

SUMMARY OF QUANTITIES		CONSTRUCTION CODE		0004	0021	0021
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% TCSP 20% LOCAL ROADWAY	80% TCSP 20% LOCAL LIGHTING	80% TCSP 20% LOCAL SIGNALS
* 20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	10	10		
* 20600110	GRANULAR EMBANKMENT, SPECIAL	TON	20	20		
* 21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	30	30		
* 25200100	SODDING	SQ YD	80	80		
* 25200200	SUPPLEMENTAL WATERING	UNIT	5	5		
28000510	INLET FILTERS	EACH	12	12		
* 31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	158	158		
* 35101400	AGGREGATE BASE COURSE, TYPE B	TON	102	102		
* 35300300	PORTLAND CEMENT CONCRETE BASE COURSE 8"	SQ YD	103	103		
* 40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	25	25		
* 40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	846	846		
* 40600300	AGGREGATE (PRIME COAT)	TON	17	17		
* 40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGWAYS	TON	1	1		
* 40600839	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-9.5FG, N70	TON	85	85		
* 40600990	TEMPORARY RAMP	SQ YD	274	274		
* 40603237	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.OFG, N70	TON	502	502		
* 40603540	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	415	415		
* 42400300	PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	SQ FT	2800	2800		
* 42400800	DETECTABLE WARNINGS	SQ FT	147	147		
* 44000100	PAVEMENT REMOVAL	SQ YD	190	190		
* 44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	402	402		
* 44000164	HOT-MIX ASPHALT SURFACE REMOVAL, 3 3/4"	SQ YD	3826	3826		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	178	178		
44000600	SIDEWALK REMOVAL	SQ FT	2115	2115		
* 44200990	CLASS B PATCHES, TYPE I, 12 INCH	SQ YD	25	25		
* 44200994	CLASS B PATCHES, TYPE II, 12 INCH	SQ YD	100	100		
* 44200998	CLASS B PATCHES, TYPE III, 12 INCH	SQ YD	25	25		
* 44201000	CLASS B PATCHES, TYPE IV, 12 INCH	SQ YD	25	25		
* 54248510	CONCRETE COLLAR	CU YD	2	2		
* 550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	16	16		
* 550A0070	STORM SEWERS, CLASS A, TYPE 1 15"	FOOT	5	5		
* 55100500	STORM SEWER REMOVAL 12"	FOOT	3	3		
* 55100700	STORM SEWER REMOVAL 15"	FOOT	7	7		
* 59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	6	6		
* 60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	2	2		
* 60255500	MANHOLES TO BE ADJUSTED	EACH	1	1		

\* SEE SPECIAL PROVISIONS

SUMMARY OF QUANTITIES		CONSTRUCTION CODE		0004	0021	0021
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% TCSP 20% LOCAL ROADWAY	80% TCSP 20% LOCAL LIGHTING	80% TCSP 20% LOCAL SIGNALS
* 60266600	VALVE BOXES TO BE ADJUSTED	EACH	2	2		
* 60500060	REMOVING INLETS	EACH	2	2		
67100100	MOBILIZATION	L SUM	1	1		
70300570	PAVEMENT MARKING TAPE, TYPE III 24"	FOOT	128	128		
* 70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	256	256		
* 72000100	SIGN PANEL - TYPE 1	SQ FT	43	43		
* 72000200	SIGN PANEL - TYPE 2	SQ FT	50	50		
△ 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	125	125		
△ 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	723	723		
△ 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	121	121		
△ 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	997	997		
△ 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	128	128		
△ * 78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	2	2		
△ * 81028320	UNDERGROUND CONDUIT, PVC, 1" DIA.	FOOT	80			80
△ * 81028330	UNDERGROUND CONDUIT, PVC, 1 1/4" DIA.	FOOT	2			2
△ * 81028340	UNDERGROUND CONDUIT, PVC, 1 1/2" DIA.	FOOT	111			111
△ * 81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	222		106	116
△ * 81028360	UNDERGROUND CONDUIT, PVC, 2 1/2" DIA.	FOOT	95			95
△ * 81028390	UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	2			2
△ * 81028740	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/2" DIA.	FOOT	350			350
△ * 81028750	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.	FOOT	1522		1432	90
△ * 81028770	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 3" DIA.	FOOT	220			220
△ * 81028790	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 4" DIA.	FOOT	85			85
△ 81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	3			3
△ 81400720	DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	1			1
△ * 81500100	GULFBOX JUNCTION	EACH	7		7	
△ * 81500120	GULFBOX JUNCTION, COMPOSITE CONCRETE	EACH	7			7
△ * 81702101	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 14	FOOT	320		320	
△ * 81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	5050		5050	
△ * 83000400	LIGHT POLE, ALUMINUM, 30 FT. M.H., 10 FT. DAVIT ARM	EACH	5		5	
△ * 84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	4		4	
△ * 84200804	REMOVAL OF POLE FOUNDATION	EACH	4		4	
△ * 85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1			1
△ * 86200200	UNINTERRUPTABLE POWER SUPPLY, STANDARD	EACH	1			1
△ * 87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1750			1750
△ * 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	150			150

\* SEE SPECIAL PROVISIONS

△ SPECIALTY ITEMS

FILE NAME = p:\U0070070\_Urbana - Goodwin Green TCSP\Bidding\Addendum 1\add 1 summary.dgn  
 PLOT DATE = 7/11/2013 9:09:25 AM

DESIGNED - J.A.J. REVISION 1 07/10/2013  
 DRAWN - J.A.J. REVISION -  
 CHECKED - S.M.W. REVISION -  
 DATE - 04/2013 REVISION -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE : NONE SHEET NO. 4 OF 31 SHEETS STA. TO STA.

F.A.U. RTE. 7175	SECTION 12-00518-00-TL	COUNTY CHAMPAIGN	TOTAL SHEETS 31	SHEET NO. 4
GOODWIN AVENUE		CONTRACT NO. 91483		
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		



SUMMARY OF QUANTITIES		CONSTRUCTION CODE		0004	0021	0021
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% TCSP 20% LOCAL ROADWAY	80% TCSP 20% LOCAL LIGHTING	80% TCSP 20% LOCAL SIGNALS
△ *	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	990		990
△ *	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2150		2150
△ *	87301515	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 3 PAIR	FOOT	1660		1660
△ *	87301795	ELECTRIC CABLE IN CONDUIT, SERVICE NO. 3 1C	FOOT	785		785
△ *	87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	660		660
△ *	87500600	TRAFFIC SIGNAL POST, 10 FT.	EACH	3		3
△ □ *	87501200	TRAFFIC SIGNAL POST, 16 FT.	EACH	2		2
△ *	87600200	PEDESTRIAN PUSH-BUTTON POST, TYPE II	EACH	4		4
△ *	87702960	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT.	EACH	4		4
△ *	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	15		15
△ *	87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4		4
△ *	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60		60
△ *	88040070	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2		2
△ *	88040090	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6		6
△ *	88040150	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2		2
△ *	88040160	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4		4
△ *	88040260	SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 1-3-SECTION, 1-5-SECTION, BRACKET MOUNTED	EACH	2		2
△ *	88102825	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8		8
△ *	88200100	TRAFFIC SIGNAL BACKPLATE	EACH	10		10
△ *	88600100	DETECTOR LOOP, TYPE I	FOOT	705		705
△ *	88700200	LIGHT DETECTOR	EACH	2		2
△ *	88700300	LIGHT DETECTOR AMPLIFIER	EACH	1		1
△ *	89502380	REMOVE EXISTING HANDHOLE	EACH	6		6
△ *	89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	10		10
*	K1003680	MULCH	SQ YD	340	340	
△ *	X0322748	BICYCLE LANE MARKING	EACH	5	5	
*	X6020084	MANHOLES, SPECIAL	EACH	1	1	
*	X6024240	INLETS, SPECIAL	EACH	1	1	
*	X6025600	MANHOLES TO BE ADJUSTED (SPECIAL)	EACH	15	15	
*	X6026624	VALVE BOXES TO BE ADJUSTED (SPECIAL)	EACH	7	7	
*	X6064200	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)	FOOT	195	195	
△ *	X6300230	STEEL POSTS	EACH	1	1	
*	X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1	1	
△ *	X8050095	SERVICE INSTALLATION (SPECIAL)	EACH	1		1
△ *	X8130110	JUNCTION BOX (SPECIAL)	EACH	4	4	
△ *	X8130125	REMOVE EXISTING JUNCTION BOX	EACH	3	1	2

\* SEE SPECIAL PROVISIONS

SUMMARY OF QUANTITIES		CONSTRUCTION CODE		0004	0021	0021
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% TCSP 20% LOCAL ROADWAY	80% TCSP 20% LOCAL LIGHTING	80% TCSP 20% LOCAL SIGNALS
△ *	X8130130	JUNCTION BOX TO BE ADJUSTED	EACH	1	1	
△ *	X8300001	LIGHT POLE, SPECIAL	EACH	1		1
△ *	X8360120	LIGHT POLE FOUNDATION, SPECIAL	EACH	6		6
△ *	X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	490		490
△ *	X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8		8
△ *	X8760250	VIBROTACTILE FEATURE	EACH	8		8
△ *	X8850106	INDUCTIVE LOOP DETECTOR, RACK MOUNTED	EACH	10		10
△ *	XX005703	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT, SPECIAL	L SUM	1		1
*	XX006343	SEEDING (COMPLETE)	SQ YD	340	340	
△ *	XX007797	LUMINAIRE (SPECIAL)	EACH	1		1
△ *	XX008068	LUMINAIRE INSTALLATION, TYPE 1	EACH	5		5
△ *	XX008069	LUMINAIRE INSTALLATION, TYPE 2	EACH	4		4
△ *	XX008608	CABLE, SPECIAL	FOOT	1250		1250
*	XZ127900	RETAINING WALL REMOVAL	FOOT	10	10	
*	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
*	Z0036700	PARKING METER POSTS TO BE REMOVED	EACH	1	1	
*	Z0038700	PERMANENT BENCH MARKS	EACH	1	1	
*	Z0042300	PORTLAND CEMENT CONCRETE SIDEWALK CURB	FOOT	10	10	
*	Z0056648	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 12"	FOOT	3	3	

\* SEE SPECIAL PROVISIONS

△ SPECIALTY ITEMS

FILE NAME = p:\U0070070\_Urbana - Goodwin Green TCSP\Bidding\Addendum 1\add 1 summary.dgn  
 PLOT DATE = 7/11/2013 9:09:25 AM

DESIGNED - J.A.J. REVISION - 07/10/2013  
 DRAWN - J.A.J. REVISION -  
 CHECKED - S.M.W. REVISION -  
 DATE - 04/2013 REVISION -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE : NONE SHEET NO. 5 OF 31 SHEETS STA. TO STA.

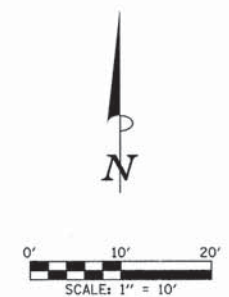
F.A.U. RTE. 7175	SECTION 12-00518-00-TL	COUNTY CHAMPAIGN	TOTAL SHEETS 31	SHEET NO. 5
GOODWIN AVENUE		CONTRACT NO. 91483		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



POST, MAST ARM, AND CONTROLLER DATA				
NO.	STATION	OFFSET	DESCRIPTION	FOUNDATION
P1	499+68.6	56.3' LT	LIGHT POLE (SEE ROADWAY LIGHTING PLANS)	(SEE DETAIL)
P2	499+64.4	47.8' LT	TRAFFIC SIGNAL POST, 10'	A
P3	499+55.0	39.7' LT	PEDESTRIAN PUSH-BUTTON POST	(SEE DETAIL)
P4	499+48.0	49.5' LT	STEEL COMB. MAST ARM ASSEMBLY AND POLE 46'	E-36"DIA.-15'
P5	499+51.0	37.4' RT	TRAFFIC SIGNAL POST, 16'	A
P6	499+54.6	42.4' RT	PEDESTRIAN PUSH-BUTTON POST	(SEE DETAIL)
P7	499+62.8	49.9' RT	TRAFFIC SIGNAL POST, 10'	A
P8	499+48.4	46.5' RT	STEEL COMB. MAST ARM ASSEMBLY AND POLE 46'	E-36"DIA.-15'
P9	500+27.5	50.5' LT	PEDESTRIAN PUSH-BUTTON POST	(SEE DETAIL)
P10	500+46.0	40.0' LT	TRAFFIC SIGNAL POST, 16'	A
P11	500+44.2	51.3' LT	STEEL COMB. MAST ARM ASSEMBLY AND POLE 46'	E-36"DIA.-15'
P12	500+74.0	50.0' RT	STEEL COMB. MAST ARM ASSEMBLY AND POLE 46'	E-36"DIA.-15'
P13	500+43.8	42.3' RT	TRAFFIC SIGNAL POST, 10'	A
P14	500+26.6	50.8' RT	PEDESTRIAN PUSH-BUTTON POST	(SEE DETAIL)
P15	500+23.3	54.4' RT	LIGHT POLE (SEE ROADWAY LIGHTING PLANS)	(SEE DETAIL)
P16	500+42.0	60.0' RT	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	C



- NOTES:
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTING THE CONCRETE FOUNDATIONS.
  - EXCAVATIONS ADJACENT TO CONCRETE FOUNDATIONS SHALL BE BACKFILLED PRIOR TO CONSTRUCTING THE FOUNDATIONS AS DIRECTED BY THE ENGINEER. TRENCH BACKFILL MATERIAL OR CONTROLLED LOW STRENGTH MATERIAL SHALL BE BLOCKED OUT AT THE FOUNDATION LOCATIONS TO ALLOW FOR THEIR LATER CONSTRUCTION.
  - THE CONTRACTOR SHALL VERIFY THE LOCATION OF GULFBOX H5 TO INTERCEPT THE EXISTING SERVICE CONDUIT.
  - THE INTERSECTION OF GOODWIN AVENUE AND GREEN STREET SHALL BE ALL-WAY STOP-CONTROLLED DURING THE CONSTRUCTION OF THE PROPOSED TRAFFIC SIGNAL IMPROVEMENTS. THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN TEMPORARY "STOP" SIGNS ON EACH QUADRANT OF THE INTERSECTION AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (SPECIAL), AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
  - THE CONTRACTOR SHALL REMOVE THE EXISTING MAST ARM MOUNTED STREET NAME SIGNS, "NO TURN ON RED" SIGNS, AND FOLDING "STOP" SIGNS FROM THE EXISTING TRAFFIC SIGNAL EQUIPMENT AND RETURN THEM TO THE CITY OF URBANA. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE VARIOUS REMOVAL PAY ITEMS, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.



DETECTOR LOOP DATA			
NO.	STATION	OFFSET	NO. OF TURNS
11	500+69.0	3.5' LT	4
12	500+54.0	3.5' LT	4
21	497+58.0	25.5' RT	5
22	497+58.0	14.0' RT	5
31	32+27.5	3.5' LT	4
32	32+42.5	3.5' LT	4
41	33+82.5	14.8' LT	4
42	33+67.5	14.8' LT	4
43	33+62.5	23.0' LT	6*
51	499+31.0	3.5' RT	4
52	499+46.0	3.5' RT	4
61	502+42.0	25.5' LT	5
62	502+42.0	14.0' LT	5
71	33+77.5	4.0' LT	5
72	33+62.5	4.0' LT	5
81	32+27.5	7.3' RT	4
82	32+42.5	7.3' RT	4
83	32+42.5	15.5' RT	6*

**KEY NOTES**

- STA. 33+02.76 (€ GOODWIN AVE.) = STA. 500+00.00 (€ GREEN ST.)
- INTERCEPT EXISTING 1/4" CONDUIT
- INSTALL LUMINAIRE ARM PERPENDICULAR TO TRAFFIC SIGNAL MAST ARM
- PROVIDE 1" SCH. 80 PVC CONDUIT FROM METER SOCKET TO DOUBLE HANDHOLE FOR SERVICE INSTALLATION (SPECIAL)

HANDHOLE AND GULFBOX JUNCTION DATA			
NO.	STATION	OFFSET	DESCRIPTION
H1	499+71.1	64.8' LT	GULFBOX JUNCTION, CC
H2	499+53.0	49.5' LT	HANDHOLE, PCC
H3	497+63.0	34.0' RT	GULFBOX JUNCTION, CC
H4	499+38.5	34.0' RT	GULFBOX JUNCTION, CC
H5	499+54.0	54.0' RT	GULFBOX JUNCTION, CC
H6	499+51.0	51.0' RT	HANDHOLE, PCC
H7	502+37.0	41.0' LT	GULFBOX JUNCTION, CC
H8	500+62.5	40.0' LT	GULFBOX JUNCTION, CC
H9	500+25.0	62.0' LT	HANDHOLE, PCC
H10	500+21.2	68.8' RT	GULFBOX JUNCTION, CC
H11	500+39.2	57.2' RT	DOUBLE HANDHOLE, PCC

TRAFFIC SIGNAL LEGEND	
.....	CONDUIT BORED AND PULLED (A) (PE = POLYETHYLENE DUCT)
-----	CONDUIT IN TRENCH (T)
●	STEEL COMB. MAST ARM ASSEMBLY AND POLE
○	SIGNAL POST
→	SIGNAL HEAD
→	SIGNAL HEAD WITH BACKPLATE
→	PEDESTRIAN SIGNAL HEAD
→	PEDESTRIAN PUSH-BUTTON POST
⊙	ACCESSIBLE PEDESTRIAN SIGNALS
□	CONTROLLER AND CABINET
□	DETECTOR LOOP, TYPE I
⚡	SERVICE INSTALLATION
⊕	CONFIRMATION BEACON
⚡	EMERGENCY VEHICLE PREEMPTION DETECTOR
⊕	HANDHOLE, PORTLAND CEMENT CONCRETE
⊕	DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE
⊕	GULFBOX JUNCTION
⊕	LUMINAIRE AND MAST ARM (SEE ROADWAY LIGHTING PLANS)
⊕	LIGHT POLE (SEE ROADWAY LIGHTING PLANS)
⊕	JUNCTION BOX (SEE ROADWAY LIGHTING PLANS)
⊕	CONDUIT AUGERED (SEE ROADWAY LIGHTING PLANS)
⊕	CONDUIT IN TRENCH (SEE ROADWAY LIGHTING PLANS)

\* OR AS OTHERWISE DIRECTED BY THE ENGINEER

FILE NAME = p:\U0070070\_Urbana - Goodwin Green TCSP\Bidding\Addendum 1\add 1 traffic signals.dgn

PLOT DATE = 7/11/2013 9:09:25 AM

DESIGNED - A.E.A./J.A.J.	REVISED - 11/07/10/2013
DRAWN - A.E.A.	REVISED -
CHECKED - S.M.W.	REVISED -
DATE - 04/2013	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GOODWIN AVENUE & GREEN STREET  
TRAFFIC SIGNAL LAYOUT

SCALE: 1"=10'

F.A.U. RTE. 7175	SECTION 12-00518-00-TL	COUNTY CHAMPAIGN	TOTAL SHEETS 31	SHEET NO. 19
GOODWIN AVENUE		CONTRACT NO. 91483		
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		



BILL OF MATERIALS

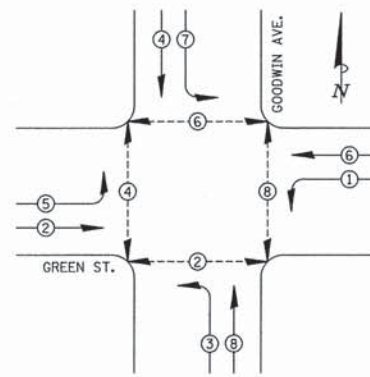
ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SO FT	43
SIGN PANEL - TYPE 2	SO FT	50
UNDERGROUND CONDUIT, PVC, 1" DIA.	FOOT	80
UNDERGROUND CONDUIT, PVC, 1 1/2" DIA.	FOOT	2
UNDERGROUND CONDUIT, PVC, 1 1/2" DIA.	FOOT	111
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	116
UNDERGROUND CONDUIT, PVC, 2 1/2" DIA.	FOOT	95
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	2
UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/2"	FOOT	350
UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2"	FOOT	90
UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 3"	FOOT	220
UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 4"	FOOT	85
HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	3
DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	1
GULFBOX JUNCTION, COMPOSITE CONCRETE	EACH	7
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, STANDARD	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C	FOOT	1750
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	FOOT	150
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C	FOOT	990
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7C	FOOT	2150
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 3 PAIR	FOOT	1660
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 3 1C	FOOT	785
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	660
TRAFFIC SIGNAL POST, 10 FT.	EACH	3
TRAFFIC SIGNAL POST, 16 FT.	EACH	2
PEDESTRIAN PUSH-BUTTON POST, TYPE II	EACH	4
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT.	EACH	4
CONCRETE FOUNDATION, TYPE A	FOOT	15
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 1-3-SECTION, 1-5-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE	EACH	10
DETECTOR LOOP, TYPE I	FOOT	705
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
REMOVE EXISTING HANDHOLE	EACH	6
REMOVE EXISTING CONCRETE FOUNDATION	EACH	10
SERVICE INSTALLATION (SPECIAL)	EACH	1
REMOVE EXISTING JUNCTION BOX	EACH	2
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	490
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
VIBROTACTILE FEATURE	EACH	8
INDUCTIVE LOOP DETECTOR, RACK MOUNTED	EACH	10
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT, SPECIAL	L SUM	1

SEE SPECIAL PROVISIONS FOR SYSTEM GROUNDING INFORMATION

TRAFFIC SIGNAL GENERAL NOTES

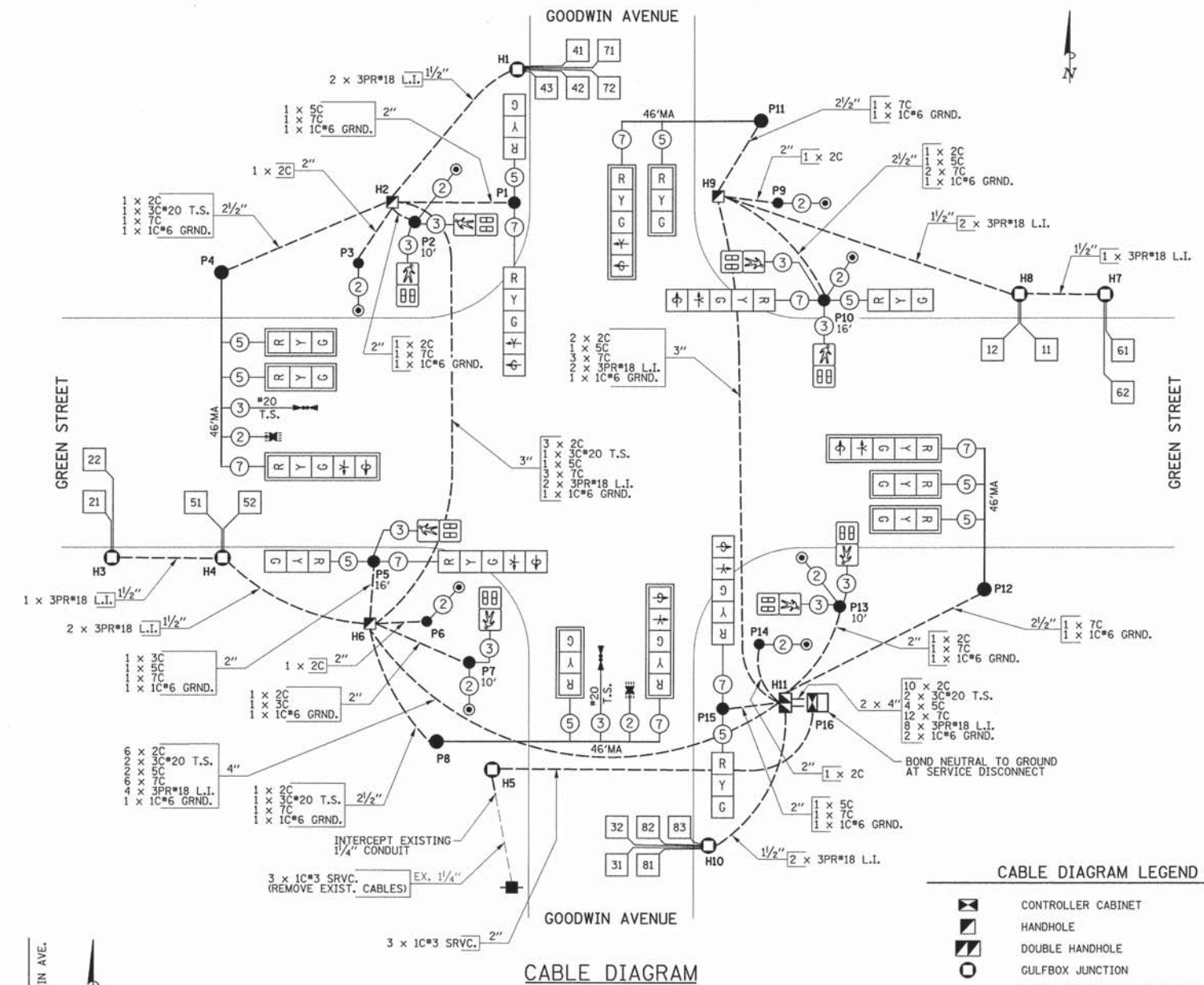
- THE ACTUAL LOCATIONS OF ALL SIGNAL FOUNDATIONS, HANDHOLES, AND THE TRAFFIC SIGNAL CONTROLLER WILL BE VERIFIED IN THE FIELD BY THE ENGINEER.
- POST MOUNTED SIGNAL HEADS SHALL BE INSTALLED SUCH THAT NO PART OF THE SIGNAL HEAD IS WITHIN TWO (2) FEET OF THE FACE OF CURB. MAST ARM POLES SHALL BE PLACED SUCH THAT A MINIMUM DISTANCE OF SIX (6) FEET IS MAINTAINED BETWEEN THE CENTER OF THE POLE AND THE FACE OF CURB (ON THE MAST ARM SIDE) UNLESS OTHERWISE SHOWN ON THE PLANS.
- BRACKET MOUNTED SIGNAL HEADS MOUNTED TO A LIGHT POLE SHALL BE MOUNTED WITH BLACK POLYCARBONATE BRACKETS FASTENED TO THE LIGHT POLE WITH BLACK STAINLESS STEEL BANDING. THE TOP BRACKET SHALL BE SHIMMED AS REQUIRED FOR THE INSTALLATION.
- COMBINATION MAST ARM ASSEMBLIES SHALL BE FURNISHED WITH 15-FOOT LUMINAIRE ARMS WITH A MOUNTED LUMINAIRE HEIGHT OF 35 FEET.
- ALL MAST ARM MOUNTED SIGNAL HEADS ON AN INDIVIDUAL MAST ARM SHALL BE MOUNTED SO THAT THE RED INDICATIONS ARE LEVEL WITH EACH OTHER UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- 12" LENSES SHALL BE USED ON ALL SIGNAL FACES. LED INDICATIONS SHALL BE USED ON ALL SIGNAL HEADS AND PEDESTRIAN SIGNAL HEADS. PEDESTRIAN SIGNAL HEAD FACES SHALL BE SYMBOLS WITH COUNTDOWN TIMERS.
- ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE THE POLARA NAVIGATOR SYSTEM OR APPROVED EQUIVALENT.
- THE LUMINAIRE ARM, LUMINAIRE POLE WIRING, LUMINAIRE, AND PHOTOCELL SHALL BE ERCTED WITH THE TRAFFIC SIGNAL MAST ARM POLE.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR UNCOVERING OR HAND DIGGING AROUND UTILITIES.
- NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN 2 FOOT DEPTH.
- A 1/4" POLYPROPYLENE PULL ROPE SHALL BE INSTALLED IN ALL CONDUIT RUNS EXCEEDING 20 FEET. A MINIMUM OF 2 FEET OF ROPE SHALL BE PROVIDED AT EACH END OF A CONDUIT RUN. THE ROPE SHALL BE INCLUDED IN THE COST OF THE RESPECTIVE CONDUIT PAY ITEM.
- ALL ADAPTERS REQUIRED TO CONNECT THE PROPOSED CONDUIT TO THE EXISTING CONDUIT SHALL BE INCLUDED IN THE COST OF THE RESPECTIVE CONDUIT PAY ITEM.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ELECTRICAL SERVICE FOR THE TRAFFIC SIGNALS AND SHALL CONTACT THE UTILITY COMPANY AND THE CITY OF URBANA PRIOR TO COMMENCEMENT OF WORK FOR THE REQUIREMENTS FOR THE SERVICE INSTALLATION.
- THE TRAFFIC SIGNAL CONTROLLER SHALL BE ORIENTED SUCH THAT INTERSECTION OPERATION AND CONTROLLER COMPONENTS CAN BE VIEWED SIMULTANEOUSLY.
- CONTROLLER PROGRAMMING OF SIGNAL TIMING WILL BE PROVIDED BY THE CITY OF URBANA.
- THE CONFIRMATION BEACON SHALL BE INCLUDED IN THE COST OF THE LIGHT DETECTOR.
- THE ELECTRIC CABLE FOR THE LIGHT DETECTOR SHALL BE A CONTINUOUS UNBROKEN RUN FROM THE LIGHT DETECTOR TO THE LIGHT DETECTOR AMPLIFIER. SPLICES IN THE CABLE SHALL NOT BE ALLOWED.
- THE THREE SECTION AND FIVE SECTION SIGNAL HEADS THAT OPERATE TOGETHER IN THE SAME PHASE AT THE SAME LOCATION WILL BE COMBINED ON A SINGLE SEVEN CONDUCTOR CABLE. TWO PEDESTRIAN SIGNAL HEADS AT THE SAME LOCATION OR ON THE SAME QUADRANT WILL BE COMBINED ON A SINGLE SEVEN CONDUCTOR CABLE. SPLICES WILL BE MADE IN THE POLE HANDHOLE OR CONCRETE HANDHOLE WITH INDIVIDUAL CABLES RUNNING FROM THE SPLICE TO EACH SIGNAL HEAD OR PEDESTRIAN SIGNAL HEAD. WATERPROOF CABLE SPLICES SHALL BE ACCORDING TO ARTICLE 873.03 OF THE STANDARD SPECIFICATIONS.
- THE CONCRETE FOUNDATION FOR THE PEDESTRIAN PUSH-BUTTON POST SHALL BE INCLUDED IN THE COST OF THE PEDESTRIAN PUSH-BUTTON POST.
- DETECTOR LOOPS SHALL BE INSTALLED AFTER CONSTRUCTION OF THE HMA SURFACE COURSE.
- DISTURBED AREAS AROUND PROPOSED CONCRETE FOUNDATIONS SHALL BE BACKFILLED WITH CONTROLLED LOW-STRENGTH MATERIAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THIS WORK SHALL BE INCLUDED IN THE COST OF THE CONCRETE FOUNDATION, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

NO.	DESCRIPTION
P1	R10-11, R10-22
P4	R10-11, D3-1 (GOODWIN)
P5	R10-11
P8	R10-11, D3-1 (GREEN)
P10	R10-11
P11	R10-11, D3-1 (GREEN)
P12	R10-11, D3-1 (GOODWIN)
P15	R10-11, R10-22



PHASE DESIGNATION DIAGRAM

PHASE DESIGNATION DIAGRAM LEGEND	
	DUAL ENTRY PHASE
	PEDESTRIAN PHASE
* NUMBER REFERS TO ASSOCIATED PHASE	

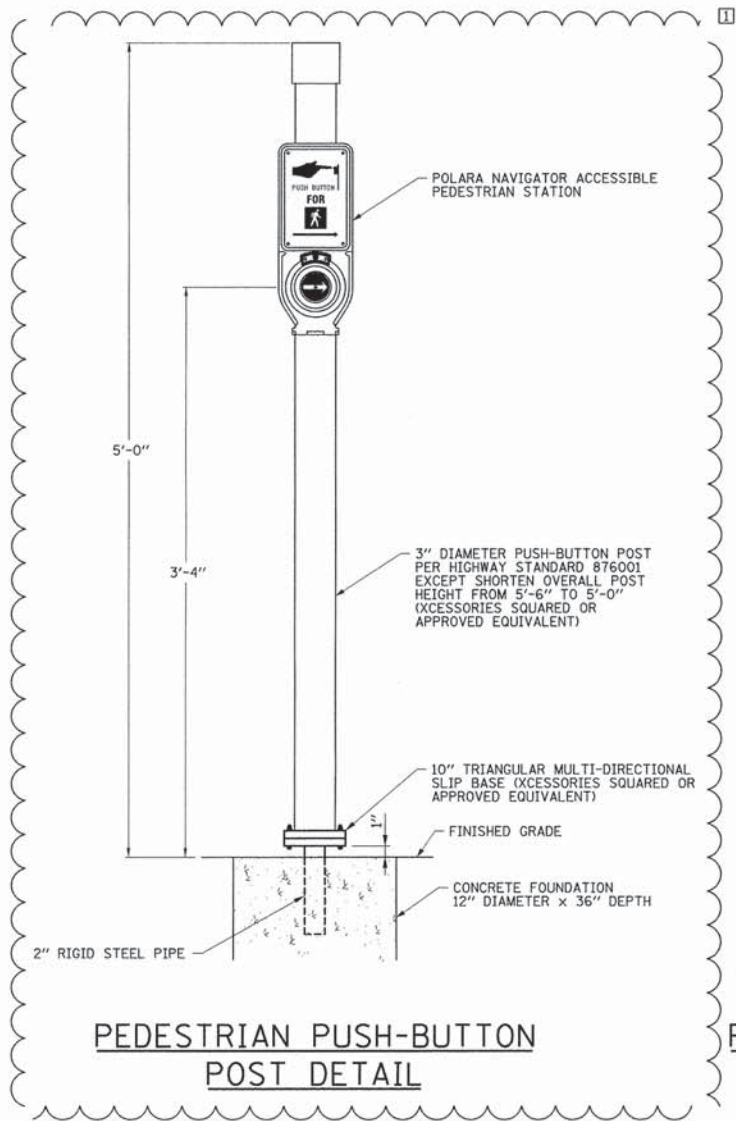


DETECTOR LOOP DATA					
NO.	SIZE	MODE	NO.	SIZE	MODE
11	6' x 6'	PRESENCE	51	6' x 6'	PRESENCE
12	6' x 6'	PRESENCE	52	6' x 6'	PRESENCE
21	6' x 6'	PULSE	61	6' x 6'	PULSE
22	6' x 6'	PULSE	62	6' x 6'	PULSE
31	6' x 6'	PRESENCE	71	6' x 6'	PRESENCE
32	6' x 6'	PRESENCE	72	6' x 6'	PRESENCE
41	6' x 6'	PRESENCE	81	6' x 6'	PRESENCE
42	6' x 6'	PRESENCE	82	6' x 6'	PRESENCE
43	2' x 6' QUADRUPOLE	PRESENCE	83	2' x 6' QUADRUPOLE	PRESENCE

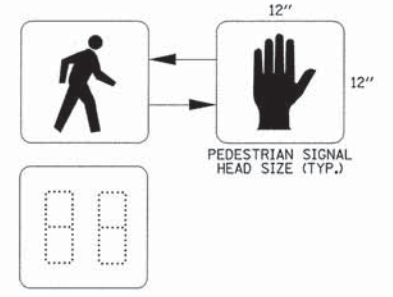
THE FOLLOWING LOOPS SHALL BE WIRED TO COMMON AMPLIFIERS: (11,12) (21,22) (31,32) (41,42) (43) (51,52) (61,62) (71,72) (81,82) (83) = 10 AMPLIFIERS REQUIRED. THE CONTROLLER SHALL BE SET TO MINIMUM RECALL ON GREEN STREET. QUADRUPOLE LOOPS SHALL BE USED IN BIKE LANES AS SHOWN ON THE PLANS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE 6' DIMENSION SHALL BE THE LENGTH OF THE LOOP IN THE DIRECTION OF TRAVEL. THE 2' DIMENSION SHALL BE THE OVERALL WIDTH OF THE LOOP ACROSS THE BIKE LANE. THE HOME-RUN FROM EACH LOOP SHALL ENTER A GULFBOX JUNCTION THROUGH A SEPARATE 1" CONDUIT. EACH PROPOSED SERIES OF LOOPS SHALL BE SPLICED TO ITS RESPECTIVE LEAD-IN CABLE IN A GULFBOX JUNCTION. EACH BIKE LANE LOOP SHALL USE THE REMAINING PAIR OF THE 3 PAIR LEAD-IN CABLE FOR THE ADJACENT VEHICLE LANE LOOPS BUT SHALL BE WIRED TO ITS OWN AMPLIFIER.

FILE NAME = p:\U0070070_Urbana - Goodwin Green TCSP\Bldg\Addendum 1\add 1 traffic signals.dgn	DESIGNED - A.E.A./J.A.J.	REVISED - 07/10/2013	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GOODWIN AVENUE & GREEN STREET TRAFFIC SIGNAL PLANS CABLE AND PHASE DESIGNATION DIAGRAMS / GENERAL NOTES / BILL OF MATERIALS	F.A.U. RTE. 7175	SECTION 12-00518-00-TL	COUNTY CHAMPAIGN	TOTAL SHEETS 31	SHEET NO. 22		
PLOT DATE = 7/11/2013 9:09:26 AM	CHECKED - S.M.W.	REVISED -			SCALE = NONE	SHEET NO. 22 OF 31 SHEETS	STA. TO STA.	GOODWIN AVENUE		CONTRACT NO. 91483	
	DATE - 04/2013	REVISED -					FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
							CITY OF URBANA		SECTION NO. 12-00518-00-TL	CHAMPAIGN COUNTY	





**PEDESTRIAN PUSH-BUTTON POST DETAIL**



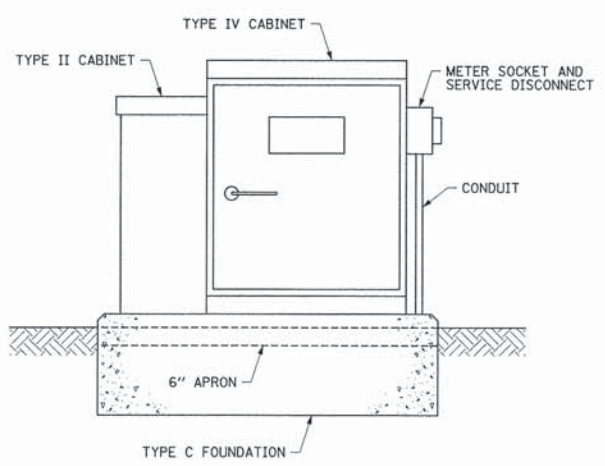
**PEDESTRIAN COUNTDOWN SIGNAL DISPLAY DETAIL**



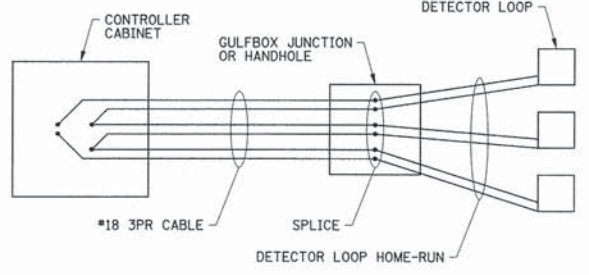
**R10-3**

THE PEDESTRIAN PUSH-BUTTON SIGNS SHALL BE INCLUDED IN THE COST OF THE ACCESSIBLE PEDESTRIAN SIGNALS.

**PEDESTRIAN PUSH-BUTTON SIGN DETAIL**

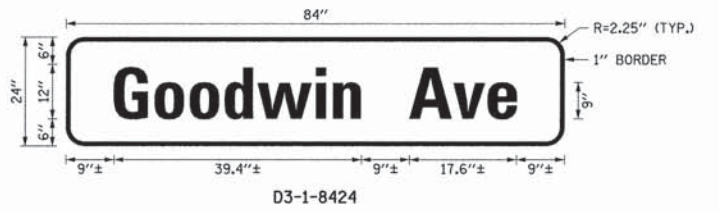


**UPS BATTERY CABINET MOUNTING DETAIL**



**DETECTOR LOOP WIRING DETAIL**

WIRED IN SERIES WITH MULTI-PAIR CABLE



**MAST ARM MOUNTED STREET NAME SIGN DETAILS**

TEXT: 12" UPPERCASE, 9" LOWERCASE, SERIES B  
TYPE A SHEETING REQUIRED

COLORS:  
LEGEND: WHITE (RETROREFLECTIVE)  
BORDER: WHITE (RETROREFLECTIVE)  
BACKGROUND: GREEN (RETROREFLECTIVE)



**R10-11-2430**



**R10-22-1218**

**REGULATORY SIGN DETAILS**

FILE NAME = p:\U0070070_Urbana - Goodwin Green TCSP\Bidding\Addendum 1\add 1 traffic signals.dgn	DESIGNED - A.E.A./J.A.J.	REVISED - 07/10/2013	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		GOODWIN AVENUE & GREEN STREET TRAFFIC SIGNAL PLANS TRAFFIC SIGNAL DETAILS			F.A.U. RTE. 7175	SECTION 12-00518-00-TL	COUNTY CHAMPAIGN	TOTAL SHEETS 31	SHEET NO. 24				
PLOT DATE = 7/11/2013 9:09:26 AM	DRAWN - A.E.A.	REVISED -						SCALE : NONE		SHEET NO. 24 OF 31 SHEETS	STA.	TO STA.	GOODWIN AVENUE		CONTRACT NO. 91483	
	CHECKED - S.M.W.	REVISED -											FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT
	DATE - 04/2013	REVISED -														