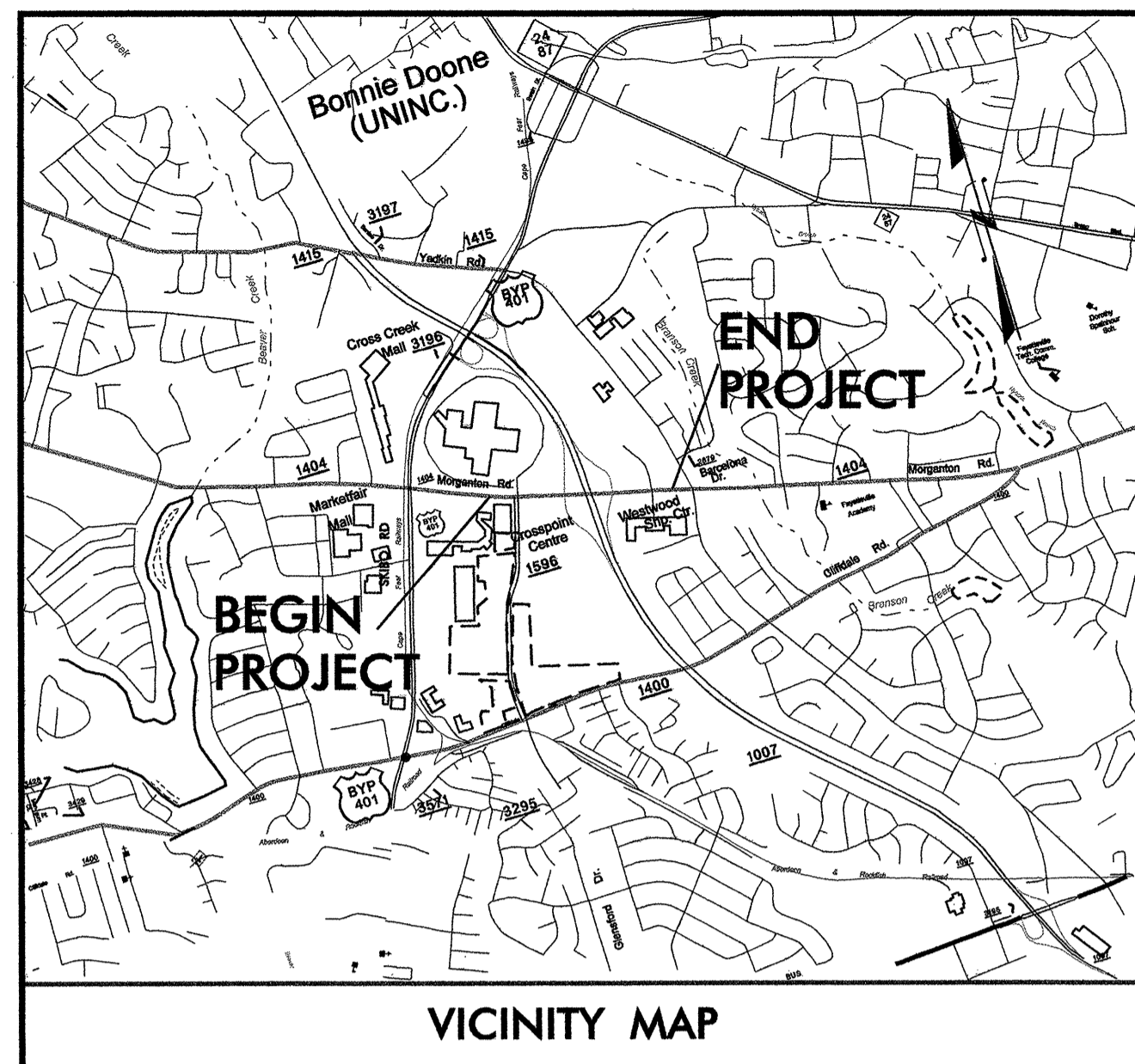
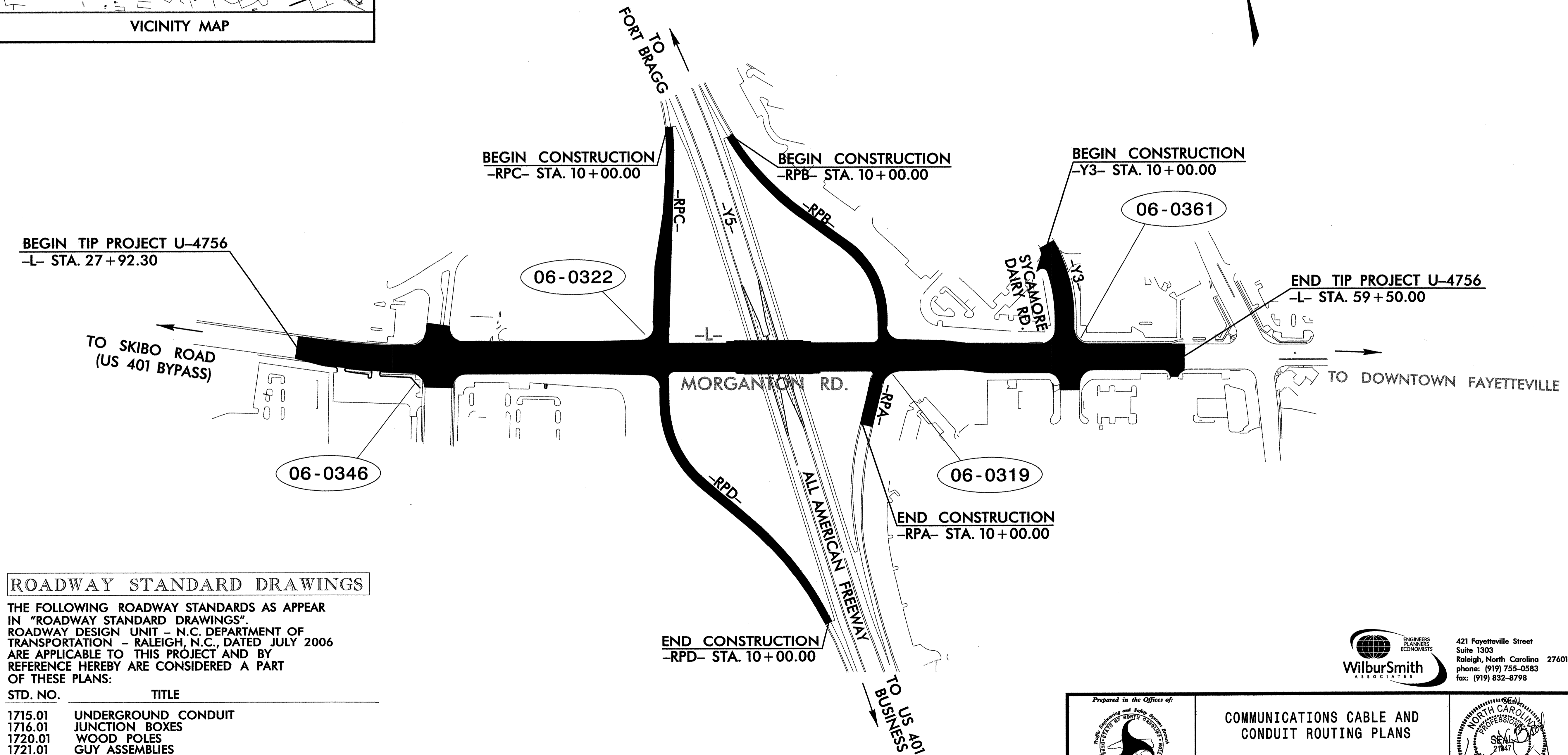


U-4756



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
CUMBERLAND COUNTY

LOCATION: Morganton Road from west of Glensford Drive to east of Sycamore Dairy Road
TYPE OF WORK: Communications Cable and Conduit Routing



PROJECT:

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" ROADWAY DESIGN UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1715.01	UNDERGROUND CONDUIT
1716.01	JUNCTION BOXES
1720.01	WOOD POLES
1721.01	GUY ASSEMBLIES
1730.01	FIBER OPTIC CABLE - SPARE CABLE STORAGE
1730.02	FIBER OPTIC CABLE - CONDUIT INSTALLATION
1733.01	DELINEATOR MARKERS
1740.01	METAL POLES

NCDOT CONTACT:
TRAFFIC ENGINEERING AND SAFETY SYSTEMS BRANCH
G.G. MURR, JR., PE - INTELLIGENT TRANSPORTATION SYSTEMS ENGINEER

WilburSmith ASSOCIATES
ENGINEERS PLANNERS ECONOMISTS
421 Fayetteville Street
Suite 1303
Raleigh, North Carolina 27601
phone: (919) 755-0583
fax: (919) 832-8798

Prepared in the Offices of:

COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS

DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE

PLAN DATE: June 2007 REVIEWED BY: D. Privette

PREPARED BY: K. Bisby REVIEWED BY:

REVISIONS	INIT.	DATE

SIGNATURE _____ DATE _____

CADD Filename: _____

- 1 INSTALL REA, PE - 22, SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE
- 2 INSTALL REA, PE - 38, (FIGURE 8) SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE
- 3 INSTALL REA, PE - 39, (UNDERGROUND) SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE
- 4 INSTALL SMFO CABLE
- 5 INSTALL MMFO CABLE
- 6 INSTALL FIBER OPTIC DROP CABLE
- 7 INSTALL TRACER WIRE
- 8 TRENCH
- 9 INSTALL PVC CONDUIT
- 10 INSTALL RIGID, GALVANIZED STEEL CONDUIT
- 11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD
- 12 INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL
- 13 INSTALL OUTER-DUCT POLYETHYLENE CONDUIT
- 14 INSTALL POLYETHYLENE CONDUIT
- 15 DIRECTIONAL DRILL CONDUIT
- 16 BORE AND JACK CONDUIT
- 17 INSTALL CABLE(S) IN EXISTING CONDUIT
- 18 INSTALL CABLE(S) IN NEW CONDUIT
- 19 INSTALL CABLE(S) IN EXISTING RISER
- 20 INSTALL CABLE(S) IN NEW RISER
- 21 INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS
- 22 INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)
- 23 INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)
- 24 INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET
- 25 INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET
- 26 TERMINATE COMMUNICATIONS CABLE ON EXISTING TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET
- 26A TERMINATE COMMUNICATIONS CABLE ON EXISTING TELEMETRY INTERFACE PANEL IN CCTV CONTROLLER CABINET
- 27 INSTALL NEW TELEMETRY INTERFACE PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET
- 28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET
- 29 INSTALL UNDERGROUND SPLICE ENCLOSURE
- 30 INSTALL AERIAL SPLICE ENCLOSURE
- 31 INSTALL POLE MOUNTED SPLICE CABINET
- 32 INSTALL BASE MOUNTED SPLICE CABINET

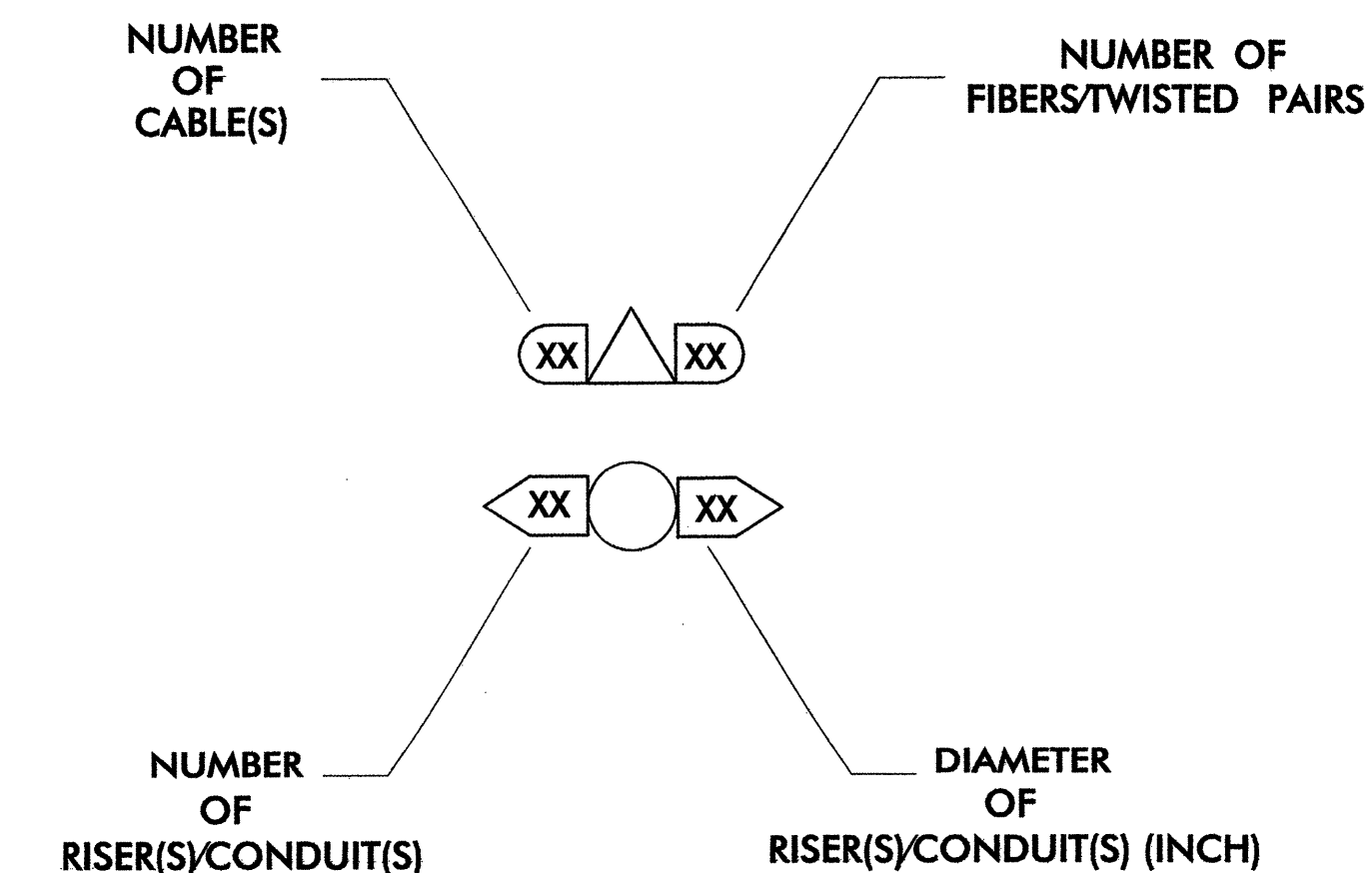
- 33 REMOVE EXISTING SPLICE CABINET
- 34 INSTALL CABINET FOUNDATION
- 35 REMOVE EXISTING CABINET FOUNDATION
- 36 INSTALL CCTV CAMERA ASSEMBLY
- 37 INSTALL CCTV CAMERA WOOD POLE
- 38 INSTALL CCTV CAMERA METAL POLE AND FOUNDATION
- 39 INSTALL JUNCTION BOX
- 40 INSTALL OVERSIZED JUNCTION BOX
- 41 REMOVE EXISTING JUNCTION BOX
- 42 INSTALL WOOD POLE
- 43 REMOVE EXISTING WOOD POLE
- 44 INSTALL AERIAL GUY ASSEMBLY
- 45 INSTALL STANDARD GUY ASSEMBLY
- 46 INSTALL SIDEWALK GUY ASSEMBLY
- 47 INSTALL MESSENGER CABLE
- 48 REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE
- 49 REMOVE EXISTING MESSENGER CABLE
- 50 INSTALL TELEPHONE SERVICE
- 51 INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE
- 52 INSTALL DELINEATOR MARKER
- 53 STORE 20 FEET OF COMMUNICATIONS CABLE
- 54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE
- 55 LASH CABLE(S) TO EXISTING MESSENGER CABLE
- 56 LASH CABLE(S) TO NEW MESSENGER CABLE
- 57 MODIFY EXISTING ELECTRICAL SERVICE
- 58 INSTALL NEW ELECTRICAL SERVICE
- 59 RELOCATE EXISTING CCTV CAMERA ASSEMBLY

LEGEND

- FO NEW FIBER OPTIC COMMUNICATIONS CABLE
- TWIST PR NEW TWISTED PAIR COMMUNICATIONS CABLE
- EXI EXISTING COMMUNICATIONS CABLE
- REM EXISTING COMMUNICATIONS CABLE TO BE REMOVED
- NEW AERIAL GUY ASSEMBLY
- NEW CONDUIT
- EXISTING CONDUIT
- DD NEW DIRECTIONAL DRILLED CONDUIT
- B&J NEW BORED AND JACKED CONDUIT
- NEW JUNCTION BOX
- EXISTING JUNCTION BOX
- NEW WOOD POLE
- EXISTING WOOD POLE
- AERIAL SPLICE ENCLOSURE
- NEW METAL POLE
- EXISTING METAL POLE
- EXISTING CCTV ASSEMBLY
- NEW STANDARD GUY ASSEMBLY
- NEW SIDEWALK GUY ASSEMBLY
- NEW CABLE STORAGE RACKS (SNOW SHOES)
- EXISTING CONTROLLER AND CABINET
- EXISTING SPLICE CABINET
- NEW SPLICE CABINET
- SIGNAL POLE
- SP SIGNAL INVENTORY NUMBER

CONSTRUCTION NOTE SYMBOLOGY KEY

- XX INDICATES NUMBER OF CABLES, LOOPS, ETC.
- XX INDICATES NUMBER OF FIBERS PER CABLE, TWISTED PAIRS PER CABLE, ETC.
- XX INDICATES NUMBER OF RISER(S)/CONDUIT(S)
- XX INDICATES DIAMETER OF RISER(S)/CONDUIT(S) (INCH)

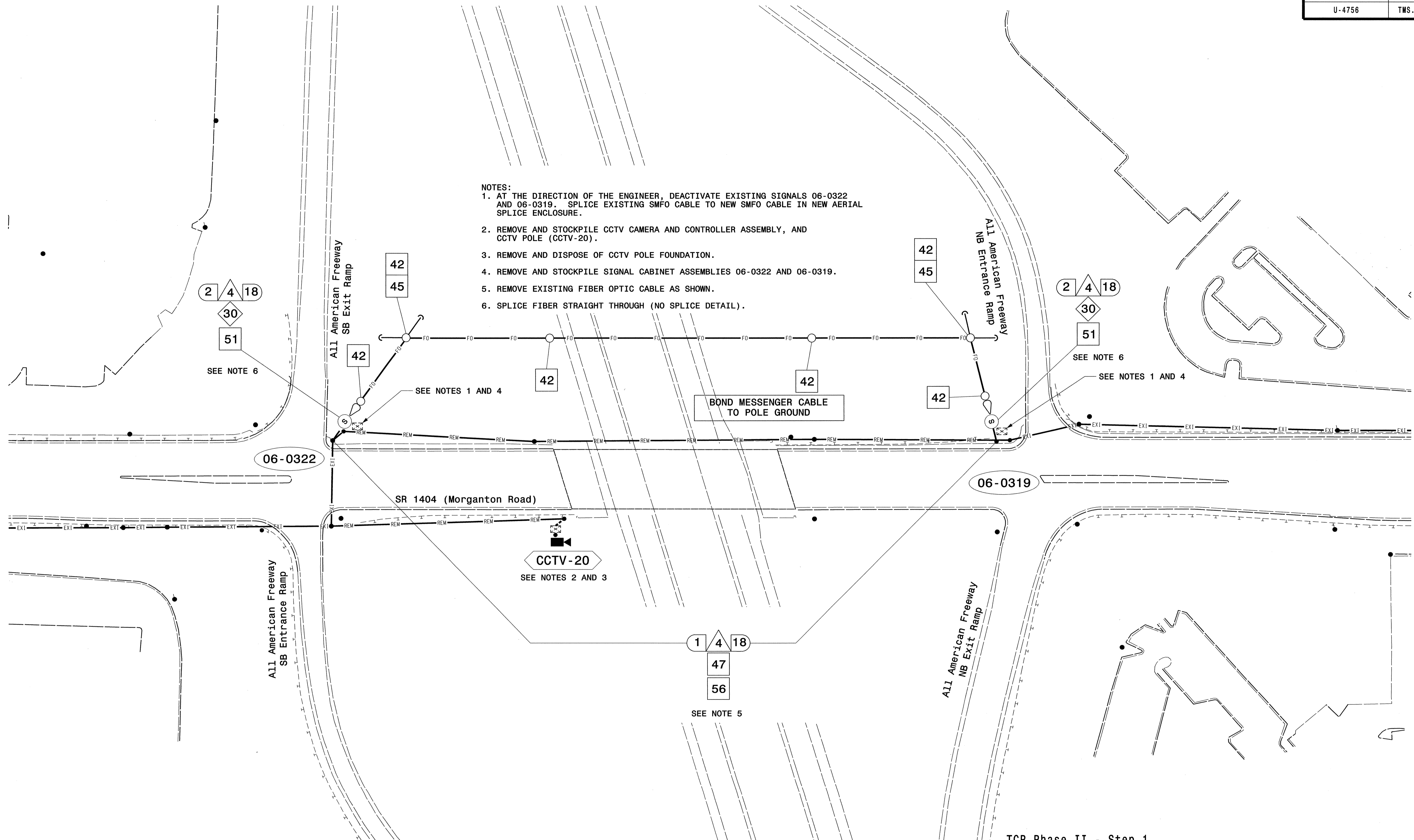


WilburSmith
ASSOCIATES

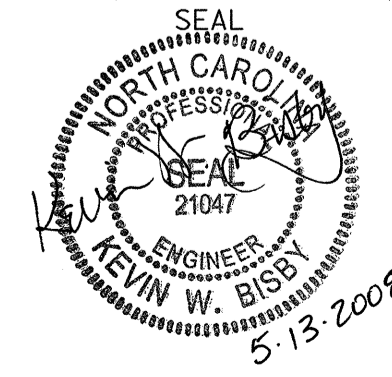
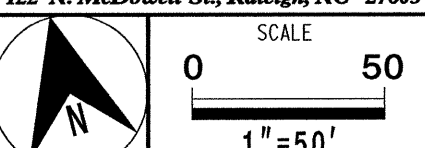
421 Fayetteville Street
Suite 1303
Raleigh, North Carolina
phone: (919) 755-0583
fax: (919) 832-8798

	CONSTRUCTION NOTES	
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE	
PLAN DATE: MAY 2007	REVIEWED BY: D. Swinton	
PREPARED BY: K. Bisby	REVIEWED BY:	
REVISIONS	INIT.	DATE
SIGNATURE		DATE
CADD File name:		

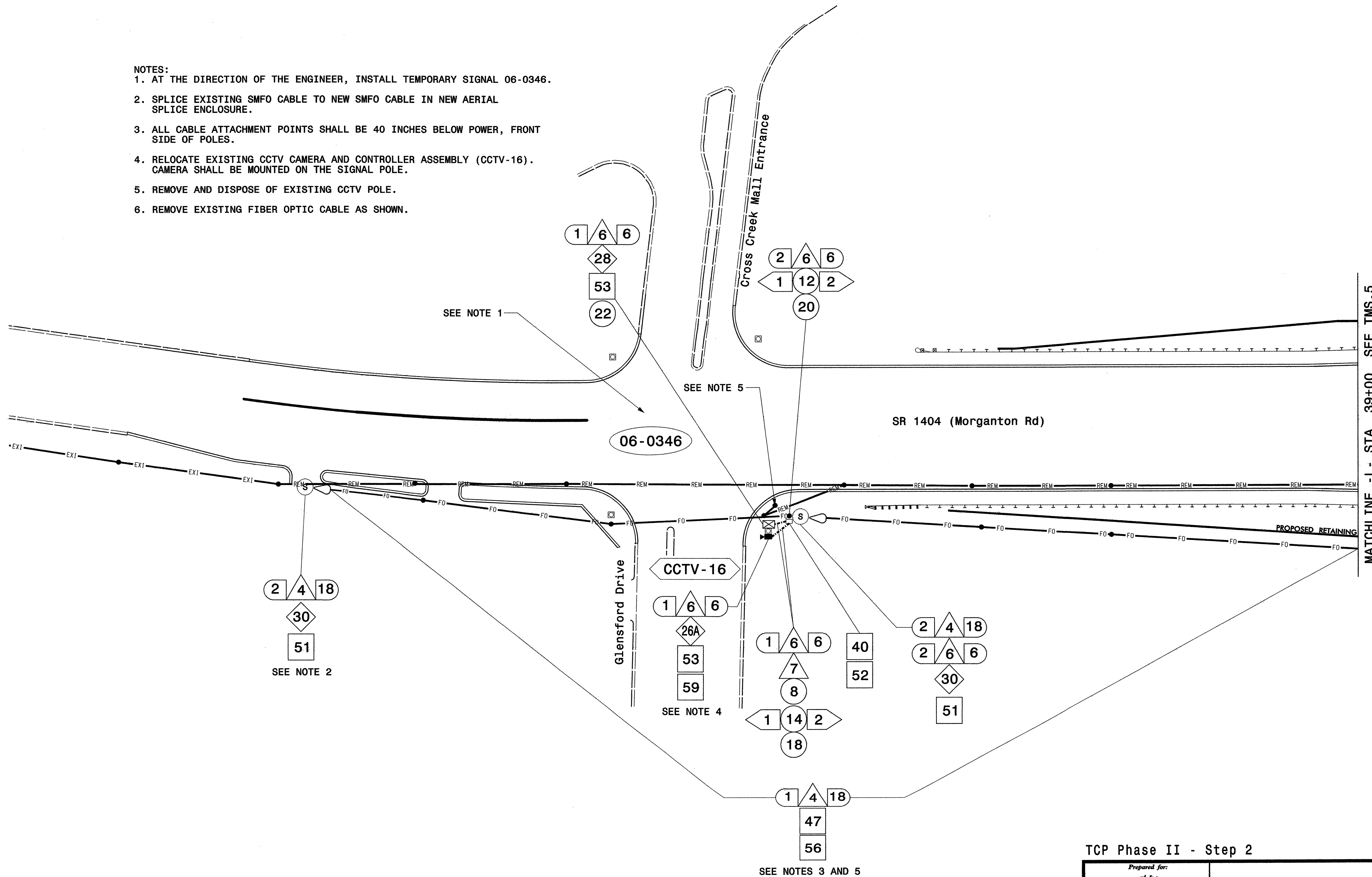
- NOTES:
1. AT THE DIRECTION OF THE ENGINEER, DEACTIVATE EXISTING SIGNALS 06-0322 AND 06-0319. SPLICE EXISTING SMFO CABLE TO NEW SMFO CABLE IN NEW AERIAL SPLICE ENCLOSURE.
 2. REMOVE AND STOCKPILE CCTV CAMERA AND CONTROLLER ASSEMBLY, AND CCTV POLE (CCTV-20).
 3. REMOVE AND DISPOSE OF CCTV POLE FOUNDATION.
 4. REMOVE AND STOCKPILE SIGNAL CABINET ASSEMBLIES 06-0322 AND 06-0319.
 5. REMOVE EXISTING FIBER OPTIC CABLE AS SHOWN.
 6. SPLICE FIBER STRAIGHT THROUGH (NO SPLICE DETAIL).



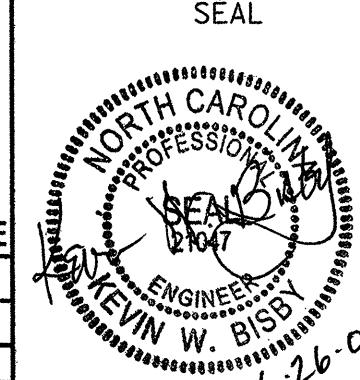
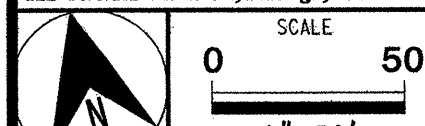
TCP Phase II - Step 1

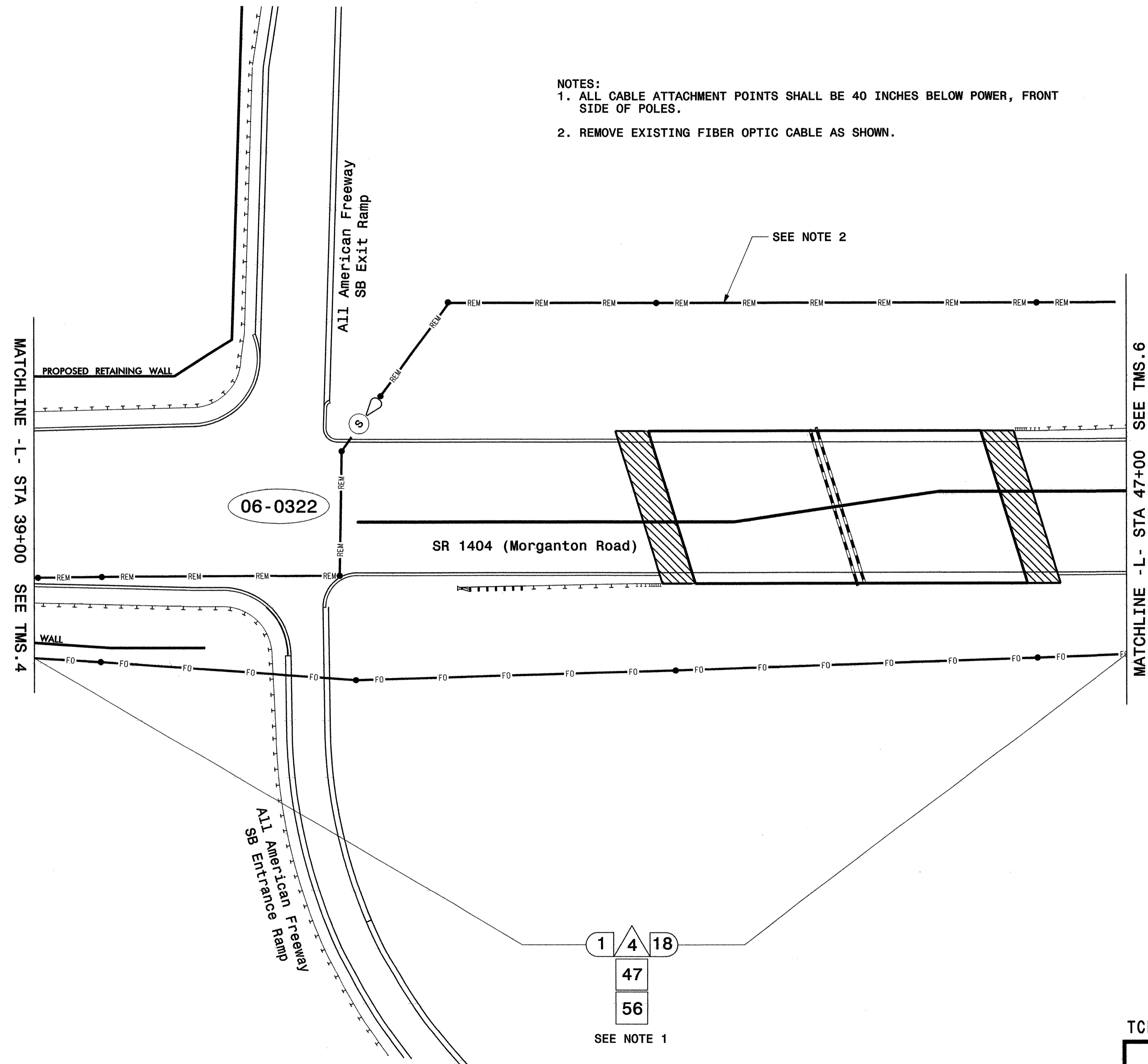
 SEAL NORTH CAROLINA PROFESSIONAL ENGINEER KEVIN W. BISBY 21047 5-13-2008	COMMUNICATIONS CABLE ROUTING ALONG MORGANTON ROAD							
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE PLAN DATE: June 2007 REVIEWED BY: D. Privette PREPARED BY: K. Bisby REVIEWED BY:							
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REVISIONS	INIT.	DATE						

- NOTES:
1. AT THE DIRECTION OF THE ENGINEER, INSTALL TEMPORARY SIGNAL 06-0346.
 2. SPLICE EXISTING SMFO CABLE TO NEW SMFO CABLE IN NEW AERIAL SPLICE ENCLOSURE.
 3. ALL CABLE ATTACHMENT POINTS SHALL BE 40 INCHES BELOW POWER, FRONT SIDE OF POLES.
 4. RELOCATE EXISTING CCTV CAMERA AND CONTROLLER ASSEMBLY (CCTV-16). CAMERA SHALL BE MOUNTED ON THE SIGNAL POLE.
 5. REMOVE AND DISPOSE OF EXISTING CCTV POLE.
 6. REMOVE EXISTING FIBER OPTIC CABLE AS SHOWN.



TCP Phase II - Step 2

	COMMUNICATIONS CABLE ROUTING ALONG MORGANTON ROAD									
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE PLAN DATE: June 2007 REVIEWED BY: D. Privette PREPARED BY: K. Bisby REVIEWED BY:									
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NO.	DESCRIPTION	INIT.	DATE							



NOTES:
 1. ALL CABLE ATTACHMENT POINTS SHALL BE 40 INCHES BELOW POWER, FRONT SIDE OF POLES.
 2. REMOVE EXISTING FIBER OPTIC CABLE AS SHOWN.

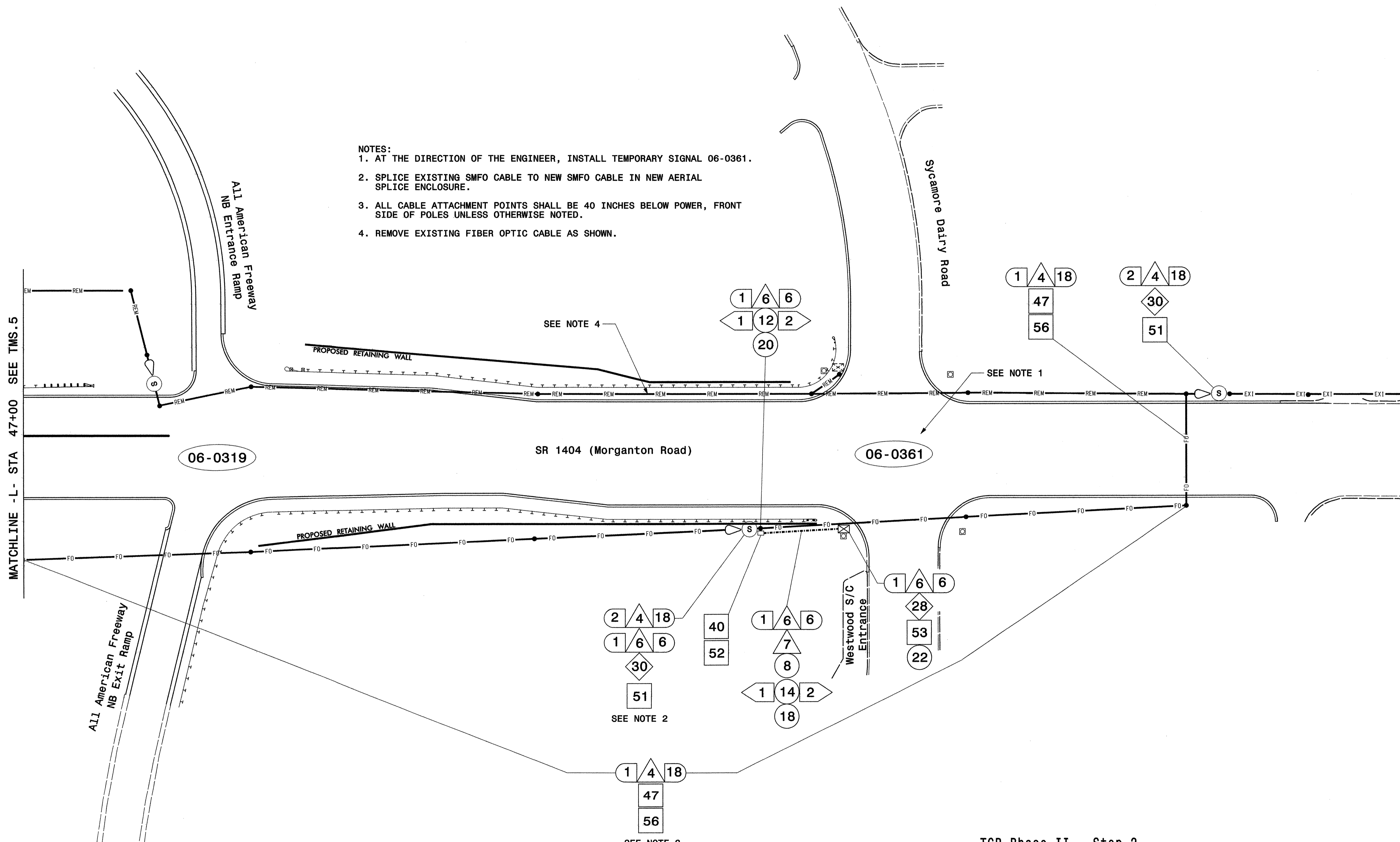
SEE NOTE 2

1 4 18
 47
 56
 SEE NOTE 1

TCP Phase II - Step 2

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 fax: (919) 832-8798

	COMMUNICATIONS CABLE ROUTING ALONG MORGANTON ROAD		
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE PLAN DATE: June 2007 PREPARED BY: K. Bisby	REVIEWED BY: D. Privette REVIEWED BY:	



- NOTES:
1. AT THE DIRECTION OF THE ENGINEER, INSTALL TEMPORARY SIGNAL 06-0361.
 2. SPLICE EXISTING SMFO CABLE TO NEW SMFO CABLE IN NEW AERIAL SPLICE ENCLOSURE.
 3. ALL CABLE ATTACHMENT POINTS SHALL BE 40 INCHES BELOW POWER, FRONT SIDE OF POLES UNLESS OTHERWISE NOTED.
 4. REMOVE EXISTING FIBER OPTIC CABLE AS SHOWN.

MATCHLINE - L - STA 47+00 SEE TMS.5

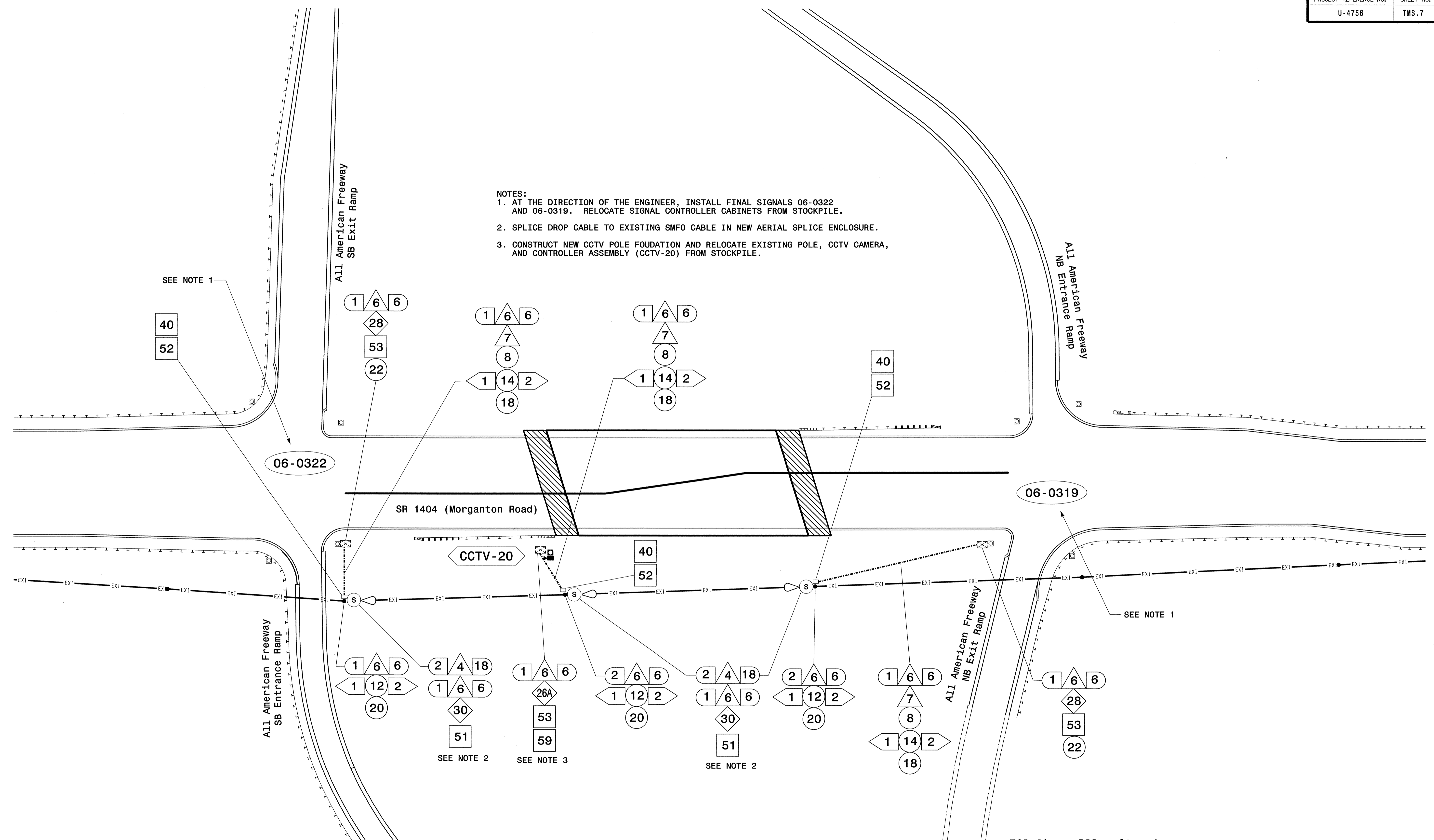
TCP Phase II - Step 2

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Suite 1303
Raleigh, North Carolina 27601
phone: (919) 755-0583
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	COMMUNICATIONS CABLE ROUTING ALONG MORGANTON ROAD							
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE							
	PLAN DATE: June 2007	REVIEWED BY: D. Privette						
	PREPARED BY: K. Bisby	REVIEWED BY:						
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SIGNATURE		DATE						
CADD File name:								

SEAL
NORTH CAROLINA
PROFESSIONAL ENGINEER
KEVIN W. BISBY
21047
6-26-07

NOTES:
 1. AT THE DIRECTION OF THE ENGINEER, INSTALL FINAL SIGNALS 06-0322 AND 06-0319. RELOCATE SIGNAL CONTROLLER CABINETS FROM STOCKPILE.
 2. SPLICE DROP CABLE TO EXISTING SMFO CABLE IN NEW AERIAL SPLICE ENCLOSURE.
 3. CONSTRUCT NEW CCTV POLE FOUNDATION AND RELOCATE EXISTING POLE, CCTV CAMERA, AND CONTROLLER ASSEMBLY (CCTV-20) FROM STOCKPILE.



SEE NOTE 1

40
52

06-0322

SR 1404 (Morganton Road)

CCTV-20

40
52

06-0319

SEE NOTE 1

All American Freeway
SB Entrance Ramp

All American Freeway
NB Exit Ramp

1 6 6
1 12 2
20

2 4 18
1 6 6
30
51

SEE NOTE 2

1 6 6
26A
53
59

SEE NOTE 3

2 6 6
1 12 2
20

2 4 18
1 6 6
30
51

SEE NOTE 2

2 6 6
1 12 2
20

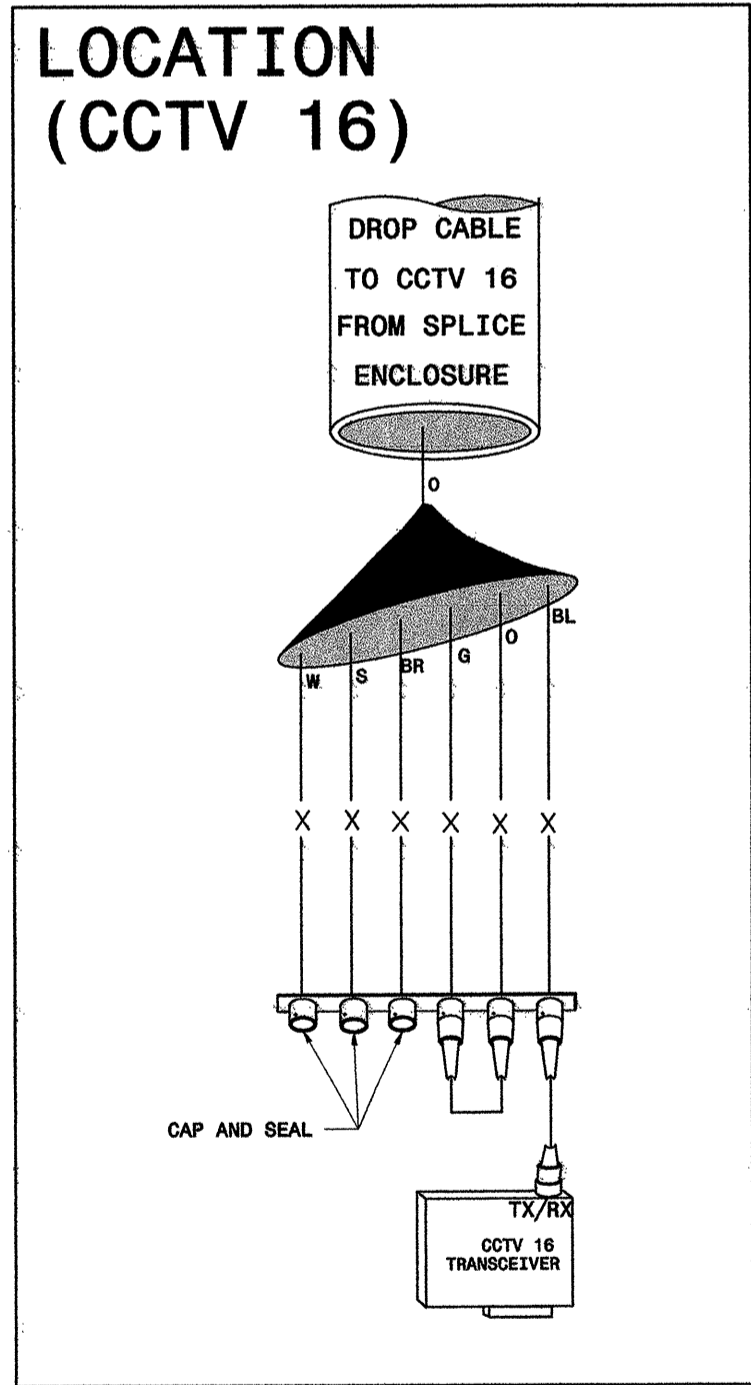
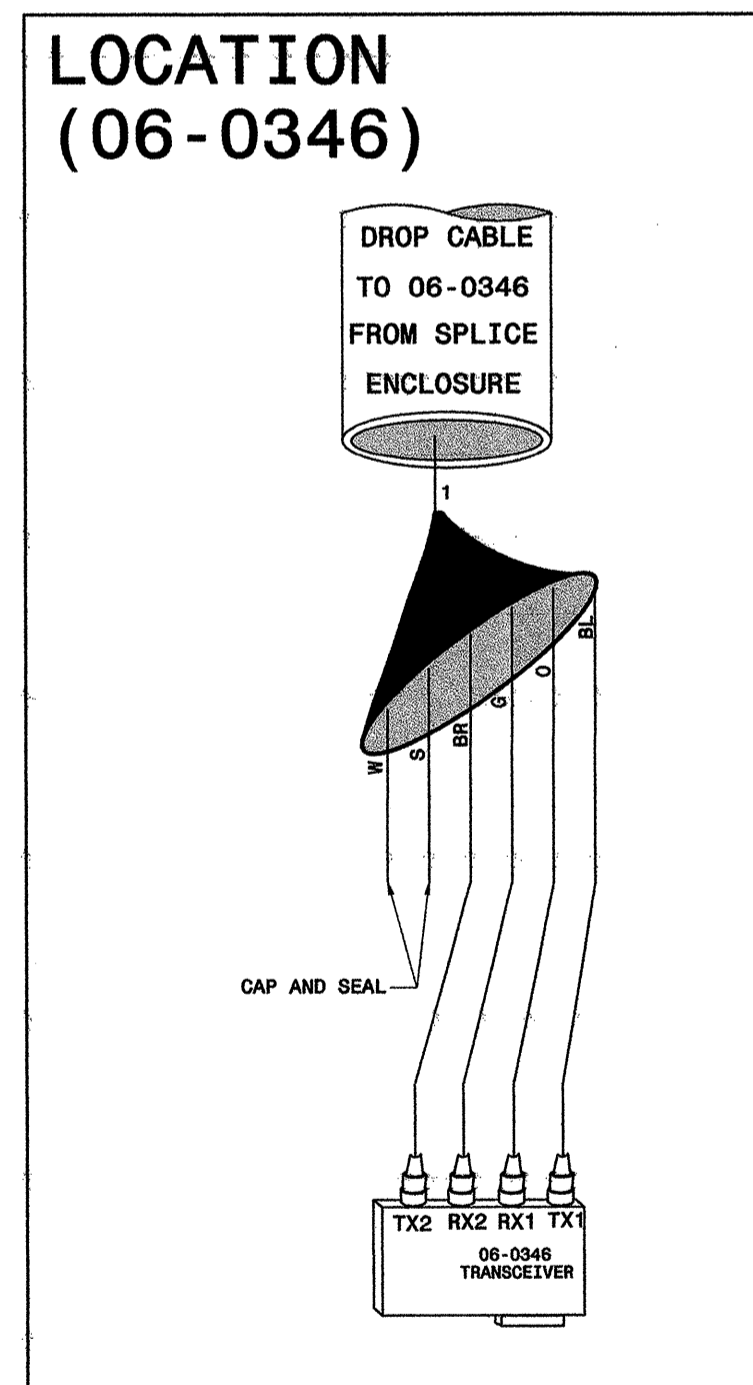
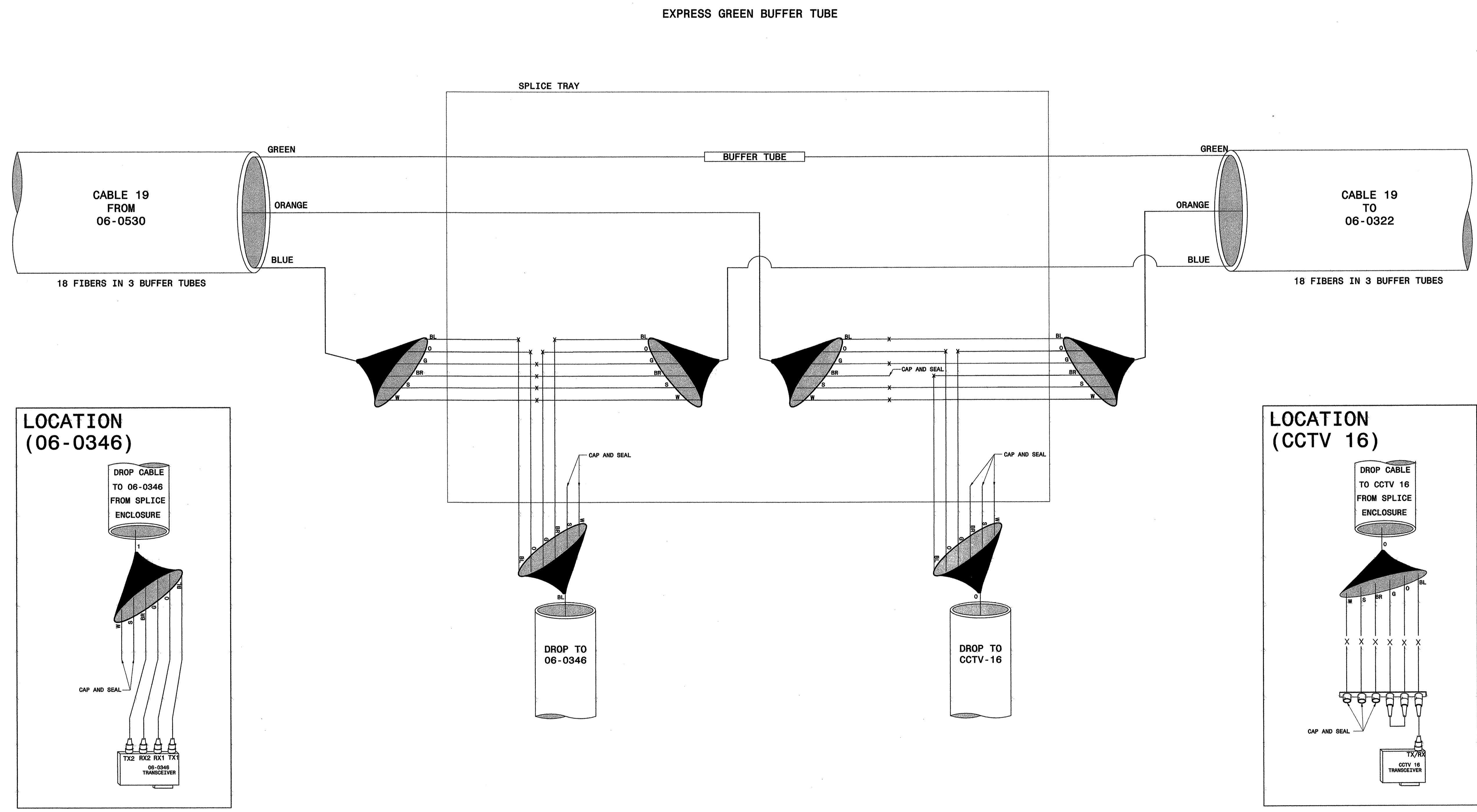
1 6 6
7
8
1 14 2
18

1 6 6
28
53
22

TCP Phase III - Step 1

	COMMUNICATIONS CABLE ROUTING ALONG MORGANTON ROAD											
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE PLAN DATE: June 2007 REVIEWED BY: D. Privette PREPARED BY: K. Bisby REVIEWED BY:											
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SIGNATURE	DATE											

06-0346
SR 1404 MORGANTON ROAD AT GLENSFORD DRIVE



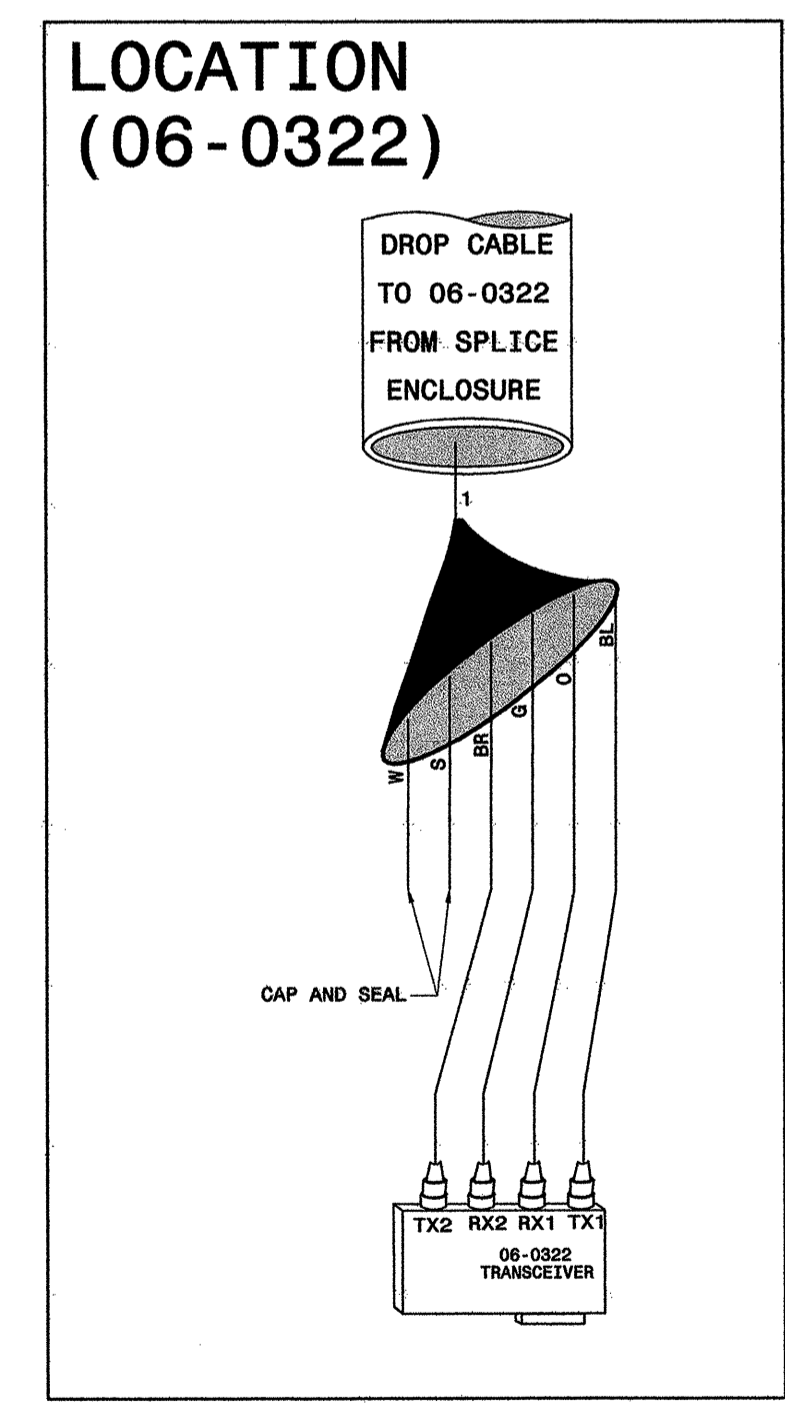
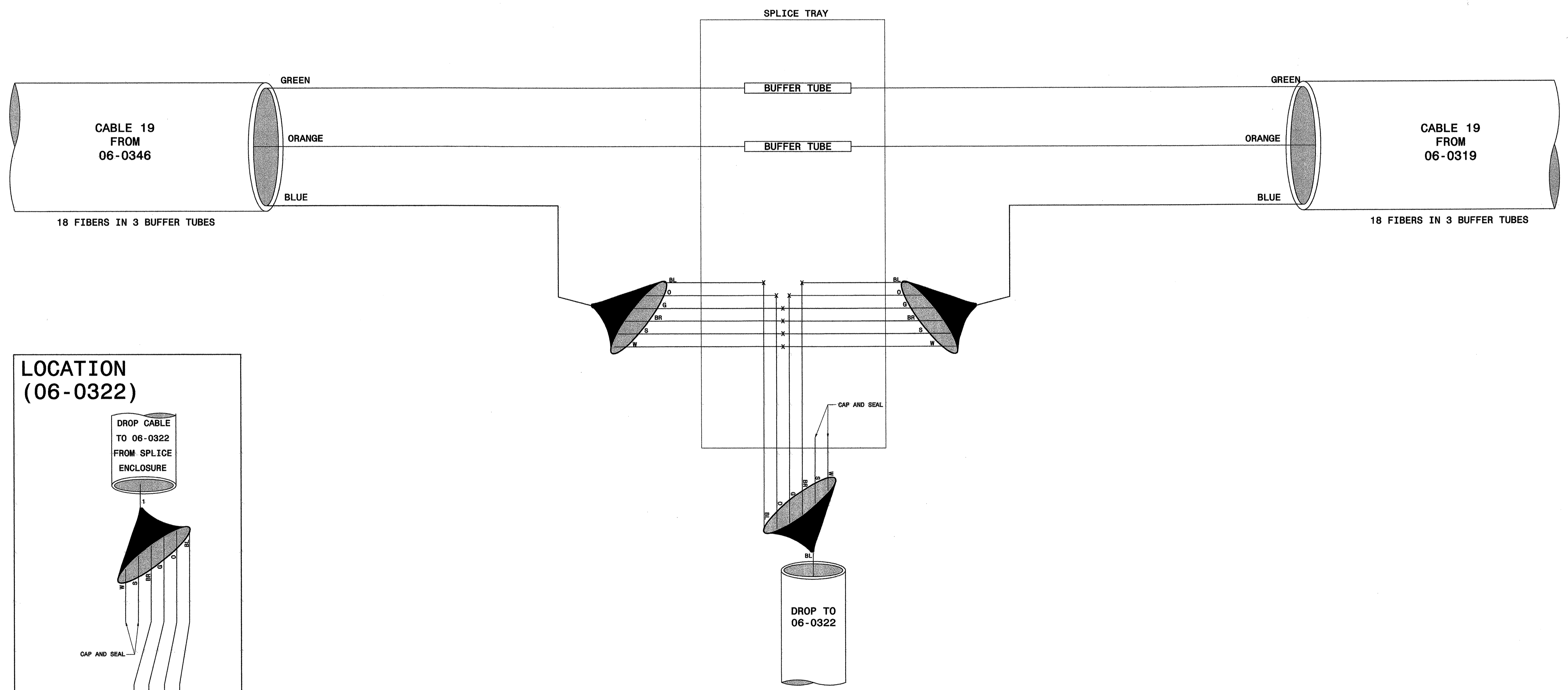
FINAL SPLICE DETAIL - TCP PHASE II STEP 2

	SPLICING DETAILS ALONG MORGANTON ROAD		
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE PLAN DATE: June 2007 REVIEWED BY: D. Privette PREPARED BY: K. Bisby REVIEWED BY:		
	REVISIONS _____ _____ _____	INIT. DATE _____ _____ _____	

CADD Filename: _____

06-0322
 SR 1404 MORGANTON ROAD AT ALL AMERICAN FREEWAY SB RAMPS

EXPRESS GREEN AND ORANGE BUFFER TUBES.

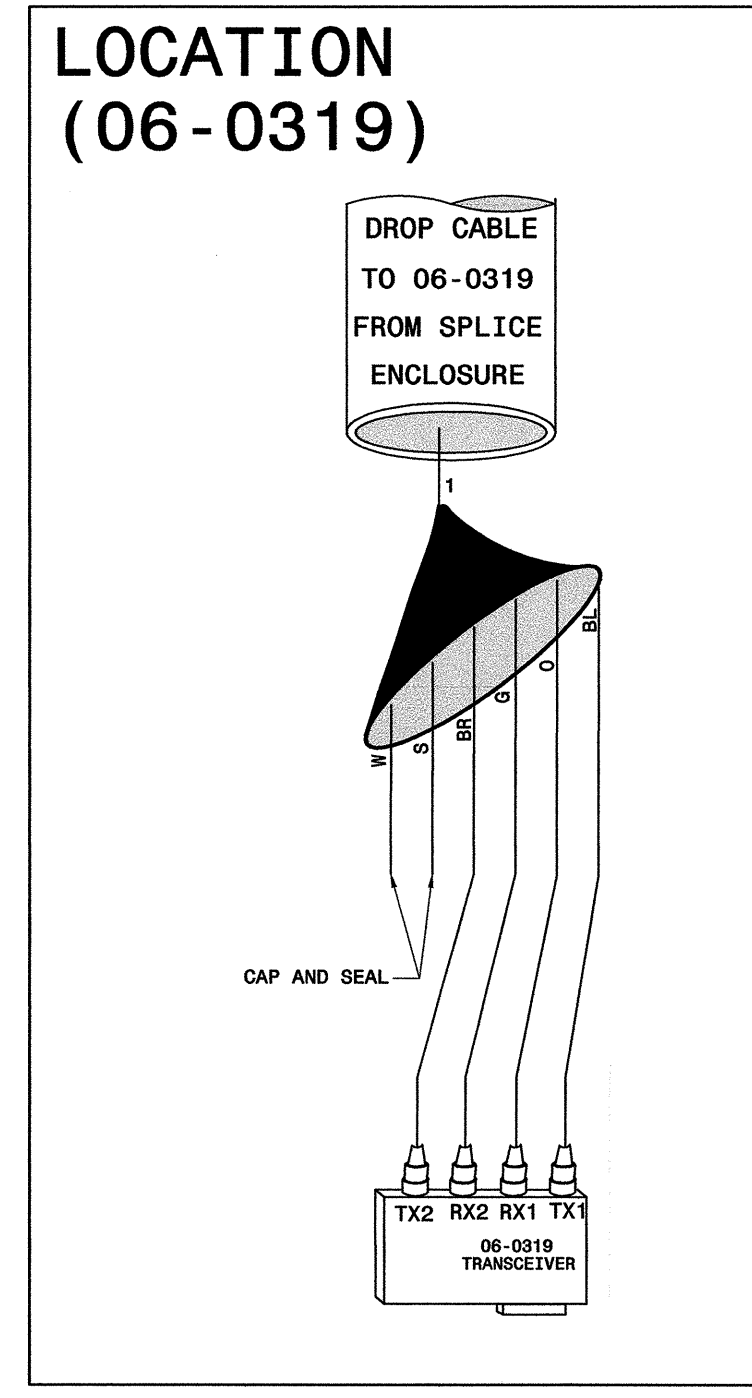
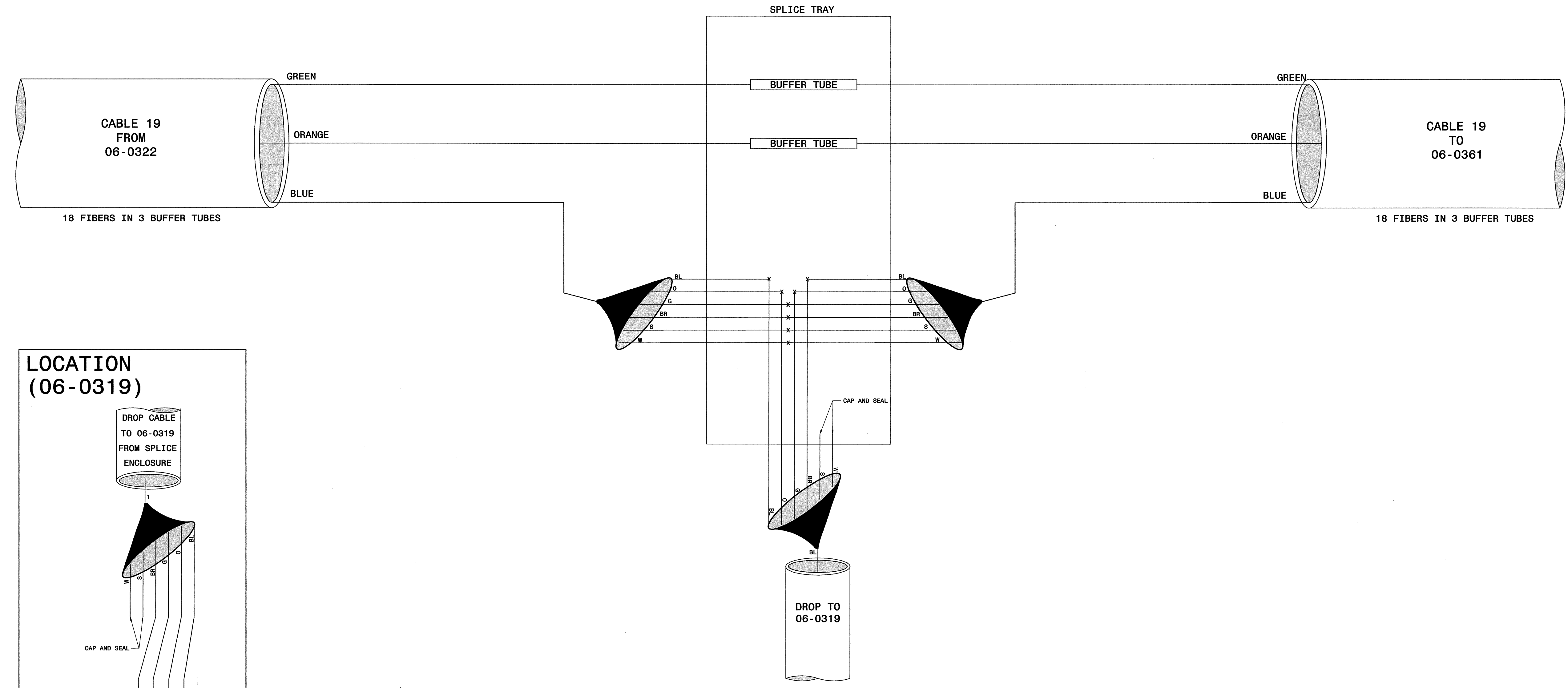


FINAL SPLICE DETAIL - TCP PHASE III STEP 1

	SPLICING DETAILS ALONG MORGANTON ROAD		
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE		
	PLAN DATE: June 2007	REVIEWED BY: D. Privette	
PREPARED BY: K. Bisby	REVIEWED BY:	INIT.	DATE
REVISIONS			
		SIGNATURE	DATE
CADD Filename:			

06-0319
 SR 1404 MORGANTON ROAD AT ALL AMERICAN FREEWAY NB RAMPS

EXPRESS GREEN AND ORANGE BUFFER TUBES.

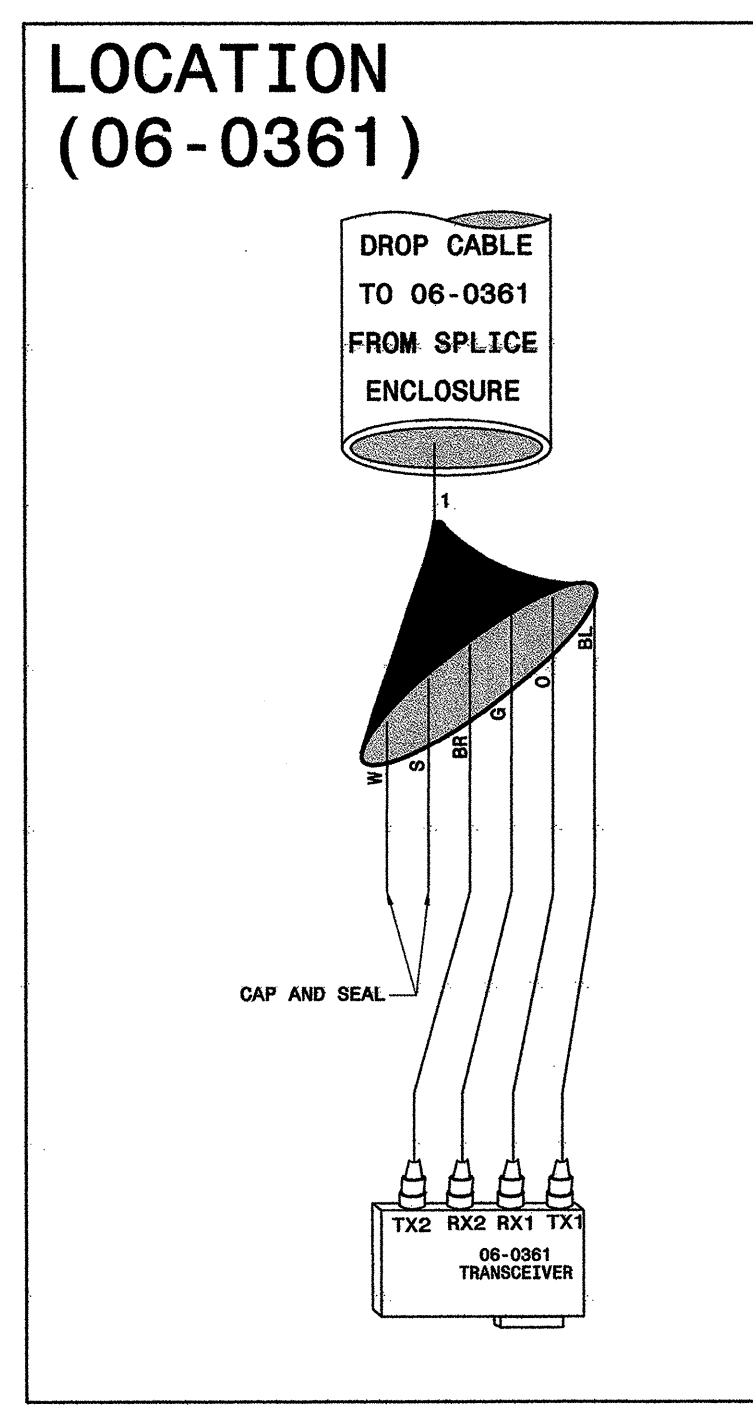
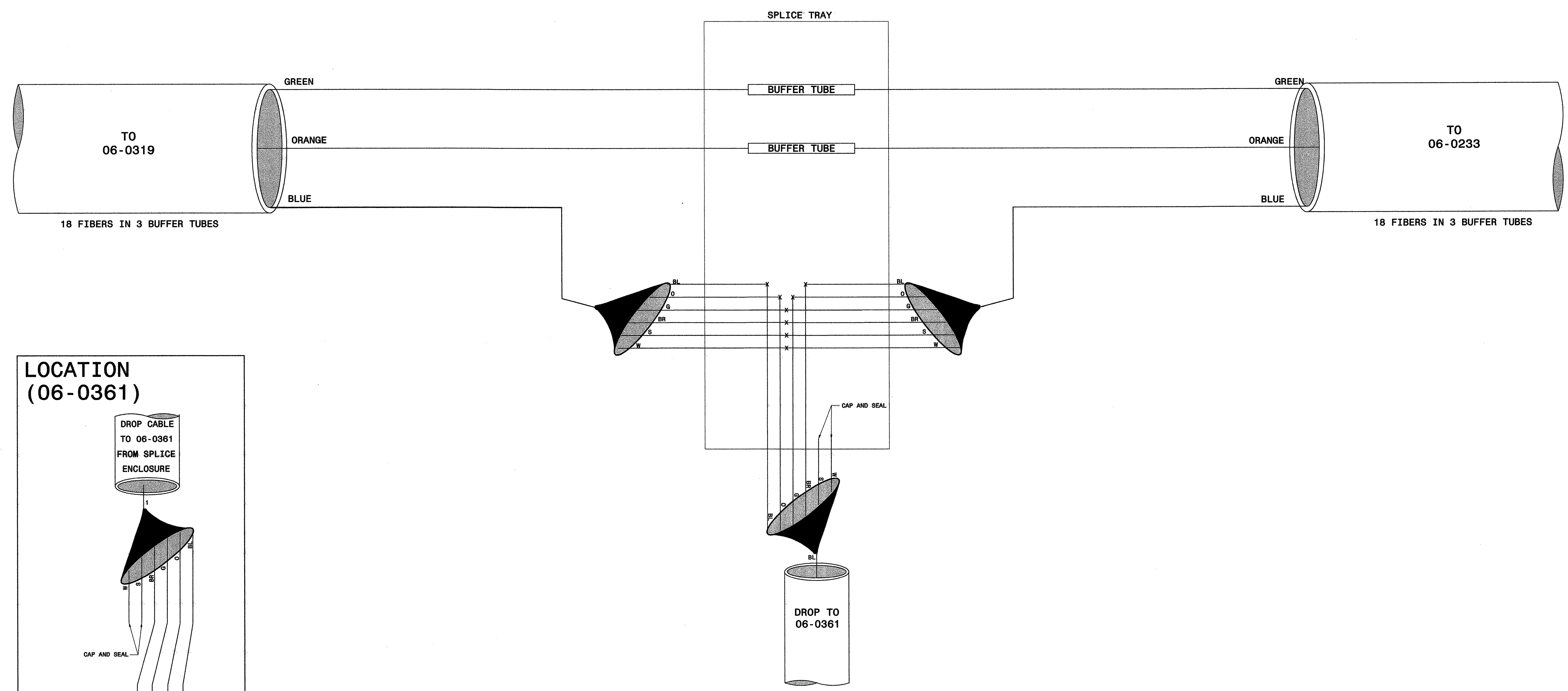


FINAL SPLICE DETAIL - TCP PHASE III STEP 1

<p>122 N. McDowell St., Raleigh, NC 27603</p>	<p>SPLICING DETAILS ALONG MORGANTON ROAD</p>		
	<p>DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE</p>		
<p>PLAN DATE: June 2007</p>	<p>REVIEWED BY: D. Privette</p>		
<p>PREPARED BY: K. Bisby</p>	<p>REVIEWED BY:</p>	<p>INIT.</p>	<p>DATE</p>
<p>REVISIONS</p>			
<p>SIGNATURE</p>			
<p>CADD Filename:</p>			

06-0361
SR 1404 MORGANTON ROAD AT SYCAMORE DAIRY ROAD

EXPRESS GREEN AND ORANGE BUFFER TUBES.

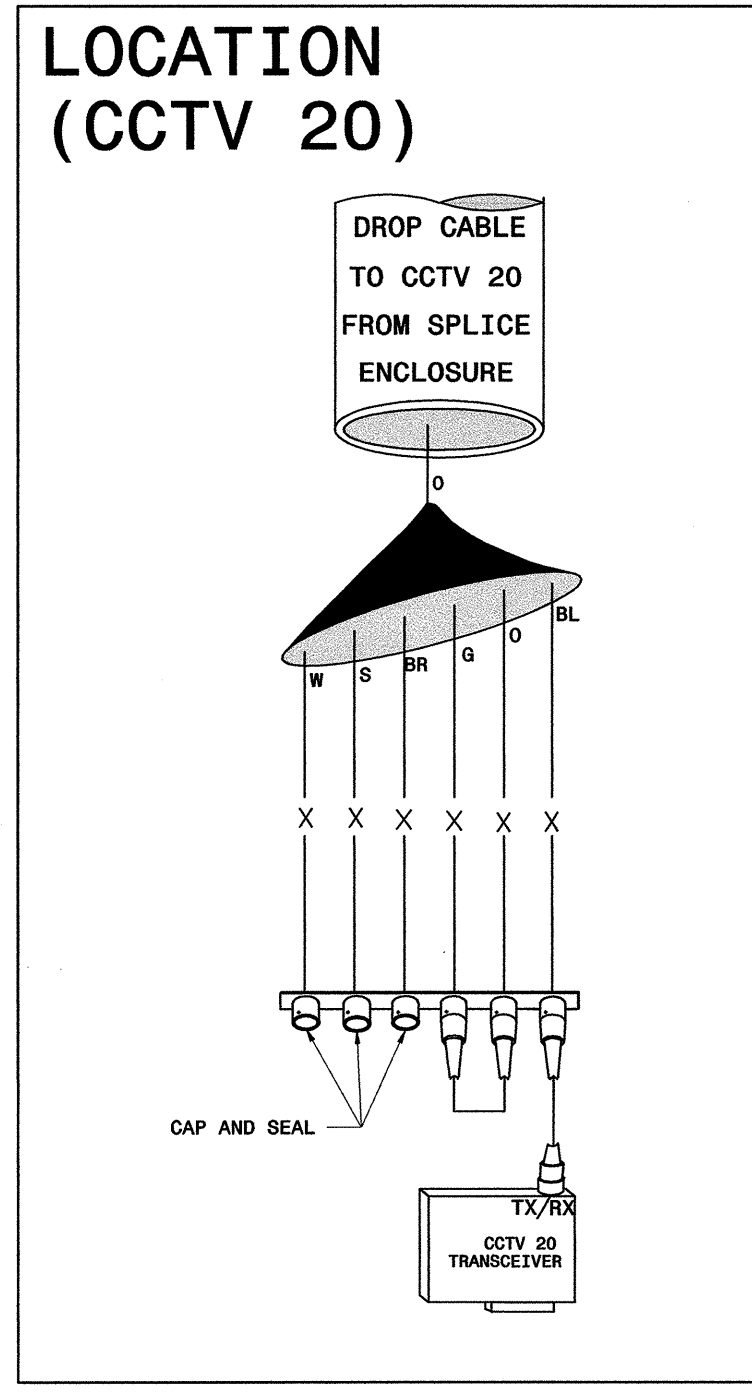
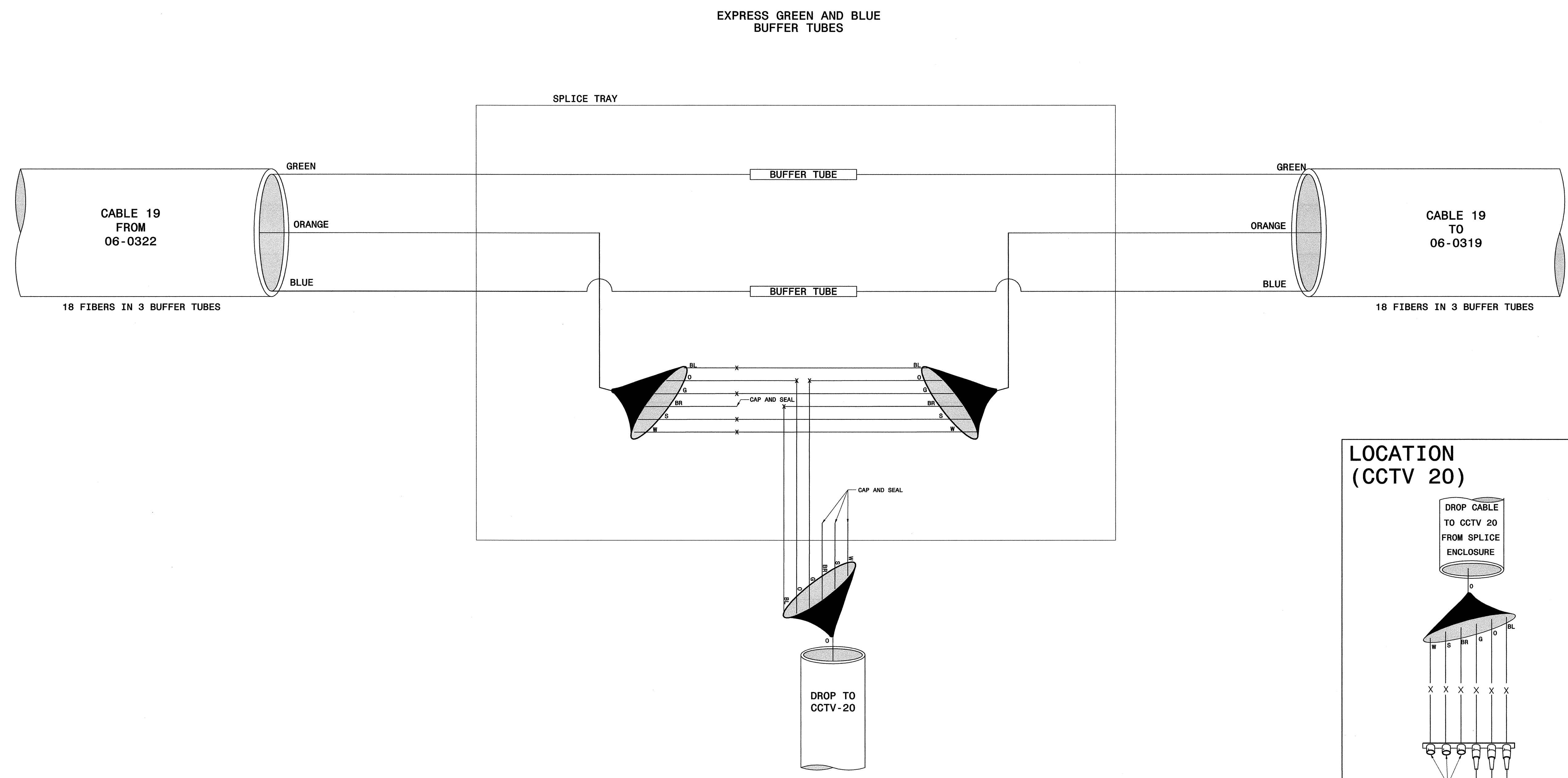


FINAL SPLICE DETAIL - TCP PHASE II STEP 2

	SPLICING DETAILS ALONG MORGANTON ROAD		
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE PLAN DATE: June 2007 REVIEWED BY: D. Privette	PREPARED BY: K. Bisby REVIEWED BY:	
REVISIONS			CADD Filename:

CCTV-20

SR 1404 MORGANTON ROAD EAST OF ALL AMERICAN FREEWAY NB RAMPS



FINAL SPLICE DETAIL - TCP PHASE III STEP 1

<p>Prepared for: Traffic Engineering and Safety Systems DIVISION OF TRANSPORTATION Traffic Management Systems 122 N. McDowell St., Raleigh, NC 27603</p>	SPLICING DETAILS ALONG MORGANTON ROAD		
	DIVISION 6 CUMBERLAND COUNTY FAYETTEVILLE PLAN DATE: June 2007 REVIEWED BY: D. Privette PREPARED BY: K. Bisby REVIEWED BY:	REVISIONS: _____ INIT. DATE _____ _____ _____	
SIGNATURE: _____ DATE: _____ CADD Filename:			SEAL