

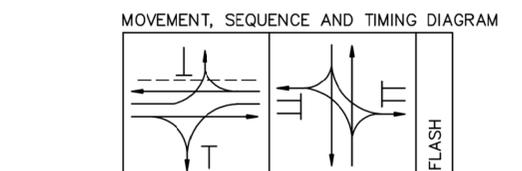
JANUARY 2010 VOLUMES

| TIME PERIOD | SCHUYLKILL ROAD | BETHEL CHURCH RD | S.R. 1035 | TOTALS |
|-----------------------|-----------------|------------------|------------|----------|
| 1. 7:00AM TO 8:00AM | 19 | 122 | 98 | 11 |
| 2. 8:00AM TO 9:00AM | 35 | 96 | 103 | 10 |
| 3. 9:00AM TO 10:00AM | | | | |
| 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 | 11 | 91 | 155 | 1 |
| | 6 | 125 | 201 | 1 |

SCHUYLKILL ROAD

++ ADVANCED DILEMMA ZONE NOTES
 EST. TIME OF ARRIVAL: MIN. 2.5 - MAX. 5.5 SEC.
 RANGE OF PROTECTION: MIN. 0 - MAX. 450 FT.
 SPEED BOUNDARY: MIN. 27 MPH - MAX. 30 MPH

++ DENSITY ZONE NOTES
 RANGE OF DETECTION: 0 TO 100 FEET FROM STOP
 BAR SPEED BOUNDARY: MIN. 5 MPH - MAX. 45 MPH

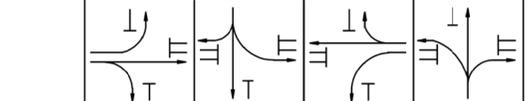


| PHASE | 2+6 | 4+8 | FLASH |
|-------|----------------|---------------|-------|
| 1,2 | G G Y R R R R | R R R R R R R | Y |
| 3,4,5 | G G Y R R R R | R R R R R R R | Y |
| 6,7 | R R R R G Y R | R R R R G Y R | R |
| 8,9 | R R R R G Y R | R R R R G Y R | R |
| 10,11 | M FH H H H H H | H H H H H H H | OFF |

| FIXED | 5.1 | 1.2 | 3.6 | 2.3 |
|-------------|-----|-----|-----|-----|
| MINIMUM | 10 | | 3 | |
| PASSAGE | ** | | 3 | |
| MAX. 1 | 69 | | 41 | |
| MAX. 2 | 74 | | 46 | |
| PEDESTRIAN* | 7 | 16 | | |
| MEMORY | MN | NL | | |

* MAN SYMBOL UPON PEDESTRIAN ACTUATION ONLY, OTHERWISE HAND SYMBOL AT ALL TIMES.
 • MAX. 2 TO OPERATE FROM 6 AM - 9 AM MON - FRIDAY. MAX 1 TO OPERATE ALL OTHER TIMES.

EMERGENCY PRE-EMPTION PHASING

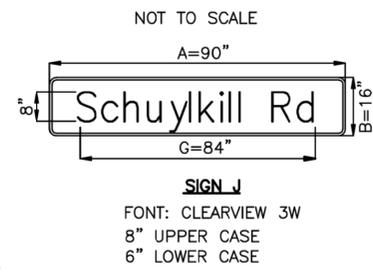


| PHASE | 2 | 4 | 6 | 8 |
|-------|------------|------------|------------|------------|
| 1,2 | G Y R | R R R | R R R | R R R |
| 3,4,5 | R R R | R R R | G Y R | R R R |
| 6,7 | R R R | G Y R | R R R | R R R |
| 8,9 | R R R | R R R | R R R | G Y R |
| 10,11 | H H H | H H H | H H H | H H H |
| FIXED | ** 5.1 1.2 | ** 3.6 2.3 | ** 5.1 1.2 | ** 3.6 2.3 |

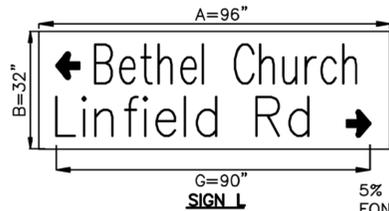
** FOR DURATION OF PRE-EMPTION
 NOTE: IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON, TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.

Ⓞ G WHEN RETURNING TO NORMAL OPERATION

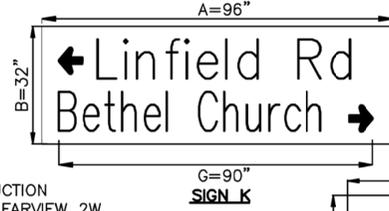
SIGN DETAILS



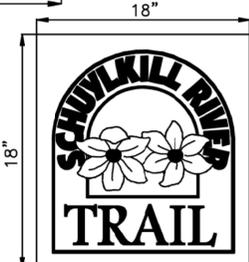
SIGN J
 FONT: CLEARVIEW 3W
 8" UPPER CASE
 6" LOWER CASE



SIGN L
 5% REDUCTION
 FONT: CLEARVIEW 2W
 10.6" UPPER CASE
 8" LOWER CASE



SIGN K
 5% REDUCTION
 FONT: CLEARVIEW 2W
 10.6" UPPER CASE
 8" LOWER CASE



SIGN B

SIGN TABULATION

| PLAN SYMBOL | SERIES NUMBER | SIZE | REMARKS |
|-------------|---------------|-------|--|
| A | R1-1 | 30X30 | STOP |
| B | R3-7L | 30X30 | LEFT LANE MUST TURN LEFT |
| C | R10-11 | 30X36 | NO TURN ON RED |
| D | R9-3A | 18X18 | NO PEDESTRIAN CROSSING |
| E | D3-4 | 90X16 | OVERHEAD STREET NAME SIGN (SEE DETAIL) |
| F | D3-5 | 96X32 | OVERHEAD STREET NAME SIGN (SEE DETAIL) |
| G | D3-5 | 96X32 | OVERHEAD STREET NAME SIGN (SEE DETAIL) |
| H | R10-3E | 9X15 | EDUCATIONAL PUSH BUTTON FOR WALK SIGNAL WITH COUNTDOWN TIMER |
| I | R10-15L | 30X30 | TURNING TRAFFIC MUST YIELD TO PEDESTRIANS (LEFT) SIGN |
| J | R10-15R | 30X30 | TURNING TRAFFIC MUST YIELD TO PEDESTRIANS (RIGHT) SIGN |
| K | SPECIAL | 18X18 | SCHUYLKILL RIVER TRAIL |

GENERAL NOTES

NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS PRIOR APPROVAL IS GRANTED IN WRITING BY A REPRESENTATIVE OF THE DEPARTMENT OF TRANSPORTATION.

ALL MAINTENANCE WORK INCLUDING TRIMMING OF TREES, NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS IS THE RESPONSIBILITY OF THE PERMITTEE.

ALL SIGNS AND PAVEMENT MARKINGS INDICATED ON THIS DRAWING ARE CONSIDERED PART OF THE PERMIT AND SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH PUBLICATION NO. 212.

POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB OR THE EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.

SIGNALS ERECTED OVER THE ROADWAY SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 16 FT. ABOVE THE ROADWAY. POST MOUNTED SIGNALS SHALL BE A MINIMUM OF 8 FT. ABOVE THE SIDEWALK OR PAVEMENT.

ALL OVERHEAD SIGNALS MUST BE RIGIDLY MOUNTED, TOP AND BOTTOM, AND EQUIPPED WITH BACKPLATES.

THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNALS MEASURED AT RIGHT ANGLES TO THE APPROACH SHALL BE 8 FEET.

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

CURBING TO BE INSTALLED BY MUNICIPALITY AND WHERE NOTED, SHALL BE PLAIN CEMENT CONCRETE CURB OR GRANITE CURB, INSTALLED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS FORM 408.

PRIOR TO INSTALLATION THE CONTRACTOR SHALL CONSULT WITH THE LOCAL OFFICIALS AND UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF THE LATEST AMENDMENT TO ACT 287, PREVENTION OF DAMAGE TO UNDERGROUND UTILITIES, DATED DECEMBER 20, 1974.

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.

PERMITTEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR ANY CHANGES IN INTERSECTION GEOMETRY REGARDING EXCAVATION.

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.

NOT FOR CONSTRUCTION

UNDER PENNDOT REVIEW
 PLANS SUBJECT TO CHANGE
 DATE: 7/23/15

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
 ENGINEERING DISTRICT 6-0

COUNTY: CHESTER
 MUNICIPALITY: EAST COVENTRY TOWNSHIP
 INTERSECTION: SCHUYLKILL ROAD (S.R. 0724) & BETHEL CHURCH/LINFIELD RDS (S.R. 1035)

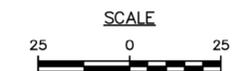
REVIEWED: _____ DATE _____
 MUNICIPAL OFFICIAL _____ DATE _____

RECOMMENDED: **DOUGLAS MAY** 5/11/89
MARK L. KRAY 5/11/89
 DISTRICT TRAFFIC ENGINEER DATE

| NO. | REVISION | DES./REV. | DATE | REV. | DATE | RECOM. | DATE |
|-----|-------------------------|-----------|----------|------|----------|--------|----------|
| 1 | NEW DWG, TIMING | C.B. | 5/11/89 | MLK | 5/11/89 | DWM | 5/11/89 |
| 2 | MODIFYING OPERATION | JUF | 12/13/92 | MLK | 12/21/92 | DWM | 12/21/92 |
| 3 | ADD "NTOR" SIGN | | | | | WJE | 12/12/03 |
| 4 | SIGNAL UPGRADE, NEW DWG | McM | 6/30/15 | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |

EMERGENCY PRE-EMPTION NOTES:

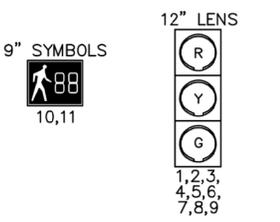
- CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE EASTBOUND & WESTBOUND APPROACHES OF SCHUYLKILL ROAD, THE NORTHBOUND APPROACH OF BETHEL CHURCH ROAD, AND THE SOUTHBOUND APPROACH OF LINFIELD ROAD WITH A FAIL SAFE DEVICE FOR EACH DIRECTION OF OPERATION. THIS EMERGENCY BEACON SHALL CONSIST OF A FLASHING WHITE FLOOD LIGHT, AND SHALL FLASH WHEN THE EMERGENCY VEHICLE HAS CONTROL OF THE INTERSECTION FOR THE APPROPRIATE APPROACH. LOCATION OF EMERGENCY VEHICLE DETECTORS ARE TO BE FIELD ADJUSTED TO ACHIEVE MAXIMUM OPERATION.
- THE SIGNALS SHALL TERMINATE ALL GREEN INDICATIONS IMMEDIATELY, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, FOLLOWED BY THE COMPLETE YELLOW AND RED CLEARANCE INTERVALS, ACCORDINGLY. THEN THE GREEN INTERVAL FOR THE PRE-EMPTED PHASE SHALL FOLLOW.
- THE SIGNALS SHALL TIME OUT ALL YELLOW AND RED INDICATIONS, WHEN ACTIVATED BY EMERGENCY VEHICLE, FOLLOWED BY THE GREEN INTERVAL OF THE PRE-EMPTION PHASE GOVERNED BY THE APPROACHING EMERGENCY VEHICLE.
- IF THE SIGNALS ARE FLASHING WHEN ACTIVATED BY AN EMERGENCY VEHICLE, ALL SIGNALS SHALL REMAIN FLASHING.
- 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.
- UPON COMPLETION OF PRE-EMPTION, PHASE 2,4,6 OR 8 IN RETURNING TO NORMAL OPERATION, PHASE 2+6 INTERVAL 1 SHALL FOLLOW.
- IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED, PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVED" OPERATION.



LEGEND

- 20' MAST ARM/IDENTIFYING LENGTH
- 12"x6" LOOP SENSOR/SIZE
- VEHICULAR SIGNAL HEAD/BACKPLATE/VISORS/DIRECTIONAL ARROW/IDENTIFYING NUMBER
- EMERGENCY PRE-EMPTION FLASHING BEACON
- PEDESTRIAN SIGNAL HEAD/IDENTIFYING NUMBER
- EMERGENCY PRE-EMPTION DEVICE
- PEDESTRIAN PUSHBUTTON/SIGN
- CURB RAMP
- SIGN/IDENTIFYING LETTER
- UTILITY POLE
- INLET
- PHASE NUMBER
- LUMINAIRE
- ADVANCE DILEMMA ZONE DETECTION SYSTEM

SIGNAL INDICATIONS



ALL SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS