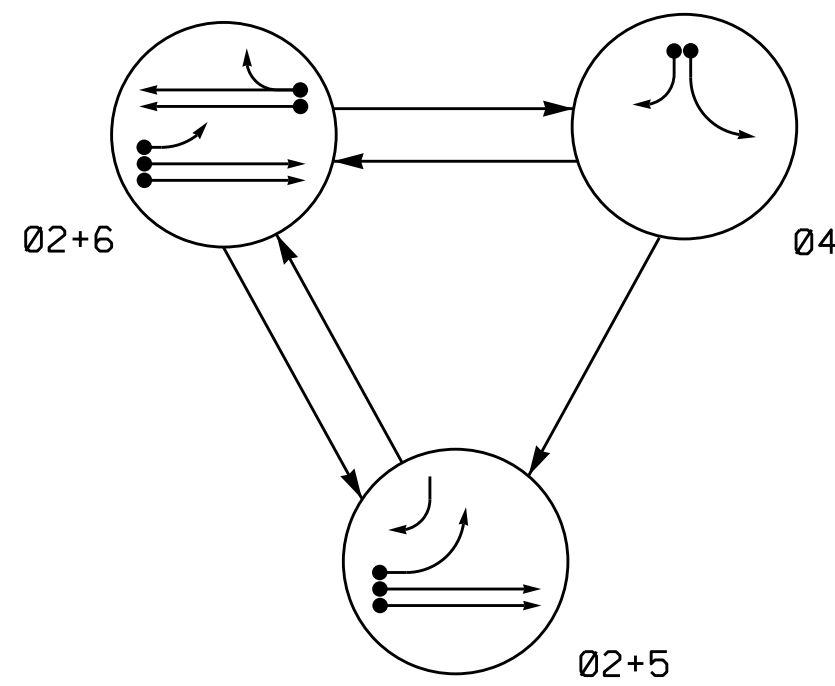


PHASING DIAGRAM

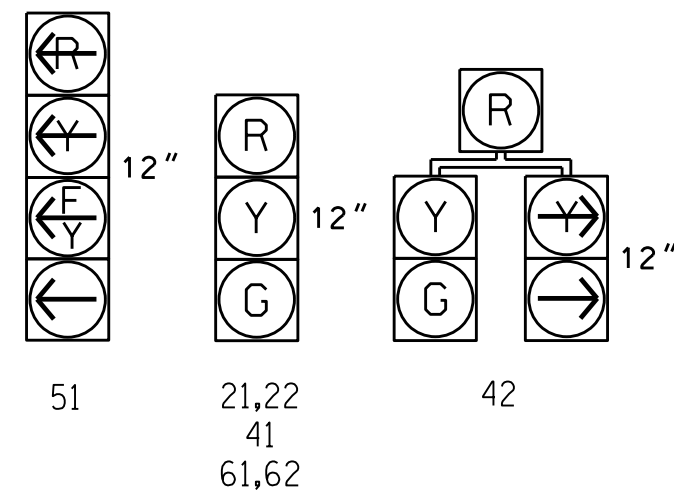


PHASING DIAGRAM DETECTION LEGEND
 ←● DETECTED MOVEMENT
 ←○ UNDETECTED MOVEMENT (OVERLAP)
 - - - UNSIGNALIZED MOVEMENT
 ←- - - PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE			
	02+5	02+6	04	F
21,22	G	G	R	Y
41	R	R	G	R
42	R	R	G	R
51	-	F	R	Y
61,62	R	G	R	Y

SIGNAL FACE I.D.

All Heads L.E.D.

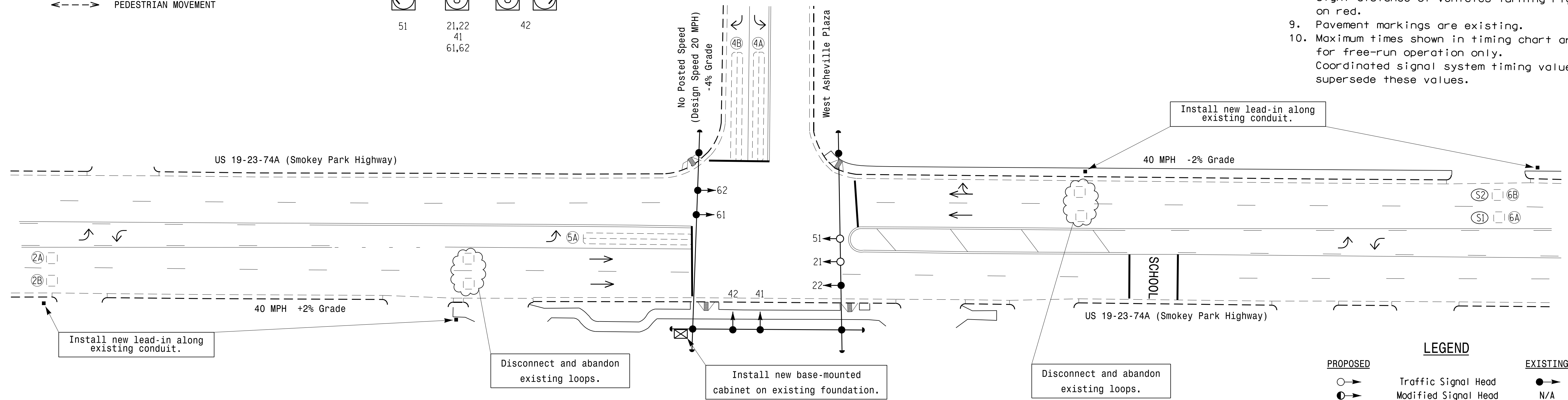


OASIS 2070 LOOP & DETECTOR INSTALLATION CHART												
INDUCTIVE LOOPS				DETECTOR PROGRAMMING								
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP NEW CARD	
2A	6X6	350	EXIST	-	2	Y	Y	-	-	-	-	Y
2B	6X6	350	EXIST	-	2	Y	Y	-	-	-	-	Y
4A	6X60	0	2-4-2	-	4	Y	Y	-	-	-	-	Y
4B	6X60	0	2-4-2	-	4	Y	Y	-	-	15	-	Y
5A	6X60	0	2-4-2	-	5	Y	Y	-	-	15	-	Y
6A/S1	6X6	350	EXIST	-	6	Y	Y	-	-	-	3	Y
6B/S2	6X6	350	EXIST	-	6	Y	Y	-	-	-	-	Y

3 Phase Fully 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 5 may be lagged.
- Reposition existing signal head numbered 22.
- Disconnect existing loops as shown.
- Set all detector units to presence mode.
- In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Pavement markings are existing.
- 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			
	2	4	5	6
Min Green 1 *	12	7	7	12
Extension 1 *	6.0	1.0	1.0	6.0
Max Green 1 *	60	30	20	60
Yellow Clearance	4.3	3.0	3.0	4.3
Red Clearance	1.4	2.3	2.1	1.4
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	1.5	-	-	1.5
Max Variable Initial *	39	-	-	39
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

* 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.

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	→
N/A Wheelchair Ramp	↗

Signal Upgrade

Prepared In the Offices of:

 TRANSPORTATION MOBILITY AND SAFETY SOLUTIONS, INC.
 SIGNAL DESIGN SECTION

US 19-23-74A (Smokey Park Highway) at West Asheville Plaza

Division 13 Buncombe County Asheville

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

PREPARED BY: Jeff Spence REVIEWED BY:

REVISIONS INIT. DATE

SCALE 0 30 1"=30'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
 RICHARD N. ZINSER
 PROFESSIONAL ENGINEER
 043914
 10/14/2016
 DATE

SIG. INVENTORY NO. 13-0823

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