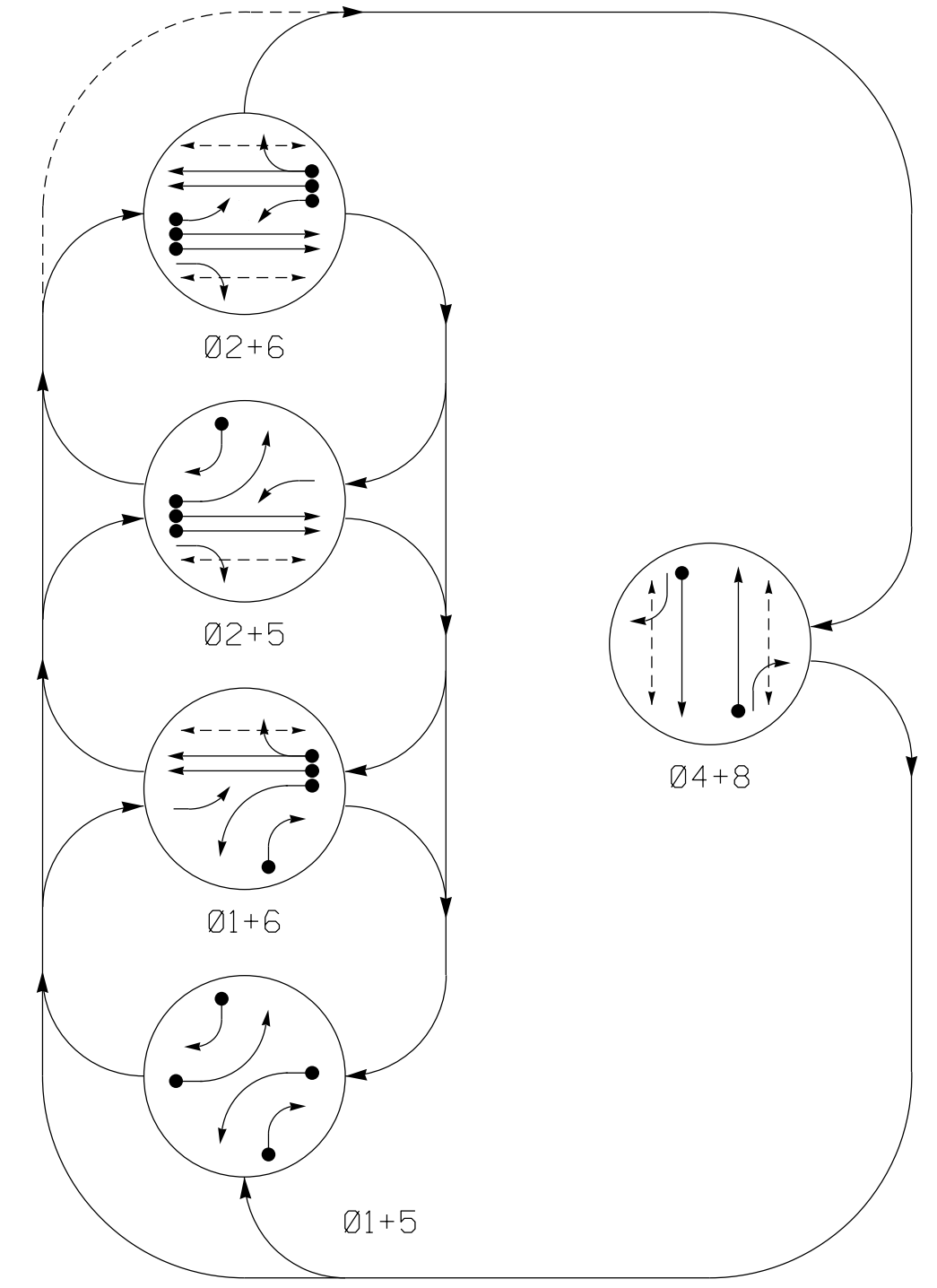


**PHASING DIAGRAM**



**PHASING DIAGRAM DETECTION LEGEND**

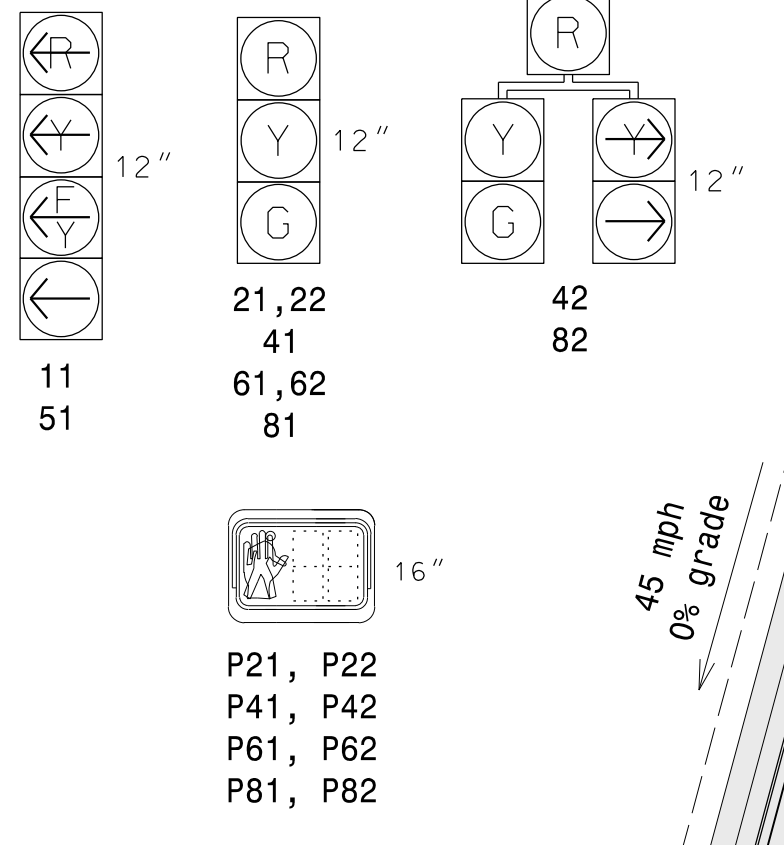
- DETECTED MOVEMENT
- ◄ UNDETECTED MOVEMENT (OVERLAP)
- ◄ UNIGNALIZED MOVEMENT
- ◄ PEDESTRIAN MOVEMENT

**TABLE OF OPERATION**

| SIGNAL FACE | PHASE |      |      |      |        |
|-------------|-------|------|------|------|--------|
|             | 01+5  | 02+5 | 02+6 | 04+8 | FUTURE |
| 11          | ←     | ←    | ←    | ←    | ←      |
| 21, 22      | R     | R    | G    | G    | R      |
| 41          | R     | R    | R    | R    | G      |
| 42          | R     | R    | R    | R    | G      |
| 51          | ←     | ←    | ←    | ←    | ←      |
| 61, 62      | R     | G    | R    | G    | R      |
| 81          | R     | R    | R    | R    | G      |
| 82          | R     | R    | R    | R    | G      |
| P21, P22    | DW    | DW   | W    | DW   | DRK    |
| P41, P42    | DW    | DW   | DW   | W    | DRK    |
| P61, P62    | DW    | W    | DW   | W    | DRK    |
| P81, P82    | DW    | DW   | DW   | W    | DRK    |

**SIGNAL FACE I.D.**

All Heads L.E.D.



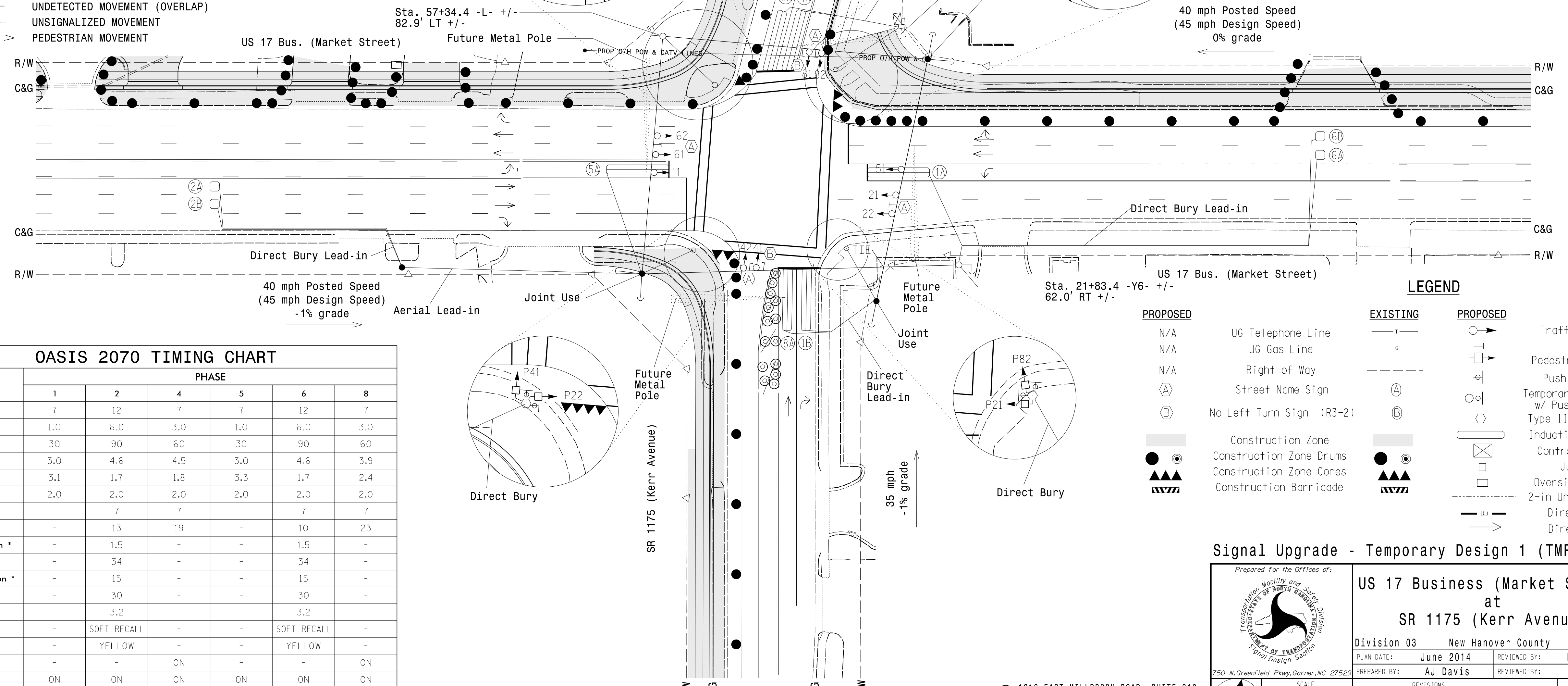
**OASIS 2070 LOOP & DETECTOR INSTALLATION CHART**

| LOOP | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | DETECTOR PROGRAMMING |         |           |              |            |             |          |
|------|-----------|----------------------------|-------|----------|----------------------|---------|-----------|--------------|------------|-------------|----------|
|      |           |                            |       |          | PHASE                | CALLING | EXTENSION | STRETCH TIME | DELAY TIME | SYSTEM LOOP | NEW CARD |
| 1A   | 6X40      | 0                          | 2-4-2 | Y        | 1                    | Y       | Y         | -            | 15         | -           | Y        |
| 1B   | 6X40      | 0                          | 2-4-2 | Y        | 6                    | Y       | Y         | -            | 3          | -           | Y        |
| 2A   | 6X6       | 300                        | 6     | Y        | 2                    | Y       | Y         | -            | -          | -           | Y        |
| 2B   | 6X6       | 300                        | 6     | Y        | 2                    | Y       | Y         | -            | -          | -           | Y        |
| 4A   | 6X40      | 0                          | 2-4-2 | Y        | 4                    | Y       | Y         | -            | -          | -           | Y        |
| 5A   | 6X40      | 0                          | 2-4-2 | Y        | 5                    | Y       | Y         | -            | 15         | -           | Y        |
| 5B   | 6X40      | 0                          | 2-4-2 | Y        | 5                    | Y       | Y         | -            | 15         | -           | Y        |
| 6A   | 6X6       | 300                        | 6     | Y        | 6                    | Y       | Y         | -            | -          | -           | Y        |
| 6B   | 6X6       | 300                        | 6     | Y        | 6                    | Y       | Y         | -            | -          | -           | Y        |
| 8A   | 6X40      | 0                          | 2-4-2 | Y        | 8                    | Y       | Y         | -            | -          | -           | Y        |

**5 Phase Fully Actuated (Wilmington Signal System)**

**NOTES**

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Run all lead-in cable overhead on existing utility poles where possible.
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. Pedestrian Pushbutton and sign shall be mounted parallel with associated crosswalk.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
11. Install new signal heads with enough signal cable to allow for the repositioning of the signal heads as shown in the subsequent temporary signal designs.
12. Signal system data: Controller Asset #0049.



**OASIS 2070 TIMING CHART**

| FEATURE                 | PHASE |             |     |     |             |     |  |  |
|-------------------------|-------|-------------|-----|-----|-------------|-----|--|--|
|                         | 1     | 2           | 4   | 5   | 6           | 8   |  |  |
| Min Green 1 *           | 7     | 12          | 7   | 7   | 12          | 7   |  |  |
| Extension 1 *           | 1.0   | 6.0         | 3.0 | 1.0 | 6.0         | 3.0 |  |  |
| Max Green 1 *           | 30    | 90          | 60  | 30  | 90          | 60  |  |  |
| Yellow Clearance        | 3.0   | 4.6         | 4.5 | 3.0 | 4.6         | 3.9 |  |  |
| Red Clearance           | 3.1   | 1.7         | 1.8 | 3.3 | 1.7         | 2.4 |  |  |
| Red Revert              | 2.0   | 2.0         | 2.0 | 2.0 | 2.0         | 2.0 |  |  |
| Walk 1 *                | -     | 7           | 7   | -   | 7           | 7   |  |  |
| Don't Walk 1            | -     | 13          | 19  | -   | 10          | 23  |  |  |
| Seconds Per Actuation * | -     | 1.5         | -   | -   | 1.5         | -   |  |  |
| Max Variable Initial *  | -     | 34          | -   | -   | 34          | -   |  |  |
| Time Before Reduction * | -     | 15          | -   | -   | 15          | -   |  |  |
| Time To Reduce *        | -     | 30          | -   | -   | 30          | -   |  |  |
| Minimum Gap             | -     | 3.2         | -   | -   | 3.2         | -   |  |  |
| Recall Mode             | -     | SOFT RECALL | -   | -   | SOFT 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.

| PROPOSED | EXISTING                 | PROPOSED | EXISTING  |
|----------|--------------------------|----------|---|
| N/A      | UG Telephone Line        | ○        | Traffic Signal Head                             |
| N/A      | UG Gas Line              | □        | Sign  |
| N/A      | Right of Way             | ◄        | Pedestrian Signal Head                          |
| (A)      | Street Name Sign         | ◄        | Push Button & Sign                              |
| (B)      | No Left Turn Sign (R3-2) | ◄        | Temporary Pedestrian Post w/ Push Button & Sign |
| ●        | Construction Zone        | ○        | Type II Signal Pedestal                         |
| ▲        | Construction Zone Drums  | ⊗        | Inductive Loop Detector                         |
| ▲        | Construction Zone Cones  | ⊗        | Controller & Cabinet                            |
| ▲        | Construction Barricade   | ⊗        | Junction Box                                    |
|          |                          | ⊗        | Oversize Junction Box                           |
|          |                          | ⊗        | 2-in Underground Conduit                        |
|          |                          | ⊗        | Directional Drill                               |
|          |                          | ⊗        | Directional Arrow                               |

**Signal Upgrade - Temporary Design 1 (TMP Phase II)**

Prepared for the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

**US 17 Business (Market Street) at SR 1175 (Kerr Avenue)**

Division 03 New Hanover County Wilmington

PLAN DATE: June 2014 REVIEWED BY: MB Toth

PREPARED BY: AJ Davis REVIEWED BY: LM Moon

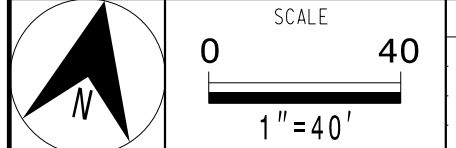
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MEISSA B. TOTH

12/19/2014

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SIG. INVENTORY NO. 03-004911