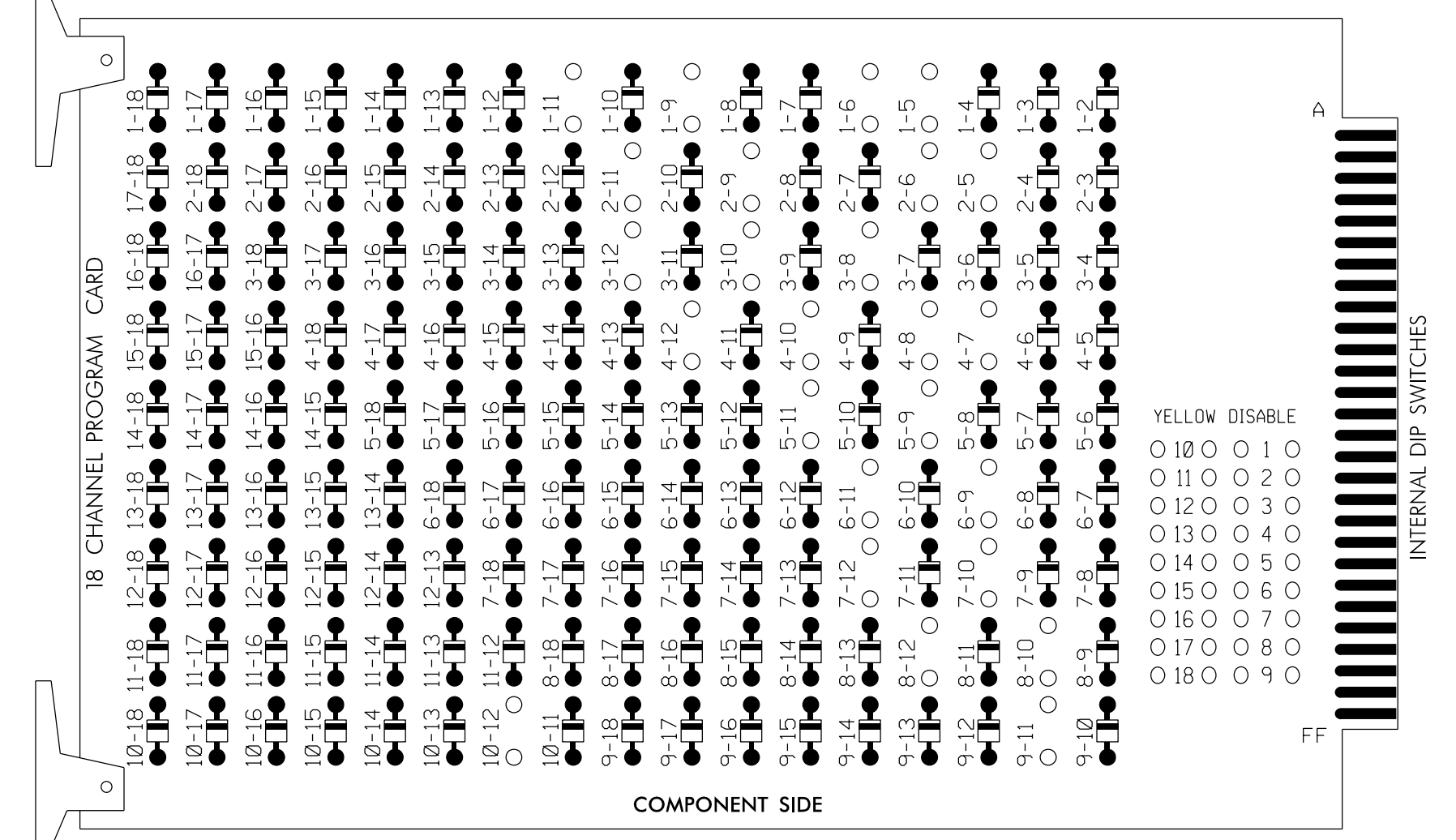


EDI MODEL 2018ECLip-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-11, 2-5, 2-6, 2-9, 2-11, 3-8, 3-10, 3-12, 4-7, 4-8, 4-10, 4-12, 5-9, 5-11, 6-9, 6-11, 7-10, 7-12, 8-10, 8-12, 9-11 and 10-12.



REMOVE JUMPERS AS SHOWN

NOTES:

- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
- Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
- Ensure that Red Enable is active at all times during normal operation.
- Integrate monitor with Ethernet network in cabinet.

NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the Signal Plans.
- Program phases 4 and 8 for Dual Entry.
- Program controller to start up in phase 2 Green and 6 Green.
- The cabinet and controller are part of the Elizabeth City Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070LX
 CABINET.....332 W/AUX
 SOFTWARE.....ECONOLITE ASC/3-2070
 CABINET MOUNT.....BASE
 OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE
 LOAD SWITCHES USED.....S1,S2,S4,S5,S7,S8,S10,S11,
 AUX S1,AUX S2,AUX S4,AUX S5
 PHASES USED.....1,2,**3,4,5,6,**7,8
 OVERLAP "A".....*
 OVERLAP "B".....*
 OVERLAP "C".....*
 OVERLAP "D".....*
 * See overlap programming detail on sheet 2
 ** Phase only used during preempt

SIGNAL HEAD HOOK-UP CHART

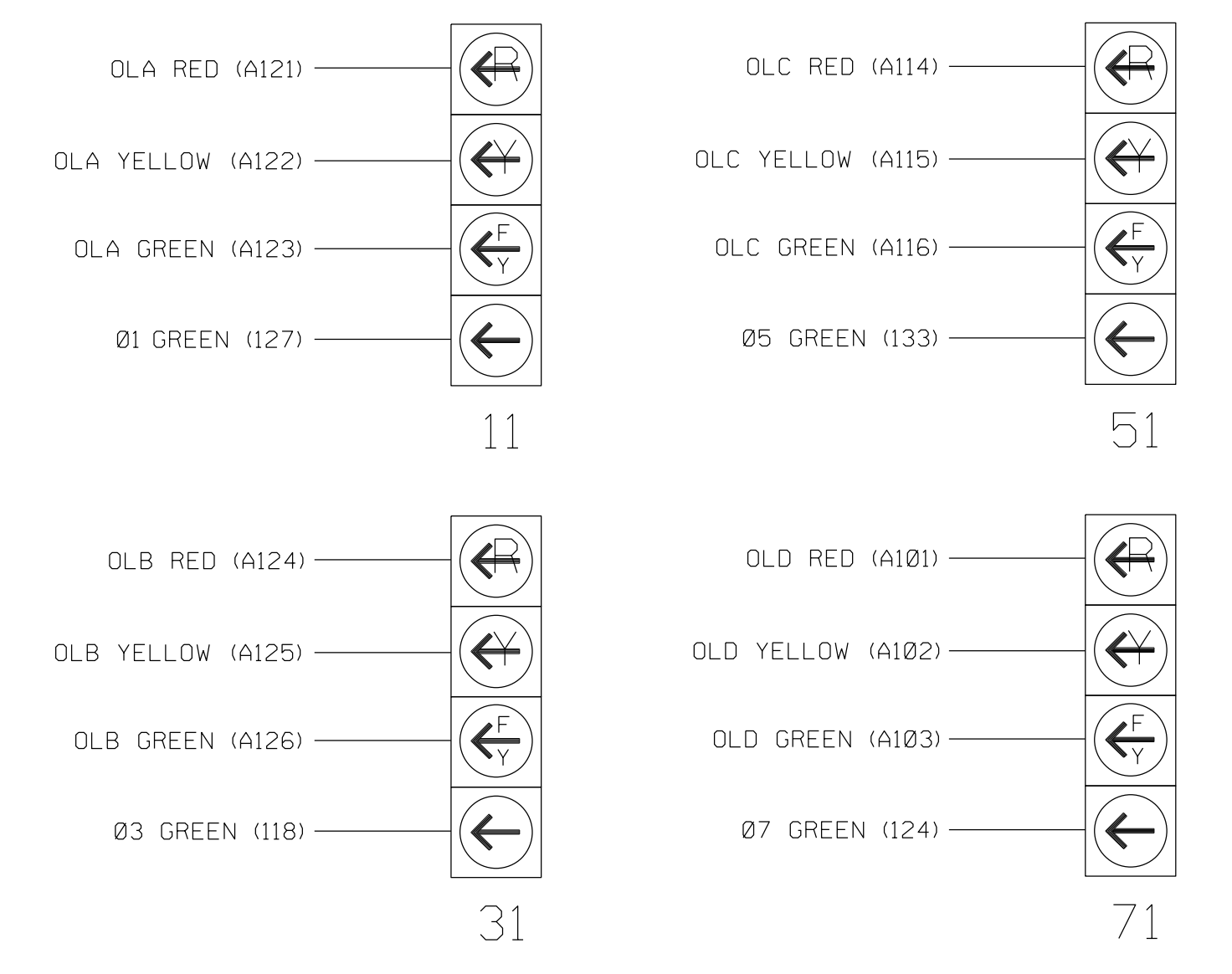
| LOAD SWITCH NO. | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | S11 | S12 | AUX S1 | AUX S2 | AUX S3 | AUX S4 | AUX S5 | AUX S6 |
|-----------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| CMU CHANNEL NO. | 1 | 2 | 13 | 3 | 4 | 14 | 5 | 6 | 15 | 7 | 8 | 16 | 9 | 10 | 17 | 11 | 12 | 18 |
| PHASE | 1 | 2 | 2 PED | 3 | 4 | 4 PED | 5 | 6 | 6 PED | 7 | 8 | 8 PED | OLA | OLB | SPARE | OLC | OLD | SPARE |
| SIGNAL HEAD NO. | 11 | 21,22 | NU | 31 | 41,42 | NU | 51 | 61,62 | NU | 71 | 81,82 | NU | 11 | 31 | NU | 51 | 71 | NU |
| RED | 128 | | | 101 | | | 134 | | | 107 | | | | | | | | |
| YELLOW | * | 129 | | * 102 | | | * 135 | | | * 108 | | | | | | | | |
| GREEN | | 130 | | 103 | | | 136 | | | 109 | | | | | | | | |
| RED ARROW | | | | | | | | | | | | | A121 | A124 | | A114 | A101 | |
| YELLOW ARROW | | | | | | | | | | | | | A122 | A125 | | A115 | A102 | |
| FLASHING YELLOW ARROW | | | | | | | | | | | | | A123 | A126 | | A116 | A103 | |
| GREEN ARROW | 127 | | | 118 | | | 133 | | | 124 | | | | | | | | |

NU = Not Used

* Denotes install load resistor. See load resistor installation detail this sheet.
 ★ See pictorial of head wiring in detail this sheet.

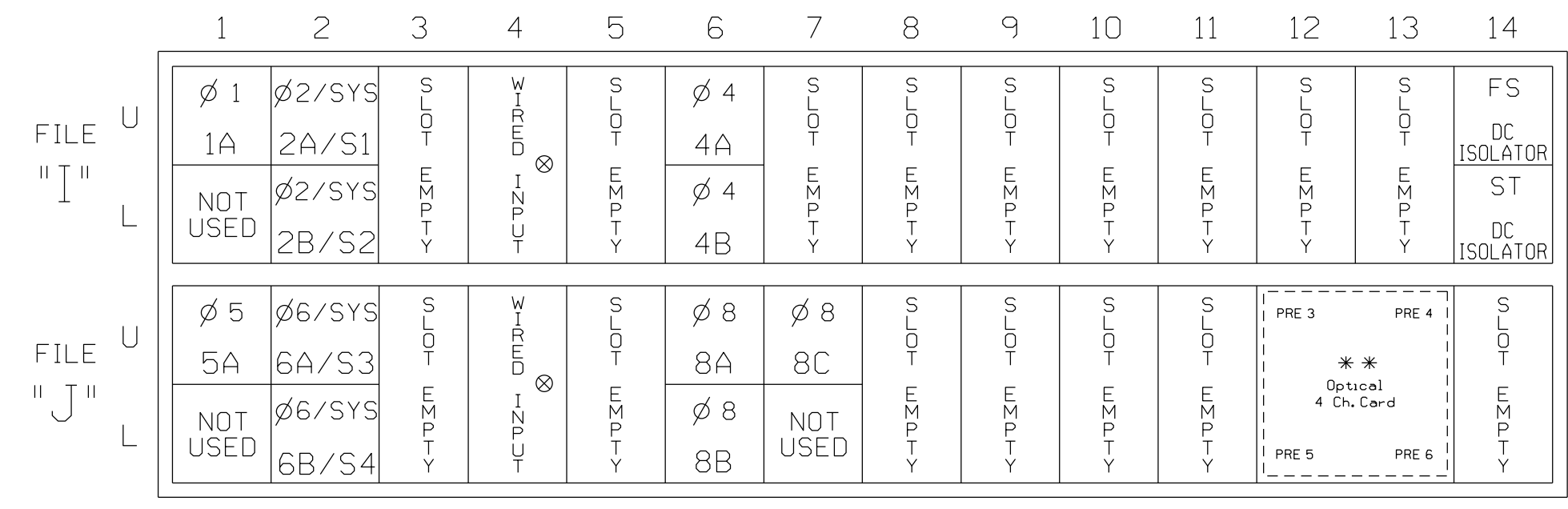
FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



INPUT FILE POSITION LAYOUT

(front view)



EX.: 1A, 2A, ETC. = LOOP NO.'S
 * Wired Input - Do not populate slot with detector card

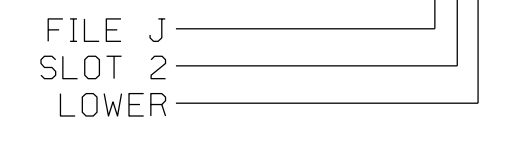
FS = FLASH SENSE
 ST = STOP TIME
 PRE = PREEMPT

INPUT FILE CONNECTION & PROGRAMMING CHART

| LOOP NO. | LOOP TERMINAL | INPUT FILE POS. | PIN NO. | DETECTOR NO. | NEMA PHASE | CALL | EXTEND TIME | DELAY TIME | ADDED INITIAL | DETECTOR TYPE |
|----------|---------------|-----------------|---------|--------------|------------|------|-------------|------------|---------------|---------------|
| 1A' | TB2-1,2 | I1U | 56 | 1 | 1 | YES | | 15 | | S |
| | - | J4U | 48 | 26 | 6 | YES | | 3 | | G |
| 2A/S1 | TB2-5,6 | I2U | 39 | 2 | 2/SYS | YES | | | X | N |
| 2B/S2 | TB2-7,8 | I2L | 43 | 12 | 2/SYS | YES | | | X | N |
| 4A | TB4-9,10 | I6U | 41 | 4 | 4 | YES | | | | S |
| 4B | TB4-11,12 | I6L | 45 | 14 | 4 | YES | | 10 | | S |
| 5A' | TB3-1,2 | J1U | 55 | 5 | 5 | YES | | 15 | | S |
| | - | I4U | 47 | 22 | 2 | YES | | 3 | | G |
| 6A/S3 | TB3-5,6 | J2U | 40 | 6 | 6/SYS | YES | | | X | N |
| 6B/S4 | TB3-7,8 | J2L | 44 | 16 | 6/SYS | YES | | | X | N |
| 8A | TB5-9,10 | J6U | 42 | 8 | 8 | YES | | | | S |
| 8B | TB5-11,12 | J6L | 46 | 18 | 8 | YES | | | | S |
| 8C | TB7-1,2 | J7U | 66 | 38 | 8 | YES | | 15 | | S |

- Add jumper from I1-W to J4-W, on rear of input file.
- Add jumper from J1-W to I4-W, on rear of input file.

INPUT FILE POSITION LEGEND: J2L



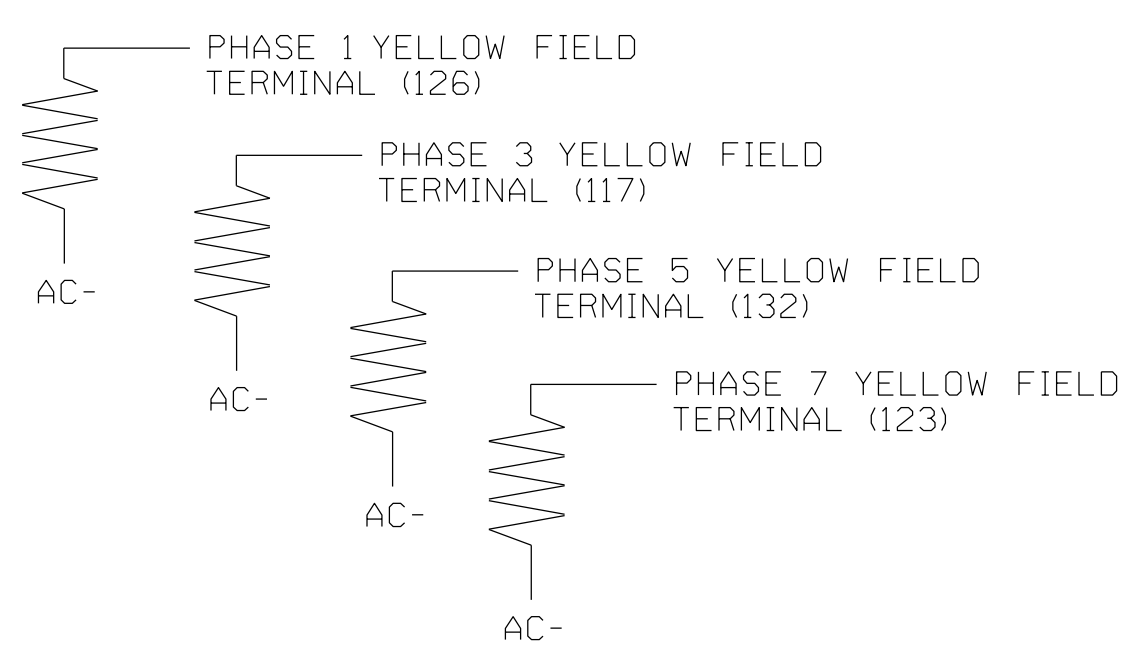
** OPTICAL PREEMPTION SYSTEM

- Install an optical preemption system for emergency vehicle preemption. Perform installation according to manufacturer's directions and NCDOT engineer-approved mounting locations to accomplish the preemption schemes shown on the Signal Design Plans.
- Ensure that the Optical Preemption System is fully compatible with equipment manufactured in accordance with the specification of the type 2070 controller.

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)

| VALUE (ohms) | WATTAGE |
|--------------|-----------|
| 1.5K - 1.9K | 25W (min) |
| 2.0K - 3.0K | 10W (min) |



Electrical Detail - Sheet 1 of 3

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

Prepared for the Offices of:
 Mobility and Safety Division
 NORTH CAROLINA PROFESSIONAL ENGINEERS
 SEAL 022516
 LISA M. MOON

NC 344 (Halstead Blvd. Ext.)
 at
 Mt. Everest Way/
 Mt. Everest Drive
 Division 1 Pasquotank County Elizabeth City

PLAN DATE: March 2018 REVIEWED BY: AJ Davis
 PREPARED BY: DJ White REVIEWED BY: LM Moon

REVISIONS: _____ INIT. DATE: _____

DocuSigned by:
 Lisa M. Moon 9/20/2018
 50CFE68D300421 DATE: _____
 SIG. INVENTORY NO. 01-0755

