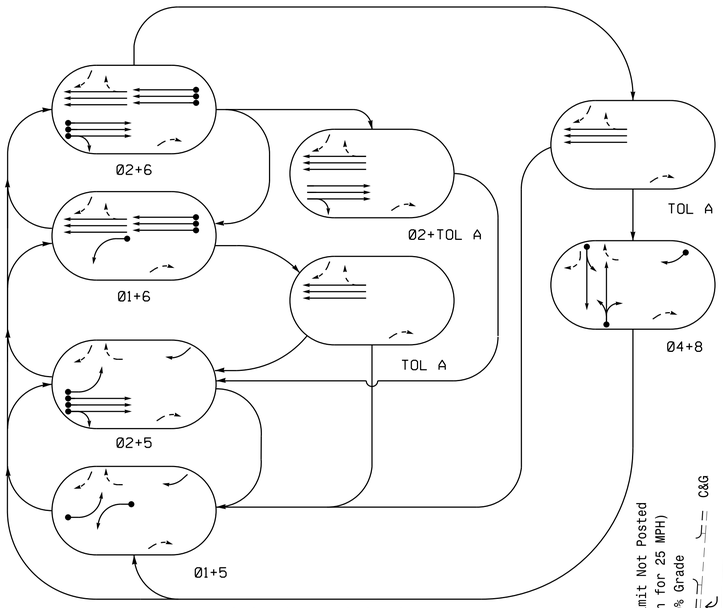
PROJECT REFERENCE NO.	SHEET NO.
U-4715 B	Sig. 170.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

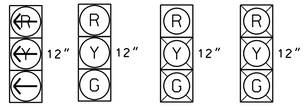
TABLE OF OPERATION

SIGNAL FACE	PHASE 0 1 + 5	0 2 + 5	0 1 + 6	0 2 + 6	0 4 + 8	TOL A	Ø5+Ø6 OVLP A	FLASH
11	←	~~R~~	←	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
21, 22, 23	R	G	R	G	R	R	G	Y
41, 42	R	R	R	G	R	R	R	R
43, 44	G	G	R	R	G	R	R	R
51	←	←	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
61, 62, 63	R	R	G	G	R	G	G	Y
64, 65, 66	R	R	G	G	R	R	R	Y
81, 82	R	R	R	R	G	R	R	R

SIGNAL FACE I.D.

All Heads L.E.D.

◯ Denotes Optically Programmable Section



11, 51 — 21, 22, 23, 41, 42, 64, 65, 81, 82 — 61, 62, 63 — 43, 44, 66

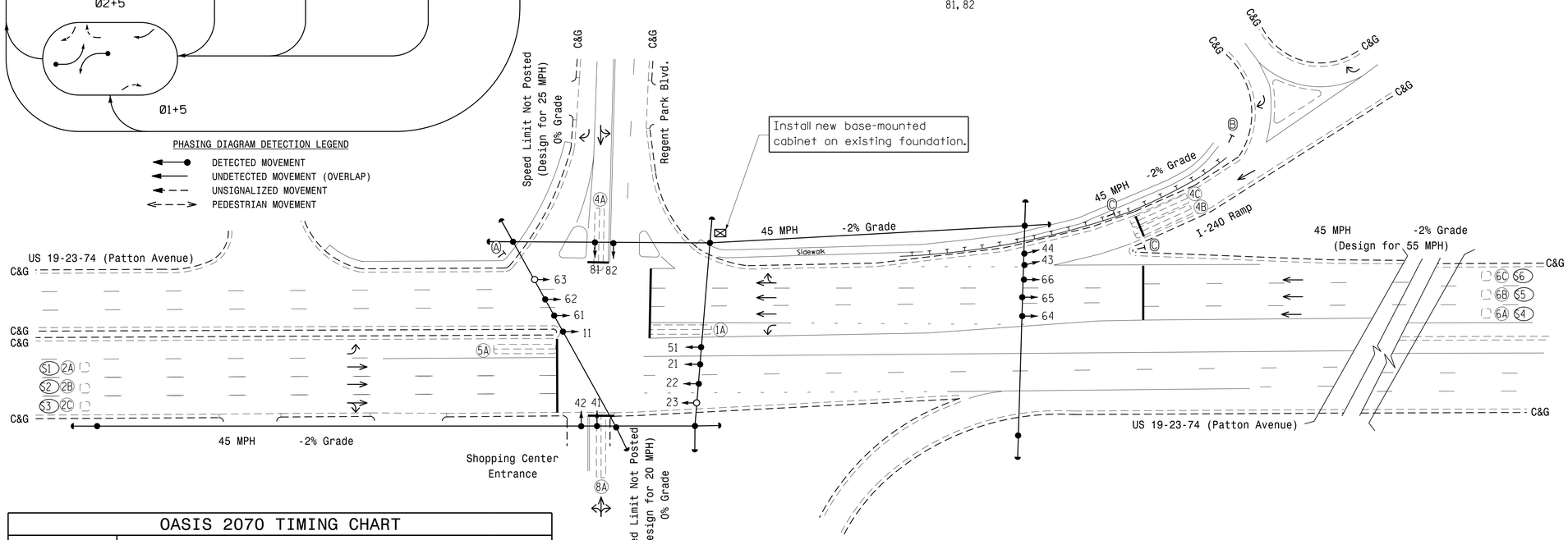
OASIS 2070 LOOP & DETECTOR INSTALLATION

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
1A	6X40	0	2-4-2	-	1	Y	Y	-	-	-	-	Y
2A/S1	6X6	300	EXISTING	-	2	Y	Y	-	-	-	Y	Y
2B/S2	6X6	300	EXISTING	-	2	Y	Y	-	-	-	Y	Y
2C/S3	6X6	300	EXISTING	-	2	Y	Y	-	-	-	Y	Y
4A	6X40	+5	2-4-2	-	4	Y	Y	-	-	3	-	Y
4B	6X40	+5	2-4-2	-	4	Y	Y	-	-	-	-	Y
4C	6X40	+5	2-4-2	-	4	Y	Y	-	-	-	-	Y
5A	6X40	0	2-4-2	-	5	Y	Y	-	-	-	-	Y
6A/S4	6X6	425	EXISTING	-	6	Y	Y	-	-	-	Y	Y
6B/S5	6X6	425	EXISTING	-	6	Y	Y	-	-	-	Y	Y
6C/S6	6X6	425	EXISTING	-	6	Y	Y	-	-	-	Y	Y
8A	6X40	0	2-4-2	-	8	Y	Y	-	-	5	-	Y

5 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 1 and/or phase 5 may be lagged.
4. Reposition existing signal heads numbered 21,22,61 & 62.
5. Set all detector units to presence mode.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. Pavement markings are existing.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8	TOL A
Min Green 1 *	7	12	7	7	14	7	6
Extension 1 *	2.0	6.0	2.0	2.0	6.0	2.0	
Max Green 1 *	15	90	20	15	90	20	
Yellow Clearance	3.0	4.7	3.2	3.0	5.4	3.2	5.4
Red Clearance	2.6	1.0	3.2	2.3	1.0	3.2	1.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	
Walk 1 *	-	-	-	-	-	-	
Don't Walk 1	-	-	-	-	-	-	
Seconds Per Actuation *	-	1.2	-	-	1.2	-	
Max Variable Initial *	-	34	-	-	47	-	
Time Before Reduction *	-	15	-	-	15	-	
Time To Reduce *	-	30	-	-	30	-	
Minimum Gap	-	3.0	-	-	3.4	-	
Recall Mode	-	MIN RECALL	-	-	MIN RECALL	-	
Vehicle Call Memory	-	YELLOW	-	-	YELLOW	-	
Dual Entry	-	-	ON	-	-	ON	
Simultaneous Gap	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.

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	→
→	Pavement Marking Arrow	→
Ⓐ	"YIELD" Sign (R1-2)	Ⓐ
Ⓑ	"STOP" Sign (R1-1)	Ⓑ
Ⓒ	"NO TURN ON RED" Sign (R10-11)	Ⓒ

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

US 19-23-74 (Patton Avenue) at I-240 Ramp and Regent Park Blvd./ Shopping Center Entrance

Division 13 Buncombe County Asheville

PLAN DATE: May 2016 REVIEWED BY: R. N. Zinser

PREPARED BY: C. Pierce REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 024393 ENGINEER TIMOTHY J. WILLIAMS

DocuSigned by: J. O. Williams 10/20/2016
97AD792EE8E934CA... DATE

SIG. INVENTORY NO. 13-0920

20-OCT-2016 15:30
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