

25A @ Meijer

Phase	1	2	3	4	5	6	7	8
Direction	-	Nb/Sb	-	Eb	-	-	-	-
Min Grn.	-	25.0	-	10.0	-	-	-	-
Walk	-	-	-	-	-	-	-	-
Ped Clr.	-	-	-	-	-	-	-	-
Veh. Ext.	-	3.0	-	1.0	-	-	-	-
Max 1	-	50.0	-	30.0	-	-	-	-
Max 2	-	50.0	-	30.0	-	-	-	-
Yellow	-	4.3	-	3.0	-	-	-	-
All Red	-	2.0	-	2.0	-	-	-	-

Note: There are NO pedestrian phases.

25A @ KC

Phase	1	2	3	4	5	6	7	8
Direction	-	Nb/Sb	WbL	Eb	-	-	EbL	Wb
Min Grn.	-	30.0	7.0	7.0	-	-	7.0	7.0
Walk	-	12.0	-	-	-	-	-	-
Ped Clr.	-	12.0	-	-	-	-	-	-
Veh. Ext.	-	3.0	3.0	3.0	-	-	3.0	3.0
Max 1	-	50.0	25.0	30.0	-	-	25.0	30.0
Max 2	-	60.0	30.0	40.0	-	-	30.0	40.0
Yellow	-	4.5	4.0	4.0	-	-	4.0	4.0
All Red	-	1.5	1.0	1.5	-	-	1.0	1.5



Eb detection is radar.

Typical: Nb and Sb advanced radar detection zones are approximate to dilemma zones for 45mph - 150' to 330', measured from stop bar.



MODEL Q-2



1

2

MEIJER
DETECTION

ON



OFF

POWER SUPPLY

Click! 112
2 Contact Closures

Channel

1 2



Menu

1 2 3 4

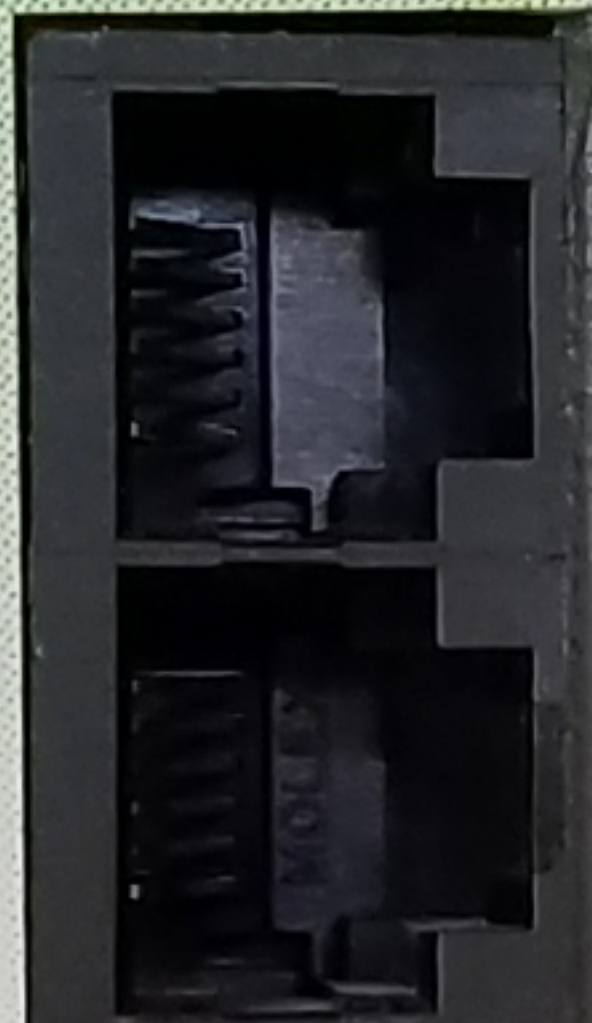


PWR PU TD RD

Mode Switch



RS-485
Bus 1



RS-485
Bus 2



WAVETRONIX™
www.wavetronix.com

EB-4

Click! 112
2 Contact Closures

Channel

1 2



Menu

1 2 3 4

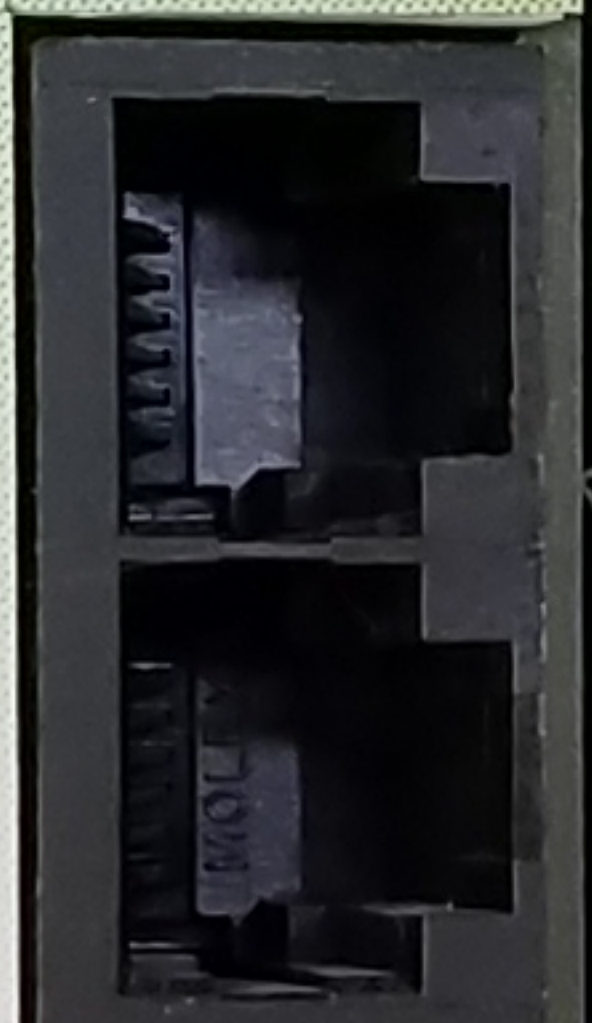


PWR PU TD RD

Mode Switch



RS-485
Bus 1



RS-485
Bus 2



WAVETRONIX™
www.wavetronix.com

NB-2

Click! 112
2 Contact Closures

Channel

1 2



Menu

1 2 3 4



PWR PU TD RD

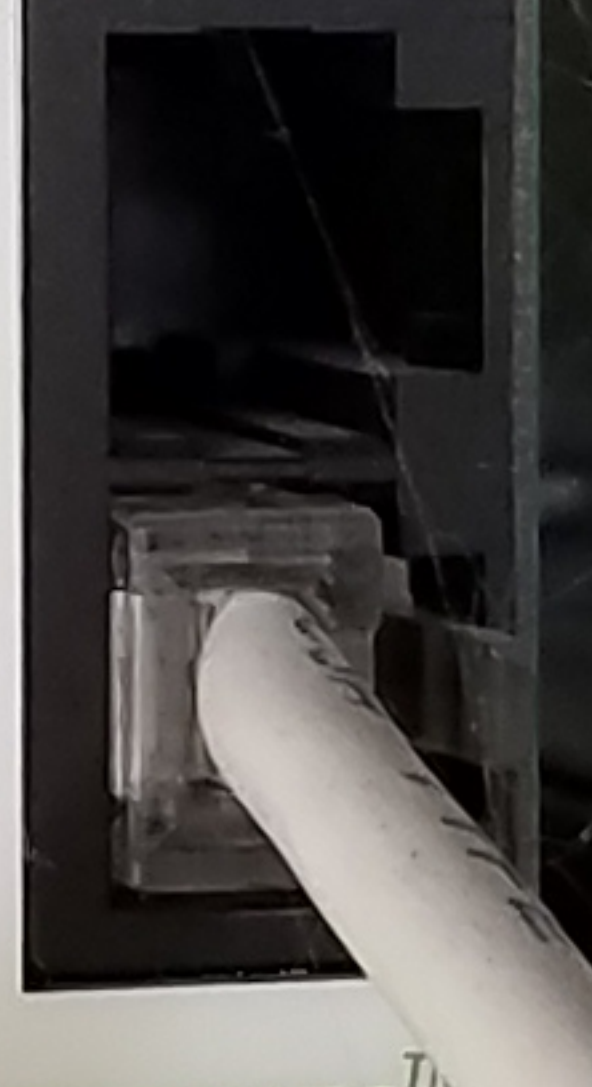
Mode Switch



RS-485
Bus 1



RS-485
Bus 2



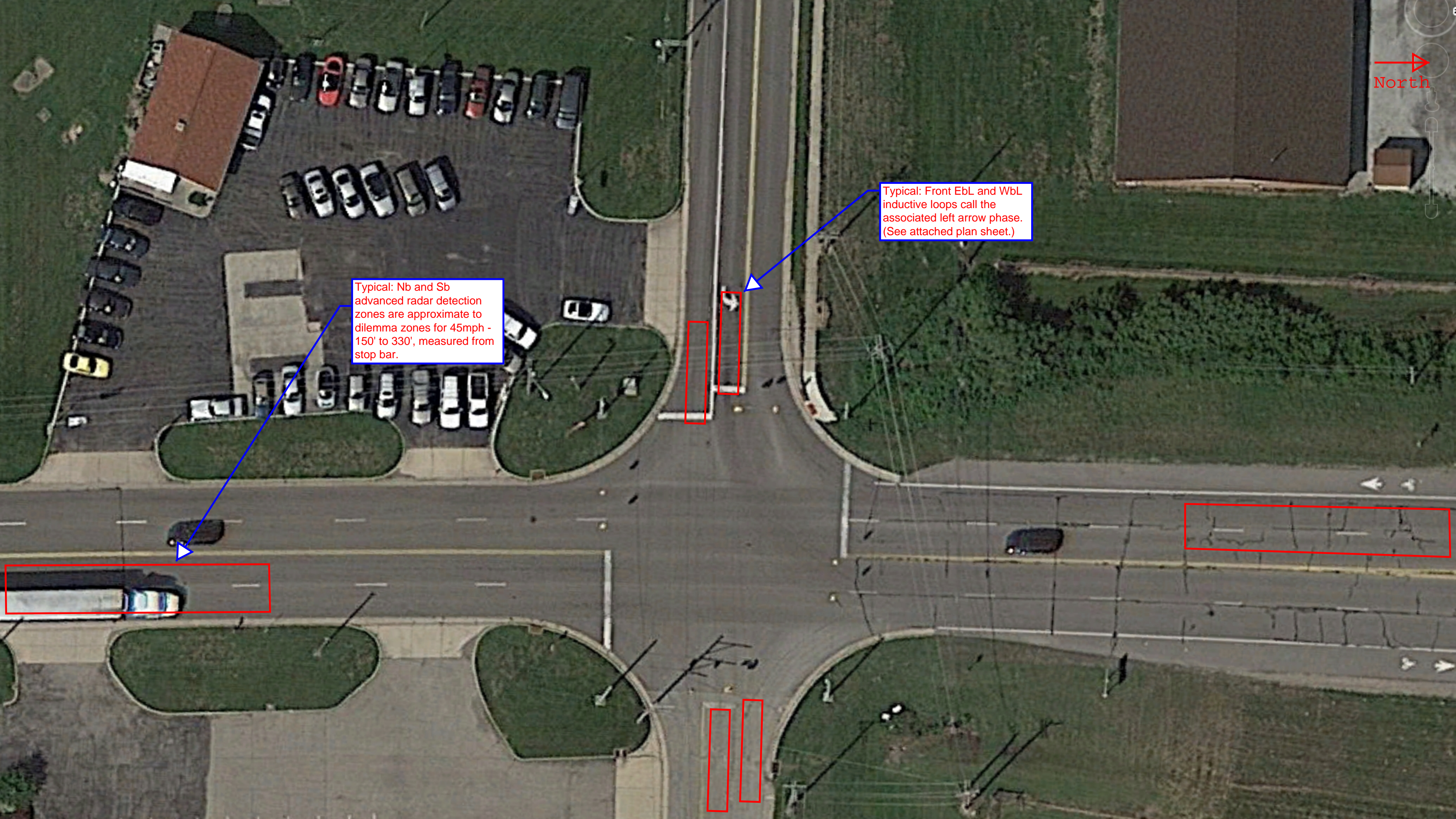
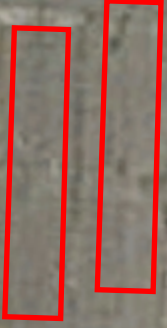
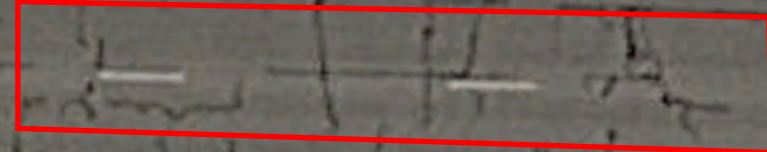
WAVETRONIX™
www.wavetronix.com

SB-2



Typical: Front EbL and WbL inductive loops call the associated left arrow phase. (See attached plan sheet.)

Typical: Nb and Sb advanced radar detection zones are approximate to dilemma zones for 45mph - 150' to 330', measured from stop bar.



REVISIONS	DATE	COMMENTS
1	10 SEPT 92	APPENDUM #1

CITY OF TIPP CITY
KESSLER-COWELLSVILLE
TRAFFIC SIGNAL PLAN

WORL & Associates, Inc.
Consulting Engineers
10675 Washington Blvd.
CSD 6168

DRAWN BY: JMT
CHECKED BY:
JOB No: 92106
DATE: SEPT. 1992
SHEET NUMBER

QUANTITY	UNIT	ITEM	DESCRIPTION
6	EA.	632	VEHICULAR SIGNAL HEAD, 3-SECTION, 12" LENS, ONE WAY
2	EA.	632	VEHICULAR SIGNAL HEAD, 5-SECTION, 12" LENS, ONE WAY
2	EA.	632	PEDESTRIAN SIGNAL HEAD, TYPE D-2
2	EA.	632	PEDESTRIAN PUSHBUTTON
6	EA.	632	LOOP DETECTOR UNIT, AS PER PLAN
680	L.F.	632	LOOP DETECTOR PAVEMENT CUTTING
9.6	C.Y.	632	CONCRETE FOR ANCHOR BASE FOUNDATIONS
4	EA.	632	STRAIN POLE, TYPE TC-81.10, DESIGN 5, 30 FEET
4	EA.	632	CABLE SUPPORT ASSEMBLY
353	L.F.	632	MESSENGER WIRE, 7 STRAND 3/8" DIA. WITH ACCESSORIES
333	L.F.	632	SIGNAL CABLE, 7 CONDUCTOR NO. 14 AWG
545	L.F.	632	SIGNAL CABLE, 5 CONDUCTOR NO. 14 AWG
1558	L.F.	632	LOOP DETECTOR WIRE, TYPE "E"
1020	L.F.	632	LOOP DETECTOR LEAD-IN CABLE
60	L.F.	632	POWER CABLE, 2-CONDUCTOR NO. 8 AWG
8	EA.	632	COVERING OF VEHICULAR SIGNAL HEAD
1	EA.	633	CONTROLLER, AS PER PLAN
0.99	C.Y.	633	CONCRETE FOR CABINET FOUNDATION
4	EA.	625	PULL BOX, 713.081, 10" DIA.
1	EA.	625	PULL BOX, 713.081, 16"x25"
5	EA.	625	GROUND ROD
43	L.F.	625	TRENCH
33	L.F.	625	CONDUIT, 713.04, 2"
10	L.F.	625	CONDUIT, 713.04, 3"
15	S.F.	630	SIGNS, FLAT SHEET, TYPE "G"
2	EA.	630	SIGN HANGER ASSEMBLY, SPAN WIRE

GENERAL NOTES

POWER SERVICES AS PER PLAN:

ELECTRIC POWER SHALL BE OBTAINED FROM THE CITY OF TIPP CITY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR A SERVICE DROP TO THE TOP OF THE SIGNAL POLE AS NOTED ON THE PLANS.

PAYMENT FOR THIS ITEM OF WORK SHALL BE INCIDENTAL TO PAY ITEM 632 POWER CABLE, 2-CONDUCTOR, NO. 8 AWG AND SHALL INCLUDE PROVIDING A CLEVIS WITH ONE INSULATOR AT THE TOP OF THE POLE NOTED ON THE PLANS.

ITEM 633 CONTROLLER, AS PER PLAN:

THIS ITEM OF WORK SHALL BE AS PER 633.06 AND 633.08 EXCEPT AS HEREIN NOTED.

THE CONTROLLER SHALL BE A TRANSYT MODEL 1880 EL AS MANUFACTURED BY THE TRANSYT CORPORATION OR A GENESIS MODEL EPAC 300 AS MANUFACTURED BY THE AUTOMATIC SIGNAL/EAGLE SIGNAL CONTROLS CO..

THE BACK PANEL SHALL BE A 12-POSITION PANEL AND SHALL BE EQUIPPED WITH THE NECESSARY ACCESSORIES TO PROVIDE THE PHASING AS SHOWN ON THE SIGNAL PLAN SHEETS.

THE CONTROLLERS SHALL BE PROVIDED WITH TIME BASE COORDINATION CAPABILITIES.

THE CONTROLLER AS PROVIDED SHALL HAVE THE CAPABILITIES TO MONITOR AND STORE DATA INCLUDING BUT NOT LIMITED TO TRAFFIC VOLUMES PER EXISTING LOOP DETECTOR, SPEED DATA AND GREEN UTILIZATION.

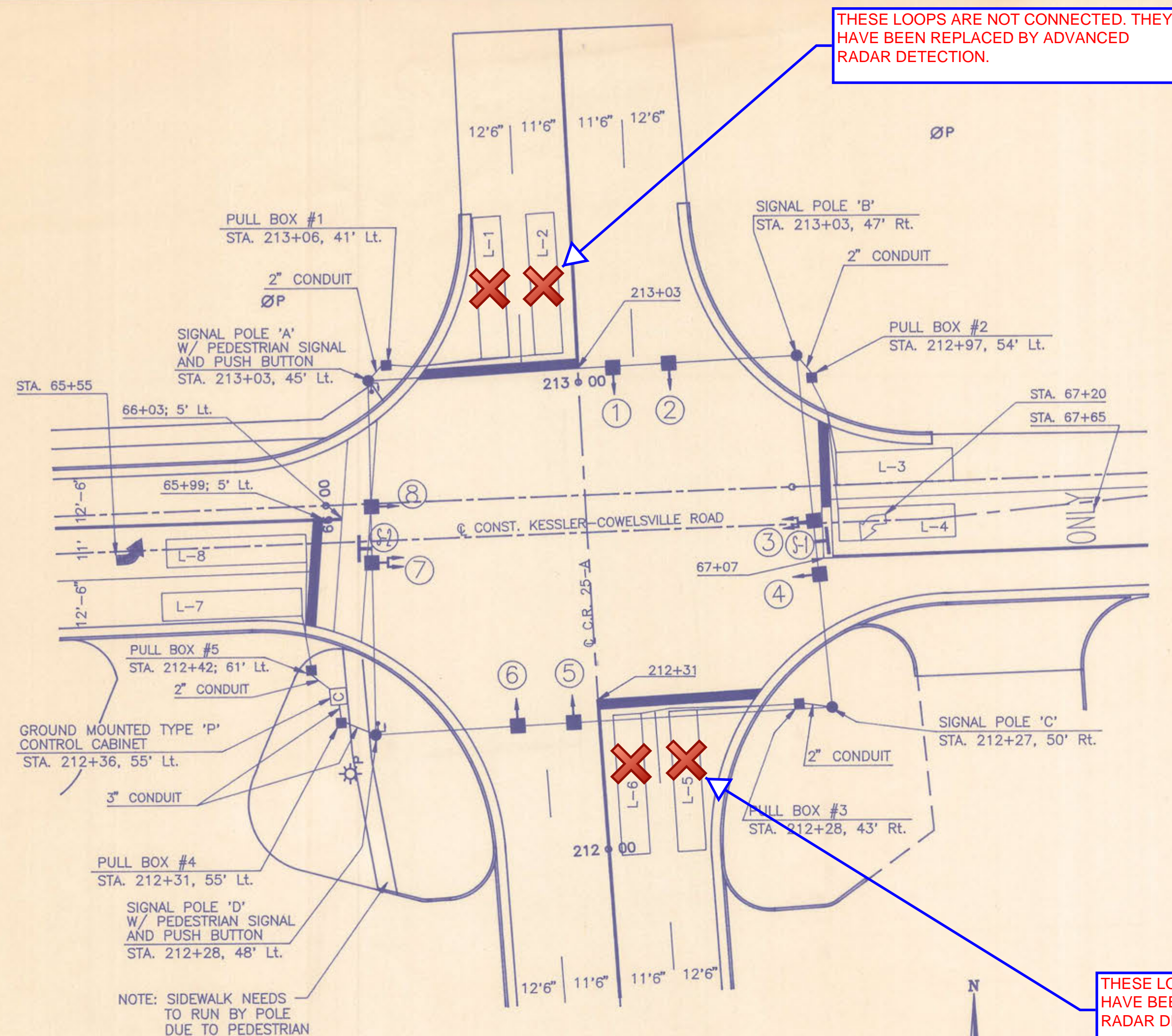
ALL PROGRAMMING DATA SHALL BE CAPABLE OF BEING ENTERED BY THE KEYBOARD OR BY A LAPTOP COMPUTER. A COPY OF THE SOFTWARE REQUIRED TO INTERFACE WITH THE CONTROLLER SHALL BE PROVIDED TO THE CITY OF TIPP CITY AS PART OF THIS ITEM OF WORK.

ITEM 632 LOOP DETECTOR UNIT, AS PER PLAN:

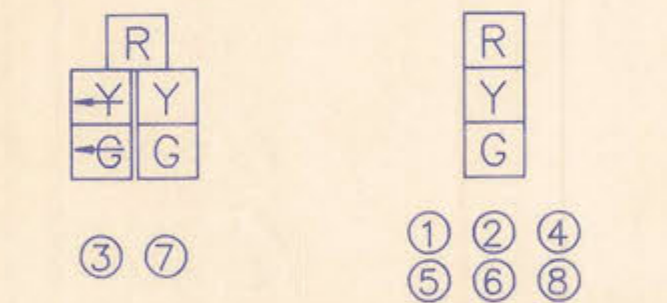
ALL LOOP DETECTOR UNITS PROVIDED SHALL BE DETECTOR SYSTEM, MODEL 913, SINGLE CHANNEL UNITS. THESE UNITS SHALL HAVE EXTEND AND DELAY FEATURES.

NOTES:

- STRAIN POLES:
 - FOUNDATIONS SHALL BE SET SQUARE TO THE CENTER LINE OF COUNTY ROAD 25-A.
 - HAND HOLES ON ALL POLES SHALL BE ON THE NORTH SIDE OF THE POLES.
 - ORIENTATION OF CABLE ENTRANCES AT TOP OF EACH POLE SHALL LOCATED FROM THE HAND HOLE:
 - POLE 'A' 135° CLOCKWISE
 - POLE 'B' 225° CLOCKWISE
 - POLE 'C' 315° CLOCKWISE
 - POLE 'D' 45° CLOCKWISE
 - POLE 'D' SIGNAL CABLE ENTRANCE SHALL BE A 3" BLIND HALF COUPLING.
 - ORIENTATION OF BLIND HALF COUPLINGS OF PEDESTRIAN SIGNALS SHALL BE LOCATED FROM THE HAND HOLE:
 - POLE 'A' 90° CLOCKWISE
 - POLE 'D' 270° CLOCKWISE
- FINAL LOCATION OF LOOP DETECTORS, PULL BOXES AND SIGNAL POLES SHALL BE APPROVED BY THE ENGINEER BEFORE INSTALLATION.
- CONDUIT ELL IN POLE 'D' FOUNDATION SHALL BE 3" DIAMETER.
- CONTROLLER CABINET DOOR SHALL FACE THE EAST.



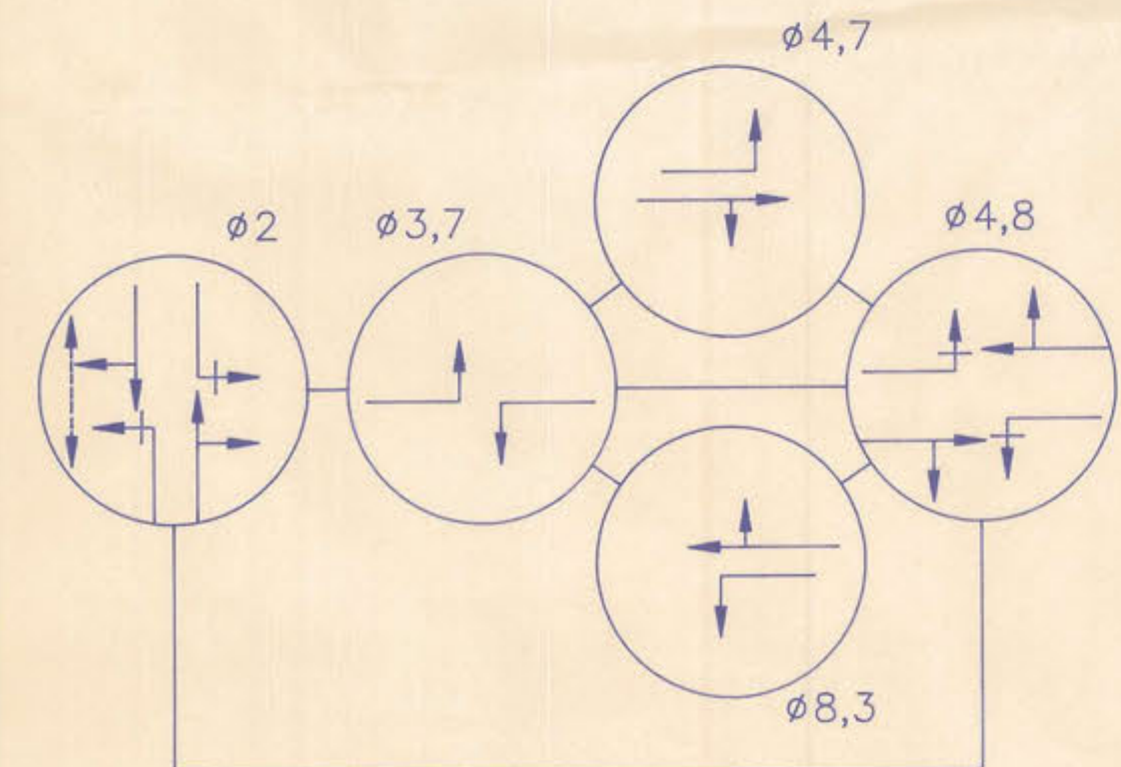
**INTERSECTION AT 25-A AND
KESSLER-COWELLSVILLE**



SIGNAL INDICATIONS
(ALL SIGNALS ARE 12" LENS)



OVERHEAD SIGNS



SIGNAL PHASING

PHASE INTERVAL	VEH. SIGNALS								PED. SIG.	
	1	2	3	4	5	6	7	8	1	2
ø2 VEH GRN/WALK	G	G	R	R	G	G	R	R	W	W
PED CLEAR	Y	G	R	R	G	G	R	R	FDW	FDW
VEH. CLEAR	Y	Y	R	R	Y	Y	R	R	DW	DW
ALL RED	R	R	R	R	R	R	R	R	DW	DW
ø3,7 VEH GREEN	R	R	R _G	R	R	R _G	R	R	DW	DW
VEH CLEAR	R	R	R _Y	R	R	R _Y	R	R	DW	DW
ALL RED	R	R	R	R	R	R	R	R	DW	DW
ø4,8 VEH GREEN	R	R	R	R	R	R	R	R	DW	DW
VEH CLEAR	R	R	Y	Y	R	Y	Y	R	DW	DW
ALL RED	R	R	R	R	R	R	R	R	DW	DW
ø4,7 VEH GRN	R	R	R _G	R	R	R _G	R	R	DW	DW
VEH CLEAR	R	R	R _Y	Y	R	R _Y	Y	R	DW	DW
ALL RED	R	R	R	R	R	R	R	R	DW	DW
ø3,8 VEH GREEN	R	R	R	R	R	R _G	R	R	DW	DW
VEH CLEAR	R	R	R	R	R	R _Y	Y	R	DW	DW
ALL RED	R	R	R	R	R	R	R	R	DW	DW
FLASH	Y	Y	R	R	Y	Y	R	R	-	-

PHASE	2	3	4	7	8
MIN. GRN.	12	7	7	7	7
VEH EXT	4.0	3.0	4.0	3.0	3.0
MAX 1	50	25	30	25	30
MAX 2	60	30	40	30	40
WALK	12	---	---	---	---
PED CLEAR	12	---	---	---	---
YELLOW	4.5	4.0	4.0	4.0	4.0
ALL RED	1.5	1.0	1.5	1.0	1.5
RECALL	SOFT	---	---	---	---

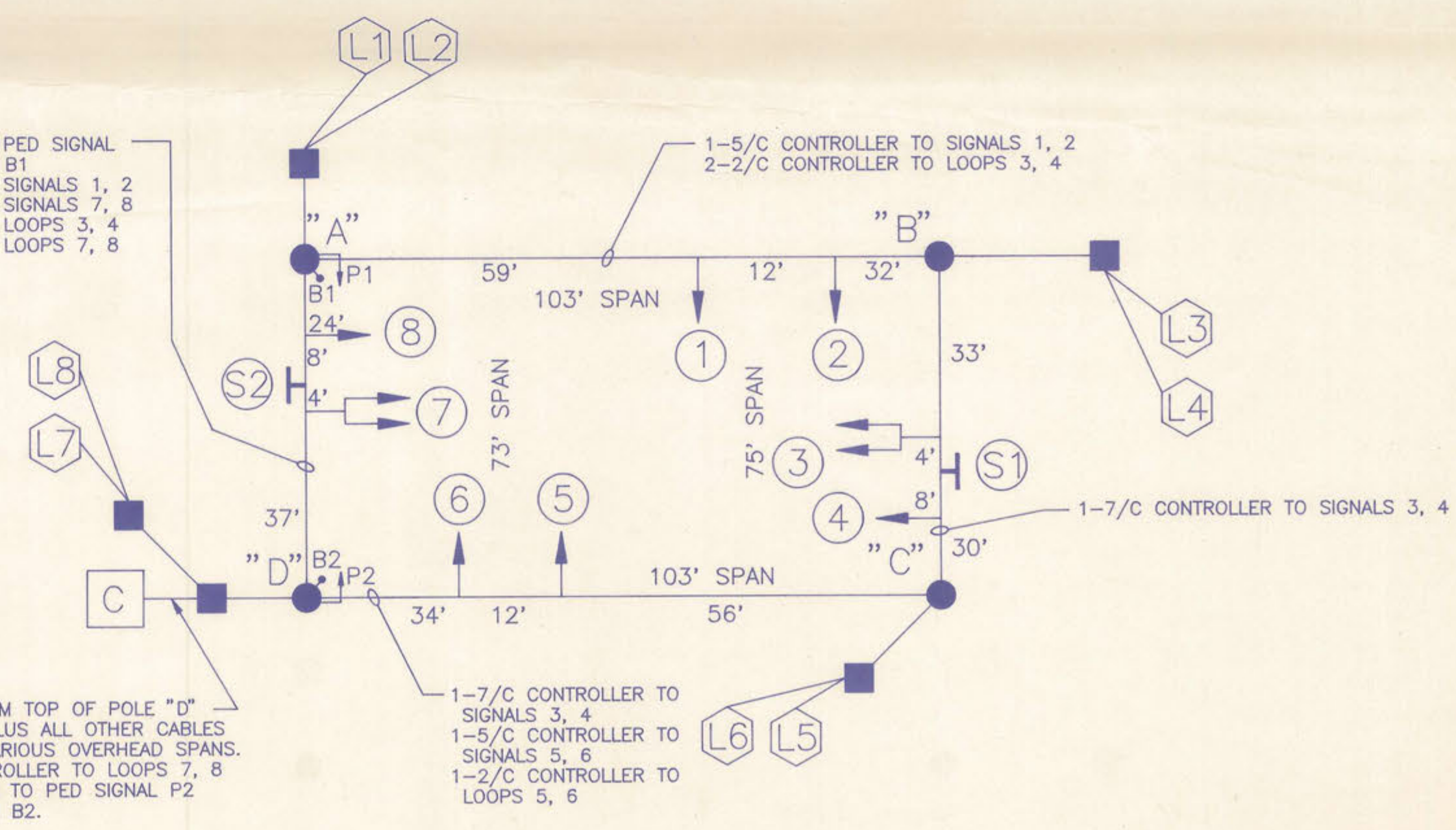
SEE UPDATED TIMING CHART.

#1	10" DIA.
#2	10" DIA.
#3	10" DIA.
#4	16" x 25"
#5	10" DIA.

LOOP	SIZE	MODE
L-1	6'x30'	PRESENCE
L-2	6'x30'	
L-3	7'x25'	
L-4	6'x25'	
L-5	6'x30'	
L-6	6'x30'	
L-7	6'x30'	
L-8	6'x30'	PRESENCE

- NOTE:
- LOOPS L-1 AND L-2 SHALL BE CONNECTED IN SERIES.
 - LOOPS L-5 AND L-6 SHALL BE CONNECTED IN SERIES.
 - LOOPS ARE TO BE LOCATED 12" BEHIND STOP LINES UNLESS OTHERWISE STATIONED.
 - ALL LOOPS SHALL BE INSTALLED IN THE FINAL ROADWAY SURFACE.

- 1-5/C CONTROLLER TO PED SIGNAL P1 AND PUSH BUTTON B1
- 1-5/C CONTROLLER TO SIGNALS 1, 2
- 1-7/C CONTROLLER TO SIGNALS 7, 8
- 2-2/C CONTROLLER TO LOOPS 3, 4
- 1-2/C CONTROLLER TO LOOPS 7, 8



SPAN WIRE AND SIGNAL CABLE DETAIL