

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAI 80 (I-80)
SECTION D3 FENCE REPAIR 2012-1

FURNISHING AND INSTALLING SECURITY FENCE
LASALLE COUNTY
C-93-018-12

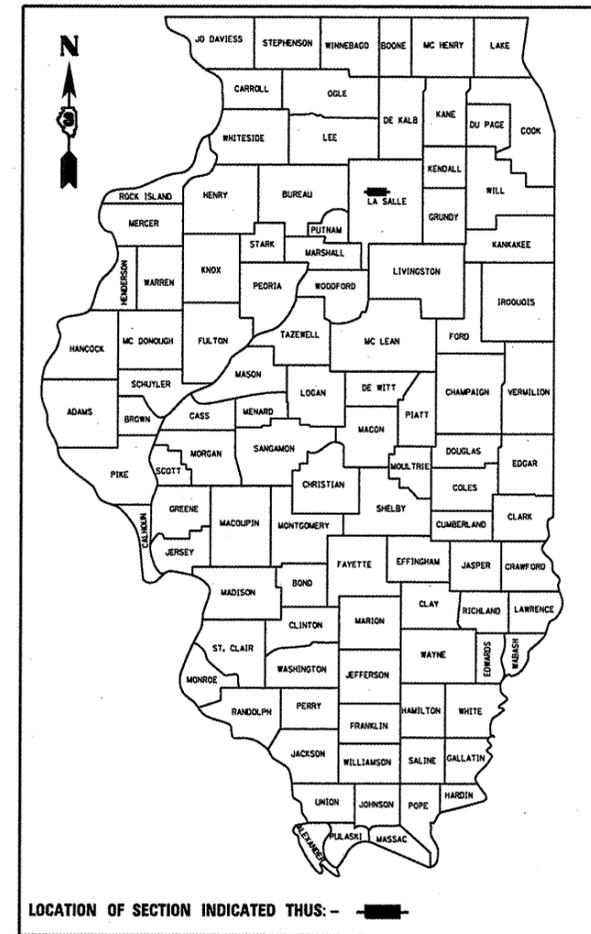
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	D3 FENCE REPAIR 2012-1	LASALLE	7	1
		ILLINOIS	CONTRACT NO. 66B69	

1. COVER SHEET
2. GENERAL NOTES
3. SUMMARY OF QUANTITIES
4. SITE PLAN FOR BRIDGE MAINTENANCE HEADQUARTERS
- 5 - 7. CHAIN LINK FENCE DETAILS

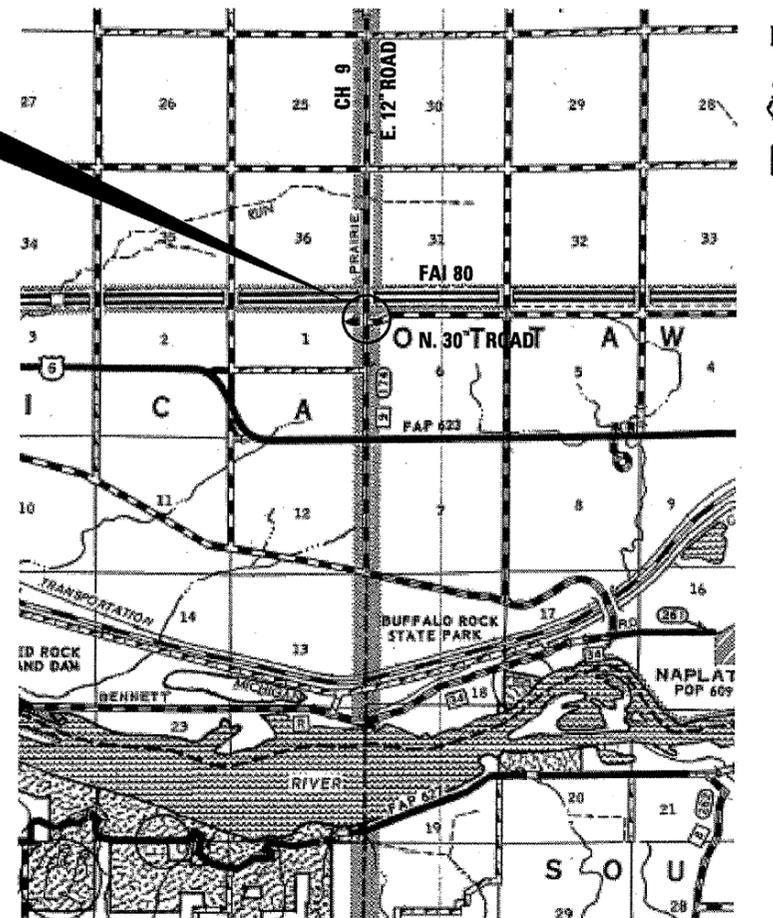
STANDARDS

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 701001-02 OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' (4.5 m) AWAY
- 701006-03 OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 701901-02 TRAFFIC CONTROL DEVICES

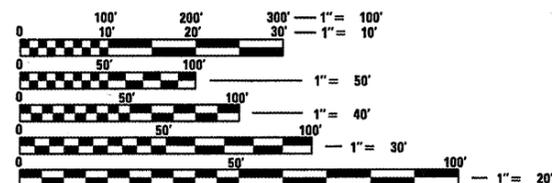
D-93-015-12



PROJECT LOCATION
DISTRICT 3
BRIDGE MAINTENANCE HEADQUARTERS



POINT LOCATION



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
OR 811

DISTRICT 3 NO. 815-434-6131
PROJECT ENGINEER: JOE KANNEL P.E.
UNIT CHIEF: RON WOODSHANK
TOWNSHIP: UTICA AND OTTAWA

CONTRACT NO. 66B69

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 3-30 2012
Eric S. Therkelsen
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 11 2012
John D. Baranzelli, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

May 20 2012
William R. Frey
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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GENERAL NOTES

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE PRESENCE OF DEPARTMENT-OWNED UNDERGROUND ELECTRICAL CABLE WITHIN THE LIMITS OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR SHALL REQUEST THE ILLINOIS DEPARTMENT OF TRANSPORTATION IN OTTAWA (815-434-8417) TO LOCATE THE UNDERGROUND FACILITIES, PROVIDING A MINIMUM OF 72 HOURS NOTICE. THE DEPARTMENT IS NOT A MEMBER OF THE JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (JULIE) SYSTEM.

ALL DAMAGE TO DEPARTMENT OWNED UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE. THIS SHALL INCLUDE ALL TEMPORARY REPAIRS REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS. SPLICING OF ELECTRIC CABLE SHALL NOT BE ALLOWED. ELECTRIC CABLE SHALL BE REPLACED FROM POLE TO POLE OR CONTROLLER.

THE CONTRACTOR SHALL CONTACT JULIE AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.

COMMITMENTS

ALL EXISTING SOILS OR EMBANKMENTS DISTURBED OR EXCAVATED DUE TO THE CONTRACTOR'S CONSTRUCTION OPERATIONS SHALL REMAIN ON SITE AND SHALL BE DISPOSED OF WITHIN THE LIMITS OF THE STATE RIGHT OF WAY.

DATE: 3-30-12

PREPARED BY: *Don Brunick*
DISTRICT STUDIES & PLANS ENGINEER

EXAMINED BY: *Herb J. Meyer*
DISTRICT CONSTRUCTION ENGINEER

Wayne D. Phillips
DISTRICT MATERIALS ENGINEER

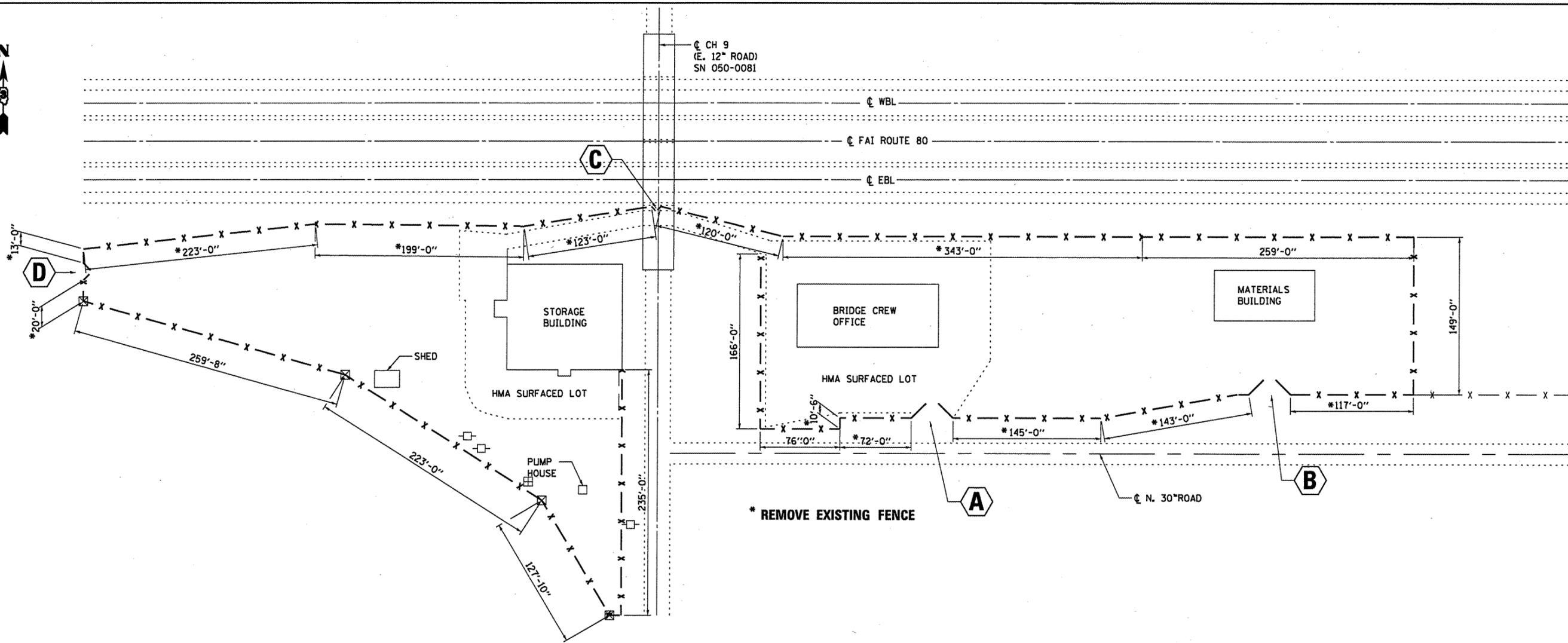
Samuel A. Hucker
DISTRICT OPERATIONS ENGINEER

FILE NAME =	USER NAME = petelijj	DESIGNED - TIM PLETSCH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	F.A.I. F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci\pwwork\pwwork\petelijj\d0282107\0366869-sht-details.dgn	DRAWN - TIM PLETSCH	REVISED -	80			D3 FENCE REPAIR 2012-1	LASALLE	7	2	
PLOT SCALE = 100.0000' / 1" =	CHECKED - RON WOODSHANK	REVISED -	CONTRACT NO. 66869							
PLOT DATE = 2/16/2012	DATE -	REVISED -	SCALE:			SHEET 1 OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT	

CONSTR. CODE
STATE FUNDS
100%

ROADWAY
0044
RURAL

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	
67100100	MOBILIZATION	L SUM	1	1
X0301797	GATE REMOVAL	EACH	3	3
X6640308	CHAIN LINK GATES (SPECIAL)	EACH	4	4
X6640560	CHAIN LINK FENCE, 6' (SPECIAL)	FOOT	3024	3024
X6650202	WOVEN WIRE FENCE REMOVAL	FOOT	1518	1518



- A** REMOVE: 32' GATE
REPLACEMENT: 6'x20' CHAIN LINK GATE, DOUBLE (SPECIAL)
- B** INSTALL 6'x20' CHAIN LINK GATE, DOUBLE (SPECIAL)
- C** REMOVE: 9' GATE
REPLACEMENT: 6'x9' CHAIN LINK GATE, SINGLE (SPECIAL)
- D** REMOVE: 16' GATE
REPLACEMENT: 6'x8' CHAIN LINK GATE, DOUBLE (SPECIAL)

LEGEND

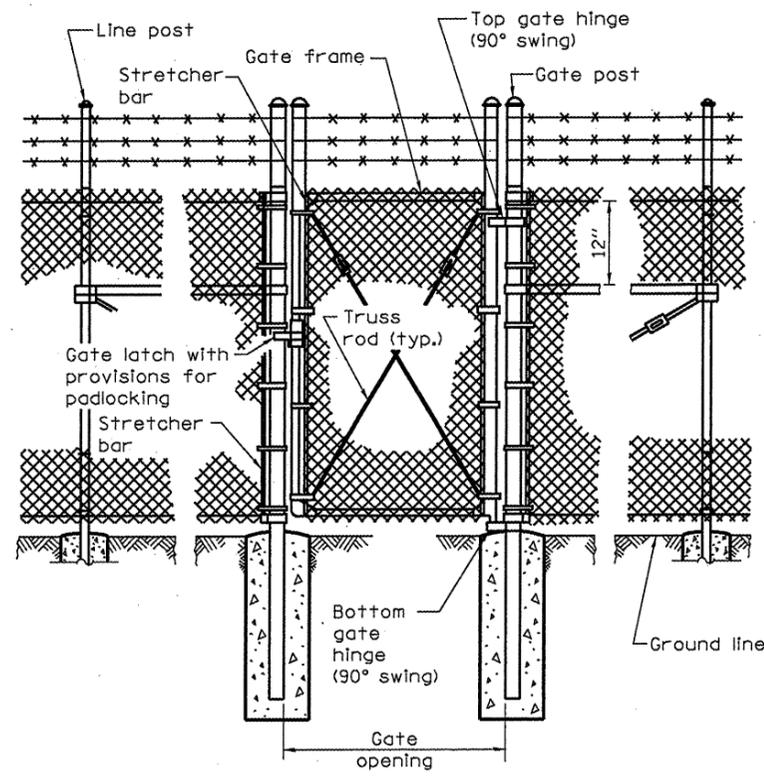
- x - x - x - EXISTING WOVEN WIRE FENCE
- EXISTING POWER POLE
- ⊠ RIGHT OF WAY MARKER
- ⊞ TELEPHONE PEDESTAL
- x / \ x - PROPOSED CHAIN LINK GATE
- x - x - x - PROPOSED CHAIN LINK FENCE

GENERAL NOTES

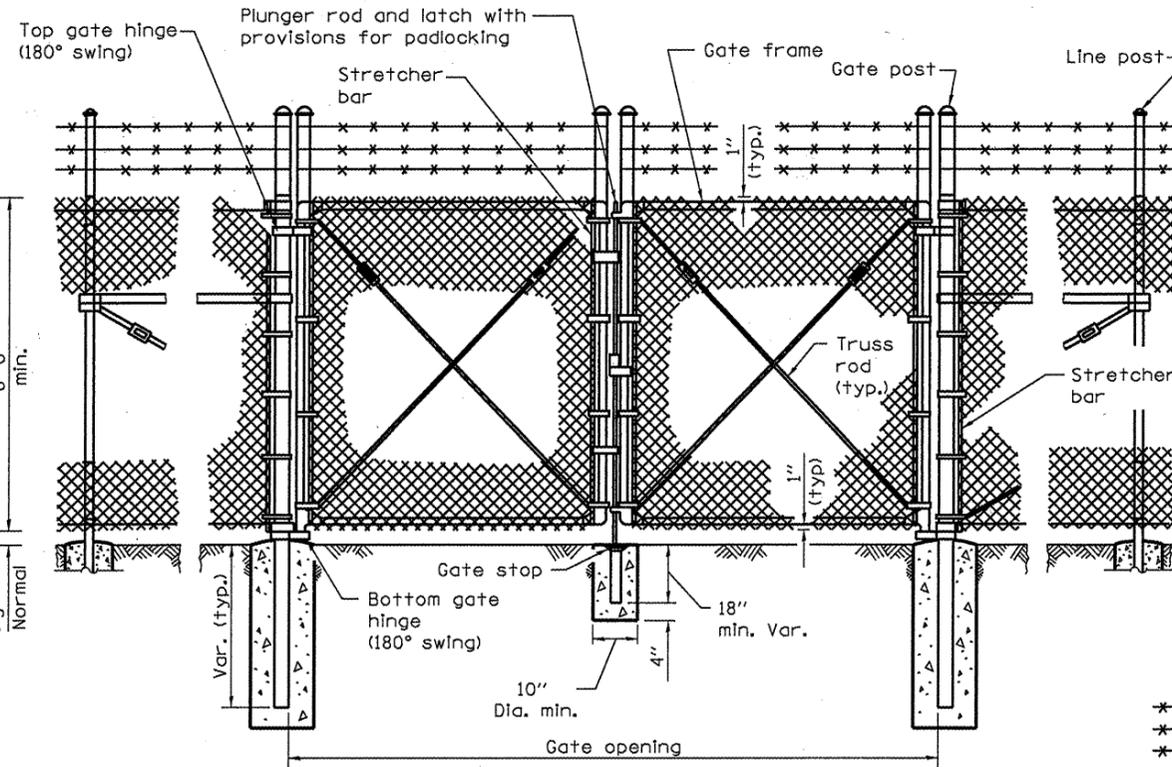
THE CONTRACTOR SHALL CONSULT THE DEPARTMENT'S BRIDGE ENGINEER FOR EXACT LOCATION OF FENCE INSTALLATION PRIOR TO BEGINNING FENCE REMOVAL OPERATIONS.

PLAN DIMENSIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO ORDERING OF MATERIALS.

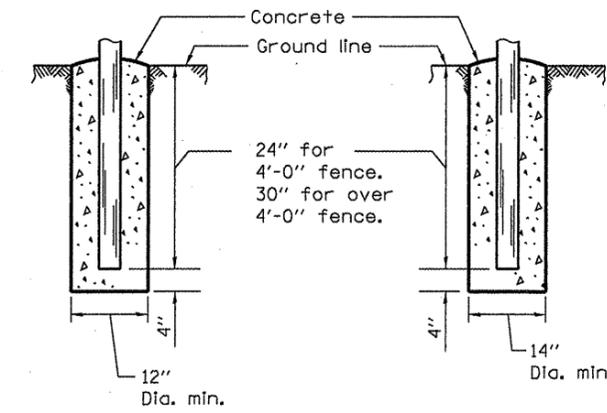
FILE NAME =	USER NAME = potelyj	DESIGNED - TIM PLETSCH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SITE PLAN FOR BRIDGE MAINTENANCE HEADQUARTERS	F.A.I. F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
01\pwwork\pwwork\potelyj\d0262107\03665669-shd-details.dgn		DRAWN - TIM PLETSCH	REVISED -			80	D3 FENCE REPAIR 2012-1	LASALLE	7	4	
PLOT SCALE = 1/8" = 100'-0"		CHECKED - RON WOODSHANK	REVISED -			CONTRACT NO. 66B69					
PLOT DATE = 2/16/2012		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
				SCALE:	SHEET 1 OF 1 SHEETS	STA.	TO STA.				



SINGLE GATE ARRANGEMENT

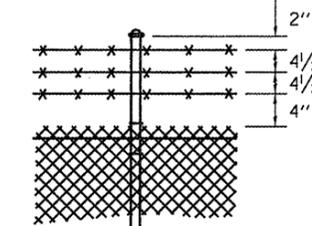


DOUBLE GATE ARRANGEMENT

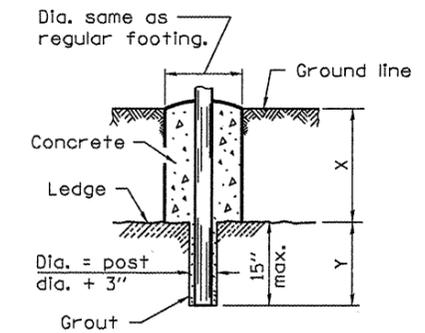


FOOTING FOR LINE POST

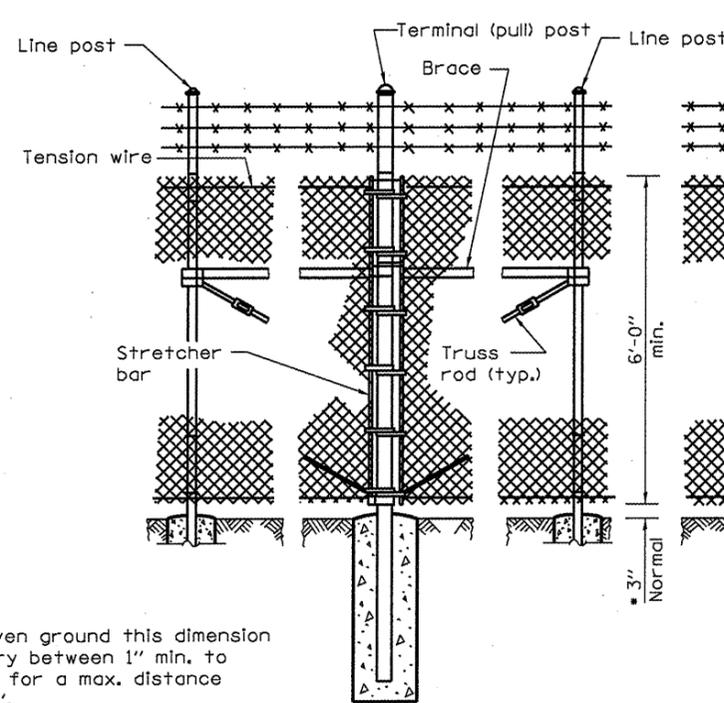
FOOTING FOR GATE & TERMINAL POST



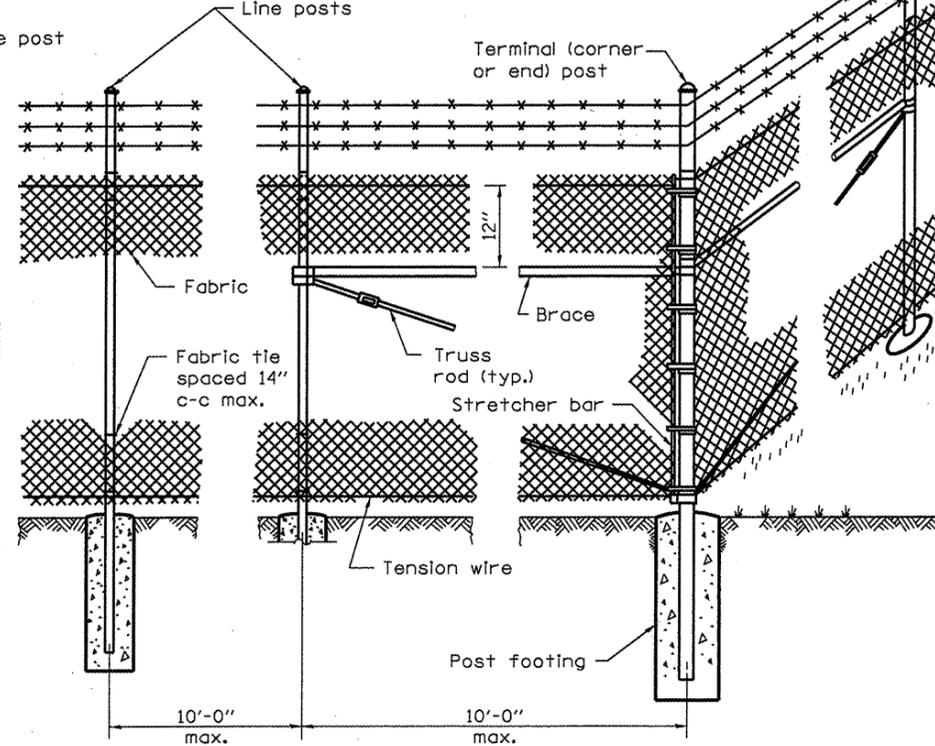
BARBED WIRE SPACING DETAIL



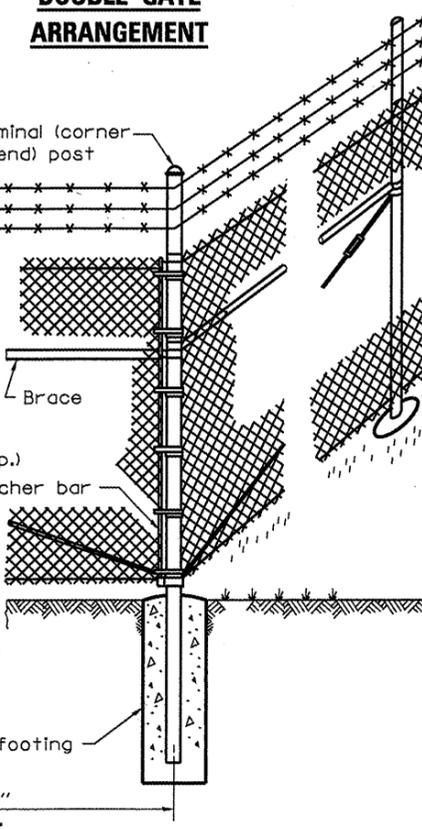
FOOTING FOR POST IN ROCK LEDGE



PULL POST ARRANGEMENT

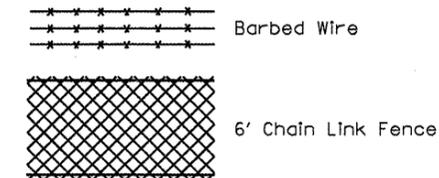


LINE POST ARRANGEMENT



CORNER OR END POST ARRANGEMENT

LEGEND



GENERAL NOTES

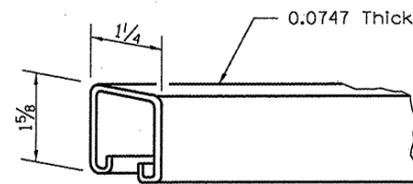
Pull posts shall be placed at locations determined by the Engineer. They shall be placed at 660' intervals between posts to which the ends of the fabric are clamped or midway between such posts when the distance is less than 1320' and greater than 660'.

X + Y shall not exceed 24", 30", or 36", as applicable. When X is 0 - 9", 15", or 21", then Y = 15" and the post shall be shortened as required. When X exceeds 9", 15", or 21", then Y shall be decreased correspondingly.

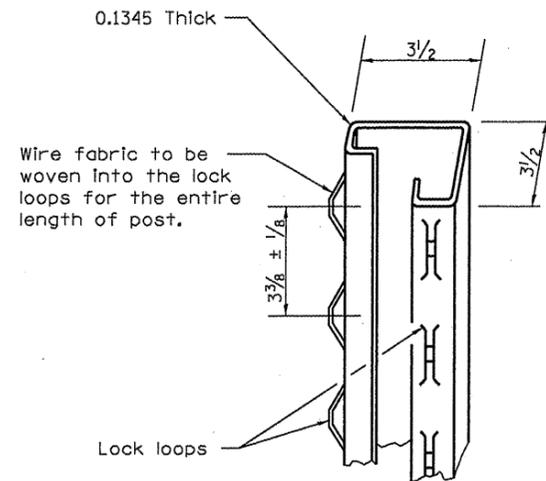
All dimensions are in inches unless otherwise shown.

• On uneven ground this dimension may vary between 1" min. to 5" max. for a max. distance of 8'-0".

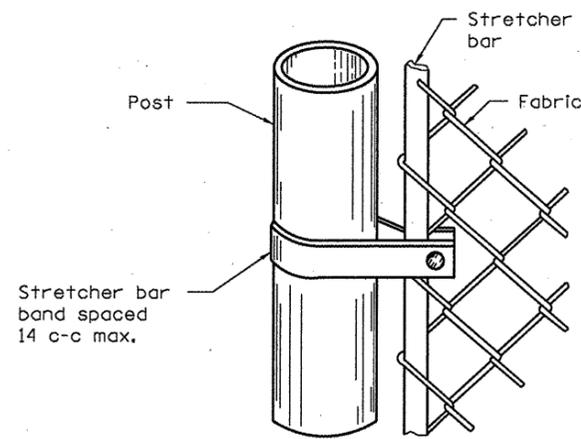
FILE NAME =	USER NAME = potelyj	DESIGNED - TIM PLETSCH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CHAIN LINK FENCE DETAILS	F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
oi\pwwork\pwwork\potelyj\d8282187\0368699-ahd-details.dgn	PLOT SCALE = 100.0000' / 1" =	DRAWN - TIM PLETSCH	REVISED -			80	D3 FENCE REPAIR 2012-1	LASALLE	7	5	
PLOT DATE = 2/16/2012	DATE -	CHECKED - RON WOODSHANK	REVISED -			CONTRACT NO. 66B69					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



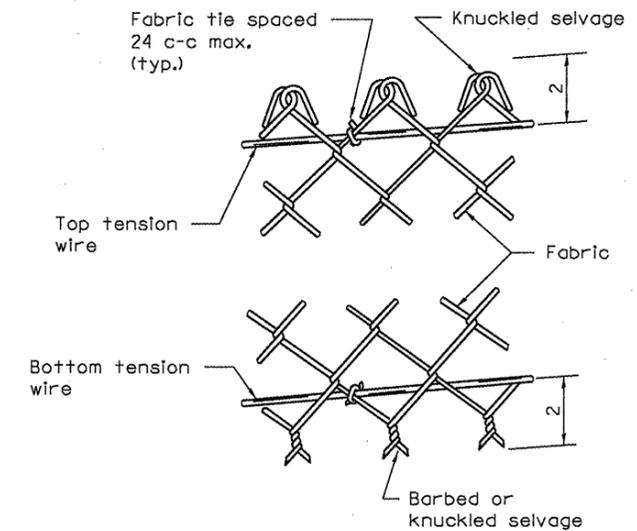
ROLL FORMED SECTION OF BRACE



ROLL FORMED SECTION OF TERMINAL & GATE POST



METHOD OF FASTENING STRETCHER BAR TO POST



METHOD OF TYING FABRIC TO TENSION WIRES

LINE POST	
Section	lbs./ft.
Pipe Type A 1.90 O.D.	2.72
Pipe Type B 1.90 O.D.	2.28
Pipe Type C 1.90 O.D.	2.26
H 1.875x1.625	2.72
□	1.60
I	2.30

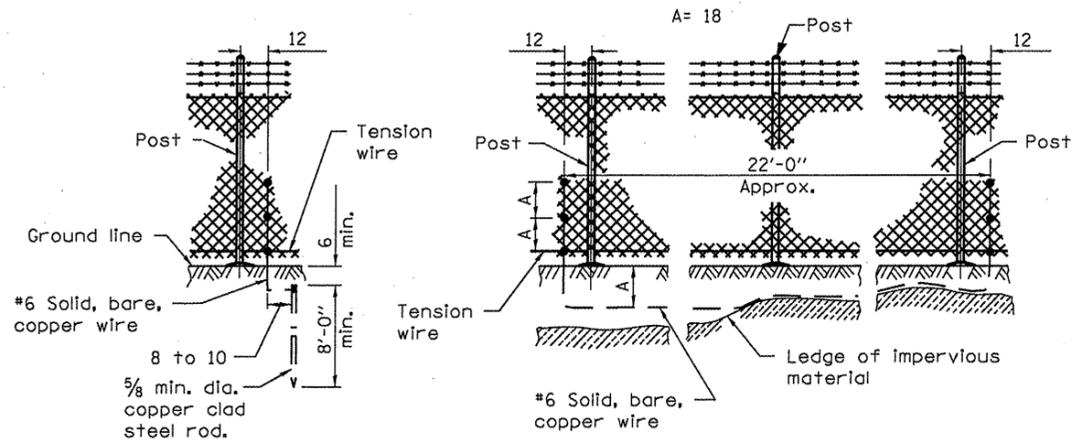
TERMINAL POST	
Section	lbs./ft.
Pipe Type A 2.375 O.D.	3.65
Pipe Type B 2.375 O.D.	3.11
Pipe Type C 2.375 O.D.	3.09
Roll Formed 3/2x3/2	See detail
Sq. Tubing 2 1/2x2 1/2	4.32

HORIZONTAL BRACES	
Section	lbs./ft.
Pipe Type A 1.66 O.D.	2.27
Pipe Type B 1.66 O.D.	1.83
Pipe Type C 1.66 O.D.	1.82
H 1.31x1.5	2.25
Roll Formed 1 5/8x1 1/4	See detail

GATE FRAMES	
Section	lbs./ft.
Pipe Type A 1.66 O.D.	2.27
Pipe Type B 1.66 O.D.	1.83
Pipe Type C 1.66 O.D.	1.82

GATE POSTS *							
Gate Opening * ft.		Pipe Type A		Sq. Tubing		Pipe Type B	
		Size (O.D.)	lbs./ft.	Size	lbs./ft.	Size (O.D.)	lbs./ft.
Single	Double						
Up to 4	Up to 8	2.375	3.65	2 1/2	4.32	2.375	3.11
Over 4 to 8	Over 8 to 16	2.875	5.79	3	5.78	2.875	4.64
Over 8 to 12	Over 16 to 24	3.5	7.58	3	8.80	3.5	5.707

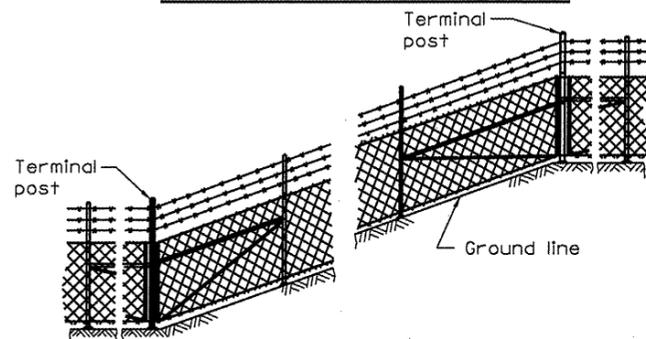
* The 3/2 x 3/2 roll formed section as detailed may be used as gate posts for single gate up to 6' and double gate up to 12'.



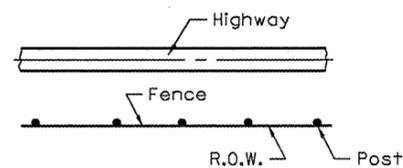
STANDARD GROUND

COUNTERPOISE GROUND (ALTERNATE)

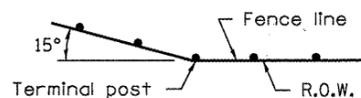
PROTECTIVE ELECTRICAL GROUNDS



INSTALLATION ON SLOPES



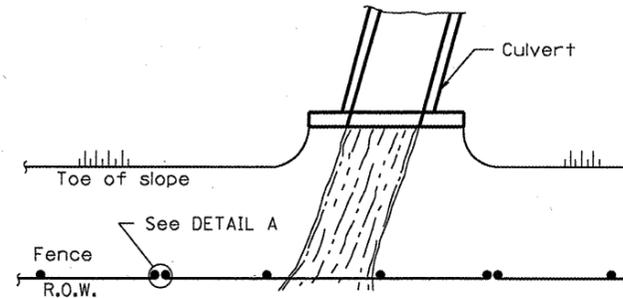
PLAN



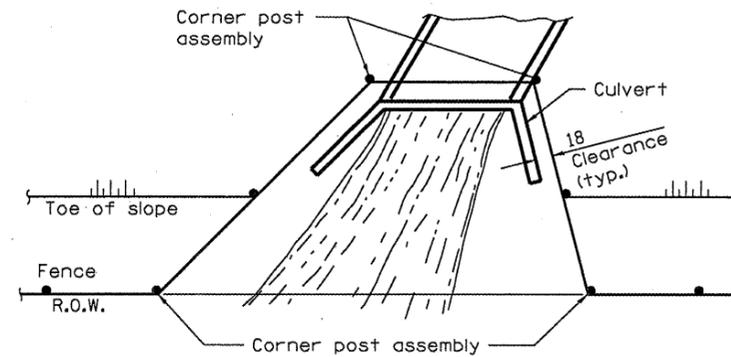
When fence line has a change in direction of 15° or more, a terminal post shall be placed as shown above.

Where angle is less than 15° and existing conditions require a terminal post, they shall be placed as directed by the Engineer.

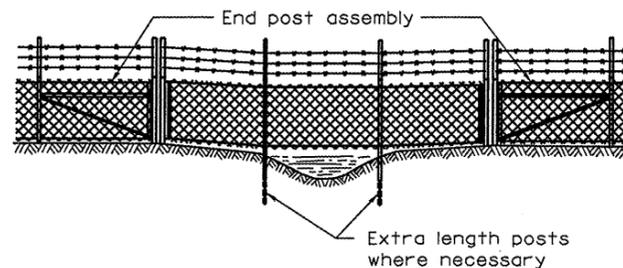
INSTALLATION AT CORNERS



PLAN AT STREAM CROSSING

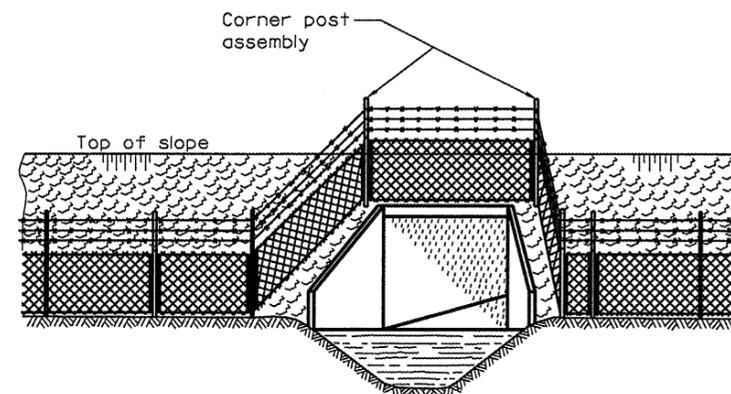


PLAN AT HEADWALL



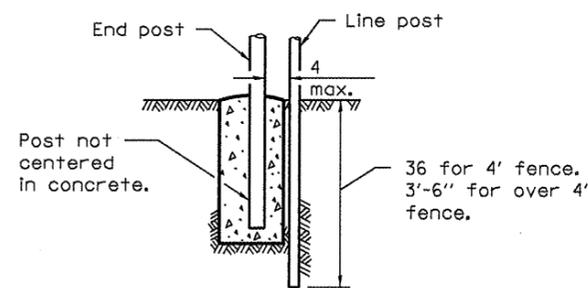
The chain link fabric shall be replaced by barbed wire strands at 12 maximum centers between the double posts when shown on DETAIL A when shown on the plans.

ELEVATION INSTALLATION OVER STREAM



ELEVATION INSTALLATION AROUND HEADWALL

When the width of the culvert makes it necessary to anchor a post to the top of the culvert, a cast iron shoe or other device approved by the Engineer shall be used.



DETAIL A

LEGEND



FILE NAME =	USER NAME = potelijj	DESIGNED - TIM PLETSCH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CHAIN LINK FENCE DETAILS	F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pwwork\pedit\potelijj\02282187\036659-shr-details.dgn	DRAWN - TIM PLETSCH	REVISED -	80			D3 FENCE REPAIR 2012-1	LASALLE	7	7	
PLOT SCALE = 100.0000' / 1"	CHECKED - RON WOODSHANK	REVISED -	CONTRACT NO. 66B69							
PLOT DATE = 2/16/2012	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							
					SCALE:	SHEET 3 OF 3 SHEETS STA.		TO STA.		