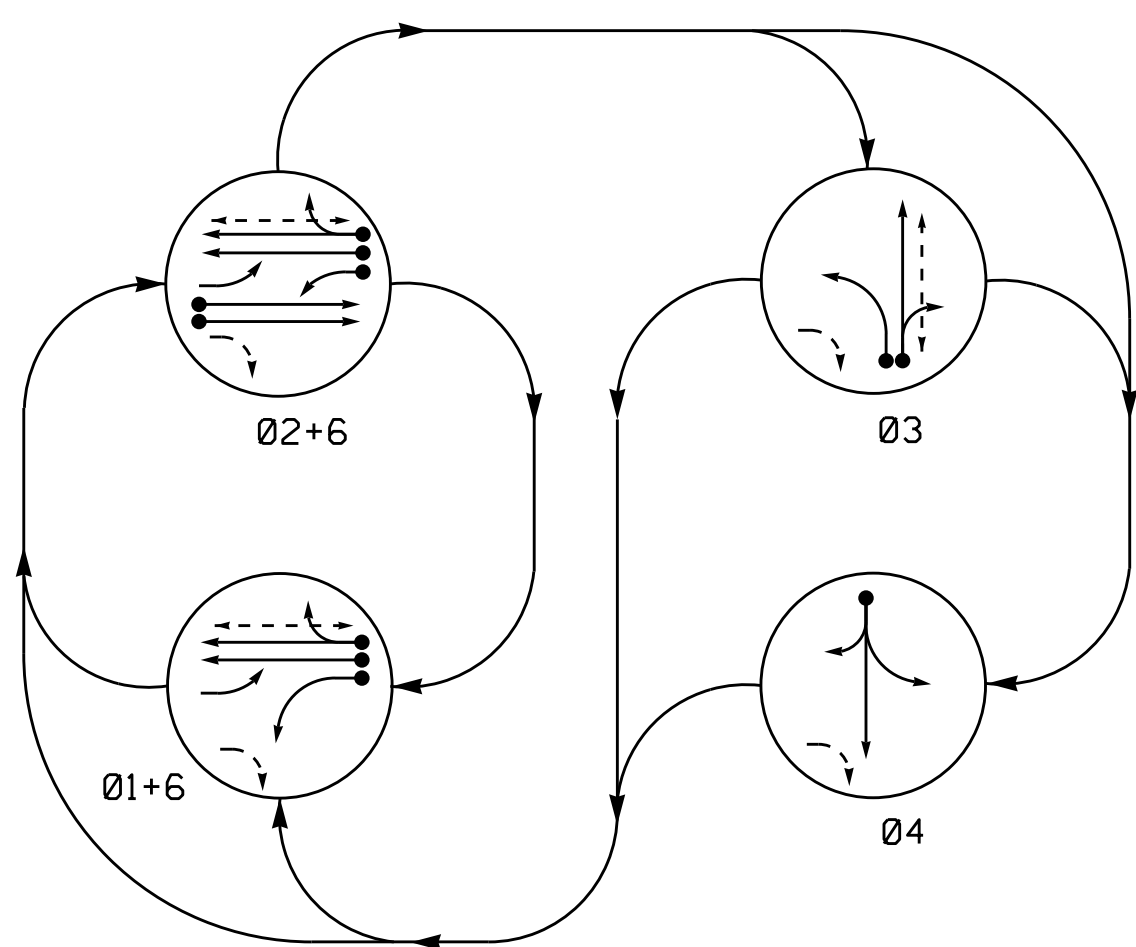


PHASING DIAGRAM



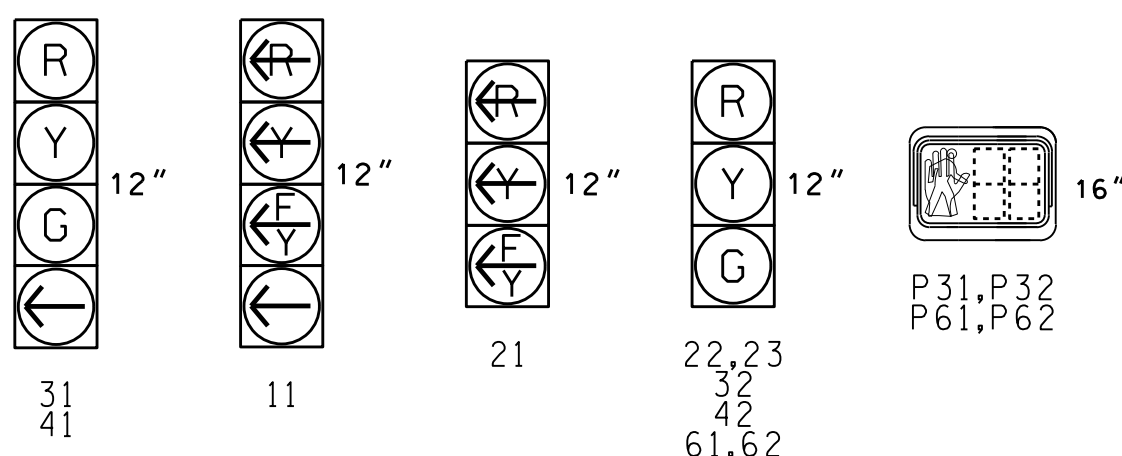
PHASING DIAGRAM DETECTION LEGEND

- ➡ ● DETECTED MOVEMENT
- ➡ ○ UNDETECTED MOVEMENT (OVERLAP)
- ➡ --- UNSIGNALIZED MOVEMENT
- ➡ - - - PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE				FLASH
	01+6	02+6	03	04	
11	---	---	---	---	---
21	---	---	---	---	---
22,23	R	G	R	R	Y
31	R	R	G	R	R
32	R	R	G	R	R
41	R	R	R	G	R
42	R	R	R	G	R
61,62	G	G	R	R	Y
P 31,P32	DW	DW	W	DW	DRK
P 61,P62	W	W	DW	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



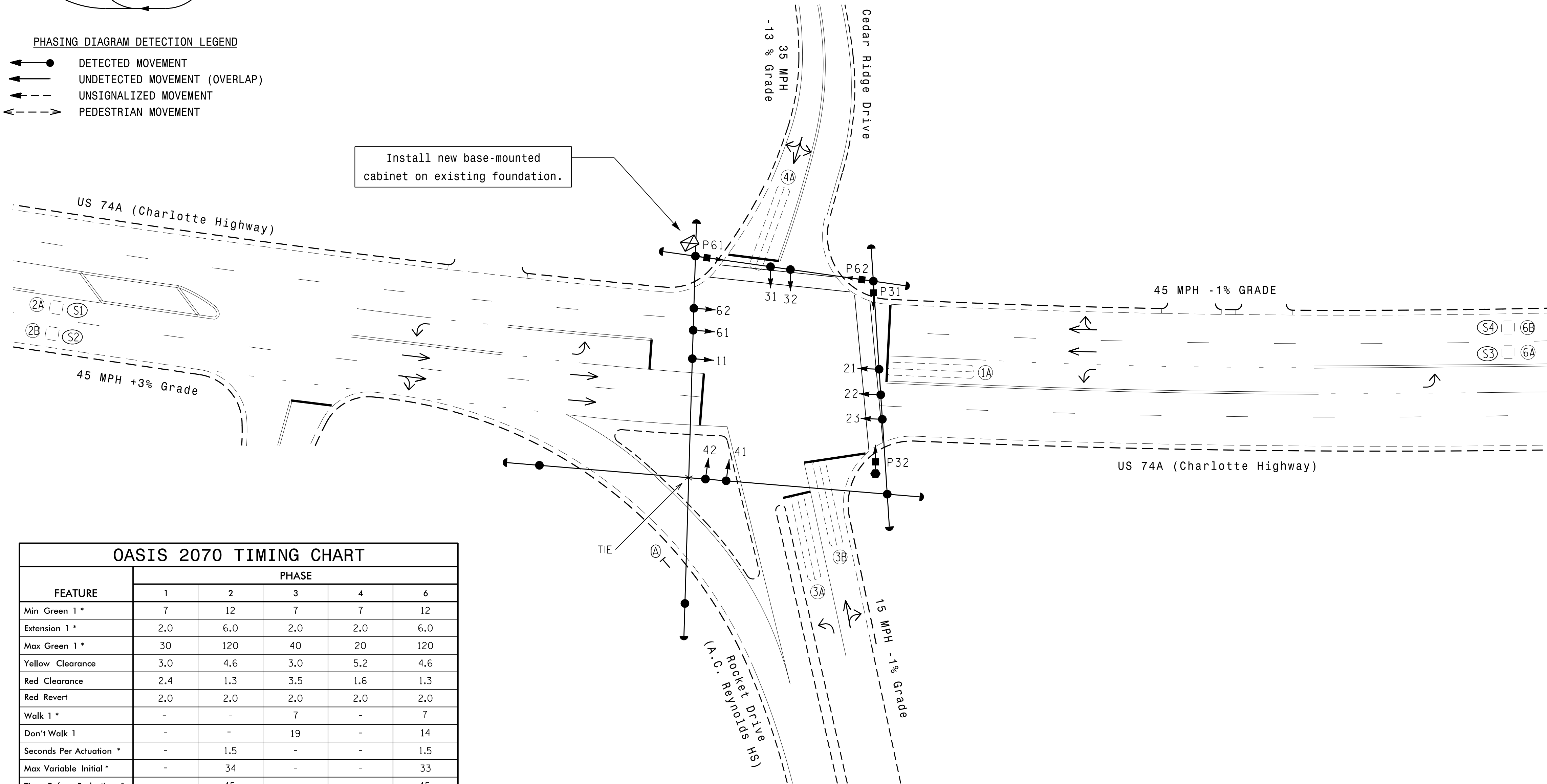
OASIS 2070 LOOP & DETECTOR INSTALLATION

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING						
					PHASE	CALLING	EXTENSION FULL TIME DELAY	STRETCH TIME	DELAY TIME	LOOP SYSTEM	NEW CARD
1A	6X40	0	2-4-2	-	1	Y	Y	-	15	-	Y
2A/S1	6X6	300	EXISTING	-	2	Y	Y	-	-	-	Y
2B/S2	6X6	300	EXISTING	-	2	Y	Y	-	-	-	Y
3A	6X40	0	2-4-2	-	3	Y	Y	-	-	-	Y
3B	6X40	0	2-4-2	-	3	Y	Y	-	10	-	Y
4A	6X40	+5	2-4-2	-	4	Y	Y	-	10	-	Y
6A/S3	6X6	285	EXISTING	-	6	Y	Y	-	-	-	Y
6B/S4	6X6	285	EXISTING	-	6	Y	Y	-	-	-	Y

4 Phase Actuated Asheville Signal System

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 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



Install new base-mounted cabinet on existing foundation.

OASIS 2070 TIMING CHART

FEATURE	PHASE				
	1	2	3	4	6
Min Green 1 *	7	12	7	7	12
Extension 1 *	2.0	6.0	2.0	2.0	6.0
Max Green 1 *	30	120	40	20	120
Yellow Clearance	3.0	4.6	3.0	5.2	4.6
Red Clearance	2.4	1.3	3.5	1.6	1.3
Red Revert	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	7	-	7
Don't Walk 1	-	-	19	-	14
Seconds Per Actuation *	-	1.5	-	-	1.5
Max Variable Initial *	-	34	-	-	33
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	-	YELLOW	-	-	YELLOW
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.

LEGEND

- | | |
|--|---|
| ○➡ PROPOSED Traffic Signal Head | ●➡ EXISTING Traffic Signal Head |
| ○➡ PROPOSED Modified Signal Head Sign | N/A |
| ⊞➡ PROPOSED Pedestrian Signal Head With Push Button & Sign | ⊞➡ EXISTING Pedestrian Signal Head |
| ⊞➡ PROPOSED Signal Pole with Guy | ⊞➡ EXISTING Signal Pole with Guy |
| ⊞➡ PROPOSED Signal Pole with Sidewalk Guy | ⊞➡ EXISTING Signal Pole with Sidewalk Guy |
| ⊞➡ PROPOSED Inductive Loop Detector | ⊞➡ EXISTING Inductive Loop Detector |
| ⊞➡ PROPOSED Controller & Cabinet | ⊞➡ EXISTING Controller & Cabinet |
| ○ PROPOSED Pedestrian Signal Pedestal | ● EXISTING Pedestrian Signal Pedestal |
| □ PROPOSED Junction Box | □ EXISTING Junction Box |
| - - - PROPOSED 2-in Underground Conduit | - - - EXISTING 2-in Underground Conduit |
| N/A | ➡ EXISTING Right of Way |
| ➡ PROPOSED Directional Arrow | ➡ EXISTING Directional Arrow |
| ⊞➡ PROPOSED Master Controller & Cabinet | ⊞➡ EXISTING Master Controller & Cabinet |
| ○ PROPOSED Type II Signal Pedestal | ● EXISTING Type II Signal Pedestal |
| ⊞➡ PROPOSED "YIELD" Sign (R1-2) | ⊞➡ EXISTING "YIELD" Sign (R1-2) |

Signal Upgrade

Prepared in the Offices of:

TRANSPORTATION MOBILITY AND SAFETY SOLUTIONS
A DIVISION OF NORTH CAROLINA TRANSPORTATION TRUST
Signal Design Section

US 74A (Charlotte Highway) at Rocket Drive (A.C. Reynolds HS) / Cedar Ridge Drive

Division 13 Buncombe County Reynolds

PLAN DATE: June 2016 REVIEWED BY: T.J. Williams

PREPARED BY: R.N. Zinser REVIEWED BY:

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE 0 30
1"=30'

REVISIONS INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

RICHARD N. ZINSER
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Richard N. Zinser 8/10/2016

SIG. INVENTORY NO. 13-0453