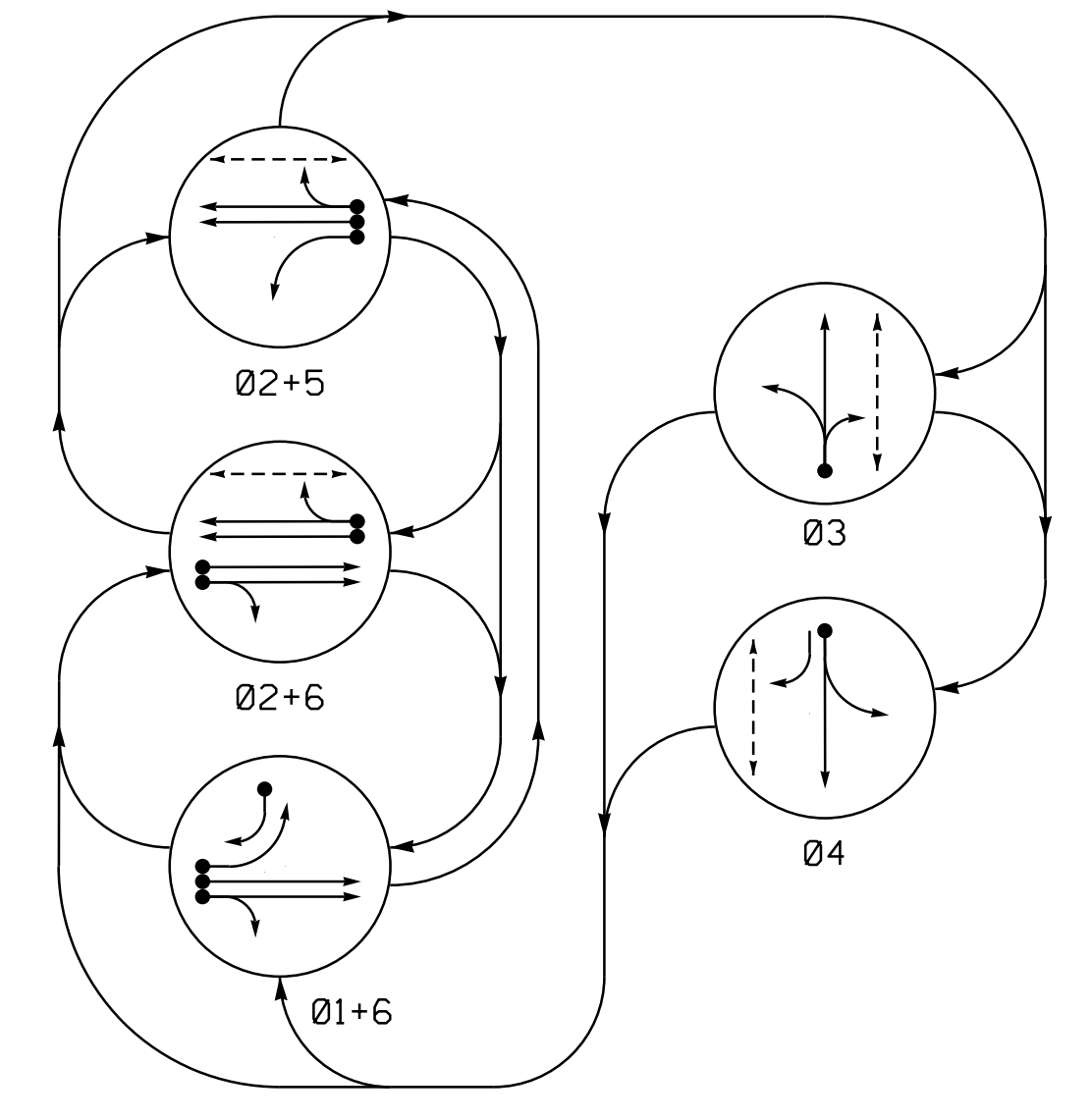


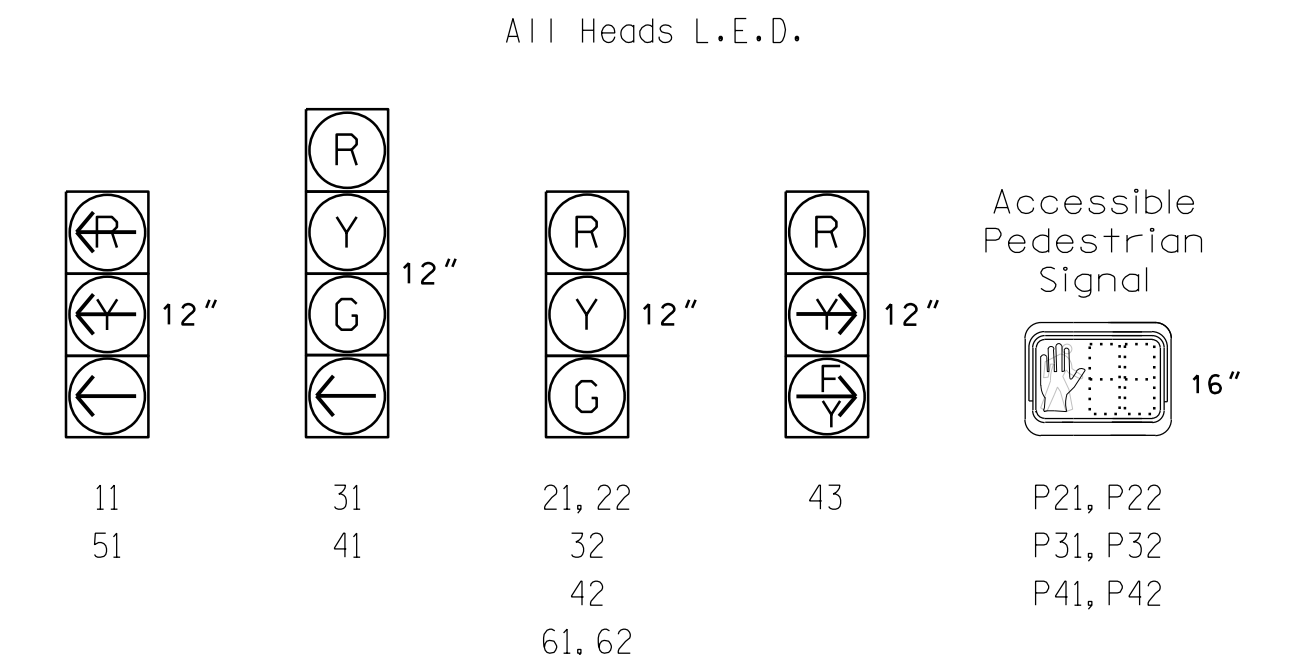
**PHASING DIAGRAM**



**TABLE OF OPERATION**

SIGNAL FACE	PHASE					
	01+6	02+6	02+5	03	04	ISB
11	←	→	→	→	→	→
21, 22	R	G	G	R	R	Y
31	R	R	R	G	R	R
32	R	R	R	G	R	R
41	R	R	R	R	G	R
42	R	R	R	R	G	R
43	←	←	←	←	←	←
51	←	←	←	←	←	←
61, 62	G	G	R	R	R	Y
P21, P22	DW	W	W	DW	DW	DRK
P31, P32	DW	DW	DW	W	DW	DRK
P41, P42	DW	DW	DW	DW	W	DRK

**SIGNAL FACE I.D.**



**MAXTIME DETECTOR INSTALLATION CHART**

ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	RELAY DURING GREEN	NEW CARD
1A	6X40	0	*	*	1	3	-	X	-	X	-	*
1B	6X40	0	*	*	1	15	-	X	-	X	-	*
2A	6X6	70	*	*	2	-	-	X	-	X	-	*
2B	6X6	70	*	*	2	-	-	X	-	X	-	*
3A	6X40	0	*	*	3	10	-	X	-	X	-	*
4A	6X40	0	*	*	4	-	-	X	-	X	-	*
5A	6X40	0	*	*	5	3	-	X	-	X	-	*
6A	6X6	70	*	*	6	-	-	X	-	X	-	*
6B	6X6	70	*	*	6	-	-	X	-	X	-	*

\* Multizone Microwave Detection

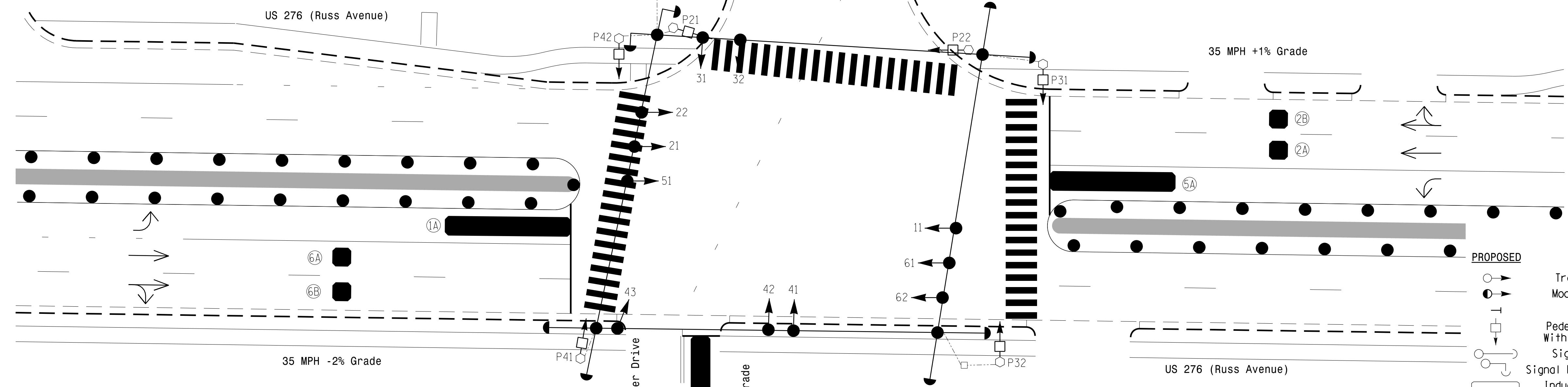
**5 Phase Fully Actuated D14-12\_Waynesville**

**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.
- The order of Phase 1+6 and phase 2+5 may be reversed.
- The order of Phase 3 and phase 4 may be reversed.
- Reposition existing signal heads numbered 21, 22, 41, 42, and 51.
- Set all detector units to presence mode.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- This intersection features accessible pedestrian signals utilizing percussive tone walk indications and/or speech messages.
- See traffic control plans for stop bar and crosswalk locations.
- This intersection uses multizone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

**PHASING DIAGRAM DETECTION LEGEND**

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



**MAXTIME TIMING CHART**

FEATURE	PHASE					
	1	2	3	4	5	6
Walk *	-	7	7	7	-	-
Ped Clear *	-	24	18	18	-	-
Min Green	7	10	7	7	7	10
Passage *	2.0	3.0	2.0	2.0	2.0	3.0
Max I *	15	50	20	20	15	50
Yellow Change	3.0	3.8	3.5	3.5	3.0	4.0
Red Clear	3.3	3.0	2.8	3.2	3.8	2.8
Added Initial *	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Advance Walk	-	-	-	-	-	-
Non Lock Detector	X	-	X	X	X	-
Vehicle Recall	-	MIN RECALL	-	-	-	MIN RECALL
Dual Entry	-	-	-	-	-	-

\* 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.

**ACCESSIBLE PEDESTRIAN SIGNAL OPERATION**

SIGNAL FACE	VOICE TONES	INTERVAL	SPEECH MESSAGE
P21	- X	Walk	(Percussive Tone)
	X -	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Ingles.
	- X	Walk	(Percussive Tone)
P22	- X	Walk	(Percussive Tone)
	X -	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Ingles.
	- X	Walk	(Percussive Tone)
P31	- X	Walk	(Percussive Tone)
	X -	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Russ.
	- X	Walk	(Percussive Tone)
P32	- X	Walk	(Percussive Tone)
	X -	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Russ.
	- X	Walk	(Percussive Tone)
P41	- X	Walk	(Percussive Tone)
	X -	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Russ.
	- X	Walk	(Percussive Tone)
P42	- X	Walk	(Percussive Tone)
	X -	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Russ.
	- X	Walk	(Percussive Tone)

**LEGEND**

- |     |  |     |          |
|-----|--|-----|----------|
| ○   | Traffic Signal Head                            | ●   | EXISTING |
| ○   | Modified Signal Head                           | N/A |          |
| ⊥   | Sign   | ⊥   |          |
| ⊥   | Pedestrian Signal Head With Push Button & Sign | ⊥   |          |
| ⊥   | Signal Pole with Guy                           | ⊥   |          |
| ⊥   | Signal Pole with Sidewalk Guy                  | ⊥   |          |
| ⊥   | Inductive Loop Detector                        | ⊥   |          |
| ⊥   | Controller & Cabinet                           | ⊥   |          |
| ⊥   | Junction Box                                   | ⊥   |          |
| --- | 2-in Underground Conduit                       | --- |          |
| N/A | Right of Way                                   | --- |          |
| →   | Directional Arrow                              | →   |          |
| ▬   | Microwave Detection Zone                       | N/A |          |
| ▬   | Construction Zone                              | N/A |          |
| ●   | Construction Zone Drums                        | N/A |          |
| ○   | Skinny Drums                                   | N/A |          |
| ○   | Type II Signal Pedestal                        | ●   |          |

**Signal Upgrade Temporary Design 3 - (TMP Phase III)**



	<b>US 276 (Russ Avenue)</b> at <b>Ingles Shopping Center / Long John Silver Drive</b>		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER WILLIAM J. HAMILTON LICENSE NO. 32396 DATE: 04/11/2023
	Division 14 Haywood County Waynesville PLAN DATE: April 2023 PREPARED BY: TS Popelka REVISIONS: _____ SCALE: 0" = 20' 1" = 20'	REVIEWED BY: WJ Hamilton RKA PROJ. NO.: 16085 (040) DATE: _____	