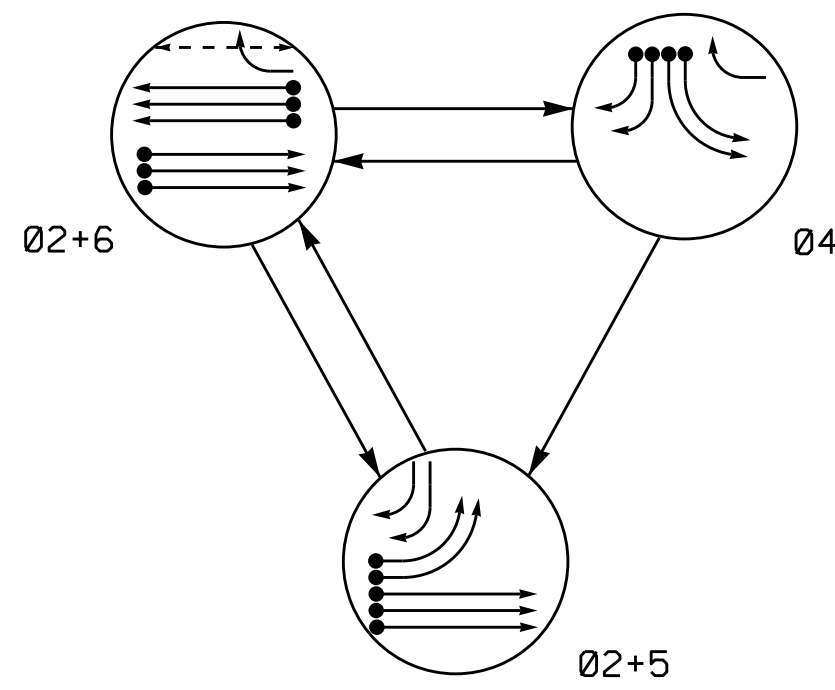


PHASING DIAGRAM



| SIGNAL FACE | PHASE | | | |
|-------------|-------|------|----|-----|
| | 02+5 | 02+6 | 04 | F |
| 21,22,23 | G | G | R | Y |
| 41,42 | R | R | Y | R |
| 43,44 | Y | R | Y | R |
| 51,52 | Y | R | R | Y |
| 61,62 | R | G | R | Y |
| 63 | R | G | R | Y |
| P61,P62 | DW | W | DW | DRK |

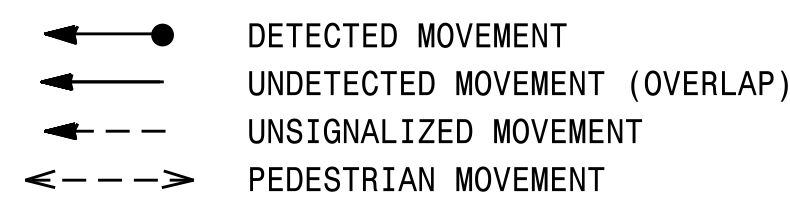
| ASC/3 DETECTOR INSTALLATION CHART | | | | | | | | | | |
|-----------------------------------|-----------|----------------------------|-------|----------|-------------|---------|-------------|------------|------|----------------------|
| DETECTOR | | | | | PROGRAMMING | | | | | |
| LOOP | SIZE (FT)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

3 Phase Fully Actuated Fayetteville Signal System

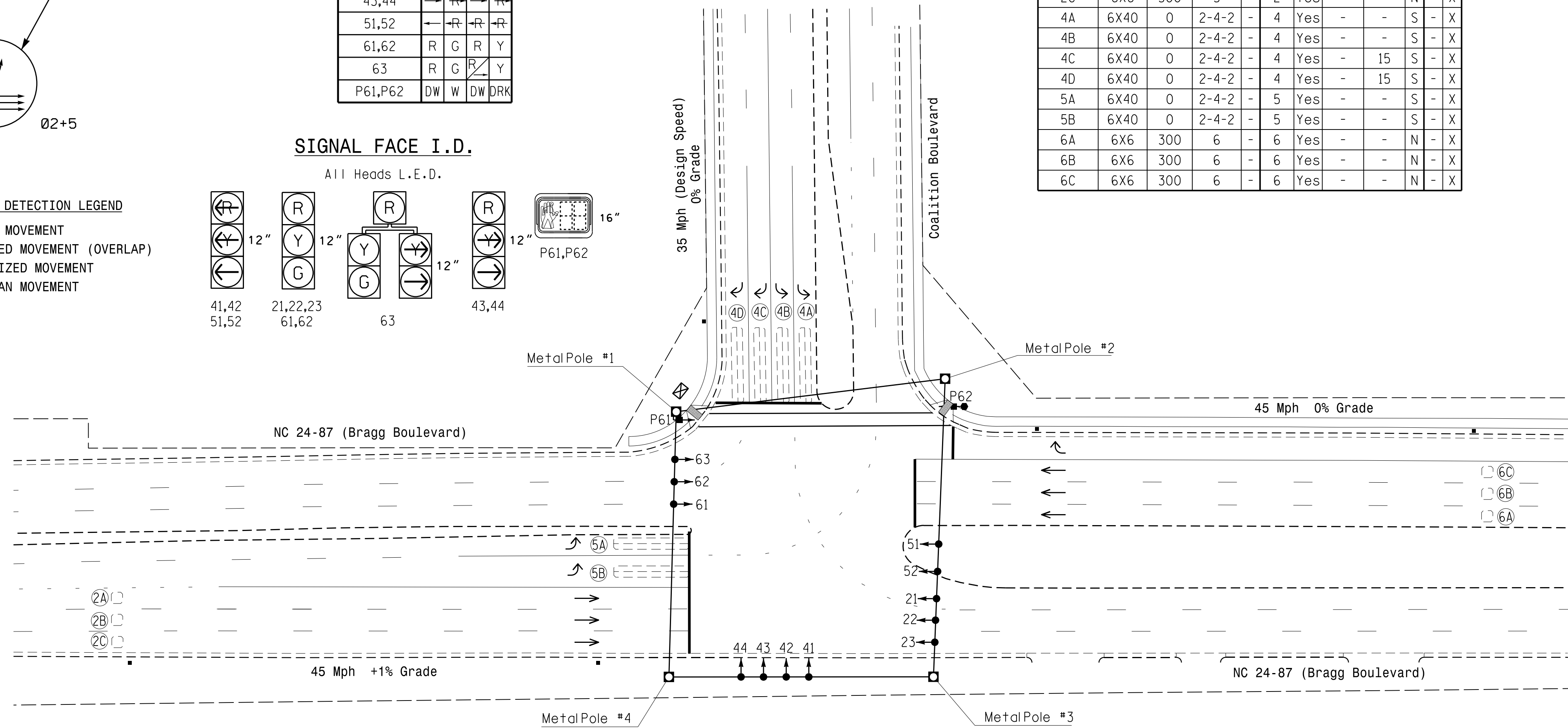
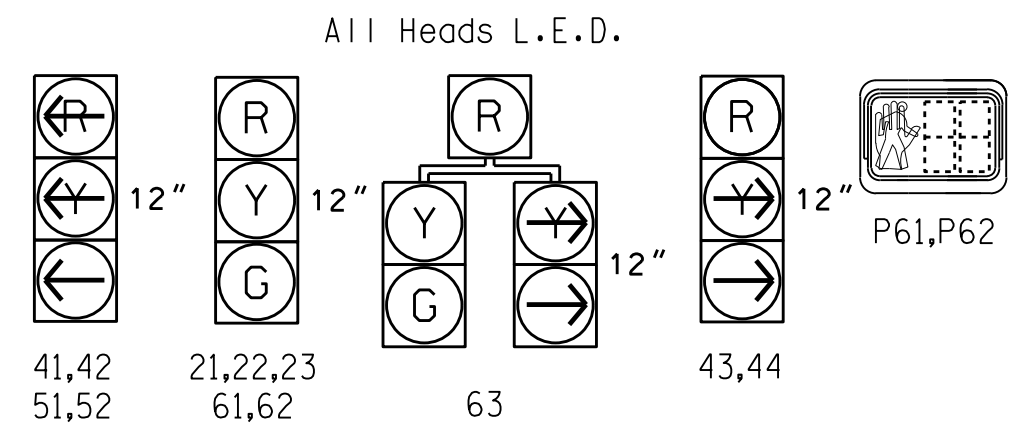
NOTES

- 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.
- Set all detector units to presence mode.
- 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.

PHASING DIAGRAM DETECTION LEGEND



SIGNAL FACE I.D.

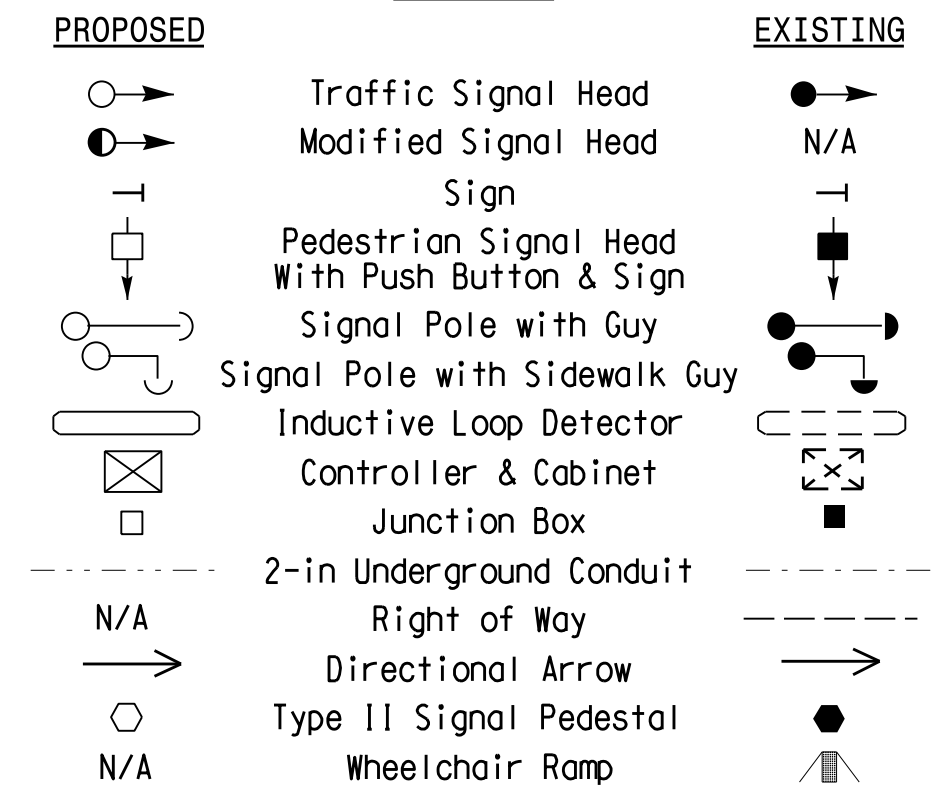


ASC/3 TIMING CHART

| FEATURE | PHASE | | | |
|-------------------------|-------------|-----|-----|-------------|
| | 2 | 4 | 5 | 6 |
| Min Green * | 12 | 7 | 7 | 12 |
| Walk * | 0 | 0 | 0 | 7 |
| Ped Clear | 0 | 0 | 0 | 32 |
| Veh. Extension * | 6.0 | 2.0 | 2.0 | 6.0 |
| Max 1 * | 90 | 45 | 45 | 90 |
| Yellow | 4.4 | 3.0 | 3.0 | 4.5 |
| Red Clear | 1.7 | 3.7 | 3.8 | 1.6 |
| Actuations B4 Add * | 0 | - | - | 0 |
| Seconds /Actuation * | 1.8 | - | - | 1.8 |
| Max Initial * | 34 | - | - | 34 |
| Time Before Reduction * | 30 | - | - | 30 |
| Time To Reduce * | 45 | - | - | 45 |
| Minimum Gap | 3.0 | - | - | 3.0 |
| 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



Signal Upgrade

Prepared in the Offices of:

 750 N. Greenfield Pkwy, Garner, NC 27529

NC 24-87 (Bragg Boulevard) at Coalition Boulevard
 Division 6 Cumberland County Fayetteville
 PLAN DATE: January 2016 REVIEWED BY: PLA
 PREPARED BY: Jeff Spence REVIEWED BY:

750 N. Greenfield Pkwy, Garner, NC 27529
 SCALE: 0 40
 1" = 40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
 JASON P. GALLOWAY
 PROFESSIONAL ENGINEER
 029904
 5/16/2016

SIG. INVENTORY NO. 06-1341

16-MAY-2016 10:39
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