

# GENERAL NOTES

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TEST THE SYSTEM AT LOCAL INTERSECTION LEVEL, SUBSYSTEM LEVEL MASTER CONTROLLER LEVEL AND PERSONAL COMPUTER REMOTE DIAL UP LEVEL.

GATHER THE SYSTEM FAILURE CRITICAL ALARMS REPORT AND ARCHIVE THEM WHERE APPLICABLE.

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ASSIGN LOOP DETECTORS AND PROGRAM THE CONTROLLERS TO GATHER TRAFFIC VOLUMES IN 15 MINUTE INTERVAL, WHERE APPLICABLE.

EXACT LOCATION OF DETECTORS SHALL BE DETERMINED PRIOR TO INSTALLATION BY A REPRESENTATIVE OF PENNDOT.

OBTAIN POLE ATTACHMENT PERMIT FOR AERIAL FIBER OPTIC INSTALLATION.

MAINTAIN MASTER CONTROLLER COMMUNICATION SUCH AS PHONE DROPS.

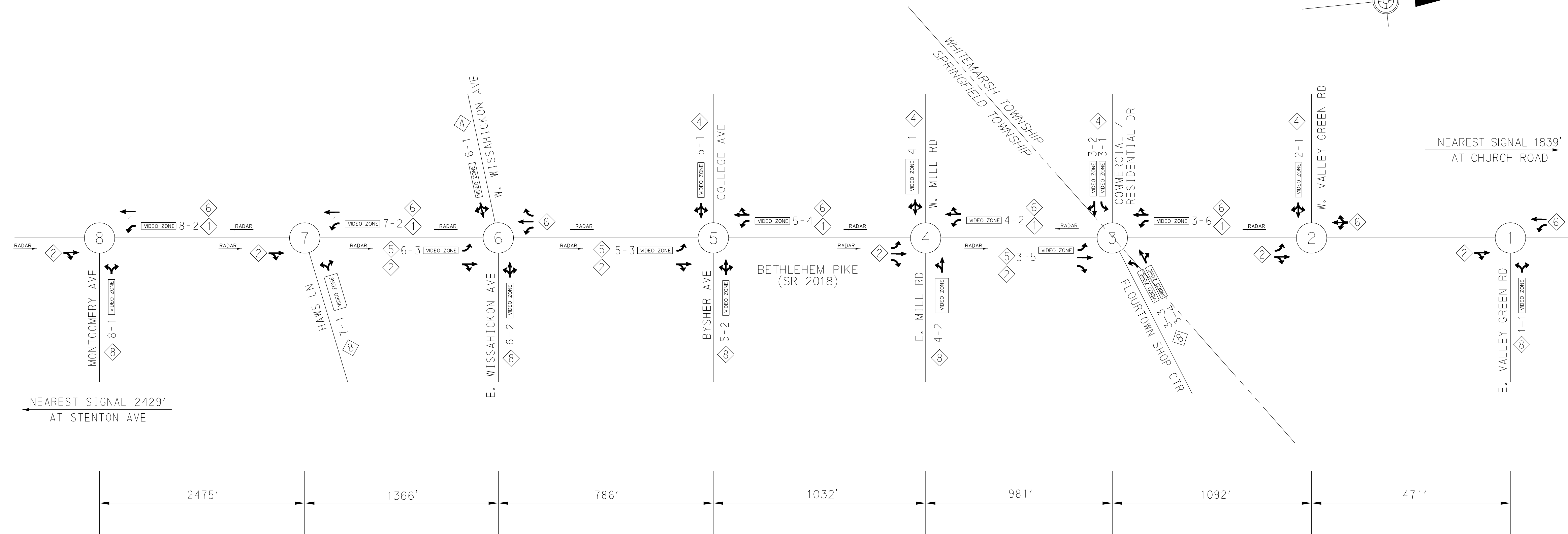
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WHEN LIQUID FUELS MONEY IS USED, SIGNAL INSTALLATION MUST CONFORM TO FORM 408 AND A COPY OF THE PROPOSED SPECIFICATIONS MUST BE SUBMITTED TO THE DISTRICT TRAFFIC UNIT FOR REVIEW PRIOR TO BIDDING.

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CONDUIT INSTALLED IN BITUMINOUS ROADWAY LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-8800 SERIES.



### SYSTEM NOTES:

- PROGRAMS TO BE SELECTED BY CLOSED LOOP SYSTEM (TIME OF DAY) OR TBC BACKUP.
- OFFSET REFERENCED TO THE BEGINNING OF NEMA TS2 FIRST GREEN.
- ACTUAL GREEN TIME DETERMINED BY CYCLE LENGTH.
- MASTER CONTROLLER LOCATED AT BETHLEHEM PIKE & MILL ROAD.
- SYSTEM LIMITS:  
ALONG BETHLEHEM PIKE FROM E. VALLEY GREEN ROAD TO MONTGOMERY AVE.
- PRIMARY COORDINATION: MULTI-MODE FIBER CABLE BETWEEN 1 AND 8.  
SECONDARY COORDINATION: TIME BASED COORDINATION (DEFAULT TO BACKUP T.B.C.)
- SYSTEM IS DESIGNED FOR THE SYSTEM SOFTWARE: TACTICS
- WORK STATION AT PENNDOT & SPRINGFIELD TOWNSHIP VIA PENNDOT FIBER BACKBONE.

### LEGEND

- SX-Y SYSTEM DETECTOR, INTERSECTION X - LOOP NO. Y
- X-Y VIDEO DETECTION ZONE, INTERSECTION X - ZONE NO. Y
- PHASE

SCALE: NOT TO SCALE

## SYSTEM PLAN

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION  
ENGINEERING DISTRICT 6-0

COUNTY: MONTGOMERY

MUNICIPALITY: SPRINGFIELD & WHITEMARSH TOWNSHIPS

INTERSECTION: BETHLEHEM PIKE (S.R. 2018)

REVIEWED:

DONALD E. BERGER JR. MUNICIPAL OFFICIAL 9/2/09 DATE

RECOMMENDED:

DAVID ADAMS 9/25/09

LOUIS R. BELMONTE 9/29/09  
DISTRICT TRAFFIC ENGINEER

NO.	REVISION	DES./REVW.	DATE	REVW.	DATE	RECOM.	DATE
1	ADDED SKIPPAK PIKE & CHURCH RD TO SYSTEM & REVISED TIMINGS	ORA	7/30/09	DLA	9/25/09	LRB	9/29/09
2	AS-BUILT	TS2		DLA	10/31/12	APATEL	11/7/12
3	REVISED INT 3,6 SPLITS			DLA	5/1/13	APATEL	5/6/13
4	REVISE TIMINGS	KPL	3/8/17	DLA	3/31/17	APATEL	4/3/17
5	REVISE INT.#8 TIMINGS, INT.#5 PROGRAM 3 OFFSET	KPL	9/12/17	KPL	9/28/17	DLA	9/29/17
6	REVISE PROGRAM 3 OFFSETS AND INT.#5 TIMING	EJR	11/19/18	KPL	12/19/18	DLA	12/27/18
7	REVISE TIMINGS INTS.#3 THROUGH INT.#8	HNTB					
8							

CYCLE/SPLIT/OFFSET

PROGRAM 1 = AM PEAK												PHASE	CYCLE	OFFSET #1	OFFSET #2	OFFSET #3
INTERSECTIONS	FILE NO.	1	2	3	4	5	6	7	8	PED		BALANCED	DR1(EB)	DR2(WB)		
1 E. VALLEY GREEN RD	2632	-	59	-	-	-	59	-	31	-	90	54				
2 W. VALLEY GREEN RD	2735	-	68	-	22	-	68	-	-	-	90	39				
3 FLOURTOWN SHOP CTR/RESTURANT DR	0672	13(LEAD)	55	-	22	13(LEAD)	55	-	22	-	90	41				
4 MILL RD	0674	13(LEAD)	40	-	37	-	53	-	37	-	90	1				
5 BYSHER RD/COLLEGE AVE	0676	14(LAG)	42	-	17(SPLIT)	14(LEAD)	42	-	17(SPLIT)	-	90	12				
6 WISSAHICKON AVE	1484	-	59	-	31	13(LEAD)	46	-	31	-	90	25				
7 HAWS LN	0297	15(LEAD)	45	-	-	-	60	-	30	-	90	62				
8 MONTGOMERY AVE	0675	15(LEAD)	49	-	-	-	64	-	26	-	90	14				
PROGRAM 2 = MID-DAY PEAK												PHASE	CYCLE	OFFSET #1	OFFSET #2	OFFSET #3
1 E. VALLEY GREEN RD	2632	-	65	-	-	-	65	-	25	-	90	43				
2 W. VALLEY GREEN RD	2735	-	65	-	25	-	65	-	-	-	90	42				
3 FLOURTOWN SHOP CTR/RESTURANT DR	0672	13(LEAD)	49	-	28	13(LEAD)	49	-	28	-	90	62				
4 MILL RD	0674	13(LEAD)	42	-	35	-	55	-	35	-	90	1				
5 BYSHER RD/COLLEGE AVE	0676	14(LAG)	38	-	19(SPLIT)	14(LEAD)	38	-	19(SPLIT)	-	90	87				
6 WISSAHICKON AVE	1484	-	60	-	30	13(LEAD)	47	-	30	-	90	26				
7 HAWS LN	0297	14(LEAD)	55	-	-	-	69	-	21	-	90	72				
8 MONTGOMERY AVE	0675	15(LEAD)	49	-	-	-	64	-	26	-	90	39				
PROGRAM 3 = PM PEAK												PHASE	CYCLE	OFFSET #1	OFFSET #2	OFFSET #3
1 E. VALLEY GREEN RD	2632	-	65	-	-	-	65	-	25	-	90	39				
2 W. VALLEY GREEN RD	2735	-	62	-	28	-	62	-	-	-	90	32				
3 FLOURTOWN SHOP CTR/RESTURANT DR	0672	13(LEAD)	50	-	27	13(LEAD)	50	-	27	-	90	38				
4 MILL RD	0674	13(LEAD)	39	-	38	-	52	-	38	-	90	3				
5 BYSHER RD/COLLEGE AVE	0676	14(LAG)	42	-	17(SPLIT)	14(LEAD)	42	-	17(SPLIT)	-	90	81				
6 WISSAHICKON AVE	1484	-	55	-	35	13(LEAD)	42	-	35	-	90	88				
7 HAWS LN	0297	14(LEAD)	53	-	-	-	67	-	23	-	90	49				
8 MONTGOMERY AVE	0675	13(LEAD)	51	-	-	-	64	-	26	-	90	8				
PROGRAM 4 = PM OFF PEAK												PHASE	CYCLE	OFFSET #1	OFFSET #2	OFFSET #3
1 E. VALLEY GREEN RD	2632	-	65	-	-	-	65	-	25	-	90	51				
2 W. VALLEY GREEN RD	2735	-	65	-	25	-	65	-	-	-	90	25				
3 FLOURTOWN SHOP CTR/RESTURANT DR	0672	13(LEAD)	49	-	28	13(LEAD)	49	-	28	-	90	47				
4 MILL RD	0674	13(LEAD)	42	-	35	-	55	-	35	-	90	19				
5 BYSHER RD/COLLEGE AVE	0676	14(LAG)	40	-	18(SPLIT)	14(LEAD)	40	-	18(SPLIT)	-	90	75				
6 WISSAHICKON AVE	1484	-	61	-	29	13(LEAD)	48	-	29	-	90	89				
7 HAWS LN	0297	14(LEAD)	55	-	-	-	69	-	21	-	90	52				
8 MONTGOMERY AVE	0675	14(LEAD)	50	-	-	-	64	-	26	-	90	12				
PROGRAM 5 = WEEKEND AM												PHASE	CYCLE	OFFSET #1	OFFSET #2	OFFSET #3
1 E. VALLEY GREEN RD	2632	-	60	-	-	-	60	-	20	-	80	15				
2 W. VALLEY GREEN RD	2735	-	60	-	20	-	60	-	-	-	80	13				
3 FLOURTOWN SHOP CTR/RESTURANT DR	0672	13(LEAD)	35	-	32	13(LEAD)	35	-	32	-	80	32				
4 MILL RD	0674	13(LEAD)	37	-	30	-	50	-	30	-	80	69				
5 BYSHER RD/COLLEGE AVE	0676	14(LAG)	30	-	18(SPLIT)	14(LEAD)	30	-	18(SPLIT)	-	80	64				
6 WISSAHICKON AVE	1484	-	55	-	25	13(LEAD)	42	-	25	-	80	8				
7 HAWS LN	0297	15(LEAD)	44	-	-	-	59	-	21	-	80	45				
8 MONTGOMERY AVE	0675	13(LEAD)	41	-	-	-	54	-	26	-	80	19				
PROGRAM 6 = WEEKEND MID-DAY												PHASE	CYCLE	OFFSET #1	OFFSET #2	OFFSET #3
1 E. VALLEY GREEN RD	2632	-	75	-	-	-	75	-	25	-	100	19				
2 W. VALLEY GREEN RD	2735	-	70	-	30	-	70	-	-	-	100	20				
3 FLOURTOWN SHOP CTR/RESTURANT DR	0672	13(LEAD)	52	-	35	13(LEAD)	52	-	35	-	100	37				
4 MILL RD	0674	15(LEAD)	45	-	40	-	60	-	40	-	100	96				
5 BYSHER RD/COLLEGE AVE	0676	14(LAG)	44	-	21(SPLIT)	14(LEAD)	44	-	21(SPLIT)	-	100	80				
6 WISSAHICKON AVE	1484	-	66	-	34	13(LEAD)	53	-	34	-	100	11				
7 HAWS LN	0297	15(LEAD)	61	-	-	-	76	-	24	-	100	69				
8 MONTGOMERY AVE	0675	15(LEAD)	59	-	-	-	74	-	26	-	100	19				
PROGRAM 7 = WEEKEND PM												PHASE	CYCLE	OFFSET #1	OFFSET #2	OFFSET #3
1 E. VALLEY GREEN RD	2632	-	60	-	-	-	60	-	20	-	80	44				
2 W. VALLEY GREEN RD	2735	-	60	-	20	-	60	-	-	-	80	33				
3 FLOURTOWN SHOP CTR/RESTURANT DR	0672	13(LEAD)	35	-	32	13(LEAD)	35	-	32	-	80	44				
4 MILL RD	0674	13(LEAD)	37	-	30	-	50	-	30	-	80	4				
5 BYSHER RD/COLLEGE AVE	0676	14(LAG)	36	-	18(SPLIT)	14(LEAD)	36	-	18(SPLIT)	-	80	0				
6 WISSAHICKON AVE	1484	-	55	-	25	13(LEAD)	42	-	25	-	80	13				
7 HAWS LN	0297	15(LEAD)	44	-	-	-	59	-	21	-	80	52				
8 MONTGOMERY AVE	0675	13(LEAD)	41	-	-	-	54	-	26	-	80	18				

NOTES: - ALL SPLIT TIMES INCLUDE YELLOW AND RED TIMES FOR A GIVEN PHASE.  
 - REFER TO TRAFFIC SIGNAL CONSTRUCTION PLAN FOR MAXIMUM 1, MAXIMUM 2, AND CLEARANCE AND PED TIMES.

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EVENT	DAY*	TIME	PROGRAM	CYCLE	CONTROLLER PATTERN	REMARKS
1	1-7	00:00	MAX 1		FREE	FREE
2	1-5	06:00	1	90	1/1/1	AM PEAK
3	1-5	09:00	2	90	2/1/1	MID-DAY PEAK
4	1-5	15:00	3	90	3/1/1	PM PEAK
5	1-5	18:30	4	90	2/2/1	PM OFF PEAK
6	1-5	20:30	MAX 1		FREE	FREE
7	6,7	08:00	5	90	4/1/1	WEEKEND AM
8	6,7	11:00	6	90	4/2/1	WEEKEND MID-DAY
9	6,7	15:00	7	90	4/3/1	WEEKEND PM
10	6,7	18:00	MAX 1		FREE	FREE

\* DAY 1 = MONDAY

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 ENGINEERING DISTRICT 6-0

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MUNICIPALITY: SPRINGFIELD & WHITEMARSH TOWNSHIPS

INTERSECTION: BETHLEHEM PIKE (S.R. 2018)

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 \_\_\_\_\_ DATE  
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