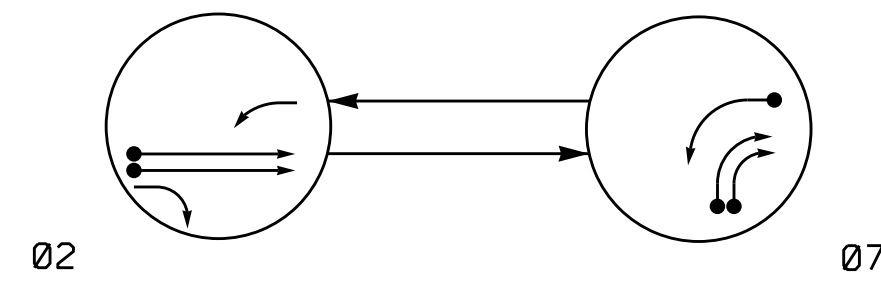


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

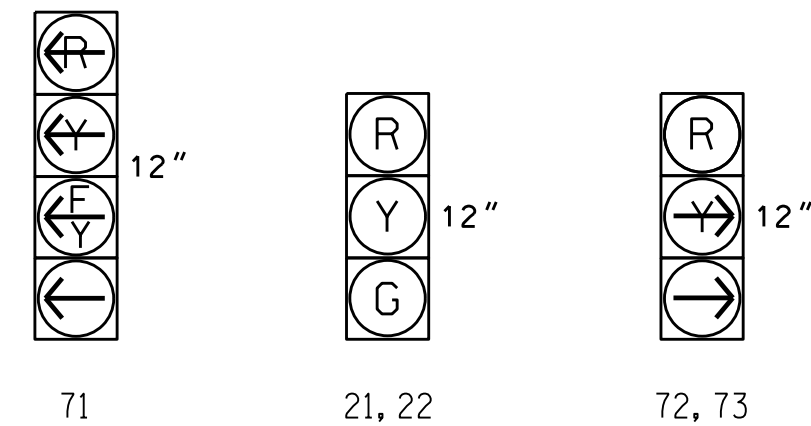
- → DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- ⚡ PEDESTRIAN MOVEMENT

TABLE OF OPERATION

| SIGNAL FACE | PHASE |     |     |
|-------------|-------|-----|-----|
|             | 02    | 07  | F L |
| 21, 22      | G     | R   | Y   |
| 71          | F     | --- | --- |
| 72, 73      | R     | --- | R   |

SIGNAL FACE I.D.

All Heads L.E.D.

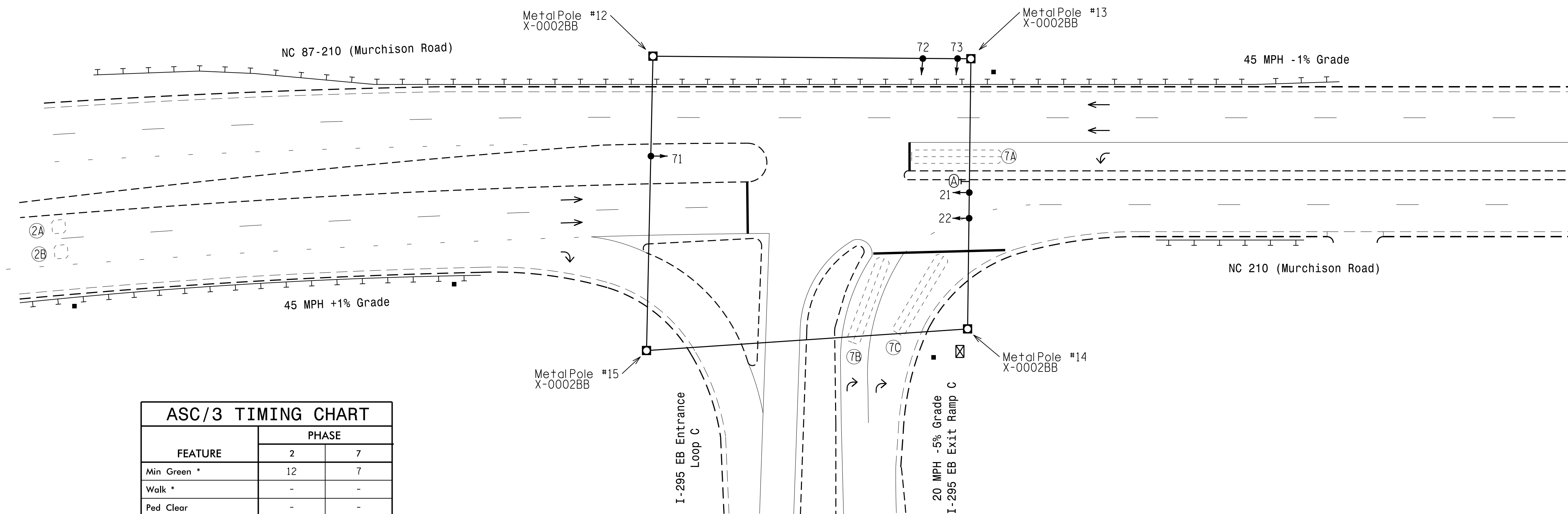


| ASC/3 DETECTOR INSTALLATION CHART |           |                            |       |          |             |         |             |            |      |             |
|-----------------------------------|-----------|----------------------------|-------|----------|-------------|---------|-------------|------------|------|-------------|
| LOOP                              | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | PROGRAMMING |         |             |            |      |             |
|                                   |           |                            |       |          | PHASE       | CALLING | EXTEND TIME | DELAY TIME | TYPE | SYSTEM LOOP |
| 2A                                | 6X6       | 300                        | 5     | -        | 2           | Yes     | -           | -          | N    | - X         |
| 2B                                | 6X6       | 300                        | 5     | -        | 2           | Yes     | -           | -          | N    | - X         |
| 7A                                | 6X40      | 0                          | 2-4-2 | -        | 7           | Yes     | -           | 15         | S    | - X         |
| 7B                                | 6X40      | 0                          | 2-4-2 | -        | 7           | Yes     | -           | 10         | S    | - X         |
| 7C                                | 6X40      | 0                          | 2-4-2 | -        | 7           | Yes     | -           | 10         | S    | - X         |

2 Phase Fully Actuated Fayetteville Signal System

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



ASC/3 TIMING CHART

| FEATURE                 | PHASE       |     |
|-------------------------|-------------|-----|
|                         | 2           | 7   |
| Min Green *             | 12          | 7   |
| Walk *                  | -           | -   |
| Ped Clear               | -           | -   |
| Veh. Extension *        | 6.0         | 2.0 |
| Max 1 *                 | 90          | 30  |
| Yellow                  | 4.4         | 3.1 |
| Red Clear               | 1.3         | 2.6 |
| Red Revert              | -           | -   |
| Actuations B4 Add *     | 0           | -   |
| Seconds / Actuation *   | 1.0         | -   |
| Max Initial *           | 34          | -   |
| Time Before Reduction * | 15          | -   |
| Time To Reduce *        | 45          | -   |
| Minimum Gap             | 3.0         | -   |
| Locking Detector        | X           | -   |
| Recall Position         | VEH. RECALL | -   |
| Dual Entry              | -           | -   |
| Simultaneous Gap        | 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.

LEGEND

- | PROPOSED   | EXISTING   |
|--|--|
| ○ → Traffic Signal Head                          | ● → N/A  |
| ● → Modified Signal Head                         | □ → N/A  |
| ⊥ Sign   | ⊥ Sign   |
| ⊥ Pedestrian Signal Head With Push Button & Sign | ⊥ Pedestrian Signal Head With Push Button & Sign |
| ⊥ Signal Pole with Guy                           | ⊥ Signal Pole with Guy                           |
| ⊥ Signal Pole with Sidewalk Guy                  | ⊥ Signal Pole with Sidewalk Guy                  |
| ⊥ Metal Strain Pole                              | ⊥ Metal Strain Pole                              |
| ⊥ Inductive Loop Detector                        | ⊥ Inductive Loop Detector                        |
| ⊥ Controller & Cabinet                           | ⊥ Controller & Cabinet                           |
| ⊥ Junction Box                                   | ⊥ Junction Box                                   |
| --- 2-in Underground Conduit                     | --- 2-in Underground Conduit                     |
| N/A Right of Way                                 | N/A Right of Way                                 |
| N/A Guardrail                                    | N/A Guardrail                                    |
| → Directional Arrow                              | → Directional Arrow                              |
| (A) No Left Turn Sign (R3-2)                     | (A) No Left Turn Sign (R3-2)                     |

Signal Upgrade

Prepared In the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

NC 87-210 (Murchison Road) at I-295 EB Ramp/Loop C

Division 6 Cumberland County Fayetteville

PLAN DATE: May 2016 REVIEWED BY: JPG

PREPARED BY: Devin Smith/emm REVIEWED BY:

REVISIONS: \_\_\_\_\_ INIT. DATE

DocuSigned by: Jason P. Gallaway 8/23/2016

SCALE: 0 30 1"=30'

SIG. INVENTORY NO. 06-1303

23-AUG-2016 15:10  
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