DESIGN DESIGNATION:

N/A

TRAFFIC DATA:

1995 2020
ADT IL. RTE. 22: 1980 37000
POSTED SPEED LIMIT IL. RTE. 22: 65 km/h
DESIGN SPEED LIMIT IL. RTE. 22: 70 km/h

INDEX OF SHEETS

- 1 COVER SHEET
- 2 GENERAL NOTES, SUMMARY OF QUANTITIES
 - ALIGNMENT AND TIES, BENCHMARKS
- DRAINAGE, EROSION CONTROL AND LANDSCAPING
- 4-5 DISTRICT DETAILS
- 6 CROSS SECTIONS

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 337 (ILLINOIS ROUTE 22)
BETWEEN THE BANNOCKBURN SHOPPING CENTER ENTRANCES

SECTION Y-T-1
DRAINAGE CORRECTION
LAKE COUNTY
C-91-482-09

R 12 E

Prairie Wolf

STATE STANDARDS

000001-05

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

001006 DECIMAL OF AN INCH AND OF A FOOT

280001-04 TEMPORARY EROSION CONTROL SYSTEMS

602006-02 CATCH BASIN TYPE B

602601-02 PRECAST REINFORCED CONCRETE FLAT SLAB TOP

604031-02 FRAME AND GRATE TYPE 7

701101-02 OFF-RD OPERATIONS, MULTILANE, 4.5 m (15') TO 600 mm (24'') FROM PAVEMENT EDGE

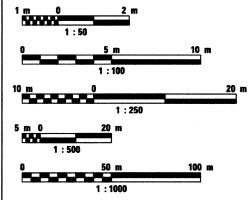
701106-02. OFF-RD OPERATIONS, MULTILANE, MORE THAN 4.5 m (15') AWAY

701606-06 URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN 701701-06 URBAN LANE CLOSURE, MULTILANE INTERSECTION

701901-01 TRAFFIC CONTROL DEVICES

PROJECT LOCATED IN THE VILLAGE OF BANNOCKBURN

METRIC RATIOS



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.

J.U.L.I.E.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

CONTRACT NO. 60G50



CRAIG A. LUKOWICZ

MY LICENSE EXPIRES ON 11-30-09.

IL RTE. 22

IMPROVEMENT

STA. 110 + 780.20

ILLINOIS REGISTERED PROFESSIONAL ENGINEER NO. 062-041788

1:100

GROSS LENGTH OF PROJECT = 115.800 m = 0.116 km

NET LENGTH OF PROJECT = 115.800 m = 0.116 km

W Old Mill Rd

NET LENGTH OF PROJECT = 115.800 m = 0.116 km

WEST DEERFIELD TOWNSHIP
LOCATION MAP

CONSULTING
ENGINEERS
SCIENTISTS
& LAND
SURVEYORS

CONSULTING
BOOLINGER,
333 Pierce Road, S
630 438 6400 FAX
www.bollingerlach.c.

Walter E Helle

Nature Park

Bollinger, Lach & Associates, Inc.
333 Pierce Road, Suite 200 Itasca, Illinois 60143
630 436 6400 FAX 630 438 6444
www.bollingerlach.com

IL RTE. 22

IMPROVEMENT ENDS

STA. 110 + 896.00

D-91-531-99



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED MARCH 18, 20 01

May 8 20 09

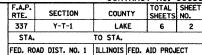
Charles Charles of Design and Environmen

Chrustine M. Reed B.

DIRECTOR, DIVISION OF HIGHWAYS

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

F.A.P. ROUTE 337 SECTION: Y-T-1 LAKE COUNTY



BENCHMARK

BENCHMARK 110 FOUND SQUARE CUT IN CONCRETE BASE OF TRAFFIC SIGNAL WITH ARM AT SOUTHWEST CORNER OF ILLINOIS ROUTE 22 AND ILLINOIS 43 ELEVATION: 205.2030m

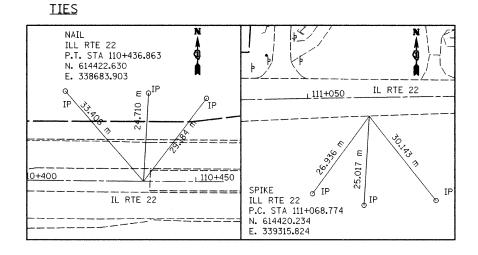
BENCHMARK 111 FOUND SQUARE CUT IN NORTHWEST CORNER WING WALL OF ILLINOIS ROUTE 22 BRIDGE OVER NORTH BRANCH OF CHICAGO RIVER ELEVATION: 201.6009m

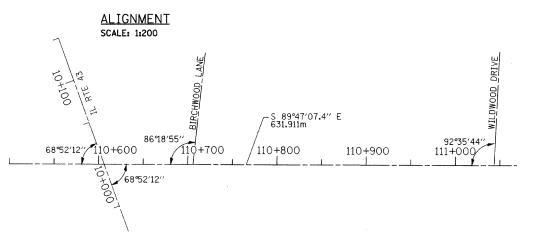
BENCHMARK 119 SET SQUARE CUT IN END OF LONG ISLAND EAST SIDE OF ROUTE 43
SOUTH 152.4m OF ILLINOIS ROUTE 22 AT EXIT OF BANNOCKBURN GREEN
ELEVATION: 203.7486m

	SUMMARY OF QUANTITIES		URBAN
CODE NO.	PAY ITEM	UNIT	7007 TOTAL QTY. 1007. STATE
M2020010	EARTH EXCAVATION	CU M	337
M2113100	TOPSOIL FURNISH AND PLACE, 100 mm	SQ M	1,559
M2021200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU M	237
M2500400	NITROGEN FERTILIZER NUTRIENT	KG	11
M2520110	SODDING. SALT TOLERANT	SQ M	1.559
M2500500	PHOSPHORUS FERTILIZER NUTRIENT	KG	11
28000510	INLET FILTERS	EACH	5
M2500600	POTASSIUM FERTILIZER NUTRIENT	KG	11
M5502900	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III 750 MM	METER	7
M2520200	SUPPLEMENTAL WATERING	UNIT	38
M5504800	STORM SEWERS TO BE CLEANED	METER	6
60206705	CATCH BASINS, TYPE B	EACH	4
60402110	GRATES, TYPE 7	EACH	4
60500050	REMOVING CATCH BASINS	EACH	2
67100100	MOBILIZATION	L SUM	1
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	1
MX032985	VIDEO TAPING STORM SEWERS	METER	925
XX005656	INLET FILTER CLEANING	EACH	5
Z0013798	CONSTRUCTION LAYOUT	L SUM	1
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	2

	EAR	THWORK QUANTITIES		
LOCATION (STA TO STA)	EARTH EX. (CU m)	ADJ. EARTH EX.	EMBANKMENT (CU m)	BALANCE WASTE (+) OR SHORTAGE (-)
110+780.20 TO 110+896	337.396	286.787	69.033	217.754
TOTAL	337			218

REVISIONS								
NAME D	ATE	ILLIN		PARTMEN				RTATION
			FA	P ROUTE 3	oor ar	RIE. 22)	
		IL. RTE. 22						
	\dashv	GENERAL NOTES, SUMMARY OF QUANTITIES,						
		ALIGNMENT, BENCHMARK AND TIES						
		SCALE:	NONE			DRAWN BY	1	DC
		DATE	MARCH 20	, 2009		CHECKED	BY	JIP





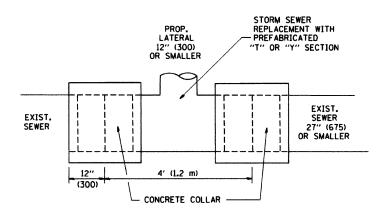
GENERAL NOTES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED).
- 2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF BANNOCKBURN.
- 3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 4. BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH TYPE I OR TYPE II BARRICADE USED. (ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL).
- 5. THE PROJECT CONTRACT PLANS AND DOCUMENTS ARE IN METRIC UNIT.

SOIL EROSION & SEDIMENT CONTROL

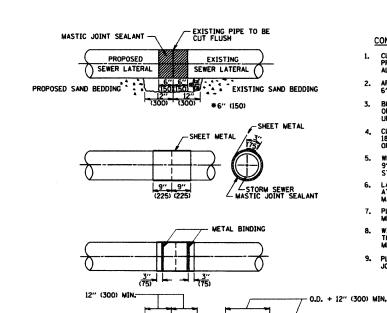
- 1. THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR MAINTENANCE OF ALL SOIL EROSION CONTROL DURING CONSTRUCTION.
- 2. LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF THE GUTTERS OR DRAINAGE STRUCTURES SO THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY.
- 3. THE LANDSCAPING AND EROSION CONTROL MEASURES SHOWN ARE BUT A GRAPHICAL REPRESENTATION OF SUGGESTED MEASURES. DEVIATIONS FROM THIS PLAN ARE TO BE EXPECTED PENDING A JOB SITE INSPECTION BETWEEN THE CONTRACTOR AND THE DEPARTMENT.
- 4. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL REVISED FEBRUARY 2002.
- 5. ALL EROSION CONTROL MEASURES MUST BE INSPECTED EVERY SEVEN DAYS AND AFTER EACH $\frac{1}{2}$ " RAIN EVENT.

CONTRACT NO. 60G50
COUNTY TOTAL SHEET NO. SECTION STORM SEWER STRUCTURES 337 Y-T-1 LAKE 6 3 STA. TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT PR. CB TYPE B, GRATE 7
RIM=201.016 (RAISED 0.15m TO EXISTING MANHOLE 1 RIM=202.732 575mm × 350mm INV=199.958 (N) PREVENT CLOGGING) 1350mm INV=199.958 (E) 750mm INV=199.860 (N) PR. CB TYPE B, GRATE 7 RIM=201.159 EXISTING INLET BIRCHWOOD LANE PROJECT ENDS RIM=201.912 PROJECT BEGINS 600mm INV=200.427 (N) STA. 110+896.00 300mm INV=200.754 (S) STA. 110+780.20 EXISTING & IL RTE 22 -EXISTING MANHOLE EXISTING CATCH BASIN RIM=202.085 RIM=201.147 1350mm INV=199.799 (W,E) 1200mm INV=199.653 (N) 750mm INV=199.799 (S) PR. CB TYPE B, GRATE 7 3A RIM=201.037 750mm INV=199.891 (N) EXISTING INLET 110+7 110+900 RIM=202.259 1110+800 1 ____<u>+110+85</u>0 300mm INV=200.674 (S) EX INV=201.095 -PR. CB TYPE B, GRATE 7 RIM=201.131 FINAL SURVEYED...
SURVEY PLOTTED...
NOTE BOOK TEMPLATE...
AREAS CHEC 600mm INV=200.092 (N) EXISTING MANHOLE RIM=202.085 1900mm X 1200mm INV=199.784 (W,E) 750mm INV=199.809 (S) EX INV=201.253 BANNOCKBURN GREEN BANNOCKBURN GREEN STORM SEWER PIPES SHOPPING CENTER SHOPPING CENTER PIPE SIZE CHANGES TO RCEP PROPOSED SODDING, SALT TOLERANT SPAN 1900mm RISE 1200mm PROPOSED STORM STRUCTURE (S3A) 3m 750mm Ø RCP @ 3.0% (000) PROPOSED STORM SEWER (S6A) 4m 750mm Ø RCP @ 1.30% R EXISTING STRUCTURE TO BE REMOVED 205 205 204 204 -EXISTING PROFILE ALONG EXISTING CENTER LINE IL RIE. 22 203 203 202 202 201 201 200 200 199 199 198 198 197 197 196 110+925 REVISIONS NAME DATE ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL. RTE. 22) IL. RTE. 22 194 DRAINAGE, EROSION CONTROL AND LANDSCAPING SCALE: 1:500 HORIZ. DRAWN BY LP DATE MARCH 20, 2009 CHECKED BY JIP 110+725 110+750 110+775 110+800 110+825 110+850 110+875 110+900



DETAIL "A"

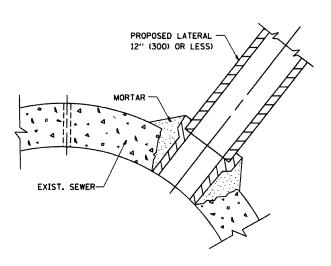
LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER



DETAIL "B" CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

- CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
- 2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
- BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' × 6' (300 × 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERANCE OF THE PIPE PLUS 3" (75) LONG.
- 5. WRAP THE SMEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
- 6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
- WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- 9. PLACE CLASS SI CONCRETE AROUND THE



DETAIL "C"

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

- THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE
 - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS

REVISIO	
NAME	DATE
M. DE YONG	07/25/90
M. DE YONG	02/05/92
M. DE YONG	05/08/9
R. SHAH	09/09/9
R. SHAH	10/25/94
R. SHAH	06/12/96

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER

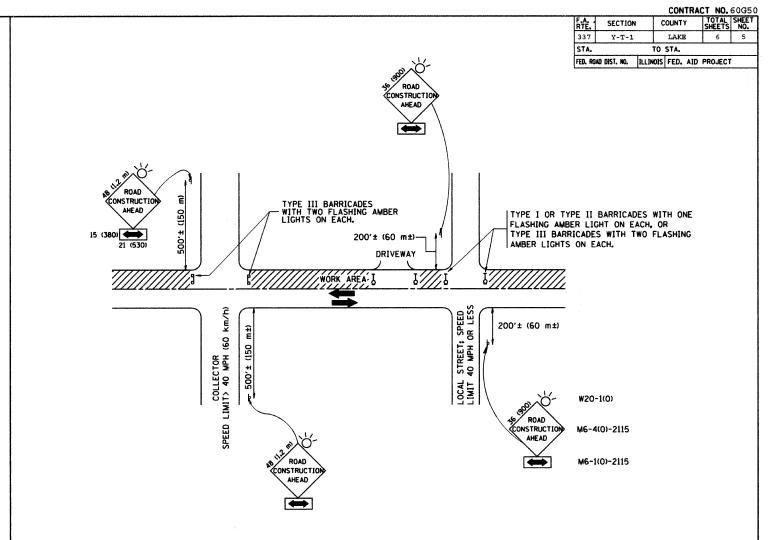
SCALE: VERT. NONE

CHECKED BY

BD500-01 (BD-7)

11. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:

DATE SCALE NAME P.C.F.E.



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 ENGINEERS
- O) 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 1, 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:
- O) 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
- 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 (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 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.

REVISIO	NS	
NAME	DATE	
LHA	6/89	TF
T. RAMMACHER	09/08/94	111
J. OBERLE	10/18/95	
A. HOUSEH	03/06/96	S
A. HOUSEH	10/15/96	ာ
T. RAMMACHER	01/06/00	
		SCA
		304

ILLINOIS DEPARTMENT OF TRANSPORTATION RAFFIC CONTROL AND PROTECTION FOR

SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

CALE: NONE

CHECKED BY

TC-10

DATE NAME SCALE NAME