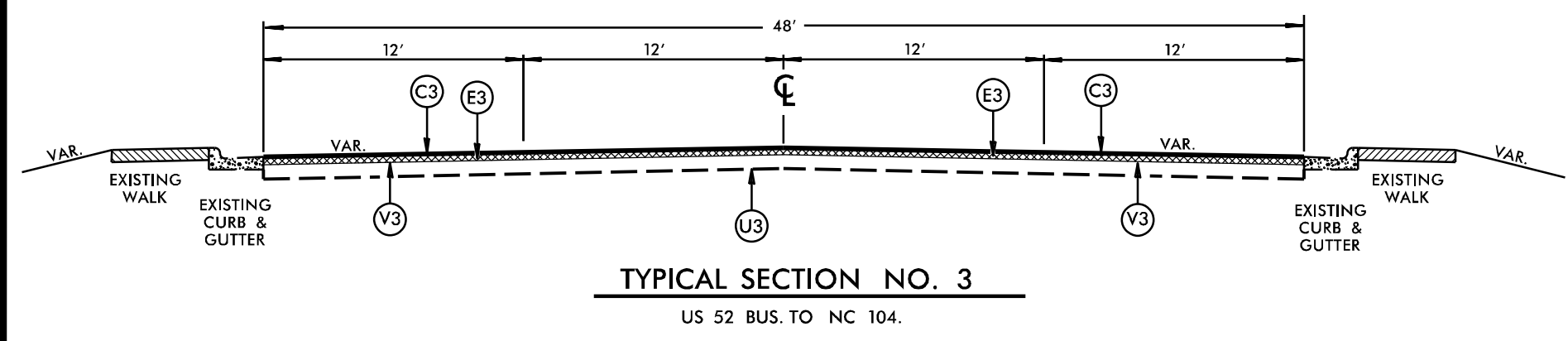
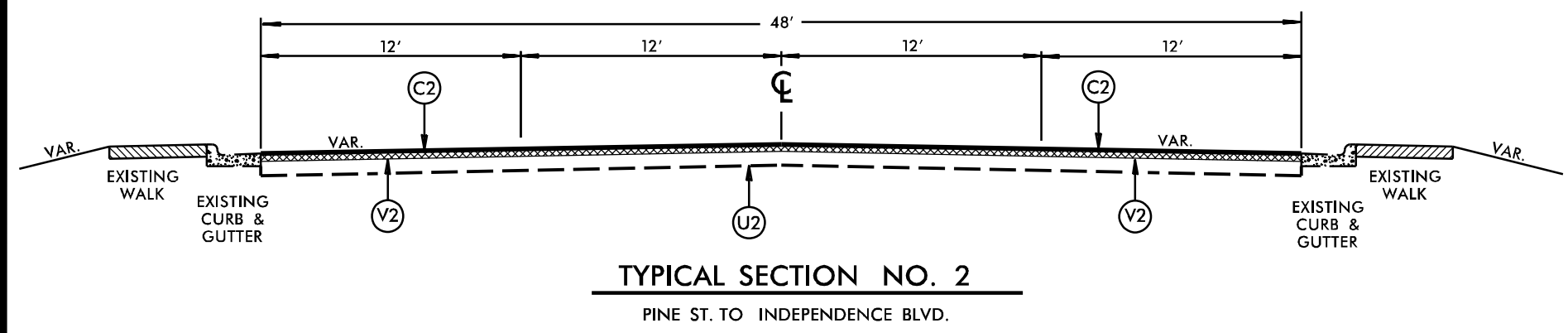
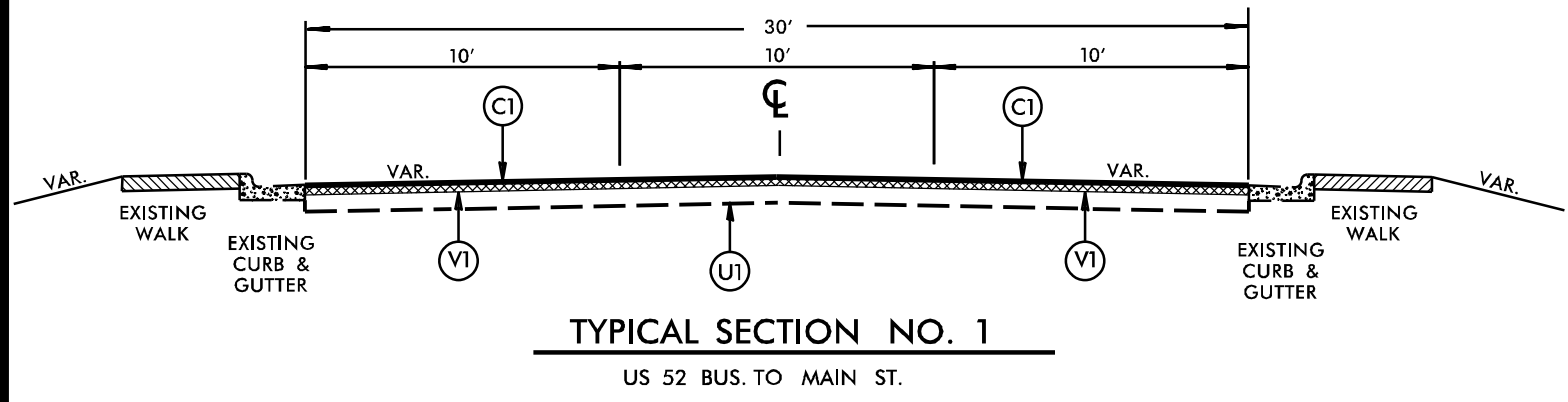


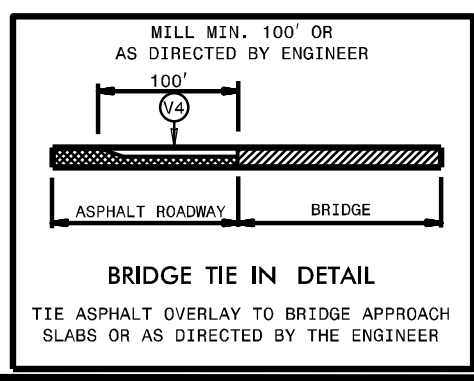
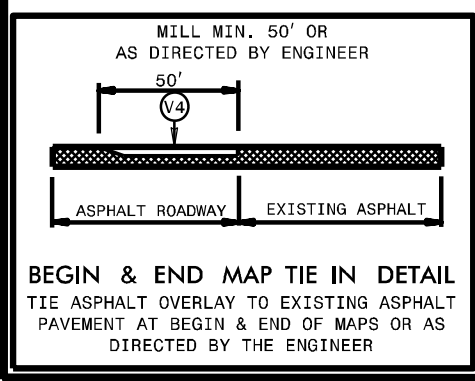


**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

WBS # 50138.3.49



PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" - 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. PER 1.5" OF DEPTH.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 336 LBS. PER SQ. YD.
E3	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
U1	EXISTING PAVEMENT WITH CONCRETE BASE. REPAIR DAMAGED CONCRETE WITH FULL DEPTH PATCH
U2	EXISTING PAVEMENT.
U3	EXISTING PAVEMENT.
V1	MILL APPROXIMATELY 1.5" - 3" TO EXPOSE CONCRETE BASE
V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1-1/2"
V3	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 7"
V4	INCIDENTAL MILLING



**SURRY COUNTY**  
**US52BUS, NC89, NC103, SR2432**  
**RESURFACING**

DIVISION II - DISTRICT I CONSTRUCTION

REVISIONS	INT.	DATE

SCALE: 1"=30'

DATE: FEB. 2017

PREPARED BY: S.B. DARNELL

REVIEWED BY: J.D. WOOD

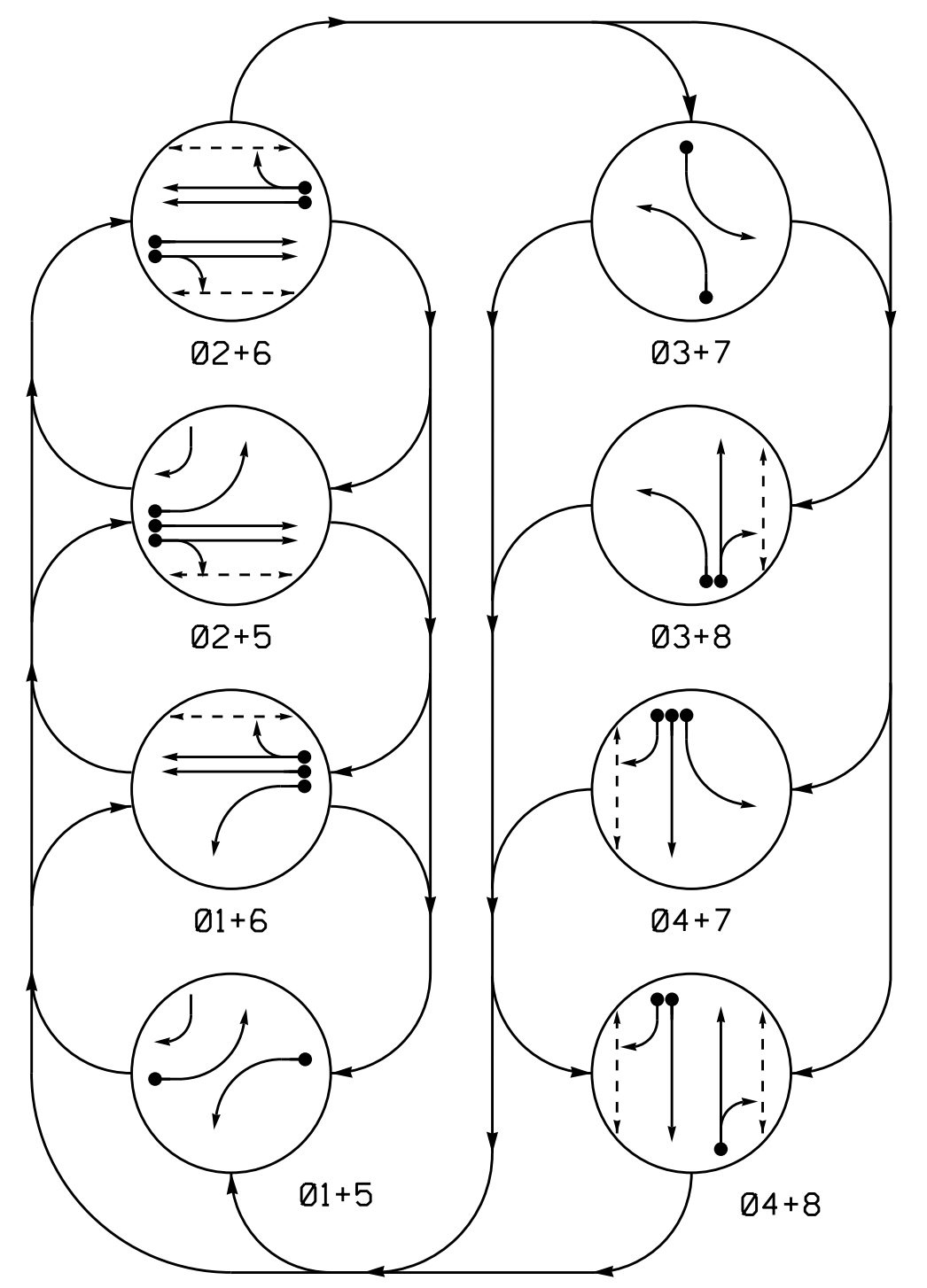
REVISION BY:

DIVISION OF HIGHWAYS

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

N.C. DEPARTMENT of TRANSPORTATION  
DIVISION of HIGHWAYS  
DIVISION ELEVEN

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

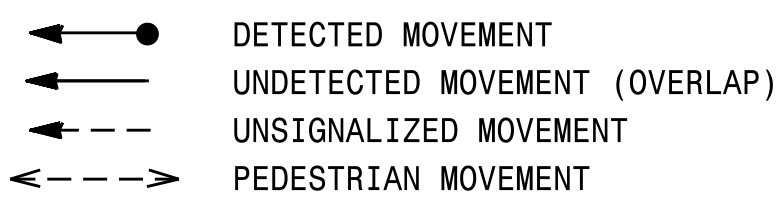
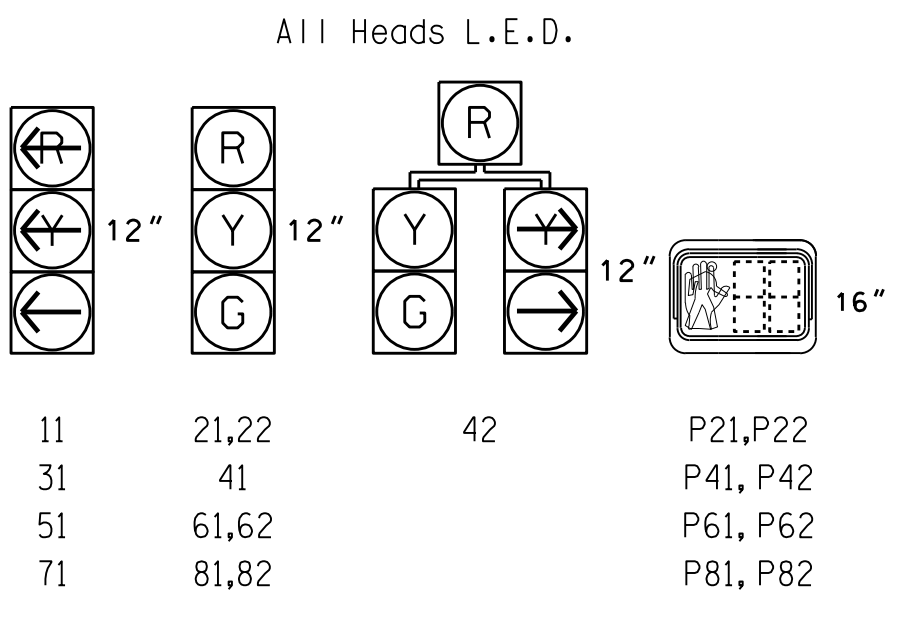


TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+5	02+6	03+7	04+8	01+6	02+5	03+8	04+7
11	—	—	—	—	—	—	—	—
21,22	R	R	G	G	R	R	R	Y
31	—	—	—	—	—	—	—	—
41	R	R	R	R	R	R	G	G
42	R	R	R	R	R	R	G	G
51	—	—	—	—	—	—	—	—
61,62	R	G	R	G	R	R	R	Y
71	—	—	—	—	—	—	—	—
81,82	R	R	R	R	G	R	G	R
P21,P22	DW	DW	W	W	DW	DW	DW	DRK
P41,P42	DW	DW	DW	DW	DW	DW	W	DRK
P61,P62	DW	W	DW	W	DW	DW	DW	DRK
P81,P82	DW	DW	DW	DW	DW	W	DRK	

SIGNAL FACE I.D.



OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD	
				PHASE	CALLING	EXTENSION	STRETCH TIME			DELAY TIME
1A	6X40	0	2-4-2	Y	1	Y	Y	-	3	-
2A,2B	6X6	70	4	-	2	Y	Y	-	-	-
3A	6X40	0	2-4-2	-	3	Y	Y	-	-	-
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	-
4B	6X40	0	2-4-2	Y	4	Y	Y	-	15	-
5A	6X40	0	2-4-2	-	5	Y	Y	-	3	-
6A,6B	6X6	70	4	Y	6	Y	Y	-	-	-
7A	6X40	0	2-4-2	-	7	Y	Y	-	3	-
8A	6X40	0	2-4-2	Y	8	Y	Y	-	10	-

8 Phase Fully Actuated Isolated

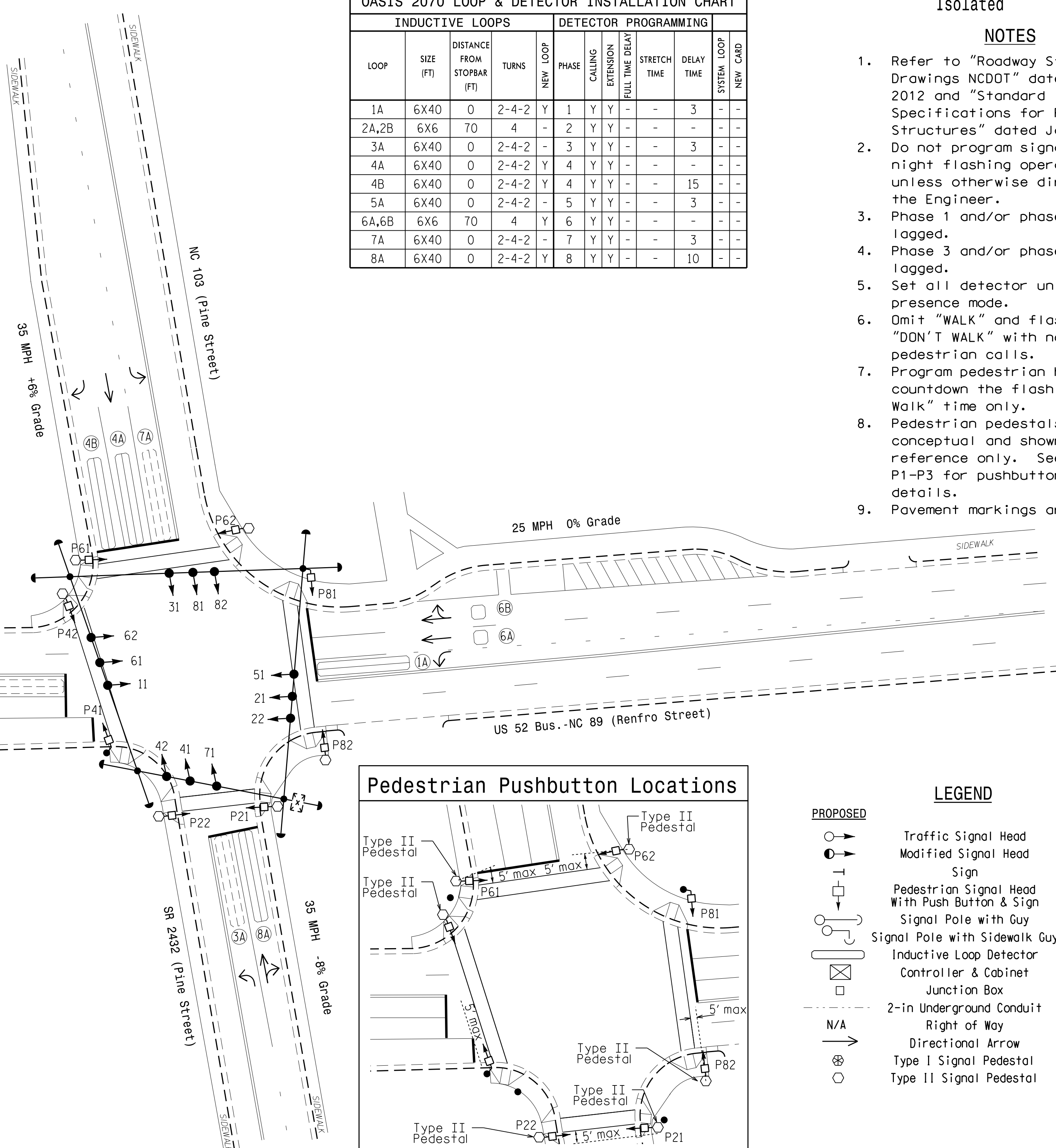
NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 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.
- Pedestrian pedestals are conceptual and shown for reference only. See sheets P1-P3 for pushbutton location details.
- Pavement markings are existing.

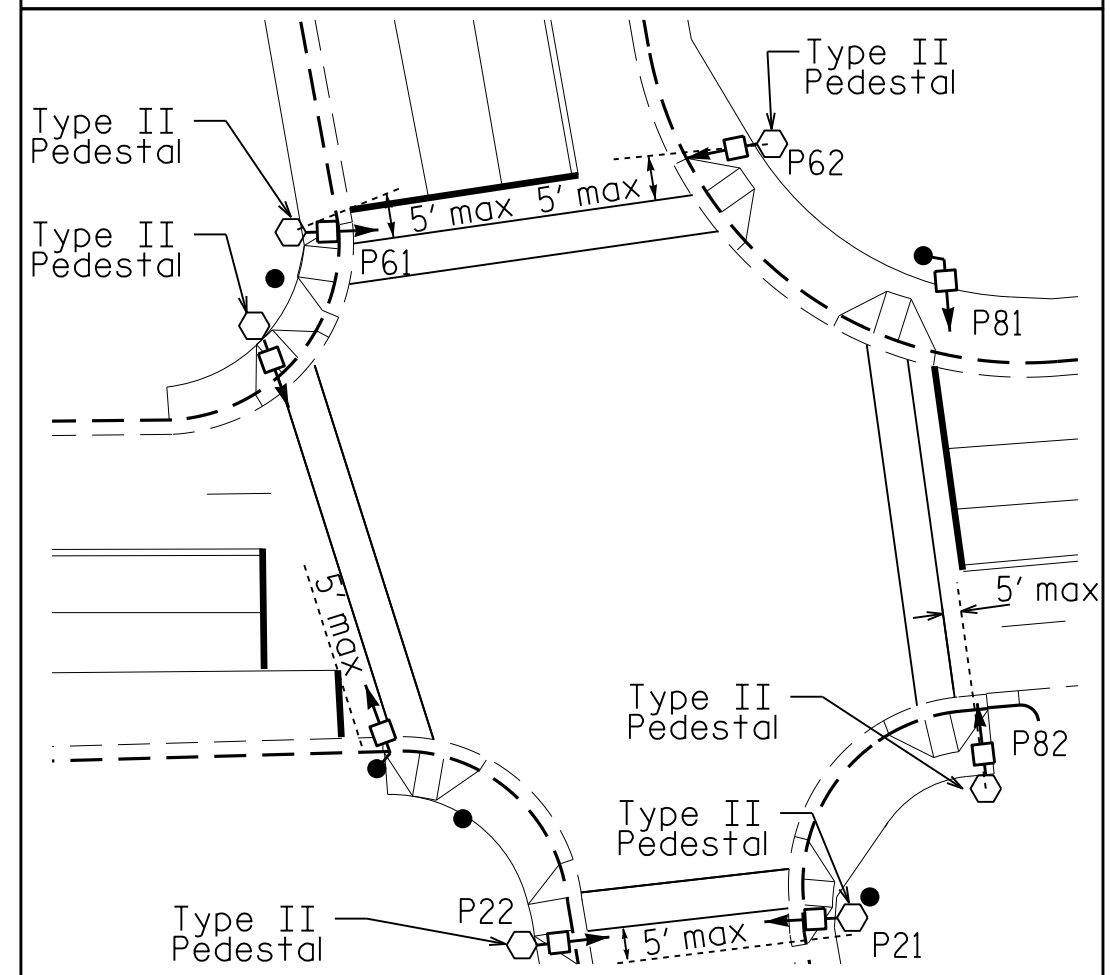
OASIS 2070 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green 1 *	7	10	7	7	7	10	7	7
Extension 1 *	2.0	3.0	2.0	2.0	2.0	3.0	2.0	2.0
Max Green 1 *	20	50	15	40	15	50	15	40
Yellow Clearance	3.0	4.0	3.3	4.5	3.0	4.0	3.0	4.5
Red Clearance	2.8	2.8	3.1	2.3	2.8	2.2	3.1	2.4
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	7	-	7	-	7	-	7
Don't Walk 1	-	6	-	13	-	12	-	12
Seconds Per Actuation *	-	-	-	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-	-	-
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW	-	-
Dual Entry	-	-	-	-	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON	ON	ON	ON	ON

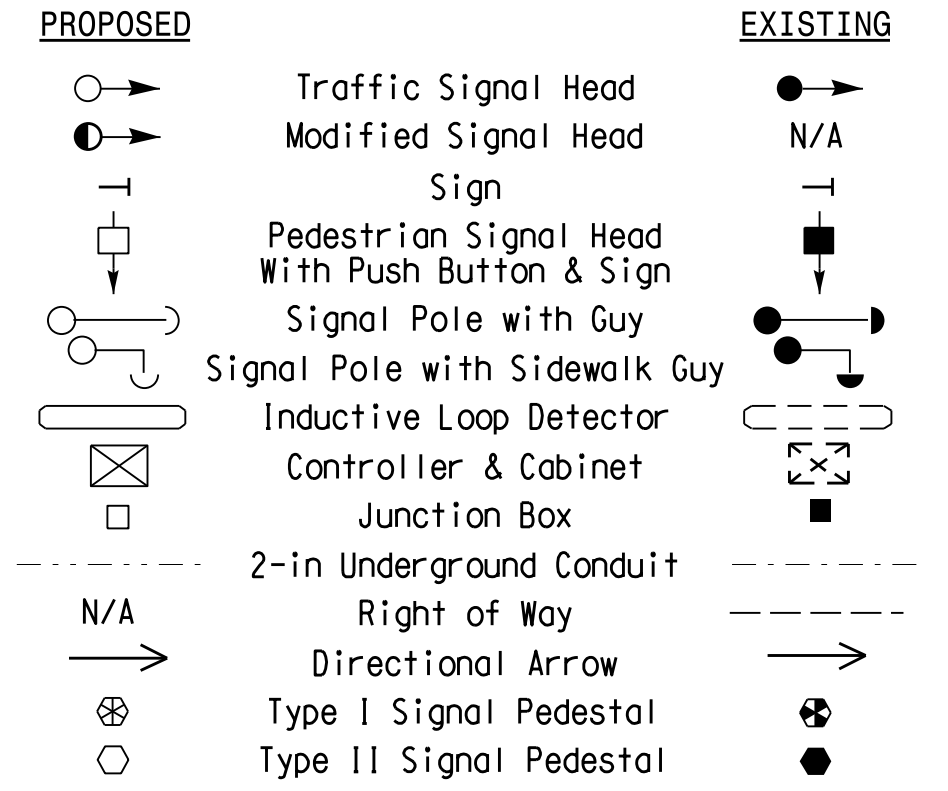
\* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.



Pedestrian Pushbutton Locations



LEGEND



Signal Upgrade - Final Design

Prepared in the Offices of:  
  
 750 N. Greenfield Pkwy, Garner, NC 27529  
 SCALE: 0 30  
 1"=30'

US 52 Bus-NC 89(Renfro Street) at NC 103/SR 2432 (Pine Street)

Division 11 Surry County Mount Airy  
 PLAN DATE: November 2015 REVIEWED BY: Z. Little  
 PREPARED BY: M. Mahbooba REVIEWED BY:

REVISIONS: INIT. DATE

DocuSign by:   
 11/30/2015  
 DATE: 11-30-2015  
 SIG. INVENTORY NO. II-0521

This plan supersedes the plan sealed on 9/8/2015.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL  
 NORTH CAROLINA  
 PROFESSIONAL ENGINEER  
 ZACHARY M. LITTLE  
 030530