

CONTRACT: C201275-SG TIP PROJECT: R-06091A

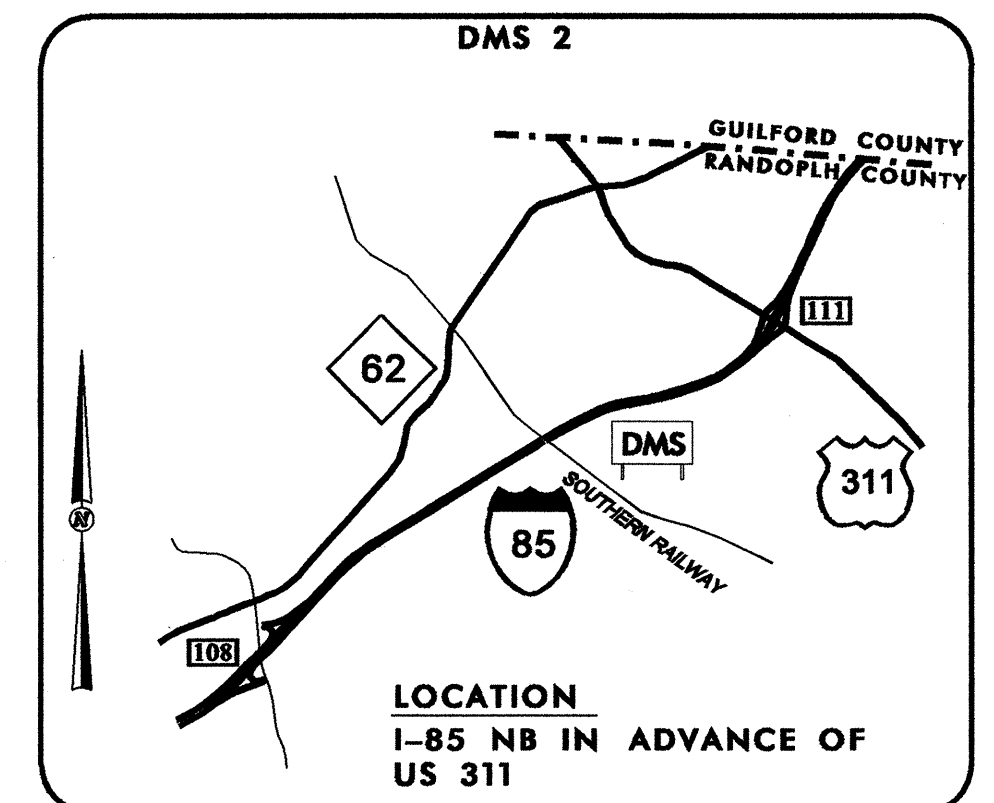
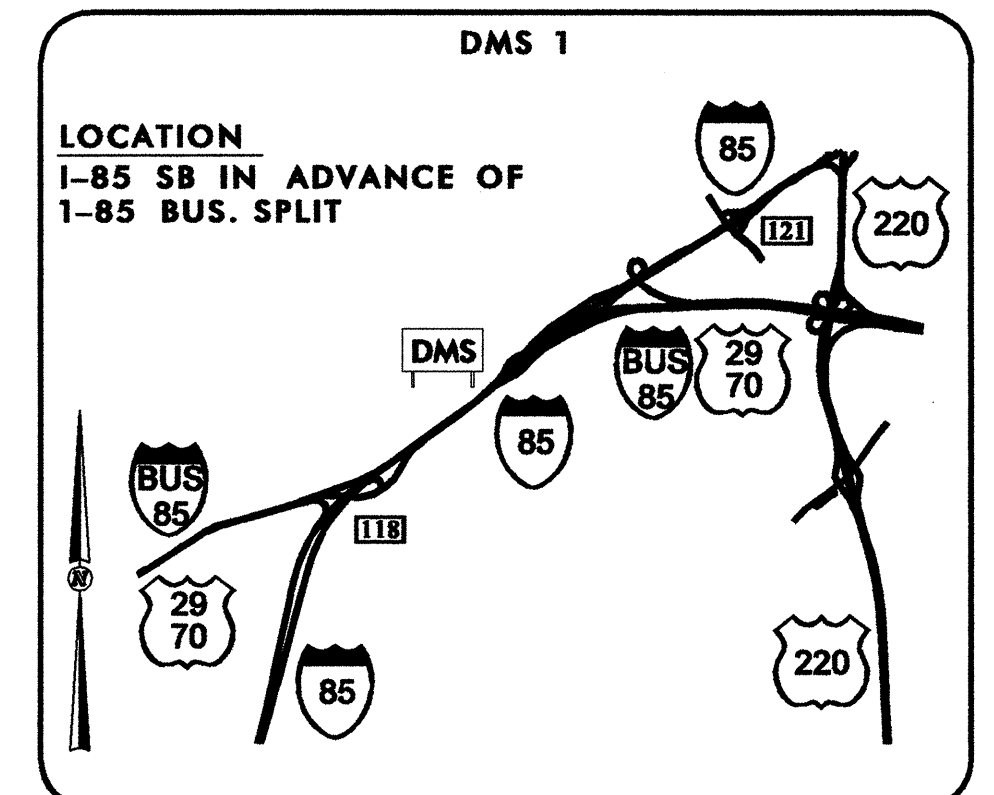
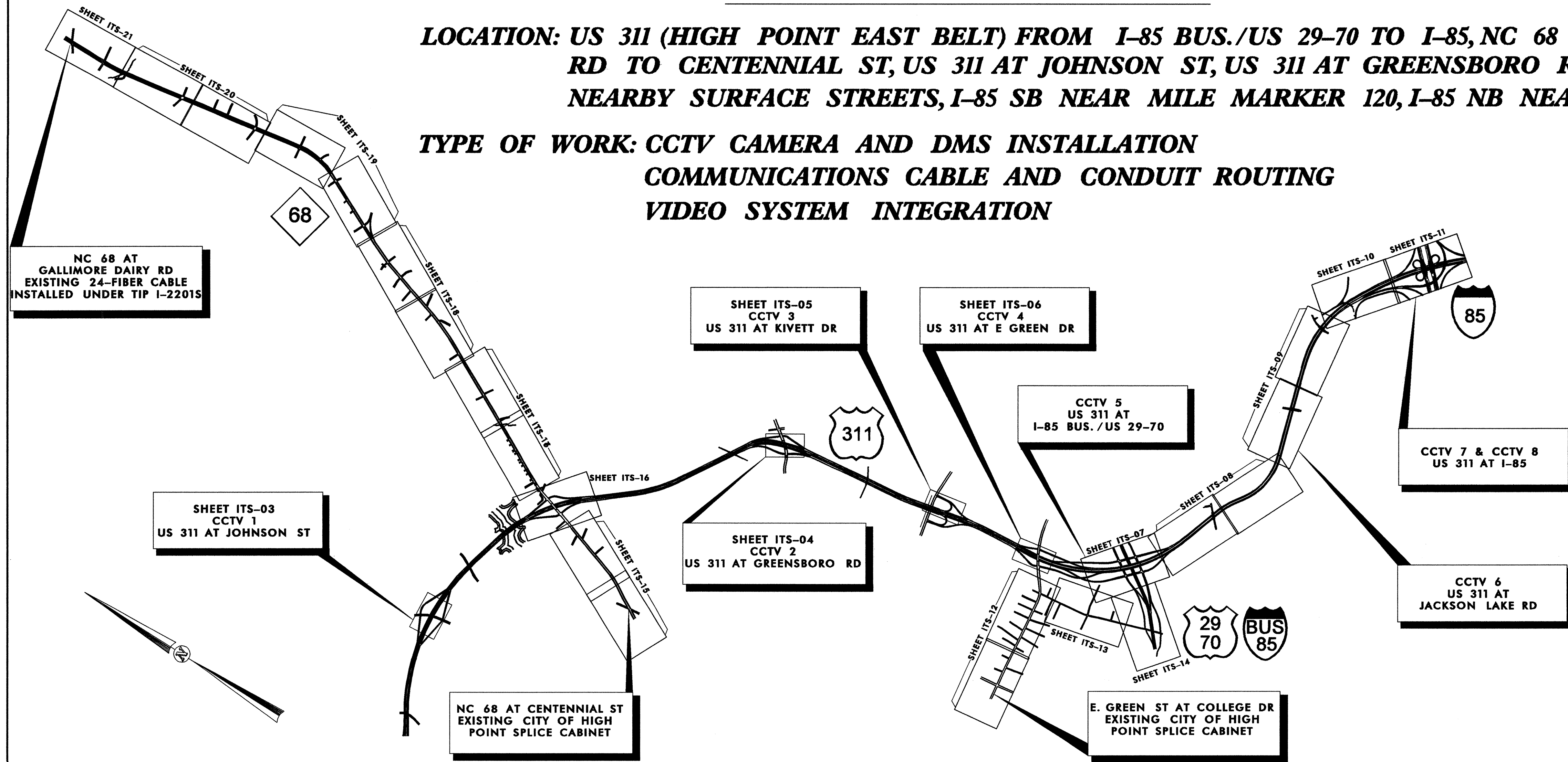
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

GUILFORD & RANDOLPH COUNTIES

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-06091A	ITS-1	52
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34345.3.15	STP-NHF-119-1(15)	CONST.	

LOCATION: US 311 (HIGH POINT EAST BELT) FROM I-85 BUS./US 29-70 TO I-85, NC 68 FROM GALLIMORE DAIRY RD TO CENTENNIAL ST, US 311 AT JOHNSON ST, US 311 AT GREENSBORO RD, US 311 AT KIVETT DR AND NEARBY SURFACE STREETS, I-85 SB NEAR MILE MARKER 120, I-85 NB NEAR MILE MARKER 109

**TYPE OF WORK: CCTV CAMERA AND DMS INSTALLATION
COMMUNICATIONS CABLE AND CONDUIT ROUTING
VIDEO SYSTEM INTEGRATION**



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 JANUARY 2002 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	ATTACHMENT AND GROUNDING GUY ASSEMBLIES
1730.01	FIBER OPTIC CABLE SPARE CABLE STORAGE
1730.02	FIBER OPTIC CABLE CONDUIT INSTALLATION
1733.01	DELINEATOR MARKERS
1751.01	ELECTRICAL SERVICE GROUNDING
1751.02	ELECTRICAL SERVICE DETAILS
1752.01	POWER, GROUND AND AUXILIARY POWER SYSTEMS

INDEX OF PLAN SHEETS

SHEET NUMBER	LOCATION / DESCRIPTION
ITS 1	TITLE SHEET
ITS 2A-2C	CONSTRUCTION NOTES AND TYPICAL DETAILS
ITS 3-6	CCTV 1, CCTV 2, CCTV 3 & CCTV 4 DETAILS
ITS 7-11	US-311 FROM I-85 TO I-85 BUS FIBER ROUTING AND CCTV 4-8 DETAILS
ITS 12-14	I-85 BUS TO COLLEGE DR SPLICE CABINET FIBER ROUTING DETAILS
ITS 15-21	NC-68 FROM GALLIMORE DAIRY RD TO CENTENNIAL ST SPLICE CABINET FIBER ROUTING DETAILS
ITS 22	DYNAMIC MESSAGE SIGN DETAILS
SPL 1-8	FIBER SPLICING DETAILS

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

DIVISION ADMINISTRATOR

LETTING DATE

February 20, 2007

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE DESIGN ENGINEER

PROJECT LENGTH

NC 68 = 9.25 KM
US 311 = 4.83 KM

E. GREEN & COLLEGE DR TO I-85 BUS /US 29-70 = 3.62 KM

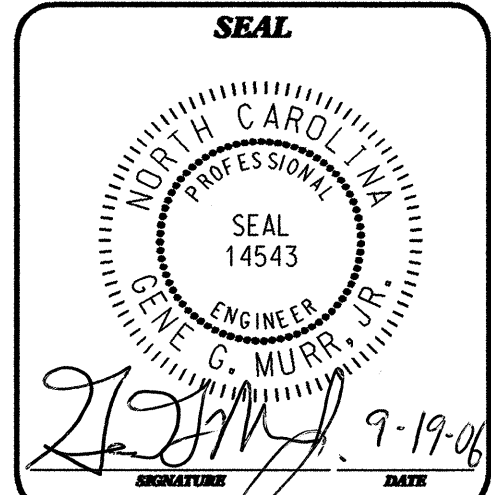
TOTAL LENGTH = 17.7 KM

**NC DOT CONTACTS:
TRAFFIC ENGINEERING AND SAFETY SYSTEMS BRANCH**

G. G. MURR, JR., PE - ITS ENGINEER
THOMAS G. PARKER - ITS PROJECT ENGINEER
SHERRY C. YOW - ITS PROJECT DESIGN ENGINEER



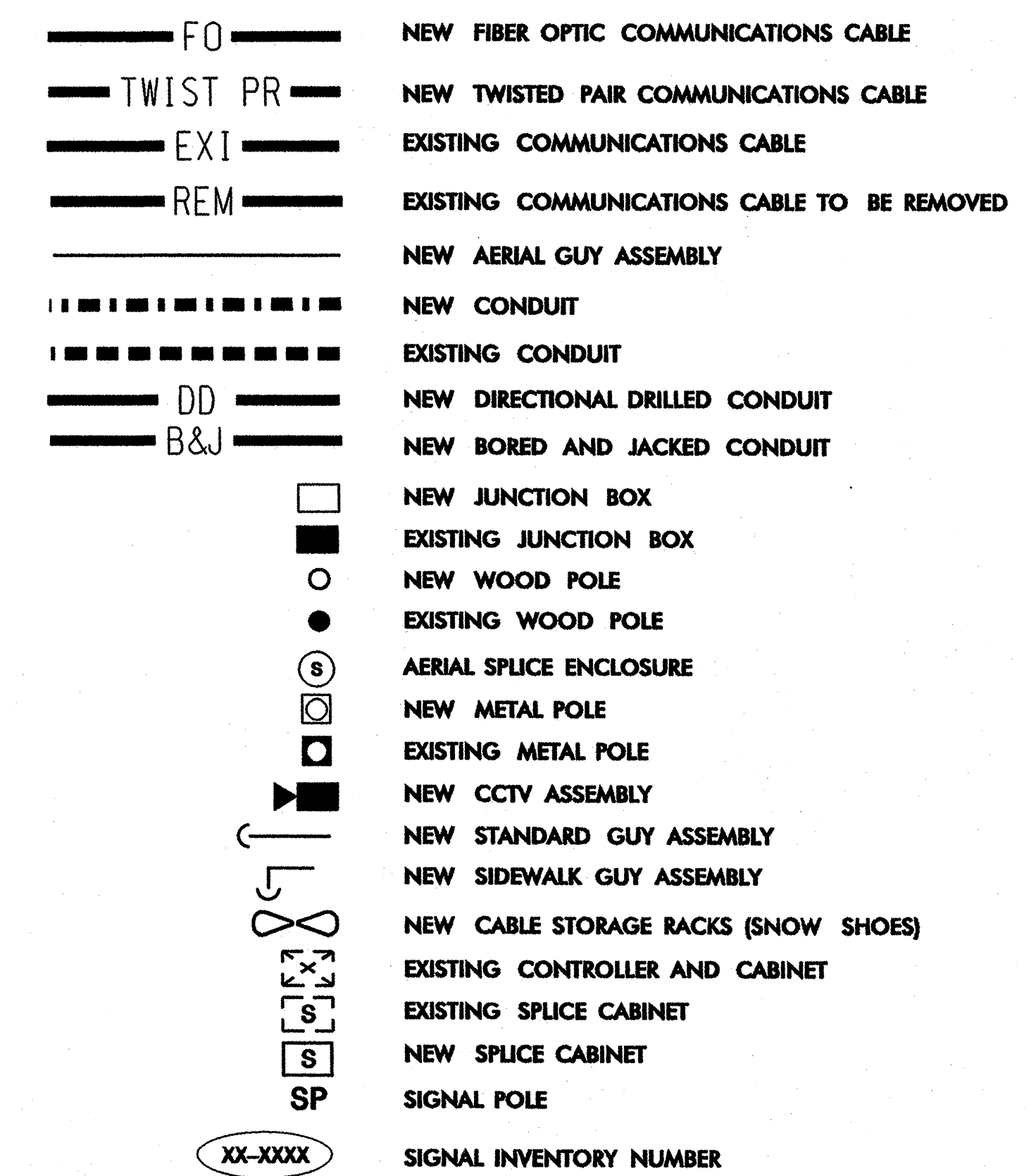
ALL DIMENSIONS IN THESE PLANS ARE IN METERS UNLESS OTHERWISE NOTED



- 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
- 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

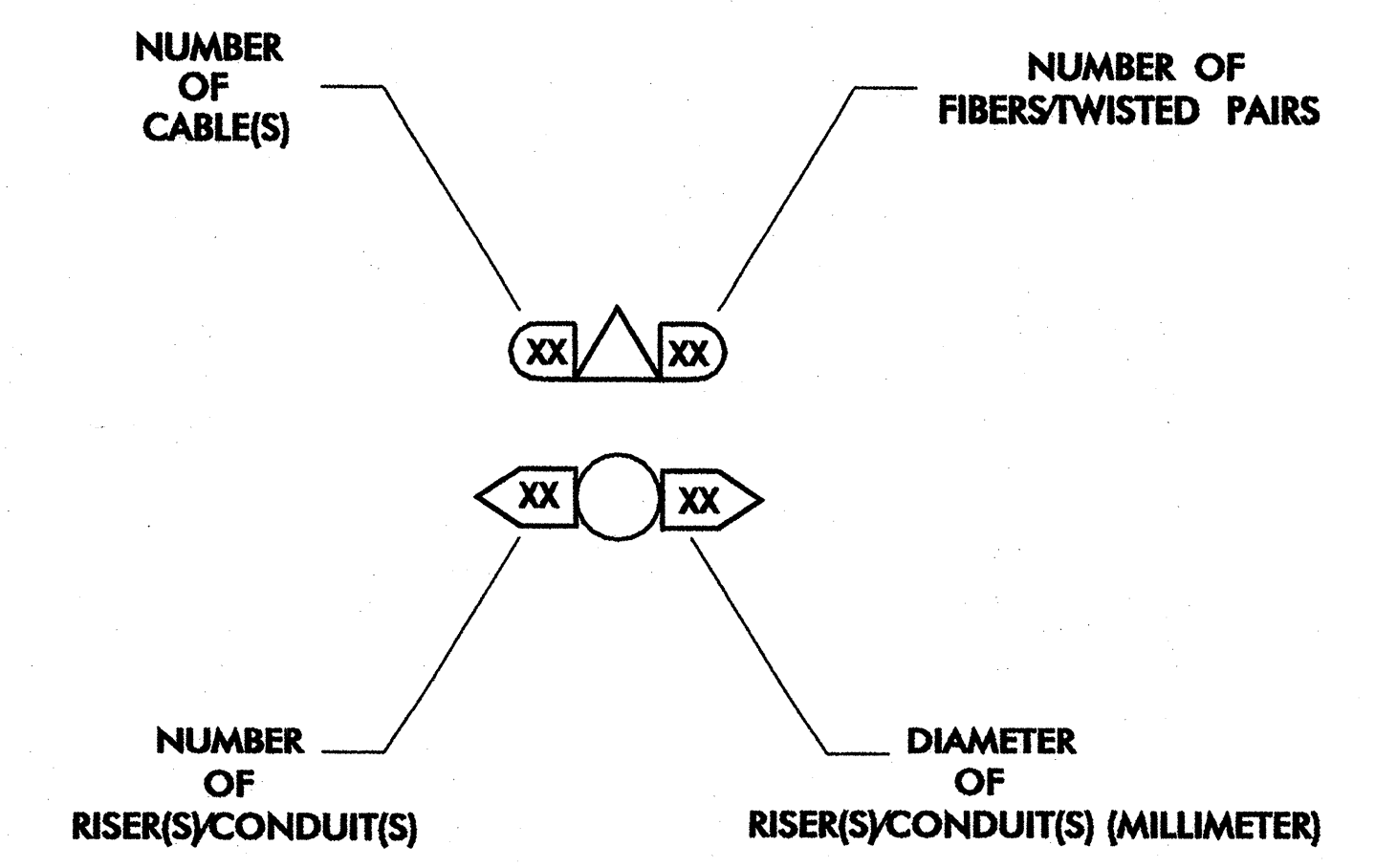
- 34 INSTALL CABINET FOUNDATION
- 35 REMOVE EXISTING CABINET FOUNDATION
- 36 INSTALL CCTV CAMERA ASSEMBLY
- 37 INSTALL CCTV CAMERA WOOD POLE
- 38 INSTALL CCTV CAMERA METAL POLE AND FOUNDATION
- 39 INSTALL JUNCTION BOX
- 40 INSTALL OVERSIZED JUNCTION BOX
- 41 REMOVE EXISTING JUNCTION BOX
- 42 INSTALL 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 30 METERS OF CABLE
- 52 INSTALL DELINEATOR MARKER
- 53 STORE 6 METERS 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

LEGEND

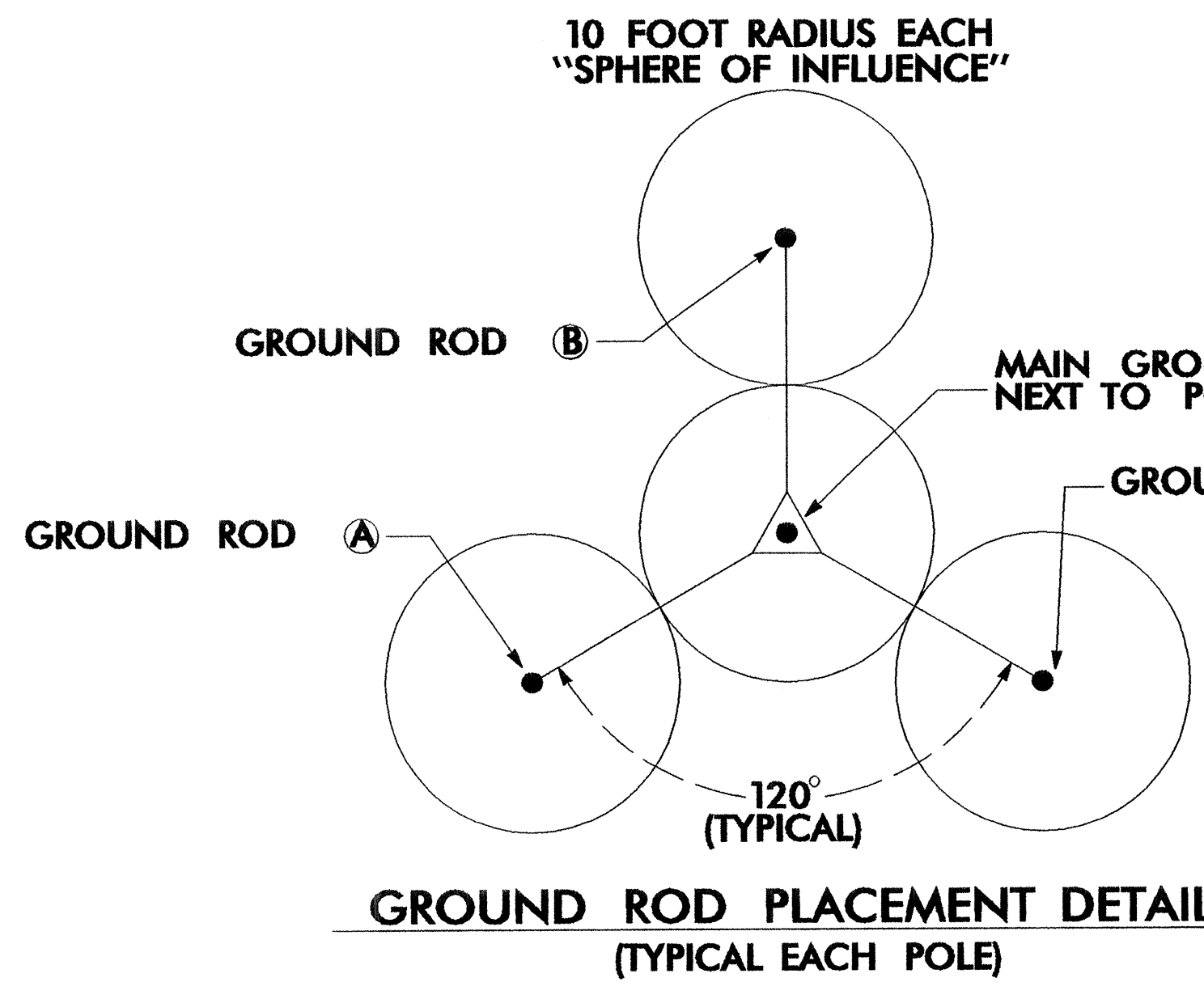


CONSTRUCTION NOTE SYMBOLOGY KEY

- 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)



	CONSTRUCTION NOTES		
	PLAN DATE: _____ SCALE: _____ REVISIONS: _____	REVIEWED BY: _____ REVIEWED BY: G. A. FULLER INIT. DATE: _____	

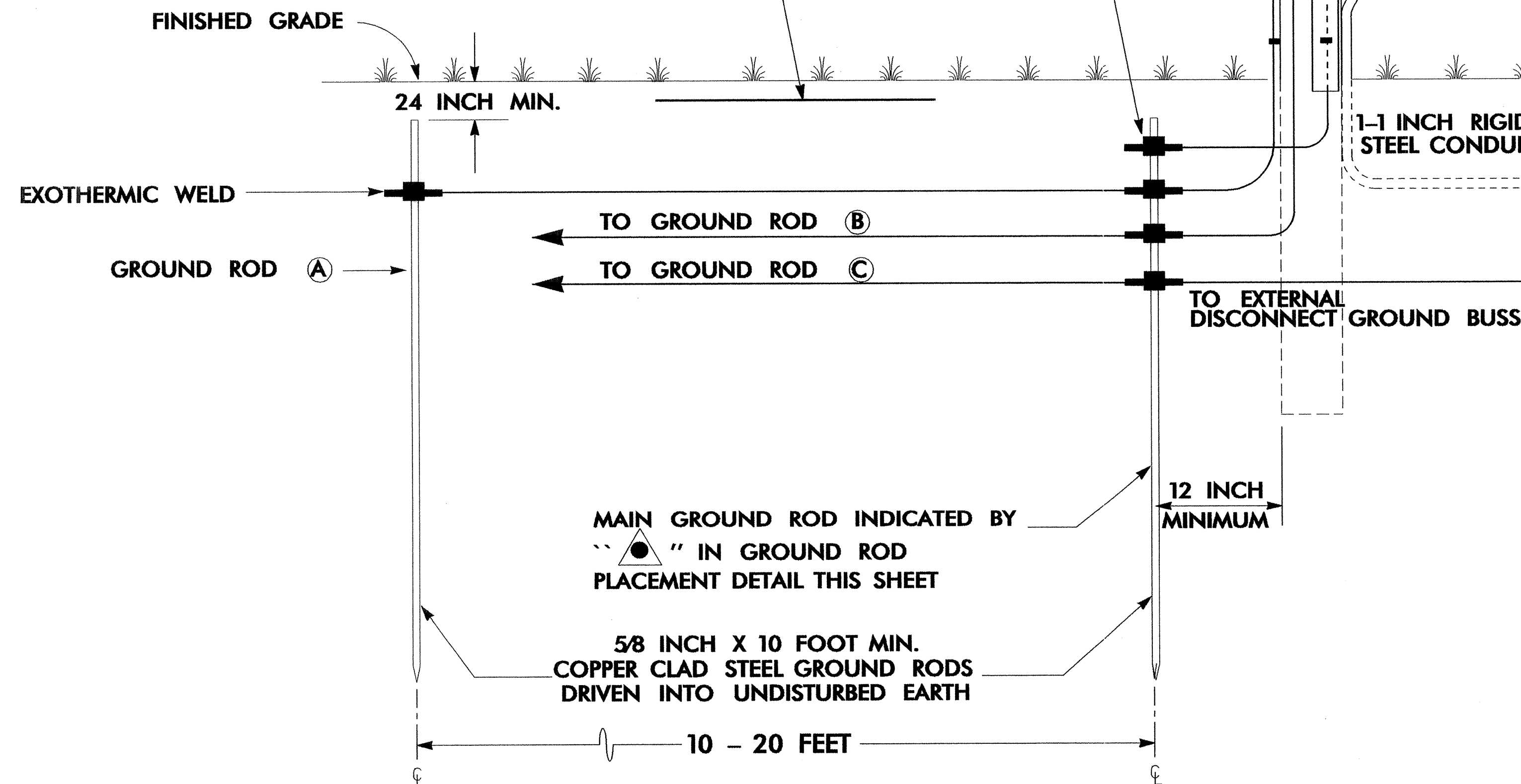


BOND #4 AWG SOLID BARE COPPER WIRE TO CAMERA SUPPORT BASE BY AN ALUMINUM TO COPPER #2 - #14 AWG LUG. ATTACH TO CAMERA BASE WITH A STAINLESS STEEL SELF TAPPING SCREW. REMOVE PAINT OR PROTECTIVE COATING WHERE ATTACHING LUG ONLY.

INSTALL 2 INCH PVC U-GUARD OVER COPPER CONDUCTOR FROM GROUND LEVEL TO 15 FOOT MINIMUM ABOVE THE GROUND.

1 - 2 INCH RISER FOR POWER AND CONTROL WIRES

INSTALL MARKER TAPE 12 INCHES BELOW GRADE AND ABOVE ALL GROUNDING CONDUCTORS.



0.5 INCH X 36 INCH MINIMUM COPPER-CLAD AIR TERMINAL (CLASS II)

BOND 0.5 INCH DIAMETER, 28 STRAND (MINIMUM) CLASS II COPPER CONDUCTOR TO THE AIR TERMINAL BY AN EXOTHERMIC WELD METHOD.

#4 AWG SOLID BARE COPPER WIRE TO GROUND RODS A, B, AND C

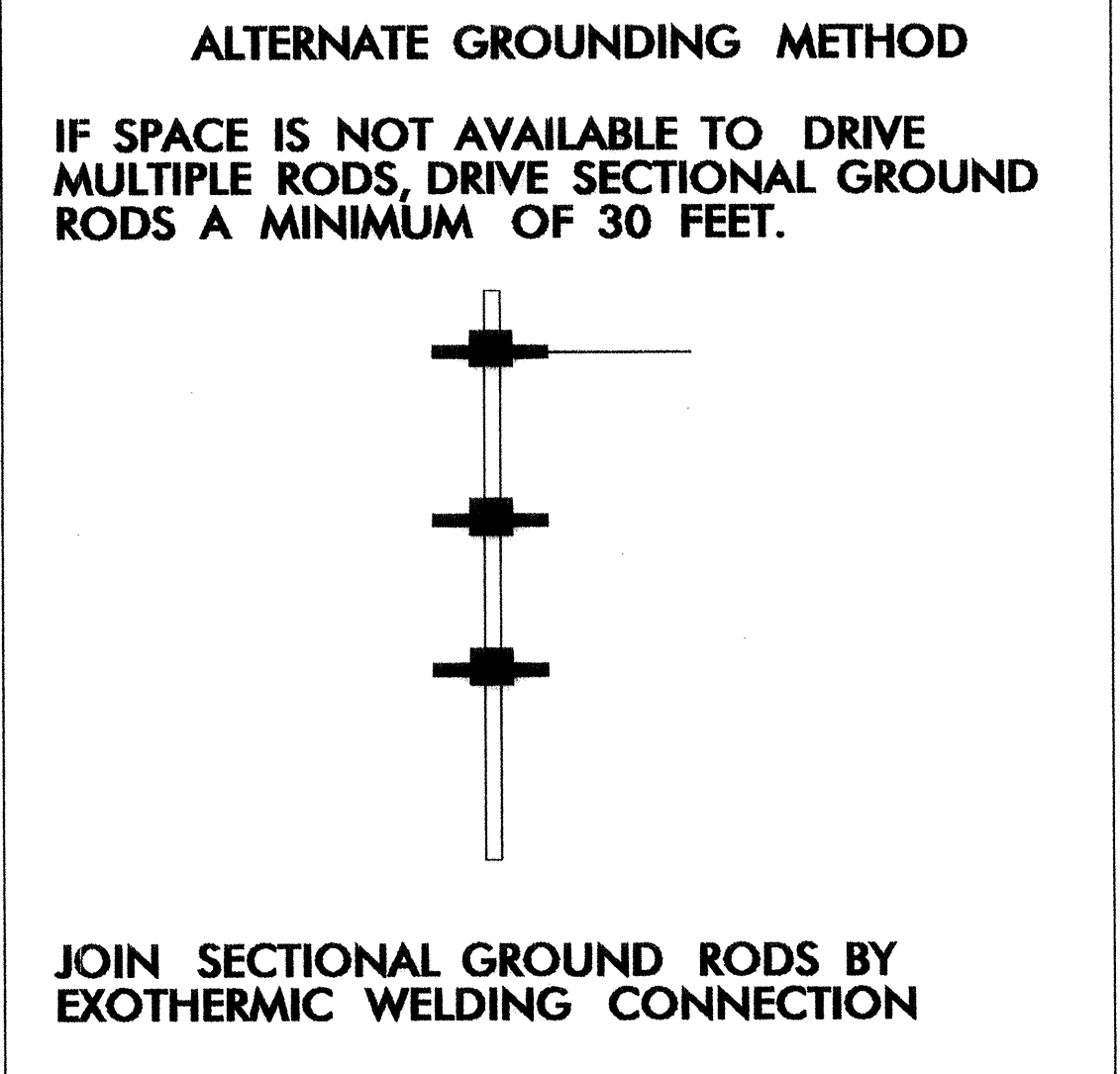
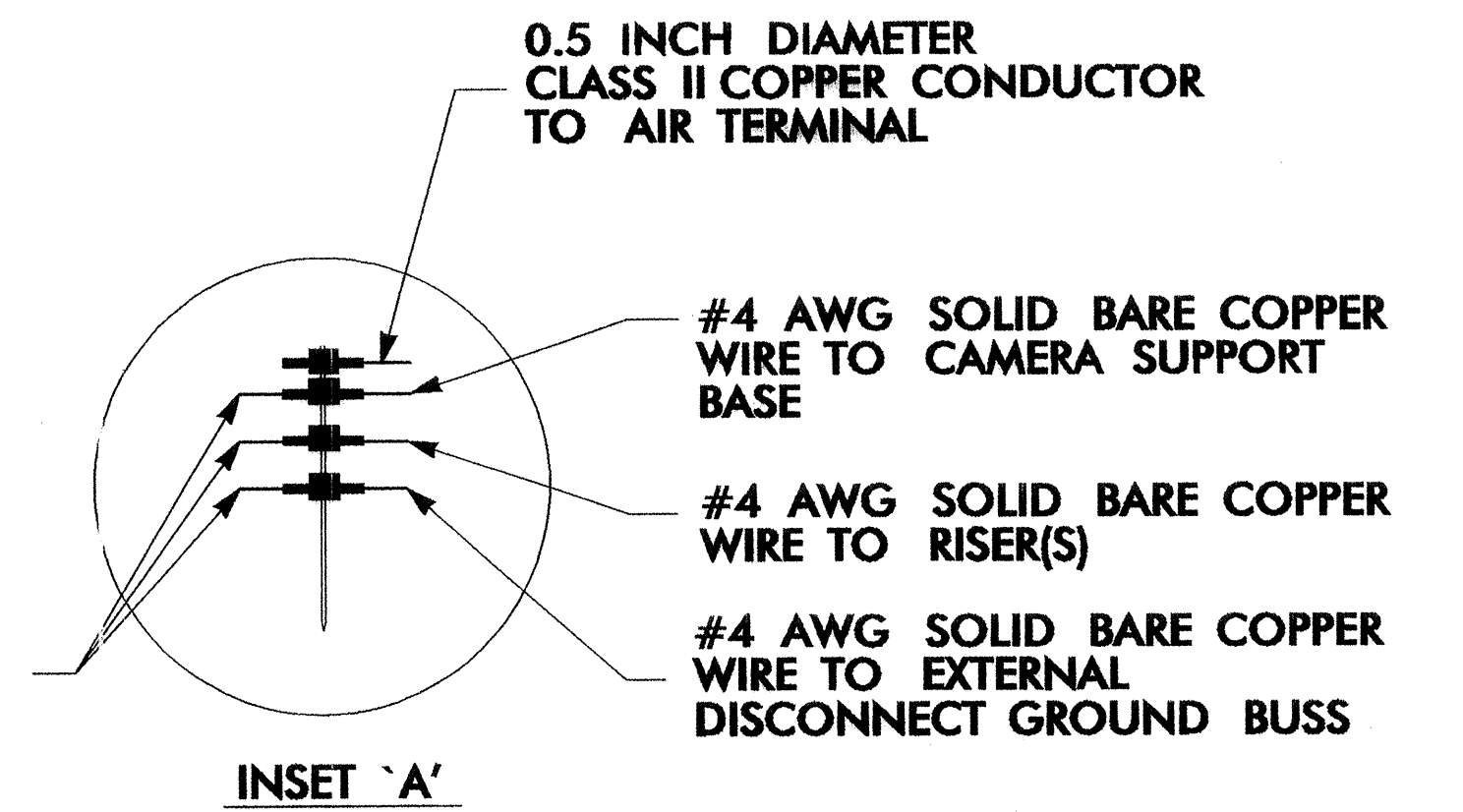
SECURE 0.5 INCH DIAMETER, 28 STRAND (MINIMUM) CLASS II COPPER CONDUCTOR TO THE POLE ON 24 INCH CENTERS. USE COPPER CABLE CLIPS DESIGNED FOR USE WITH THE CLASS II COPPER CONDUCTOR. SECURE EACH COPPER CABLE CLIP TO THE POLE USING A 0.25 INCH DIAMETER X 1.5 INCH LONG HEX HEAD, GALVANIZED SCREW.

INSTALL CCTV CAMERA

5 FEET

POWER AND CONTROL WIRES

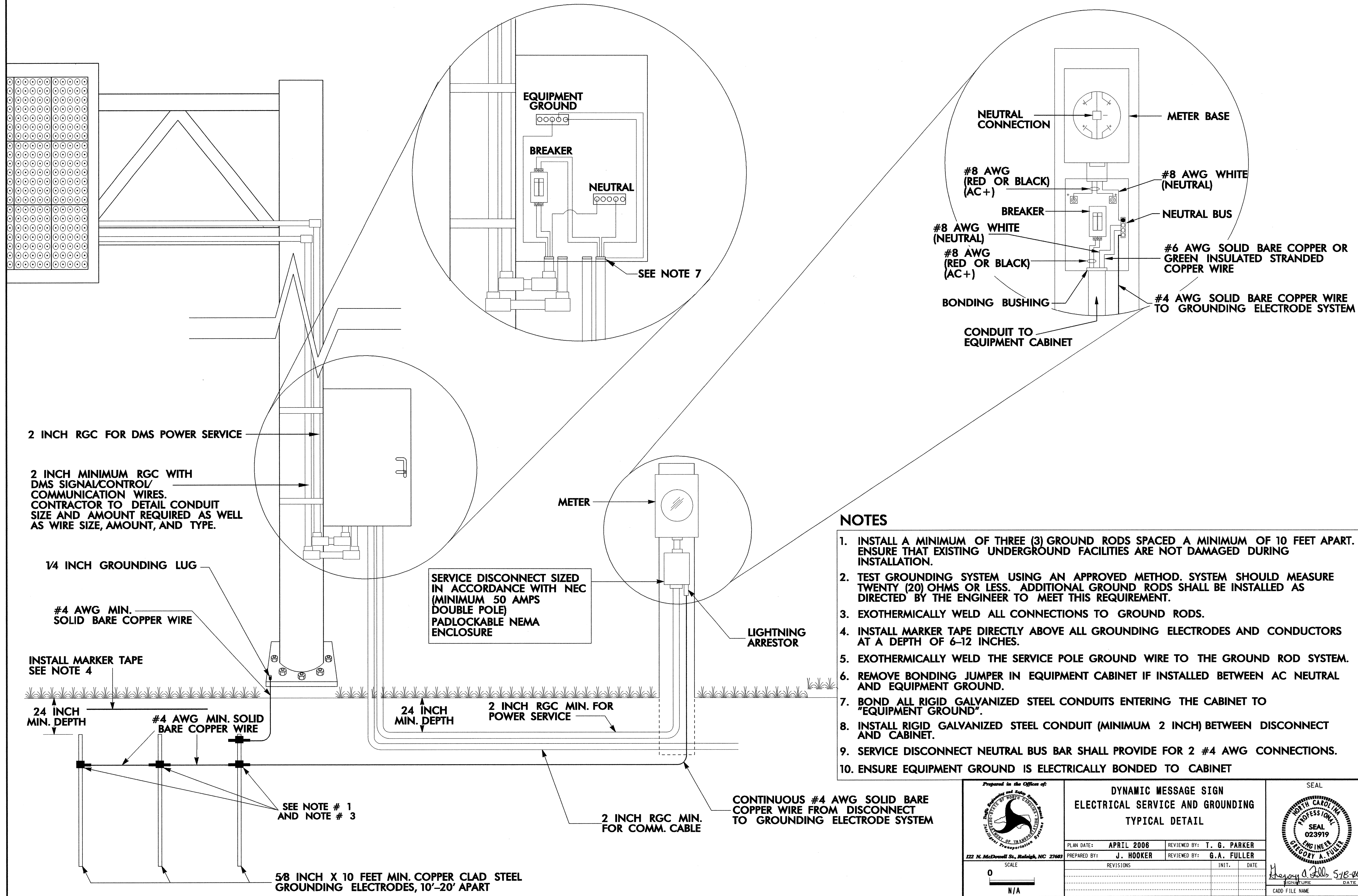
INSTALL POLE MOUNT EQUIPMENT CABINET



NOTES

1. BOND 0.5 INCH DIAMETER, 28 STRAND (MINIMUM) CLASS II COPPER CONDUCTOR TO THE MAIN GROUND ROD BY AN EXOTHERMIC WELD METHOD. MAINTAIN MAXIMUM HORIZONTAL SEPARATION BETWEEN COPPER CONDUCTOR AND RISER.
2. EXOTHERMICALLY WELD ALL CONNECTIONS TO GROUND RODS.
3. BOND #4 AWG SOLID BARE COPPER WIRE TO THE RISER(S).
4. THE CONTRACTOR MAY, UPON APPROVAL OF THE ENGINEER, INSTALL A 30-FOOT SECTIONAL GROUND ROD FOR INSTANCES WHEN CONDITIONS WILL NOT ALLOW FOR THE INSTALLATION OF THE 3 - RADIAL GROUND RODS.
5. INSTALL MARKER TAPE DIRECTLY ABOVE ALL GROUNDING ELECTRODES AND CONDUCTORS AT A DEPTH OF 12 INCHES.

	CCTV CAMERA INSTALLATION FOR WOOD POLES TYPICAL DETAIL	
	PLAN DATE: MARCH 2004 PREPARED BY: J. HOOKER SCALE: NONE	REVIEWED BY: T. G. PARKER REVIEWED BY: G. A. FULLER DATE: 04/13/06
122 N. McDowell St., Raleigh, NC 27603		SIGNATURE: <i>Gregory A. Fuller</i> 4/13/06 DATE: 04/13/06 CADD FILE NAME:



2 INCH RGC FOR DMS POWER SERVICE

2 INCH MINIMUM RGC WITH DMS SIGNAL/CONTROL/COMMUNICATION WIRES. CONTRACTOR TO DETAIL CONDUIT SIZE AND AMOUNT REQUIRED AS WELL AS WIRE SIZE, AMOUNT, AND TYPE.

1/4 INCH GROUNDING LUG

#4 AWG MIN. SOLID BARE COPPER WIRE

INSTALL MARKER TAPE SEE NOTE 4

24 INCH MIN. DEPTH

#4 AWG MIN. SOLID BARE COPPER WIRE

SEE NOTE # 1 AND NOTE # 3

5/8 INCH X 10 FEET MIN. COPPER CLAD STEEL GROUNDING ELECTRODES, 10'-20' APART

SERVICE DISCONNECT SIZED IN ACCORDANCE WITH NEC (MINIMUM 50 AMPS DOUBLE POLE) PADLOCKABLE NEMA ENCLOSURE

24 INCH MIN. DEPTH

2 INCH RGC MIN. FOR POWER SERVICE

2 INCH RGC MIN. FOR COMM. CABLE

CONTINUOUS #4 AWG SOLID BARE COPPER WIRE FROM DISCONNECT TO GROUNDING ELECTRODE SYSTEM

EQUIPMENT GROUND
BREAKER
NEUTRAL

SEE NOTE 7

NEUTRAL CONNECTION
METER BASE

#8 AWG (RED OR BLACK) (AC+)

#8 AWG WHITE (NEUTRAL)

BREAKER

NEUTRAL BUS

#8 AWG WHITE (NEUTRAL)

#6 AWG SOLID BARE COPPER OR GREEN INSULATED STRANDED COPPER WIRE

#8 AWG (RED OR BLACK) (AC+)

#4 AWG SOLID BARE COPPER WIRE TO GROUNDING ELECTRODE SYSTEM

BONDING BUSHING

CONDUIT TO EQUIPMENT CABINET

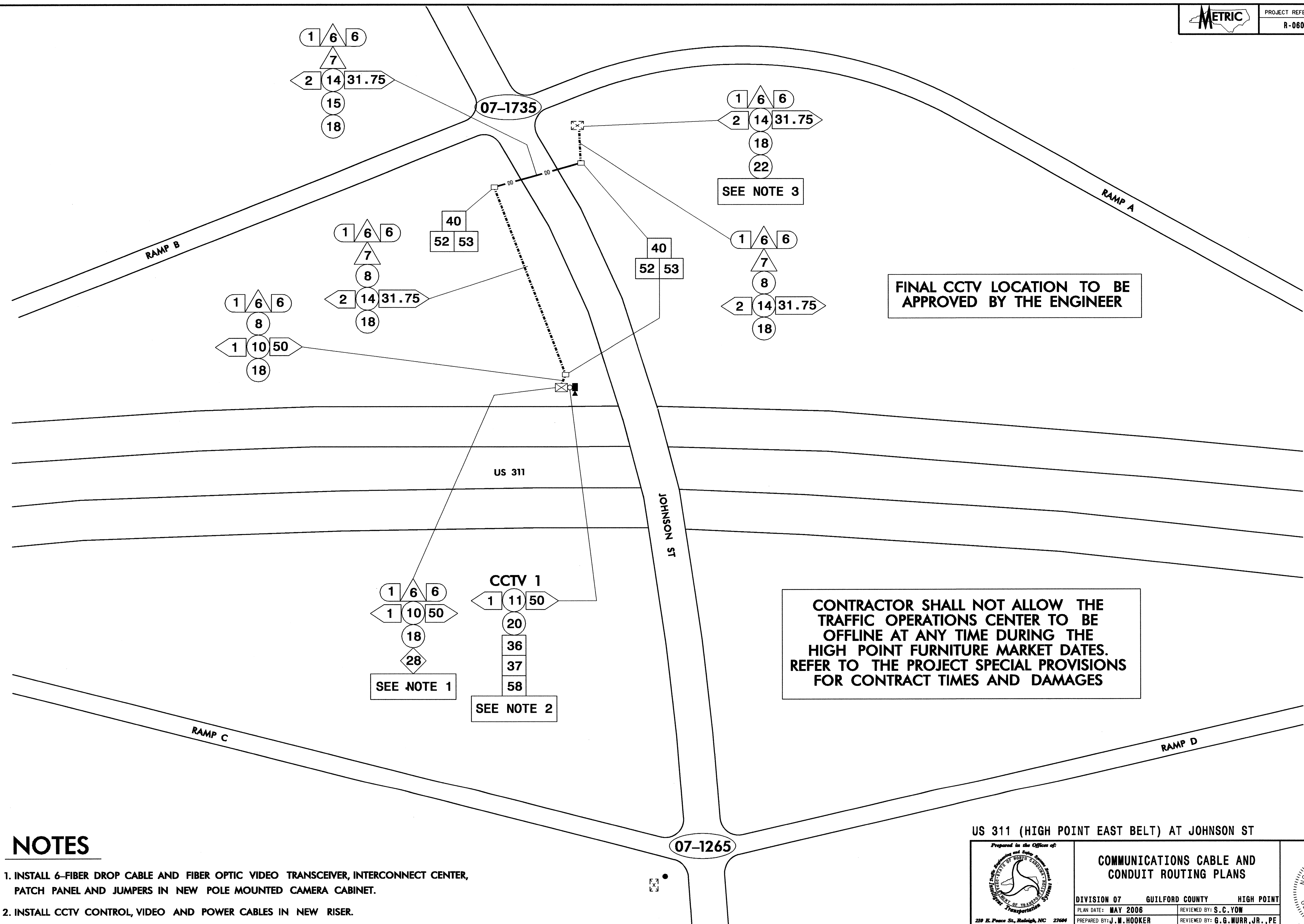
METER

LIGHTNING ARRESTOR

NOTES

1. INSTALL A MINIMUM OF THREE (3) GROUND RODS SPACED A MINIMUM OF 10 FEET APART. ENSURE THAT EXISTING UNDERGROUND FACILITIES ARE NOT DAMAGED DURING INSTALLATION.
2. TEST GROUNDING SYSTEM USING AN APPROVED METHOD. SYSTEM SHOULD MEASURE TWENTY (20) OHMS OR LESS. ADDITIONAL GROUND RODS SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER TO MEET THIS REQUIREMENT.
3. EXOTHERMICALLY WELD ALL CONNECTIONS TO GROUND RODS.
4. INSTALL MARKER TAPE DIRECTLY ABOVE ALL GROUNDING ELECTRODES AND CONDUCTORS AT A DEPTH OF 6-12 INCHES.
5. EXOTHERMICALLY WELD THE SERVICE POLE GROUND WIRE TO THE GROUND ROD SYSTEM.
6. REMOVE BONDING JUMPER IN EQUIPMENT CABINET IF INSTALLED BETWEEN AC NEUTRAL AND EQUIPMENT GROUND.
7. BOND ALL RIGID GALVANIZED STEEL CONDUITS ENTERING THE CABINET TO "EQUIPMENT GROUND".
8. INSTALL RIGID GALVANIZED STEEL CONDUIT (MINIMUM 2 INCH) BETWEEN DISCONNECT AND CABINET.
9. SERVICE DISCONNECT NEUTRAL BUS BAR SHALL PROVIDE FOR 2 #4 AWG CONNECTIONS.
10. ENSURE EQUIPMENT GROUND IS ELECTRICALLY BONDED TO CABINET

<p>Prepared in the Office of:</p> <p>122 N. McDowell St., Raleigh, NC 27603</p>	<p>DYNAMIC MESSAGE SIGN ELECTRICAL SERVICE AND GROUNDING TYPICAL DETAIL</p>		<p>SEAL</p>
	<p>PLAN DATE: APRIL 2006</p>	<p>REVIEWED BY: T. G. PARKER</p>	
<p>PREPARED BY: J. HOOKER</p>	<p>REVIEWED BY: G.A. FULLER</p>	<p>REVISIONS</p>	<p>INIT. DATE</p>
<p>CADD FILE NAME</p>			<p>SIGNATURE: Gregory A. Fuller</p>



NOTES

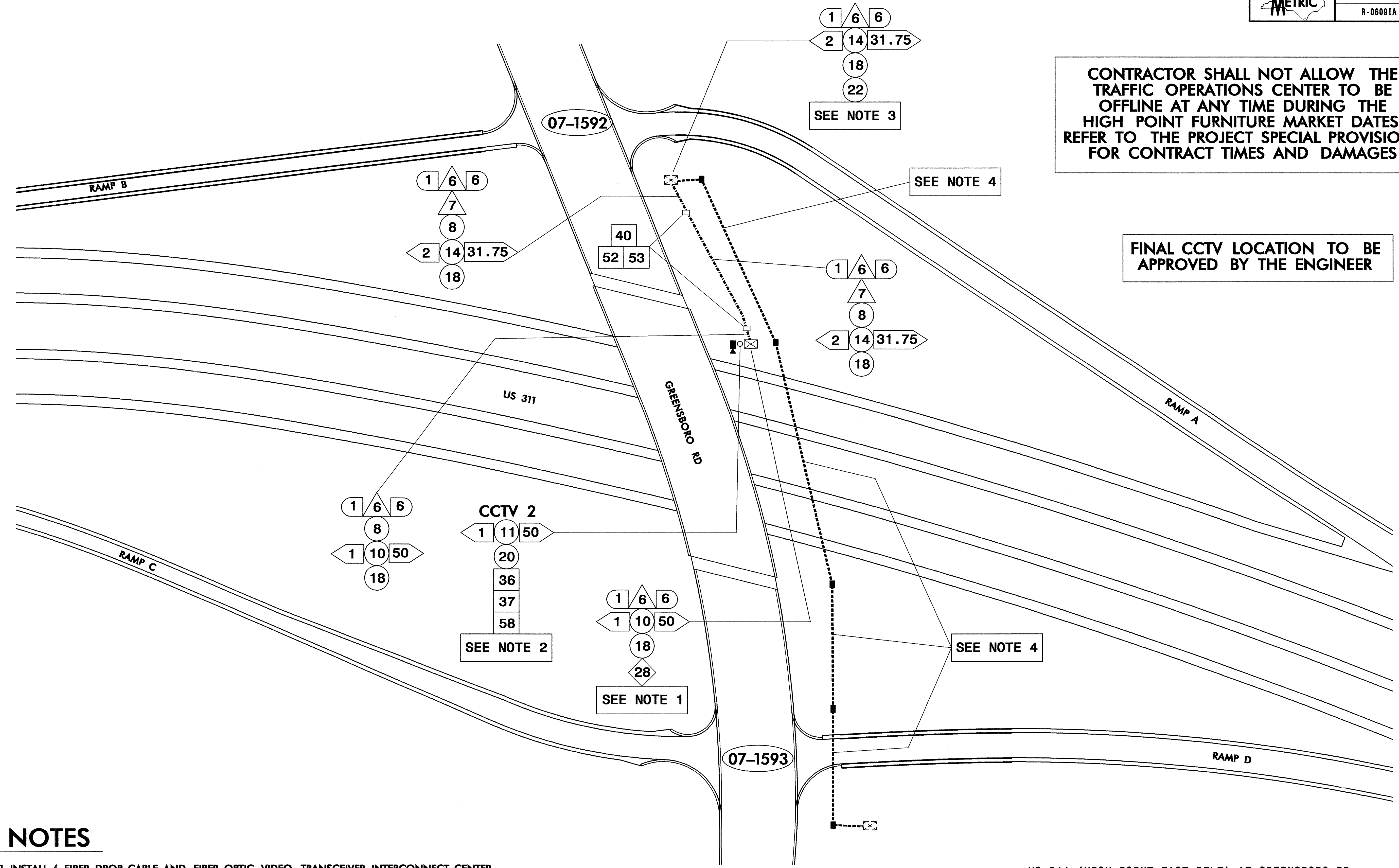
1. INSTALL 6-FIBER DROP CABLE AND FIBER OPTIC VIDEO TRANSCEIVER, INTERCONNECT CENTER, PATCH PANEL AND JUMPERS IN NEW POLE MOUNTED CAMERA CABINET.
2. INSTALL CCTV CONTROL, VIDEO AND POWER CABLES IN NEW RISER.
3. INSTALL 6-FIBER DROP CABLE IN EXISTING TRAFFIC SIGNAL CABINET
SPLICE 6-FIBER DROP CABLE TO EXISTING 48-FIBER CABLE IN ACCORDANCE WITH THE SPLICE DETAILS.

US 311 (HIGH POINT EAST BELT) AT JOHNSON ST

	COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS	
	DIVISION 07 GUILFORD COUNTY HIGH POINT PLAN DATE: MAY 2006 REVIEWED BY: S.C. YOW PREPARED BY: J.W. HOOKER REVIEWED BY: G.G. MURR, JR., PE	REVISIONS INIT. DATE _____ _____ _____
210 E. Peace St., Raleigh, NC 27604 	SCALE 0' _____	SIGNATURE DATE 5-17-06 CADD FILE NAME:

CONTRACTOR SHALL NOT ALLOW THE TRAFFIC OPERATIONS CENTER TO BE OFFLINE AT ANY TIME DURING THE HIGH POINT FURNITURE MARKET DATES. REFER TO THE PROJECT SPECIAL PROVISIONS FOR CONTRACT TIMES AND DAMAGES

FINAL CCTV LOCATION TO BE APPROVED BY THE ENGINEER

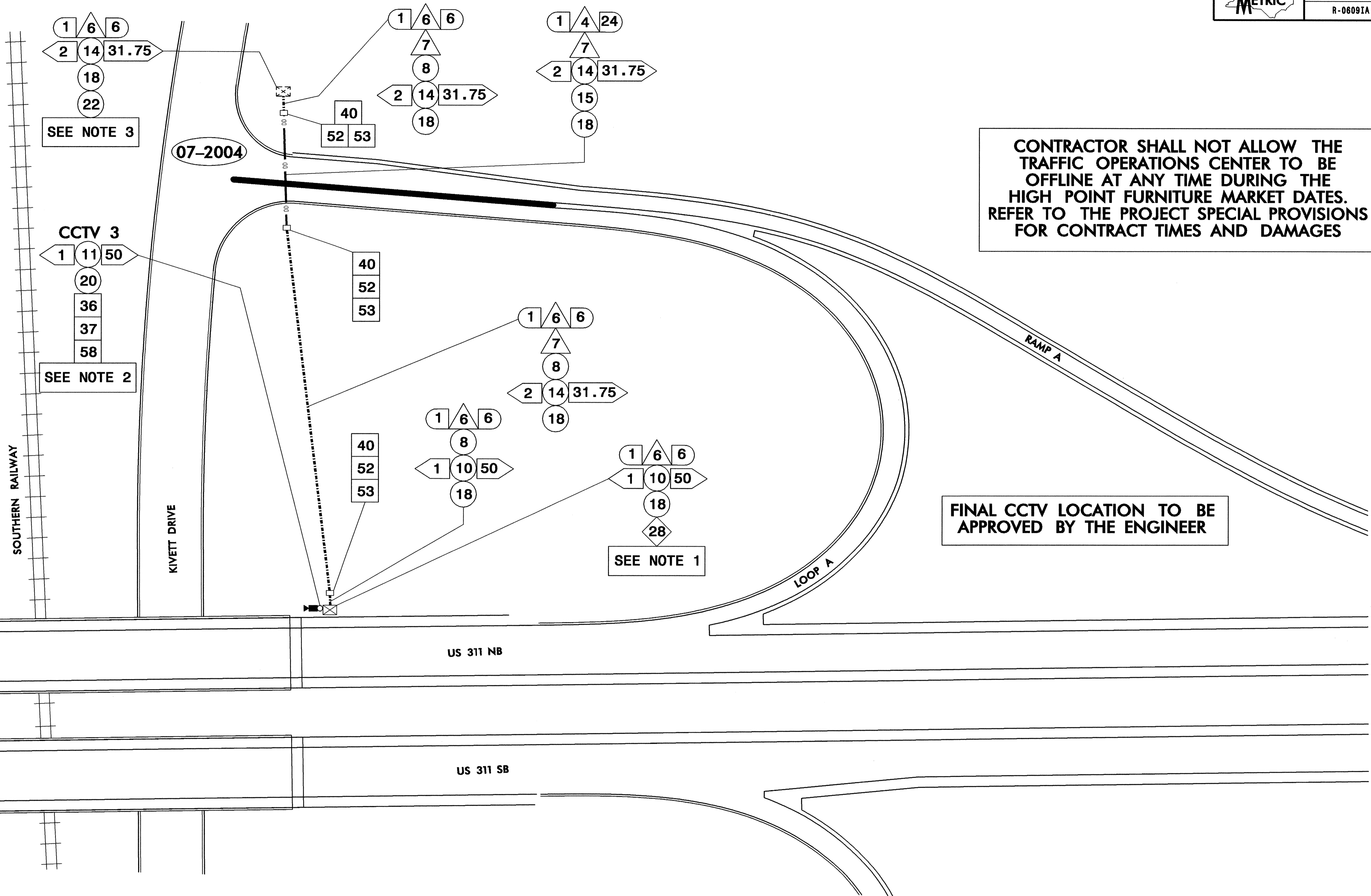


NOTES

1. INSTALL 6-FIBER DROP CABLE AND FIBER OPTIC VIDEO TRANSCEIVER, INTERCONNECT CENTER, PATCH PANEL AND JUMPERS IN NEW POLE MOUNTED CAMERA CABINET.
2. INSTALL CCTV CONTROL, VIDEO AND POWER CABLES IN NEW RISER.
3. INSTALL 6-FIBER DROP CABLE IN EXISTING TRAFFIC SIGNAL CABINET
SPlice 6-FIBER DROP CABLE TO EXISTING 48-FIBER CABLE IN ACCORDANCE WITH THE SPLICE DETAILS.
4. EXISTING CONDUIT AND 48-FIBER CABLE INSTALLED UNDER R-0609H
NEW 6-FIBER DROP CABLE MAY BE INSTALLED IN EXISTING CONDUIT AND JUNCTION BOXES UPON APPROVAL FROM THE ENGINEER.

US 311 (HIGH POINT EAST BELT) AT GREENSBORO RD

<p>210 E. Peace St., Raleigh, NC 27604</p>	COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS		
	DIVISION 07 GUILFORD COUNTY HIGH POINT PLAN DATE: MAY 2006 REVIEWED BY: S.C. YOW PREPARED BY: J.M. HOOKER REVIEWED BY: G.G. MURR, JR., PE	REVISIONS INT. DATE	
SCALE: 0	SIGNATURE: <i>G.G. Murr, Jr.</i> DATE: 5-17-06		SEAL: 14543



CONTRACTOR SHALL NOT ALLOW THE TRAFFIC OPERATIONS CENTER TO BE OFFLINE AT ANY TIME DURING THE HIGH POINT FURNITURE MARKET DATES. REFER TO THE PROJECT SPECIAL PROVISIONS FOR CONTRACT TIMES AND DAMAGES

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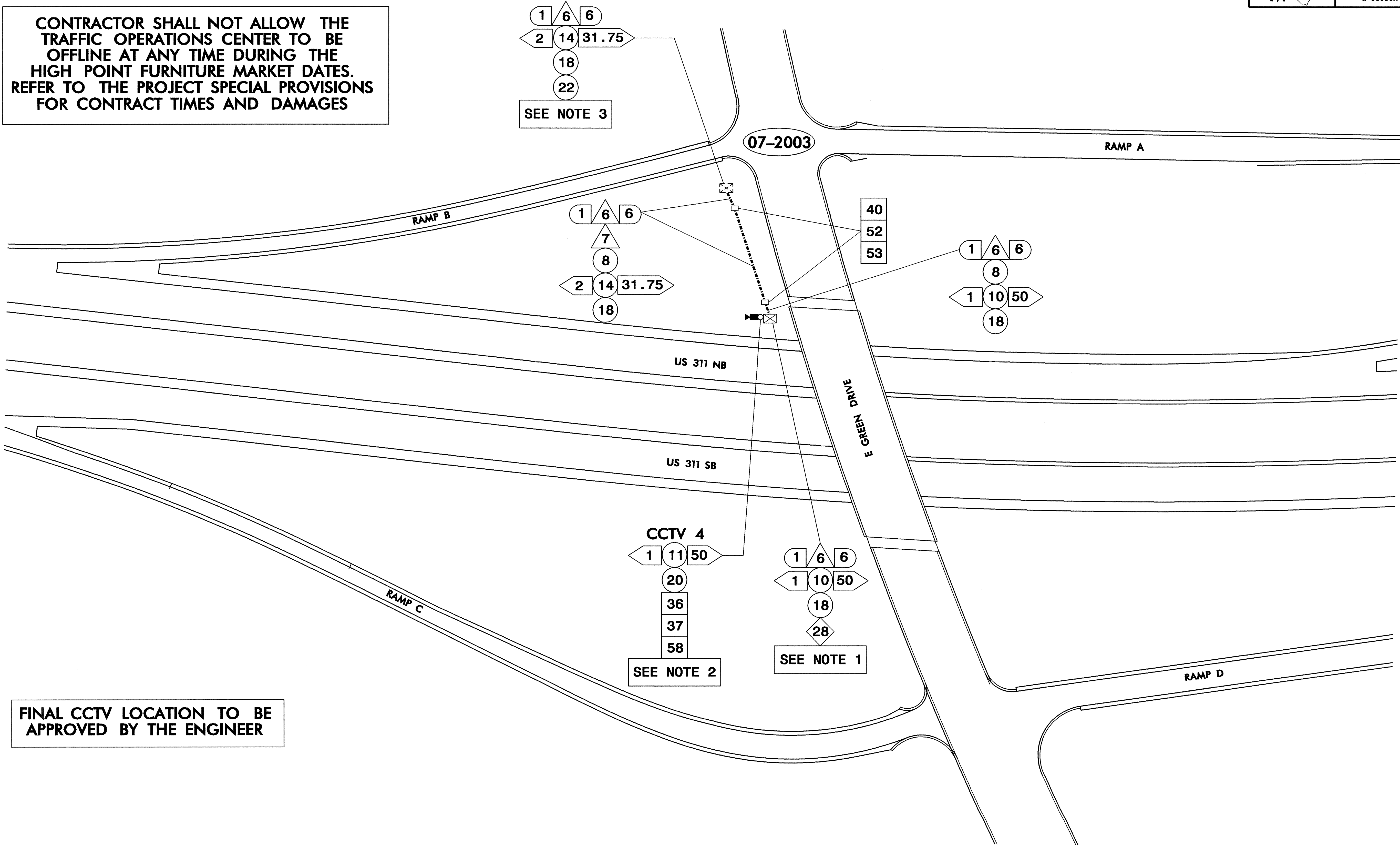
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US 311 (HIGH POINT EAST BELT) AT KIVETT DR

	COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS	
	DIVISION 07 GUILFORD COUNTY HIGH POINT PLAN DATE: MAY 2006 REVIEWED BY: S.C. YOW PREPARED BY: J.W. HOOKER REVIEWED BY: G.G. MURR, JR., PE	REVISIONS INIT. DATE _____ _____ _____
210 E. Fowce St., Raleigh, NC 27604 SCALE: 0' = _____	SIGNATURE: <i>Gene G. Murr, Jr.</i> DATE: 5-17-06 CAD FILE NAME:	

CONTRACTOR SHALL NOT ALLOW THE TRAFFIC OPERATIONS CENTER TO BE OFFLINE AT ANY TIME DURING THE HIGH POINT FURNITURE MARKET DATES. REFER TO THE PROJECT SPECIAL PROVISIONS FOR CONTRACT TIMES AND DAMAGES



FINAL CCTV LOCATION TO BE APPROVED BY THE ENGINEER

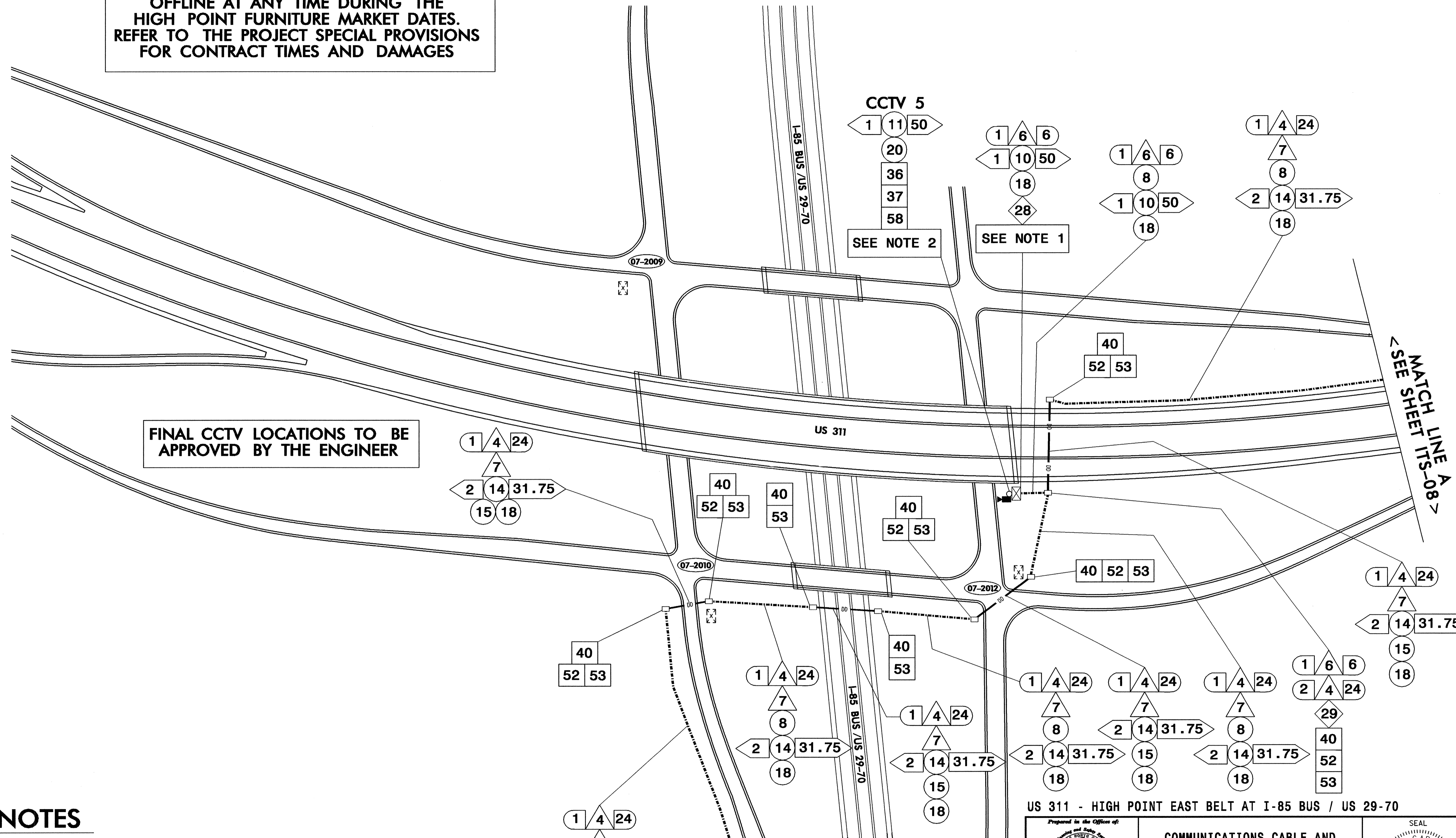
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SPLICE 6-FIBER DROP CABLE TO EXISTING 48-FIBER CABLE IN ACCORDANCE WITH THE SPLICE DETAILS.

US 311 (HIGH POINT EAST BELT) AT E GREEN DR

	COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS										
	DIVISION 07 GUILFORD COUNTY HIGH POINT PLAN DATE: MAY 2006 REVIEWED BY: S.C. YOW PREPARED BY: J.M. HOOKER REVIEWED BY: G.G. MURR, JR., PE										
210 E. Peace St., Raleigh, NC 27604	SCALE 	REVISIONS <table border="1"> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>INIT.</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DESCRIPTION	INIT.	DATE					SIGNATURE: <i>G.G. Murr, Jr.</i> DATE: 5-17-06 CADD Filename:
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CONTRACTOR SHALL NOT ALLOW THE TRAFFIC OPERATIONS CENTER TO BE OFFLINE AT ANY TIME DURING THE HIGH POINT FURNITURE MARKET DATES. REFER TO THE PROJECT SPECIAL PROVISIONS FOR CONTRACT TIMES AND DAMAGES



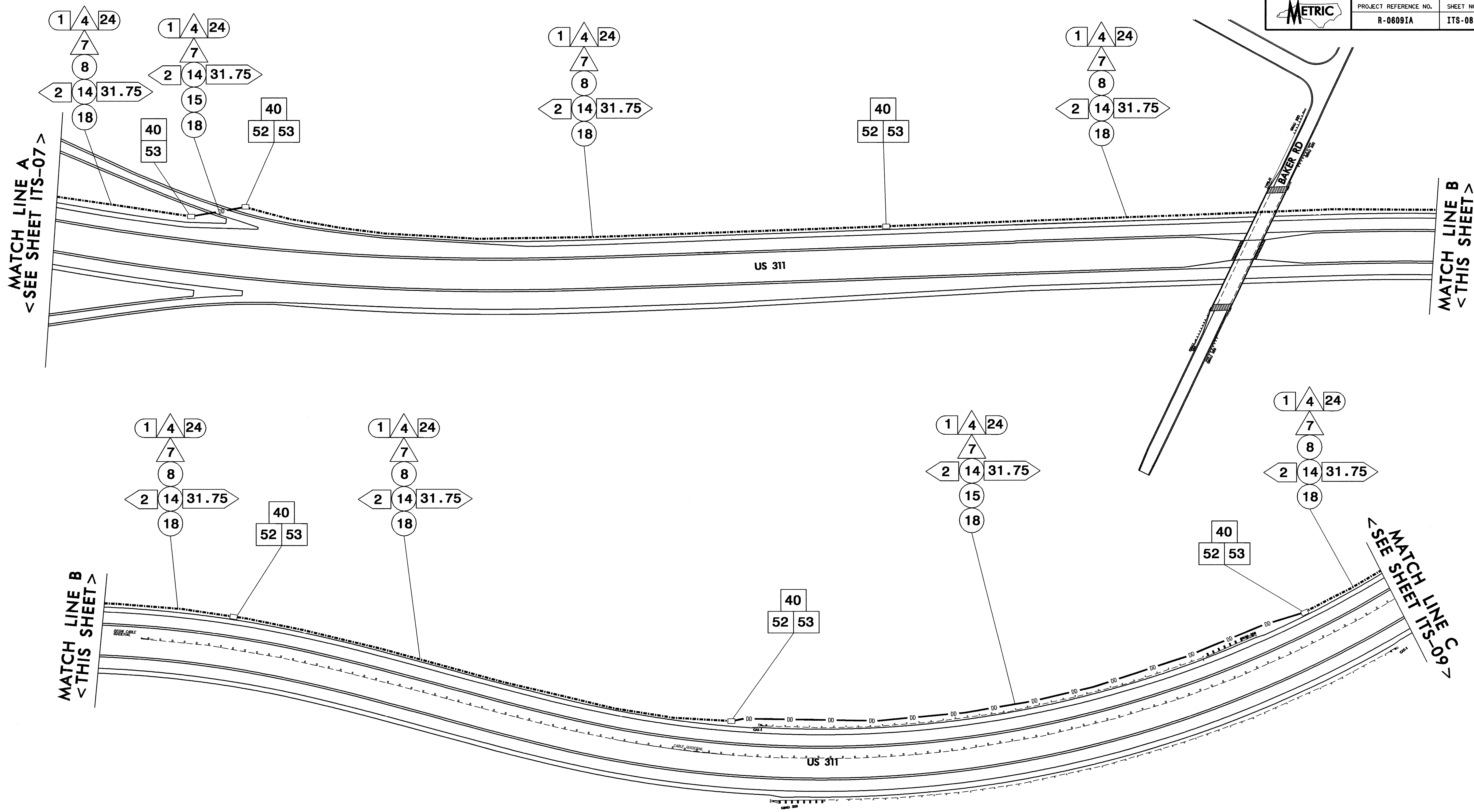
FINAL CCTV LOCATIONS TO BE APPROVED BY THE ENGINEER

NOTES

1. INSTALL 6-FIBER DROP CABLE AND FIBER OPTIC VIDEO TRANSCEIVER, INTERCONNECT CENTER, PATCH PANEL AND JUMPERS IN NEW POLE MOUNTED CAMERA CABINET.
2. INSTALL CCTV CONTROL, VIDEO AND POWER CABLES IN NEW RISER.
3. PLACE OVERSIZED JUNCTION BOXES APPROXIMATELY 457 METERS APART, UNLESS OTHERWISE NOTED

US 311 - HIGH POINT EAST BELT AT I-85 BUS / US 29-70

	COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS		
	DIVISION 07 GUILFORD COUNTY HIGH POINT PLAN DATE: MAY 2006 REVIEWED BY: S.C. YOW PREPARED BY: J.W. HOOKER REVIEWED BY: G.G. MURR, JR., PE	REVISIONS: _____ INIT. DATE _____ _____	
210 E. Peace St., Raleigh, NC 27604 SCALE: 0		SIGNATURE: <i>G.G. Murr, Jr.</i> DATE: 5-17-06 CADD File Name:	



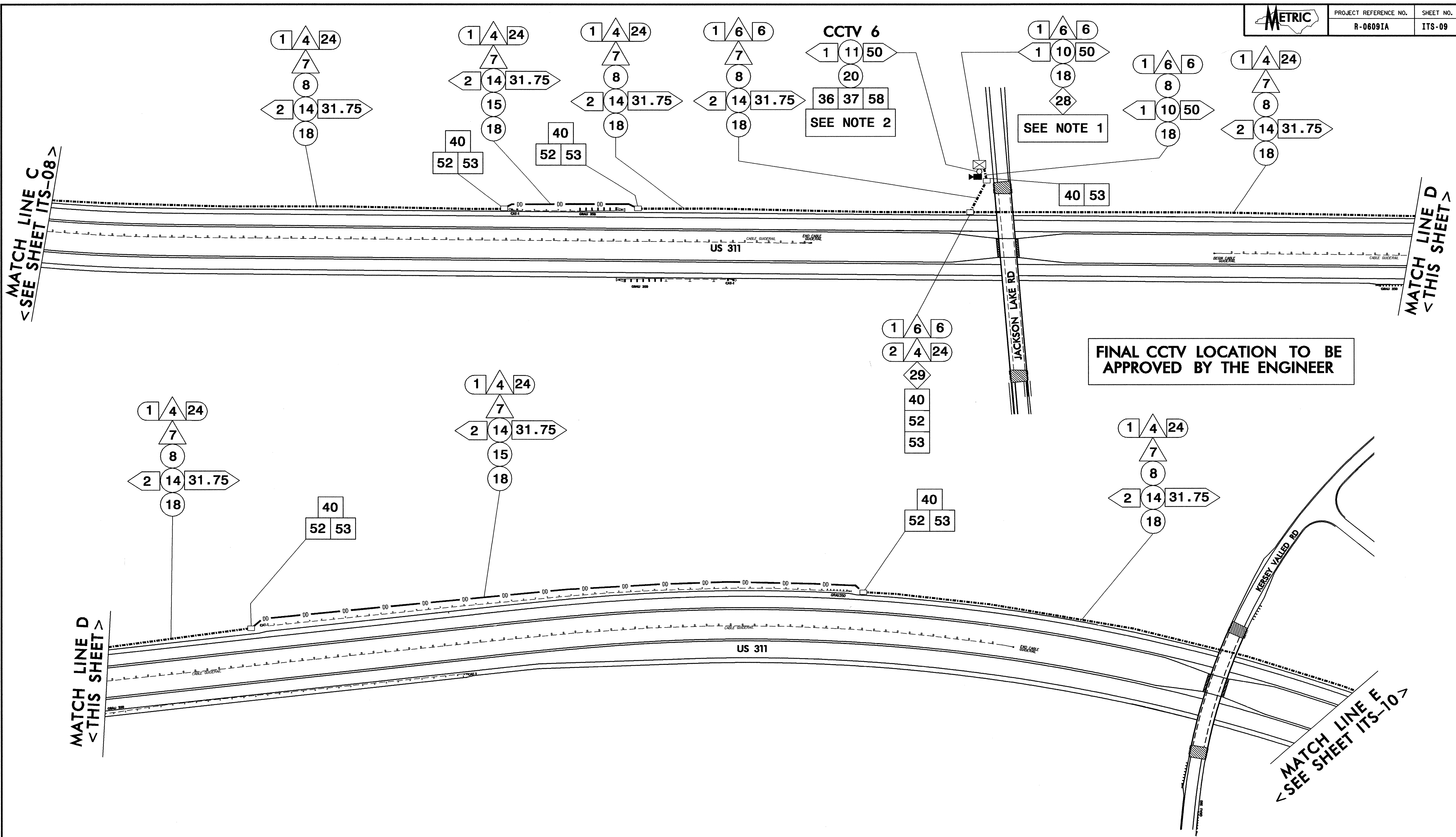
NOTES

PLACE OVERSIZED JUNCTION BOXES APPROXIMATELY 457 METERS APART, UNLESS OTHERWISE NOTED

CONTRACTOR SHALL NOT ALLOW THE TRAFFIC OPERATIONS CENTER TO BE OFFLINE AT ANY TIME DURING THE HIGH POINT FURNITURE MARKET DATES. REFER TO THE PROJECT SPECIAL PROVISIONS FOR CONTRACT TIMES AND DAMAGES

US 311 - HIGH POINT EAST BELT

<p>210 E. Fowle St., Raleigh, NC 27604</p>	<p>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</p>		
	<p>DIVISION 07 GUILFORD COUNTY HIGH POINT</p> <p>PLAN DATE: MAY 2006 REVIEWED BY: S.C. YOW</p> <p>PREPARED BY: J.M. HOOKER REVIEWED BY: G.G. MURR, JR., PE</p>	<p>REVISIONS</p> <p>INIT. DATE</p>	



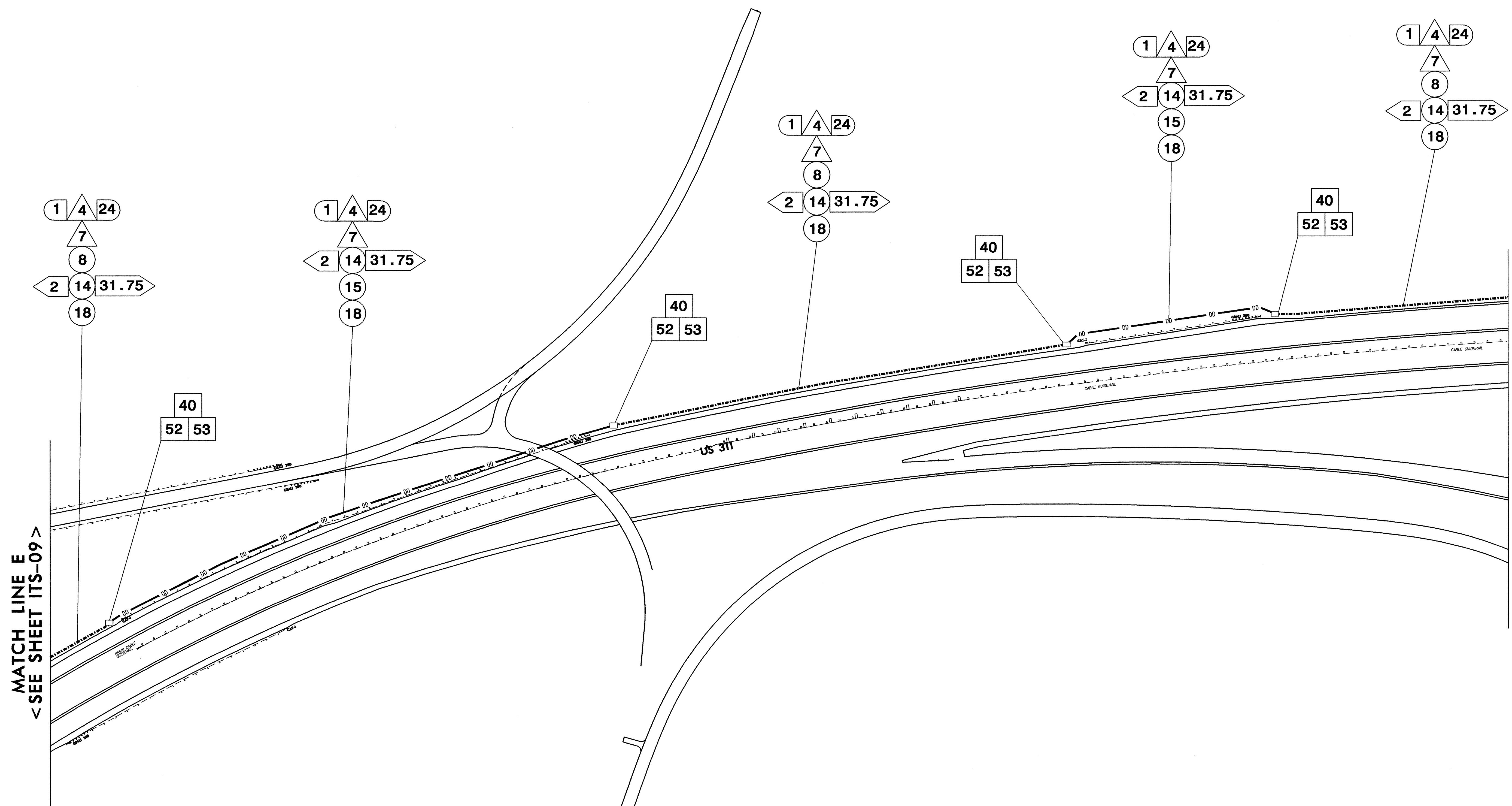
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3. PLACE OVERSIZED JUNCTION BOXES APPROXIMATELY 457 METERS APART, UNLESS OTHERWISE NOTED

CONTRACTOR SHALL NOT ALLOW THE TRAFFIC OPERATIONS CENTER TO BE OFFLINE AT ANY TIME DURING THE HIGH POINT FURNITURE MARKET DATES. REFER TO THE PROJECT SPECIAL PROVISIONS FOR CONTRACT TIMES AND DAMAGES

US 311 - HIGH POINT EAST BELT

<p>210 E. Peace St., Raleigh, NC 27604</p>	<p>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</p>		
	<p>DIVISION 07 GUILFORD COUNTY HIGH POINT</p> <p>PLAN DATE: MAY 2006 REVIEWED BY: S.C. YOW</p> <p>PREPARED BY: J.W. HOOKER REVIEWED BY: G.G. MURR, JR., PE</p>	<p>REVISIONS</p> <p>INIT. DATE</p>	



MATCH LINE E
< SEE SHEET ITS-09 >

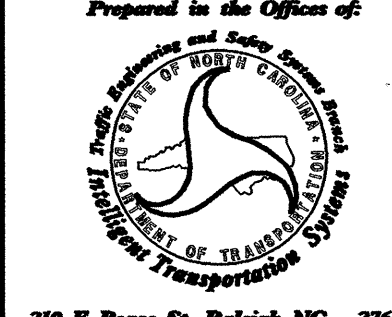
MATCH LINE F
< SEE SHEET ITS-11 >

NOTES

PLACE OVERSIZED JUNCTION BOXES APPROXIMATELY 457 METERS APART, UNLESS OTHERWISE NOTED

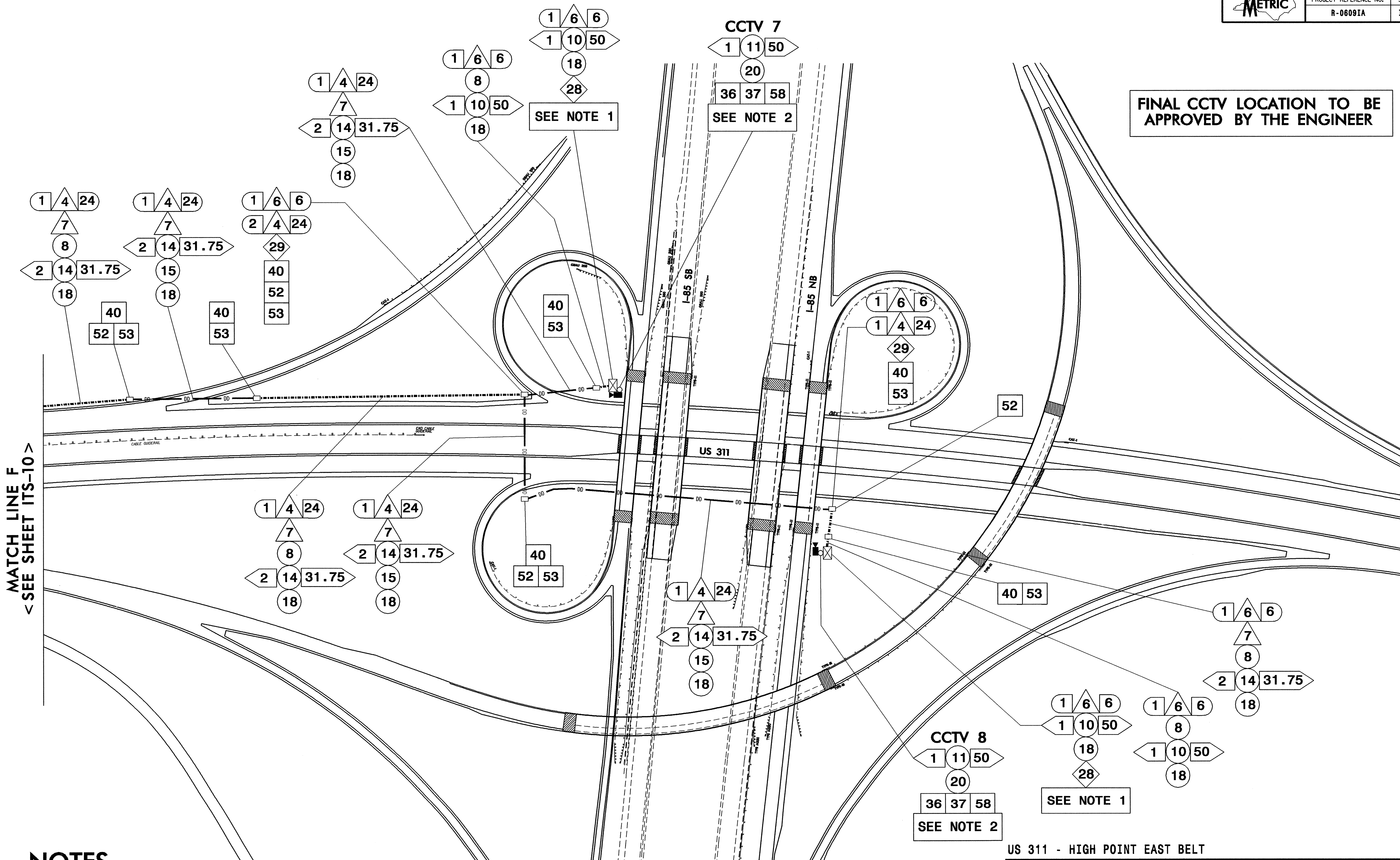
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US 311 - HIGH POINT EAST BELT

 Prepared in the Office of: 210 E. Peace St., Raleigh, NC 27604	COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14543 GENE G. MURR, JR. DATE 5-17-06
	DIVISION 07 GUILFORD COUNTY HIGH POINT PLAN DATE: MAY 2006 REVIEWED BY: S.C. YOW PREPARED BY: J.M. HOOKER REVIEWED BY: G.G. MURR, JR., PE	REVISIONS INIT. DATE	

CADD File name:

FINAL CCTV LOCATION TO BE APPROVED BY THE ENGINEER



MATCH LINE F
< SEE SHEET ITS-10 >

NOTES

1. INSTALL 6-FIBER DROP CABLE AND FIBER OPTIC VIDEO TRANSCEIVER, INTERCONNECT CENTER, PATCH PANEL AND JUMPERS IN NEW POLE MOUNTED CAMERA CABINET.
2. INSTALL CCTV CONTROL, VIDEO AND POWER CABLES IN NEW RISER.
3. PLACE OVERSIZED JUNCTION BOXES APPROXIMATELY 457 METERS APART, UNLESS OTHERWISE NOTED

CONTRACTOR SHALL NOT ALLOW THE TRAFFIC OPERATIONS CENTER TO BE OFFLINE AT ANY TIME DURING THE HIGH POINT FURNITURE MARKET DATES. REFER TO THE PROJECT SPECIAL PROVISIONS FOR CONTRACT TIMES AND DAMAGES

US 311 - HIGH POINT EAST BELT

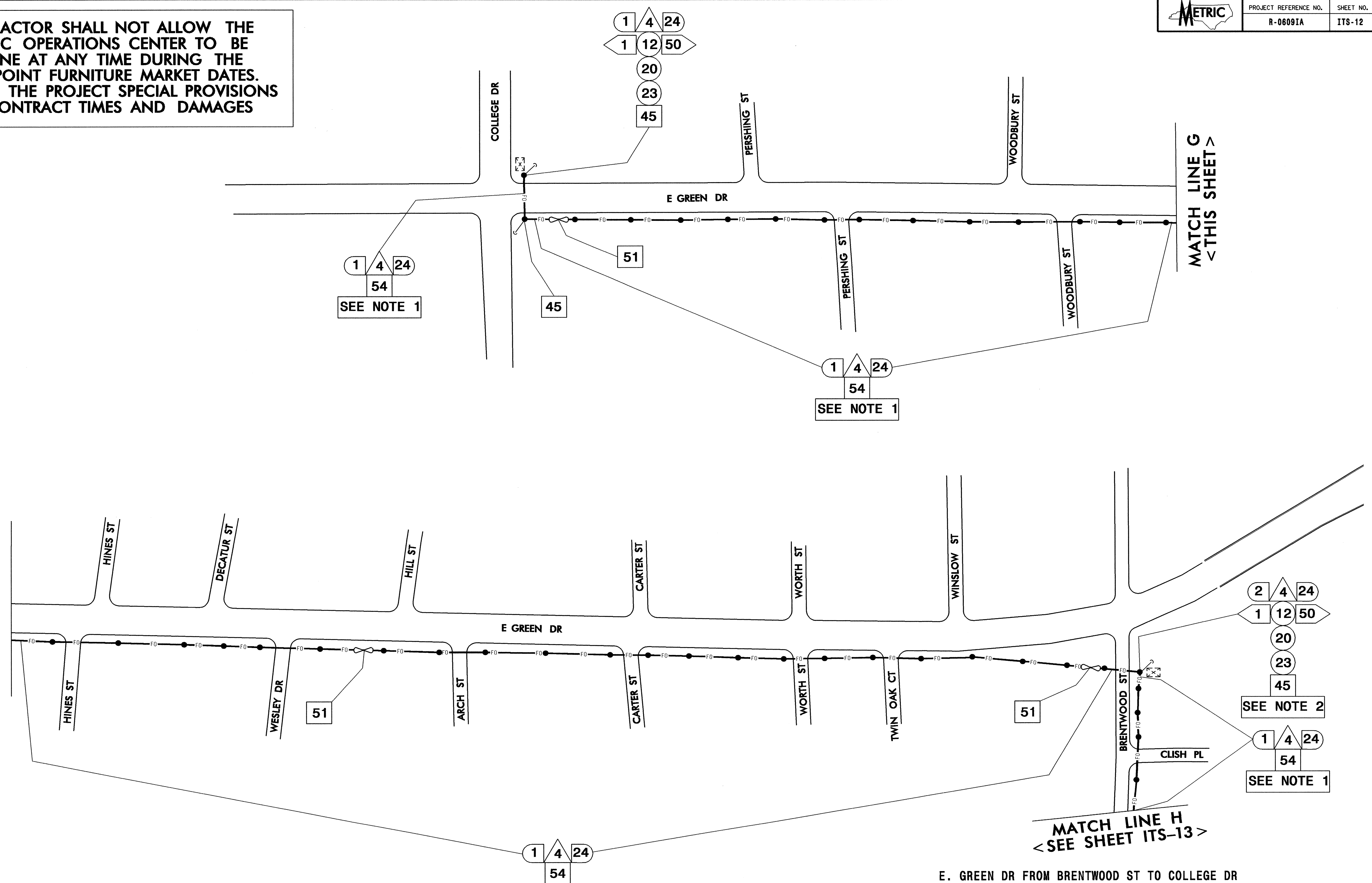
<p>210 E. Peace St., Raleigh, NC 27604</p>	<p>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</p>		
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MATCH LINE G <THIS SHEET >

MATCH LINE G <THIS SHEET >

MATCH LINE H <SEE SHEET ITS-13 >



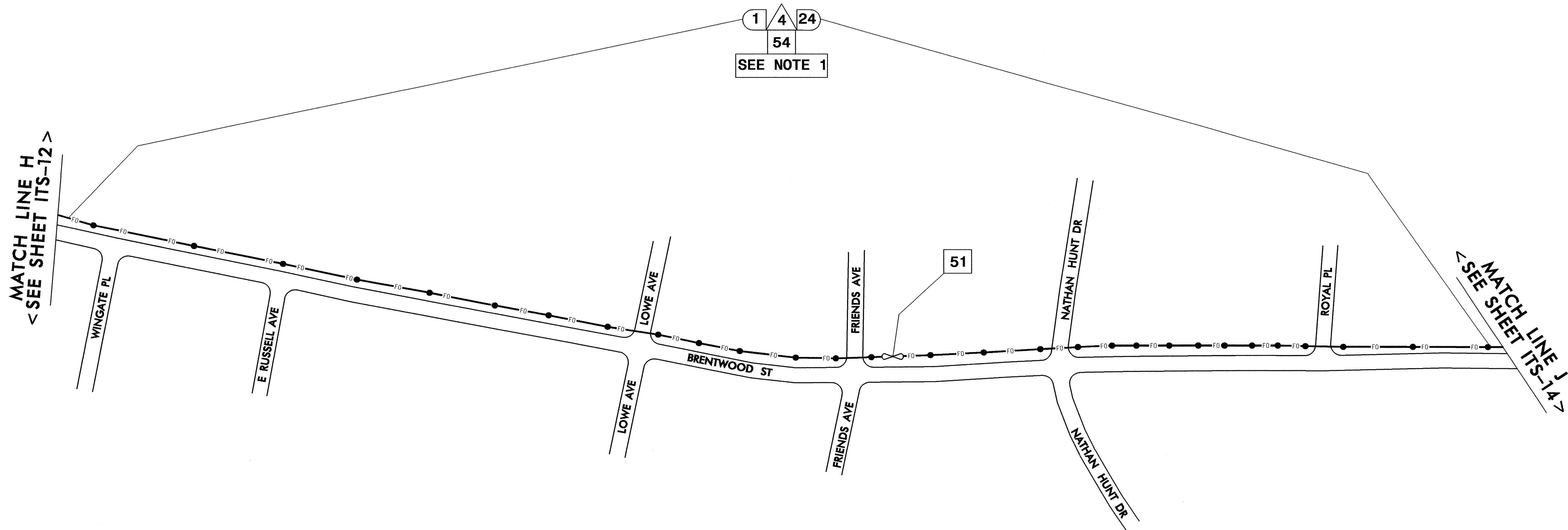
NOTES

- LASH NEW 24-FIBER CABLE TO EXISTING CITY OF HIGH POINT FIBER OPTIC CABLE BOND MESSENGER CABLE TO POLE GROUND AT 760 METER INTERVALS, UNLESS OTHERWISE NOTED
- INSTALL NEW 24-FIBER CABLE IN EXISTING TRAFFIC SIGNAL CABINET. SPLICE IN ACCORDANCE WITH SPLICE DETAILS.

E. GREEN DR FROM BRENTWOOD ST TO COLLEGE DR

	COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS		
	DIVISION 07 GUILFORD COUNTY HIGH POINT PLAN DATE: MAY 2006 REVIEWED BY: S.C. YOW PREPARED BY: J.M. HOOKER REVIEWED BY: G.G. MURR, JR., PE		
210 S. Peace St., Raleigh, NC 27604 	SCALE 	REVISIONS _____ _____ _____	INIT. DATE _____ _____ _____
CADD Filename:		SIGNATURE DATE 5/17/06	

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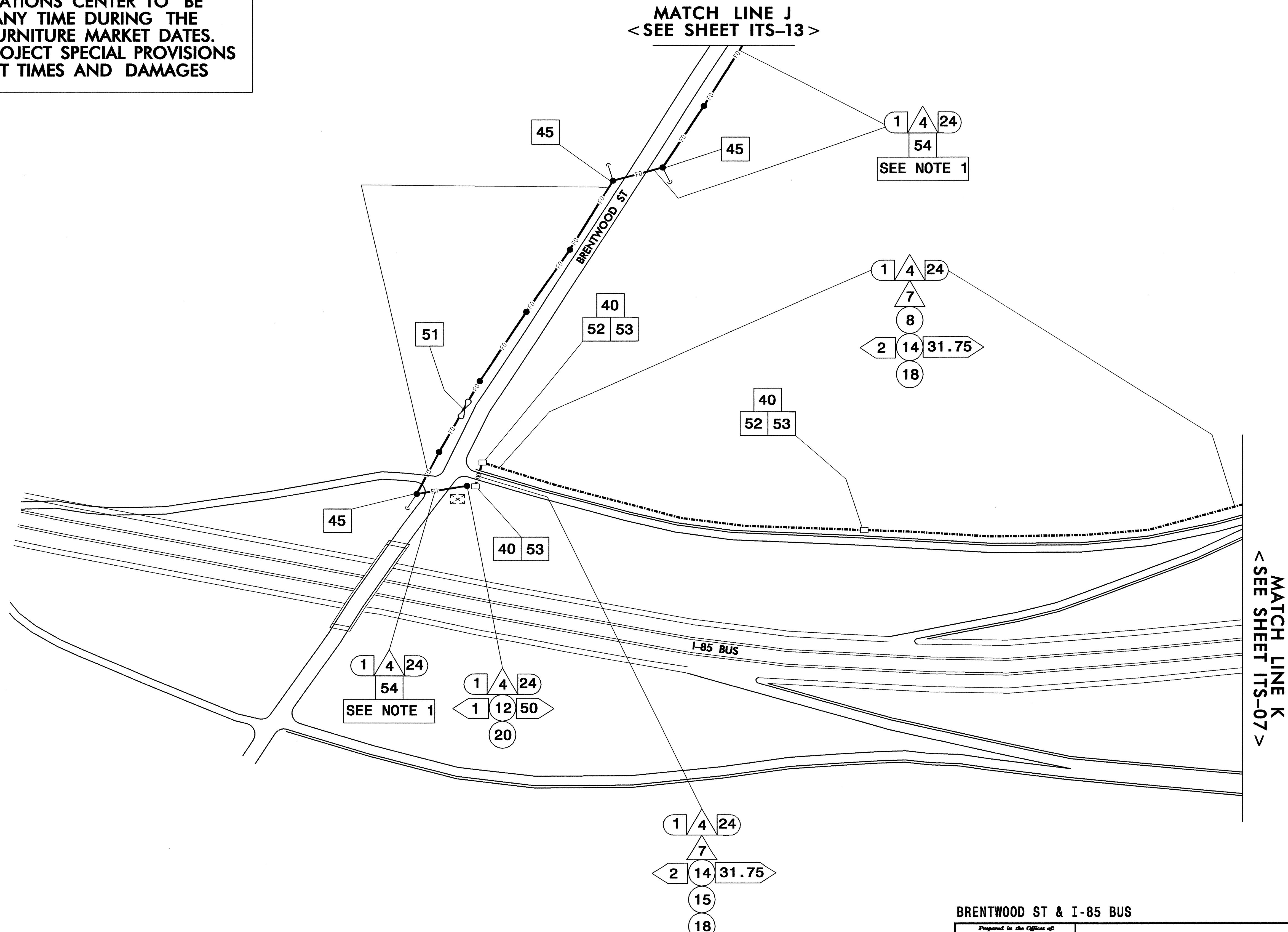
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BRENTWOOD ST

<p>210 E. Peace St., Raleigh, NC 27604</p>	<p>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</p>										
	<p>DIVISION 07 GUILFORD COUNTY HIGH POINT</p> <p>PLAN DATE: MAY 2006 REVIEWED BY: S.C. YOW</p> <p>PREPARED BY: J.M. HOOKER REVIEWED BY: G.G. MURR, JR., PE</p>	<table border="1"> <thead> <tr> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS	INIT.	DATE					
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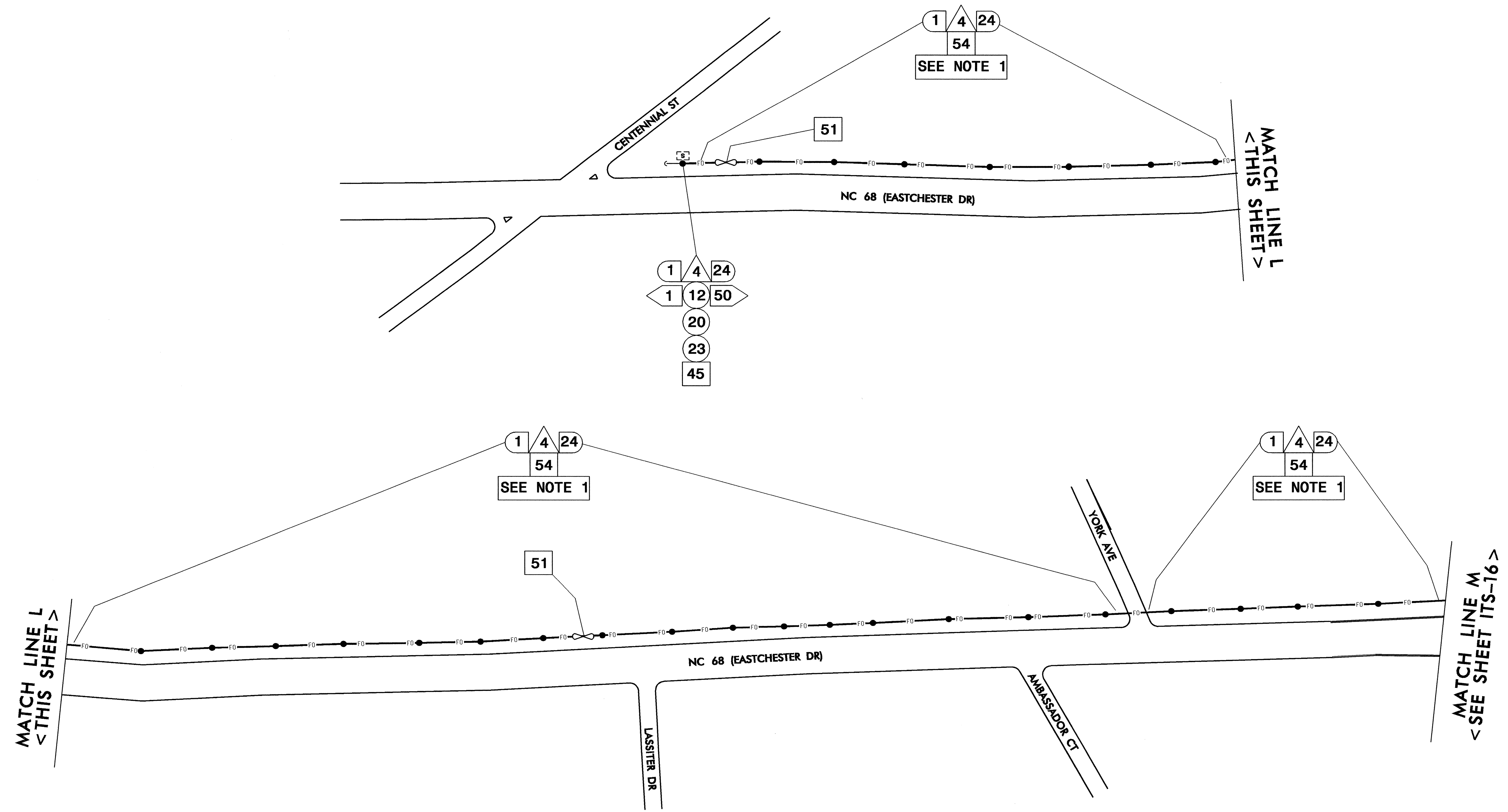


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2. PLACE OVERSIZED JUNCTION BOXES APPROXIMATELY 457 METERS APART, UNLESS OTHERWISE NOTED

BRENTWOOD ST & I-85 BUS

<p>210 E. Peace St., Raleigh, NC 27604</p>	<p>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</p>							
	<p>DIVISION 07 GUILFORD COUNTY HIGH POINT</p> <p>PLAN DATE: MAY 2006 REVIEWED BY: S.C. YOW</p> <p>PREPARED BY: J.M. HOOKER REVIEWED BY: G.G. MURR, JR., PE</p>	<table border="1"> <thead> <tr> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS	INIT.	DATE		
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<p>SCALE</p>	<p>SIGNATURE: <i>G.G. Murr, Jr.</i> DATE: 5-17-06</p>		<p>CADD File name:</p>					



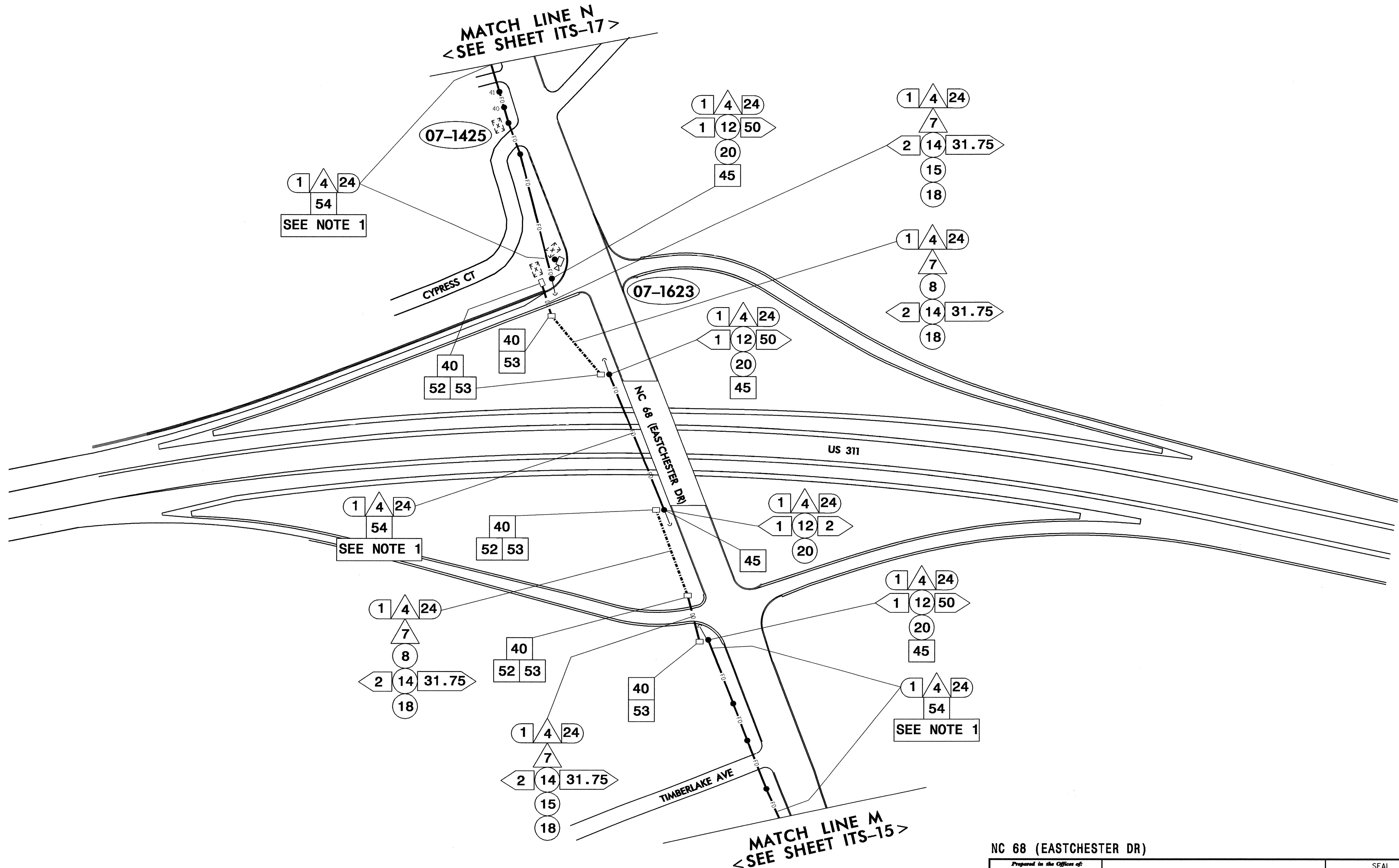
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NC 68 (EASTCHESTER DR)

<p>210 E. Ponce St., Raleigh, NC 27604</p>	<p>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</p>		
	<p>DIVISION 07 GUILFORD COUNTY HIGH POINT</p>	<p>REVIEWED BY: S.C. YOW</p>	
<p>PLAN DATE: MAY 2006</p>	<p>REVIEWED BY: G.G. MURR, JR., PE</p>	<p>PREPARED BY: J.W. HOOKER</p>	
<p>SCALE 0</p>	<p>REVISIONS</p>	<p>INIT.</p>	<p>DATE</p>
<p>SIGNATURE: <i>[Signature]</i></p>		<p>DATE: 5-17-06</p>	

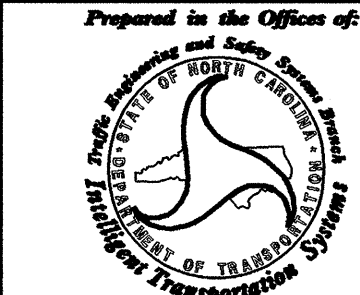
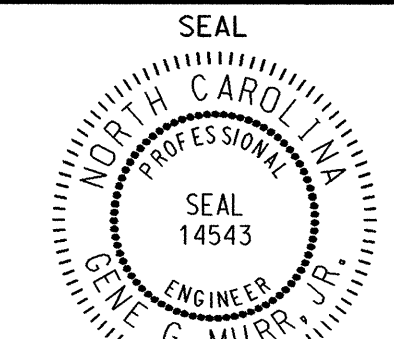
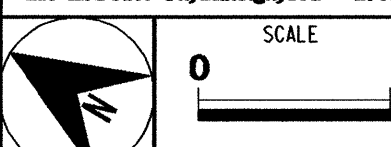


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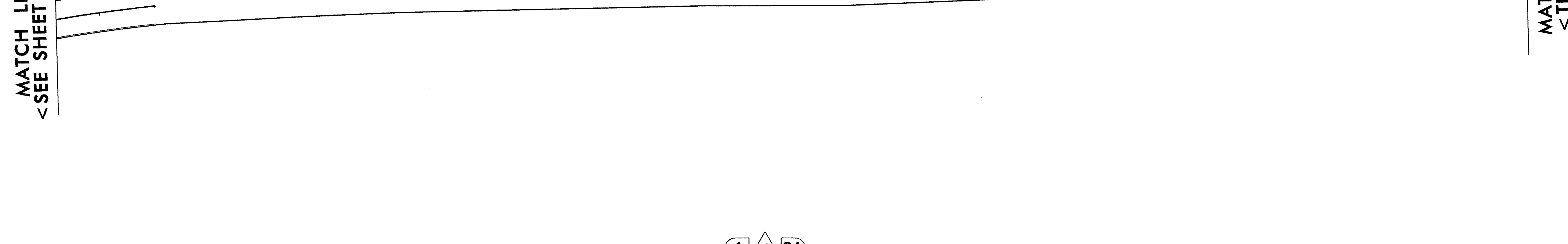
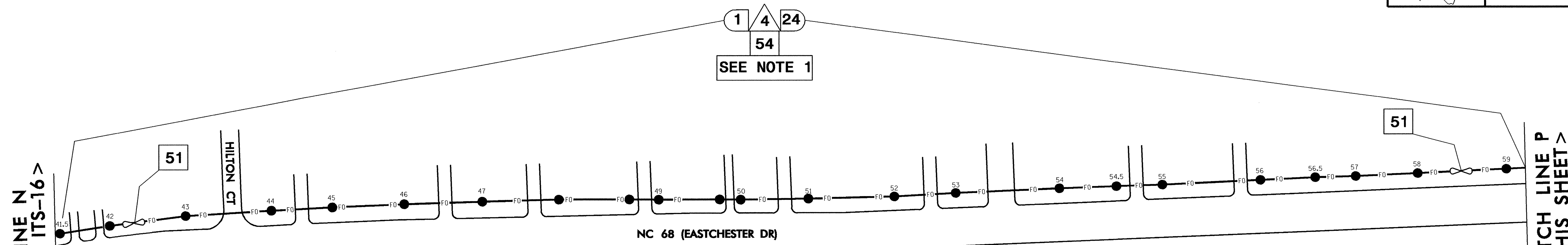
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NC 68 (EASTCHESTER DR)

 <small>Prepared in the Office of NORTH CAROLINA DEPARTMENT OF TRANSPORTATION</small>	COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS		 SEAL NORTH CAROLINA PROFESSIONAL ENGINEER 14543 G. G. MURR, JR.
	DIVISION 07 GUILFORD COUNTY HIGH POINT PLAN DATE: MAY 2006 REVIEWED BY: S. C. YOW PREPARED BY: J. W. HOOKER REVIEWED BY: G. G. MURR, JR., PE		
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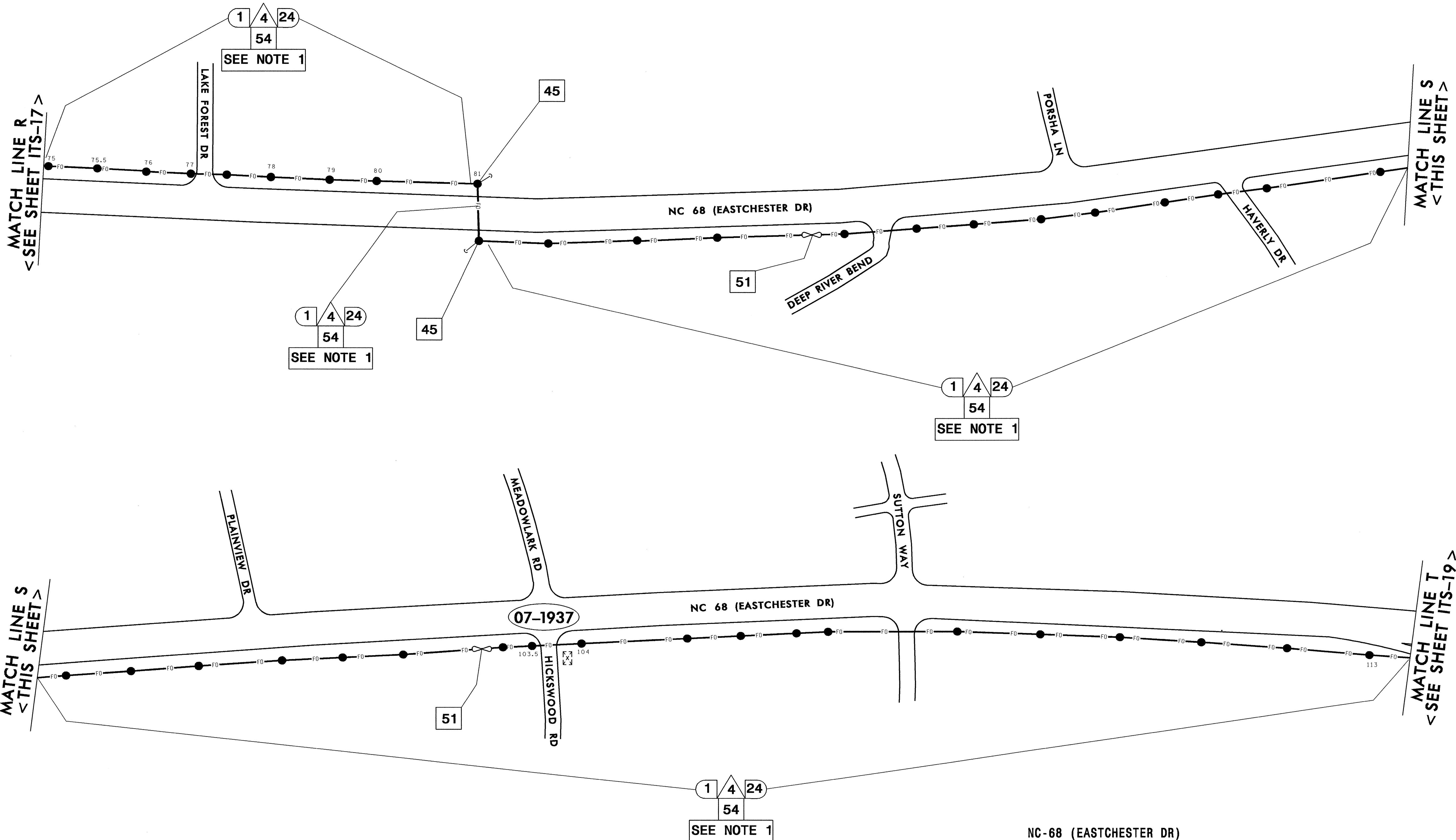
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NC-68 (EASTCHESTER DR)

<p>210 S. Fowle St., Raleigh, NC 27604</p>	<p>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</p>		
	<p>DIVISION 07 GUILFORD COUNTY HIGH POINT</p> <p>PLAN DATE: MAY 2006 REVIEWED BY: S.C. YOW</p> <p>PREPARED BY: J.W. HOOKER REVIEWED BY: G.G. MURR, JR., PE</p>	<p>REVISIONS INIT. DATE</p>	
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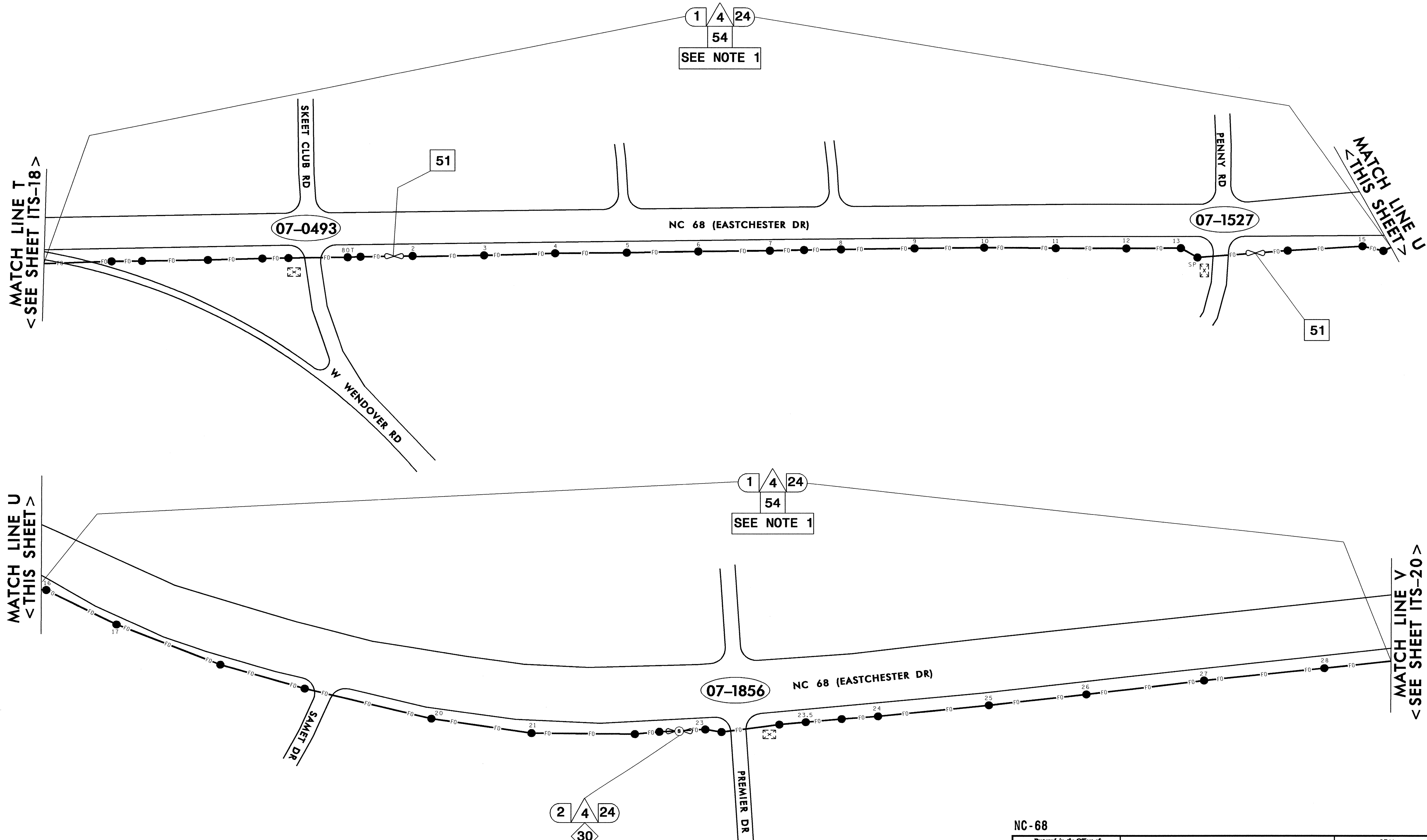
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NC-68 (EASTCHESTER DR)

	COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS	
	DIVISION 07	GUILFORD COUNTY
	PLAN DATE: MAY 2006 PREPARED BY: J. M. HOOKER	HIGH POINT REVIEWED BY: S. C. YOW REVIEWED BY: G. G. MURR, JR., PE
210 E. Peace St., Raleigh, NC 27604	REVISIONS INIT. DATE	SIGNATURE: <i>G. G. Murr, Jr.</i> DATE: 5-17-06



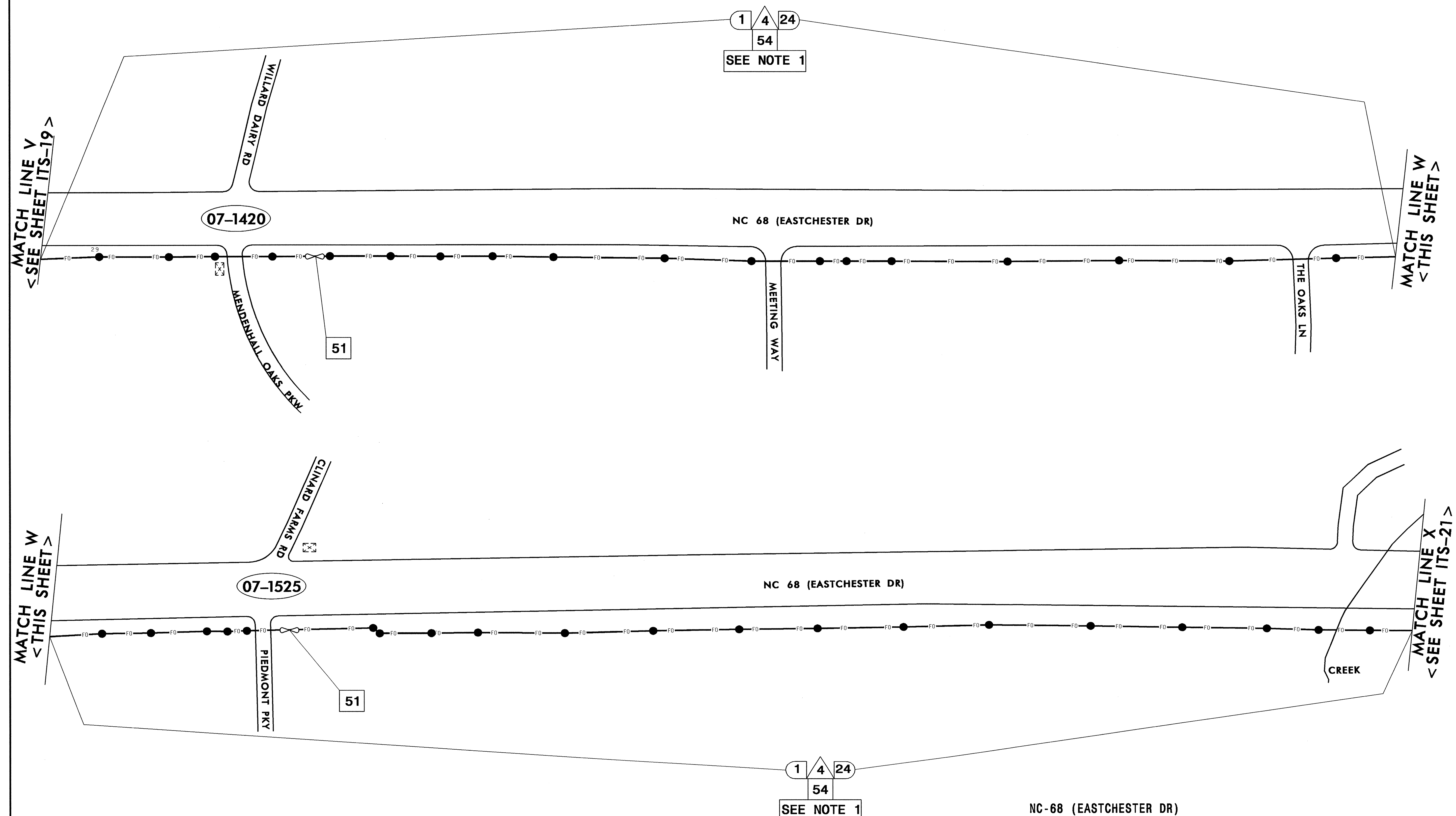
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NC - 68

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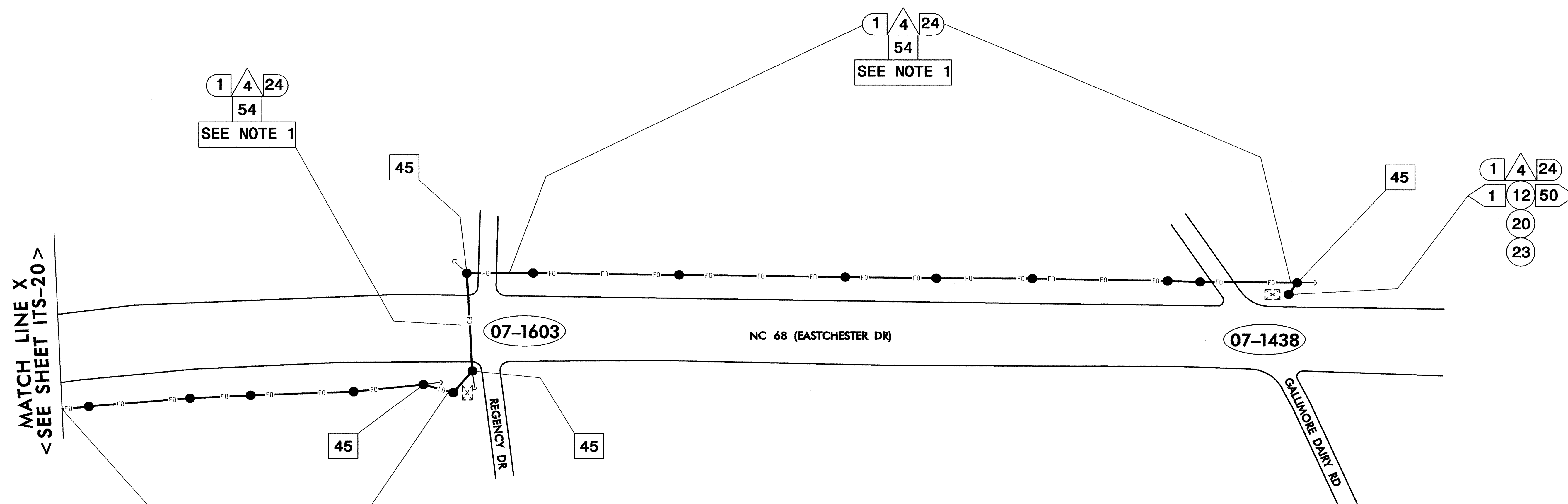
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<p>SCALE: 0</p>		<p>SIGNATURE: <i>J.M. Hooker</i> DATE: 5-17-06</p>	

CADD Filename:



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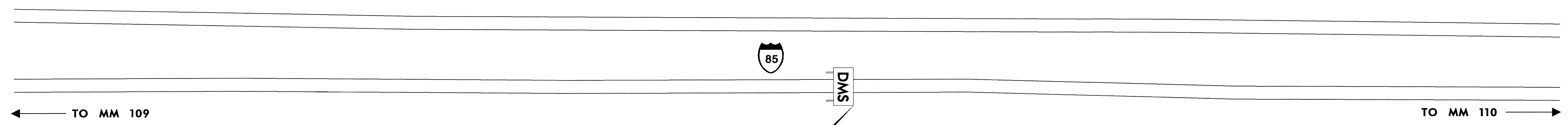
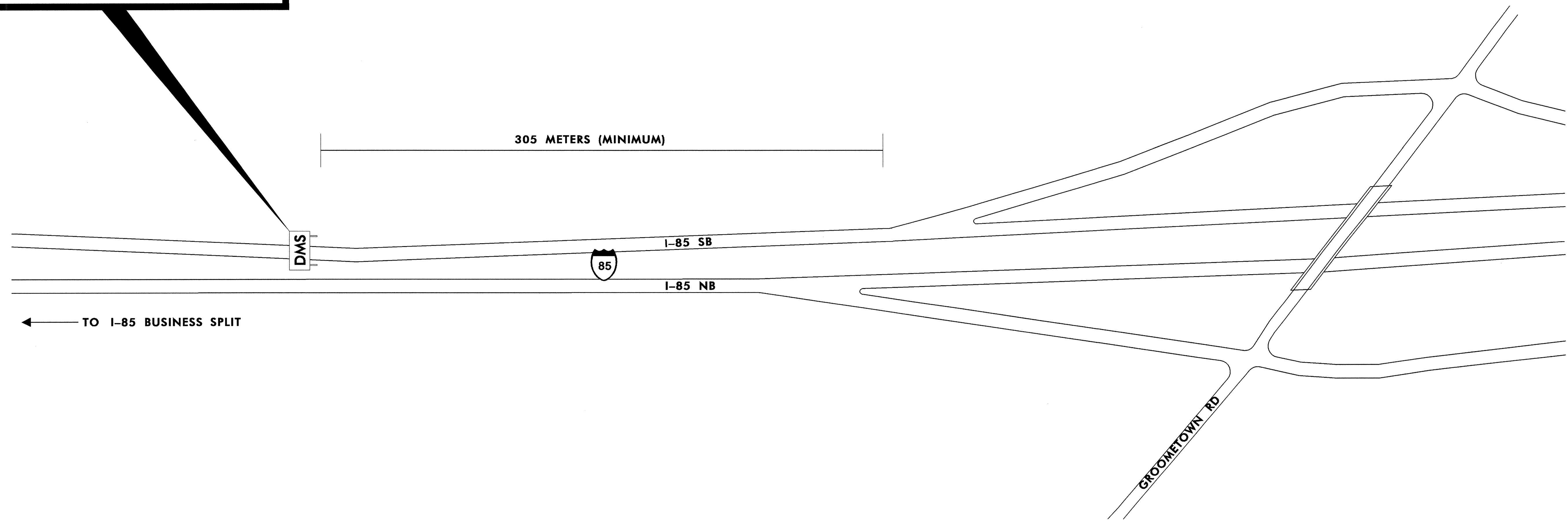
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<p>210 E. Peace St., Raleigh, NC 27604</p>	<p>PREPARED BY: J. M. HOOKER</p>	<p>REVIEWED BY: G. G. MURR, JR., PE</p>
<p>SCALE 0</p>	<p>REVISIONS</p>	<p>INIT. DATE</p>
<p>CADD File name:</p>	<p>SIGNATURE: <i>[Signature]</i></p>	<p>DATE: 5-17-06</p>

DMS 1
 INSTALL NEW DYNAMIC MESSAGE SIGN
 INSTALL NEW ELECTRICAL SERVICE
 INSTALL NEW PHONE SERVICE
 INSTALL NEW DATA MODEM

FINAL DMS LOCATION TO BE APPROVED BY THE ENGINEER



FINAL DMS LOCATION TO BE APPROVED BY THE ENGINEER

DMS 2
 INSTALL NEW DYNAMIC MESSAGE SIGN
 INSTALL NEW ELECTRICAL SERVICE
 INSTALL NEW PHONE SERVICE
 INSTALL NEW DATA MODEM

NOTES

- INSTALL DMS ON I-85 SB NEAR MM 120 IN ADVANCE OF THE I-85 BUSINESS SPLIT.
- SEE SIGNING PLANS FOR ADDITIONAL INFORMATION
- FINAL DMS LOCATION TO BE APPROVED BY THE ENGINEER

DMS 1 & 2

	COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS											
	DIVISION 07 GUILFORD COUNTY HIGH POINT PLAN DATE: MAY 2006 REVIEWED BY: S.C. YOW PREPARED BY: J.W. HOOKER REVIEWED BY: G.G. MURR, JR., PE											
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