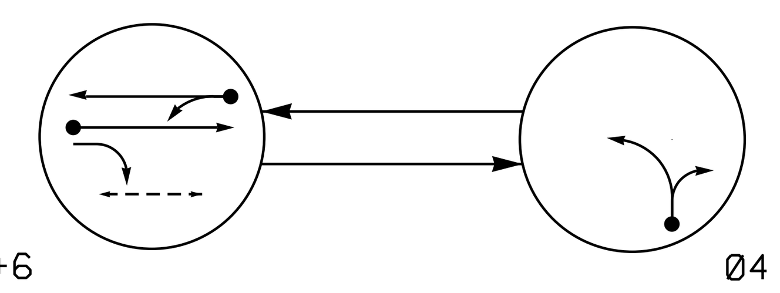
PROJECT REFERENCE NO.	SHEET NO.
U-5839	Sig 2.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

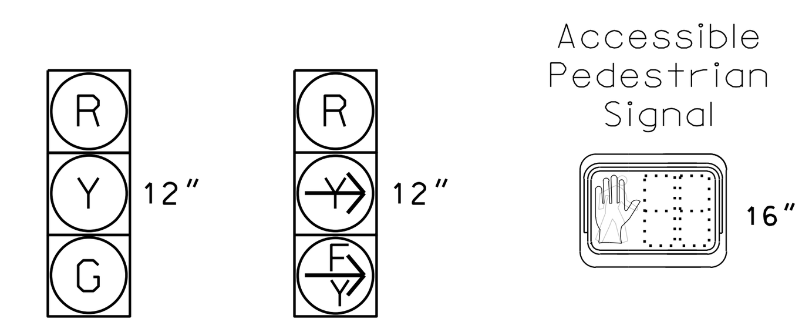
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2+6	Ø4	FLASH
21, 22	G	R	Y
41, 42, 43	R	G	R
61, 62	G	R	Y
63	F/Y→	R	Y→
P61, P62	W	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

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

* Multizone Microwave Detection.

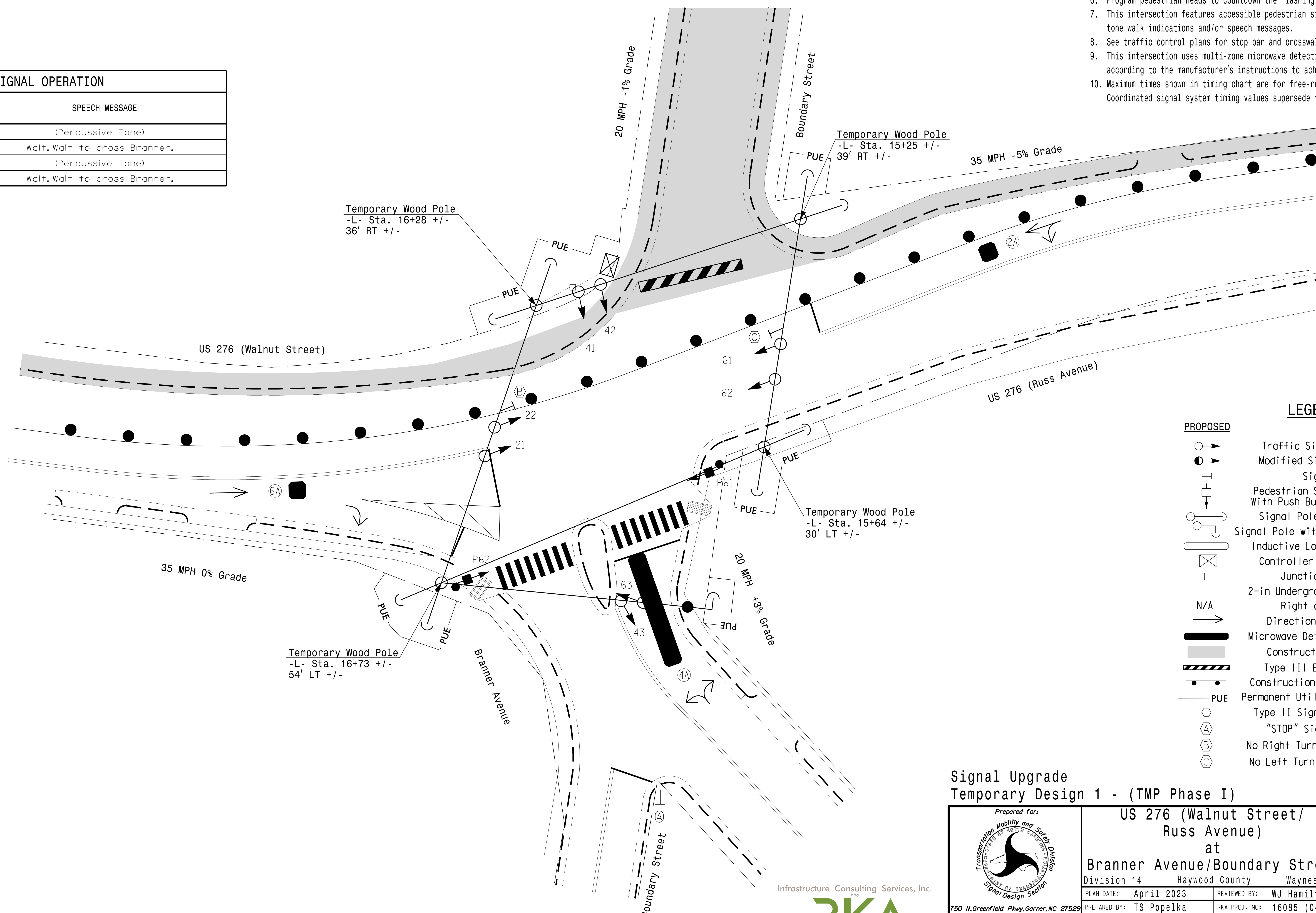
2 Phase
Fully Actuated
D14-12_Waynesville

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
5. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
6. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
7. This intersection features accessible pedestrian signals utilizing percussive tone walk indications and/or speech messages.
8. See traffic control plans for stop bar and crosswalk locations.
9. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

ACCESSIBLE PEDESTRIAN SIGNAL OPERATION

SIGNAL FACE	VOICE	TONES	INTERVAL	SPEECH MESSAGE
P61	-	X	Walk	(Percussive Tone)
	X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Branner.
P62	-	X	Walk	(Percussive Tone)
	X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Branner.



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	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
	Type III Barricade	N/A
	Construction Zone Drums	N/A
PUE	Permanent Utility Easement	N/A
	Type II Signal Pedestal	
Ⓐ	"STOP" Sign (R1-1)	Ⓐ
Ⓑ	No Right Turn Sign (R3-1)	Ⓑ
Ⓒ	No Left Turn Sign (R3-2)	Ⓒ

MAXTIME TIMING CHART

FEATURE	PHASE 2	4	6
Walk *	–	–	7
Ped Clear *	–	–	17
Min Green	10	7	10
Passage *	3.0	2.0	3.0
Max 1 *	45	30	45
Yellow Change	4.2	3.0	4.2
Red Clear	2.7	1.9	2.7
Added Initial *	–	–	–
Maximum Initial *	–	–	–
Time Before Reduction *	–	–	–
Time To Reduce *	–	–	–
Minimum Gap	–	–	–
Advance Walk	–	–	–
Non Lock Detector	–	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.

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Signal Upgrade
Temporary Design 1 - (TMP Phase I)

Prepared for:
Transportation Mobility and Safety Division
State of North Carolina Department of Transportation
Signal Design Section
750 N.Greenfield Pkwy, Garner, NC 27529

SCALE 0 20 1"=20'

US 276 (Walnut Street/ Russ Avenue) at Branner Avenue/Boundary Street

Division 14 Haywood County Waynesville

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

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 32396 ENGINEER WILLIAM J. HAMILTON

DocuSigned by:
William J. Hamilton
A0560D704648484...
SIGNATURE 04/11/2023 DATE

SIG. INVENTORY NO. 14-0374T1