

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
607	128 RB-1-3	WILL	11	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 60E92		

D-91-538-08
 ★ 11+1=12

FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT LOCATED IN THE CITY OF JOLIET

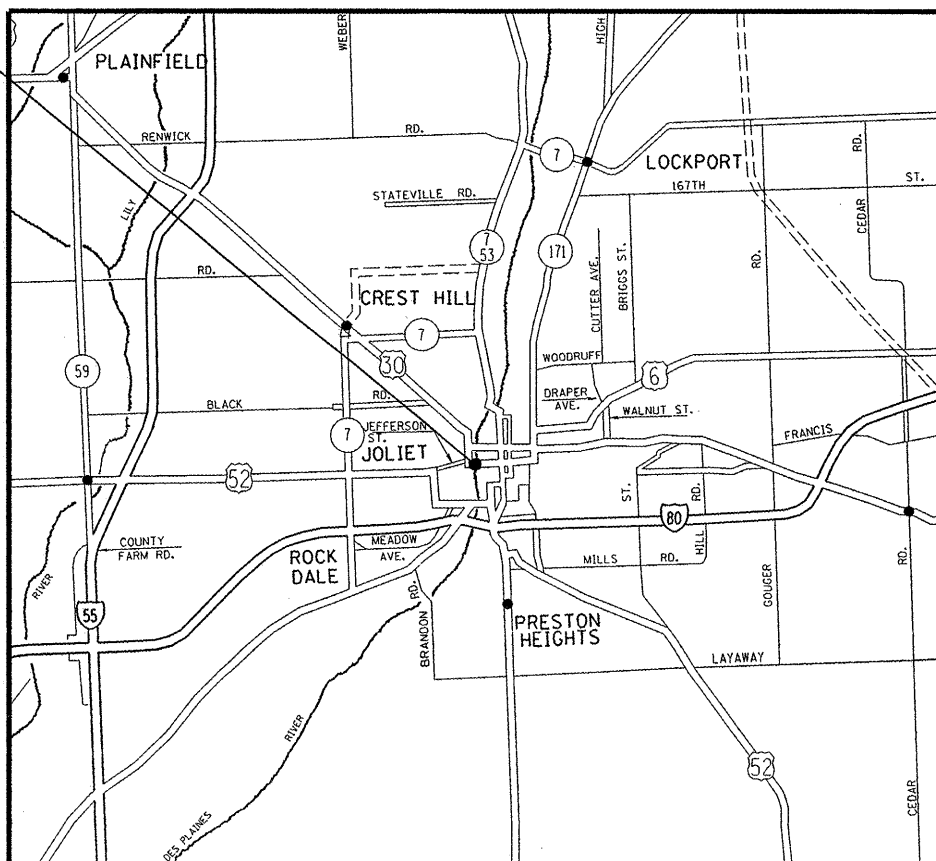
**PROPOSED
 HIGHWAY PLANS**

FAP ROUTE 607: US 30 (EB) (JEFFERSON STREET)
 OVER DES PLAINES RIVER
 BRIDGE REPAIRS: REPLACE PINION RACKS
 SECTION 128 RB-1-3
 WILL COUNTY
 C-91-538-08

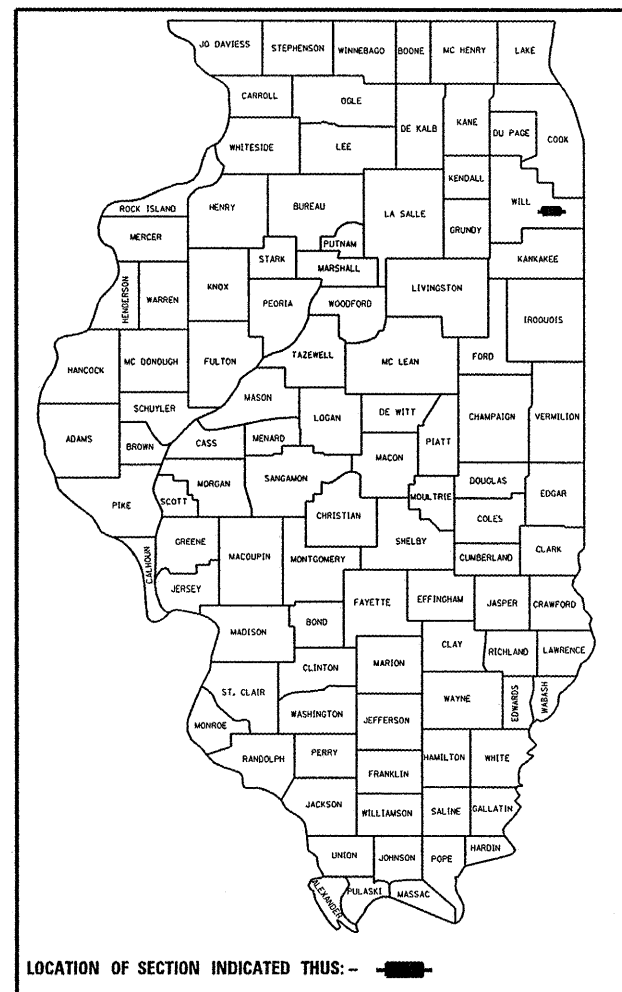
TRAFFIC DATA

2007 ADT = 9,800
 POSTED SPEED LIMIT = 30 MPH

SN 099-0166



JOLIET TOWNSHIP



LOCATION OF SECTION INDICATED THIS: -

J.U.L.I.E.
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
 1-800-892-0123
 OR 811

PROJECT ENGINEER ROBERT BORO (847) 705-4178
 PROJECT MANAGER KEN ENG

CONTRACT NO. 60E92

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED July 14, 20 08
 Diana M. O'Keefe DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

August 15, 20 08
 Eric E. Hamm ENGINEER OF DESIGN AND ENVIRONMENT

August 15, 20 08
 Christine M. Reed DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
 OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4-9	BRIDGE REPAIR PLANS
10, 10A, 11	TRAFFIC DETOUR DETAILS

LIST OF STATE STANDARDS

STANDARD NO.	DESCRIPTION
701301 - 02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701801 - 03	LANE CLOSURE, MULTILANE 1W OR 2W CROSS WALK OR SIDE WALK CLOSURE
701901	TRAFFIC CONTROL DEVICES

GENERAL NOTES:

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED UPON THE UNIT PRICE BID FOR THE WORK.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4470 FOR ARTERIALS A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION OF ALL EMERGENCY SERVICES, SCHOOL DISTRICTS, I.D.O.T.'S COMMUNICATIONS CENTER, SPRINGFIELD TRUCK PERMIT SECTION AND OTHER AGENCIES AFFECTED BY THE CLOSURE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR POSTING SIGNS THAT WILL INDICATE THE DATES THE CLOSURE WILL BE IN PLACE.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT 1-800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED)

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF JOLIET.

FILE NAME: c:\projects\struct\099-0166.dgn	USER NAME: smrkham	DESIGNED: -	REVISOR: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US 30 (EB) (JEFFERSON STREET) OVER DES PLAINES RIVER INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES S.N. 099-0166	F.A.P. RTE. 607	SECTION 128 RB-1-3	COUNTY WILL	TOTAL SHEETS 11	SHEET NO. 2	
	PLOT SCALE: 2.0624" / IN.	DRAWN: -	REVISOR: -			SCALE: NONE	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60E92	
	PLOT DATE: 7/14/2000	CHECKED: -	REVISOR: -								
		DATE: -	REVISOR: -								

Rev.

F.R.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
607	128 NB-1-3	WILL	11	3
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	
CONTRACT NO. 60E92				

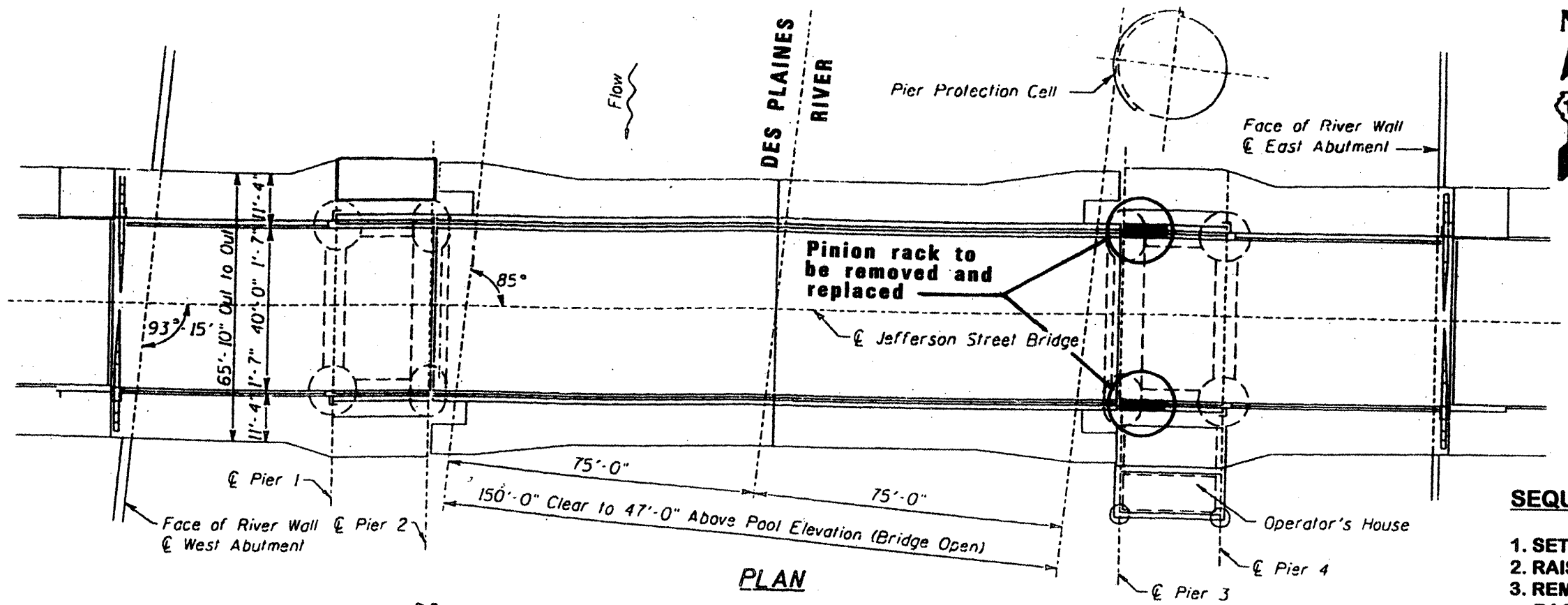
SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE SFTY-2A					
CODE NO	ITEM	UNIT	URBAN 100% STATE TOTAL QUANTITIES SFTY-2A					
50501140	STRUCTURAL STEEL REPAIR	L SUM	1					
67100100	MOBILIZATION	L SUM	1					
70102550	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH	1					
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1					
X0320622	FIELD MEASUREMENTS	L SUM	1					
X0322467	TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE	SO. FT	48					

7/18/2008 11:03:18 AM C:\PLOT\11099-0166.dgn

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
US 30 (EB) (JEFFERSON STREET)
OVER DES PLAINES RIVER
S.N. 099-0166

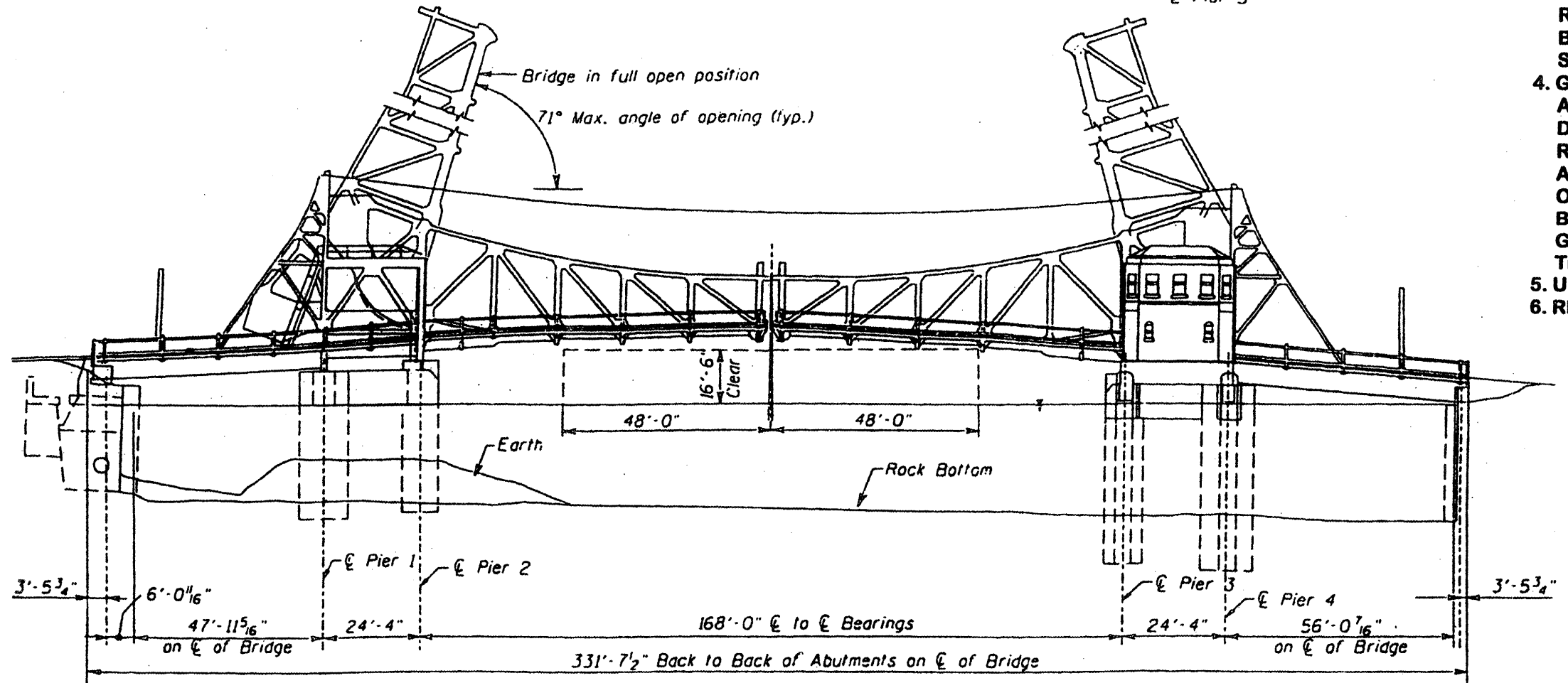
PLOT DATE: 7/18/2008



PLAN

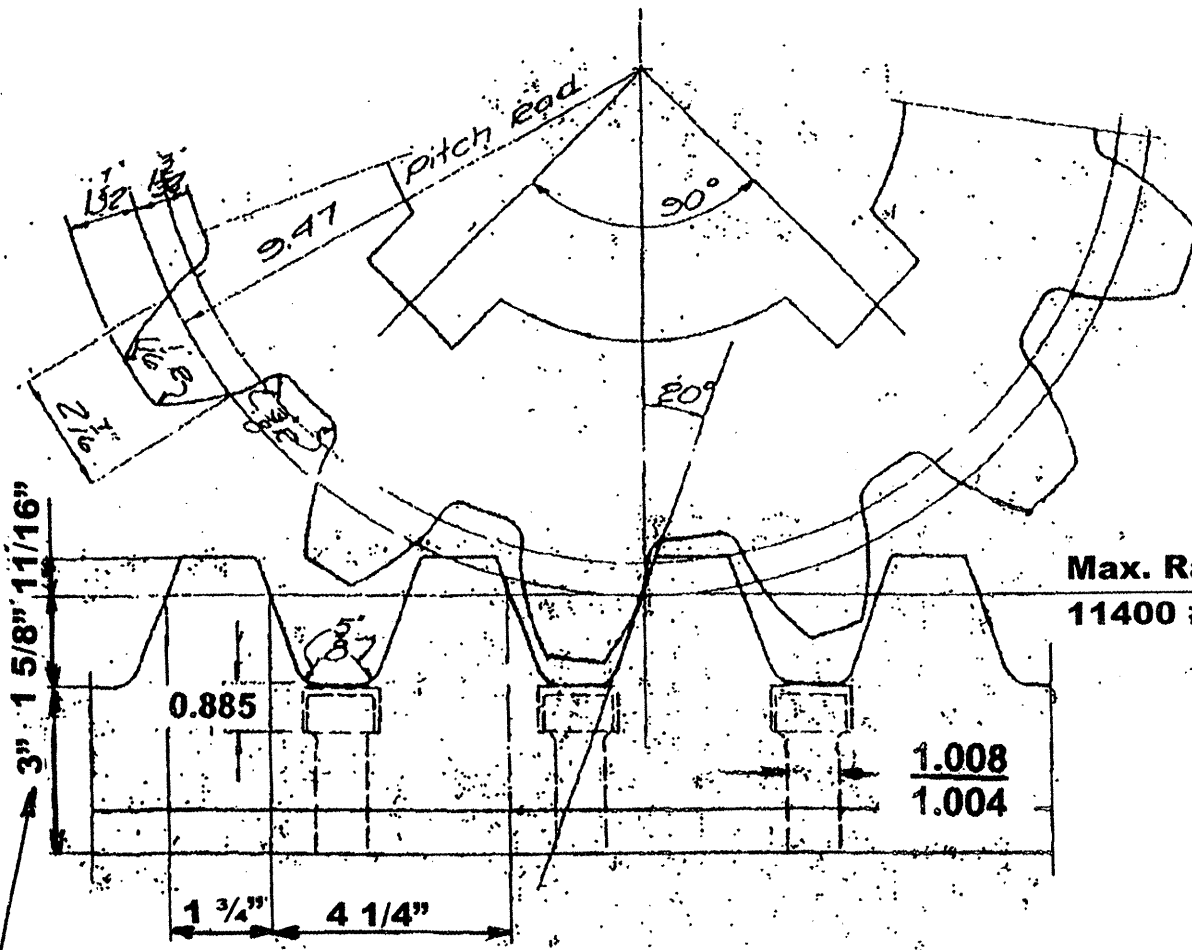
SEQUENCE OF CONSTRUCTION

1. SET UP DETOUR.
2. RAISE BRIDGE TO FULL OPEN POSITION.
3. REMOVE EXISTING FILLET WELDS FROM RACK BY AIR-ARC GOUGING. CARE SHALL BE TAKEN NOT TO DAMAGE EXISTING RACK SUPPORT.
4. GRIND RACK SUPPORT SMOOTH AFTER ARC-GOUGING TO REMOVE SPATTERS, DEBRIS OR HIGH SPOTS. RACK SUPPORT SURFACE SHALL HAVE A ROUGHNESS AVERAGE (Ra) OF 250 μ m OR LESS. GRINDING EQUIPMENT SHALL BE APPROVED BY THE ENGINEER THE GRINDING OPERATION SHALL NOT GOUGE THE RACK SUPPORT.
5. UNBOLT AND REMOVE EXISTING RACK.
6. REPLACE NEW RACK.



ELEVATION

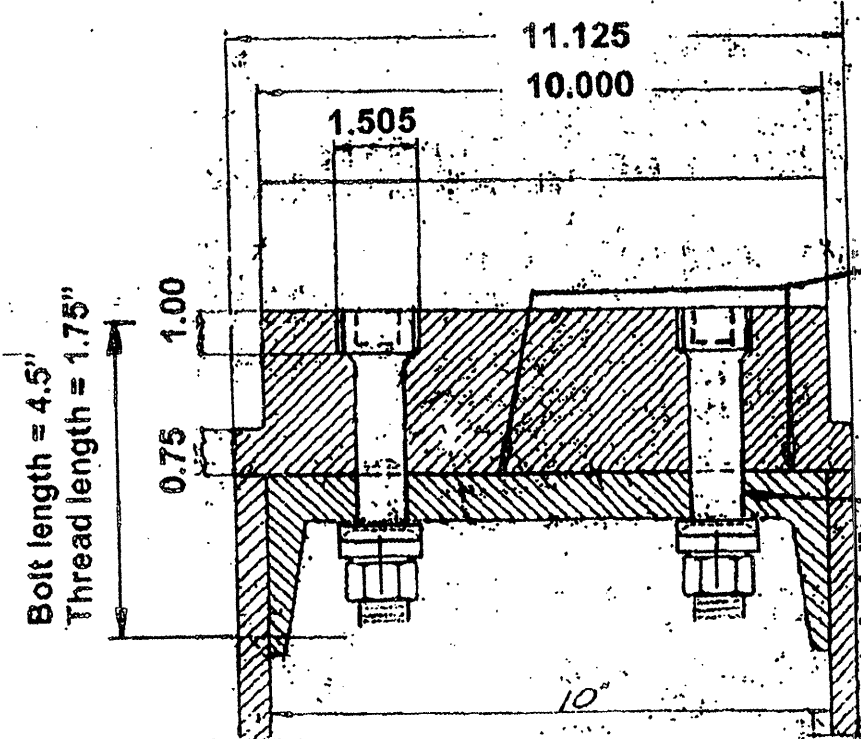
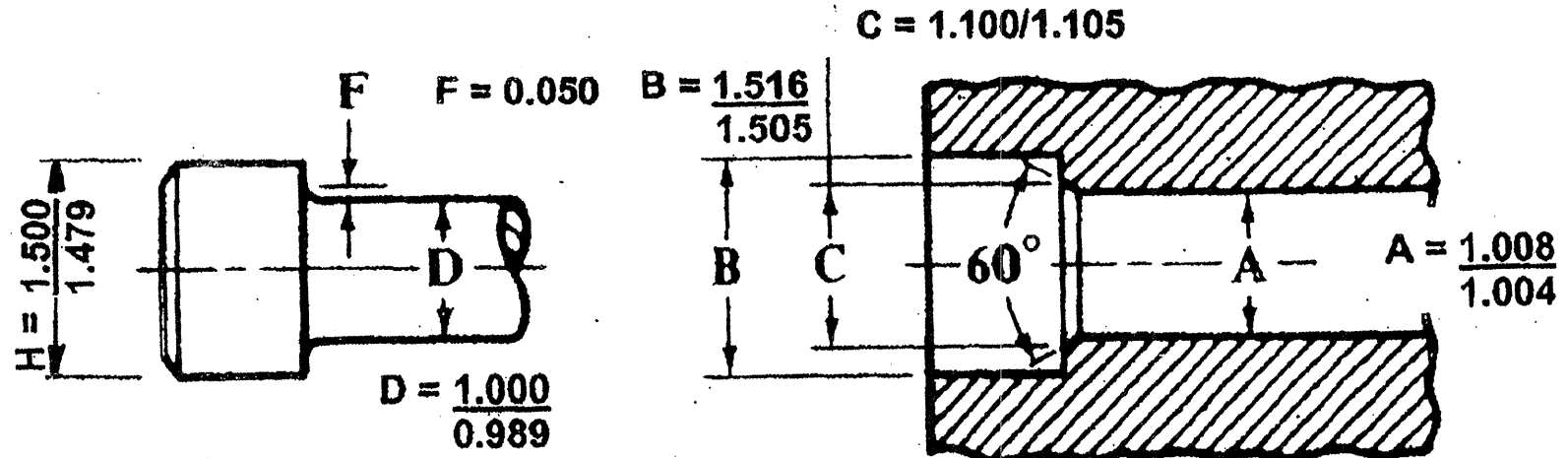
FILE NAME : c:\projects\struct\1899-0166.dgn	USER NAME : umakosov	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US 30 (EB) (JEFFERSON STREET) OVER DES PLAINES RIVER GENERAL PLAN AND ELEVATION S.N. 099-0166		F.A.P. RTE. 607	SECTION 128 RB-1-3	COUNTY WILL	TOTAL SHEETS 11	SHEET NO. 4	
	PLOT SCALE : 2.8624" = 1"	CHECKED -	REVISED -		SCALE: NONE	SHEET NO. OF SHEETS STA.	TO STA.	CONTRACT NO. 60E92				
	PLOT DATE : 7/14/2008	DATE -	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							



RACK & PINION MESH

Max. Rack Stress
11400 # per rack

Material: ASTM A574 alloy
steel socket head cap screws,
1"-8 UNC, Class 3A threads



SECTION THROUGH RACK

Apply one of the following epoxy compounds in a 0.005" thick layer before bolting:
 (a) Devcon SC 2002 NS, a single Component structural epoxy, which requires heat curing at 200°F-275°F.
 (b) 3M Scotch-Weld Epoxy 2216 B/A, a flexible two-part 75°F curing epoxy.
 Any requests for substitutes shall be accompanied by actual shear strength testing between equivalent steel surfaces, 2,200 psi min after curing.

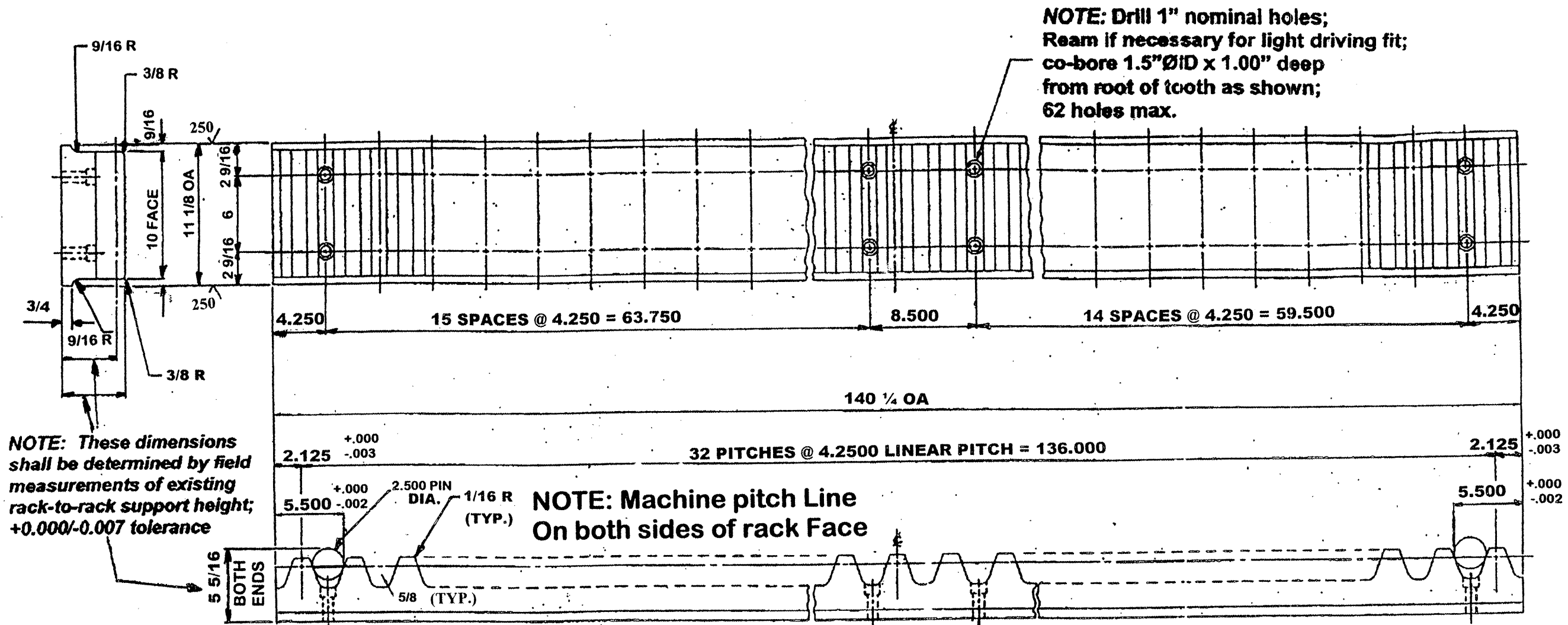
Ream existing rack support holes to 1 1/16" max to fit if necessary; 1.004 Ø preferred

RACK BOLT DETAILS

NOTE: This dimension shall be determined by field measurements of existing rack-to-rack support height; +0.000/-0.007 tolerance

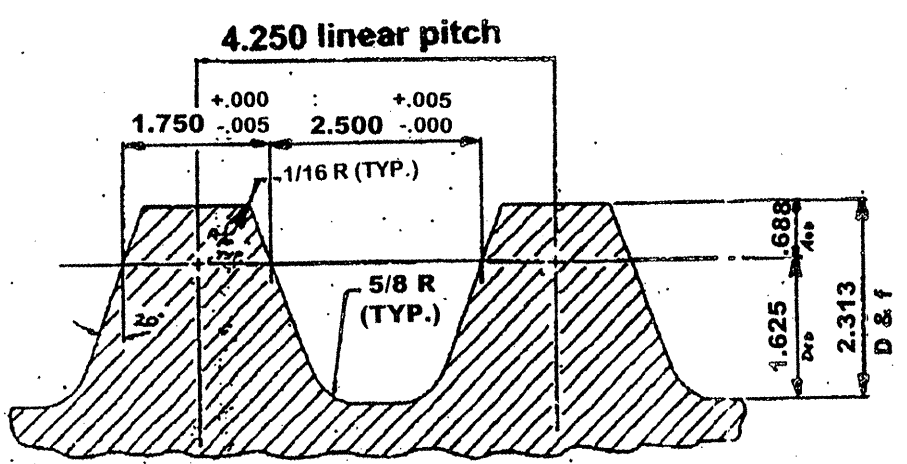
All dimensions in inches except as noted

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PLOT DATE : 7/14/2008	DATE	REVISED	REVISED							



125 ✓ **FINISH ALL OVER EXCEPT AS NOTED**

All dimensions in inches except as noted



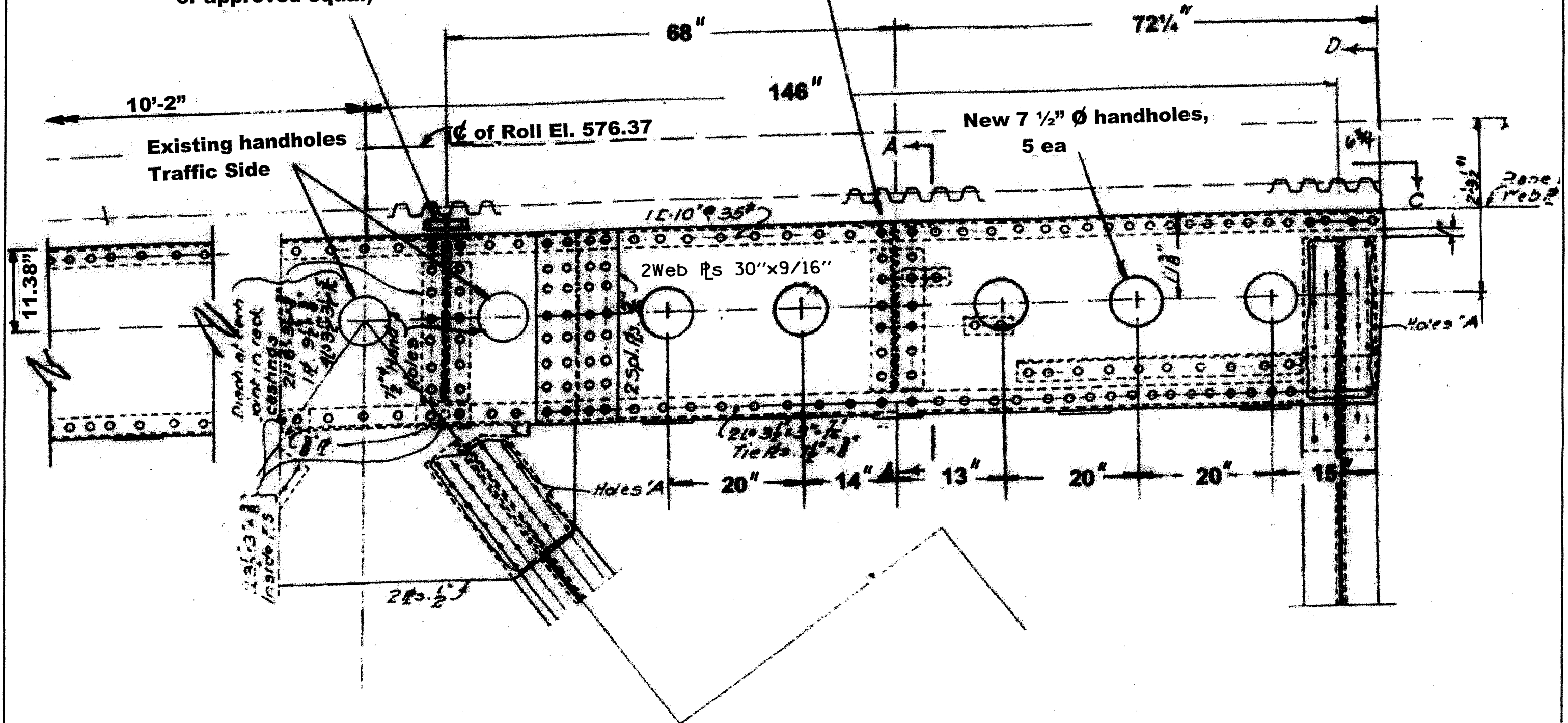
FULL SIZE TOOTH LAYOUT

RACK & TOOTH DIMENSIONS

FILE NAME: c:\projects\struct\1099-0166.dgn USER NAME: timakosmv DESIGNED: [] DRAWN: [] CHECKED: [] DATE: 7/14/2008	DESIGNED: [] DRAWN: [] CHECKED: [] DATE: []	REVISED: [] REVISED: [] REVISED: [] REVISED: []	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION			US 30 (EB) (JEFFERSON STREET) OVER DES PLAINES RIVER RACK AND TOOTH DIMENSIONS S.N. 099-0166			F.A.P. RTE. 607	SECTION 128 RB-1-3	COUNTY WILL	TOTAL SHEETS 11	SHEET NO. 7
						SCALE: NONE	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT CONTRACT NO. 60E92				

New dual-channel peak strain displacement indicator (Life Span Technologies or approved equal)

New 140 1/4" long x 10" face rack with 4.25" linear pitch



**NEW HANDHOLE ACCESS
(RIVER SIDE OF BRIDGE)
FACING SIDE WALK**

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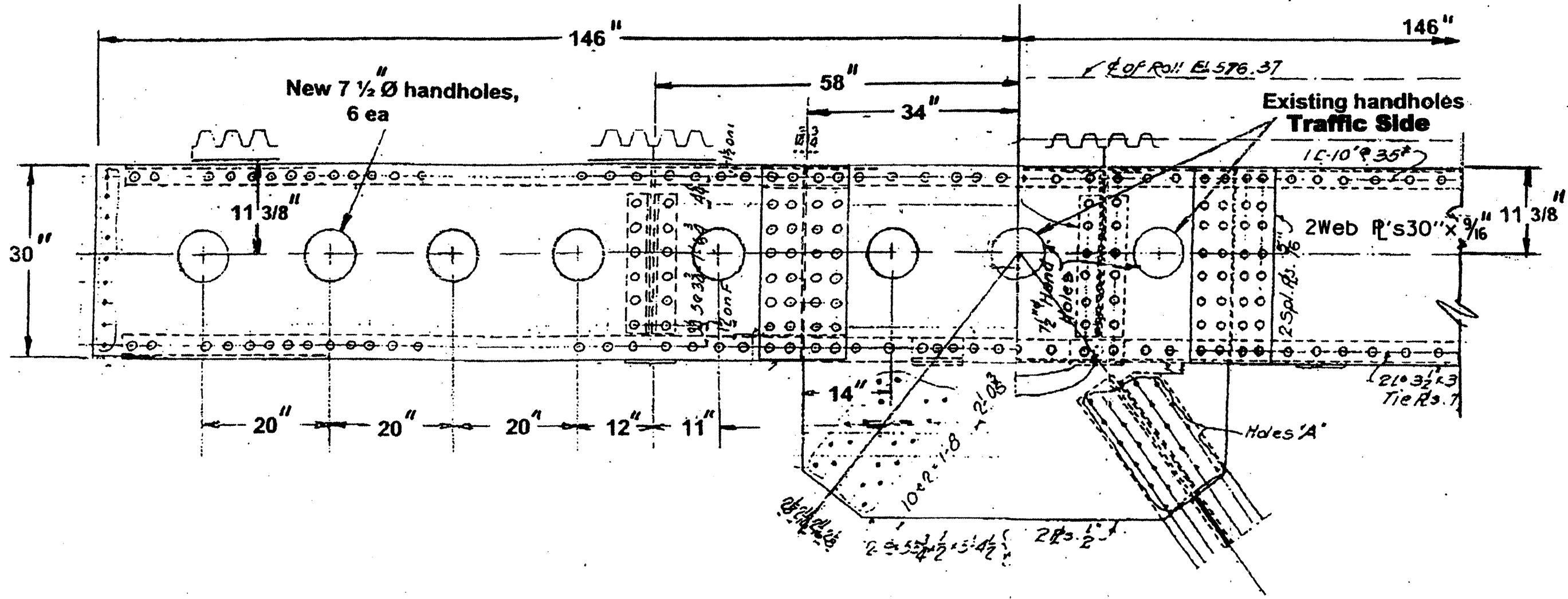
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PLOT DATE : 7/14/2008

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

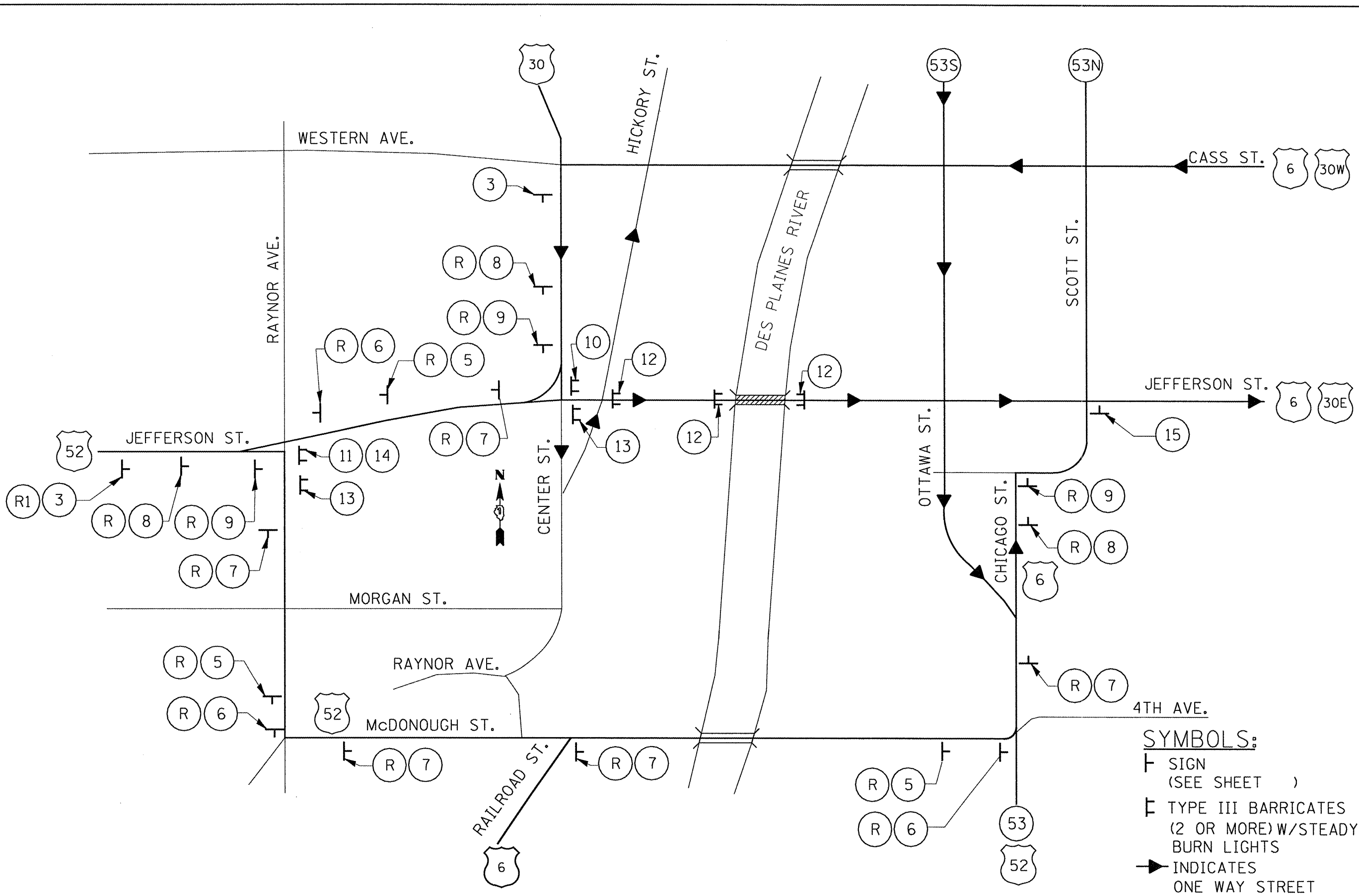
US 30 (EB) (JEFFERSON STREET) OVER DES PLAINES RIVER
NEW HANDHOLE ACCESS
S.N. 099-0166
SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
607	128 RB-1-3	WILL	11	3
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60E92	



**NEW HANDHOLE ACCESS
(APPROACH SIDE OF BRIDGE)
FACING SIDE WALK**

FILE NAME : c:\projects\struct1\899-0166.dgn	USER NAME : tcrakomv	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US 30 / JEFFERSON STREET (EB) OVER DES PLAINES RIVER NEW HANDHOLE ACCESS S.N. 099-0166	F.A.P. RTE. 607	SECTION 128 RB-1-3	COUNTY WILL	TOTAL SHEETS 11	SHEET NO. 9
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PLT DATE : 7/14/2000	DATE	REVISED -	REVISED -							



- SYMBOLS:**
- ┆ SIGN
(SEE SHEET)
 - ┆ TYPE III BARRICADES
(2 OR MORE) W/STEADY
BURN LIGHTS
 - ➔ INDICATES
ONE WAY STREET

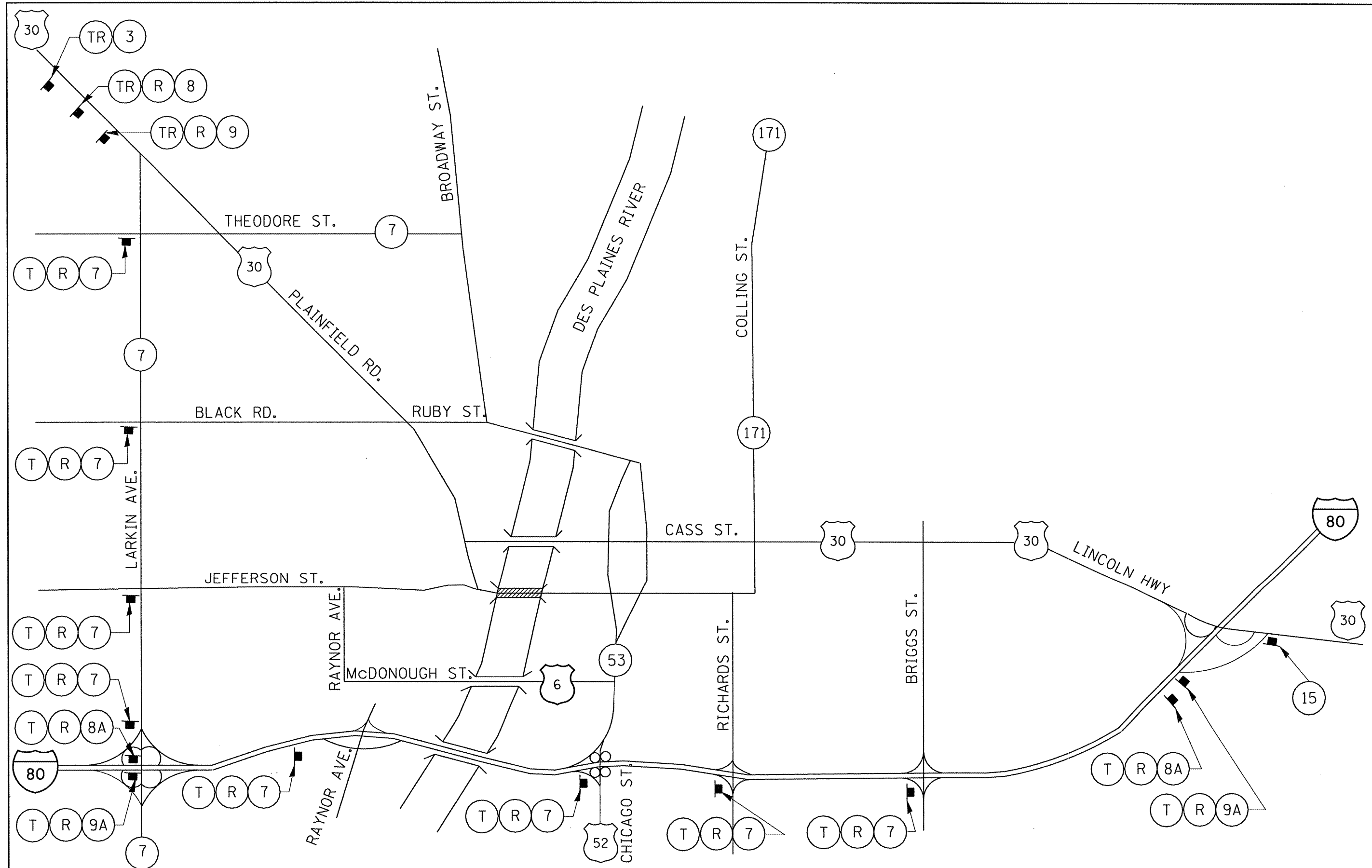
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PLOT DATE = 8/11/2008			

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US 30 (EB) (JEFFERSON STREET) OVER DES PLAINES RIVER
TRUCK DETOUR
S.N. 099-0166**

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

F.A.P. RTE. 607	SECTION 128 RB-1-3	COUNTY WILL	TOTAL SHEETS 11	SHEET NO. 10
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60E92				



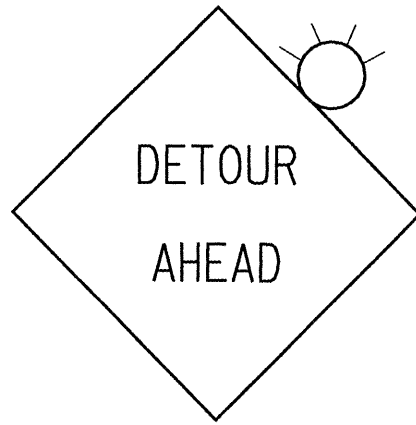
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	PLOT DATE = 8/11/2008	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US 30 /JEFFERSON STREET (EB) OVER DES PLAINS RIVER
CLASS II TRUCK DETOUR
S.N. 099-0166**

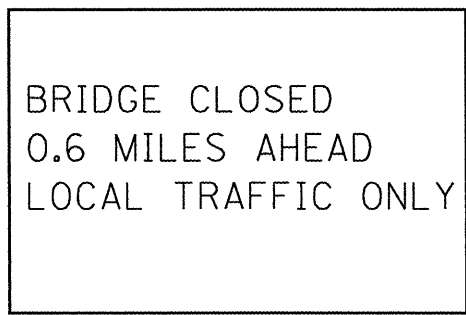
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FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60E92	



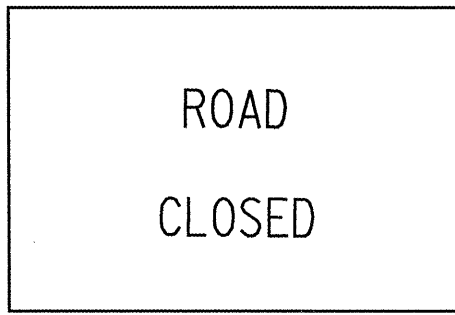
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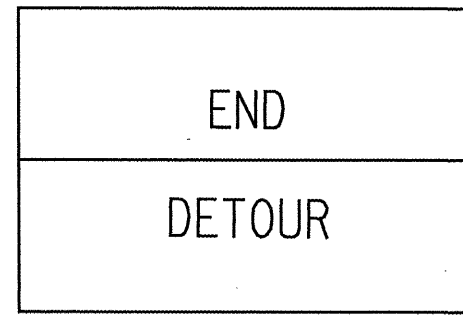
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R11-2 4830

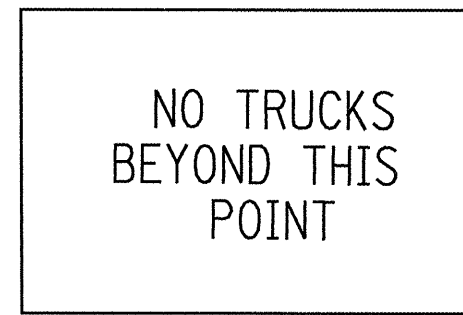
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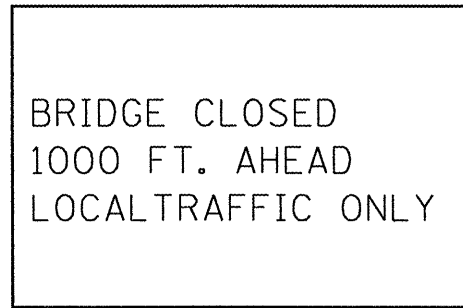
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M4-8

15



13



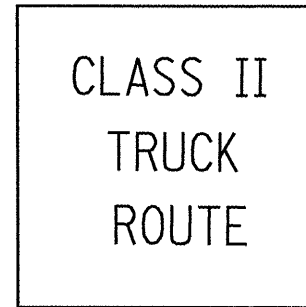
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M4 - 10R

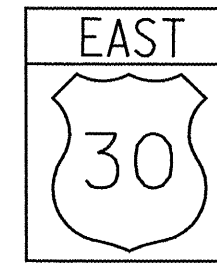
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TR



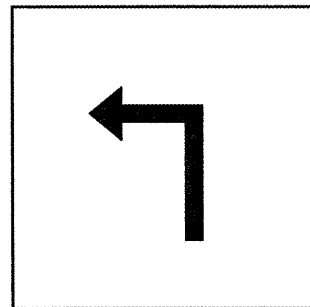
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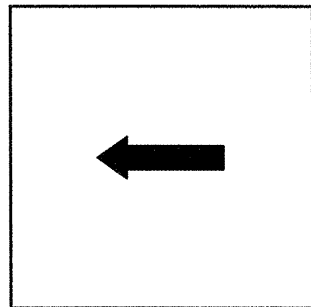
M1-4

R1



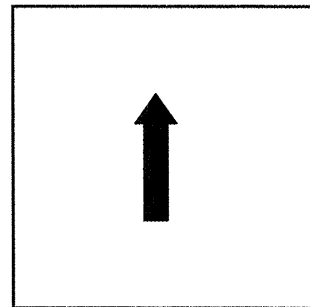
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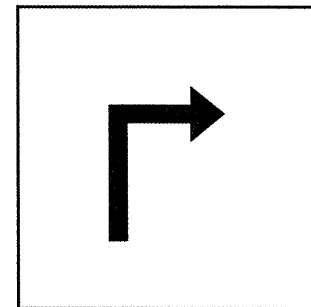
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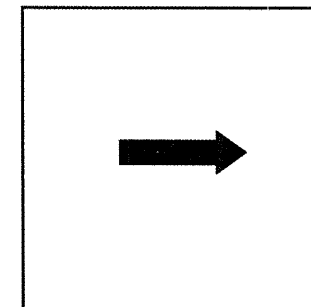
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M6-1 (0) 3018

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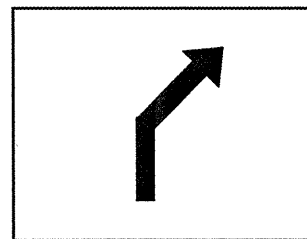


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M1-4

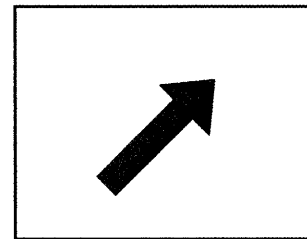
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R



M5-2R (0) 3018

8A



M6-2R (0) 3018

9A

NOTES:

1. ALL CONFLICTING TRAIL BLAZER ASSEMBLIES SHALL BE COMPLETELY COVERED.
2. ALL SIGNS SHALL BE BLACK ON ORANGE.
3. SIGNS 10 11 12 13 TO BE MOUNTED ON TOP OF TYPE III BARRICADE.

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
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		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 30 (EB) (JEFFERSON STREET) OVER DES PLAINES RIVER
DETOUR SIGNAGE
S.N. 099-0166

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
607	128 RB-1-3	WILL	11	11
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60E92	