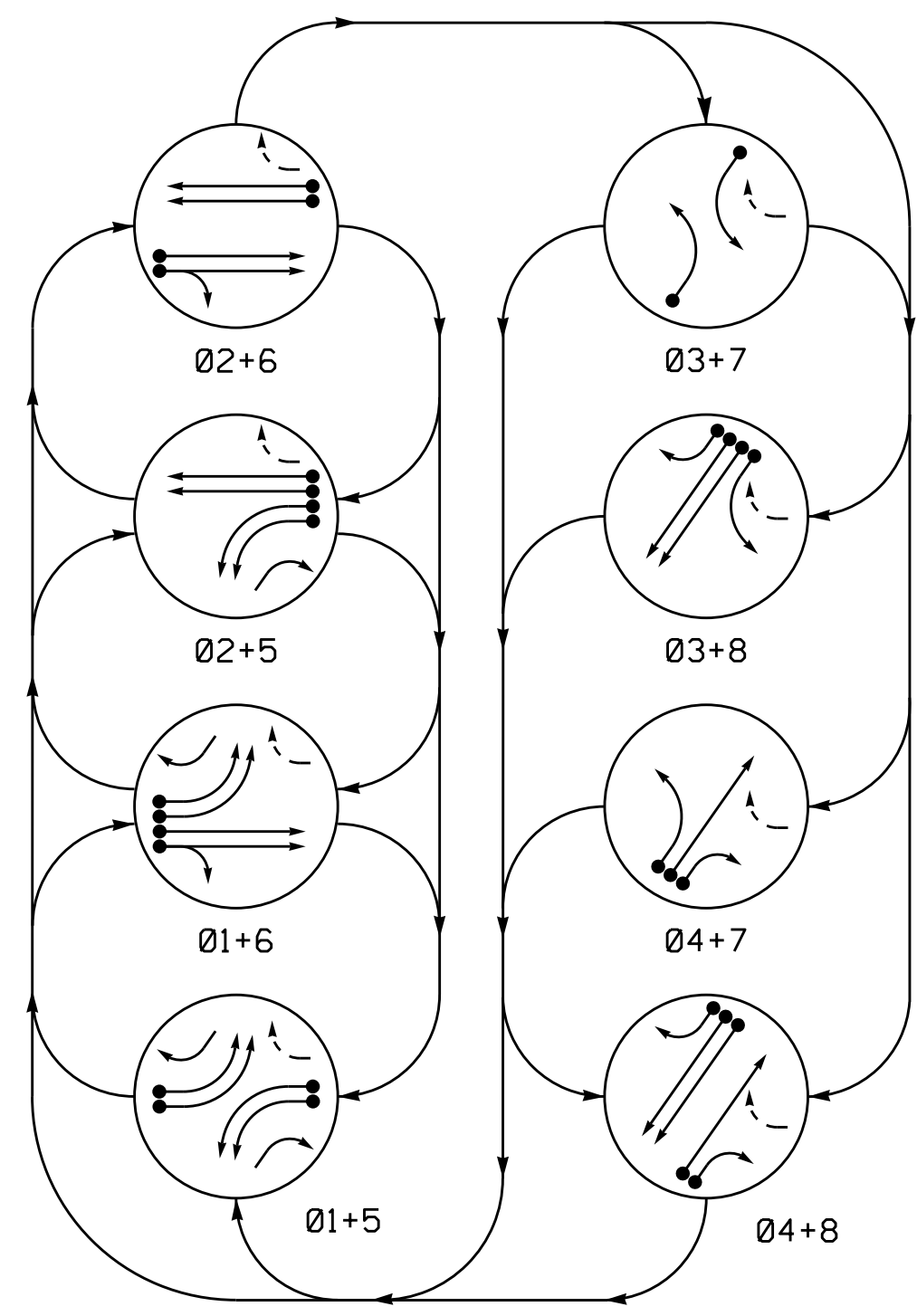


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

| SIGNAL FACE | PHASE | | | | | | | |
|-------------|-------|------|------|------|------|------|------|------|
| | 01+5 | 01+6 | 02+5 | 02+6 | 03+7 | 03+8 | 04+7 | 04+8 |
| 11, 12 | --- | --- | --- | --- | --- | --- | --- | --- |
| 21, 22 | R | R | G | G | R | R | R | Y |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- |
| 41 | R | R | R | R | R | R | G | G |
| 42 | R | R | R | R | R | R | G | G |
| 51, 52 | --- | --- | --- | --- | --- | --- | --- | --- |
| 61, 62 | R | G | R | G | R | R | R | Y |
| 71 | --- | --- | --- | --- | --- | --- | --- | --- |
| 81 | R | R | R | R | R | G | R | G |
| 82 | R | R | R | R | R | G | R | G |

| 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 |
| 1A, 1B | 6X60 | +5 | 2-4-2 | - | 1 | Yes | - | 3 | S | - X |
| 2A, 2B | 6X6 | 300 | 4 | - | 2 | Yes | - | - | N | - X |
| 3A | 6X60 | +5 | 2-4-2 | - | 3 | Yes | - | 3 | S | - X |
| 4A | 6X60 | +5 | 2-4-2 | - | 4 | Yes | - | - | S | - X |
| 4B | 6X60 | +5 | 2-4-2 | - | 4 | Yes | - | 15 | S | - X |
| 5A, 5B | 6X60 | +5 | 2-4-2 | - | 5 | Yes | - | 3 | S | - X |
| 6A, 6B | 6X6 | 300 | 4 | - | 6 | Yes | - | - | N | - X |
| 7A | 6X60 | +5 | 2-4-2 | - | 7 | Yes | - | 3 | S | - X |
| 8A, 8B | 6X60 | +5 | 2-4-2 | - | 8 | Yes | - | - | S | - X |
| 8C | 6X60 | +5 | 2-4-2 | - | 8 | Yes | - | 15 | S | - X |

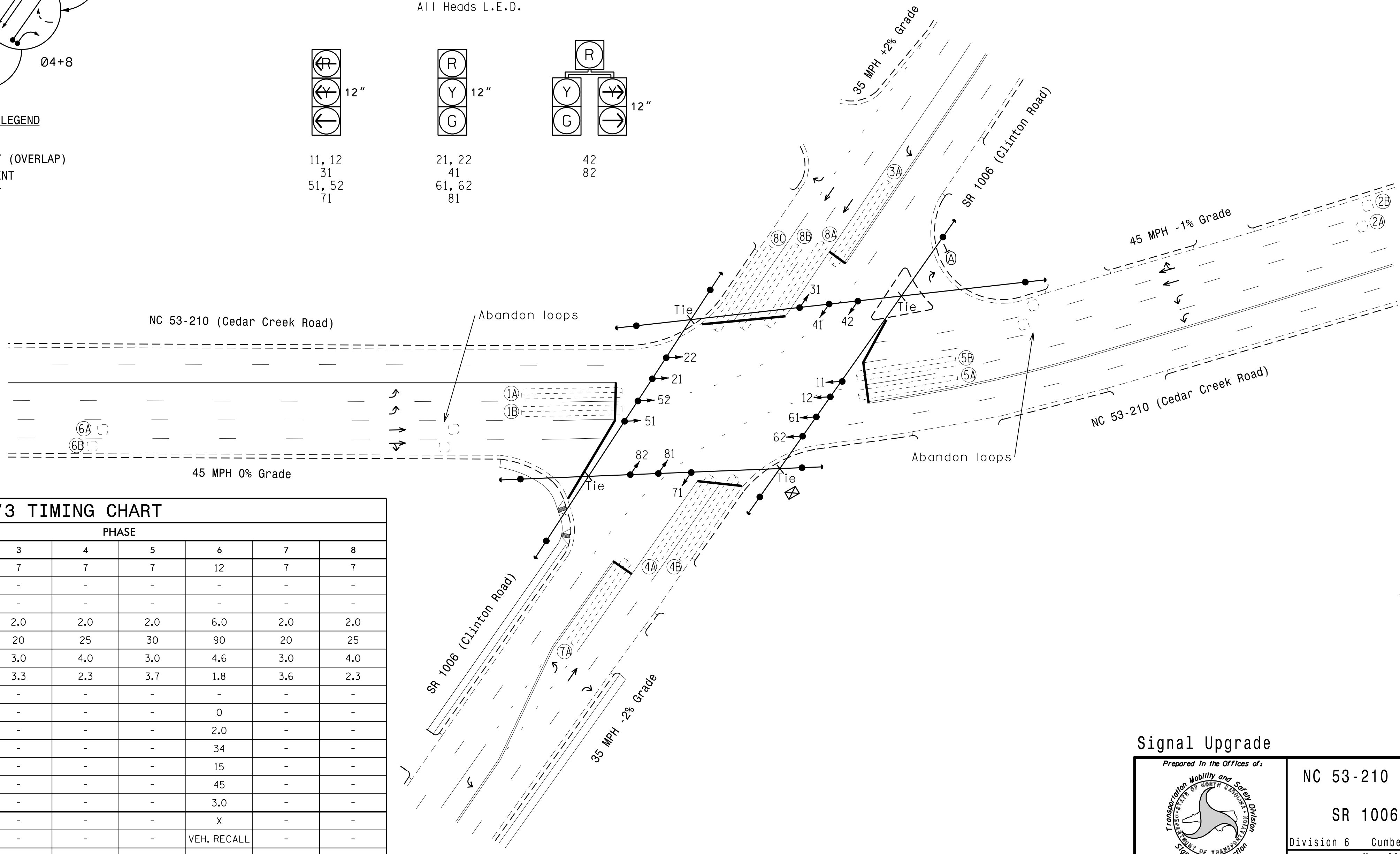
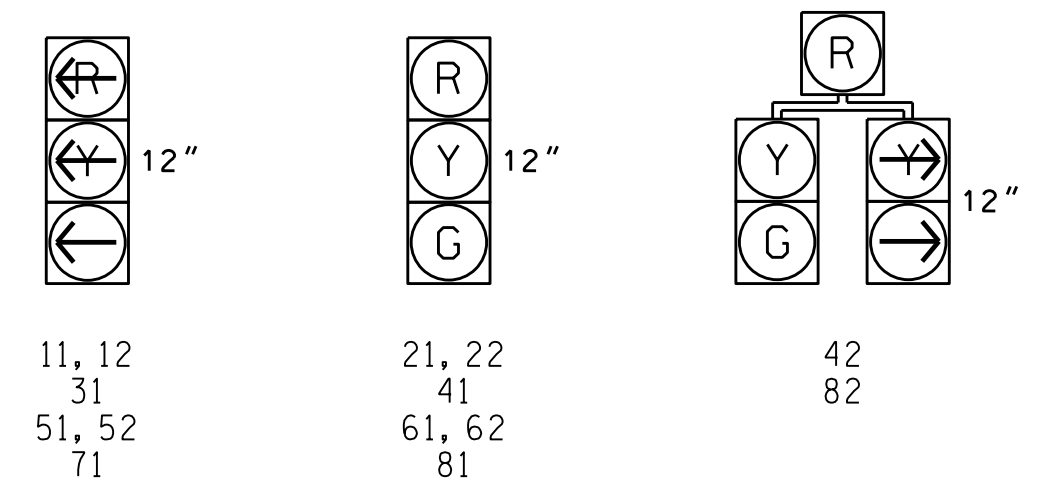
8 Phase Fully Actuated Fayetteville Signal System

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 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 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.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

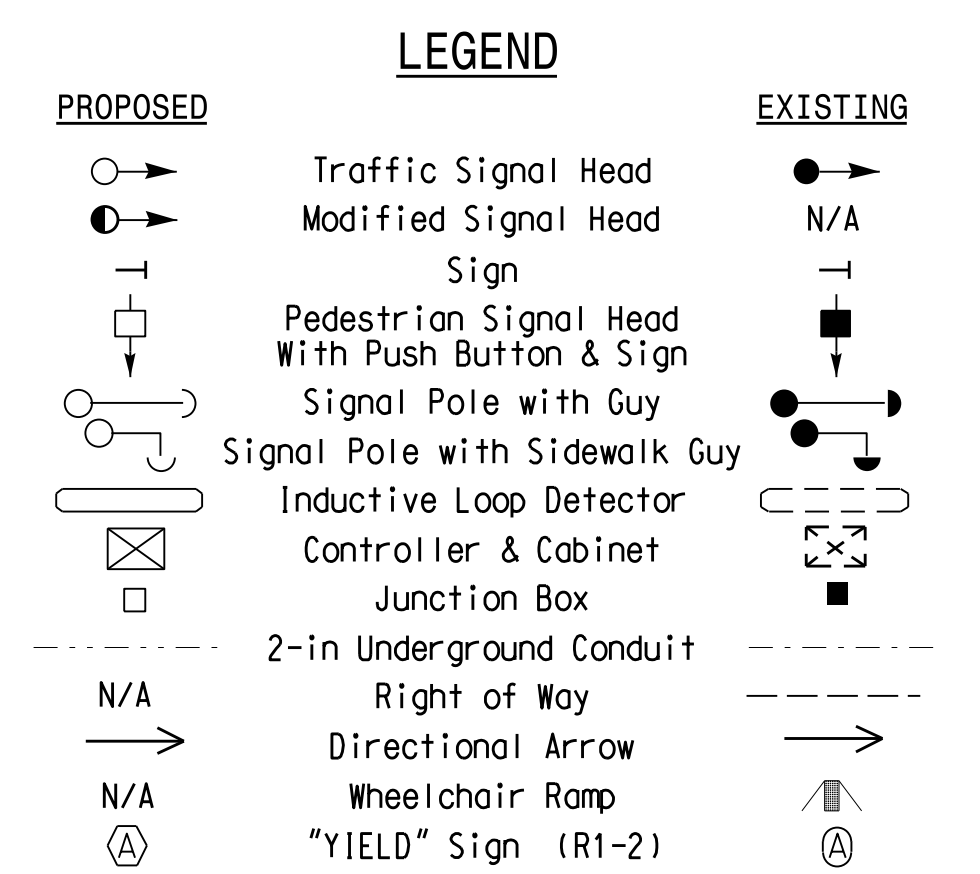
SIGNAL FACE I.D.

All Heads L.E.D.



| FEATURE | ASC/3 TIMING CHART | | | | | | | |
|-------------------------|--------------------|-------------|-----|-----|-----|-------------|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Min Green * | 7 | 12 | 7 | 7 | 7 | 12 | 7 | 7 |
| Walk * | - | - | - | - | - | - | - | - |
| Ped Clear | - | - | - | - | - | - | - | - |
| Veh. Extension * | 2.0 | 6.0 | 2.0 | 2.0 | 2.0 | 6.0 | 2.0 | 2.0 |
| Max 1 * | 30 | 90 | 20 | 25 | 30 | 90 | 20 | 25 |
| Yellow | 3.0 | 4.6 | 3.0 | 4.0 | 3.0 | 4.6 | 3.0 | 4.0 |
| Red Clear | 3.9 | 1.8 | 3.3 | 2.3 | 3.7 | 1.8 | 3.6 | 2.3 |
| Red Revert | - | - | - | - | - | - | - | - |
| Actuations B4 Add * | - | 0 | - | - | - | 0 | - | - |
| Seconds / Actuation * | - | 2.0 | - | - | - | 2.0 | - | - |
| Max Initial * | - | 34 | - | - | - | 34 | - | - |
| Time Before Reduction * | - | 15 | - | - | - | 15 | - | - |
| 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 | 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.



Signal Upgrade

Prepared in the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: 1" = 40'

NC 53-210 (Cedar Creek Road) at SR 1006 (Clinton Road)

Division 6 Cumberland County Fayetteville

PLAN DATE: May 2016 REVIEWED BY: JPG

PREPARED BY: Devin Smith REVIEWED BY:

REVISIONS: INIT. DATE

DocuSigned by: Jason P. Gallaway 8/18/2016

SEAL: JASON P. GALLAWAY, PROFESSIONAL ENGINEER, SEAL 029904

SIG. INVENTORY NO. 06-0072

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

18-AUG-2016 13:06
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