



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

April 13, 2023

Addendum No. 2

RE: Contract # C204380

WBS # 44398.3.1

STATE FUNDED

Wake County (U-5826)

SR-2000 (FALLS OF NEUSE ROAD) FROM I-540 TO SR-2006 (DURANT RD).

April 18, 2023 Letting

To Whom It May Concern:

Reference is made to the plans furnished to you on this project.

The following revisions have been made to the Signal Plans.

Sheet No.	Revision
Sig. 13.0	Additional information provided for Strain Poles.

Please void the above listed Sheet in your Plans and staple the revised Sheet thereto.

The contract will be prepared accordingly.

Sincerely,

DocuSigned by:
Ronald Elton Davenport, Jr.
F81B6038A47A442...

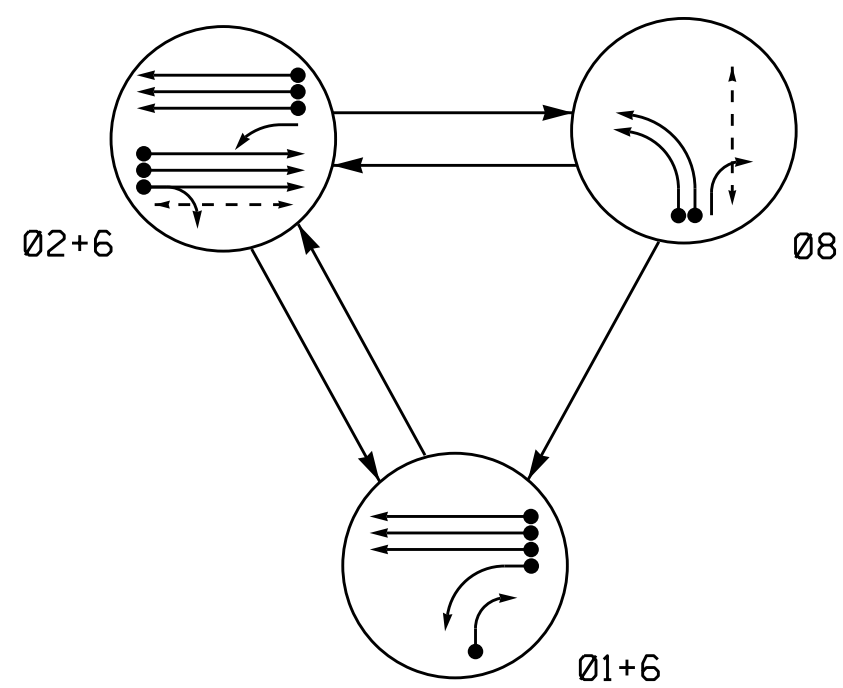
Ronald E. Davenport, Jr., PE
State Contract Officer

RED/cms
Attachments

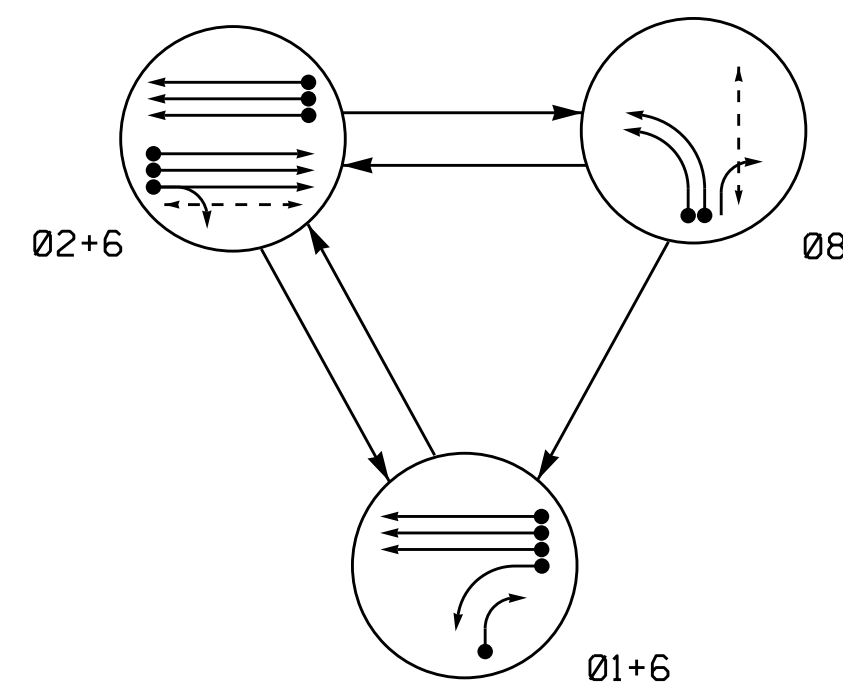
cc: Mr. Boyd Tharrington, PE
Mr. Brandon H. Jones, PE
Mr. Ken Kennedy, PE
Mr. Mike Gwyn
Project File (2)

Mr. Forrest Dungan, PE
Ms. Jaci Kincaid
Mr. Jon Weathersbee, PE

DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE		
	01+6	02+6	08
11	← F →	← R →	← Y →
21, 22, 23	R	G	R
61, 62, 63	G	G	R
81, 82	← R →	← R →	← R →
83	→	← F →	R
P21, P22	DW	W	DW DRK
P81, P82	DW	DW	W DRK

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE		
	01+6	02+6	08
11	← R →	← R →	← Y →
21, 22, 23	R	G	R
61, 62, 63	G	G	R
81, 82	← R →	← R →	← R →
83	→	← F →	R
P21, P22	DW	W	DW DRK
P81, P82	DW	DW	W DRK

SE-PAC 2070 LOOP & DETECTOR UNIT INSTALLATION CHART

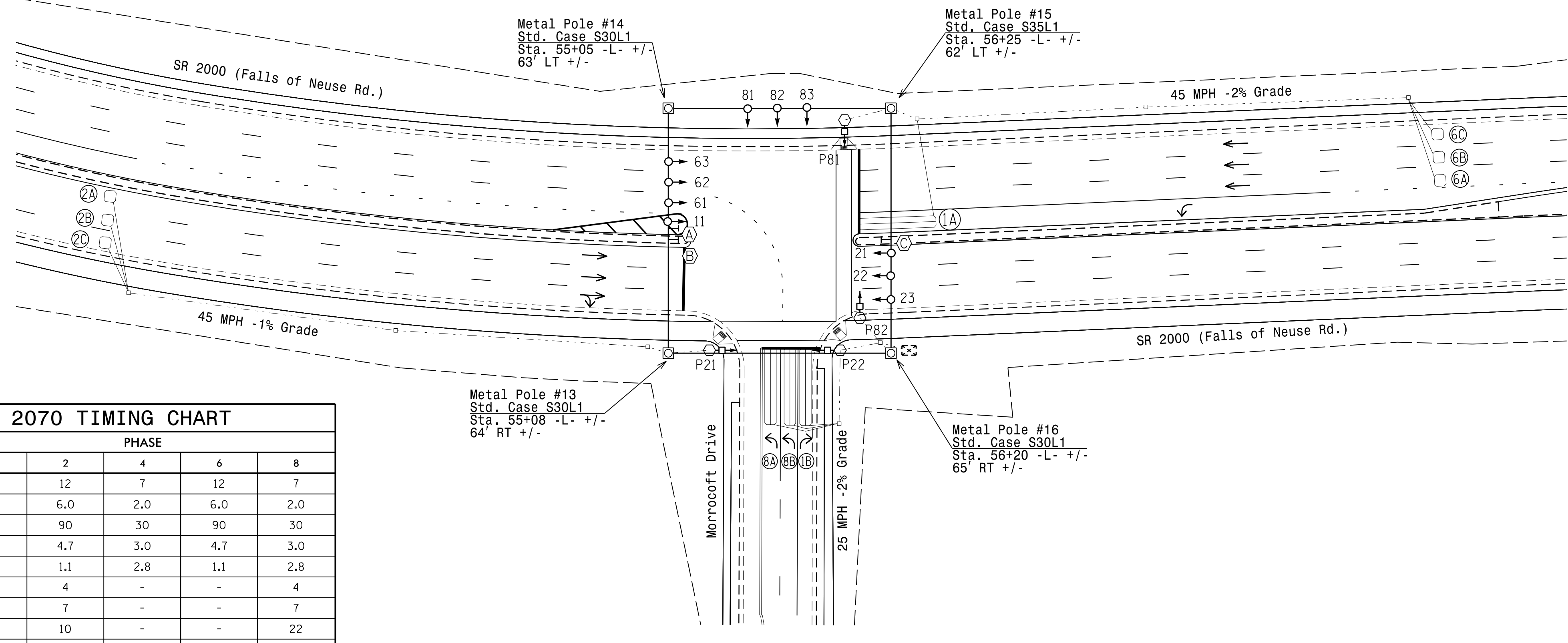
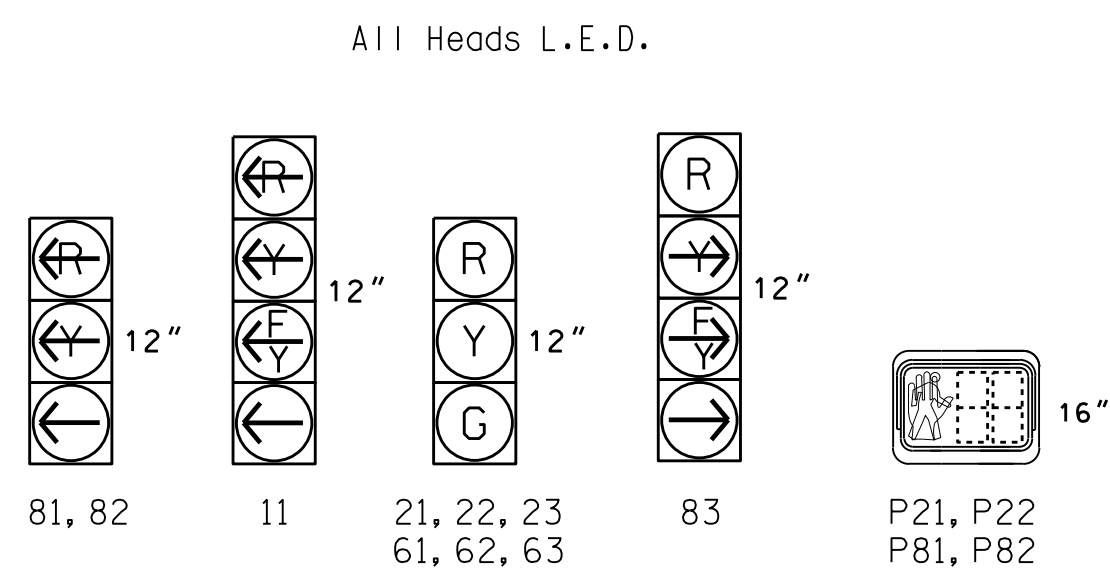
LOOP NO.	INDUCTIVE LOOPS					DETECTOR PROGRAMMING												
	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	ASSIGNED PHASE	TIMING		OPERATION MODE							STATUS		
							DELAY	EXTEND (STRETCH)	VEHICLE	PEDESTRIAN	T CALL	STOP A	STOP B	PASSENGER PROTECT	PROTECT THROUGH		AND	SWITCH
1A	6X40	2-4-2	0	X	-	1	5 SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-
1B	6X40	2-4-2	0	X	-	1	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-
2A	6X6	4	300	X	-	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-
2B	6X6	4	300	X	-	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-
2C	6X6	4	300	X	-	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-
6A	6X6	4	300	X	-	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-
6B	6X6	4	300	X	-	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-
6C	6X6	4	300	X	-	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-
8A	6X40	2-4-2	0	X	-	8	3 SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-
8B	6X40	2-4-2	0	X	-	8	- SEC.	- SEC.	X	-	-	-	-	-	-	-	X	-

3 Phase Fully Actuated (Raleigh 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 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.
- The Division (City) Traffic Engineer will determine the hours of use for each phasing plan.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Program phase 4 as a dummy phase for Ring 1.
- This intersection features accessible pedestrian signals utilizing percussive tone walk indications and/or speech messages.

SIGNAL FACE I.D.



SE-PAC 2070 TIMING CHART

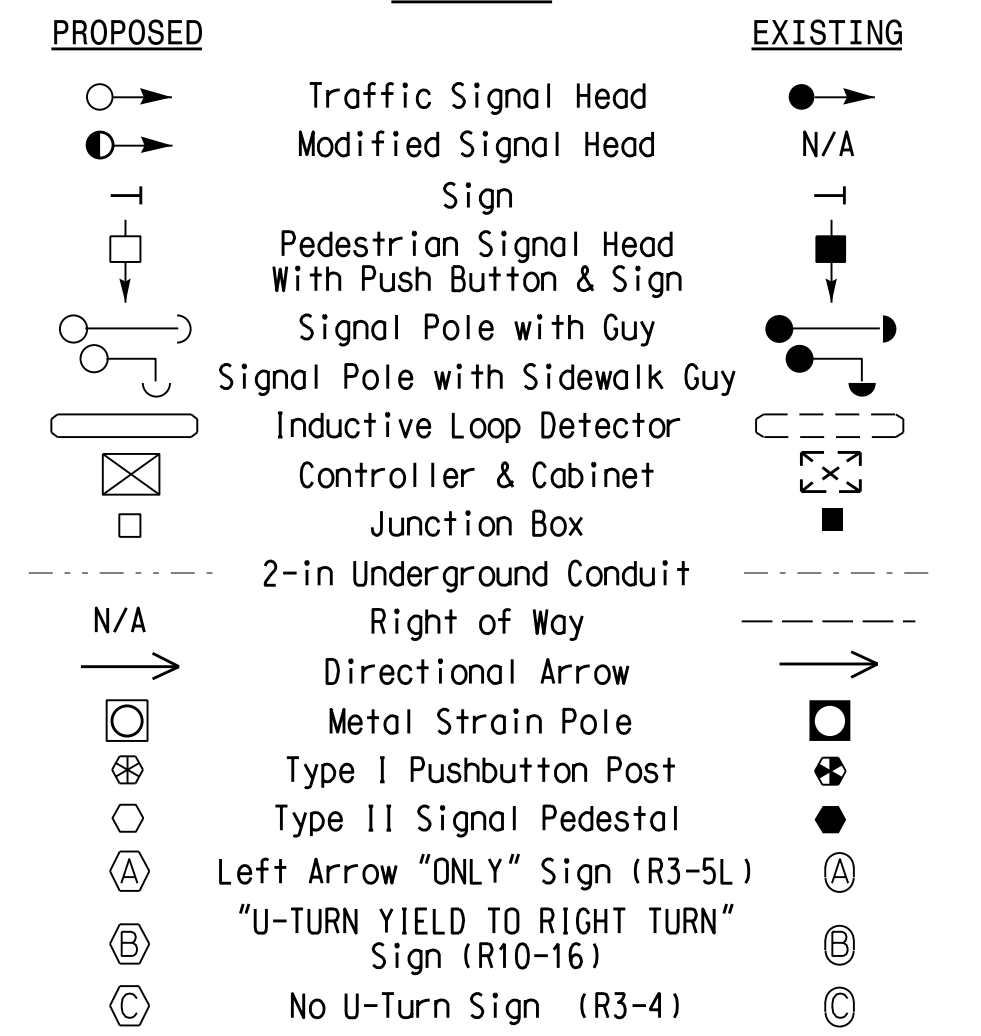
FEATURE	PHASE				
	1	2	4	6	8
Min Green *	7	12	7	12	7
Passage Gap *	2.0	6.0	2.0	6.0	2.0
Maximum Green *	15	90	30	90	30
Yellow Change	3.0	4.7	3.0	4.7	3.0
Red Clear	2.8	1.1	2.8	1.1	2.8
Advance Walk *	-	4	-	-	4
Walk *	-	7	-	-	7
Pedestrian Clear	-	10	-	-	22
Added Initial *	-	1.0	-	1.0	-
Maximum Initial *	-	34	-	34	-
Time Before Reduction *	-	15	-	15	-
Time To Reduce *	-	30	-	30	-
Minimum Gap	-	3.0	-	3.0	-
Recall Mode	-	MIN RECALL	-	MIN RECALL	-
Vehicle Call Memory	NON-LOCK	LOCK	-	LOCK	NON-LOCK
Dual Entry	-	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON	ON

* 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, P22	-	X	Walk	(Percussive Tone)
	X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Morrocoff.
P81, P82	-	X	Walk	(Percussive Tone)
	X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Falls of Neuse.

LEGEND



Signal Upgrade - Final Design

SR 2000 (Falls of Neuse Rd.) at Morrocoff Drive

Division 5 Wake County Raleigh

PLAN DATE: January 2023 REVIEWED BY:

PREPARED BY: I. O. Umozurike REVIEWED BY:

Scale: 1" = 40'

DATE: 01/03/2023

SIG. INVENTORY NO. 05-2293