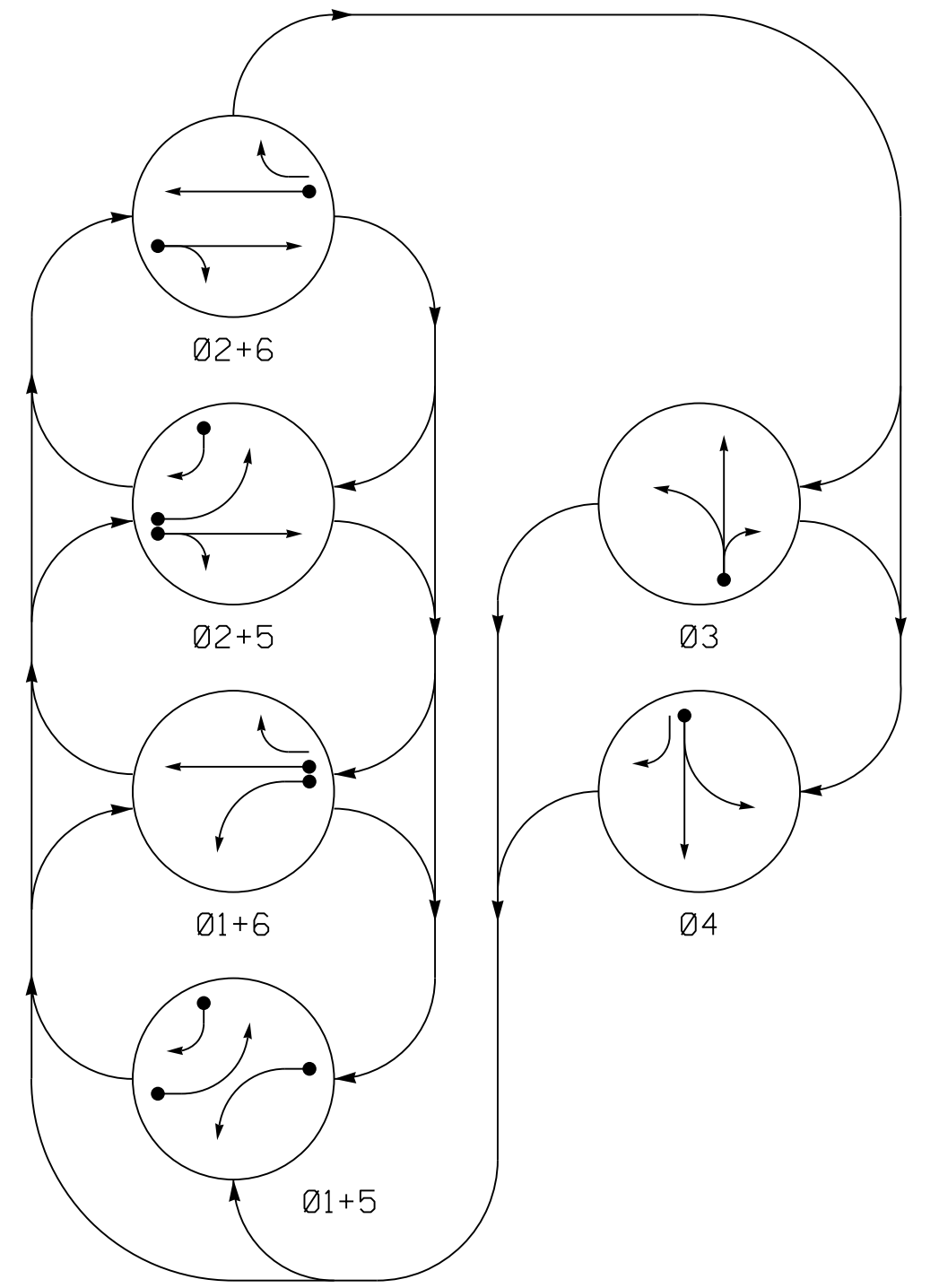


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

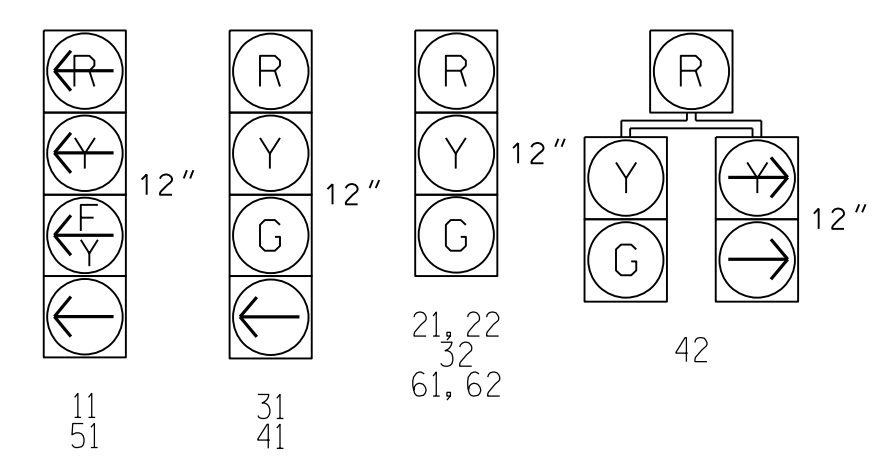
- ←● DETECTED MOVEMENT
- ← UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- ←> PEDESTRIAN MOVEMENT

TABLE OF OPERATION

| SIGNAL FACE | PHASE | | | | | |
|-------------|---------|---------|---------|---------|-----|-----|
| | Ø 1 + 5 | Ø 1 + 6 | Ø 2 + 5 | Ø 2 + 6 | Ø 3 | Ø 4 |
| 11 | ← | ← | ← | ← | ← | ← |
| 21, 22 | R | R | G | G | R | Y |
| 31 | R | R | R | R | G | R |
| 32 | R | R | R | R | G | R |
| 41 | R | R | R | R | R | G |
| 42 | R | R | R | R | R | G |
| 51 | ← | ← | ← | ← | ← | ← |
| 61, 62 | R | G | R | G | R | Y |

SIGNAL FACE I.D.

All Heads L.E.D.



OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

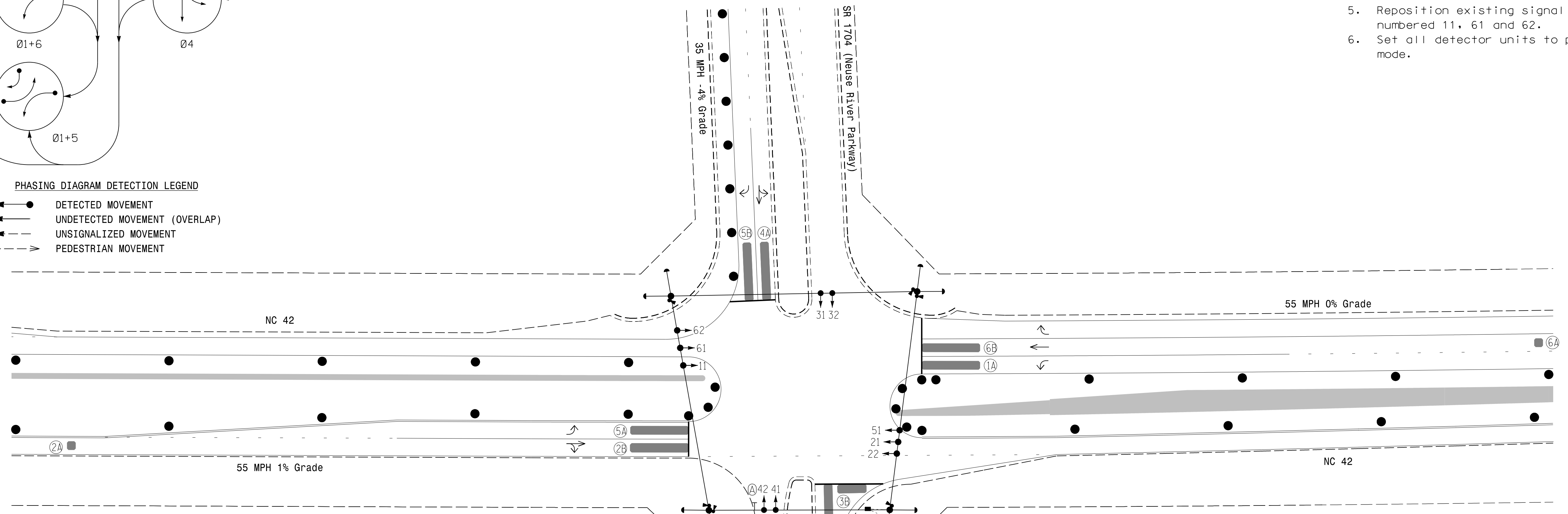
| LOOP | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | INDUCTIVE LOOPS | | DETECTOR PROGRAMMING | | | | STRETCH TIME | DELAY TIME | SYSTEM LOOP | NEW CARD |
|------|-----------|----------------------------|-----------------|----------|----------------------|-----------------------------------|--------------|------------|--------------|------------|-------------|----------|
| | | | TURNS | NEW LOOP | PHASE | CALLING EXTENSION FULL TIME DELAY | STRETCH TIME | DELAY TIME | | | | |
| 1A | 6X40 | 0 | * | Y | 1 | Y | Y | - | 15 | - | * | |
| 2A | 6X6 | 420 | * | - | 2 | Y | Y | - | - | - | * | |
| 2B | 6X40 | 0 | * | - | 2 | Y | Y | 2.0 | 5 | - | * | |
| 3A | 6X40 | 0 | * | - | 3 | Y | Y | - | 10 | - | * | |
| 3B | 20X6 | 0 | * | - | 3 | Y | Y | - | 15 | - | * | |
| 4A | 6X40 | 0 | * | Y | 4 | Y | Y | - | - | - | * | |
| 5A | 6X40 | 0 | * | - | 5 | Y | Y | - | 15 | - | * | |
| 5B | 6X40 | 0 | * | Y | 5 | Y | Y | - | 15 | - | * | |
| 6A | 6X6 | 420 | * | Y | 6 | Y | Y | - | - | - | * | |
| 6B | 6X40 | 0 | * | Y | 6 | Y | Y | 2.0 | 5 | - | * | |

* Video Detection Zone

6 Phase Fully Actuated Isolated

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018, "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Reposition existing signal heads numbered 11, 61 and 62.
- Set all detector units to presence mode.



OASIS 2070 TIMING CHART

| FEATURE | PHASE | | | | | |
|-------------------------|-------|------------|-----|-----|-----|------------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Min Green 1 * | 7 | 14 | 7 | 7 | 7 | 14 |
| Extension 1 | 2.0 | 6.0 | 2.0 | 2.0 | 2.0 | 6.0 |
| Max Green 1 * | 20 | 90 | 25 | 45 | 25 | 90 |
| Yellow Clearance | 3.2 | 5.1 | 3.0 | 4.1 | 3.1 | 5.2 |
| Red Clearance | 3.1 | 1.3 | 3.5 | 2.3 | 3.2 | 1.6 |
| Red Revert | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Walk 1 * | - | - | - | - | - | - |
| Don't Walk 1 | - | - | - | - | - | - |
| Seconds Per Actuation * | - | - | - | - | - | - |
| Max Variable Initial * | - | - | - | - | - | - |
| Time Before Reduction * | - | 15 | - | - | - | 15 |
| Time To Reduce * | - | 30 | - | - | - | 30 |
| Minimum Gap | - | 3.4 | - | - | - | 3.4 |
| Recall Mode | - | MIN RECALL | - | - | - | MIN RECALL |
| Vehicle Call Memory | - | - | - | - | - | - |
| Dual Entry | - | - | - | - | - | - |
| 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.

LEGEND

| | | | |
|---------------------------------|---------------------------------|-----------------------------------|-----------------------------------|
| PROPOSED | EXISTING | PROPOSED | EXISTING |
| → Traffic Signal Head | → Traffic Signal Head | → 2-in Underground Conduit | → 2-in Underground Conduit |
| ↑ Sign | ↑ Sign | → Right of Way | → Right of Way |
| ○ Signal Pole with Guy | ○ Signal Pole with Guy | → Directional Arrow | → Directional Arrow |
| ○ Signal Pole with Sidewalk Guy | ○ Signal Pole with Sidewalk Guy | ▭ Construction Zone | ▭ Construction Zone |
| ▭ Video Detection Area | ▭ Video Detection Area | ● Construction Drums | ● Construction Drums |
| ○ Video Detector | ○ Video Detector | ⊙ Right Arrow "ONLY" Sign (R3-5R) | ⊙ Right Arrow "ONLY" Sign (R3-5R) |
| ⊠ Controller & Cabinet | ⊠ Controller & Cabinet | ⊠ | ⊠ |
| □ Junction Box | □ Junction Box | | |
| □ Oversized Junction Box | □ Oversized Junction Box | | |

Signal Upgrade - Temporary Design 4 (TMP Phase III)

Prepared by
URS
URS Corporation - North Carolina
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Prepared for the Offices of:
TRANSPORTATION MOBILITY AND SAFETY DIVISION
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
SIGNAL DESIGN SECTION
750 N. Greenfield Pkwy, Garner, NC 27529

NC 42
at
SR 1704 (Neuse River Parkway) /
Queen Ann Drive
Division 4 Johnston County Clayton
PLAN DATE: January 2018 REVIEWED BY: C. L. Kalencik
PREPARED BY: S. W. COX REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
040715
C. L. KALENCIK
5/25/2018
SIG. INVENTORY NO. 04-141214

5/25/2018 L:\MORT\BVI\118\081\4325B\Traffic\c45\gnal\40141214_s1g_dsn_dote.dgn