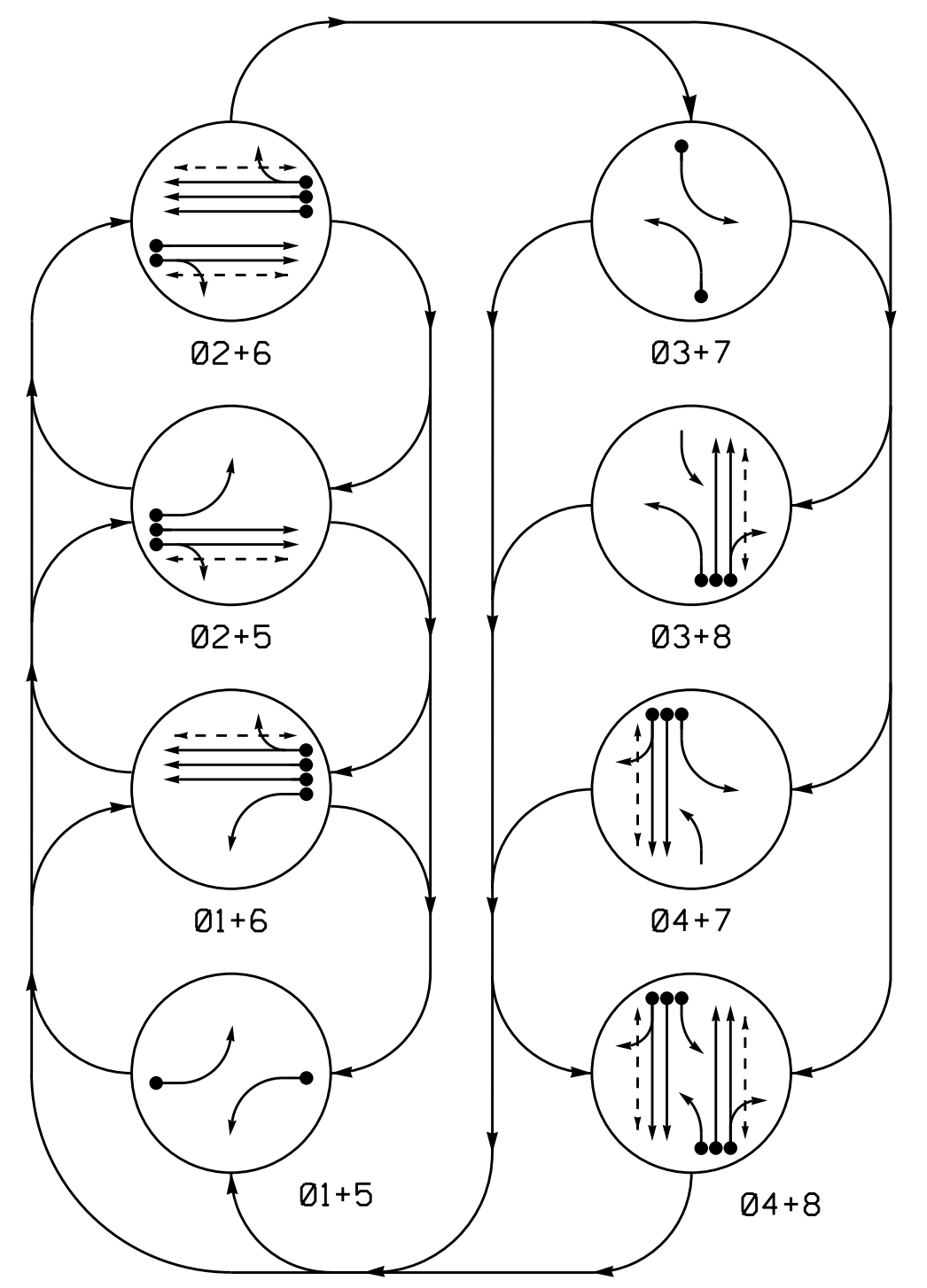


PHASING DIAGRAM



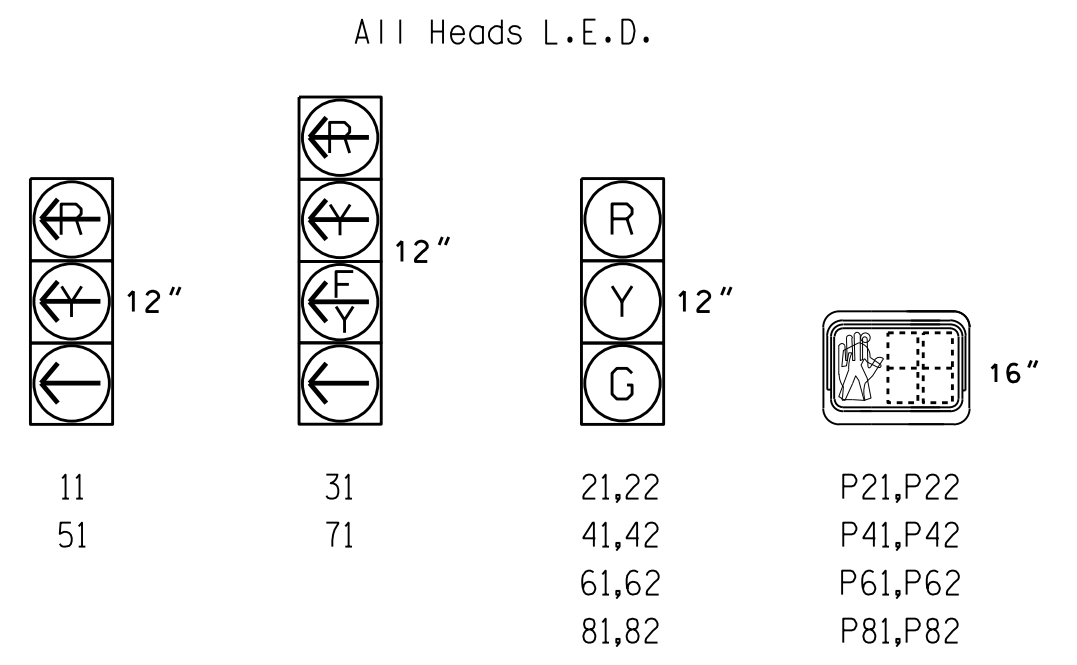
PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8
11	---	---	---	---	---	---	---	---
21,22	R	R	G	G	R	R	R	Y
31	---	---	---	---	---	---	---	---
41,42	R	R	R	R	R	R	G	G
51	---	---	---	---	---	---	---	---
61,62	R	G	R	G	R	R	R	Y
71	---	---	---	---	---	---	---	---
81,82	R	R	R	R	R	G	R	G
P21,P22	DW	DW	W	W	DW	DW	DW	DRK
P41,P42	DW	DW	DW	DW	DW	W	W	DRK
P61,P62	DW	W	DW	W	DW	DW	DW	DRK
P81,P82	DW	DW	DW	DW	W	DW	W	DRK

SIGNAL FACE I.D.



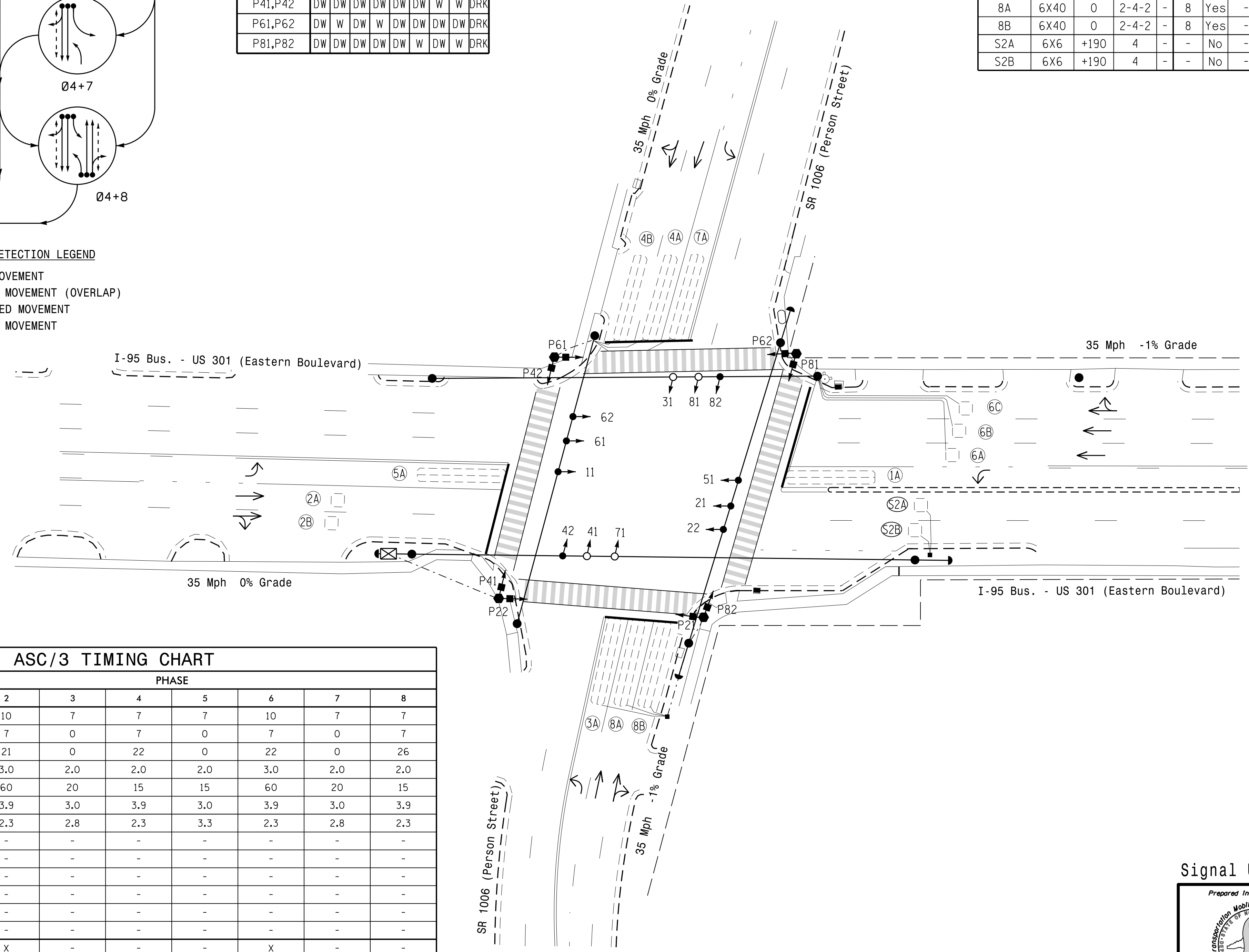
ASC/3 DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING						
					PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	-	1	Yes	-	3	S	-	X
2A,2B	6X6	70	3	-	2	Yes	-	-	S	-	X
3A	6X40	0	2-4-2	-	3	Yes	-	15	S	-	X
4A	6X40	0	2-4-2	-	4	Yes	-	-	S	-	X
4B	6X40	0	2-4-2	-	4	Yes	-	5	S	-	X
5A	6X40	0	2-4-2	-	5	Yes	-	3	S	-	X
6A,6B,6C	6X6	70	4	-	6	Yes	-	-	S	-	X
7A	6X40	0	2-4-2	-	7	Yes	-	15	S	-	X
8A	6X40	0	2-4-2	-	8	Yes	-	-	S	-	X
8B	6X40	0	2-4-2	-	8	Yes	-	5	S	-	X
S2A	6X6	+190	4	-	-	No	-	-	N	X	X
S2B	6X6	+190	4	-	-	No	-	-	N	X	X

8 Phase Fully Actuated Fayetteville Signal System

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



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 *	0	7	0	7	0	7	0	7
Ped Clear	0	21	0	22	0	22	0	26
Veh. Extension *	2.0	3.0	2.0	2.0	2.0	3.0	2.0	2.0
Max 1 *	15	60	20	15	15	60	20	15
Yellow	3.0	3.9	3.0	3.9	3.0	3.9	3.0	3.9
Red Clear	3.3	2.3	2.8	2.3	3.3	2.3	2.8	2.3
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	-	-	-	X	-	-	-	X
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.

LEGEND

- |  |  |  |  |
|--|--|--|--|
|  | PROPOSED Traffic Signal Head           |  | EXISTING Traffic Signal Head           |
|  | PROPOSED Modified Signal Head          |  | EXISTING Modified Signal Head          |
|  | PROPOSED Pedestrian Signal Head        |  | EXISTING Pedestrian Signal Head        |
|  | PROPOSED Signal Pole with Guy          |  | EXISTING Signal Pole with Guy          |
|  | PROPOSED Signal Pole with Sidewalk Guy |  | EXISTING Signal Pole with Sidewalk Guy |
|  | PROPOSED Type II Signal Pedestal       |  | EXISTING Type II Signal Pedestal       |
|  | PROPOSED Inductive Loop Detector       |  | EXISTING Inductive Loop Detector       |
|  | PROPOSED Controller & Cabinet          |  | EXISTING Controller & Cabinet          |
|  | PROPOSED Junction Box                  |  | EXISTING Junction Box                  |
|  | PROPOSED 2-in Underground Conduit      |  | EXISTING 2-in Underground Conduit      |
|  | PROPOSED Right of Way                  |  | EXISTING Right of Way                  |
|  | PROPOSED Directional Arrow             |  | EXISTING Directional Arrow             |

Signal Upgrade

I-95 Bus. - US 301 (Eastern Boulevard) At SR 1006 (Person Street)

Division 6 Cumberland County Fayetteville

PLAN DATE: April 2016 REVIEWED BY: JPG

PREPARED BY: KPG, Jr. REVIEWED BY:

SEAL

DATE: 7/20/2016

SIG. INVENTORY NO. 06-0029

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: 0 30 1"=30'

2016-07-20 10:57:15 Signal Design Section Eastern Region 01-06-16-5742 Fayetteville ASC3-806-0029-06000029-sig\_dsn\_2016mdd-dgn kpgaredin

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED