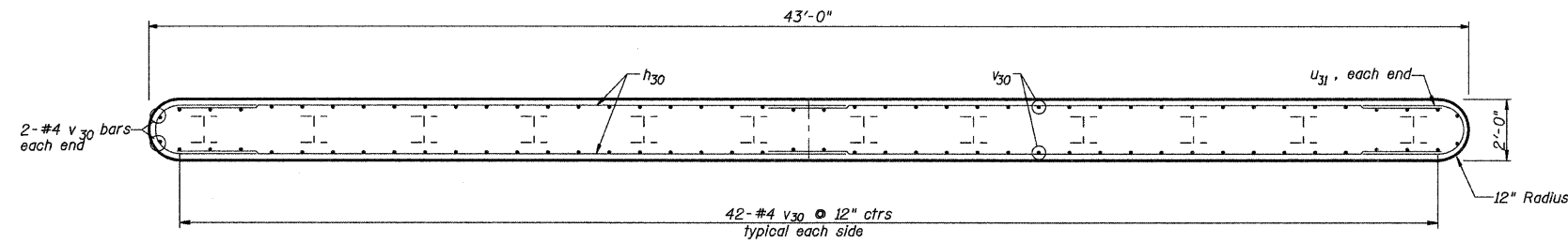


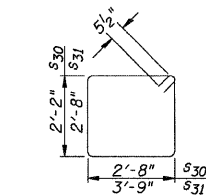
CONTRACT #87374

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
C.H. 48	*	Kankakee	56	33
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

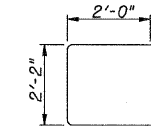
\*85-00221-00-BR



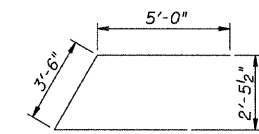
SECTION E-E



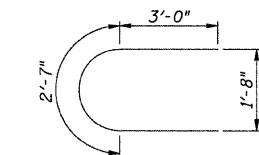
BARS S30 & S31



BAR S32



BAR U30



BAR U31

**PILE DATA**

Location: Piers

Pile Type and Size: Steel HP 10x42

Nominal Required Bearing: 335 kips

Factored Resistance Available: 167 kips

Estimated Pile Length: 20 ft.

No. of Production Piles: 11 @ North Pier  
11 @ South Pier

No. of Test Piles: 1 @ North Pier  
1 @ South Pier

**BILL OF MATERIAL - 2 PIERS**

Bar	No.	Size	Length	Shape
h30	80	# 4	21'-9"	—
p30	40	# 5	23'-10"	—
s30	92	# 5	10'-7"	U
s31	8	# 5	13'-9"	U
s32	4	# 5	6'-2"	U
u30	12	# 5	13'-6"	U
u31	40	# 5	8'-7"	U
v30	176	# 4	11'-4"	—
Concrete Structures		Cu. Yds.	90.5	
Reinforcement Bars		Lbs.	5,180	
Test Pile, Steel HP10x42		Each	2	
Furnishing Steel Piles HP10x42		Foot	440	
Driving Piles		Foot	440	
Metal Shoes		Each	24	
Structure Excavation		Cu. Yds.	52	

DSGN	K.J. Hoffmann				
DR	K.J. Hoffmann				
CHK	J.R. Wolf				
APVD	A.Frauenhoffer	NO.	DATE	REVISION	BY

**FRAUENHOFFER**

Frauenhoffer and Associates, P.C. Consulting Engineers  
3002 Crossing Court Champaign, IL 61822 217-361-6268

PIERS (SHEET 2 OF 2)

CH 48 OVER HORSE CREEK  
SECTION 85-00221-00-BR  
KANKAKEE COUNTY

SHEET 33

DWG NO. 85019-PIER.dwg  
DATE FEB 2007  
PROJ NO. 85019