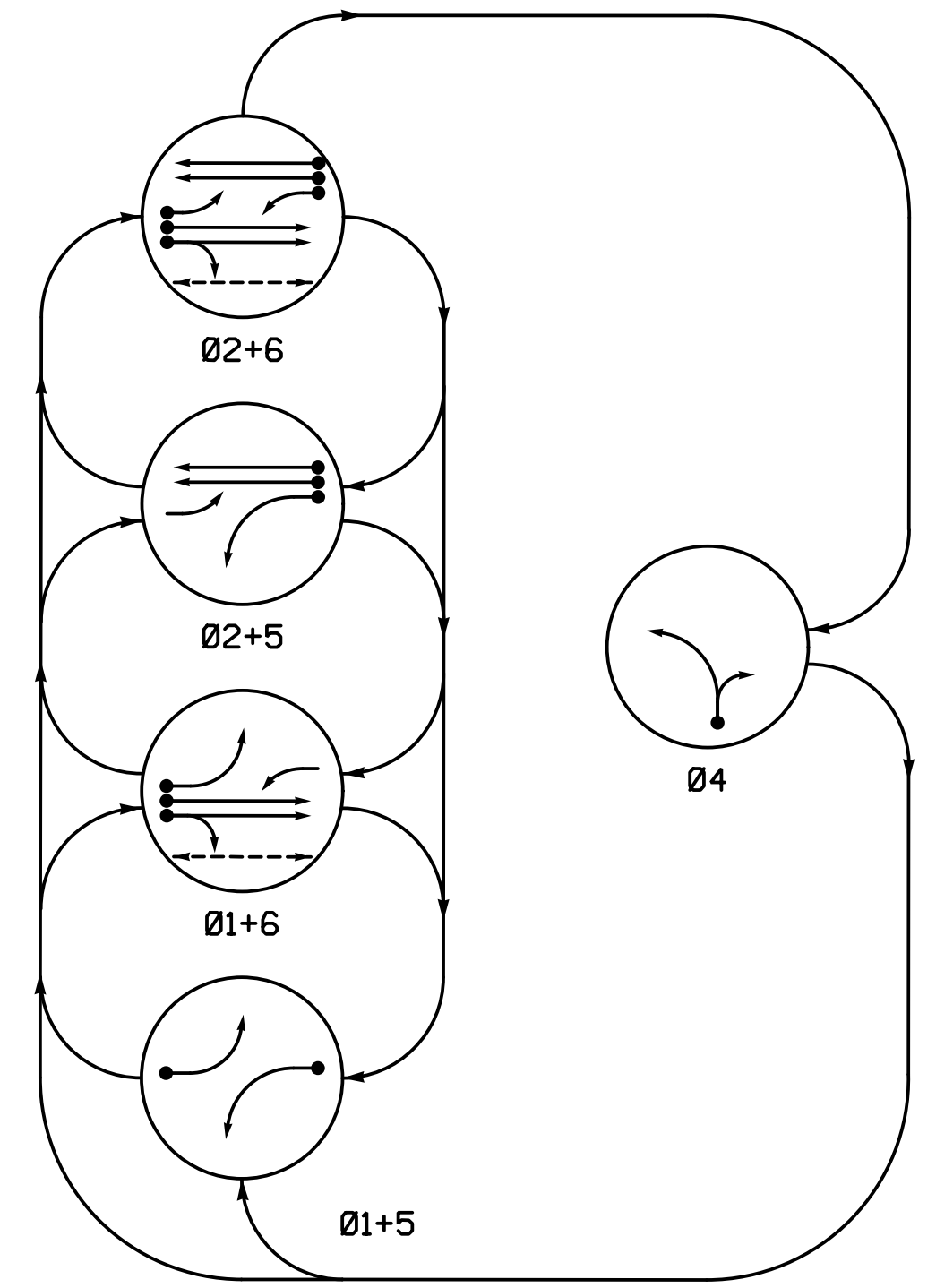
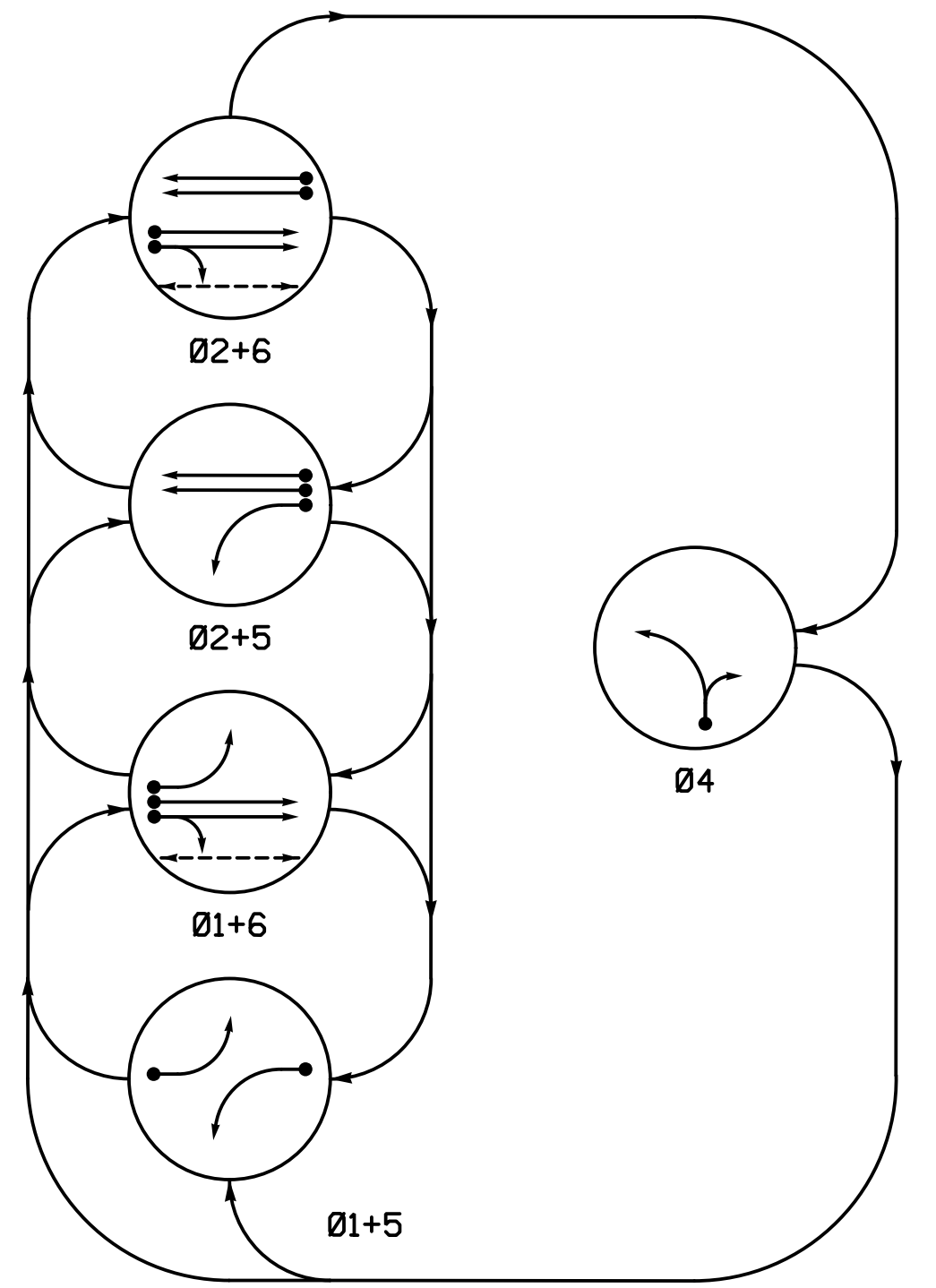


DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- ← ● → DETECTED MOVEMENT
- ← ○ → UNDETECTED MOVEMENT (OVERLAP)
- ← ····· → UNSIGNALIZED MOVEMENT
- ← - - - → PEDESTRIAN MOVEMENT

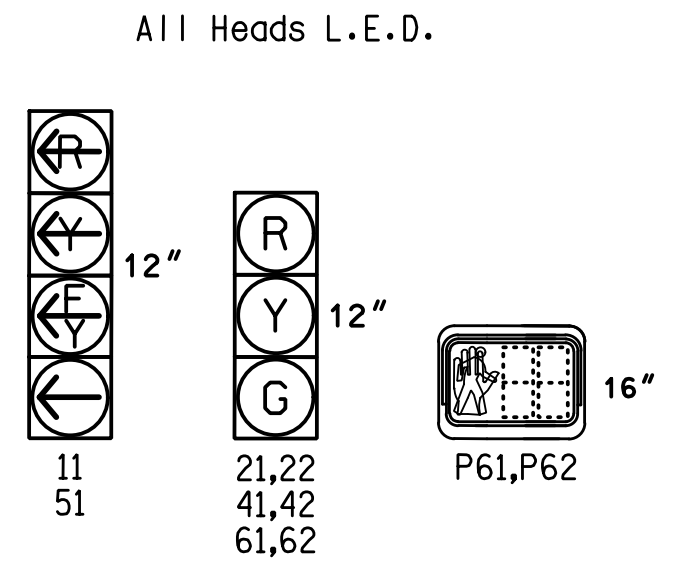
DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					F L TOP
	01+5	01+6	02+5	02+6	04	
11	---	---	F	F	-R	-Y
21,22	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
51	---	---	F	F	-R	-Y
61,62	R	G	R	G	R	Y
P61,P62	DW	W	DW	W	DW	DRK

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					F L TOP
	01+5	01+6	02+5	02+6	04	
11	---	---	-R	-R	-Y	-Y
21,22	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
51	---	---	-R	-R	-Y	-Y
61,62	R	G	R	G	R	Y
P61,P62	DW	W	DW	W	DW	DRK

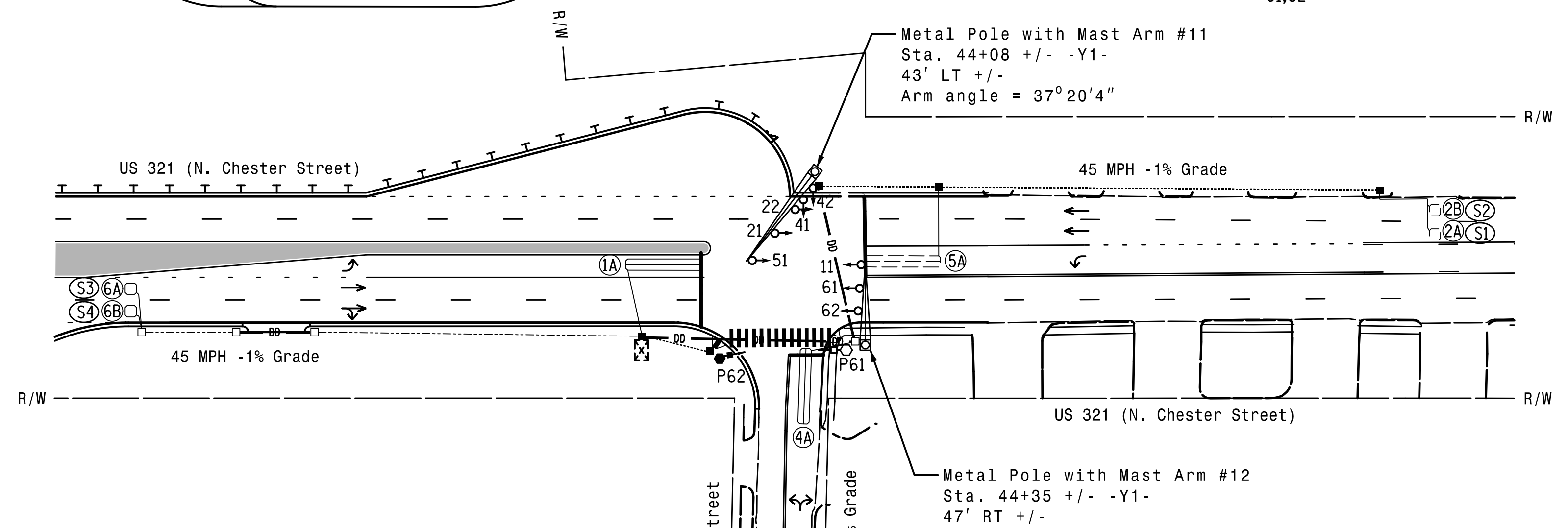
SIGNAL FACE I.D.



5 Phase Fully Actuated (Gastonia City 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. Set all detector units to presence mode.
5. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
6. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
7. The City Traffic Engineer will determine the hours of use for each phasing plan.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
9. Signal System data: Controller Asset #1623.



Metal Pole with Mast Arm #11
Sta. 44+08 +/- -Y1-
43' LT +/-
Arm angle = 37° 20' 4"

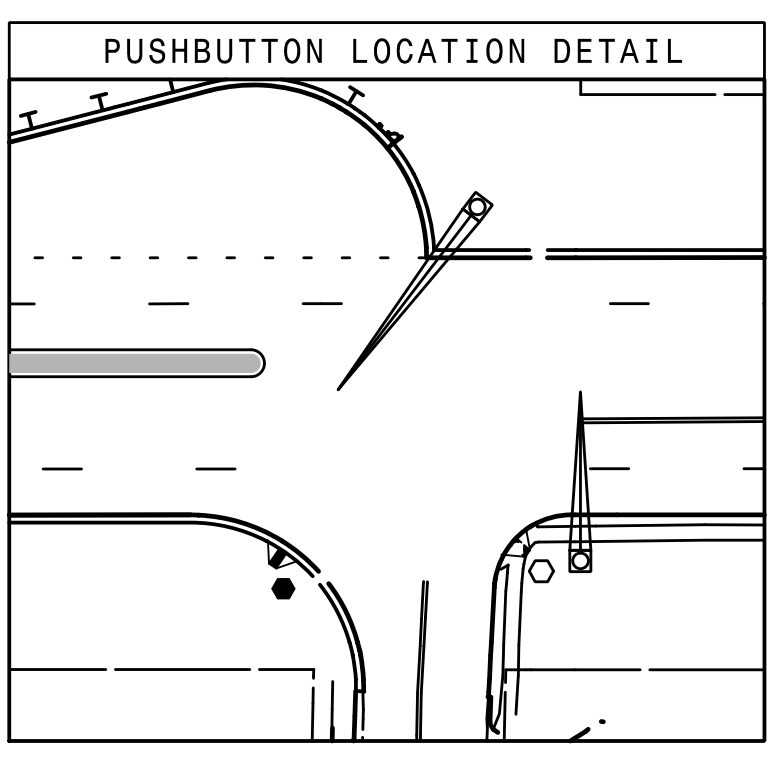
Metal Pole with Mast Arm #12
Sta. 44+35 +/- -Y1-
47' RT +/-

LEGEND

- | | | | |
|-------|---|-----|---|
| ○ → | PROPOSED Traffic Signal Head | ● → | EXISTING Traffic Signal Head |
| ○ → | PROPOSED Modified Signal Head | N/A | EXISTING Modified Signal Head |
| ○ → | PROPOSED Sign | N/A | EXISTING Sign |
| ○ → | PROPOSED Pedestrian Signal Head With Push Button & Sign | ○ → | EXISTING Pedestrian Signal Head With Push Button & Sign |
| ○ → | 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 Junction Box | □ | EXISTING Junction Box |
| --- | PROPOSED 2-in Underground Conduit | --- | EXISTING 2-in Underground Conduit |
| N/A | PROPOSED Right of Way | --- | EXISTING Right of Way |
| → | PROPOSED Directional Arrow | → | EXISTING Directional Arrow |
| - - - | PROPOSED Directional Drill | N/A | EXISTING Directional Drill |
| ○ | PROPOSED Metal Pole with Mastarm | ○ | EXISTING Metal Pole with Mastarm |
| N/A | PROPOSED Guardrail | --- | EXISTING Guardrail |
| ○ | PROPOSED Type II Signal Pedestal | ○ | EXISTING Type II Signal Pedestal |
| N/A | PROPOSED Wheelchair Ramp | ▲ | EXISTING Wheelchair Ramp |

OASIS 2070 TIMING CHART

FEATURE	PHASE				
	1	2	4	5	6
Min Green 1 *	7	12	7	7	12
Extension 1 *	2.0	6.0	2.0	2.0	6.0
Max Green 1 *	20	90	25	20	90
Yellow Clearance	3.0	4.6	3.0	3.0	4.6
Red Clearance	3.8	2.2	2.9	2.1	2.2
Red Revert	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	4
Don't Walk 1	-	-	-	-	12
Seconds Per Actuation *	-	1.5	-	-	1.5
Max Variable Initial *	-	34	-	-	34
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



OASIS 2070 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
1A	6X40	0	2-4-2	Y	1	Y	Y	-	15**	-	Y
					6*	Y	Y	Y	3	-	Y
2A/S1	6X6	300	6	-	2	Y	Y	-	-	-	Y
2B/S2	6X6	300	6	-	2	Y	Y	-	-	-	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	-	10	-	-
					5	Y	Y	-	15**	-	-
5A	6X40	0	2-4-2	-	2*	Y	Y	Y	3	-	-
6A/S3	6X6	300	4	Y	6	Y	Y	-	-	-	Y
6B/S4	6X6	300	4	Y	6	Y	Y	-	-	-	Y

*Disable phase call during alternate phasing operation.
**Reduce delay time to 3 seconds during alternate phasing operation.

Signal Upgrade - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

* 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.

HNTB HNTB NORTH CAROLINA, P.C.
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Raleigh, North Carolina 27609
NC License No: C-1554
(919) 546-8997

US 321 (N. Chester Street) at Radio Street

Division 12 Gaston Co. Gastonia

PLAN DATE: September 2016 REVIEWED BY: T.R. Terrell

PREPARED BY: J.A. Wagner REVIEWED BY: N.R. Simmons

REVISIONS	INIT.	DATE

DocuSigned by: *Matasha R. Simmons* 12/16/2016

SIGNATURE DATE

SIG. INVENTORY NO. 12-1623