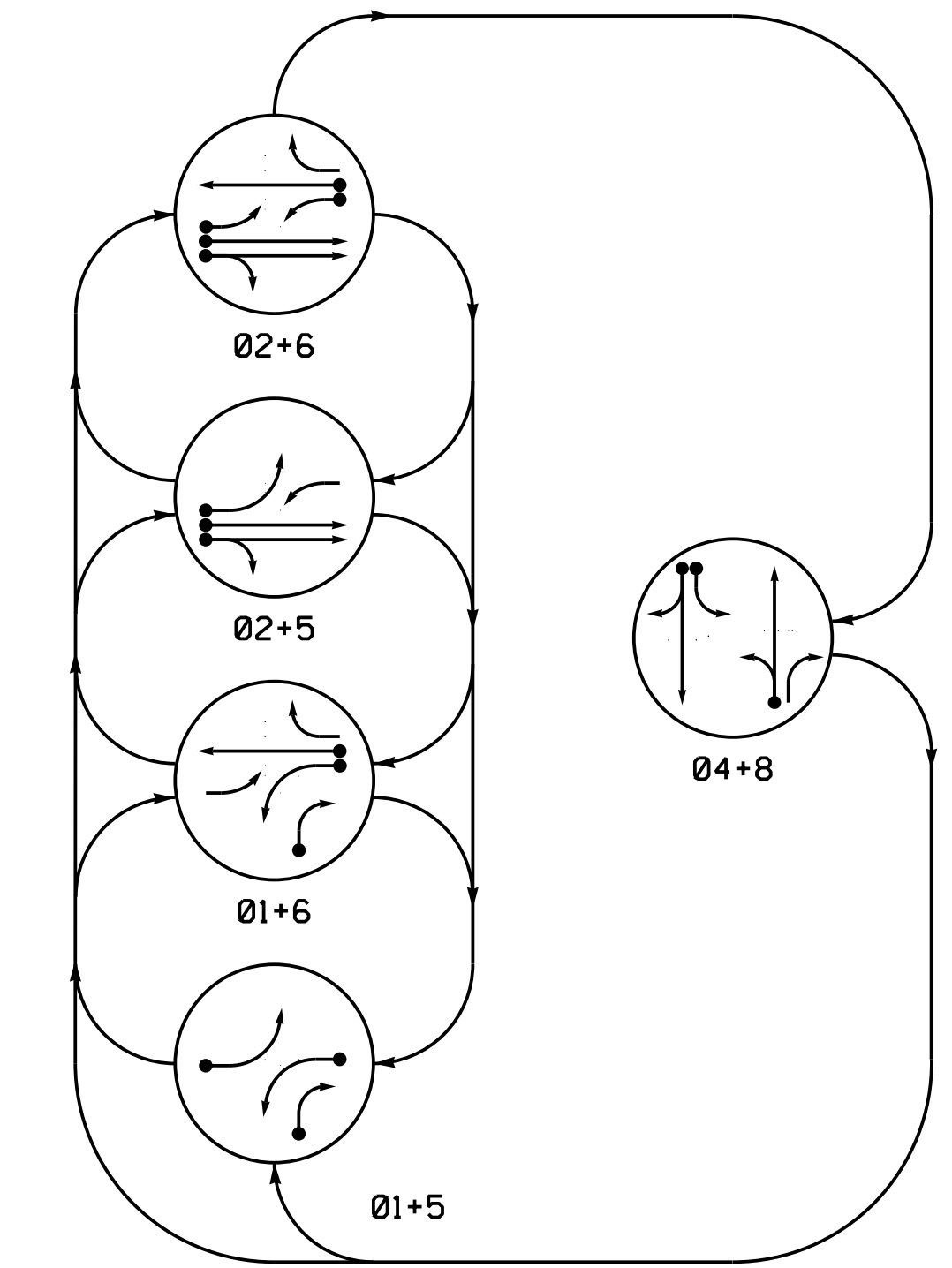
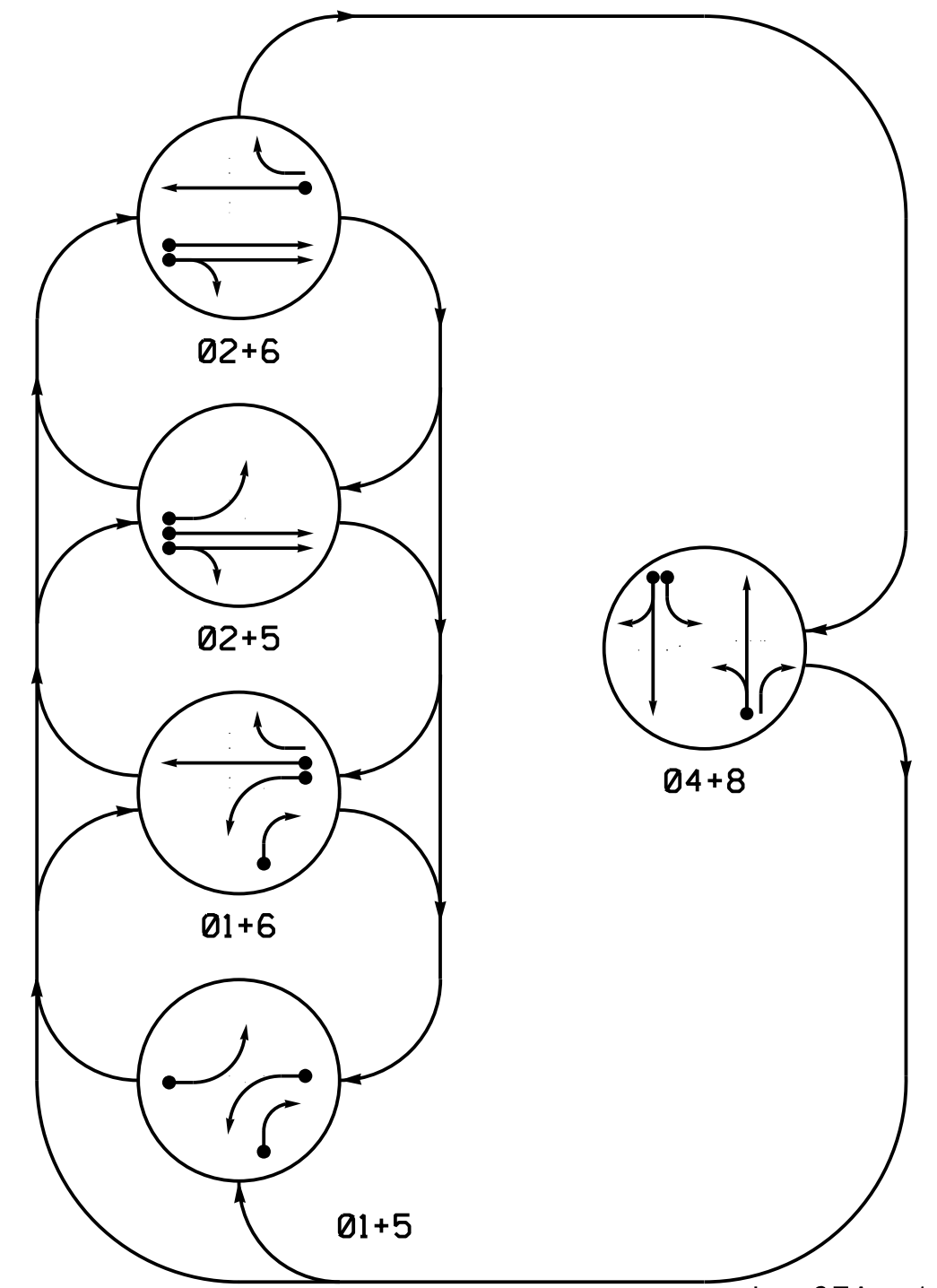


DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION

| SIGNAL FACE | PHASE | | | | | |
|-------------|-------|------|------|------|------|-----|
| | 01+5 | 01+6 | 02+5 | 02+6 | 04+8 | F L |
| 11 | - | - | - | - | - | - |
| 21,22 | R | R | G | G | R | Y |
| 41 | R | R | R | R | R | Y |
| 42,43 | R | R | R | R | G | R |
| 51 | - | - | - | - | - | - |
| 61,62 | R | G | R | G | R | Y |
| 81 | R | R | R | R | G | R |
| 82 | R | R | R | R | G | R |

ALTERNATE PHASING TABLE OF OPERATION

| SIGNAL FACE | PHASE | | | | | |
|-------------|-------|------|------|------|------|-----|
| | 01+5 | 01+6 | 02+5 | 02+6 | 04+8 | F L |
| 11 | - | - | - | - | - | - |
| 21,22 | R | R | G | G | R | Y |
| 41 | R | R | R | R | R | Y |
| 42,43 | R | R | R | R | G | R |
| 51 | - | - | - | - | - | - |
| 61,62 | R | G | R | G | R | Y |
| 81 | R | R | R | R | G | R |
| 82 | R | R | R | R | G | R |

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

| ZONE | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | DETECTOR PROGRAMMING | | | | SYSTEM LOOP | NEW CARD | |
|------|-----------|----------------------------|-------|----------|----------------------|---------|-----------|-----------------|-------------|----------|---|
| | | | | | PHASE | CALLING | EXTENSION | FULL TIME DELAY | | | |
| 1A | 6X40 | 0 | * | * | 1 | Y | Y | - | 15** | - | Y |
| 1B | 6X40 | 0 | * | * | 1 | Y | Y | - | 15 | - | Y |
| 4A | 6X40 | 0 | * | * | 4 | Y | Y | - | 3 | - | Y |
| 4B | 6X40 | 0 | * | * | 4 | Y | Y | - | 10 | - | Y |
| 5A | 6X40 | 0 | * | * | 5 | Y | Y | - | 15** | - | Y |
| 8A | 6X40 | 0 | * | * | 8 | Y | Y | - | 3 | - | Y |

* Multizone Microwave Detection
 ** Reduce delay to 3 seconds during alternate phasing.
 # Disable phase call for loop(s) during alternate phasing.

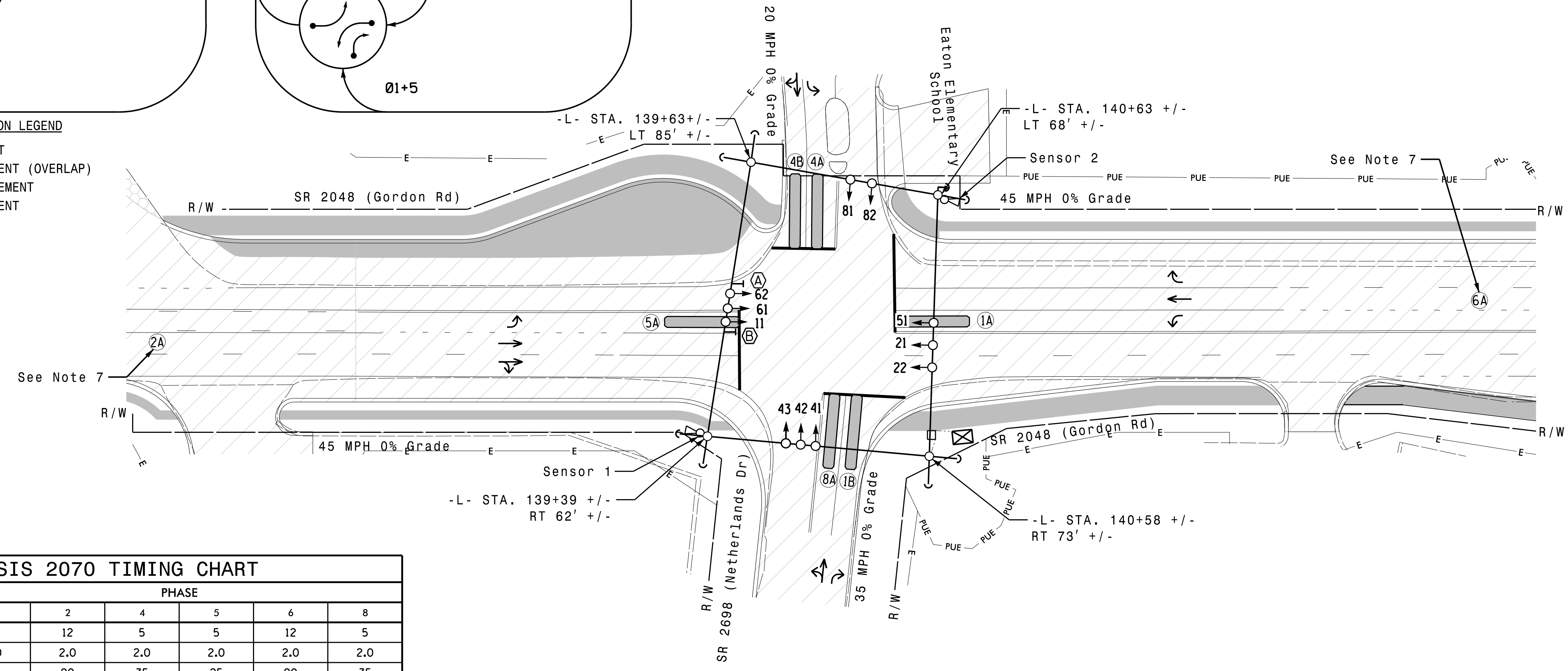
5 Phase Fully Actuated Wilmington Signal System

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phases 1 and/or 5 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as to not obstruct sight distance of vehicles turning right on red.
- The Division (City) Traffic Engineer will determine the hours of use or each phasing plan.
- This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Signal system data: Controller Asset #0847.

PHASING DIAGRAM DETECTION LEGEND

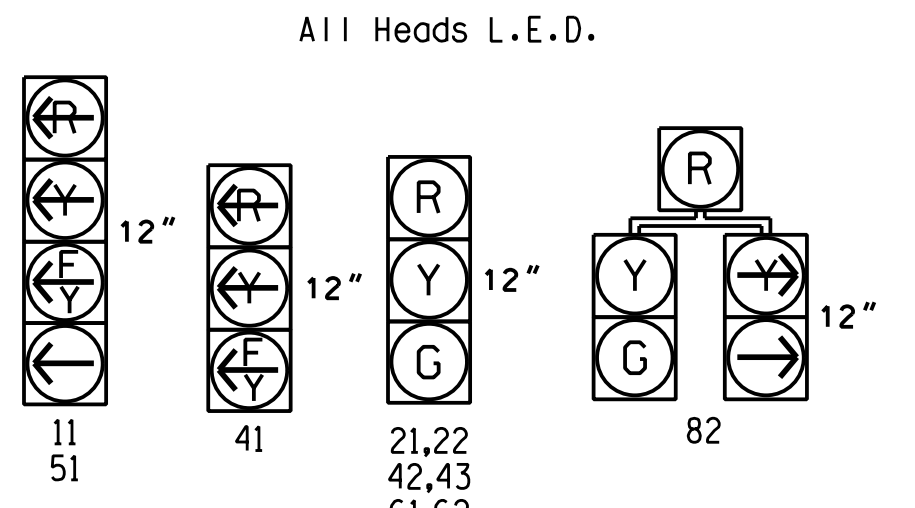
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALED MOVEMENT
- PEDESTRIAN MOVEMENT



OASIS 2070 TIMING CHART

| FEATURE | PHASE | | | | | |
|-------------------------|-------|------------|-----|-----|------------|-----|
| | 1 | 2 | 4 | 5 | 6 | 8 |
| Min Green 1 * | 5 | 12 | 5 | 5 | 12 | 5 |
| Extension 1 * | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Max Green 1 * | 25 | 90 | 35 | 25 | 90 | 35 |
| Yellow Clearance | 3.0 | 4.5 | 3.8 | 3.0 | 4.5 | 3.8 |
| Red Clearance | 1.9 | 1.3 | 2.6 | 2.3 | 1.3 | 2.6 |
| Red Revert | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Walk 1 * | - | - | - | - | - | - |
| Don't Walk 1 | - | - | - | - | - | - |
| Seconds Per Actuation * | - | - | - | - | - | - |
| Max Variable Initial * | - | - | - | - | - | - |
| Time Before Reduction * | - | - | - | - | - | - |
| Time To Reduce * | - | - | - | - | - | - |
| Minimum Gap | - | - | - | - | - | - |
| Recall Mode | - | MIN RECALL | - | - | MIN RECALL | - |
| Vehicle Call Memory | - | YELLOW | - | - | YELLOW | - |
| Dual Entry | - | - | ON | - | - | ON |
| Simultaneous Gap | ON | ON | ON | ON | ON | ON |

SIGNAL FACE I.D.



RADAR DETECTION SYSTEM

| FUNCTION | Sensor 1 | Sensor 2 |
|----------------------------------|----------|----------|
| Channel | 1 | 1 |
| Phase | 2 | 6 |
| Direction of Travel | EB | WB |
| Detection Zone (ft) | 100-600 | 100-600 |
| Enable Speed | Y | Y |
| Speed Range (mph) | 35-100 | 35-100 |
| Enable Estimated Time of Arrival | Y | Y |
| Estimated Time of Arrival (sec) | 1.0-6.5 | 2.5-6.5 |

LEGEND

| PROPOSED | EXISTING |
|--|----------|
| Traffic Signal Head | N/A |
| Modified Signal Head | N/A |
| Sign | N/A |
| Pedestrian Signal Head | N/A |
| Signal Pole with Guy | N/A |
| Signal Pole with Sidewalk Guy | N/A |
| Microwave Detection Zone | N/A |
| Out of Pavement Detector | N/A |
| Controller & Cabinet | N/A |
| Junction Box | N/A |
| 2-in Underground Conduit | N/A |
| Right of Way | N/A |
| Permanent Utility Easement | N/A |
| Construction Easement | N/A |
| Directional Arrow | N/A |
| Construction Zone | N/A |
| Wedge/Widen | N/A |
| Curb Ramp | N/A |
| Right Arrow "ONLY" Sign (R3-SR) | N/A |
| "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) | N/A |

Signal Upgrade-
 Temporary Design 1
 (Construction Phase 1)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for: **SR 2048 (Gordon Rd) at SR 2698 (Netherlands Dr) / Eaton Elementary School**

Division 3 New Hanover County Wilmington

PLAN DATE: May 2022 REVIEWED BY: N.K. Vlanich

PREPARED BY: E.E. Tiller REVIEWED BY: N.R. Simmons

SCALE: 1"=40'

5/17/2024

SIG. INVENTORY NO. 03-084711