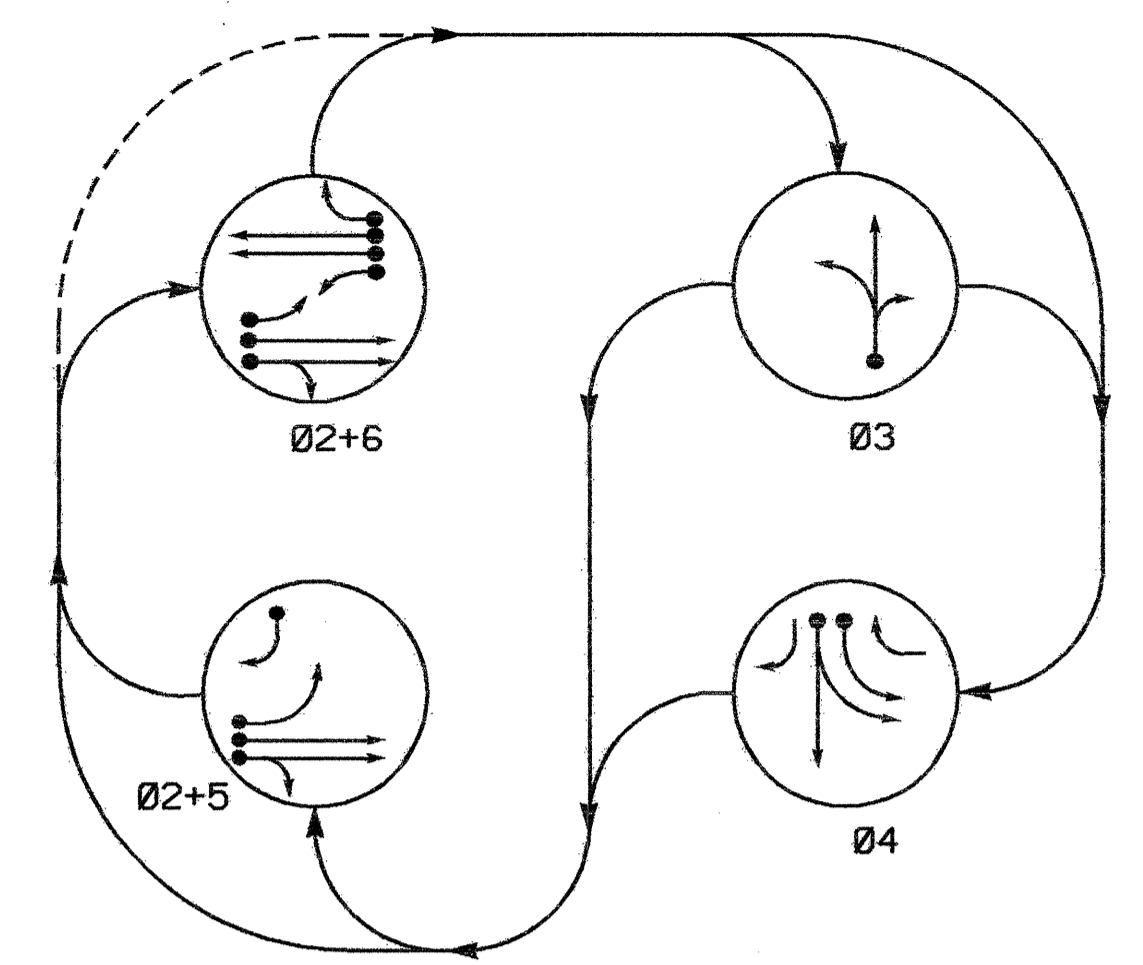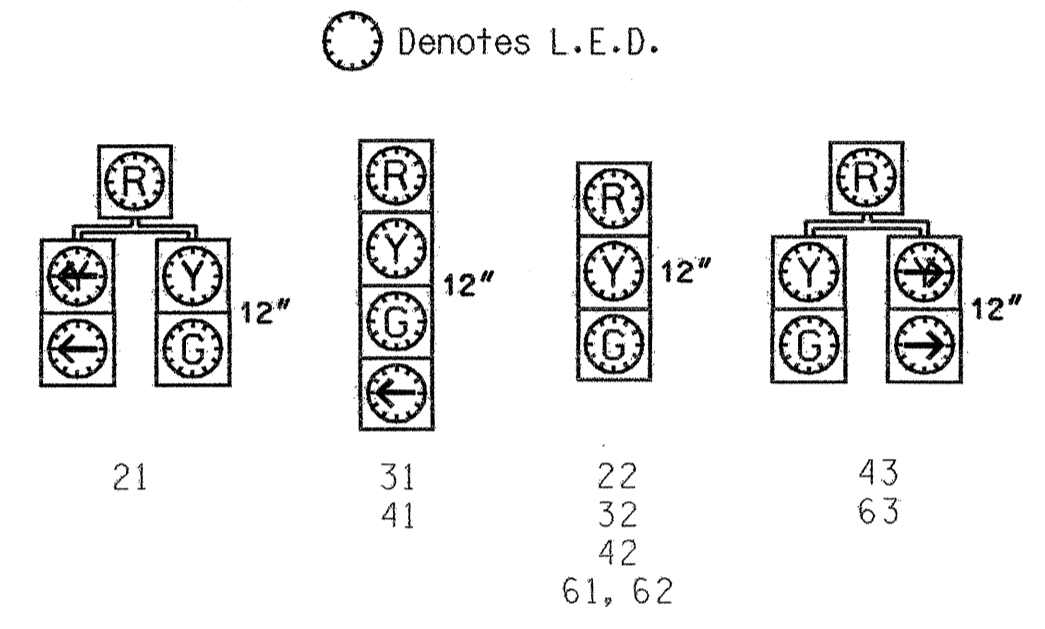## PHASING DIAGRAM



Ø2+6    Ø3

Ø2+5    Ø4

### PHASING DIAGRAM DETECTION LEGEND

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

## TABLE OF OPERATION

| SIGNAL FACE | Ø2+5 | Ø2+6 | Ø3 | Ø4 | FLASH |
|---|---|---|---|---|---|
| 21 | G | G | R | R | Y |
| 22 | G | G | R | R | Y |
| 31 | R | R | G | R | R |
| 32 | R | R | G | R | R |
| 41 | R | R | R | G | R |
| 42 | R | R | R | G | R |
| 43 | R | R | R | G | R |
| 61, 62 | R | G | R | R | Y |
| 63 | R | G | R | R | Y |

## SIGNAL FACE I.D.

◯ Denotes L.E.D.



21    31    22    43
      41    32    63
            42
         61, 62

## 2070L LOOP & DETECTOR INSTALLATION

| | INDUCTIVE LOOPS | | | DETECTOR PROGRAMMING | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| LOOP | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | PHASE | CALLING | EXTENSION | FULL TIME DELAY | STRETCH TIME | DELAY TIME | SYSTEM LOOP | NEW CARD |
| 2A, 2B | EXISTING | EXISTING | EXISTING | - | 2 | Y | Y | - | 1.8 | - | - | - |
| 2C, 2D | EXISTING | EXISTING | EXISTING | - | 2 | Y | Y | - | - | - | - | - |
| 3A | EXISTING | EXISTING | EXISTING | - | 3 | Y | Y | - | - | 10 | - | - |
| 4A | EXISTING | EXISTING | EXISTING | - | 4 | Y | Y | - | - | 3 | - | - |
| 4B | EXISTING | EXISTING | EXISTING | - | 4 | Y | Y | - | - | - | - | - |
| 5A | EXISTING | EXISTING | EXISTING | - | 5 | Y | Y | - | - | 15 | - | - |
| | | | | | 2 | Y | Y | - | - | - | - | - |
| 5B | EXISTING | EXISTING | EXISTING | - | 5 | Y | Y | - | - | 15 | - | - |
| 6A, 6B | EXISTING | EXISTING | EXISTING | - | 6 | Y | Y | - | 1.8 | - | - | - |
| 6C, 6D | EXISTING | EXISTING | EXISTING | - | 6 | Y | Y | - | - | - | - | - |

### 4 Phase
### Fully Actuated
### 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. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Omit phase 5 during phase 6 on.
4. Program controller to clear from phase 2+6 to phase 5 by progressing through phase 4 (see Electrical Details).
5. The order of phase 3 and phase 4 may be reversed.
6. Set all detector units to presence mode.
7. Pavement markings are existing.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
9. City signal system data: Controller Asset #0234.
10. **All work on this signal will be done and paid for under TIP Project U-2408. This plan is only to show that this intersection is part of the Gastonia City Signal System and some minor changes to timing chart.**



R/W    R/W

SR 1351 (ISLEY DRIVE)

35 MPH +7% GRADE

NC 274 (BESSEMER CITY ROAD)

R/W

45 MPH +4% GRADE

45 MPH -5% GRADE

NC 274 (BESSEMER CITY ROAD)

R/W

R/W

R/W

Driveway
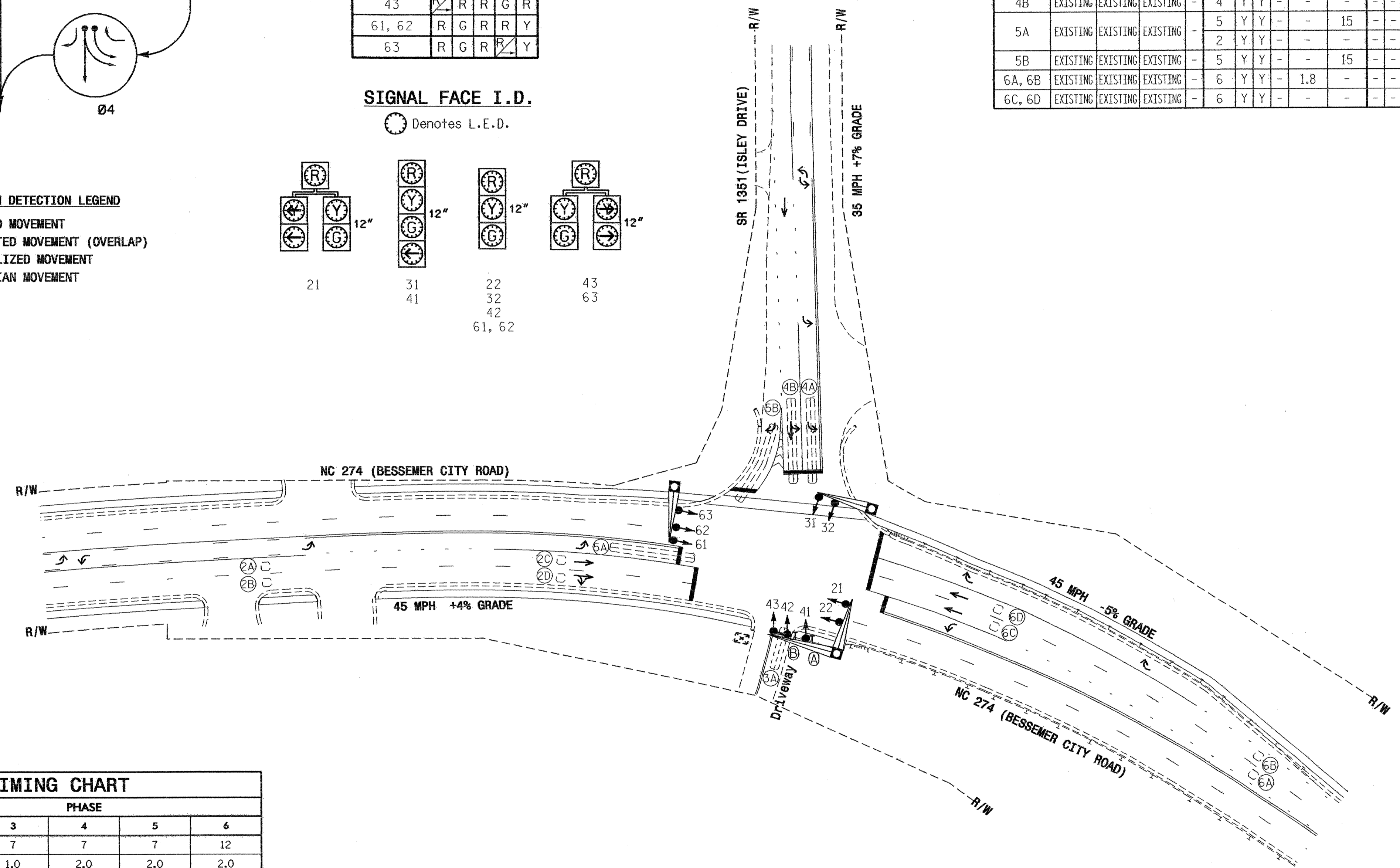
## 2070L TIMING CHART

| FEATURE | PHASE | | | | |
|---|---|---|---|---|---|
| | 2 | 3 | 4 | 5 | 6 |
| Min Green 1 * | 12 | 7 | 7 | 7 | 12 |
| Extension 1 * | 2.0 | 1.0 | 2.0 | 2.0 | 2.0 |
| Max Green 1 * | 45 | 20 | 20 | 15 | 45 |
| Yellow Clearance | 4.7 | 4.0 | 4.0 | 4.0 | 4.7 |
| Red Clearance | 2.1 | 1.9 | 2.5 | 2.8 | 2.1 |
| Walk 1 * | - | - | - | - | - |
| Don't Walk 1 * | - | - | - | - | - |
| Seconds Per Actuation * | - | - | - | - | - |
| Max Variable Initial * | - | - | - | - | - |
| Time Before Reduction * | - | - | - | - | - |
| Time To Reduce * | - | - | - | - | - |
| Minimum Gap | - | - | - | - | - |
| Recall Mode | MIN RECALL | - | - | - | MIN RECALL |
| Vehicle Call Memory | YELLOW | - | - | - | YELLOW |
| Dual Entry | - | - | - | - | - |
| Simultaneous Gap | ON | 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.

## 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 | → |
| ◁ | Metal Pole with Mastarm | ◁ |
| Ⓐ | Left Arrow "ONLY" Sign (R3-5L) | Ⓐ |
| Ⓑ | Combined Through and Left Arrow Sign (R3-6L) | Ⓑ |

Signal Upgrade

SIG. INVENTORY NO. 12-0234

12-MAY-2005 08:33
w:#n/pcop ies-un i t#workgroups#t ip projects#U-4736#s igna l plans#U-2408#U-2408#12-0234 s ig.dgn 20050314.dgn