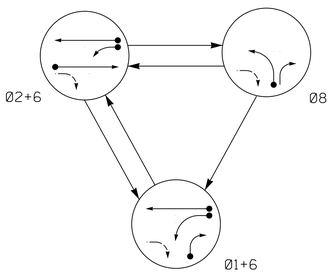
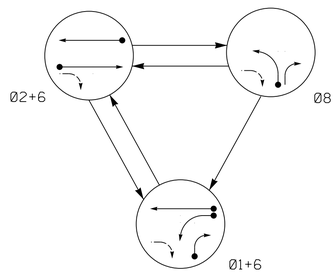
| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| R-2577A | Sig. 18.0 |

## DEFAULT PHASING DIAGRAM




## ALTERNATE PHASING DIAGRAM




### DEFAULT PHASING TABLE OF OPERATION

| SIGNAL FACE | PHASE Ø1+6 | PHASE Ø2+6 | PHASE Ø8 | FLASH |
|---|---|---|---|---|
| 11 | ← | F Y | ~~R~~ | ~~Y~~ |
| 12 | → | R | → | R |
| 21 | R | ↑ | R | Y |
| 22 | R | G | R | Y |
| 61,62 | G | G | R | Y |
| 81 | ~~R~~ | ~~R~~ | ← | ~~R~~ |

### ALTERNATE PHASING TABLE OF OPERATION

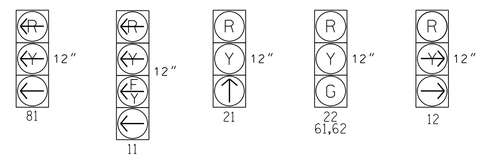
| SIGNAL FACE | PHASE Ø1+6 | PHASE Ø2+6 | PHASE Ø8 | FLASH |
|---|---|---|---|---|
| 11 | ← | ~~R~~ | ~~R~~ | ~~Y~~ |
| 12 | → | R | → | R |
| 21 | R | ↑ | R | Y |
| 22 | R | G | R | Y |
| 61,62 | G | G | R | Y |
| 81 | ~~R~~ | ~~R~~ | ← | ~~R~~ |

### PHASING DIAGRAM DETECTION LEGEND

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

## SIGNAL FACE I.D.

All Heads L.E.D.




### MAXTIME DETECTOR INSTALLATION CHART

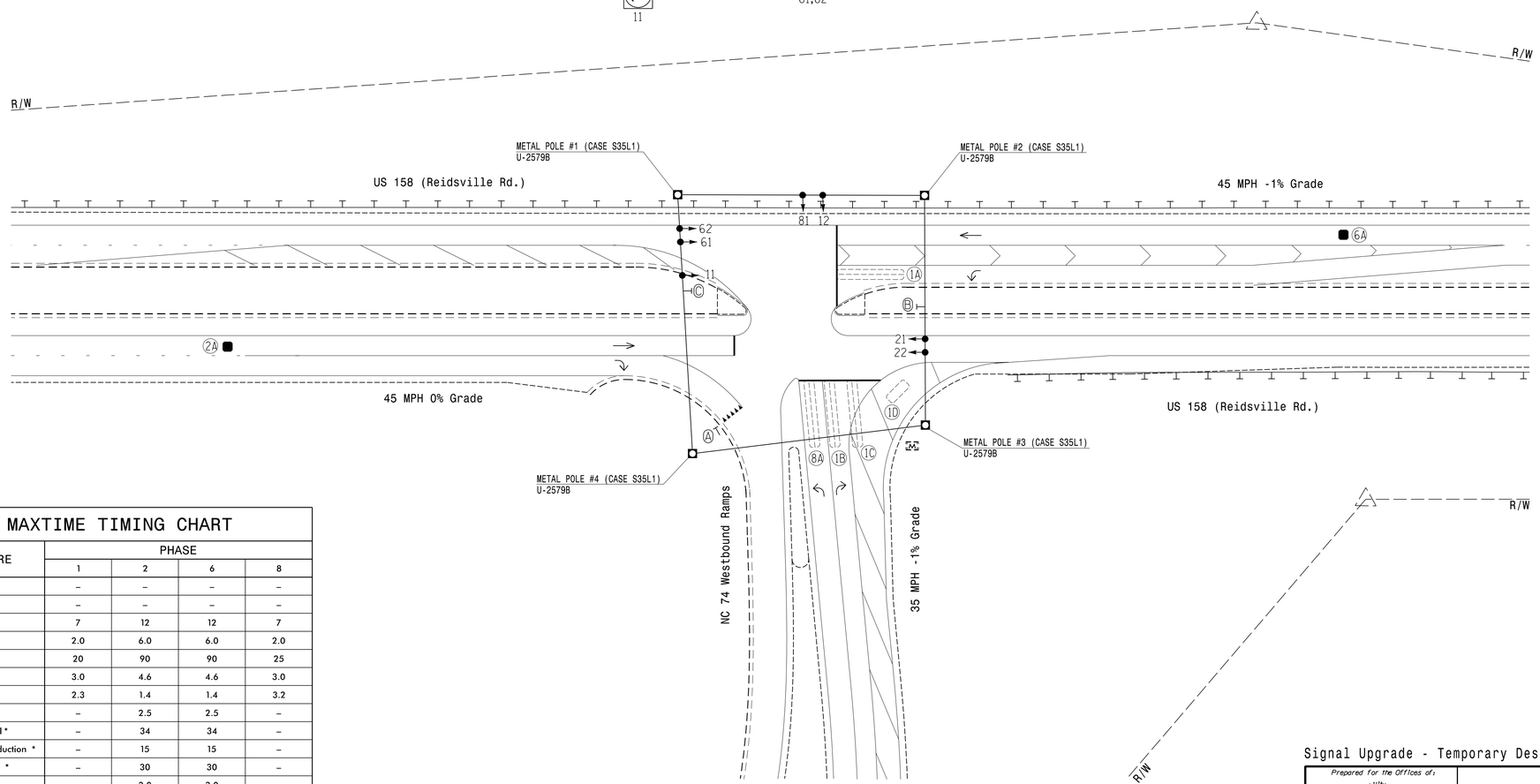
| DETECTOR | | | | | PROGRAMMING | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOOP/ ZONE | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | CALL PHASE | DELAY TIME | EXTEND TIME | EXTEND | ADDED INITIAL | CALL | DELAY DURING GREEN | NEW CARD |
| 1A | 6X40 | 0 | 2-4-2 | - | 1 | 15# | - | X | - | X | X | - |
| | | | | | 6## | 3 | - | X | - | X | X | - |
| 1B | 6X40 | 0 | 2-4-2 | - | 1 | 15 | - | X | - | X | - | - |
| 1C | 6X40 | 0 | 2-4-2 | - | 1 | 15 | - | X | - | X | - | - |
| 1D | 6X15 | 0 | 4 | - | DISCONNECTED | | | | | | | |
| 2A ✳ | 6X6 | 300 | ✳ | ✳ | 2 | - | - | X | X | X | - | ✳ |
| 6A ✳ | 6X6 | 300 | ✳ | ✳ | 6 | - | - | X | X | X | - | ✳ |
| 8B | 6X40 | 0 | 2-4-2 | - | 8 | - | - | X | - | X | - | - |

\# Disable Delay During Alternate Phasing Operation.
\## Disable Phase Call For Loop(s) During Alternate Phasing Operation.
✳ Video Detection Zone

## 3 Phase
## Fully Actuated
## (US 158 Signal System)
## Signal System #: D09-11_Winston-Salem

## NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 may be lagged.
4. Reposition existing signal heads numbered 21 and 22.
5. Set all detector units to presence mode.
6. Disconnect existing loop 1D.
7. This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
8. The Division Traffic Engineer will determine the hours of use for each phasing plan.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. Disconnect and bag existing signal head 13.




## 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 | |
| | Video Detection Zone | |
| N/A | Guardrail | |
| | Metal Strain Pole | |
| | Master Controller & Cabinet | |
| Ⓐ | "YIELD" Sign (R1-2) | Ⓐ |
| Ⓑ | No U-Turn Sign (R3-4) | Ⓑ |
| Ⓒ | "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) | Ⓒ |

### MAXTIME TIMING CHART

| FEATURE | PHASE 1 | PHASE 2 | PHASE 6 | PHASE 8 |
|---|---|---|---|---|
| Walk * | – | – | – | – |
| Ped Clear * | – | – | – | – |
| Min Green | 7 | 12 | 12 | 7 |
| Passage * | 2.0 | 6.0 | 6.0 | 2.0 |
| Max 1 * | 20 | 90 | 90 | 25 |
| Yellow Change | 3.0 | 4.6 | 4.6 | 3.0 |
| Red Clear | 2.3 | 1.4 | 1.4 | 3.2 |
| Added Initial * | – | 2.5 | 2.5 | – |
| Maximum Initial * | – | 34 | 34 | – |
| Time Before Reduction * | – | 15 | 15 | – |
| Time To Reduce * | – | 30 | 30 | – |
| Minimum Gap | – | 3.0 | 3.0 | – |
| Advance Walk | – | – | – | – |
| Non Lock Detector | X | – | – | X |
| Vehicle Recall | – | MIN RECALL | MIN RECALL | – |
| Dual Entry | – | – | – | – |

* 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 - Temporary Design 3 (TMP Phase III)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED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Prepared for the Offices of:
Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 0 40 1" = 40'

# US 158 (Reidsville Rd.) at NC 74 Westbound Ramps

Division 9 Forsyth County Winston-Salem

PLAN DATE: February 2024 REVIEWED BY: DT Sears
PREPARED BY: WP Erickson-Jones REVIEWED BY:

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

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 056142 ENGINEER W. PORTER JONES

DocuSigned by: Porter Jones 2/12/2024
DOBE3E3ABE0A8B...
SIGNATURE DATE

SIG. INVENTORY NO. 09-051IT3

2/12/2024
R:\Traffic Control\Signals\Designs\Signals\09051IT3_sig_dsn_XXXXXXXX.dgn
WPJones