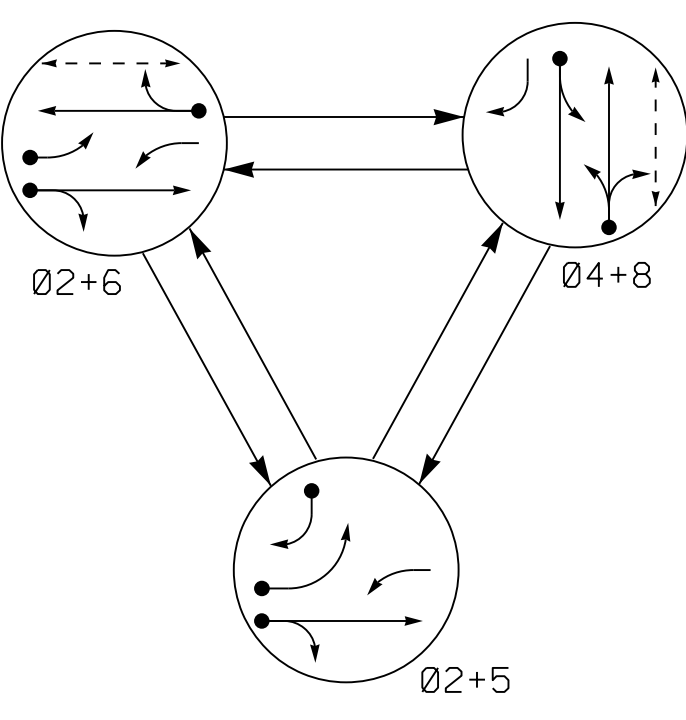


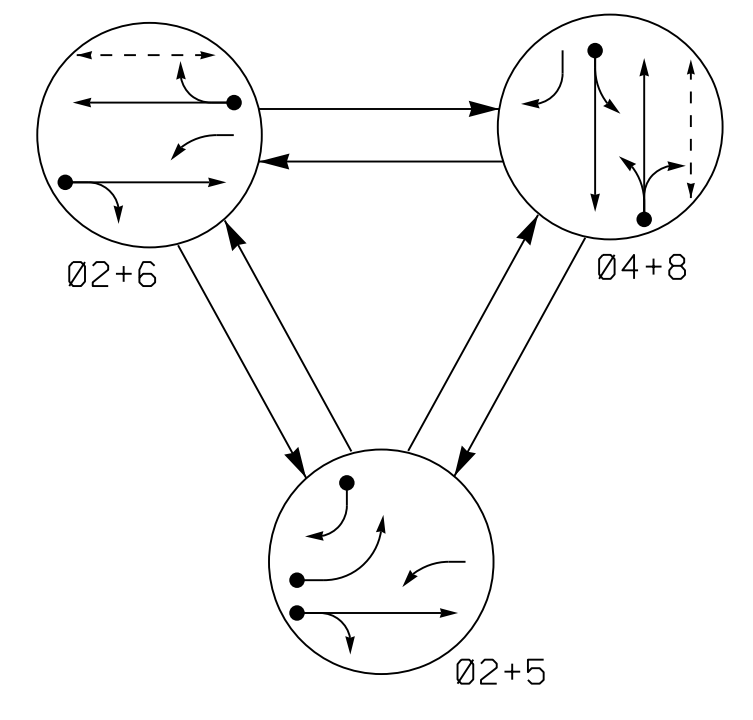
DEFAULT PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE			
	02+5	02+6	04+8	FLASH
21, 22	G	G	R	Y
41, 42	R	R	G	R
43	-	R	F	R
51	-	F	R	Y
61	F	F	R	Y
62, 63	R	G	R	Y
81, 82	R	R	G	R
P61, P62	DW	W	DW	DRK
P81, P82	DW	DW	W	DRK

ALTERNATE PHASING DIAGRAM



ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE			
	02+5	02+6	04+8	FLASH
21, 22	G	G	R	Y
41, 42	R	R	G	R
43	-	R	F	R
51	-	F	R	Y
61	F	F	R	Y
62, 63	R	G	R	Y
81, 82	R	R	G	R
P61, P62	DW	W	DW	DRK
P81, P82	DW	DW	W	DRK

ASC/3 DETECTOR INSTALLATION CHART

DETECTOR				PROGRAMMING								
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	LOOP SYSTEM	NEW CARD
2A	6x6	70	3	X	2	Yes	-	-	-	N	-	X
4A	6x40	0	2-4-2	X	4	Yes	-	3	-	N	-	X
5A	6x40	0	2-4-2	X	5	Yes	-	★15	-	N	-	X
5B	6x40	0	2-4-2	X	5	Yes	-	15	-	N	-	X
6A	6x6	0	2-4-2	X	6	Yes	-	-	-	N	-	X
6B	6x6	70	3	X	6	Yes	-	-	-	N	-	X
8A	6x40	0	2-4-2	X	8	Yes	-	10	-	N	-	X
S4	6x6	+65	3	X	-	No	-	-	-	N	X	X
S8	6x6	+77	3	X	-	No	-	-	-	N	X	X

★ Reduce delay to 3 sec during Alternate Phasing Operation.
 # Disable Phase(s) call during Alternate Phasing Operation.

3 Phase Fully Actuated System D06-24_Lumberton

NOTES

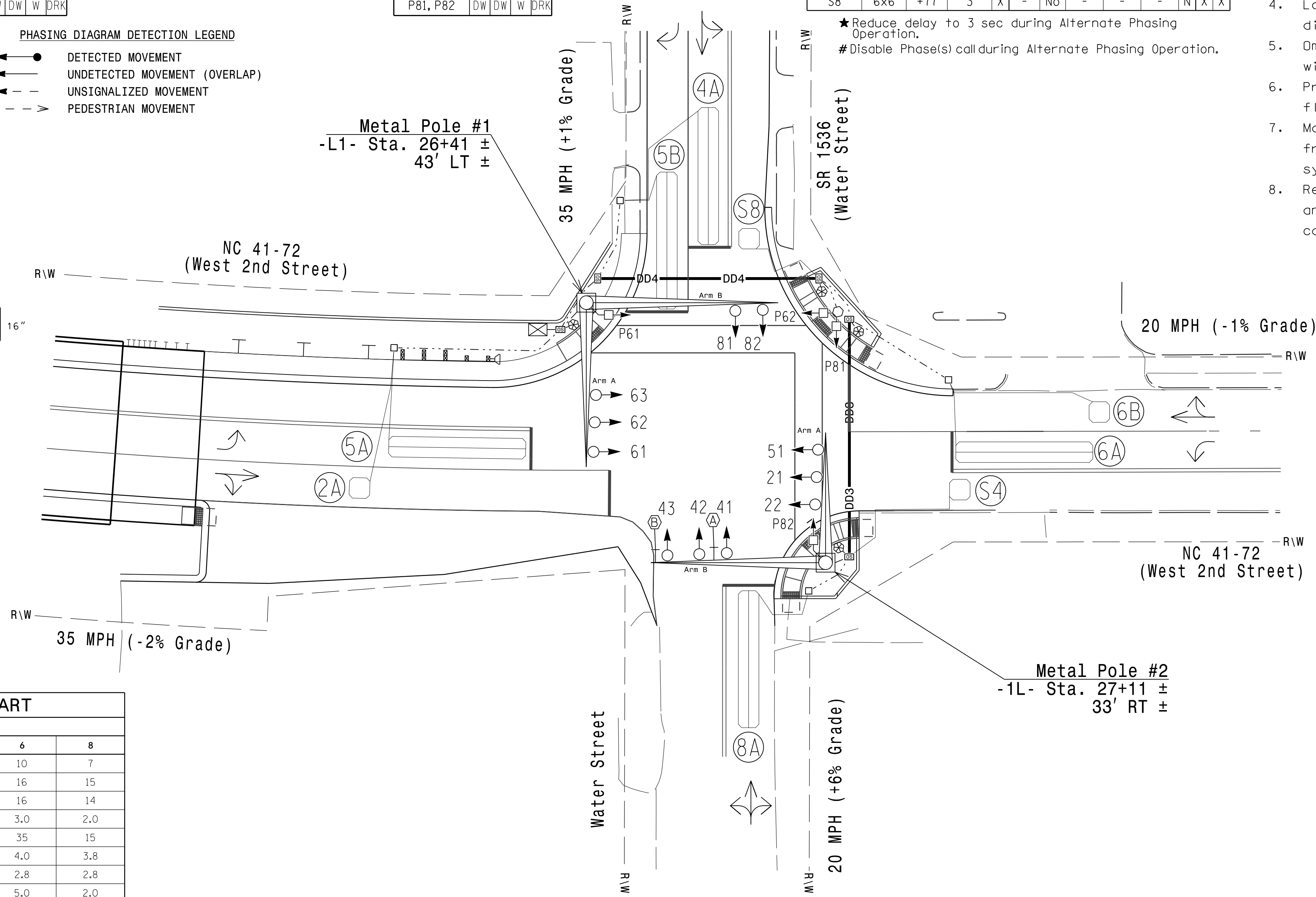
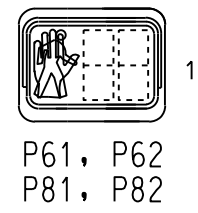
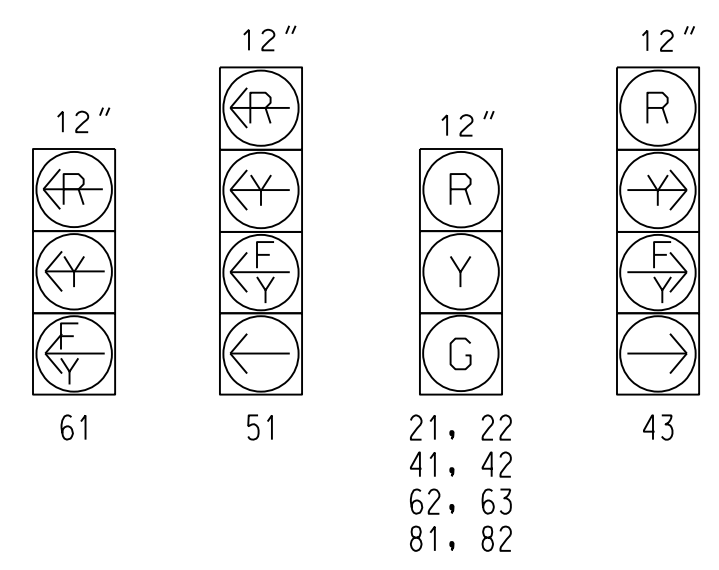
- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Relocate existing wireless radio, antenna, and any additional communication equipment and/or cabling to new cabinet.

PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

All Heads L.E.D.



ASC/3 TIMING CHART

FEATURE	PHASE				
	2	4	5	6	8
Min Green *	10	7	7	10	7
Walk *	-	-	-	16	15
Ped Clear	-	-	-	16	14
Veh. Extension *	3.0	2.0	2.0	3.0	2.0
Max I *	35	15	25	35	15
Yellow	4.0	3.8	3.0	4.0	3.8
Red Clear	2.8	2.8	2.4	2.8	2.8
Red Revert	5.0	2.0	2.0	5.0	2.0
Actuations B4 Add *	-	-	-	-	-
Seconds /Actuation *	-	-	-	-	-
Max Initial *	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-
Time To Reduce *	-	-	-	-	-
Minimum Gap	-	-	-	-	-
Locking Detector	X	-	-	X	-
Recall Position	SOFT RECALL	-	-	SOFT 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 | ●➔ N/A |
| ○➔ Modified Signal Head | ○➔ N/A |
| ➔ Sign | ➔ Sign |
| ➔ 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 | ⊠ Junction Box |
| ⊠ Junction Box | ⊠ Junction Box |
| --- 2-in Underground Conduit | --- 2-in Underground Conduit |
| N/A Right of Way | N/A Right of Way |
| ➔ Directional Arrow | ➔ Directional Arrow |
| ⊠ Metal Pole with Mastarm | ⊠ Metal Pole with Mastarm |
| --- Directional Drill | N/A |
| ⊕ Type I Pushbutton Post | ⊕ Type I Pushbutton Post |
| ○ Type II Signal Pedestal | ○ Type II Signal Pedestal |
| N/A Curb Ramp | N/A |
| ⊕ Combined Thru and Left Arrow Sign (R3-6L) | ⊕ Combined Thru and Left Arrow Sign (R3-6L) |
| ⊕ Right Arrow "ONLY" Sign (R3-5R) | ⊕ Right Arrow "ONLY" Sign (R3-5R) |

Signal Upgrade - Final Design

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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 41-72 (West 2nd Street) at SR 1536 (Water Street)
 Division 6 Robeson County Lumberton
 PLAN DATE: FEBRUARY 2023 REVIEWED BY: R M Muncey
 PREPARED BY: J. Hambricht REVIEWED BY: D Waller

REGINA M. MUNCEY
 PROFESSIONAL ENGINEER
 SEAL 43239
 NORTH CAROLINA
 REGISTERED PROFESSIONAL ENGINEER
 REGINA M. MUNCEY
 2/2/2023
 DATE
 SIGNATURE
 DATE
 SIG. INVENTORY NO. 06-0193

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

33888457.DWG DATE: 02/02/2023
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 User: r.muncey