

- 1 INSTALL REA, PE - 22, SHIELDED, TWISTED PAIR COMMUNICATIONS CABLE
- 2 INSTALL COAX CABLE
- 3 INSTALL ETHERNET 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 MODIFY EXISTING INTERCONNECT CENTER /SPICE ENCLOSURE
- 27 INSTALL NEW FIBER OPTIC TRANSCEIVER
- 28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPlice CABLE IN CABINET
- 29 INSTALL UNDERGROUND SPICE ENCLOSURE
- 30 INSTALL AERIAL SPICE ENCLOSURE
- 31 INSTALL POLE MOUNTED SPICE CABINET
- 32 INSTALL BASE MOUNTED SPICE CABINET
- 33 REMOVE EXISTING SPICE CABINET

- 34 INSTALL CABINET FOUNDATION
- 35 INSTALL CCTV CAMERA POLE MOUNTED CABINET
- 36 INSTALL CCTV CAMERA ASSEMBLY
- 37 INSTALL CCTV CAMERA WOOD POLE
- 38 INSTALL CCTV CAMERA METAL POLE AND FOUNDATION
- 39 INSTALL JUNCTION BOX
- 40A INSTALL OVERSIZED JUNCTION BOX
- 40B INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 36" x 24")
- 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
- 48A REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE
- 48B REMOVE EXISTING COMMUNICATIONS CABLE
- 49 BACK PULL EXISTING COMMUNICATIONS CABLE
- 50 INSTALL CELLULAR MODEM
- 51 INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE
- 52A INSTALL DELINEATOR MARKER
- 52B INSTALL JUNCTION BOX MARKER
- 53 STORE 20 FEET OF COMMUNICATIONS CABLE
- 54 LASH CABLE(S) TO EXISTING 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 INSTALL NEW ETHERNET EDGE SWITCH
- 60 BOND TRACER WIRE TO EQUIPMENT GROUND BUS  
DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS
- 61 BOND RISER AND MESSENGER CABLE TO POLE GROUND
- 62 BOND RISER TO POLE GROUND
- 63 BOND MESSENGER CABLE TO POLE GROUND
- 64 INSTALL HEAT SHRINK TUBING RETROFIT KIT
- 65 INSTALL MOLDABLE DUCT SEAL
- 66 SLACK SPAN

**LEGEND**

	NEW FIBER OPTIC COMMUNICATIONS CABLE
	NEW TWISTED PAIR COMMUNICATIONS CABLE
	EXISTING COMMUNICATIONS CABLE
	EXISTING COMMUNICATIONS CABLE TO BE REMOVED
	NEW AERIAL GUY ASSEMBLY
	NEW CONDUIT
	EXISTING CONDUIT
	NEW DIRECTIONAL DRILLED CONDUIT
	NEW BORED AND JACKED CONDUIT

	NEW JUNCTION BOX		NEW CABLE STORAGE RACKS (SNOW SHOES)
	EXISTING JUNCTION BOX		EXISTING CABLE STORAGE RACK (SNOW SHOE)
	NEW WOOD POLE		EXISTING CONTROLLER AND CABINET
	EXISTING WOOD POLE		NEW CCTV CABINET
	AERIAL SPICE ENCLOSURE		EXISTING SPICE CABINET
	UNDERGROUND SPICE ENCLOSURE		NEW SPICE CABINET
	NEW METAL POLE		SIGNAL POLE
	EXISTING METAL POLE		FLAT PANEL ANTENNA (SINGLE)
	NEW CCTV ASSEMBLY		YAGI ANTENNA (DOUBLE) FOR REPEATER OPERATION
	EXISTING CCTV ASSEMBLY		YAGI ANTENNA (SINGLE)
	NEW STANDARD GUY ASSEMBLY		OMNI ANTENNA
	NEW SIDEWALK GUY ASSEMBLY		PROPOSED PEDESTAL-MOUNTED DMS STRUCTURE
	NEW ELECTRICAL SERVICE		EXISTING PEDESTAL-MOUNTED DMS STRUCTURE
	NEW ITS DEVICE NUMBER		

**CONSTRUCTION NOTE SYMBOLOGY KEY**

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

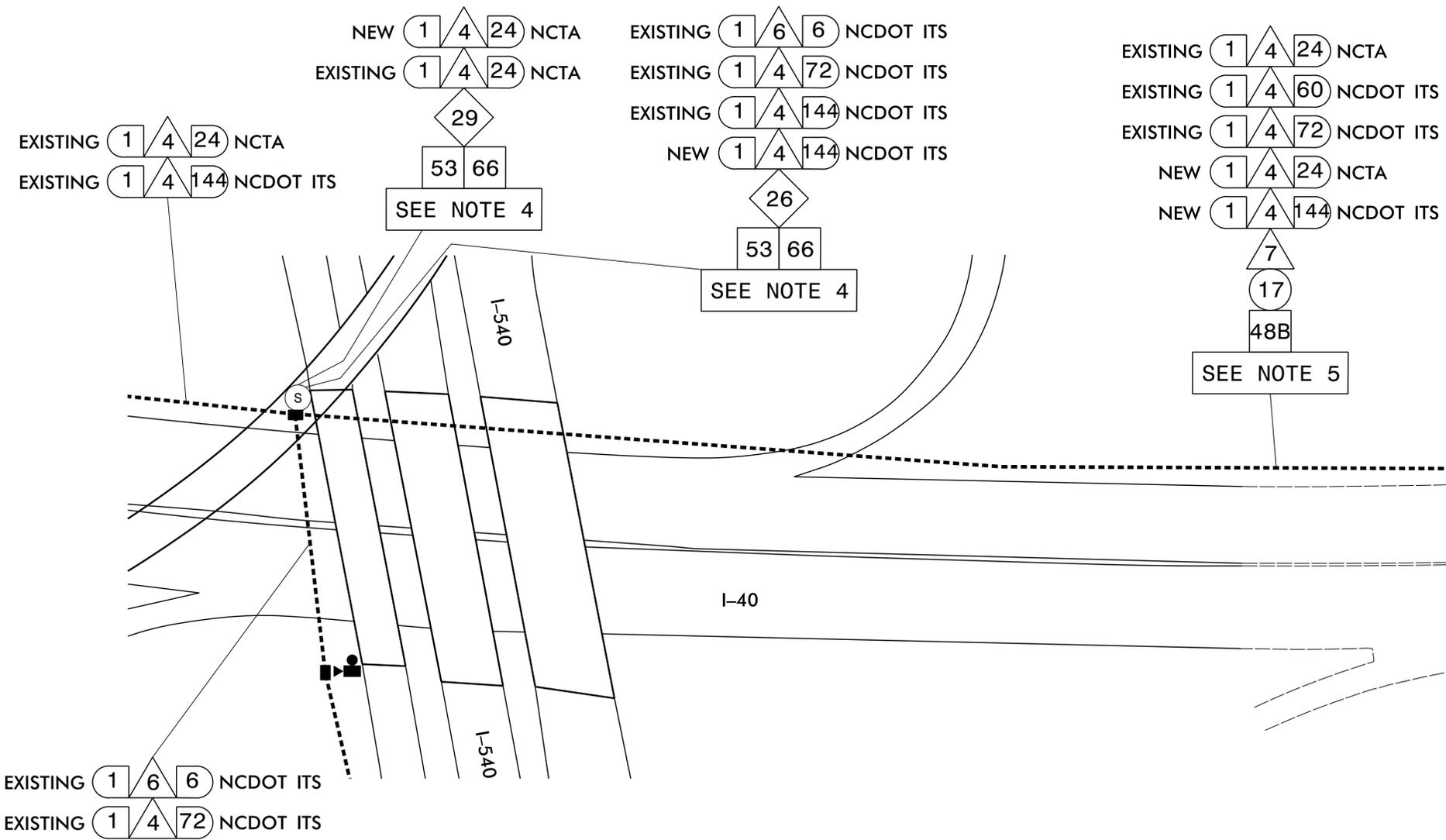
NUMBER OF CABLE(S)		NUMBER OF FIBERS/TWISTED PAIRS
NUMBER OF RISER(S)/CONDUIT(S)		DIAMETER OF RISER(S)/CONDUIT(S) (INCH)

	NEW/EXISTING CABLE
	REMOVE/MODIFY CABLE
	CONDUIT/RISER

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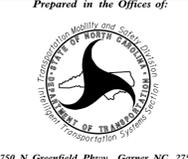
	<b>ITS CONSTRUCTION NOTES</b>		
	DIVISION 05 WAKE COUNTY CARY		
PLAN DATE: JULY 2019 PREPARED BY: A. J. SKUCE	REVIEWED BY: <i>Neil Berry</i> DATE:	SEAL M. A. ASLAMI ENGINEER 032108 7/29/2019	
REVISIONS:		DATE:	

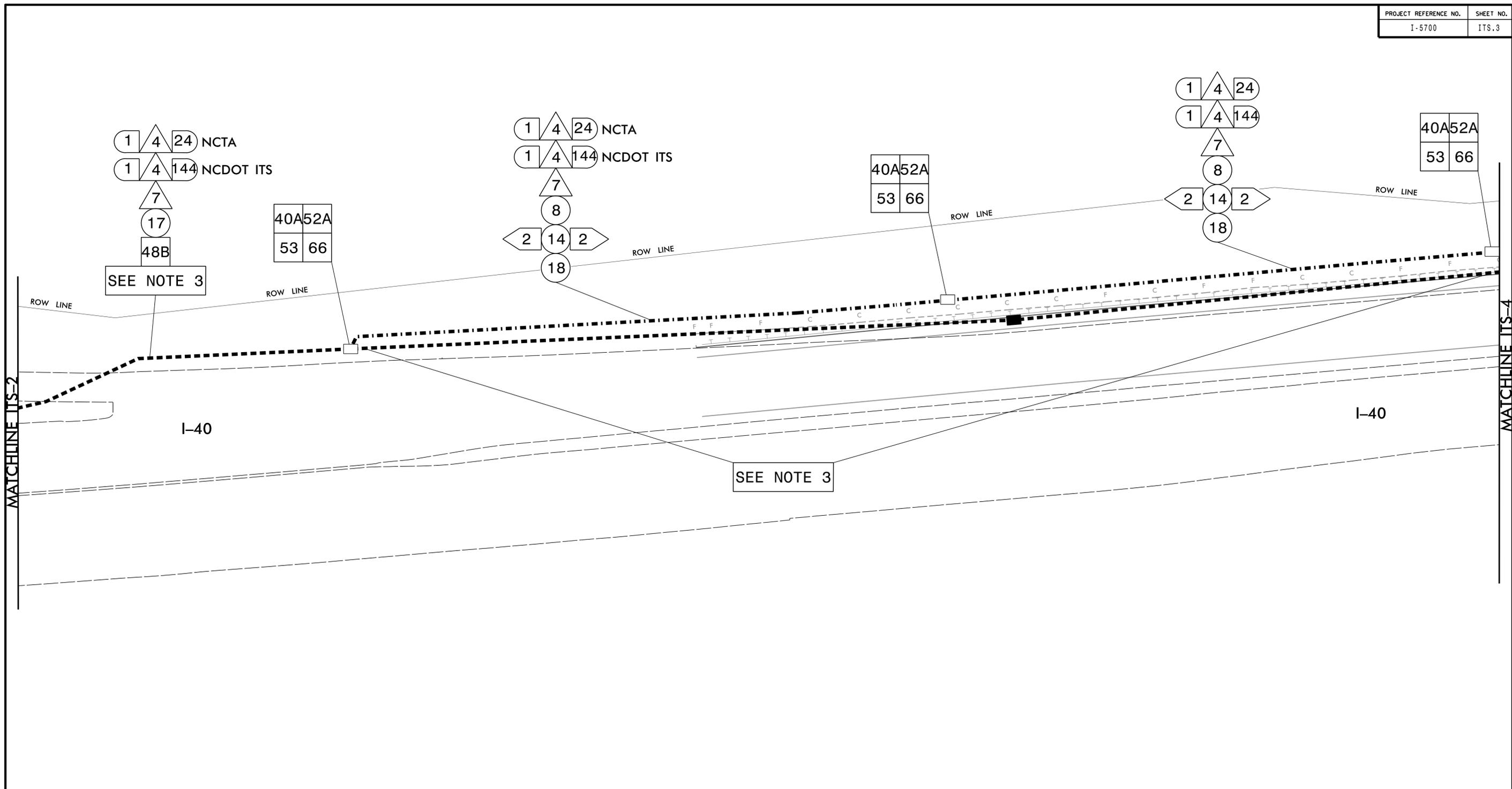


- 1) NOTIFY THE DIVISION 05 REGIONAL ITS ENGINEER, CLIFF BRAAM, AT 919-825-2635 FIVE (5) DAYS PRIOR TO BEGINNING WORK ON FIBER-OPTIC SYSTEM COMMUNICATIONS CABLE. NOTIFY THE REGIONAL ITS ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY. ALL WORK IS NOT COMPLETE UNTIL THE FIBER-OPTIC SYSTEM IS BACK UP AND OPERATIONAL.
- 2) NOTIFY THE NORTH CAROLINA TURNPIKE AUTHORITY ROADSIDE TOLL TECHNOLOGY MANAGER, RACHEL RUIZ, AT 919-710-0115 FIVE (5) DAYS PRIOR TO BEGINNING WORK ON FIBER-OPTIC SYSTEM COMMUNICATIONS CABLE. NOTIFY THE ROADSIDE TOLL TECHNOLOGY MANAGER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY. ALL WORK IS NOT COMPLETE UNTIL THE FIBER-OPTIC SYSTEM IS BACK UP AND OPERATIONAL.
- 3) CONTRACTOR TO RECORD EXISTING SPLICE ARRANGEMENT FOR COMPARISON TO THE SUPPLIED SPLICE DETAILS. IF DISCREPANCIES EXIST, CONTACT THE ENGINEER TO DETERMINE HOW TO PROCEED WITH RESPLICING. PROVIDE AS-BUILT PLANS TO THE ENGINEER IF FINAL SPLICE ARRANGEMENT DIFFERS FROM THE SUPPLIED SPLICE DETAILS.
- 4) SPLICE NCTA CABLES AND NCDOT ITS CABLES IN SEPARATE SPLICE ENCLOSURES.
- 5) AFTER NEW 144-FIBER AND 24-FIBER CABLES HAVE BEEN INSTALLED AND SPLICED, REMOVE EXISTING 60-FIBER, 72-FIBER AND 24-FIBER CABLES. REMOVE EXISTING JUNCTION BOXES AND BACKFILL WITH SUITABLE MATERIAL. ABANDON EXISTING CONDUIT IN PLACE.

TMP PHASE 1

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 Prepared in the Offices of: 750 N. Greenfield Pkwy., Garner, NC 27529	<b>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</b>		SEAL  ENGINEER MOHD A. ASLAMANI 032108
	DIVISION 05 WAKE COUNTY CARY		
PLAN DATE: JULY 2019 PREPARED BY: A. J. SKUCE	REVIEWED BY: <i>Neil Berry</i> DATE:	REVISIONS:	DATE:
SCALE: 1" = 70' 	DocuSigned by: <i>Mohd Aslami</i> 7/29/2019 DATE		

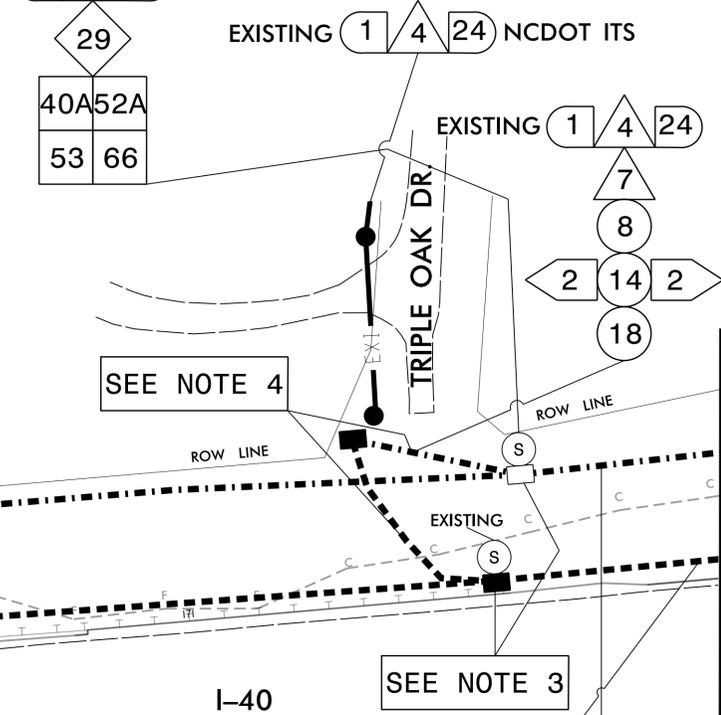
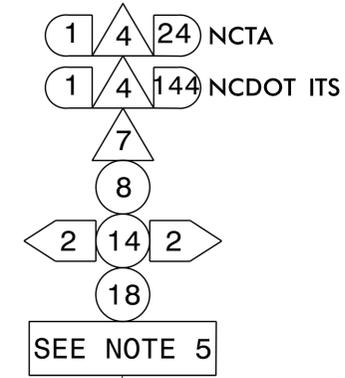
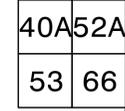
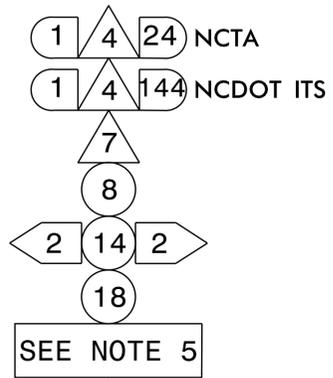


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	<b>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</b>		
	DIVISION 05 WAKE COUNTY CARY		
Prepared in the Offices of: 	PLAN DATE: JULY 2019 PREPARED BY: A. J. SKUCE	REVIEWED BY: <i>Neil Avery</i> DATE:	SEAL MOHAMED A. ASLAMANI ENGINEER 7/29/2019 DATE
750 N. Greenfield Pkwy., Garner, NC 27529	SCALE: 0 50' 1" = 50'	REVISIONS:	DocuSigned by: Mohamed Aslami

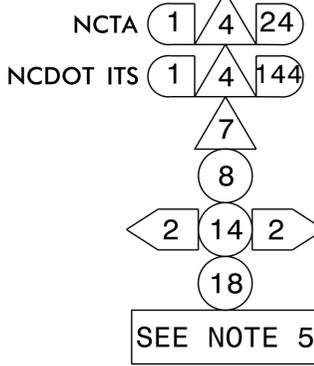


MATCHLINE ITS-3

MATCHLINE ITS-5

I-40

SEE NOTE 6

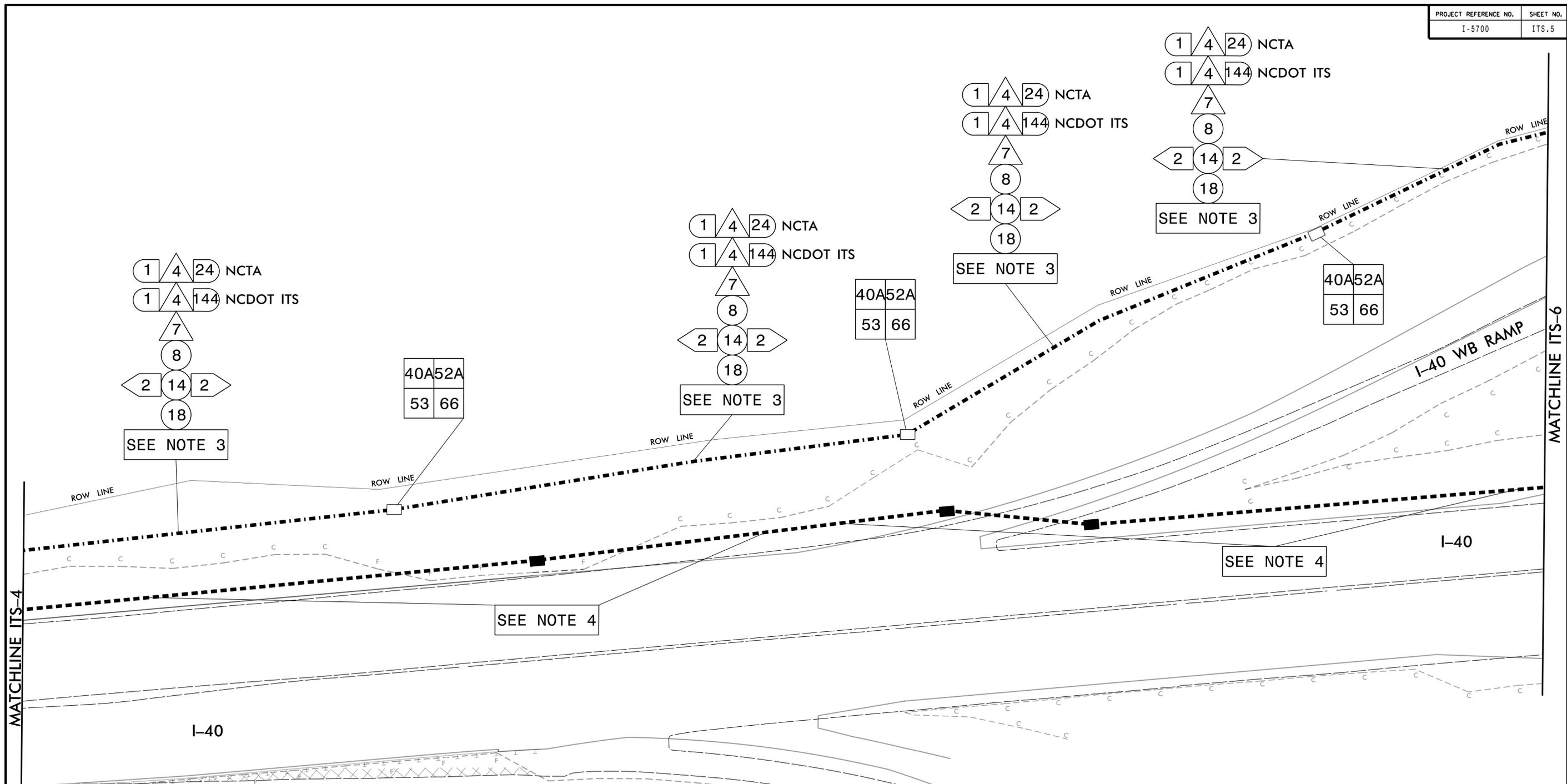


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- 3) CONTRACTOR SHALL RECORD CURRENT SPLICE ARRANGEMENT PRIOR TO REMOVAL OF EXISTING CABLE AND SPLICE ENCLOSURE AND SHALL REPLICATE THE SAME SPLICING FOR THE NEW CABLES AND SPLICE ENCLOSURE. DO NOT CUT OR SPLICE NEW NCTA 24-FIBER CABLE INTO THE NEW SPLICE ENCLOSURE.
- 4) BACKPULL EXISTING 24-FIBER CABLE FROM THE EXISTING SPLICE ENCLOSURE AND REROUTE THROUGH NEW CONDUIT TO THE NEW SPLICE ENCLOSURE.
- 5) INSTALL NEW CONDUIT SYSTEM AS CLOSE TO THE RIGHT OF WAY LINE AS POSSIBLE TO AVOID DAMAGE DURING FUTURE CONSTRUCTION IN THIS AREA.
- 6) AFTER NEW 144-FIBER AND 24-FIBER CABLES HAVE BEEN INSTALLED AND SPLICED, REMOVE EXISTING 60-FIBER, 72-FIBER AND 24-FIBER CABLES. REMOVE EXISTING JUNCTION BOXES AND BACKFILL WITH SUITABLE MATERIAL. ABANDON EXISTING CONDUIT IN PLACE.

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 Prepared in the Offices of: 750 N. Greenfield Pkwy., Garner, NC 27529	COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS		SEAL  ENGINEER MOHD A. ASLAMI
	DIVISION 05 WAKE COUNTY CARY PLAN DATE: JULY 2019 PREPARED BY: A. J. SKUCE	REVIEWED BY: <i>Neil Berry</i> DATE:	



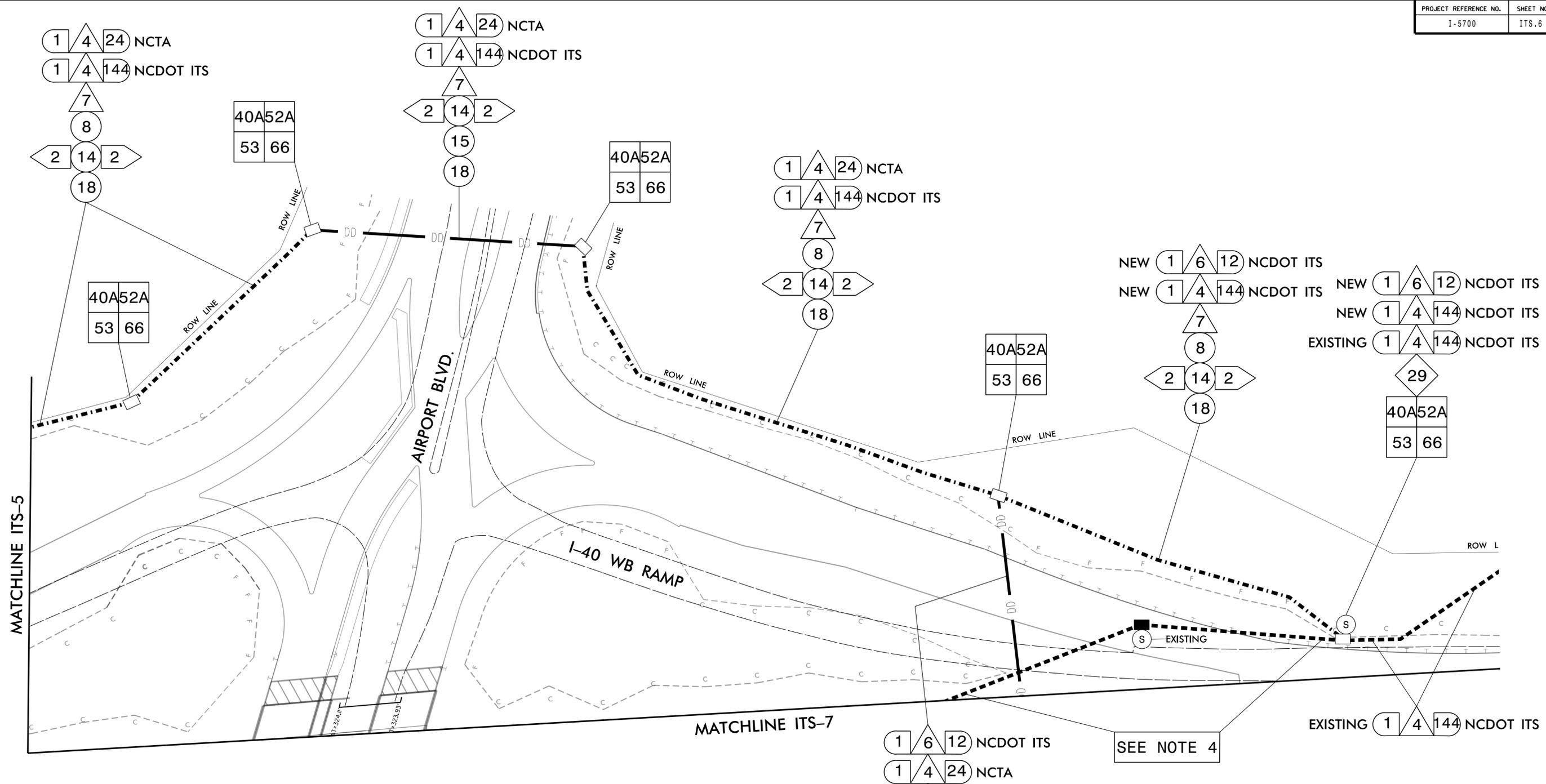
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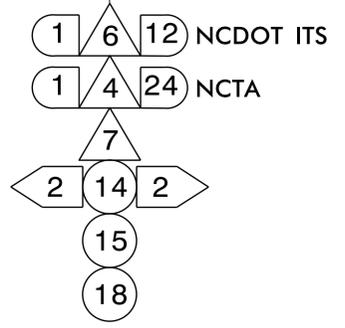
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<p>750 N. Greenfield Pkwy., Garner, NC 27529</p>	<b>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</b>		
	DIVISION 05 WAKE COUNTY CARY PLAN DATE: JULY 2019 PREPARED BY: A. J. SKUCE	REVIEWED BY: <i>Neil Avery</i> DATE:	

SCALE: 1" = 50'



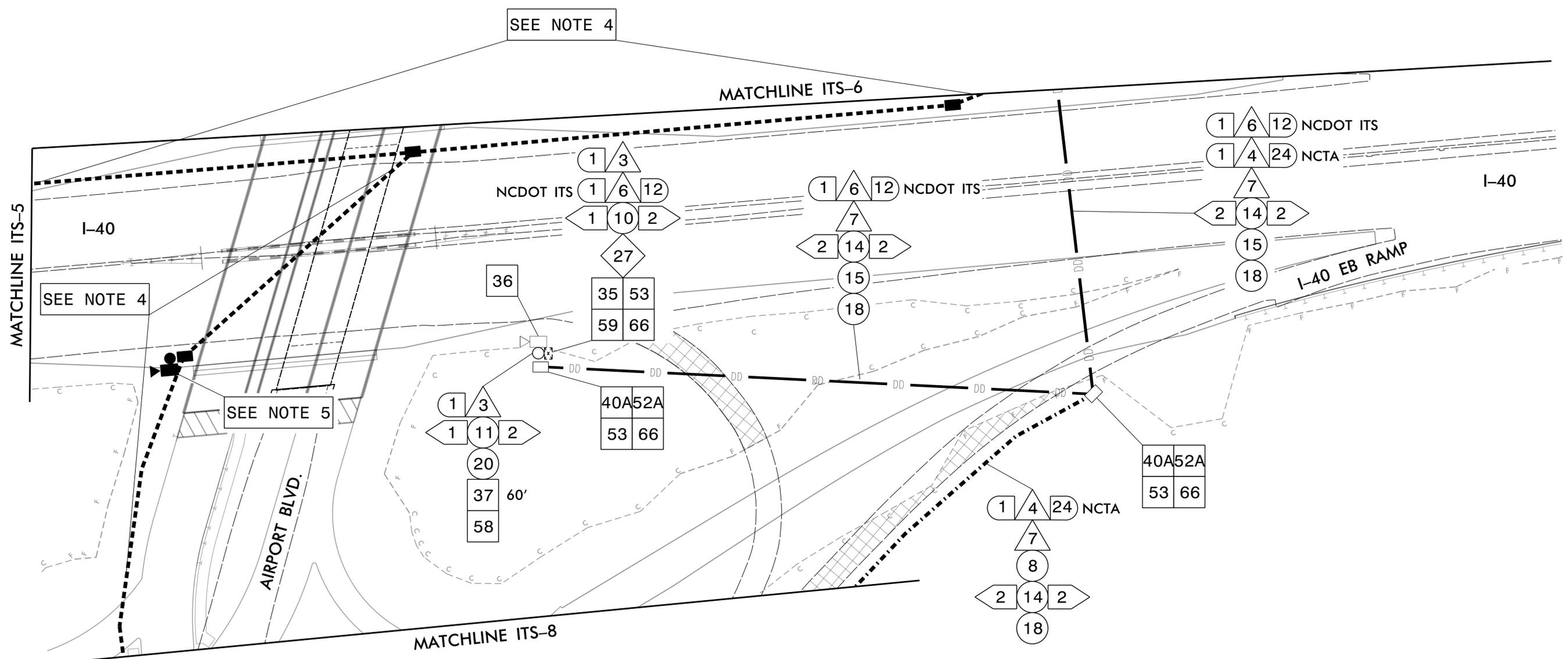
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- 3) INSTALL NEW CONDUIT SYSTEM AS CLOSE TO THE RIGHT OF WAY LINE AS POSSIBLE TO AVOID DAMAGE DURING FUTURE CONSTRUCTION IN THIS AREA.
- 4) AFTER NEW 144-FIBER AND 24-FIBER CABLES HAVE BEEN INSTALLED AND SPLICED, REMOVE EXISTING 60-FIBER, 72-FIBER AND 24-FIBER CABLES. REMOVE EXISTING JUNCTION BOXES AND BACKFILL WITH SUITABLE MATERIAL. ABANDON EXISTING CONDUIT IN PLACE.



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	DIVISION 05 WAKE COUNTY CARY		
Prepared in the Offices of: 	PLAN DATE: JULY 2019 PREPARED BY: A. J. SKUCE	REVIEWED BY: <i>Neil Avery</i> DATE:	SEAL MOHD A. ASLAMANI ENGINEER No. 032108 DATE: 7/29/2019
750 N. Greenfield Pkwy., Garner, NC 27529 	SCALE: 1" = 50' REVISIONS:	DATE:	DocuSigned by: Mohd Aslami SC9808A80808495

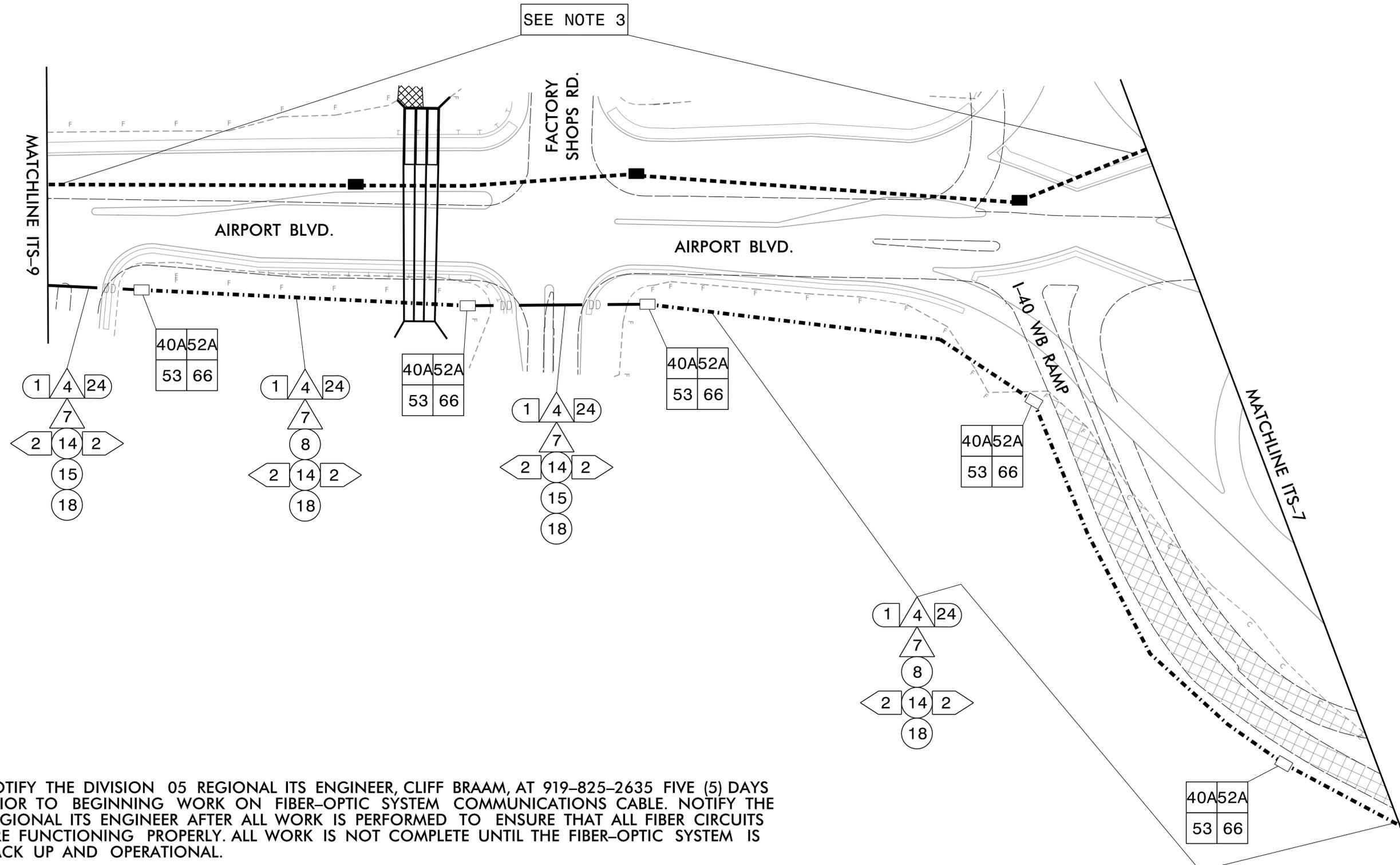


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- 5) REMOVE EXISTING CCTV CAMERA, CABINET AND POLE. RETURN THE CCTV CAMERA AND CABINET TO THE ENGINEER.

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	<b>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</b>		
	DIVISION 05 WAKE COUNTY CARY		
750 N. Greenfield Pkwy., Garner, NC 27529	PLAN DATE: JULY 2019	REVIEWED BY: <i>Neil Berry</i>	SEAL 032108 ENGINEER MOHD A. ASLAMANI
SCALE 0 50' 1" = 50'	PREPARED BY: A. J. SKUCE	DATE:	DocuSigned by: <i>Mohd Aslami</i> 7/29/2019 DATE

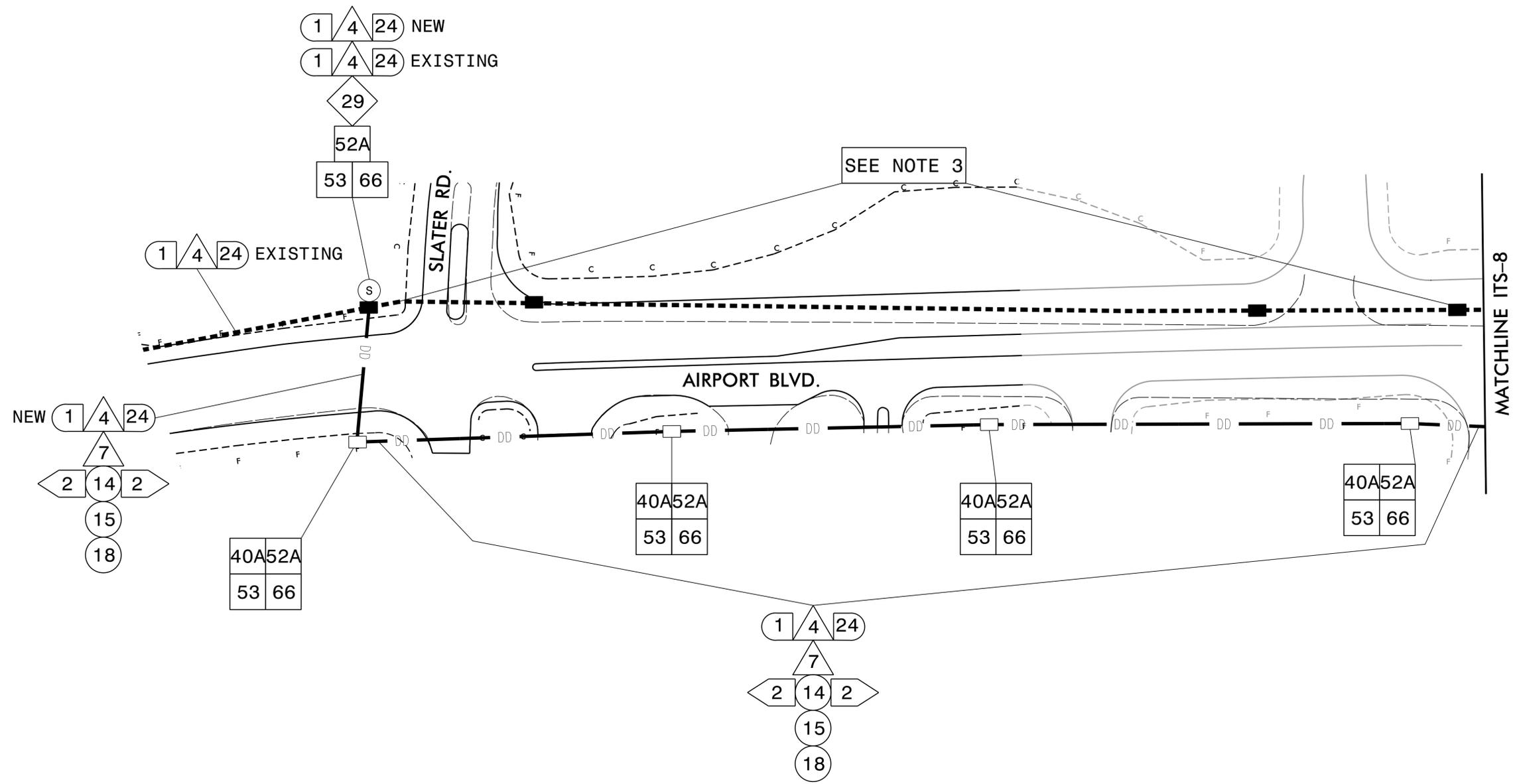


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- 3) AFTER NEW 24-FIBER CABLE HAS BEEN INSTALLED AND SPLICED, REMOVE EXISTING 24-FIBER CABLE. REMOVE EXISTING JUNCTION BOXES AND BACKFILL WITH SUITABLE MATERIAL. ABANDON EXISTING CONDUIT IN PLACE.

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	<b>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</b>		
	DIVISION 05 WAKE COUNTY CARY		
Prepared in the Offices of: 	PLAN DATE: JULY 2019 PREPARED BY: A. J. SKUCE	REVIEWED BY: <i>Neil Avery</i> DATE:	SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MOHD A. ASLAMANI 032108
750 N. Greenfield Pkwy., Garner, NC 27529 SCALE 1" = 50' 	REVISIONS:	DATE:	DocuSigned by: Mohd Aslami 7/29/2019 DATE



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 <small>750 N. Greenfield Pkwy., Garner, NC 27529</small>	<b>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</b>		 <small>SEAL 032108</small> <b>MOHD A. ASLAMI</b> <small>ENGINEER</small>				
	<small>Prepared in the Offices of:</small> <small>750 N. Greenfield Pkwy., Garner, NC 27529</small>	<small>DIVISION 05 WAKE COUNTY</small> <small>PLAN DATE: JULY 2019</small> <small>PREPARED BY: A. J. SKUCE</small>		<small>REVIEWED BY: <i>Neil Aslam</i></small> <small>DATE: 7/29/2019</small>			
 <small>SCALE</small> <small>0 50'</small> <small>1" = 50'</small>	<small>REVISIONS</small> <table border="1"> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>				<small>DATE</small> <table border="1"> <tr> <td> </td> <td> </td> </tr> </table>		

**EXISTING UNDERGROUND SPLICE ENCLOSURE**  
 I-40 AT I-540 NCDOT ITS CABLE  
 SEE SHEET ITS.2

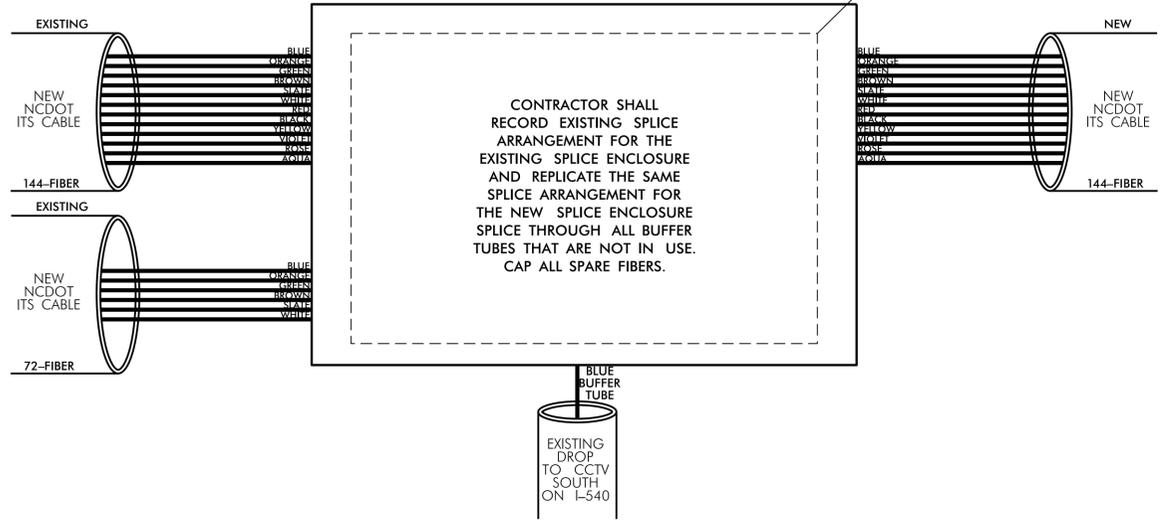
Notes:  
 Unused fibers left coiled and stored in splice tray.  
 Unused Buffer Tubes left coiled and stored in splice tray.

**COLOR CODE TIA/EIA 598-A**

- (1) BLUE (7) RED
- (2) ORANGE (8) BLACK
- (3) GREEN (9) YELLOW
- (4) BROWN (10) VIOLET
- (5) SLATE (11) ROSE
- (6) WHITE (12) AQUA

**LEGEND**  
 X = FUSION SPLICE  
 C = CAP IN TRAY

SEE NOTE 3 FOR MORE DETAILS



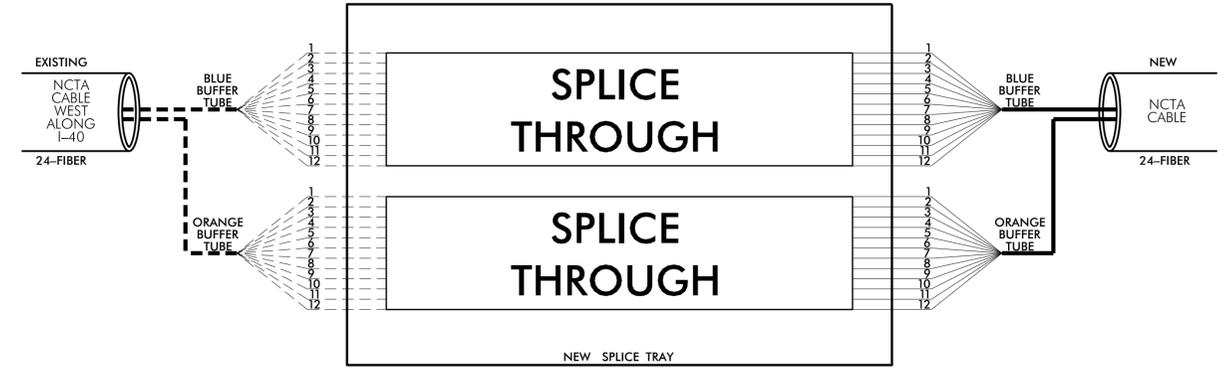
**NEW UNDERGROUND SPLICE ENCLOSURE**  
 I-40 AT I-540 NCTA CABLE  
 SEE SHEET ITS.2

Notes:  
 Unused fibers left coiled and stored in splice tray.  
 Unused Buffer Tubes left coiled and stored in splice tray.

**COLOR CODE TIA/EIA 598-A**

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**LEGEND**  
 X = FUSION SPLICE  
 C = CAP IN TRAY



- 1) NOTIFY THE DIVISION 05 REGIONAL ITS ENGINEER, CLIFF BRAAM, AT 919-825-2635 FIVE (5) DAYS PRIOR TO BEGINNING WORK ON FIBER-OPTIC SYSTEM COMMUNICATIONS CABLE. NOTIFY THE REGIONAL ITS ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY. ALL WORK IS NOT COMPLETE UNTIL THE FIBER-OPTIC SYSTEM IS BACK UP AND OPERATIONAL.
- 2) NOTIFY THE NORTH CAROLINA TURNPIKE AUTHORITY ROADSIDE TOLL TECHNOLOGY MANAGER, RACHEL RUIZ, AT 919-710-0115 FIVE (5) DAYS PRIOR TO BEGINNING WORK ON FIBER-OPTIC SYSTEM COMMUNICATIONS CABLE. NOTIFY THE ROADSIDE TOLL TECHNOLOGY MANAGER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY. ALL WORK IS NOT COMPLETE UNTIL THE FIBER-OPTIC SYSTEM IS BACK UP AND OPERATIONAL.
- 3) CONTRACTOR TO RECORD EXISTING SPLICE ARRANGEMENT FOR COMPARISON TO THE SUPPLIED SPLICE DETAILS. IF DISCREPANCIES EXIST, CONTACT THE ENGINEER TO DETERMINE HOW TO PROCEED WITH RESPLICING. PROVIDE AS-BUILT PLANS TO THE ENGINEER IF FINAL SPLICE ARRANGEMENT DIFFERS FROM THE SUPPLIED SPLICE DETAILS.
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- 5) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:  
 REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"  
 1) SPLICE LOCATION  
 2) DATE  
 3) COMPANY NAME  
 4) NAME OF INDIVIDUAL PERFORMING THE SPLICING

PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.

TMP PHASE 1

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

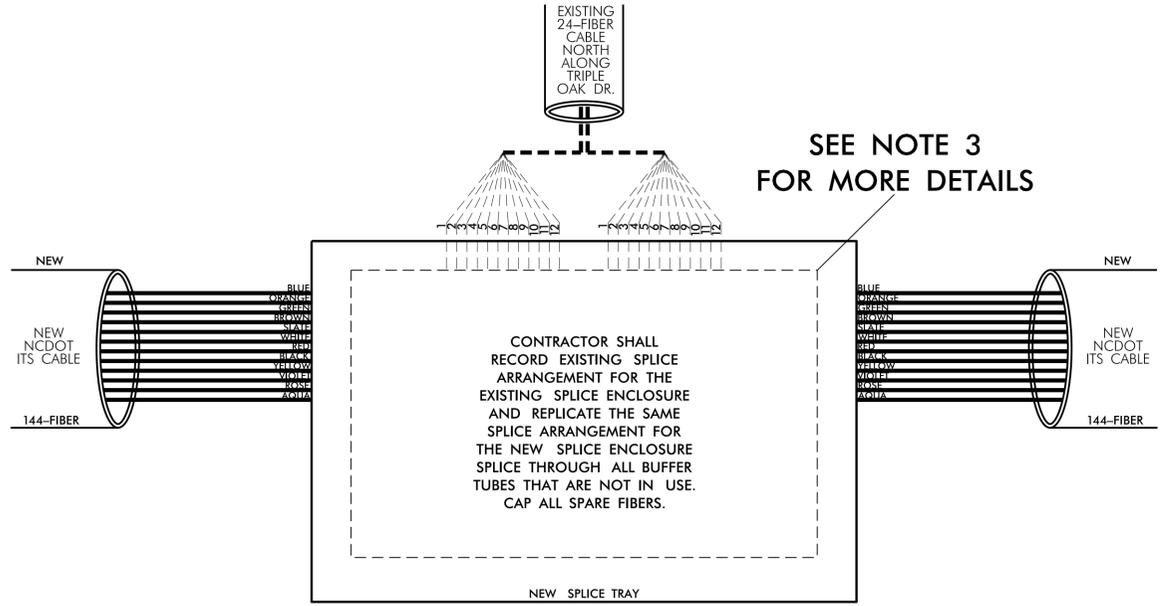
	<b>SPLICE DETAIL</b>		SEAL 
	DIVISION 05 WAKE COUNTY CARY		
PLAN DATE: JULY 2019 PREPARED BY: A. J. SKUCE	REVIEWED BY: <i>Neil Berry</i> DATE:		SEAL 032108 ENGINEER MOHD A. ASLAMANI
REVISIONS:	DATE:	DATE:	DATE:

**NEW UNDERGROUND SPlice ENCLOSURE**  
 I-40 - WEST OF AIRPORT BLVD.  
 NCDOT ITS CABLE  
 SEE SHEET ITS.4

Notes:  
 Unused fibers left coiled and stored in splice tray.  
 Unused Buffer Tubes left coiled and stored in splice tray.

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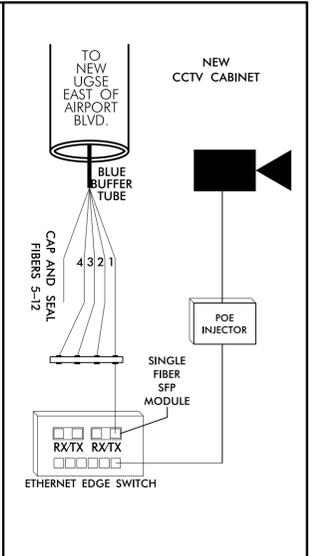
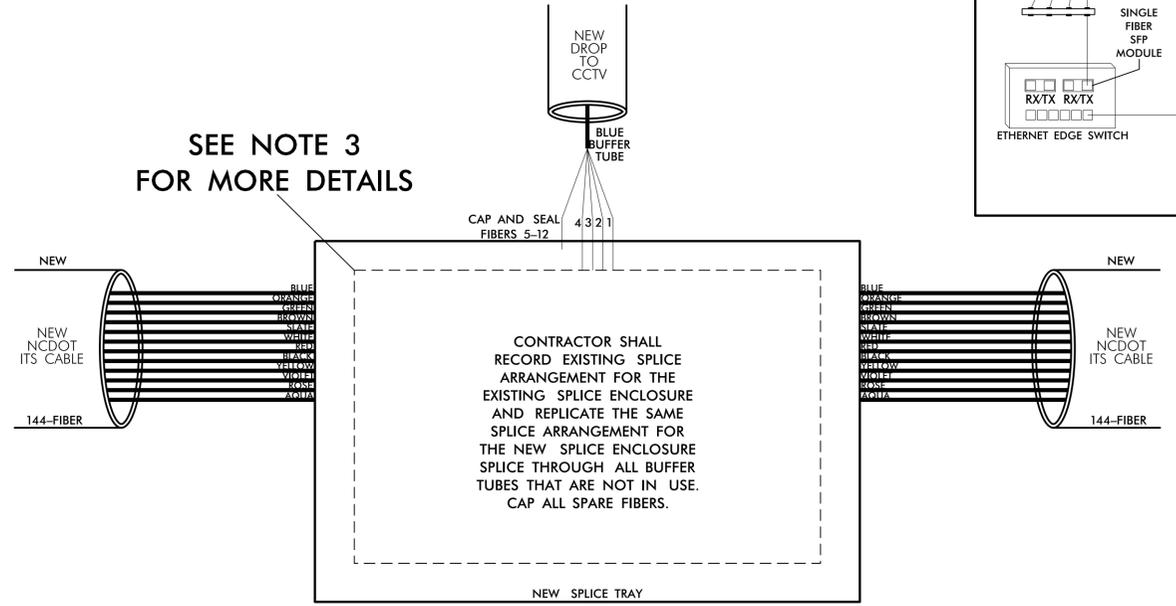


**NEW UNDERGROUND SPlice ENCLOSURE**  
 I-40 - EAST OF AIRPORT BLVD.  
 NCDOT CABLE  
 SEE SHEET ITS.6

Notes:  
 Unused fibers left coiled and stored in splice tray.  
 Unused Buffer Tubes left coiled and stored in splice tray.

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**LEGEND**  
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- 1) NOTIFY THE DIVISION 05 REGIONAL ITS ENGINEER, CLIFF BRAAM, AT 919-825-2635 FIVE (5) DAYS PRIOR TO BEGINNING WORK ON FIBER-OPTIC SYSTEM COMMUNICATIONS CABLE. NOTIFY THE REGIONAL ITS ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY. ALL WORK IS NOT COMPLETE UNTIL THE FIBER-OPTIC SYSTEM IS BACK UP AND OPERATIONAL.
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- 1) SPlice LOCATION
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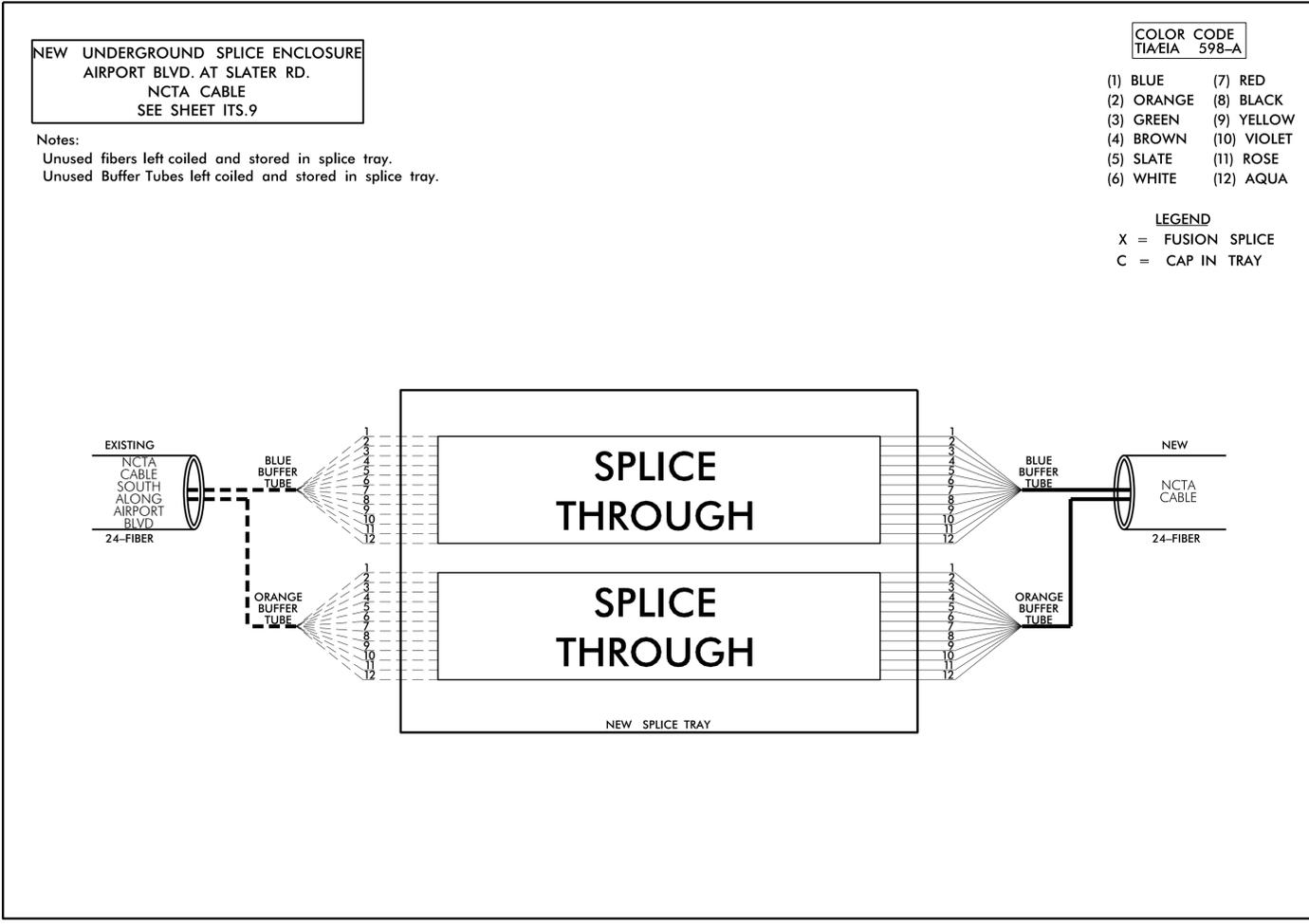
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TMP PHASE 1

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

	<b>SPlice DETAIL</b>		
	DIVISION 05 WAKE COUNTY CARY PLAN DATE: JULY 2019 PREPARED BY: A. J. SKUCE REVIEWED BY: <i>Neil Berry</i> DATE: _____	REVISIONS: _____ DATE: _____	

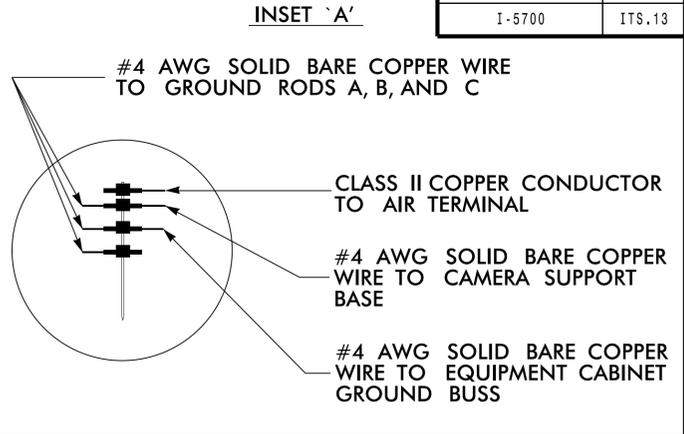
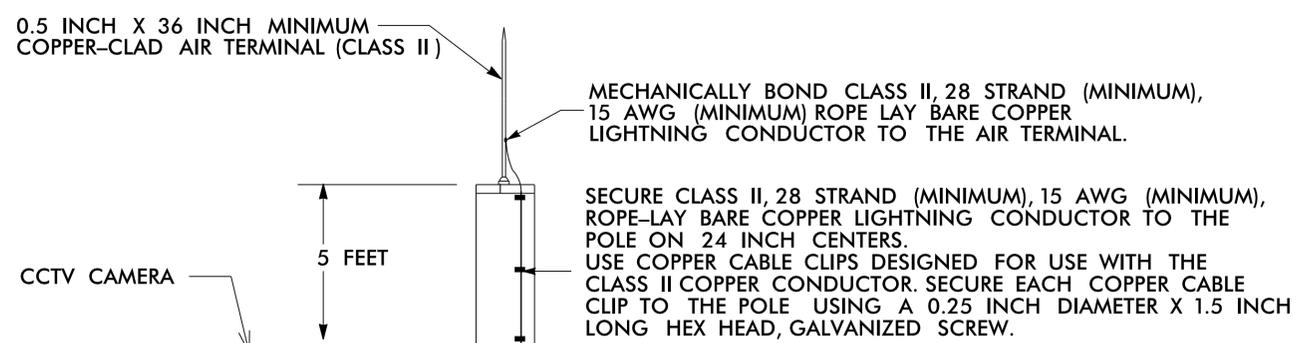
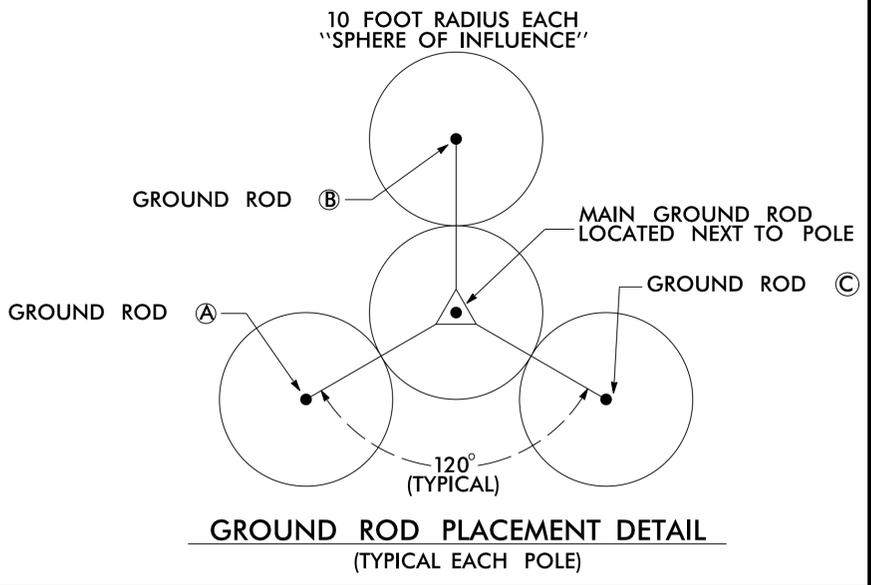
DocuSigned by: *Mohd Aslami* 7/29/2019  
 DATE



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TMP PHASE 1		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
 <small>Prepared in the Offices of:</small> <small>750 N. Greenfield Pkwy., Garner, NC 27529</small>	<h3 style="margin: 0;">SPlice DETAIL</h3> <p style="margin: 0;">DIVISION 05 WAKE COUNTY CARY</p> <p style="margin: 0;">PLAN DATE: JULY 2019 REVIEWED BY: <i>Neil Berry</i></p> <p style="margin: 0;">PREPARED BY: A. J. SKUCE</p> <p style="margin: 0; font-size: small;">REVISIONS: _____ DATE: _____</p>	<p style="margin: 0;">SEAL</p> <p style="margin: 0; font-size: small;">MOHD A. ASLAM</p>	
		<p style="margin: 0; font-size: small;">DocuSigned by:</p> <p style="margin: 0; font-size: small;">7/29/2019</p> <p style="margin: 0; font-size: small;">DATE</p>	<p style="margin: 0; font-size: small;">DocuSigned by:</p> <p style="margin: 0; font-size: small;">7/29/2019</p> <p style="margin: 0; font-size: small;">DATE</p>

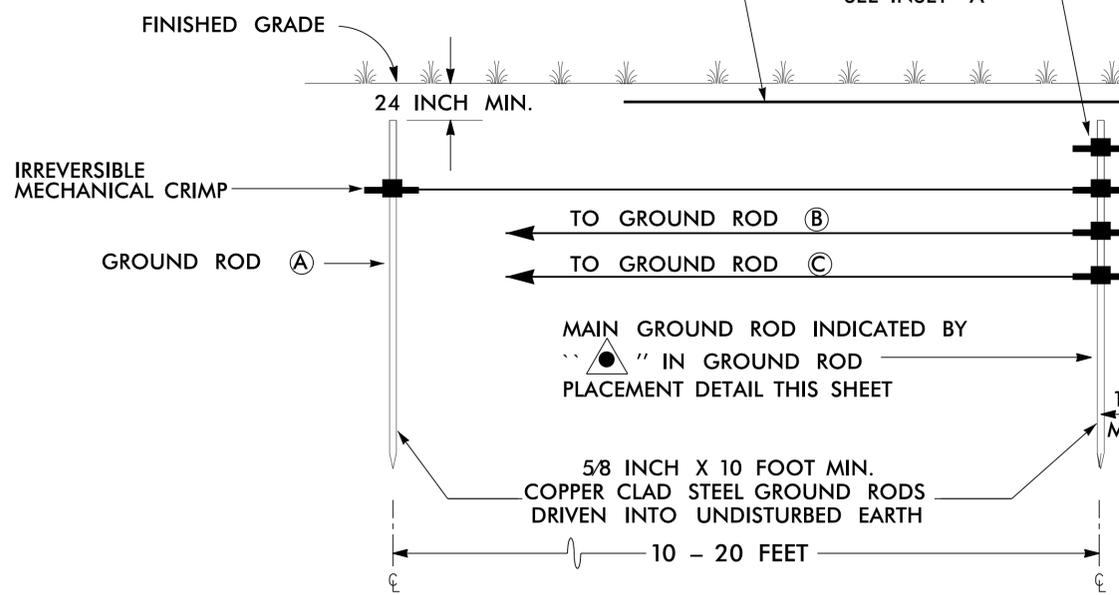


BOND #4 AWG SOLID BARE COPPER WIRE TO CAMERA SUPPORT BASE BY AN ALUMINUM TO COPPER #2 - #14 AWG LUG. ATTACH TO CAMERA BASE WITH A STAINLESS STEEL SELF TAPPING SCREW. REMOVE PAINT OR PROTECTIVE COATING WHERE ATTACHING LUG ONLY.

INSTALL 2-INCH PVC U-GUARD OVER COPPER CONDUCTOR FROM GROUND LEVEL TO 10 FEET (MINIMUM) ABOVE THE GROUND.

2-INCH RIGID GALVANIZED STEEL RISER FOR POWER AND CONTROL WIRES

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



ELECTRICAL SERVICE DROP CONDUCTORS INSTALLED BY UTILITY COMPANY

1 1/2-INCH RIGID GALVANIZED STEEL RISER WITH WEATHERHEAD

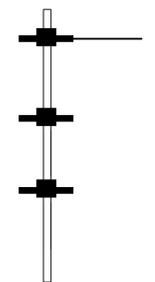
POLE MOUNT EQUIPMENT CABINET

METER BASE /DISCONNECT COMBINATION PANEL

SEE NOTE 5

ALTERNATE GROUNDING METHOD

IF SPACE IS NOT AVAILABLE TO DRIVE MULTIPLE RODS, DRIVE SECTIONAL GROUND RODS A MINIMUM OF 30 FEET.



JOIN SECTIONAL GROUND RODS BY IRREVERSIBLE COMPRESSION COUPLER

NOTES

- BOND CLASS II, 28 STRAND (MINIMUM), 15 AWG (MINIMUM) ROPE-LAY BARE COPPER CONDUCTOR TO THE MAIN GROUND ROD BY AN IRREVERSIBLE MECHANICAL CRIMP. MAINTAIN MAXIMUM HORIZONTAL SEPARATION BETWEEN COPPER CONDUCTOR AND RISER.
- ALL CONNECTIONS TO GROUND RODS SHOULD BE MADE WITH AN IRREVERSIBLE MECHANICAL CRIMP METHOD.
- 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.
- INSTALL MARKER TAPE DIRECTLY ABOVE ALL GROUNDING ELECTRODES AND CONDUCTORS AT A DEPTH OF 12 INCHES.
- REMOVE BONDING JUMPER BETWEEN EQUIPMENT CABINET GROUND BUSS AND NEUTRAL BUSS.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:

CCTV CAMERA INSTALLATION FOR WOOD POLES WITH AERIAL ELECTRICAL SERVICE TYPICAL DETAIL

DIVISION 05 WAKE COUNTY

PLAN DATE: JULY 2019

REVIEWED BY: *Neil Avery*

PREPARED BY: *M. A. Aslami*

REVIEWED BY: *M. A. Aslami*

SCALE

2018 STANDARD SPECIFICATIONS UPGRADE TO IRREVERSIBLE MECHANICAL CRIMP

INIT. DATE

A.J.S. 11/2017

7/29/2019

CADD FILE NAME