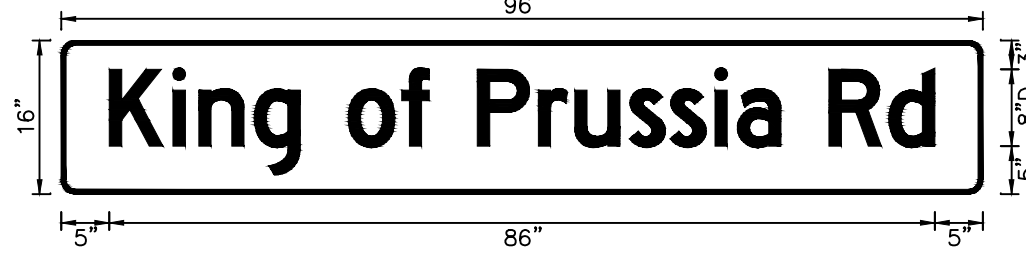
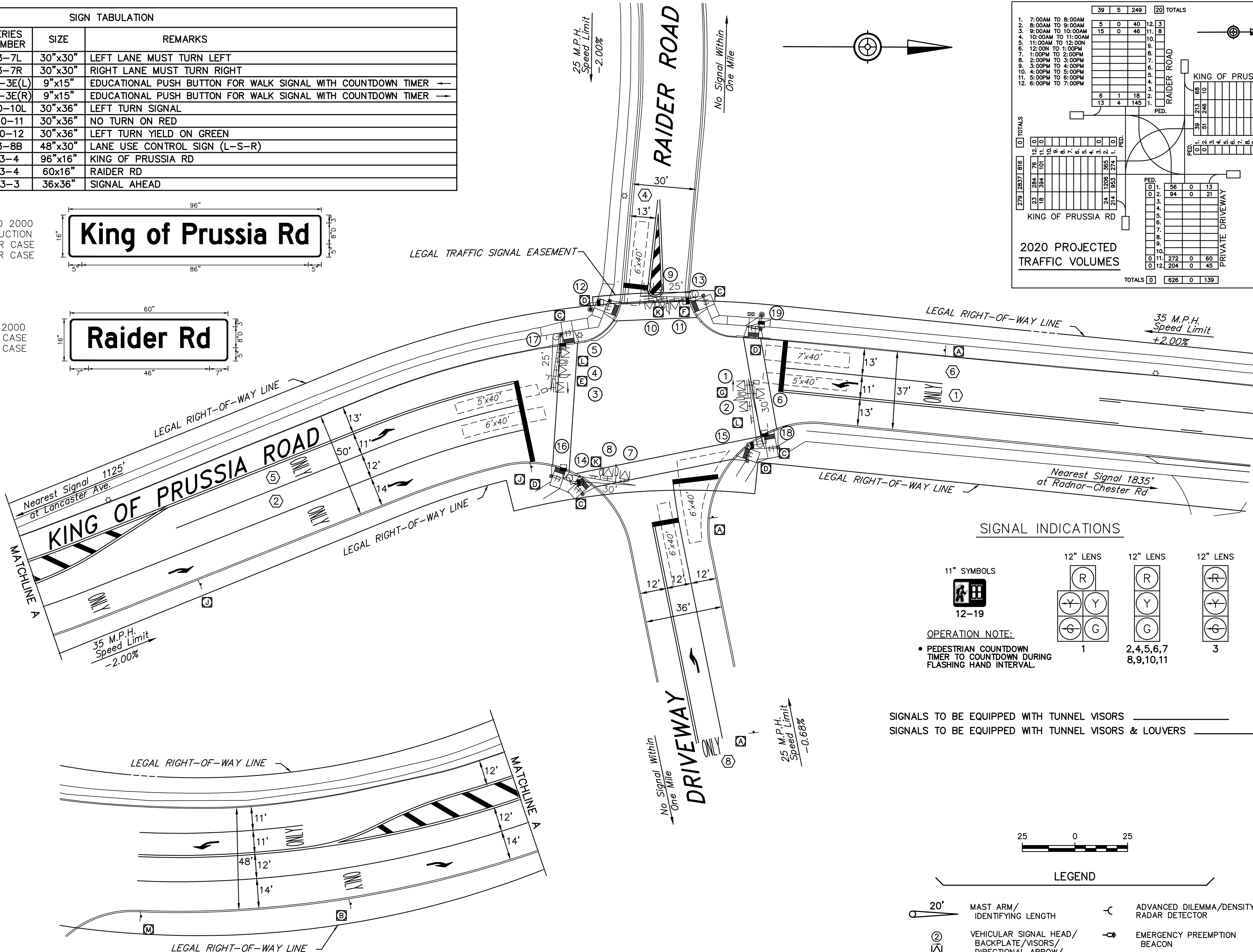
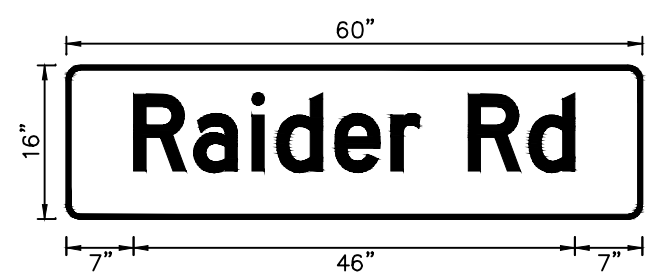


SIGN TABULATION			
PLAN SYMBOL	SERIES NUMBER	SIZE	REMARKS
A	R3-7L	30"x30"	LEFT LANE MUST TURN LEFT
B	R3-7R	30"x30"	RIGHT LANE MUST TURN RIGHT
C	R10-3E(L)	9"x15"	EDUCATIONAL PUSH BUTTON FOR WALK SIGNAL WITH COUNTDOWN TIMER
D	R10-3E(R)	9"x15"	EDUCATIONAL PUSH BUTTON FOR WALK SIGNAL WITH COUNTDOWN TIMER
E	R10-10L	30"x36"	LEFT TURN SIGNAL
F	R10-11	30"x36"	NO TURN ON RED
G	R10-12	30"x36"	LEFT TURN YIELD ON GREEN
J	R3-8B	48"x30"	LANE USE CONTROL SIGN (L-S-R)
K	D3-4	96"x16"	KING OF PRUSSIA RD
L	D3-4	60"x16"	RAIDER RD
M	W3-3	36"x36"	SIGNAL AHEAD

FONT : D 2000  
13% REDUCTION  
8" UPPER CASE  
6" LOWER CASE



FONT : D 2000  
8" UPPER CASE  
6" LOWER CASE



39		5		249		20		TOTALS	
1.	7:00AM TO 8:00AM	5	0	40	12	3			
2.	8:00AM TO 9:00AM	15	0	46	11	3			
3.	9:00AM TO 10:00AM	15	0	46	11	3			
4.	10:00AM TO 11:00AM								
5.	11:00AM TO 12:00PM								
6.	12:00PM TO 1:00PM								
7.	1:00PM TO 2:00PM								
8.	2:00PM TO 3:00PM								
9.	3:00PM TO 4:00PM								
10.	4:00PM TO 5:00PM								
11.	5:00PM TO 6:00PM								
12.	6:00PM TO 7:00PM								
TOTALS		6	1	18	1	3			
TOTALS		13	4	145	1	11			

2020 PROJECTED TRAFFIC VOLUMES

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**SYSTEM PERMIT # I-0010**

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION  
**ENGINEERING DISTRICT 6-0**

COUNTY: DELAWARE  
MUNICIPALITY: RADNOR TOWNSHIP  
INTERSECTION: KING OF PRUSSIA ROAD AND RAIDER ROAD

REVIEWED: \_\_\_\_\_ DATE \_\_\_\_\_  
MUNICIPAL OFFICIAL: \_\_\_\_\_ DATE \_\_\_\_\_  
RECOMMENDED: \_\_\_\_\_ DATE \_\_\_\_\_  
DISTRICT TRAFFIC ENGINEER: \_\_\_\_\_ DATE \_\_\_\_\_

NO.	REVISION	DES./REVW.	DATE	REVW.	DATE	RECOM.	DATE
1							
2							
3							
4							
5							
6							
7							
8							

USER NAME: SPENCER SLACK  
 FILE NAME: R:\Projects\UPHS\UPHS1504-145 King of Prussia Road\DESIGN\_PUBLISH\TRAFFIC SIGNAL\UPHS1504-SC-Plans.dwg  
 DATE PLOTTED: 4/10/2018 12:03:12 PM  
 DATE SAVED: 4/10/2018 12:03:12 PM

USER NAME: SPENCER SLACK  
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 DATE SAVED: 4/9/2018 @ 2:31:23 PM  
 DATE PLOTTED: 4/9/2018 @ 2:35:06 PM

MOVEMENT, SEQUENCE AND TIMING DIAGRAM

	1+5			1+6			2+5			2+6				4+8				EMERGENCY FLASHING
PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
SIGNALS	INTERVAL			INTERVAL			INTERVAL			INTERVAL				INTERVAL				
1	R/G	R/A <sup>①</sup>	R <sup>①</sup>	R	R	R	G/G	Y/A <sup>②</sup>	R <sup>②</sup>	G	G	Y	R	R	R	R	Y	
2	R	R	R	R	R	R	G	Y <sup>③</sup>	R <sup>③</sup>	G	G	Y	R	R	R	R	Y	
3	G	Y <sup>④</sup>	R <sup>④</sup>	G	Y <sup>④</sup>	R <sup>④</sup>	R	R	R	R	R	R	R	R	R	R	R	
4,5,6	R	R	R	G	Y <sup>⑤</sup>	R <sup>⑤</sup>	R	R	R	G	G	Y	R	R	R	R	Y	
7,8,9	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	
10,11	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	
12,13,14,15	H	H	H	H	H	H	H	H	H	M	FH	H	H	H	H	H	OFF	
16,17,18,19	H	H	H	H	H	H	H	H	H	H	H	H	H	M	FH	FH	OFF	

FIXED		4	2		4	2		4	2			4	2			4	2
MINIMUM	3			3			3			28				7			
PASSAGE	3			3			3			**				3			
MAXIMUM I	5			5			5			47				20			
MAXIMUM II	5			5			5			47				20			
PEDESTRIAN*										7	21			5	16		
MEMORY	NL			NL			NL			MX				NL			

\* UPON PEDESTRIAN ACTUATION ONLY, OTHERWISE HAND SYMBOL AT ALL TIMES  
 NOTE: REFER TO SYSTEM PERMIT # I-0010 FOR PROGRAM TIMING & WEEKLY PROGRAM CHART

- SIGNAL TO DWELL IN 2+6 UNTIL ACTUATED BY 4+8 OR 1+5

OPERATIONAL NOTES

- ① R/G IF FOLLOWED BY PHASE 2+5
- ② G IF FOLLOWED BY PHASE 1+6
- ③ G IF FOLLOWED BY PHASE 2+6
- ④ G/Y IF FOLLOWED BY PHASE 2+6

\*\* DENSITY ZONE NOTES

- RANGE OF DETECTION: 0-100 FEET FROM STOP BAR
- SPEED BOUNDARY: 5-30 MPH

\*\* ADVANCED DILEMMA ZONE NOTES

- ESTIMATED TIME OF ARRIVAL: MIN 2.5-MAX 5.5 SEC.
- RANGE OF DETECTION: 0-450 FEET
- SPEED BOUNDARY: 27-100 MPH

EMERGENCY PRE-EMPTION PHASING MOVEMENT, SEQUENCE AND TIMING DIAGRAM

	2			6			4			8		
PHASE	18	19	20	21	22	23	24	25	26	27	28	29
SIGNALS	INTERVAL			INTERVAL			INTERVAL			INTERVAL		
1	R	R	R	G/G	Y/A <sup>①</sup>	R <sup>①</sup>	R	R	R	R	R	R
2	R	R	R	G	Y <sup>②</sup>	R <sup>②</sup>	R	R	R	R	R	R
3	G	Y <sup>③</sup>	R <sup>③</sup>	R	R	R	R	R	R	R	R	R
4,5,6	G	Y <sup>④</sup>	R <sup>④</sup>	R	R	R	R	R	R	R	R	R
7,8,9	R	R	R	R	R	R	G	Y	R	R	R	R
10,11	R	R	R	R	R	R	R	R	R	G	Y	R
12,13,14,15	H	H	H	H	H	H	H	H	H	H	H	H
16,17,18,19	H	H	H	H	H	H	H	H	H	H	H	H
FIXED	①	4	2	①	4	2	①	4	2	①	4	2

- ① FOR DURATION OF PREEMPTION
- ② TO REMAIN G WHEN RETURNING TO NORMAL OPERATION
- ③ TO INDICATE G/Y WHEN RETURNING TO NORMAL OPERATION

EMERGENCY PRE-EMPTION NOTES:

CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE NORTHBOUND AND SOUTHBOUND APPROACHES OF KING OF PRUSSIA ROAD, THE EASTBOUND APPROACH OF RAIDER ROAD, AND THE WESTBOUND APPROACHES OF THE PRIVATE DRIVEWAY WITH A FAIL SAFE DEVICE FOR EACH DIRECTION OF OPERATION. THIS FAIL SAFE DEVICE SHALL CONSIST OF A FLASHING WHITE FLOOD LIGHT, AND SHALL BEGIN FLASHING WHEN THE PREEMPTION PHASE DISPLAYS PREEMPTION GREEN FOR THE EMERGENCY VEHICLE APPROACH.

THE SIGNALS, WHEN ACTIVATED BY EMERGENCY VEHICLE, SHALL TERMINATE ALL GREEN INDICATIONS, EXCEPT THE GREEN INDICATIONS FOR THE PHASE GOVERNED BY THE APPROACHING EMERGENCY VEHICLE, FOLLOWED BY COMPLETE YELLOW AND RED CLEARANCE INTERVALS, ACCORDINGLY. THEN THE "GREEN" INTERVAL FOR THE PREEMPTED PHASE SHALL FOLLOW ONLY THOSE PHASES NOT POSING A YELLOW TRAP CONDITION MAY REMAIN GREEN (1+6, 2+5) WHEN GOVERNED BY APPROACHING EMERGENCY VEHICLE.

IF THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, ARE FLASHING ALL SIGNALS SHALL REMAIN FLASHING.

THE SIGNALS, WHEN ACTIVATED BY EMERGENCY VEHICLE, SHALL TIME OUT ALL YELLOW AND RED INDICATIONS, FOLLOWED BY THE GREEN INTERVAL OF THE PRE-EMPTION PHASE GOVERNED BY THE APPROACHING EMERGENCY VEHICLE.

IF SIGNALS HAVE BEEN ACTUATED BY PEDESTRIAN PUSHBUTTON, AND THE SIGNAL IS PRE-EMPTED DURING THE "MAN" INTERVAL, THE MAN INTERVAL SHALL TERMINATE IMMEDIATELY, FOLLOWED BY THE "FLASHING HAND" INDICATION IN ITS ENTIRETY. THIS INTERVAL SHALL TIME OUT FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES BEFORE GOING INTO EMERGENCY PRE-EMPTION.

UPON COMPLETION OF PRE-EMPTION PHASE 2, 4, 6 OR 8 IN RETURNING TO NORMAL OPERATION, PHASE 2+6 INTERVAL 10 SHALL FOLLOW.

IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED. PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVE" OPERATION.

IF PREEMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR THE IDENTIFICATION OF VEHICLES, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON, TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PREEMPTION.

IF ADDITIONAL PRE-EMPTION PHASES ARE ACTIVATED WHILE IN PRE-EMPTION, THE ORIGINAL PRE-EMPTION PHASE SHALL TIME OUT BEFORE PROCEEDING TO THE NEXT PRE-EMPTION PHASE.

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