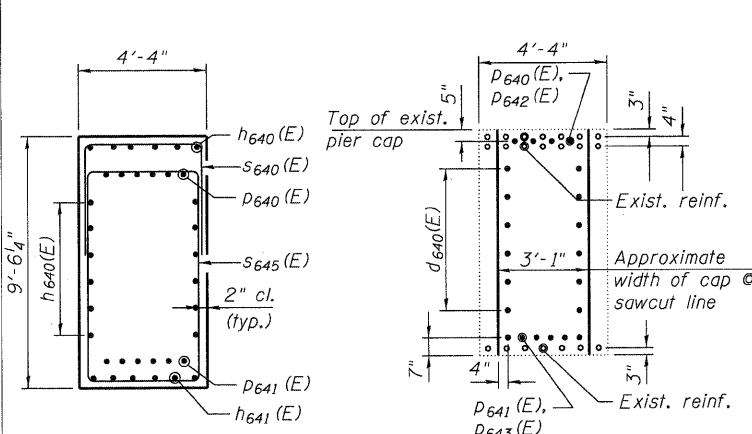
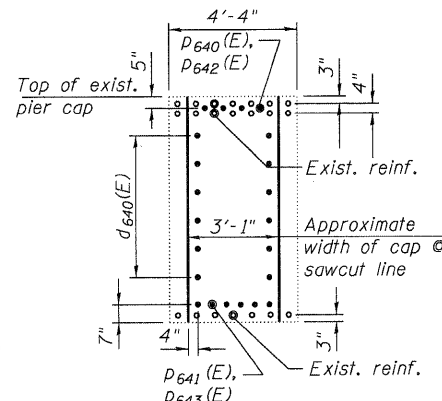


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

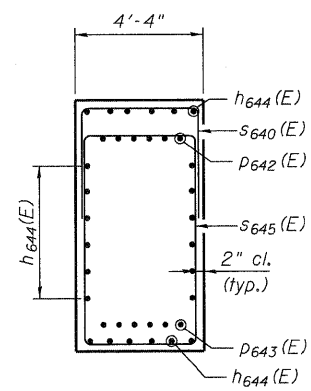
BILL OF MATERIAL



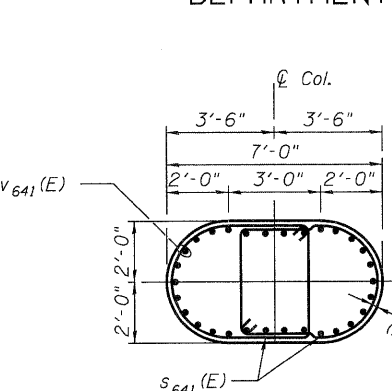
SECTION A-A



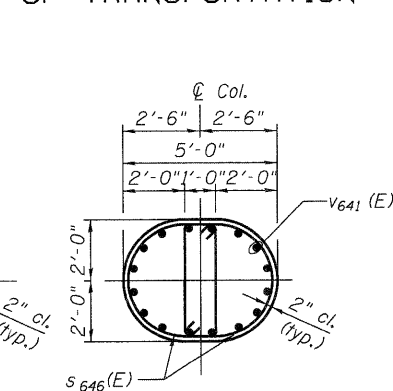
SECTION B-B &
SECTION C-C



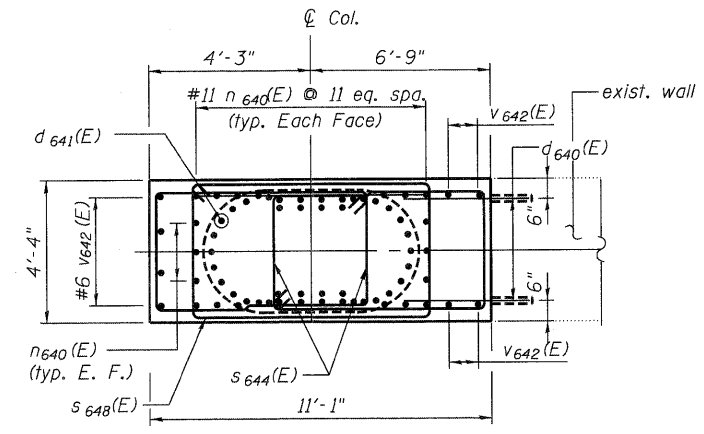
SECTION D-D



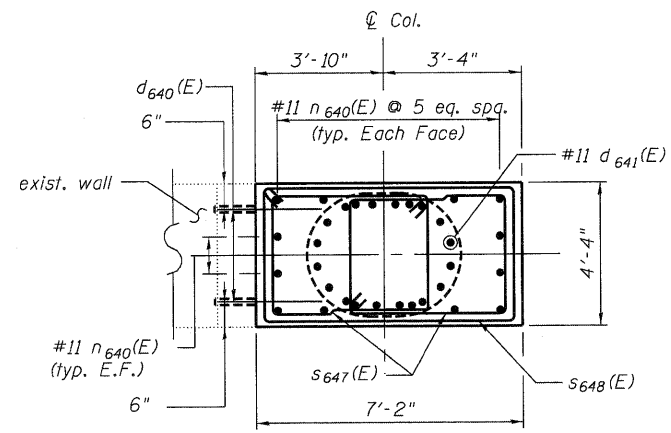
SECTION E-E



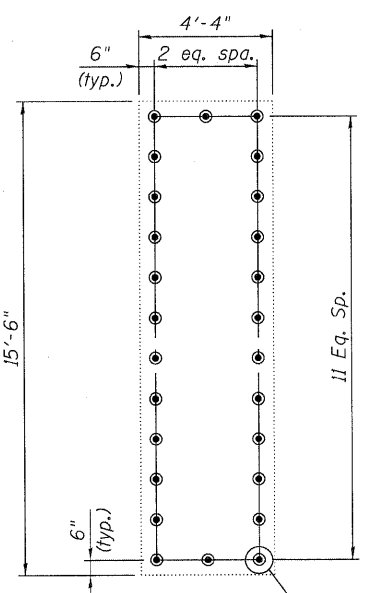
SECTION F-F



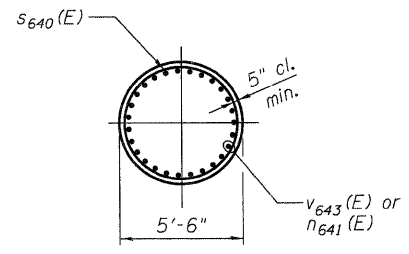
SECTION G-G



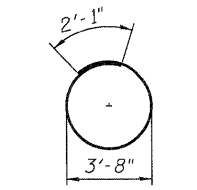
SECTION H-H



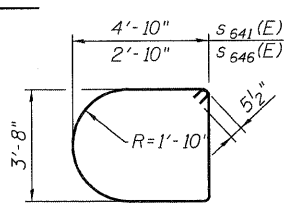
SECTION J-J



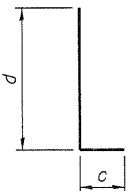
SECTION K-K



BAR S643(E)

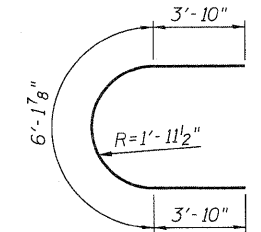


BAR S641(E) & S646(E)

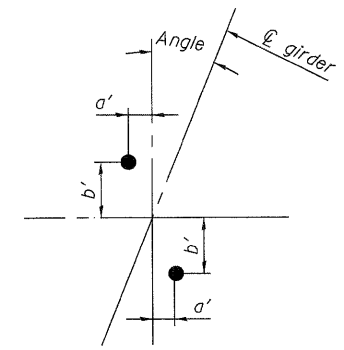


BAR P640(E), P642(E), N640(E),
H641(E) & H643(E)

Bar	c	d
P640(E)	1'-7"	9'-6"
P641(E)	1'-2"	9'-6"
P642(E)	1'-7"	9'-10"
P643(E)	1'-2"	9'-10"
N640(E)	2'-0"	15'-0"
H641(E)	1'-8"	10'-9"
H643(E)	1'-8"	7'-8"



BAR U640(E) & U641(E)



ANCHOR BOLT LAYOUT

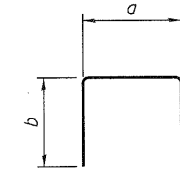
Girder	Angle	a'	b'
NG13	21°39'15"	1'-0 3/4"	5 1/8"
P	21°39'15"	1'-0 3/4"	5 1/8"
NG11	22°8'40"	1'-0 3/4"	5 3/16"
NG12	22°37'52"	1'-0 1/16"	5 5/16"

MINIMUM BAR LAPS

Bar Size	Min. Lap
#6	3'-10"
#9	8'-7"
#11	10'-2"

Bar	e	f
S642(E)	9'-6"	5'-0"
S644(E)	4'-0"	7'-6"
S645(E)	7'-6"	4'-0"
S647(E)	4'-0"	5'-11"
S648(E)	4'-0"	6'-10"

BAR S642(E), S644(E), S645(E),
S647(E) & S648(E)



BAR S640(E) & T640(E)

Bar	a	b
S640(E)	4'-0"	3'-6"
T640(E)	20'-6"	2'-0"

Bar	No.	Size	Length	Shape
d640(E)	76	#5	2'-8"	—
d641(E)	46	#11	20'-4"	—
h640(E)	24	#5	8'-0"	—
h641(E)	6	#9	12'-5"	—
h642(E)	32	#6	19'-8"	—
h643(E)	6	#9	9'-4"	—
h644(E)	24	#5	8'-8"	—
n640(E)	46	#11	27'-1"	—
n641(E)	88	#9	15'-2"	—
p640(E)	4	#9	11'-1"	—
p641(E)	6	#7	10'-8"	—
p642(E)	4	#9	11'-5"	—
p643(E)	6	#7	11'-0"	—
s640(E)	18	#5	11'-0"	—
s641(E)	54	#5	16'-5"	—
s642(E)	256	#5	29'-11"	—
s643(E)	68	#5	13'-8"	—
s644(E)	32	#5	23'-11"	—
s645(E)	26	#5	23'-11"	—
s646(E)	52	#5	12'-5"	—
s647(E)	32	#5	20'-9"	—
s648(E)	8	#5	22'-7"	—
t640(E)	28	#11	24'-6"	—
t641(E)	28	#11	20'-8"	—
u640(E)	16	#6	13'-10"	—
v640(E)	14	#5	9'-3"	—
v641(E)	46	#11	29'-5"	—
v642(E)	12	#6	15'-2"	—
v643(E)	88	#9	41'-10"	—
s640d(E)	4	#5	42'-3"	—
Drilled Shaft in Soil	CU YD		146.1	
Drilled Shaft in Rock	CU YD		2.9	
Structure Excavation	CU YD		72.2	
Concrete Structures	CU YD		239.3	
Reinforcement Bars, Epoxy Coated	POUND		64,810	

* Length is height of spiral.

PIER 11 DETAILS
STRUCTURE NO. 016-3240

TYLIN INTERNATIONAL

DESIGNED	BY	LS	REVISIONS
CHECKED	AMD	LS	NAME
DRAWN	DY	LS	DATE
CHECKED	AMD	LS	
DATE	03/25/2011		

DESIGNED	BY	LS	REVISIONS
CHECKED	AMD	LS	NAME
DRAWN	DY	LS	DATE
CHECKED	AMD	LS	
DATE	06/03/2011		

SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	55	0711.2R & 1011.1BR	COOK	741	667
73 SHEETS					CONTRACT NO. 60999
		FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	