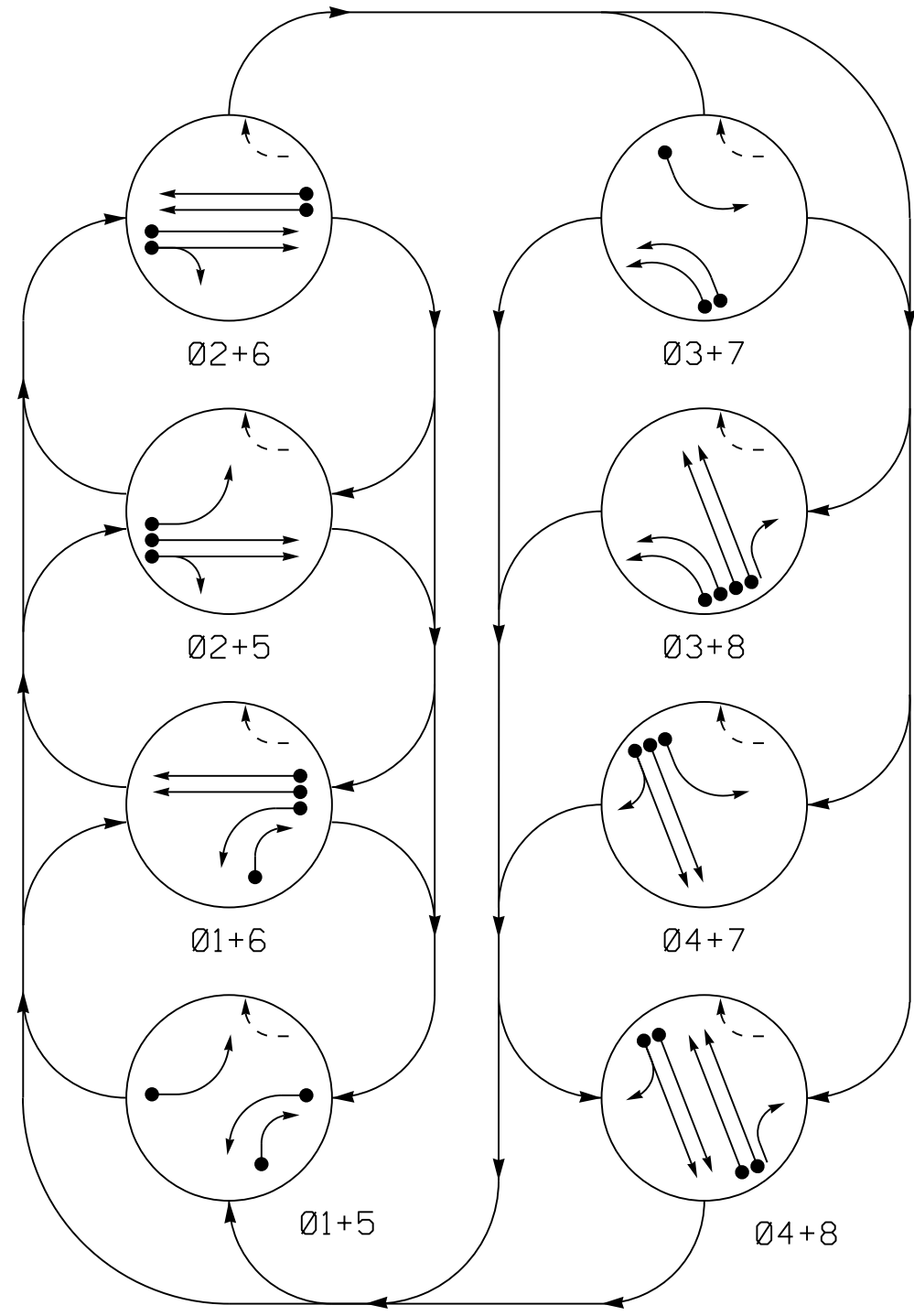
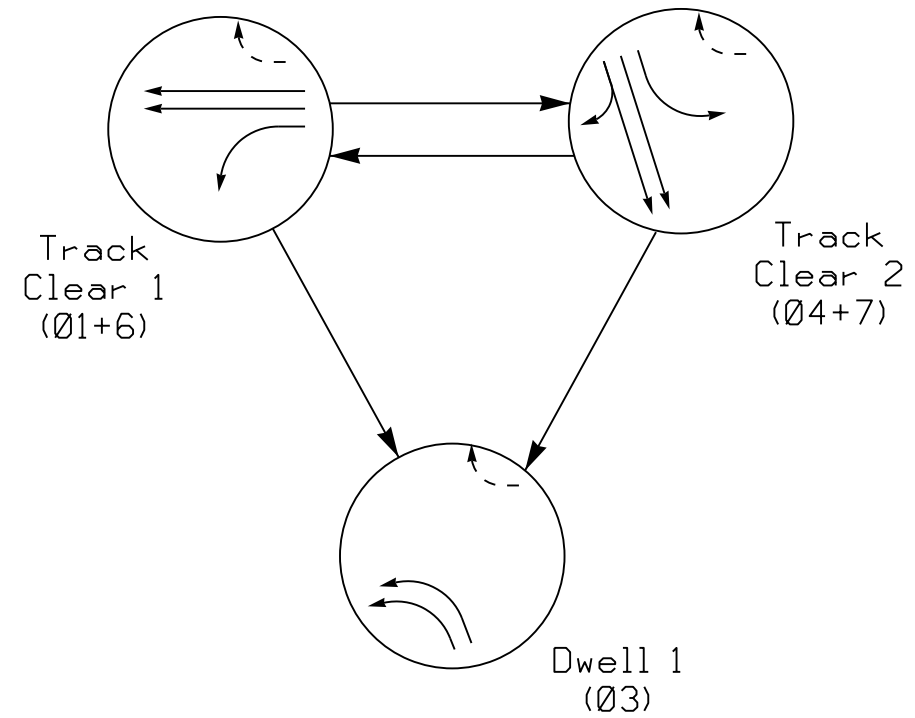


PHASING DIAGRAM



RAIL PREEMPT PHASES (High Priority)



PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE											
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3+7	Ø3+8	Ø4+7	Ø4+8	Ø1+5	Ø1+6	Ø2+5	Ø2+6
11	←	←	←	←	←	←	←	←	←	←	←	←
21,22	R	R	G	G	R	R	R	R	R	R	R	Y
31,32	←	←	←	←	←	←	←	←	←	←	←	←
41,42	R	R	R	R	R	R	R	G	G	R	G	R
51	←	←	←	←	←	←	←	←	←	←	←	←
61,62	R	G	R	G	R	R	R	R	G	R	R	Y
71	←	←	←	←	←	←	←	←	←	←	←	←
81	R	R	R	R	R	G	R	G	R	R	R	R
82	R	R	R	R	R	G	R	G	R	R	R	R
Sign (A)	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	*

* See Note 7

ASC/3 DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	LOOP	NEW CARD
1A	6X40	0	*	-	1	Yes	-	-	-	S	-	-
1B	6X40	0	*	-	1	Yes	-	15	-	S	-	-
2A	6X6	70	*	-	2	Yes	-	-	-	S	-	-
2B	6X6	70	*	-	2	Yes	-	-	-	S	-	-
3A	6X40	0	*	-	3	Yes	-	3	-	S	-	-
3B	6X40	0	*	-	3	Yes	-	-	-	S	-	-
4A	6X40	0	*	-	4	Yes	-	-	-	S	-	-
4B	6X40	0	*	-	4	Yes	-	10	-	S	-	-
4C	6X15	0	*	-	4	Yes	-	15	-	S	-	-
5A	6X40	0	*	-	5	Yes	-	-	-	S	-	-
6A	6X6	70	*	-	6	Yes	-	-	-	S	-	-
6B	6X6	70	*	-	6	Yes	-	-	-	S	-	-
7A	6X40	0	*	-	7	Yes	-	3	-	S	-	-
8A	6X40	0	*	-	8	Yes	-	-	-	S	-	-
8B	6X40	0	*	-	8	Yes	-	-	-	S	-	-

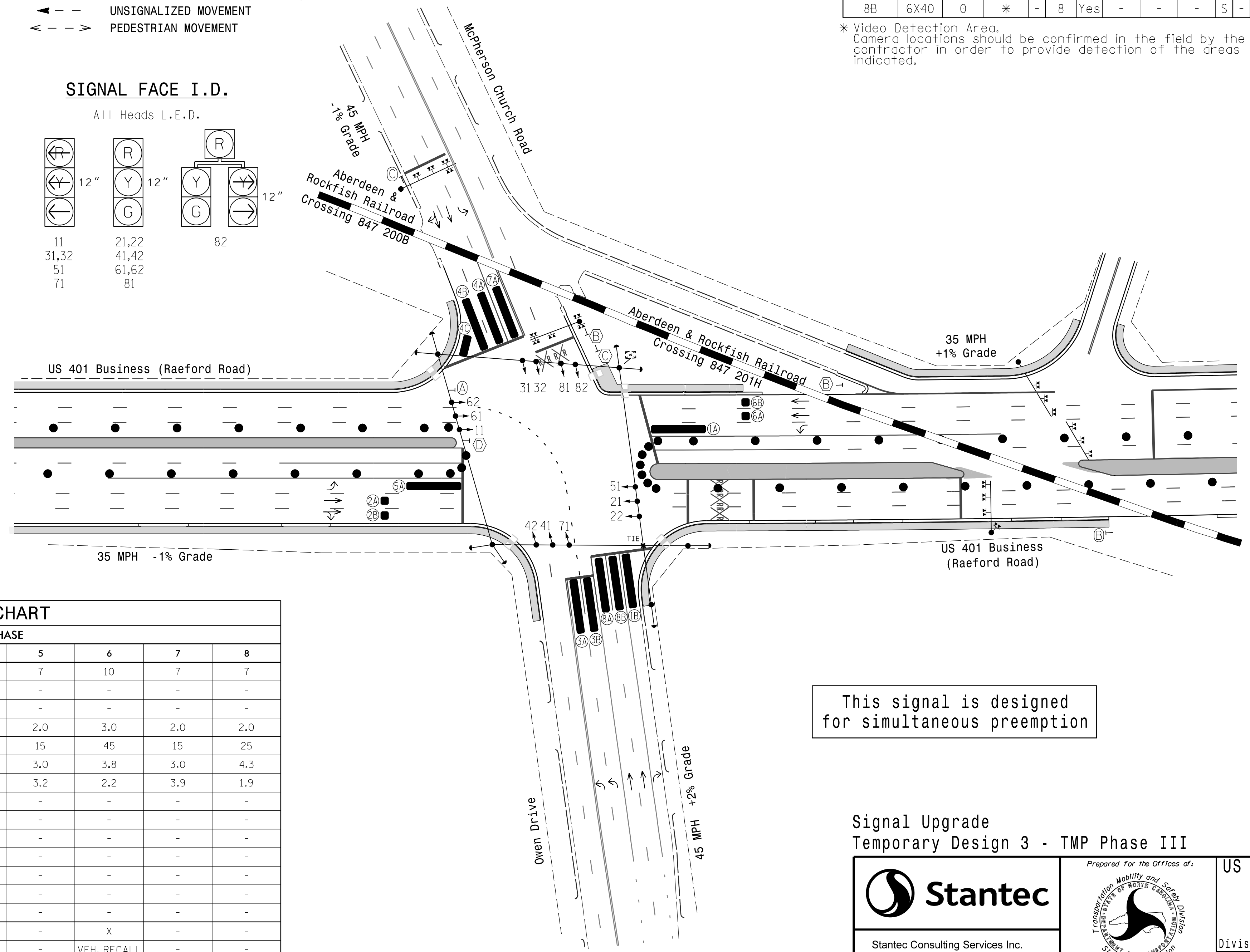
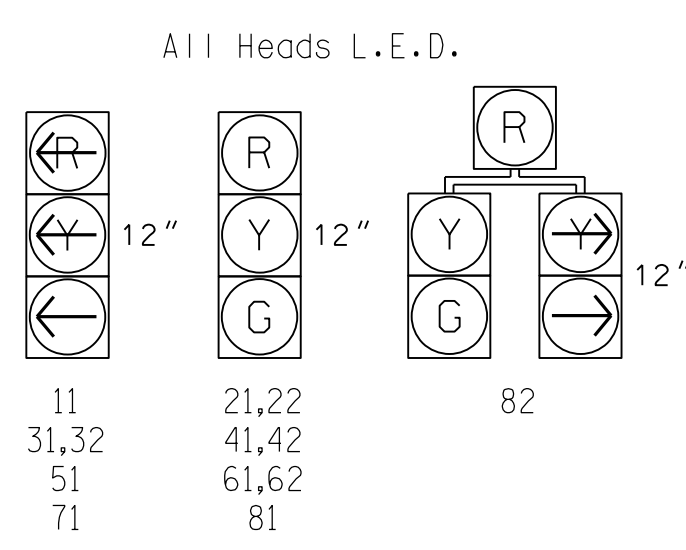
* Video Detection Area. Camera locations should be confirmed in the field by the contractor in order to provide detection of the areas indicated.

ASC/3 RR PREEMPT

FUNCTION	SEQUENCE 1	SEQUENCE 2
Exit Phase(s)	4,8	4,8
Preempt Override	OFF	OFF
Delay Time	0	0
Ped Clear Trough Yellow	N	N
Terminate Phases	N	N
Track Clear Reserve	Y	Y
Entrance Walk	255*	255*
Entrance Ped Clear	255*	255*
Entrance Min Green	1	1
Entrance Yellow Change	25.5*	25.5*
Entrance Red Clear	25.5*	25.5*
Track Clear Min Green 1	35	19
Track Clear Yellow Change 1	3.8	4.6
Track Clear Red Clear 1	2.5	2.3
Track Clear Min Green 2	19	35
Track Clear Yellow Change 2	4.6	3.8
Track Clear Red Clear 2	2.3	2.5
Min Dwell Time	7	7
Exit Yellow Change	25.5*	25.5*
Exit Red Clear	25.5*	25.5*

* Time defaults to time used for phase during normal operation.

SIGNAL FACE I.D.



This signal is designed for simultaneous preemption

LEGEND

- | PROPOSED | EXISTING |
|--|-----------|
| ○ → Traffic Signal Head | ● → N/A |
| ○ → Modified Signal Head | ○ → N/A |
| ○ → Pedestrian Signal Head With Push Button & Sign | ○ → N/A |
| ○ → Signal Pole with Guy | ○ → N/A |
| ○ → Signal Pole with Sidewalk Guy | ○ → N/A |
| □ → Inductive Loop Detector | □ → N/A |
| □ → Controller & Cabinet | □ → N/A |
| □ → Junction Box | □ → N/A |
| --- 2-in Underground Conduit | --- N/A |
| N/A → Right of Way | --- N/A |
| N/A → Directional Arrow | → N/A |
| N/A → Railroad Cantilever | --- N/A |
| N/A → Railroad Tracks | --- N/A |
| ■ → Video Detection Area | ■ → N/A |
| ■ → Construction Zone | ■ → N/A |
| ● → Construction Zone Drums | ● → N/A |
| (A) → "NO RIGHT TURN - TRAIN" L.E.D. Blankout Sign | (A) → N/A |
| (B) → "DO NOT STOP ON TRACKS" Sign (R8-8) | (B) → N/A |
| (C) → "Stop Here on Red" Sign (R10-6) | (C) → N/A |
| (D) → "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) | (D) → N/A |

ASC/3 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	10	7	7	7	10	7	7
Walk *	-	-	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-	-	-
Veh. Extension *	2.0	3.0	2.0	2.0	2.0	3.0	2.0	2.0
Max 1 *	15	45	15	25	15	45	15	25
Yellow	3.0	3.9	3.0	4.6	3.0	3.8	3.0	4.3
Red Clear	3.3	2.4	4.0	2.1	3.2	2.2	3.9	1.9
Red Revert	-	-	-	-	-	-	-	-
Actuations B4 Add *	-	-	-	-	-	-	-	-
Seconds /Actuation *	-	-	-	-	-	-	-	-
Max Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-	-	-
Locking Detector	-	X	-	-	-	X	-	-
Recall Position	-	VEH. RECALL	-	-	-	VEH. RECALL	-	-
Dual Entry	-	-	-	-	-	-	-	-
Simultaneous Gap	X	X	X	X	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.

Signal Upgrade Temporary Design 3 - TMP Phase III

US 401 Business (Raeford Road) at McPherson Church Road/ Owen Drive

Division 6 Cumberland County Fayetteville

PLAN DATE: March 2018 REVIEWED BY: E D Harris

PREPARED BY: G B Spell REVIEWED BY: B L Watson

REVISIONS	INIT.	DATE