

| PROJECT LENGTH               |               | Prepared in the Office of:<br><b>DIVISION OF HIGHWAYS</b><br>431 Transportation Dr., Fayetteville N.C. 28301 |  |  |
|------------------------------|---------------|--|--|--|
| PROJECT W–5706U TOTAL LENGTH | = 0.031 Miles | 2018 STANDARD SPECIFICATIONS<br>RIGHT OF WAY DATE:<br>JULY 31, 2019<br>LETTING DATE:<br>MARCH 5, 2025        | JOHN GAUTHIER<br>PROJECT ENGINEER<br>ALEX HENDERSON<br>PROJECT DESIGN ENGINEER |  |

# Note: Not to Scale

### 

| County Line   |  |
|---|--|
| Township Line   |  |
| City Line   |  |
| Reservation Line  |  |
| Property Line   |  |
| Existing Iron Pin (EIP)   |  |
| Computed Property Corner  | ×  |
| Existing Concrete Monument (ECM)  |  |
| Parcel/Sequence Number  |  |
| Existing Fence Line   | XX   |
| Proposed Woven Wire Fence   | <del>0</del>   |
| Proposed Chain Link Fence   |  |
| Proposed Barbed Wire Fence  |  |
| Existing Wotland Roundary   |  |
| Proposed Wetland Deveders   |  |
| Evisting Endergroup 1.4 1 1.2   |  |
| Existing Endangered Animal Boundary   | EAB  |
| Existing Endangered Plant Boundary  | EPB  |
| Existing Historic Property Boundary   | HPB  |
| Known Contamination Area: Soil  | ∑; _ s _ ∑; _ s −  |
| Potential Contamination Area: Soil  |  |
| Known Contamination Area: Water   | _ w _ ∭ _ w -  |
| Potential Contamination Area: Water   |  |
| Contaminated Site: Known or Potential –   |  |
| BUILDINGS AND OTHER CUI   | TUDE   |
|   | LIUKE:   |
| Gas Pump Vent or U/G Tank Cap   | 0  |
| Gas Pump Vent or U/G Tank Cap<br>Sign   |  |
| Gas Pump Vent or U/G Tank Cap<br>Sign<br>Well   | ♀  |
| Gas Pump Vent or U/G Tank Cap<br>Sign<br>Well<br>Small Mine   | ♀<br>♀<br>♀  |
| Gas Pump Vent or U/G Tank Cap<br>Sign<br>Well<br>Small Mine<br>Foundation   | ♀<br>♀<br>♀<br>♀   |
| Gas Pump Vent or U/G Tank Cap<br>Sign<br>Well<br>Small Mine<br>Foundation<br>Area Outline   | ○<br>♀<br>♀<br>☆   |
| Gas Pump Vent or U/G Tank Cap<br>Sign<br>Well<br>Small Mine<br>Foundation<br>Area Outline<br>Cemetery   | <br>♀<br>♀<br>☆<br>★                                     |
| Gas Pump Vent or U/G Tank Cap<br>Sign<br>Well<br>Small Mine<br>Foundation<br>Area Outline<br>Cemetery<br>Building   | <br>♀<br>♀<br>♀<br>♀<br>↓                                |
| Gas Pump Vent or U/G Tank Cap<br>Sign<br>Well<br>Small Mine<br>Foundation<br>Area Outline<br>Cemetery<br>Building   |  |
| Gas Pump Vent or U/G Tank Cap<br>Sign<br>Well<br>Small Mine<br>Foundation<br>Area Outline<br>Cemetery<br>Building<br>School   |  |
| Gas Pump Vent or U/G Tank Cap<br>Sign<br>Well<br>Small Mine<br>Foundation<br>Area Outline<br>Cemetery<br>Building<br>School<br>Church   |  |
| Gas Pump Vent or U/G Tank Cap<br>Sign<br>Well<br>Small Mine<br>Foundation<br>Area Outline<br>Cemetery<br>Building<br>School<br>Church<br>Dam  |  |
| Gas Pump Vent or U/G Tank Cap   |  |
| Gas Pump Vent or U/G Tank Cap<br>Sign<br>Well<br>Small Mine<br>Foundation<br>Foundation<br>Area Outline<br>Cemetery<br>Building<br>School<br>School<br>Church<br>Dam<br><i>HYDROLOGY:</i><br>Stream or Body of Water  |  |
| Gas Pump Vent or U/G Tank Cap<br>Sign<br>Well<br>Small Mine<br>Foundation<br>Area Outline<br>Area Outline<br>Cemetery<br>Building<br>School<br>School<br>Church<br>Dam<br><i>HYDROLOGY:</i><br>Stream or Body of Water<br>Hydro, Pool or Reservoir                                      |  |
| Gas Pump Vent or U/G Tank Cap<br>Sign<br>Well<br>Small Mine<br>Foundation<br>Area Outline<br>Area Outline<br>Cemetery<br>Gemetery<br>Building<br>School<br>School<br>Church<br>Dam<br><i>HYDROLOGY:</i><br>Stream or Body of Water<br>Hydro, Pool or Reservoir<br>Jurisdictional Stream |  |
| Gas Pump Vent or U/G Tank Cap   |  |
| Gas Pump Vent or U/G Tank Cap   | $ \begin{array}{c}                                     $ |
| Gas Pump Vent or U/G Tank Cap   | $ \begin{array}{c}                                     $ |
| Gas Pump Vent or U/G Tank Cap   | $ \begin{array}{c}                                     $ |
| Gas Pump Vent or U/G Tank Cap   | $ \begin{array}{c}                                     $ |
| Gas Pump Vent or U/G Tank Cap   | $ \begin{array}{c}                                     $ |
| Gas Pump Vent or U/G Tank Cap   | CTOKE:   |

### RAILROADS:

Standard RR Signal Switch — RR Abando **RR** Dismantled

Primary Ho Primary Ho Secondary Vertical Ber Existing Ri Proposed (Re Proposed Existing Pe Proposed (Re Existing C/ Proposed Proposed Existing Rig Proposed Existing Co Proposed Proposed Existing Ea Proposed Proposed Proposed Proposed Proposed Proposed Proposed Aerial Utility Easement

Existing Edg Existing Cur Proposed SI Proposed SI Proposed C Existing Me Proposed G Existing Cab Proposed C Equality Syr Pavement Re VEGETA Single Tree Single Shrul Hedge —

# STATE OF NORTH CAROLIN CONVENTIONAL PLA

| _        |                  |
|----------|------------------|
| Gauge    |                  |
| Milepost | O<br>MILEPOST 35 |
|          |                  |
| oned     |                  |

| A DIVISION OF HIGHWA                      | A VS             | PROJECT<br>W-                               | reference no. sf<br>5706U |
|---|------------------|---|---------------------------|
| J SHFFT SYMROL                            |                  |   |                           |
|   |                  | WATER:                                      |                           |
| Woods Line                                |                  | Water Manhole                               | - W                       |
| Orchard                                   | - & & & &        | Water Meter                                 | - 0                       |
| Vineyard                                  | - Vineyard       | Water Valve                                 | - 🛛                       |
| EXISTING STRUCTURES:                      |                  | Water Hydrant                               |                           |
| MAJOR:                                    |                  | U/G Water Line Test Hole (SUE – LOS A)*—    | - 3                       |
| Bridge, Tunnel or Box Culvert             | CONC             | U/G Water Line (SUE – LOS B)*               | — — — w— — —              |
| Bridge Wing Wall, Head Wall and End Wall  | - ) CONC WW (    | U/G Water Line (SUE – LOS C)*               | — — — w — — —             |
| MINOR:                                    |                  | U/G Water Line (SUE – LOS D)*               |                           |
| Head and End Wall                         | CONC HW          | Above Ground Water Line                     | A/G Water                 |
| Pipe Culvert                              |                  | TV:   | _                         |
| Footbridge                                | ≻≺               | TV Pedestal                                 | - <u>C</u>                |
| Drainage Box: Catch Basin, DI or JB       | СВ               | TV Tower                                    | - 🚫                       |
| Paved Ditch Gutter                        |                  | U/G TV Cable Hand Hole                      | — H <sub>H</sub>          |
| Storm Sewer Manhole                       | S                | U/G TV Test Hole (SUE – LOS A)*             | -                         |
| Storm Sewer                               | S                | U/G TV Cable (SUE – LOS B)*                 | — — — — TV— — —           |
| UTILITIES:                                |                  | U/G TV Cable (SUE – LOS C)*                 | — — — TV — — —            |
| * SUE – Subsurface Utility Engineering    | · · · ·          | U/G TV Cable (SUE – LOS D)*                 | TV                        |
| LOS – Level of Service – A,B,C or D       | (Accuracy)       | U/G Fiber Optic Cable (SUE – LOS B)*        | — — — — TV FO— — ·        |
|   | 4                | U/G Fiber Optic Cable (SUE – LOS C)*        | — — — TV FO— —            |
| Existing Power Pole                       | - •              | U/G Fiber Optic Cable (SUE – LOS D)*        | TV F0                     |
| Proposed Power Pole                       | - O              | GAS:  |                           |
| Existing Joint Use Pole                   | <b>—</b>         | Gas Valve                                   | - 🔷                       |
| Proposed Joint Use Pole                   | -0-              | Gas Meter                                   | -                         |
| Power Manhole                             | - (P)            | U/G Gas Line Test Hole (SUE – LOS A)*       | -                         |
| Power Line Tower                          | -                | U/G Gas Line (SUE – LOS B)*                 | — — — G — — - G — —       |
| Power Transformer                         | -                | U/G Gas Line (SUE – LOS C)*                 | C                         |
| U/G Power Cable Hand Hole                 | - H <sub>H</sub> | U/G Gas Line (SUE – LOS D)*                 | G                         |
| H-Frame Pole                              | - • •            | Above Ground Gas Line                       | A/G Gas                   |
| U/G Power Line Test Hole (SUE – LOS A)* – | - 🔹              | SANITARY SEWER:                             |                           |
| U/G Power Line (SUE – LOS B)*             | P                | Sanitary Sewer Manhole                      | -                         |
| U/G Power Line (SUE – LOS C)*             | P P              | Sanitary Sewer Cleanout                     | - (†)                     |
| U/G Power Line (SUE – LOS D)*             | - P              | U/G Sanitary Sewer Line                     | SS                        |
| TELEPHONE:                                |                  | Above Ground Sanitary Sewer                 | A/G Sanitary Sewe         |
| Existing Telephone Pole                   | •-               | SS Force Main Line Test Hole (SUE – LOS A   | A)* 👁                     |
| Proposed Telephone Pole                   | -0-              | SS Force Main Line (SUE – LOS B)*           | — — — — — FSS— — —        |
| Telephone Manhole                         | - ①              | SS Force Main Line (SUE – LOS C)*           | — — — FSS — — –           |
| Telephone Pedestal                        | -                | SS Force Main Line (SUE – LOS D)*           | — FSS — FSS —             |
| Telephone Cell Tower                      | - , ,            | MISCELLANEOUS:                              |                           |
| U/G Telephone Cable Hand Hole             | - H <sub>H</sub> | Utility Pole                                | - •                       |
| U/G Telephone Test Hole (SUE – LOS A)* –  | - 🔹              | Utility Pole with Base                      |                           |
| U/G Telephone Cable (SUE – LOS B)*        | T                | Utility Located Object                      |                           |
| U/G Telephone Cable (SUE – LOS C)*        | T T              | Utility Traffic Signal Box                  | - 5                       |
| U/G Telephone Cable (SUE – LOS D)*        | T                | Utility Unknown U/G Line (SUE – LOS B)* $-$ |                           |
| U/G Telephone Conduit (SUE – LOS B)*      | - <u> </u>       | U/G Tank; Water, Gas, Oil                   | -                         |
| U/G Telephone Conduit (SUE – LOS C)*      | TC               | Underground Storage Tank, Approx. Loc. —    | - <u>(UST</u> )           |
| U/G Telephone Conduit (SUE – LOS D)*      |                  | A/G Tank; Water, Gas, Oil                   | -                         |
| U/G Fiber Optics Cable (SUE – LOS B)*     | T FO             | Geoenvironmental Boring                     | -                         |
| U/G Fiber Optics Cable (SUE – LOS C)*     | T FO             | Abandoned According to Utility Records —    | - AATUR                   |
| U/G Fiber Optics Cable (SUE – LOS D)*     | T FO             | End of Information                          | – E.O.I.                  |

| $\langle \bullet \rangle$              | * SUE – Subsurface Utility Engineering    |
|--|---|
| $\land$                                | LOS – Level of Service – A,B,C or D (Ac   |
| •                                      | POWER:                                    |
| $\langle \! A \! \rangle$              | Existing Power Pole                       |
|  | Proposed Power Pole                       |
|  | Existing Joint Use Pole                   |
|  | Proposed Joint Use Pole                   |
|  | Power Manhole                             |
|  | Power Line Tower                          |
| —————————————————————————————————————— | Power Transformer                         |
| E                                      | U/G Power Cable Hand Hole                 |
| TDE                                    | H-Frame Pole                              |
| PDE                                    | U/G Power Line Test Hole (SUE – LOS A)* — |
| DUE                                    | U/G Power Line (SUE – LOS B)*             |
| PUE                                    | U/G Power Line (SUE – LOS C)*             |
| TUE                                    | U/G Power Line (SUE – LOS D)*             |
| AUE                                    | TELEPHONE:                                |
| <b>5.S</b> •                           | Existing Telephone Pole                   |
|  | Proposed Telephone Pole                   |
|  | Telephone Manhole                         |
| <u>C</u>                               | Telephone Pedestal                        |
| F                                      | Telephone Cell Tower                      |
|  | U/G Telephone Cable Hand Hole ————        |
|  | U/G Telephone Test Hole (SUE – LOS A)* —  |
|  | U/G Telephone Cable (SUE – LOS B)*        |
|  | U/G Telephone Cable (SUE – LOS C)* — —    |
| <u> </u>                               | U/G Telephone Cable (SUE – LOS D)* — —    |
|  | LI/G Telephone Conduit (SLIF - LOS R)*    |

# RIGHT OF WAY & PROJECT CONTROL:

| oriz Control Point                             | $\bigcirc$       |
|--|------------------|
| oriz and Vert Control Point                    | ۲                |
| Horiz and Vert Control Point ——                | •                |
| enchmark ————                                  |                  |
| ight of Way Monument                           | $\bigtriangleup$ |
| Right of Way Monument<br>ebar and Cap)         |                  |
| Right of Way Monument<br>Concrete)             |                  |
| ermanent Easement Monument ——                  | $\diamond$       |
| Permanent Easement Monument —<br>ebar and Cap) | $\diamond$       |
| A Monument —                                   | $\land$          |
| C/A Monument (Rebar and Cap) —                 | $\checkmark$     |
| C/A Monument (Concrete) ———                    | ۸                |
| ght of Way Line                                |                  |
| Right of Way Line                              |                  |
| ontrol of Access Line                          | (Ĉ)              |
| Control of Access Line                         |                  |
| ROW and CA Line                                |                  |
| sement Line                                    | — — E — -        |
| Temporary Construction Easement-               | E                |
| Temporary Drainage Easement ——                 | TDE              |
| Permanent Drainage Easement ——                 | PDE              |
| Permanent Drainage/Utility Easement            | DUE              |
| Permanent Utility Easement                     | PUE              |
| Temporary Utility Easement                     | TUE              |
|  |                  |

## ROADS AND RELATED FEATURE

| ge of Pavement          |   |
|-------------------------|---|
| urb                     |   |
| ilope Stakes Cut        | <u>C</u>                                |
| olope Stakes Fill       | F                                       |
| Curb Ramp ————          | CR                                      |
| etal Guardrail —————    | <u> </u>                                |
| Guardrail ————          | <u> </u>                                |
| ble Guiderail           | <u> </u>                                |
| Cable Guiderail         |   |
| mbol                    | $igodoldsymbol{\Theta}$                 |
| lemoval                 |   |
| TION:                   |   |
|                         | යි                                      |
| ıp ———————————————————— | හි                                      |
|                         | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |



|                | PROJECT REFERENCE NO. | SHEET NO. |
|----------------|-----------------------|-----------|
|                | W-5706U               | 4         |
|                |                       |           |
| I              |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |
| 3/2            |                       |           |
| Ťœ́            |                       |           |
| 9              |                       |           |
| A X            |                       |           |
|                |                       |           |
| -              |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |
| -57 <b>06U</b> |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |
| /              |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |
|                |                       |           |



|                   | 02      |
|-------------------|---------|
|                   | 2       |
|                   | S       |
|                   | σ       |
|                   | .0      |
|                   | ں<br>ا  |
|                   | 08      |
|                   | 8       |
|                   | 06      |
|                   | *       |
|                   | 8       |
|                   | 9       |
|                   | 06      |
|                   | *9      |
|                   | 9       |
|                   | .2      |
|                   | *       |
|                   | 6       |
|                   | Ö       |
|                   | Å       |
|                   | C       |
|                   | te.     |
|                   | ģ       |
|                   | ¥       |
|                   | Ö       |
|                   | ;-<br>+ |
|                   | 00      |
|                   | S<br>C  |
|                   | Р       |
|                   | 00      |
|                   | ð       |
|                   | 0       |
|                   | 6       |
|                   | ŝ       |
|                   | ж<br>0  |
|                   | D       |
| 2                 | Р       |
| ::                | ŝ       |
| 1                 | S       |
| 24                | *       |
| 20.               | SU      |
| $\stackrel{ }{>}$ | ŝ       |
| Ñ                 |         |
| ۔<br>ي            | *       |
| $\sim$ .          | 10      |

\* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what

| PROJECT REFERENCE NO. | SHEET NO. |
|-----------------------|-----------|
| W-5706U               | Sig.1.0   |

### 6 Phase Fully Actuated Fayetteville Signal System

### <u>NOTES</u>

- 1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- 2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- 3. Phase 1 and/or phase 5 may be lagged.
- 4. The order of phase 3 and phase 4 may be reversed.
- 5. Set all detector units to presence mode.
- 6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- 7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- 8. Pavement markings are existing.
- 9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



| gnal Upgrade                    |   | DOCUMENT NOT CONSIDERED<br>FINAL UNLESS ALL<br>SIGNATURES COMPLETED                              |
|---------------------------------|---|--|
| Prepared in the Offices of:     | SR 1404 (Hay Street/<br>Morganton Road)/Ft. Bragg Road<br>at<br>Highland Ave. and Oakridge Ave.<br>Division 6 Cumberland County Fayetteville<br>PLAN DATE: August 2024 REVIEWED BY: ZML | SEAL<br>SEAL<br>O30530<br>SEAL<br>O30530   |
| Greenfield Pkwy.Garner.NC 27529 | PREPARED BY: Jeff Spence REVIEWED BY:   | CHARY M. LITTIN  |
| SCALE<br>0 30<br>1 "= 30 '      | REVISIONS INIT. DATE  | Signed by:<br>Zachary M. Little 11/25/2024<br>OC21EED94E5341E DATE<br>SIG. INVENTORY NO. 06-0008 |

| LATION CHART |                |               |                         |      |             |          |
|--------------|----------------|---------------|-------------------------|------|-------------|----------|
| PROGRAMMING  |                |               |                         |      |             |          |
|              | EXTEND<br>TIME | DELAY<br>TIME | USE<br>ADDED<br>INITIAL | ТҮРЕ | SYSTEM LOOP | NEW CARD |
| S            | _              | 15            | I                       | Ν    | -           | Х        |
| S            | -              | I             | I                       | Ν    | I           | Х        |
| S            | _              | I             | I                       | Ν    | I           | Х        |
| S            | -              | -             | -                       | Ν    | I           | Х        |
| S            | -              | 10            | -                       | Ν    | -           | Х        |
| S            | -              | 3             | -                       | Ν    | -           | Х        |
| S            | -              | 15            | -                       | Ν    | -           | Х        |
| S            | -              | 15            | -                       | Ν    | -           | Х        |
| S            | -              | -             | -                       | Ν    | -           | Х        |
| S            | -              | -             | -                       | Ν    | -           | Х        |
| S            | -              | -             | -                       | Ν    | -           | Х        |
| )            | -              | -             | -                       | Ν    | Х           | Х        |
| )            | _              | _             | _                       | Ν    | χ           | X        |



| LOOP NO.            | LOOP<br>TERMINAL      | INPUT<br>FILE POS. | PIN<br>NO.  | DETECTOR<br>NO.        | NEMA<br>PHASE | CALL  | EXTEND<br>TIME | DELAY<br>TIME | ADDED<br>INITIAL | DE TEC <sup>T</sup><br>TYPE |
|---------------------|-----------------------|--------------------|-------------|------------------------|---------------|-------|----------------|---------------|------------------|-----------------------------|
| 101                 | TB21-1,2              | IIU                | 56          | 1                      | 1             | YES   |                | 15            |                  | N                           |
| I IH                | -                     | -                  | 59          | 15                     | 6             | YES   |                |               |                  | N                           |
| 2A                  | TB21-3,4              | I2U                | 39          | 2                      | 2             | YES   |                |               |                  | N                           |
| 2B                  | TB23-3,4              | I2L                | 43          | 12                     | 2             | YES   |                |               |                  | N                           |
| 3A                  | TB21-5,6              | I3U                | 58          | 3                      | 3             | YES   |                | 10            |                  | N                           |
| 4A                  | TB21-7,8              | I4U                | 41          | 4                      | 4             | YES   |                | 3             |                  | N                           |
| 4B                  | TB23-7,8              | I4L                | 45          | 14                     | 4             | YES   |                | 15            |                  | N                           |
| 5^ <sup>2</sup>     | TB21-9,10             | I5U                | 55          | 5                      | 5             | YES   |                | 15            |                  | N                           |
| Эн                  | -                     | -                  | 63          | 32                     | 2             | YES   |                |               |                  | N                           |
| 6A                  | TB21-11,12            | I6U                | 40          | 6                      | 6             | YES   |                |               |                  | N                           |
| 6B                  | TB23-11,12            | I6L                | 44          | 16                     | 6             | YES   |                |               |                  | N                           |
| *S2A                | TB21-13,14            | I7U                | 57          | 7                      | 7             | YES   |                |               |                  | N                           |
| *S2B                | TB23-13,14            | I7L                | 50          | 28                     | 8             | YES   |                |               |                  | N                           |
| PED PUSH<br>BUTTONS |                       |                    |             |                        |               | NOTE  |                |               |                  |                             |
| P21,P22             | TB22-9,10             | I12U               | 67          | PED 2                  | 2 PED         | IN    | ISTALL [       | DC ISC        | LATORS           |                             |
| P41,P42             | TB24-9,10             | I12L               | 69          | PED 4                  | 4 PED         | I IN  | I INPUT        | FILE          | SLOTS            |                             |
| P61,P62             | TB22-11,12            | I13U               | 68          | PED 6                  | 6 PED         | I I I | 2 AND          | 113.          |                  |                             |
| P81,P82             | TB24-11,12            | I13L               | 70          | PED 8                  | 3 PED         |       |                | 1131          |                  |                             |
| * System<br>detect  | detector<br>or in the | only.<br>default   | Remo<br>pro | ove the v<br>ogramming | vehicle<br>). | phase | e assig        | ned t         | o this           |                             |

| PROJECT REFERENCE NO. | SHEET NO. |
|-----------------------|-----------|
| W-5706U               | Sig. 1.1  |

| SIGNAL                      |          |       |          | AL                  | HE  | AD  | HO  | OK- | UP                  | CH      | IAR   | Т       |                     |     |     |                     |
|-----------------------------|----------|-------|----------|---------------------|-----|-----|-----|-----|---------------------|---------|-------|---------|---------------------|-----|-----|---------------------|
| LOAD<br>SWITCH NO.          | S1       | S2    | S        | 3                   | S   | 4   | g   | 5   | S6                  | S7      | S8    | S       | 9                   | S1Ø | S11 | S12                 |
| CMU<br>CHANNEL<br>NO.       | 1        | 2     | 9        | 13                  |     | 3   |     | 4   | 14                  | 5       | 6     | 11      | 15                  | 7   | 8   | 16                  |
| PHASE                       | OLA      | 2     | 1 GRN    | 2<br>PED            |     | 3   |     | 4   | 4<br>PED            | OLC     | 6     | 5 GRN   | 6<br>PED            | 7   | 8   | 8<br>PED            |
| SIGNAL<br>HEAD NO.          | <b>*</b> | 21,22 | <b>★</b> | P21 <b>.</b><br>P22 | 31  | 32  | 41  | 42  | P41 <b>.</b><br>P42 | ★<br>51 | 61,62 | ★<br>51 | P61 <b>.</b><br>P62 | NU  | NU  | P31 <b>.</b><br>P32 |
| RED                         |          | 128   |          |                     | 116 | 116 | 101 | 101 |                     |         | 134   |         |                     |     |     |                     |
| YELLOW                      |          | 129   |          |                     | 117 | 117 | 102 | 102 |                     |         | 135   |         |                     |     |     |                     |
| GREEN                       |          | 130   |          |                     | 118 | 118 | 103 | 103 |                     |         | 136   |         |                     |     |     |                     |
| RED<br>ARROW                | 125      |       |          |                     |     |     |     |     |                     | 131     |       |         |                     |     |     |                     |
| YELLOW<br>ARROW             | 126      |       |          |                     |     |     |     |     |                     | 132     |       |         |                     |     |     |                     |
| FLASHING<br>YELLOW<br>ARROW | 127      |       |          |                     |     |     |     |     |                     | 133     |       |         |                     |     |     |                     |
| GREEN<br>ARROW              |          |       |          |                     | 118 |     | 103 |     |                     |         |       |         |                     |     |     |                     |
| ₩                           |          |       |          | 113                 |     |     |     |     | 104                 |         |       |         | 119                 |     |     | 110                 |
| PED<br>YELLOW               |          |       | 114      |                     |     |     |     |     | *                   |         |       | 120     |                     |     |     | *                   |
| Ŕ                           |          |       |          | 115                 |     |     |     |     | 106                 |         |       |         | 121                 |     |     | 112                 |

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual

| THIS ELECTRICAL DETAIL IS FOR |  |  |  |  |  |
|-------------------------------|--|--|--|--|--|
| THE SIGNAL DESIGN: 06-0008    |  |  |  |  |  |
| DESIGNED: August 2024         |  |  |  |  |  |
| SEALED: 11-25-24              |  |  |  |  |  |
| REVISED: N/A                  |  |  |  |  |  |

| .ectrical Deatil -   | Sheet 1 of 4  | DOCUMENT NOT CONSIDERED<br>FINAL UNLESS ALL<br>SIGNATURES COMPLETED |  |  |  |
|--|---|---|--|--|--|
| TRICAL AND PROGRAMMING<br>DETAILS FOR:   | SR 1404 (Hay Street/  | SEAL  |  |  |  |
| Prepared In the Offices of:  | Morganton Road)/Ft. Bragg Road<br>at<br>Highland Ave. and Oakridge Ave<br>Division 6 Cumberland County Fayetteville | SEAL<br>036833  |  |  |  |
| In the second se | PLAN DATE: November 2024 Reviewed By:<br>PREPARED By: James Peterson Reviewed By:                                   | PL ENGINEER   |  |  |  |
| G Stanagement S<br>Single Management S   | REVISIONS INIT. DATE  | Signed by:<br>Ryan W. Hough 11/26/2024                              |  |  |  |
|  |   |   |  |  |  |



| <u>070</u><br>MENT DETAIL                        |  |
|--|--|
|  | PED YELLOW CC<br>(make co  |
| OR INPUT ASSIGNMENT                              | In order to use FYA COM<br>cabinet must be wired s<br>outputs are wired to th  |
| CIP  | (field term, 114) to Ch<br>term, 120) to Channel 1   |
| 7 8<br>0 0<br>ASSIGNED TO PHASE 3<br>5 16<br>0 0 | Follow the instructions<br>STEP 1: Fold down rear<br>STEP 2: Find unused wir<br>connector (which<br>STEP 3: Find the conduct<br>monitor card ec<br>terminal on the |
| SW ASSIGN  | CMU-13<br>CMU-R  |
| SH<br>TGR  | NOTE: Some cabinet mo<br>this wiring cor<br>down the rear p  |
| X<br>·<br>X<br>·<br>X<br>·<br>X<br>·<br>X        | OF 3 Reyed Con   |
| X<br>•<br>•<br>•                                 |  |
| heads during<br>ne Table of<br>shown.            |  |
| STARTUP AND                                      |  |
| VING DETAIL                                      |  |
| <i>an)</i>                                       |  |
| START/FLASH                                      |  |
| <br>3 4 5 6                                      | El   |
| M N O P<br>X X X X<br>D 6<br>- G: ND             |  |
| Green "G"  | 750 /  |
|  |  |

|  |                     |                    | PROJ       | ECT REFERENCE NO. | SHEET NO.        |
|--|---------------------|--------------------|------------|-------------------|------------------|
|  |                     |                    |            | W-5706U           | Sig 1 2          |
|  |                     |                    |            |                   | <u> </u>         |
|  |                     |                    |            |                   |                  |
|  |                     | = T ^ T I          |            |                   |                  |
| JNFLICI MUNII                            | <u>UR WIRING DE</u> |                    |            |                   |                  |
| cabinet wiring changes as s              | hown below)         |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
| IPACT mode on the 20                     | 010ECL-NC Monitor   | r, the             |            |                   |                  |
| such that the (unus                      | ed) Ped Yellow I    | oad_switch         |            |                   |                  |
| ne conflict monitor                      | as follows: Fro     | om 2 PY            | 4          |                   |                  |
| 0 Green (monitor n                       | in R).              |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
| below to make the                        | appropriate conn    | ections:           |            |                   |                  |
| panel of output fi                       | le.                 |                    |            |                   |                  |
| ring harness from c                      | conflict monitor    | card edge          |            |                   |                  |
| ch should be tied a                      | and bundled toget   | her).              |            |                   |                  |
| ctors that correspo                      | ond to the follow   | ing conflict       |            |                   |                  |
| dge pins and solder                      | wire to the appi    | ropriate<br>below• |            |                   |                  |
|  | II IIE US SHOWN I   |                    |            |                   |                  |
|  | - 2PY (term.        | 114)               |            |                   |                  |
|  |                     | 120)               |            |                   |                  |
|  | - ori (term.        | 1201               |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  | avad apparetate     | +~ ~~~~'           | ich        |                   |                  |
| nfiguration. If c                        | connectors are u    | sed, fold          | 1511       |                   |                  |
| panel of the output                      | t file and find     | the set            |            |                   |                  |
| INCIDIS UNU CONNEC                       | A THEILUS SHOWN     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
| 1-2PY                                    | ·CMU-13 <br>·CMU-16 |                    |            |                   |                  |
| 3-6PY 3-                                 | -CMU-R              |                    |            |                   |                  |
| 4-8PY                                    | ·CMU-U              |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  | Г                   |                    |            |                   |                  |
|  | THIS ELECTRIC       | AL DETAIL IS       | FOR        |                   |                  |
|  | THE SIGNAL DE       | ESIGN: 06-0008     | 3          |                   |                  |
|  | DESIGNED: Aug       | just 2024          |            |                   |                  |
|  | SEALED: 11-25       | -24                |            |                   |                  |
|  | REVISED: N/A        |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            |                   |                  |
|  |                     |                    |            | DOCUMENT NOT C    | ONSIDERED        |
| lectrical Deatil - Sh                    | eet 2 of 4          |                    |            | FINAL UNLES       | S ALL<br>MPLETED |
| CTRICAL AND PROGRAMMING<br>DETAILS FOR:  | SR 1404 (Ha         | y Street/          |            | SEAL              |                  |
| Mo                                       | rganton Road)/      | Ft. Bragg          | Road       |                   |                  |
| Prepared in the Offices of:              | at                  |                    |            | H CAR             |                  |
| Hi                                       | .ghland Ave. ar     | nd Oakridg         | e Ave.     | SE VI             | A. L             |
| Divi                                     | sion 6 Cumberlan    | d County Fa        | yetteville | 036833            | 3                |
| PLAN                                     | DATE: AUGUST 2016   | REVIEWED BY: B.    | AS         | F PL SNGINER      |                  |
| CONTRAMENTSUT                            | REVISIONS           | INIT.              | DATE       | Signed by:        | 10,000           |
| """<br>N.Greenfield Pkwv.Garner.NC 27529 |                     |                    |            | Ryan W. Hough     | 11/26/2024       |
|  |                     |                    |            |                   | DATE<br>06-0008  |



(program controller as shown)



v-2024 15:12 S&SU#ITS Signals\*Workgroups\*Sig Man\*Peterson\*060008\_sm\_ele\_xxx.

|   |  | PROJECT REFERENCE NO. SHEET NO.   |
|---|--|---|
| ASC/3 FLASH SENSE INPUT COM   | ITROL  | W-37000   319. 1.3  |
| FOR RED-RED FLASH   |  | ECONOLITE ASC/3-2070 I/O PIN REMAPPING  |
| *The NCDOT default database is programmed to addresss Yellow-Re<br>Logic Statement 100 must be modified as shown when running Red   | ed flash.<br>J-Red flash.                        | The ASC/3 Configurator utility program must be used to remap  |
| 1. From Main Menu select 1. CONFIGURATION   |  | the I/O pins as shown below. Consult the ASC/3 Configurator<br>User Guide for specific instructions on software use.  |
| 2. From CONFIGURATION Submenu select 8. LOGI  | C PROCESSOR                                      |   |
| 3. From LOGIC PROCESSOR Submenu select 2. LO  | GIC STATEMENTS                                   | 1. Run the Configurator utility. Load a file as the Current DB.   |
| Change the "LP" to 100 and move the cursor down. Delete<br>the two "CTR-SET" statements by moving the cursor over<br>them and hitting the "C" key. then hit "ENTER", select | 0.7  | 2. Choose the C1-out tab to change the I/O mapping as needed. Use<br>the drop down list within the program to select the assigned<br>function for the pins shown below.   |
| LP SET CIB UN , NIT ENT , and then set the number to 4  | THIS STATEMENT IS USED                           | 3. Save the database file and download it to the controller.  |
| LP#:100 COPY FROM:100 ACTIVE: M FALSE<br>IF LP CIB CODE ON 331 F  | TO CONTROL THE FLASH<br>SENSE INPUT WHEN RUNNING |   |
| THEN LP DELAY FOR 1.0 SECONDS   | RED-RED FLASH OPERATION.                         | PIN # FUNCTION ASSIGNED FUNCTION  |
| LP SET CIB ON 427   |  | PIN 18-PHASE 1 CREEN  |
| ELSE  |  | PIN 35-PED 2 YELLOW — PHASE 1 GREEN $\checkmark$  |
|   |  |   |
| Hit "ESC", then 1 for "LUGIC STATEMENT CONTRO<br>next verify that LP#100 is ENABLED,  | _ "•   | PIN 34-PHASE 5 GREEN> PHASE 6 PED CLEAR ▼ NOTE: FOR FYA 5-11<br>COMPACT MODE  |
| END PROGRAMMING   |  | PIN 36-PED 6 YELLOW ─────> PHASE 5 GREEN 🔽  |
|   |  | <ul> <li>NOTE: The steps below can be used to view changes to 1/0 pins within the controller. Any 1/0 pins that have been remapped will display and show their default function in addition to the current assigned function.</li> <li>1. From Main Menu select 7. STATUS DISPLAY</li> <li>2. From STATUS DISPLAY Submenu select 8. INPUTS/OUTPUTS</li> <li>3. From INPUT/OUTPUT Submenu select 9. 1/0 DIFFERENCES</li> </ul>   |
|   |  | THIS ELECTRICAL DETAIL IS FOR<br>THE SIGNAL DESIGN: 06-0008<br>DESIGNED: August 2024<br>SEALED: 11-25-24<br>REVISED: N/A  |
|   |  | Electrical Deatil - Sheet 3 of 4       Document Not considered<br>Final UNLESS ALL<br>SIGNATURES COMPLETED       Details For:       Prepared In the Offices of:       Morganton Road)/Ft. Bragg Road<br>at       Highland Ave. and Oakridge Ave.       Division 6     Cumberland County       Prepared In the Offices of:       Morganton Road)/Ft. Bragg Road<br>at       Highland Ave. and Oakridge Ave.       Division 6     Cumberland County       PREPARED BY:       PREPARED BY:       Division 6       Prepared In the Offices of:       Division 6       Cumberland County       PREPARED BY:       Division 6       PREPARED BY:       INIT     Date       Revisions       INIT       Revisions       INIT       Bignet by:       Store Method Phanes       Division 6       Cumberland County       PREPARED BY:       James Peterson       Revisions       INIT       Date       Revisions       Store Metace       Divisions       Divisions       Revisions       Store Metace       Divisions       Divisions       Divisions       Divisions       Divisions </td |

1. From Main Menu select 1. CONFIGUE

2. From CONFIGURATION Submenu select

3. From the LOGIC PROCESSOR Submenu

ENTER A "1" IN THE LP# FIELD, PRESS 'ENTER', AND PROGRAM AS SHOWN.

| LP#: | 1   | COPY FROM: 1   | ACTIVE: | М  | (T/  |
|------|-----|----------------|---------|----|------|
| IF   | PED | ON PH WALK     | 2       | IS | ON   |
| AND  | VEH | GREEN ON PH    | 2       | IS | OF F |
|      |     |                |         |    |      |
| THEN | SIG | SET OLP RED    | 1       |    | ON   |
|      | SIG | SET OLP YELLOW | 1       |    | OF F |
|      | SIG | SET OVLP GREEN | 1       |    | OF F |
|      |     |                |         |    |      |
| ELSE |     |                |         |    |      |
|      |     |                |         |    |      |

ENTER A "3" IN THE LP# FIELD, PRESS 'ENTER', AND PROGRAM AS SHOWN.

| LP#: | 2   | COPY FROM:   | 2   | ACTIVE: | М  | ( ' |
|------|-----|--------------|-----|---------|----|-----|
| IF   | PED | ON PH WALK   |     | 6       | IS | 0   |
| AND  | VEH | GREEN ON PH  |     | 6       | IS | OF  |
|      |     |              |     |         |    |     |
| THEN | SIG | SET OLP RED  |     | 3       |    | ON  |
|      | SIG | SET OLP YELL | .OW | 3       |    | OFF |
|      | SIG | SET OVLP GRE | ΕN  | 3       |    | OFF |
| ELSE |     |              |     |         |    |     |
|      |     |              |     |         |    |     |

# ECONOLITE ASC/3-2070 LOGIC PROCESSOR PRO FOR LEADING PED INTERVAL (DELAYE

(program controller as shown)

The following logic processor configuration holds the FYA's on si 11 and 51 red for the duration of the delayed green time (le ped interval) when serving a ped call on the opposing through

| R | ATION  |                     |
|---|--------|---------------------|
|   | 8. LOG | IC PROCESSOR        |
|   | select | 2. LOGIC STATEMENTS |

| (T/F)<br>ON   |  |
|---------------|--|
| N<br>FF<br>FF |  |

HOLD SIGNAL HEAD 11 FYA RED DURING THE PHASE 2 DELAYED GREEN TIME (LEADING PED INTERVAL)

| /F ) |                         |
|------|-------------------------|
|      | HOLD SIGNAL HEAD 51 FYA |
| F    | RED DURING THE PHASE 6  |
| -    | DELAYED GREEN TIME      |
|      | (LEADING PED INTERVAL)  |
|      |                         |
|      |                         |
|      |                         |
|      |                         |

|  | W-5706U                   | Sig. 1.4           |
|--|---------------------------|--------------------|
|  |                           |                    |
|  |                           |                    |
|  |                           |                    |
| OGRAMMING DETAIL   |                           |                    |
| ED GREEN)  |                           |                    |
|  |                           |                    |
| ignal heads<br>eading<br>phase.  |                           |                    |
| 1. From Main Menu select 1. CONFIGURATION  |                           |                    |
| 2. From CONFIGURATION Submenu select 8. LOGIC PROCESSOR  |                           |                    |
| 3. From the LOGIC PROCESSOR Submenu select 1. LOGIC STATEMENT CONTROL  |                           |                    |
| ENABLE LOGIC PROCESSOR STATEMENTS 1-4 BY POSITIONING<br>THE CURSOR OVER THE FIELDS SHOWN BELOW AND USING THE<br>TOGGLE KEY TO ENABLE THEM .  |                           |                    |
| LOGIC STATEMENT CONTROL  |                           |                    |
| 1       2       3       4       5       6       7       8       9       0       1       2       3       4       5       6         LP       1-15       E       E       . </td <td></td> <td></td> |                           |                    |
|  |                           |                    |
|  |                           |                    |
|  |                           |                    |
|  |                           |                    |
|  |                           |                    |
|  |                           |                    |
|  |                           |                    |
|  |                           |                    |
|  |                           |                    |
| THIS ELECTRICAL DETAIL IS FOR<br>THE SIGNAL DESIGN: 06-0008<br>DESIGNED: August 2024<br>SEALED: 11-25-24<br>REVISED: N/A   |                           |                    |
|  |                           |                    |
|  |                           |                    |
|  |                           |                    |
|  |                           |                    |
|  |                           |                    |
| Electrical Dectil - Chect 4 of 4   | DOCUMENT NOT<br>FINAL UNL | CONSIDERED         |
| ELECTRICAL AND PROGRAMMING SR 1404 (Hav Street/  | SIGNATURES (              |                    |
| Prepared in the Offices of:<br>Morganton Road)/Ft. Bragg Ro  | ad with C                 | ARO                |
| Highland Ave. and Oakridge A   | Ve.                       | SION Z             |
| Division 6 Cumberland County Fayette<br>PLAN DATE: November 2024 Reviewed By:  |                           | 333                |
| PREPARED BY: James Peterson Reviewed By:<br>Revisions INIT.  | DATE Signed by:           | HOUGIN             |
| <sup>°</sup> <sup>4</sup> / <sub>s</sub> Man <sup>age</sup> <sup>w</sup><br>750 N.Greenfield Pkwy.Garner, NC 27529   | 430320FAA2654C3           | 11/26/2024<br>DATE |
|  | SIG. INVENTORY NO.        | 06-0008            |

PROJECT REFERENCE NO.

SHEET NO.