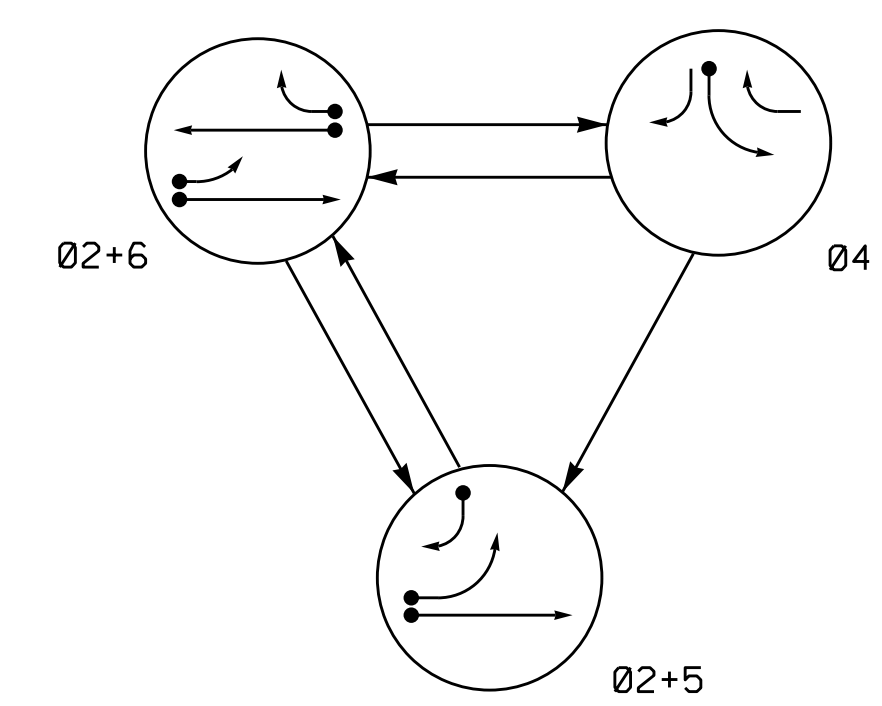


3 Phase Fully Actuated Fayetteville Signal System

PHASING DIAGRAM



| SIGNAL FACE | PHASE | | | |
|-------------|---------|---------|-----|------|
| | Ø 2 + 5 | Ø 2 + 6 | Ø 4 | FLSH |
| 21,22 | G | G | R | Y |
| 41 | R | R | G | R |
| 42 | R | R | G | R |
| 51 | ← | ← | ← | ← |
| 61 | R | G | R | Y |
| 62 | R | G | R | Y |

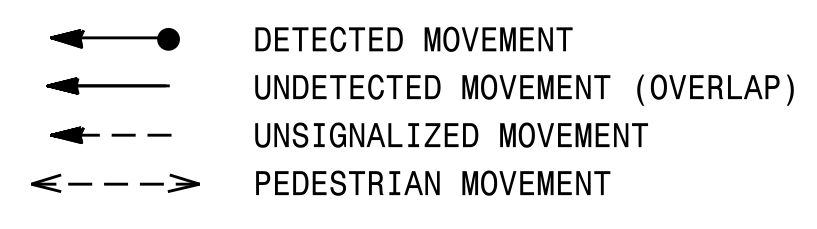
| ASC/3 DETECTOR INSTALLATION CHART | | | | | | | | | | |
|-----------------------------------|-----------|----------------------------|-------|----------|-------------|---------|-------------|------------|------|----------------------|
| DETECTOR | | | | | PROGRAMMING | | | | | |
| LOOP | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | PHASE | CALLING | EXTEND TIME | DELAY TIME | TYPE | LOOP SYSTEM NEW CARD |
| 2A | 6X18.5 | 70 | 3 | - | 2 | Yes | - | - | S | - X |
| 4A | 6X60 | +5 | 2-4-2 | - | 4 | Yes | - | 3 | S | - X |
| 5A | 6X60 | +5 | 2-4-2 | - | 5 | Yes | - | 10 | S | - X |
| 5B | 6X60 | +5 | 2-4-2 | - | 5 | Yes | - | 10 | S | - X |
| 6A | 6X20 | 200 | 2 | - | 6** | Yes | - | 3 | S | - X |
| 6B | 6X12 | 70 | 3 | - | 6 | Yes | - | - | S | - X |

** See Note 8

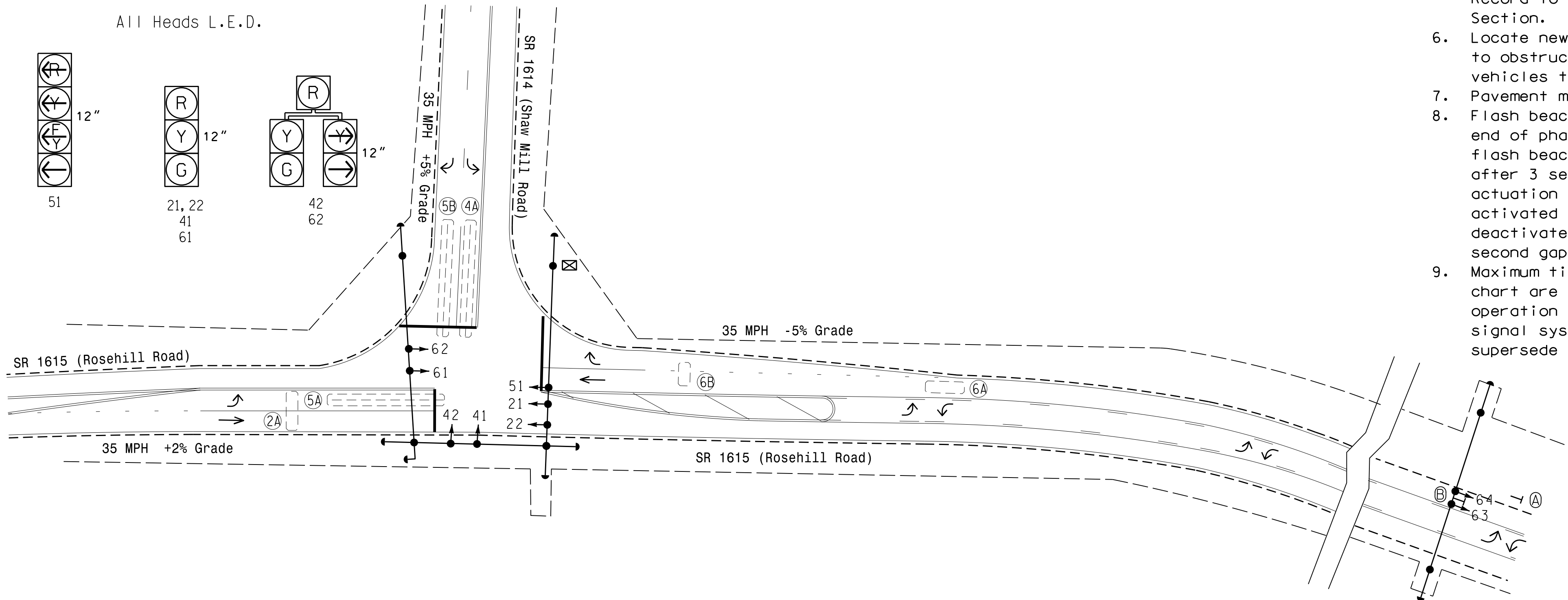
NOTES

- 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.
- 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.
- Pavement markings are existing.
- Flash beacons 63 and 64 at the end of phase 6 green. Also flash beacons during phase 6 after 3 seconds of constant actuation of Loop 6A. Once activated during phase 6, deactivate beacons after a 2 second gap.
- 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.

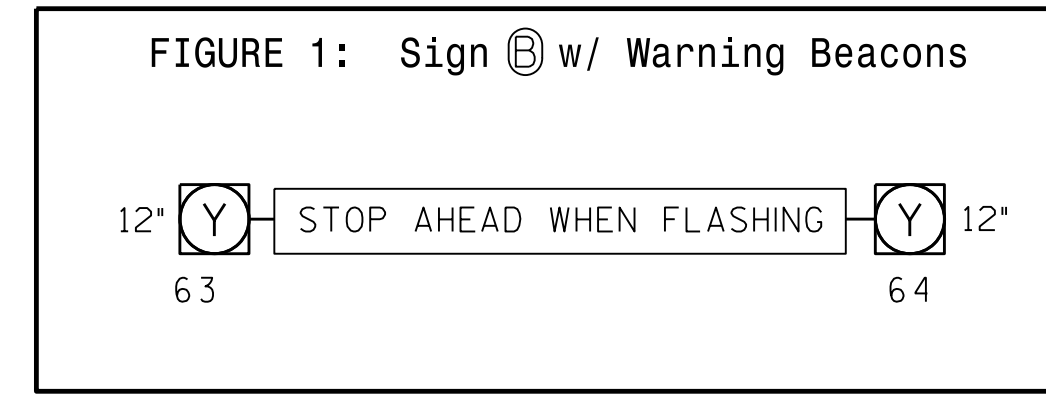


| FEATURE | PHASE | | | |
|-------------------------|-------------|-----|-----|-------------|
| | 2 | 4 | 5 | 6 |
| Min Green * | 10 | 7 | 7 | 10 |
| Walk * | 0 | 0 | 0 | 0 |
| Ped Clear | 0 | 0 | 0 | 0 |
| Veh. Extension * | 3.0 | 2.0 | 3.0 | 3.0 |
| Max I * | 35 | 30 | 20 | 35 |
| Yellow | 4.2 | 3.0 | 3.0 | 4.2 |
| Red Clear | 1.5 | 2.1 | 1.2 | 1.5 |
| 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 |

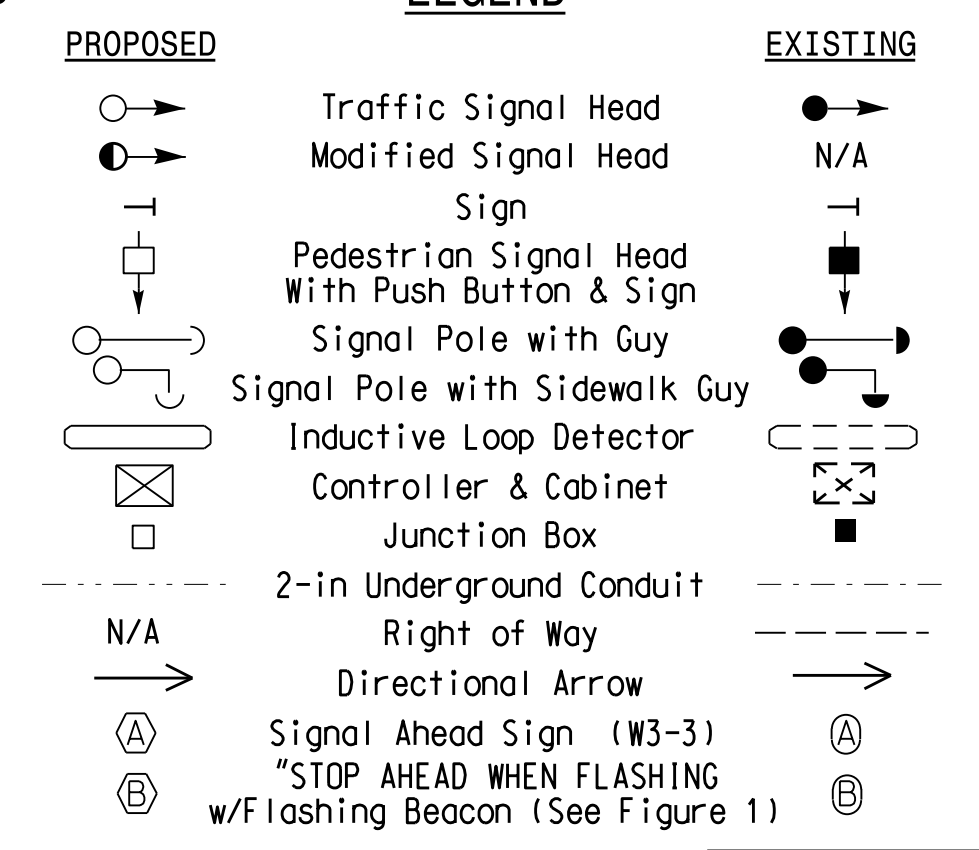
* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

| WARNING BEACON TABLE OF OPERATION | | |
|-----------------------------------|----------|-----|
| SIGNAL FACE | INTERVAL | |
| | 1 | 2 |
| 63, 64 | ON | OFF |

See Note 8



LEGEND



Signal Upgrade

Prepared In the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

SR 1615 (Rosehill Road) at SR 1614 (Shaw Mill Road)

Division 6 Cumberland County N. of Fayetteville

PLAN DATE: JUNE 2016 REVIEWED BY: JPG

PREPARED BY: KGP, Jr. REVIEWED BY:

REVISIONS: INIT. DATE

SCALE: 1"=40'

SEAL: JASON P. GALLOWAY, ENGINEER, 029904

DATE: 9/29/2016

SIG. INVENTORY NO. 06-0451

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

09-SEP-2016 11:51
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