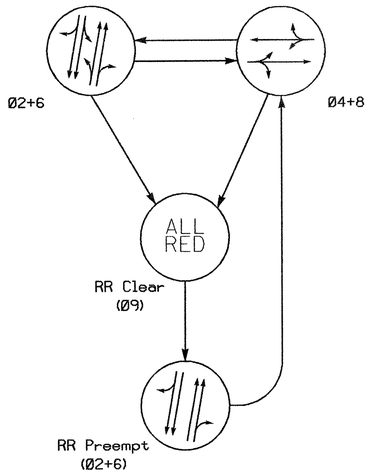
| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-4736 | Sig105 |

## PHASING DIAGRAM




PHASING DIAGRAM DETECTION LEGEND

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

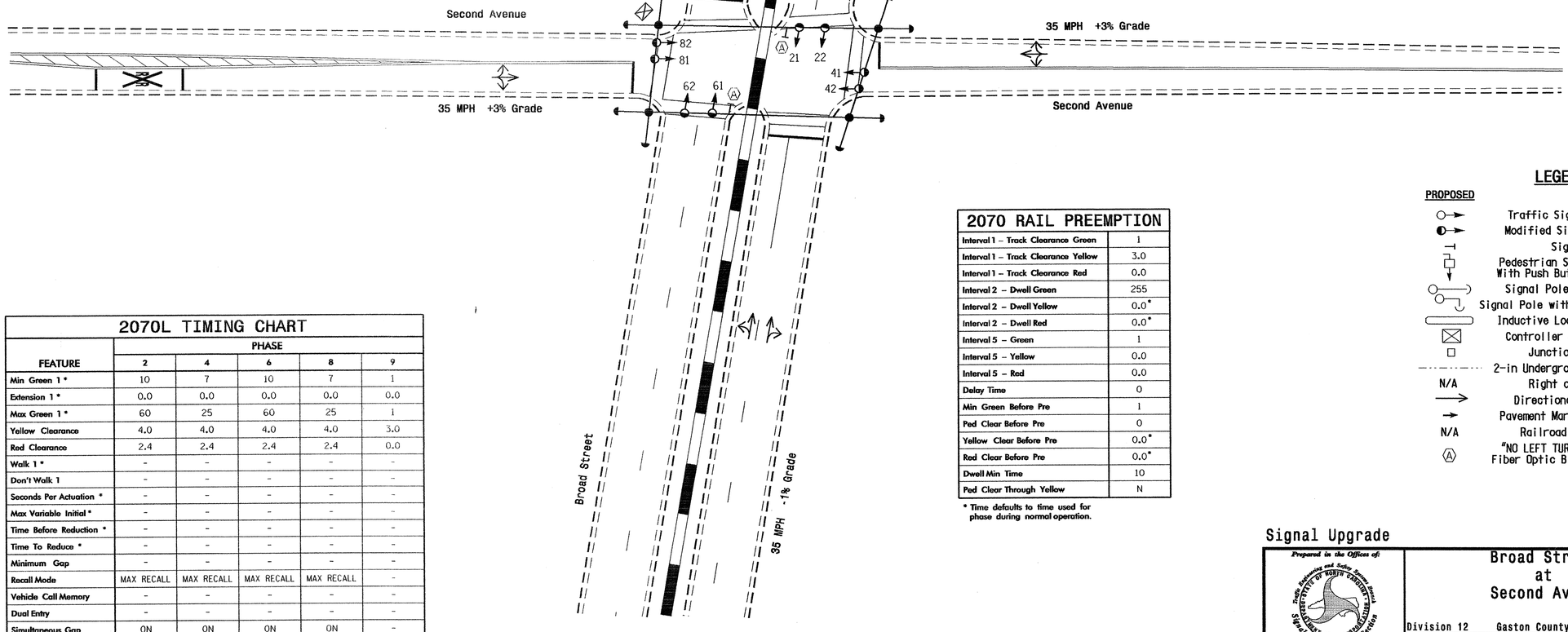
| TABLE OF OPERATION | | | | | |
|---|---|---|---|---|---|
| SIGNAL FACE | PHASE Ø2+6 | PHASE Ø4+8 | PHASE Ø9 RR CLEAR | PHASE Ø2+6 RR PREEMPT | FLASH |
| 21,22 | G | R | R | G | Y |
| 41,42 | R | G | R | R | R |
| 61,62 | G | R | R | G | Y |
| 81,82 | R | G | R | R | R |
| Ⓐ | OFF | OFF | ON | ON | * |

* See Note 5

## SIGNAL FACE I.D.

Denotes L.E.D.


21,22
41,42
61,62
81,82




## 2 Phase
## Pre-Timed w/ RR Preempt
## Gastonia City System

## NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
2. This location contains railroad preemption phasing. Do not program signal for late night flashing operation.
3. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
4. Pavement markings are existing.
5. Ensure flashing operation does not alter operation of blankout signs.
6. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
7. Omit Phase 9 during normal operation.
8. City system data: Controller Asset 0102.

## 2070L TIMING CHART

| FEATURE | PHASE 2 | 4 | 6 | 8 | 9 |
|---|---|---|---|---|---|
| Min Green 1 * | 10 | 7 | 10 | 7 | 1 |
| Extension 1 * | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Max Green 1 * | 60 | 25 | 60 | 25 | 1 |
| Yellow Clearance | 4.0 | 4.0 | 4.0 | 4.0 | 3.0 |
| Red Clearance | 2.4 | 2.4 | 2.4 | 2.4 | 0.0 |
| Walk 1 * | - | - | - | - | - |
| Don't Walk 1 | - | - | - | - | - |
| Seconds Per Actuation * | - | - | - | - | - |
| Max Variable Initial * | - | - | - | - | - |
| Time Before Reduction * | - | - | - | - | - |
| Time To Reduce * | - | - | - | - | - |
| Minimum Gap | - | - | - | - | - |
| Recall Mode | MAX RECALL | MAX RECALL | MAX RECALL | MAX RECALL | - |
| Vehicle Call Memory | - | - | - | - | - |
| Dual Entry | - | - | - | - | - |
| Simultaneous Gap | ON | ON | ON | ON | - |

* 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.

## 2070 RAIL PREEMPTION

| | |
|---|---|
| Interval 1 – Track Clearance Green | 1 |
| Interval 1 – Track Clearance Yellow | 3.0 |
| Interval 1 – Track Clearance Red | 0.0 |
| Interval 2 – Dwell Green | 255 |
| Interval 2 – Dwell Yellow | 0.0* |
| Interval 2 – Dwell Red | 0.0* |
| Interval 5 – Green | 1 |
| Interval 5 – Yellow | 0.0 |
| Interval 5 – Red | 0.0 |
| Delay Time | 0 |
| Min Green Before Pre | 1 |
| Ped Clear Before Pre | 0 |
| Yellow Clear Before Pre | 0.0* |
| Red Clear Before Pre | 0.0* |
| Dwell Min Time | 10 |
| Ped Clear Through Yellow | N |

* Time defaults to time used for phase during normal operation.

## LEGEND

| PROPOSED | | EXISTING |
|---|---|---|
| ○→ | Traffic Signal Head | ●→ |
| ◐→ | Modified Signal Head | N/A |
| ⊣ | Sign | ⊣ |
| | Pedestrian Signal Head With Push Button & Sign | |
| ○ | Signal Pole with Guy | ● |
| ○ | Signal Pole with Sidewalk Guy | ● |
| ▭ | Inductive Loop Detector | ▭ |
| ⊠ | Controller & Cabinet | ⊠ |
| □ | Junction Box | ■ |
| ---------- | 2-in Underground Conduit | ---------- |
| N/A | Right of Way | — — — |
| → | Directional Arrow | → |
| → | Pavement Marking Arrow | → |
| N/A | Railroad Tracks | |
| Ⓐ | "NO LEFT TURN – TRAIN" Fiber Optic Blankout Sign | Ⓐ |

Signal Upgrade

Prepared in the Offices of:
Traffic Engineering and Safety Systems Branch
North Carolina Department of Transportation
Traffic Signal Systems and Geometrics Section
122 N. McDowell St., Raleigh, NC 27603

# Broad Street at Second Avenue

Division 12 Gaston County Gastonia

| | | | |
|---|---|---|---|
| PLAN DATE: | January 2005 | REVIEWED BY: | D.Y. Ishak |
| PREPARED BY: | Z.W. Little | REVIEWED BY: | |

| REVISIONS | INIT. | DATE |
|---|---|---|
| | | |

SCALE 0 30 1"=30'

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 22 ENGINEER RICHARD E. MULLINAX
SIGNATURE
DATE 27 JANUARY 2005

SIG. INVENTORY NO. 12-0102

01-MAR-2005 10:27
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kriel.donoso