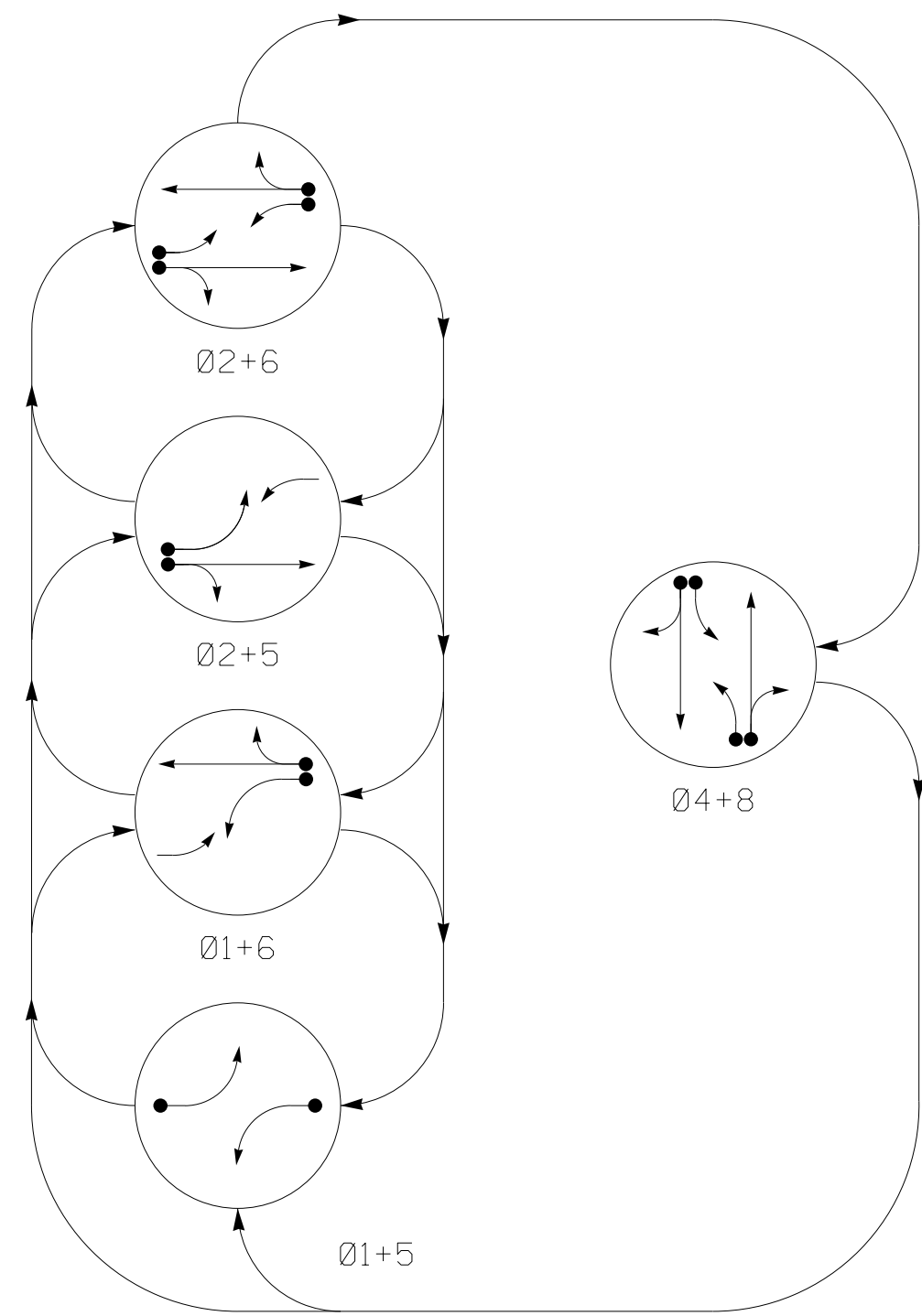
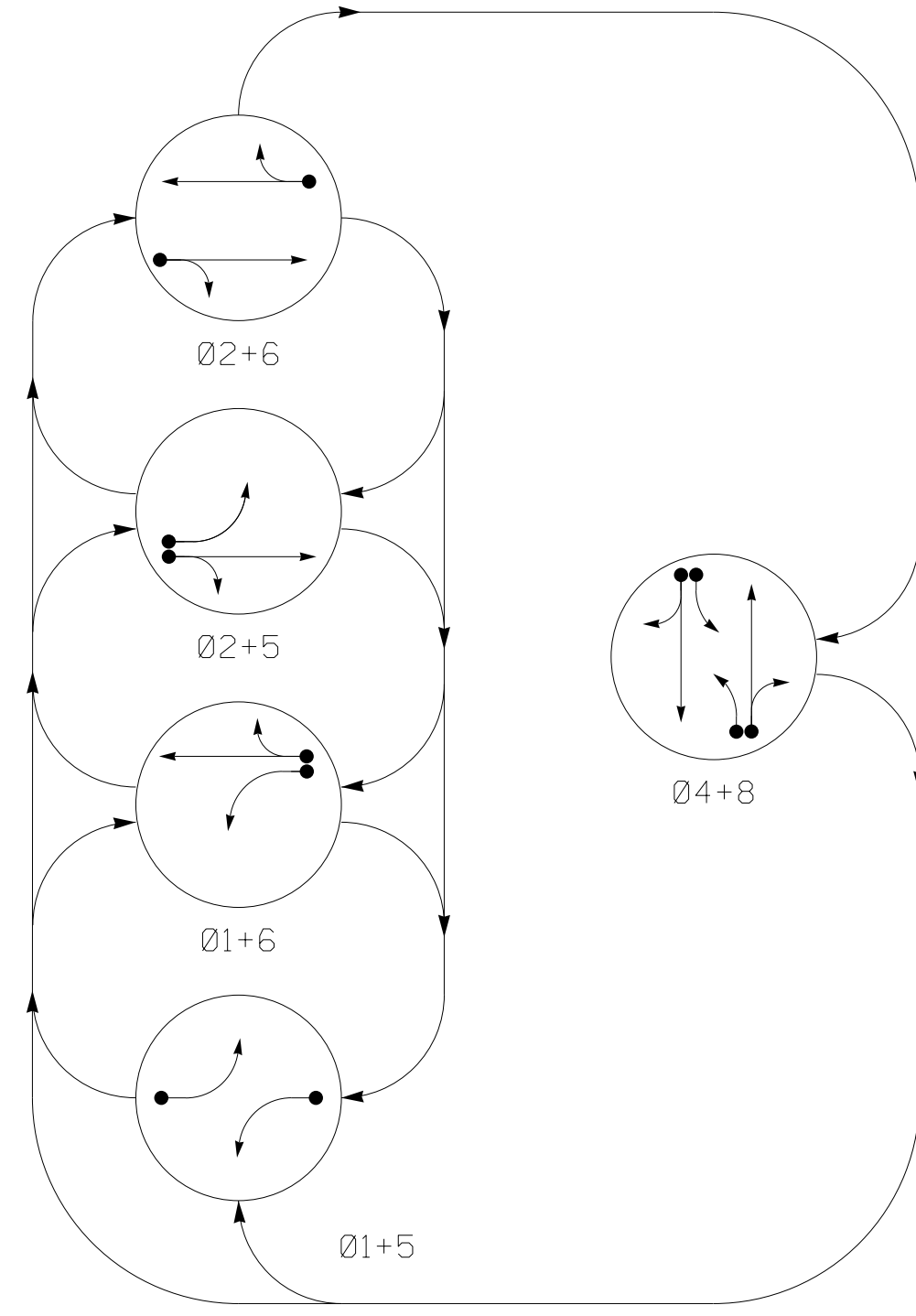


DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND
 ● DETECTED MOVEMENT
 ◐ UNDETECTED MOVEMENT (OVERLAP)
 ◑ UNSIGNALIZED MOVEMENT
 ◒ PEDESTRIAN MOVEMENT

DEFAULT PHASING TABLE OF OPERATION

| SIGNAL FACE | PHASE | | | | | | | |
|-------------|-------|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 8 |
| 11 | ← | ← | ← | ← | ← | ← | ← | ← |
| 21, 22 | R | R | G | G | R | R | Y | |
| 41 | ← | ← | ← | ← | ← | ← | ← | ← |
| 42, 43 | R | R | R | R | G | R | | |
| 51 | ← | ← | ← | ← | ← | ← | ← | ← |
| 61, 62 | R | G | R | G | R | Y | | |
| 81 | ← | ← | ← | ← | ← | ← | ← | ← |
| 82, 83 | R | R | R | R | G | R | | |

ALTERNATE PHASING TABLE OF OPERATION

| SIGNAL FACE | PHASE | | | | | | | |
|-------------|-------|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 8 |
| 11 | ← | ← | ← | ← | ← | ← | ← | ← |
| 21, 22 | R | R | G | G | R | R | Y | |
| 41 | ← | ← | ← | ← | ← | ← | ← | ← |
| 42, 43 | R | R | R | R | G | R | | |
| 51 | ← | ← | ← | ← | ← | ← | ← | ← |
| 61, 62 | R | G | R | G | R | Y | | |
| 81 | ← | ← | ← | ← | ← | ← | ← | ← |
| 82, 83 | R | R | R | R | G | R | | |

MAXTIME DETECTOR INSTALLATION CHART

| LOOP | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | PROGRAMMING | | | | | | | |
|------|-----------|----------------------------|-------|----------|-------------|------------|-------------|--------|---------------|------|--------------------|----------|
| | | | | | CALL PHASE | DELAY TIME | EXTEND TIME | EXTEND | ADDED INITIAL | CALL | DELAY DURING GREEN | NEW CARD |
| 1A | 6X40 | 0 | 2-4-2 | X | 1 | 15.0* | - | X | - | X | - | X |
| 2A | 6X6 | 70 | 3 | X | 2 | - | - | X | - | X | - | X |
| 4A | 6X40 | 0 | 2-4-2 | X | 4 | 3.0 | - | X | - | X | - | X |
| 4B | 6X40 | 0 | 2-4-2 | X | 4 | 10.0 | - | X | - | X | - | X |
| 5A | 6X40 | 0 | 2-4-2 | X | 5 | 15.0* | - | X | - | X | - | X |
| 6A | 6X6 | 70 | 4 | X | 6 | - | - | X | - | X | - | X |
| 8A | 6X40 | 0 | 2-4-2 | X | 8 | 3.0 | - | X | - | X | - | X |
| 8B | 6X40 | 0 | 2-4-2 | X | 8 | 10.0 | - | X | - | X | - | X |

* Reduce delay to 3 seconds during Alternate Phasing Operation.
 # Disable phase call for loop(s) during Alternate Phasing Operation.

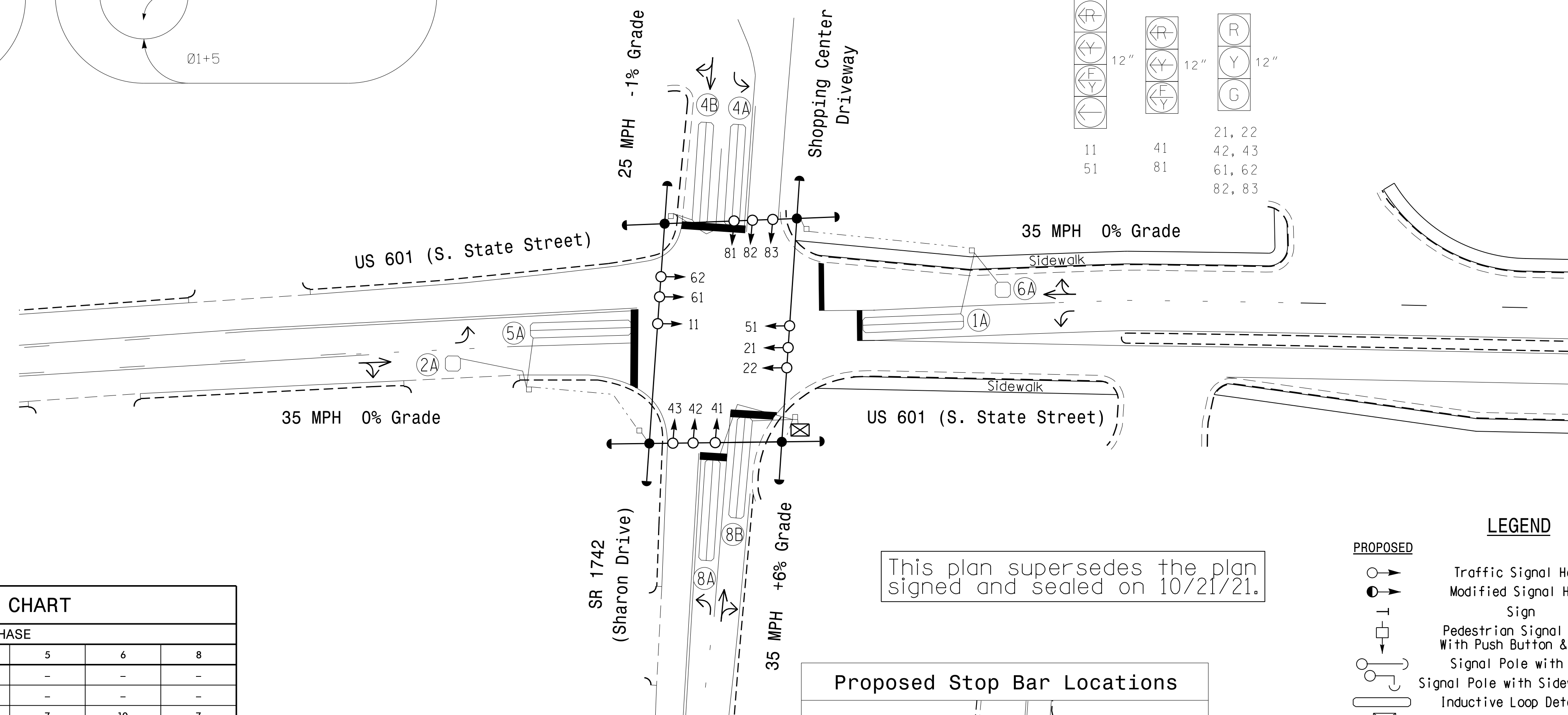
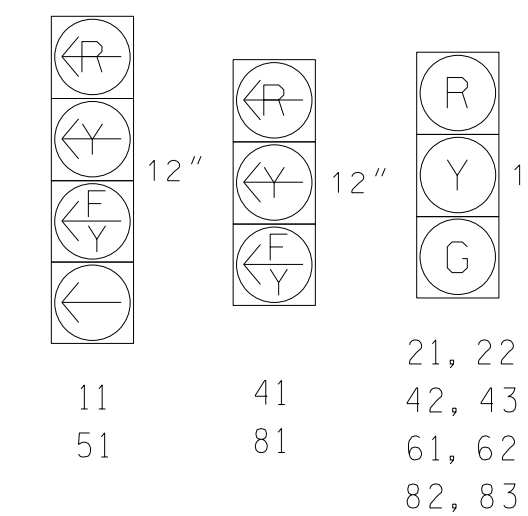
5 Phase Fully Actuated w/ Alternate Phasing Operation Isolated

NOTES

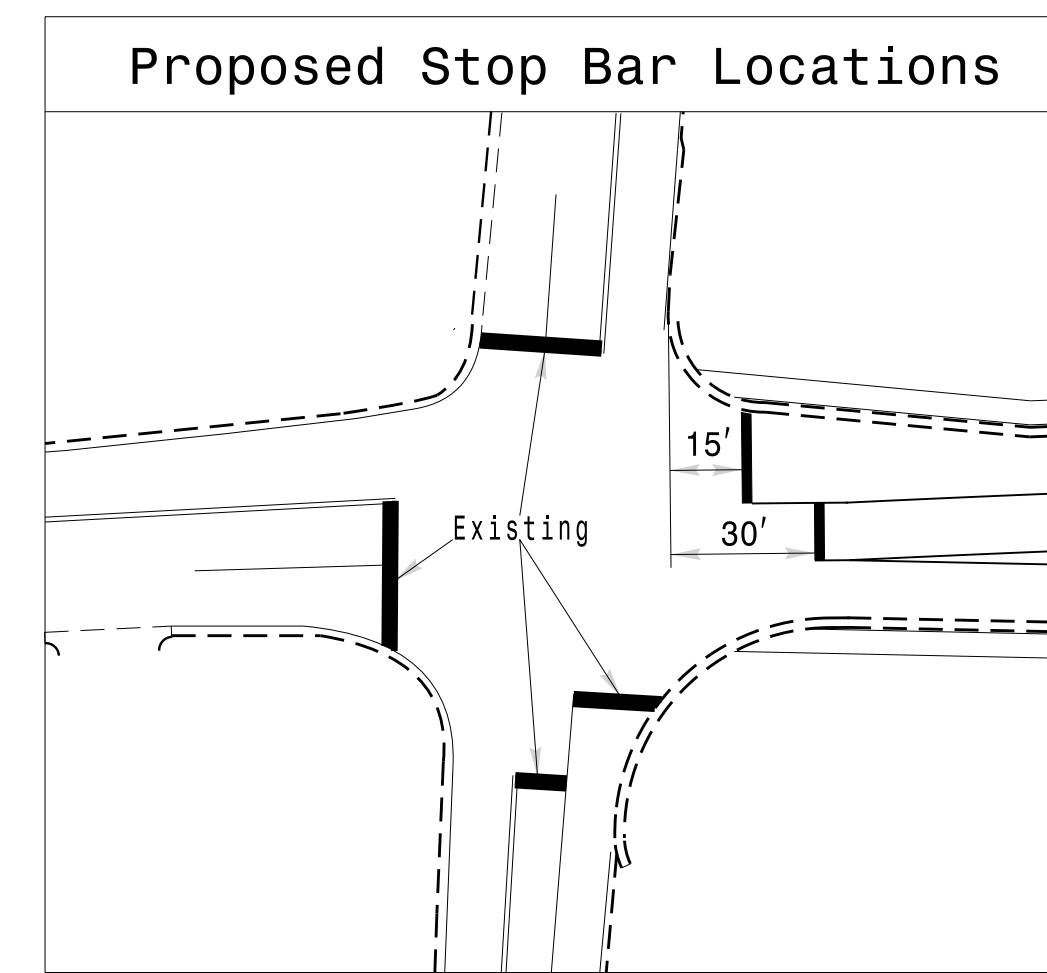
- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning on red.
- The Division Traffic Engineer will determine the hours of use for each phasing plan.

SIGNAL FACE I.D.

All Heads L.E.D.



This plan supersedes the plan signed and sealed on 10/21/21.



MAXTIME TIMING CHART

| FEATURE | PHASE | | | | | | |
|-------------------------|-------|------------|-----|-----|------------|-----|--|
| | 1 | 2 | 4 | 5 | 6 | 8 | |
| Walk * | - | - | - | - | - | - | |
| Ped Clear * | - | - | - | - | - | - | |
| Min Green * | 7 | 10 | 7 | 7 | 10 | 7 | |
| Passage * | 2.0 | 3.0 | 2.0 | 2.0 | 3.0 | 2.0 | |
| Max I * | 15 | 30 | 20 | 15 | 30 | 20 | |
| Yellow Change | 3.0 | 3.8 | 3.5 | 3.0 | 3.8 | 3.5 | |
| Red Clear | 2.4 | 1.6 | 1.8 | 1.9 | 1.6 | 1.8 | |
| Added Initial * | - | - | - | - | - | - | |
| Maximum Initial * | - | - | - | - | - | - | |
| Time Before Reduction * | - | - | - | - | - | - | |
| Time To Reduce * | - | - | - | - | - | - | |
| Minimum Gap | - | - | - | - | - | - | |
| Advance Walk | - | - | - | - | - | - | |
| Non Lock Detector | X | - | X | X | - | X | |
| Vehicle Recall | - | MIN RECALL | - | - | MIN RECALL | - | |
| Dual Entry | - | - | X | - | - | X | |

* These values may be field adjusted. Do not adjust Min Green and Passage 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 | ● → Traffic Signal Head |
| ◐ → Modified Signal Head | ◑ → Modified Signal Head |
| ◒ → Pedestrian Signal Head With Push Button & Sign | ◒ → Pedestrian Signal Head With Push Button & Sign |
| ○ → Signal Pole with Guy | ○ → Signal Pole with Guy |
| ○ → Signal Pole with Sidewalk Guy | ○ → Signal Pole with Sidewalk Guy |
| ⊠ → Inductive Loop Detector | ⊠ → Inductive Loop Detector |
| □ → Controller & Cabinet | □ → Controller & Cabinet |
| □ → Junction Box | □ → Junction Box |
| --- 2-in Underground Conduit | --- 2-in Underground Conduit |
| --- Right of Way | --- Right of Way |
| → Directional Arrow | → Directional Arrow |

Signal Upgrade

Prepared For the Offices of:
 Transportation Mobility and Safety Division
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 Signal Design Section

US 601 (S. State Street) at SR 1742 (Sharon Drive)/ Shopping Center Driveway
 Division 11 Yadkin County Yadkinville
 PLAN DATE: August 2023 REVIEWED BY: R.N. Zinser
 PREPARED BY: T.A. Kenion REVIEWED BY:

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: 1"=30'

REVISIONS: INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL: R. Nicholas Zinser, PROFESSIONAL ENGINEER, No. 043914, State of North Carolina

DATE: 11/14/2023

SIG. INVENTORY NO. II-0089