISERS)	4,027	LF		
LASH 1-864F CABLE (INCLUDES 0' IN SLACK LOOPS & RISERS)	380'	LF		
PLACE (BURIED CABLE) MARKER	73	EA		



MISSOURI CITY, TX SIENNA VILLAGE/MISSOURI CITY LATERA NFID: 1706ANAY.013 MCImetro ACCESS TRANSMISSION SERVICES CORPORATION OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
SIENNA VILLAGE/MISSOURI CITY LATERAL
MISSOURI CITY TX

DATE: 08-25-2017

ENGINEER: EAGLE EYE

DRAWN BY: ROBERT SANTOS

No. DATE DESCRIPTION

1 8/25/17 1ST REVISION

REVISIONS

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SCALE

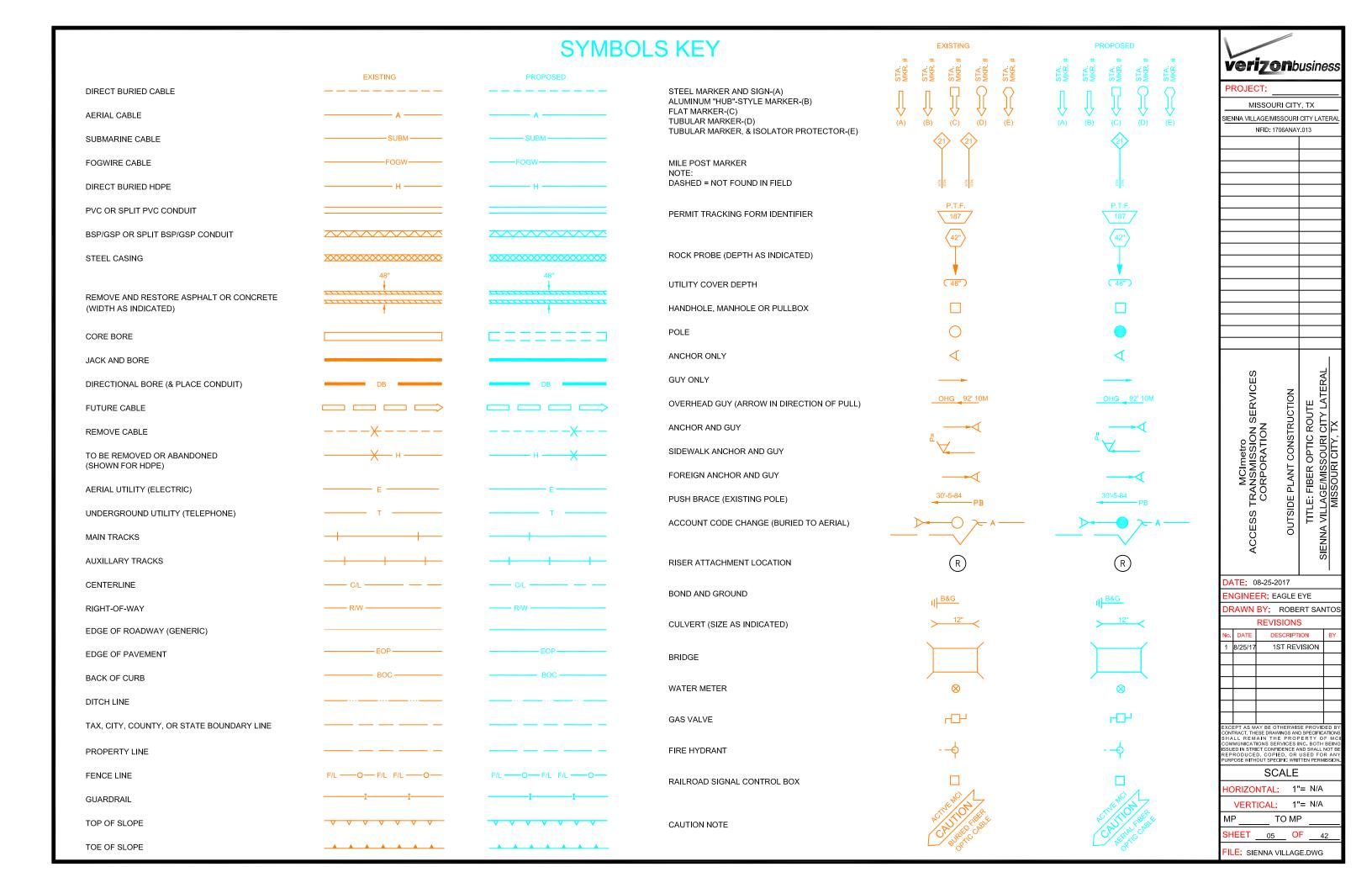
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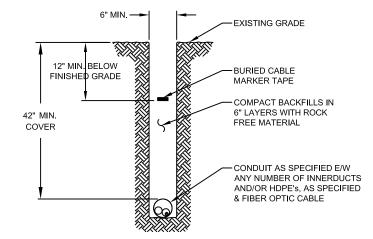
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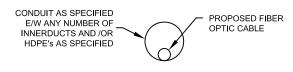


CONSTRUCTION DETAILS

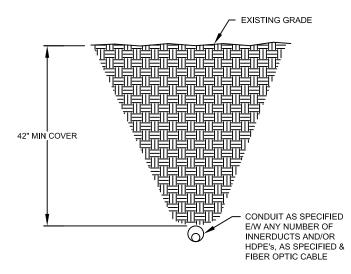
TYPICAL DETAIL"A" TRENCH & PLACE CONDUIT



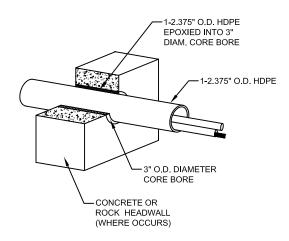
TYPICAL DETAIL "B" CROSS SECTION OF PROPOSED HDPE



TYPICAL DETAIL "C" DIRECTIONAL BORE CROSS SECTION FOR CONDUIT



TYPICAL DETAIL "D" 3" CORE BORE



NOTE

EPOXY GROUT IS USED AT BOTH ENDS OF CORE BORE TO SEAL GAP BETWEEN 2.375" CONDUIT AND PVC SLEEVE.

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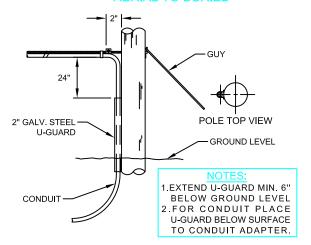
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VERTICAL:

GENERAL AERIAL CONSTRUCTION DETAILS

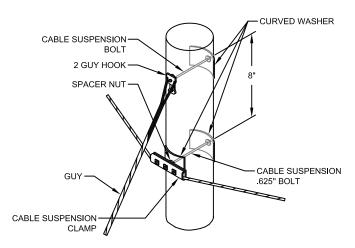
TYPICAL DETAIL "A"

POLE ARRANGEMENT FOR **AERIAL TO BURIED**



TYPICAL DETAIL "D"

SUSPENSION STRAND - PULL TOWARD POLE - LESS THAN 5 FEET



TYPICAL DETAIL "G"

JOINING 045 LASHING WIRE



FORMING WIRE OVER STUD OF CLAMP

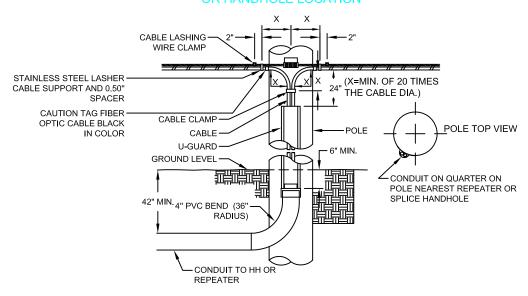
REMOVE ANY SLACK IN THE LASHING WIRE BY MAINTAINING A PULL ON THE WIRE AND TAPPING THE STRAND SHARPLY. THEN FORM THE WIRE OVER THE STUD AND TIGHTEN THE NUT. CUT THE FREE END OF THE LASHING WIRE OFF 0.75" BEYOND THE END OF THE CLAMP.

FORMING LASHING WIRE **AROUND STRAND**

FORM THE LASHING WIRE AROUND THE STRAND AND PLACE IT BELOW THE STUD AND BETWEEN THE SECOND WASHER AND STUD SHOULDER.

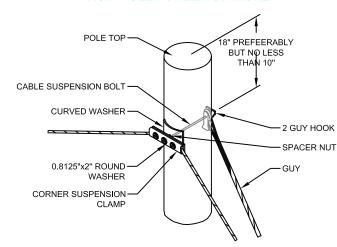
TYPICAL DETAIL "B"

POLE ARRANGEMENT FOR REPEATER OR HANDHOLE LOCATION



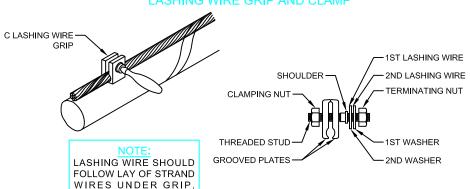
TYPICAL DETAIL "E"

SUSPENSION STRAND - PULL AWAY FROM POLE - 5 FEET OR MORE



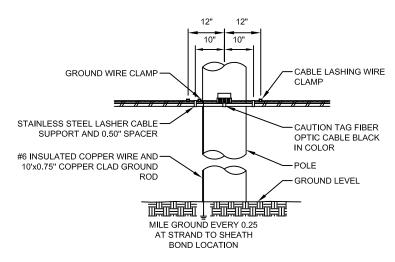
TYPICAL DETAIL "H"

LASHING WIRE GRIP AND CLAMP



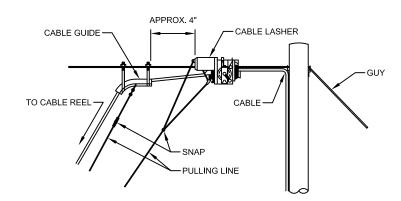
TYPICAL DETAIL "C"

TYPICAL CABLE & HARDWARE **INSTALLATION**



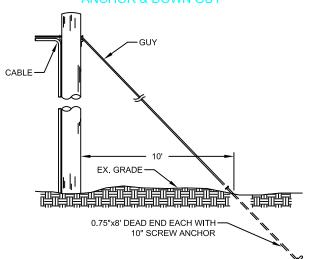
TYPICAL DETAIL "F"

TYPICAL ARRANGEMENT OF CABLE LASHER AND CABLE GUIDE



TYPICAL DETAIL "I"

ANCHOR & DOWN GUY





MISSOURI CITY, TX

SIENNA VILLAGE/MISSOURI CITY LATERA NFID: 1706ANAY.013

SERVICES OUTSIDE PLANT CONSTRUCTION

ROUTE ICITY LATER TX

TITLE: FIBER OPTIC R VILLAGE/MISSOURI C MISSOURI CITY, T

DATE: 08-25-2017

NGINEER: EAGLE EYE

RAWN BY: ROBERT SANTOS

REVISIONS

1ST REVISION

DESCRIPTION

EXCEPT AS MAY BE OTHERWISE PROVIDED IS CONTRACT, THESE DRAWINGS AND SPECIFICATION SHALL REMAIN THE PROPERTY OF M COMMUNICATIONS SERVICES INC. BOTH BEIN SUEDIN STRICT COMPIDENCE AND SHALL NOTI REPRODUCED. COPIED, OR USED FOR AN PURPOSE WITHOUT SPECIFIC WINTEN FERMISSIC

SCALE ORIZONTAL: 1"= N/A

VERTICAL: 1"= N/A

TO MP 6A OF

ILE: SIENNA VILLAGE.DWG

AERIAL IN-LINE SLACK STORAGE DETAILS

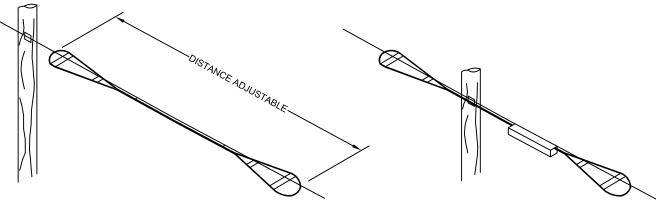


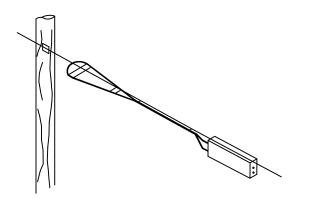
TYPICAL DETAIL "B" IN-LINE SPLICE APPLICATION

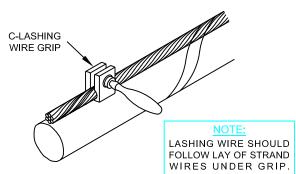
TYPICAL DETAIL "C"
BUTT SPLICE APPLICATION

TYPICAL DETAIL "D"

LASHING WIRE GRIP AND CLAMP C-LASHING WIRE GRIP INSTALLED ON STRAND





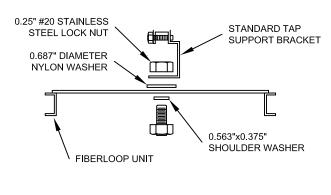


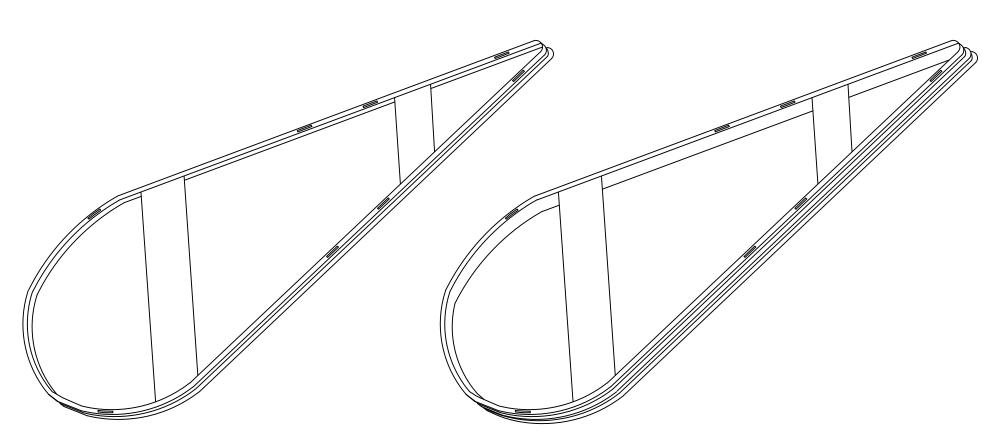
TYPICAL DETAIL "E"

HARDWARE KIT

TYPICAL DETAIL "F"

SINGLE & DOUBLE FIBER LOOPS





verizo)n b	usi	ne	s
PROJECT:				
MISSOL	IRI CITY	′, TX		
SIENNA VILLAGE/M			ATE	R
NFID: 1	706ANA\	′.013		
MCImetro ACCESS TRANSMISSION SERVICES CORPORATION	OUTSIDE PLANT CONSTRUCTION	TITLE: FIBER OPTIC ROUTE	ENNA VILLAGE/MISSOURI CITY LATERAL	MICCOLLINI OT Y

DATE:	08-25-2017
 DAIL.	00 20 20 17

ENGINEER: EAGLE EYE

DRAWN BY: ROBERT SANTO

	REVISIONS					
No.	DATE	DESCRIPTION	BY			
1	8/25/17	1ST REVISION				

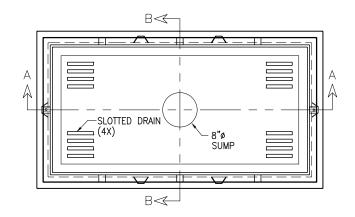
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FILE: SII	ENNA VILI	LA (5019)1	A WG

30" x 60" x 30" 30K STANDARD HANDHOLE DETAILS

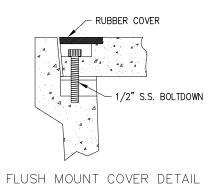
DETAIL "A"

LOCKING DEVICE **CROSS SECTION**



DETAIL "B"

FLUSH MOUNT COVER DETAIL



36 1/8"

33 3/8"

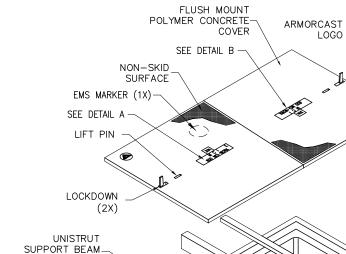
30"

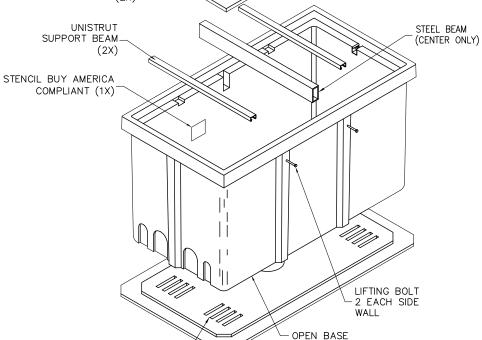
KNOCKOUTS 1 EACH END

(2X)

DETAIL "C" **EXPLODED ISOMETRIC DETAIL**

LOGO





66 1/8" 63 3/8" 60" _ 1 3/4" 30" 59" SECTION A-A

800 MCI-WORK

DETAIL A

800 MCI-WORK DETAIL B

SEALED PLASTIC BAG PLACED INSIDE VAULT TO CONTAIN

3 1/2"

4 1/2" KNOCKOUTS-

2 EACH END (4X)

KNOCKOÚTS

1 EACH END (2X)

(1) JOHNNY LOCK KEY(2) S.S. JOHNNY BOLTS S.S. JOHNNY BOLTS W/FLAT WASHER.

SHRINK WRAP COVERS TO FRAME FOR PACKAGING.

---10"—

— 29**"** –

SECTION B-B

30K STANDARD HANDHOLE

DRAIN (4X)-

30"x60"x30" POLYMER CONCRETE FLUSH MOUNT ASSEMBLY MEETS SCTE/ANSI 77-TIER 22 LOADING CRITERIA **ADDITIONAL REQUIREMENTS:** DESIGNED LOAD: 30,000 LBS MINIMUM FAILURE LOAD: 45,000 LBS

POLYMER CONCRETE DETACHABLE BASE

verizo)n b	usi	nes
PROJECT:			
MISSOU	IRI CITY	′, TX	
	ISSOURI		_ATER/
NFID: 1	1706ANA	Y.013	
MCImetro ACCESS TRANSMISSION SERVICES CORPORATION	OUTSIDE PLANT CONSTRUCTION	TITLE: FIBER OPTIC ROUTE	SIENNA VILLAGE/MISSOURI CITY LATERAL
DATE: 08-25-2	2017		

ENGINEER: EAGLE EYE

RAWN BY: ROBERT SANTOS

REVISIONS DESCRIPTION 1ST REVISION

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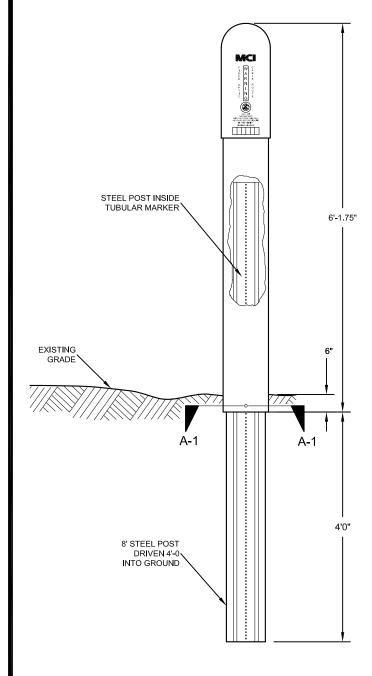
SCALE IORIZONTAL: 1"= N/A 1"= N/A TO MP SHEET <u>07</u> OF <u>42</u>

FILE: SIENNA VILLAGE.DWG

TUBULAR MARKER DETAILS

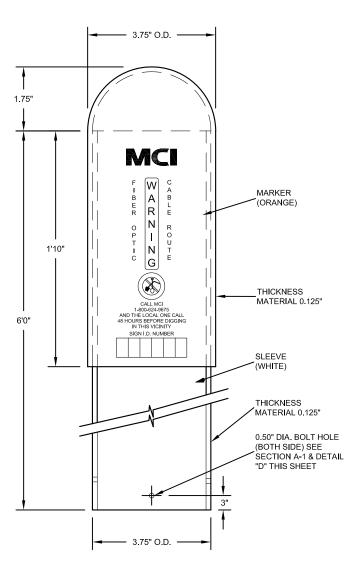
DETAIL "A"

INSTALLATION VIEW



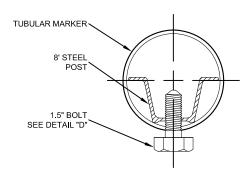
DETAIL "B"

FRONT VIEW



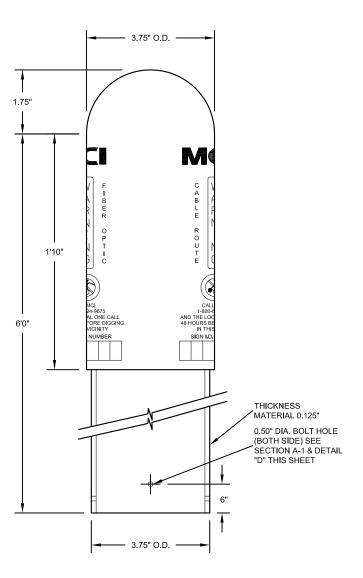
SECTION A-1

TUBULAR MARKER



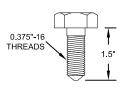
DETAIL "C"

SIDE VIEW



DETAIL "D"

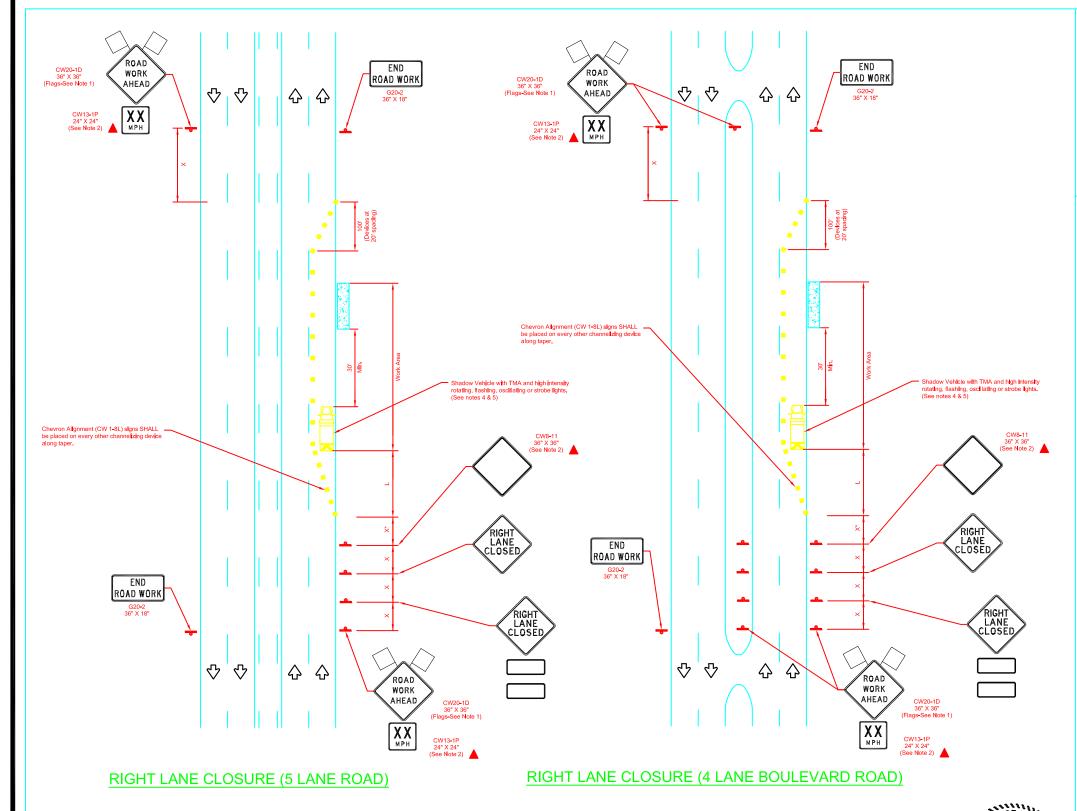
1.5" BOLT



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	AGE/MISS			.ATE	RAL	
	IFID. 1700	JAINA	.013			
ACCESS T	CORPORATION 8-25-20		TITLE: FIBER OPTIC ROUTE	SIENNA VILLAGE/MISSOURI CITY LATERAL	MISSOURI CITY, TX	
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EXCEPT AS MAY BE OTHERWISE PROVIDED BY CONTRACT, THESE DRAWINGS AND SPECIFICATIONS SHALL REMAIN THE PROPERTY OF MCI COMMUNICATIONS SERVICES INC. BOTH BEING SSUED IN STRICT CONFIDENCE AND SHALL NOT BE REPRODUCED, COPIED, OR USED FOR ANY PURPOSE WITHOUT SPECIFIC WRITTEN PERMISSION.						
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ILE: SIENNA VILLAGE. DWG

TRAFFIC CONTROL PLAN DETAILS



TRAFFIC CONTROL PLAN SECTION SHALL BE COMPLETED BY ENGINEER

ROADWAY	POSTED TAPER SPEED LENGTH		CHANN DEV	CING ELIZING ICES	SIGN SPACING	BUFFER SPACE	
			TAPER	TANGENT			
WEST LAKE HOUSTON PKWY.: WILL CLAYTON PKWY. TO UPRR	45 MPH	540'	45'	90'	320'	195'	

LEGEND					
	Type 3 Barrlcade		Channelizing Devices		
中	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)		
Ê	Traller Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)		
	Sign	⟨→	Traffic Flow		
$\overline{\triangle}$	Flag	LO	Flagger		

Posted Speed	Formula	Ċ	Minimum Desirable Lengths "	L"	Suggested Spadr Chann Devi	ng of el izi ng	Minimum Sign SpacIng "X"	Suggested Longitudinal Buffer Space
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent	Distance	"B"
30	ws ²	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40	60	265'	295'	320'	40'	80'	240'	155'
45		450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55	L=WS	550'	605'	660'	55'	110'	500'	295'
60]	600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

Conventional Roads Only Taper lengths have been rounded off.

L=Length of Taper(FT) W=WIdth of Offset(FT) S=Posted Speed(MPH)

GENERAL NOTES

Flags attached to signs where shown are OPTIONAL.
 All tarffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol are OPTIONAL.
 Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the

PROJECT TITLE:

A. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work, if workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.

5. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in

Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.
 Contractor shall provide and install traffic control devices in conformance with part VI of Texas Manual on Uniform Traffic Control Devices (TMUTCD - Latest edition with revisions) during construction.
 No lanes shall be blocked from 7am to 9am and 4pm to 6:30pm Monday thru Friday.
 Off duty police officers/flaggers are required to direct traffic when applicable.
 If project is within 400 feet from a signalized intersection, the Contractor shall contact Harris County Engineering Department, Traffic Signal Maintenance at (713) 881-3210 five (5) days prior to the start of construction.



MISSOURI CITY, TX

SIENNA VILLAGE/MISSOURI CITY LATERA NEID: 1706ANAY 013

MCImetro ACCESS TRANSMISSION SERVICES CORPORATION	OUTSIDE PLANT CONSTRUCTION	TITLE: FIBER OPTIC ROUTE	SIENNA VILLAGE/MISSOURI CITY LATERAL	AT ATO ISLOSSIM
-	2017			
JINEER F	AGI F I	FYF		

ENGINEER: EAGLE EYE

DRAWN BY: ROBERT SANTOS

	REVISIONS						
٠.	DATE	DESCRIPTION	BY				
	8/25/17	1ST REVISION					

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SCALE

IORIZONTAL: 1"= N/A

VERTICAL: 1"= N/A

TO MP SHEET 08

HCED STANDARD

SHEET NO:

FILE: SIENNA VILLAGE. DWG

OF 42

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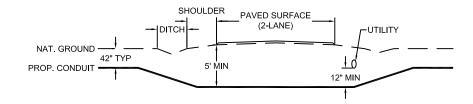
		OF TELL
	TEO, LLC 5510 Community DRIVE Houston, Texas	****
)	77005 281-536-5123 OFFICE 713-668-6334 FAX teollc@gmail.com FIRM # F-8978	E. GALVAN 51526 C/STERE
		INDIVONAL POSSO

DATE NAME

ROAD CROSSING DETAILS

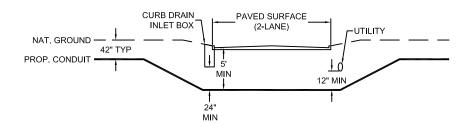
TYPICAL DETAIL "A"

TWO LANE - ASPHALT ROAD - NO CURB



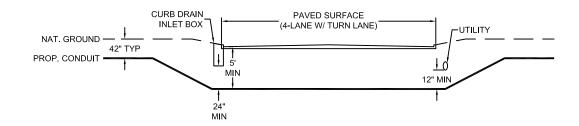
TYPICAL DETAIL "B"

TWO LANE - CURBED ROAD



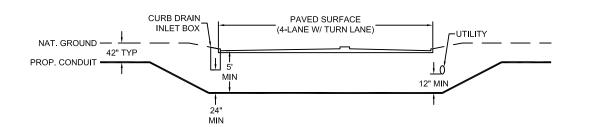
TYPICAL DETAIL "C"

FOUR LANE (W/ TURN LANE) - CURBED ROAD - NO MEDIAN



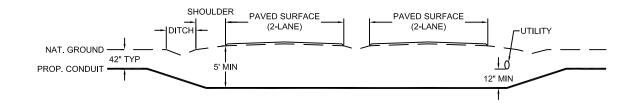
TYPICAL DETAIL "D

FOUR LANE (W/ TURN LANE) - CURBED ROAD - WITH MEDIAN



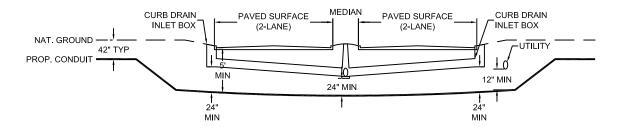
TYPICAL DETAIL "E"

4 LANE - SPLIT ASPHALT ROAD - NO CURB



TYPICAL DETAIL "F"

4 LANE - SPLIT CURBED ROAD



verizonbusiness

MISSOURI CITY, TX

SIENNA VILLAGE/MISSOURI CITY LATERA

NFID: 1706ANAY.013

MCImetro ACCESS TRANSMISSION SERVICES CORPORATION

DATE: 08-25-2017 ENGINEER: EAGLE EYE

DRAWN BY: ROBERT SANTO

REVISIONS

DESCRIPTION

1ST REVISION

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SCALE

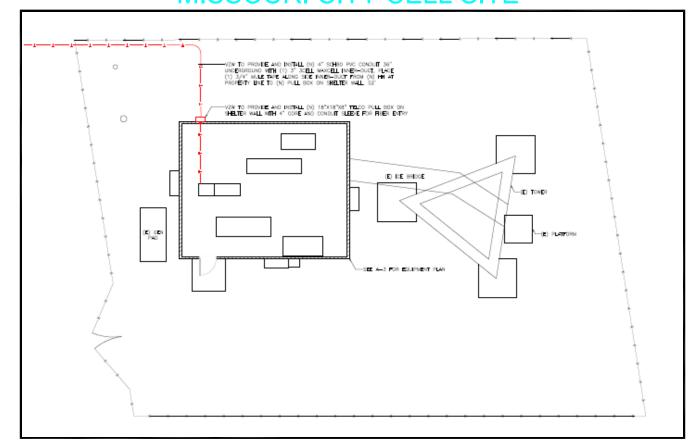
HORIZONTAL: 1"= N/A

VERTICAL: 1"= N/A TO MP

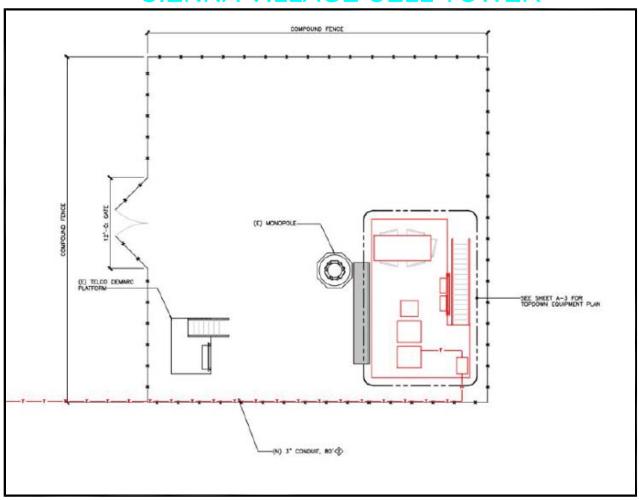
OF SHEET __08A

FILE: SIENNA VILLAGE.DWG

CELL SITES DETAILS MISSOURI CITY CELL SITE



SIENNA VILLAGE CELL TOWER



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PROJEC	T:				
MI	SSOURI	CITY	/, TX		
	AGE/MISS			ATER	ΑL
N	FID: 1706	ANAY.	.013		
MCImetro ACCESS TRANSMISSION SERVICES	CORPORATION	OUTSIDE PLANT CONSTRUCTION	TITLE: FIBER OPTIC ROUTE	SIENNA VILLAGE/MISSOURI CITY LATERAL	MISSOCKI CITY, TX

DATE: 08-25-2017

ENGINEER: EAGLE EYE

DRAWN BY: ROBERT SANTOS REVISIONS

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SCALE

HORIZONTAL: 1"= N/A

VERTICAL: 1"= N/A

TO MP SHEET 08B

FILE: SIENNA VILLAGE DWG

