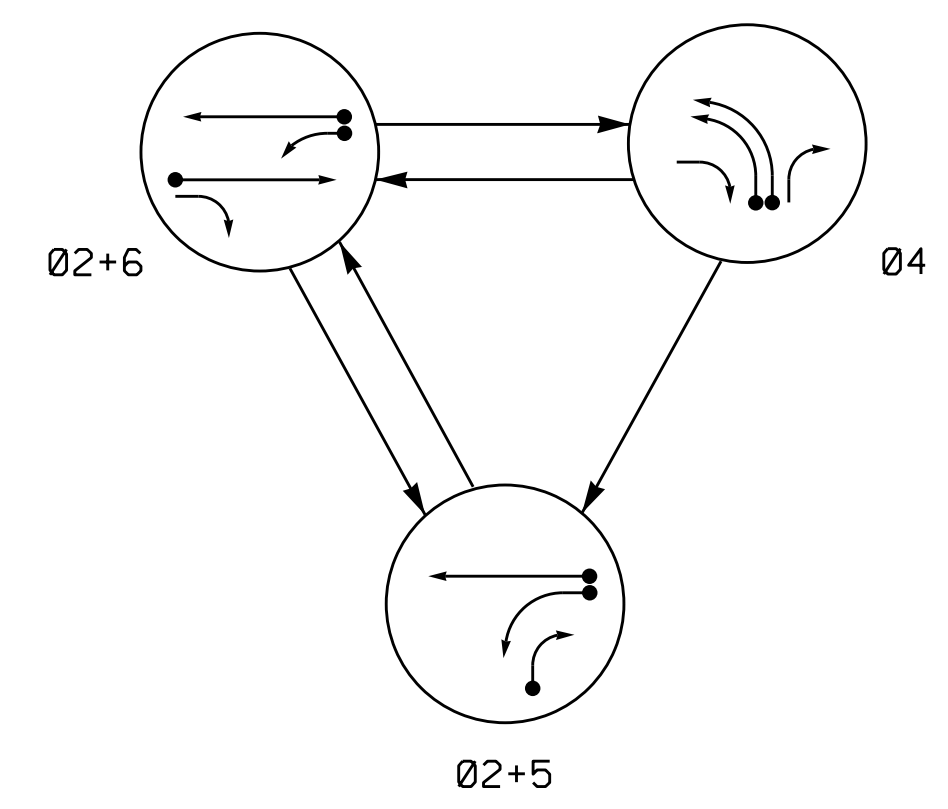
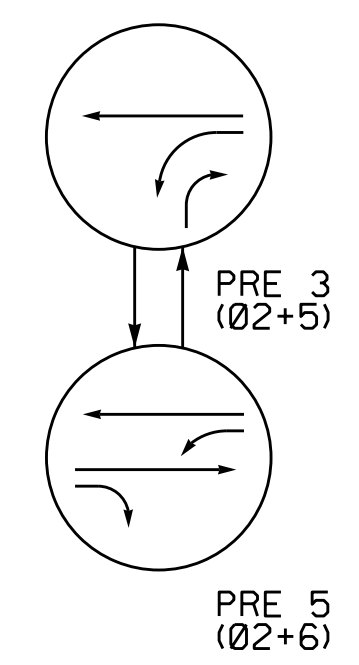


**PHASING DIAGRAM**



**EV PREEMPT PHASES**  
(Medium Priority)



**TABLE OF OPERATION**

| SIGNAL FACE | PHASE |      |    |       |       |       |
|-------------|-------|------|----|-------|-------|-------|
|             | 02+5  | 02+6 | 04 | PRE 3 | PRE 5 | FLUSH |
| 21, 22      | G     | G    | R  | G     | G     | Y     |
| 41, 42      | R     | R    | L  | R     | R     | R     |
| 43          | L     | R    | L  | R     | R     | R     |
| 51          | L     | R    | R  | L     | R     | Y     |
| 61          | R     | G    | R  | R     | G     | Y     |
| 62          | R     | G    | R  | R     | G     | Y     |

**ASC/3 DETECTOR INSTALLATION CHART**

| ZONE   | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | PROGRAMMING |         |             |            |                   |      |             |          |
|--------|-----------|----------------------------|-------|----------|-------------|---------|-------------|------------|-------------------|------|-------------|----------|
|        |           |                            |       |          | PHASE       | CALLING | EXTEND TIME | DELAY TIME | USE ADDED INITIAL | TYPE | SYSTEM LOOP | NEW CARD |
| 2A/S13 | 6X6       | 300                        | *     | *        | 2           | Yes     | -           | -          | X                 | N    | X           | *        |
| 4A     | 6X40      | 0                          | *     | *        | 4           | Yes     | -           | 3          | -                 | S    | -           | *        |
| 4B     | 6X40      | 0                          | *     | *        | 4           | Yes     | -           | -          | -                 | S    | -           | *        |
| 5A     | 6X40      | 0                          | *     | *        | 5           | Yes     | -           | 15         | -                 | S    | -           | *        |
| 5B     | 6X40      | 0                          | *     | *        | 2           | Yes     | -           | 3          | -                 | G    | -           | *        |
| 6A/S11 | 6X6       | 300                        | *     | *        | 6           | Yes     | -           | -          | X                 | N    | X           | *        |
| S12    | 6x6       | 300                        | *     | *        | -           | No      | -           | -          | -                 | N    | X           | *        |
| S15    | 6x6       | +145                       | *     | *        | -           | No      | -           | -          | -                 | N    | X           | *        |
| S16    | 6x6       | +145                       | *     | *        | -           | No      | -           | -          | -                 | N    | X           | *        |

3 Phase Fully Actuated w/ Emergency Vehicle Preemption SR 1007 (Mebane Oaks Rd) CLS Signal System #: 10705

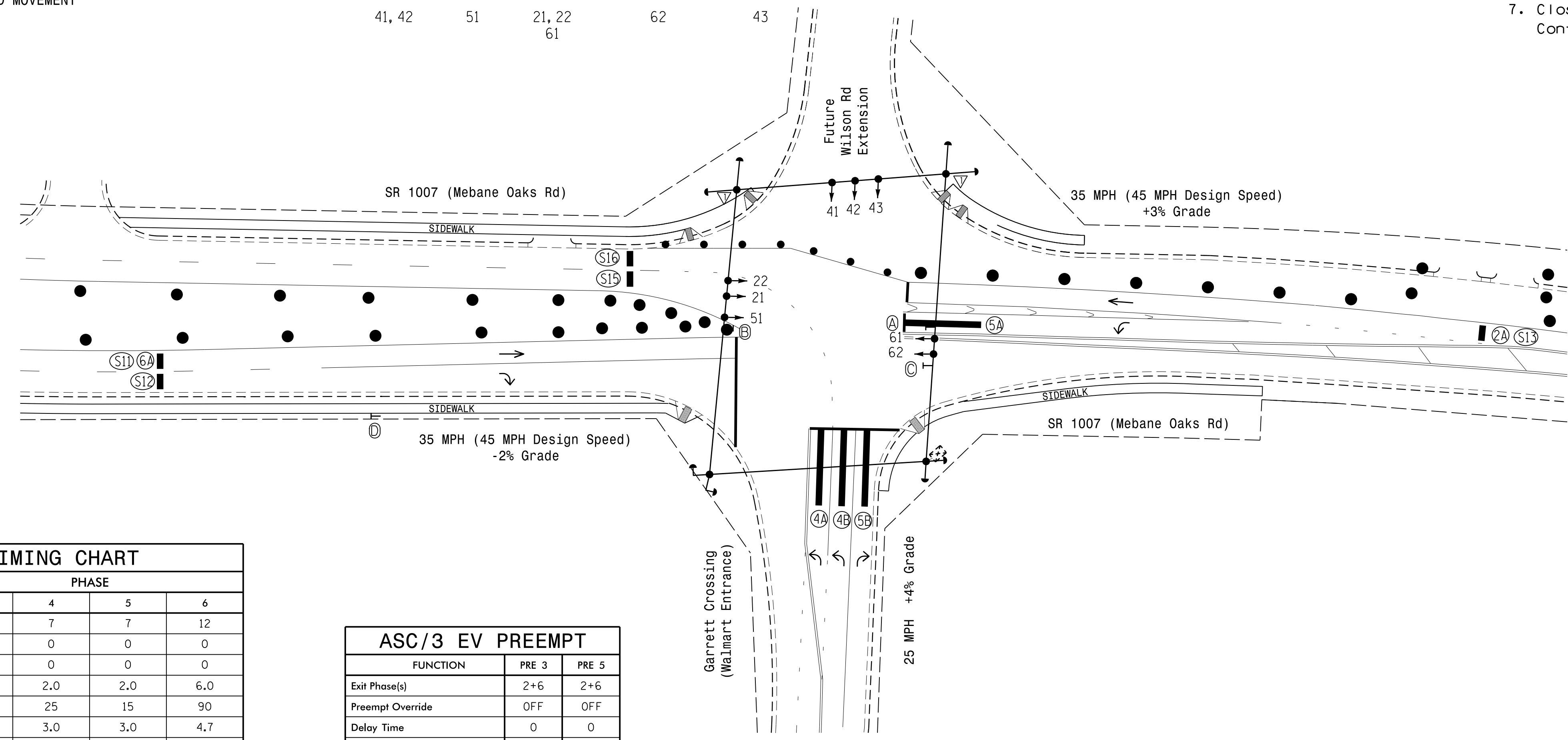
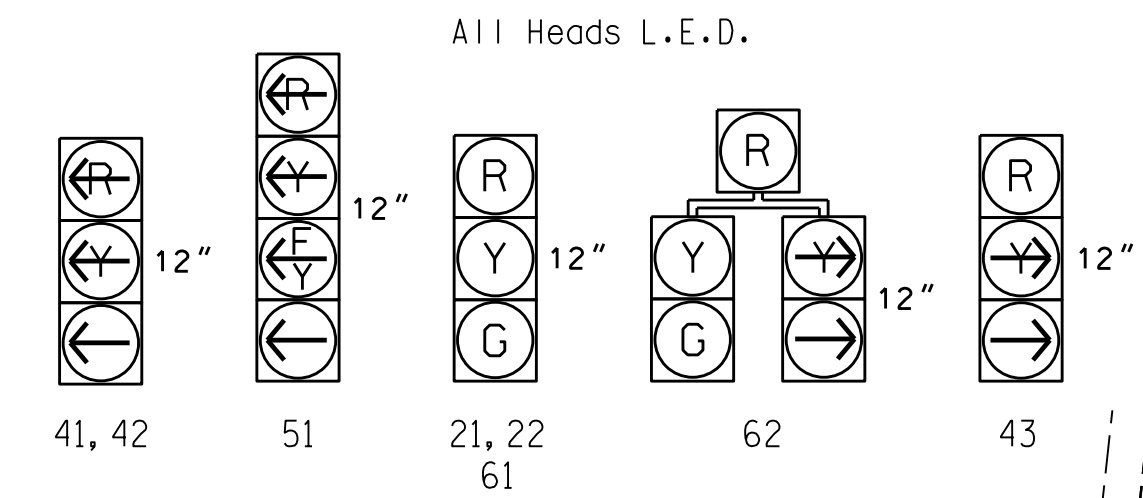
**NOTES**

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 5 may be lagged.
- Set all detector units to presence mode.
- This intersection features a GPS Emergency Vehicle Preemption system.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Controller Asset #: 2060.

**PHASING DIAGRAM DETECTION LEGEND**

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

**SIGNAL FACE I.D.**



**ASC/3 TIMING CHART**

| FEATURE                 | PHASE       |     |     |             |
|-------------------------|-------------|-----|-----|-------------|
|                         | 2           | 4   | 5   | 6           |
| Min Green *             | 12          | 7   | 7   | 12          |
| Walk *                  | 0           | 0   | 0   | 0           |
| Ped Clear               | 0           | 0   | 0   | 0           |
| Veh. Extension *        | 6.0         | 2.0 | 2.0 | 6.0         |
| Max 1 *                 | 90          | 25  | 15  | 90          |
| Yellow                  | 4.7         | 3.0 | 3.0 | 4.7         |
| Red Clear               | 1.3         | 3.3 | 2.3 | 1.3         |
| Red Revert              | 2.0         | 2.0 | 2.0 | 2.0         |
| Actuations B4 Add *     | 0           | -   | -   | 0           |
| Seconds /Actuation *    | 2.5         | -   | -   | 2.5         |
| Max Initial *           | 34          | -   | -   | 34          |
| Time Before Reduction * | 15          | -   | -   | 15          |
| Time To Reduce *        | 30          | -   | -   | 30          |
| Minimum Gap             | 3.0         | -   | -   | 3.0         |
| Locking Detector        | X           | -   | -   | X           |
| Recall Position         | VEH. RECALL | -   | -   | VEH. RECALL |
| Dual Entry              | -           | -   | -   | -           |
| Simultaneous Gap        | X           | X   | X   | X           |

**ASC/3 EV PREEMPT**

| FUNCTION                     | PRE 3 | PRE 5 |
|------------------------------|-------|-------|
| Exit Phase(s)                | 2+6   | 2+6   |
| Preempt Override             | OFF   | OFF   |
| Delay Time                   | 0     | 0     |
| Ped Clear Through Yellow     | N     | N     |
| Terminate Phases             | N     | N     |
| Entrance Walk                | 255*  | 255*  |
| Entrance Ped Clear           | 255*  | 255*  |
| Entrance Min Green           | 1     | 1     |
| Entrance Yellow Clear        | 25.5* | 25.5* |
| Entrance Red Clear           | 25.5* | 25.5* |
| Min Dwell Time               | 7     | 7     |
| Preempt Input Extension Time | 2     | 2     |
| Preempt Max Time             | 120   | 120   |
| Exit Yellow Clear            | 25.5* | 25.5* |
| Exit Red Clear               | 25.5* | 25.5* |

**LEGEND**

| PROPOSED                                  | EXISTING                                  |
|---|---|
| Traffic Signal Head                       | Traffic Signal Head                       |
| Signal Pole with Guy                      | Signal Pole with Guy                      |
| Signal Pole with Sidewalk Guy             | Signal Pole with Sidewalk Guy             |
| Controller & Cabinet                      | Controller & Cabinet                      |
| Junction Box                              | Junction Box                              |
| 2-in Underground Conduit                  | 2-in Underground Conduit                  |
| Right of Way                              | Right of Way                              |
| Directional Arrow                         | Directional Arrow                         |
| Construction Zone Drums                   | Construction Zone Drums                   |
| Construction Zone                         | Construction Zone                         |
| Video Detection Area                      | Video Detection Area                      |
| Curb Ramp                                 | Curb Ramp                                 |
| No U Turn Sign (R3-4)                     | No U Turn Sign (R3-4)                     |
| Left Arrow "ONLY" Sign (R3-5L)            | Left Arrow "ONLY" Sign (R3-5L)            |
| Right Arrow "ONLY" Sign (R3-5R)           | Right Arrow "ONLY" Sign (R3-5R)           |
| "RIGHT LANE MUST TURN RIGHT" Sign (R3-7R) | "RIGHT LANE MUST TURN RIGHT" Sign (R3-7R) |

\* 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.

\* Time defaults to time used for phase during normal operation

**Signal Upgrade - Temporary Design 3 (TMP Phase III)**

SR 1007 (Mebane Oaks Rd) at Garrett Crossing (Walmart Entrance)

Division 7 Alamance County Mebane

PLAN DATE: November 2019 REVIEWED BY: Z. "Gavin" Teng

PREPARED BY: Z. "Gavin" Teng REVIEWED BY:

REVISIONS

SCALE 0 40 1"=40'

DATE 6/10/2021

18064862744494

REVISION SEAL

PROFESSOR OF ENGINEERING

SEAL 026486

ROBERT J. ZIEGLER

TRANSPORTATION MOBILITY AND SAFETY DIVISION

750 N. Greenfield Pkwy, Garner, NC 27529

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Not a certified document as to the Original Document but Only as to the Revisions - This document originally Issued and sealed by Zhaolong Teng, PE, #032179, on 12/17/2019. This document is only certified as to the revisions.

SIG. INVENTORY NO. 07-2060T3

10-JUNE-2021 12:53  
 S:\PROJECTS\18064862744494\SIGNAL\Signal\Section\Central\_Regional\iv 741-5711-007-2060 rev072060T3.sld\_rev\_20210610.dgn  
 rz1:tenbo