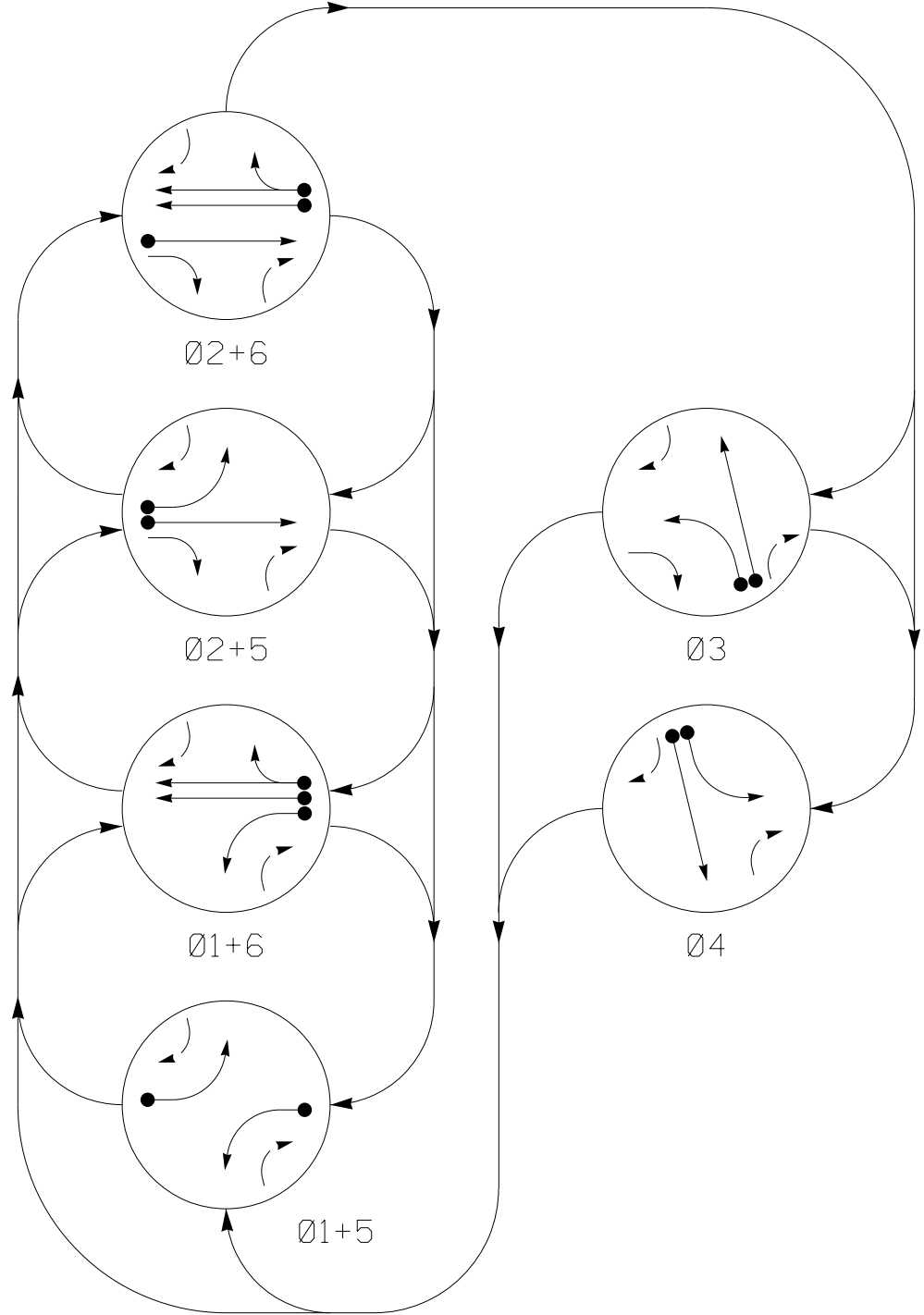


| PROJECT REFERENCE NO. | SHEET NO. |
|-----------------------|-----------|
| U-3609B               | SIG-2.0   |

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

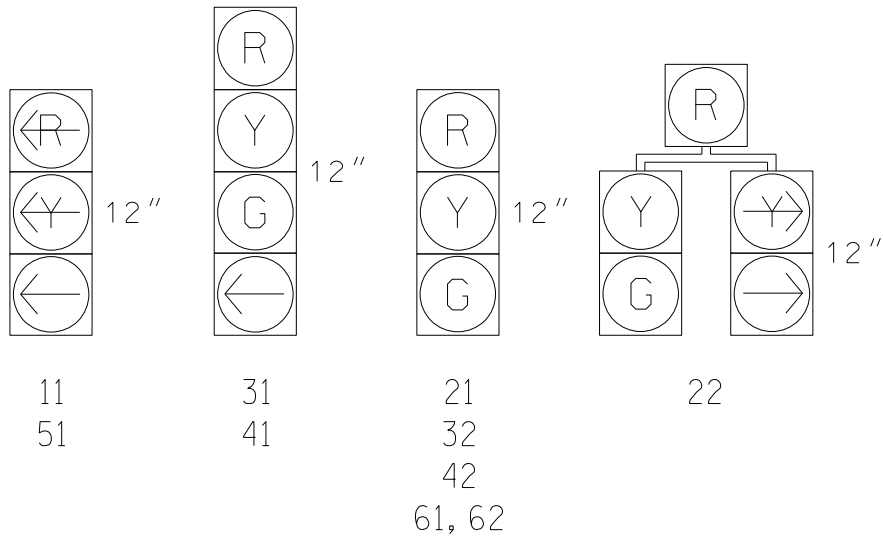
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

| SIGNAL FACE | PHASE   |         |         |         |     |     |
|-------------|---------|---------|---------|---------|-----|-----|
|             | Ø 1 + 5 | Ø 1 + 6 | Ø 2 + 5 | Ø 2 + 6 | Ø 3 | Ø 4 |
| 11          | ←       | ←       | ←       | ←       | ←   | ←   |
| 21          | R       | R       | G       | G       | R   | R   |
| 22          | R       | R       | G       | G       | R   | R   |
| 31          | R       | R       | R       | R       | G   | R   |
| 32          | R       | R       | R       | R       | G   | R   |
| 41          | R       | R       | R       | R       | R   | G   |
| 42          | R       | R       | R       | R       | R   | G   |
| 51          | ←       | ←       | ←       | ←       | ←   | ←   |
| 61, 62      | R       | G       | R       | G       | R   | R   |

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

| DETECTOR |           |                            |       | PROGRAMMING |            |            |             |        |                    |                             |
|----------|-----------|----------------------------|-------|-------------|------------|------------|-------------|--------|--------------------|-----------------------------|
| LOOP     | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP    | CALL PHASE | DELAY TIME | EXTEND TIME | EXTEND | ADDED INITIAL CALL | DELAY DURING GREEN NEW CARD |
| 1A       | 6X40      | 0                          | *     | *           | 1          | 3.0        | -           | X      | -                  | *                           |
| 3A       | 6X40      | 0                          | *     | *           | 3          | 3.0        | -           | X      | -                  | *                           |
| 3B       | 6X40      | 0                          | *     | *           | 3          | -          | -           | X      | -                  | *                           |
| 4A       | 6X40      | 0                          | *     | *           | 4          | 3.0        | -           | X      | -                  | *                           |
| 4B       | 6X40      | 0                          | *     | *           | 4          | -          | -           | X      | -                  | *                           |
| 5A       | 6X40      | 0                          | *     | *           | 5          | 3.0        | -           | X      | -                  | *                           |

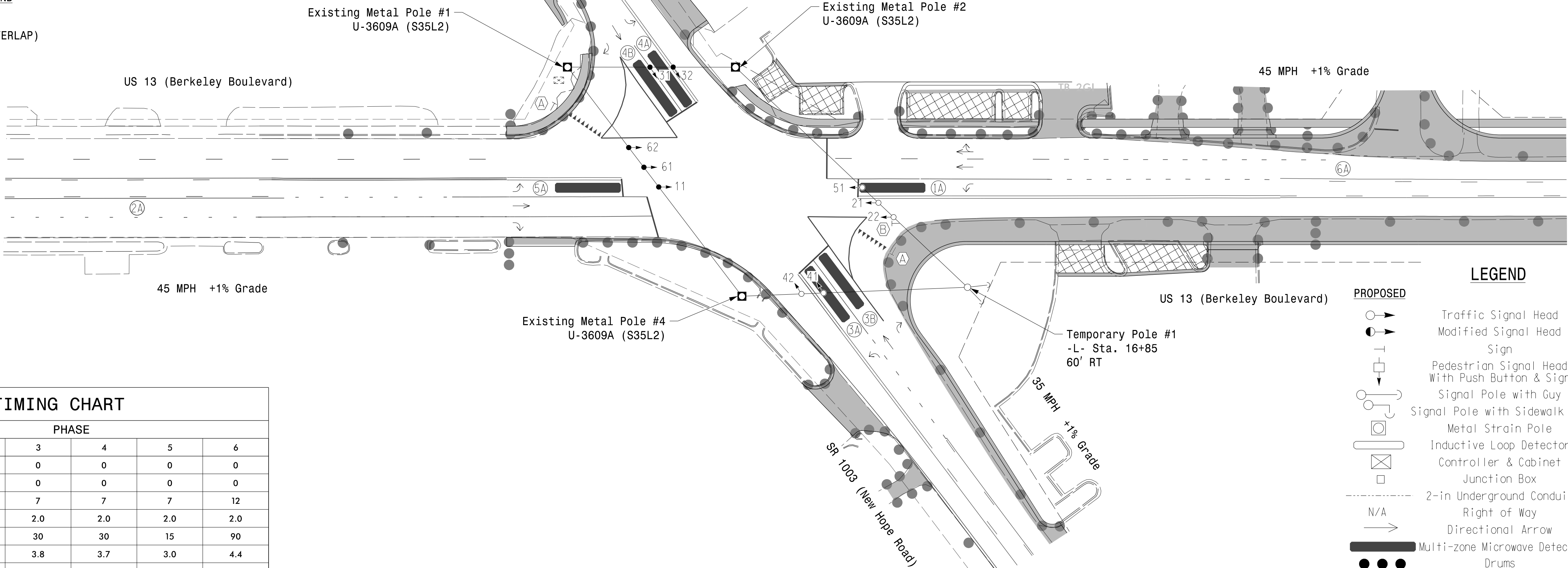
\* Multi-zone Microwave Detection

Multi-zone Microwave Detection

| FUNCTION                         | 2A Sensor 1 | 6A Sensor 2 |
|----------------------------------|-------------|-------------|
| Channel                          | 1           | 1           |
| Phase                            | 2           | 6           |
| Direction of Travel              | NB          | SB          |
| Type                             | Priority    | Priority    |
| Level                            | 1           | 1           |
| Detection Zone (ft)              | 100-500     | 100-500     |
| Enable Speed                     | Y           | Y           |
| Speed Range (mph)                | 35-100      | 35-100      |
| Enable Estimated Time of Arrival | Y           | Y           |
| Estimated Time of Arrival (sec)  | 2.5-6.5     | 2.5-6.5     |

6 Phase  
Fully Actuated  
(Goldsboro 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.
- Phase 1 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Field adjust temporary pole as needed.
- This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.



MAXTIME TIMING CHART

| FEATURE                 | PHASE |            |     |     |     |            |
|-------------------------|-------|------------|-----|-----|-----|------------|
|                         | 1     | 2          | 3   | 4   | 5   | 6          |
| Walk *                  | 0     | 0          | 0   | 0   | 0   | 0          |
| Ped Clear               | 0     | 0          | 0   | 0   | 0   | 0          |
| Min Green *             | 7     | 12         | 7   | 7   | 7   | 12         |
| Passage *               | 2.0   | 2.0        | 2.0 | 2.0 | 2.0 | 2.0        |
| Max I *                 | 30    | 90         | 30  | 30  | 15  | 90         |
| Yellow Change           | 3.0   | 4.4        | 3.8 | 3.7 | 3.0 | 4.4        |
| Red Clear               | 2.4   | 1.5        | 2.1 | 2.4 | 2.6 | 1.5        |
| Added Initial *         | -     | -          | -   | -   | -   | -          |
| Maximum Initial *       | -     | -          | -   | -   | -   | -          |
| Time Before Reduction * | -     | -          | -   | -   | -   | -          |
| Time To Reduce *        | -     | -          | -   | -   | -   | -          |
| Minimum Gap             | -     | -          | -   | -   | -   | -          |
| Advance Walk            | -     | -          | -   | -   | -   | -          |
| Non Lock Detector       | X     | -          | X   | X   | X   | -          |
| Vehicle Recall          | -     | MIN RECALL | -   | -   | -   | MIN RECALL |
| Dual Entry              | -     | -          | -   | -   | -   | -          |

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

LEGEND

- | PROPOSED                                       | EXISTING |
|------------------------------------------------|----------|
| Traffic Signal Head                            | N/A      |
| Modified Signal Head                           | N/A      |
| Sign                                           | N/A      |
| Pedestrian Signal Head With Push Button & Sign | N/A      |
| Signal Pole with Guy                           | N/A      |
| Signal Pole with Sidewalk Guy                  | N/A      |
| Metal Strain Pole                              | N/A      |
| Inductive Loop Detector                        | N/A      |
| Controller & Cabinet                           | N/A      |
| Junction Box                                   | N/A      |
| 2-in Underground Conduit                       | N/A      |
| Right of Way                                   | N/A      |
| Directional Arrow                              | N/A      |
| Multi-zone Microwave Detection                 | N/A      |
| Drums                                          | N/A      |
| "YIELD" Sign (R1-2)                            | N/A      |
| Right Turn "ONLY" Sign (R3-5R)                 | N/A      |

Signal Upgrade  
Temporary Design 1 -TMP Phase I Steps 1 & 2  
-TMP Phase II

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**Stantec**

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Prepared for the Offices of:

Transportation Mobility and Safety Division  
NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
Signal Design Section

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE  
0 40  
1" = 40'

US 13 (Berkeley Boulevard)  
at  
SR 1003 (New Hope Road)

Division 4 Wayne County Goldsboro

PLAN DATE: March 2025 REVIEWED BY: J. Galloway  
PREPARED BY: J. Hambricht REVIEWED BY: R M Muncey

REVISIONS INIT. DATE

NORTH CAROLINA  
PROFESSIONAL  
SEAL  
029904  
ENGINEER  
JASON P. GALLOWAY

Signed by: Jason Galloway 8/18/2025  
DATE

SIG. INVENTORY NO. 04-0367T1