

# REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT

# Fort Bend County Engineering Department 301 Jackson Suite 401

301 Jackson Suite 401 Richmond, Texas 77469 281.633.7500 Permits@fortbendcountytx.gov

***************************************	X Right of Way  Commercial	l Drivew		
	Permit No: 2018-2	20523		
Appli	icant: MCI Metro Access Transmission Service			Services
Job l	Location Site: 4911 Sandhill Drive, Sugar Land	d, TX 77	7479	
Bono	No. Date of Bond: 5/1	1/2017	Amount:	\$50,000.00
Layin Road Comr Texas	bove applicant came to make use of certain Fort Eg, Construction, Maintenance, and Repair of Buries, Streets, Highways, and Drainage Ditches in Fort missioners Court of Fort Bend County, Texas," as pos, of the Minutes of the Commissioners Court of Fortstant with Chapter 181, Vernon's Texas Statutes	ed Cable Bend Co passed bo ort Bend	s, Conduits, and ounty, Texas, Ui y the Commissi I County, Texas,	I Pole Lines, In, Under, Across or Along nder the Jurisdiction of the oners Court of Fort Bend County,
Note: 1. 2. 3.	s: Evidence of review by the Commissioners Court grounds for job shutdown. Written notices are required: a. 48 hours in advance of construction b. When construction is completed ar Administrator thru MyGovernment This permit expires one (1) year from date of permiters.	n start u nd ready tOnline.	ip, and / for final inspec org portal.	ction, submit notification to Permit
Commotic	nis <u>5th</u> day of <u>June</u> , <u>2018</u> , Upon Motion of Commis missioner <u>Morales</u> , duly put a e of said above purpose is hereby acknowledged b said notice be placed on record according to the re	and carr by the Co	ied, it is ORDER ommissioners C	ED, ADJUDGED AND DECREED that said ourt of Fort Bend County, Texas, and
Signa	iture	Pres	ented to Comm	nissioners Court and approved.
Ву:	County Engineer	_ Date	e Recorded <u>6-7</u>	7-2018 Comm. Court No. 13D
Ву:	N/A	Cler By:	k of Commissio	ners Court
	Drainage District Engineer/Manager	l	Deputy	



# 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 Rigi	nt of Way Permit	,
Con	nmercial Driveway	Permit
Permit No	2018-20523	
		e activity in Fort Bend County" and accompanying opriate regulations set by Commissioner's Court
(1) COMPLETE APPLICATION FORM:		
X a. Name of road, street, and/or	r drainage ditch affe	cted.
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: \$50,000.00
Performance bond submitted.	Bond No:	Amount:
Cashier's Check	Check No:	Amount:
(3) DRAINAGE DISTRICT APPROVAL (WHE	EN APPLICABLE):	
Drainage District Approval	_	Date
We have reviewed this project and agree it r	neets minimum rec	juirements.
han Eghten		5/24/2018
Permit Administrator		Date

# MCImetro ACCESS TRANSMISSION SERVICES CORPORATION OUTSIDE PLANT CONSTRUCTION

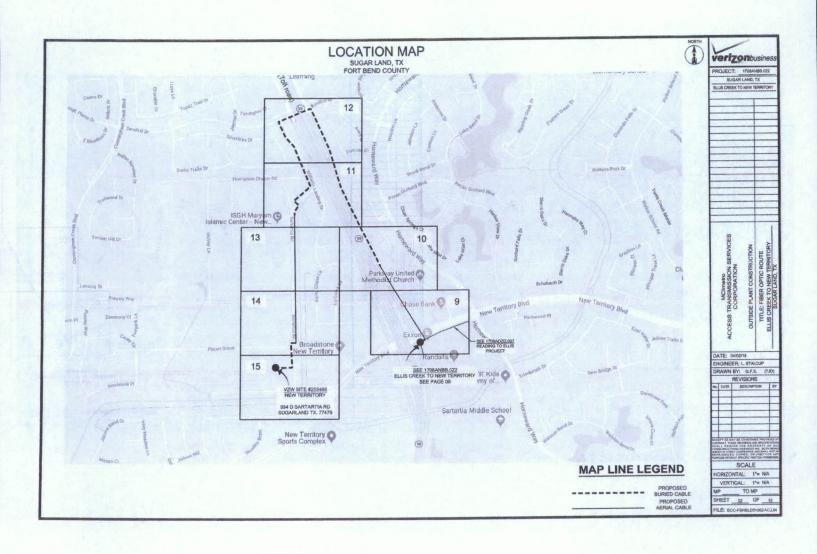
OUTSIDE PLANT CONSTRUCTION FIBER OPTIC CABLE ROUTE

# ECC FIBER BUILD: 1706ANBB.022 ELLIS CREEK TO NEW TERRITORY SUGAR LAND, TX

SITE CODE: HODATX

PROJECT STATUS: CONSTRUCTION

DATE: 04/02/18



# **CONTACT SHEET**

#### MCI

PROJECT ENGINEER:

PROJECT MANAGER:

PROJECT COORDINATOR:

#### **OUTSIDE PLANT CONSTRUCTION:**

CONSTRUCTION CONTRACTOR:

ERVIN CABLE CONSTRUCTION 844-322-2524

CONSTRUCTION MANAGER: PROJECT COORDINATOR:

AURELIO MALLAMANCE

BARRY PHILLIPS

270-349-0337 918-688-4168

AGENT: MANAGER:

COORDINATOR: MANAGER:

PROGRAM MANAGER:

LIGHTWAVE ENGINEER:

CIVIL ENGINEER:

TERMINAL CONST. REP.:

SPLICING MANAGER:

TSO MANAGER:

#### **ENGINEERING CONTRACTOR**

**GOLDEN FIELD SERVICES:** 

10830 EAST 45TH ST. STE. 405 TULSA, OK 74146

PRESIDENT:

JERRY JEFFRIES, SR.

OFFICE: CELL: E-MAIL

OFFICE:

(918) 610-0014 (918) 638-3317

(918) 610-0014

(918) 610-0016

JLJEFFRIES@GOLDENFIELDSERVICES.COM

PROJECT MANAGER:

LARRY STALCUP

OFFICE:

(918) 610-0014 (918) 633-2198

E-MAIL

LSTALCUP@GOLDENFIELDSERVICES.COM

NAME OF FIRM: PROJECT COORDINATOR: PROJECT SUPERINTENDENT:

#### **RAILROADS**

#### 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

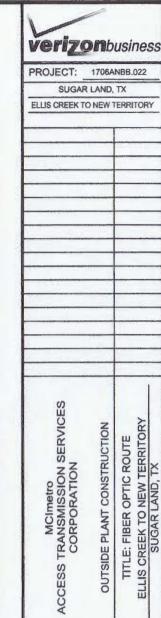
#### **COUNTY GOVERNMENT**

FORT BEND COUNTY

#### STATE GOVERNMENT

#### FEDERAL GOVERNMENT

OTHER



- 1			
	DATE: 04/02/	18	
	ENGINEER:	. STALCL	JP
	DRAWN BY:	G.F.S.	(TJD)

REVISIONS No. DATE DESCRIPTION

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SCALE HORIZONTAL: 1"= N/A VERTICAL: 1"= N/A SHEET 03 OF 15

FILE: ECC-FBRBLD01003 AC.LIN

# GENERAL NOTES / CLARIFICATION NOTES

#### **GENERAL NOTES**

- VERIZON BUSINESS COMPRISES THE FOLLOWING OPERATING ENTITIES:
  - MCI COMMUNICATIONS SERVICES, INC.
  - MCI METRO COMMUNICATIONS SERVICES, INC.
  - MCI METRO ACCESS TRANSMISSION SERVICES OF VIRGINIA, INC.
  - MCI METRO ACCESS TRANSMISSION SERVICES OF MASSACHUSETTS, INC.
  - METROPOLITAN FIBER SYSTEMS OF NEW YORK, INC.
- 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.
- 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
- 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
- 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.
- 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.
- 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.
- ALL 4" ID CONDUIT WILL BE SCHEDULE 40 (EG.: PVC OR GSP/BSP), OR AS SPECIFIED.
- UNDERGROUND CONDUIT WILL BE PLACED AT 48" MINIMUM COVER UNLESS OTHERWISE SPECIFIED ON THE CONSTRUCTION DRAWINGS.

## **CLARIFICATION NOTES**

#### ADDENDUM NOTES

## **CLARIFICATION NOTES (CONTINUED)**

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MCImetro ACCESS TRANSMISSION SERVICES CORPORATION	OUTSIDE PLANT CONSTRUCTION	TITLE: FIBER OPTIC ROUTE	SUGAR LAND, TX
DATE: 04/02/	18		
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SCALE

HORIZONTAL: 1"= N/A

VERTICAL: 1"= N/A

SHEET 04 OF 15 FILE: ECC-FBRBLD01004AC.LIN

# 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 SELECCTED 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.
- 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 ELECCTRONIC 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.
- 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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SHEET 4A OF 15
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# **CLARIFICATION SUMMARY SHEET** PROJECT SPECIFIC

PROJECT CLARIFICATION SUMMARY	1-1-1	
DESCRIPTION	QUANTITY	UNIT
PLACE (30"x60"x30") HANDHOLE	12	EA
PLACE 1-2" HDPE (SDR 11) CONDUIT	5,289	LF
PULL 1-288CT CABLE (2,515' IN NEW CONDUIT, 450' IN COILS, 50' IN RISERS)	3,015	LF
PULL 1-72CT CABLE (2,774' IN NEW CONDUIT, 975' IN COILS, 25' IN RISERS, EXIST.CONDUIT 250')	4,025	LF
ATTACH (25') 2" U-GUARD RISER	3	EA
(PLACE) DOWN GUY & ANCHOR	3	EA
(PLACE) OVERHEAD GUY	1	EA
PLACE 1-6M AERIAL STRAND (INCLUDES ALL HARDWARE, LOOP EQUIPMENT, & 100' IN GUYS)	2,923	LF
ASH 1-288F CABLE (INCLUDES 100' IN SLACK LOOPS)	1,249	LF
ASH 1-72F CABLE (INCLUDES 100' IN SLACK LOOPS)	1,670	LF
PLACE MARKER	12	EA

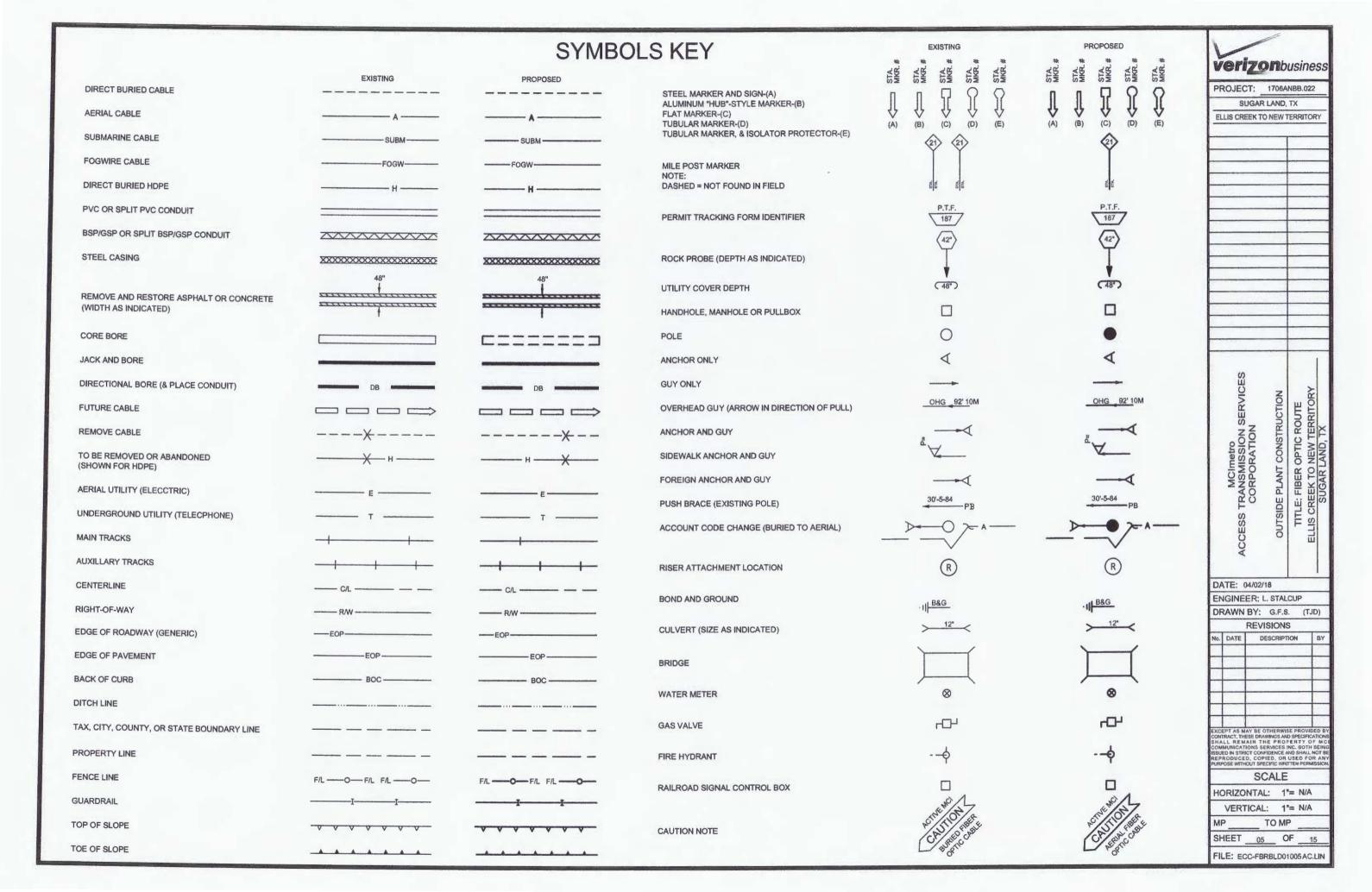
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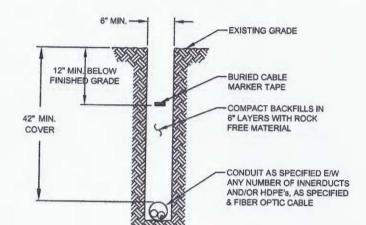
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SHEET 4B OF 15 FILE: ECC-FBRBLD01004DC.LIN



# **CONSTRUCTION DETAILS**

# TYPICAL DETAIL "A" TRENCH & PLACE CONDUIT



#### TYPICAL DETAIL "B"

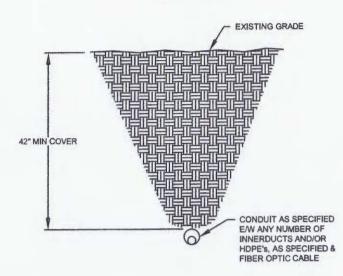
CROSS SECTION OF PROPOSED HDPE

CONDUIT AS SPECIFIED
E/W ANY NUMBER OF
INNERDUCTS AND /OR
HDPE's AS SPECIFIED

PROPOSED FIBER
OPTIC CABLE

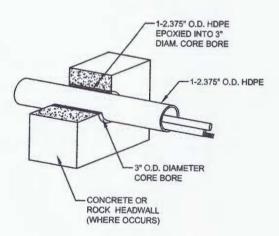
#### TYPICAL DETAIL "C"

# 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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DRAWN BY:	G.F.S		(TJS	6)

**verizon**business

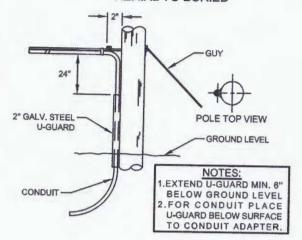
ENGINEER: L. STALCUP
DRAWN BY: G.F.S. (
REVISIONS
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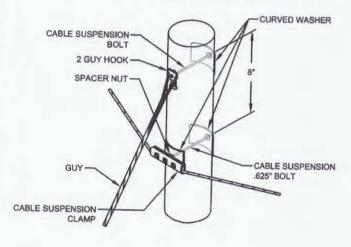
#### TYPICAL DETAIL "A"

#### POLE ARRANGEMENT FOR **AERIAL TO BURIED**



#### TYPICAL DETAIL "D"

#### SUSPENSION STRAND - PULL TOWARD POLE - LESS THAN 5 FEET



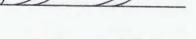
#### TYPICAL DETAIL "G"

#### 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

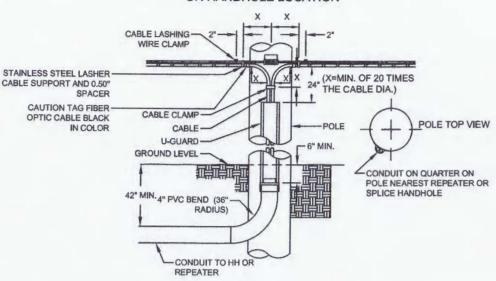
AROUND STRAND

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

# **GENERAL AERIAL CONSTRUCTION DETAILS**

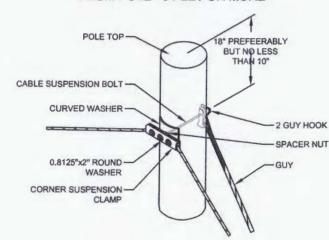
#### TYPICAL DETAIL "B"

#### POLE ARRANGEMENT FOR REPEATER OR HANDHOLE LOCATION



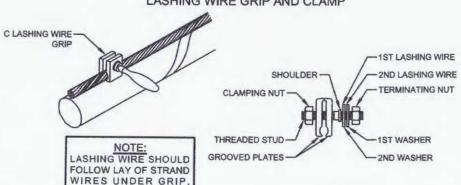
#### TYPICAL DETAIL "E"

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



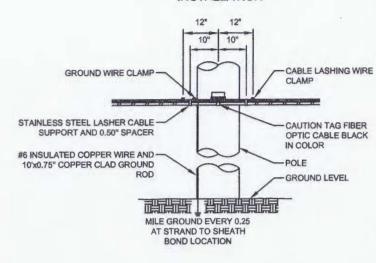
#### TYPICAL DETAIL "H"

#### LASHING WIRE GRIP AND CLAMP



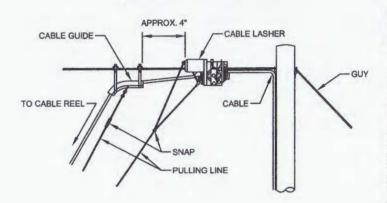
#### TYPICAL DETAIL "C"

#### TYPICAL CABLE & HARDWARE INSTALLATION



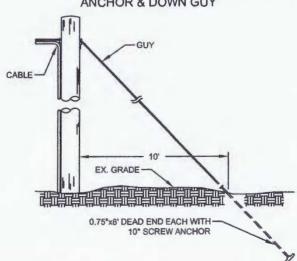
#### TYPICAL DETAIL "F"

#### TYPICAL ARRANGEMENT OF CABLE LASHER AND CABLE GUIDE



#### TYPICAL DETAIL "I"

#### ANCHOR & DOWN GUY



# verizonbusiness

PROJECT: 1706ANBB.022 SUGAR LAND, TX **ELLIS CREEK TO NEW TERRITORY** OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
ELLIS CREEK TO NEW TERRITORY
SUGAR LAND. TX DATE: 04/02/18 ENGINEER; L. STALCUP

DRAWN BY: G.F.S. (TJS)

REVISIONS

DESCRIPTION

XCEPT AS MAY BE OTHERWISE PRO ONTRACT, THESE DRAWINGS AND SPECIFICATION HALL REMAIN THE PROPERTY OF MIC OMMUNICATIONS SERVICES INC. BOTH BEIN RODUCED, COPIED, OR USED FOR AIR

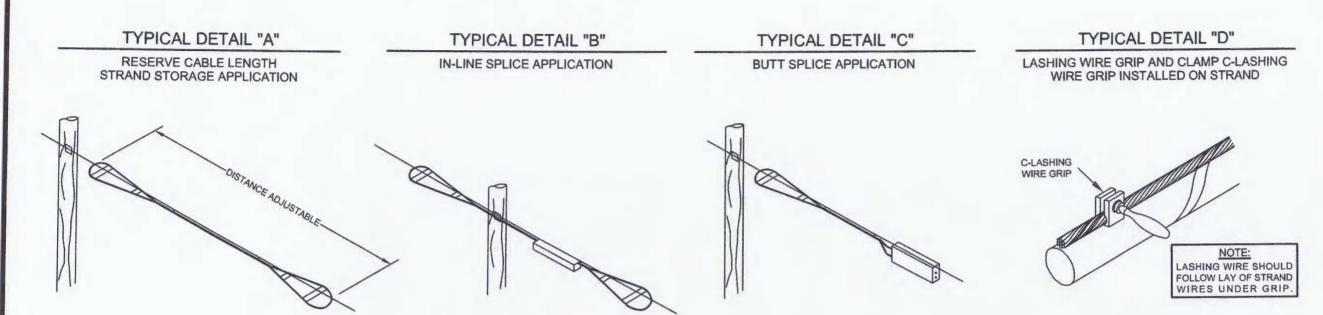
SCALE HORIZONTAL: 1"= N/A

VERTICAL: 1"= N/A

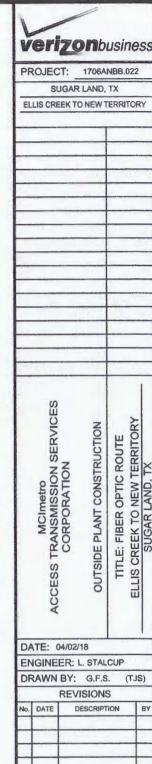
TO MP SHEET 6A OF

FILE: ECC-FBRBLD01006BC.LIN

# **AERIAL IN-LINE SLACK STORAGE DETAILS**







DATE: 04/02/18	
ENGINEER: L. STALC	UP
DRAWN BY: G.F.S.	(TJS
DEVICIONS	

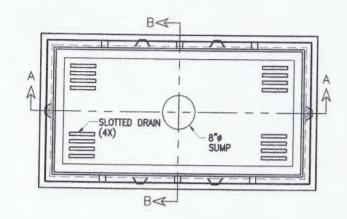
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No.	DATE	DESCRIPTION	BY				
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-	-		-				
EXC	EPT AS MAY	BE OTHERWISE PRO	IDED BY				

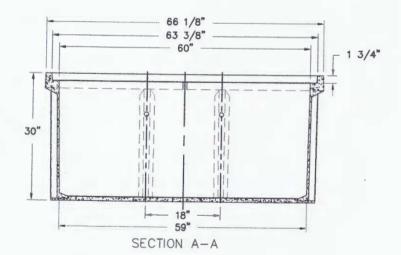
I DIG OOL MITTE	JOT OF LOSS IN	o maire	at Little
	SCA	LE	
HORIZOI	NTAL:	1"=	N/A
VERT	ICAL:	1"=	N/A
MP	ТО	MP	
SHEET	6B	OF	15

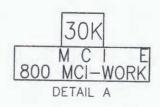
FILE: ECC-FBRBLD01006CC.LIN

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

#### DETAIL "A" LOCKING DEVICE **CROSS SECTION**





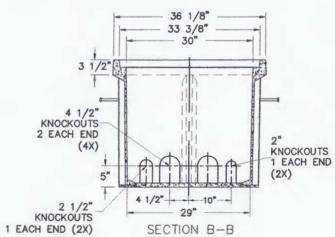




#### **DETAIL "B" FLUSH MOUNT**

COVER DETAIL

RUBBER COVER 1/2" S.S. BOLTDOWN FLUSH MOUNT COVER DETAIL



#### SEALED PLASTIC BAG PLACED INSIDE VAULT TO CONTAIN

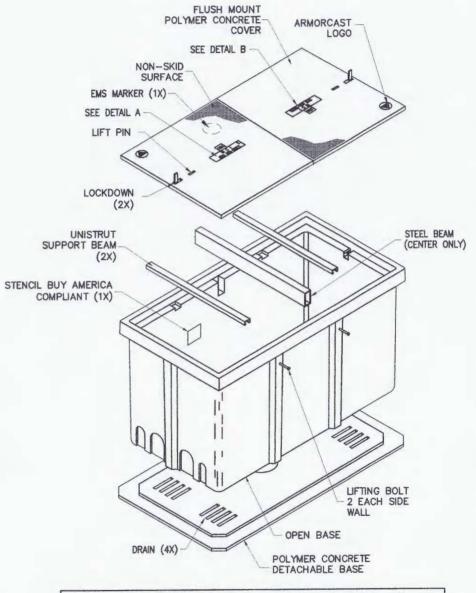
ITEM QTY

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

SHRINK WRAP COVERS TO FRAME FOR PACKAGING.

### DETAIL "C"

EXPLODED ISOMETRIC DETAIL



# **30K STANDARD HANDHOLE**

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

veriz	<b>On</b> business
PROJECT:	1706ANBB.022
SUGA	R LAND, TX

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	MCImetro ACCESS TRANSMISSION SERVICES			>	_
	5		OUTSIDE PLANT CONSTRUCTION	TITLE: FIBER OPTIC ROUTE	5
	R		C	TITLE: FIBER OPTIC ROUTE	=
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REP	RODUCE	D. COF	PIED, OR	USED FO	RAN
PURF	OSE WITH	OUT SP	ECIFIC WRI	I TEN PERA	iiosi()
		5	CALE		

HORIZONTAL: 1"= N/A

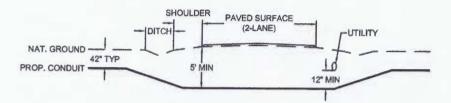
VERTICAL: 1"= N/A

SHEET 07 OF 15 FILE: ECC-FBRBLD01007AC.LIN

# TYPICAL CROSSING PROFILE DETAILS: UNDERGROUND

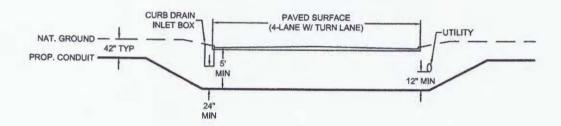
TYPICAL DETAIL "A"

TWO LANE - ASPHALT ROAD - NO CURB



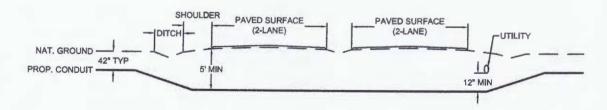
#### TYPICAL DETAIL "C"

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



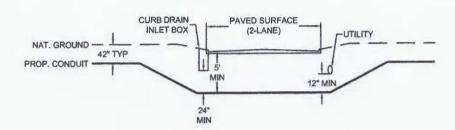
### TYPICAL DETAIL "E"

4 LANE - SPLIT ASPHALT ROAD - NO CURB



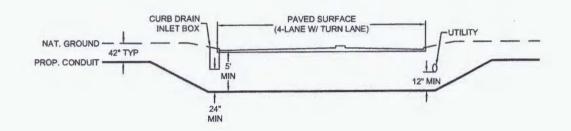
#### TYPICAL DETAIL "B"

TWO LANE - CURBED ROAD



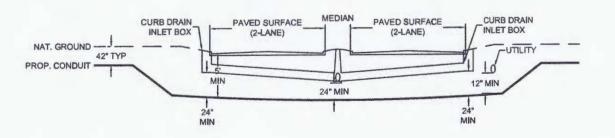
#### TYPICAL DETAIL "D

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



#### TYPICAL DETAIL "F"

4 LANE - SPLIT CURBED ROAD





PROJECT: 1706ANBB.022

SUGAR LAND, TX

ELLIS CREEK TO NEW TERRITORY

ACCESS TRANSMISSION SERVICES
CORPORATION
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC ROUTE
ELLIS CREEK TO NEW TERRITORY

DATE: 04/02/18
ENGINEER; L. STALCUP
DRAWN BY: G.F.S. (TJS)

REVISIONS

DATE DESCRIPTION BY

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

SCALE

HORIZONTAL: 1"= N/A

VERTICAL: 1"= N/A

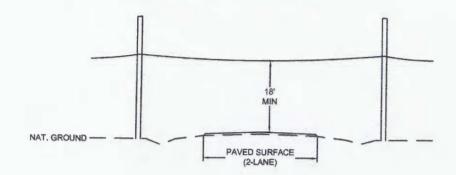
MP\_\_\_\_\_TO MP

SHEET \_\_7A\_\_\_OF \_\_15

FILE: ECC-FBRBLD01007BC.LIN

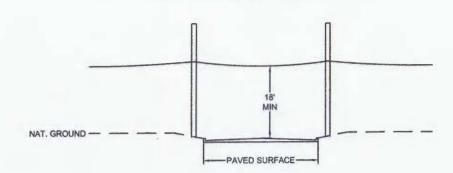
# TYPICAL CROSSING PROFILE DETAILS: AERIAL

TYPICAL DETAIL "A" TWO LANE - ASPHALT ROAD - NO CURB



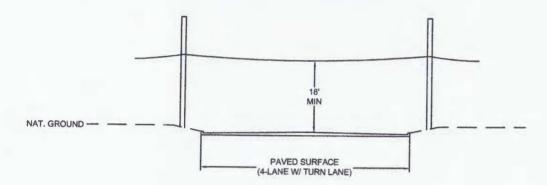
TYPICAL DETAIL "B"

TWO LANE - CURBED ROAD



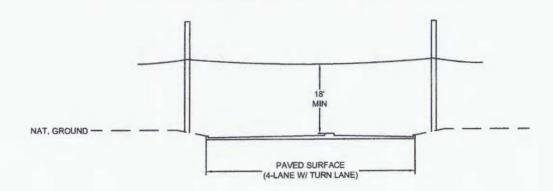
TYPICAL DETAIL "C"

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



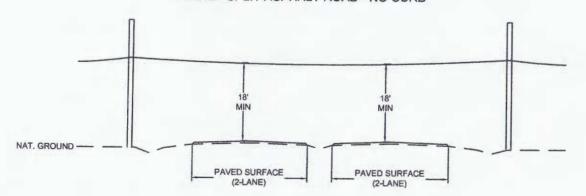
TYPICAL DETAIL "D

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



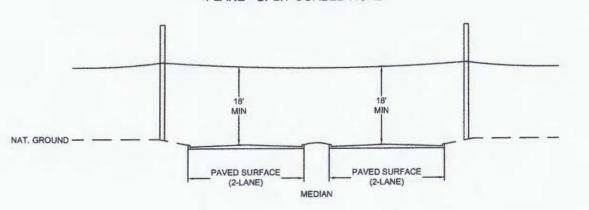
#### TYPICAL DETAIL "E"

4 LANE - SPLIT ASPHALT ROAD - NO CURB



TYPICAL DETAIL "F"

4 LANE - SPLIT CURBED ROAD





PROJECT: 1706ANBB.022

ELLIS CREEK TO NEW TERRITORY

SUGAR LAND, TX MCImetro ACCESS TRANSMISSION SERVICES CORPORATION TITLE: FIBER OPTIC ROUTE ELLIS CREEK TO NEW TERRITORY SUGAR LAND TX OUTSIDE PLANT CONSTRUCTION

DATE: 04/02/18

ENGINEER: L. STALCUP

DRAWN BY: G.F.S. (TJS)

REVISIONS

SCALE

HORIZONTAL: 1"= N/A

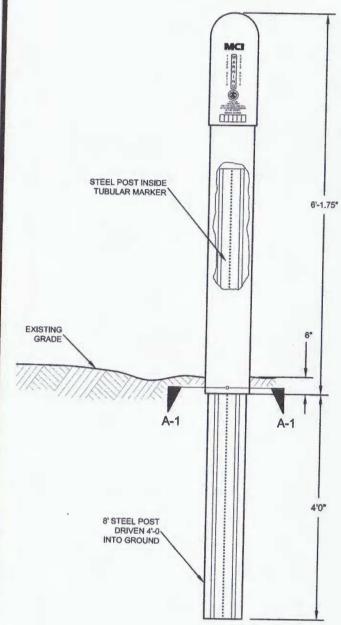
VERTICAL: 1"= N/A

SHEET 7B OF 15

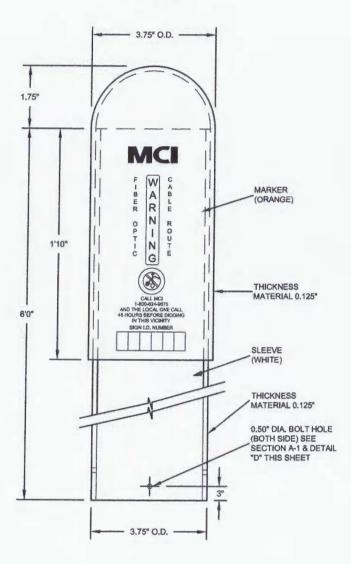
FILE: ECC-FBRBLD01007CC.LIN

# **TUBULAR MARKER DETAILS**

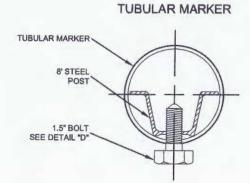
# DETAIL "A" INSTALLATION VIEW



### **DETAIL "B"** FRONT VIEW

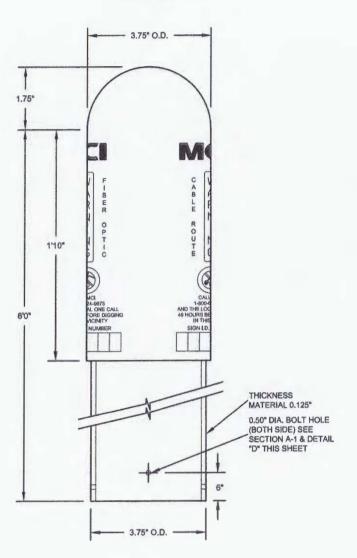


# **SECTION A-1**



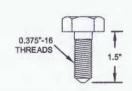
# DETAIL "C"

SIDE VIEW



#### DETAIL "D"

1.5" BOLT



04/02/1

ENGINEER: L. STALCUP DRAWN BY: G.F.S. (TJD)

REVISIONS

DESCRIPTION

RODUCED, COPIED, OR USED FOR A

SCALE

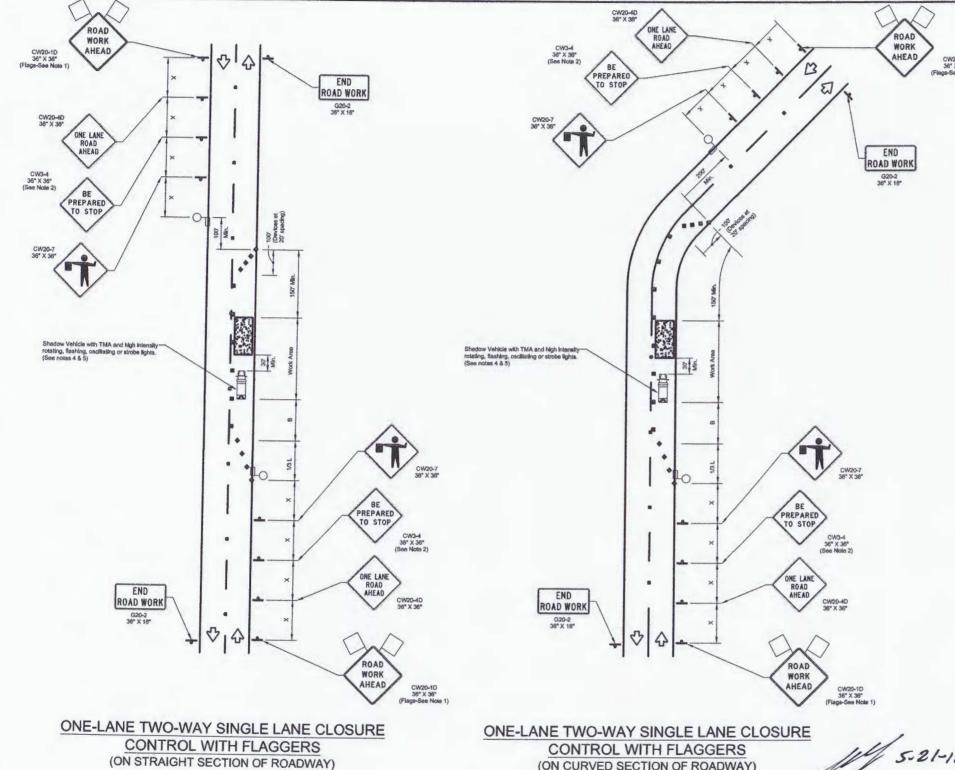
HORIZONTAL: 1"= N/A

VERTICAL: 1"= N/A TO MP

SHEET 8 OF 15

FILE: ECC-FBRBLD01008 AC.LIN

# TRAFFIC CONTROL PLAN DETAILS



CONTROL WITH FLAGGERS (ON CURVED SECTION OF ROADWAY)

> TEO, LLC 5510 Community DRIVE Houston, Texas 77005 281-536-5123 OFFICE 51526



#### TRAFFIC CONTROL PLAN SECTION SHALL BE COMPLETED BY ENGINEER

ROADWAY	POSTED SPEED	TAPER LENGTH	CHANN	ACING NELIZING VICES	SIGN SPACING	BUFFER
			TAPER	TANGENT	ST AGENCE	
WILLIAMS LANDING DR.	30	180'	30,	60'	120'	80,
SARTARTIA RD.	30	180'	30'	60'	120'	80,

	LE	GEND	
27772	Type 3 Barricade		Channelizing Devices
中	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
-	Sign	3	Traffic Flow
a	Flag	100	Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths "L"		Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Specing	Suggested Longitudinal Buffer Space	
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent	Distance	,B,
	2	150°	165'			200		
35	L= WS <sup>2</sup>	205'	225	245	35"	70"	160'	120'
40		265	295'	3201	40'	80'	240'	155'
45	L≈WS	450'	495	540	45'	90,	320'	195'
50		500'	550°	600	50"	100'	400'	240'
55		550'	605'	660,	55'	110	500	295'
60	Laws	900'	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

N.T.S.

- Flags ettached to signs where shown are OPTKONAL.
   All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol are
- 1. Praiga statisched or signife where in REQUIRED, except those denoted with the triangle symbol are OPTICNAL.

  2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol are OPTICNAL.

  3. Inacctive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.

  4. 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. It workers are no longer present but road or work conditions require the traffic control to remain in place. Type 3 Berifacates 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 order to protect wider work spaces.

  6. 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.

  7. No lanes shall be blocked from Tam to Sam and 4 pm to 6:30pm Monday thru Priday.

  8. If longled 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.

1706ANBB.026 ELLIS CREEK TO NEW TERRITORY

ERVIN CABLE CONSTRUCTION

TRAFFIC CONTROL PLAN (RIGHT LANE CLOSURE

verize	<b>On</b> business	
PROJECT:	1706ANBB.022	

SUGAR LAND, TX ELLIS CREEK TO NEW TERRITORY

MCImetro
CESS TRANSMISSION SERVICES
CORPORATION TITLE: FIBER OPTIC ROUTE ELLIS CREEK TO NEW TERRITORY SUGAR LAND, TX OUTSIDE PLANT CONSTRUCTION DATE: 04/02/18 ENGINEER: L. STALCUP

DESCRIPTION

DRAWN BY: G.F.S. (CR) **REVISIONS** 

SCALE HORIZONTAL: 1"= N/A VERTICAL: 1"= N/A

HCED STANDARD

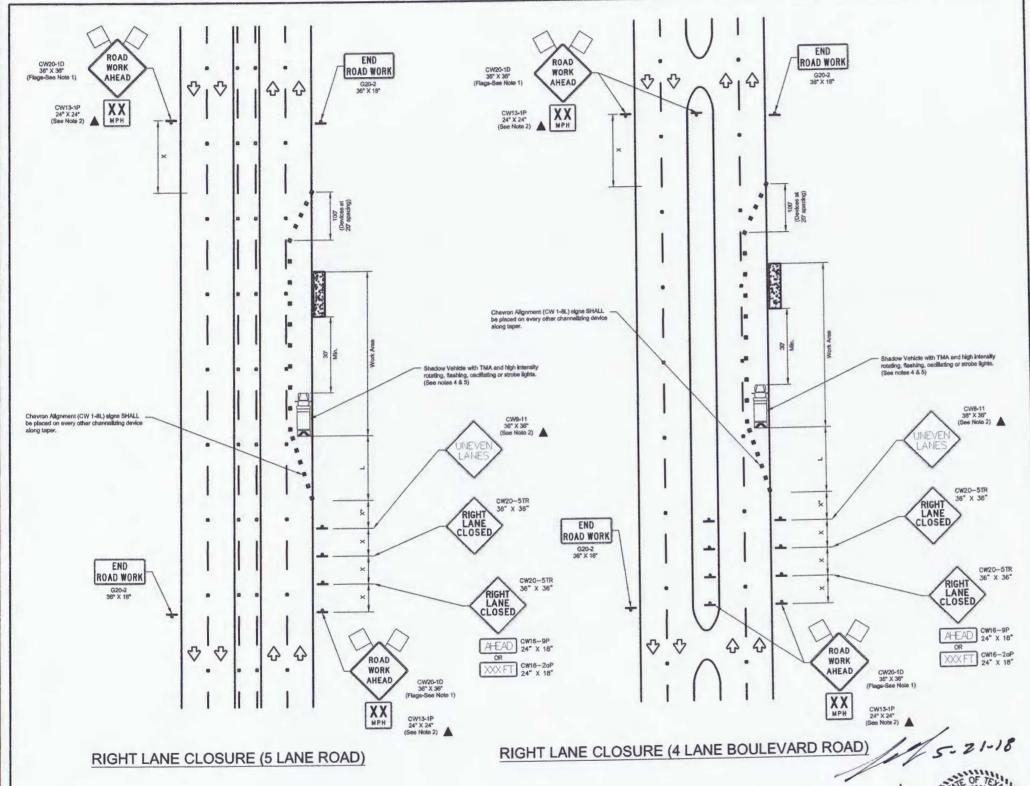
39

SHEET NO:

8A / 16

SHEET 8A OF 15 FILE: ECC-FBRBLD01008AC.LIN

# TRAFFIC CONTROL PLAN DETAILS



TRAFFIC CONTROL PLAN SECTION SHALL BE COMPLETED

ROADWAY SANDHILL DR.	POSTED	TAPER	CHANN	CING ELIZING SIGN SPACING		BUFFER
	SPEED	LENGIN	TAPER	TANGENT		
	30	180'	30"	60' 120	120°	90"
		DADWAY SPEED	DADWAY SPEED LENGTH	DADWAY SPEED LENGTH DEN TAPER	DADWAY SPEED LENGTH DEVICES TAPER TANGENT	DADWAY SPEED LENGTH DEVICES SPACING TAPER TANGENT  1207

	LE	GEND	
7//28	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
-	Sign	3	Traffic Flow
0	Flag	ILO	Flagger

Posted Speed	Formula	Minimum Desirable Taper Langths "L"		Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing	Suggested Longitudinal Buffer Space	
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent	Distance	.8.
30	2	150"	165	180	30"	60°	120'	90,
35	L= WS <sup>2</sup>	205	225	245	35	70'	160'	120'
40		265'	295'	320'	40'	80'	240"	155'
45		450'	495'	540	45'	90,	320	195'
50		500'	550'	600	50°	100'	400'	240'
55	-	550'	605'	660'	55'	110'	500'	295'
60	L=WS	600	660'	720'	60'	120'	600"	350'
65		650'	715	780	65	130	700'	410
		700	770	840'	70	140	800'	475
70		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)

TEO, LLC

77005 281-538-5123 OFFICE

713-668-6334 FAX teolic@gmail.com FIRM # F-8978

- GENERAL NOTES

  1. Flags attached to signs where shown are OPTIONAL.

  2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol are OPTIONAL.

  3. Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.

  4. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of error exposure without advancely effecting the parformance or quality of the work, if workers are no longer present but road or work conditions require the traffic control to memain in place, Type 3 Berricades 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 order to protect vider work spaces.

  6. Contractor shall provide and install straffic control devices in conformance with part Vi of Texas Manual on Uniform Traffic Control Devices (TMUTCD Latest edition with revisions) during construction.

  7. No Is are shall be blocked from 7 am to 9 am and 4pm to 6:30pm Monday that Friday.

  8. Off duty police offices/linggers are required to direct traffic when applicable.

  9. If project is within 400 feet from a signalized intersection, the Contractor shall contact Harris County Engineering Department, Traffic Signal Maintenence at (713) 881-3210 five (5) days prior to the start of construction.

PRODECT TITE	1706ANBB.026 ELLIS CREEK TO NEW T	EKKITOK
DRAWN BY: GFS	ERVIN CABLE CONSTRUCTION	HCED STANDARD
CK'D BY: GFS	SHEET DESCRIPTION: TRAFFIC CONTROL PLAN (RIGHT LANE CLOSURE)	41
SCALE: N.T.S.		SHEET NO:
	APPROVED BY:	8B / 16



PROJECT: 1706ANBB.022 SUGAR LAND, TX ELLIS CREEK TO NEW TERRITORY

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MCImetro ACCESS TRANSMISSION SERVICES CORPORATION				
9	OUTSIDE PLANT CONSTRUCTION		ELLIS CREEK TO NEW TERRITORY	
N.	Ĕ	TITLE: FIBER OPTIC ROUTE	E	
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NGINEER: L	. STAI	CUP		
PRAWN BY:	G.F.S	5.	(CR	)
REVI	SION	5		

No. DATE DESCRIPTION

SCALE								
IORIZONTAL:	1"=	N/A						
	4 9	B1//						

VERTICAL: TO MP SHEET 8B OF

FILE: ECC-FBRBLD01008AC.LIN

# TXDOT TRAFFIC CONTROL PLAN DETAILS

ROAD

WORK

AHEAD

CW20-1D 48" X 48"

LEFT SHOULDER CLOSED

CW21-50L 48" X 48"

Firm# F8978

E. GALVAN, JR.

DISCLAIMER:
The use of this standord is governed by the "Texas Engineering Practice Act". No is which is about the use of this standord by Labora shortscever. Tablo assumes no responsibility for of this standord to other formats or for incorrect results or domages resulting from it.

4,4

RIGHT

SHOULDER

CLOSED

CW21 -5aR

ROAD

AHEAD

CW20-10

Shadow Vehicle with TMA and high intesity, rotating, flashing, oscillating or strobe lights.

- Shadow Vehicle with TMA and high intesity, rotating, flashing, oscillating or strobe lights.

TCP (5-1a)

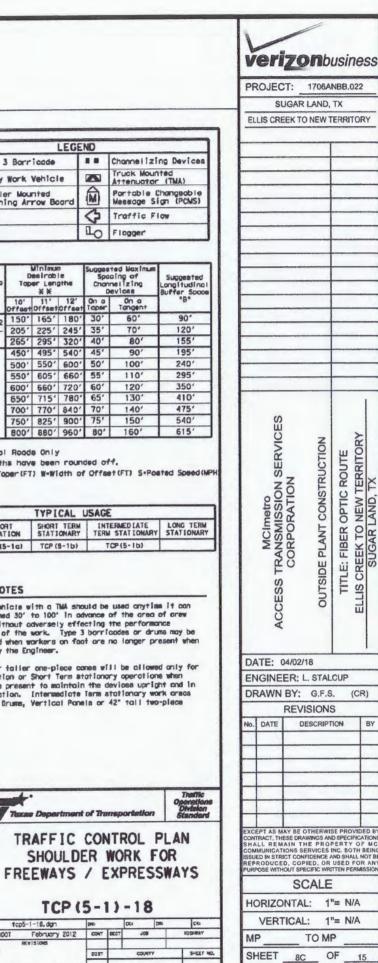
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5-21-18

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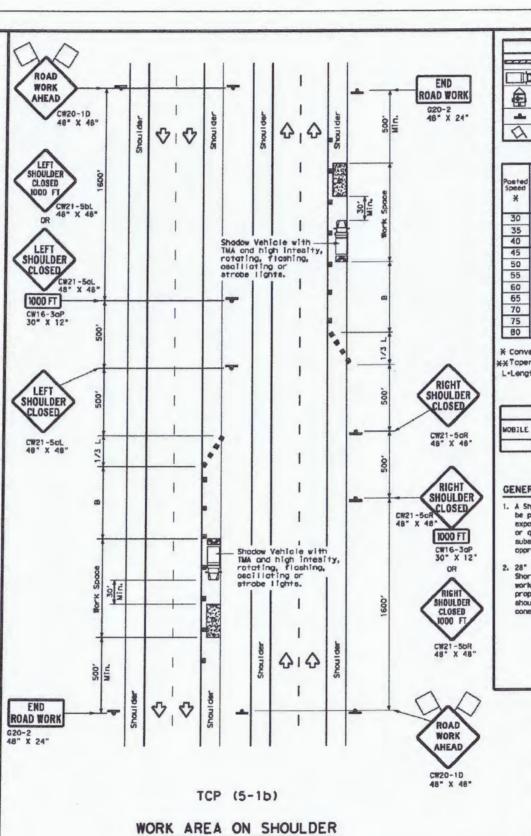
V

WORK AREA ON SHOULDER



OF

FILE: ECC-FBRBLD01008DC.LIN



LEGEND . Channellzing Devices Type 3 Borricode Truck Mounted Attenuator (TMA) r\_1 leavy Work Vehicle M Portable Changeable Message Sign (PCMS) Trailer Mounted Flashing Arrow Board 4 Traffic Flow Sign Flog LO Flogger

Posted Speed	Formule	Desirable			Suggested Waximum Spacing of Channelizing Devices		Suggested Longitudinal Buffer Spoos
*		10' Offset	11' Offsat	12' Offset	On a Topar	On a Tangent	*B*
30	2	150"	165'	180'	30'	60'	90'
35	L= W5	205"	225'	245'	35'	70'	120'
40		265'	295*	320'	40'	80'	155'
45		450'	495*	540'	45'	90'	195'
50		500'	550"	600'	50'	100'	240'
55	L=WS	550'	605	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650"	715"	780"	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75	1	750'	825"	900'	75'	150'	540'
BO		800'	880'	960'	80'	160'	615'

\* Conventional Roads Only

\*XToper lengths have been rounded off.

L-Length of Toper (FT) W-Width of Offset (FT) S-Posted Speed (M

TYPICAL USAGE							
MOBILE	SHORT	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY			
	TCP(5-1a)	TCP (5-1b)	TCP (5-1b)				

#### GENERAL NOTES

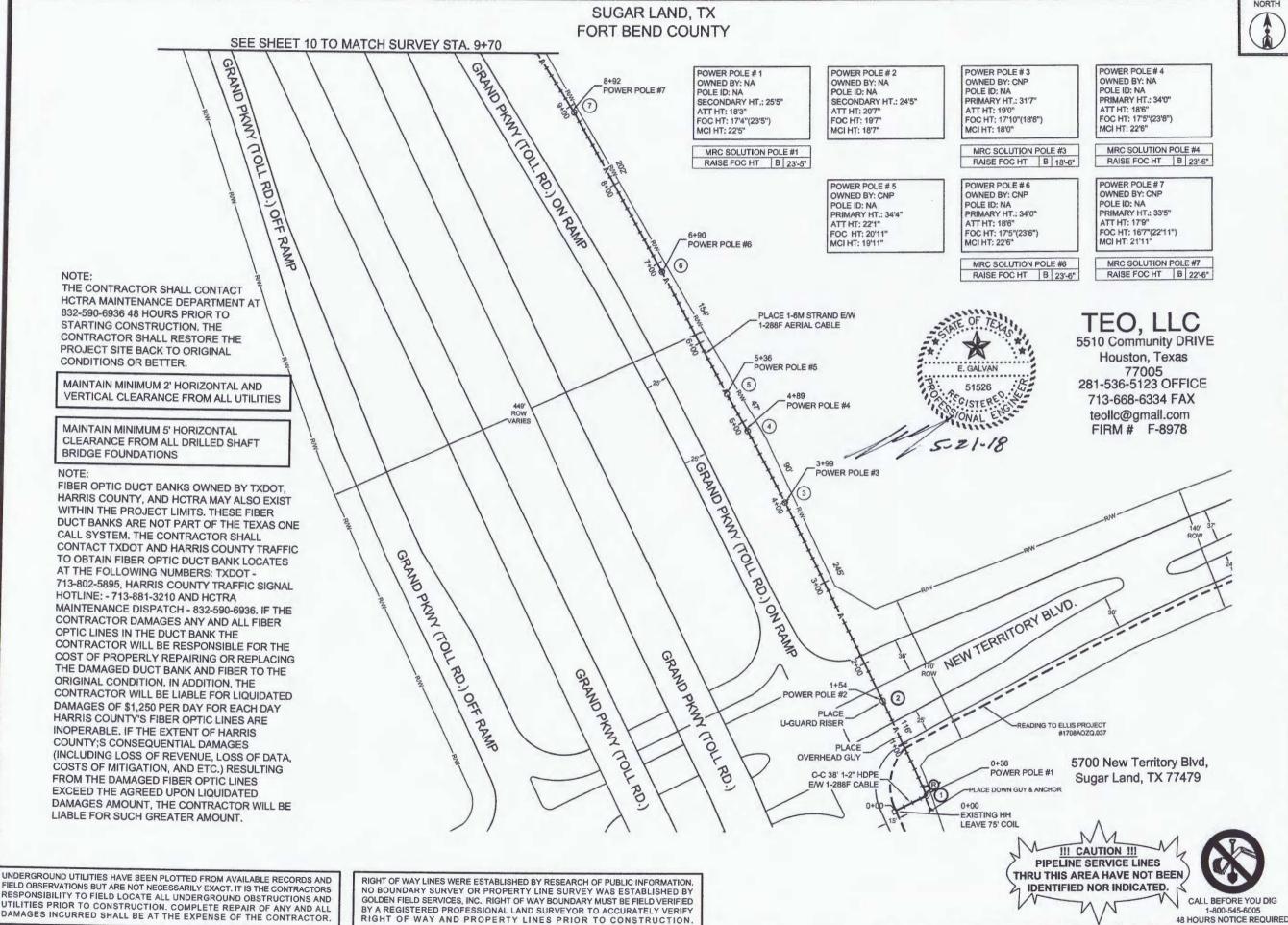
- A Shadow Vehicle with a TMA should be used anytime it can be positioned 30' to 100' in advance of the area of orew exposure without adversely effecting the performance or quality of the work. Type 3 bornloades or drums may be substituted when workers on foot are no larger present when
- 28" tall or taller one-piece cones will be allowed only for Short Durotion or Short Term stationary operations when workers are present to maintain the devices upright and in proper location. Intermediate Isrm stationary work areas should use Drums, Vertical Panels or 42" tall two-place

**Texas Department of Transportation** 

February 2012 CONT

FILE: tcp5-1-18.dgm

TCP (5-1)-18



verizonbusiness

PROJECT: 1706ANBB.022 SUGAR LAND, TX

ELLIS CREEK TO NEW TERRITORY

CLARIFICATION NO QUANTITY PROP. 1-2" HDPE 38' PULL 1-288F CABLE 138 PLACE 8M STRAND 934' LASH 1-96F CABLE 932' DOWN GUY & ANCHOR RISER: 2" U GUARD OVERHEAD GUY

> MCImetro TRANSMISSION SERVICES CORPORATION CONSTRUCTION ROUTE OPTIC **OUTSIDE PLANT** FIBER TITLE:

DATE: 04/02/18 ENGINEER: L. STALCUP

ACCESS

DRAWN BY: G.F.S. (TJD)

REVISIONS DESCRIPTION

REPRODUCED, COPIED, OR USED FOR AN PURPOSE WITHOUT SPECIFIC WRITTEN PERMISSIO

SCALE HORIZONTAL: 1"= 100"

VERTICAL:

1"= N/A TO MP

SHEET 09 OF 15 FILE: ECC-FBRBLD01009 AC.LIN

SUGAR LAND, TX FORT BEND COUNTY SEE SHEET 11 TO MATCH SURVEY STA. 20+40 19+95 BY PASS POWER POLE # 10 POWER POLE #8 POWER POLE#9 OWNED BY: CNP OWNED BY: CNP OWNED BY: CNP POLE ID: NA POLE ID: NA POLE ID: NA NETURAL HT.: 27'9" SECONDARY HT.: SECONDARY HT: ATT HT: 19'3" 20'1" ATT HT: 16'10" 23'0" ATT HT: 22'0' FOC HT: 18'5" FOC HT: 15'8"(19'0") FOC HT: 21'0" MCI HT: 18'0" MCI HT: 18'0" MCI HT: 20'0' BY PASS MRC SOLUTION POLE #10 RAISE FOC HT B 19'-0" BP 341' ROW GRAND PKINY (TOLL F BY PASS NOTE: FIBER OPTIC DUCT BANKS OWNED BY GRAND PKNY (TOLL RD.) TEO, LLC 5510 Community DRIVE TXDOT, HARRIS COUNTY, AND HCTRA C-C 900' 1-2" HDPE MAY ALSO EXIST WITHIN THE PROJECT EW 1-288F CABLE LIMITS, THESE FIBER DUCT BANKS ARE NOT PART OF THE TEXAS ONE CALL Houston, Texas SYSTEM. THE CONTRACTOR SHALL 77005 CONTACT TXDOT AND HARRIS COUNTY 281-536-5123 OFFICE 51526 TRAFFIC TO OBTAIN FIBER OPTIC DUCT PLACE DOWN GUY & ANCHOR 713-668-6334 FAX BANK LOCATES AT THE FOLLOWING B NUMBERS: TXDOT - 713-802-5895, teollc@gmail.com 12+97 HARRIS COUNTY TRAFFIC SIGNAL -PLACE HH & MKR FIRM # F-8978 LEAVE 100' COIL HOTLINE: - 713-881-3210 AND HCTRA MAINTENANCE DISPATCH --C-C 10' 1-2" HDPE E/W 288F CABLE 832-590-6936. IF THE CONTRACTOR 12+87 DAMAGES ANY AND ALL FIBER OPTIC POWER POLE #10 LINES IN THE DUCT BANK THE ATTACH RISER CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF PROPERLY REPAIRING OR REPLACING THE DAMAGED DUCT BANK AND FIBER TO 5801 New Territory Blvd, POWER POLE #9 THE ORIGINAL CONDITION, IN Sugar Land, TX 77479 ADDITION, THE CONTRACTOR WILL BE LIABLE FOR LIQUIDATED DAMAGES OF \$1,250 PER DAY FOR EACH DAY HARRIS PLACE 1-6M STRAND E/W COUNTY'S FIBER OPTIC LINES ARE 1-288F AERIAL CABLE INOPERABLE. IF THE EXTENT OF HARRIS COUNTY;S CONSEQUENTIAL 10+85 POWER POLE #8 DAMAGES (INCLUDING LOSS OF REVENUE, LOSS OF DATA, COSTS OF MAINTAIN MINIMUM 2' HORIZONTAL AND VERTICAL CLEARANCE FROM ALL UTILITIES MITIGATION, AND ETC.) RESULTING FROM THE DAMAGED FIBER OPTIC LINES EXCEED THE AGREED UPON MAINTAIN MINIMUM 5' HORIZONTAL LIQUIDATED DAMAGES AMOUNT, THE CLEARANCE FROM ALL DRILLED SHAFT CONTRACTOR WILL BE LIABLE FOR **BRIDGE FOUNDATIONS** SUCH GREATER AMOUNT. SEE SHEET 9 TO MATCH SURVEY STA. 9+70 III CAUTION III PIPELINE SERVICE LINES

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS AND FIELD OBSERVATIONS BUT ARE NOT NECESSARILY EXACT. IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD LOCATE ALL UNDERGROUND OBSTRUCTIONS AND UTILITIES PRIOR TO CONSTRUCTION. COMPLETE REPAIR OF ANY AND ALL DAMAGES INCURRED SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

RIGHT OF WAY LINES WERE ESTABLISHED BY RESEARCH OF PUBLIC INFORMATION, NO BOUNDARY SURVEY OR PROPERTY LINE SURVEY WAS ESTABLISHED BY GOLDEN FIELD SERVICES, INC.. RIGHT OF WAY BOUNDARY MUST BE FIELD VERIFIED BY A REGISTERED PROFESSIONAL LAND SURVEYOR TO ACCURATELY VERIFY RIGHT OF WAY AND PROPERTY LINES PRIOR TO CONSTRUCTION.





PROJECT: 1706ANBB.022 SUGAR LAND, TX ELLIS CREEK TO NEW TERRITORY CLARIFICATION NO. QUANTITY PLACE HANDHOLE PROP. 1-2" HDPE 753' 878" PULL 1-288F CABLE 317' PLACE 6M STRAND LASH 1-288F CABLE DOWN GUY & ANCHOR RISER: 2" U GUARD PLACE MARKER EFIBER OPTIC ROUTE SEEK TO NEW TERRITORY SUGAR LAND, TX CONSTRUCTION MCImetro TRANSMISSION SI CORPORATION OUTSIDE PLANT TITLE: ACCESS DATE: 04/02/18 ENGINEER: L. STALCUP DRAWN BY: G.F.S. (TJD) REVISIONS DESCRIPTION No. DATE

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

SCALE

HORIZONTAL: 1"= 100'

VERTICAL: 1"= N/A

MP\_\_\_\_\_TO MP

SHEET \_\_10\_\_OF \_\_15

CALL BEFORE YOU DIG 1-800-545-6005

THRU THIS AREA HAVE NOT BEEN

IDENTIFIED NOR INDICATED.

48 HOURS NOTICE REQUIRED FILE: ECC-FBRBLD01010AC.LIN

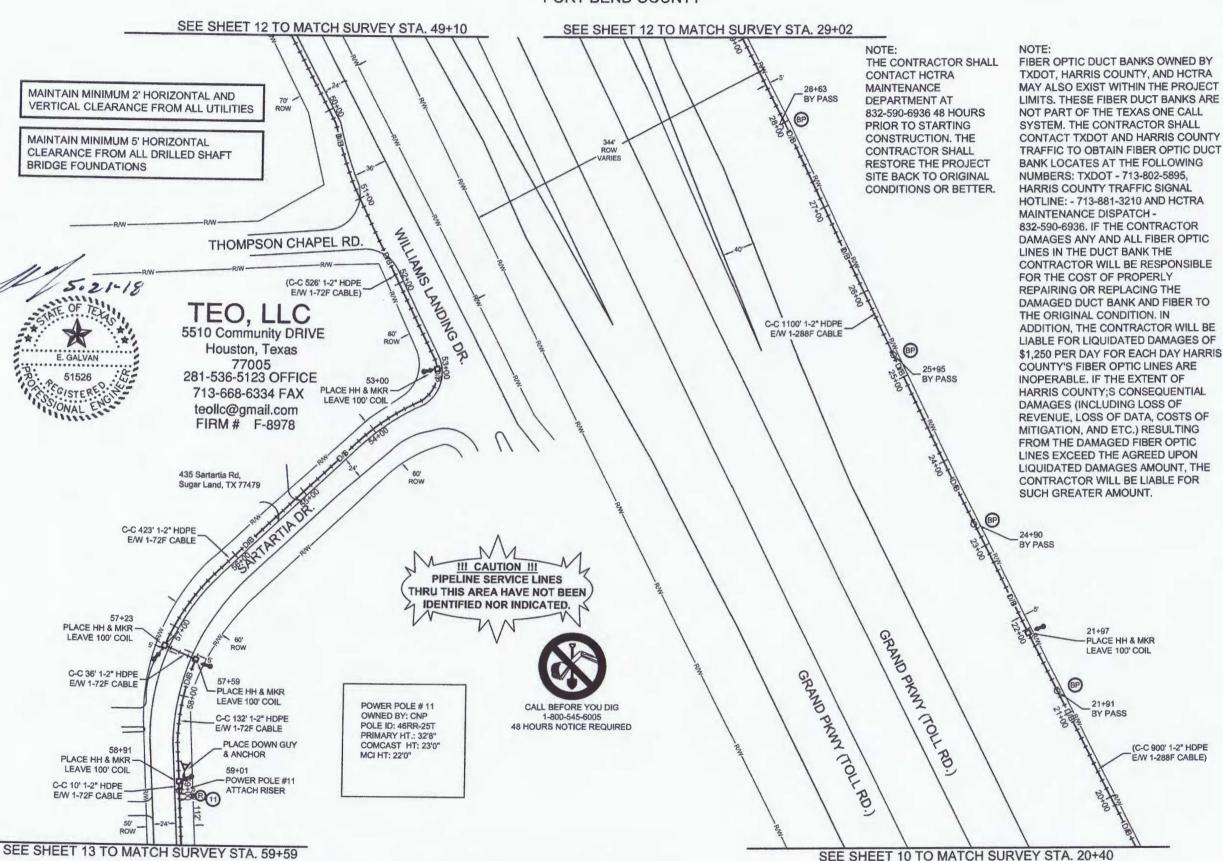
#### SUGAR LAND, TX FORT BEND COUNTY





PROJECT: 1706ANBB.022 SUGAR LAND, TX ELLIS CREEK TO NEW TERRITORY CLARIFICATION NO. QUANTITY PLACE HANDHOLE 4 PROP. 1-2" HDPE 18531 PULL 1-288F CABLE 962 PULL 1-72F CARLE 1316 PLACE 6M STRAND 59' LASH 1-72F CABLE 58' DOWN GUY & ANCHOR RISER: 2" U GUARD PLACE MARKER SERVICES CONSTRUCTION OPTIC ROUTE OUTSIDE PLANT FIBER ( TITLE: IS CRE ACCESS DATE: 04/02/18 ENGINEER: L. STALCUP DRAWN BY: G.F.S. (TJD) REVISIONS DESCRIPTION RODUCED, COPIED, OR USED FOR A OSE WITHOUT SPECIFIC WRITTEN PERMISSI SCALE HORIZONTAL: 1"= 100" VERTICAL: 1"= N/A TO MP SHEET 11 OF 15

FILE: ECC-FBRBLD01011 AC.LIN



RIGHT OF WAY LINES WERE ESTABLISHED BY RESEARCH OF PUBLIC INFORMATION.

NO BOUNDARY SURVEY OR PROPERTY LINE SURVEY WAS ESTABLISHED BY

GOLDEN FIELD SERVICES, INC., RIGHT OF WAY BOUNDARY MUST BE FIELD VERIFIED

BY A REGISTERED PROFESSIONAL LAND SURVEYOR TO ACCURATELY VERIFY

RIGHT OF WAY AND PROPERTY LINES PRIOR TO CONSTRUCTION.

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS AND

FIELD OBSERVATIONS BUT ARE NOT NECESSARILY EXACT, IT IS THE CONTRACTORS

RESPONSIBILITY TO FIELD LOCATE ALL UNDERGROUND OBSTRUCTIONS AND

UTILITIES PRIOR TO CONSTRUCTION. COMPLETE REPAIR OF ANY AND ALL

DAMAGES INCURRED SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

#### SUGAR LAND, TX FORT BEND COUNTY





PROJECT: 1706ANBB.022 SUGAR LAND, TX ELLIS CREEK TO NEW TERRITORY CLARIFICATION NO. QUANTITY PLACE HANDHOLE PROP. 1-2" HDPE 2008 1037 PULL 1-288F CABLE PULL 1-72F CABLE 1421 PLACE MARKER TITLE: FIBER OPTIC ROUTE
ELLIS CREEK TO NEW TERRITORY
SUGAR LAND, TX CONSTRUCTION MCImetro ACCESS TRANSMISSION ( CORPORATION **OUTSIDE PLANT** DATE: 04/02/18 ENGINEER: L. STALCUP DRAWN BY: G.F.S. (TJD) REVISIONS No. DATE DESCRIPTION SCALE HORIZONTAL: 1"= 100"

FIBER OPTIC DUCT BANKS OWNED BY TXDOT, HARRIS COUNTY, AND HCTRA MAY ALSO EXIST WITHIN THE PROJECT LIMITS. THESE FIBER DUCT BANKS ARE NOT PART OF THE TEXAS ONE CALL SYSTEM, THE CONTRACTOR SHALL CONTACT TXDOT AND HARRIS COUNTY TRAFFIC TO OBTAIN FIBER OPTIC DUCT BANK LOCATES AT THE FOLLOWING NUMBERS: TXDOT - 713-802-5895, HARRIS COUNTY TRAFFIC SIGNAL HOTLINE: - 713-881-3210 AND HCTRA MAINTENANCE DISPATCH - 832-590-6936, IF THE CONTRACTOR DAMAGES ANY AND ALL FIBER OPTIC LINES IN THE DUCT BANK THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF PROPERLY REPAIRING OR REPLACING THE DAMAGED DUCT BANK AND FIBER TO THE ORIGINAL CONDITION. IN ADDITION, THE CONTRACTOR WILL BE LIABLE FOR LIQUIDATED DAMAGES OF \$1,250 PER DAY FOR EACH DAY HARRIS COUNTY'S FIBER OPTIC LINES ARE INOPERABLE, IF THE EXTENT OF HARRIS COUNTY;S CONSEQUENTIAL DAMAGES (INCLUDING LOSS OF REVENUE, LOSS OF DATA, COSTS OF MITIGATION, AND ETC.) RESULTING FROM THE DAMAGED FIBER OPTIC LINES EXCEED THE AGREED UPON LIQUIDATED DAMAGES AMOUNT, THE CONTRACTOR WILL BE LIABLE FOR SUCH GREATER AMOUNT. III CAUTION III PIPELINE SERVICE LINES THRU THIS AREA HAVE NOT BEEN IDENTIFIED NOR INDICATED. CALL BEFORE YOU DIG 1-800-545-6005 **48 HOURS NOTICE REQUIRED** 

SHALL REMAIN THE PROPERTY OF M

VERTICAL: 1"= N/A TO MP SHEET 12 OF

FILE: ECC-FBRBLD01012AC.LIN

SANDHILL PLACE HH & MKR LEAVE 75' COIL FOR 288F CABLE LEAVE 75' COIL FOR 72F CABLE C-C 483' 1-2" HDPE EW 1-72F CABLE SANDHILL DR. GRAND C-C 467' 1-2" HDPE PANA GRAND TOLL RD. OFF RAMP BY PASS (TOUL AD. 42+47 ROW WILLIAMS PLACE HH & MKR LEAVE 100' COIL ONBAMP BY PASS NOTE: THE CONTRACTOR SHALL CONTACT HCTRA PLACE HH & MKR OR MAINTENANCE DEPARTMENT AT LEAVE 100' COIL 832-590-6936 48 HOURS PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL RESTORE THE PROJECT SITE BACK TO ORIGINAL CONDITIONS OR BETTER. GRAND PKNY (TOLL F BY PASS C-C 527' 1-2" HDPE E/W 1-72F CABLE MAINTAIN MINIMUM 2' HORIZONTAL AND VERTICAL CLEARANCE FROM ALL UTILITIES NO ADDRESS AVAILBLE GRAND MAINTAIN MINIMUM 5' HORIZONTAL GRAND PRONY (TOLL AD.) CLEARANCE FROM ALL DRILLED SHAFT (C-C 1100' 1-2" HDPE **BRIDGE FOUNDATIONS** RD.) OFF DPKWY (TOLL RD.) OW RAMP EW 1-288F CABLE) GRAND PKMY (TOLL RD.) 47+74 PLACE HH & MKR 5510 Community DRIVE LEAVE 100' COIL Houston, Texas 77005 ................... 281-536-5123 OFFICE 51526 C-C 526' 1-2" HDPE 713-668-6334 FAX EW 1-72F CABLE teollc@gmail.com FIRM # F-8978 SEE SHEET 11 TO MATCH SURVEY STA. 49+10 SEE SHEET 11 TO MATCH SURVEY STA. 29+02

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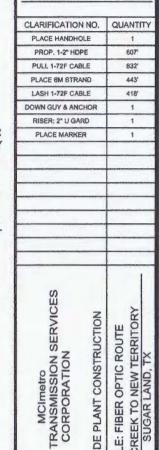
RIGHT OF WAY LINES WERE ESTABLISHED BY RESEARCH OF PUBLIC INFORMATION. NO BOUNDARY SURVEY OR PROPERTY LINE SURVEY WAS ESTABLISHED BY GOLDEN FIELD SERVICES, INC., RIGHT OF WAY BOUNDARY MUST BE FIELD VERIFIED BY A REGISTERED PROFESSIONAL LAND SURVEYOR TO ACCURATELY VERIFY RIGHT OF WAY AND PROPERTY LINES PRIOR TO CONSTRUCTION.





PROJECT: 1706ANBB.022 SUGAR LAND, TX

ELLIS CREEK TO NEW TERRITORY



ACCESS

DATE: 04/02/18 ENGINEER: L. STALCUP

DRAWN BY: G.F.S. (TJD) REVISIONS

DESCRIPTION

PLANT

OUTSIDE

CONTRACT, THESE DRAWINGS AND SPECIFICATION SHALL REMAIN THE PROPERTY OF MIC COMMUNICATIONS SERVICES INC. BOTH BEIN ISSUED IN STRICT CONFIDENCE AND SHALL NOT REPRODUCED, COPIED, OR USED FOR A PURPOSE WITHOUT SPECIFIC WRITTEN PERMISSION

SCALE

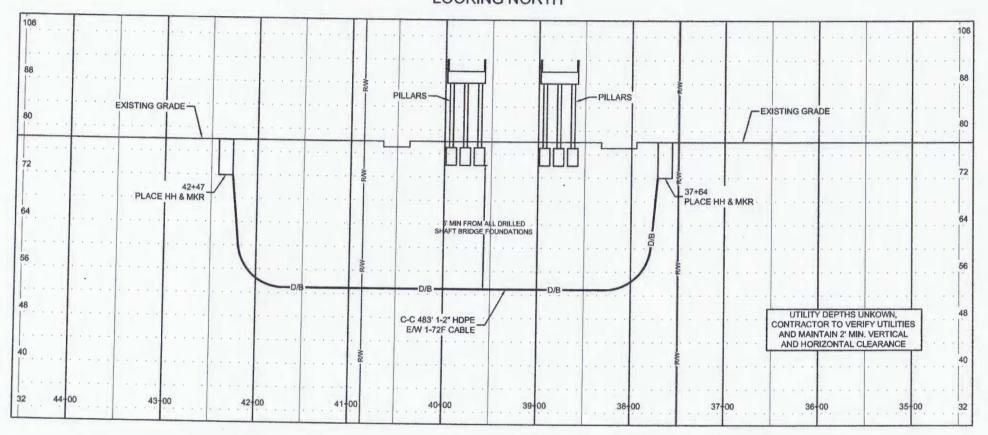
HORIZONTAL: 1"= 100"

VERTICAL: 1"= N/A TO MP

SHEET 12A OF

FILE: ECC-FBRBLD01009BC.LIN **48 HOURS NOTICE REQUIRED** 

### US 99 (GRAND PARKWAY TOLL ROAD) LOOKING NORTH



NOTE:

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NOTE:

THE CONTRACTOR SHALL CONTACT HCTRA MAINTENANCE DEPARTMENT AT 832-590-6936 48 HOURS PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL RESTORE THE PROJECT SITE BACK TO ORIGINAL CONDITIONS OR BETTER.

MAINTAIN MINIMUM 2' HORIZONTAL AND VERTICAL CLEARANCE FROM ALL UTILITIES

MAINTAIN MINIMUM 5' HORIZONTAL CLEARANCE FROM ALL DRILLED SHAFT **BRIDGE FOUNDATIONS** 



TEO, LLC 5510 Community DRIVE Houston, Texas 77005 281-536-5123 OFFICE 713-668-6334 FAX teollc@gmail.com FIRM # F-8978

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Construction notes: 48 Hour Notice: Contractor shall notify Harris County prior to commencing construction and/or backfilling any utilities. Contractor(s) to contact Public Review Department @ (713-274- 3931) or public.review@hcpid.org . Ensure minimum burial 4' from BOC



From:

Gary Gehbauer

To:

Velasquez, Courtney

Cc:

Lopez, Carmen; Phil Martin (philmartin@mikestoneassociates.com)

Subject:

RE: Permit 2018-20523 - Grand Parkway - SH 99

Date:

Friday, May 11, 2018 10:09:47 AM

Attachments:

2018-20523-Site Plan.pdf

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

#### Good morning Courtney,

Only comment I have is something that I had not noticed on our previous discussions/reviews with MCI prior to permit submittal—the sheets with the PE seals do not have a signature and date. I have contacted Keith Creekmore with Golden Field Services a few minutes ago to see if he could get those sheets signed. He said he would submit those. Once those sheets are received, we would have no objections.

**Thanks** Gary

Gary Gehbauer, PE **BGE** 10777 Westheimer, Suite 400 Houston, Texas 77042 (281)558-8700 voice (281)558-9706 fax ggehbauer@bgeinc.com

From: Velasquez, Courtney [mailto:Courtney.Velasquez@fortbendcountytx.gov]

Sent: Friday, May 11, 2018 9:25 AM

To: Gary Gehbauer < GGehbauer @bgeinc.com>

Cc: Lopez, Carmen < Carmen.Lopez@fortbendcountytx.gov>

Subject: Permit 2018-20523 - Grand Parkway - SH 99

Gary please take a look at this Permit request and advise, it is for:

MCI Metro to – "Aerial Fiber Optic cable installation along the East side of Grand Pkwy Toll Rd. (SH 99) from New Territory Blvd.North then start Buried Fiber Optic cable installation of 1-2" SDR-11 HDPE conduit to Sandhill Dr. then cross to the West side of Grand Pkw"

**Courtney Velasquez** Clerk III **Fort Bend County Engineering** 

301 Jackson St., Suite 401 | Richmond, TX 77469 Email: Courtney. Velasquez@fortbendcountytx.gov

Phone: 281-633-7516

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