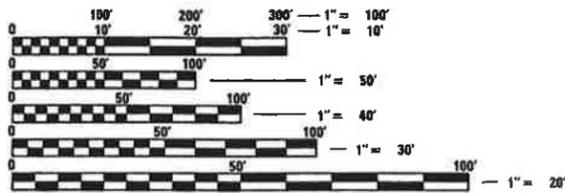


FOR INDEX OF SHEETS, SEE SHEET NO. 2
 FOR LIST OF STATE STANDARDS, SEE SHEET NO. 2



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

TRAFFIC DATA=OFF SYSTEM
 DESIGN DESIGNATION=LOCAL STREET

	POSTED SPEED (MPH)
HART ROAD	30
RADDANT ROAD	30
LARKSPUR LANE	30

J.U.L.I.E.
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION CALL 811



Know what's below.
 Call before you dig.

STATE OF ILLINOIS 07-31-2015 LETTING ITEM 019
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

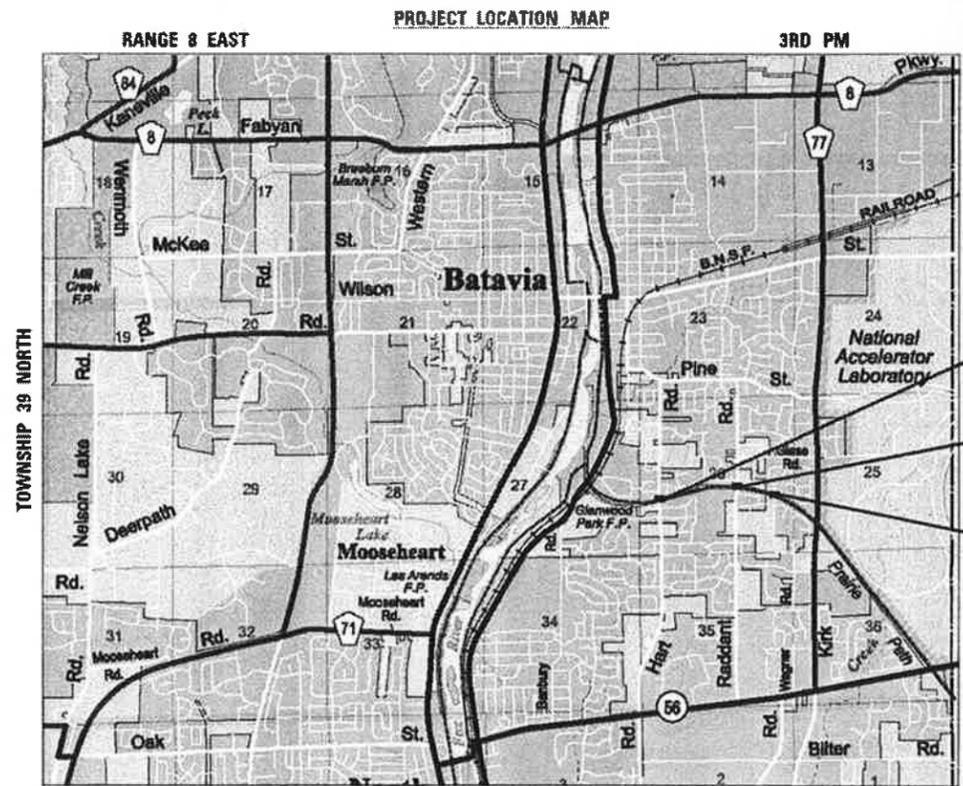
PRAIRIE PATH CROSSWALK IMPROVEMENTS
 AT HART ROAD, RADDANT ROAD
 AND WAGNER ROAD (LARKSPUR LANE)

SECTION: 13-00082-00-SP
 PROJECT: SRTS-4009 (300)
 CITY OF BATAVIA
 KANE COUNTY
 JOB: C-91-131-15

F.A.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	13-00082-00-SP	KANE	8	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 61883		



LOCATION OF SECTION INDICATED THUS: - [black rectangle] -



- HART ROAD CROSSWALK
- RADDANT ROAD CROSSWALK
- WAGNER ROAD (LARKSPUR LANE) CROSSWALK

PROFESSIONAL ENGINEER'S SIGN & SEAL
 EXCLUDING SHEET(S):




JEFFREY L. PISHA, P.E.
 EXPIRES: 11-30-15

BATAVIA TOWNSHIP
 PROJECT LENGTH
 GROSS AND NET LENGTH OF IMPROVEMENTS = NA

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

APPROVED MAY 4 2015
Andrew Pisha
 CITY OF BATAVIA

PASSED MAY 5 2015
C. Holtz
 DISTRICT ONE ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID
 BASED ON LIMITED REVIEW May 6 2015
John F. ...
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER



HRGreen

651 PRAIRIE POINTE, SUITE 201 | YORKVILLE, ILLINOIS 60560
 Phone: 630.553.7560 | Toll Free: 800.728.7805 | Fax: 630.553.7646 | HRGreen.com
 ILLINOIS PROFESSIONAL DESIGN FIRM #184-001322

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 OF THE STATE OF ILLINOIS

PROJECT ENGINEER: H. KNIGHT
 PROJECT MANAGER: J. PISHA
 CONTRACT NO. 61B83

FEDERAL AND PROGRAM ENGINEER: FAWAD AQUEEL, P.E. 847-705-4021 SCHAUMBURG, IL

COMPANY NAME: HR GREEN
 PROJECT CONTACT: HR GREEN, P.E.
 CLIENT: CITY OF BATAVIA
 FILE NAME: 222-130082-00-SP
 PLOT NUMBER: 001-130082-00-SP
 REV. TABLE:

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4 CROSSWALK PLAN - HART ROAD, RADDANT ROAD, AND WAGNER ROAD (LARKSPUR LANE)
- 5 DETAILS AND SIGNAGE
- 6 LIGHT POLE FOUNDATION, METAL
- 7 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
- 8 DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS

STATE STANDARDS

STANDARD NO.	LIST OF DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006-00	DECIMAL OF AN INCH AND OF A FOOT
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" 600 mm) FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701901-04	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS

DISTRICT ONE DETAILS

STANDARD NO.	LIST OF DESCRIPTION
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TS-05	STANDARD TRAFFIC SIGNAL DESIGN DETAILS

GENERAL NOTES

1. ALL REFERENCES TO "STANDARD SPECIFICATIONS" IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, JANUARY 1, 2012. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
2. ALL REFERENCES TO "ENGINEER" SHALL BE INTERPRETED TO MEAN THE RESIDENT ENGINEER.
3. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT SAME TO THE ENGINEER BEFORE DOING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTIONS, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS PRIOR TO BIDDING ON THE PROJECT.
5. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT 8-1-1, KDOT AT (630) 584-1170 AND THE CITY OF BATAVIA AT (630) 454-2000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION IS REQUIRED).
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.
7. THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR. THIS WORK SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MIGHT NOT BE SHOWN ON THE PLANS. ANY UTILITY PROPERTY DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.
9. ALL UTILITY COMPANIES SHALL BE NOTIFIED AT LEAST 3 DAYS PRIOR TO THE START OF CONSTRUCTION.
10. THE CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONS AND PROTECTION MEASURES REQUIRED TO MAINTAIN EXISTING UTILITIES, SEWERS, AND APPURTENANCES THAT MUST BE KEPT IN OPERATION.
11. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS, AND REFERENCE MARKERS UNTIL THE OWNER, HIS AGENT, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
12. THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH TYPE I OR II BARRICADE USED, ONE (1) SAND BAG ACROSS EACH BOTTOM RAIL. TYPE III BARRICADES SHALL HAVE FOUR (4) WEIGHTED SANDBAGS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY SIGNS DAMAGED BY HIS/HER CONSTRUCTION ACTIVITIES AND WILL REPLACE THEM AT NO COST TO THE CITY.
14. SIGNS SHALL NOT BE MOVED OR COVERED UNTIL PROGRESS OF WORK NECESSITATES IT.
15. THE CONTRACTOR WILL BE REQUIRED TO TEMPORARILY RESET ALL SUCH SIGNS THAT INTERFERE WITH HIS CONSTRUCTION OPERATIONS. ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND CLEAN FOR THE DURATION OF THE TEMPORARY SETTING AND MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER AND BE VISIBLE TO THE TRAFFIC FOR WHICH IT IS INTENDED. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.
16. THE CONTRACTOR SHALL PLAN THEIR WORK BASED ON THEIR OWN BORINGS, EXPLORATIONS AND OBSERVATIONS TO DETERMINE SOIL CONDITIONS AT THE LOCATION OF PROPOSED WORK.



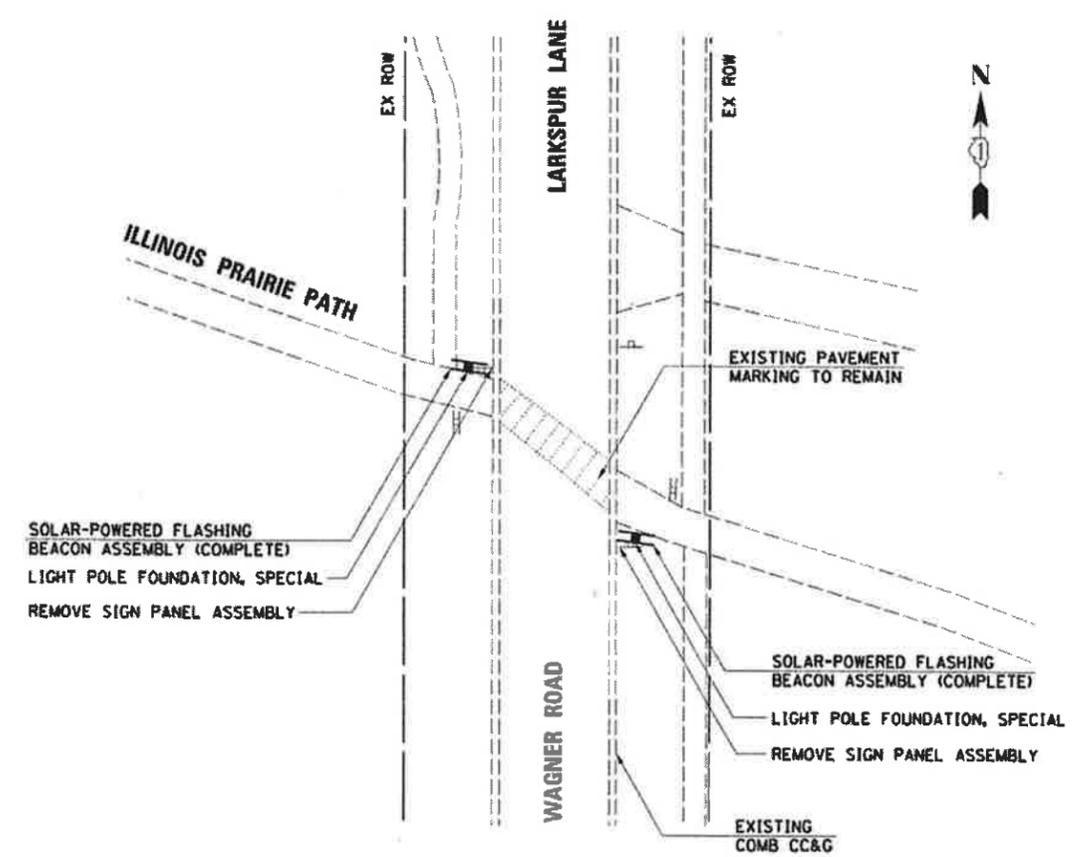
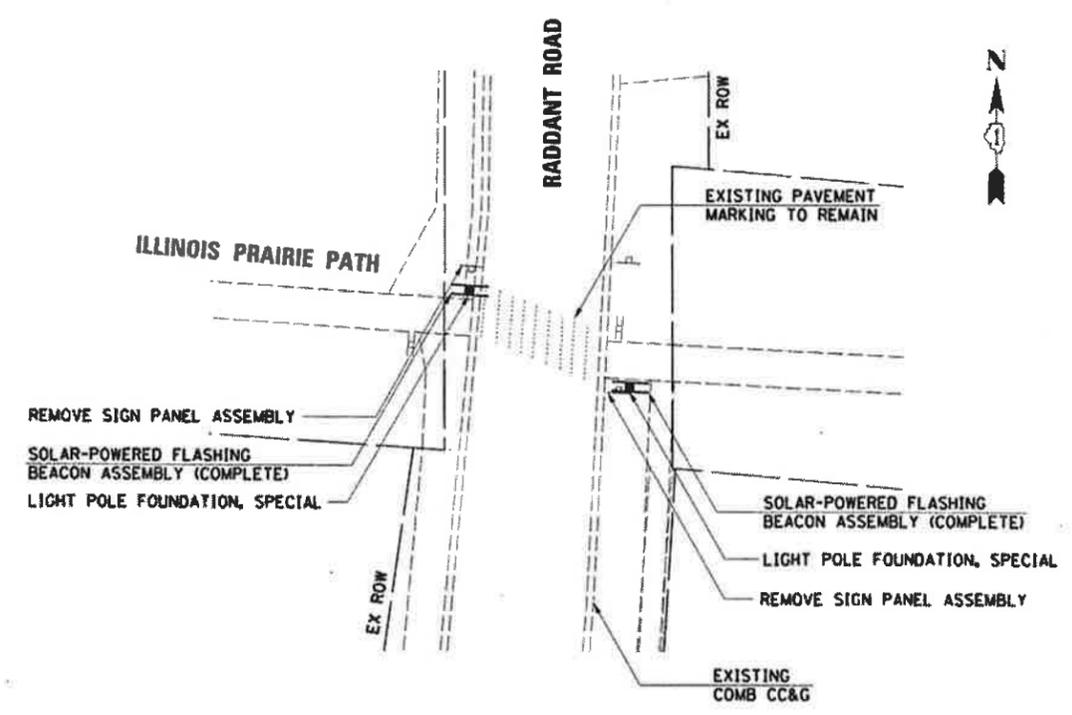
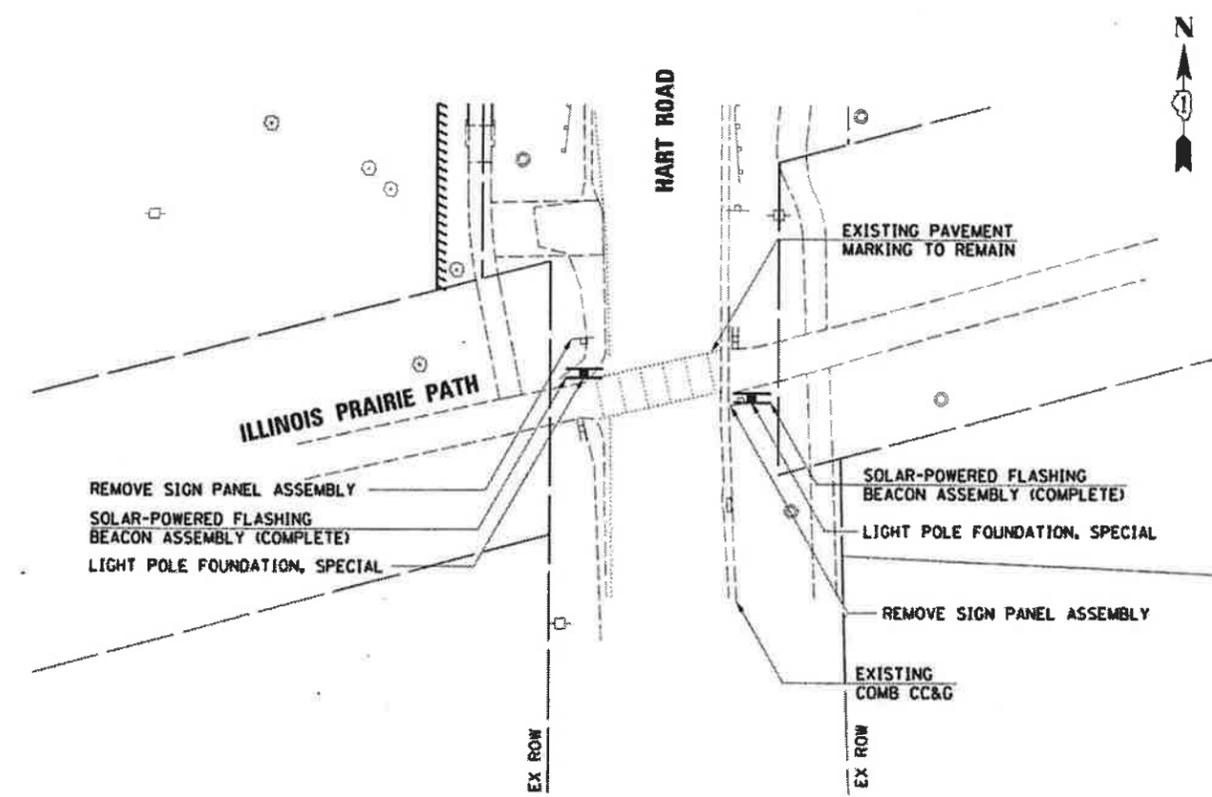
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PLOT DATE = 4/28/2015	DATE = 4/28/15	REVISED =

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES

F.A.U. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
	13-00082-00-SP	KANE	8	2
CONTRACT NO. 61B83				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

SCALE: SHEET NO. OF SHEETS STA. TO STA.



RESTORATION OF WORK AREA

RESTORATION OF THE WORK AREA SHALL BE INCLUDED IN THE COST OF LIGHT POLE FOUNDATION, SPECIAL AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL DAMAGE TO ROADWAY SURFACES SUCH AS CURB AND CUTTERS, SHOULDERS, SIDEWALKS, PAVEMENT, ETC. SHALL BE PLACED IN KIND. ALL DAMAGE TO PARKWAYS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

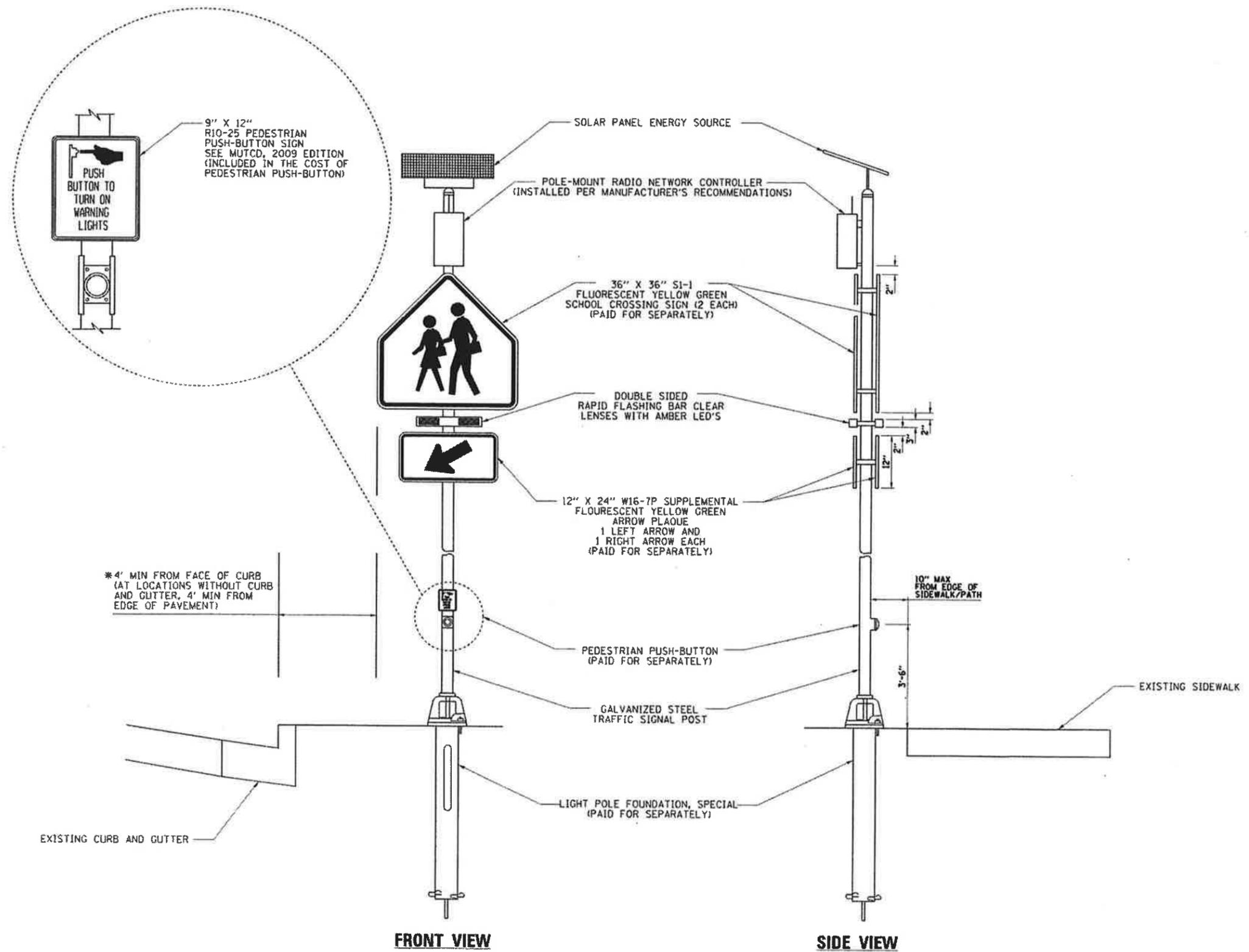
CROSSWALK PLAN
HART ROAD, RADDANT ROAD, AND WAGNER ROAD (LARKSPUR LANE)

F.A.U. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 61B83	

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PLOT DATE = 4/28/15	DATE = 4/28/15	REVISED -

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184-091322

SCALE: SHEET NO. OF SHEETS STA. TO STA.



* 4' MIN FROM FACE OF CURB
(AT LOCATIONS WITHOUT CURB
AND GUTTER, 4' MIN FROM
EDGE OF PAVEMENT)

EXISTING CURB AND GUTTER

10" MAX
FROM EDGE OF
SIDEWALK/PATH

EXISTING SIDEWALK

* 2' MIN FROM FACE OF CURB
ALONG WEST SIDE OF
RADDANT ROAD DUE TO
THE 3' WIDE PARKWAY

FRONT VIEW **SIDE VIEW**

**TYPICAL RECTANGULAR RAPID FLASHING BEACON SYSTEM
PEDESTRIAN PEDESTAL INSTALLATION (TWO SIDED)**

ACTUAL DIMENSIONS AND MOUNTING REQUIREMENTS
PER SPECIAL PROVISIONS AND MANUFACTURER RECOMMENDATIONS
(SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE))



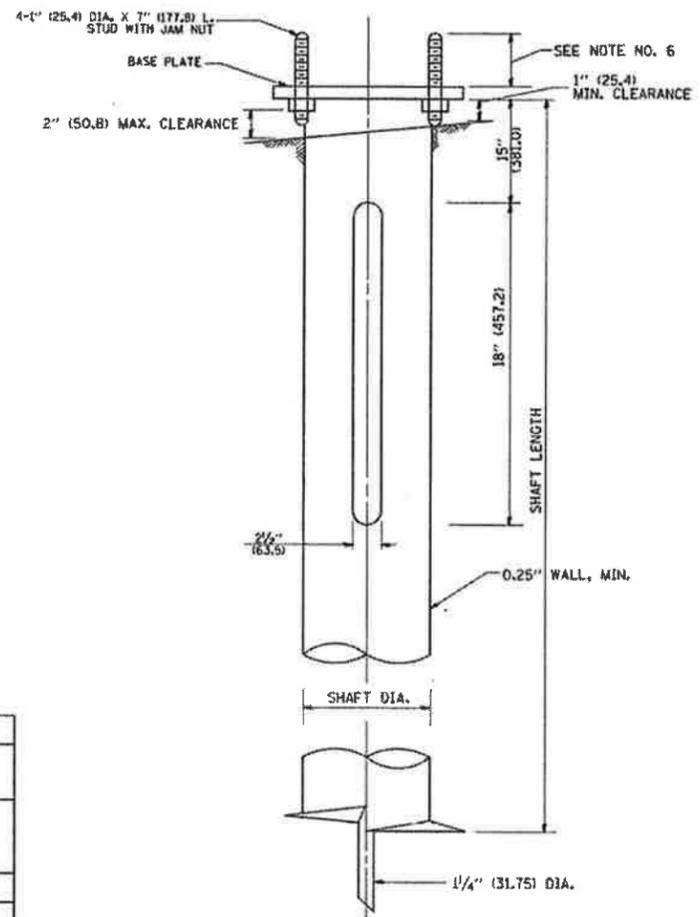
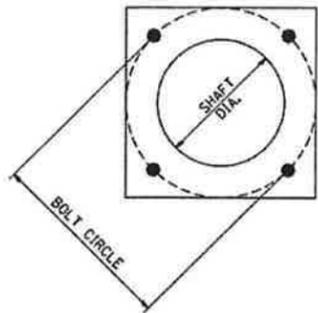
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PLOT DATE = 4/28/2015	DATE = 4/28/15	REVISED =

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETAILS AND SIGNAGE

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
	13-00082-00-SP	KANE	8	5
CONTRACT NO. 61B83				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



NOTES:

1. ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. ALL MATERIAL SHALL BE GALVINIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
3. ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN 1/4" (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
4. THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE POLE INSTALLATION.
5. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
6. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
7. ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
8. METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FOUNDATION IS NOT ALLOWED.
9. THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
10. THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS ($\pm 1^\circ$) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC (± 0.188) TO THE SHAFT AXIS.
11. THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC (± 0.125) AND IN LINE ($\pm 2^\circ$).
12. THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.

HELIX FOUNDATION SIZE

POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	11 1/2"	8 5/8"	6 FT.	12"x12"x1"
31 FT.-35 FT.	11 1/2"	8 5/8"	6 FT.	12"x12"x1"
36 FT.-40FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
41 FT.-45 FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
46 FT.-50 FT.	15"	10"	8 FT.	15"x15"x1 1/4"

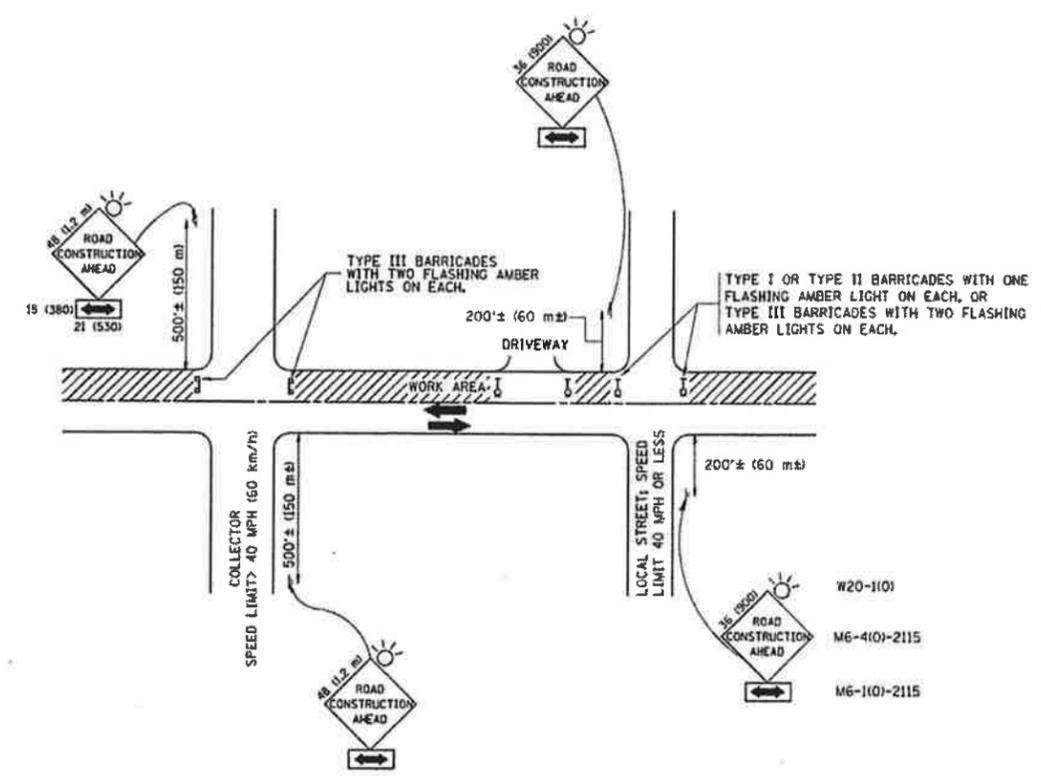
METAL HELIX FOUNDATION MATERIALS

ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE 0H, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)

FILE NAME: W:\projects\272-34\13a-385.dgn	USER NAME: gregianobis	DESIGNED: -	REVISIONS: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHT POLE FOUNDATION, METAL	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
PLOT SCALE: 5/8" = 1' @ 11"	PLOT DATE: 1/4/2008	DRAWN: DLB	CHECKED: -			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	BE-388 CONTRACT NO.			
		DATE: 02-27-07	REVISIONS: -									
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT												

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LIGHT POLE FOUNDATION, METAL		F.A.U. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
			13-00082-00-SP	KANE	8	6
CONTRACT NO. 61B83						
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 70150L, STD. 70150S OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

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		DRAWN =	REVISED = A. HOUSEH 03-06-96
		CHECKED =	REVISED = A. HOUSEH 10-15-96
		DATE = 06-89	REVISED = T. RAUMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TC-18			
CONTRACT NO.				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

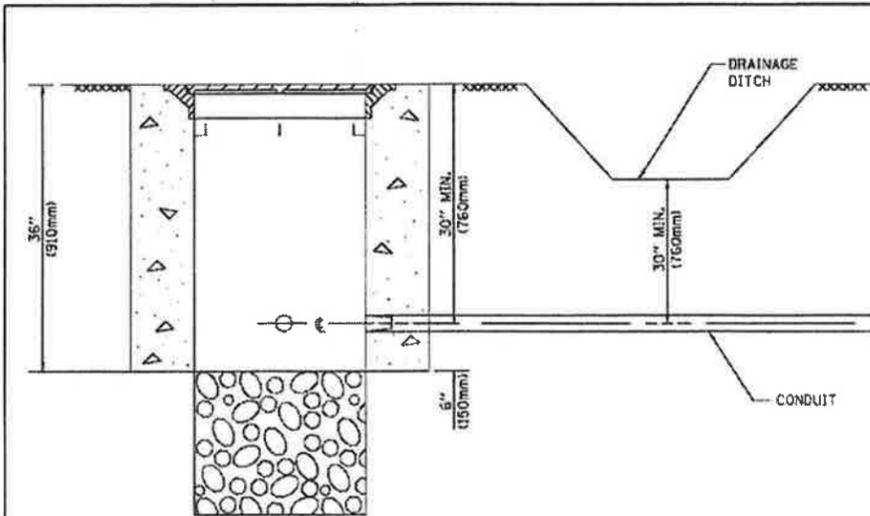
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

F.A.U. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
	13-00082-00-5P	KANE	8	7
CONTRACT NO. 61B83				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

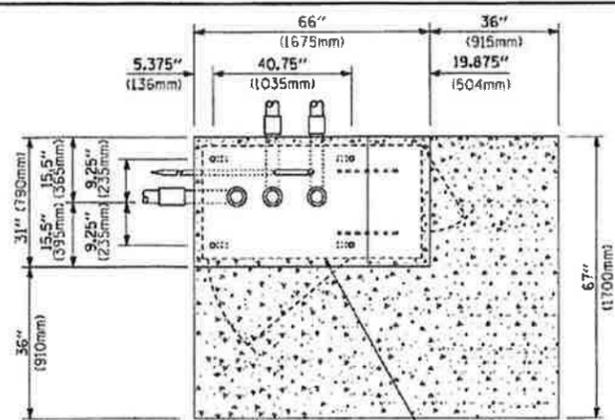




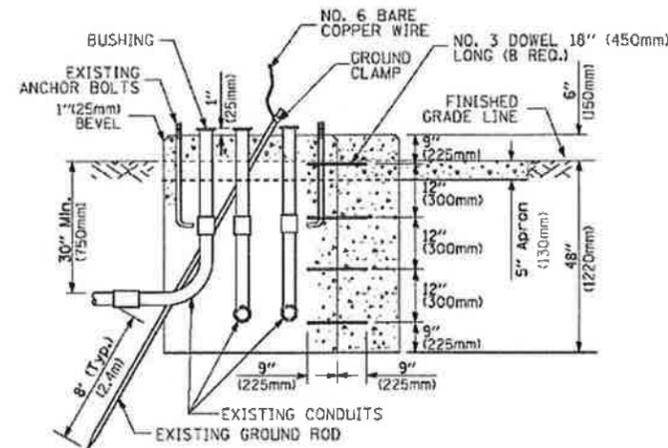
NOTES:

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



TOP VIEW
(NOT TO SCALE)

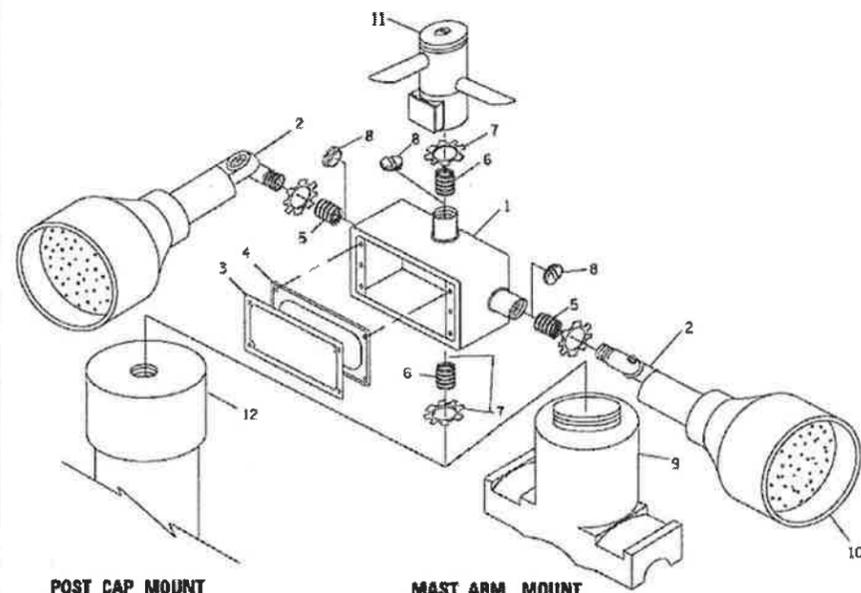


MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	1/2" (19 mm) LOCKNUT
8	1/2" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP (18 FT. (5.4 m) POST MIN.)

NOTES:

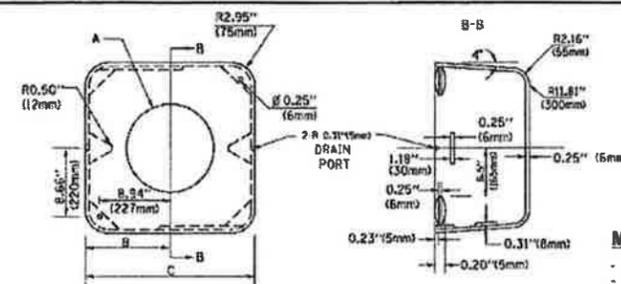
1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (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.



POST CAP MOUNT

MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



MATERIAL:

- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24 kg)
VARIES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	58 lbs (31 kg)
VARIES	13.0" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

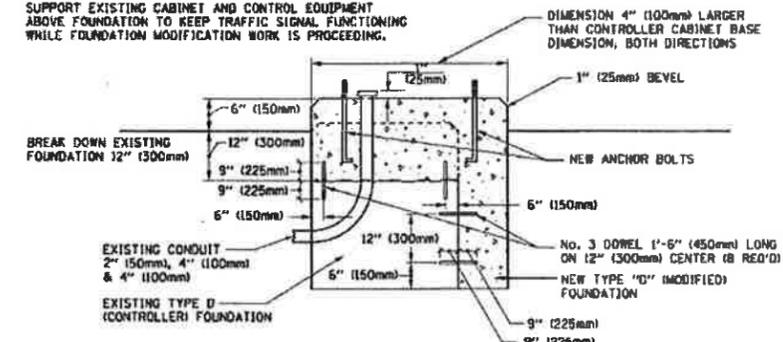
SHROUD

NOTES:

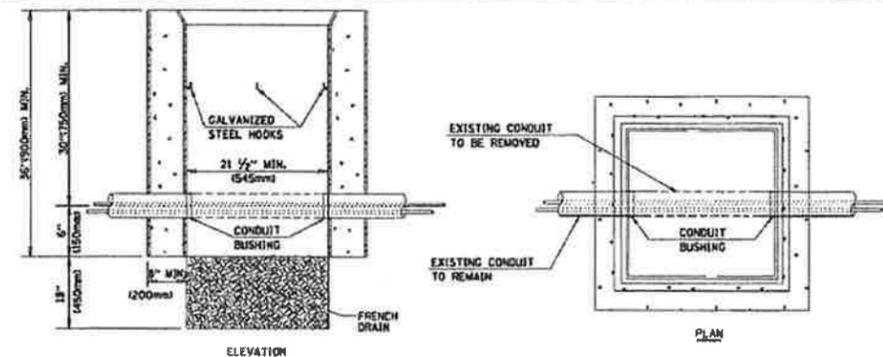
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

FILE NAME =	USER NAME = foostm	DESIGNED - DAD	REVISED - DAG 1-1-14
FILE NAME = 274.dwt24.dgn	USER NAME = foostm	DRAWN - BCK	REVISED -
PLOT SCALE = 1/8" = 1'	USER NAME = foostm	CHECKED - DAD	REVISED -
PLOT DATE = 1/13/2014	USER NAME = foostm	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE		F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			TS-05			
SCALE: NONE		SHEET NO. 6 OF 7 SHEETS		STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

FILE NAME =	USER NAME = mfeiler	DESIGNED -	REVISED -
FILE NAME = 274.dwt24.dgn	USER NAME = mfeiler	DRAWN -	REVISED -
PLOT SCALE =	USER NAME = mfeiler	CHECKED -	REVISED -
PLOT DATE = 4/28/2015	USER NAME = mfeiler	DATE - 4/28/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE		F.A.U. R.T.E.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			13-00082-00-SP	KANE	8	8
SCALE:		SHEET NO. OF SHEETS		STA. TO STA.	CONTRACT NO. 61B83	
				FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

ABV	ABOVE	CU YD	CUBIC YARD	HD	HEAD	PED	PEDESTAL	STD	STANDARD
A/C	ACCESS CONTROL	CULV	CULVERT	HDW	HEADWALL	PNT	POINT	SBI	STATE BOND ISSUE
AC	ACRE	C&G	CURB & GUTTER	HDUTY	HEAVY DUTY	PC	POINT OF CURVATURE	SR	STATE ROUTE
ADJ	ADJUST	D	DEGREE OF CURVE	ha	HECTARE	PI	POINT OF INTERSECTION OF HORIZONTAL CURVE	STA	STATION
AS	AERIAL SURVEYS	DC	DEPRESSED CURVE	HMA	HOT MIX ASPHALT	PRC	POINT OF REVERSE CURVE	SPBGR	STEEL PLATE BEAM GUARDRAIL
AGG	AGGREGATE	DET	DETECTOR	HWY	HIGHWAY	PT	POINT OF TANGENCY	SS	STORM SEWER
AH	AHEAD	DIA	DIAMETER	HORIZ	HORIZONTAL	POT	POINT ON TANGENT	STY	STORY
APT	APARTMENT	DIST	DISTRICT	HSE	HOUSE	POLYETH	POLYETHYLENE	ST	STREET
ASPH	ASPHALT	DOM	DOMESTIC	IL	ILLINOIS	PCC	PORTLAND CEMENT CONCRETE	STR	STRUCTURE
AUX	AUXILIARY	DBL	DOUBLE	IMP	IMPROVEMENT	PP	POWER POLE OR PRINCIPAL POINT	e	SUPERELEVATION RATE
AGS	AUXILIARY GAS VALVE (SERVICE)	DSEL	DOWNSTREAM ELEVATION	IN DIA	INCH DIAMETER	PRM	PRIME	S.E. RUN.	SUPERELEVATION RUNOFF LENGTH
AVE	AVENUE	DSFL	DOWNSTREAM FLOWLINE	INL	INLET	PE	PRIVATE ENTRANCE	SURF	SURFACE
AX	AXIS OF ROTATION	DR	DRAINAGE OR DRIVE	INST	INSTALLATION	PROF	PROFILE	SMK	SURVEY MARKER
BK	BACK	DI	DRAINAGE INLET OR DROP INLET	IDS	INTERSECTION DESIGN STUDY	PGL	PROFILE GRADELINE	T	TANGENT DISTANCE
B-B	BACK TO BACK	DRV	DRIVEWAY	INV	INVERT	PROJ	PROJECT	T.R.	TANGENT RUNOUT DISTANCE
BKPL	BACKPLATE	DCT	DUCT	IP	IRON PIPE	P.C.	PROPERTY CORNER	TEL	TELEPHONE
B	BARN	EA	EACH	IR	IRON ROD	PL	PROPERTY LINE	TB	TELEPHONE BOX
BARR	BARRICADE	EB	EASTBOUND	JT	JOINT	PR	PROPOSED	TP	TELEPHONE POLE
BGN	BEGIN	EOP	EDGE OF PAVEMENT	kg	KILOGRAM	R	RADIUS	TEMP	TEMPORARY
BM	BENCHMARK	E-CL	EDGE TO CENTERLINE	km	KILOMETER	RR	RAILROAD	TBM	TEMPORARY BENCH MARK
BIND	BINDER	E-E	EDGE TO EDGE	LS	LANDSCAPING	RRS	RAILROAD SPIKE	TD	TILE DRAIN
BIT	BITUMINOUS	EL	ELEVATION	LN	LANE	RPS	REFERENCE POINT STAKE	TBE	TO BE EXTENDED
BTM	BOTTOM	ENTR	ENTRANCE	LT	LEFT	REF	REFLECTIVE	TBR	TO BE REMOVED
BLVD	BOULEVARD	EXC	EXCAVATION	LP	LIGHT POLE	RCCP	REINFORCED CONCRETE CULVERT PIPE	TBS	TO BE SAVED
BRK	BRICK	EX	EXISTING	LGT	LIGHTING	REINF	REINFORCEMENT	TWP	TOWNSHIP
BBOX	BUFFALO BOX	EXPWAY	EXPRESSWAY	LF	LINEAL FEET OR LINEAR FEET	REM	REMOVAL	TR	TOWNSHIP ROAD
BLDG	BUILDING	E	EXTERNAL DISTANCE OF HORIZONTAL CURVE	L	LITER OR CURVE LENGTH	RC	REMOVE CROWN	TS	TRAFFIC SIGNAL
CIP	CAST IRON PIPE	E	OFFSET DISTANCE TO VERTICAL CURVE	LC	LONG CHORD	REP	REPLACEMENT	TSCB	TRAFFIC SIGNAL CONTROL BOX
CB	CATCH BASIN	F-F	FACE TO FACE	LNG	LONGITUDINAL	REST	RESTAURANT	TSC	TRAFFIC SYSTEMS CENTER
C-C	CENTER TO CENTER	FA	FEDERAL AID	L SUM	LUMP SUM	RESURF	RESURFACING	TRVS	TRANSVERSE
CL	CENTERLINE OR CLEARANCE	FAI	FEDERAL AID INTERSTATE	MACH	MACHINE	RET	RETAINING	TRVL	TRAVEL
CL-E	CENTERLINE TO EDGE	FAP	FEDERAL AID PRIMARY	MB	MAIL BOX	RT	RIGHT	TRN	TURN
CL-F	CENTERLINE TO FACE	FAS	FEDERAL AID SECONDARY	MH	MANHOLE	ROW	RIGHT-OF-WAY	TY	TYPE
CTS	CENTERS	FAUS	FEDERAL AID URBAN SECONDARY	MATL	MATERIAL	RD	ROAD	T-A	TYPE A
CERT	CERTIFIED	FP	FENCE POST	MED	MEDIAN	RDWY	ROADWAY	TYP	TYPICAL
CHSLD	CHISELED	FE	FIELD ENTRANCE	m	METER	RTE	ROUTE	UNDGND	UNDERGROUND
CS	CITY STREET	FH	FIRE HYDRANT	METH	METHOD	SAN	SANITARY	USGS	U.S. GEOLOGICAL SURVEY
CP	CLAY PIPE	FL	FLOW LINE	M	MID-ORDINATE	SANS	SANITARY SEWER	USEL	UPSTREAM ELEVATION
CLSD	CLOSED	FB	FOOT BRIDGE	mm	MILLIMETER	SEC	SECTION	USFL	UPSTREAM FLOWLINE
CLID	CLOSED LID	FDN	FOUNDATION	mm DIA	MILLIMETER DIAMETER	SEED	SEEDING	UTIL	UTILITY
CT	COAT OR COURT	FR	FRAME	MIX	MIXTURE	SHAP	SHAPING	VBOX	VALVE BOX
COMB	COMBINATION	F&G	FRAME & GRATE	MBH	MOBILE HOME	S	SHED	VV	VALVE VAULT
C	COMMERCIAL BUILDING	FRWAY	FREEWAY	MOD	MODIFIED	SH	SHEET	VL	VAULT
CE	COMMERCIAL ENTRANCE	GAL	GALLON	MFT	MOTOR FUEL TAX	SHLD	SHOULDER	VEH	VEHICLE
CONC	CONCRETE	GALV	GALVANIZED	N & BC	NAIL & BOTTLE CAP	SW	SIDEWALK OR SOUTHWEST	VP	VENT PIPE
CONST	CONSTRUCT	G	GARAGE	N & C	NAIL & CAP	SIG	SIGNAL	VERT	VERTICAL
CONTD	CONTINUED	GM	GAS METER	N & W	NAIL & WASHER	SOD	SODDING	VC	VERTICAL CURVE
CONT	CONTINUOUS	GV	GAS VALVE	NOAA	NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION	SM	SOLID MEDIAN	VPC	VERTICAL POINT OF CURVATURE
COR	CORNER	GRAN	GRANULAR	NC	NORMAL CROWN	SB	SOUTHBOUND	VPI	VERTICAL POINT OF INTERSECTION
CORR	CORRUGATED	GR	GRATE	NB	NORTHBOUND	SE	SOUTHEAST	VPT	VERTICAL POINT OF TANGENCY
CMP	CORRUGATED METAL PIPE	GRVL	GRAVEL	NE	NORTHEAST	SPL	SPECIAL	WM	WATER METER
CNTY	COUNTY	GND	GROUND	NW	NORTHWEST	SD	SPECIAL DITCH	WV	WATER VALVE
CH	COUNTY HIGHWAY	GUT	GUTTER	OLID	OPEN LID	SQ FT	SQUARE FEET	WMAIN	WATER MAIN
CSE	COURSE	GP	GUY POLE	PAT	PATTERN	m ²	SQUARE METER	WB	WESTBOUND
XSECT	CROSS SECTION	GW	GUY WIRE	PVD	PAVED	mm ²	SQUARE MILLIMETER	WILDFL	WILDFLOWERS
m ³	CUBIC METER	HH	HANDHOLE	PVMT	PAVEMENT	SQ YD	SQUARE YARD	W	WITH
mm ³	CUBIC MILLIMETER	HATCH	HATCHING	PM	PAVEMENT MARKING	STB	STABILIZED	WO	WITHOUT

Illinois Department of Transportation	
PASSED	January 1, 2011
<i>Michael Brand</i>	
ENGINEER OF POLICY AND PROCEDURES	
APPROVED	January 1, 2011
<i>Scott Smith</i>	
ENGINEER OF DESIGN AND ENVIRONMENT	
ISSUED	1-1-97

DATE	REVISIONS
1-1-11	Updated abbreviations and symbols.
1-1-08	Updated abbreviations and symbols.

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

(Sheet 1 of 8)

STANDARD 000001-06

<u>ADJUSTMENT ITEMS</u>		<u>EX</u>	<u>PR</u>	<u>ALIGNMENT ITEMS</u>		<u>EX</u>	<u>PR</u>	<u>CONTOUR ITEMS</u>		<u>EX</u>	<u>PR</u>
Structure To Be Adjusted			ADJ	Baseline				Approx. Index Line			
Structure To Be Cleaned			C	Centerline				Approx. Intermediate Line			
Main Structure To Be Filled			FM	Centerline Break Circle		o	o	Index Contour			
Structure To Be Filled			F	Baseline Symbol		B	B	Intermediate Contour			
Structure To Be Filled Special			FSP	Centerline Symbol		C	C	<u>DRAINAGE ITEMS</u>			
Structure To Be Removed			R	PI Indicator		△	△	Channel or Stream Line			
Structure To Be Reconstructed			REC	Point Indicator		o	o	Culvert Line			
Structure To Be Reconstructed Special			RSP	Horizontal Curve Data (Half Size)		CURVE P.I. STA= Δ= D= R= T= L= E= e= T.R.= S.E. RUN= P.C. STA= P.T. STA=	CURVE P.I. STA= Δ= D= R= T= L= E= e= T.R.= S.E. RUN= P.C. STA= P.T. STA=	Grading & Shaping Ditches			
Frame and Grate To Be Adjusted			A	<u>BOUNDARIES ITEMS</u>		<u>EX</u>	<u>PR</u>	Drainage Boundary Line			
Frame and Lid To Be Adjusted			A	Dashed Property Line				Paved Ditch			
Domestic Service Box To Be Adjusted			A	Solid Property/Lot Line				Aggregate Ditch			
Valve Vault To Be Adjusted			A	Section/Grant Line				Pipe Underdrain			
Special Adjustment			SP	Quarter Section Line				Storm Sewer			
Item To Be Abandoned			AB	Quarter/Quarter Section Line				Flowline			
Item To Be Moved			M	County/Township Line				Ditch Check			
Item To Be Relocated			REL	State Line				Headwall			
Pavement Removal and Replacement				Iron Pipe Found		o		Inlet			
				Iron Pipe Set		●		Manhole			
				Survey Marker		⊗		Summit			
				Property Line Symbol		P		Roadway Ditch Flow			
				Same Ownership Symbol (Half Size)		↗		Swale			
				Northwest Quarter Corner (Half Size)		⊙		Catch Basin			
				Section Corner (Half Size)		⊕		Culvert End Section			
				Southeast Quarter Corner (Half Size)		⊙		Water Surface Indicator			
								Riprap			

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**STANDARD SYMBOLS,
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(Sheet 2 of 8)

STANDARD 000001-06

EROSION & SEDIMENT CONTROL ITEMS

EX

PR

Cleaning & Grading Limits



Dike



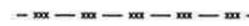
Erosion Control Fence



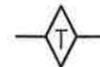
Perimeter Erosion Barrier



Temporary Fence



Ditch Check Temporary



Ditch Check Permanent



Inlet & Pipe Protection



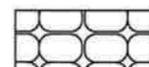
Sediment Basin



Erosion Control Blanket



Fabric Formed Concrete Revetment Mat



Turf Reinforcement Mat



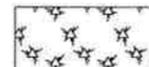
Mulch Temporary



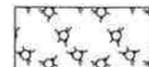
Mulch Method 1



Mulch Method 2 Stabilized



Mulch Method 3 Hydraulic

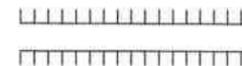


NON-HIGHWAY IMPROVEMENT ITEMS

EX

PR

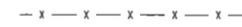
Noise Attn./Levee



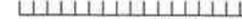
Field Line



Fence



Base of Levee



Mailbox



Multiple Mailboxes



Pay Telephone



Advertising Sign



LANDSCAPING ITEMS

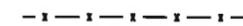
EX

PR

Contour Mounding Line



Fence



Fence Post



Shrubs



Mowline



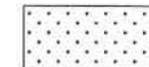
Perennial Plants



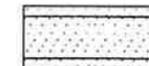
Seeding Class 2



Seeding Class 2A



Seeding Class 4



Seeding Class 4 & 5 Combined

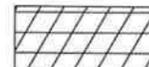


EXISTING LANDSCAPING ITEMS (contd.)

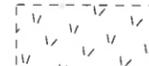
EX

PR

Seeding Class 5



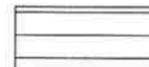
Seeding Class 7



Seedlings Type 1



Seedlings Type 2



Sodding



Mowstake w/Sign



Tree Trunk Protection



Evergreen Tree



Shade Tree



LIGHTING

EX

PR

Duct



Conduit



Electrical Aerial Cable



Electrical Buried Cable



Controller



Underpass Luminaire



Power Pole



STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

(Sheet 3 of 8)

STANDARD 000001-06

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LIGHTING
(contd.)

	EX	PR
Pull Point		
Handhole		
Heavy Duty Handhole		
Junction Box		
Light Unit Comb.		
Electrical Ground		
Traffic Flow Arrow		
High Mast Pole (Half Size)		
Light Unit-1		

PAVEMENT (MISC.)

	EX	PR
Keyed Long. Joint		
Keyed Long. Joint w/Tie Bars		
Sawed Long. Joint w/Tie Bars		
Bituminous Shoulder		
Bituminous Taper		
Stabilized Driveway		
Widening		

PAVEMENT MARKINGS

	EX	PR
Bike Lane Symbol		
Bike Lane Text		
Handicap Symbol		
RR Crossing		
Raised Marker Amber 1 Way		
Raised Marker Amber 2 Way		
Raised Marker Crystal 1 Way		
Two Way Turn Left		
Shoulder Diag. Pattern		
Skip-Dash White		
Skip-Dash Yellow		
Stop Line		
Solid Line		
Double Centerline		
Dotted Lines		
CL 2Ln 2Way RRPM 12.2 m (40') o.c.		
CL 2Ln 2Way RRPM 80' (24.4 m) o.c.		
CL Multilane Div. RRPM 40' (12.2 m) o.c.		
CL Multilane Div. RRPM 80' (24.4 m) o.c.		
CL Multilane Div. Dbl. RRPM 80' (24.4 m) o.c.		
CL Multilane Undiv.		
Two Way Turn Left Line		

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**STANDARD SYMBOLS,
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(Sheet 4 of 8)

STANDARD 000001-06

PAVEMENT MARKINGS

(contd.)

Urban Combination Left

Urban Combination Right

Urban Left Turn Arrow

Urban Right Turn Arrow

Urban Left Turn Only

Urban Right Turn Only

Urban Thru Only

Urban U-Turn

Urban Combined U-Turn

Rural Combination Left

Rural Combination Right

Rural Left Turn Arrow

Rural Right Turn Arrow

Rural Left Turn Only

Rural Right Turn Only

Rural Thru Only

EX

PR

ONLY ONLY ONLY

ONLY ONLY ONLY

RAILROAD ITEMS

EX

PR

Abandoned Railroad

Railroad

Railroad Point

Control Box

Crossing Gate

Flashing Signal

Railroad Cant. Mast Arm

Crossbuck

REMOVAL ITEMS

EX

PR

Removal Tic

Bituminous Removal

Hatch Pattern

Tree Removal Single

RIGHT OF WAY ITEMS

EX

PR

Future ROW Corner Monument

ROW Marker

ROW Line

Easement

Temporary Easement

**STANDARD SYMBOLS,
ABBREVIATIONS
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(Sheet 5 of 8)

STANDARD 000001-06

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**RIGHT OF WAY ITEMS
(contd.)**

	EX	PR
Access Control Line	— AC —	— AC —
Access Control Line & ROW	— AC —	— AC —
Access Control Line & ROW with Fence	-x— AR —	-x— AC —
Excess ROW Line		— XS —

**ROADWAY PLAN
ITEMS**

	EX	PR
Cable Barrier		
Concrete Barrier		
Edge of Pavement		
Bit Shoulders, Medians and C&G Line		
Aggregate Shoulder		
Sidewalks, Driveways		
Guardrail		
Guardrail Post		
Traffic Sign		
Corrugated Median		
Impact Attenuator		
North Arrow with District Office (Half Size)		
Match Line		STA. 45+00
Slope Limit Line		
Typical Cross-Section Line		

ROADWAY PROFILES

	EX	PR
P.I. Indicator	▲	▲
Point Indicator	○	○
Earthworks Balance Point		
Begin Point		
Vert. Curve Data	VPI = ELEV = L = E =	VPI = ELEV = L = E =
Ditch Profile Left Side		
Ditch Profile Right Side		
Roadway Profile Line		
Storm Sewer Profile Left Side		
Storm Sewer Profile Right Side		

SIGNING ITEMS

	EX	PR
Cone, Drum or Barricade		○
Barricade Type II		
Barricade Type III		
Barricade With Edge Line		
Flashing Light Sign		○
Panels I		
Panels II		
Direction of Traffic		
Sign Flag (Half Size)		

**SIGNING ITEMS
(contd.)**

	EX	PR
Reverse Left W1-4L (Half Size)		
Reverse Right W1-4R (Half Size)		
Two Way Traffic Sign W6-3 (Half Size)		
Detour Ahead W20-2(O) (Half Size)		
Left Lane Closed Ahead W20-5L(O) (Half Size)		
Right Lane Closed Ahead W20-5R(O) (Half Size)		
Road Closed Ahead W20-3(O) (Half Size)		
Road Construction Ahead W20-1(O) (Half Size)		
Single Lane Ahead (Half Size)		
Transition Left W4-2L (Half Size)		
Transition Right W4-2R (Half Size)		

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**STANDARD SYMBOLS,
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(Sheet 6 of 8)

STANDARD 000001-06

SIGNING ITEMS
(contd.)

EX

PR

One Way Arrow Lrg. W1-6-(0)
(Half Size)



Two Way Arrow Large W1-7-(0)
(Half Size)



Detour M4-10L-(0)
(Half Size)



Detour M4-10R-(0)
(Half Size)



One Way Left R6-1L
(Half Size)



One Way Right R6-1R
(Half Size)



Left Turn Lane R3-I100L
(Half Size)



Keep Left R4-7AL
(Half Size)



Keep Left R4-7BL
(Half Size)



Keep Right R4-7AR
(Half Size)



Keep Right R4-7BR
(Half Size)



Stop Here On Red R10-6-AL
(Half Size)



Stop Here On Red R10-6-AR
(Half Size)



No Left Turn R3-2
(Half Size)



No Right Turn R3-1
(Half Size)



Road Closed R11-2
(Half Size)



Road Closed Thru Traffic R11-2
(Half Size)



STRUCTURES ITEMS

EX

PR

Box Culvert Barrel



Box Culvert Headwall



Bridge Pier



Bridge



Retaining Wall



Temporary Sheet Piling



TRAFFIC SHEET ITEMS

EX

PR

Cable Number



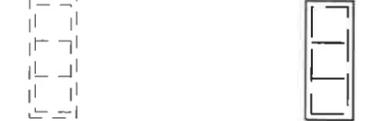
Left Turn Green



Left Turn Yellow



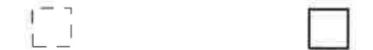
Signal Backplate



Signal Section 8" (200 mm)



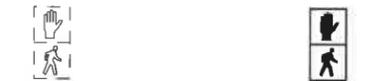
Signal Section 12" (300 mm)



Walk/Don't Walk Letters



Walk/Don't Walk Symbols



TRAFFIC SIGNAL ITEMS

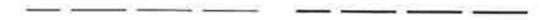
EX

PR

Galv. Steel Conduit



Underground Cable



Detector Loop Line



Detector Loop Large



Detector Loop Small



Detector Loop Quadrapole



Illinois Department of Transportation

PASSED January 1, 2011
Michael Brand
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2011
Scott Smith
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

**STANDARD SYMBOLS,
ABBREVIATIONS
AND PATTERNS**

(Sheet 7 of 8)

STANDARD 000001-06

**TRAFFIC SIGNAL
ITEMS (contd.)**

EX

PR

Detector Raceway



Aluminum Mast Arm



Steel Mast Arm



Veh. Detector Magnetic



Conduit Splice



Controller



Gulfbox Junction



Wood Pole



Temp. Signal Head



Handhole



Double Handhole



Heavy Duty Handhole



Junction Box



Ped. Pushbutton Detector



Ped. Signal Head



Power Pole Service



Priority Veh. Detector



Signal Head



Signal Head w/Backplate



Signal Post



Closed Circuit TV



Video Detector System



**UNDERGROUND
UTILITY ITEMS**

EX

PR

ABANDONED

Cable TV



Electric Cable



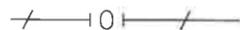
Fiber Optic



Gas Pipe



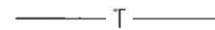
Oil Pipe



Sanitary Sewer



Telephone Cable



Water Pipe



UTILITIES ITEMS

EX

PR

Controller



Double Handhole



Fire Hydrant



GuyWire or Deadman Anchor



Handhole



Heavy Duty Handhole



Junction Box



Light Pole



Manhole



Pipeline Warning Sign



Power Pole



Power Pole with Light



Sanitary Sewer Cleanout



Splice Box Above Ground



Telephone Splice Box
Above Ground



Telephone Pole



**UTILITY ITEMS
(contd.)**

EX

PR

Traffic Signal



Traffic Signal Control Box



Water Meter



Water Meter Valve Box



Profile Line



Aerial Power Line



VEGETATION ITEMS

EX

PR

Deciduous Tree



Bush or Shrub



Evergreen Tree



Stump



Orchard/Nursery Line



Vegetation Line



Woods & Bush Line



**WATER FEATURE
ITEMS**

EX

PR

Stream or Drainage Ditch



Waters Edge



Water Surface Indicator



Water Point



Disappearing Ditch



Marsh



Marsh/Swamp Boundary



Illinois Department of Transportation

PASSED January 1, 2011

Michael Beard
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2011

Scott Smith
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

**STANDARD SYMBOLS,
ABBREVIATIONS
AND PATTERNS**

(Sheet 8 of 8)

STANDARD 000001-06

DECIMAL OF AN INCH AND OF A FOOT

A		B	A		B	A		B	A		B	A		B	A		B
1/64	0.0052	1/16	1/64	0.171875	2/16	1/32	0.3385	4/16	3/64	0.5052	6/16	1/16	0.671875	8/16	2/32	0.8385	10/16
	0.0104	1/8		0.1771	2/8		0.34375	4/8		0.5104	6/8		0.6771	8/8		0.84375	10/8
	0.015625	3/16		0.1823	2 3/16		0.3490	4 3/16		0.515625	6 3/16		0.6823	8 3/16		0.8490	10 3/16
	0.0208	1/4		0.1875	2 1/4		0.3542	4 1/4		0.5208	6 1/4		0.6875	8 1/4		0.8542	10 1/4
1/32	0.0260	5/16	1/64	0.1927	2 5/16	2 3/64	0.359375	4 5/16	1/32	0.5260	6 5/16	5/64	0.6927	8 5/16	5/64	0.859375	10 5/16
	0.03125	3/8		0.1979	2 3/8		0.3646	4 3/8		0.53125	6 3/8		0.6979	8 3/8		0.8646	10 3/8
	0.0365	7/16		0.203125	2 7/16		0.3698	4 7/16		0.5365	6 7/16		0.703125	8 7/16		0.8698	10 7/16
	0.0417	1/2		0.2083	2 1/2		0.3750	4 1/2		0.5417	6 1/2		0.7083	8 1/2		0.8750	10 1/2
3/64	0.046875	9/16	1/32	0.2135	2 9/16	2 5/64	0.3802	4 9/16	3/64	0.546875	6 9/16	2 3/32	0.7135	8 9/16	5/64	0.8802	10 9/16
	0.0521	5/8		0.21875	2 5/8		0.3854	4 5/8		0.5521	6 5/8		0.71875	8 5/8		0.8854	10 5/8
	0.0573	11/16		0.2240	2 11/16		0.390625	4 11/16		0.5573	6 11/16		0.7240	8 11/16		0.890625	10 11/16
	0.0625	3/4		0.2292	2 3/4		0.3958	4 3/4		0.5625	6 3/4		0.7292	8 3/4		0.8958	10 3/4
5/64	0.0677	13/16	1/4	0.234375	2 13/16	1/32	0.4010	4 13/16	3/64	0.5677	6 13/16	4/64	0.734375	8 13/16	2 1/32	0.9010	10 13/16
	0.0729	7/8		0.2396	2 7/8		0.40625	4 7/8		0.5729	6 7/8		0.7396	8 7/8		0.90625	10 7/8
	0.078125	15/16		0.2448	2 15/16		0.4115	4 15/16		0.578125	6 15/16		0.7448	8 15/16		0.9115	10 15/16
	0.0833	1		0.2500	3		0.4167	5		0.5833	7		0.7500	9		0.9167	11
3/32	0.0885	1 1/16	1/64	0.2552	3 1/16	2 1/64	0.421875	5 1/16	1/32	0.5885	7 1/16	4 1/64	0.7552	9 1/16	5 1/64	0.921875	11 1/16
	0.09375	1 1/8		0.2604	3 1/8		0.4271	5 1/8		0.59375	7 1/8		0.7604	9 1/8		0.9271	11 1/8
	0.0990	1 3/16		0.265625	3 3/16		0.4323	5 3/16		0.5990	7 3/16		0.765625	9 3/16		0.9323	11 3/16
	0.1042	1 1/4		0.2708	3 1/4		0.4375	5 1/4		0.6042	7 1/4		0.7708	9 1/4		0.9375	11 1/4
7/64	0.109375	1 5/16	9/32	0.2760	3 5/16	2 3/64	0.4427	5 5/16	3/64	0.609375	7 5/16	2 5/32	0.7760	9 5/16	6 1/64	0.9427	11 5/16
	0.1146	1 3/8		0.28125	3 3/8		0.4479	5 3/8		0.6146	7 3/8		0.78125	9 3/8		0.9479	11 3/8
	0.1198	1 7/16		0.2865	3 7/16		0.453125	5 7/16		0.6198	7 7/16		0.7865	9 7/16		0.953125	11 7/16
	0.1250	1 1/2		0.2917	3 1/2		0.4583	5 1/2		0.6250	7 1/2		0.7917	9 1/2		0.9583	11 1/2
9/64	0.1302	1 9/16	1/64	0.296875	3 9/16	1/32	0.4635	5 9/16	1/64	0.6302	7 9/16	5/64	0.796875	9 9/16	3/32	0.9635	11 9/16
	0.1354	1 5/8		0.3021	3 5/8		0.46875	5 5/8		0.6354	7 5/8		0.8021	9 5/8		0.96875	11 5/8
	0.140625	1 11/16		0.3073	3 11/16		0.4740	5 11/16		0.640625	7 11/16		0.8073	9 11/16		0.9740	11 11/16
	0.1458	1 3/4		0.3125	3 3/4		0.4792	5 3/4		0.6458	7 3/4		0.8125	9 3/4		0.9792	11 3/4
5/32	0.1510	1 13/16	2 1/64	0.3177	3 13/16	1/2	0.484375	5 13/16	2 1/32	0.6510	7 13/16	5 3/64	0.8177	9 13/16	6 3/64	0.984375	11 13/16
	0.15625	1 7/8		0.3229	3 7/8		0.4896	5 7/8		0.65625	7 7/8		0.8229	9 7/8		0.9896	11 7/8
	0.1615	1 15/16		0.328125	3 15/16		0.4948	5 15/16		0.6615	7 15/16		0.828125	9 15/16		0.9948	11 15/16
	0.1667	2		0.3333	4		0.5000	6		0.6667	8		0.8333	10		1.0000	12

A = Fractions of Inch or Foot
 B = Inch Equivalents to Foot Fractions

DATE	REVISIONS
1-1-97	New Standard.

**DECIMAL OF AN INCH
AND OF A FOOT**

STANDARD 001006

Illinois Department of Transportation

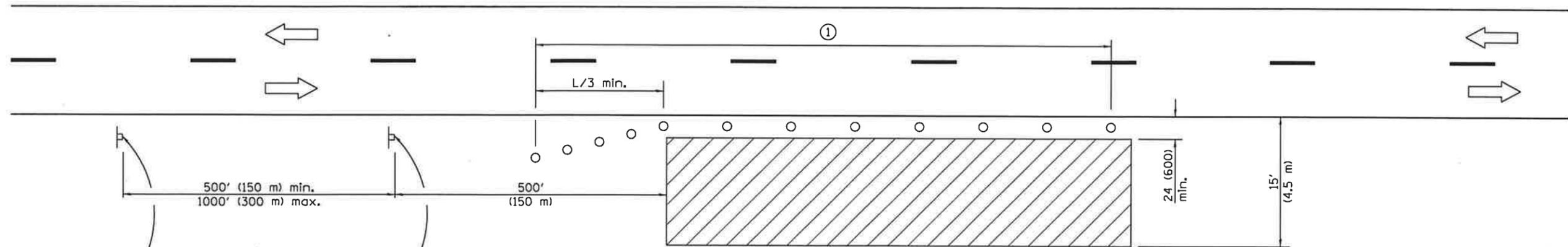
PASSED January 1, 1997

APPROVED January 1, 1997

ENGINEER OF POLICY AND PROCEDURES

ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97



For contract construction projects



W20-1103(0)-48



W21-1(0)-48

For maintenance and utility projects



W20-1(0)-48

TYPICAL APPLICATIONS

- Utility operations
- Culvert extensions
- Side slope changes
- Guardrail installation and maintenance
- Delineator installation
- Landscaping operations
- Shoulder repair
- Sign installation and maintenance

SYMBOLS

-  Work area
-  Sign
-  Cone, drum or barricade

① When the work operation exceeds one hour, cones, drums or barricades shall be placed at 25' (8 m) centers for L/3 distance, and at 50' (15 m) centers through the remainder of the work area.

GENERAL NOTES

This Standard is used where any vehicles, equipment, workers or their activities will encroach in the area 15' (4.5 m) to 24' (600) from the edge of pavement.

Calculate L as follows:

SPEED LIMIT	FORMULAS	
	English	(Metric)
40 mph (70 km/h) or less:	$L = \frac{WS^2}{60}$	$L = \frac{WS^2}{150}$
45 mph (80 km/h) or greater:	$L = (W)(S)$	$L = 0.65(W)(S)$

W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

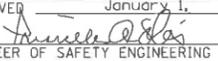
All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-14	Revised workers sign number to agree with current MUTCD.
1-1-13	Omitted text 'WORKERS' sign.

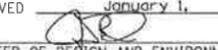
**OFF-RD OPERATIONS, 2L, 2W,
15' (4.5 m) TO 24" (600 mm)
FROM PAVEMENT EDGE**

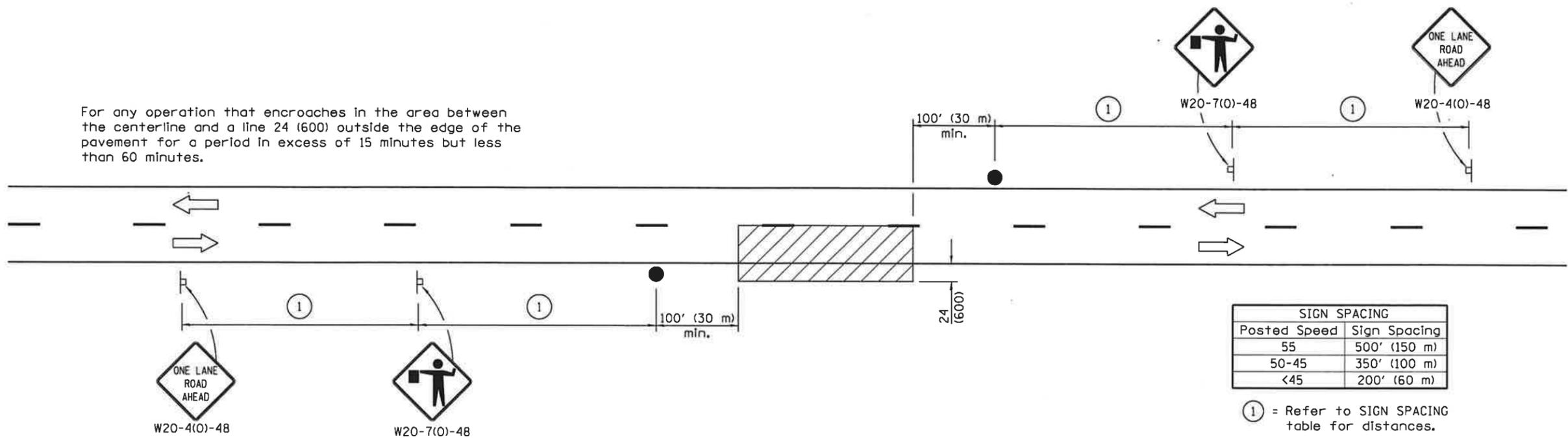
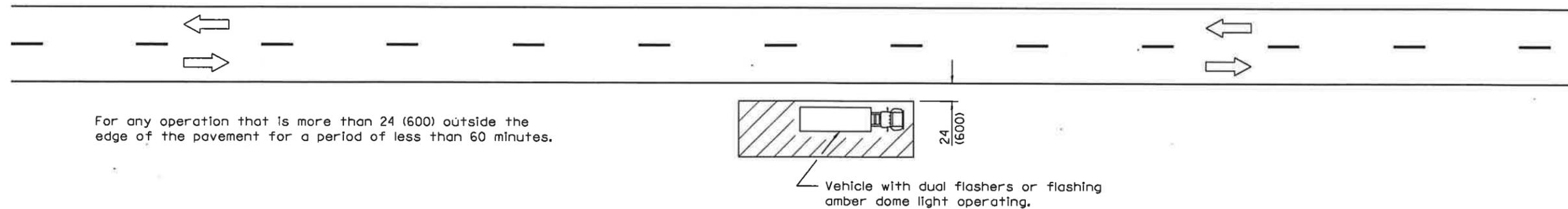
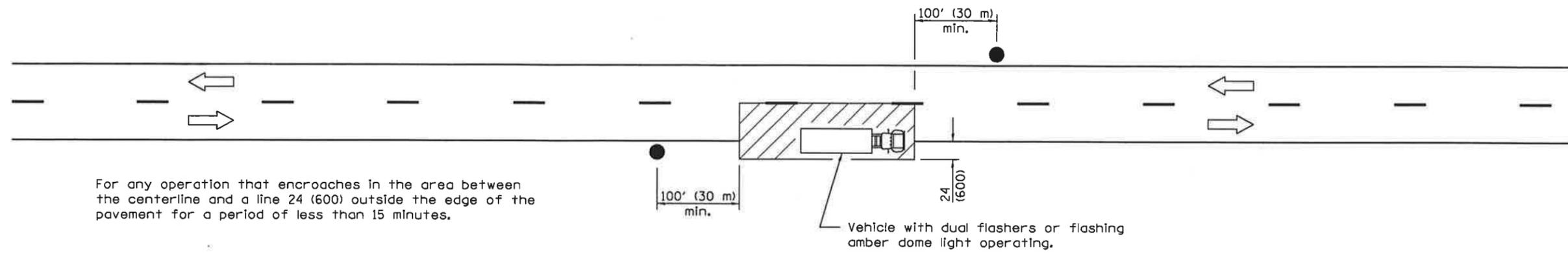
STANDARD 701006-05

Illinois Department of Transportation

APPROVED January 1, 2014

 ENGINEER OF SAFETY ENGINEERING

ISSUED 1-1-97

APPROVED January 1, 2014

 ENGINEER OF DESIGN AND ENVIRONMENT



TYPICAL APPLICATIONS

- Marking patches
- Field survey
- String line
- Utility operations
- Cleaning up debris on pavement

SYMBOLS

- Work area
- Sign on portable or permanent support
- Flagger with traffic control sign

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

Illinois Department of Transportation

APPROVED January 1, 2011
Amber O'Brien
 ENGINEER OF SAFETY ENGINEERING

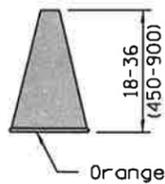
ISSUED 1-1-97

APPROVED January 1, 2011
Scott Smith
 ENGINEER OF DESIGN AND ENVIRONMENT

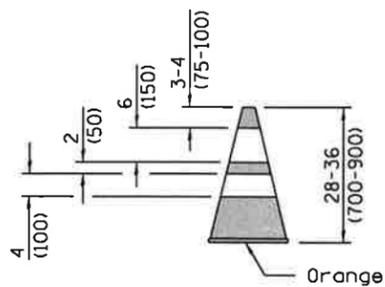
DATE	REVISIONS
1-1-11	Revised flagger sign.
1-1-09	Switched units to English (metric).

LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

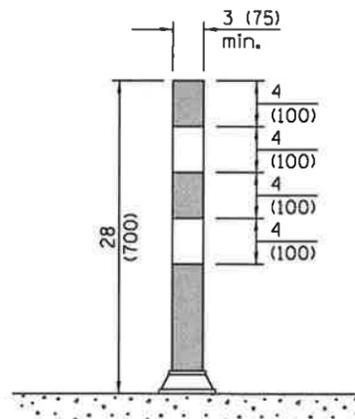
STANDARD 701301-04



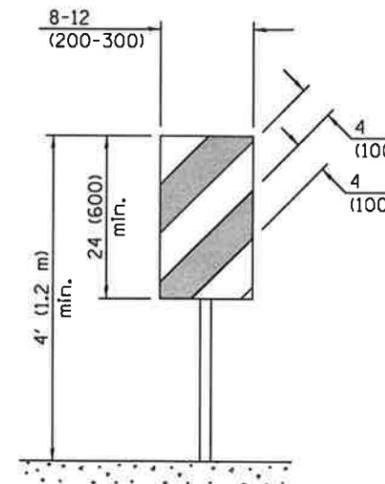
CONE



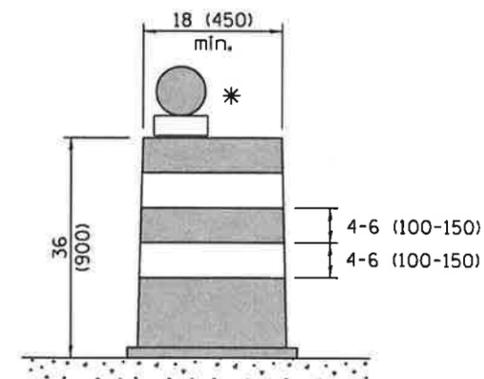
REFLECTORIZED CONE



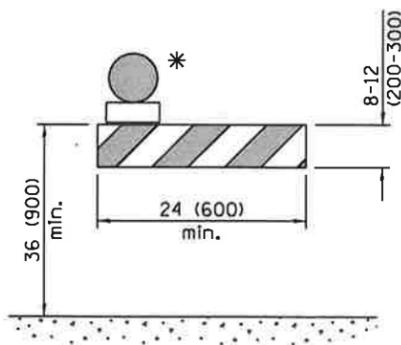
FLEXIBLE DELINEATOR



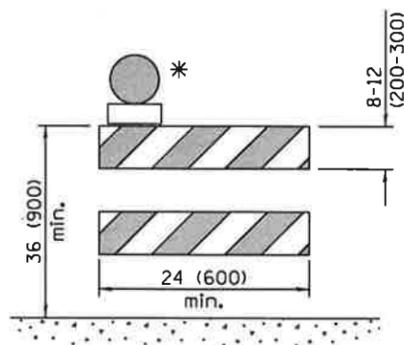
**VERTICAL PANEL
POST MOUNTED**



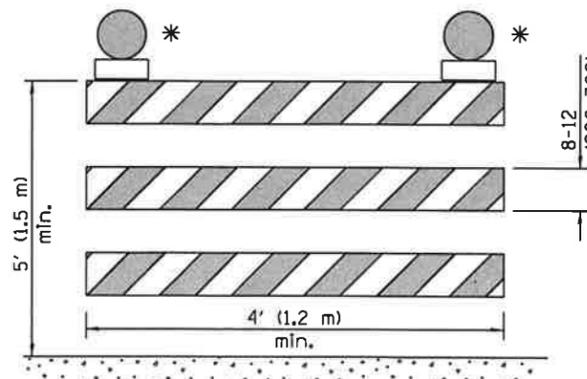
DRUM



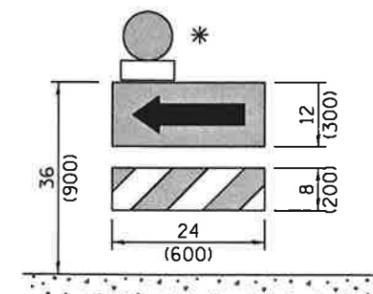
TYPE I BARRICADE



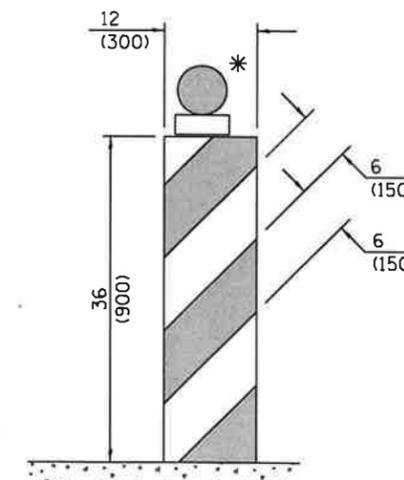
TYPE II BARRICADE



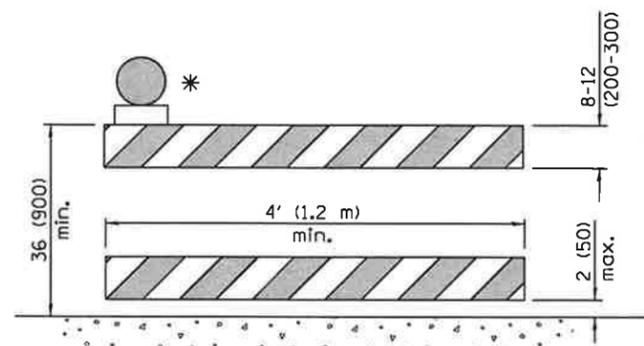
TYPE III BARRICADE



**DIRECTION INDICATOR
BARRICADE**



VERTICAL BARRICADE



**DETECTABLE PEDESTRIAN
CHANNELIZING BARRICADE**

* Warning lights (if required)

GENERAL NOTES

All heights shown shall be measured above the pavement surface.

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

Illinois Department of Transportation

APPROVED January 1, 2015
Jerry Ellis
 ENGINEER OF OPERATIONS

APPROVED January 1, 2015
DR
 ENGINEER OF DESIGN AND ENVIRONMENT

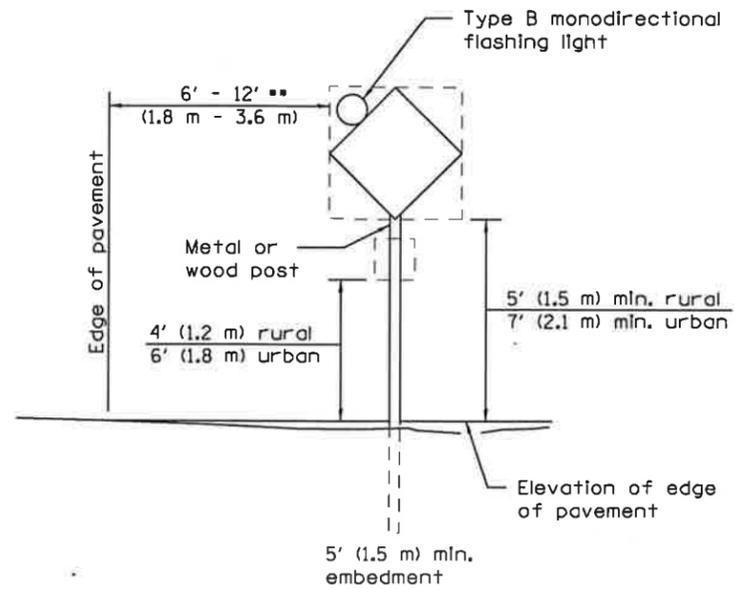
ISSUED 76-1-1-97

DATE	REVISIONS
1-1-15	Revised two sign numbers on sheet 2. Added note reg. PHOTO ENFORCED plaque.
1-1-14	Modified flagger sign height. Added highway construction speed zone signs.

**TRAFFIC CONTROL
DEVICES**

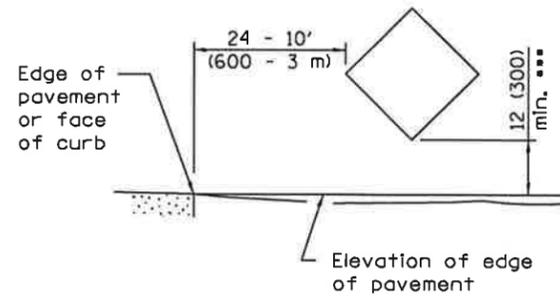
(Sheet 1 of 3)

STANDARD 701901-04



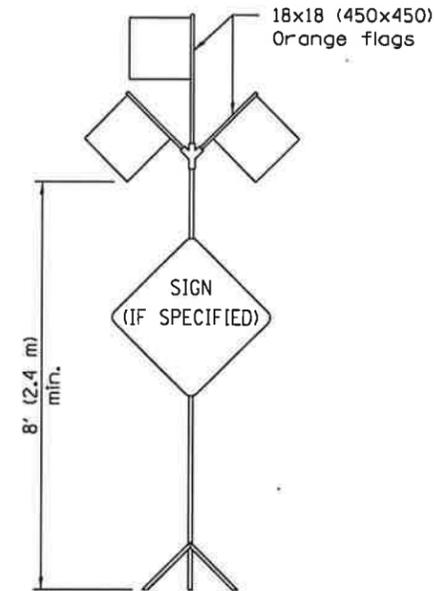
POST MOUNTED SIGNS

•• When curb or paved shoulder are present this dimension shall be 24 (600) to the face of curb or 6' (1.8 m) to the outside edge of the paved shoulder.

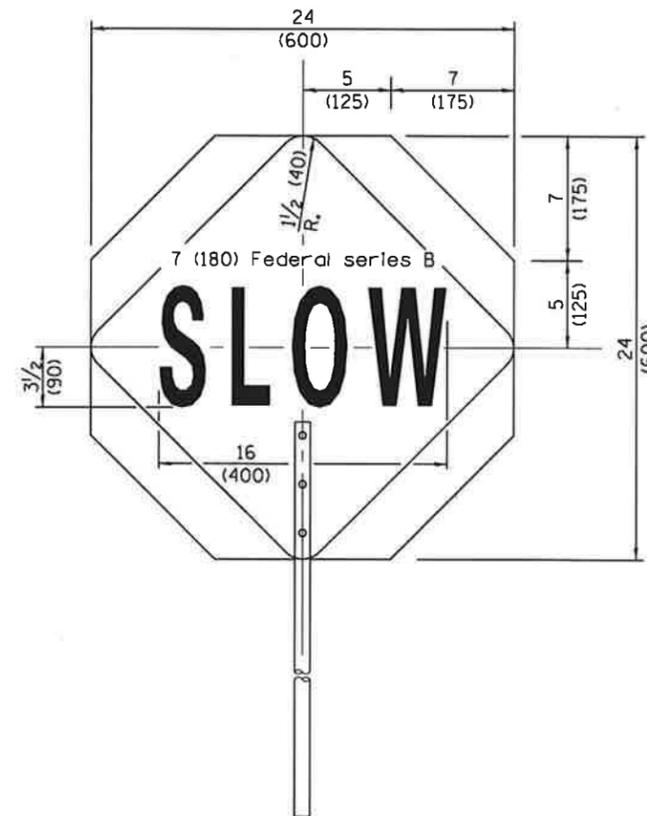
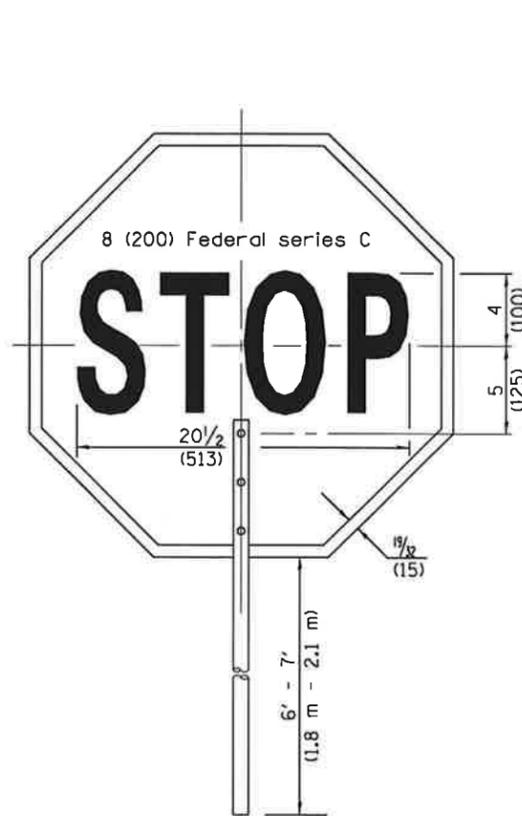


SIGNS ON TEMPORARY SUPPORTS

••• When work operations exceed four days, this dimension shall be 5' (1.5 m) min. If located behind other devices, the height shall be sufficient to be seen completely above the devices.



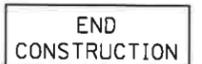
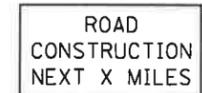
HIGH LEVEL WARNING DEVICE



FRONT SIDE

REVERSE SIDE

FLAGGER TRAFFIC CONTROL SIGN



G20-I104(O)-6036

G20-I105(O)-6024

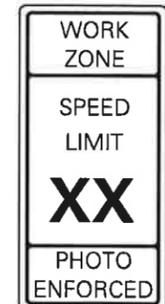
This signing is required for all projects 2 miles (3200 m) or more in length.

ROAD CONSTRUCTION NEXT X MILES sign shall be placed 500' (150 m) in advance of project limits.

END CONSTRUCTION sign shall be erected at the end of the job unless another job is within 2 miles (3200 m).

Dual sign displays shall be utilized on multi-lane highways.

WORK LIMIT SIGNING



W21-I115(O)-3618

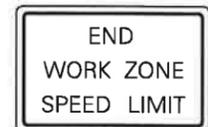
R2-1-3648

R10-I108p-3618 ••••



R2-I106p-3618

Sign assembly as shown on Standards or as allowed by District Operations.



G20-I103(O)-6036

This sign shall be used when the above sign assembly is used.

HIGHWAY CONSTRUCTION SPEED ZONE SIGNS

•••• R10-I108p shall only be used along roadways under the jurisdiction of the State.

TRAFFIC CONTROL DEVICES

(Sheet 2 of 3)

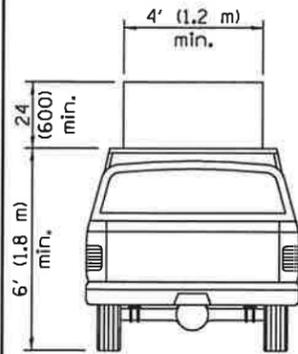
STANDARD 701901-04

Illinois Department of Transportation

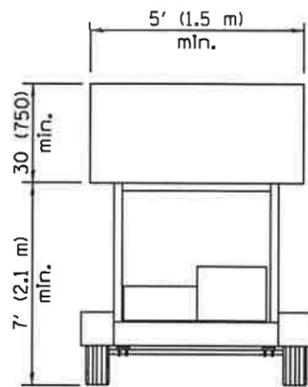
APPROVED January 1, 2015
Amy Ellis
 ENGINEER OF OPERATIONS

APPROVED January 1, 2015
[Signature]
 ENGINEER OF DESIGN AND ENVIRONMENT

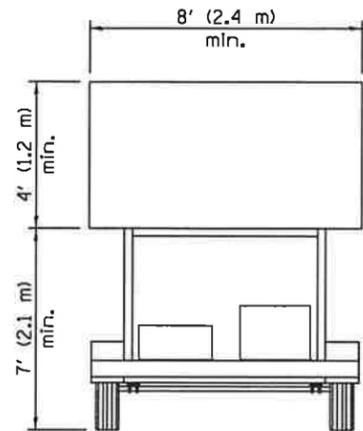
ISSUED 1-1-97



**TYPE A
ROOF
MOUNTED**

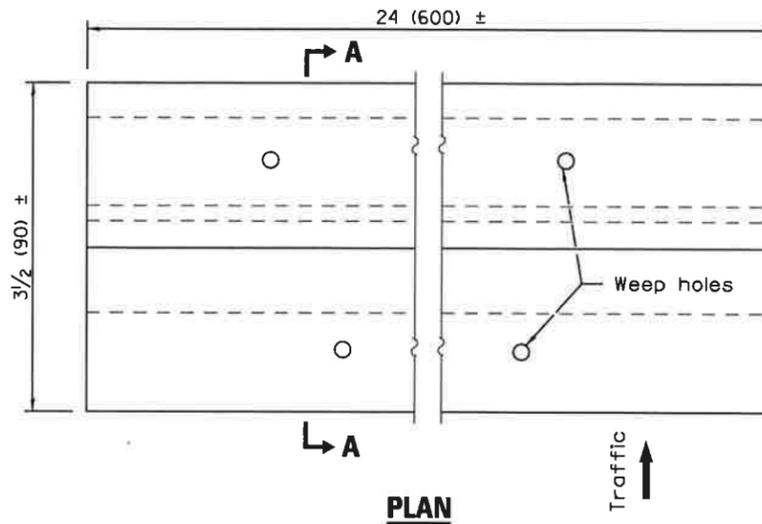


**TYPE B
ROOF OR TRAILER
MOUNTED**

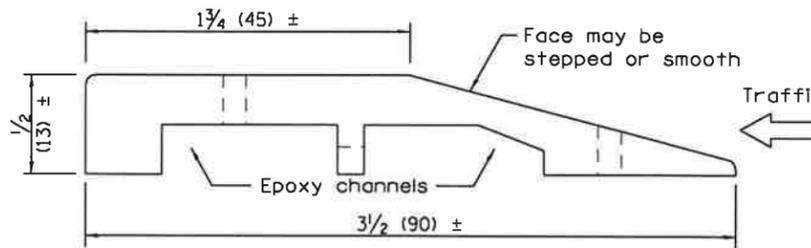


**TYPE C
TRAILER
MOUNTED**

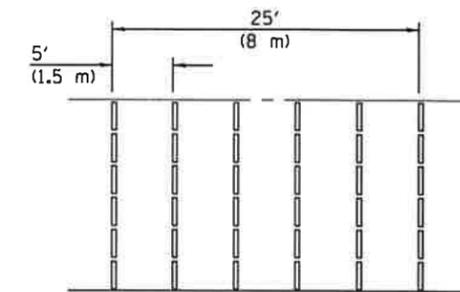
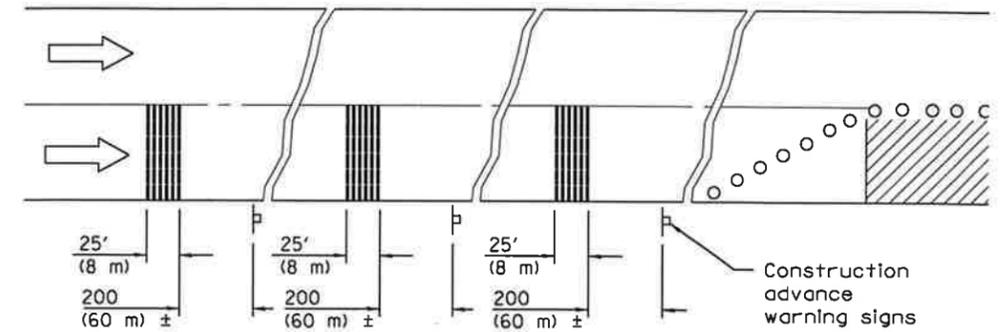
ARROW BOARDS



PLAN

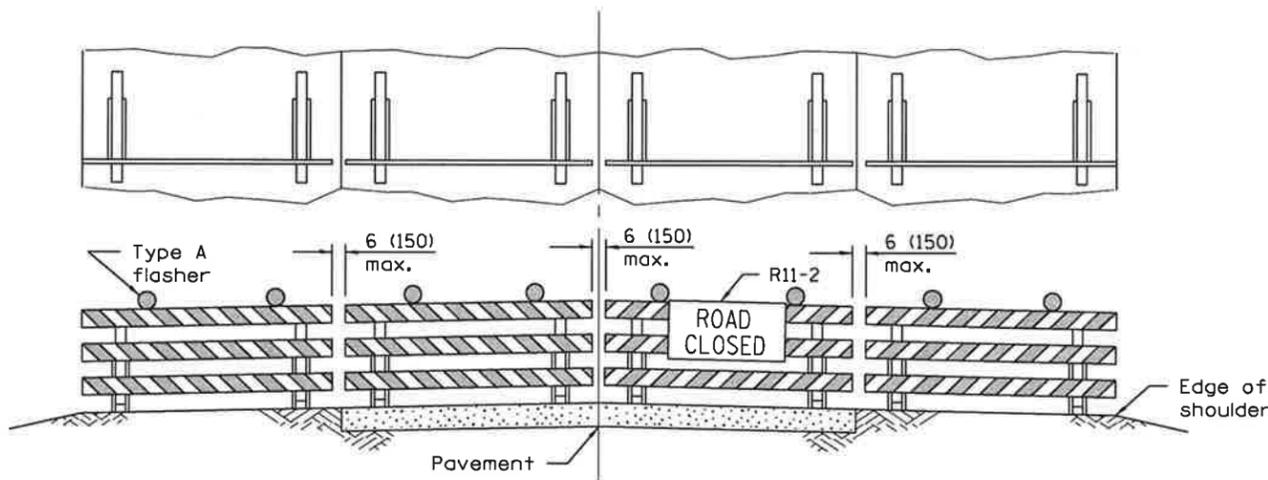


SECTION A-A



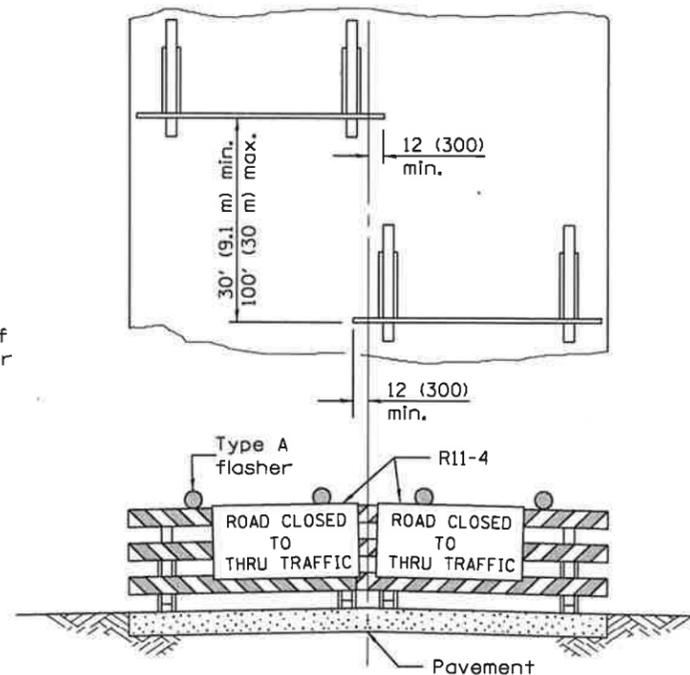
TYPICAL INSTALLATION

TEMPORARY RUMBLE STRIPS



ROAD CLOSED TO ALL TRAFFIC

Reflectorized striping may be omitted on the back side of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the sign may be mounted on an NCHRP 350 temporary sign support directly in front of the barricade.



ROAD CLOSED TO THRU TRAFFIC

Reflectorized striping shall appear on both sides of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the signs may be mounted on NCHRP 350 temporary sign supports directly in front of the barricade.

**TYPICAL APPLICATIONS OF
TYPE III BARRICADES CLOSING A ROAD**

Illinois Department of Transportation

APPROVED January 1, 2015
Jerry Ellis
 ENGINEER OF OPERATIONS

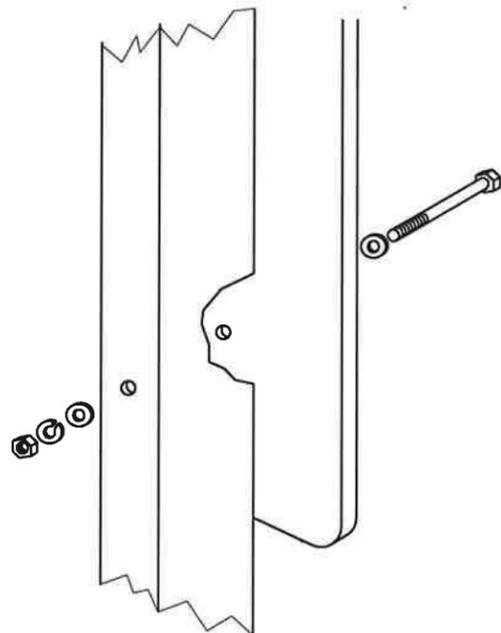
APPROVED January 1, 2015
[Signature]
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

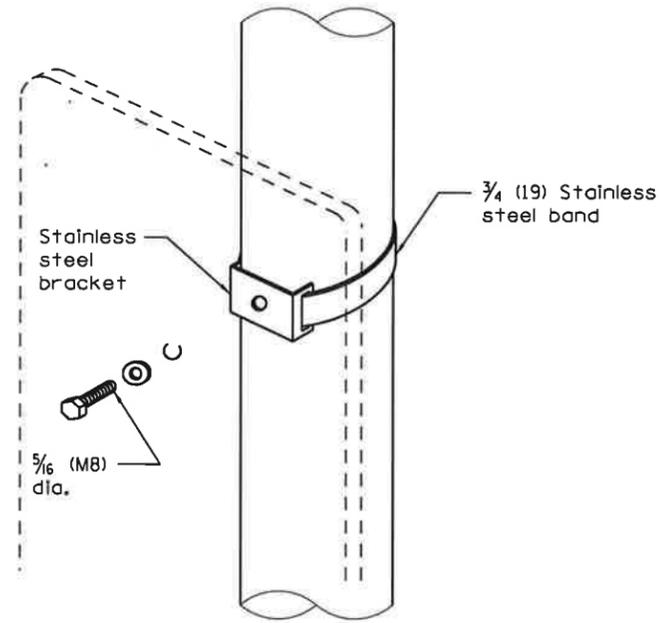
**TRAFFIC CONTROL
DEVICES**

(Sheet 3 of 3)

STANDARD 701901-04

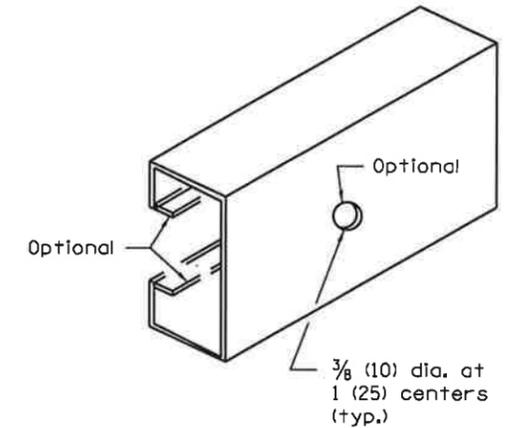
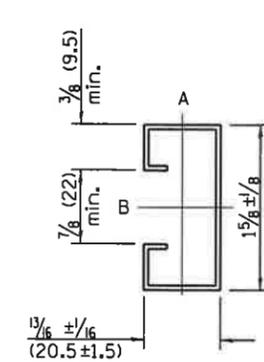


Sign panel 36 (900) wide or less

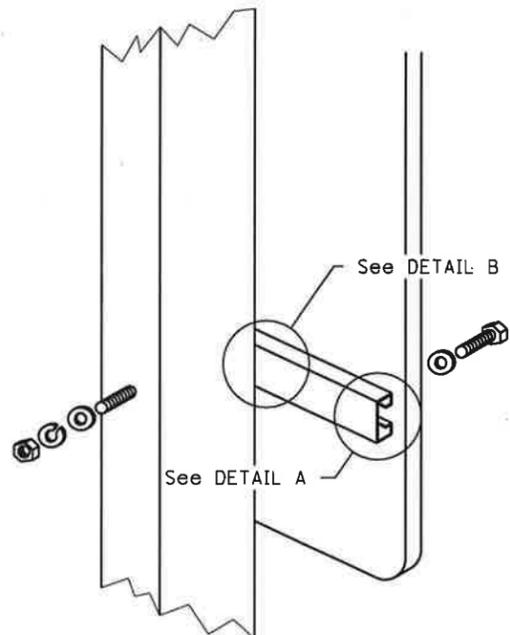


Sign panel 36 (900) wide or less

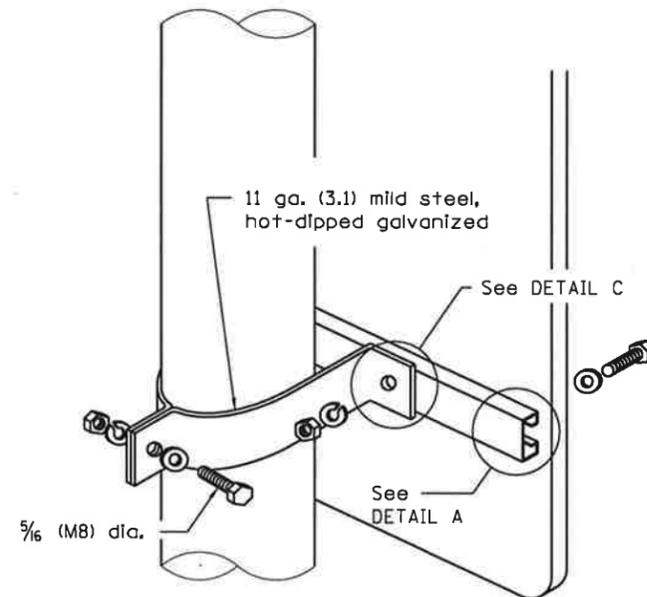
Section modulus (minimum)	Axis A	Axis B
Steel	0.050 in. ³ (819 mm ³)	0.105 in. ³ (1720 mm ³)
Aluminum	0.150 in. ³ (2458 mm ³)	0.315 in. ³ (5162 mm ³)



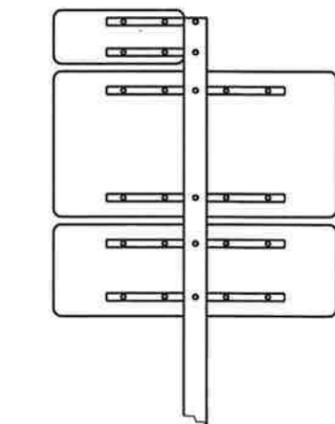
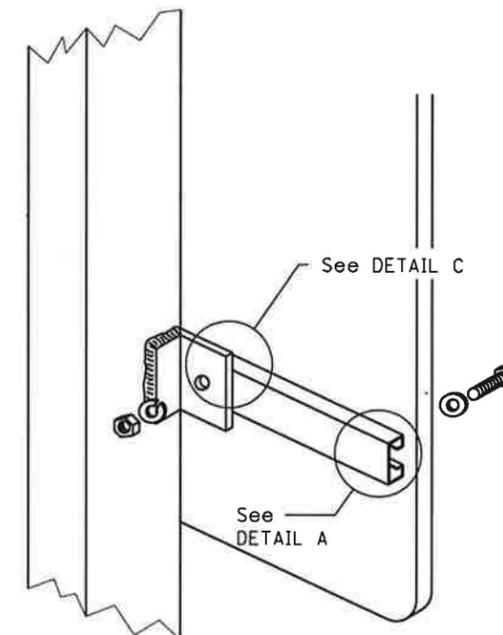
SUPPORTING CHANNEL DETAILS



Sign panel over 36 (900) wide



Sign panel over 36 (900) wide

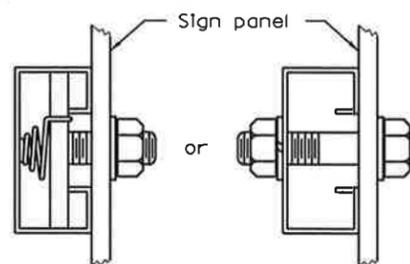


ROUTE MARKER ASSEMBLY

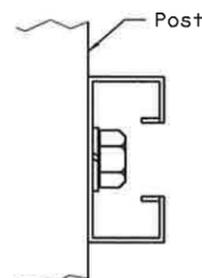
WOOD OR TELESCOPING STEEL POSTS

LIGHT OR SIGNAL STANDARDS

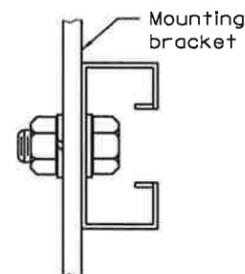
BREAKAWAY STEEL TUBING POSTS
(All sign panel sizes)



DETAIL A



DETAIL B



DETAIL C

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

DATE	REVISIONS
1-1-09	Switched units to English (metric).
1-1-97	Renum. Standard 2319-6.

SIGN PANEL MOUNTING DETAILS

STANDARD 720001-01

Illinois Department of Transportation

APPROVED January 1, 2009
ENGINEER OF OPERATIONS

APPROVED January 1, 2009
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97