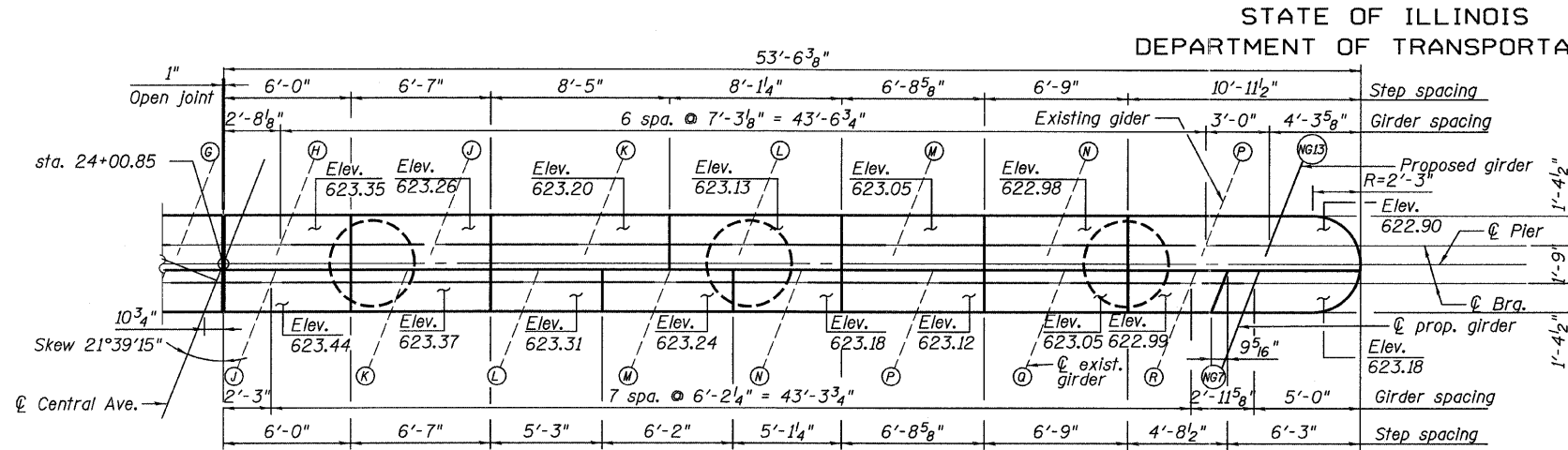
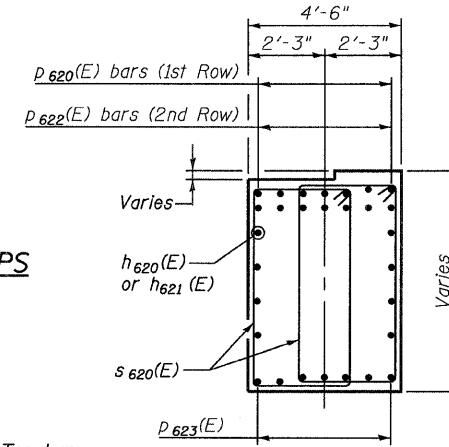


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



MINIMUM BAR LAPS

Bar Size	Min. Lap
#5	3'-3"
#6	3'-1"
#9	6'-10"
#11	10'-8"
#11	12'-1"



SECTION E-E

BAR U620(E), & U621(E)

Bar	a	r	b
U620(E)	3'-8"	2'-1/2"	6'-4 5/8"
U621(E)	3'-8"	2'-4"	7'-4"

BAR S623(E) & U622(E)

Bar	c	d
S623(E)	4'-2"	2'-1"
S624(E)	2'-10"	4'-4"
U622(E)	4'-2"	2'-1"

BAR S620(E) & S621(E)

Bar	c	d
S620(E)	2'-10"	6'-6"
S621(E)	4'-9"	9'-3"
S622(E)	2'-10"	6'-4"

BAR P620(E), P621(E), P622(E), & P625(E)

Bar	e	f
P620(E)	2'-0"	41'-10"
P621(E)	2'-0"	20'-5"
P622(E)	2'-0"	24'-1"
P625(E)	2'-0"	39'-0"

BILL OF MATERIAL

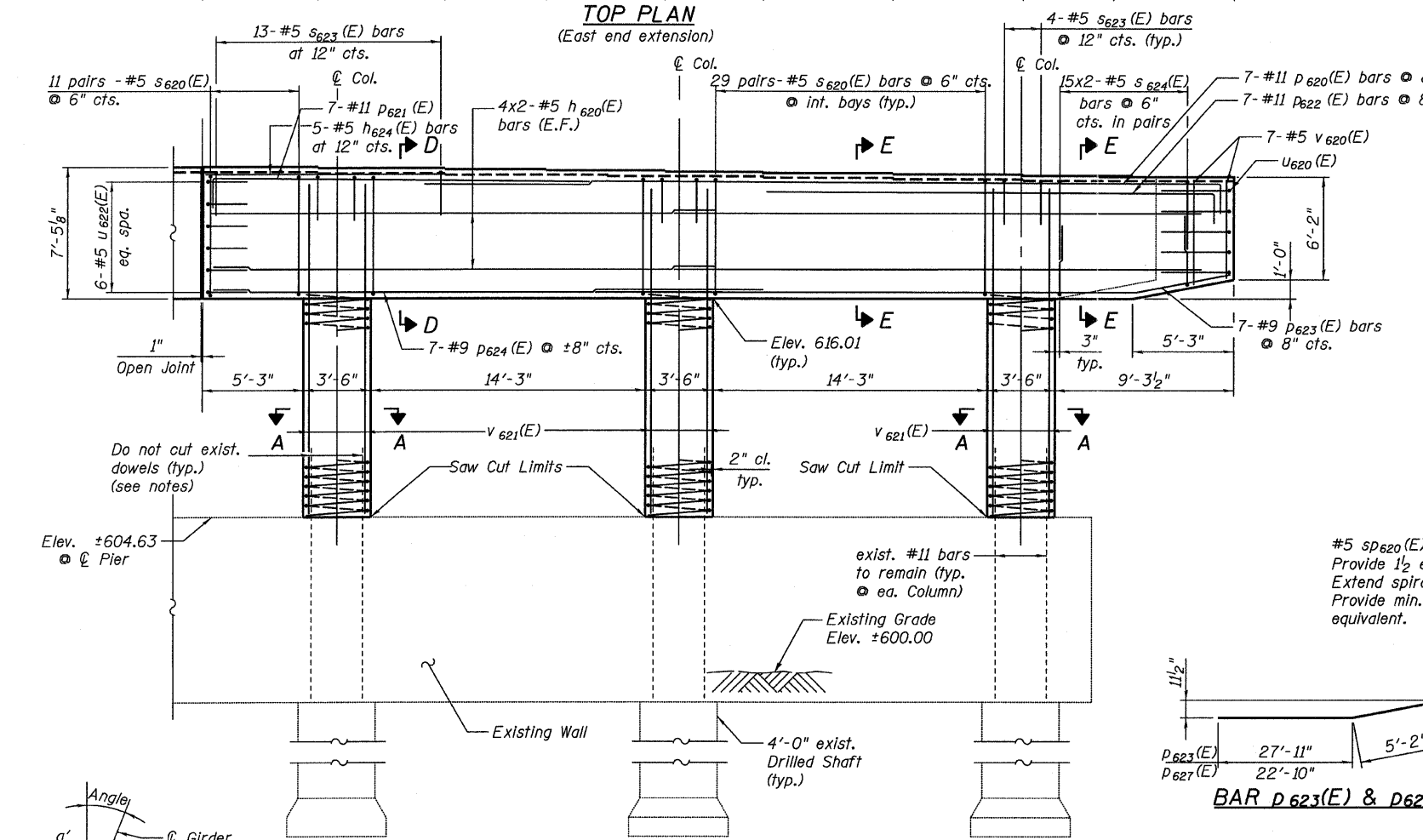
Bar	No.	Size	Length	Shape
d620(E)	24	#6	3'-10"	=====
d621(E)	19	#11	18'-3"	=====
h620(E)	16	#5	27'-3"	=====
h621(E)	16	#5	33'-7"	=====
h622(E)	8	#9	18'-3"	=====
h623(E)	16	#5	16'-7"	=====
h624(E)	5	#5	12'-3"	=====
h625(E)	5	#5	25'-3"	=====
h626(E)	5	#5	18'-11"	=====
h620(E)	19	#11	18'-8"	=====
P620(E)	7	#11	43'-10"	=====
P621(E)	7	#11	22'-4"	=====
P622(E)	7	#11	26'-0"	=====
P623(E)	7	#9	33'-1"	=====
P624(E)	7	#9	28'-11"	=====
P625(E)	14	#11	41'-0"	=====
P626(E)	7	#9	46'-8"	=====
P627(E)	7	#9	28'-0"	=====
S620(E)	138	#5	19'-7"	=====
S621(E)	21	#5	28'-11"	=====
S622(E)	196	#5	19'-3"	=====
S623(E)	89	#5	10'-6"	=====
S624(E)	88	#5	11'-6"	=====
SP620(E)	7	#5	11'-9"	=====
SP621(E)	1	#5	75'-8"	=====
U620(E)	10	#5	13'-9"	=====
U621(E)	10	#5	14'-8"	=====
U622(E)	12	#5	8'-3"	=====
V620(E)	14	#5	5'-3"	=====
V621(E)	133	#11	15'-4"	=====
V622(E)	6	#5	9'-3"	=====
V623(E)	38	#11	42'-11"	=====
Drilled Shaft in Soil		CU YD	48.9	
Drilled Shaft in Rock		CU YD	0.5	
Concrete Sealer		SQ FT	4,368	
Structure Excavation		CU YD	3.3	
Concrete Structures		CU YD	189.7	
Reinforcement Bars, Epoxy Coated		POUND	49,560	

* Cut to fit in field.
** Length is height of spiral.

NOTES

- Epoxy grout d620(E) bars according to Article 584 of the Standard Specifications. Drill to miss existing reinforcement. The epoxy grout and method of application shall be approved by the Engineer. All drilling and grouting of rebar to be included with the cost of "Reinforcement Bars, Epoxy Coated."
- Space reinforcement in pier cap to miss anchor bolts.
- All edges shall have standard 3/4" chamfers except as noted.
- For Sections A, B, C, D & E see sheet 60.
- E.F. - Each Face.
- eq. spa. - denotes equally spaced.
- Existing reinforcement shall be cleaned and incorporated into new construction. Cost included with Concrete Removal.
- Cast steps monolithically with cap.

PIER 9 REPLACEMENT
& WIDENING - EAST
STRUCTURE NO. 016-3240



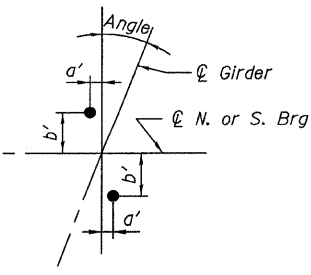
NORTH

Beam	Angle	a'	b'
NG13	20°57'48"	1'-0 7/8"	5 1/8"
A Thru P	21°39'15"	1'-0"	4 3/4"
NG11	22°08'40"	1'-0 7/8"	5 1/4"
NG12	22°37'52"	1'-0 3/4"	5 3/8"

SOUTH

Beam	Angle	a'	b'
NG7	20°57'48"	8 5/8"	3 1/4"
A thru R & NG1 thru NG3	21°39'15"	8 5/8"	3 3/8"

ANCHOR BOLT LAYOUT



TYLIN INTERNATIONAL

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

SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
73 SHEETS	55	0711.2R & 1011.1BR	COOK	741	662
			CONTRACT NO. 60999		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					