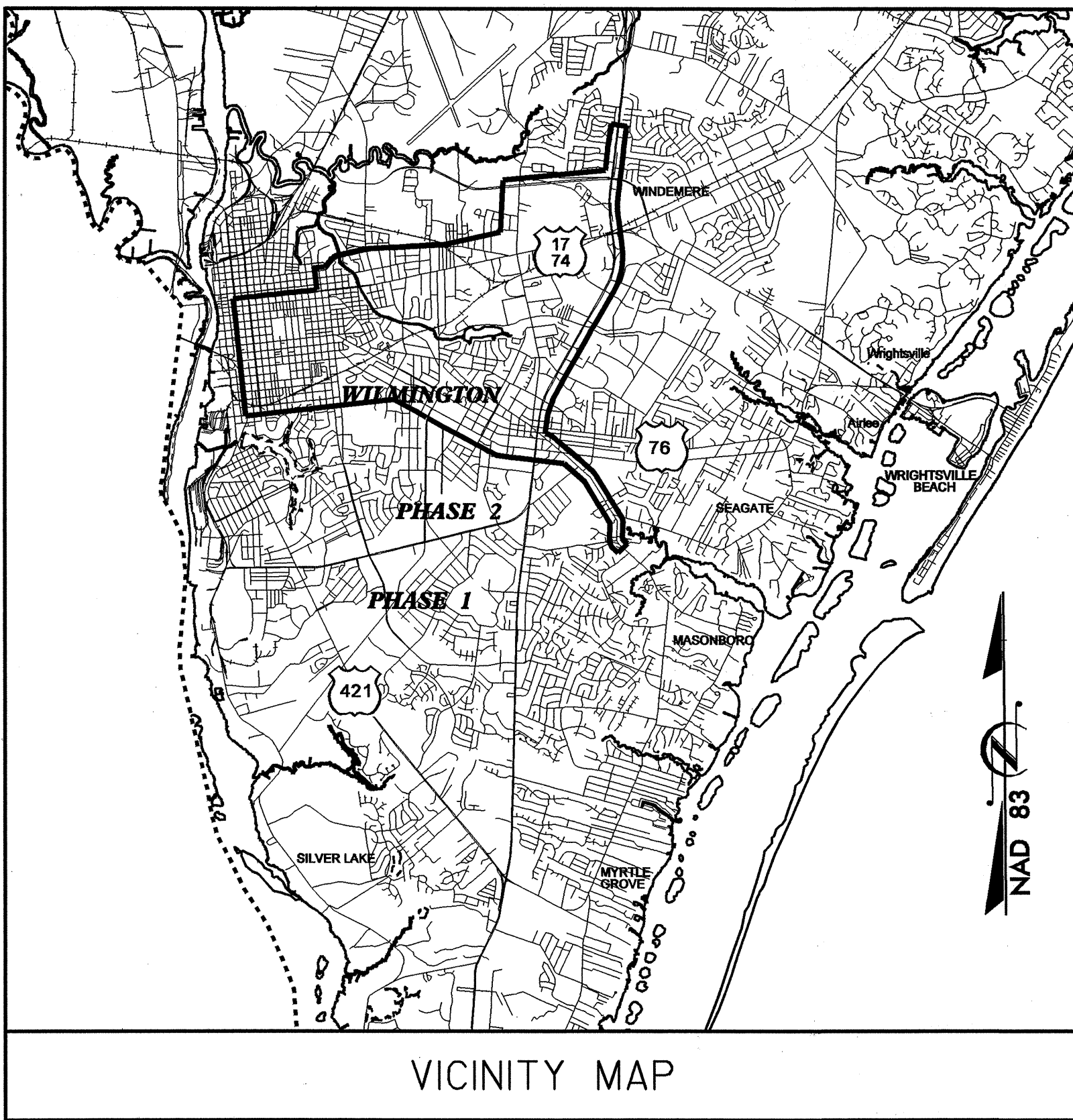


STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5017B	1	
41439.1.1			P.E.
41439.3.2	STP-0332(27)		CONST.

**CONTRACT: C201978 TIP PROJECT: U-5017B**



**NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION**

PLANS FOR PROPOSED IMPROVEMENTS  
**CITY OF WILMINGTON**  
 COMPUTERIZED TRAFFIC SIGNAL SYSTEM

**WILMINGTON - PHASE 2: CENTRAL SECTION**  
 REPLACEMENT OF THE COMPUTERIZED TRAFFIC SIGNAL SYSTEM.  
 RELATED WORK INCLUDES UPGRADING LOCAL INTERSECTION CONTROLLERS,  
 CABINETS, SYSTEM DETECTORS, LIMITED SIGNAL WIRING AND LIMITED  
 SIGNAL HEADS, EXPANSION OF CCTV MONITORING NETWORK, AND INSTALLATION  
 OF A COMMUNICATIONS NETWORK COMPRISED OF FIBER-OPTIC CABLE AND  
 WIRELESS TECHNOLOGY WITH ALL RELATED EQUIPMENT.



2006 STANDARD SPECIFICATIONS

**LETTING DATE:**  
  
**NOVEMBER 18, 2008**

**PROJECT LENGTH**  
  
**PROJECT LENGTH = 20.8 MILES**

**NC DOT CONTACTS:**  
**TRAFFIC ENGINEERING AND SAFETY SYSTEMS BRANCH**  
**INTELLIGENT TRANSPORTATION SYSTEMS SECTION**  
 THOMAS G. PARKER - ITS PROJECT ENGINEER

DEPARTMENT OF TRANSPORTATION  
 FEDERAL HIGHWAY ADMINISTRATION

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
 DIVISION ADMINISTRATOR

DIVISION OF HIGHWAYS  
 STATE OF NORTH CAROLINA

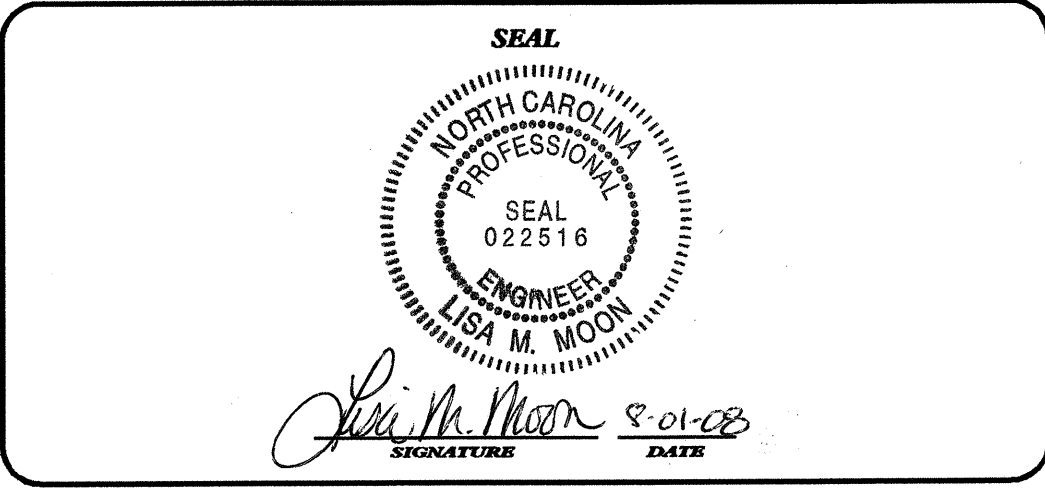
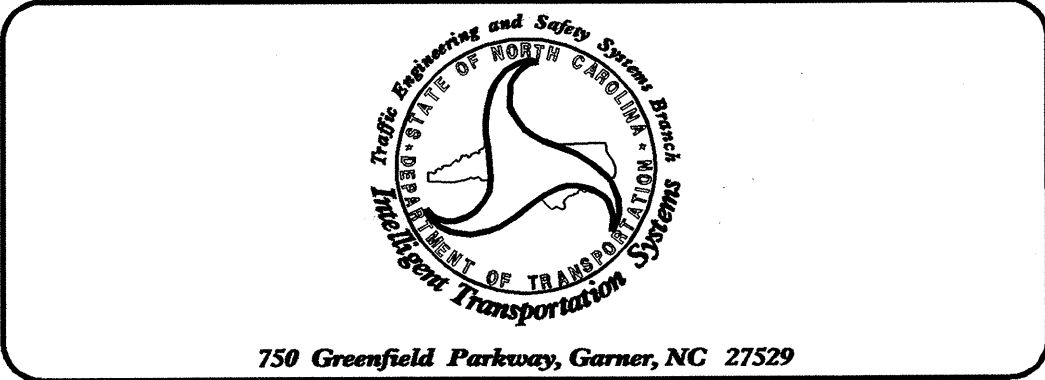
STATE DESIGN ENGINEER \_\_\_\_\_ P.E.

**PBS&J** 1616 EAST HILLBROOK ROAD, SUITE 310  
 RALEIGH, NORTH CAROLINA 27609  
 (919) 876-6888

J. TODD BROOKS - PBS&J PROJECT MANAGER  
 DAVID L. JONES - PBS&J ASSISTANT PROJECT MANAGER  
 LISA M. MOON - PBS&J SENIOR PROJECT ENGINEER

**CITY OF WILMINGTON**  
 NORTH CAROLINA  
 305 Chestnut Street  
 4th Floor, Tower  
 Wilmington, NC 28402

DON BENNETT - CITY TRAFFIC ENGINEERING MANAGER



# INDEX OF SHEETS

1	TITLE SHEET
2	INDEX OF SHEETS AND ROADWAY STANDARD DRAWINGS
3	SUMMARY OF QUANTITIES
4	LEGEND / GENERAL NOTES / ATTACHMENT POINT ABBREVIATIONS
5A-5B	CABLE SCHEMATIC
6	FIBER USAGE SUMMARY
7	SIGNAL SYSTEM BLOCK DIAGRAM
8	CCTV SYSTEM BLOCK DIAGRAM
9	WIRELESS FIELD EQUIPMENT BLOCK DIAGRAM
10A-10B	SYSTEM DETECTORS AND CONTROL ZONE SCHEMATIC
11 THRU 16	SUMMARY OF WORK BY CABLE LAYOUT PLANS
17 THRU 18	SUMMARY OF WORK BY INTERSECTION
TCP 2-1 THRU TCP 2-4	TRAFFIC CONTROL PLANS
CL 2-A	CONSTRUCTION NOTES
CL 2-1 THRU 2-88	CABLE LAYOUT PLANS
FS 2-01	SPLICING DETAIL KEY SHEET
FS 2-02 THRU FS 2-37	SPLICE DETAILS
SD 2-1	CCTV CAMERA INSTALLATION FOR WOOD POLES U/G ELECT. SERVICE
SD 2-2	CCTV CAMERA INSTALLATION FOR WOOD POLES O/H ELECT. SERVICE
SD 2-3	CCTV POLE-MOUNTED CABINET ASSEMBLY LAYOUT
SD 2-4	RISER DETAIL
SD 2-5	FOUNDATION MODIFICATION DETAIL
SD 2-6	BASE ADAPTER DETAIL
SD 2-7	TERMINAL SPLICE CABINET DETAIL
SD 2-8	POLE-MOUNTED SIGNAL CABINET DETAIL
SD 2-9	TMC RACK LAYOUT
SD 2-10	RECONFIGURED POLE-MOUNTED 336S CABINET
SD 2-11	900 MHz RADIO ANTENNA
SD 2-12	WIRING AND GROUNDING SCHEMATIC, RADIO EQUIPMENT
SD 2-13	POLE-MOUNTED CCTV CABINET DETAIL
SD 2-14	GROUND MOUNTED ELECTRICAL SERVICE DETAIL
SD 2-15	AERIAL FIBER-OPTIC CABLE STORAGE & SPLICE ENCLOSURES
SIG. 1 THRU SIG. 162	PHASE 2, STATE TRAFFIC SIGNAL PLANS
CSIG. 163 THRU CSIG. 193	PHASE 2, CITY TRAFFIC SIGNAL PLANS

## ROADWAY STANDARD DRAWINGS

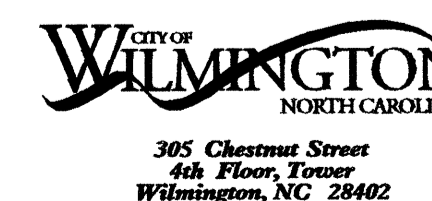
THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE ARE HEREBY CONSIDERED A PART OF THESE PLANS:


STD. NO.	TITLE
848.01	CONCRETE SIDEWALK
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW PANELS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGERS
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1180.01	SKINNY-DRUM
1700.01	ELECTRICAL SERVICE OPTIONS
1700.02	ELECTRICAL SERVICE GROUNDING
1705.01	SIGNAL HEADS
1715.01	UNDERGROUND CONDUIT - TRENCHING
1716.01	JUNCTION BOXES
1720.01	WOOD POLES
1721.01	GUY ASSEMBLIES
1725.01	INDUCTIVE DETECTION LOOPS
1730.01	FIBER OPTIC CABLE
1751.01	CONTROLLERS AND CABINETS (BASEMOUNT)
1751.02	CONTROLLERS AND CABINETS - (POLE MOUNT)
1752.01	CONTROLLERS AND CABINETS - POWER, GROUND AND AUXILIARY POWER SYSTEMS

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1616 EAST MILLBROOK ROAD, SUITE 310  
 RALEIGH, NORTH CAROLINA 27609  
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Prepared for the Offices of:  NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		WILMINGTON Signal System Index of Sheets and Roadway Standard Drawings Phase 2		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 022516 LISA M. MOON	
Division 03 New Hanover County Wilmington		PLAN DATE: July 2008		REVIEWED BY: MRC	
PREPARED BY: LMM		REVISIONS		INIT. DATE	
SCALE NONE		SIGNATURE: <i>Lisa M. Moon</i>		DATE: 8-01-08	

CADD File name: 2-02-IndexSheet.dgn

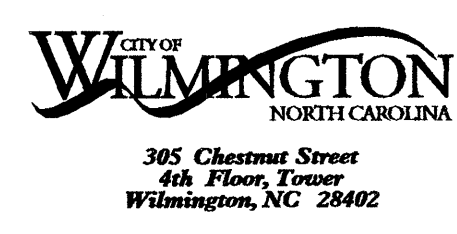
# SUMMARY OF QUANTITIES

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C201978

ItemNumber	Sec #	Quantity	Unit	Description	ItemNumber	Sec #	Quantity	Unit	Description	ItemNumber	Sec #	Quantity	Unit	Description	ItemNumber	Sec #	Quantity	Unit	Description
000100000-N	800	Lump Sum		MOBILIZATION	740800000-E	1722	7	EA	1" RISER WITH WEATHERHEAD	798000000-N	SP	7	EA	GENERIC SIGNAL ITEM CCTV CABINET	798000000-N	SP	2	EA	GENERIC SIGNAL ITEM FURNISH FIBER-OPTIC VIDEO/DATA RECEIVER
440500000-E	1110	840	SF	WORK ZONE SIGNS (PORTABLE)	742000000-E	1722	51	EA	2" RISER WITH WEATHERHEAD	798000000-N	SP	7	EA	GENERIC SIGNAL ITEM CCTV CAMERA ASSEMBLY	798000000-N	SP	2	EA	GENERIC SIGNAL ITEM FURNISH FIBER-OPTIC VIDEO/DATA TRANSMITTER
441000000-E	1110	72	SF	WORK ZONE SIGNS (BARRICADE MOUNTED)	743000000-N	1722	13	EA	HEAT SHRINK TUBING RETROFIT KIT	798000000-N	SP	7	EA	GENERIC SIGNAL ITEM CCTV WOOD POLE	798000000-N	SP	70	EA	GENERIC SIGNAL ITEM MODIFY EXISTING ELECTRICAL SERVICE FOR TRAFFIC SIGNAL
441500000-N	1115	3	EA	FLASHING ARROW PANELS, TYPE C	743200000-E	1722	57	EA	2" RISER WITH HEAT SHRINK TUBING	798000000-N	SP	92	EA	GENERIC SIGNAL ITEM DOWN GUY ASSEMBLY	798000000-N	SP	2	EA	GENERIC SIGNAL ITEM MODIFY EXISTING SPLICE
442000000-N	1120	3	EA	CHANGEABLE MESSAGE SIGN	744400000-E	1725	4,745	LF	INDUCTIVE LOOP SAWCUT	798000000-N	SP	4	EA	GENERIC SIGNAL ITEM DROP CABLE ASSEMBLY (>400')	798000000-N	SP	2	EA	GENERIC SIGNAL ITEM NEW ELECTRICAL SERVICE FOR CCTV (OVERHEAD)
443000000-N	1130	150	EA	DRUMS	745600000-E	1726	16,400	LF	LEAD-IN CABLE (***** (14-2)	798000000-N	SP	16	EA	GENERIC SIGNAL ITEM DROP CABLE ASSEMBLY (150')	798000000-N	SP	5	EA	GENERIC SIGNAL ITEM NEW ELECTRICAL SERVICE FOR CCTV (UNDERGROUND)
443500000-N	1135	150	EA	CONES	751600000-E	1730	93,630	LF	COMMUNICATIONS CABLE (**FIBER) (24)	798000000-N	SP	26	EA	GENERIC SIGNAL ITEM DROP CABLE ASSEMBLY (200')	798000000-N	SP	6	EA	GENERIC SIGNAL ITEM NEW ELECTRICAL SERVICE FOR TRAFFIC SIGNAL
444500000-E	1145	50	LF	BARRICADES (TYPE III)	751600000-E	1730	26,920	LF	COMMUNICATIONS CABLE (**FIBER) (96)	798000000-N	SP	26	EA	GENERIC SIGNAL ITEM DROP CABLE ASSEMBLY (300')	798000000-N	SP	1	EA	GENERIC SIGNAL ITEM REMOVE SPLICE CABINET
445000000-N	1150	450	HR	FLAGGER	754000000-N	1731	86	EA	SPLICE ENCLOSURE	798000000-N	SP	8	EA	GENERIC SIGNAL ITEM DROP CABLE ASSEMBLY (400')	798000000-N	SP	2	EA	GENERIC SIGNAL ITEM SERVICE POLE
448000000-N	1165	3	EA	TMIA	756400000-N	1732	91	EA	FIBER-OPTIC TRANSCEIVER, DROP & REPEAT	798000000-N	SP	11	EA	GENERIC SIGNAL ITEM DROP CABLE ASSEMBLY (50')	798000000-N	SP	25	EA	GENERIC SIGNAL ITEM SIDEWALK GUY ASSEMBLY
451000000-N	SP	600	HR	POLICE	757516000-E	1734	12,690	LF	REMOVE EXISTING COMMUNICATIONS CABLE	798000000-N	SP	10	EA	GENERIC SIGNAL ITEM FIBER-OPTIC VIDEO/DATA RECEIVER	798000000-N	SP	5	EA	GENERIC SIGNAL ITEM TERMINAL SPLICE CABINET
451600000-N	1180	100	EA	SKINNY DRUM	757518000-N	1735	5	EA	CABLE TRANSFER	798000000-N	SP	10	EA	GENERIC SIGNAL ITEM FIBER-OPTIC VIDEO/DATA TRANSMITTER	798000000-N	SP	Lump Sum		GENERIC SIGNAL ITEM CCTV SOFTWARE INTEGRATION
706000000-E	1705	1,335	LF	SIGNAL CABLE	763600000-N	1745	3	EA	SIGN FOR SIGNALS	798000000-N	SP	4	EA	GENERIC SIGNAL ITEM FURNISH 2070L CONTROLLER	798000000-N	SP	Lump Sum		GENERIC SIGNAL ITEM REMOVE CCTV EQUIPMENT
712000000-E	1705	2	EA	VEHICLE SIGNAL HEAD (12", 3 SECTION)	768400000-N	1750	20	EA	SIGNAL CABINET FOUNDATION	798000000-N	SP	3	EA	GENERIC SIGNAL ITEM FURNISH 332 CABINET	799000000-E	SP	1,335	LF	GENERIC SIGNAL ITEM AERIAL CABLE PROTECTOR
713200000-E	1705	4	EA	VEHICLE SIGNAL HEAD (12", 4 SECTION)	768600000-N	SP	20	EA	CONDUIT ENTRANCE INTO EXISTING FOUNDATION	798000000-N	SP	2	EA	GENERIC SIGNAL ITEM FURNISH 336S CABINET	799000000-E	SP	820	LF	GENERIC SIGNAL ITEM UNDERGROUND CONDUIT (2, 1-1/4")
714400000-E	1705	1	EA	VEHICLE SIGNAL HEAD (12", 5 SECTION)	768700000-N	SP	33	EA	MODIFY FOUNDATION FOR CONTROLLER CABINET	798000000-N	SP	1	EA	GENERIC SIGNAL ITEM FURNISH 900 MHZ RADIO	799000000-E	SP	3,140	LF	GENERIC SIGNAL ITEM UNDERGROUND CONDUIT (1, 2")
725200000-E	1710	2,205	LF	MESSENGER CABLE (1/4")	775600000-N	1751	54	EA	CONTROLLER WITH CABINET (TYPE 2070L, BASE MOUNTED)	798000000-N	SP	26	EA	GENERIC SIGNAL ITEM FURNISH DETECTOR CARD (TYPE 2070L)					
727900000-E	1715	7,230	LF	TRACER WIRE	776800000-N	1751	35	EA	CONTROLLER WITH CABINET (TYPE 2070L, POLE MOUNTED)	798000000-N	SP	7	EA	GENERIC SIGNAL ITEM AERIAL GUY ASSEMBLY					
730100000-E	1715	100	LF	DIRECTIONAL DRILL (***** (1, 1-1/4")	778000000-N	1751	523	EA	DETECTOR CARD (TYPE 2070L)	798000000-N	SP	22	EA	GENERIC SIGNAL ITEM AUXILIARY FILE					
730100000-E	1715	2,145	LF	DIRECTIONAL DRILL (***** (2, 1-1/4")	790100000-N	1753	43	EA	CABINET BASE EXTENDER										
731200000-N	1716	11	EA	JUNCTION BOX (***** (SPECIAL-SIZED, HEAVY DUTY)	790101000-N	1753	10	EA	CABINET BASE ADAPTER										
732400000-N	1716	30	EA	JUNCTION BOX (STANDARD SIZE)	798000000-N	SP	9	EA	GENERIC SIGNAL ITEM 900 MHZ RADIO										
734800000-N	1716	16	EA	JUNCTION BOX (OVER-SIZED, HEAVY DUTY)	798000000-N	SP	7	EA	GENERIC SIGNAL ITEM AERIAL GUY ASSEMBLY										
736000000-N	1720	1	EA	WOOD POLE	798000000-N	SP	7	EA	GENERIC SIGNAL ITEM AERIAL GUY ASSEMBLY										
738400000-E	1722	39	EA	**** RISER WITH ***** (1", HEAT SHRINK TUBING)	798000000-N	SP	22	EA	GENERIC SIGNAL ITEM AUXILIARY FILE										

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<p style="font-size: x-small;">Prepared for the Offices of: Traffic Engineering and Safety Services Division of Transportation State of North Carolina</p>	<p><b>Wilmington Signal System Summary of Quantities Phase 2</b></p>		SEAL
	<p>Division 03    New Hanover County    Wilmington</p>		
	<p>PLAN DATE: July 2008</p>	<p>REVIEWED BY: MRC</p>	
<p>PREPARED BY: LMM</p>			
<p>REVISIONS</p>		<p>INIT.    DATE</p>	
<p>NONE</p>			
<p>SIGNATURE</p>		<p>DATE</p>	
<p>CADD Filename: 2-03-Quantities.dgn</p>			

### LEGEND

- FO— NEW FIBER-OPTIC COMMUNICATIONS CABLE
- EX1— EXISTING COMMUNICATIONS CABLE
- REM— EXISTING COMMUNICATIONS CABLE TO BE REMOVED
- NEW AND EXISTING AERIAL GUY ASSEMBLY
- NEW CONDUIT
- EXISTING CONDUIT
- DD— NEW DIRECTIONAL DRILLED CONDUIT
- B&J— NEW BORED AND JACKED CONDUIT
- NEW STANDARD JUNCTION BOX
- EXISTING STANDARD JUNCTION BOX
- NEW OVERSIZED OR SPECIAL-SIZED JUNCTION BOX
- EXISTING OVERSIZED JUNCTION BOX
- NEW WOOD POLE
- EXISTING WOOD POLE
- ⊙ NEW AERIAL SPLICE ENCLOSURE
- ⊙ EXISTING AERIAL SPLICE ENCLOSURE
- ⊙ NEW UNDERGROUND SPLICE ENCLOSURE
- ⊙ NEW METAL POLE
- ⊙ EXISTING METAL POLE
- ⊙ NEW CCTV CAMERA ASSEMBLY
- ⊙ EXISTING CCTV CAMERA ASSEMBLY
- NEW STANDARD GUY ASSEMBLY
- EXISTING STANDARD GUY ASSEMBLY
- ↵ NEW SIDEWALK GUY ASSEMBLY
- ↵ EXISTING SIDEWALK GUY ASSEMBLY
- ∞ NEW CABLE STORAGE RACKS (SNOW SHOES)
- ∞ EXISTING CABLE STORAGE RACKS (SNOW SHOES)
- ⊠ NEW CONTROLLER AND CABINET
- ⊠ EXISTING CONTROLLER AND CABINET
- ⊠ NEW SPLICE CABINET
- ⊠ EXISTING SPLICE CABINET
- SP SIGNAL POLE
- BST BELLSOUTH (AT&T) POLE
- PE PROGRESS ENERGY POLE
- EOP EDGE OF PAVEMENT
- BOC BACK OF CURB
- EOL EDGE OF LANE
- XX-XXXX NCDOT SIGNAL INVENTORY NUMBER
- CXXX CITY OF WILMINGTON SIGNAL ID NUMBER

### GENERAL NOTES

1. THESE PLANS WERE PREPARED FROM INVENTORIES AND FIELD DATA COLLECTED FROM JUNE 2007 THROUGH SEPTEMBER 2007. ACTUAL CONDITIONS IN THE FIELD AT THE TIME OF CONSTRUCTION MAY BE DIFFERENT FROM THOSE SHOWN IN THE PLANS.
2. THE FIELD LOCATION OF ANY ITEM TO BE INSTALLED AS PART OF THIS PROJECT SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
3. NEW TRAFFIC SIGNAL CONTROLLER CABINETS ARE SPECIFIED ON THE PLANS.
4. BURIED UTILITIES AND STRUCTURES: PIPELINES, STORM SEWERS, POWER CABLES, UTILITY CABLES, BASEMENTS, AND OTHER PUBLICLY AND PRIVATELY OWNED UNDERGROUND OBSTRUCTIONS EXIST ADJACENT TO AND WITHIN THE STREET RIGHT-OF-WAY WITHIN THE CONSTRUCTION LIMITS OF THIS PROJECT. INVESTIGATE THE LOCATION OF SUCH BURIED UTILITIES AND STRUCTURES WITH PUBLIC AND PRIVATE UTILITIES.
5. THE PLAN SHEETS HAVE BEEN DEVELOPED AS CLOSE TO SCALE AS PRACTICAL. ACTUAL FIELD CONDITIONS, HOWEVER, SHALL PROVIDE THE BASIS FOR APPLYING THE WORK SHOWN.
6. THE ROADWAY STANDARD DRAWINGS AND THE DETAILS PROVIDED IN THIS PLAN SET SHALL ALL APPLY TO ALL WORK REQUIRED IN THIS PROJECT. WHETHER A PARTICULAR DETAIL IS SPECIFICALLY REFERENCED TO A WORK ITEM OR NOT, IN THE EVENT OF A CONFLICT, THE ORDER OF PRECEDENCE SHALL BE: THE PROJECT SPECIAL PROVISIONS, THE PLAN SET - INCLUDING DETAILS, SUPPLEMENTAL SPECIFICATIONS, THE STANDARD SPECIFICATIONS, AND THEN THE ROADWAY STANDARD DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR APPLYING THE PROPER DETAILS.
7. ANY OF THE CONTRACTOR'S WORK ACTIVITIES WHICH IMPACT ANY UTILITY FACILITY OR RAILROAD SHALL BE COORDINATED WITH THE OWNER OF ALL AFFECTED UTILITIES AND RAILROADS. THE CONTRACTOR SHALL FOLLOW ANY AND ALL WORK PROCEDURES THE UTILITY AND RAILROAD OWNERS MAY REQUIRE.
8. THE PLANS FREQUENTLY SHOW DIRECTIONAL DRILLS ACROSS STREETS AND DRIVEWAYS WITH THE INSTALLATION OF A SINGLE JUNCTION BOX. THE INTENT IS TO TRANSITION FROM DIRECTIONAL DRILL TO TRENCHING WITHOUT INSTALLING A SECOND JUNCTION BOX. BASED ON FIELD CONDITIONS, THE CONTRACTOR MAY ELECT TO INSTALL THE SINGLE JUNCTION BOX ON THE OPPOSITE SIDE OF THE STREET OR DRIVEWAY FROM THAT SHOWN IN THE PLANS.
9. ALL WORK SHOWN ON THESE PLANS SHALL BE PERFORMED BY THE CONTRACTOR UNLESS IT IS SPECIFICALLY NOTED THAT THE WORK WILL BE PERFORMED BY OTHERS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NEW HANOVER COUNTY FIBER OPTIC CABLE (NHC FOC) THAT IS AFFECTED BY THIS PROJECT. ANY NHC FOC THAT IS WITHIN THE LIMITS OF THE FOLLOWING CABLE LAYOUT PLANS SHALL NOT BE DAMAGED OR RENDERED INOPERATIVE. IF CONTRACTOR DAMAGES OR RENDERS INOPERATIVE THE NHC FOC, DIRECTLY OR INDIRECTLY, DURING THE COURSE OF THIS PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMMEDIATELY (WITHIN 8 HOURS) REPAIRING NHC FOC.



### ATTACHMENT POINT ABBREVIATIONS

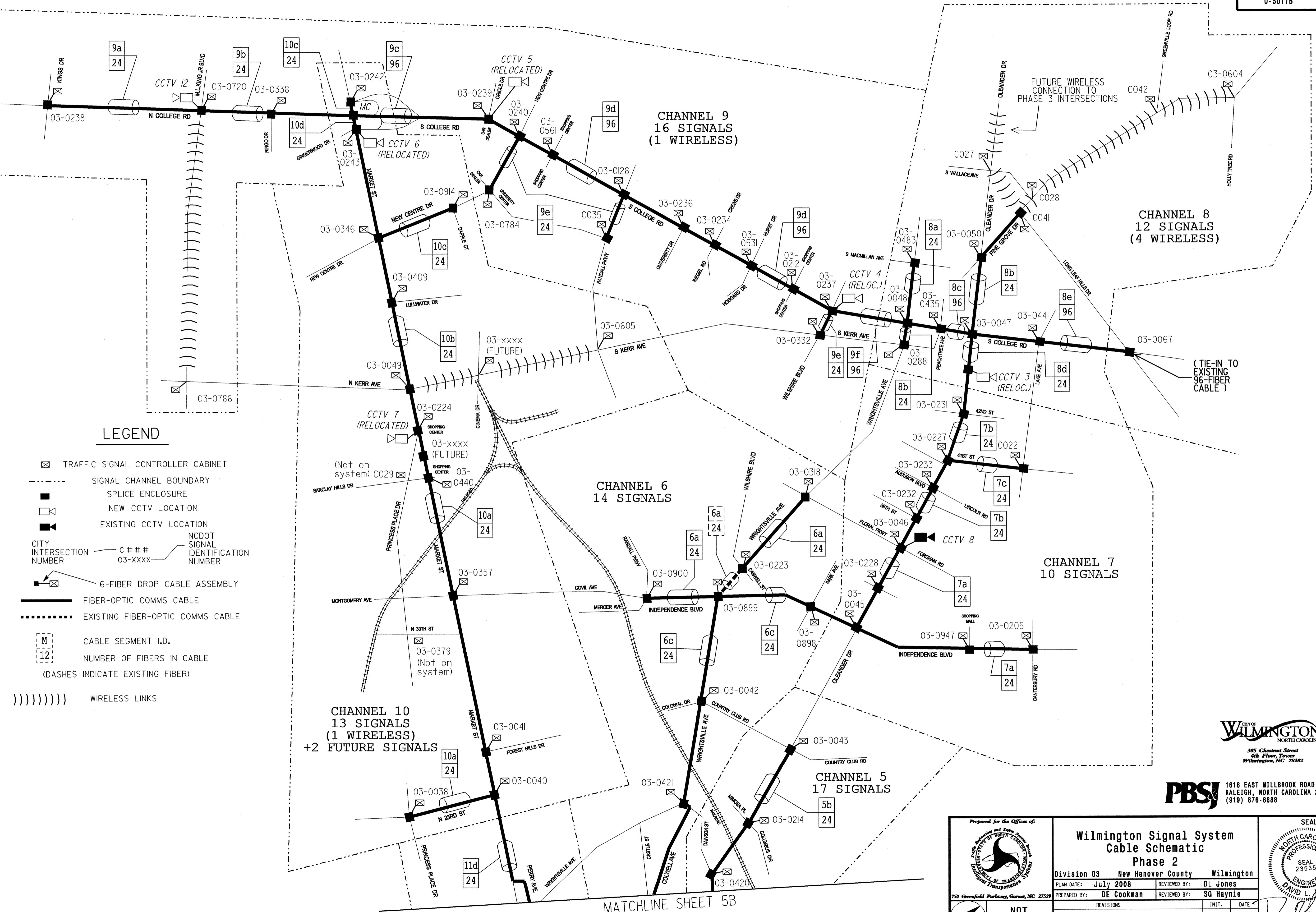
- |       |   |
|-------|---|
| AGUY  | Aerial Guy  |
| ARLT  | Area Light  |
| BKT   | Bracket   |
| BS    | Backside Attachment   |
| CAM   | Camera Bracket  |
| CAPB  | Capacitor Bank  |
| CATV  | Cable Television  |
| CDRP  | Cable Drop  |
| CGUY  | Cable Television Guy  |
| DL    | Drip Loop   |
| EXI   | Existing Communications Cable   |
| FIRE  | Fire Alarm Circuit  |
| FLCAB | Flasher Cabinet   |
| FS    | Front Side Attachment   |
| LIC   | Lead-In Cable (Detector)  |
| MSGR  | Messenger   |
| NEUT  | Neutral   |
| NHC   | New Hanover County  |
| OSS   | Overhead Sign Span  |
| PGUY  | Power Guy   |
| PRI   | Primary Power   |
| PWR   | Power   |
| RSR   | Riser   |
| SAME  | Same Elevation /Attachment Height   |
| SEC   | Secondary Power   |
| SGRSR | Signal Riser  |
| SGUY  | Signal Guy  |
| SIG   | Signal Span   |
| SLDL  | Streetlight Drip Loop   |
| SO    | Standoff  |
| SPBX  | Pole-Mounted Splice Box, Signal   |
| SRVC  | Service Conductor   |
| STLT  | Streetlight   |
| SVRSR | Service Riser   |
| TDRP  | Telephone Drop  |
| TEL   | Telephone   |
| TFMR  | Transformer   |
| TGUY  | Telephone Guy   |
| TOP   | Top of Pole   |
| TRI   | Triplex   |
| TRIWH | Triplex Weatherhead   |
| TWP   | Twisted Pair  |
| X ANY | Crossing Line, where "Any" is the abbreviation for the overhead line that is crossing exist/prop. cable route |

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RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888

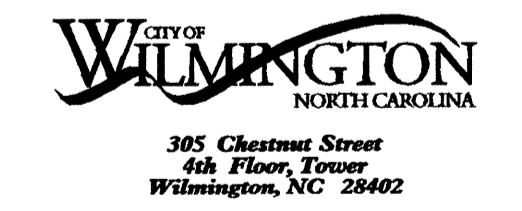
**CITY OF WILMINGTON**  
NORTH CAROLINA  
305 Chestnut Street  
4th Floor, Tower  
Wilmington, NC 28402

	Prepared for the Offices of: 		<b>Wilmington Signal System Legend/General Notes/ Attachment Point Abbreviations Phase 2</b>	
	Division 03 New Hanover County Wilmington		PLAN DATE: July 2008 REVIEWED BY: MRC	
PREPARED BY: LMM		REVIEWED BY:		SCALE NONE
REVISIONS		INIT. DATE		
SIGNATURE: <i>Lisa M. Noon</i>		DATE: 7-23-08		CADD Filename: 2-04-Legend_Sheet.dgn
SIGNATURE:		DATE:		



**LEGEND**

- ☒ TRAFFIC SIGNAL CONTROLLER CABINET
- SIGNAL CHANNEL BOUNDARY
- SPLICE ENCLOSURE
- NEW CCTV LOCATION
- ◻ EXISTING CCTV LOCATION
- CITY INTERSECTION NUMBER C### NCDOT SIGNAL IDENTIFICATION NUMBER 03-XXXX
- ☒ 6-FIBER DROP CABLE ASSEMBLY
- FIBER-OPTIC COMMS CABLE
- - - EXISTING FIBER-OPTIC COMMS CABLE
- M CABLE SEGMENT I.D.
- 12 NUMBER OF FIBERS IN CABLE (DASHES INDICATE EXISTING FIBER)
- )))))) WIRELESS LINKS

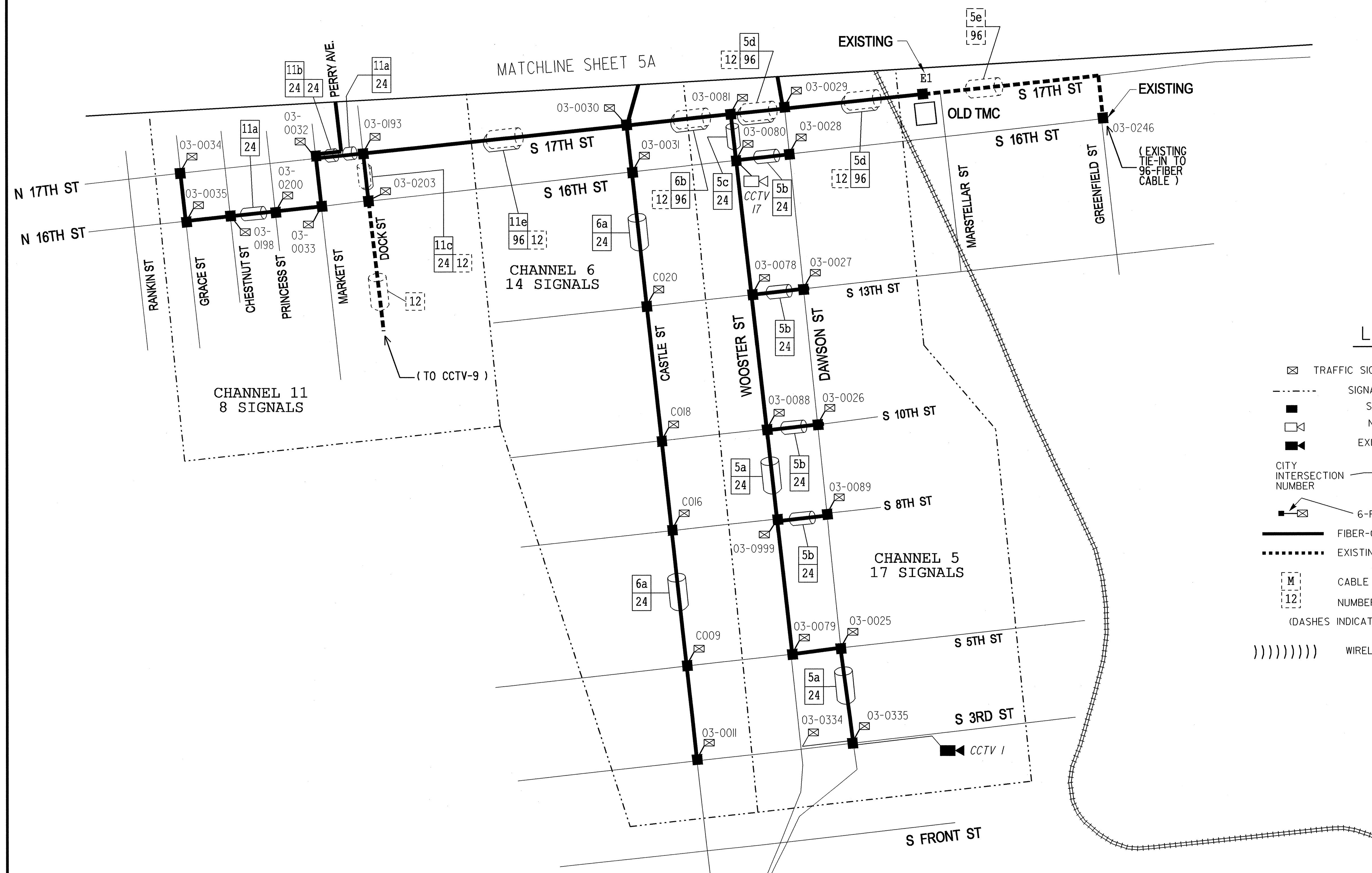


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RALEIGH, NORTH CAROLINA 27609  
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	<b>Wilmington Signal System Cable Schematic Phase 2</b>		
	Division 03 New Hanover County Wilmington		
PLAN DATE: July 2008		REVIEWED BY: DL Jones	
PREPARED BY: DE Cookman		REVIEWED BY: SG Haynie	
REVISIONS		INIT. DATE	
NOT TO SCALE		SIGNATURE: <i>David L. Jones</i> DATE:	
750 Greenfield Parkway, Garner, NC 27529		CAD File Name: CS-2-1A.dgn	

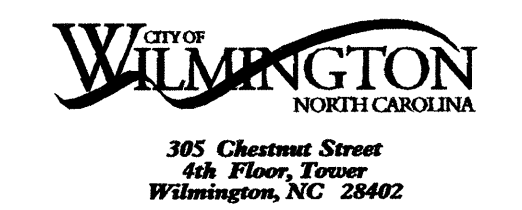
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 18566

MATCHLINE SHEET 5B



### LEGEND

- ☒ TRAFFIC SIGNAL CONTROLLER CABINET
- - - - - SIGNAL CHANNEL BOUNDARY
- SPLICE ENCLOSURE
- ◻ NEW CCTV LOCATION
- ◼ EXISTING CCTV LOCATION
- CITY INTERSECTION NUMBER C ###
- NCDOT SIGNAL IDENTIFICATION NUMBER 03-XXXX
- 6-FIBER DROP CABLE ASSEMBLY
- FIBER-OPTIC COMMS CABLE
- - - - - EXISTING FIBER-OPTIC COMMS CABLE
- M CABLE SEGMENT I.D.
- 12 NUMBER OF FIBERS IN CABLE (DASHES INDICATE EXISTING FIBER)
- )))))) WIRELESS LINKS

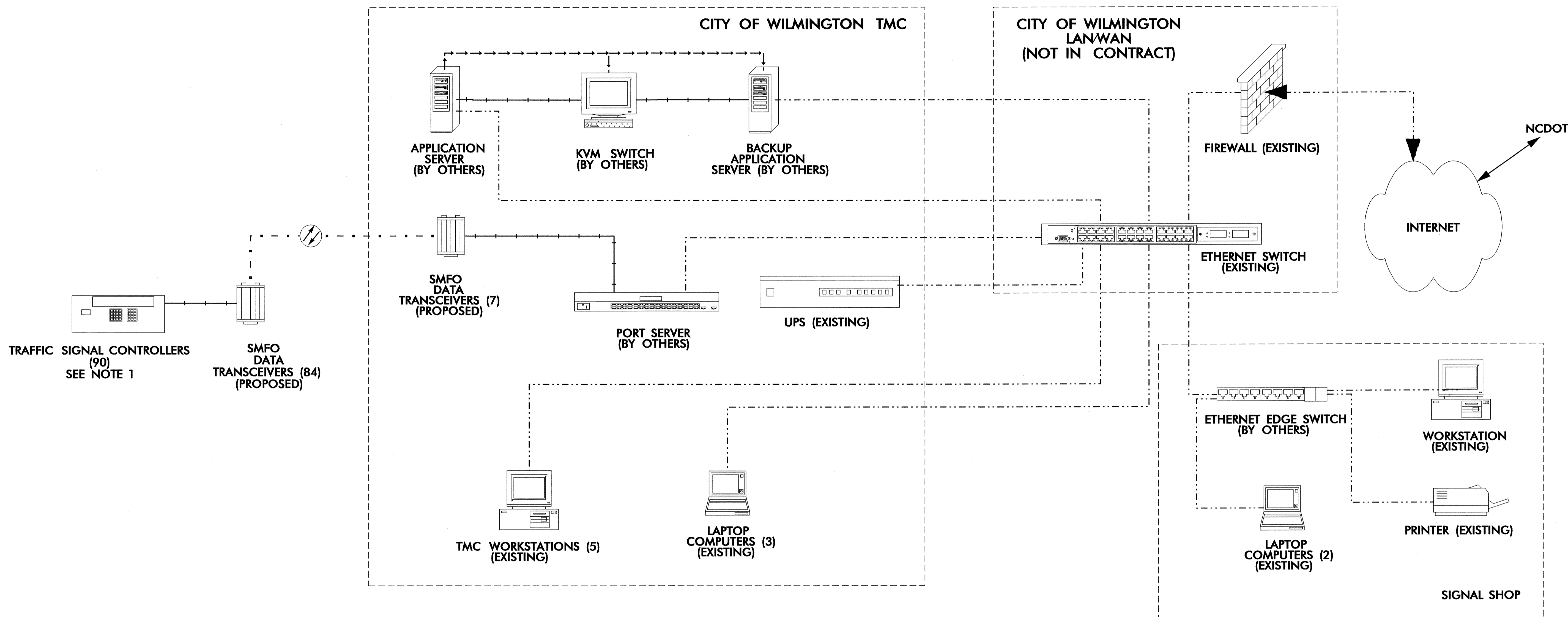


**PBS** 1616 EAST WILLBROOK ROAD, SUITE 310  
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(919) 876-6888

24-JUL-2008 14:56 G:\TEC\Curr\280337-01 - Wl\mington Sig Sys\Comms & ITS\MCS 2-1a.dgn 18566

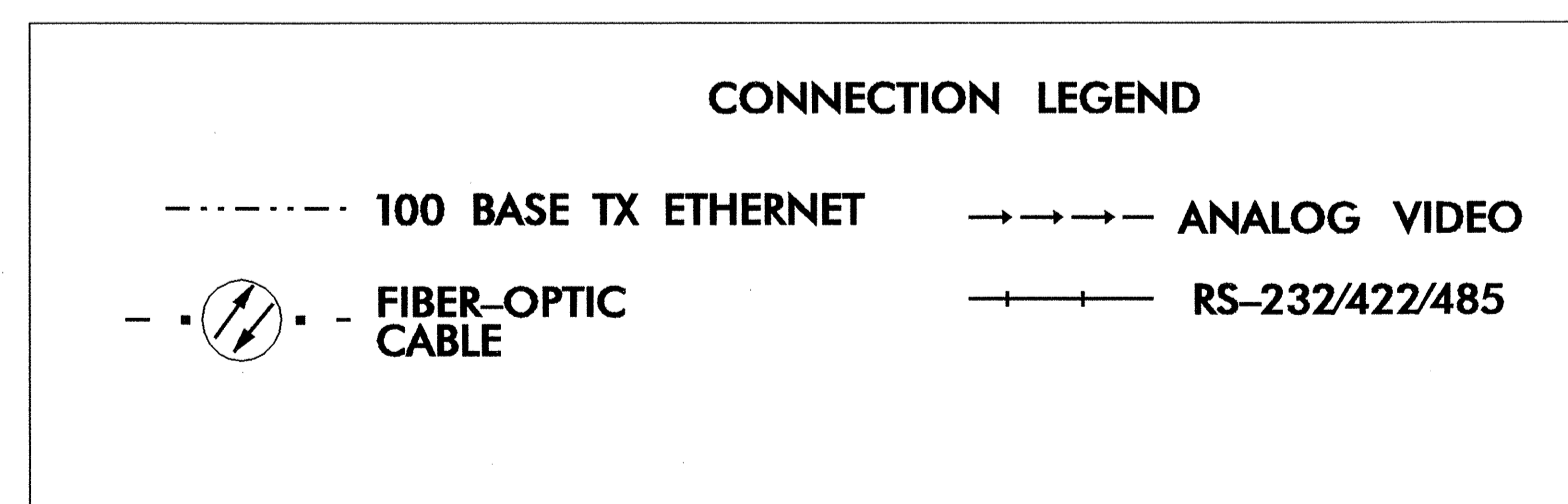
	<b>Wilmington Signal System Cable Schematic Phase 2</b>		
	Division 03 New Hanover County Wilmington		
PLAN DATE: July 2008	REVIEWED BY: DL Jones		PREPARED BY: DE Cookman REVIEWED BY: SG Haynie
PREPARED BY: DE Cookman	REVIEWED BY: SG Haynie		
REVISIONS	INIT.	DATE	SIGNATURE: <i>David H. Jones</i> 7/25/08 DATE
NOT TO SCALE			CADD Filename: CS 2-1A.dgn





**NOTES**

1. THE NUMBER OF TRAFFIC SIGNAL CONTROLLERS INCLUDES 6 CONTROLLERS CONNECTED BY WIRELESS.
2. WORK IN THIS PHASE DENOTED BY "REPLACE" OR "PROPOSED" DESIGNATIONS.

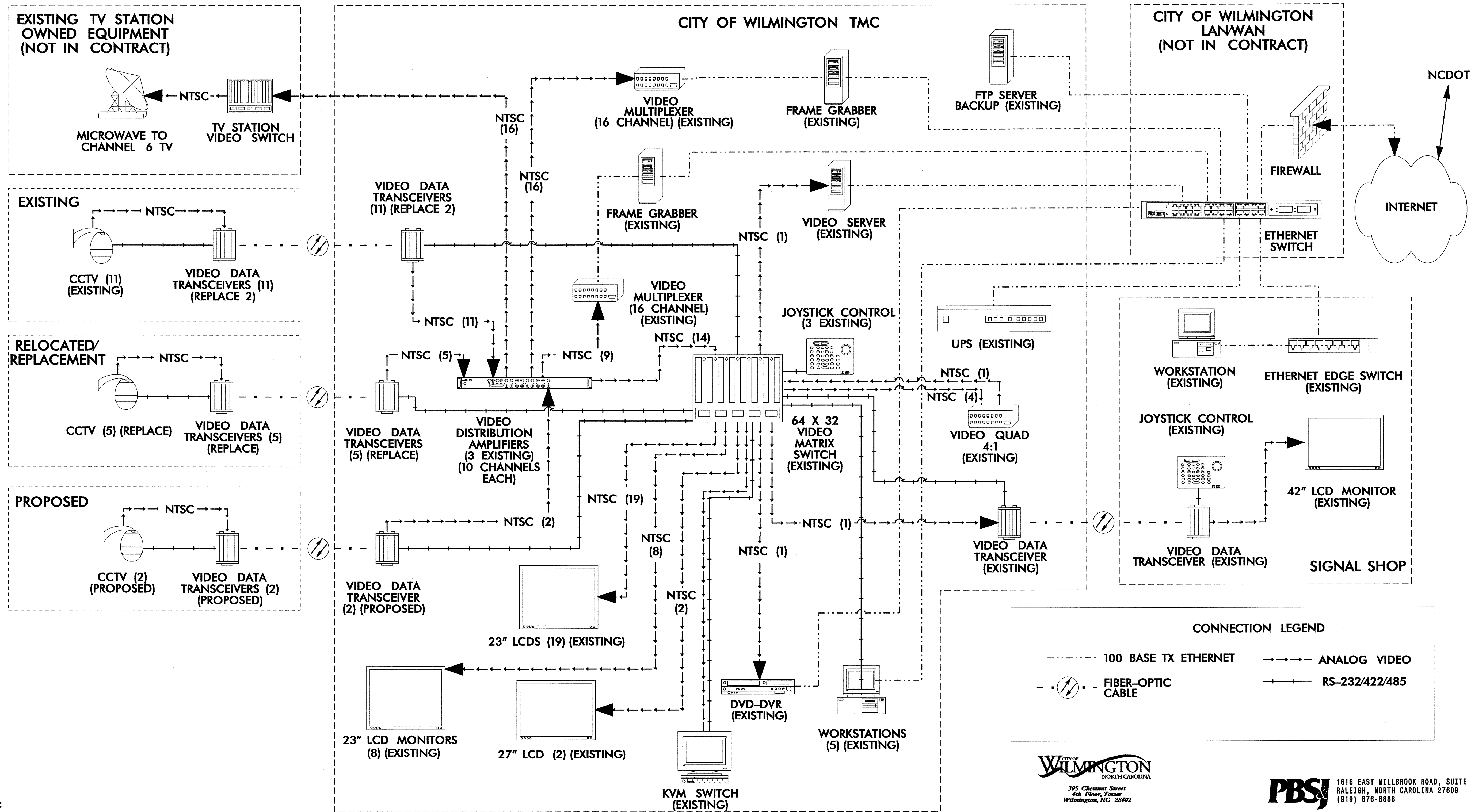


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Wilmington, NC 28402

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(919) 876-6888

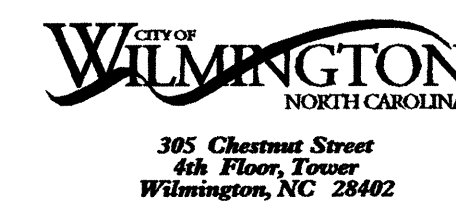
	<b>Wilmington Signal System</b>		
	<b>Signal System Block Diagram</b>		
	Division 03 New Hanover County Wilmington PLAN DATE: July 2008 REVIEWED BY: HA Badgett PREPARED BY: DEC REVIEWED BY: DL Jones		
SCALE: NONE	REVISIONS:	INIT. DATE:	SIGNATURE: <i>DL Jones</i> DATE: 2-07.dgn





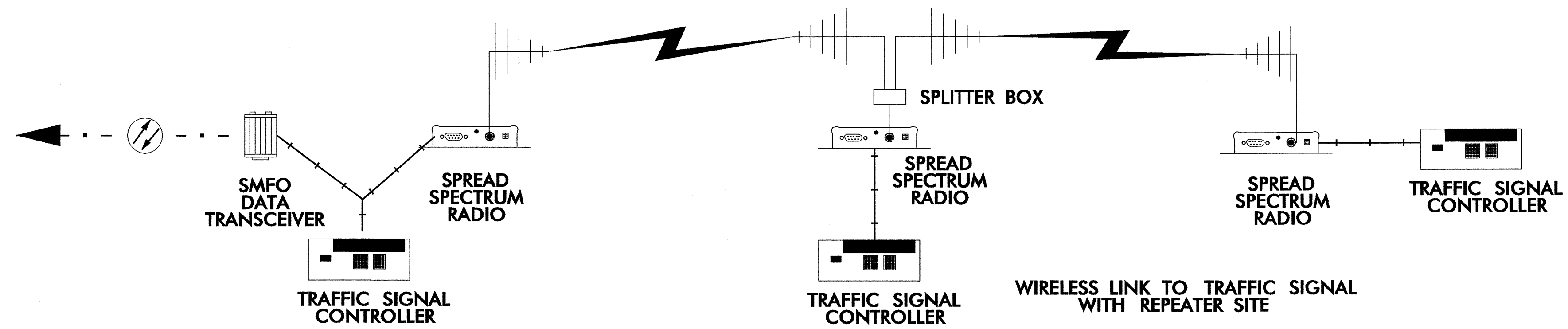
- NOTES:**
1. REPLACE VIDEO TRANSCEIVERS IN TMC AND FIELD FOR CAMERAS WITHIN LIMITS OF PHASE 2.
  2. WORK IN THIS PHASE DENOTED BY "REPLACE" OR "PROPOSED" DESIGNATIONS.

23-JUL-2008 11:26 G:\REG-CURR\280337.01 - Wilmington Sfg Sys\SpecData\118Phase 2\2-08.dgn 18566

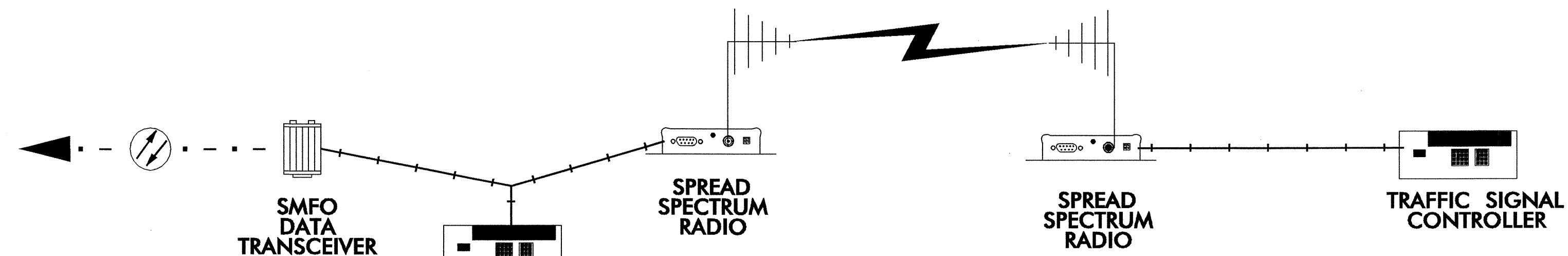


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<p>Prepared for the Offices of:</p> <p>City of Wilmington North Carolina</p> <p>305 Chestnut Street 4th Floor, Tower Wilmington, NC 28402</p>		<p><b>Wilmington Signal System</b></p> <p><b>CCTV System Block Diagram</b></p> <p>Division 03 New Hanover County Wilmington</p> <p>PLAN DATE: July 2008 REVIEWED BY: HA Badgett</p> <p>PREPARED BY: DEC REVIEWED BY: DL Jones</p>		<p>SEAL</p>
SCALE	NONE	REVISIONS	INIT. DATE	
		<p>SIGNATURE: <i>DL Jones</i> DATE: _____</p> <p>CADD Filename: 2-08.dgn</p>		



REPEATER LOCATION



WIRELESS LINK TO TRAFFIC SIGNAL

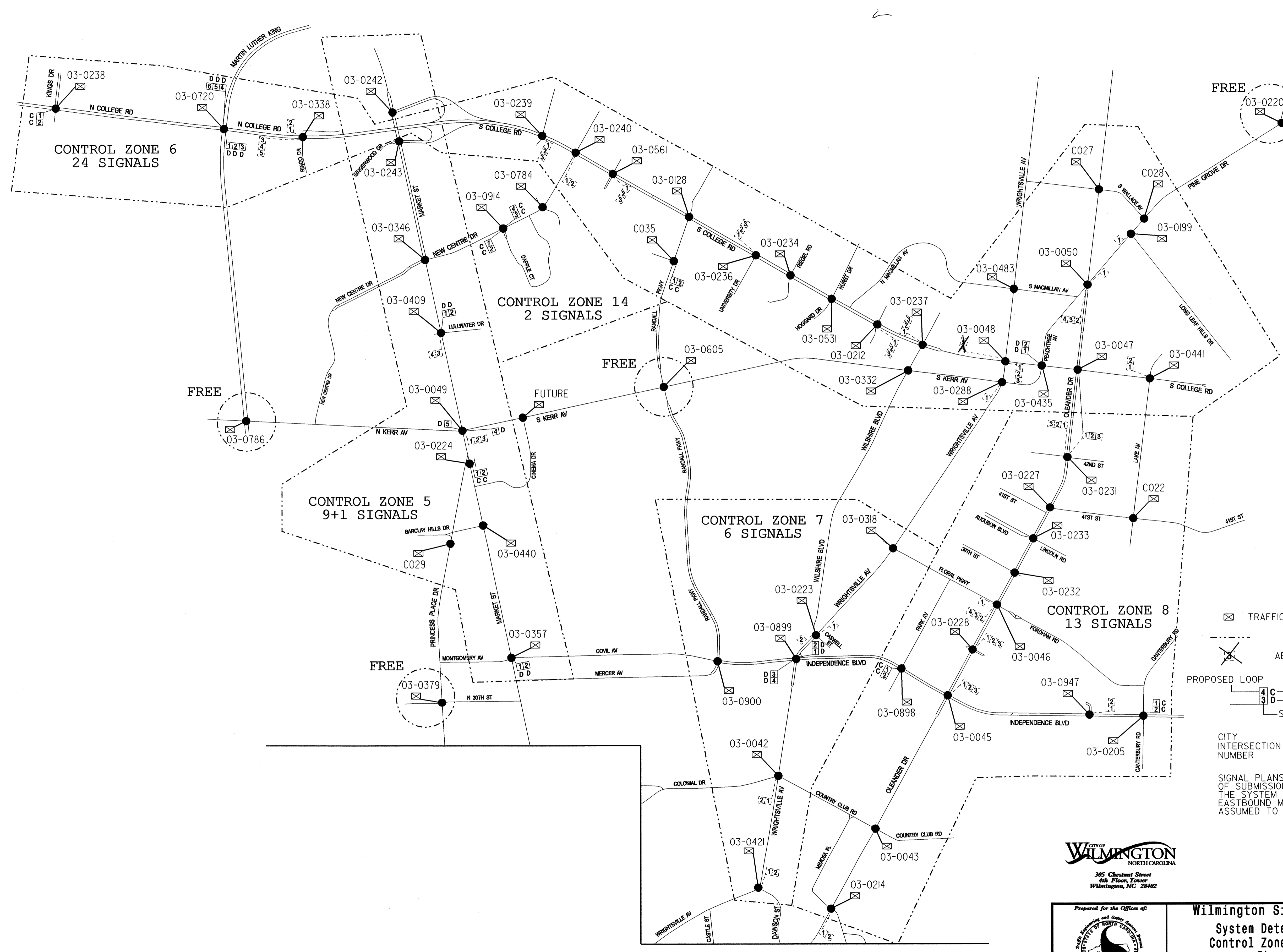
CONNECTION LEGEND			
-----	100 BASE TX ETHERNET	- - - - -	ANALOG VIDEO
- - - - -	FIBER-OPTIC CABLE	-----	RS-232/422/485

**CITY OF WILMINGTON**  
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RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888

31-JUL-2008 09:52  
G:\E\curry\28037.01 - Wilmington Sig Sys\SpecDetail\Phase 2\2-09.dgn  
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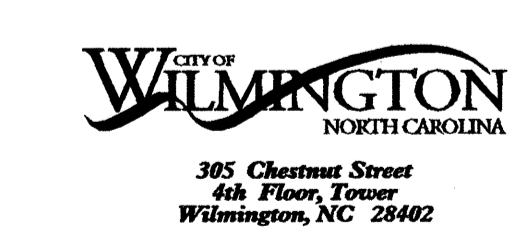
 Prepared for the Offices of:  750 Greenfield Parkway, Garner, NC 27529	<b>Wilmington Signal System</b> <b>Wireless Field Equipment</b> <b>Block Diagram</b>		SEAL
	Division 03 New Hanover County Wilmington		
	PLAN DATE: July 2008	REVIEWED BY: HA Badgett	
PREPARED BY: DEC	REVIEWED BY: DL Jones	REVISIONS	INIT. DATE
SCALE: NONE	SIGNATURE: <i>DL Jones</i>	DATE: 7/25/08	DATE:
CAD Filename: 2-09.DGN			DATE:



### LEGEND

- TRAFFIC SIGNAL CONTROLLER CABINET
- CONTROL ZONE BOUNDARY
- ABANDON SYSTEM DETECTOR
- PROPOSED LOOP
- 'COMBO' LOOP
- DEDICATED LOOP
- EXISTING LOOP
- SYSTEM DETECTOR I.D.
- CITY INTERSECTION NUMBER
- NCDOT SIGNAL IDENTIFICATION NUMBER

SIGNAL PLANS WERE NOT AVAILABLE AT TIME OF SUBMISSION. FOR PURPOSES OF RENUMBERING THE SYSTEM DETECTORS, NORTHBOUND AND EASTBOUND MAIN LINE APPROACHES WERE ASSUMED TO BE SIGNAL PHASE 2.

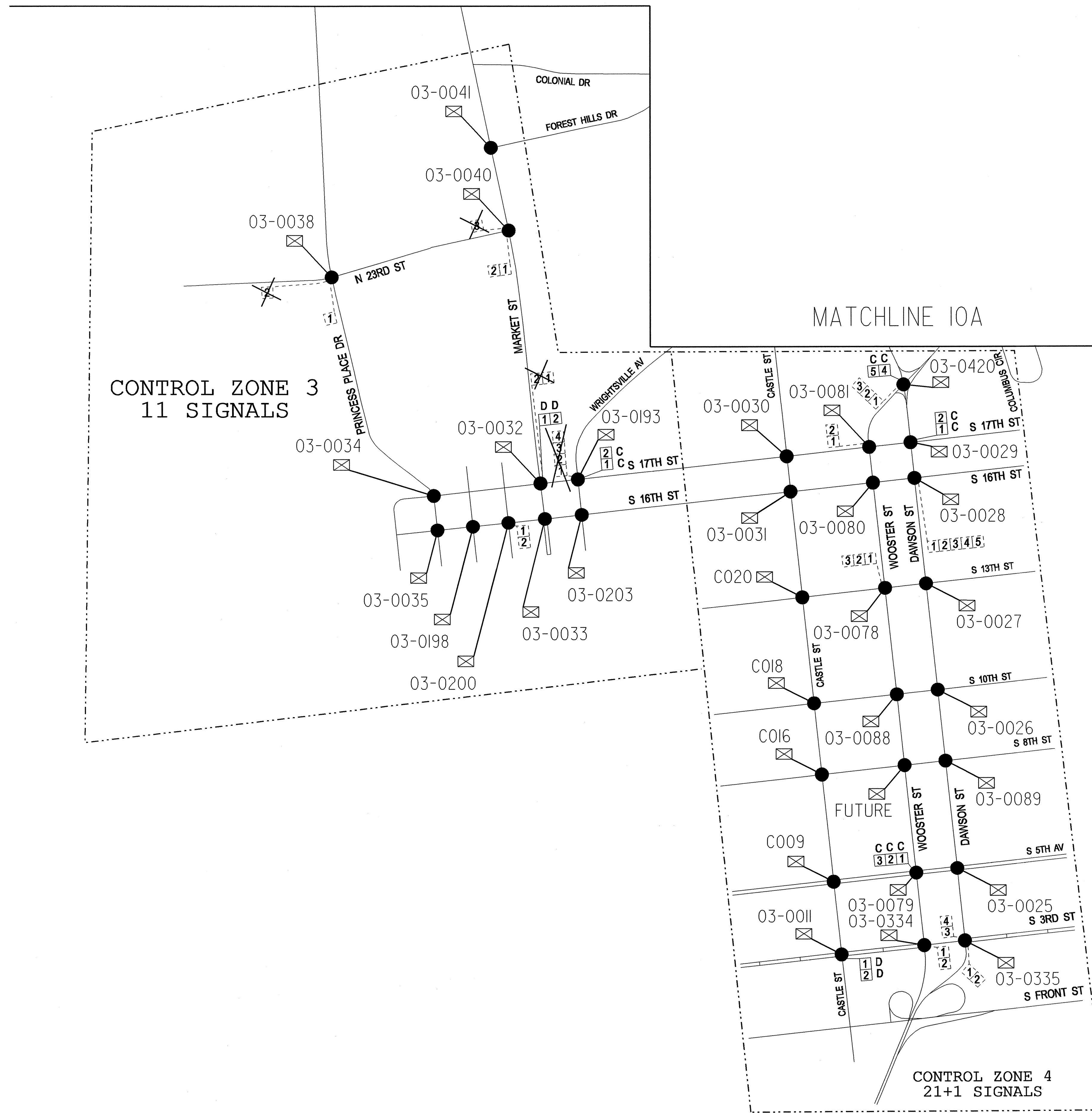


**PBS&J** 1616 EAST WILLBROOK ROAD, SUITE 310  
 RALEIGH, NORTH CAROLINA 27609  
 (919) 876-6888

	<b>Wilmington Signal System</b> <b>System Detectors and Control Zone Schematic</b> <b>Phase 2</b>		
	Division 03 New Hanover County Wilmington PLAN DATE: July 2008 REVIEWED BY: DL Jones PREPARED BY: DE Cookman REVIEWED BY: SG Haynie		
750 Greenfield Parkway, Garner, NC 27529 SCALE: NOT TO SCALE	REVISIONS: _____ INIT. DATE: _____	SIGNATURE: <i>David L. Jones</i> DATE: 7/25/08	SEAL: 2-10A.dgn

23-JUL-2008 11:26  
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 185566

MATCHLINE 10B



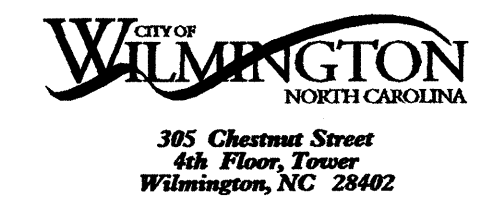
**CONTROL ZONE 3**  
11 SIGNALS

**CONTROL ZONE 4**  
21+1 SIGNALS

**LEGEND**

- ☒ TRAFFIC SIGNAL CONTROLLER CABINET
- CONTROL ZONE BOUNDARY
- ⊗ ABANDON SYSTEM DETECTOR
- PROPOSED LOOP
- 'COMBO' LOOP
- EXISTING LOOP
- DEDICATED LOOP
- SYSTEM DETECTOR I.D.
- CITY INTERSECTION NUMBER
- C###
- 03-XXXX
- NCDOT SIGNAL IDENTIFICATION NUMBER

SIGNAL PLANS WERE NOT AVAILABLE AT TIME OF SUBMISSION. FOR PURPOSES OF RENUMBERING THE SYSTEM DETECTORS, NORTHBOUND AND EASTBOUND MAIN LINE APPROACHES WERE ASSUMED TO BE SIGNAL PHASE 2.



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	<b>Wilmington Signal System</b>		
	<b>System Detectors and Control Zone Schematic Phase 2</b>		
Division 03 New Hanover County Wilmington		PLAN DATE: July 2008	REVIEWED BY: DL Jones
PREPARED BY: SG Haynie		REVIEWED BY:	
REVISIONS		INIT.	DATE
NOT TO SCALE			
SCALE			
CADD File Name: 2-10B.dgn			

# SUMMARY OF WORK BY CABLE LAYOUT PLANS

CABLE LAYOUT SHEET NUMBER	MESSENGER CABLE (1/4")	AERIAL CABLE PROTECTOR	TRACER WIRE	UNDERGROUND CONDUIT (2 CONDUITS, 1 1/4 INCH)	UNDERGROUND CONDUIT (1 CONDUIT, 2 INCH)	DIRECTIONAL DRILL (2 CONDUITS, 1 1/4 INCH)	JUNCTION BOX (OVERSIZED, HEAVY-DUTY)	JUNCTION BOX (SPECIAL-SIZED, HEAVY-DUTY)	WOOD POLE	CCTV WOOD POLE	SERVICE POLE	AERIAL GUY ASSEMBLY	DOWN GUY ASSEMBLY	SIDEWALK GUY ASSEMBLY	HEAT SHRINK TUBING RETROFIT KIT	2" RISER WITH HEAT SHRINK TUBING	2" RISER WITH WEATHER HEAD	1" RISER WITH HEAT SHRINK TUBING	1" RISER WITH WEATHERHEAD	900MHZ RADIO
	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
CL 2-1	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	-	-	1	-	-
CL 2-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
CL 2-3	35	80	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	1	-	-
CL 2-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-
CL 2-5	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
CL 2-6	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	1	-	-	-	-
CL 2-7	440	-	-	-	-	-	-	-	1	-	-	-	2	-	-	-	-	-	-	-
CL 2-8	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
CL 2-9	235	-	640	-	-	-	-	1	-	-	-	-	1	1	-	1	-	-	-	-
CL 2-10	130	-	70	-	-	-	-	1	-	-	-	-	1	-	-	1	-	-	-	-
CL 2-11	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	1	-	-
CL 2-12	30	385	280	280	-	-	1	1	-	-	-	-	2	2	-	1	-	2	-	-
CL 2-13	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	2	-	-
CL 2-14	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	2	-	-
CL 2-15	-	-	460	-	-	460	2	1	-	1	-	-	1	-	-	2	1	3	-	-
CL 2-16	-	-	550	-	-	550	3	1	-	-	-	-	4	-	-	4	-	-	-	-
CL 2-17	80	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-
CL 2-18	-	400	-	-	-	-	-	-	-	-	-	-	1	1	-	1	-	-	-	-
CL 2-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-20	-	120	40	40	-	-	1	1	-	-	-	-	3	-	1	2	-	-	-	-
CL 2-21	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	-	-	-	-
CL 2-22	20	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	-	-
CL 2-23	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1	-	-	-	-
CL 2-24	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	1	-	-	-	-
CL 2-25	160	-	-	-	-	-	-	-	-	1	-	-	4	1	-	1	1	1	-	-
CL 2-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
CL 2-27	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	1	-	2
CL 2-28	-	-	-	-	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
CL 2-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
CL 2-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-33	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
CL 2-34	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	1	-	-
CL 2-35	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	1	-	-
CL 2-36	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-


See Boxed Note at Bottom of Sheet

Work shown on this sheet is a summary of work for the installation of the fiber-optic cable, wireless links, and CCTV installations that are shown on the cable layout plans (i.e. CL sheets). Work to be done for traffic signals is shown separately on the signal designs at the back of this plan package and on the following "Summary of Work by Intersection" sheet.

This area has been determined to contain properties with documented historic significance. If it is necessary to deviate from these plans in this area, alert the Engineer to contact Project Development and Environmental Analysis Branch - Historic Architecture Group of the North Carolina Department of Transportation for an effects determination before proceeding.

**PBS&J** 1616 EAST MILLBROOK ROAD, SUITE 310  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888

**CITY OF WILMINGTON**  
305 Chestnut Street  
4th Floor, Tower  
Wilmington, NC 28402

Prepared for the Offices of:  
  
**Wilmington Signal System**  
**Summary of Work**  
**by Cable Layout Plans**  
**Phase 2**  
 Division 03 New Hanover County Wilmington  
 PLAN DATE: July 2008 REVIEWED BY: DL JONES  
 PREPARED BY: DEC/JAW REVIEWED BY: LM Moon/JT Brooks  
 REVISIONS: \_\_\_\_\_ INIT. DATE  
 Scale: None  
 CADD File Name: Sum Work CL-11.dgn

SEAL  
 NORTH CAROLINA  
 PROFESSIONAL  
 ENGINEER  
 LISA M. MOON  
 SIGNATURE: *Lisa M. Moon* DATE: 8-01-08

# SUMMARY OF WORK BY CABLE LAYOUT PLANS

See Boxed Note at Bottom of Sheet

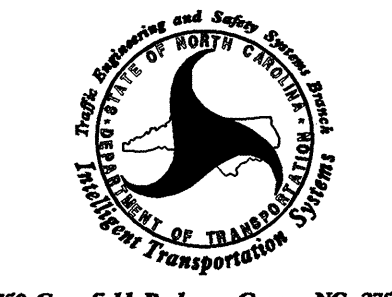
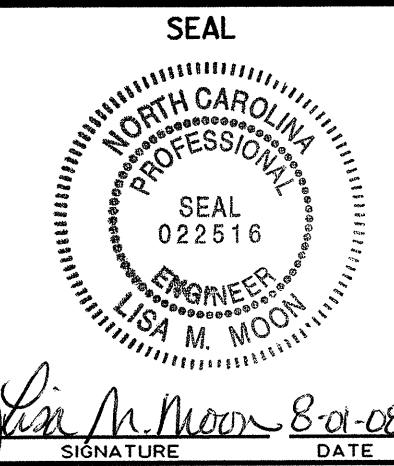
CABLE LAYOUT SHEET NUMBER	MESSENGER CABLE (1/4")	AERIAL CABLE PROTECTOR	TRACER WIRE	UNDERGROUND CONDUIT (2 CONDUITS, 1 1/2 INCH)	UNDERGROUND CONDUIT (1 CONDUIT, 2 INCH)	DIRECTIONAL DRILL (2 CONDUITS, 1 1/2 INCH)	JUNCTION BOX (OVERSIZED, HEAVY-DUTY)	JUNCTION BOX (SPECIAL-SIZED, HEAVY-DUTY)	WOOD POLE	CCTV WOOD POLE	SERVICE POLE	AERIAL GUY ASSEMBLY	DOWN GUY ASSEMBLY	SIDEWALK GUY ASSEMBLY	HEAT SHRINK TUBING RETROFIT KIT	2" RISER WITH HEAT SHRINK TUBING	2" RISER WITH WEATHER HEAD	1" RISER WITH HEAT SHRINK TUBING	1" RISER WITH WEATHERHEAD	900MHZ RADIO
	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
CL 2-37	40	50	-	-	-	35	-	-	-	-	-	-	1	5	-	-	-	2	-	-
CL 2-38	-	-	410	-	-	-	-	2	-	-	-	-	1	1	-	2	-	1	-	-
CL 2-39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-
CL 2-40	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-41	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	-	-	-
CL 2-42	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	1	-	-
CL 2-43	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-
CL 2-44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
CL 2-45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-46	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-
CL 2-47	120	50	-	-	-	-	-	-	-	1	1	-	2	-	-	-	1	2	1	-
CL 2-48	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	2	-	-	-	1
CL 2-49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
CL 2-50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
CL 2-51	-	-	410	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-
CL 2-52	-	-	-	-	-	-	-	-	-	1	-	-	1	-	2	-	1	1	-	-
CL 2-53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
CL 2-54	-	-	170	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
CL 2-55	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-
CL 2-56	-	-	670	-	35	-	1	1	-	-	-	1	1	-	-	1	-	-	-	-
CL 2-57	-	-	1,180	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-58	-	-	1,180	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-59	-	50	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-
CL 2-60	-	-	40	-	40	-	-	1	-	-	-	-	-	1	-	1	-	-	-	-
CL 2-61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
CL 2-63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-65	50	-	-	500	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-
CL 2-66	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-
CL 2-67	100	-	-	-	-	-	-	-	-	-	-	-	2	1	-	3	-	-	-	-
CL 2-68	125	-	210	-	-	210	2	-	-	1	-	-	2	-	-	2	1	1	-	-
CL 2-69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-
CL 2-70	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	-	-	-	-
CL 2-71	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	2	-	-	-	-
CL 2-72	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	1	-	-	-	-

Work shown on this sheet is a summary of work for the installation of the fiber-optic cable, wireless links, and CCTV installations that are shown on the cable layout plans (i.e. CL sheets). Work to be done for traffic signals is shown separately on the signal designs at the back of this plan package and on the following "Summary of Work by Intersection" sheet.

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**PBS** 1616 EAST WILLBROOK ROAD, SUITE 310 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888

**CITY OF WILMINGTON** 305 Chestnut Street 4th Floor, Tower Wilmington, NC 28402

	<b>Wilmington Signal System</b> Summary of Work by Cable Layout Plans Phase 2		
	Division 03 New Hanover County Wilmington PLAN DATE: July 2008 PREPARED BY: DEC/JAW	REVIEWED BY: DL JONES REVIEWED BY: LM Moon/JT Brooks	
Scale None	SIGNATURE: <i>Lisa M. Moon</i> DATE: 8-1-08		SEAL

# SUMMARY OF WORK BY CABLE LAYOUT PLANS

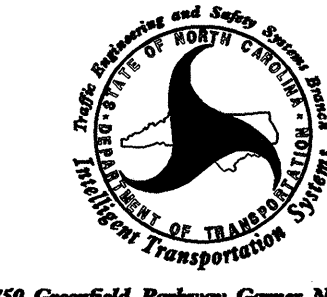
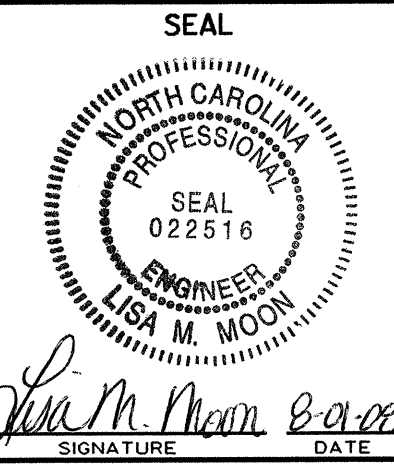
CABLE LAYOUT SHEET NUMBER	MESSENGER CABLE (1/4")	AERIAL CABLE PROTECTOR	TRACER WIRE	UNDERGROUND CONDUIT (2 CONDUITS, 1 1/4 INCH)	UNDERGROUND CONDUIT (1 CONDUIT, 2 INCH)	DIRECTIONAL DRILL (2 CONDUITS, 1 1/4 INCH)	JUNCTION BOX (OVERSIZED, HEAVY-DUTY)	JUNCTION BOX (SPECIAL-SIZED, HEAVY-DUTY)	WOOD POLE	CCTV WOOD POLE	SERVICE POLE	AERIAL GUY ASSEMBLY	DOWN GUY ASSEMBLY	SIDEWALK GUY ASSEMBLY	HEAT SHRINK TUBING RETROFIT KIT	2" RISER WITH HEAT SHRINK TUBING	2" RISER WITH WEATHER HEAD	1" RISER WITH HEAT SHRINK TUBING	1" RISER WITH WEATHERHEAD	900MHZ RADIO
	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
CL 2-73	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-
CL 2-74	280	-	-	-	-	-	-	-	-	-	-	-	3	-	-	1	-	-	-	-
CL 2-75	-	100	610	-	-	610	1	-	-	-	-	-	3	-	-	2	-	-	-	-
CL 2-76	-	-	140	-	-	140	1	-	-	1	-	-	-	-	-	1	1	1	-	-
CL 2-77	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
CL 2-78	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-
CL 2-79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-
CL 2-80	250	-	-	-	-	-	-	-	-	1	1	-	4	-	-	3	1	1	1	2
CL 2-81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-82	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	1	-	-	-	-
CL 2-83	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-
CL 2-84	-	-	170	-	25	140	2	-	-	-	-	-	-	-	-	1	-	-	-	-
CL 2-85	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-
CL 2-86	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	-	-	-	-
CL 2-87	-	-	-	-	-	-	-	-	-	-	-	1	4	-	-	1	-	-	-	-
CL 2-88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
TOTALS	2,205	1,335	7,230	820	140	2,145	16	11	1	7	2	7	92	25	13	57	7	39	2	9

Work shown on this sheet is a summary of work for the installation of the fiber-optic cable, wireless links, and CCTV installations that are shown on the cable layout plans (i.e. CL sheets). Work to be done for traffic signals is shown separately on the signal designs at the back of this plan package and on the following "Summary of Work by Intersection" sheet.

01-AUG-2008 16:38 G:\TEC\CURR\280337.01 - Wilmington Sig Sys\SpecDetail\Phase 2\Sum Work CL-13.dgn 13835

**PBSJ** 1616 EAST WILLBROOK ROAD, SUITE 310  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888

**CITY OF WILMINGTON**  
NORTH CAROLINA  
305 Chestnut Street  
4th Floor, Tower  
Wilmington, NC 28402

		Prepared for the Offices of: <b>Wilmington Signal System</b> Summary of Work by Cable Layout Plans Phase 2 Division 03 New Hanover County Wilmington			
PLAN DATE: July 2008		REVIEWED BY: DL JONES		PREPARED BY: DEC/JAW	
REVISIONS		INIT.		DATE	
Scale None		SIGNATURE: <i>Lisa M. Moon</i>		DATE:	
CADD File Name: Sum Work CL-13.dgn					

# SUMMARY OF WORK BY CABLE LAYOUT PLANS

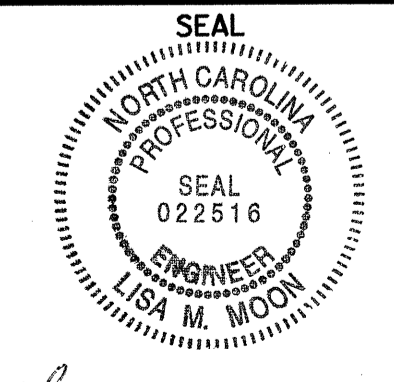
CABLE LAYOUT SHEET NUMBER	COMMUNICATIONS CABLE (24-FIBER)	COMMUNICATIONS CABLE (96-FIBER)	DROP CABLE ASSEMBLY						SPLICE ENCLOSURE	MODIFY EXISTING SPLICE	REMOVE EXISTING SPLICE CABINET	REMOVE EXISTING COMMUNICATIONS CABLE	CCTV CAMERA ASSEMBLY	CCTV CABINET	INSTALL NEW O/H ELECTRICAL SERVICE FOR CCTV	INSTALL NEW U/G ELECTRICAL SERVICE FOR CCTV	FIBER-OPTIC VIDEO/DATA TRANSCEIVER	FIBER-OPTIC TRANSCEIVER - DROP AND REPEAT
			50'	150'	200'	300'	400'	> 400'										
			EA	EA	EA	EA	EA	EA										
CL 2-1	1,305		-	-	1	1	-	-	2	-	-	-	-	-	-	-	-	2
CL 2-2	1,615		-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-3	1,500		-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-4	1,590	-	-	1	1	-	-	-	2	-	-	-	-	-	-	-	-	2
CL 2-5	1,430	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-6	1,740	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-7	1,410	-	-	-	-	-	-	-	-	-	-	420	-	-	-	-	-	-
CL 2-8	1,490	-	-	-	-	1	-	-	1	-	-	110	-	-	-	-	-	1
CL 2-9	1,740	-	1	-	-	-	-	-	1	-	-	480	-	-	-	-	-	1
CL 2-10	900	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-11	1,400	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-12	1,890	-	1	-	2	1	-	-	4	-	-	160	-	-	-	-	-	4
CL 2-13	2,000	-	-	-	1	1	-	-	2	-	-	-	-	-	-	-	-	2
CL 2-14	2,150	-	-	-	2	-	-	-	2	-	-	-	-	-	-	-	-	2
CL 2-15	2,530	-	1	1	-	1	-	-	3	-	-	-	1	1	-	1	1	4
CL 2-16	1,390	-	1	-	-	-	-	-	1	-	-	310	-	-	-	-	-	1
CL 2-17	1,570	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-18	860	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-20	1,690	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-21	1,460	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-22	1,800	-	-	1	1	-	-	1	2	-	-	-	-	-	-	-	1	2
CL 2-23	1,800	-	-	-	-	2	-	-	2	-	-	-	-	-	-	-	-	2
CL 2-24	1,500	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-25	1,235	680	-	-	-	2	-	-	2	-	-	230	1	1	-	1	1	1
CL 2-26	1,630	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-27	920	-	-	-	1	-	-	-	1	-	-	720	-	-	-	-	-	1
CL 2-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-29	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-
CL 2-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-33	-	20	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
CL 2-34	560	1,570	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-35	1,165	1,490	-	1	2	-	-	-	3	-	-	-	-	-	-	-	-	2
CL 2-36	-	1,400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Work shown on this sheet is a summary of work for the installation of the fiber-optic cable, wireless links, and CCTV installations that are shown on the cable layout plans (i.e. CL sheets). Work to be done for traffic signals is shown separately on the signal designs at the back of this plan package and on the following "Summary of Work by Intersection" sheet.

05-AUG-2008 13:56 G:\REC\Curr\280337.01 - Wilmington Sig Sys\SpecDetail\Phase 2\Sum Work CL\_14.dgn 13833

**PBS** 1616 EAST MILLBROOK ROAD, SUITE 310  
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(919) 876-6888

**CITY OF WILMINGTON**  
305 Chestnut Street  
4th Floor, Tower  
Wilmington, NC 28402

	<b>Wilmington Signal System</b> Summary of Work by Cable Layout Plans Phase 2	
	Division 03 New Hanover County Wilmington PLAN DATE: July 2008 REVIEWED BY: DL JONES PREPARED BY: DEG/JAW REVIEWED BY: LW Moon/JT Brooks	REVISIONS: _____ INIT. DATE _____ SIGNATURE: <i>Lisa M. Moon</i> DATE: 8-1-08 SEAL: 022516



# SUMMARY OF WORK BY CABLE LAYOUT PLANS

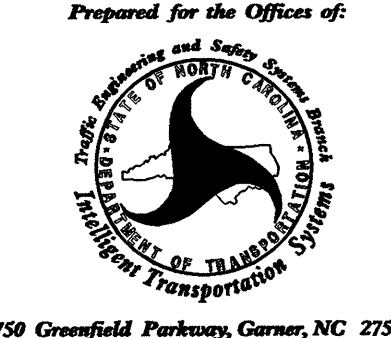
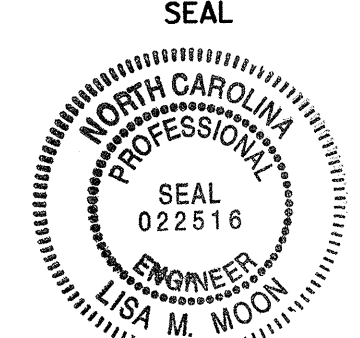
CABLE LAYOUT SHEET NUMBER	COMMUNICATIONS CABLE (24-FIBER)	COMMUNICATIONS CABLE (96-FIBER)	DROP CABLE ASSEMBLY						SPLICE ENCLOSURE	MODIFY EXISTING SPLICE	REMOVE EXISTING SPLICE CABINET	REMOVE EXISTING COMMUNICATIONS CABLE	CCTV CAMERA ASSEMBLY	CCTV CABINET	INSTALL NEW O/H ELECTRICAL SERVICE FOR CCTV	INSTALL NEW U/G ELECTRICAL SERVICE FOR CCTV	FIBER-OPTIC VIDEO/DATA TRANSCEIVER	FIBER-OPTIC TRANSCEIVER - DROP AND REPEAT
			50'	150'	200'	300'	400'	> 400'										
			EA	EA	EA	EA	EA	EA										
CL 2-37	1,440	910	-	-	1	1	-	-	2	-	-	340	-	-	-	-	-	2
CL 2-38	1,660	-	2	1	-	-	-	-	3	-	-	510	-	-	-	-	-	3
CL 2-39	1,580	-	-	1	2	-	-	-	3	-	-	-	-	-	-	-	-	3
CL 2-40	1,700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-41	1,480	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	1
CL 2-42	1,490	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-43	1,480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-44	1,400	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
CL 2-45	1,700	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
CL 2-46	1,630	-	-	-	-	1	-	-	1	-	-	220	-	-	-	-	-	1
CL 2-47	1,560	-	-	-	-	-	1	-	1	-	-	-	1	1	1	-	1	1
CL 2-48	1,540	-	-	-	1	-	-	-	1	-	-	420	-	-	-	-	-	1
CL 2-49	1,490	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-50	2,170	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-51	1,560	-	-	-	-	-	-	-	-	-	-	410	-	-	-	-	-	-
CL 2-52	1,630	540	-	-	-	2	-	1	3	-	-	160	1	1	-	1	1	2
CL 2-53	870	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	1
CL 2-54	1,560	-	-	-	-	-	1	-	1	-	-	170	-	-	-	-	-	1
CL 2-55	1,350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-56	1,520	-	1	-	-	-	-	-	1	-	-	620	-	-	-	-	-	1
CL 2-57	1,180	-	-	-	-	-	-	-	-	-	-	1,150	-	-	-	-	-	-
CL 2-58	1,240	-	1	-	-	-	-	-	1	-	-	1,180	-	-	-	-	-	1
CL 2-59	1,400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-60	650	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-61	-	-	-	-	-	-	-	-	-	-	-	450	-	-	-	-	-	-
CL 2-62	-	-	-	-	-	-	-	-	-	-	-	810	-	-	-	-	-	-
CL 2-63	-	-	-	-	-	-	-	-	-	-	-	1,420	-	-	-	-	-	-
CL 2-64	-	-	-	-	-	-	-	-	-	-	-	1,400	-	-	-	-	-	-
CL 2-65	-	2,220	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
CL 2-66	-	1,760	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-67	1,360	1,740	-	-	1	1	1	-	3	-	-	30	-	-	-	-	-	3
CL 2-68	120	1,480	-	-	-	1	1	-	1	-	-	-	1	1	-	1	1	-
CL 2-69	980	490	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	2
CL 2-70	-	1,450	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-71	-	1,800	-	-	2	-	-	-	2	-	-	-	-	-	-	-	-	2
CL 2-72	-	1,360	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1

Work shown on this sheet is a summary of work for the installation of the fiber-optic cable, wireless links, and CCTV installations that are shown on the cable layout plans (i.e. CL sheets). Work to be done for traffic signals is shown separately on the signal designs at the back of this plan package and on the following "Summary of Work by Intersection" sheet.

04-AUG-2008 09:51 G:\EG-Curr\280331.01 - W\imington S\g Sys\Spec\Detail\Phase 2\Sum Work CL\_15.dgn 18866

**PBS** 1616 EAST HILLBROOK ROAD, SUITE 310 RALEIGH, NORTH CAROLINA 27609 (919) 876-8888

**WILMINGTON** 305 Chestnut Street 4th Floor, Tower Wilmington, NC 28402

	Prepared for the Offices of: <b>Wilmington Signal System</b> Summary of Work by Cable Layout Plans Phase 2		
	Division 03 New Hanover County Wilmington PLAN DATE: July 2008 PREPARED BY: DEC/JAW	REVIEWED BY: DL JONES REVIEWED BY: LM Moon/JT Brooks	
Scale None	SIGNATURE: <i>Lisa M. Moon</i> DATE: 8-1-08 CADD Filename: Sum Work CL_15.dgn		

# SUMMARY OF WORK BY CABLE LAYOUT PLANS

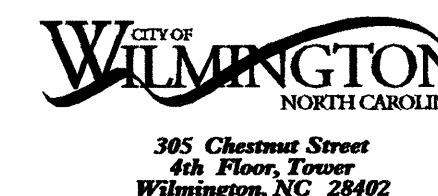
CABLE LAYOUT SHEET NUMBER	COMMUNICATIONS CABLE (24-FIBER) LF	COMMUNICATIONS CABLE (96-FIBER) LF	DROP CABLE ASSEMBLY						SPLICE ENCLOSURE EA	MODIFY EXISTING SPLICE EA	REMOVE EXISTING SPLICE CABINET EA	REMOVE EXISTING COMMUNICATIONS CABLE LF	CCTV CAMERA ASSEMBLY EA	CCTV CABINET EA	INSTALL NEW O/H ELECTRICAL SERVICE FOR CCTV EA	INSTALL NEW U/G ELECTRICAL SERVICE FOR CCTV EA	FIBER-OPTIC VIDEO/DATA TRANSCEIVER EA	FIBER-OPTIC TRANSCEIVER - DROP AND REPEAT EA
			50'	150'	200'	300'	400'	> 400'										
			EA	EA	EA	EA	EA	EA										
CL 2-73	410	1,620	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-74	-	1,720	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	1
CL 2-75	560	1,490	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-76	-	1,580	-	1	-	-	-	1	1	-	-	-	1	1	-	1	1	1
CL 2-77	-	1,600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-78	1,490	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL 2-79	1,550	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-80	1,610	-	-	-	1	-	-	1	1	-	-	-	1	1	1	-	1	1
CL 2-81	1,610	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
CL 2-82	880	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	1
CL 2-83	1,280	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-84	700	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-85	900	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-86	1,250	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-87	1,380	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
CL 2-88	-	-	-	-	-	-	-	-	-	-	-	970	-	-	-	-	-	-
TOTALS	93,630	26,920	11	16	26	26	8	4	86	2	1	12,690	7	7	2	5	9	84

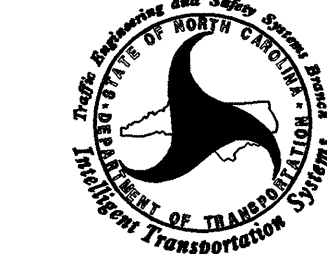

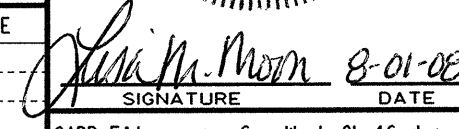
Work shown on this sheet is a summary of work for the installation of the fiber-optic cable, wireless links, and CCTV installations that are shown on the cable layout plans (i.e. CL sheets). Work to be done for traffic signals is shown separately on the signal designs at the back of this plan package and on the following "Summary of Work by Intersection" sheet.

04-AUG-2008 09:52 G:\ECC\curr\280337.01 - W:\imington\Sig Sys\Spec\Detail\Phase 2\Sum Work CL\_16.dgn 18586



1616 EAST MILLBROOK ROAD, SUITE 310  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-8888



Prepared for the Offices of: 		<b>Wilmington Signal System</b> <b>Summary of Work</b> <b>by Cable Layout Plans</b> <b>Phase 2</b>		
Division 03 New Hanover County Wilmington PLAN DATE: July 2008 REVIEWED BY: DL JONES PREPARED BY: DEC/JAW REVIEWED BY: LM Moon/JT Brooks		REVISIONS	INIT. DATE	
Scale	None			SIGNATURE:  DATE: 8-01-08

CADD Filename: Sum Work CL\_16.dgn



