

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

| SIGNAL<br>FACE | PHASE |       |    |    |       |
|----------------|-------|-------|----|----|-------|
|                | 1 + 6 | 2 + 6 | 3  | 4  | FLASH |
| 11             | ←     | →     | →  | →  | →     |
| 21             | →     | →     | →  | →  | →     |
| 22,23          | →     | →     | →  | →  | →     |
| 31,32          | →     | →     | ←  | →  | →     |
| 41             | →     | →     | →  | →  | →     |
| 42             | →     | →     | →  | →  | →     |
| 61,62          | →     | →     | →  | →  | →     |
| P21,P22        | DW    | W     | DW | DW | DRK   |
| P31,P32        | DW    | DW    | W  | DW | DRK   |

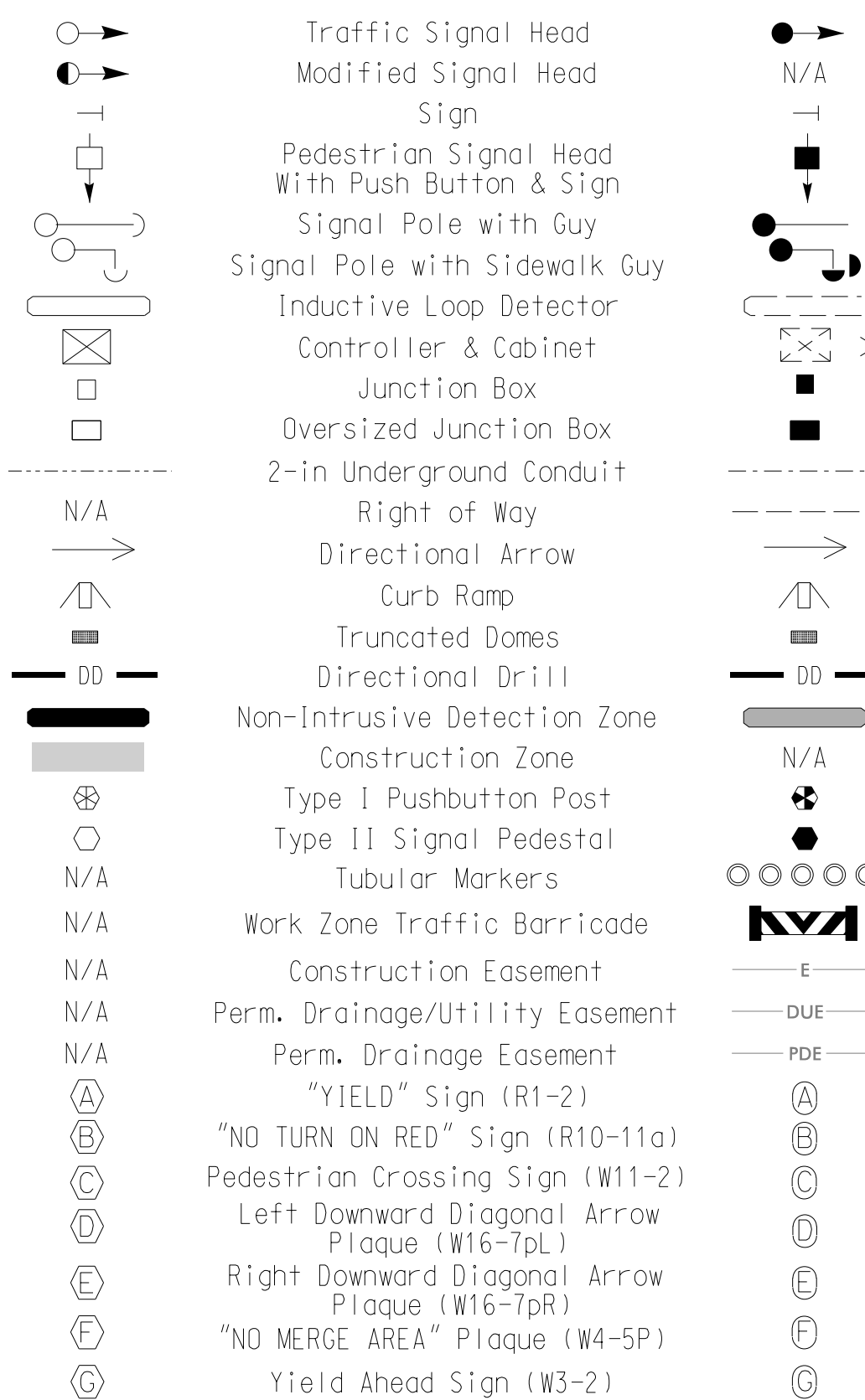
| DETECTOR |           |                            |       |          | PROGRAMMING |            |             |        |               |      |                    | NEW CARD |
|----------|-----------|----------------------------|-------|----------|-------------|------------|-------------|--------|---------------|------|--------------------|----------|
| LOOP     | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | CALL PHASE  | DELAY TIME | EXTEND TIME | EXTEND | ADDED INITIAL | CALL | DELAY DURING GREEN |          |
| 1A       | *         | 0                          | *     | X        | 1           | -          | -           | X      | -             | X    | -                  | *        |
| 2A       | *         | 70                         | *     | -        | 2           | -          | -           | X      | -             | X    | -                  | *        |
| 2B       | *         | 0                          | *     | -        | 2           | -          | -           | X      | -             | X    | -                  | *        |
| 3A       | *         | 0                          | *     | X        | 3           | -          | -           | X      | -             | X    | -                  | *        |
| 3B       | *         | 0                          | *     | X        | 3           | -          | -           | X      | -             | X    | -                  | *        |
| 4A       | *         | 0                          | *     | -        | 4           | 5.0        | -           | X      | -             | X    | -                  | *        |
| 6A       | *         | 70                         | *     | X        | 6           | -          | -           | X      | -             | X    | -                  | *        |
| 6B       | *         | 70                         | *     | X        | 6           | -          | -           | X      | -             | X    | -                  | *        |

\* Multi-Zone Microwave Detection Zone

## NOTES

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 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. Remove existing Yield Ahead Sign.
9. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

PROPOSED



EXISTING

| FEATURE                 | PHASE |            |     |     |            |
|-------------------------|-------|------------|-----|-----|------------|
|                         | 1     | 2          | 3   | 4   | 6          |
| Walk *                  | –     | 13         | 14  | –   | –          |
| Ped Clear               | –     | 18         | 15  | –   | –          |
| Min Green *             | 7     | 10         | 7   | 7   | 10         |
| Passage *               | 2.0   | 3.0        | 2.0 | 2.0 | 3.0        |
| Max 1 *                 | 25    | 70         | 50  | 20  | 85         |
| Yellow Change           | 3.0   | 4.1        | 4.2 | 3.1 | 4.1        |
| Red Clear               | 2.9   | 3.7        | 3.3 | 4.0 | 3.7        |
| Added Initial *         | –     | –          | –   | –   | –          |
| Maximum Initial *       | –     | –          | –   | –   | –          |
| Time Before Reduction * | –     | –          | –   | –   | –          |
| Time To Reduce *        | –     | –          | –   | –   | –          |
| Minimum Gap             | –     | –          | –   | –   | –          |
| Advance Walk            | –     | 6          | 7   | –   | –          |
| Non Lock Detector       | 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.

| Prepared for the Offices of:<br><br>TRANSPORTATION<br>DEPARTMENT OF TRANSPORTATION<br>STATE OF NORTH CAROLINA<br>Signal Design Section                                                                                                                                                                                                                                                                                                                                                                                                                         | <h2 style="margin: 0;">US 23 Bus./NC 107 (Main Street)<br/>at<br/>US 23 Bus. (Asheville Highway)/<br/>SR 1355 (Sunrise Park)</h2> | SEAL<br><br><br>SEAL<br>052936<br>ENGINEER<br>BRITTANY N. GROOME |          |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Division 14      Jackson County      Sylva                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                   |                                                                                                                                                       |          |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PLAN DATE:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | August 2025                                                                                                                       | REVIEWED BY:                                                                                                                                          |          |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ZM Esposito                                                                                                                       |                                                                                                                                                       |          |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PREPARED BY:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DJ White                                                                                                                          | REVIEWED BY:                                                                                                                                          |          |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | BN Groome                                                                                                                         |                                                                                                                                                       |          |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">REVISONS</th> <th style="width: 20%;">INIT.</th> <th style="width: 20%;">DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table> |                                                                                                                                   |                                                                                                                                                       | REVISONS | INIT. | DATE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| REVISONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | INIT.                                                                                                                             | DATE                                                                                                                                                  |          |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| <div style="display: flex; align-items: center;"> <div style="flex: 1;">  </div> <div style="flex: 1;"> <p style="text-align: center;">SCALE</p> <div style="display: flex; align-items: center;"> <span style="font-size: 1.2em; margin-right: 10px;">0</span>  <span style="margin-left: 10px;">30</span> </div> <p style="text-align: center; font-weight: bold;">1"=30'</p> </div> </div>                                                                             |                                                                                                                                   |                                                                                                                                                       |          |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 750 N.Greenfield Pkwy,Garner,NC 27529                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                   |                                                                                                                                                       |          |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <div style="display: flex; justify-content: space-between;"> <div>           Signed by<br/> <br/>           Brittany Groome         </div> <div>           8/26/2025<br/> <small>DATE</small> </div> </div>                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                   |                                                                                                                                                       |          |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <div style="display: flex; justify-content: space-between;"> <div>           TDRSAGE/YDRSAGE<br/>           _____         </div> <div>           DATE<br/>           _____         </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                   |                                                                                                                                                       |          |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <div style="display: flex; justify-content: space-between;"> <div>SIG. INVENTORY NO.</div> <div>I4-0397T</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                   |                                                                                                                                                       |          |       |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

DOCUMENT NOT CONSIDERED  
FINAL UNLESS ALL  
SIGNATURES COMPLETED

SF AI

US 23 Bus./NC 107 (Main Street)  
at  
US 23 Bus. (Asheville Highway)/  
SR 1355 (Sunrise Park)

Division 14      Jackson County      Sylva

|            |             |              |             |
|------------|-------------|--------------|-------------|
| PLAN DATE: | August 2025 | REVIEWED BY: | ZM Esposito |
|------------|-------------|--------------|-------------|

|    |                       |                        |
|----|-----------------------|------------------------|
| 29 | PREPARED BY: DJ White | REVIEWED BY: BN Groome |
|----|-----------------------|------------------------|

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

[illegible]

—Signed by

Signed By: Brittany A. Grooms 8/26/2025

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SIG. INVENTORY NO. 14-0397T2