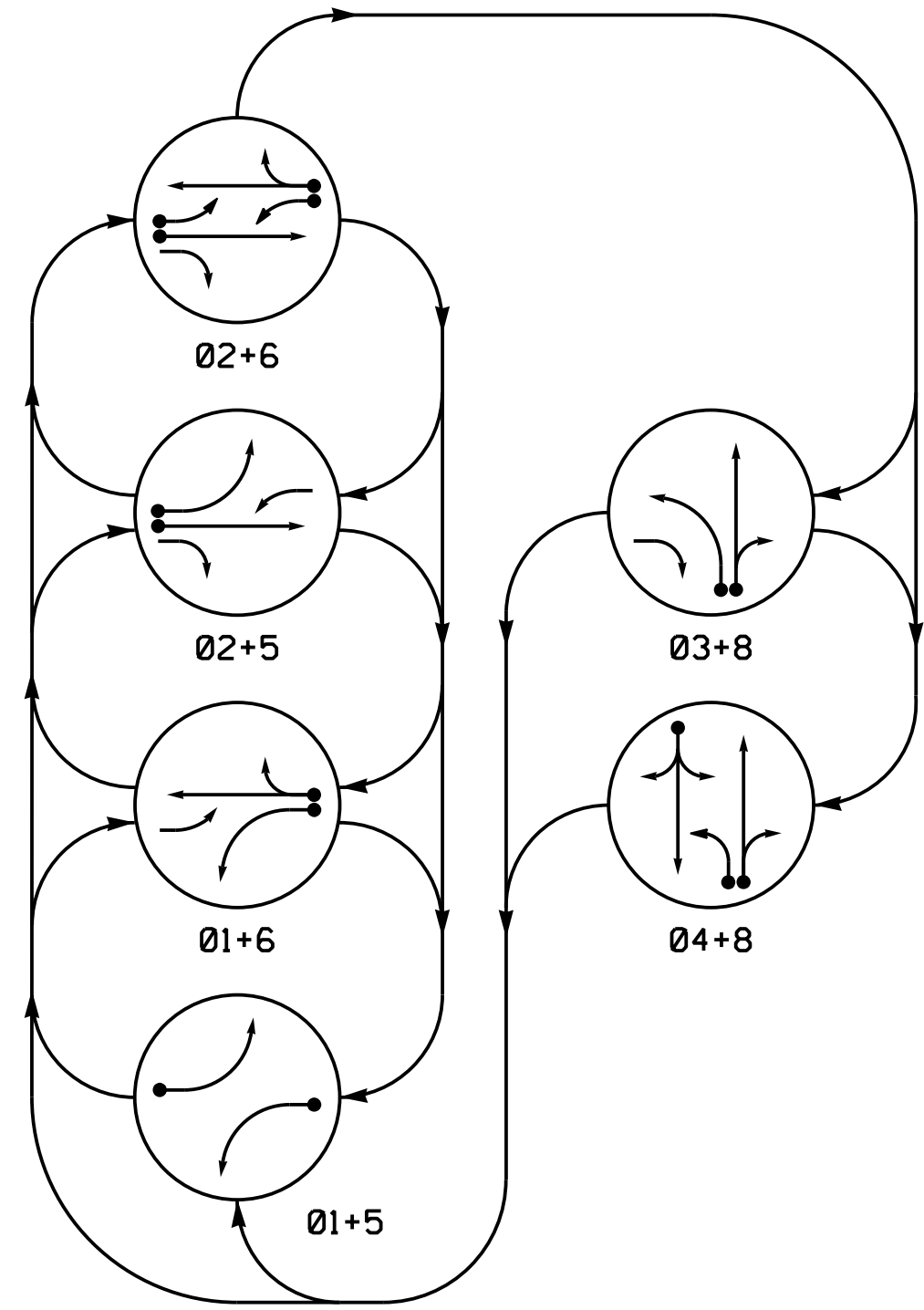
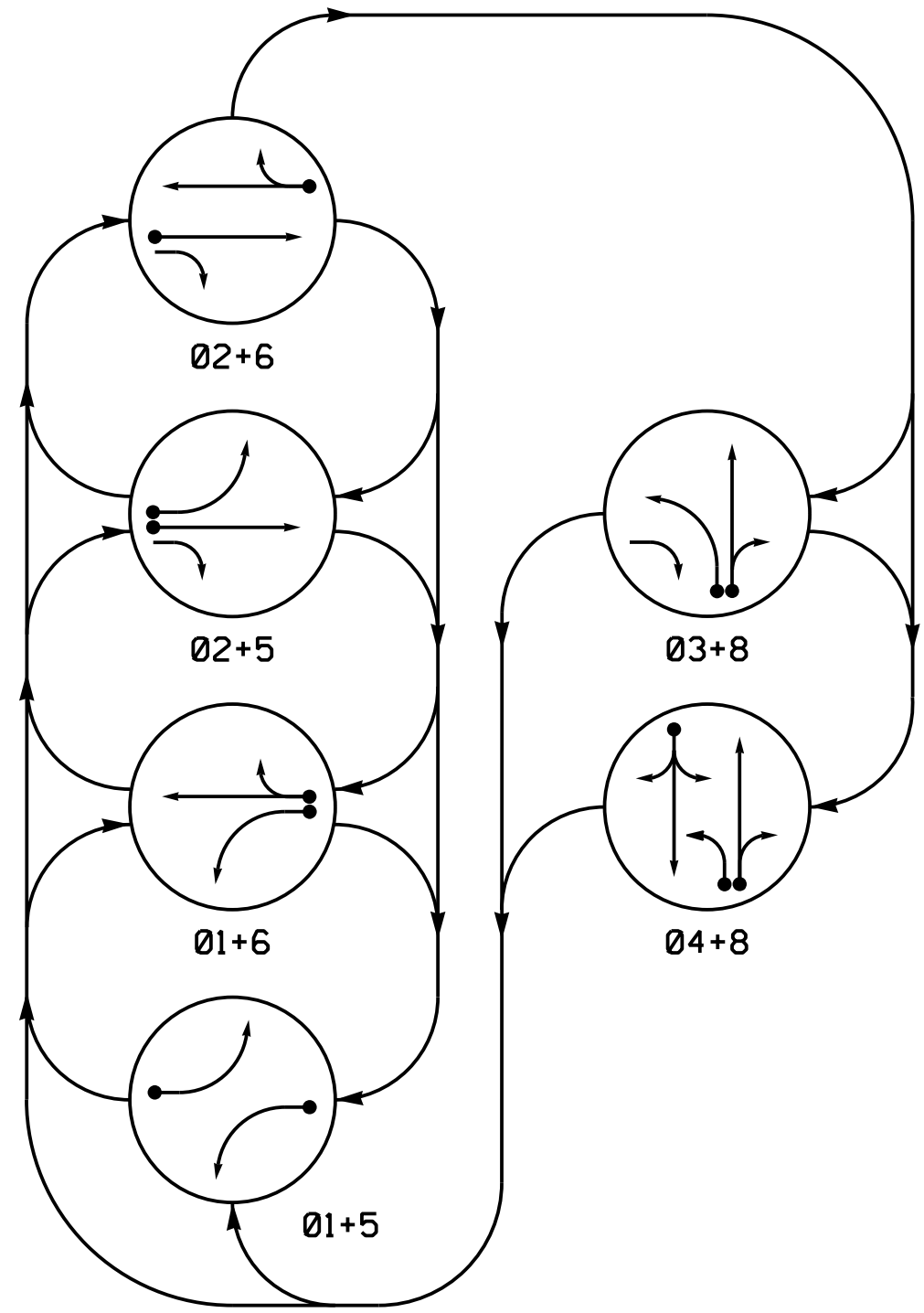


**DEFAULT PHASING DIAGRAM**



**ALTERNATE PHASING DIAGRAM**



**PHASING DIAGRAM DETECTION LEGEND**

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

**DEFAULT PHASING TABLE OF OPERATION**

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+8	04+8	F	FL
11	—	—	—	—	—	—	—	—
21	R	R	G	G	R	R	Y	Y
22	R	R	G	G	R	R	Y	Y
31	R	R	R	R	—	—	—	—
41,42	R	R	R	R	R	G	R	Y
51	—	—	—	—	—	—	—	—
61,62	R	G	R	G	R	R	Y	Y
81,82	R	R	R	R	G	G	R	Y

**ALTERNATE PHASING TABLE OF OPERATION**

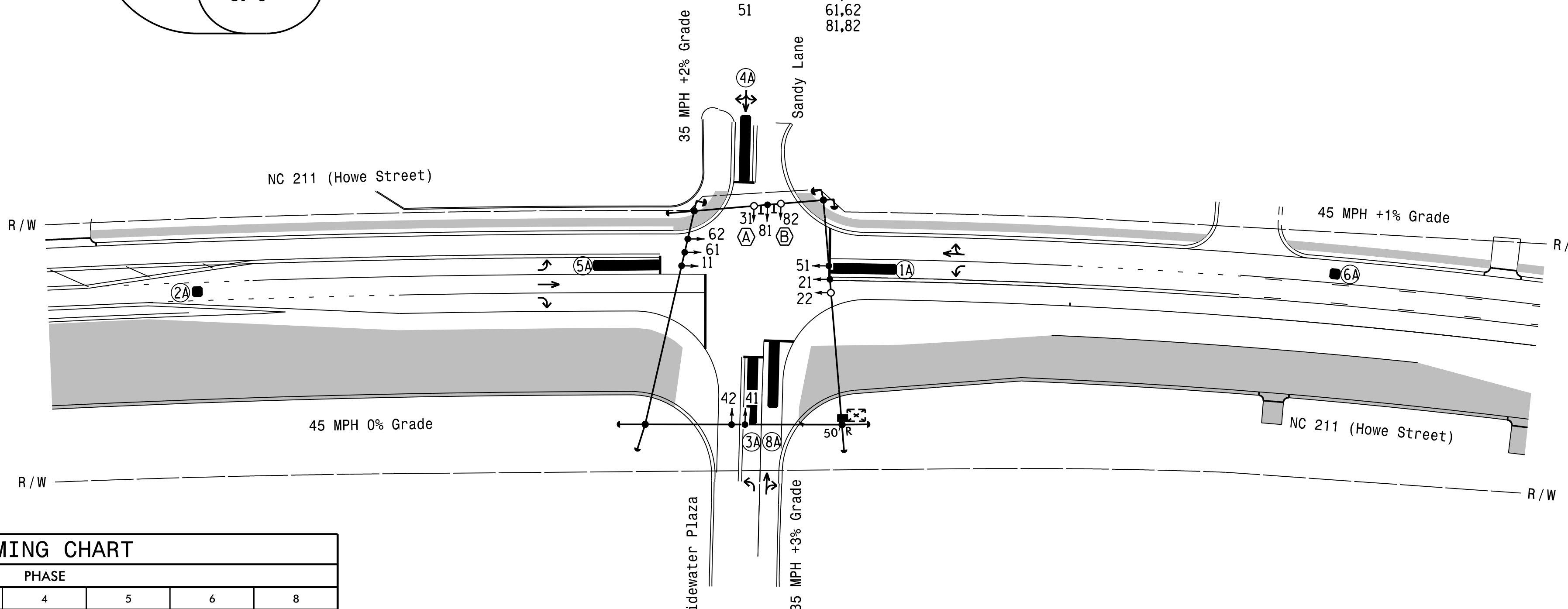
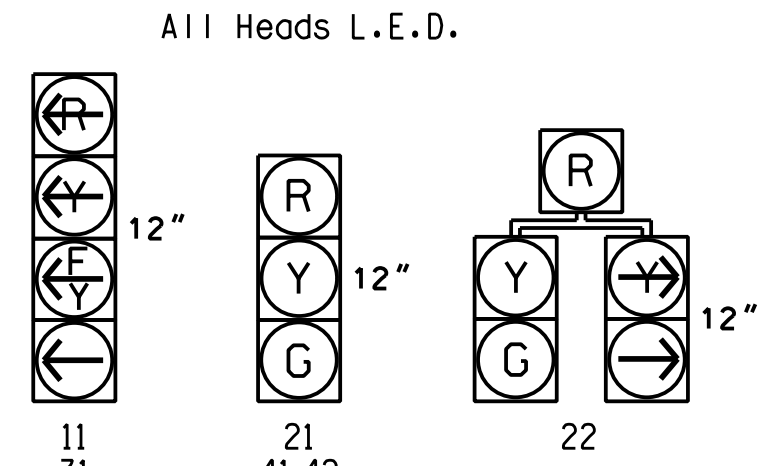
SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+8	04+8	F	FL
11	—	—	—	—	—	—	—	—
21	R	R	G	G	R	R	Y	Y
22	R	R	G	G	R	R	Y	Y
31	R	R	R	R	—	—	—	—
41,42	R	R	R	R	R	G	R	Y
51	—	—	—	—	—	—	—	—
61,62	R	G	R	G	R	R	Y	Y
81,82	R	R	R	R	G	G	R	Y

**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	FULL TIME DELAY			STRETCH TIME
1A	6X40	0	*	*	1	Y	Y	-	-	***15	-
2A	6X6	300	*	*	2	Y	Y	-	-	3	-
3A	6X40	0	*	*	3	Y	Y	-	-	15	-
4A	6X40	0	*	*	4	Y	Y	-	-	10	-
5A	6X40	0	*	*	5	Y	Y	-	-	***15	-
6A	6X6	300	*	*	6	Y	Y	-	-	3	-
8A	6X40	0	*	*	8	Y	Y	-	-	10	-

\* Multizone Microwave Detection.  
 \*\* Disable phase 2 and 6 call for 1A and 5A during alternate phasing operation.  
 \*\*\* Reduce delay to 3 seconds during alternate phasing operation.

**SIGNAL FACE I.D.**



**OASIS 2070 TIMING CHART**

FEATURE	PHASE							
	1	2	3	4	5	6	8	
Min Green 1 *	7	12	7	7	7	12	7	
Extension 1 *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	
Max Green 1 *	20	90	20	25	20	90	25	
Yellow Clearance	3.0	4.5	3.0	3.7	3.0	4.5	3.7	
Red Clearance	2.3	1.0	2.3	1.7	2.1	1.0	1.7	
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Walk 1 *	-	-	-	-	-	-	-	
Don't Walk 1	-	-	-	-	-	-	-	
Seconds Per Actuation *	-	2.5	-	-	-	2.5	-	
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	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.

**6 Phase Fully Actuated (NC 133 Closed Loop 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.
  - Omit Phase 3 during Phase 4 on.
  - Reposition existing signal heads numbered 11,21,22,51,61,62 and 81.
  - Set all detector units to presence mode.
  - The Division Traffic Engineer will determine the hours of use for each phasing plan.
  - Incorporate Microwave Detection system for vehicle detection.
  - Provide the Engineer with the Manufacturer's approved Microwave Detection locations and mounting heights to obtain detection zones as shown.
  - 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 #: 0897.

**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
⊠ Controller & Cabinet	⊠ N/A
⊠ Junction Box	⊠ N/A
--- 2-in Underground Conduit	--- N/A
N/A Right of Way	N/A
→ Directional Arrow	→ N/A
▬ Microwave Detection Zone	▬ N/A
--- Directional Drill	--- N/A
▬ Construction Zone	▬ N/A
(A) Left Arrow "ONLY" Sign (R3-5L)	(A) N/A
(B) Combined Through and Right Arrow Sign (R3-6R)	(B) N/A

Signal Upgrade  
 Temporary Design 2  
 Construction Phases 1d-1e,2

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

	Prepared For: NC 211 (Howe Street) at Tidewater Plaza/Sandy Lane		SEAL 
	Division 03 Brunswick Co. Southport PLAN DATE: June 2017 PREPARED BY: A.H. Thornburg SCALE: 1"=50' REVISIONS:	REVIEWED BY: A.D. Klinskyk REVIEWED BY: N.R. Simmons DATE: 9/10/2021 SIGNATURE:	

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