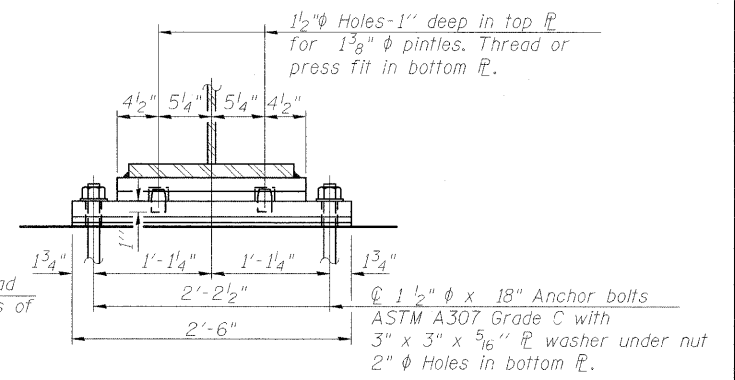
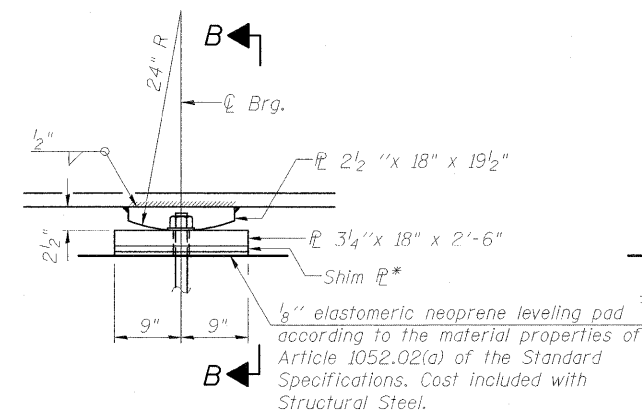


NORTHBOUND STRUCTURE 100-0088

LOCATION	GIRDER	ANGLE "A"	"B" (in.)	"C" (in.)	"D" (in.)
North Abutment	1	21° 25' 20"	4 1/2	4 1/4	1 5/8
North Abutment	2	21° 2' 58"	4 1/2	4 1/4	1 5/8
North Abutment	3	20° 40' 28"	4 1/2	4 1/4	1 5/8
North Abutment	4	20° 17' 52"	4 1/2	4 1/4	1 1/2
North Abutment	5	19° 55' 10"	4 1/2	4 1/4	1 1/2
North Abutment	6	19° 32' 21"	4 1/2	4 1/4	1 1/2
North Abutment	7	19° 9' 25"	4 1/2	4 1/4	1 1/2
North Abutment	8	18° 46' 23"	4 1/2	4 1/4	1 1/2
North Abutment	9	18° 23' 15"	4 1/2	4 1/4	1 3/8
North Abutment	10	18° 0' 0"	4 1/2	4 1/4	1 3/8
Pier 1	1	21° 25' 20"	13	12 3/8	4 3/4
Pier 1	2	21° 2' 58"	13	12 3/8	4 5/8
Pier 1	3	20° 40' 28"	13	12 3/8	4 5/8
Pier 1	4	20° 17' 52"	13	12 1/4	4 1/2
Pier 1	5	19° 55' 10"	13	12 1/4	4 1/2
Pier 1	6	19° 32' 21"	13	12 1/4	4 1/2
Pier 1	7	19° 9' 25"	13	12 1/4	4 1/4
Pier 1	8	18° 46' 23"	13	12 1/4	4 1/8
Pier 1	9	18° 23' 15"	13	12 3/8	4 1/8
Pier 1	10	18° 0' 0"	13	12 3/8	4
Pier 2	1	21° 25' 20"	13	12 3/8	4 3/4
Pier 2	2	21° 2' 58"	13	12 3/8	4 5/8
Pier 2	3	20° 40' 28"	13	12 3/8	4 5/8
Pier 2	4	20° 17' 52"	13	12 1/4	4 1/2
Pier 2	5	19° 55' 10"	13	12 1/4	4 1/2
Pier 2	6	19° 32' 21"	13	12 1/4	4 3/8
Pier 2	7	19° 9' 25"	13	12 1/4	4 1/4
Pier 2	8	18° 46' 23"	13	12 1/4	4 1/8
Pier 2	9	18° 23' 15"	13	12 3/8	4 1/8
Pier 2	10	18° 0' 0"	13	12 3/8	4
South Abutment	1	21° 25' 20"	4 1/2	4 1/4	1 5/8
South Abutment	2	21° 2' 58"	4 1/2	4 1/4	1 5/8
South Abutment	3	20° 40' 28"	4 1/2	4 1/4	1 5/8
South Abutment	4	20° 17' 52"	4 1/2	4 1/4	1 1/2
South Abutment	5	19° 55' 10"	4 1/2	4 1/4	1 1/2
South Abutment	6	19° 32' 21"	4 1/2	4 1/4	1 1/2
South Abutment	7	19° 9' 25"	4 1/2	4 1/4	1 1/2
South Abutment	8	18° 46' 23"	4 1/2	4 1/4	1 1/2
South Abutment	9	18° 23' 15"	4 1/2	4 1/4	1 3/8
South Abutment	10	18° 0' 0"	4 1/2	4 1/4	1 3/8

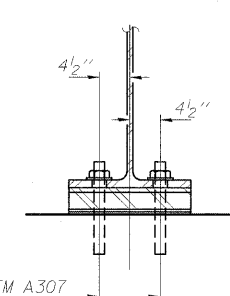
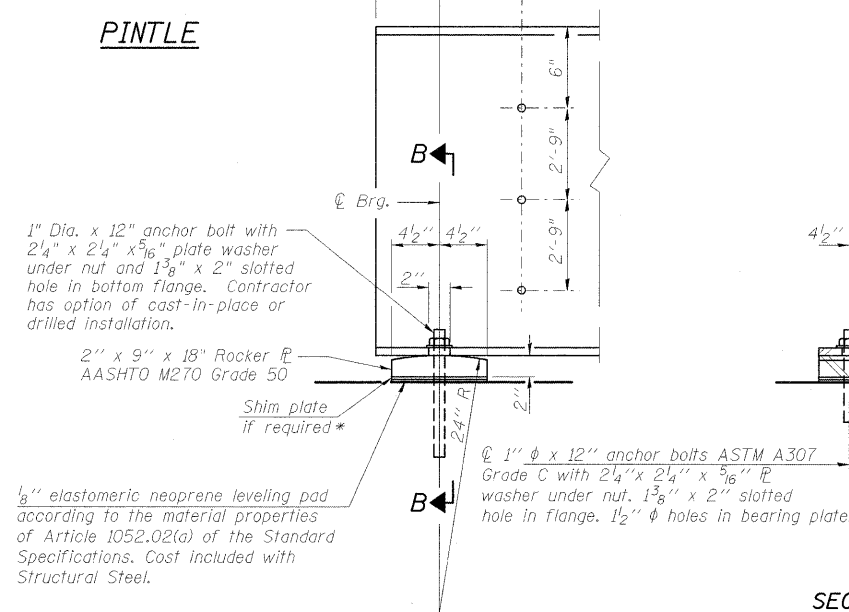
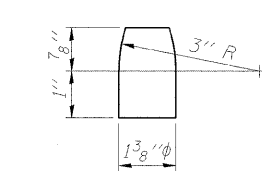
SOUTHBOUND STRUCTURE 100-0089

LOCATION	GIRDER	ANGLE "A"	"B" (in.)	"C" (in.)	"D" (in.)
North Abutment	11	18° 0' 0"	4 1/2	4 1/4	1 3/8
North Abutment	12	17° 51' 28"	4 1/2	4 1/4	1 3/8
North Abutment	13	17° 42' 55"	4 1/2	4 1/4	1 3/8
North Abutment	14	17° 34' 22"	4 1/2	4 1/4	1 3/8
North Abutment	15	17° 25' 47"	4 1/2	4 1/4	1 3/8
North Abutment	16	17° 17' 12"	4 1/2	4 1/4	1 3/8
North Abutment	17	17° 8' 36"	4 1/2	4 1/4	1 3/8
North Abutment	18	16° 59' 59"	4 1/2	4 1/4	1 3/8
North Abutment	19	16° 51' 21"	4 1/2	4 1/4	1 1/4
Pier 1	11	18° 0' 0"	13	12 3/8	4
Pier 1	12	17° 51' 28"	13	12 3/8	4
Pier 1	13	17° 42' 55"	13	12 3/8	4
Pier 1	14	17° 34' 22"	13	12 3/8	3 7/8
Pier 1	15	17° 25' 47"	13	12 3/8	3 7/8
Pier 1	16	17° 17' 12"	13	12 3/8	3 7/8
Pier 1	17	17° 8' 36"	13	12 3/8	3 7/8
Pier 1	18	16° 59' 59"	13	12 3/8	3 3/4
Pier 1	19	16° 51' 21"	13	12 1/2	3 3/4
Pier 2	11	18° 0' 0"	13	12 3/8	4
Pier 2	12	17° 51' 28"	13	12 3/8	4
Pier 2	13	17° 42' 55"	13	12 3/8	4
Pier 2	14	17° 34' 22"	13	12 3/8	3 7/8
Pier 2	15	17° 25' 47"	13	12 3/8	3 7/8
Pier 2	16	17° 17' 12"	13	12 3/8	3 7/8
Pier 2	17	17° 8' 36"	13	12 3/8	3 7/8
Pier 2	18	16° 59' 59"	13	12 3/8	3 3/4
Pier 2	19	16° 51' 21"	13	12 1/2	3 3/4
South Abutment	11	18° 0' 0"	4 1/2	4 1/4	1 3/8
South Abutment	12	17° 51' 28"	4 1/2	4 1/4	1 3/8
South Abutment	13	17° 42' 55"	4 1/2	4 1/4	1 3/8
South Abutment	14	17° 34' 22"	4 1/2	4 1/4	1 3/8
South Abutment	15	17° 25' 47"	4 1/2	4 1/4	1 3/8
South Abutment	16	17° 17' 12"	4 1/2	4 1/4	1 3/8
South Abutment	17	17° 8' 36"	4 1/2	4 1/4	1 3/8
South Abutment	18	16° 59' 59"	4 1/2	4 1/4	1 3/8
South Abutment	19	16° 51' 21"	4 1/2	4 1/4	1 1/4



***SHIM PLATES REQUIRED**

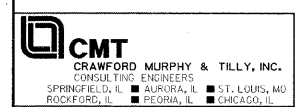
- N. Abut., Girder 11 - 1/8" shim
- Pier 1, Girder 7 - 1/4" shim
- Pier 1, Girder 11 - 1/8" shim
- Pier 2, Girder 11 - 3/8" shim
- Pier 2, Girder 15 - 1/2" shim
- S. Abut., Girder 6 - 1/2" shim
- S. Abut., Girder 11 - 1/2" shim



BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1"φ	Each	76
Anchor Bolts, 1 1/2"φ	Each	76

Note:
Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.



FILE NAME = ... \B37-STRUCT STEEL DETAILS.NB-SB.dgn	USER NAME = Rob Heady	DESIGNED = BPD	REVISIONS =
PLOT SCALE =		CHECKED = WLB	REVISIONS =
PLOT DATE = 10/7/2011		DRAWN = GLD	REVISIONS =
		CHECKED = BPD	REVISIONS =

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS - I
STRUCTURE NO. 100-0088 (N.B.) & 100-0089 (S.B.)
SHEET NO. 45 OF 75 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(X1-6-2)HBK-2	WILLIAMSON	968	630
* F.A.I. 57 AND F.A.P. 331			CONTRACT NO. 78182	
ILLINOIS FED. AID PROJECT				