PROJECT REFERENCE NO.	SHEET NO.
U-4715 B	Sig. 42.0

PHASING DIAGRAM

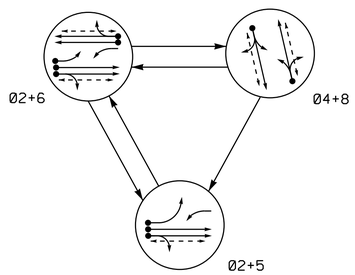
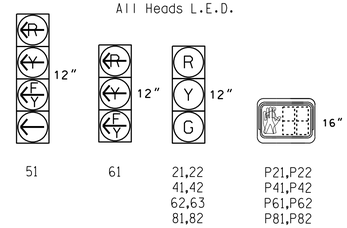


TABLE OF OPERATION

SIGNAL FACE	PHASE 02+5	PHASE 02+6	PHASE 04+8	FLASH
21,22	G	G	R	Y
41,42	R	R	G	R
51	←	F Y	~~R~~	~~Y~~
61	~~F Y~~	~~F Y~~	~~R~~	~~Y~~
62,63	R	G	R	Y
81,82	R	R	G	R
P21,P22	W	W	DW	DRK
P41,P42	DW	DW	W	DRK
P61,P62	DW	W	DW	DRK
P81,P82	DW	DW	W	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
2A	6X6	300	EXIST	-	2	Y	Y	-	1.6	-	-	Y
2B	6X6	300	EXIST	-	2	Y	Y	-	1.6	-	-	Y
2C	6X6	90	EXIST	-	2	Y	Y	-	-	-	-	Y
2D	6X6	90	EXIST	-	2	Y	Y	-	-	-	-	Y
4A	6X40	+5	2-4-2	-	4	Y	Y	-	-	5	-	Y
4B	6X25	+5	2-4-2	-	4	Y	Y	-	-	15	-	Y
5A	6X40	0	2-4-2	-	5	Y	Y	-	-	15	-	Y
					2	Y	Y	-	-	-	-	Y
6A	6X6	300	EXIST	-	6	Y	Y	-	1.6	-	-	Y
6B	6X6	300	EXIST	-	6	Y	Y	-	1.6	-	-	Y
6C	6X6	90	EXIST	-	6	Y	Y	-	-	-	-	Y
6D	6X6	90	EXIST	-	6	Y	Y	-	-	-	-	Y
8A	6X40	+5	2-4-2	-	8	Y	Y	-	-	5	-	Y
8B	6X25	+5	2-4-2	-	8	Y	Y	-	-	15	-	Y

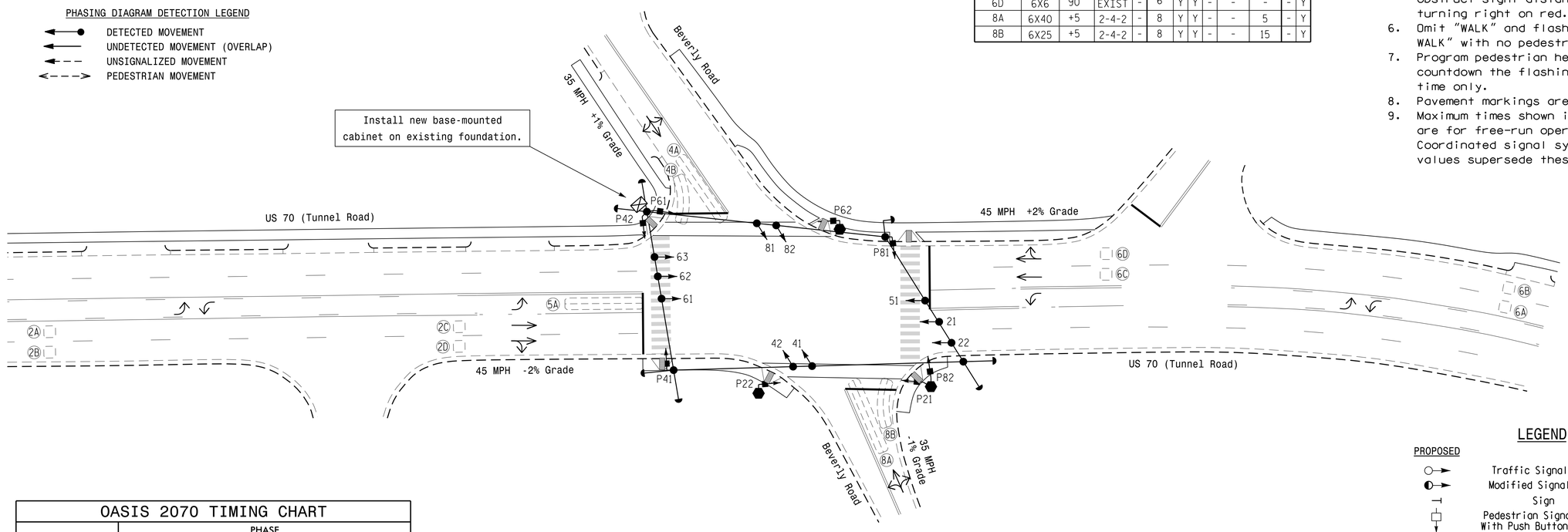
3 Phase
Fully Actuated
Asheville Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 5 may be lagged.
4. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
8. Pavement markings are existing.
9. 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



OASIS 2070 TIMING CHART

FEATURE	PHASE 2	PHASE 4	PHASE 5	PHASE 6	PHASE 8
Min Green 1 *	12	7	7	12	7
Extension 1 *	2.0	2.0	2.0	2.0	2.0
Max Green 1 *	60	25	15	60	25
Yellow Clearance	4.7	3.9	3.0	4.7	3.9
Red Clearance	2.1	3.0	2.4	2.1	3.0
Red Revert	2.0	2.0	2.0	2.0	2.0
Walk 1 *	7	7	-	7	7
Don't Walk 1	17	16	-	20	16
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	-	ON	-	-	ON
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.

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	
	Type II Signal Pedestal	
N/A	Curb Ramp	

Signal Upgrade

Prepared In the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 0 30 1"=30'

US 70 (Tunnel Rd.) at Beverly Road

Division 13 Buncombe County Asheville

PLAN DATE: December 2015 REVIEWED BY: P.L. Alexander

PREPARED BY: R.N. Zinser REVIEWED BY:

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 043914 ENGINEER RICHARD N. ZINSER

DocuSigned by: Richard N. Zinser 8/9/2016
F13B897347224BF DATE

SIG. INVENTORY NO. 13-0234

09-AUG-2016 14:17
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