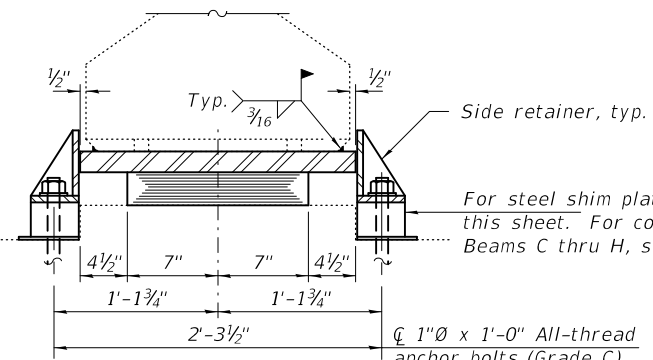


ELEVATION AT PIER 4

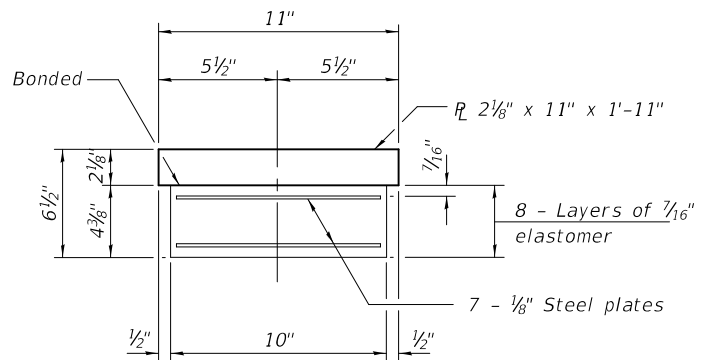


SECTION A-A

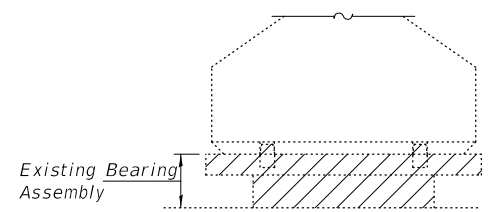
TYPE I ELASTOMERIC EXP. BRG.
(Beam B - N. Side)

For steel shim plates at Beams A & B, see this sheet. For concrete pedestals at Beams C thru H, see sheet 2 of 3 for details.

Notes:
Stainless steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.
Side retainers and steel shim plates shall be included in the cost of Furnishing & Erecting Structural Steel.
Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.
All exposed bearing plates and side retainers shall be hot dip galvanized according to AASHTO M111.

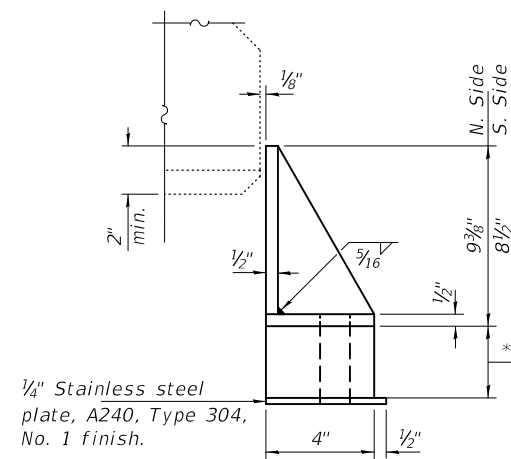


BEARING ASSEMBLY



EXISTING BEARING REMOVAL DETAIL

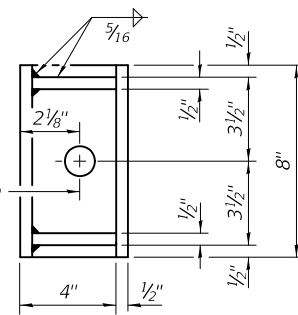
Cost included with Jack and Remove Existing Bearings.



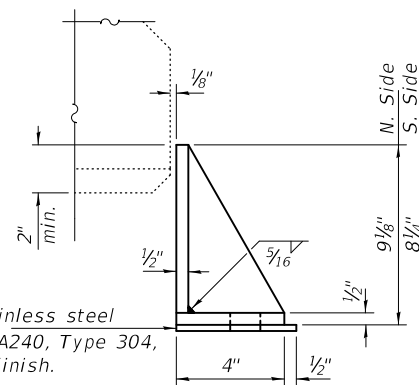
** 7/8" - Beam A - S. Side
1 3/4" - Beam A - N. Side
2 5/8" - Beam B - S. Side
3 3/4" - Beam B - N. Side

SIDE RETAINER - BEAMS A & B

(For exterior faces of beams A)
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



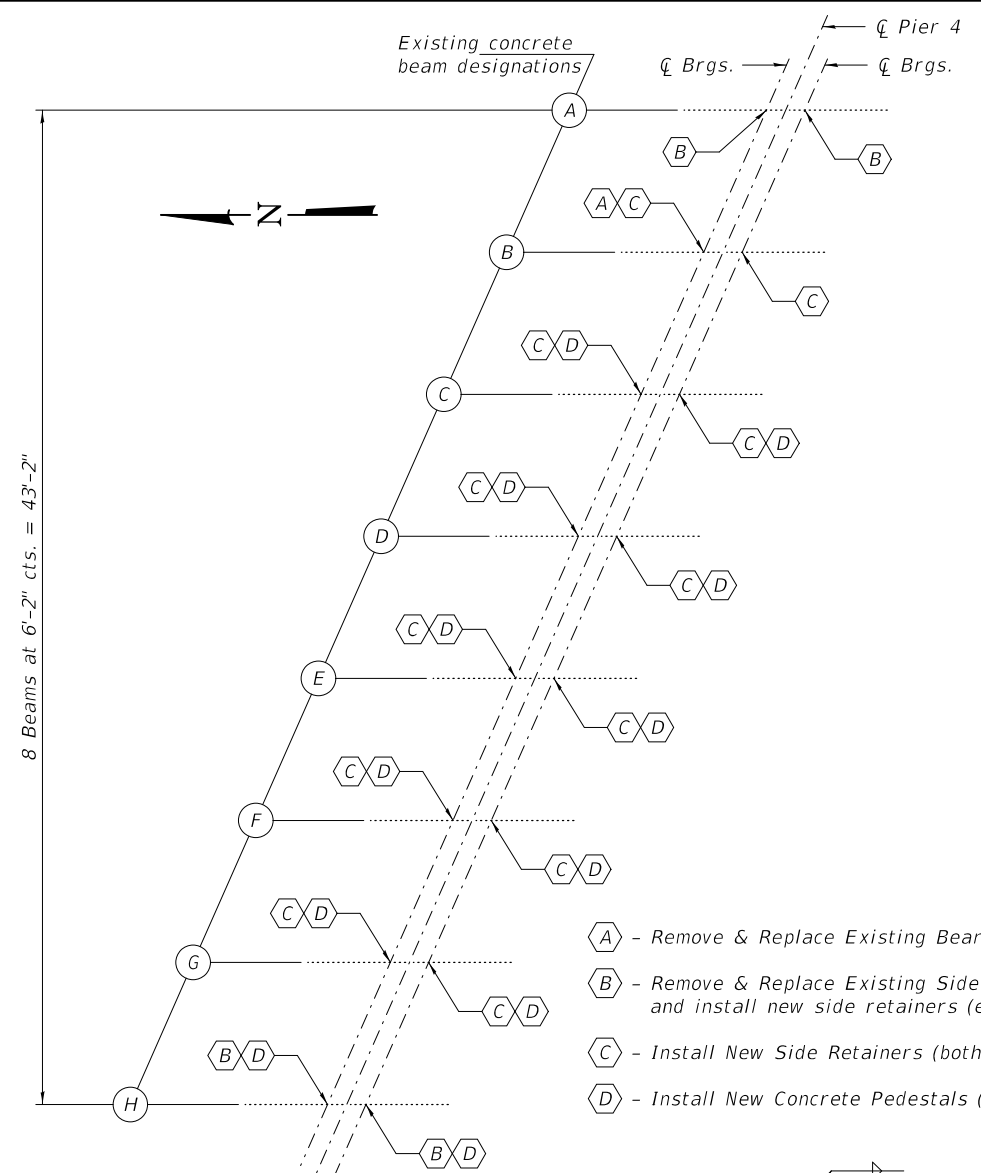
(6 Req'd.)



1/4" Stainless steel plate, A240, Type 304, No. 1 finish.

SIDE RETAINER - BEAMS C THRU H

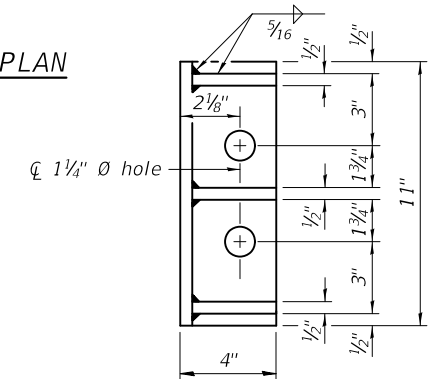
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



8 Beams at 6'-2" cts. = 43'-2"

PARTIAL FRAMING PLAN

- A - Remove & Replace Existing Bearing
- B - Remove & Replace Existing Side Retainer (int.) and install new side retainers (ext.)
- C - Install New Side Retainers (both sides)
- D - Install New Concrete Pedestals (both sides)



BEAMS A & H

Interior faces only.
(4 Req'd.)

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	1
Furnishing & Erecting Structural Steel	Pound	860
Jack & Remove Existing Bearings	Each	1
Anchor Bolts	Each	36

REV-SEP

EXPIRES 11-30-2022

(Seal applies to sheets 77-79 of 95 only)



DESIGNED - Victor H. Veliz
CHECKED - Stephen M. Ryan
DRAWN - daburdell
CHECKED - VHV SMR

EXAMINED - *Trig A. B...*
ENGINEER OF STRUCTURAL SERVICES
PASSED - *David Carl Puzev*
ENGINEER OF BRIDGES AND STRUCTURES

DATE - DECEMBER 10, 2020
REVISED -
REVISED -

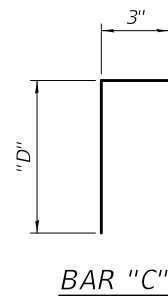
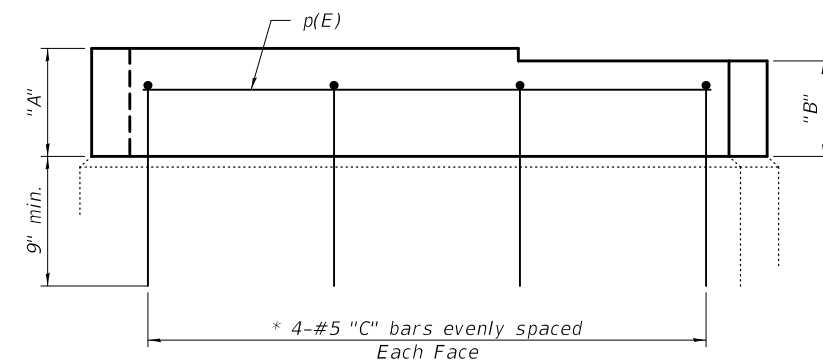
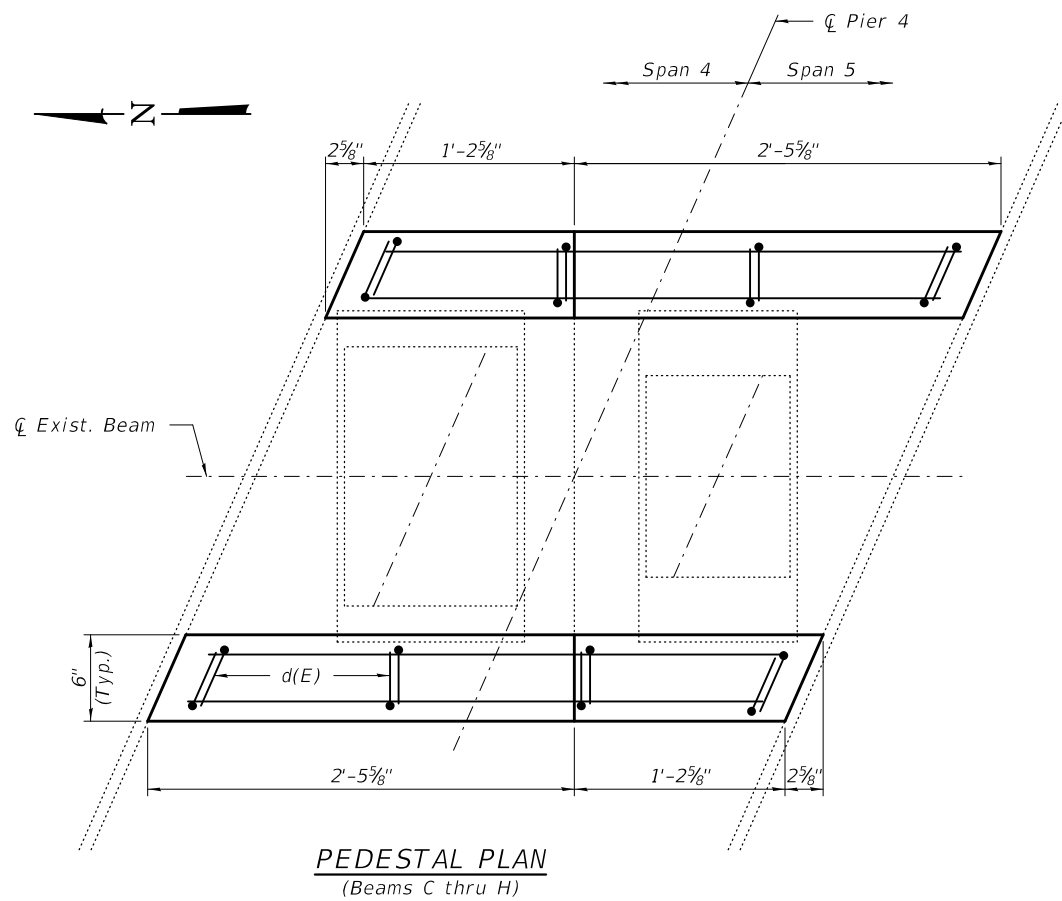
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS - PIER 4
SN 016-2513 (NB)

ENTIRE SHEET REVISED

SHEET NO. 1 OF 3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	2018-124-BR	COOK	88	77
CONTRACT NO. 62H50			ILLINOIS FED. AID PROJECT	



BEAM	"A"	"B"	"C"	"D"
C	5 9/16"	5"	d3(E)	1'-0"
D	6 7/8"	6 7/8"	d2(E)	1'-1"
E	7 1/16"	7 1/2"	d1(E)	1'-2"
F	5 7/8"	7 1 5/16"	d(E)	1'-3"
G	4 3/8"	6 1 1/16"	d1(E)	1'-2"
H	5 7/16"	4 5/8"	d3(E)	1'-0"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	8	#5	1'-6"	┌
d1(E)	16	#5	1'-5"	┌
d2(E)	8	#5	1'-4"	┌
d3(E)	16	#5	1'-3"	┌
p(E)	12	#5	3'-4"	—
Concrete Structures			Cu. Yd.	0.5
Reinforcement Bars, Epoxy Coated			Pound	110

ENTIRE SHEET REVISED

REV-SEP

DESIGNED - VHV
 CHECKED - SMR
 DRAWN - daburdell
 CHECKED - VHV SMR

EXAMINED
 PASSED
 ENGINEER OF STRUCTURAL SERVICES
 ENGINEER OF BRIDGES AND STRUCTURES

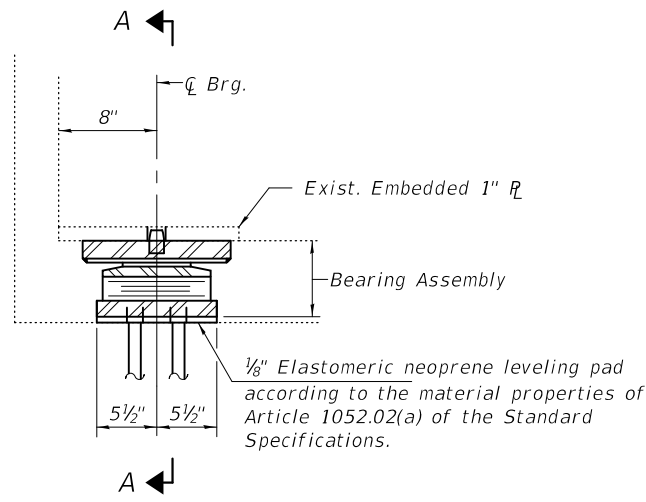
DATE - DECEMBER 10, 2020
 REVISED
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

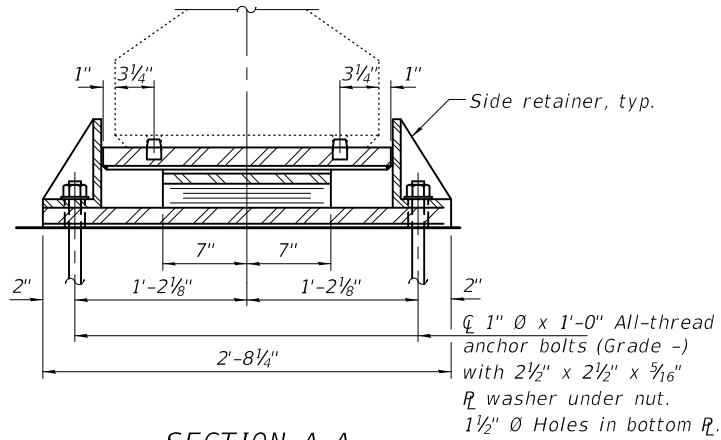
PEDESTAL DETAILS - PIER 4 (BEAMS C THRU H)
 SN 016-2513 (NB)

SHEET NO. 2 OF 3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	2018-124-BR	COOK	88	78
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62H50	

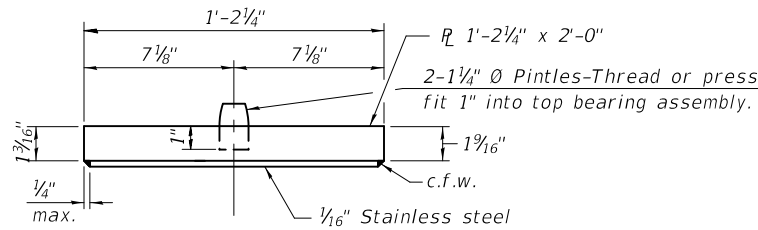


ELEVATION AT ABUT.

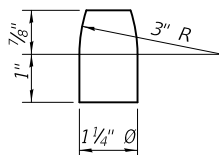


SECTION A-A

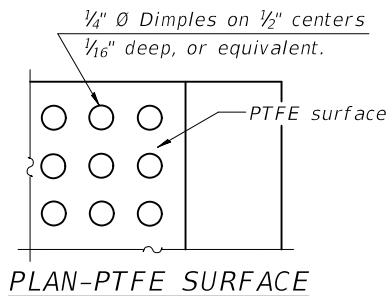
TYPE II ELASTOMERIC EXP. BRG.



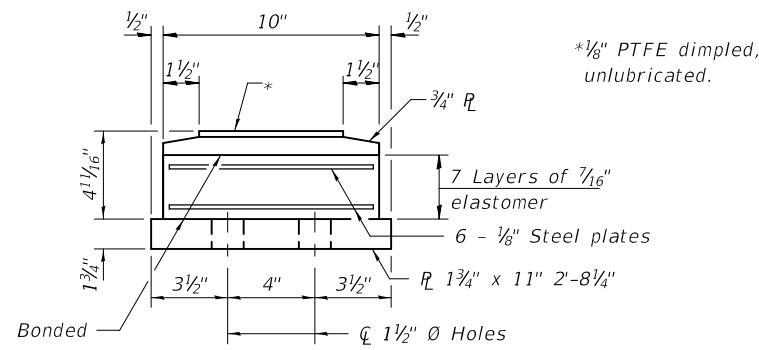
TOP BEARING ASSEMBLY



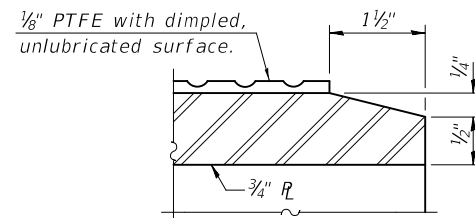
PINTLE



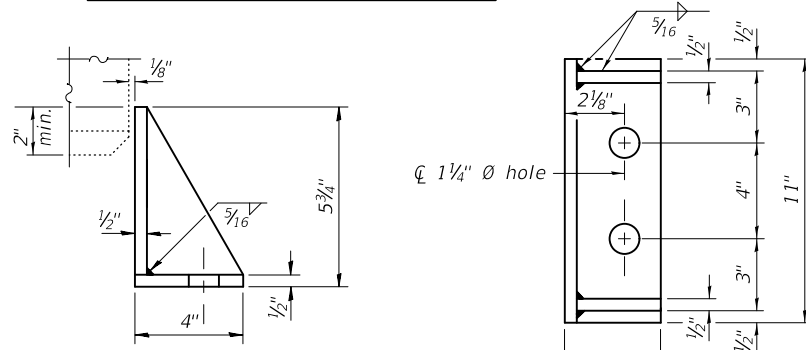
PLAN-PTFE SURFACE



BOTTOM BEARING ASSEMBLY

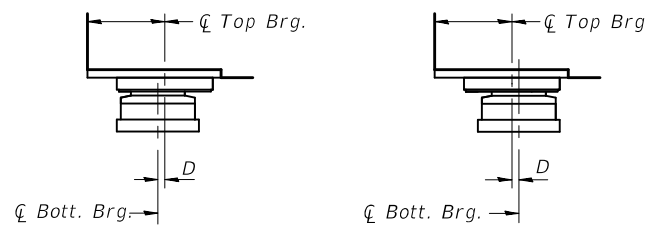


SECTION THRU PTFE



SIDE RETAINER

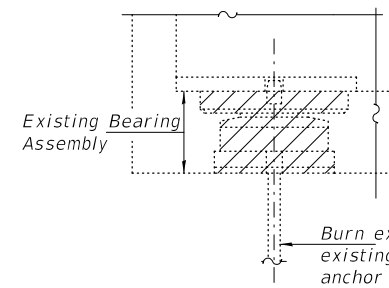
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



BELOW 50°F. ABOVE 50°F.
D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

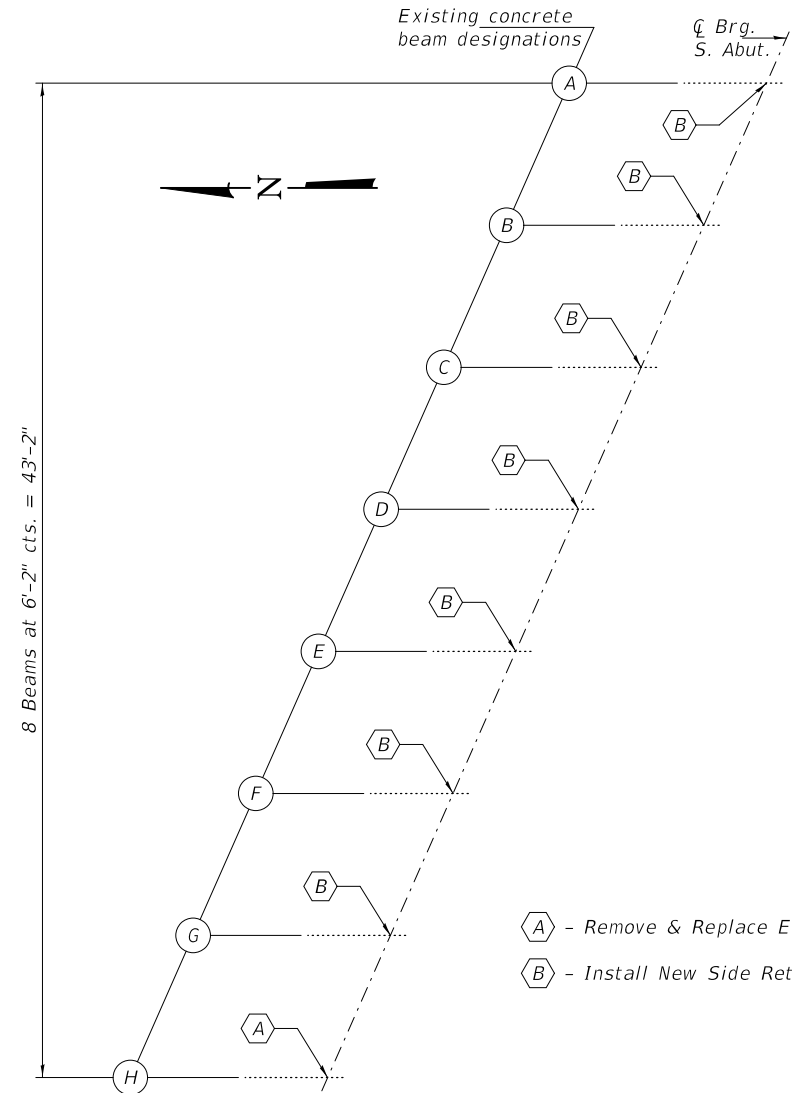
EXPANSION BEARING ORIENTATION

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



PARTIAL FRAMING PLAN

Notes:
Side retainers and leveling pads shall be included in the cost of Elastomeric Bearing Assembly, Type II.
The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.
See sheet of for additional details of embedded plate.

Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.
All exposed bearing plates and side retainers shall be hot dipped galvanized according to AASHTO M111.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	8
Jack & Remove Existing Bearings	Each	8
Anchor Bolts	Each	32

ENTIRE SHEET REVISED

DESIGNED - VHV
CHECKED - SMR
DRAWN - daburdell
CHECKED - VHV SMR

EXAMINED
PASSED
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES

DATE - DECEMBER 10, 2020
REVISED
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS - SOUTH ABUTMENT
SN 016-2513 (NB)

SHEET NO. 3 OF 3 SHEETS

REV-SEP
F.A.P. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.
350 2018-124-BR COOK 88 79
CONTRACT NO. 62H50
ILLINOIS FED. AID PROJECT