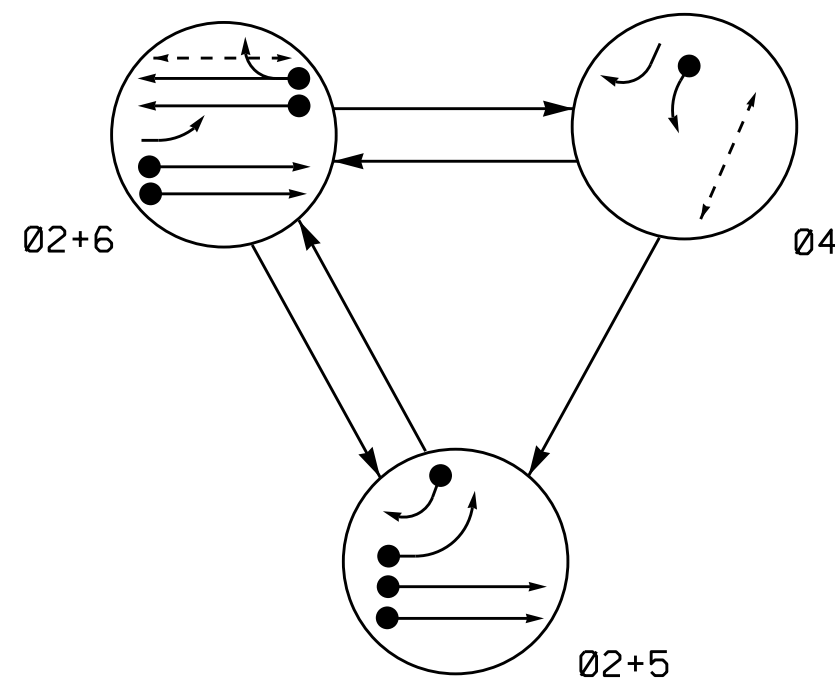


PHASING DIAGRAM



| SIGNAL FACE | PHASE |       |     |             |
|-------------|-------|-------|-----|-------------|
|             | Ø 2+5 | Ø 2+6 | Ø 4 | F L H S A B |
| 21,22       | G     | G     | R   | Y           |
| 41          | R     | R     | G   | R           |
| 42          | R     | R     | G   | R           |
| 51          | -     | -     | R   | Y           |
| 61,62       | R     | G     | R   | Y           |
| P41,P42     | DW    | DW    | W   | DRK         |
| P61,P62     | DW    | W     | DW  | DRK         |

| ASC/3 DETECTOR INSTALLATION CHART |           |                            |       |             |       |         |             |            |      |          |
|-----------------------------------|-----------|----------------------------|-------|-------------|-------|---------|-------------|------------|------|----------|
| DETECTOR                          |           |                            |       | PROGRAMMING |       |         |             |            |      |          |
| LOOP                              | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP    | PHASE | CALLING | EXTEND TIME | DELAY TIME | TYPE | NEW CARD |
| 2A,2B                             | 6X6       | 70                         | 4     | -           | 2     | Yes     | -           | -          | S    | - X      |
| 4A                                | 6X60      | +5                         | 2-4-2 | -           | 4     | Yes     | -           | -          | S    | - X      |
| 5A                                | 6X60      | +5                         | 2-4-2 | -           | 5     | Yes     | -           | 15         | S    | - X      |
| 5B                                | 6X60      | +5                         | 2-4-2 | -           | 5     | Yes     | -           | 10         | S    | - X      |
| 6A,6B                             | 6X6       | 70                         | 4     | -           | 6     | Yes     | -           | -          | S    | - X      |

3 Phase Fully Actuated Fayetteville Signal System

NOTES

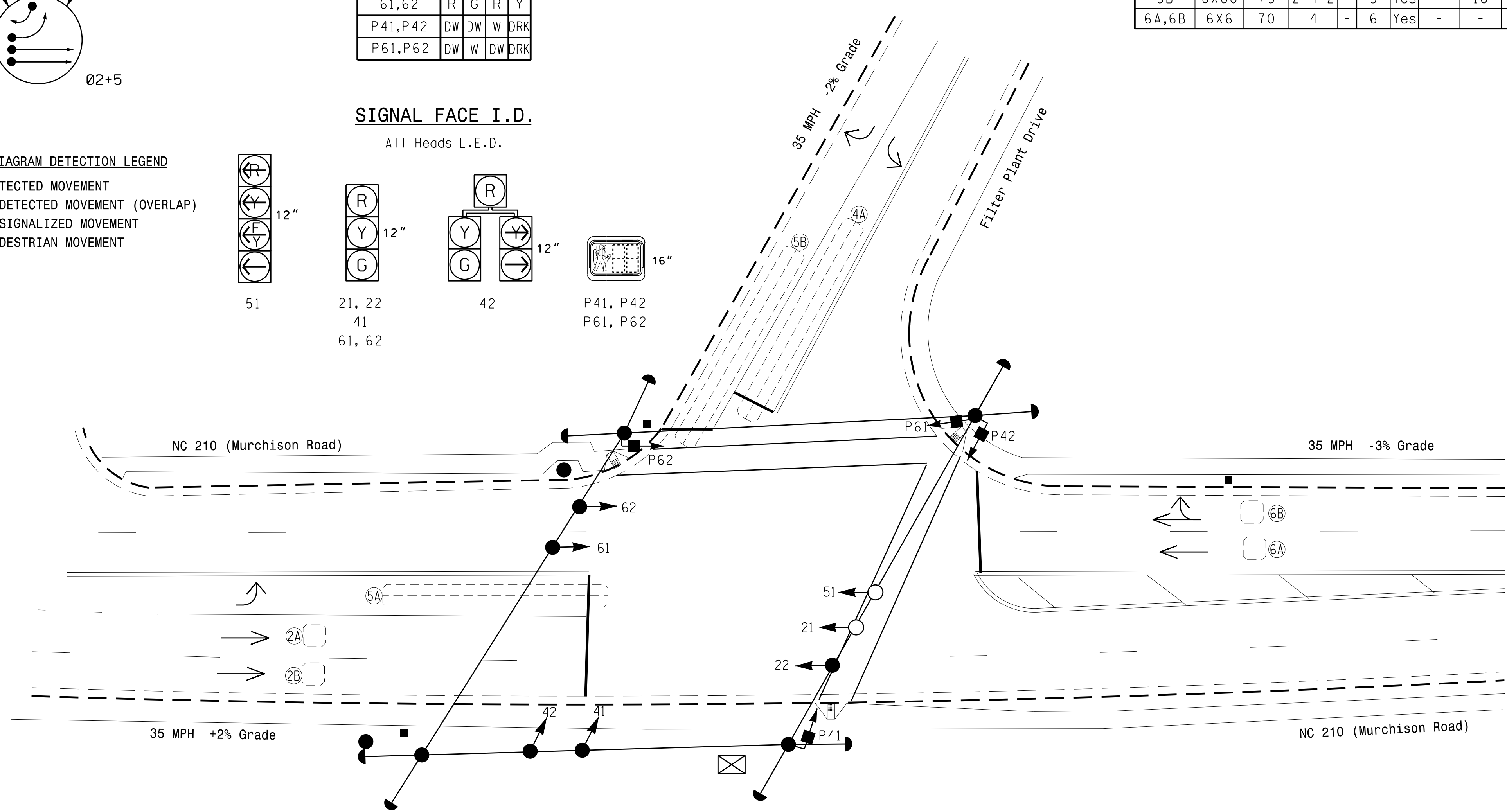
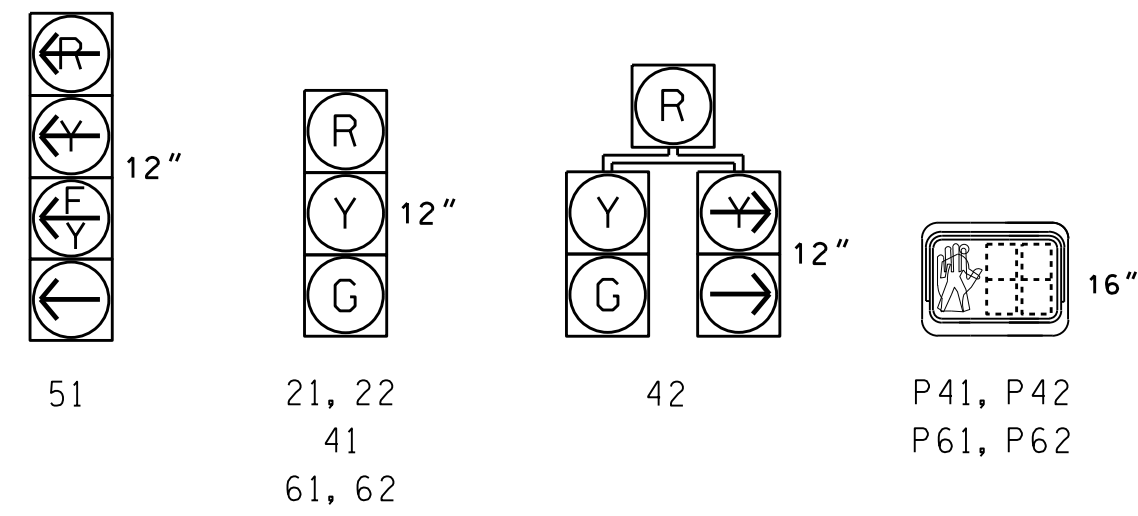
- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 5 may be lagged.
- Reposition existing signal head number 22.
- Set all detector units to presence mode.
- In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

SIGNAL FACE I.D.

All Heads L.E.D.

PHASING DIAGRAM DETECTION LEGEND

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



| FEATURE                 | ASC/3 TIMING CHART |     |     |             |
|-------------------------|--------------------|-----|-----|-------------|
|                         | 2                  | 4   | 5   | 6           |
| Min Green *             | 10                 | 7   | 7   | 10          |
| Walk *                  | 0                  | 7   | 0   | 7           |
| Ped Clear               | 0                  | 19  | 0   | 22          |
| Veh. Extension *        | 3.0                | 1.0 | 1.0 | 3.0         |
| Max 1 *                 | 45                 | 20  | 20  | 45          |
| Yellow                  | 4.1                | 4.0 | 3.0 | 4.1         |
| Red Clear               | 2.0                | 1.4 | 2.1 | 2.0         |
| Actuations B4 Add *     | -                  | -   | -   | -           |
| Seconds / Actuation *   | -                  | -   | -   | -           |
| Max Initial *           | -                  | -   | -   | -           |
| Time Before Reduction * | -                  | -   | -   | -           |
| Time To Reduce *        | -                  | -   | -   | -           |
| Minimum Gap             | -                  | -   | -   | -           |
| Locking Detector        | X                  | -   | -   | X           |
| Recall Position         | VEH. RECALL        | -   | -   | VEH. RECALL |
| Dual Entry              | -                  | -   | -   | -           |
| Simultaneous Gap        | X                  | X   | 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 |
|----------|----------|
|          |          |
|          |          |
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|          |          |

Signal Upgrade

|  |  |                               |   |
|--|--|-------------------------------|---|
|  | <p>NC 210 (Murchison Rd) at Filter Plant Drive</p> |                               |   |
|  | <p>Division 6 Cumberland County Fayetteville</p>   | <p>PLANNED BY: EM Minshew</p> |   |
| <p>750 N. Greenfield Pkwy, Garner, NC 27529</p>                      | <p>SCALE 1"=20'</p>                                | <p>REVISIONS</p>              | <p>INIT. DATE</p>                                 |
| <p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p> |  |                               | <p>DocuSigned by: Jason P. Gallaway 8/24/2016</p> |
| <p>SIG. INVENTORY NO. 06-0445</p>                                    |  |                               | <p>DATE</p>                                       |

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 emminshew