



Metropolitan

Communications Group

A-2015-2475348

// fiber engineering // construction // splicing

April 3, 2015

PA Public Utility Commission
ATTN: Ms. Rosemary Chiavetta
Secretary
P.O. Box # 3265
Harrisburg, PA 17105-3265

RECEIVED

APR 06 2015

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Re: XO Communications – AARDOT 517721G East Lampeter Township, Lancaster County

Ms. Chiavetta,

Metropolitan Communications Group (MCG) has been retained by XO Communications to provide project management and engineering services for a proposed fiber build in East Lampeter Township, Lancaster County.

Enclosed is an application to the PUC for XO Communications to rearrange aerial cables crossing the Norfolk Southern Railroad on Greenfield Road at Crossing # 517721G.

If you have any questions or need additional information please do not hesitate to contact me at (610) 241-6788.

Sincerely,

Dave McEvoy
OSP Engineer
Metropolitan Communications Group
910 Camaro Run Drive
West Chester, PA 19380
(610) 696-6910
(610) 241-6788

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~~APR 06 2015~~

~~PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU~~



communications

**GREENFIELD ROAD POLE RELOCATION
LANCASTER, PA
LANCASTER COUNTY
DESIGN**

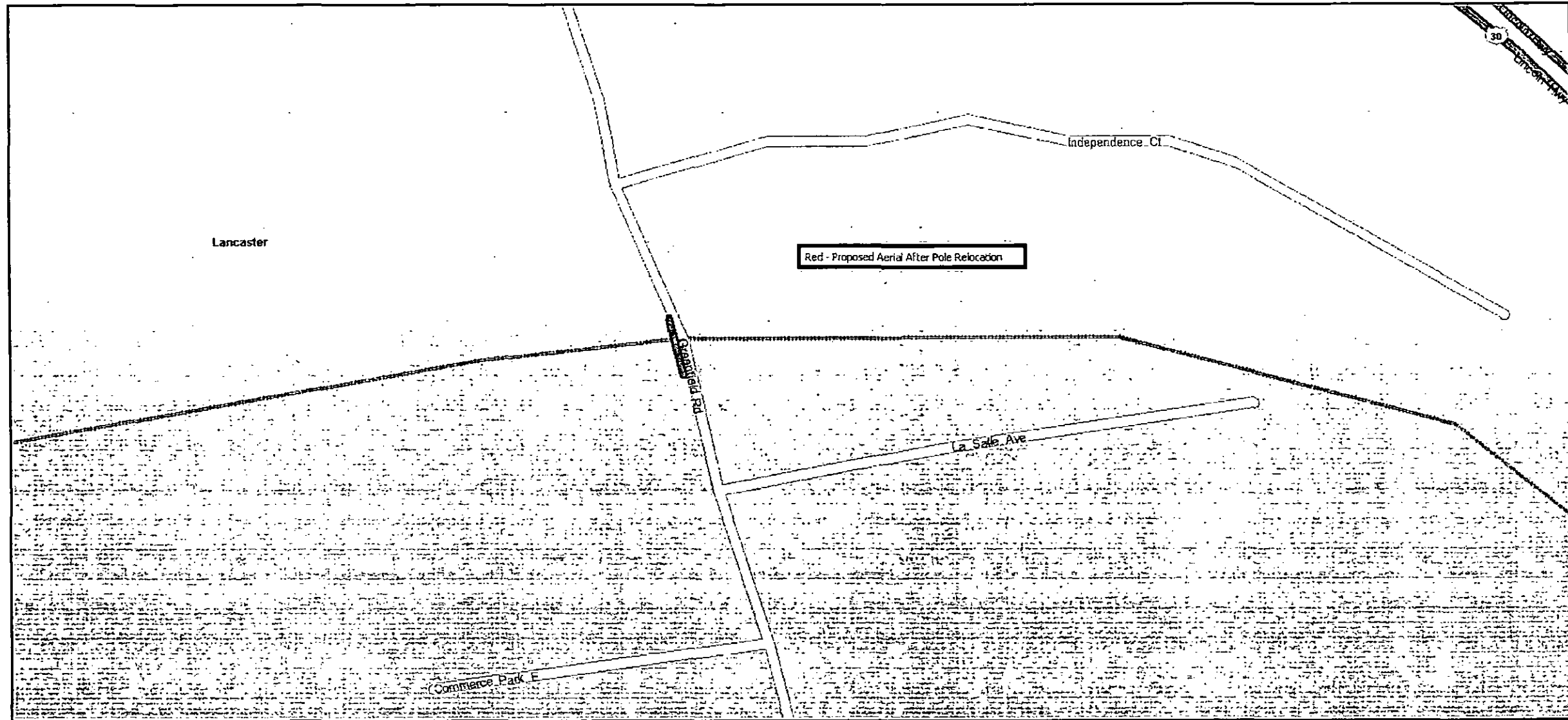
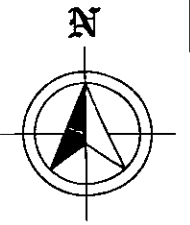
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APR 06 2015
PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

CUSTOMER APPROVAL

BY: _____
DATE: _____

PREPARED BY:
 **Metropolitan**
Communications Group
fiber engineering construction splicing

910 Camaro Run Drive, West Chester, PA 19380
Office: (610) 696-6910 • Fax: (610) 696-6937



CALL BEFORE YOU DIG
1-800-242-1776
72 HOURS NOTICE REQUIRED

REVISIONS		
DATE:	DESCRIPTIONS:	BY:



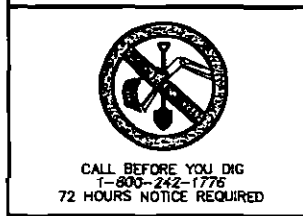
PROJECT MANAGER: SP
ENGINEERED BY: TV
DRAWN BY: DTL
PRELIMINARY DATE
03/18/15

TITLE: GREENFIELD ROAD POLE RELOCATION LOCATION MAP	
LANCASTER, PA	LANCASTER COUNTY
DRAWING NO: XO_Greenfield_Rd_Pole_Relo_Location_Map	
ISSUE DATE:	SHEET: 2 OF 9
SCALE: NONE	

CONTRACTOR SUPPLIED			
TASK CODE	WORK DESCRIPTION	EST.	ACT.
XXXX	XXX	XXXLF	
XXXX	XXX	XXXLF	

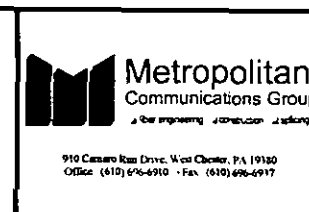
XO SUPPLIED			
MATERIAL DESCRIPTION	EST.	ACT.	
FIBER OPTIC CABLE	XXXLF		
FIBER OPTIC CABLE TAGS	X EA		

WORK PLAN INDEX			
DWG #	DESCRIPTION	ISSUE DATE	ASBUILT DATE
SHT 01	COVER SHEET		
SHT 02	LOCATION MAP		
SHT 03	WORK PLAN INDEX		
SHT 04	CONTACT SHEET		
SHT 05	CONSTRUCTION & GENERAL NOTES		
SHT 06	SYMBOLS KEY		
SHT 07	TYPICAL AERIAL POLE DETAILS		
SHT 08	PROPOSED FIBER ROUTE		
SHT 09	PROFILE VIEW		



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T-800-242-1776
72 HOURS NOTICE REQUIRED

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DATE:	DESCRIPTIONS:	BY:

Metropolitan
Communications Group
910 Cassaro Run Drive, West Chester, PA 19380
Office (610) 696-6910 • Fax (610) 696-6917

PROJECT MANAGER: SP
ENGINEERED BY: TV
DRAWN BY: DTL
PRELIMINARY DATE
03/18/15

TITLE:	GREENFIELD ROAD POLE RELOCATION WORK PLAN INDEX LANCASTER, PA LANCASTER COUNTY
DRAWING NO:	XO_Greenfield_Rd_Pole_Relo_TOC
ISSUE DATE:	SCALE: NONE SHEET: 3 OF 9

CONTACT SHEET

XO COMMUNICATIONS:

IMPLEMENTATION ENGINEER: SCOTT DREILING 1-610-842-4323

ENGINEERING CONTRACTOR:

NAME OF FIRM: METROPOLITAN COMMUNICATIONS GROUP 1-610-696-6910
 PROJECT MANAGER: SHAWN PERRIN 1-610-420-3211
 OSP ENGINEER: TED VAUGHAN 1-215-692-0919

CONSTRUCTION CONTRACTOR:

NAME OF FIRM: #-###-###-####
 PROJECT MANAGER: #-###-###-####

UTILITIES

ONE CALL SYSTEM (UTILITY LOCATES) 1-800-242-1776

CITY GOVERNMENT

NAME #-###-###-####



REVISIONS		
DATE:	DESCRIPTIONS:	BY:



PROJECT MANAGER: SP
ENGINEERED BY: TV
DRAWN BY: DTL
PRELIMINARY DATE
03/18/15

TITLE: GREENFIELD ROAD POLE RELOCATION CONTACT SHEET LANCASTER, PA LANCASTER COUNTY		
DRAWING NO: XO_Greenfield_Rd_Pole_Relo_Contact_Sheet	ISSUE DATE:	SCALE: NONE
SHEET: 4 OF 9		

CONSTRUCTION NOTES:

1. ATTACH AT TOP COMMUNICATIONS POSITION UNLESS SPECIFIED OTHERWISE ON THE PRINTS.
2. ALL AERIAL DOMESTIC STRAND WILL BE 6.6M EXCEPT AS DESIGNATED IN THE PRINTS.
3. ALL GUYING DOMESTIC STRAND WILL BE 6.6M OR AS SPECIFIED IN THE DRAWINGS.
4. STRAND WILL BE BONDED TO POWER GROUND AT EVERY AVAILABLE GROUND, IF NO GROUND PRESENT WITHIN 1000' PLACE NEW VERTICLE GROUND AND ROD
5. ALL ANCHORS WILL BE 6' LONG, DOUBLE-EYED, 10" SCREW TYPE.
6. NEW POLES WILL BE 30' CLASS 4 UNLESS OTHERWISE SPECIFIED.
7. ALL AERIAL CABLE WILL BE DOUBLE-LASHED USING TYPE 302 .045 STAINLESS LASHING WIRE.
8. CONTRACTOR IS RESPONSIBLE FOR SUPPLYING ALL MATERIALS WITH EXCEPTION OF FIBER OPTIC CABLE, WARNING TAGS, BURIED CABLE WARNING TAPE, AND OTHER MARKER POST SIGNS.
9. ALL CONDUIT WILL BE 4" ID SCHEDULE 40(i.e. PVC OR GIP), UNLESS SPECIFIED OTHERWISE.
10. ALL BURIED CONDUIT/CABLE WILL BE PLACED AT 36" MINIMUM COVER UNLESS SPECIFIED OTHERWISE ON THE CONSTRUCTION DRAWINGS.
11. ALL 90 DEGREE SWEEPS IN CONDUIT CONSTRUCTION WILL BE A MINIMUM 38.2" RADIUS UNLESS SPECIFIED OTHERWISE.
12. ALL CONDUIT MUST HAVE C-WIRE IN WITH INNERDUCT IN A CONTINUOUS PULL FROM START TO END OF CONDUIT, IF NOT ABLE A WATER TIGHT SPLICE CAN BE USED AT HANDHOLE/MANHOLE LOCATIONS
13. MAXIMUM PULLING TENSION ON CABLES IS 600 LBS.
14. PULLING EYE MUST BE USED, AND CORRECTLY ATTACHED TO CABLE VIA A 600 LB. BREAKAWAY SWIVEL.
15. MINIMUM BEND RADIUS FOR FIBER OPTIC CABLE IS EQUAL TO 20 TIMES THE DIAMETER OF THE CABLE.
16. APPROPRIATE DUCT PLUGS WILL BE USED TO SEAL THE CONDUIT AND INNERDUCT.
17. PLACE CABLE TAGS ON FIBER/INNERDUCT AT POLES, MANHOLES, ON BOTH SIDES OF ALL PENETRATIONS AND ON AERIAL CABLE AT POLE ATTACHMENTS, COILS AND SPLICE LOCATIONS.

GENERAL NOTES:

1. THE CONTRACTOR MUST CONTACT PA ONE-CALL AT 1-800-242-1776 FOR LOCATION OF EXISTING FACILITIES PRIOR TO START OF CONSTRUCTION.
2. THE MAJOR PORTION OF THE WORK COVERED UNDER THIS SPECIFICATION WILL BE PERFORMED ON PUBLIC RIGHT OF WAY.
THE SAFETY OF THE WORKERS AND THE PUBLIC SHALL BE CONSIDERED OF THE UTMOST IMPORTANCE. PENNDOT PUBLICATION 203 (WORK ZONE TRAFFIC CONTROL) SHALL BE CLOSELY FOLLOWED. WARNING DEVICES, GUARDS, FLASHERS, FLAGS, AND FLAGMEN SHALL BE USED AS REQUIRED TO PROVIDE ADEQUATE PROTECTION TO VEHICULAR TRAFFIC, THE PUBLIC AND WORKMEN. STATE LAWS, CITY AND COUNTY ORDINANCES RELATIVE TO WORKING HOURS, TRAFFIC CONTROL, WARNING SIGNALS, COLOR OF LENS IN FLASHERS, GUARDS, FLAGMEN, ETC. SHALL BE COMPLIED WITH WHEN WORKING ON OR NEAR ANY PUBLIC RIGHT OF WAY. ALL DEVICES MUST BE IN PLACE PRIOR TO THE START OF CONSTRUCTION AND SHALL BE MAINTAINED BY CONTRACTOR DURING CONSTRUCTION.
3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH OSHA REGULATIONS. PARTICULAR EMPHASIS HAS BEEN PLACED ON THE REQUIREMENT TO SHORE OR SLOPE ALL EXCAVATIONS GREATER THAN FOUR FEET DEEP.
4. ALL KNOWN UNDERGROUND OBSTRUCTIONS ARE MARKED ON THE PLAN AND PROFILE DRAWINGS. HOWEVER, OTHER UTILITY OBSTRUCTIONS MAY EXIST. BEFORE ACTUAL CONSTRUCTION, EXACT LOCATION AND DEPTH OF ALL OBSTRUCTIONS MUST BE DETERMINED BY THE CONTRACTOR. PARTICULAR ATTENTION SHALL BE PAID TO DRAINAGE STRUCTURES AND AN EXTENSIVE BURIED TRAFFIC CONTROL SIGNAL WIRE NETWORK. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THESE ACTIVITIES. DAMAGE AND RESTORATION OF ANY UTILITIES OR ANY OTHER OBSTRUCTION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. EXCAVATIONS SHALL BE LEFT OPEN OVERNIGHT ONLY IF ABSOLUTELY NECESSARY AND WITH THE REQUIRED APPROVAL OF INVOLVED STATE AND LOCAL AGENCIES. ANY EXCAVATION LEFT OPEN OVERNIGHT MUST BE SUITABLY MARKED AND PROTECTED BY BARRICADES,

TEMPORARY FENCES, OR COVERED WITH 3/4" STEEL PLATING TO PROTECT THE GENERAL PUBLIC AND VEHICULAR TRAFFIC. STEEL PLATES PROVIDED BY CONTRACTOR WILL BE USED TO MAINTAIN VEHICULAR TRAFFIC AND INGRESS AND EGRESS TO DRIVE IN BUSINESSES DURING CONSTRUCTION.

6. NO OPEN FLAME, TORCH, LIGHTED CIGAR, CIGARETTE OR PIPE SHALL BE BROUGHT NEAR OR INTO AN OPEN MANHOLE. THIS RULE SHALL BE OBSERVED EVEN THOUGH TESTS INDICATE THAT THE ATMOSPHERE IS FREE OF COMBUSTIBLE GAS. MANHOLES MUST BE CONTINUOUSLY VENTILATED WHEN WORKING IN THEM.
7. XO PENNSYLVANIA, AND IT'S REPRESENTATIVES, RESERVE THE RIGHT TO STOP CONSTRUCTION IF, AT ANY TIME, IT DEEM THE WORK TO BE UNSAFE, INADEQUATE OR HAZARDOUS. WORK SHALL NOT BE RESUMED UNTIL AGREEABLE MEASURES HAVE BEEN TAKEN TO RESOLVE THE PROBLEM.
8. 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 OR BETTER CONDITION.
9. EQUIPMENT TYPES SPECIFIED HEREIN (i.e. BACKHOE, TRENCHER, ETC.) ARE SUGGESTIONS ONLY AND ARE NOT INTENDED AS REQUIREMENTS. CONTRACTOR SHOULD ANTICIPATE "HAND TRENCHING" AS REQUIRED BY OTHER UTILITY OWNERS.
10. ALL WORK TO BE PERFORMED IN STRICT ACCORDANCE WITH THE APPLICABLE CODES OR REQUIREMENTS OF ANY REGULATING GOVERNMENT AGENCY, XO PENNSYLVANIA, OR RIGHT-OF-WAY GRANTOR.



CALL BEFORE YOU DIG
1-800-242-1776
72 HOURS NOTICE REQUIRED

REVISIONS		
DATE:	DESCRIPTIONS:	BY:



910 Cassaro Run Drive, West Chester, PA 19380
Office: (610) 696-6910 • Fax: (610) 696-6997

PROJECT MANAGER: SP
ENGINEERED BY: TV
DRAWN BY: DTL
PRELIMINARY DATE
03/18/15

TITLE: GREENFIELD ROAD POLE RELOCATION CONSTRUCTION & GENERAL NOTES	
LANCASTER, PA	LANCASTER COUNTY
DRAWING NO: XO_Greenfield_Rd_Pole_Relo_General_Notes	
ISSUE DATE:	SCALE: NONE SHEET: 5 OF 9

SYMBOLS KEY

EXISTING		EXISTING		PROPOSED		EXISTING		PROPOSED	
NORTH ARROW		RAILROAD CROSSING SIGNAL		RAILROAD TRACKS		FENCE			
POWER POLE		MILE MARKER POST		GUARDRAIL		GUARDRAIL			
TELEPHONE POLE		BRIDGE		CENTERLINE		FACE OF CURB			
JOINT POLE		TREE		EDGE OF PAVEMENT		BACK OF CURB			
TRANSFORMER ON POLE		BUSH		RIGHT-OF-WAY		CITY, COUNTY OR STATE BOUNDARY LINE			
CABLE TV POLE		CAUTION NOTE		PROPERTY LINE		UNDERGROUND GAS LINE			
CONCRETE POLE		TOP OF SLOPE		UNDERGROUND WATER LINE		UNDERGROUND ELECTRIC LINE			
STEEL POLE		BOTTOM OF SLOPE		UNDERGROUND TELCOM LINE		UNDERGROUND CATV			
PEDESTAL		DITCH LINE		UNDERGROUND SEWER LINE		UNDERGROUND STORM DRAIN LINE			
POLYMER CONCRETE HANDHOLE		FOOTAGE		TRENCH FIBER OPTIC CABLE		AERIAL FIBER OPTIC CABLE			
ELECTRIC MANHOLE		OVERHEAD GUY		REMOVE CABLE		CONCRETE ENCASED			
SEWER MANHOLE		SLACK SPAN		DIRECTIONAL BORE		JACK AND BORE			
STORM MANHOLE		PUSH BRACE		TEST PIT					
TELEPHONE MANHOLE		POLE TO POLE GUY							
WATER MANHOLE		ANCHOR & GUY							
UNKNOWN MANHOLE		SIDEWALK ANCHOR & GUY							
FIRE HYDRANT (FH)		ANCHOR ONLY							
STREET LIGHT (SL)		FIBER SPLICE							
TRAFFIC LIGHT (TL)		FIBER SLACK COIL (AERIAL)							
GAS VALVE (GV)		SLACK COIL (UG) (##=FOOTAGE)							
WATER VALVE/METER (WV/WM)		FIBER TAIL							
ELECTRIC VAULT									
GROUND									
CATCH BASIN									
CULVERT (SIZE AS INDICATED)									
RAILROAD SIGNAL									



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DATE:	DESCRIPTIONS:	BY:



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Engineering Construction Safety

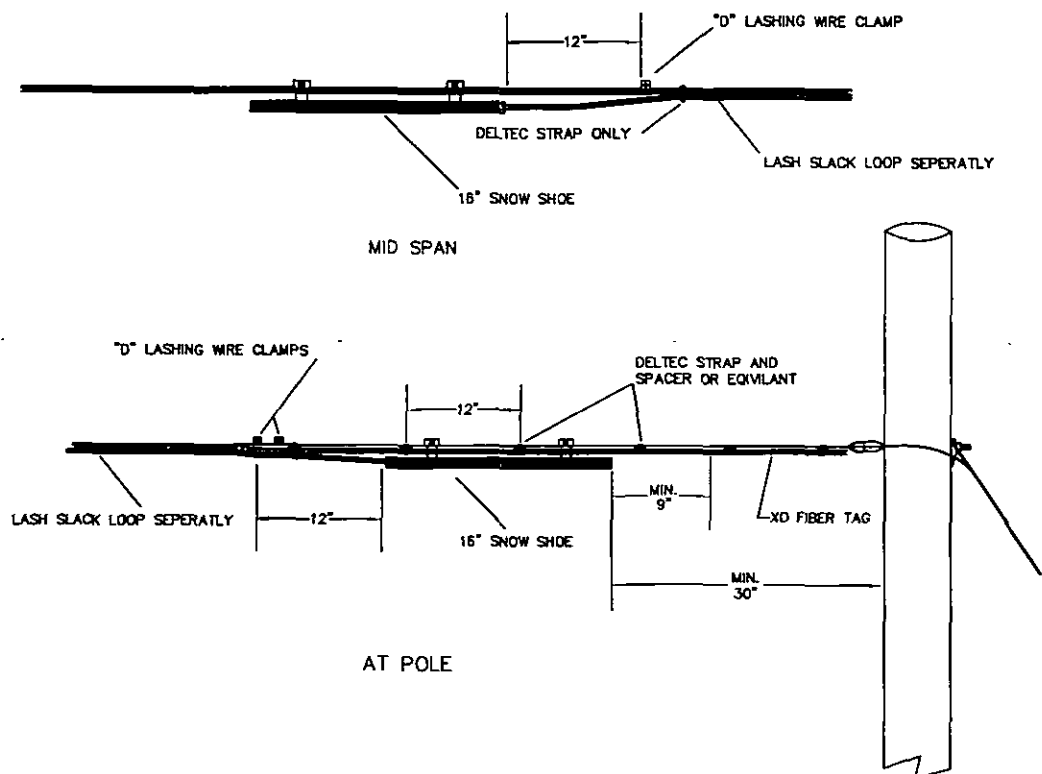
910 Canara Run Drive, West Chester, PA 19380
Office (610) 696-6910 • Fax (610) 696-6917

PROJECT MANAGER: SP
ENGINEERED BY: TV
DRAWN BY: DTL
PRELIMINARY DATE
03/18/15

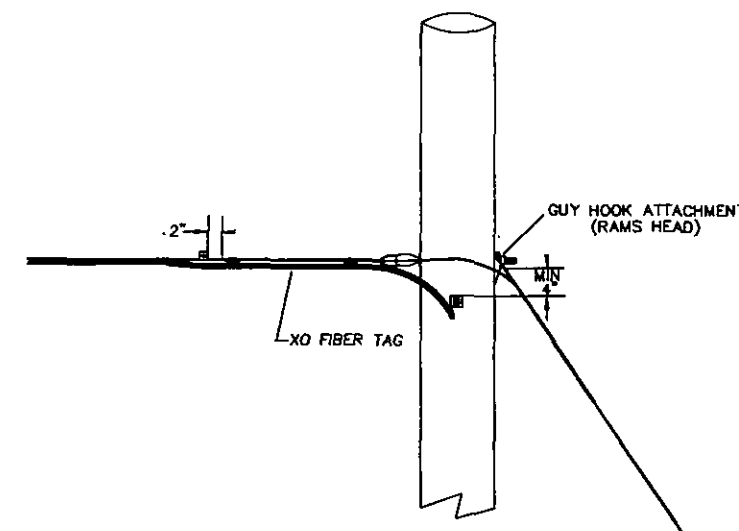
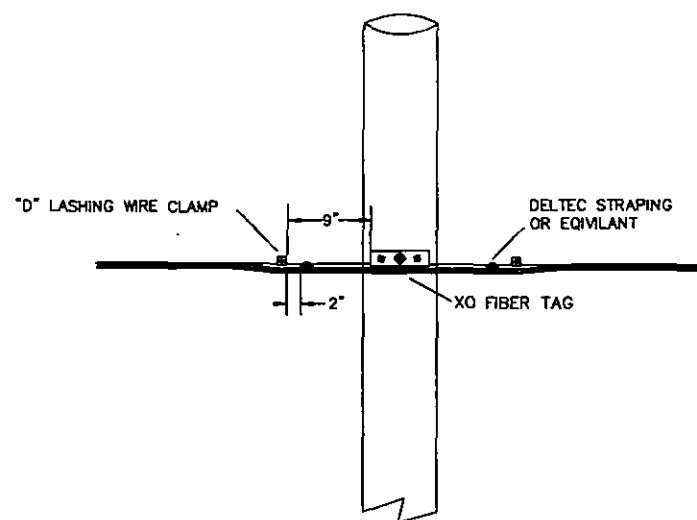
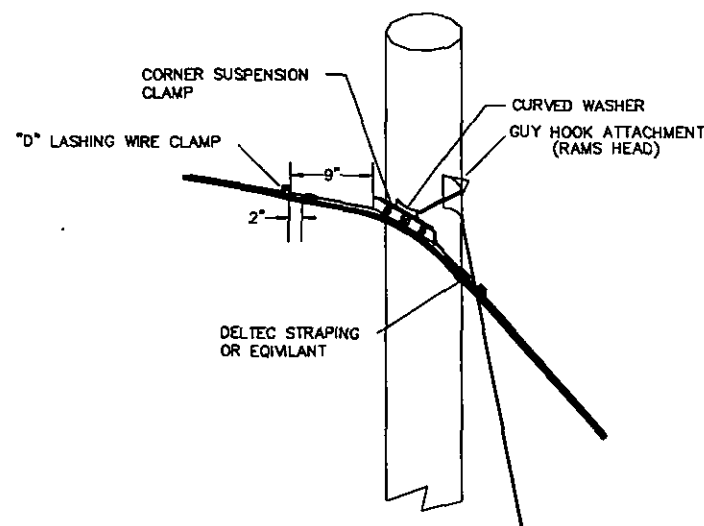
TITLE: GREENFIELD ROAD POLE RELOCATION	
SYMBOLS KEY	
LANCASTER, PA	LANCASTER COUNTY
DRAWING NO: XO_Greenfield_Rd_Pole_Relo_Symbols_Key	

ISSUE DATE:	SCALE: NONE	SHEET: 6 OF 9
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LASHING & SNOW SHOE PLACEMENT



POLE DETAILS



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REVISIONS		
DATE:	DESCRIPTIONS:	BY:



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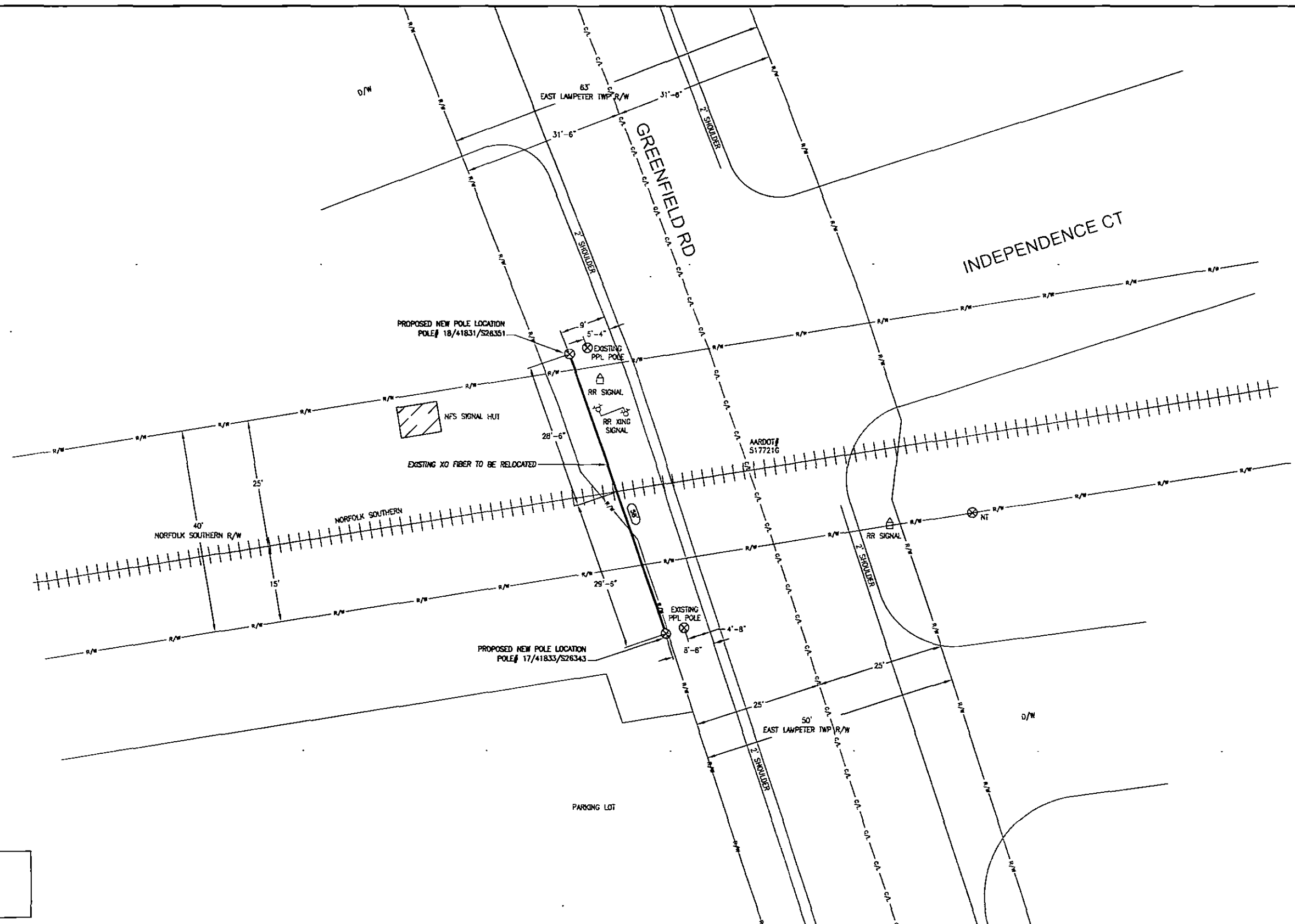
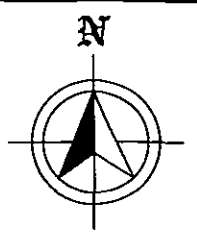
918 Camino Real Drive, West Chester, PA 19380
Office: (610) 696-6910 • Fax: (610) 696-6917

PROJECT MANAGER: SP
ENGINEERED BY: TV
DRAWN BY: DTL
PRELIMINARY DATE
03/18/15

TITLE:
GREENFIELD ROAD POLE RELOCATION
TYPICAL AERIAL POLE DETAILS
LANCASTER, PA LANCASTER COUNTY

DRAWING NO: XO_Greenfield_Rd_Pole_Relo_Typ_Aerial_Dtl5

ISSUE DATE: SCALE: NTS SHEET: 7 OF 9



REEL #
CABLE ID #
TYPE 24 FIBER

PERMIT AUTH.
APPL #
PERMIT #
STA # TO



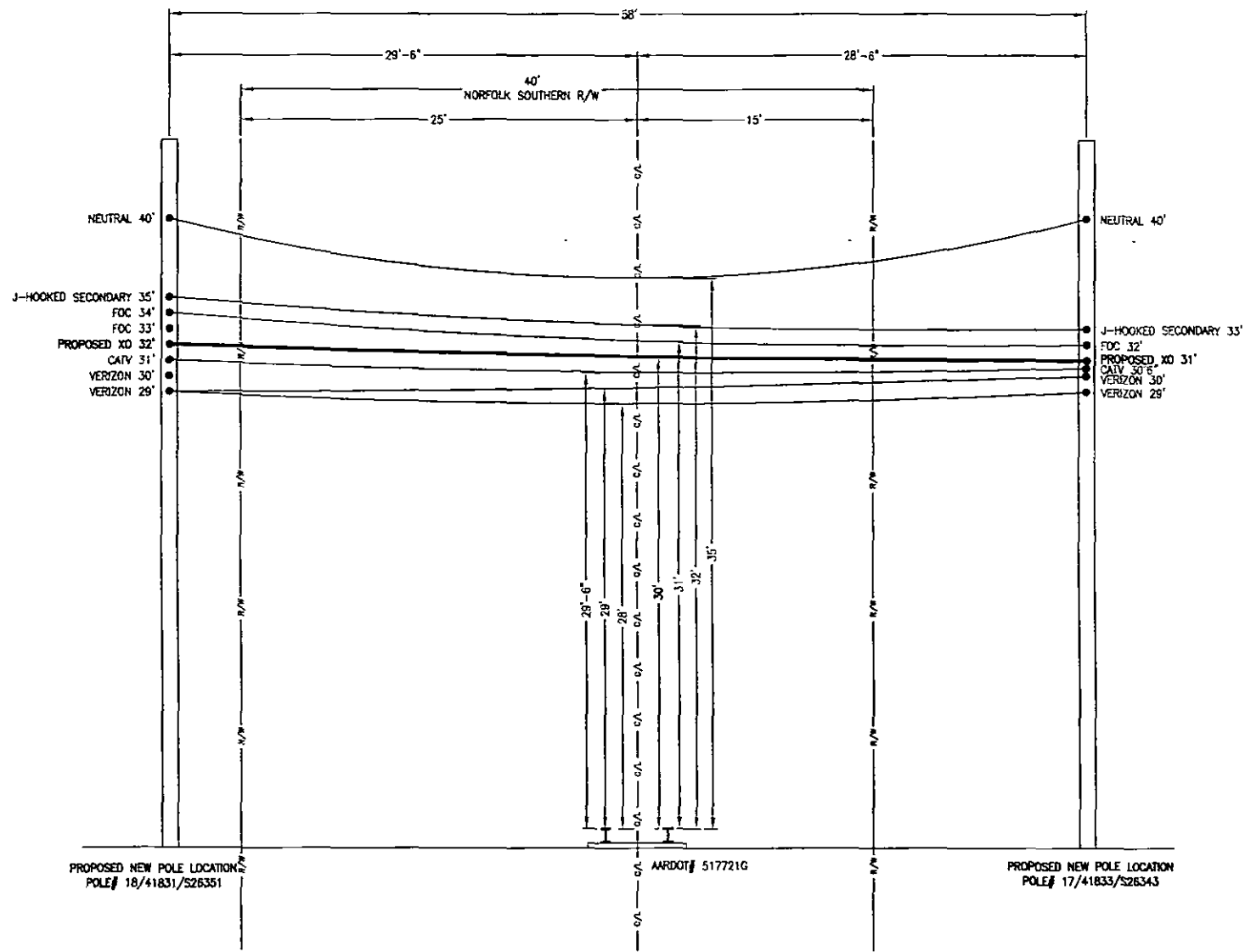
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DATE:	DESCRIPTIONS:	BY:



PROJECT MANAGER: SP
ENGINEERED BY: TV
DRAWN BY: DTL
PRELIMINARY DATE
03/18/15

TITLE: GREENFIELD ROAD POLE RELOCATION	
PLAN VIEW	
LANCASTER, PA	LANCASTER COUNTY
DRAWING NO: XO_Greenfield_Rd_Pole_Relo_Plan_View	
ISSUE DATE:	SCALE: 1" = 20' SHEET: 8 OF 9



PROFILE VIEW
FACING EAST

REEL #
CABLE ID #
TYPE 24 FIBER

PERMIT AUTH.
APPL #
PERMIT #
STA # TO

NOTE:

APPROX. ATTACHMENT HEIGHTS AFTER PPL POLE RELOCATION.



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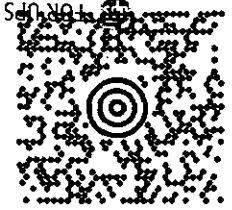

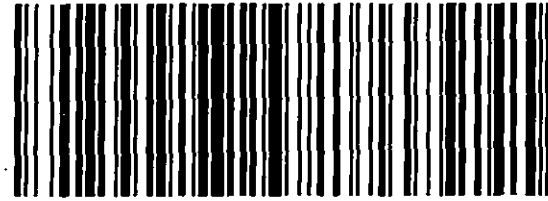


REVISIONS		
DATE:	DESCRIPTIONS:	BY:



910 Cameron Run Drive, West Chester, PA 19380
Office: (610) 696-6910 • Fax: (610) 696-6937

PROJECT MANAGER: SP	TITLE: GREENFIELD ROAD POLE RELOCATION
ENGINEERED BY: TV	PROFILE VIEW
DRAWN BY: DTL	LANCASTER, PA LANCASTER COUNTY
PRELIMINARY DATE	DRAWING NO: XO_Greenfield_Rd_Pole_Relo_Profile_View
03/18/15	ISSUE DATE: SCALE: 1" = 10' SHEET: 9 OF 9

910 Camaro Run Drive
West Chester, PA 19380

FROM: PHIL SEEHERMAN (610) 696-6910 METROPOLITAN COMMUNICATIONS GR 910 CAMARO RUN DRIVE WEST CHESTER PA 19380-4281	1 LBS	1 OF 1		PA 171 9-20 
SHIP TO: MS. ROSEMARY CHIAVETTA PA PUBLIC UTILITY COMMISSION SECRETARY P.O. BOX # 3265 HARRISBURG PA 17105-3265	UPS GROUND TRACKING #: 1Z W80 195 03 4071 3945			
 To: CHIAVETA, R. PUC Agency: PUC Floor: External Carrier: UPS GROUND 4/6/2015 9:25:56 AM	BILLING: P/P			MISSION
 1211801950340713945	VALUE: B52 45 07:13:10 2015			