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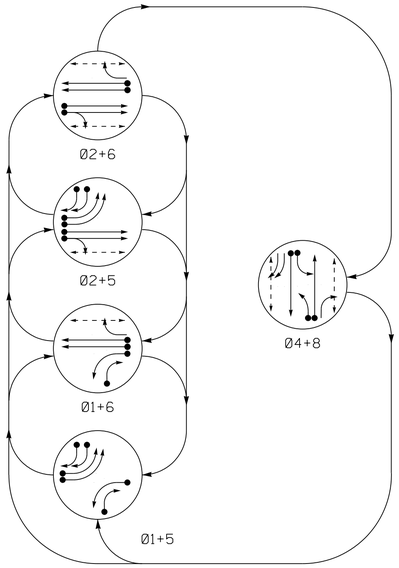
PROJECT REFERENCE NO.	SHEET NO.
U-3633	SIG-15

5-PHASE FULLY-ACTUATED (NC 273 (Highland Street) CLS)

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

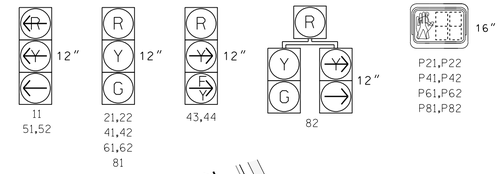
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 01+05	01+06	02+05	02+06	04+08	FLASH
11	↚	↚	̸R	̸R	̸R	̸R
21,22	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
43,44	̸Y	R	̸Y	R	̸Y	R
51,52	↚	̸R	↚	̸R	̸R	̸R
61,62	R	G	R	G	R	Y
81	R	R	R	R	G	R
82	R/↛	R/↛	R	R	G	R
P21,P22	DW	DW	W	W	DW	DRK
P41,P42	DW	DW	DW	DW	W	DRK
P61,P62	DW	W	DW	W	DW	DRK
P81,P82	DW	DW	DW	DW	W	DRK

SIGNAL FACE I.D.

All Heads L.E.D.

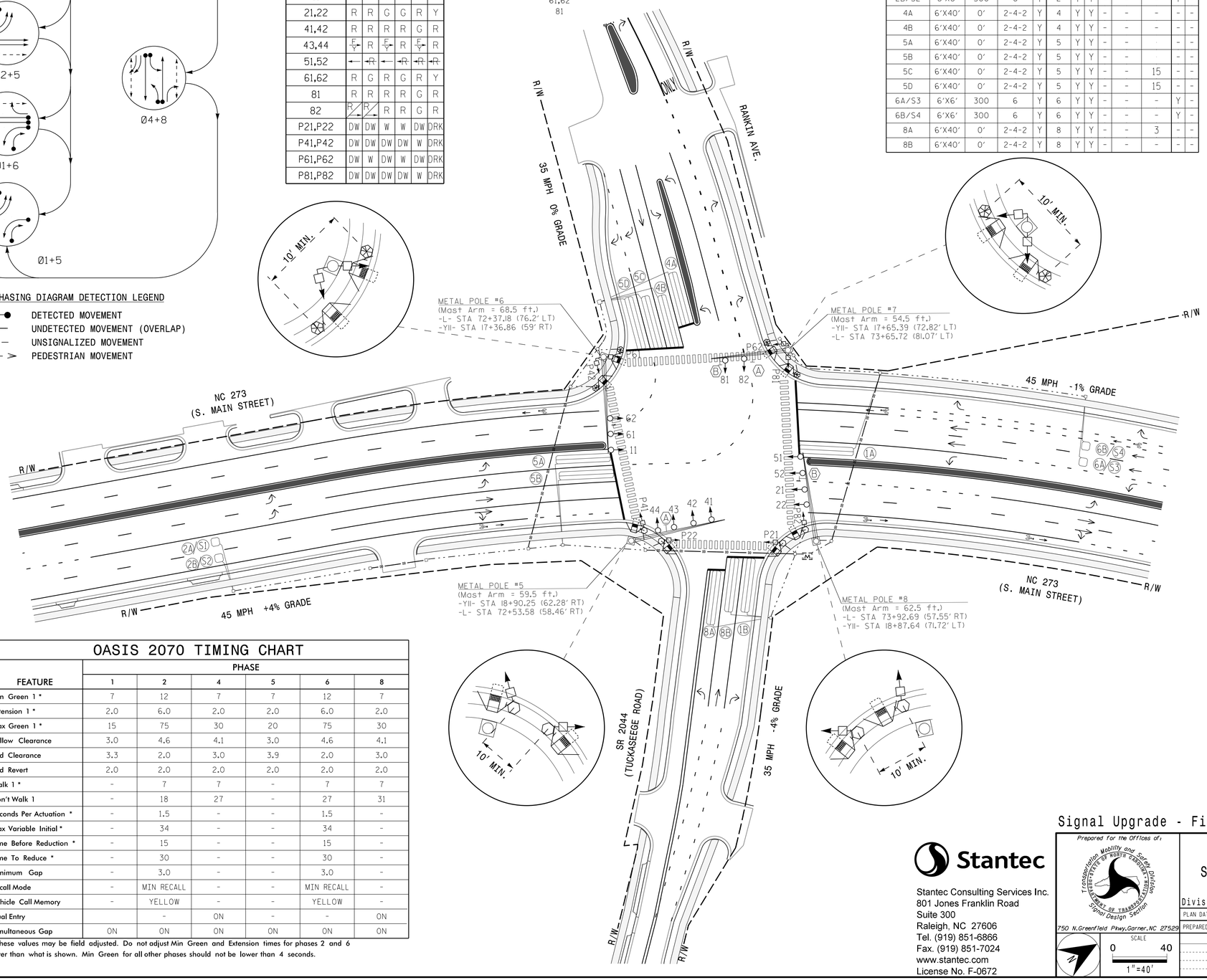


OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

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
1A	6'X40'	0'	2-4-2	Y	1	Y	Y	-	-	-	-	-
1B	6'X40'	0'	2-4-2	Y	1	Y	Y	-	-	15	-	-
2A/S1	6'X6'	300	6	Y	2	Y	Y	-	-	-	Y	-
2B/S2	6'X6'	300	6	Y	2	Y	Y	-	-	-	Y	-
4A	6'X40'	0'	2-4-2	Y	4	Y	Y	-	-	-	-	-
4B	6'X40'	0'	2-4-2	Y	4	Y	Y	-	-	-	-	-
5A	6'X40'	0'	2-4-2	Y	5	Y	Y	-	-	-	-	-
5B	6'X40'	0'	2-4-2	Y	5	Y	Y	-	-	-	-	-
5C	6'X40'	0'	2-4-2	Y	5	Y	Y	-	-	15	-	-
5D	6'X40'	0'	2-4-2	Y	5	Y	Y	-	-	15	-	-
6A/S3	6'X6'	300	6	Y	6	Y	Y	-	-	-	Y	-
6B/S4	6'X6'	300	6	Y	6	Y	Y	-	-	-	Y	-
8A	6'X40'	0'	2-4-2	Y	8	Y	Y	-	-	3	-	-
8B	6'X40'	0'	2-4-2	Y	8	Y	Y	-	-	-	-	-

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. Refer to pavement marking plan for final pavement markings.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
9. Pedestrian pedestals are conceptual and shown for reference only. See Sheets P1-P3 for push button location details.
10. Closed Loop System Data: Master Asset #11224, Controller Asset #0538



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Type I Pushbutton Post	
	Type II Signal Pedestal	
	Ped Push Button w/Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Master Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Out of Pavement Detector	
	Video Detection Area	N/A
	Metal Pole with Mastarm	
N/A	Curb Ramp	
A	"Right Turn Yield To U-Turn"	A
B	"Left Turn Only"	B

OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8
Min Green 1 *	7	12	7	7	12	7
Extension 1 *	2.0	6.0	2.0	2.0	6.0	2.0
Max Green 1 *	15	75	30	20	75	30
Yellow Clearance	3.0	4.6	4.1	3.0	4.6	4.1
Red Clearance	3.3	2.0	3.0	3.9	2.0	3.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	7	7	-	7	7
Don't Walk 1	-	18	27	-	27	31
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		-	ON	-	-	ON
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.

Signal Upgrade - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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Prepared for the Offices of: Transportation Mobility and Safety Division, State of North Carolina, Department of Transportation, Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 0 40 1"=40'

NC 273 (South Main Street) at SR 2044 (Tuckaseege Road)/ Rankin Avenue

Division 12 Gaston County Mount Holly

PLAN DATE:	JULY 2016	REVIEWED BY:	D. HARRIS
PREPARED BY:	J. HAMBRIGHT	REVIEWED BY:	B. WATSON

REVISIONS	INIT.	DATE

SEAL: NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

DocuSigned by: Betsy L. Watson 9/26/2016
SIGNATURE DATE

SIG. INVENTORY NO. 12-0538

9/22/2016
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jhambright