STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAU ROUTE 1621 (RIDGE ROAD)

@ SCHOOL STREET

SAFE ROUTES TO SCHOOL

**NEW TRAFFIC SIGNAL INSTALLATION** 

CMAQ PROJECT NO.: CMM-9003(078) L.A. SECTION NO.: 06-00162-04-TL

**VILLAGE of LANSING** 

COOK COUNTY C-91-021-09

NET LENGTH=300 FEET=0.06 MILES

INDEX OF SHEETS

SEE SHEET NO. 2

STATE STANDARDS

SEE SHEET NO. 2





CONTRACT #63118

CONTRACT #63118

CONTRACT #63118

CONTRACT #63118

CONTRACT #63118

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Approved

12/19/2008

President, Village of Larsing

Passed

Plant C transport
District 1 Engineer of Local Roads & Streets

Released for Bid
Based on Limited
Review

FEBRUARY 10, 2009

District 1 Engineer of Local Roads & Streets

Deputy Director of Highways, Region 1 Engineer 4F

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

LOCATION OF SECTION INDICATED THUS

PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:





CONCLITANTS, DODINGON FACINIFICATION (1T) 208 221 6200

1621 06-00162-04		4-TL	COOK	012	002	
STA.		Ţ	O STA.			

CONTRACT #63118

## INDEX OF SHEETS

1.	COVER SHEET
2.	INDEX OF SHEETS, GENERAL NOTES & STATE STANDARDS
3.	SUMMARY OF QUANTITIES
47.	STANDARD DISTRICT 1 TRAFFIC SIGNAL DESIGN DETAILS
8.	PAVEMENT MARKING AND SIDEWALK PLAN
9.	TRAFFIC SIGNAL INSTALLATION PLAN
10.	CABLE PLAN & SCHEDULE OF QUANTITIES
11.	MAST ARM MOUNTED STREET NAME SIGNS
12.	DISTRICT 1 TYPICAL PAVEMENT MARKINGS

#### STATE STANDARDS

	001001-02	AREAS OF REINFORCEMENT BARS
	424001-05	CURB RAMPS FOR SIDEWALKS
	701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
	701502-03	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
	701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
٠	701901-01	TRAFFIC CONTROL DEVICES
	720016-02	MAST ARM MOUNTED STREET NAME SIGNS
	780001-02	TYPICAL PAVEMENT MARKINGS
	805001-01	ELECTRIC SERVICE INSTALLATION DETAIL
	814001-02	HANDHOLES
	814006-02	DOUBLE HANDHOLES
	857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
	862001-01	UNINTERRUPTIBLE POWER SUPPLY (UPS)
	873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
	876001-01	PEDESTRIAN PUSH BUTTON POST
	877011-04	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 16' THRU 55'
	878001-07	CONCRETE FOUNDATION DETAILS
	88000601	TRAFFIC SIGNAL MOUNTING DETAILS

# **GENERAL NOTES:**

EXISTING VILLAGE OWNED AND MAINTAINED UTILITY LINES ARE SHOWN ON THE PLANS TO INDICATE THEIR PRESENCE AND APPROXIMATE LOCATION. THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF LANSING PUBLIC WORKS DEPARTMENT (708) 895-7190 TWO WEEKS PRIOR TO COMMENCING ANY EXCAVATION IN THE

EXCAVATION IN THE VICINITY OF THIS LINES. THE VILLAGE WILL THEN LOCATE AND MARK THE HORIZONTAL LOCATIONS OF THE LINES AND PROVIDE ANY AVAILABLE INFORMATION AS TO THEIR DEPTH. SHOULD ANY OF THE LINES BE DAMAGED BY THE CONTRACTOR'S OPERATION, THE CONTRACTOR SHALL REPAIR THEM TO THE SATISFACTION OF THE ENGINEER AND AT NO COST TO THE VILLAGE/STATE.

UTILITY LINES WERE PLOTTED FROM INFORMATION FURNISHED BY THE VARIOUS UTILITY COMPANIES INVOLVED AND THE ACCURACY SHOULD BE CONSIDERED APPROXIMATE ONLY.

UTILITY COMPANIES MAY BE ADJUSTING THEIR FACILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH THESE ORGANIZATIONS WHILE THESE ADJUSTMENTS ARE BEING PREFORMED. J.U.L.I.E.—JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS SYSTEM (800) 892—0123 OR 811.

ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS SHALL BE REMOVED BY THE CONTRACTOR. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

FILE NAME = 05612_04-INDX-01	USER NAME =	DESIGNED — JMN	REVISED —			RIDGE ROAD & SCHOOL STREET	F.A.U. SECTION	COUNTY TOTAL SHEET SHEETS NO.
		CHECKED JMN	REVISED	STATE OF ILLINOIS	INTERSECTION IMPROVEMENT		1621 06-00162-04-TL	COOK 012 002
	PLOT SCALE =	DRAWN — PS	REVISED —	DEPARTMENT OF TRANSPORTATION	INDEX	INDEX OF SHEETS, GENERAL NOTES, & STATE STANDARDS		CONTRACT NO. 63118
	PLOT DATE = 12-19-08	CHECKED — AG	REVISED		SCALE:	SHEET NO. 002 OF 012 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. A	AID PROJECT CMM-9003(078)

		SUMMARY OF QUANTITIES			-	MARKINGS	SIGNALS
S.I.	CODE NO.   PAY ITEM   UNIT   QUAN   SFT/-		<b></b>	SFTY-1D	Y031- <i>IF</i>		
					<del>1</del>	Srii-ID	1031-77
		PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH			20		
*	42400200	AND THE PROPERTY OF THE PROPER	SQ FT	800	800		
*	42400800	DETECTABLE WARNINGS	SQ FT	64	64	<b></b>	
*	44000600	SIDEWALK REMOVAL	SQ FT	800	800		
	67100100	MOBILIZATION	L SUM	1	11		
	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1			
	70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	11		
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1			
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	11		
	72000100	SIGN PANEL - TYPE 1	SQ FT	27	ļ	27	
*	78000200	THERMOPLASTIC PAVEMENT MARKING — LINE 4"	FOOT	200		200	
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	330		330	
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	90		90	
	81000500	CONDUIT IN TRENCH, 1 1/2" DIA., GALVANIZED STEEL	FOOT	35			35
	81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	35			35
	81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	115			115
	81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10	-		10
	81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	75			75
	81019000	CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL	FOOT	80			80
	81400100	HANDHOLE	EACH	2			2
	81400300	DOUBLE HANDHOLE	EACH	2			2
	81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	139			139
		FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	The second desired in the second desired desired in the second desired desired in the second desired				1
	85700200	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	EACH	1			1
	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	937			937
	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1180			1180
	87301245	THE RESERVE THE AND THE WORLD CONTINUE TO SERVE THE SERV	FOOT	1079			1079
	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1079			1079
	87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	50		A	50
	87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4			4
	87601200	PEDESTRIAN PUSH-BUTTON POST, GALVANIZED STEEL, TYPE II	EACH	3			3
	87702870	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 28 FT.	EACH	2			2
	87702880	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	2			2
	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	28			28
	87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4			4
	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60			60
Acres to the st	88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4		***	4
	88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4			4
	88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2			2
	88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2			2
	88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2			2
	88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2			2
	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8			8
	88200110	TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	8			8
	88700200	LIGHT DETECTOR	EACH	2			2
	88700300	LIGHT DETECTOR AMPLIFIER					
		PEDESTRIAN PUSH-BUTTON	EACH	1	·		1
	88800100	COAXIAL CABLE IN CONDUIT	EACH	8			8
	X0301576	ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	FOOT	686			686
	X0323153		FOOT	300			300
	X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	1			11
	X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	209			209
	XX003982	VIDEO VEHICLE DETECTION SYSTEM	L SUM	1		ļ	1
	×8620020	UNINTERRUPTABLE POWER SUPPLY	EACH	1			1.
	XX007246	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 18 3C	<u> </u>	686		<u> </u>	686

\* - INDICATES SPECIALTY ITEMS

COUNTY TOTAL SHEET NO.

COOK 012 003

CONTRACT NO. 63118 DESIGNED — JMN
CHECKED — JMN REVISED --USER NAME = RIDGE ROAD & SCHOOL STREET INTERSECTION IMPROVEMENT SUMMARY OF QUANTITIES FILE NAME = 05612\_04-QUAN-01 SECTION STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION 06-00162-04-TL PLOT SCALE = DRAWN — PS REVISED ---PLOT DATE = 12-19-08 SHEET NO. 003 OF 012 SHEETS STA. TO STA. SCALE: CHECKED - AG REVISED -

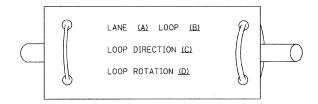
STA.		TO STA.		
1621	06-00162-04-TL	соок	012	003
F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO

CONTRACT #63118

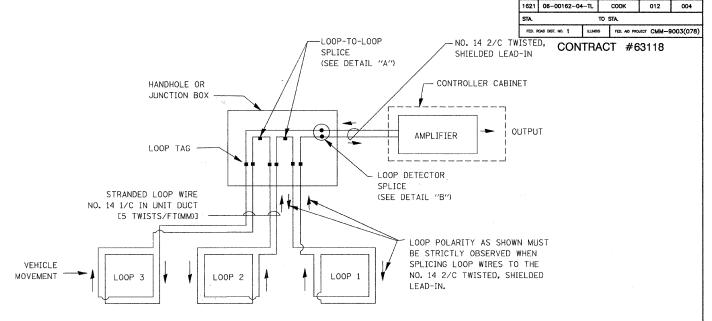
# LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

#### LOOP LEAD-IN CABLE TAG



- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



TOTAL SHEETS

TOTAL SHEE SHEETS NO.

COOK 012 004

CONTRACT NO. 63118

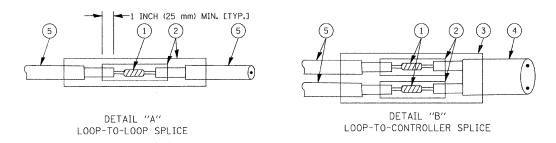
COUNTY

COUNTY

SECTION

## DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE. THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



# LOOP DETECTOR SPLICE

SCALE:

- (1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

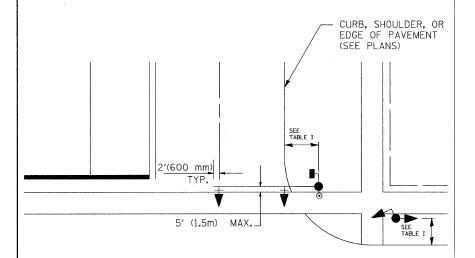
FILE NAME =	USER NAME = gaglianobt	DESIGNED -	D.A.D.	REVISED - 11-12-01
W:\diststd\22x34\tsØ5.dgn		DRAWN -	R.W.P.	REVISED - BUR. TRAFFIC 01-01-02
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	D.A.Z.	REVISED -
*	PLOT DATE = 1/4/2008	DATE -	05-30-00	REVISED ~

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

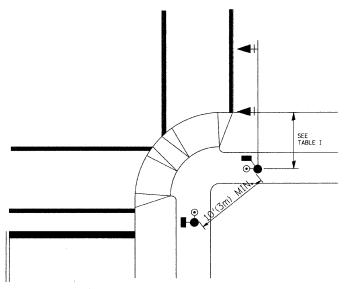
DISTRICT ONE 06-00162-04-TI STANDARD TRAFFIC SIGNAL DESIGN DETAILS TS-05 SHEET NO. 004 OF 012 SHEETS STA. FED. ROAD DIST, NO. 1 ILLINOIS FED. AID PROJECT CMM-9003(078)

#### TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



## PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

# NOTES:

1021	00-00102-04	-12	COOK	000	
STA.		то	STA.		
FED. R	OAD DIST. NO. 1	ILLINOIS	FED. AID PRO	UECT CMM-S	9003(078)

COUNTY

SECTION

CONTRACT #63118

1. AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION. EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

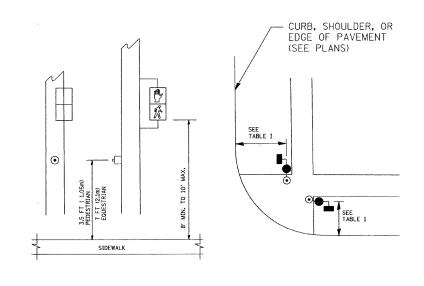
AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK, AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.

PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:

- A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
- B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
- C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
- E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- 2. PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2,4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- 3. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- 4. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

# PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION



# TABLE I

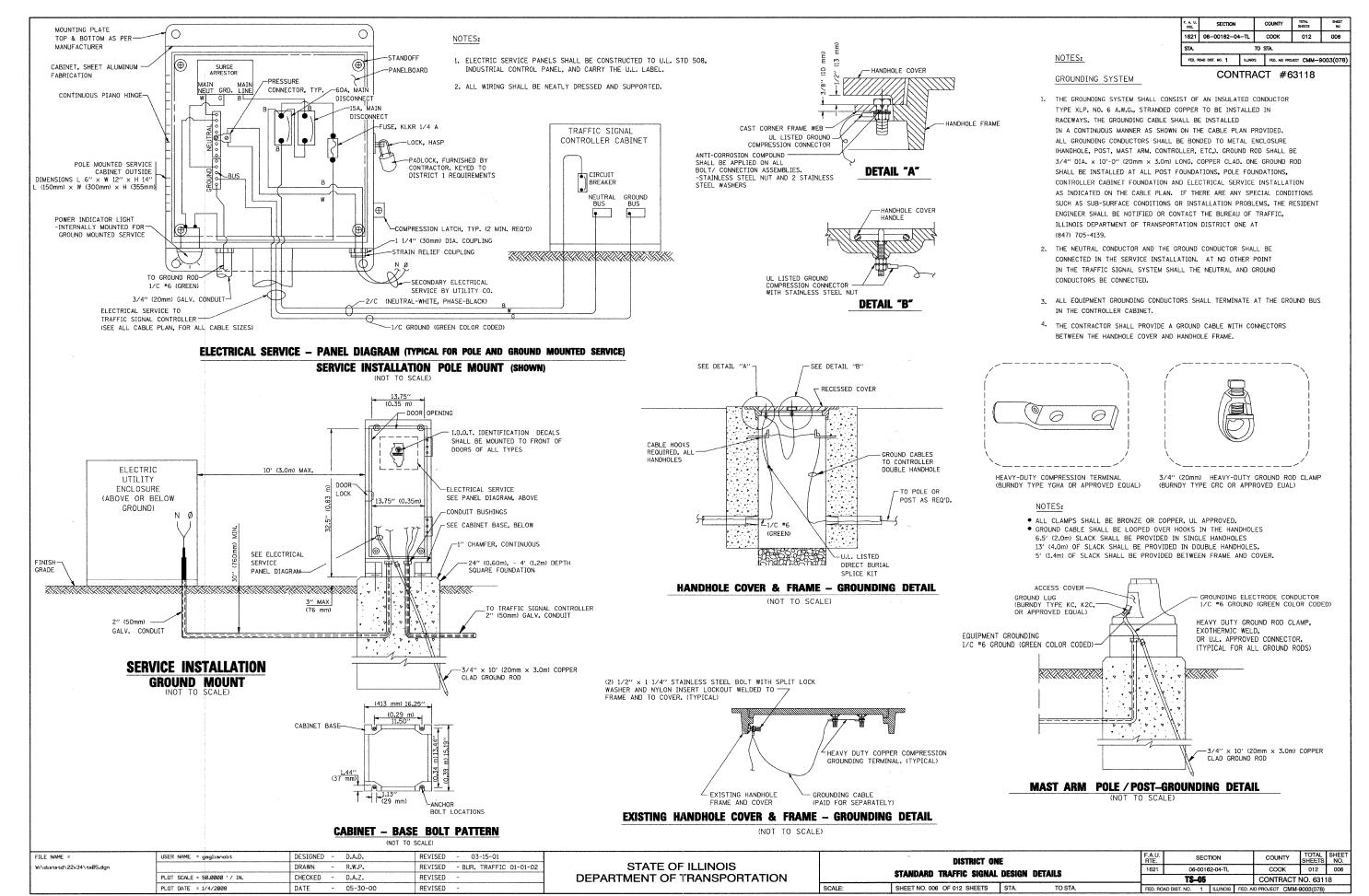
	TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
	TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
Ī	TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
ſ	PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
	PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

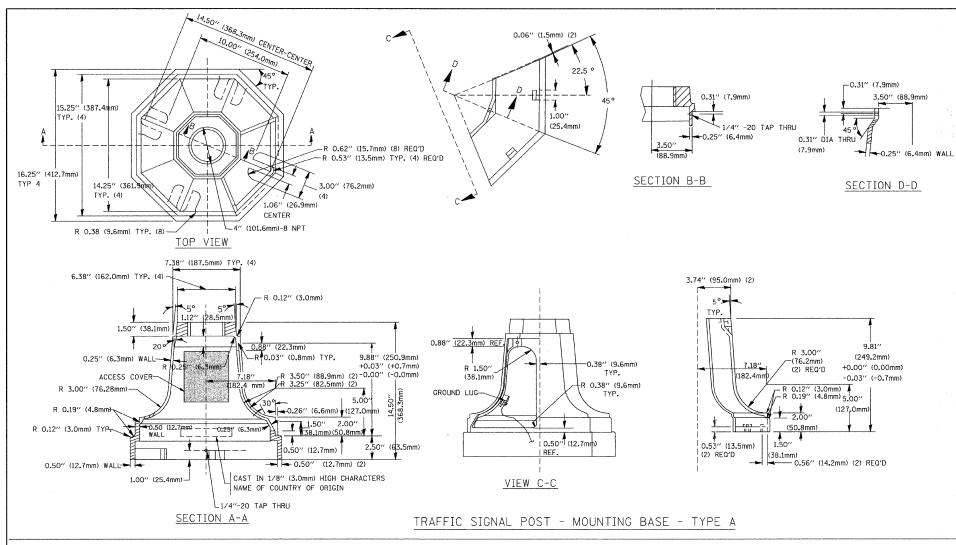
SCALE:

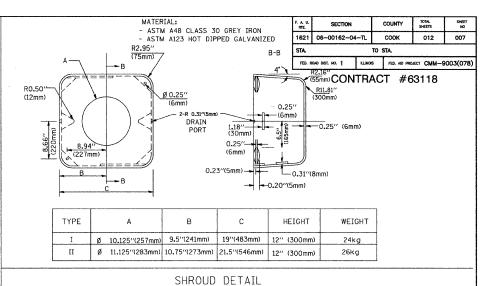
FILE NAME =	USER NAME = gaglianobt	DESIGNED -	D.A.D.	REVISED	- BUR. TRAFFIC 01-01-02
W:\distatd\22x34\ta05.dgn		DRAWN -	R.W.P.	REVISED	-
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	D.A.Z.	REVISED	-
	PLOT DATE = 1/4/2008	DATE -		REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	DISTRICT ON	E			F.A.U. RTE. SECTION				COUNTY	TOTAL SHEETS	SHEE NO.	
	STANDARD TRAFFIC SIGNAL DESIGN DETAILS			1621	1621 06-00162-04-TL				COOK	012	005	
						TS	-05			CONTRACT	NO. 6311	18
	SHEET NO. 005 OF 012 SHEETS	STA.	TO STA.		FED. RO	AD DIST. NO.	1	ILLINOIS	FED. A	ID PROJECT CMM-	9003(078)	



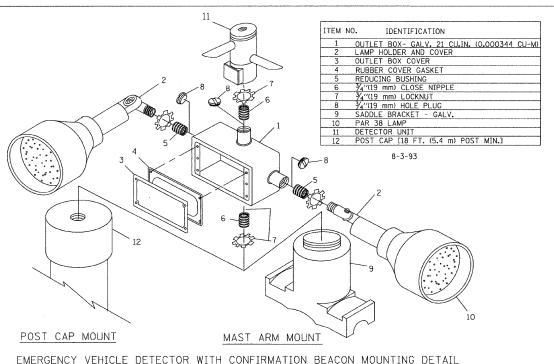




#### SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING. - DIMENSION 7" (175mm) LARGER THAN CONTROLLER BASE DIMENSION, BOTH DIRECTIONS 1" (25mm) BEVEL 6" (150mm BREAK DOWN EXISTING FOUNDATION 12" (300mm) -12" (300m - NEW ANCHOR BOLTS 9" (230mm)-9" (230mm) 6" (150mm) 12" (300mm) No. 3 DOWEL 1'-6" (450mm) LONG ON 12" (300mm) CENTER (8 REQ'D) EXISTING CONDUIT -2" (50mm), 4" (100mm) & 4" (100mm) 6" (150mm NEW TYPE "D" (MODIFIED) FOUNDATION EXISTING TYPE D (CONTROLLER) FOUNDATION

MODIFY EXISTING TYPE "D" FOUNDATION

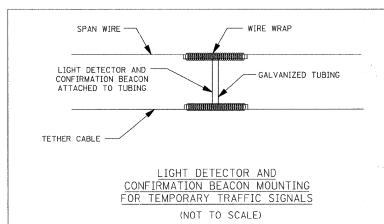
(NOT TO SCALE)



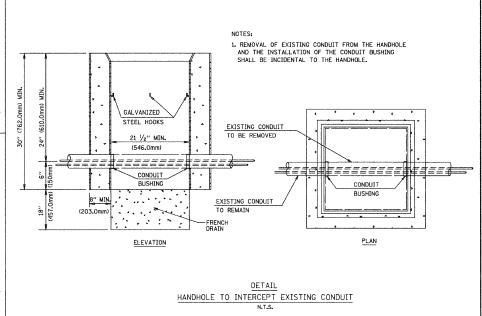
FILE NAME =	USER NAME = gaglianobt	DESIGNED	-	D.A.D.	REVISED	- BUR.TRAFFIC 03-15-01	$\overline{}$
W:\diststd\22x34\tsØ5.dgn		DRAWN	-	R.W.P.	REVISED	- BUR.TRAFFIC 11-12-01	1
	PLOT SCALE = 50.0000 '/ IN.	CHECKED	-	D.A.Z.	REVISED	- BUR.TRAFFIC 01-01-02	
	PLOT DATE = 1/4/2008	DATE	-	05-30-00	REVISED	-	1

#### NOTES:

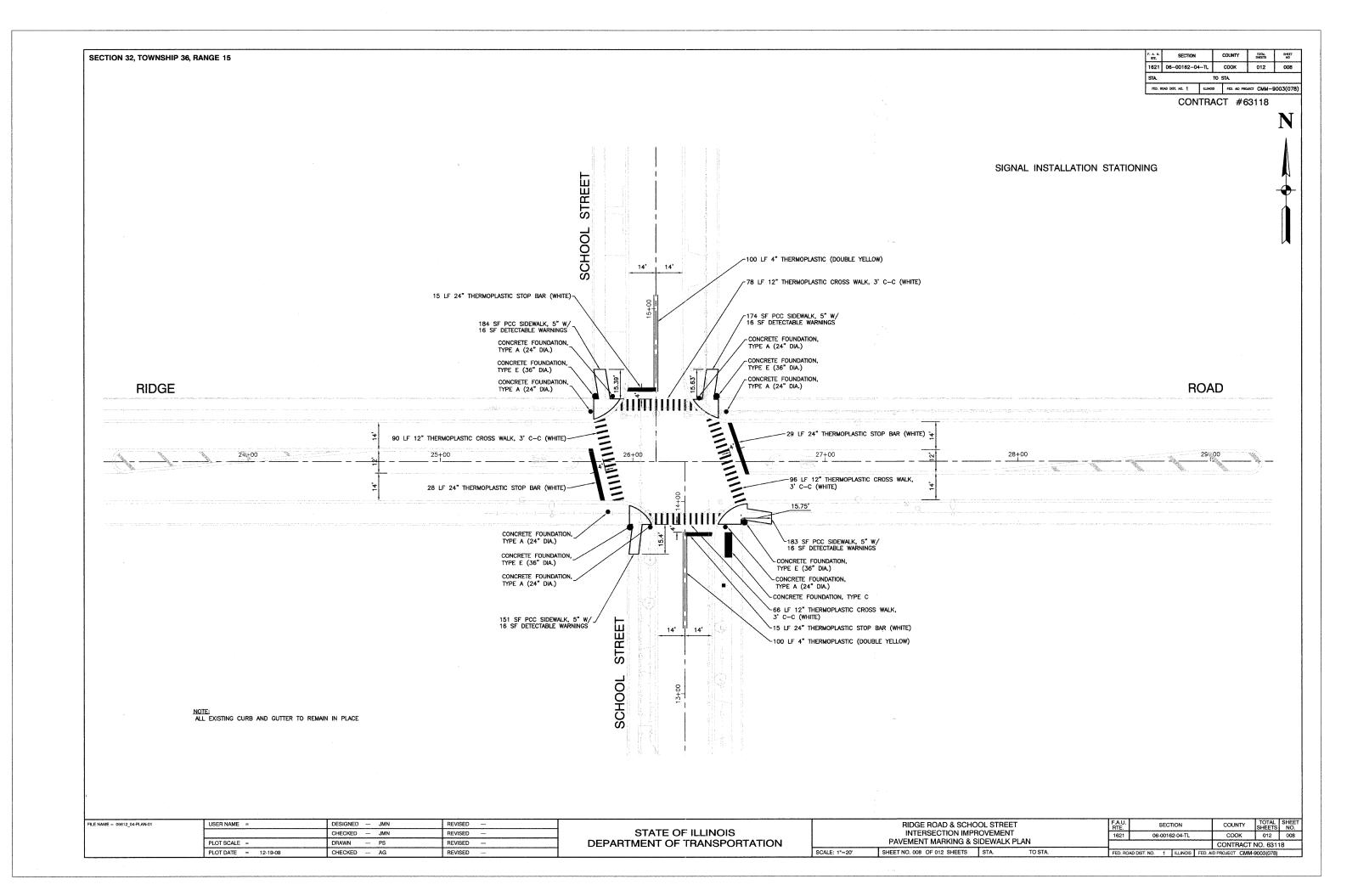
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS \*2 AND \*11 SHALL BE ALUMINUM OR GALVANIZED
- 2. ITEM \*1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
  ITEM \*2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
  ITEM \*9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- 3. WHEN POST MOUNTING IS SPECIFIED, ITEM \*9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 34"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

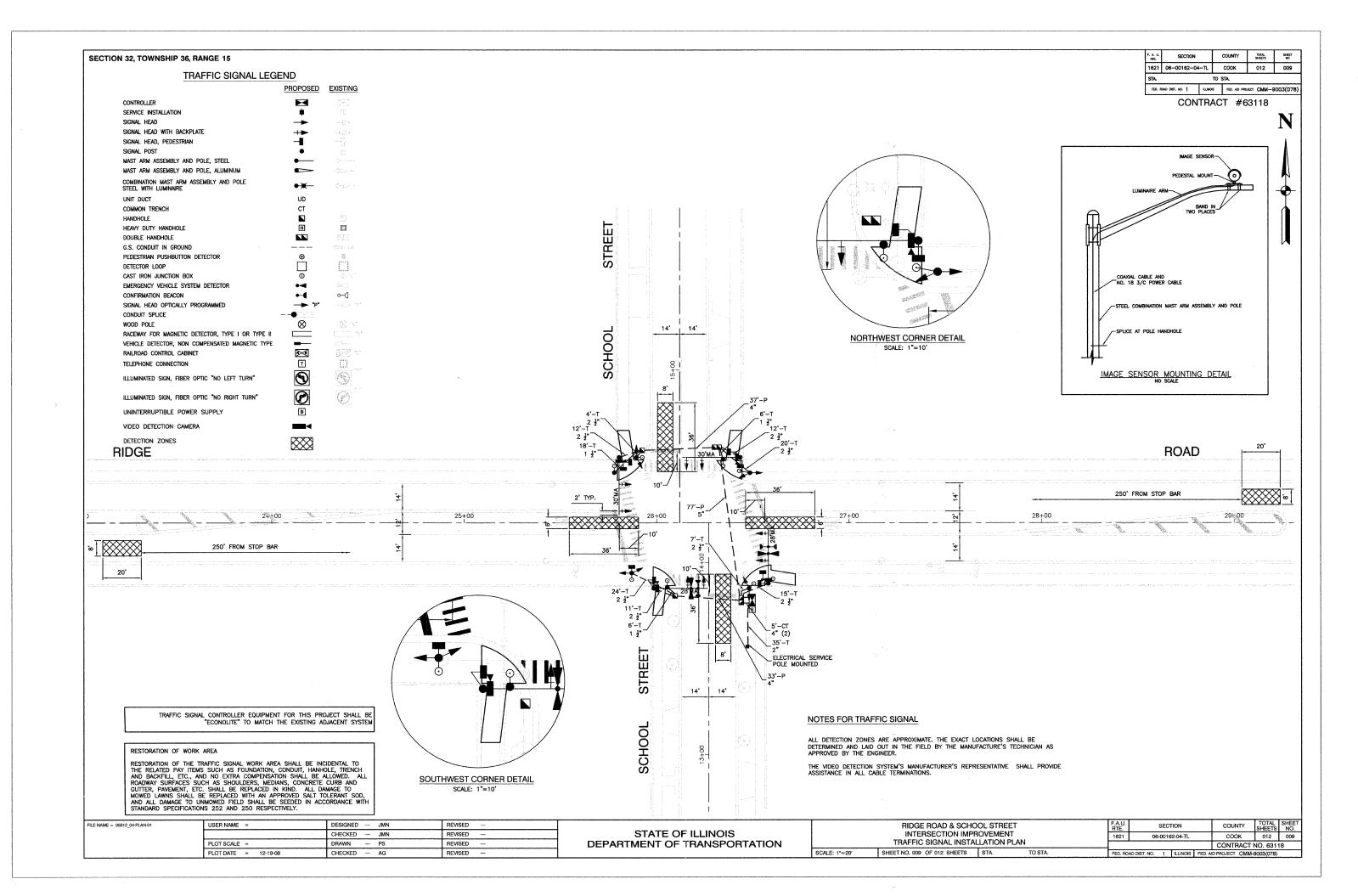


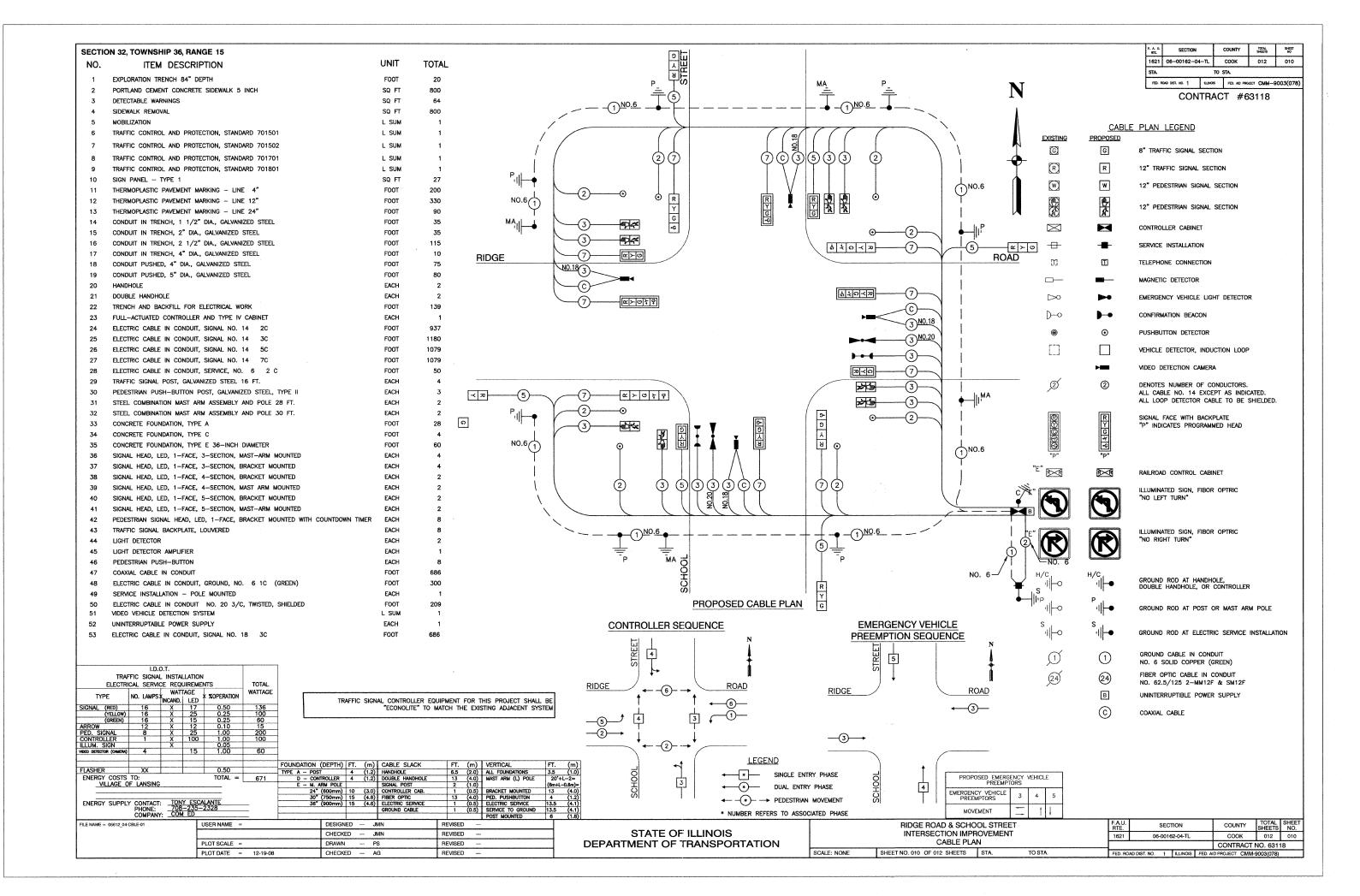
SCALE:

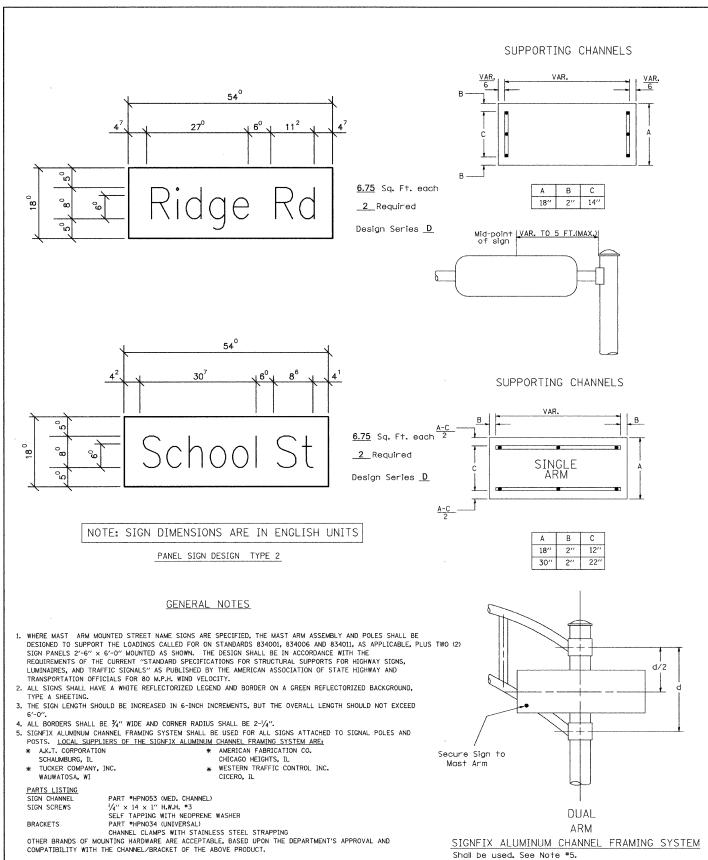


STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION









Upper Case to Lower Case

Spacing Chart 8-6 Inch Series "C & D"

EXAMPLE,  $2^{3}$  DENOTES  $\frac{3''}{8}$ 

COUNTY

TOTAL SHEET NO

UPPER AND LOWER CASE CONTRACT #63118
LETTER WIDTHS

SECTION

SECOND LETTER																	
			de oq	b h m n i		f	w	j		s	†	٧	У	>	<	4	Z
	SERIES	С	D	С	D	С	D	С	D	С	D	С	D	С	D	С	D
	AWX	12	14	14	15	12	14	06	10	11	14	06	10	11	12	12	14
	В	14	15	20	21	14	15	1 <sup>1</sup>	12	14	15	12	14	12	14	1 <sup>6</sup>	17
	CEG	14	1 <sup>5</sup>	20	21	1 <sup>2</sup>	14	06	10	1 <sup>2</sup>	14	12	14	14	15	14	15
F	DOQR	14	15	20	21	14	15	06	10	12	14	12	14	14	1 <sup>5</sup>	14	15
İ	F	05	06	14	15	06	10	05	06	0 e	1 <sup>0</sup>	06	10	O <sub>e</sub>	10	11	12
I R S T	HIMN	20	2 <sup>1</sup>	22	24	20	2 <sup>1</sup>	14	15	16	17	16	17	20	2 <sup>1</sup>	20	21
ŀ	JU	20	2 1	20	21	16	17	14	15	16	17	16	17	16	17	20	2 <sup>1</sup>
Ξ	K L	11	12	16	17	11	12	05	06	11	12	1 <sup>1</sup>	12	11	12	12	14
T T	Р	12	14	14	15	12	14	05	06	1 <sup>1</sup>	12	11	12	12	14	12	14
E R	S	12	14	16	1 7	12	14	06	10	1 <sup>2</sup>	14	1 <sup>2</sup>	14	1 <sup>2</sup>	14	12	14
	Т	1 <sup>1</sup>	12	16	1 7	06	1 <sup>0</sup>	06	10	1 <sup>1</sup>	12	11	12	11	12	12	14
	٧	06	10	14	15	11	12	06	10	12	14	12	14	1 <sup>2</sup>	14	12	14
	Υ	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12
	Z	16	17	22	24	16	17	1 <sup>2</sup>	14	16	17	16	17	16	17	20	21

Lower Case to Lower Case

Spacing Chart 6 Inch Series "C & D"

							SE	(00	۷D	LET	ŢEF	?					
No. of Part Manager,		a c g c		b h		f	w	j	ī	s	†	v	У	>	<	2	Z
	SERIES	С	D	С	D	С	D	С	D	С	D	С	D	С	D	С	D
FI	adhgij Imnqu	16	17	2 <sup>2</sup>	24	1 <sup>6</sup>	17	1 <sup>2</sup>	14	14	15	14	15	16	17	16	17
I R S	bfkops	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14
Т	се	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
F	r	06	10	12	14	06	10	03	03	05	06	05	0e	0e	10	06	10
Ē	† z	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14
ĖR	v у	11	12	14	15	11	12	05	06	0e	10	06	10	11	12	11	12
1	w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14
	×	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14

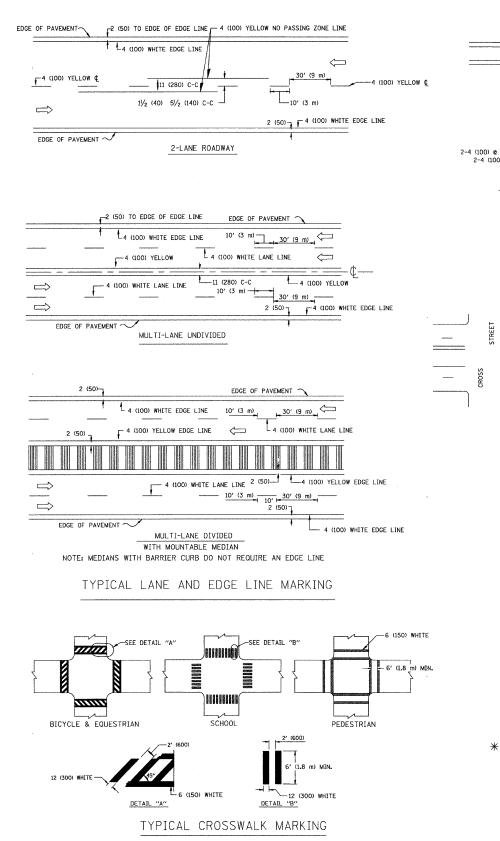
# Number to Number: Spacing Chart 8 Inch Series "C & D"

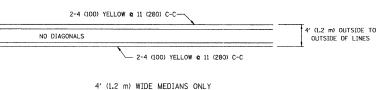
										SE	CO	ND	NU	ΙМВ	ER							
	0					1	2	2		3		4		5	6		7		8		9	
	SERI	ES	С	D	С	D	С	D	С	D	С	D	С	: D	С	D	С	D	С	D	С	D
F	0 9		1 <sup>6</sup>	17	1 <sup>6</sup>	17	14	15	1 <sup>2</sup>	14	14	1 <sup>5</sup>	14	1 <sup>5</sup>	16	17	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>6</sup>	17	1 <sup>6</sup>	17
R	1		2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	21	2 <sup>0</sup>	2 <sup>1</sup>	16	17	14	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>	14	1 <sup>5</sup>	2 <sup>0</sup>	2 <sup>1</sup>	2 <sup>0</sup>	2 <sup>1</sup>
T	2 3	4	14	1 <sup>5</sup>	14	1 <sup>5</sup>	14	1 <sup>5</sup>	1 <sup>2</sup>	14	1 <sup>2</sup>	14	14	1 <sup>5</sup>	14	1 <sup>5</sup>	11	1 <sup>2</sup>	1 <sup>6</sup>	17	14	1 <sup>5</sup>
N	5		14	1 <sup>5</sup>	14	15	14	1 <sup>5</sup>	11	1 <sup>2</sup>	11	1 <sup>2</sup>	14	15	14	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	14	1 <sup>5</sup>	14	15
M B	6		1 <sup>6</sup>	17	14	1 <sup>5</sup>	14	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>5</sup>	12	14	14	1 <sup>5</sup>	14	15	11	1 <sup>2</sup>	14	1 <sup>5</sup>	14	1 <sup>5</sup>
E	7		1 <sup>2</sup>	14	12	14	14	1 <sup>5</sup>	1 <sup>2</sup>	1 <sup>5</sup>	0 <sup>5</sup>	06	1 <sup>2</sup>	14	14	1 <sup>5</sup>	1 <sup>1</sup>	1 <sup>2</sup>	14	1 <sup>5</sup>	1 <sup>2</sup>	14
	8		1 <sup>6</sup>	17	16	17	14	1 <sup>5</sup>	12	1 <sup>5</sup>	1 <sup>2</sup>	14	14	15	16	17	1 <sup>2</sup>	14	1 <sup>6</sup>	17	14	1 <sup>5</sup>

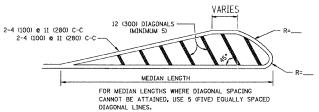
		LEI	IEK MIDIE	3					
L E T E R S		UPPER ETTERS		H UPPER LETTERS	L E T T E R		LOWER ETTERS		
T <sub>E</sub>	SER	RIES	SE	RIES	T E	SERIES			
R S	С	D	С	D	R S	С	D		
Α	36	50	50	6 5	а	35	42		
В	32	40	4 3	5 <sup>3</sup>	b	35	4 <sup>2</sup>		
С	3 <sup>2</sup>	40	43	5 <sup>3</sup>	С	3 <sup>5</sup>	4 <sup>1</sup>		
D	32	40	4 3	5 <sup>3</sup>	d	35	4 <sup>2</sup>		
E	30	35	40	47	е	35	42		
F	3 0	35	40	47	f	2 3	26		
G	3 <sup>2</sup>	40	43	53	g	35	42		
Н	32	40	43	5 <sup>3</sup>	h	35	42		
I	0 7	0.7	11	12	ī	1 <sup>1</sup>	1 <sup>1</sup>		
J	30	36	40	50	j	20	2 <sup>2</sup>		
К	3 <sup>2</sup>	41	43	5 4	k	3 <sup>5</sup>	42		
L	3 <sup>0</sup>	35	40	4 7	1	1 <sup>1</sup>	1 1		
М	3 7	45	51	6 <sup>1</sup>	m	6 °	70		
N	3 <sup>2</sup>	40	43	5 <sup>3</sup>	n	3 <sup>5</sup>	42		
0	3 <sup>4</sup>	42	45	55	0	36	43		
Р	3 <sup>2</sup>	40	43	5 <sup>3</sup>	Р	35	42		
a	3 4	4 2	45	5 <sup>5</sup>	q	35	42		
R	3 <sup>2</sup>	40	43	53	r	26	32		
S	3 <sup>2</sup>	4 0	43	5 <sup>3</sup>	s	36	42		
Т	30	35	40	47	†	27	3 <sup>2</sup>		
U	3 <sup>2</sup>	4 <sup>0</sup>	43	5 <sup>3</sup>	u	35	42		
٧	3 <sup>5</sup>	4 4	4 7	60	v	42	47		
W	44	52	60	70	w	55	6 <sup>4</sup>		
Х	3 <sup>4</sup>	40	45	53	×	44	5 <sup>1</sup>		
Υ	36	50	<sub>5</sub> 0	66	У	46	5 <sup>3</sup>		
Z	3 <sup>2</sup>	40	43	5 <sup>3</sup>	z	36	43		

N <sub>U.</sub>	6 INCH	SERIES	8 INCH SERIES						
N <sub>U</sub> MBER	С	D	С	D					
1	12	1 4	15	20					
2	3 <sup>2</sup>	40	43	53					
3	3 <sup>2</sup>	40	43	5 <sup>3</sup>					
4	35	4 3	4 7	57					
5	32	40	43	5 3					
6	32	40	43	53					
7	3 <sup>2</sup>	40	43	53					
8	3 <sup>2</sup>	40	43	53					
9	3 <sup>2</sup>	40	43	53					
0	3 4	42	45	5 <sup>5</sup>					

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	JMN	REVISED -	- DAZ/DAG 11-90			DISTRICT OF	4F		RTE.	SECTION	COUNTY	SHEETS NO.
W:\diststd\22x34\tsØ2.dgn		DRAWN -	TJBARL	REVISED -	- 06-98	STATE OF ILLINOIS	MAST ARM MOUNTED STREET NAME SIGNS				1621	06-00162-04-TL	COOK	012 011
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	R#RSK.	REVISED -	- 10-01-00	DEPARTMENT OF TRANSPORTATION						TS-02	CONTRACT	NO. 63118
	PLOT DATE = 1/4/20002-19-08	DATE -	02679	REVISED -			SCALE:	SHEET NO. 011 OF 012 SHEETS	STA.	TO STA.	FED. ROA	D DIST. NO. 1 ILLINOIS FED. AI	PROJECT CMM-	-9003(078)

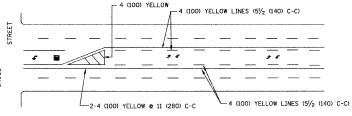




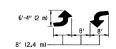


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) T0 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

# MEDIANS OVER 4' (1.2 m) WIDE

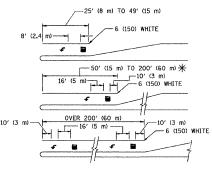


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

# TYPICAL PAINTED MEDIAN MARKING

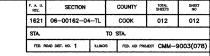


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SQ. FT. (1.5 m² )  $\P$  AREA = 20.8 SQ. FT. (1.9 m²)

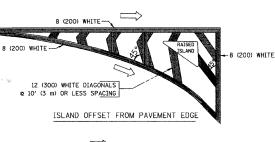
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

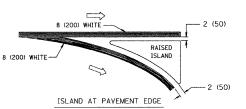
TYPICAL LEFT (OR RIGHT) TURN LANE

## TYPICAL TURN LANE MARKING



CONTRACT #63118





# TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/ <sub>2</sub> (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 51/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS	SOLID	YELLOW: TWO WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE
	e 45°  NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS		WHITE: ONE WAY TRAFFIC	SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) <b>©</b> 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) T0 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = gaglianobt	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
W:\diststd\22x34\tol3.dgn		DRAWN -	REVISED -A. HOUSEH 10-09-96
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -A. HOUSEH 10-17-96
	PLOT DATE = 1/4/2008	DATE - 03-19-90	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	F.A.U. RTE.	J.	SEC.	TION		COUNTY	COUNTY TOTAL SHEETS					
	1025	5	06-0016	2-04-TL		COOK	012	012				
TYPICAL PAVEMENT MARKINGS						TC-13 CONTRACT NO. 63						
SCALE: NONE	E: NONE SHEET NO. 012 OF 012 SHEETS STA. TO STA.					DIST. NO. 1	ID PROJECT CMM-	PROJECT CMM-9003(078)				