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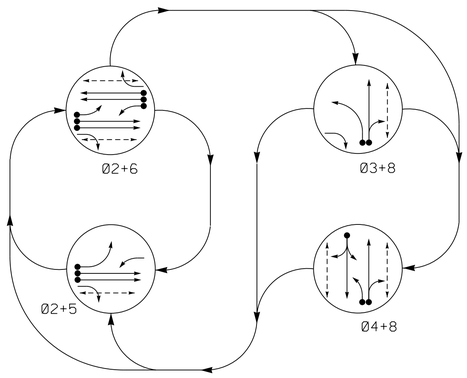
| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| R-3825B | Sig.15.0 |

## PHASING DIAGRAM




PHASING DIAGRAM DETECTION LEGEND

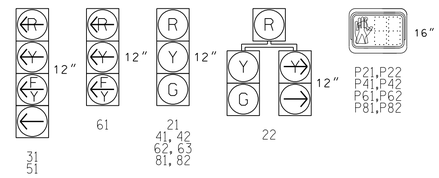
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

## TABLE OF OPERATION

| SIGNAL FACE | PHASE 02+5 | 02+6 | 03+8 | 04+8 | FLASH |
|---|---|---|---|---|---|
| 21 | G | G | R | R | Y |
| 22 | G | G | R/→ | R | Y |
| 31 | ←R | ←R | ← | F Y | ←R |
| 41,42 | R | R | R | G | R |
| 51 | ← | F Y | ←R | ←R | ←Y |
| 61 | F Y | F Y | ←R | ←R | ←Y |
| 62,63 | R | G | R | R | Y |
| 81,82 | R | R | G | G | R |
| P21,P22 | W | W | DW | DW | DRK |
| P41,P42 | DW | DW | DW | W | DRK |
| P61,P62 | DW | W | DW | DW | DRK |
| P81,P82 | DW | DW | W | W | DRK |

## SIGNAL FACE I.D.

All Heads L.E.D.



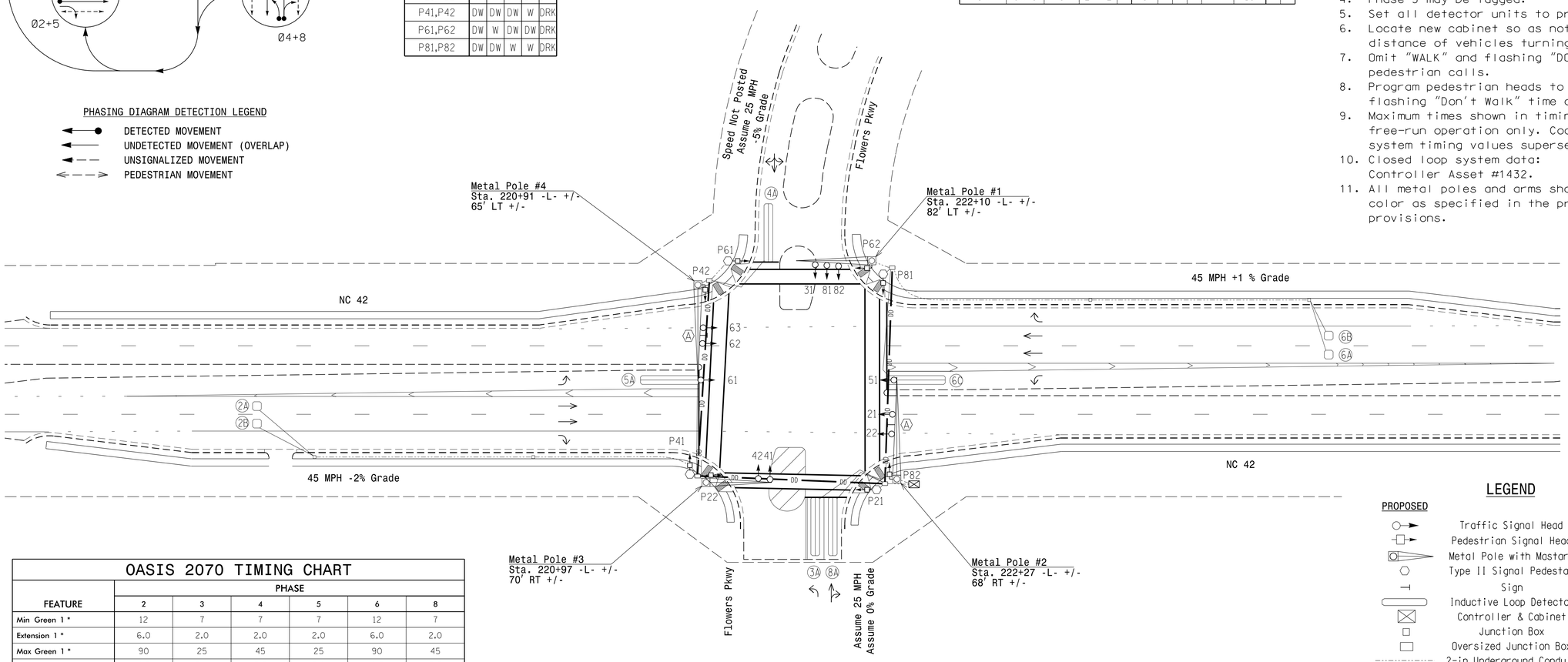

## OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

| 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 | 6X6 | 300 | 5 | Y | 2 | Y | Y | - | - | - | - | Y |
| 2B | 6X6 | 300 | 5 | Y | 2 | Y | Y | - | - | - | - | Y |
| 3A | 6X40 | 0 | 2-4-2 | Y | 3 | Y | Y | - | - | 15 | - | Y |
| | | | | | 8 | Y | Y | - | - | - | - | Y |
| 4A | 6X40 | 0 | 2-4-2 | Y | 4 | Y | Y | - | - | 10 | - | Y |
| 5A | 6X40 | 0 | 2-4-2 | Y | 5 | Y | Y | - | - | 15 | - | Y |
| | | | | | 2 | Y | Y | Y | - | 3 | - | Y |
| 6A | 6X6 | 300 | 5 | Y | 6 | Y | Y | - | - | - | - | Y |
| 6B | 6X6 | 300 | 5 | Y | 6 | Y | Y | - | - | - | - | Y |
| 8A | 6X40 | 0 | 2-4-2 | Y | 8 | Y | Y | - | - | 10 | - | Y |

4 Phase
Fully Actuated
NC 42 (East of Clayton)

## NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018. "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Omit phase 3 during phase 4 on.
4. Phase 5 may be lagged.
5. Set all detector units to presence mode.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
8. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. Closed loop system data: Controller Asset #1432.
11. All metal poles and arms should be black in color as specified in the project special provisions.




## LEGEND

| PROPOSED | | EXISTING |
|---|---|---|
| | Traffic Signal Head | |
| | Pedestrian Signal Head | |
| | Metal Pole with Mastarm | |
| | Type II Signal Pedestal | |
| | Sign | |
| | Inductive Loop Detector | |
| | Controller & Cabinet | |
| | Junction Box | |
| | Oversized Junction Box | |
| | 2-in Underground Conduit | |
| DD | Directional Drill | N/A |
| N/A | Right of Way | |
| | Directional Arrow | |
| A | Street Name Sign (D3-1) | A |

## OASIS 2070 TIMING CHART

| FEATURE | PHASE 2 | 3 | 4 | 5 | 6 | 8 |
|---|---|---|---|---|---|---|
| Min Green 1 * | 12 | 7 | 7 | 7 | 12 | 7 |
| Extension 1 * | 6.0 | 2.0 | 2.0 | 2.0 | 6.0 | 2.0 |
| Max Green 1 * | 90 | 25 | 45 | 25 | 90 | 45 |
| Yellow Clearance | 4.7 | 3.0 | 3.5 | 3.0 | 4.7 | 3.5 |
| Red Clearance | 2.1 | 3.7 | 3.6 | 3.5 | 2.1 | 3.6 |
| Red Revert | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Walk 1 * | 7 | - | 7 | - | 7 | 7 |
| Don't Walk 1 | 20 | - | 30 | - | 20 | 32 |
| Seconds Per Actuation * | 1.8 | - | - | - | 1.8 | - |
| Max Variable Initial * | 34 | - | - | - | 34 | - |
| Time Before Reduction * | 15 | - | - | - | 15 | - |
| Time To Reduce * | 30 | - | - | - | 30 | - |
| Minimum Gap | 3.0 | - | - | - | 3.0 | - |
| Recall Mode | MIN RECALL | - | - | - | MIN RECALL | - |
| Vehicle Call Memory | YELLOW | - | - | - | YELLOW | - |
| Dual Entry | - | - | ON | - | - | ON |
| Simultaneous Gap | ON | 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.

New Installation

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared by
URS
URS Corporation – North Carolina
1600 Perimeter Park Drive
Morrisville, North Carolina 27560
TELEPHONE (919) 461-1100 FAX (919) 461-1415
NC LICENSE # C-2243

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'

# NC 42 at Flowers Parkway

Division 4 Johnston County Clayton

PLAN DATE: January 2018 REVIEWED BY: C. L. Kalencik
PREPARED BY: S. W. Cox REVIEWED BY:

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

NORTH CAROLINA PROFESSIONAL SEAL 040715 ENGINEER CORTNEY L. KALENCIK

DocuSigned by: Cortney L. Kalencik 0FE9158CE2864FE... 5/25/2018

SIG. INVENTORY NO. 04-1432

5/25/2018
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