



TRAFFIC SIGNAL PERMIT

Permit No. 21-53

Sheet 1 of 3

In accordance with the Vehicle Code, the Secretary of Transportation hereby approves the installation and operation of a traffic signal at the intersection of North Atherton Street (SR 3014), Douglas Drive (T-729) and Hawbaker Industrial Drive

in the Township of Patton, County of Centre

This permit is issued to, and accepted by the Township of Patton hereinafter known as the Permittee, as follows.

This installation shall be in accordance with the Vehicle Code and the Regulations for traffic signs, signals and markings of the Department of Transportation, and shall conform to the following requirements and those contained on the attached sheets.

Type of Controller Volume Density with Emergency Vehicle Preemption

Type of Signal Mounting Overhead

Hours of Operation as "Stop" and "Go" When not operating as flashing.

Hours of Operation as Flashing As indicated on the attached diagram.

Controller Operation Controller to provide the operation, including the emergency vehicle preemption phases indicated on the attached diagram.

Controller to be interconnected with adjacent signal controllers along North Atherton Street to provide a progressive movement of traffic. Supervised by master controller at North Atherton Street, Vairo Boulevard and Martin Street.

Preemption for emergency vehicles to provide the operation indicated on the attached diagram.

All work performed by the Permittee in the erection of the traffic signals shall be under and subject to the direction of the Secretary of Transportation or his authorized representatives. The said Permittee shall use due diligence in the execution of the work authorized under this permit and shall not obstruct or endanger travel along said road. All operations must be conducted so as to permit safe and reasonable free travel at all times over the road within the limits of the work herein permitted.

The Permittee covenants and agrees to fully indemnify and save harmless the Department of Transportation and assume all liability for damages or injury, occurring to any person, persons or property through or in consequence of any act or omission of anyone working on the construction, or from faulty maintenance or operation of such traffic signal.

The Secretary of Transportation, by law, reserves the right to revoke and annul this permit in the Permittee shall at any time willfully or negligently fail to comply with the conditions contained in this permit, or, upon changes in traffic conditions, fail to make any changes in the construction or operation of this signal, or to remove it, when so ordered by the Secretary of Transportation: or if this installation is not in operation within twenty-four (24) months of the receipt of this permit. The Permittee shall maintain the signal in a safe condition at all times. The Permittee shall not make any change in the construction or operation of this traffic signal without prior written approval of the Secretary of Transportation.

This permit cancels and supersedes all previous permits issued for this location upon completion of the installation specified herein.

DATE June 24, 1991
 Revised: June 19, 1997
 Revised: July 12, 2004
 Revised: September 12, 2007
 Revised: December 7, 2009
 Revised: May 15, 2012
 Revised: May 12, 2021

APPROVED Yassmin Gramian, P.E.
 SECRETARY OF TRANSPORTATION
 BY *[Signature]*
 For for DISTRICT ENGINEER

\$DATES\$
\$TIME\$

\$FILES\$

PHASING DIAGRAM

	PHASE 1+5				PHASE 1+6				PHASE 2+5				PHASE 2+6				PHASE 4+8				FLASHING
	INTERVALS				INTERVALS				INTERVALS				INTERVALS				INTERVALS				
SIGNALS	1	2	3		1	2	3		1	2	3		1	2	3		1	2	3		
1	R	G	R	⓪	G	Y	R	⓪	R	R	R		G	Y	R		R	R	R		Y
2	R	R	R		G	Y	R	⓪	R	R	R		G	Y	R		R	R	R		Y
3	R	G	R	⓪	R	R	R		G	Y	R	⓪	G	Y	R		R	R	R		Y
4	R	R	R		R	R	R		G	Y	R	⓪	G	Y	R		R	R	R		Y
5-6	R	R	R		R	R	R		R	R	R		R	R	R		G	Y	R		R
7-8	R	R	R		R	R	R		R	R	R		R	R	R		G	Y	R		R
9-11	R	R	R		R	R	R		R	R	R		R	R	R		G	Y	R		OFF
10	R	R	R		R	R	R		G	Y	R	⓪	G	Y	R		R	R	R		OFF
12	R	R	R		G	Y	R	⓪	R	R	R		G	Y	R		R	R	R		OFF
FIXED		5.0	3.0			5.0	2.0			5.0	2.0			5.0	2.0			3.0	3.0		
MINIMUM	2				2				2				15				2				
SEC/ACT													2.1								
MAX INITIAL													33								
PASSAGE	2				2				2				6.2				3				
TBR													33								
TO REDUCE													10								
MIN GAP													3								
MAXIMUM	10				10				10				50				10				
PEDESTRIAN *													23				24				
▲ CYCLE 1	18				18				18				51				31				
▲ CYCLE 2	23				23				23				46				31				
▲ CYCLE 3	21				21				21				55				24				
▲ CYCLE 4	25				25				25				48				27				
▲ TSP CYCLE 1	14				14				14				65				21				
▲ TSP CYCLE 2	14				14				14				63				23				
▲ TSP CYCLE 3	14				14				14				72				14				
▲ TSP CYCLE 4	14				14				14				68				18				
MEMORY	NON-LOCKING				NON-LOCKING				NON-LOCKING				MIN. RECALL				NON-LOCKING				

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

* UPON PEDESTRIAN ACTUATION
▲ TOTAL LENGTH OF PHASE

TRANSIT SIGNAL PRIORITY PLAN

CYCLE	GREEN EXTENSION TIME
CYCLE 1	14 SEC
CYCLE 2	19 SEC
CYCLE 3	17 SEC
CYCLE 4	20 SEC

WB CHECK-IN DISTANCE IS 1056 FT

COORDINATION PLAN

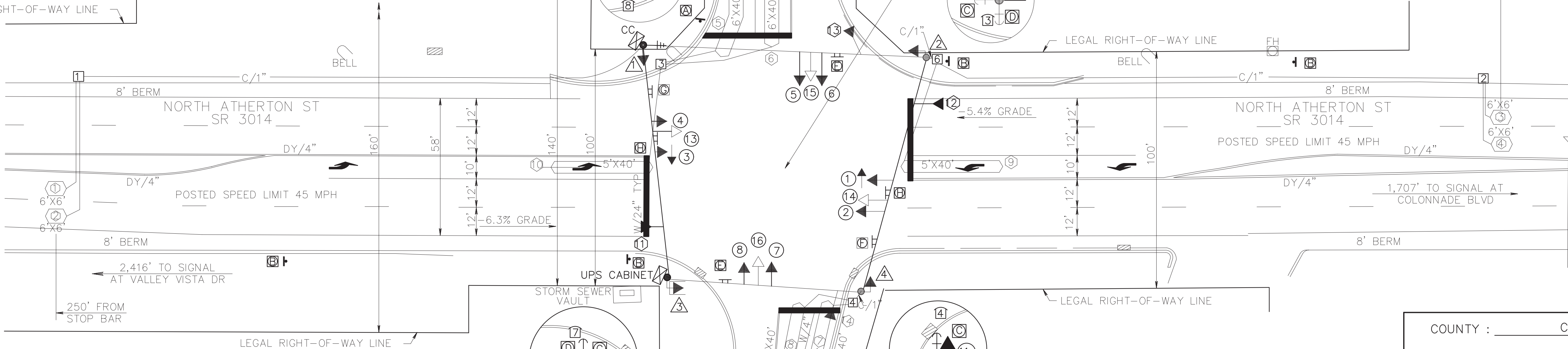
PLAN NO.	DAY OF WEEK							TIME	CYCLE	OFFSET	REMARKS
	S	M	T	W	T	F	S				
1	X	X	X	X	X	X	X	1:00	-	-	FLASH
2	X	X	X	X	X	X	X	6:00	100 SEC	-	FREE
3	X	X	X	X	X	X	X	7:00	100 SEC	57 SEC	CYCLE 2
4	X						X	8:00	100 SEC	44 SEC	CYCLE 1
5	X	X	X	X	X	X	X	10:00	100 SEC	83 SEC	CYCLE 4
6	X	X	X	X	X	X	X	16:00	100 SEC	77 SEC	CYCLE 3
7	X	X	X	X	X	X	X	19:00	100 SEC	83 SEC	CYCLE 4
8	X	X	X	X	X	X	X	22:00	100 SEC	-	FREE

OFFSETS REFERENCED TO START OF PHASE 2+6 GREEN

LEGEND

- MAST ARM
- STRAIN POLE/MESSENGER CABLE
- PEDESTAL
- VEHICULAR SIGNAL HEAD
- PEDESTRIAN SIGNAL HEAD
- SIGN
- VEHICLE DETECTOR
- PEDESTRIAN PUSH BUTTON/SIGN
- CONTROLLER ASSEMBLY
- JUNCTION BOX
- CONDUIT/SIZE
- SOLID WHITE LINE/WIDTH
- BROKEN WHITE LINE/WIDTH
- SOLID YELLOW LINE/WIDTH
- BROKEN YELLOW LINE/WIDTH
- DOUBLE SOLID YELLOW LINE/WIDTH
- LUMINAIRE
- SPREAD-SPECTRUM RADIO ANTENNA
- CONFIRMATION LIGHT
- PREEMPTION DETECTOR
- AUXILIARY CABINET FOR UPS

LEGAL RIGHT-OF-WAY LINE



SIGNS

PLAN SYMBOL	DESCRIPTION	SIZE W X H
A	R3-7L, LEFT LANE MUST TURN LEFT	30"X30"
B	R3-7C, CENTER LANE MUST TURN LEFT	48"X48"
C	R10-3R, PUSH BUTTON FOR GREEN LIGHT	9"X12"
D	R10-3R, PUSH BUTTON FOR GREEN LIGHT	9"X12"
E	D3-4, N Atherton St	84"X16"
F	D3-5, Douglas Dr	96"X28"
G	D3-5, Hawbaker Ind Dr	96"X28"
H	R10-12, LEFT TURN YIELD ON GREEN	30"X36"

NOTES:

- LOOP DETECTORS 5,6,7,8,9 AND 10 TO HAVE TIME DELAY.
- ALL JUNCTION BOXES TO BE TYPE JB-27.
- CONTROLLER PROGRAMMING TO BE DUAL ENTRY.

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
2-0	CENTRE	3014	N11	2 OF 3
PATTON TOWNSHIP				
PERMIT NO.:	21-53	SHEET	2 OF 3	
DATE ISSUED:	6/24/91	DATE REVISED:	3/19/21	

GENERAL NOTES

- INSTALL, OPERATE AND MAINTAIN THIS TRAFFIC SIGNAL IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION REGULATIONS ON OFFICIAL TRAFFIC CONTROL DEVICES.
- NO MODIFICATION OF THIS INSTALLATION IS PERMITTED UNLESS PRIOR APPROVAL IS GRANTED, IN WRITING, BY THE DEPARTMENT.
- ALL MAINTENANCE NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS, INCLUDING TRIMMING TREES, IS THE RESPONSIBILITY OF THE PERMITTEE.
- THE PERMITTEE INSTALLS AND MAINTAINS ALL SIGNS AND PAVEMENT MARKINGS INDICATED ON THIS DRAWING WHICH ARE CONSIDERED AS PART OF THE PERMIT, UNLESS OTHERWISE INDICATED. THE DEPARTMENT MAINTAINS THE LONGITUDINAL PAVEMENT MARKINGS ON STATE HIGHWAYS.
- INSTALL POST MOUNTED SIGNALS WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF THE CURB OR EDGE OF THE SHOULDER. ALSO, INSTALL SUPPORT POLES FOR OVERHEAD SIGNALS WITH A MINIMUM HORIZONTAL CLEARANCE OF 2 FEET.
- INSTALL SIGNAL HEADS AND SIGNS ERECTED OVER THE ROADWAY WITH THE BOTTOMS NOT LESS THAN 15 NOR MORE THAN 19 FEET ABOVE THE ROADWAY.
- INSTALL SIGNAL HEADS AND SIGNS ERECTED OVER THE ROADWAY WITH THE TOPS AT THE SAME ELEVATION.
- INSTALL POST MOUNTED SIGNAL HEADS WITH BOTTOMS NOT LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE SIDEWALK OR PAVEMENT GRADE.
- INSTALL SIGNALS WITH A MINIMUM HORIZONTAL DISTANCE OF 8 FEET BETWEEN THE HEADS AS MEASURED AT RIGHT ANGLES TO THE APPROACH.
- THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF PA. ACT 287 OF 1974 AS AMENDED BY ACT 181 OF 2006, PREVENTION OF DAMAGE TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION CONSULT WITH UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.
- PLACE PAVEMENT MARKINGS IN ACCORDANCE WITH TC-8600 PAVEMENT MARKING STANDARDS.

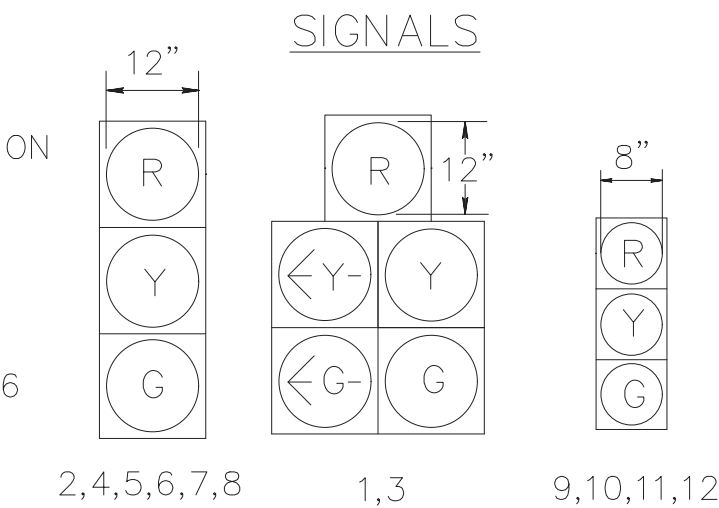
THREADED PLATE MAST ARM CONNECTIONS WILL NOT BE PERMITTED FOR THIS TRAFFIC SIGNAL PERMIT.

COUNTY : CENTRE
MUNICIPALITY : PATTON TOWNSHIP
INTERSECTION : NORTH ATHERTON ST (SR 3014),
HAWBAKER INDUSTRIAL DR AND DOUGLAS DR (T-729)

REVIEWED :
Douglas J. Erickson
MUNICIPAL OFFICIAL
DATE

RECOMMENDED :
Erik Brown
DISTRICT TRAFFIC ENGINEER
DATE

SCALE : 0 25 50 FEET



- NOTES:
- ALL VEHICULAR SIGNALS EQUIPPED WITH CUTAWAY VISORS
 - EQUIP SIGNALS 10&12 WITH LOUVERS

\$DATE\$
\$TIME\$

EMERGENCY VEHICLE PREEMPTION NOTES

NORMAL TRAFFIC SIGNAL OPERATION SHALL ONLY BE PREEMPTED BY EMERGENCY VEHICLES RESPONDING TO EMERGENCY CALLS.

EMERGENCY PREEMPTION SHALL BE PROVIDED ON A FIRST-COME, FIRST-SERVE BASIS. ONCE THE FIRST PRIORITY EMERGENCY VEHICLE CALLS THE SYSTEM, IT SHALL PREVENT OTHER PREEMPTIVE VEHICLES FROM ENTERING CALLS UNTIL THE FIRST EMERGENCY VEHICLE RELEASES CONTROL AND CLEARS THE INTERSECTION.

EMERGENCY VEHICLE PREEMPTION MAY OCCUR DURING ANY INTERVAL OF THE NORMAL CONTROLLER OPERATION. PROVIDE EMERGENCY VEHICLE PREEMPTION EQUIPMENT IN THE CONTROLLER CABINET CAPABLE OF DISPLAYING APPROACH CONTROL OPERATION. DEPENDING ON THE DIRECTION OF TRAVEL OF THE EMERGENCY VEHICLE, ONE OF THE FOLLOWING PHASES SHALL BE DISPLAYED: PHASE 1+6, PHASE 2+5, PHASE 4, OR PHASE 8. PROVIDE THE FOLLOWING SEQUENCE UPON ACTIVATION BY AN EMERGENCY VEHICLE.

IF THE CONTROLLER OPERATION IS IN INTERVAL 1 (GREEN/GREEN ARROW) OF A NON-PREEMPTIVE PHASE, THE CONTROLLER SHALL IMMEDIATELY TERMINATE THE CONFLICTING GREEN INDICATION AND PROCEED THROUGH THE YELLOW AND ALL RED CLEARANCE INTERVALS BEFORE PROCEEDING TO THE PREEMPTION PHASE GREEN.

IF THE CONTROLLER OPERATION IS IN INTERVAL 1 (GREEN/WALK) OF A NON-PREEMPTIVE PHASE, THE CONTROLLER SHALL IMMEDIATELY TERMINATE THE CONFLICTING WALK INDICATION AND PROCEED THROUGH THE FLASHING DON'T WALK INTERVAL, THE YELLOW AND ALL-RED INTERVALS BEFORE PROCEEDING TO THE PREEMPTION PHASE GREEN. THE GREEN INDICATION SHALL REMAIN GREEN THROUGH THE FLASHING DON'T WALK INTERVAL.

IF THE CONTROLLER IS IN INTERVAL 2 (GREEN/FLASHING DON'T WALK) OF A NON-PREEMPTIVE PHASE, THE CONTROLLER SHALL TIME OUT THE INTERVAL BEFORE PROCEEDING THROUGH THE YELLOW AND ALL-RED CLEARANCE INTERVALS. THE GREEN INDICATION SHALL REMAIN GREEN THROUGH THE FLASHING DON'T WALK INTERVAL.

IF THE CONTROLLER OPERATION IS IN INTERVAL 1 (GREEN) OF A PREEMPTION PHASE, THE CONTROLLER SHALL REMAIN IN THE GREEN INTERVAL OF THE PREEMPTION PHASE WHILE THE CONFLICTING GREEN INDICATIONS ARE IMMEDIATELY TERMINATED AND PROCEED THROUGH THE YELLOW AND ALL-RED INTERVALS.

IF THE CONTROLLER OPERATION IS IN INTERVAL 1 (GREEN/WALK) OF A PREEMPTION PHASE, THE CONTROLLER SHALL REMAIN IN THE GREEN INTERVAL OF THE PREEMPTION PHASE AND IMMEDIATELY TERMINATE THE WALK INDICATION AND PROCEED TO THE FLASHING DON'T WALK INTERVAL TIME. UPON CONCLUSION OF THE FLASHING DON'T WALK TIME, ANY CONFLICTING GREEN INDICATION WILL BE IMMEDIATELY TERMINATED AND PROCEED THROUGH THE YELLOW AND ALL-RED INTERVALS.

IF THE CONTROLLER OPERATION IS IN INTERVAL 2 (GREEN/FLASHING DON'T WALK) OF A PREEMPTION PHASE, THE CONTROLLER SHALL REMAIN IN THE GREEN INTERVAL OF THE PREEMPTION PHASE, EXCEPT THE FLASHING DON'T WALK SHALL TIME OUT. UPON CONCLUSION OF THE FLASHING DON'T WALK TIME, ANY CONFLICTING GREEN INDICATION WILL BE IMMEDIATELY TERMINATED AND PROCEED THROUGH THE YELLOW AND ALL-RED INTERVALS.

IF THE CONTROLLER OPERATION IS IN THE YELLOW, YELLOW ARROW OR RED CLEARANCE INTERVAL OF ANY PHASE, THE CONTROLLER SHALL TIME OUT THOSE INTERVALS NORMALLY BEFORE PROCEEDING TO THE PREEMPTION PHASE GREEN.

UPON TERMINATION OF THE PREEMPTION, THE SIGNAL SHALL RETURN TO NORMAL OPERATION.

IF EMERGENCY VEHICLE PREEMPTION OCCURS WHEN THE TRAFFIC SIGNALS ARE IN CONFLICTING/TIME CLOCK FLASHING OPERATION, THE NORMAL FLASHING OPERATION SEQUENCE, AS SHOWN IN THE PHASING DIAGRAM, SHALL CONTINUE.

WHEN THE PREEMPTION SIGNAL HAS BEEN ACCEPTED, THE FAIL-SAFE INDICATION SHALL BE DISPLAYED IMMEDIATELY ON THE PREEMPTED APPROACH IN THE FORM OF A FLASHING WHITE LIGHT. THE FAIL-SAFE INDICATION SHALL CONTINUE TO FLASH FOR THE DURATION OF THE PREEMPTION PHASE. NO FAIL-SAFE INDICATION SHALL BE GIVEN DURING FLASHING OPERATION.

COORDINATION NOTES:

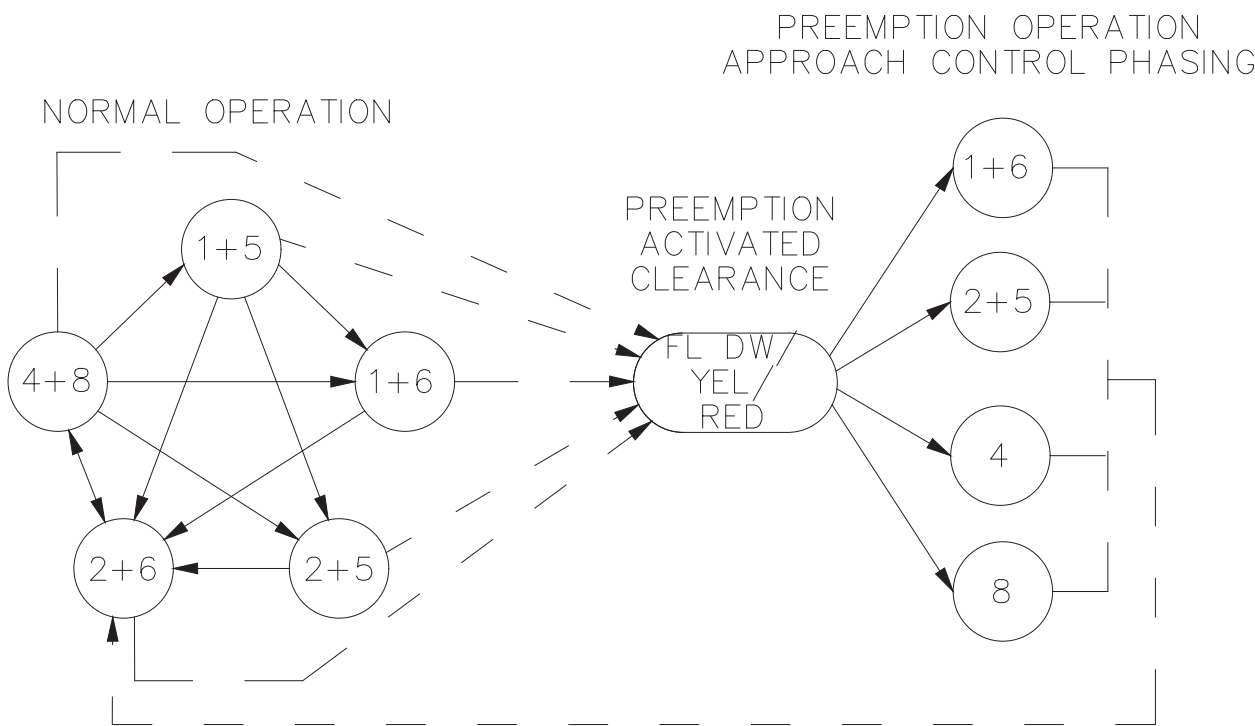
-INTERSECTIONS INTERCONNECTED VIA SPREAD SPECTRUM RADIO:
-N ATHERTON ST (SR 3014), HAWBAKER INDUSTRIAL DR & DOUGLAS DR (T-729)
-N ATHERTON ST (SR 3014) & COLONNADE BLVD (T-530)
-N ATHERTON ST (SR 3014) & COLONNADE WAY
-N ATHERTON ST (SR 3014) & PATRIOT LN
-N ATHERTON ST (SR 3014) & WOODYCREST AVE (T-691)
-N ATHERTON ST (SR 3014) & N ATHERTON PLACE ENTRANCE
-N ATHERTON ST (SR 3014), VAIRO BLVD (T-783) & MARTIN ST
-VAIRO BLVD (T-783), N ATHERTON PL & TJ MAXX DRIVEWAY
-VAIRO BLVD (T-783) & WADDLE RD (T-528)
-N ATHERTON ST (SR 3014) & AARON DR (T-330)
-N ATHERTON ST (SR 3014) & NORTH HILLS PL (T-794)
-N ATHERTON ST (SR 3014), BLUE COURSE DR (T-989) & CLINTON AVE (T-743)
-N ATHERTON ST (SR 3014) & W CHERRY LN (T-342)
-N ATHERTON ST (SR 3014) & HILLCREST AVE
-N ATHERTON ST (SR 3014) & W PARK AVE (SR 3007)
-N ATHERTON ST (SR 3014) & CURTIN RD
-N ATHERTON ST (SR 3014) & WHITE COURSE RD
-N ATHERTON ST (SR 3014) FOR BUS DEPT PED CROSSING

-TO PROVIDE A PROGRESSIVE MOVEMENT OF TRAFFIC ALONG SR 3014, CONTROLLER COORDINATED WITH ADJACENT SIGNALS:
-N ATHERTON ST (SR 3014) & COLONNADE BLVD (T-530)
-N ATHERTON ST (SR 3014) & COLONNADE WAY
-N ATHERTON ST (ST 3014) & PATRIOT LN
-N ATHERTON ST (SR 3014) & WOODYCREST AVE (T-691)
-N ATHERTON ST (SR 3014) & N ATHERTON PLACE ENTRANCE
-N ATHERTON ST (SR 3014), VAIRO BLVD (T-783) & MARTIN ST
-N ATHERTON ST (SR 3014) & AARON DR (T-330)
-N ATHERTON ST (SR 3014) & NORTH HILLS PL (T-794)
-N ATHERTON ST (SR 3014), BLUE COURSE DR (T-989) & CLINTON AVE (T-743)
-N ATHERTON ST (SR 3014) & W CHERRY LN (T-342)
-N ATHERTON ST (SR 3014) & HILLCREST AVE
-N ATHERTON ST (SR 3014) & W PARK AVE (SR 3007)
-N ATHERTON ST (SR 3014) & CURTIN RD
-N ATHERTON ST (SR 3014) & WHITE COURSE RD
-N ATHERTON ST (SR 3014) FOR BUS DEPT PED CROSSING

-MASTER RADIO AND MASTER CONTROLLER LOCATED AT:
-N ATHERTON ST (SR 3014), VAIRO BLVD (T-783) & MARTIN ST

- FAIL-SAFE INDICATION: NO FAIL-SAFE INDICATION SHALL BE GIVEN WHEN A TRANSIT SIGNAL PRIORITY CALL IS SERVED.

\$FILE\$



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
2-0	CENTRE	3014	N11	3 OF 3
PATTON TOWNSHIP				
PERMIT NO.:	21-53	SHEET	3 OF 3	
DATE ISSUED:	6/24/91	DATE REVISED:	3/19/21	

TRAFFIC SIGNAL PLAN

COUNTY : CENTRE

MUNICIPALITY : PATTON TOWNSHIP

INTERSECTION : NORTH ATHERTON ST (SR 3014),
HAWBAKER INDUSTRIAL DR AND DOUGLAS DR (T-729)

REVIEWED :
Douglas J. Erickson
MUNICIPAL OFFICIAL
DATE

Digitally signed by Douglas J. Erickson
DN: cn=Douglas J. Erickson, o=Patton Township, ou, email=derickson@tp.patton.pa.us, c=US
Date: 2021.05.10 13:51:40 -0400

RECOMMENDED :
Erik Brown
DISTRICT TRAFFIC ENGINEER
DATE

Digitally signed by Erik Brown, P.E.
Date: 2021.05.12 09:41:06 -04'00'

SCALE : 0 25 50 FEET