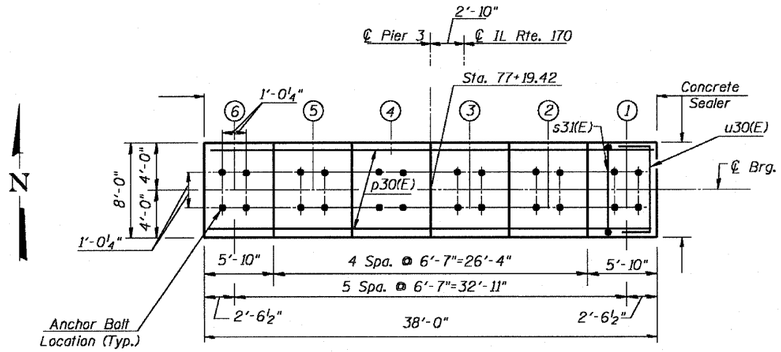
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EarthTech
A tyco International Ltd. Company

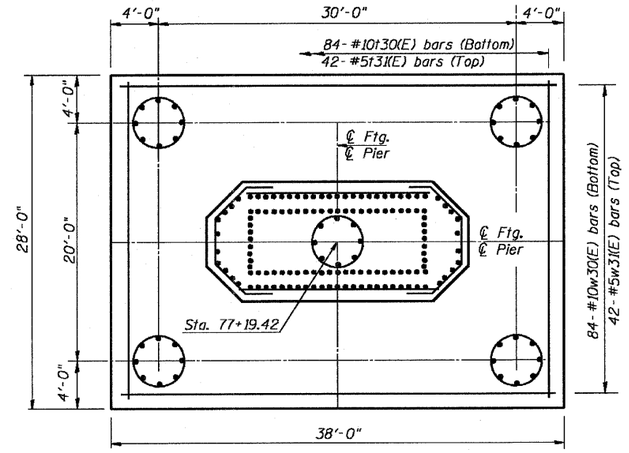
F.A.P. ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	109 BR	La Salle	351	271
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 71
89 SHEETS

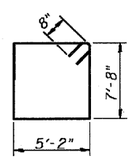
Contract # 66607



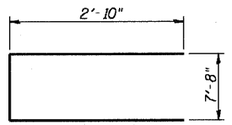
TOP PLAN



FOOTING PLAN



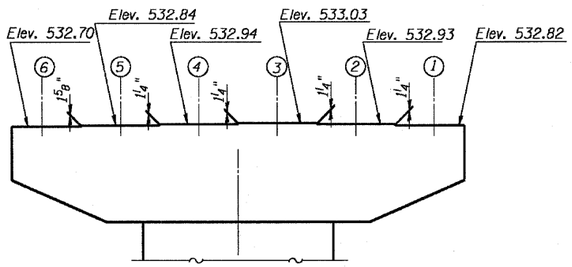
BAR s30(E)



BAR u30(E)

BILL OF MATERIAL

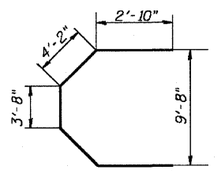
Bar	No.	Size	Length	Shape
h30(E)	12	#6	37'-8"	
h31(E)	2	#6	32'-8"	
h32(E)	48	#6	15'-8"	
h33(E)	60	#6	16'-0"	
h34(E)	2	#6	27'-4"	
h35(E)	9	#5	19'-5"	
n30(E)	66	#14	14'-3"	
n31(E)	64	#14	17'-3"	
p30(E)	20	#14	37'-8"	
p31(E)	6	#9	37'-10"	
s30(E)	64	#6	27'-0"	
s31(E)	100	#6	14'-6"	
s32(E)	48	#6	12'-4"	
s33(E)	60	#6	17'-8"	
s34(E)	19	#4	12'-8"	
s35(E)	168	#5	7'-11"	
s36(E)	210	#5	10'-10"	
s37(E)	36	#6	16'-0"	
sp30	5	#5	1084'-0"	
t30(E)	84	#10	27'-8"	
t31(E)	42	#5	27'-8"	
u30(E)	12	#6	13'-4"	
v30(E)	66	#14	26'-6"	
v31(E)	64	#14	23'-3"	
v32(E)	32	#14	33'-0"	
v33(E)	30	#14	36'-0"	
v34(E)	32	#14	28'-8"	
v35(E)	30	#14	24'-8"	
v36	100	#11	36'-3"	
w30(E)	84	#10	37'-8"	
w31(E)	42	#5	37'-8"	
Cofferdam Excavation		Cu. Yd.	548	
Concrete Structures		Cu. Yd.	868	
Reinforcement Bars, Epoxy Coated		Pound	118,340	
Reinforcement Bars		Pound	24,920	
Drilled Shaft in Rock		Cu. Yd.	107	
Mechanical Splice		Ea.	192	



TOP OF PIER
(Showing Steps Elevations)

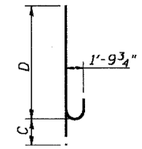
C & D DIMENSIONS

Bar	C	D
n30(E)	2'-3"	12'-0"
n31(E)	2'-3"	15'-0"

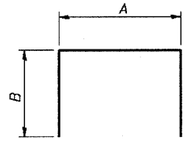


BARS nxx(E)

BAR s33(E)



BAR n30(E) & n31(E)

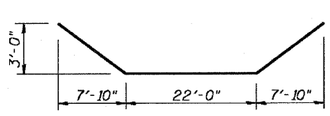


BARS sx(E)

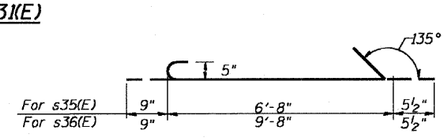
A & B DIMENSIONS

Bar	A	B
s31(E)	5'-2"	4'-8"
s32(E)	6'-8"	2'-10"
s34(E)	7'-8"	2'-6"
s37(E)	5'-2"	5'-5"

BARS syy(E)



BAR p31(E)



BAR s35(E) and s36(E)

VESSEL COLLISION FORCES

Load Case 1
Static Load = 2800K
Elevation = 500.13 ft (Barge Bow Rake 6' above MHW)
Direction = Parallel to Pier & Navigational Channel

Load Case 2
Static Load = 1400K
Elevation = 500.13 ft (Barge Bow Rake 6' above MHW)
Direction = Perpendicular to Pier & Navigational Channel

Note: Load Cases are considered independently
Load Combination 1.0(1.0D+1.0P+1.0B+1.0SF+1.0E)

Notes:

1. Work this Sheet with Sheet 70
2. Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.
3. Cofferdam Struts are not allowed to pass through Foundation.
4. Final Design & Dimensions of Cofferdams are the Responsibility of the Contractor.

DESIGNED	- RJC
CHECKED	- DEV
DRAWN	- JHR
CHECKED	- DEV

PIER 3 DETAILS
IL. 170 F.A.P. 786 OVER ILLINOIS RIVER AT SENECA
PUBLIC WATERS
LA SALLE COUNTY, SECTION 109 BR
STATION 79+04.42
STRUCTURE NO. 050-0246