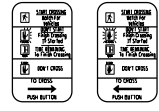
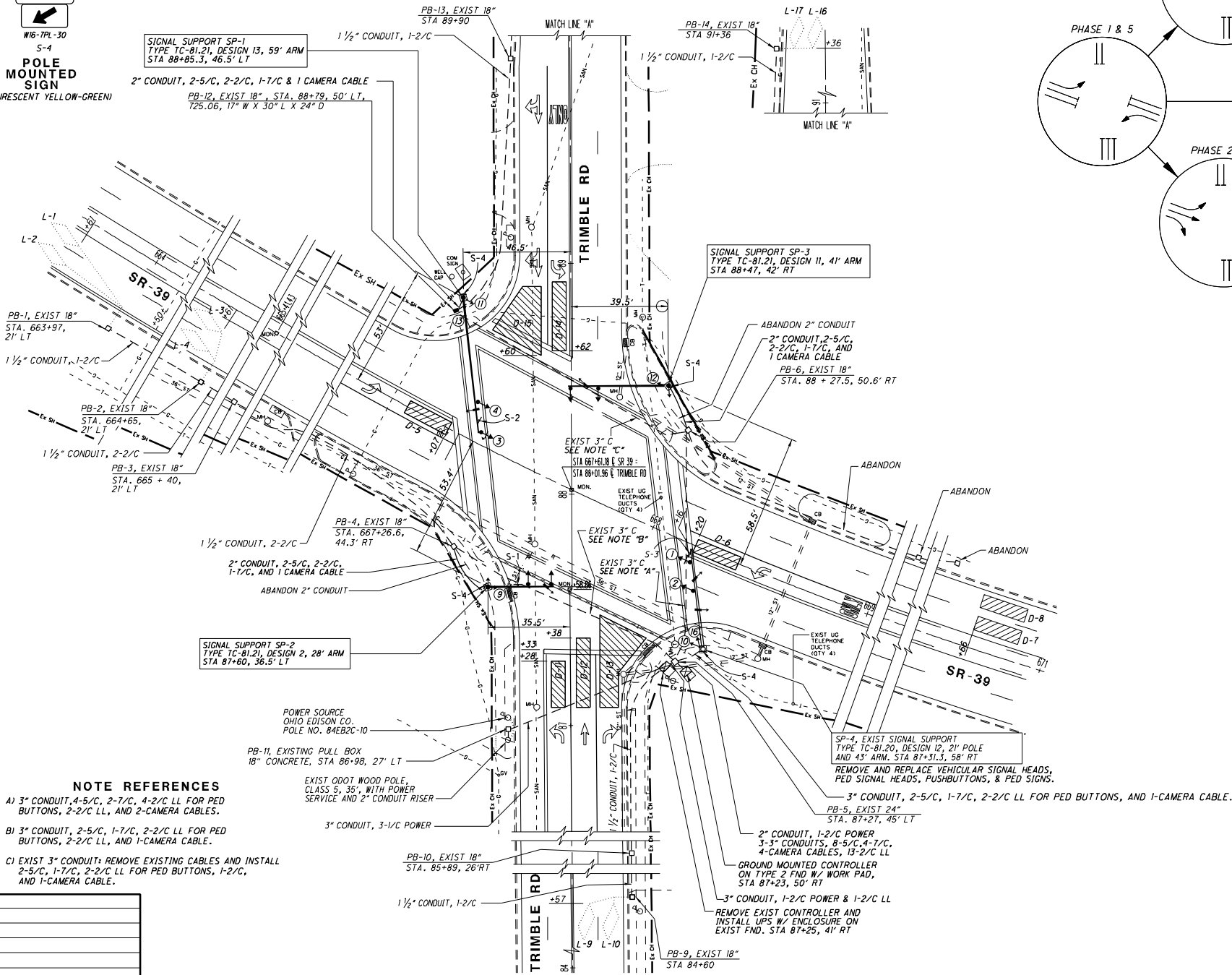
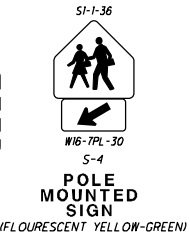
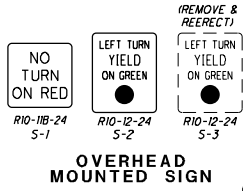


BLACK POLYCARBONATE HEADS
W/ 12" LED LAMPS & TUNNEL VISORS



TYPICAL PEDESTRIAN SIGNALS



NOTE REFERENCES

A) 3" CONDUIT, 4-5/C, 2-7/C, 4-2/C LL FOR PED BUTTONS, 2-2/C LL, AND 2-CAMERA CABLES.

B) 3" CONDUIT, 2-5/C, 1-7/C, 2-2/C LL FOR PED BUTTONS, 2-2/C LL, AND 1-CAMERA CABLE.

C) EXIST 3" CONDUIT: REMOVE EXISTING CABLES AND INSTALL 2-5/C, 1-7/C, 2-2/C LL FOR PED BUTTONS, 1-2/C, AND 1-CAMERA CABLE.

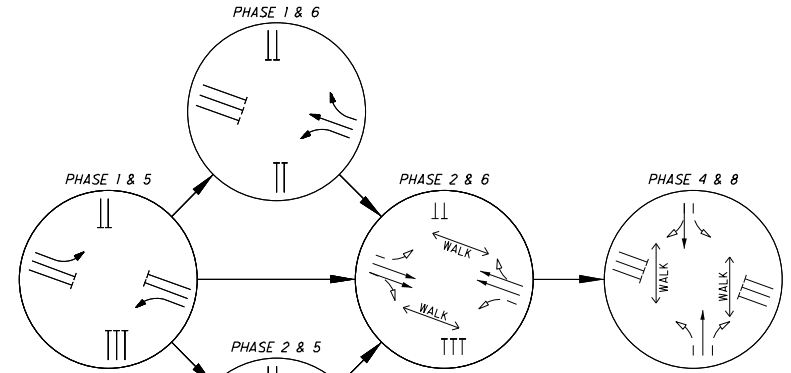
ESTIMATED QUANTITIES

ITEM	EXT.	QTY.	UNIT	DESCRIPTION
625	25400	7	FT	CONDUIT, 2", 725.04
625	25402	49	FT	CONDUIT, 2", 725.05
625	25502	21	FT	CONDUIT, 3", 725.05
625	29001	56	FT	TRENCH, AS PER PLAN
625	31600	1	EACH	PULL BOX, MISC.: REMOVE AND REPLACE, 725.06, AS PER PLAN
625	32001	4	EACH	GROUND ROD, AS PER PLAN
632	05005	6	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN
632	05085	2	EACH	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN
632	20731	8	EACH	PEDESTRIAN SIGNAL HEAD, (LED), (COUNTDOWN), TYPE D2, AS PER PLAN
632	26001	8	EACH	PEDESTRIAN PUSHBUTTON, AS PER PLAN
632	27009	7	EACH	LOOP DETECTOR UNIT, DELAY AND EXTENSION TYPE, AS PER PLAN
632	27201	5	EACH	LOOP DETECTOR TIE IN, AS PER PLAN
632	40500	1468	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
632	40700	909	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
632	64011	3	EACH	SIGNAL SUPPORT FOUNDATION, AS PER PLAN
632	65300	3416	FT	LOOP DETECTOR LEAD-IN CABLE, 2 CONDUCTOR, NO. 14 AWG
632	68200	38	FT	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG
632	80203	1	EACH	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 2, AS PER PLAN
632	80503	1	EACH	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 11, AS PER PLAN
632	80621	1	EACH	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 13, AS PER PLAN
632	80700	1	EACH	SIGNAL SUPPORT, MISC.: ADJUST RISE ON SIGNAL SUPPORT ARM
632	80700	1	EACH	SIGNAL SUPPORT, MISC.: MECHANICAL DAMPENING DEVICE
633	01581	1	EACH	CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS1, AS PER PLAN
633	67101	1	EACH	CABINET FOUNDATION, AS PER PLAN
633	67200	1	EACH	CONTROLLER WORK PAD
633	75001	1	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN, WITH ENCLOSURE
816	30001	1	EACH	VIDEO DETECTION SYSTEM, AS PER PLAN

DETECTOR CHART

LOOP OR DET. ZONE	SIZE (FT.)	NO. TURNS	MODE	DELAY (SEC.)	CONNECT DETECTOR UNIT NO.	ASSOCIATED CONTROLLER PHASE	COMMENTS
L-1	SEE DETAIL	4	PULSE		1	2	ADD LOOP
L-2	SEE DETAIL	4	PULSE		1	2	ADD LOOP
L-3	SEE DETAIL	4	PULSE		2	2	ADD LOOP
L-4	SEE DETAIL	4	PULSE		2	2	ADD LOOP
D-5	6X20	NA	PRESENCE	5*		5	DETECTION ZONE
D-6	6X20	NA	PRESENCE	5*		1	DETECTION ZONE
D-7	6X8	NA	PRESENCE			6	DETECTION ZONE
D-8	6X8	NA	PRESENCE			6	DETECTION ZONE
L-9	SEE DETAIL	4	PULSE	3*	4	8	ADD LOOP
L-10	SEE DETAIL	4	PULSE	3*	4	8	ADD LOOP
D-11	6X20	NA	PRESENCE	3*		8	DETECTION ZONE
D-12	6X30	NA	PRESENCE	3*		8	DETECTION ZONE
D-13	8X40X22	NA	PRESENCE	10*		8	DETECTION ZONE
D-14	6X30	NA	PRESENCE	10*		4	DETECTION ZONE
D-15	8X30X23	NA	PRESENCE	10*		4	DETECTION ZONE
L-16	SEE DETAIL	4	PULSE	3*	5	4	ADD LOOP
L-17	SEE DETAIL	4	PULSE	3*	5	4	ADD LOOP

* INHIBIT DELAY DURING ASSOCIATED PHASE GREEN INTERVAL



PHASING DIAGRAM

PHASING IDENTIFICATION

PHASE 1	PHASE 2	PHASE 3	PHASE 4
future use	future use	future use	future use
PHASE 5	PHASE 6	PHASE 7	PHASE 8

INSTALL JUMPERS ON BACKPANEL AS FOLLOWS:

PH 2 ON TO PH 1 OMIT
PH 6 ON TO PH 5 OMIT
PH 4 ON TO PH 3 OMIT
PH 8 ON TO PH 7 OMIT

THESE JUMPERS SHALL BE INSTALLED ON THE FRONT OF THE PANEL AND SHALL BE EASILY REMOVED IF NEEDED.

SIGNAL TIMING CHART

INTERVAL	PHASE							
	1	2	3	4	5	6	7	8
	SR 39 NB LT	SR 39 EB	FUTURE TRIMBLE USE	SR 39 SB	SR 39 EB LT	SR 39 NB	FUTURE TRIMBLE USE	SR 39 NB
MINIMUM GREEN	6	24		10	6	24		10
PASSAGE	4	4		4	4	4		4
YELLOW	3.0	5.0		3.6	3.0	3.6		3.6
ALL RED	3.0	2.4		3.0	3.0	2.4		3.0
MAXIMUM GREEN	20	40		30	20	40		30
WALK		7		7	7	7		7
PED CLEAR		23		24	23	24		24
PED RECALL	NO	NO		NO	NO	NO		NO
VEH. MIN. RECALL	NO	YES		NO	NO	YES		NO
DET. NON-LOCK	YES	NO		YES	YES	NO		YES
INITIALIZATION	RED	GRN		RED	RED	GRN		RED



FLASHER OPERATION
YELLOW TO SR 39
RED TO TRIMBLE RD
INSTALLATION DATE 8/2012
FILE NO. 819
OSIS NO. 565

DATE	REVISIONS	DATE INSTALLED	BUREAU OF TRAFFIC
9/2012	SIGNAL RECONSTRUCTED PROJECT 565(11), PID 86753	2012	OHIO DEPARTMENT OF TRANSPORTATION
			SIGNAL INSTALLATION PLAN
			REDRAWN
			SR 39 AND TRIMBLE RD
			DISTRICT 3 COUNTY RICHLAND TOWN
			APPROVED DATE 9/7/12
			APPROVED DATE 9/7/12
			APPROVED DATE 9/7/12
			ENGINEER OF TRAFFIC