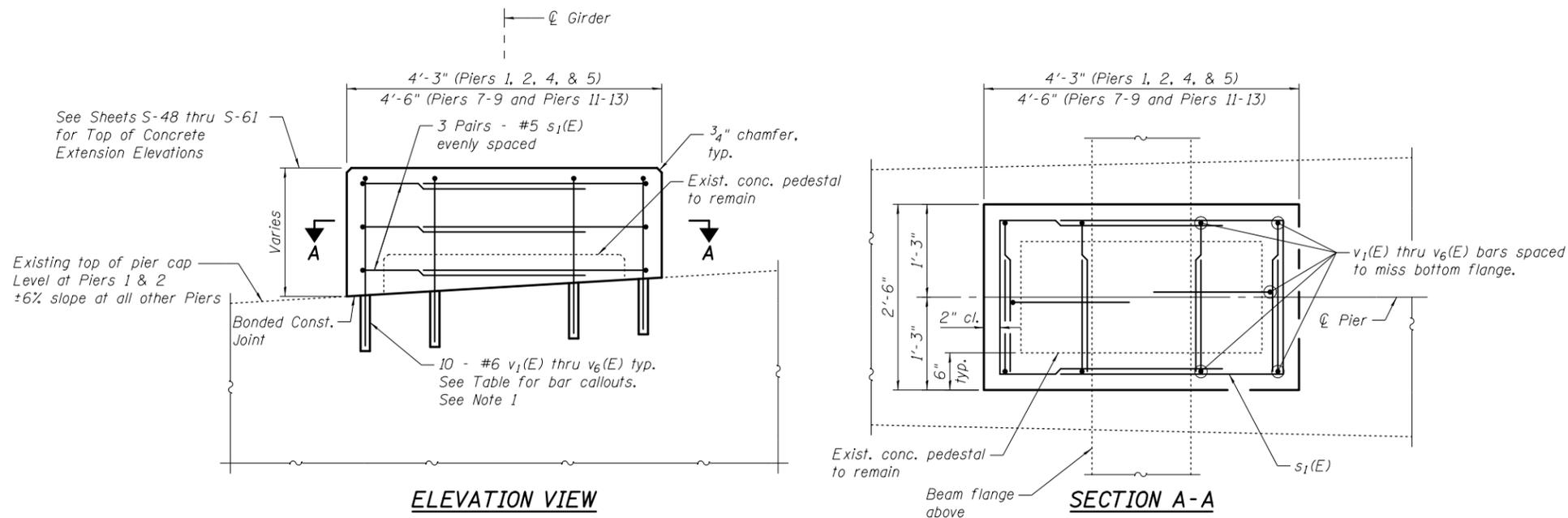


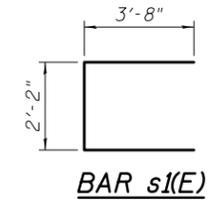
2/26/27 PM

SA:1072.05-CADD-Structure-1 SN 0162437-CADD Structure 0162437-60J12-062-BR-gfpedestal.101487/2012



TYPICAL CONCRETE EXTENSIONS FOR BEARINGS

Location	Bar
Pier 1, Girders 1 & 2	v3(E)
Girders 3 & 4	v1(E)
Pier 2, Girders 1 - 3	v4(E)
Girder 4	v3(E)
Pier 4, Girders 1 & 2	v3(E)
Girders 3 & 4	v2(E)
Pier 5	v5(E)
Pier 7	v5(E)
Pier 8	v6(E)
Pier 9	v5(E)
Pier 11	v5(E)
Pier 12	v6(E)
Pier 13	v5(E)



Bar	A
v ₁ (E)	1'-1"
v ₂ (E)	1'-3"
v ₃ (E)	1'-5"
v ₄ (E)	1'-7"
v ₅ (E)	1'-9"
v ₆ (E)	2'-1"

BARS v₁(E) thru v₆(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
s ₁ (E)	240	#5	9'-6"	□
v ₁ (E)	20	#6	3'-2"	□
v ₂ (E)	20	#6	3'-4"	□
v ₃ (E)	50	#6	3'-6"	□
v ₄ (E)	30	#6	3'-8"	□
v ₅ (E)	200	#6	3'-10"	□
v ₆ (E)	80	#6	4'-2"	□
Concrete Structures		Cu. Yd.	19.5	
Reinforcement Bars, Epoxy Coated		Pound	4,660	

NOTES:

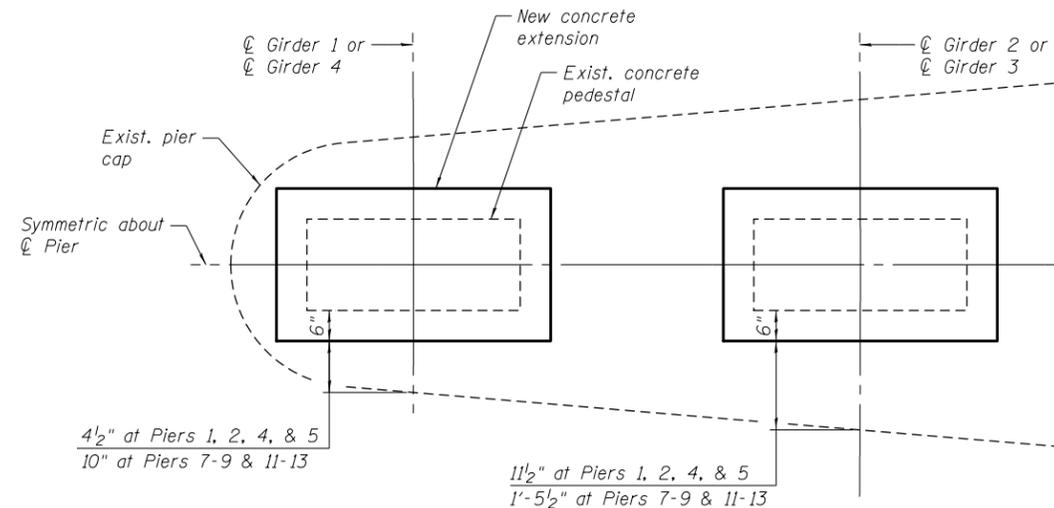
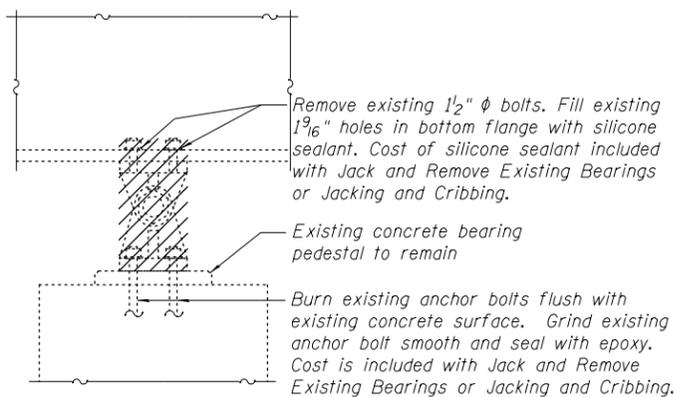
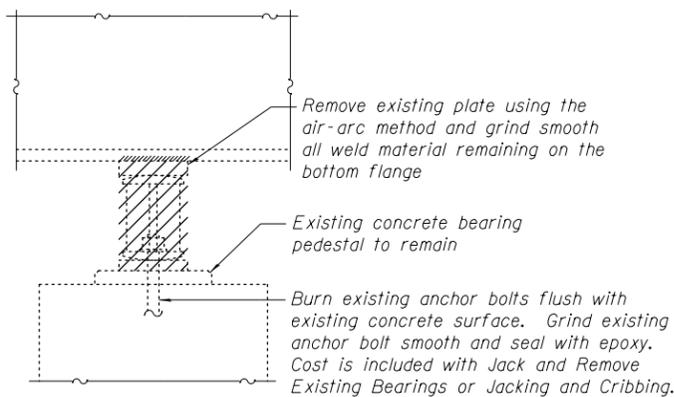
- Epoxy grout v₁(E) thru v₆(E) bars in 9" min. drilled holes according to Section 584 of the Standard Specifications.

JACKING PROCEDURE

- Jacking of existing beams shall be done after the deck in each unit is removed.
- The Contractor shall submit for approval by the Engineer details and calculations for jacking existing beams and removing and installing bearings prior to commencing any related work. Below shows the minimum jack capacity required for each bearing.

Location	Beam DL Reaction (k)	Min. Jack Capacity (k)
Abut. 1, Piers 3 & 6	7	15
Piers 1, 2, 4, 5 & 9, Abut. 2	21	35
Pier 11	39	60
Piers 7, 8, 12 & 13	53	80

- Jacking may be performed directly from the bearing seat under the girders. Each proposed concrete extension may be poured in two stages to permit jacking from the bearing seat, subject to the approval of the Engineer. See Jacking Clearance Plan View at Piers.
- There shall be at least one jack per bearing and the jack shall be placed directly under the girder. The jacking operation shall follow procedures outlined in the special provisions "Jack and Remove Existing Bearings" and "Jacking and Cribbing". The girders shall be blocked in position until after the completion of the installation of new bearings.
- The new concrete extensions and bearings shall be in place and the jacks shall be removed before the new concrete deck in each unit is poured.



Note:
Existing chamfer not accounted for in clearance dimensions shown.

JACKING CLEARANCE PLAN VIEW AT PIERS

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com

USER NAME =	DESIGNED - TL	REVISED -
PLOT SCALE =	CHECKED - BAK	REVISED -
PLOT DATE = 11/08/2012	DRAWN - MTR	REVISED -
	CHECKED - TL	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER MODIFICATION DETAILS
STRUCTURE NO. 016-2437

SHEET NO. S-62 OF S-83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2012-060-BR	COOK	285	225
CONTRACT NO. 60V61				
ILLINOIS FED. AID PROJECT				