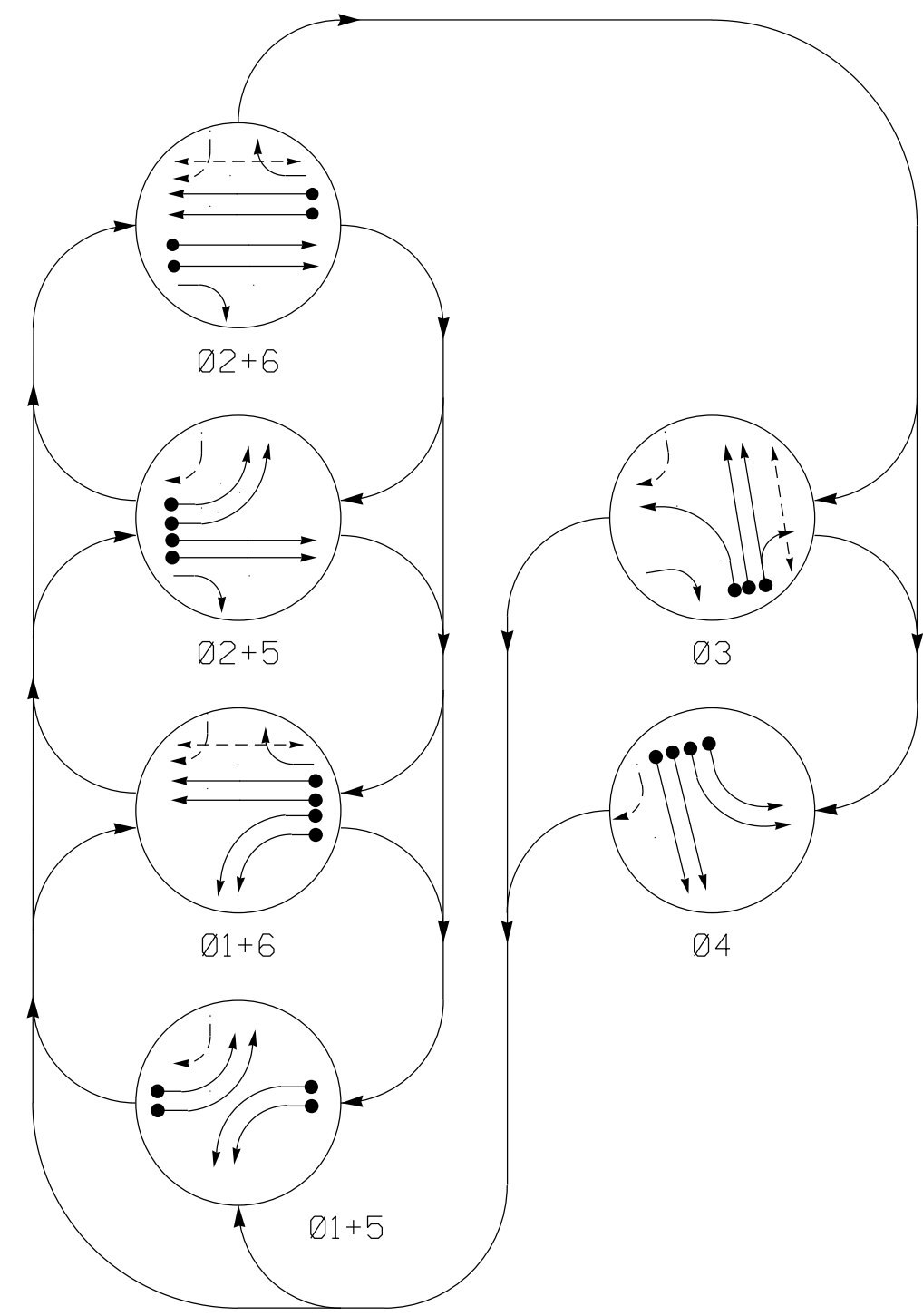


6 Phase Fully Actuated Fayetteville Signal System

- 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 and/or phase 5 may be lagged.
 - The order of phase 3 and phase 4 may be reversed.
 - Reposition existing signal heads 41, 42, 43 and 44.
 - 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.
 - Pedestrian pedestals are conceptual and shown for reference only. See sheets P1-P3 for pushbutton location details.
 - Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
 - Program pedestrian heads to countdown the flashing "Don't Walk" time only.
 - Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
 - Closed loop system data: Controller Asset# 0051.

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

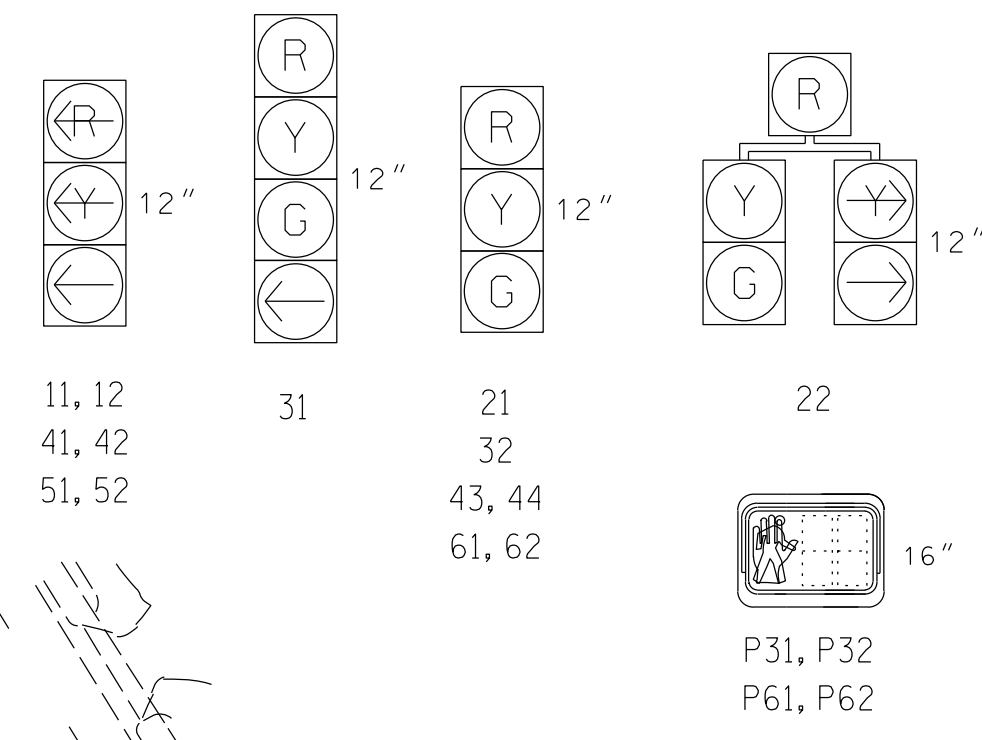
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE					
	01+5	01+6	02+5	02+6	03	04
11, 12	←	→	←	→	←	→
21	R	R	G	G	R	Y
22	R	R	G	G	R	Y
31	R	R	R	R	G	R
32	R	R	R	R	G	R
41, 42	←	→	←	→	←	→
43, 44	R	R	R	R	G	R
51, 52	←	→	←	→	←	→
61, 62	R	G	R	G	R	Y
P31, P32	DW	DW	DW	DW	W	DWDRK
P61, P62	DW	W	DW	W	DW	DRK

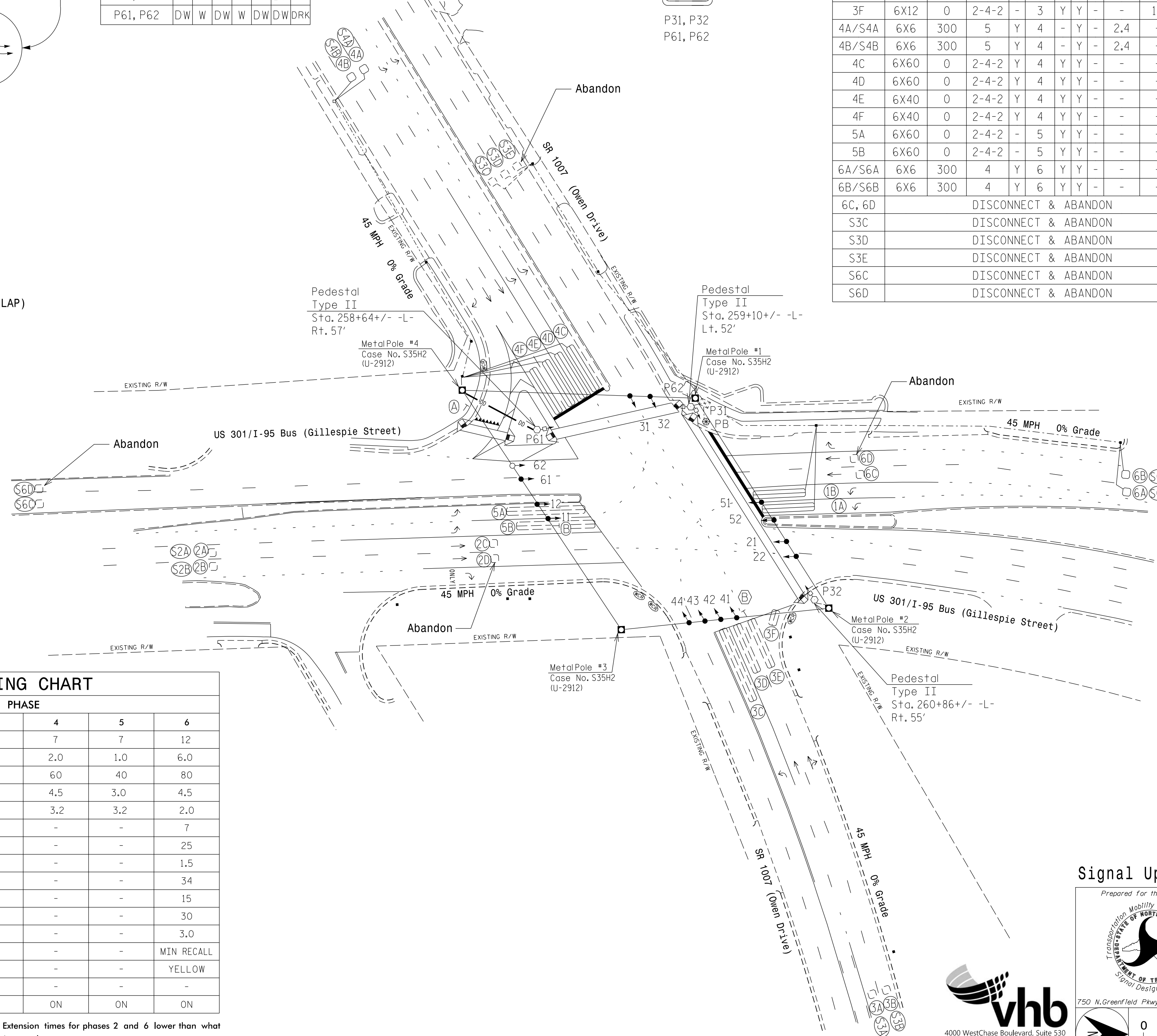
SIGNAL FACE I.D.

All Heads L.E.D.



OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	DETECTOR PROGRAMMING						
				NEW LOOP	PHASE	CALLING	EXTENSION	STRETCH TIME	DELAY TIME	
1A	6X60	0	2-4-2	Y	1	Y	Y	-	-	-
1B	6X60	0	2-4-2	Y	1	Y	Y	-	-	-
2A/S2A	6X6	300	6	-	2	Y	Y	-	-	Y
2B/S2B	6X6	300	6	-	2	Y	Y	-	-	Y
2C, 2D	DISCONNECT & ABANDON									
3A/S3A	6X6	300	5	-	3	-	Y	-	2.4	-
3B/S3B	6X6	300	5	-	3	-	Y	-	2.4	-
3C	6X60	0	2-4-2	-	3	Y	Y	-	-	3
3D	6X40	0	2-4-2	-	3	Y	Y	-	-	-
3E	6X40	0	2-4-2	-	3	Y	Y	-	-	10
3F	6X12	0	2-4-2	-	3	Y	Y	-	-	10
4A/S4A	6X6	300	5	Y	4	-	Y	-	2.4	-
4B/S4B	6X6	300	5	Y	4	-	Y	-	2.4	-
4C	6X60	0	2-4-2	Y	4	Y	Y	-	-	-
4D	6X60	0	2-4-2	Y	4	Y	Y	-	-	-
4E	6X40	0	2-4-2	Y	4	Y	Y	-	-	-
4F	6X40	0	2-4-2	Y	4	Y	Y	-	-	-
5A	6X60	0	2-4-2	-	5	Y	Y	-	-	-
5B	6X60	0	2-4-2	-	5	Y	Y	-	-	-
6A/S6A	6X6	300	4	Y	6	Y	Y	-	-	Y
6B/S6B	6X6	300	4	Y	6	Y	Y	-	-	Y
6C, 6D	DISCONNECT & ABANDON									
S3C	DISCONNECT & ABANDON									
S3D	DISCONNECT & ABANDON									
S3E	DISCONNECT & ABANDON									
S6C	DISCONNECT & ABANDON									
S6D	DISCONNECT & ABANDON									



OASIS 2070 TIMING CHART

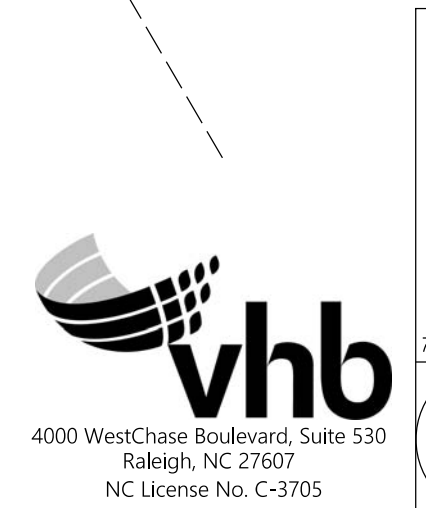
FEATURE	PHASE					
	1	2	3	4	5	6
Min Green 1 *	7	12	7	7	7	12
Extension 1	1.0	6.0	2.0	2.0	1.0	6.0
Max Green 1 *	20	80	50	60	40	80
Yellow Clearance	3.0	4.5	4.5	4.5	3.0	4.5
Red Clearance	3.1	1.9	2.7	3.2	3.2	2.0
Walk 1 *	-	-	7	-	-	7
Don't Walk 1	-	-	40	-	-	25
Seconds Per Actuation *	-	1.5	-	-	-	1.5
Max Variable 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	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
□ → Sign	□ → N/A
○ → Pedestrian Signal Head With Push Button & Sign	○ → N/A
○ → Signal Pole with Guy	○ → N/A
○ → Signal Pole with Sidewalk Guy	○ → N/A
○ → Metal Strain Pole	○ → N/A
○ → Inductive Loop Detector	○ → N/A
○ → Controller & Cabinet	○ → N/A
○ → Junction Box	○ → N/A
N/A → Wheel Chair Ramp	○ → N/A
○ → 2-in Underground Conduit	○ → N/A
○ → Directional Drill	○ → N/A
N/A → Right of Way	○ → N/A
○ → Directional Arrow	○ → N/A
○ → Type II Pedestal	○ → N/A
PB ⊕ → Pedestrian Pushbutton on Type I Pedestal	○ → N/A
Ⓐ → "YIELD" Sign (R1-2)	Ⓐ → N/A
Ⓑ → "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	Ⓑ → N/A

Signal Upgrade



Prepared for the Offices of:
 Transportation Mobility and Safety Division
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 Signal Design Section
 750 N. Greenfield Pkwy, Garner, NC 27529
 Raleigh, NC 27607
 NC License No. C-3705

US 301/I-95 Business (Gillespie Street) at SR 1007 (Owen Drive)

Division 6 Cumberland County Fayetteville

PLAN DATE: April 2015 REVIEWED BY: J.L. Lewis

PREPARED BY: D.J. Darity VHB PROJECT NO.: 38286.03

REVISIONS	INIT.	DATE

