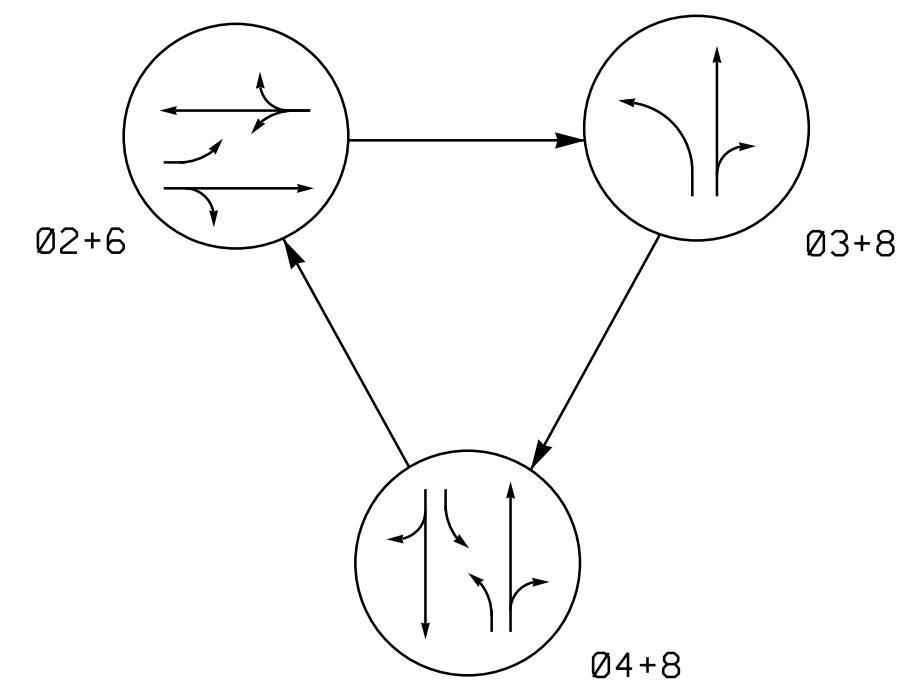


PHASING DIAGRAM

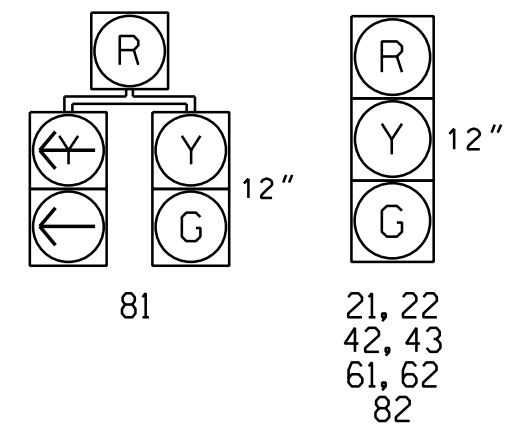


PHASING DIAGRAM DETECTION LEGEND
 ● DETECTED MOVEMENT
 ○ UNDETECTED MOVEMENT (OVERLAP)
 - - - UNSIGNALIZED MOVEMENT
 <- - - - PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE			
	Ø 2+6	Ø 4+8	Ø 3+8	Ø 4+8
21,22	G	R	R	Y
41,42	R	G	R	R
61,62	G	R	R	Y
81	R	G	Y	R
82	R	G	G	R

SIGNAL FACE I.D.
All Heads L.E.D.

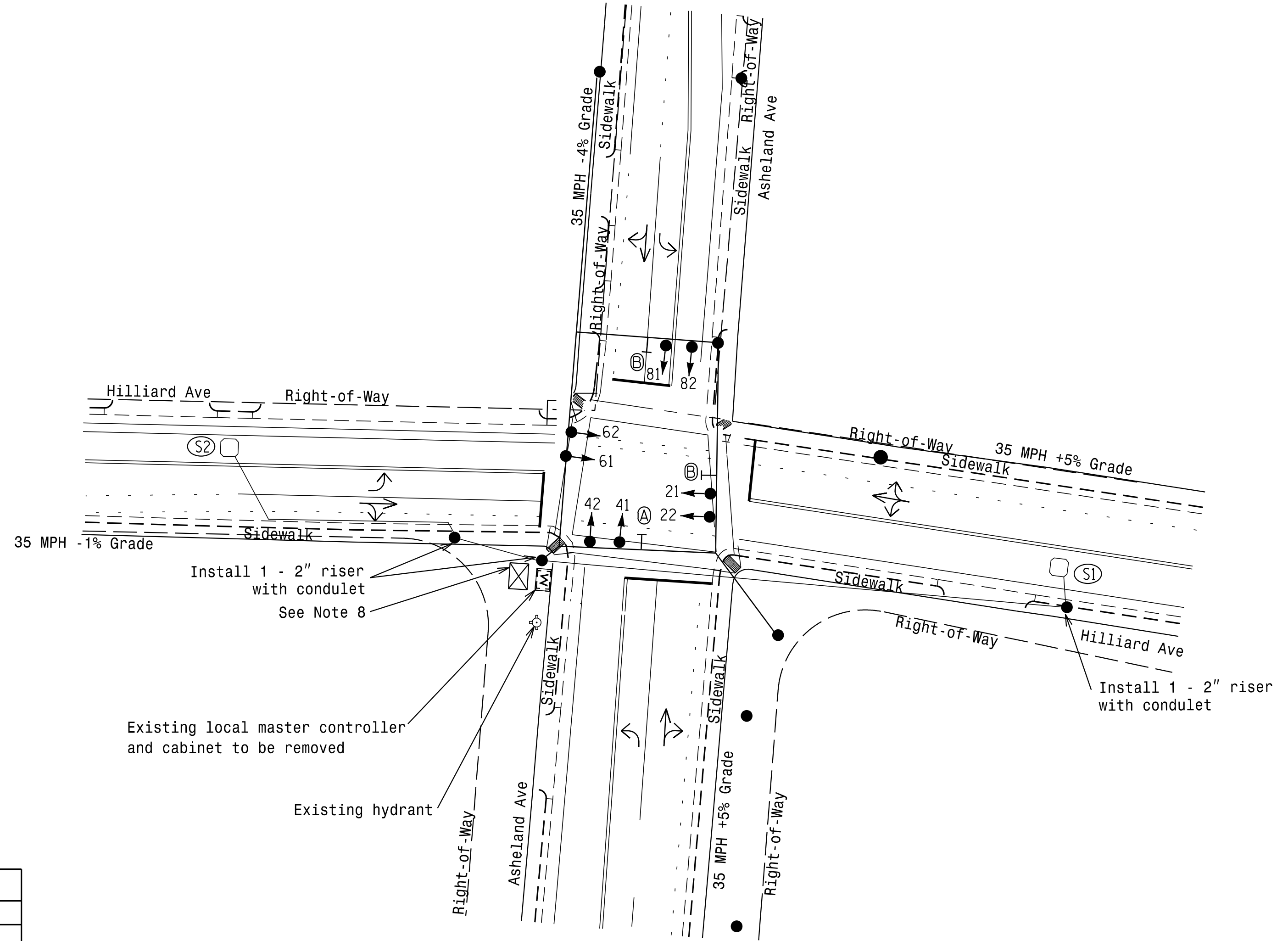


OASIS 2070E LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD
					PHASE	CALLING EXTENSION	STRETCH TIME	DELAY TIME		
S1	6X6	+150	3	Y	-	-	-	-	Y	Y
S2	6X6	+150	3	Y	-	-	-	-	Y	Y

3 Phase Pre-Timed (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. Set all detector units to presence mode.
4. 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.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Pavement markings are existing.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
8. Locate new cabinet on existing foundation.



OASIS 2070E TIMING CHART

FEATURE	PHASE				
	2	3	4	6	8
Min Green 1 *	45	7	20	45	20
Extension 1 *	0.0	2.0	0.0	0.0	0.0
Max Green 1 *	45	15	20	45	20
Yellow Clearance	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.1	1.6	1.8	2.1	1.8
Red Revert	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-
Don't Walk 1	-	-	-	-	-
Seconds Per Actuation *	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-
Time To Reduce *	-	-	-	-	-
Minimum Gap	-	-	-	-	-
Recall Mode	MAX RECALL	MAX RECALL	MAX RECALL	MAX RECALL	MAX RECALL
Vehicle Call Memory	NA	-	-	NA	-
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	EXISTING
○ → Traffic Signal Head	● → N/A
○ → Modified Signal Head	○ → N/A
○ → Pedestrian Signal Head With Push Button & Sign	○ → N/A
○ → Signal Pole with Guy	○ → N/A
○ → Signal Pole with Sidewalk Guy	○ → N/A
⊗ → Inductive Loop Detector	⊗ → N/A
⊗ → Controller & Cabinet	⊗ → N/A
⊗ → Junction Box	⊗ → N/A
- - - 2-in Underground Conduit	- - - N/A
- - - Right of Way	- - - N/A
→ Directional Arrow	→ N/A
△ → ADA Compliant Wheel Chair Ramp	△ → N/A
⊙ → 'LEFT TURN YIELD ON GREEN' Sign (R10-12)	⊙ → N/A
⊙ → 'LEFT ARROW ONLY' Sign (R3-5L)	⊙ → N/A

Signal Upgrade

Mattern & Craig
CONSULTING ENGINEERS • SURVEYORS
FIRM LICENSE NO. C-1154
12 BROAD STREET
ASHEVILLE, NORTH CAROLINA 28801
(828) 254-2201
FAX (828) 254-4562

Prepared for the Offices of:

Hilliard Avenue at Ashe/Ashe/Ashe
Buncombe County Asheville

PLAN DATE: MAY 2016 REVIEWED BY: SMH
PREPARED BY: BGR REVIEWED BY: JBV

REVISIONS: _____ INIT. DATE

SEAL

SEAL 022599
JAMES B. VOSS
ENGINEER
140F00378E041F
12/13/2016
SIGNATURE DATE
SIG. INVENTORY NO. COA-0304

4:46:03 PM R:\3602 Asheville\110 Signal System\CON\COA-0304\COA-304-sig.dgn