

PHASING DIAGRAM

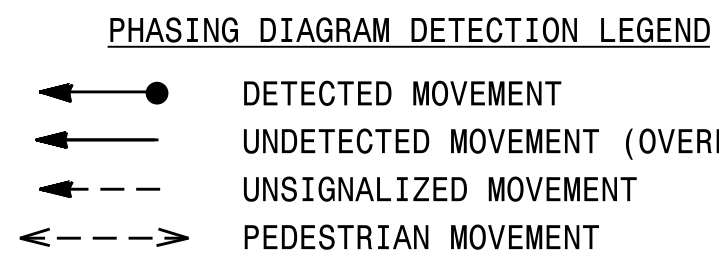
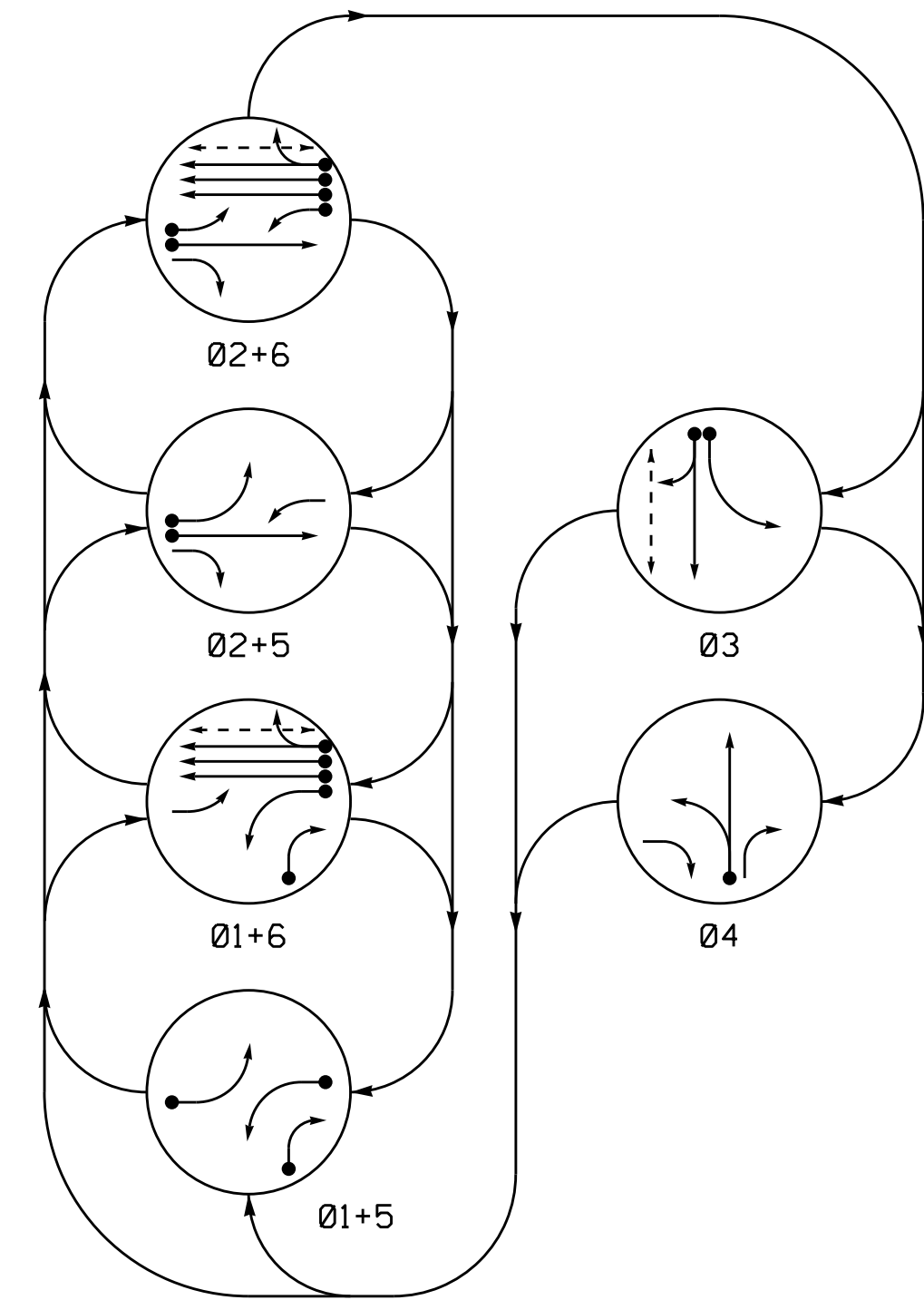
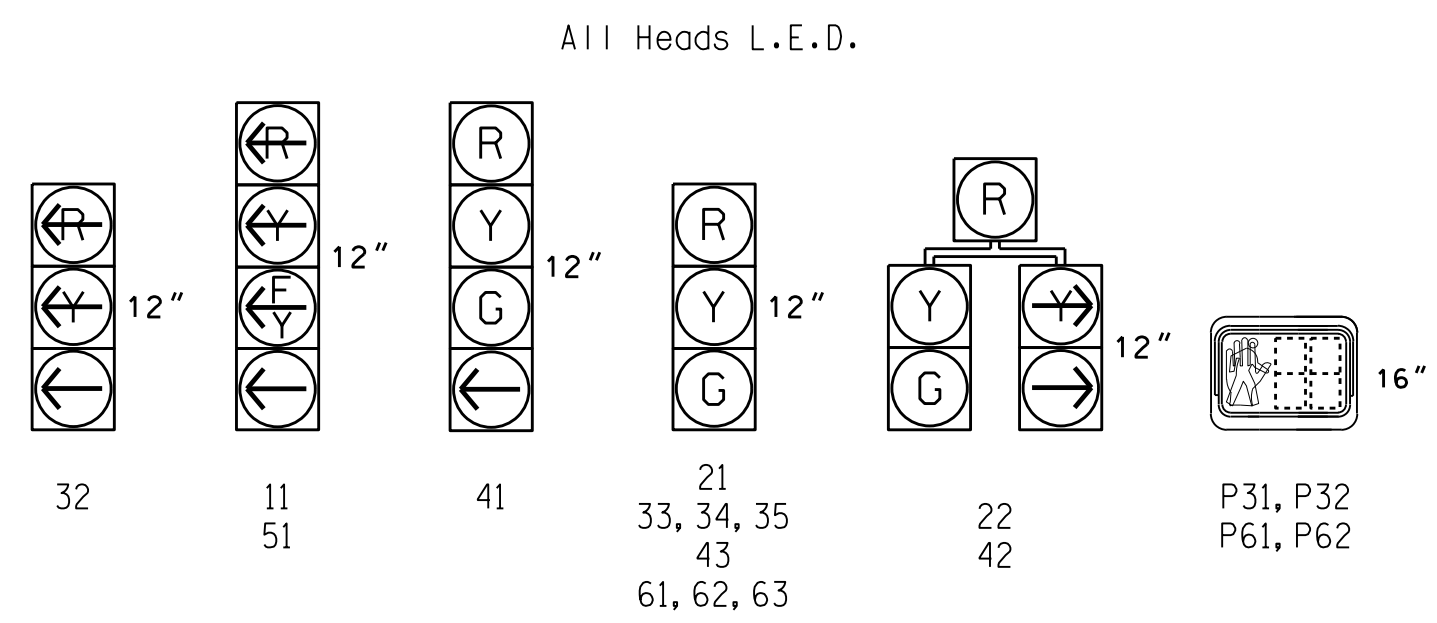


TABLE OF OPERATION

SIGNAL FACE	PHASE						F. I.C.
	01+5	01+6	02+5	02+6	03	04	
11	←	←	←	←	←	←	Y
21	R	R	G	G	R	R	Y
22	R	R	G	G	R	R	Y
32	←	←	←	←	←	←	Y
33, 34, 35	R	R	R	R	G	R	R
41	R	R	R	R	R	G	R
42	R	R	R	R	R	G	R
43	R	R	R	R	R	G	R
51	←	←	←	←	←	←	Y
61, 62, 63	R	G	R	G	R	R	Y
P31, P32	DW	DW	DW	DW	W	DW	DRK
P61, P62	DW	W	DW	W	DW	DW	DRK

SIGNAL FACE I.D.



LOOP & DETECTOR INSTALLATION CHART
ASC/3-2070EN2 CONTROLLER w/ TS-2 CABINET

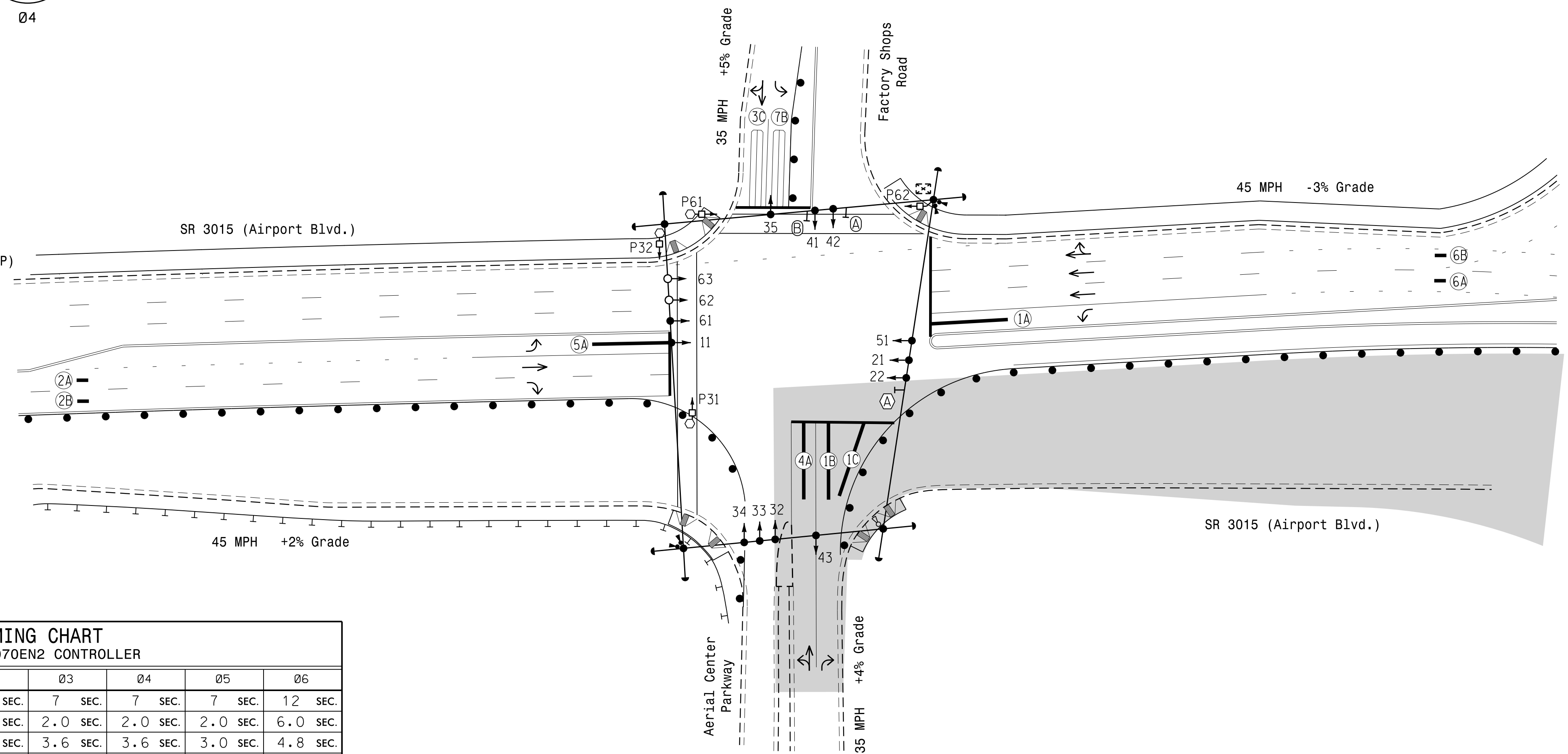
LOOP / ZONE NO.	SIZE (ft)	DIST. FROM STOPBAR (ft)	TURNS	NEW EXISTING	NEMA PHASE	DETECTOR UNITS		ADDED INITIAL	DET. TYPE	
						FEATURE	TIME (sec)			
1A*	6X40	0	*	X	-	1	-	* DELAY 15	-	S
1B*	6X40	0	*	X	-	1	-	* DELAY 15	-	S
1C*	6X40	0	*	X	-	1	-	* DELAY 15	-	S
2A*	6X6	300	*	X	-	2	-	-	-	X N
2B*	6X6	300	*	X	-	2	-	-	-	X N
3C	6X40	0	2-4-2	X	-	3	-	X DELAY 10	-	S
4A*	6X40	0	*	X	-	4	-	-	-	S
5A*	6X40	0	*	X	-	5	-	* DELAY 15	-	S
6A*	6X6	260	*	X	-	6	-	-	-	X N
6B*	6X6	260	*	X	-	6	-	-	-	X N
7B	6X40	0	2-4-2	X	-	3	-	-	-	S

* Video detection zone.

6 Phase Fully Actuated (Cary Signal System)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- 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.
- Set all detector units to presence mode.
- Reposition existing signal heads numbered 11, 21, 22, 51, and 61.
- Remove existing signal head numbered 31.
- 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.
- Cary signal system data: Fiber Channel #: 26.
- This intersection features a video detection system. Shown locations of detectors are conceptual only. Refer to the manufacturer's guidelines for optimal detector placement.



TIMING CHART
ASC/3-2070EN2 CONTROLLER

PHASE	01	02	03	04	05	06
MINIMUM GREEN *	7 SEC.	12 SEC.	7 SEC.	7 SEC.	7 SEC.	12 SEC.
VEHICLE EXT. *	2.0 SEC.	6.0 SEC.	2.0 SEC.	2.0 SEC.	2.0 SEC.	6.0 SEC.
YELLOW CHANGE INT.	3.0 SEC.	4.8 SEC.	3.6 SEC.	3.6 SEC.	3.0 SEC.	4.8 SEC.
RED CLEARANCE	3.2 SEC.	1.9 SEC.	2.2 SEC.	2.2 SEC.	3.2 SEC.	1.9 SEC.
MAX. I *	20 SEC.	120 SEC.	30 SEC.	20 SEC.	15 SEC.	120 SEC.
RECALL POSITION	NONE	MIN. RECALL	NONE	NONE	NONE	MIN. RECALL
LOCK DET.	OFF	ON	OFF	OFF	OFF	ON
WALK *	- SEC.	- SEC.	7 SEC.	- SEC.	- SEC.	7 SEC.
PED. CLEAR	- SEC.	- SEC.	20 SEC.	- SEC.	- SEC.	22 SEC.
VOLUME DENSITY	OFF	ON	OFF	OFF	OFF	ON
ACTUATION B4 ADD *	- VEH.	- VEH.	- VEH.	- VEH.	- VEH.	- VEH.
SEC. PER ACTUATION *	- SEC.	1.5 SEC.	- SEC.	- SEC.	- SEC.	1.5 SEC.
MAX. INITIAL *	- SEC.	34 SEC.	- SEC.	- SEC.	- SEC.	30 SEC.
TIME B4 REDUCTION *	- SEC.	15 SEC.	- SEC.	- SEC.	- SEC.	15 SEC.
TIME TO REDUCE *	- SEC.	45 SEC.	- SEC.	- SEC.	- SEC.	45 SEC.
MINIMUM GAP	- SEC.	3.0 SEC.	- SEC.	- SEC.	- SEC.	3.0 SEC.
DUAL ENTRY	OFF	OFF	OFF	OFF	OFF	OFF
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	⊥
⊥ Pedestrian Signal Head With Push Button & Sign	⊥
○ Signal Pole with Guy	●
○ Signal Pole with Sidewalk Guy	●
⊥ Inductive Loop Detector	⊥
□ Controller & Cabinet	□
□ Junction Box	□
--- 2-in Underground Conduit	---
N/A Right of Way	---
→ Directional Arrow	→
○ Type II Signal Pedestal	○
N/A Guardrail	⊥
N/A Curb Ramp	⊥
○ Out of Pavement Detector	○
▬ Video Detection Area	▬
▬ Construction Zone Drums	▬
▬ Construction Zone	▬
(A) Right Arrow "ONLY" Sign (R3-5R)	(A)
(B) Combined Through and Left Arrow Sign (R3-6L)	(B)

Signal Upgrade - Temporary Design 3 (TMP Phase III, Step A)

SR 3015 (Airport Blvd.) at Factory Shops Road / Aerial Center Parkway

Division 5 Wake County Morrisville

PLAN DATE: March 2019 REVIEWED BY: J.A. Lohr

PREPARED BY: J.A. Lohr

REVISIONS: _____ INIT. DATE

SCALE: 1"=40'

7/24/2019

SIG. INVENTORY NO. 05-1726T3

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