PHASING DIAGRAM

PHASING DIAGRAM DETECTION LEGEND

UNSIGNALIZED MOVEMENT

UNDETECTED MOVEMENT (OVERLAP)

DETECTED MOVEMENT

 $<\!\!\!<\!\!\!--\!\!\!>$ PEDESTRIAN MOVEMENT

02+6

BRIDGE PREEMPT (PRE 3)

EV PREEMPT

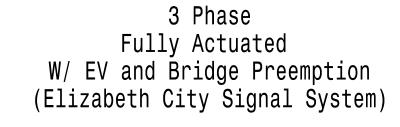
BRIDGE CLEAR (Ø1+6)

BRIDGE DWELL (Ø8)

EVP 4 (Ø1+6)

EVP 6 (Ø8)

C&G Sidewalk



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 1 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.
- Pavement markings are existing.
- This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
- Relocate existing Optical detection equipment from existing cabinet to new cabinet.
- Optical detector 10 calls EVP 4; Optical detector 20 calls EVP 6.
- Relocate existing wireless detection equipment from existing cabinet to new cabinet.
- Relocate existing FO transceivers and contact closures with all associated equipment for bridge preemption at this location and 01-0008 and 01-0009 from existing cabinet to new cabinet.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

Traffic Signal Head

Modified Signal Head

Sign Pedestrian Signal Head With Push Button & Sign

Signal Pole with Guy Signal Pole with Sidewalk Guy Wireless Detection Zone

Controller & Cabinet

Junction Box

Right of Way

Directional Arrow

Guardrail

Fire Hydrant

Optical Detector

Truncated Dome

Metal Pole with Mastarm

---- 2-in Underground Conduit

		6. 7.
		8.
de	Sidewalk	9.
	C	10.
		11.
	Bike Lane C Sidewalk	12.
reet)		

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Sidewalk C&G	US 158 (Elizabeth Street)	0	82		<u> </u>							
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		Sidewalk C&G	C&G Sidewalk									
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SIGNAL FACE I.D.

All Heads L.E.D.

21,22 61,62

TABLE OF OPERATION

SIGNAL

FACE

21, 22

61, 62

PHASE

´-| R | G | R | G | R | G |

ASC/3 TIMING CHART				
	PHASE			
FEATURE	1	2	6	8
Min Green *	7	10	10	7
Walk *	0	0	0	0
Ped Clear	0	0	0	0
Veh. Extension *	2.0	2.0	3.0	2.0
Max 1 *	20	30	30	20
Yellow	3.0	4.1	4.1	3.0
Red Clear	2.6	1.5	1.5	2.1
Actuations B4 Add *	_	-	-	-
Seconds /Actuation *	_	-	-	-
Max Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	_	-	_	
Locking Detector	-	X	Х	
Recall Position	-	VEH. RECALL	VEH. RECALL	-
Dual Entry	_	-	-	=
Simultaneous Gap	Χ	X	X	Χ

* 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	PREEMP	Т
FUNCTION	PRE 4	PRE 6
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 Change	25.5 *	25.5 *
Entrance Red Clear	25.5 *	25.5 *
Minimum Dwell Time	10	10
Preempt Input Extension Time	2	2
Preempt Max Time	120	120
Exit Yellow Change	25.5 *	25.5 *
Exit Red Clear	25.5 *	25.5 *

Limance Rea Cicai	20.07	20.0
Minimum Dwell Time	10	10
Preempt Input Extension Time	2	2
Preempt Max Time	120	120
Exit Yellow Change	25.5 *	25.5
Exit Red Clear	25.5 *	25.5
* Allows normal phase times to be u	sed.	

ASC/3 BRIDGE	PREEMPT
FUNCTION	PRE 3
Exit Phase(s)	2,6
Preempt Override	ON
Delay Time	0
Ped Clear Trough Yellow	N
Terminate Phases	N
Bridge Clear Reservice	Y
Entrance Walk	255 *
Entrance Ped Clear	255 *
Entrance Min Green	1
Entrance Yellow Change	25.5*
Entrance Red Clear	25.5*
Bridge Clear Min Green	25
Bridge Clear Yellow Change	25.5*
Bridge Clear Red Clear	25.5*
Min Dwell Time	10
Exit Yellow Change	25.5*
Exit Red Clear	25.5*

* Allows normal phase times to be used.

Signal Upgrade

UNLESS ALL SIGNATURES COMPLETED US 158 (Elizabeth Street) Water Street

PROPOSED

 \bigcirc

N/A

N/A

N/A

 \bigcirc

N/A

Division 1 Pasquotank County Elizabeth City PLAN DATE: February 2018 REVIEWED BY: AJ Davis JA Le REVIEWED BY: LM Moon INIT. DATE

022516

EXISTING

-

N/A

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DOCUMENT NOT CONSIDERED FINAL

Plans Prepared By:

ASC/3 DETECTOR INSTALLATION CHART

PHASE

1 | Yes | 15

2 Yes

2 Yes

6 Yes

8 Yes

- Yes

8 Yes 15

DETECTOR

SIZE

(FT)

6X6

6X6

6X6

1A | 6X40 | 0 | *

LOOP

2 A

2B

6 A

6^B

8B

S01

DISTANCE

FROM

STOPBAR

70

70 *

70 | *

6X6 70 *

6X40 0 *

6X40 0 *

6X6 +170

TURNS

*

*

PROGRAMMING

EXTEND DELAY

N. Greenfield Pkwy, Garner, NC 27529 PREPARED BY:

Lisa M. Moon 8/22/2018