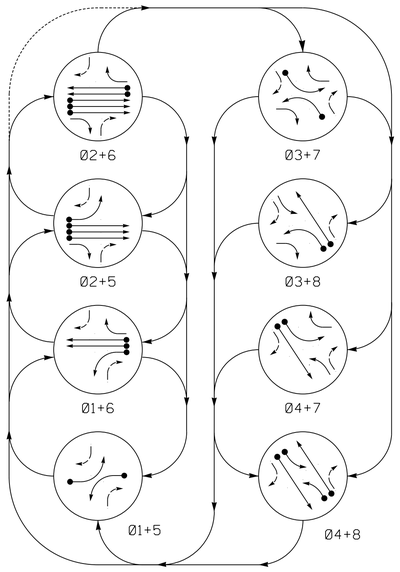
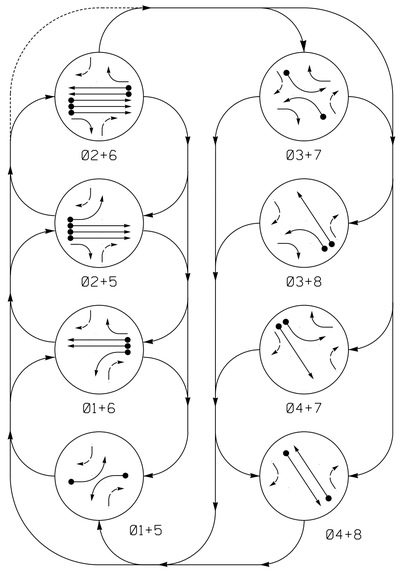
| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-4015A | Sig. 4.0 |

## DEFAULT PHASING DIAGRAM




## ALTERNATE PHASING DIAGRAM




## DEFAULT PHASING TABLE OF OPERATION

| SIGNAL FACE | PHASE 01+5 | 01+6 | 02+5 | 02+6 | 03+7 | 03+8 | 04+7 | 04+8 | FLASH |
|---|---|---|---|---|---|---|---|---|---|
| 11 | ↚ | ↚ | ↓̸ | ↓̸ | ↓̸ | ↓̸ | ↓̸ | ↓̸ | ↓̸ |
| 21,22,23 | R | R | G | G | R | R | R | R | R |
| 24 | R | R | → | → | → | → | R | R | R |
| 31 | ↓̸ | ↓̸ | ↓̸ | ↓̸ | ↚ | ↚ | F Y | F Y | ↓̸ |
| 41,42,43 | R | R | R | R | R | R | G | G | R |
| 51 | ↚ | ↓̸ | ↚ | ↓̸ | ↓̸ | ↓̸ | ↓̸ | ↓̸ | ↓̸ |
| 61,62 | R | G | R | G | R | R | R | R | R |
| 63 | R | → | R | → | → | R | → | R | R |
| 71 | ↓̸ | ↓̸ | ↓̸ | ↓̸ | ↚ | F Y | ↚ | F Y | ↓̸ |
| 81,82,83 | R | R | R | R | R | G | R | G | R |

## ALTERNATE PHASING TABLE OF OPERATION

| SIGNAL FACE | PHASE 01+5 | 01+6 | 02+5 | 02+6 | 03+7 | 03+8 | 04+7 | 04+8 | FLASH |
|---|---|---|---|---|---|---|---|---|---|
| 11 | ↚ | ↚ | ↓̸ | ↓̸ | ↓̸ | ↓̸ | ↓̸ | ↓̸ | ↓̸ |
| 21,22,23 | R | R | G | G | R | R | R | R | R |
| 24 | R | R | → | → | → | → | R | R | R |
| 31 | ↓̸ | ↓̸ | ↓̸ | ↓̸ | ↚ | ↚ | ↓̸ | ↓̸ | ↓̸ |
| 41,42,43 | R | R | R | R | R | R | G | G | R |
| 51 | ↚ | ↓̸ | ↚ | ↓̸ | ↓̸ | ↓̸ | ↓̸ | ↓̸ | ↓̸ |
| 61,62 | R | G | R | G | R | R | R | R | R |
| 63 | R | → | R | → | → | R | → | R | R |
| 71 | ↓̸ | ↓̸ | ↓̸ | ↓̸ | ↚ | ↓̸ | ↚ | ↓̸ | ↓̸ |
| 81,82,83 | R | R | R | R | R | G | R | G | R |

## ASC/3 DETECTOR INSTALLATION CHART

| DETECTOR | | | | | PROGRAMMING | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOOP | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | PHASE | CALLING | EXTEND TIME | DELAY TIME | USE ADDED INITIAL | TYPE | SYSTEM LOOP | NEW CARD |
| 1A | 6X40 | 0 | 2-4-2 | X | 1 | Yes | - | - | - | N | - | X |
| 2A | 6X6 | 420 | 6 | X | 2 | Yes | - | - | X | N | - | X |
| 2B | 6X6 | 420 | 6 | X | 2 | Yes | - | - | X | N | - | X |
| 3A | 6X40 | 0 | 2-4-2 | X | 3 | Yes | - | 15.0* | - | N | - | X |
| | | | | | 8# | Yes | - | - | - | N | - | X |
| 4A | 6X40 | 0 | 2-4-2 | X | 4 | Yes | - | - | - | N | - | X |
| 5A | 6X40 | 0 | 2-4-2 | X | 5 | Yes | - | - | - | N | - | X |
| 6A | 6X6 | 420 | 5 | X | 6 | Yes | - | - | X | N | - | X |
| 6B | 6X6 | 420 | 5 | X | 6 | Yes | - | - | X | N | - | X |
| 7A | 6X40 | 0 | 2-4-2 | X | 7 | Yes | - | 15.0** | - | N | - | X |
| | | | | | 4# | Yes | - | 3.0 | - | N | - | X |
| 8A | 6X40 | 0 | 2-4-2 | X | 8 | Yes | - | - | - | N | - | X |
| S1 | 6X6 | +265 | 4 | X | 0 | No | - | - | - | N | X | X |
| S2 | 6X6 | +265 | 4 | X | 0 | No | - | - | - | N | X | X |

* DISABLE DELAY DURING ALTERNATE PHASING OPERATION.

** REDUCE DELAY TO 3 SECONDS DURING ALTERNATE PHASING OPERATION.

\# DISABLE PHASE CALL FOR LOOP(S) DURING ALTERNATE PHASING OPERATION.

# 8 Phase
# Fully Actuated
# (High Point Signal System)

## NOTES

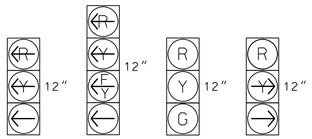
1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specification for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
5. Set all detector units to presence mode.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. The City Traffic Engineer will determine the hours of use for each phasing plan.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

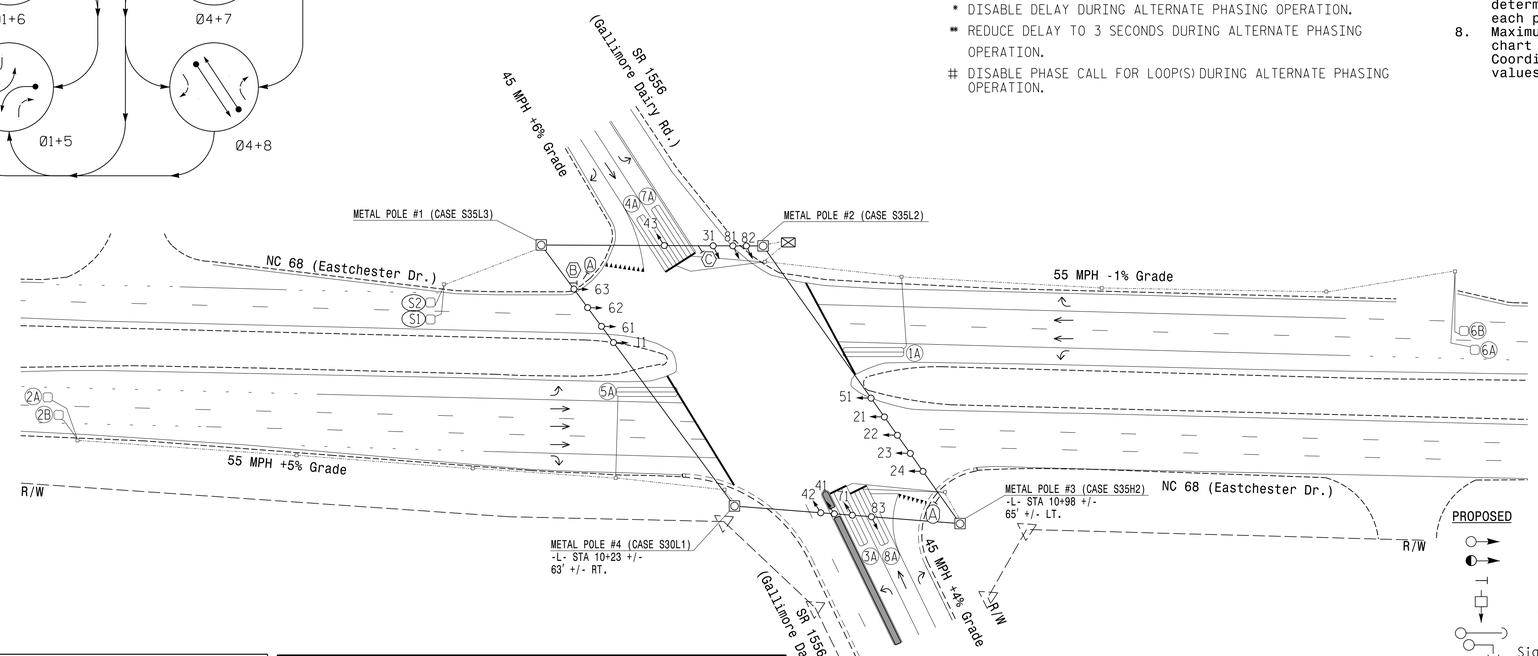
PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

## SIGNAL FACE I.D.

All Heads L.E.D.




## LEGEND

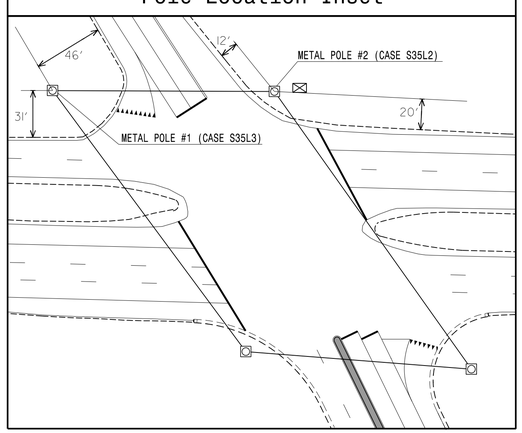
| PROPOSED | | EXISTING |
|---|---|---|
| | Traffic Signal Head | |
| | Modified Signal Head | N/A |
| | Sign | |
| | Pedestrian Signal Head With Push Button & Sign | |
| | Signal Pole with Guy | |
| | Signal Pole with Sidewalk Guy | |
| | Inductive Loop Detector | |
| | Controller & Cabinet | |
| | Junction Box | |
| | 2-in Underground Conduit | |
| N/A | Right of Way | |
| | Directional Arrow | |
| | Metal Strain Pole | |
| Ⓐ | "YIELD" Sign (R1-2) | Ⓐ |
| Ⓑ | Right Arrow "ONLY" Sign (R3-5R) | Ⓑ |
| Ⓒ | "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) | Ⓒ |

## ASC/3 TIMING CHART

| FEATURE | PHASE 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Min Green * | 7 | 14 | 7 | 7 | 7 | 14 | 7 | 7 |
| Delayed Green * | - | - | - | - | - | - | - | - |
| Walk * | - | - | - | - | - | - | - | - |
| Ped Clear | - | - | - | - | - | - | - | - |
| Veh. Extension * | 2.0 | 6.0 | 3.0 | 3.0 | 2.0 | 6.0 | 3.0 | 3.0 |
| Max 1 * | 15 | 120 | 15 | 25 | 15 | 120 | 15 | 25 |
| Yellow | 3.0 | 5.3 | 3.0 | 4.2 | 3.0 | 5.3 | 3.0 | 4.2 |
| Red Clear | 3.1 | 1.3 | 3.9 | 2.8 | 2.9 | 1.3 | 3.9 | 2.8 |
| Red Revert | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Actuations B4 Add * | - | - | - | - | - | - | - | - |
| Seconds /Actuation * | - | 1.5 | - | - | - | 1.5 | - | - |
| Max Initial * | - | 46 | - | - | - | 46 | - | - |
| Time Before Reduction * | - | 15 | - | - | - | 15 | - | - |
| Time To Reduce * | - | 30 | - | - | - | 30 | - | - |
| Minimum Gap | - | 3.4 | - | - | - | 3.4 | - | - |
| Locking Detector | - | X | - | - | - | X | - | - |
| Recall Position | - | SOFT RECALL | - | - | - | SOFT RECALL | - | - |
| Dual Entry | - | - | - | X | - | - | - | X |
| Simultaneous Gap | X | X | X | X | X | X | X | X |

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

## Pole Location Inset




Signal Upgrade-Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED


RK&K
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NC License No. F-0112
Engineers | Construction Managers | Planners | Scientists
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Prepared for the Offices of: Transportation Mobility and Safety Division, Signal Design Section, Department of Transportation, State of North Carolina, 750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 0 50 1"=50'

NC 68 (Eastchester Dr.) at SR 1556 (Gallimore Dairy Rd.)

Division 7 Guilford County High Point

| | | | |
|---|---|---|---|
| PLAN DATE: | August 2024 | REVIEWED BY: | WP Erickson-Jones |
| PREPARED BY: | A.C. Norman | REVIEWED BY: | |

| REVISIONS | INIT. | DATE |
|---|---|---|
| | | |

SEAL: NORTH CAROLINA PROFESSIONAL SEAL 056142 ENGINEER W. PORTER JONES

DocuSigned by: Porter Jones 8/22/2024
SIGNATURE DATE

SIG. INVENTORY NO. 07-1438

8/22/2024
8:45:07 AM
pjones