PHASING DIAGRAM

Ø2+6 Ø4

Ø2+5

EV PREEMPT PHASES
(Medium Priority)

PRE 3
(Ø2+5)

PRE 5
(Ø2+6)

PHASING DIAGRAM DETECTION LEGEND

→● DETECTED MOVEMENT
← UNDETECTED MOVEMENT (OVERLAP)
--- UNSIGNALIZED MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2+5	Ø2+6	Ø4	PRE 3	PRE 5	FLASH
21, 22	G	G	R	G	G	Y
41, 42	R	R	→	R	R	R
43	→	R	→	→	R	R
51	←	F	R	F	F	Y
61	R	G	R	R	G	Y
62	R	G	R	R	G	Y

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

41, 42   51   21, 22 / 61   62   43
12"   12"   12"   12"   12"

ASC/3 DETECTOR INSTALLATION CHART

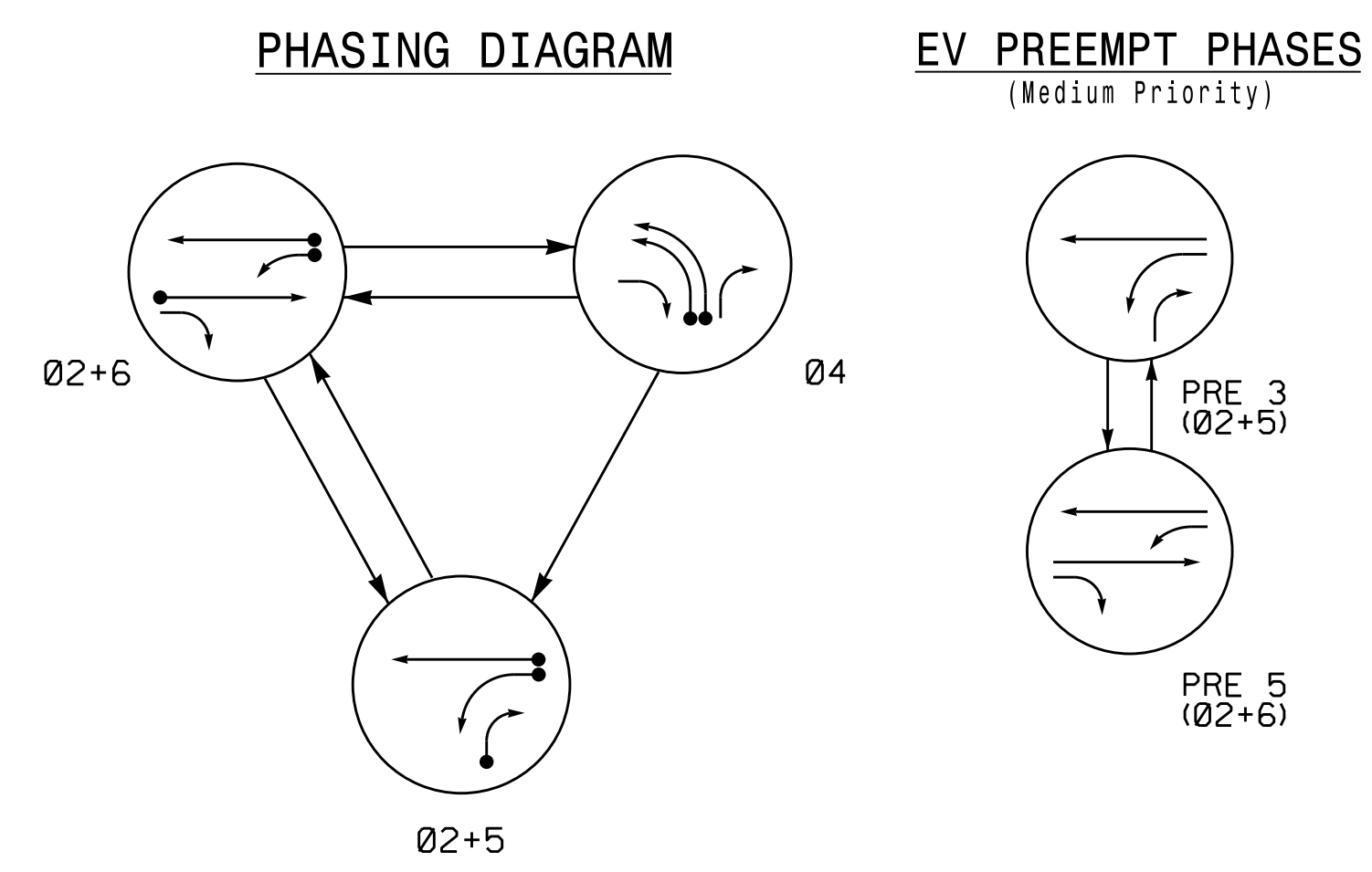| ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
2A/S13	6X6	300	✳	✳	2	Yes	–	–	X	N	X	✳
4A	6X40	0	✳	✳	4	Yes	–	3	–	S	–	✳
4B	6X40	0	✳	✳	4	Yes	–	–	–	S	–	✳
5A	6X40	0	✳	✳	5	Yes	–	15	–	S	–	✳
					2	Yes	–	3	–	G	–	✳
5B	6X40	0	✳	✳	5	Yes	–	15	–	S	–	✳
6A/S11	6X6	300	✳	✳	6	Yes	–	–	X	N	X	✳
S12	6x6	300	✳	✳	–	No	–	–	–	N	X	✳
S15	6x6	+145	✳	✳	–	No	–	–	–	N	X	✳
S16	6x6	+145	✳	✳	–	No	–	–	–	N	X	✳

✳ Video Detection Zone

3 Phase
Fully Actuated
w/ Emergency Vehicle Preemption
SR 1007 (Mebane Oaks Rd) CLS
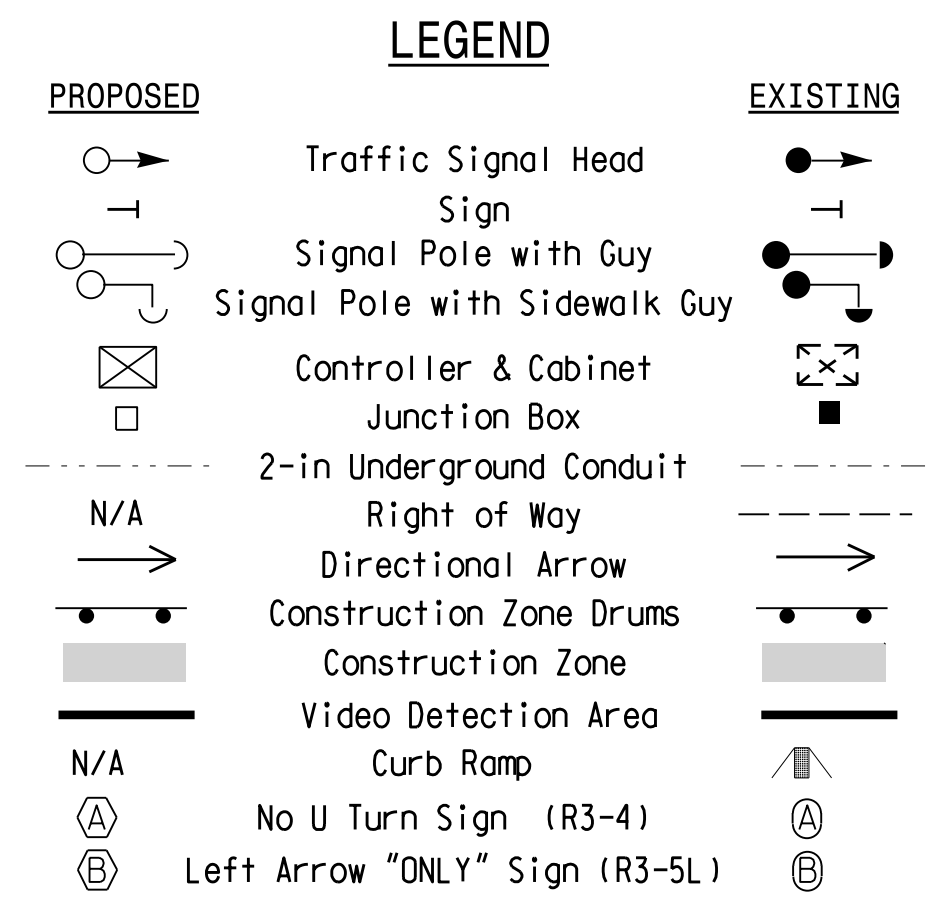## Signal System #: 10705
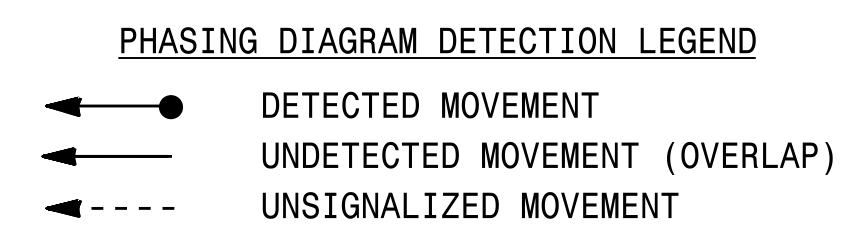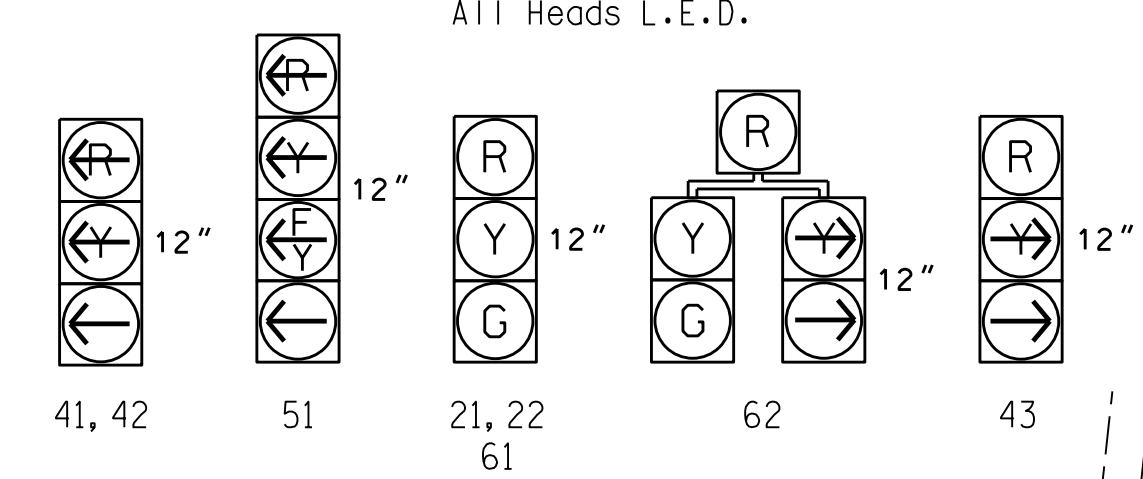
NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 5 may be lagged.
4. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Pavement markings are existing.
7. Relocate the existing GPS Emergency Vehicle Preemption system.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
9. Closed loop system data:
   Controller Asset #: 2060.

ASC/3 TIMING CHART
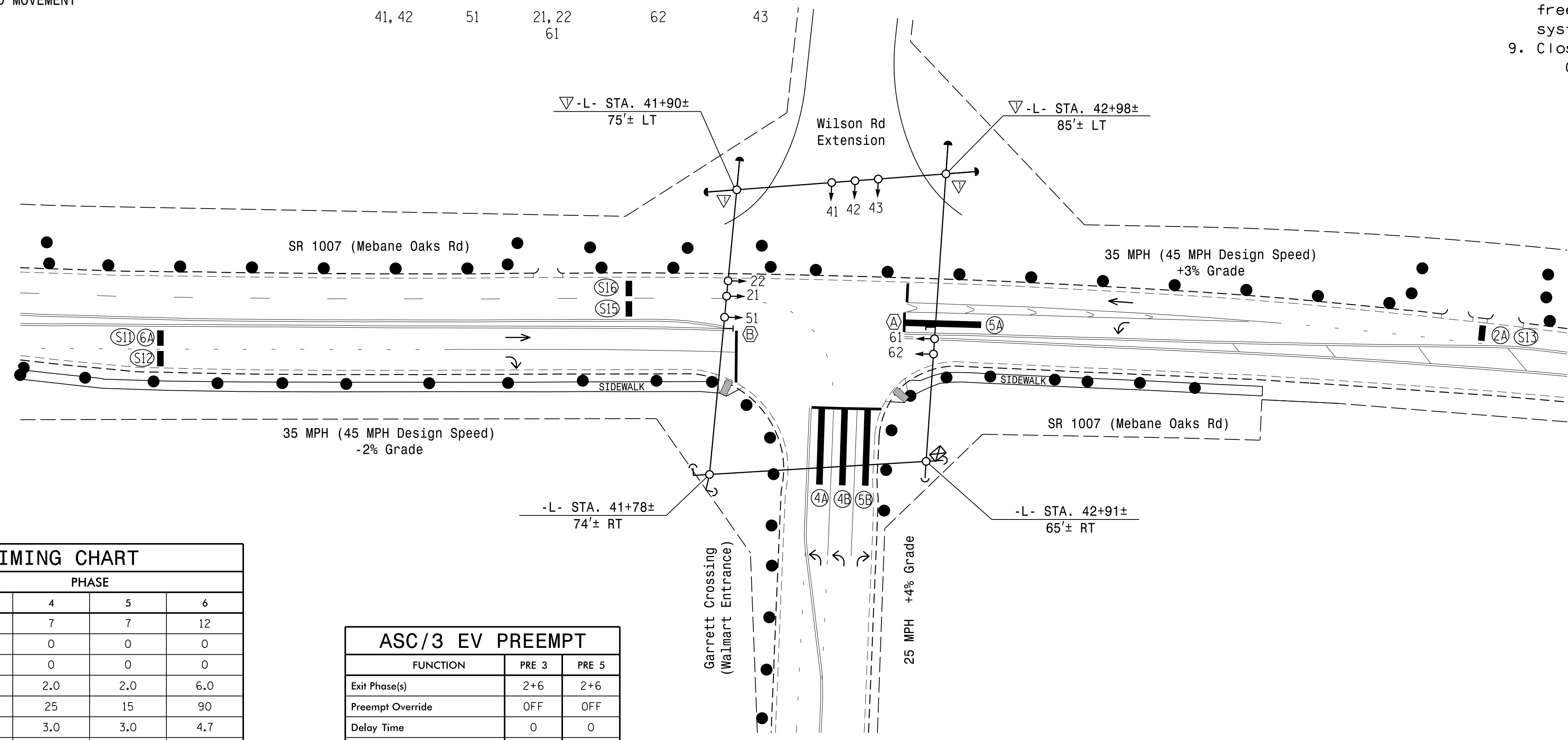
FEATURE	PHASE 2	4	5	6
Min Green *	12	7	7	12
Walk *	0	0	0	0
Ped Clear *	0	0	0	0
Veh. Extension *	6.0	2.0	2.0	6.0
Max 1 *	90	25	15	90
Yellow	4.7	3.0	3.0	4.7
Red Clear	1.2	2.4	2.1	1.2
Red Revert	2.0	2.0	2.0	2.0
Actuations B4 Add *	0	–	–	0
Seconds /Actuation *	2.5	–	–	2.5
Max Initial *	34	–	–	34
Time Before Reduction *	15	–	–	15
Time To Reduce *	30	–	–	30
Minimum Gap	3.0	–	–	3.0
Locking Detector	X	–	–	X
Recall Position	VEH. RECALL	–	–	VEH. RECALL
Dual Entry	–	–	–	–
Simultaneous Gap	X	X	X	X

* 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.

ASC/3 EV PREEMPT

FUNCTION	PRE 3	PRE 5
Exit Phase(s)	2+6	2+6
Preempt Override	OFF	OFF
Delay Time	0	0
Ped Clear Through Yellow	N	N
Terminate Phases	N	N
Entrance Walk	255*	255*
Entrance Ped Clear	255*	255*
Entrance Min Green	1	1
Entrance Yellow Clear	25.5*	25.5*
Entrance Red Clear	25.5*	25.5*
Min Dwell Time	7	7
Preempt Input Extension Time	2	2
Preempt Max Time	120	120
Exit Yellow Clear	25.5*	25.5*
Exit Red Clear	25.5*	25.5*

* Time defaults to time used for phase during normal operation

Site Plan

▽ -L- STA. 41+90± 75'± LT
▽ -L- STA. 42+98± 85'± LT
Wilson Rd Extension
41 42 43
SR 1007 (Mebane Oaks Rd)
35 MPH (45 MPH Design Speed) +3% Grade
35 MPH (45 MPH Design Speed) -2% Grade
SR 1007 (Mebane Oaks Rd)
SIDEWALK
Garrett Crossing (Walmart Entrance)
-L- STA. 41+78± 74'± RT
-L- STA. 42+91± 65'± RT
25 MPH +4% Grade

LEGEND

PROPOSED		EXISTING
○→	Traffic Signal Head	●→
○⊢	Sign	●⊢
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
⊠	Controller & Cabinet	⊠
□	Junction Box	■
	2-in Underground Conduit	
N/A	Right of Way	---
→	Directional Arrow	→
•—•	Construction Zone Drums	•—•
	Construction Zone	
	Video Detection Area	
N/A	Curb Ramp	
Ⓐ	No U Turn Sign (R3-4)	Ⓐ
Ⓑ	Left Arrow "ONLY" Sign (R3-5L)	

Signal Upgrade - Temporary Design 1 (TMP Phase I)

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REVISION ▽ SEAL

SEAL 026486
ROBERT J ZIEMBA
6/10/2021

Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SR 1007 (Mebane Oaks Rd)
at
Garrett Crossing
(Walmart Entrance)

Division 7	Alamance County	Mebane
PLAN DATE: November 2019 | REVIEWED BY: Z. "Gavin" Teng
PREPARED BY: Z. "Gavin" Teng | REVIEWED BY:

REVISIONS		INIT.	DATE
▽ REVISED POLE LOCATIONS FOR WILSON RD EXT		PS	6/10/21

SCALE
0   40
1"=40'

SIG. INVENTORY NO. 07-2060T1

10-JUN-2021 12:235
S14it153d01#it15 Signals#Signal Design Section#Central Region#Div 7#I-5711#07-2060 rev#072060T1_sig_rev_20210610.dgn
rziemba