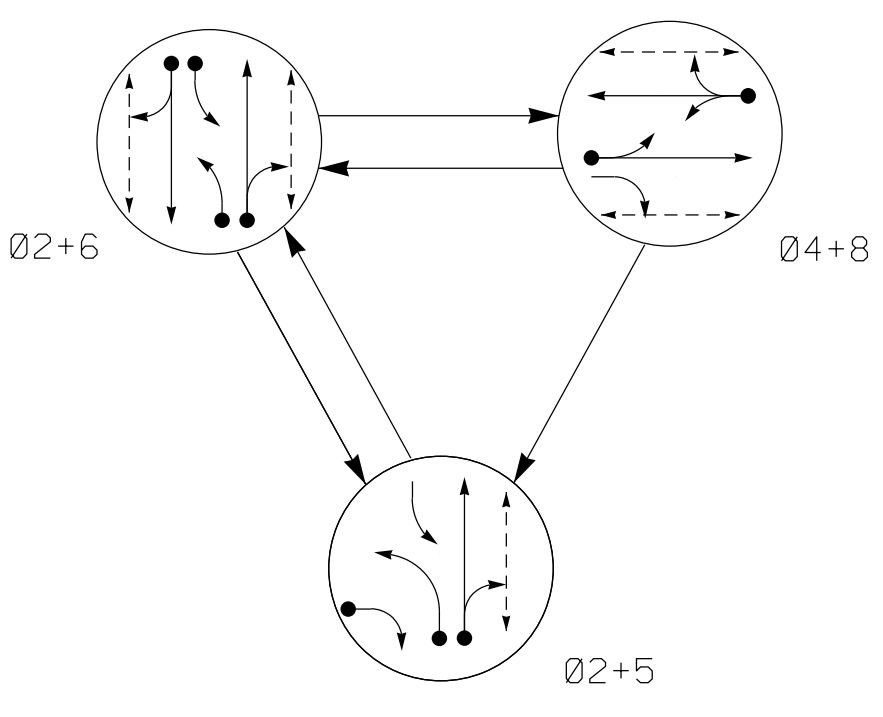


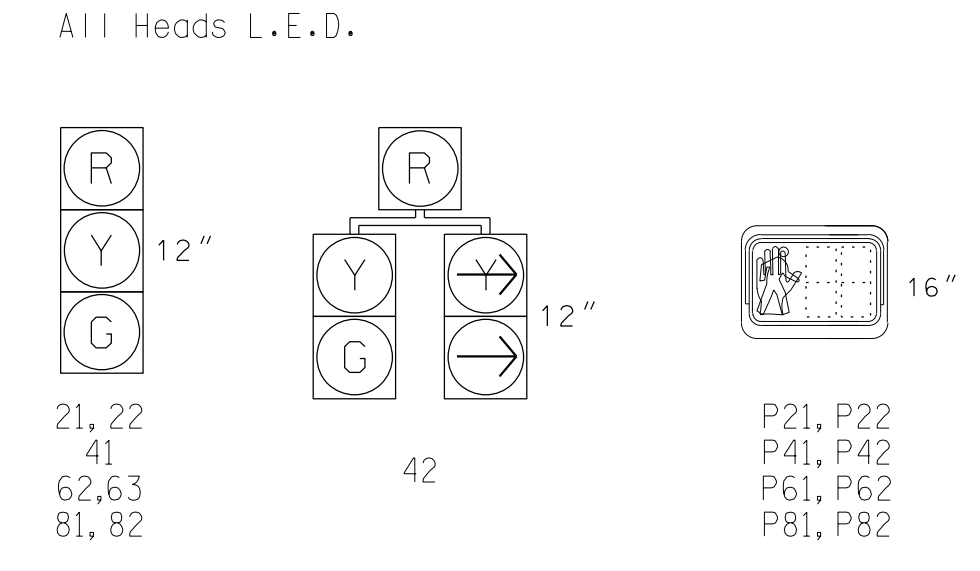
**PHASING DIAGRAM**



**PHASING DIAGRAM DETECTION LEGEND**

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

**SIGNAL FACE I.D.**



**ASC/3 DETECTOR INSTALLATION CHART**

| LOOP | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | PROGRAMMING |         |             |            |                   |      | SYSTEM LOOP | NEW CARD |
|------|-----------|----------------------------|-------|----------|-------------|---------|-------------|------------|-------------------|------|-------------|----------|
|      |           |                            |       |          | PHASE       | CALLING | EXTEND TIME | DELAY TIME | USE ADDED INITIAL | TYPE |             |          |
| 2A   | 6x40      | 0                          | 2-4-2 | X        | 2           | Yes     | -           | -          | -                 | S    | -           | X        |
| 4A   | 6x40      | +5                         | 2-4-2 | X        | 4           | Yes     | -           | 3          | -                 | S    | -           | X        |
| 5A   | 6x40      | +5                         | 2-4-2 | X        | 5           | Yes     | -           | 15         | -                 | S    | -           | X        |
| 5B   | 6x40      | +5                         | 2-4-2 | X        | 5           | Yes     | -           | 15         | -                 | S    | -           | X        |
| 6A   | 6x40      | 0                          | 2-4-2 | X        | 6           | Yes     | -           | -          | -                 | S    | -           | X        |
| 6B   | 6x40      | +5                         | 2-4-2 | X        | 6           | Yes     | -           | 3          | -                 | S    | -           | X        |
| 8A   | 6x40      | +5                         | 2-4-2 | X        | 8           | Yes     | -           | 5          | -                 | S    | -           | X        |

**3 Phase Fully Actuated (Elizabeth City Signal System)**

**NOTES**

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "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 5 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Renumber existing heads 61 and 62 as 62 and 63, respectively.
- Reposition heads 62 and 63 as shown.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Pavement markings are existing.
- Remove existing backplates.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

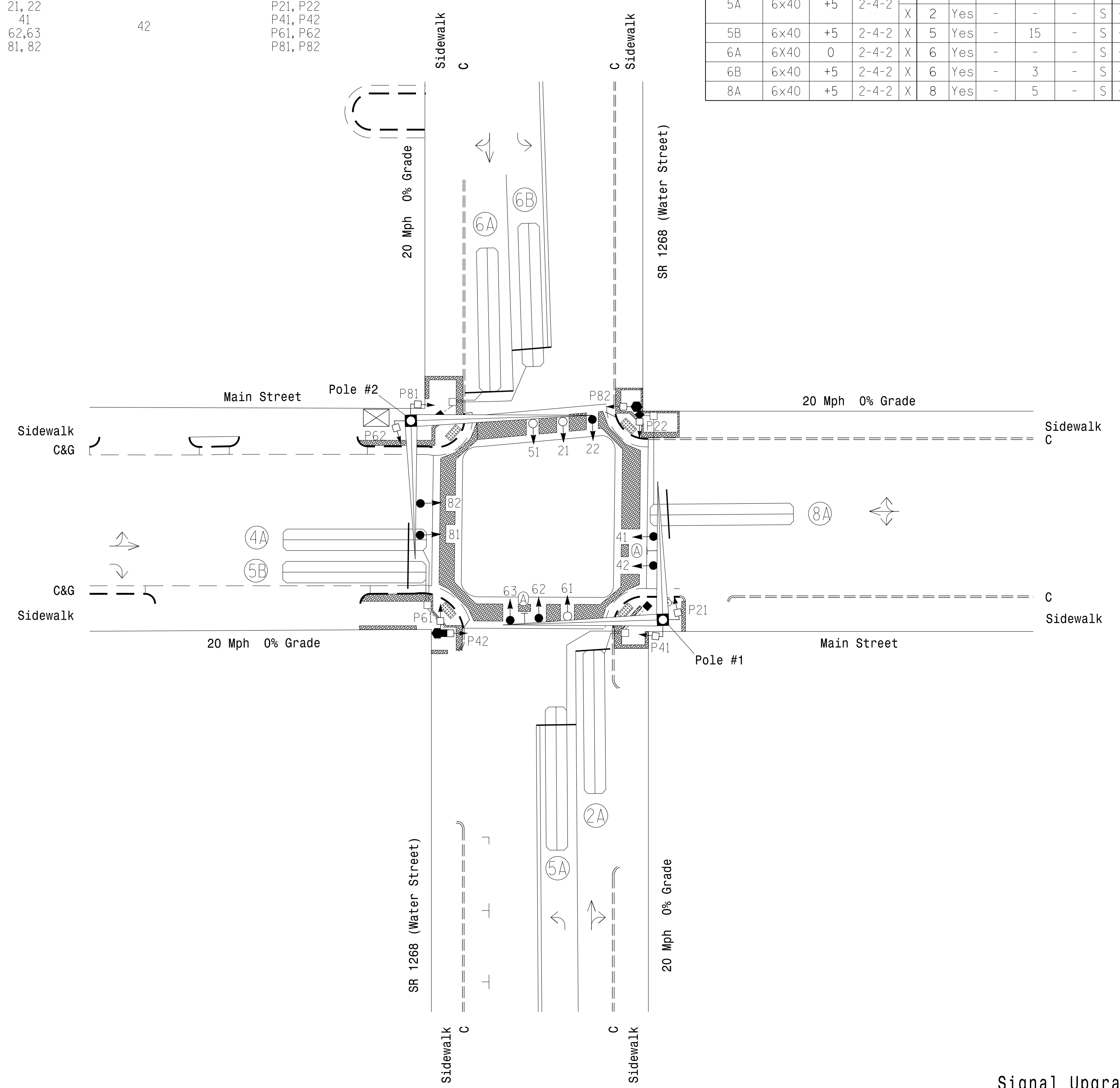
**TABLE OF OPERATION**

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

**ASC/3 TIMING CHART**

| FEATURE                 | PHASE       |     |     |             |     |
|-------------------------|-------------|-----|-----|-------------|-----|
|                         | 2           | 4   | 5   | 6           | 8   |
| Min Green *             | 10          | 7   | 7   | 10          | 7   |
| Delayed Green           | -           | 7   | -   | -           | 7   |
| Walk *                  | 7           | 7   | -   | 7           | 7   |
| Ped Clear               | 10          | 9   | -   | 9           | 9   |
| Veh. Extension *        | 3.0         | 2.0 | 2.0 | 3.0         | 2.0 |
| Max I *                 | 60          | 30  | 20  | 60          | 30  |
| Yellow                  | 3.0         | 3.0 | 3.0 | 3.0         | 3.0 |
| Red Clear               | 2.4         | 2.1 | 2.4 | 2.4         | 2.1 |
| Actuations B4 Add *     | -           | -   | -   | -           | -   |
| Seconds / Actuation *   | -           | -   | -   | -           | -   |
| Max Initial *           | -           | -   | -   | -           | -   |
| Time Before Reduction * | -           | -   | -   | -           | -   |
| Time To Reduce *        | -           | -   | -   | -           | -   |
| Minimum Gap             | -           | -   | -   | -           | -   |
| Locking Detector        | X           | -   | -   | X           | -   |
| Recall Position         | VEH, RECALL | -   | -   | VEH, RECALL | -   |
| Dual Entry              | -           | X   | -   | -           | X   |
| Simultaneous Gap        | X           | X   | X   | X           | X   |

\* 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   |
|--|--|
| ○ → Traffic Signal Head                            | ● → Traffic Signal Head                            |
| ○ → Modified Signal Head                           | N/A  |
| ○ → Pedestrian Signal Pedestal                     | ○ → Pedestrian Signal Pedestal                     |
| ○ → Pedestrian Signal Head with Push Button & Sign | ○ → Pedestrian Signal Head with Push Button & Sign |
| ○ → Metal Pole with Mastarm                        | ○ → Metal Pole with Mastarm                        |
| ○ → 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                       |
| N/A → Right of Way                                 | ○ → Right of Way                                   |
| N/A → Directional Arrow                            | ○ → Directional Arrow                              |
| N/A → Truncated Dome                               | ○ → Truncated Dome                                 |
| N/A → Fire Hydrant                                 | ○ → Fire Hydrant                                   |
| ○ → Street Name Sign                               | ○ → Street Name Sign                               |
| ○ → Brick  | N/A  |

**Signal Upgrade**

Plans Prepared By:

DRMP, Inc.  
8000 Regency Parkway, Suite 175  
Cary, NC 27519  
NC License No. C-2213 (919) 650-1038

**SR 1268 (Water Street) at Main Street**

Division 1 Pasquotank County Elizabeth City

PLAN DATE: March 2018 REVIEWED BY: AJ Davis

PREPARED BY: JA Le REVIEWED BY: LM Moon

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

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

DocuSigned by:  
*Lisa M. Moon* 8/22/2018

SIG. INVENTORY NO. 01-0011

22-AUG-2018 08:27 R:\05942\51001\5405\0005\Signal\001-0011.dgn DWI:TB AT CAR-DWH:TE-LTW