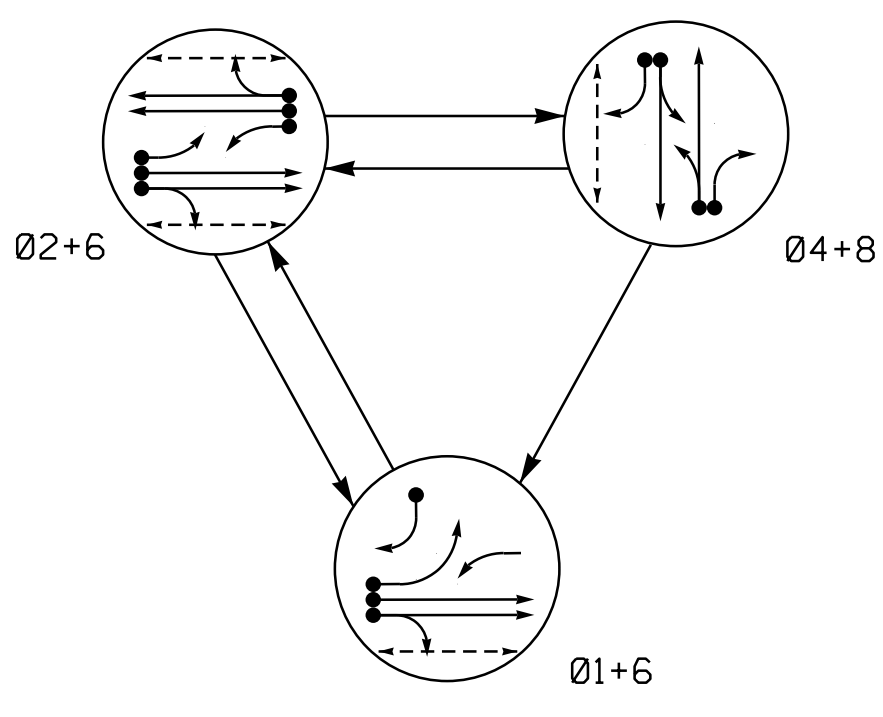


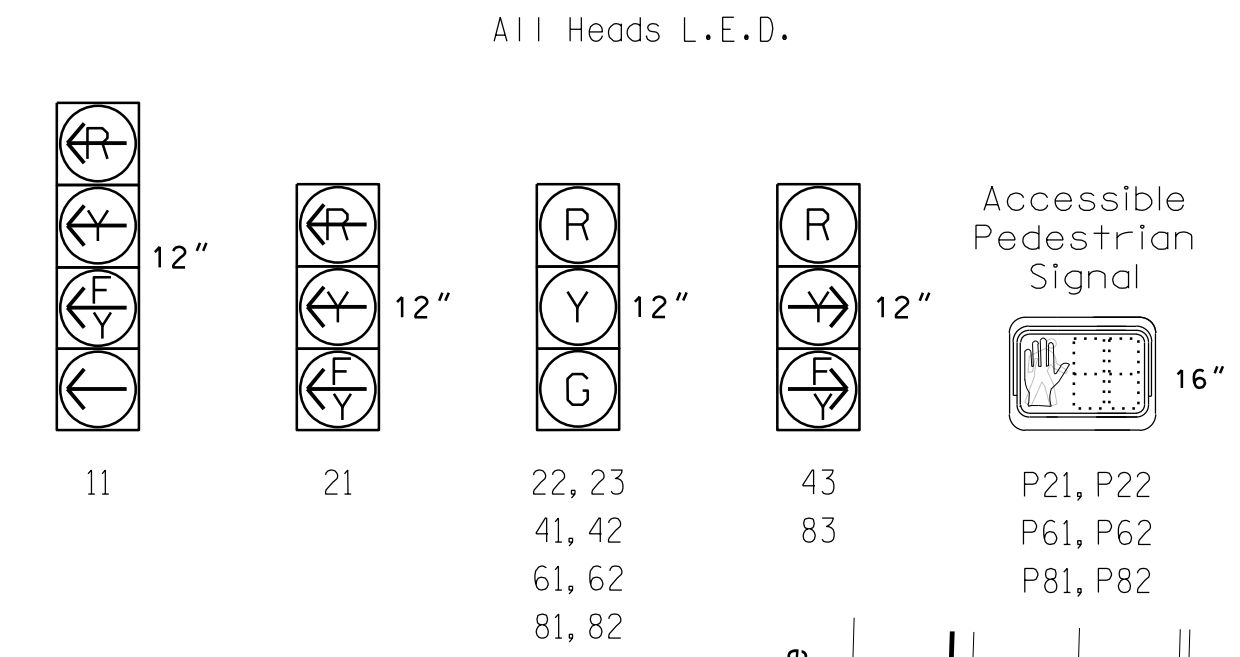
**PHASING DIAGRAM**



**TABLE OF OPERATION**

SIGNAL FACE	PHASE			
	Ø 1 + 6	Ø 2 + 6	Ø 4 + 8	F L TOTAL
11	←	←	←	←
21	←	←	←	←
22, 23	R	G	R	Y
41, 42	R	R	G	R
43	←	←	←	←
61, 62	G	G	R	Y
81, 82	R	R	G	R
83	←	←	←	←
P21, P22	DW	W	DW	DRK
P61, P62	W	W	DW	DRK
P81, P82	DW	DW	W	DRK

**SIGNAL FACE I.D.**



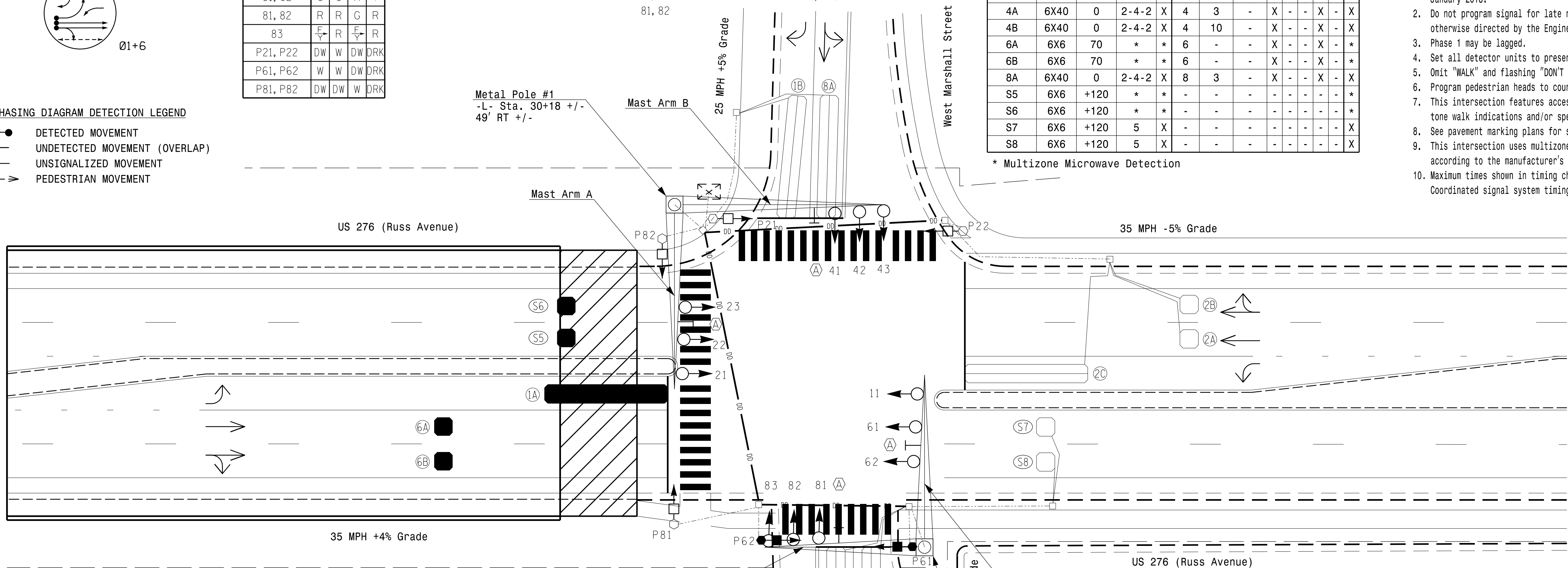
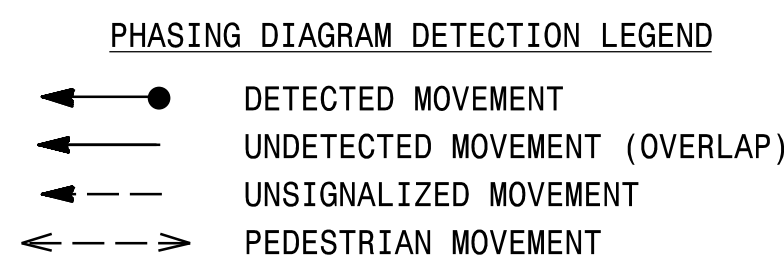
**MAXTIME DETECTOR INSTALLATION CHART**

LOOP/ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	QUEUE	CALL DURING GREEN	NEW CARD
1A	6X40	0	*	*	1	15	-	X	-	X	-	*
1B	6X40	0	2-4-2	X	1	10	-	X	-	X	-	*
2A	6X6	70	5	X	2	-	-	X	-	X	-	X
2B	6X6	70	5	X	2	-	-	X	-	X	-	X
2C	6X40	0	2-4-2	X	2	-	-	X	-	X	-	X
4A	6X40	0	2-4-2	X	4	3	-	X	-	X	-	X
4B	6X40	0	2-4-2	X	4	10	-	X	-	X	-	X
6A	6X6	70	*	*	6	-	-	X	-	X	-	*
6B	6X6	70	*	*	6	-	-	X	-	X	-	*
8A	6X40	0	2-4-2	X	8	3	-	X	-	X	-	X
S5	6X6	+120	*	*	-	-	-	-	-	-	-	*
S6	6X6	+120	*	*	-	-	-	-	-	-	-	*
S7	6X6	+120	5	X	-	-	-	-	-	-	-	X
S8	6X6	+120	5	X	-	-	-	-	-	-	-	X

**3 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.
- Phase 1 may be lagged.
- 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 pavement marking 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.



**MAXTIME TIMING CHART**

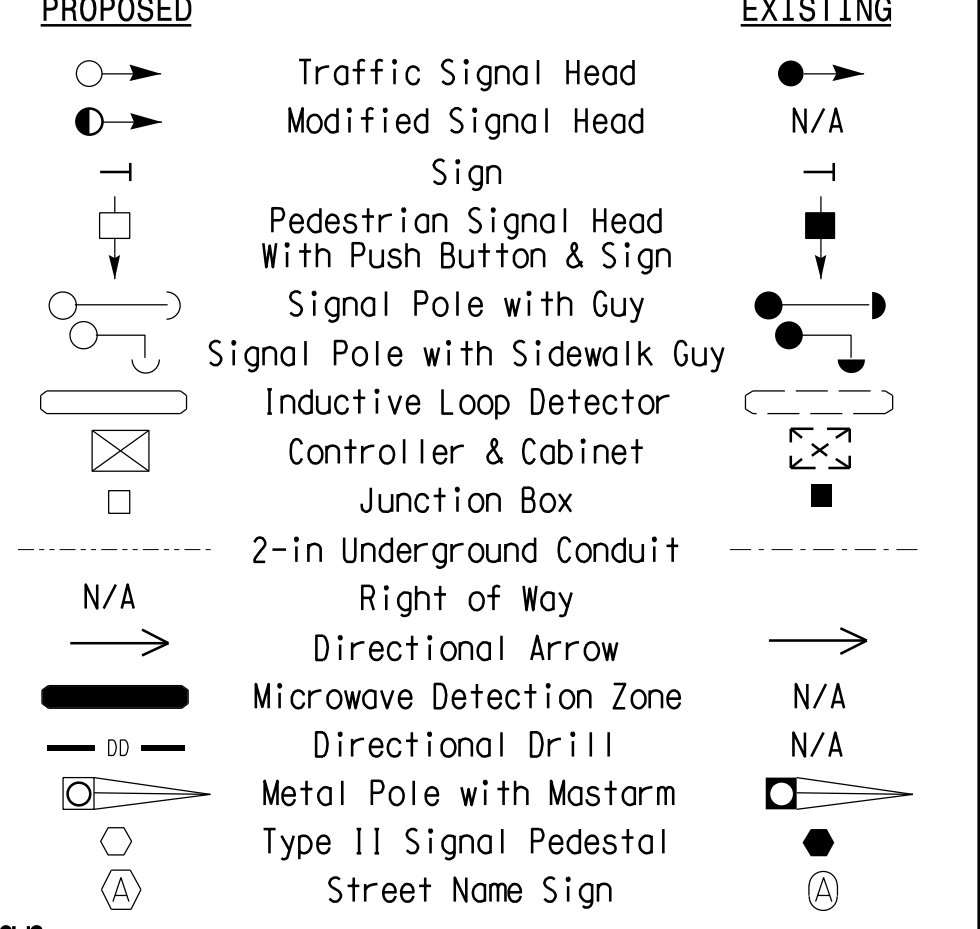
FEATURE	PHASE				
	1	2	4	6	8
Walk *	-	7	-	7	7
Ped Clear *	-	15	-	8	19
Min Green	7	10	7	10	7
Passage *	2.0	3.0	2.0	3.0	2.0
Max 1 *	15	45	25	45	25
Yellow Change	3.0	4.2	3.2	4.2	3.0
Red Clear	2.6	2.0	2.6	2.0	2.6
Added Initial *	-	-	-	-	-
Maximum Initial *	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-
Time To Reduce *	-	-	-	-	-
Minimum Gap	-	-	-	-	-
Advance Walk	-	-	-	-	-
Non Lock Detector	X	-	X	-	X
Vehicle Recall	-	MIN RECALL	-	MIN RECALL	-
Dual Entry	-	-	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.

**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 Mountain Creek.
P22	- X	Walk	(Percussive Tone)
X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Mountain Creek.
P61	- X	Walk	(Percussive Tone)
X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Bank.
P62	- X	Walk	(Percussive Tone)
X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Bank.
P81	- X	Walk	(Percussive Tone)
X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Russ.
P82	- X	Walk	(Percussive Tone)
X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Russ.

**LEGEND**



**Signal Upgrade - Final Design**

Infrastructure Consulting Services, Inc.  
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**US 276 (Russ Avenue)**  
at  
**West Marshall Street / Bank Drive**

Division 14 Haywood County Wayneville

PLAN DATE: April 2023 REVIEWED BY: WJ Hamilton  
PREPARED BY: TS Popelka RKA PROJ. NO.: 16085 (040)

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: 0 20  
1" = 20'

SEAL  
NORTH CAROLINA PROFESSIONAL ENGINEER  
SEAL 32396  
WILLIAM J. HAMILTON  
DocuSign  
William J. Hamilton  
04/11/2023  
DATE  
SIG. INVENTORY NO. 14-0685