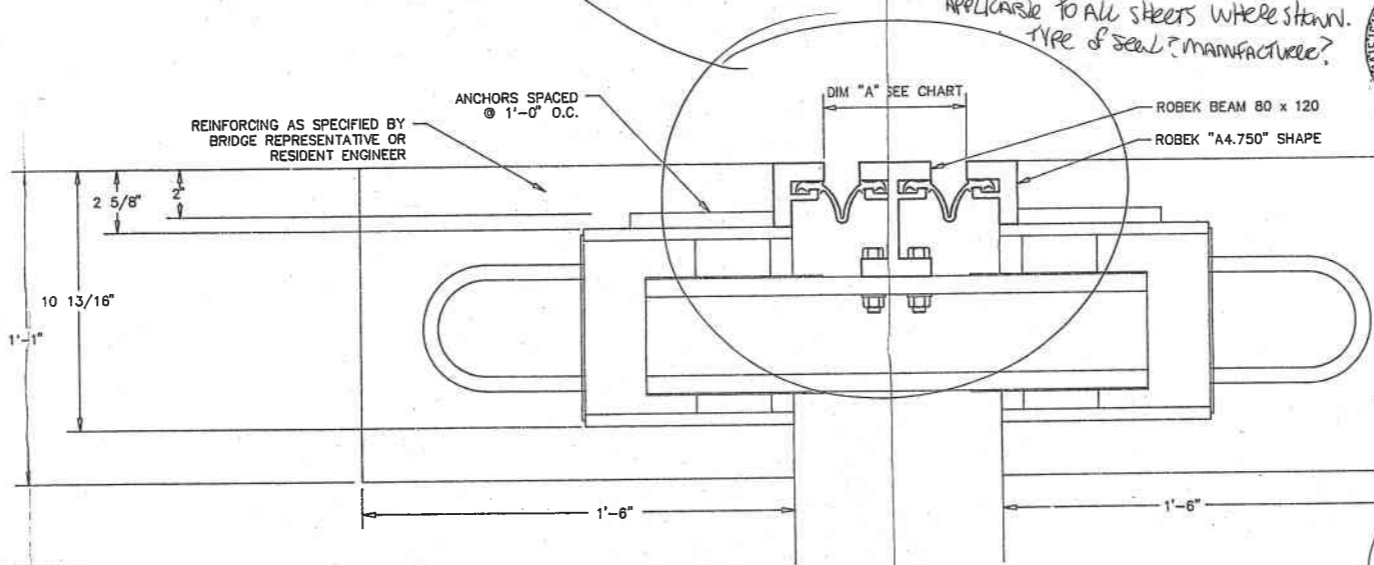


THIS SEAL IS DIFFERENT THAN SHOWN IN DESIGN - 856/1148
 HAS THERE BEEN A CHANGE ORDER REQUEST ON THIS?
ABUTMENT 1 - PHASE 2
 SCALE: 3/8"=1'-0"



TYPICAL BLOCK OUT
 SCALE: 3"=1'-0"

- NOTES**
- 1) TECHSTAR WILL NOT BE RESPONSIBLE FOR ANY FIELD WORK /BACKCHARGES/SHORTAGE WITHOUT WRITTEN AUTHORIZATION PRIOR TO START OF WORK AS PER TERMS OF TECHSTAR PURCHASE ORDER.
 - 2) TECHSTAR FIELD REPRESENTATIVE SHALL BE NOTIFIED 72 HOURS PRIOR TO AND MUST BE PRESENT DURING JOINT INSTALLATION.
 - 3) A CONCRETE BLOCK-OUT IS RECOMMENDED ON EITHER SIDE OF MODULAR JOINT FOR PROPER ALIGNMENT AFTER DEAD LOAD IS APPLIED TO STRUCTURE. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VIBRATING CONCRETE AROUND MODULAR JOINT TO ENSURE SOUNDNESS AND BEARING OF CONTROL BOXES (IF APPLICABLE) AND ANCHORING SYSTEMS.
 - 4) FOR THE INITIAL INSTALLATION THE SEAL WILL BE SHOP INSTALLED; IF NECESSARY, THE "ROBEK" SEAL MAY BE REPLACED BY SIMPLY LIFTING UP ON THE END OF THE SEAL WITH THE AID OF A CROW BAR, AND ONCE THE INITIAL 1'-0" OF THE SEAL HAS BEEN REMOVED BY PULLING TAUNTLY, THE SEAL CAN THEN BE REMOVED COMPLETELY. THE NEW SEAL CAN THEN BE PLACED.
 - 5) ALL EXPOSED SURFACES, EXCEPT STAINLESS STEEL SHALL BE PAINTED WITH CARBOLINE 11 INORGANIC ZINC PAINT, AN EPOXY INTERMEDIATE COAT, AND A URETHANE FINISH COAT. AREAS TO BE FIELD WELDED SHALL BE LEFT UNPAINTED. ALL ABRASIONS AND UNPAINTED AREAS SHALL BE COATED IN THE FIELD. FOR PAINT SPECIFICATIONS, SEE PROPOSAL NOTE.
 - 6) SEE DWG #AO-1110 FOR TYP. SECTIONS & B.O.M.
 SEE DWG #AO-2100 FOR WELD & SPLICE DETAILS.
 SEE DWG #AO-3100 FOR GIRDER INTERFACE ASSEMBLIES.
 SEE DWG #AO-4100 FOR ADJUSTING ANGLES.
 SEE DWG #AO-5100 FOR COMPONENT DETAILS.
 SEE DWG #AO-6100 FOR BARRIER COVER PLATE DETAILS.



THIS SUBMISSION HAS BEEN REVIEWED FOR GENERAL CONFORMANCE TO THE PLANS AND SPECIFICATIONS ONLY

- COMPLIES AS SUBMITTED
- COMPLIES AS NOTED
- DOES NOT COMPLY
- RESUBMIT

GLAUS, PYLE, SCHOMER, BURNS & DEHAVEN, INC.
 ARCHITECTS AND CONSULTING ENGINEERS
 DATE 06/20/14 CHECKED BY A.D.



HAVE WELD PROCEDURES BEEN SUBMITTED? CONTRACT Jeff Chandler.
 7/5/14 GPD REVIEWING
 Kevin Cameron
 Chris Baumgart
 216-794-2135

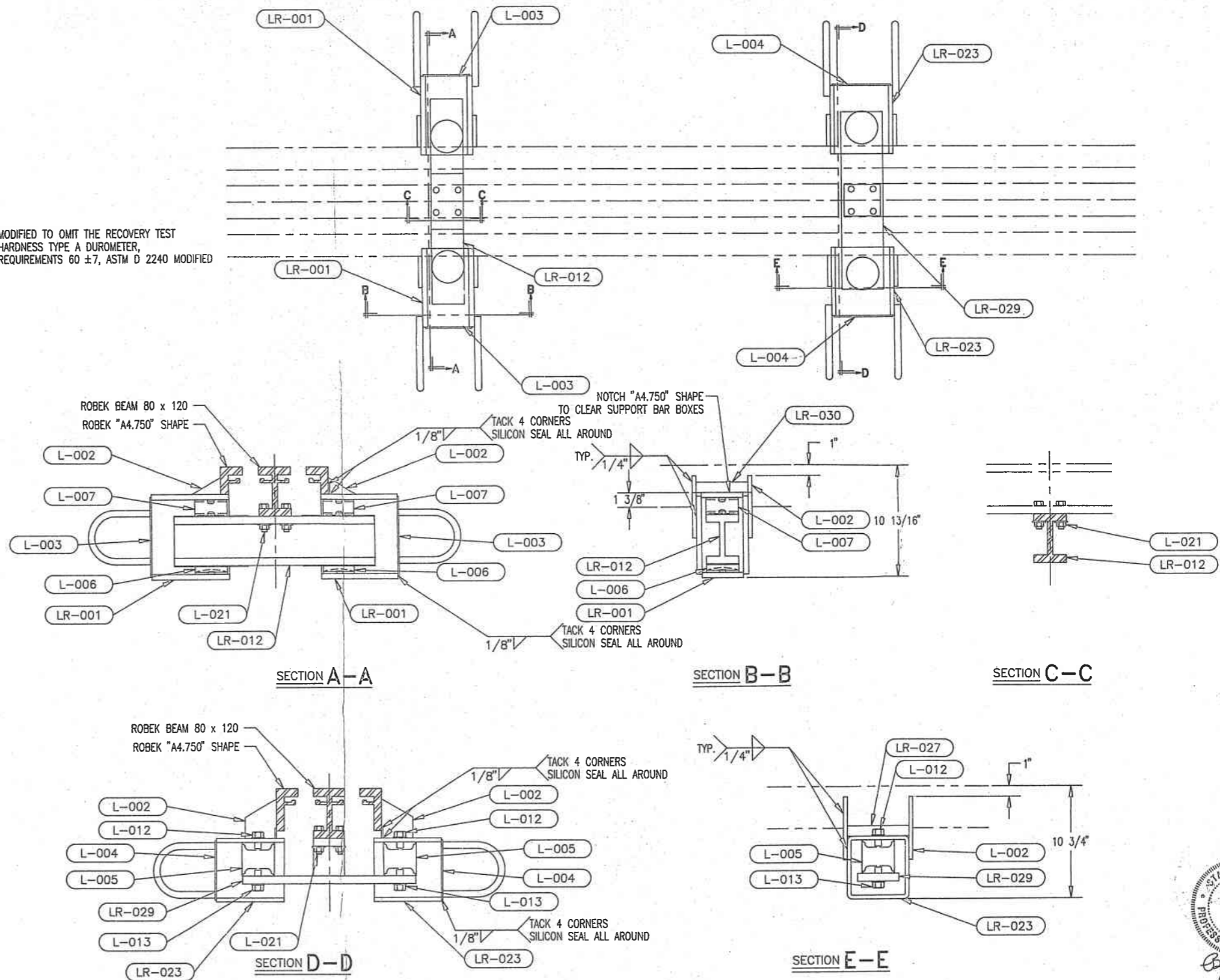
CONTRACT #	PROJECT #	NO.	DATE	REMARKS
REFERENCE # 553	IR-76-2(45)21			
BRIDGE # SUM-76-1366				
LOCATION: I-76 OVER GENERAL STREET SUMMIT COUNTY, AKRON, OHIO				
CUSTOMER: RUHLIN CONSTRUCTION				
ITEM DESCRIPTION: 2-CELL EXPANSION JOINT ASSEMBLY				
DRN. BLW	TechStar, Inc			SHEET 1 OF 14
CHKD.	DRAWING TITLE			DRAWING NO.
	ABUTMENT 1 - PHASE 2			AO-1100

TEMPERATURE SETTING CHART (IN DEGREES F)

DISTANCE TO NEUTRAL POINT	TEMP	-15°	-10°	0°	10°	20°	30°	40°	45°	50°	60°	70°	80°	90°	100°	105°
ABUTMENT 1 - WBL	555'	"A"	25/32"	9/16"	1/8"	11/16"	1/2"	13/16"	3/8"	5/32"	15/16"	1/2"	5/8"	3/4"	3/2"	17/32"
ABUTMENT 1 - EBL	370'	"A"	17/32"	7/8"	9/16"	1/2"	15/16"	5/8"	5/16"	5/32"	11/16"	3/8"	1/2"	3/4"	7/8"	9/32"

TOTAL QUAN.	MARK	DESCRIPTION	LENGTH	MATERIAL	REMARKS
02	*	ROBEK "A4.750" SHAPE	58'-10 3/8"	ASTM A 36	SPLICE AS REQ'D (MAT. LENGTH LIM. 20')
01	*	ROBEK BH. 80 x 120	58'-11 1/8"	ASTM A 588	SPLICE AS REQ'D (MAT. LENGTH LIM. 32')
02	*	ROBEK "A4.750" SHAPE	1'-2 3/32"	ASTM A 36	UPTURN (1) MIRROR IMAGE REQUIRED
02	*	ROBEK BH. 80 x 120	1'-2 15/32"	ASTM A 588	UPTURN
128	*	BAR 1/2" x 2"	6"	ASTM A 36	LOOP ANCHORS FOR "A4.750" SHAPE
	*	RHD. BAR 5/8" DIA.	1'-5"	ASTM A 36	
88	L-002	BAR 3/8" x 3"	6"	ASTM A 36	GUSSET PLATE
24	L-003	PLATE 1/8" x 4 1/2"	7 3/4"	ASTM A 36	SUPPORT BOX COVER PLATE
20	L-004	PLATE 1/8" x 5 5/8"	5 5/8"	ASTM A 36	SHEAR SPRING BOX COVER PLATE
20	L-005	ROBEK SHEAR SPRING	3 3/16"	70 DURO NAT. RUBBER	
24	L-006	ROBEK SLIDE BEARING	3/4"	NYLATRON	
24	L-007	ROBEK SLIDE SPRINGS	1 9/16"	NATURAL RUBBER & PTFE	
04	L-009	ROBEK STRIP SEAL	31'	ASTM D 2628	3" MOVEMENT RATING
20	L-012	5/8" DIA. H.S. BOLT	1"	ASTM A 325	NO NUT, 1 WASHER
20	L-013	5/8" DIA. H.S. BOLT	1 1/4"	ASTM A 325	NO NUT, 1 WASHER
10	L-015	ANGLE 1/2" x 3" x 4"	10 3/8"	ASTM A 36	(2)-ANGLES PER ADJUSTING ASSEMBLY
88	L-021	1/2" DIA. H.S. BOLT	2 1/4"	ASTM A 325	1 NUT, NO WASHER
24	LR-001	SUPPORT BAR BOX			SEE DWG AO-5100
48	a	PLATE 1/2" x 4"	7 1/2"	ASTM A 36	
48	b	PLATE 1/2" x 7 1/2"	7 1/2"	ASTM A 36	
48	c	RHD. BAR 5/8" DIA.	1'-5"	ASTM A 36	LOOP ANCHORS
48	d	3/4" DIA. BAR	9/16"	ASTM A 36	
12	LR-012	SUPPORT BAR			SEE DWG AO-5100
12	a	ROBEK BH. 80 x 120	1'-7 1/2"	ASTM A 588	
48	b	PLATE 16 GA. x 3 1/8"	7 1/8"	ASTM A 167, ALLOY 304	20 MICRO-INCH R.M.S. FINISH
20	LR-023	SHEAR SPRING BOX			SEE DWG AO-5100
20	a	TUBE 3/8" x 6" x 6"	6 1/2"	ASTM A 500 GR. B	
40	b	RHD. BAR 5/8" DIA.	1'-5"	ASTM A 36	LOOP ANCHORS
20	LR-027	SHEAR SPC BOX FILL PLATE			SEE DWG AO-5100
20	a	PLATE 1/8" x 1"	6"	ASTM A 36	
10	LR-029	SHEAR SPRING CONN. PLATE			SEE DWG AO-5100
10	a	PLATE 3/4" x 3"	3 1/2"	ASTM A 36	
10	b	PLATE 1/2" x 2 13/16"	3"	ASTM A 36	
10	c	PLATE 3/4" x 4"	1'-4 7/8"	ASTM A 36	
24	LR-030	SUPPORT BOX FILL PLATE			SEE DWG AO-5100
24	a	PLATE 1/8" x 1"	4 1/2"	ASTM A 36	
08	*	GIRDER INTERFACE ASSY		ASTM A 36	SEE DWG AO-3100
08	*	ABUTMENT INTERFACE ASSY		ASTM A 36	SEE DWG AO-3100

* MODIFIED TO OMIT THE RECOVERY TEST
HARDNESS TYPE A DUROMETER,
REQUIREMENTS 60 ± 7, ASTM D 2240 MODIFIED



WELD PER AWS D1.5-88 MINIMUMS

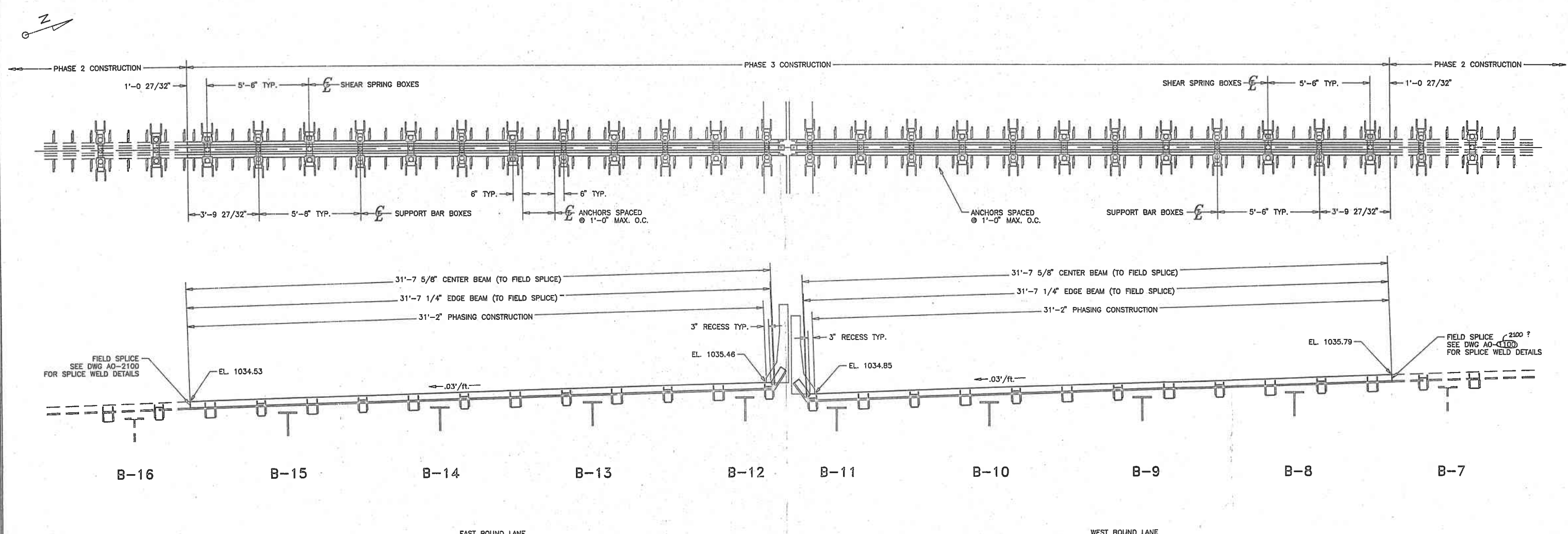
THIS SUBMISSION HAS BEEN REVIEWED FOR GENERAL CONFORMANCE TO THE PLANS AND SPECIFICATIONS ONLY

- COMPLIES AS SUBMITTED
- COMPLIES AS NOTED
- DOES NOT COMPLY
- REQUEST

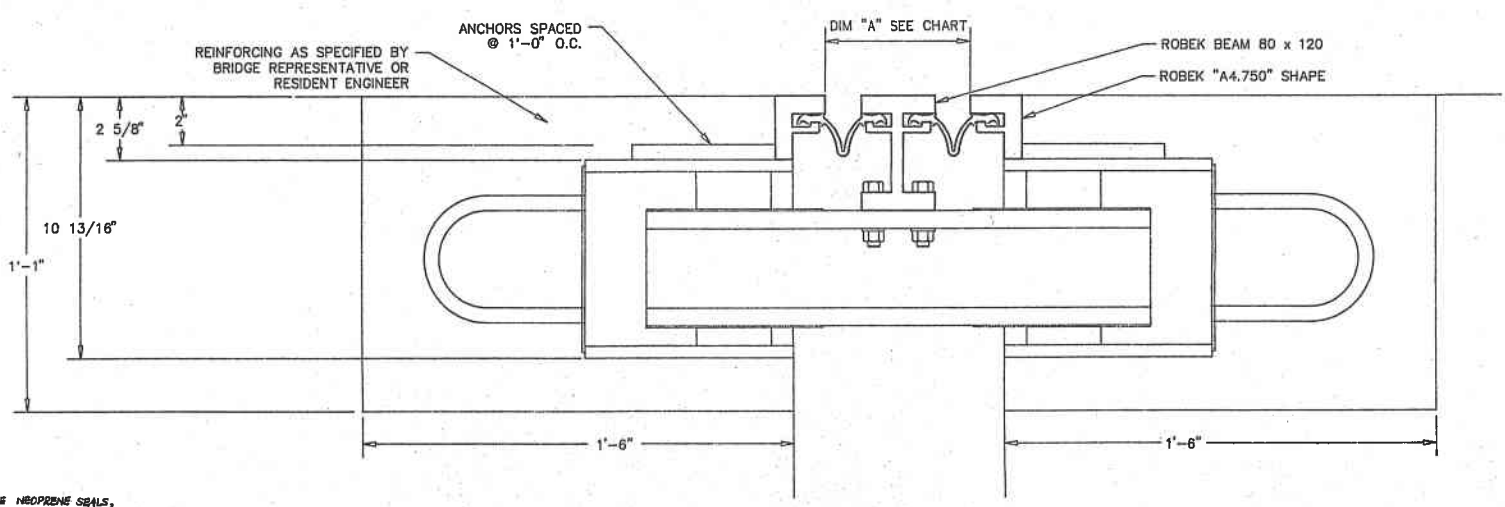
CLAUS, PYLE, SCHOMER, BURNS & DEHAVEN, INC.
CLAUS PYLE DEHAVEN ASSOCIATES, INC.
ARCHITECTS AND CONSULTING ENGINEERS
DATE 06/20/94 CHECKED BY A.P.



CONTRACT #:	PROJECT #:		
	IR-76-2(45)21		
REFERENCE #:	BRIDGE # SUM-76-1366		
LOCATION:	1-76 OVER GENERAL STREET SUMMIT COUNTY, AKRON, OHIO		
CUSTOMER:	RUHLIN CONSTRUCTION	NO.	DATE
ITEM DESCRIPTION:	2-CELL EXPANSION JOINT ASSEMBLY		REMARKS
		REVISIONS	
DRN. BLW	TechStar, Inc		SHEET 2 OF 14
CHKD.			
DRAWING TITLE		DRAWING NO.	
BILL OF MATERIAL LIST FOR AO-1100		AO-1110	



ABUTMENT 1 - PHASE 3
SCALE: 3/8"=1'-0"



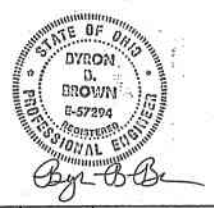
TYPICAL BLOCK OUT
SCALE: 3/8"=1'-0" SEE DRAWING NO. AO-1100

- NOTES**
- TECHSTAR WILL NOT BE RESPONSIBLE FOR ANY FIELD WORK /BACKCHARGES/SHORTAGE WITHOUT WRITTEN AUTHORIZATION PRIOR TO START OF WORK AS PER TERMS OF TECHSTAR PURCHASE ORDER.
 - TECHSTAR FIELD REPRESENTATIVE SHALL BE NOTIFIED 72 HOURS PRIOR TO AND MUST BE PRESENT DURING JOINT INSTALLATION.
 - A CONCRETE BLOCK-OUT IS RECOMMENDED ON EITHER SIDE OF MODULAR JOINT FOR PROPER ALIGNMENT AFTER DEAD LOAD IS APPLIED TO STRUCTURE. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VIBRATING CONCRETE AROUND MODULAR JOINT TO ENSURE SOUNDNESS AND BEARING OF CONTROL BOXES (IF APPLICABLE) AND ANCHORING SYSTEMS.
 - FOR THE INITIAL INSTALLATION THE SEAL WILL BE FIELD INSTALLED; IF NECESSARY, THE "ROBEK" SEAL MAY BE REPLACED BY SIMPLY LIFTING UP ON THE END OF THE SEAL WITH THE AID OF A CROW BAR, AND ONCE THE INITIAL 1'-0" OF THE SEAL HAS BEEN REMOVED BY PULLING TAUNTLY, THE SEAL CAN THEN BE REMOVED COMPLETELY. THE NEW SEAL CAN THEN BE PLACED.
 - ALL EXPOSED SURFACES, EXCEPT STAINLESS STEEL, SHALL BE PAINTED WITH CARBOLINE 11 INORGANIC ZINC PAINT, AN EPOXY INTERMEDIATE COAT, AND A URETHANE FINISH COAT. AREAS TO BE FIELD WELDED SHALL BE LEFT UNPAINTED. ALL ABRASIONS AND UNPAINTED AREAS SHALL BE COATED IN THE FIELD. FOR PAINT SPECIFICATIONS, SEE PROPOSAL NOTE.
 - SEE DWG #AO-1210 FOR TYP. SECTIONS & B.O.M.
SEE DWG #AO-2100 FOR WELD & SPLICE DETAILS.
SEE DWG #AO-3100 FOR GIRDER INTERFACE ASSEMBLIES.
SEE DWG #AO-4100 FOR ADJUSTING ANGLES.
SEE DWG #AO-5100 FOR COMPONENT DETAILS.
SEE DWG #AO-6200 FOR BARRIER COVER PLATE DETAILS

THIS SUBMISSION HAS BEEN REVIEWED FOR GENERAL CONFORMANCE TO THE PLANS AND SPECIFICATIONS ONLY

COMPLIES AS SUBMITTED
 COMPLIES AS NOTED
 DOES NOT COMPLY
 RESUBMIT

GLAUS, PYLE, SCHOMER, BURNS & DEHAVEN, INC.
GLAUS PYLE DEHAVEN ASSOCIATES, INC.
ARCHITECTS AND CONSULTING ENGINEERS
DATE 06/20/74 CHECKED BY A.D.



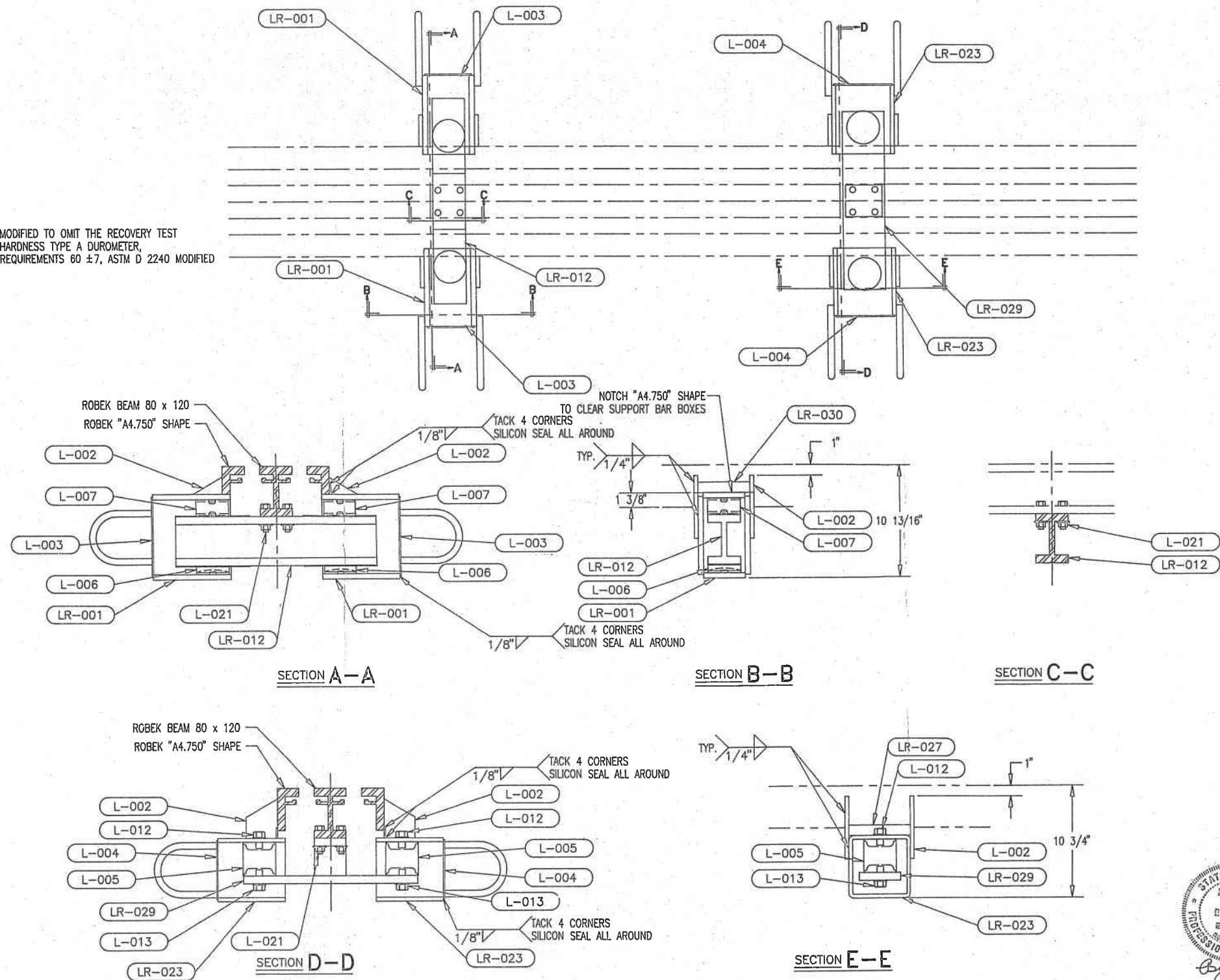
DISTANCE TO NEUTRAL POINT	TEMP	TEMPERATURE SETTING CHART (IN DEGREES F)														
		-15°	-10°	0°	10°	20°	30°	40°	45°	50°	60°	70°	80°	90°	100°	105°
ABUTMENT 1 - WBL 553'	"A"	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ABUTMENT 1 - EBL 390'	"A"	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

CONTRACT #:	PROJECT #:		
	IR-76-2(45)21		
REFERENCE #:	BRIDGE # SUM-76-1366		
LOCATION:	1-76 OVER GENERAL STREET SUMMIT COUNTY, AKRON, OHIO		
CUSTOMER:	RUHLIN CONSTRUCTION	NO.	DATE
ITEM DESCRIPTION:	2-CELL EXPANSION JOINT ASSEMBLY	REVISIONS	
DRN. BLW			
CHKD.			
DRAWING TITLE		DRAWING NO.	
ABUTMENT 1 - PHASE 3		AO-1200	

SHEET 3 OF 14

TOTAL QUAN.	MARK	DESCRIPTION	LENGTH	MATERIAL	REMARKS
02	*	ROBEK "A4.750" SHAPE	63'-2 1/2"	ASTM A 36	SPLICE AS REQ'D (MAT. LENGTH LIM. 20')
01	*	ROBEK BUL. 80 x 120	63'-3 1/4"	ASTM A 588	SPLICE AS REQ'D (MAT. LENGTH LIM. 32')
02	*	ROBEK "A4.750" SHAPE	1'-2 3/32"	ASTM A 36	UPTURN (1) MIRROR IMAGE REQUIRED
02	*	ROBEK BUL. 80 x 120	1'-2 15/32"	ASTM A 588	UPTURN
136	*	BAR 1/2" x 2"	6"	ASTM A 36	LOOP ANCHORS FOR "A4.750" SHAPE
	*	RND. BAR 5/8" DIA.	1'-5"	ASTM A 36	
96	L-002	BAR 3/8" x 3"	6"	ASTM A 36	GUSSET PLATE
24	L-003	PLATE 1/8" x 4 1/2"	7 3/4"	ASTM A 36	SUPPORT BOX COVER PLATE
24	L-004	PLATE 1/8" x 5 5/8"	5 5/8"	ASTM A 36	SHEAR SPRING BOX COVER PLATE
24	L-005	ROBEK SHEAR SPRING	3 3/16"	70 DURO NAT. RUBBER	
24	L-006	ROBEK SLIDE BEARING	3/4"	NYLATRON	
24	L-007	ROBEK SLIDE SPRINGS	1 9/16"	NATURAL RUBBER & PTFE	
04	L-009	ROBEK STRIP SEAL	65'	ASTM D 2628	3" MOVEMENT RATING
24	L-012	5/8" DIA. H.S. BOLT	1"	ASTM A 325	NO NUT, 1 WASHER
24	L-013	5/8" DIA. H.S. BOLT	1 1/4"	ASTM A 325	NO NUT, 1 WASHER
10	L-015	ANGLE 1/2" x 3" x 4"	10 3/8"	ASTM A 36	(2)-ANGLES PER ADJUSTING ASSEMBLY
96	L-021	1/2" DIA. H.S. BOLT	2 1/4"	ASTM A 325	1 NUT, 1 WASHER
24	LR-001	SUPPORT BAR BOX			SEE DWG AO-5100
48	a	PLATE 1/2" x 4"	7 1/2"	ASTM A 36	
48	b	PLATE 1/2" x 7 1/2"	7 1/2"	ASTM A 36	
48	c	RND. BAR 5/8" DIA.	1'-5"	ASTM A 36	LOOP ANCHORS
48	d	3/4" DIA. BAR	9/16"	ASTM A 36	
12	LR-012	SUPPORT BAR			SEE DWG AO-5100
12	a	ROBEK BUL. 80 x 120	1'-7 1/2"	ASTM A 588	
48	b	PLATE 16 GA. x 3 1/8"	7 1/8"	ASTM A 167, ALLOY 304	20 MICRO-INCH R.M.S. FINISH
24	LR-023	SHEAR SPRING BOX			SEE DWG AO-5100
24	a	TUBE 3/8" x 6" x 6"	6 1/2"	ASTM A 500 GR. B	
48	b	RND. BAR 5/8" DIA.	1'-5"	ASTM A 36	LOOP ANCHORS
24	LR-027	SHEAR SPC BOX FILL PLATE			SEE DWG AO-5100
24	a	PLATE 1/8" x 1"	6"	ASTM A 36	
12	LR-029	SHEAR SPRING CONN. PLATE			SEE DWG AO-5100
12	a	PLATE 3/4" x 3"	3 1/2"	ASTM A 36	
12	b	PLATE 1/2" x 2 13/16"	3"	ASTM A 36	
12	c	PLATE 3/4" x 4"	1'-4 7/8"	ASTM A 36	
24	LR-030	SUPPORT BOX FILL PLATE			SEE DWG AO-5100
24	a	PLATE 1/8" x 1"	4 1/2"	ASTM A 36	
08	*	GIRDER INTERFACE ASSY		ASTM A 36	SEE DWG AO-3100
08	*	ABUTMENT INTERFACE ASSY		ASTM A 36	SEE DWG AO-3100

* MODIFIED TO OMIT THE RECOVERY TEST
HARDNESS TYPE A DUROMETER,
REQUIREMENTS 60 ± 7, ASTM D 2240 MODIFIED



WELD PER AWS D1.5-88 MINIMUMS

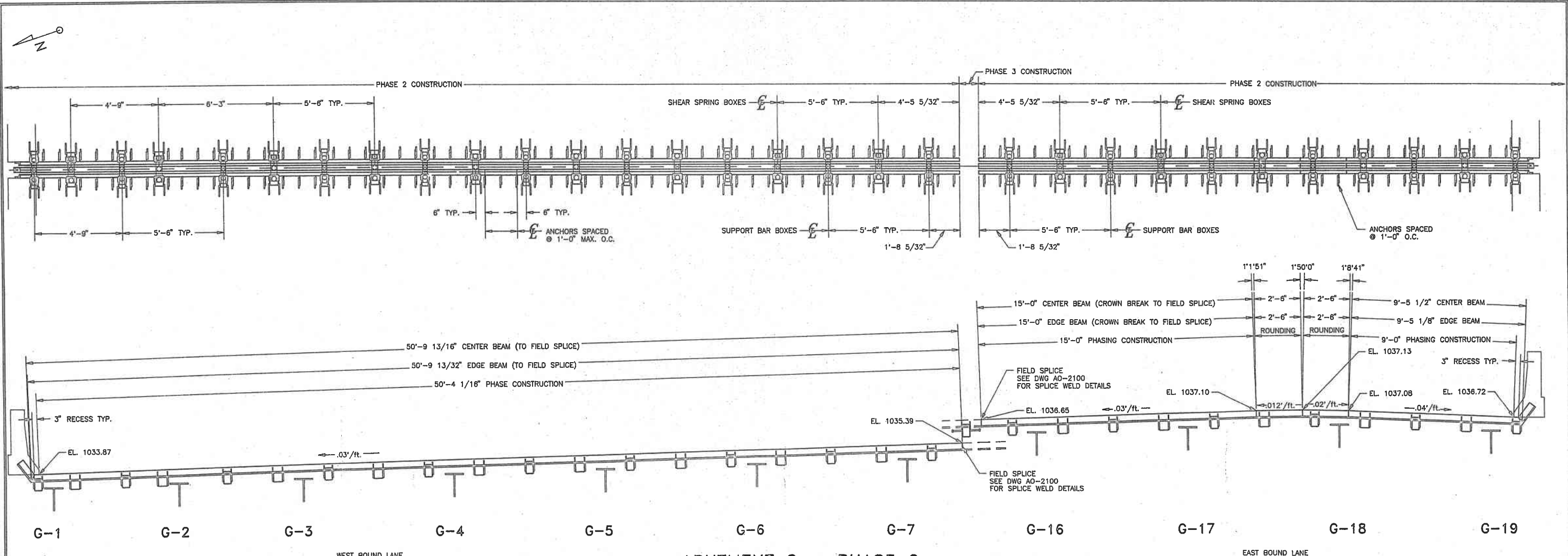
THIS SUBMISSION HAS BEEN REVIEWED FOR GENERAL CONFORMANCE TO THE PLANS AND SPECIFICATIONS ONLY

- COMPLIES AS SUBMITTED
- COMPLIES AS NOTED
- DOES NOT COMPLY
- RESUBMIT

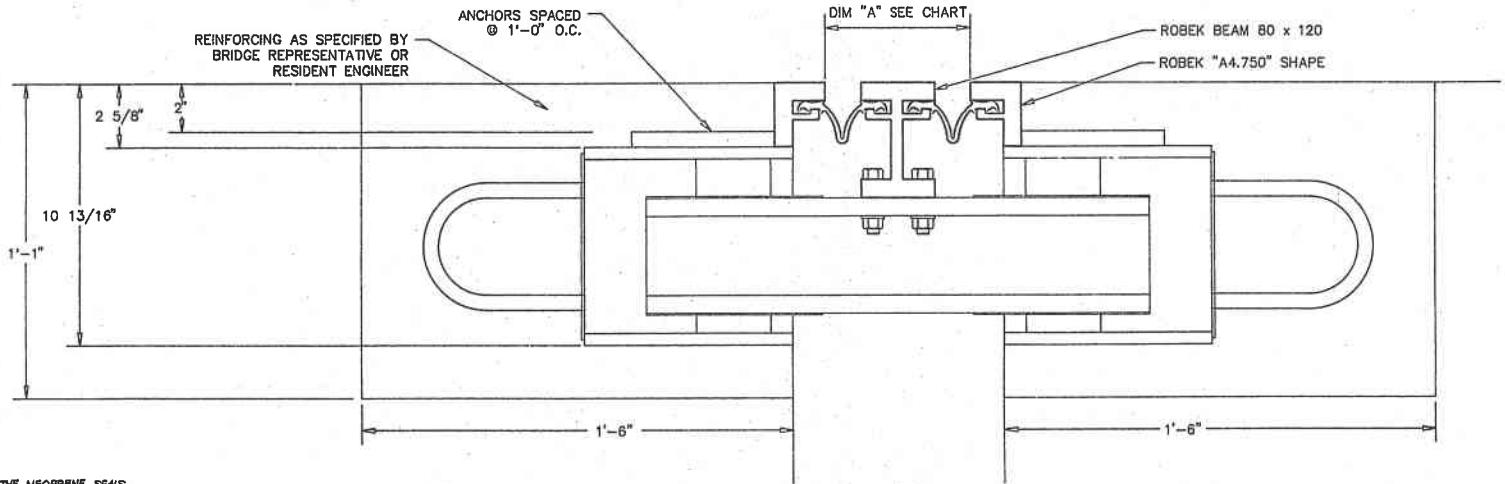
GLAUS, PYLE, SCHOMER, BURNS & DEHAVEN, INC.
GLAUS PYLE DEHAVEN ASSOCIATES, INC.
ARCHITECTS AND CONSULTING ENGINEERS
DATE 06/20/94 CHECKED BY AD



CONTRACT #	PROJECT #		
	IR-76-2(45)21		
REFERENCE #	BRIDGE # SUM-76-1366		
LOCATION:	1-76 OVER GENERAL STREET SUMMIT COUNTY, AKRON, OHIO		
CUSTOMER:	RUHLIN CONSTRUCTION	NO.	DATE
ITEM DESCRIPTION:	2-CELL EXPANSION JOINT ASSEMBLY		REMARKS
REVISIONS			
DRN. BLW	TechStar, Inc		SHEET 4 OF 14
CHKD.	DRAWING TITLE		DRAWING NO.
	BILL OF MATERIAL LIST FOR AO-1200		AO-1210



ABUTMENT 2 - PHASE 2
SCALE: 3/8"=1'-0"



TYPICAL BLOCK OUT
SCALE: 3"=1'-0"

- NOTES**
- 1) TECHSTAR WILL NOT BE RESPONSIBLE FOR ANY FIELD WORK /BACKCHARGES/SHORTAGE WITHOUT WRITTEN AUTHORIZATION PRIOR TO START OF WORK AS PER TERMS OF TECHSTAR PURCHASE ORDER.
 - 2) TECHSTAR FIELD REPRESENTATIVE SHALL BE NOTIFIED 72 HOURS PRIOR TO AND MUST BE PRESENT DURING JOINT INSTALLATION.
 - 3) A CONCRETE BLOCK-OUT IS RECOMMENDED ON EITHER SIDE OF MODULAR JOINT FOR PROPER ALIGNMENT AFTER DEAD LOAD IS APPLIED TO STRUCTURE. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VIBRATING CONCRETE AROUND MODULAR JOINT TO ENSURE SOUNDNESS AND BEARING OF CONTROL BOXES (IF APPLICABLE) AND ANCHORING SYSTEMS.
 - 4) FOR THE INITIAL INSTALLATION THE SEAL WILL BE SHOP INSTALLED; IF NECESSARY, THE "ROBEK" SEAL MAY BE REPLACED BY SIMPLY LIFTING UP ON THE END OF THE SEAL WITH THE AID OF A CROW BAR, AND ONCE THE INITIAL 1'-0" OF THE SEAL HAS BEEN REMOVED BY PULLING TAUNTLY, THE SEAL CAN THEN BE REMOVED COMPLETELY. THE NEW SEAL CAN THEN BE PLACED.
 - 5) ALL EXPOSED SURFACES, EXCEPT STAINLESS STEEL, SHALL BE PAINTED WITH CARBOLINE 11 INORGANIC ZINC PAINT, AN EPOXY INTERMEDIATE COAT, AND A URETHANE FINISH COAT. AREAS TO BE FIELD WELDED SHALL BE LEFT UNPAINTED. ALL ABRASIONS AND UNPAINTED AREAS SHALL BE COATED IN THE FIELD. FOR PAINT SPECIFICATIONS, SEE PROPOSAL NOTE.
 - 6) SEE DWG #AO-1310 FOR TYP. SECTIONS & B.O.M.
SEE DWG #AO-2100 FOR WELD & SPLICE DETAILS.
SEE DWG #AO-3100 FOR GIRDER INTERFACE ASSEMBLIES.
SEE DWG #AO-4100 FOR ADJUSTING ANGLES.
SEE DWG #AO-5100 FOR COMPONENT DETAILS.
SEE DWG #AO-6100 FOR BARRIER COVER PLATE DETAILS.

THIS SUBMISSION HAS BEEN REVIEWED FOR GENERAL CONFORMANCE TO THE PLANS AND SPECIFICATIONS ONLY

COMPLIES AS SUBMITTED
 COMPLIES AS NOTED
 DOES NOT COMPLY
 RESUBMIT

G. LAUS, P.Y.E. SCITOMER, BURNS & DEHAVEN, INC.
 G. LAUS PYLE DEHAVEN ASSOC., INC.
 ARCHITECTS AND CONSULTING ENGINEERS
 DATE 06/20/24 CHECKED BY A.D.

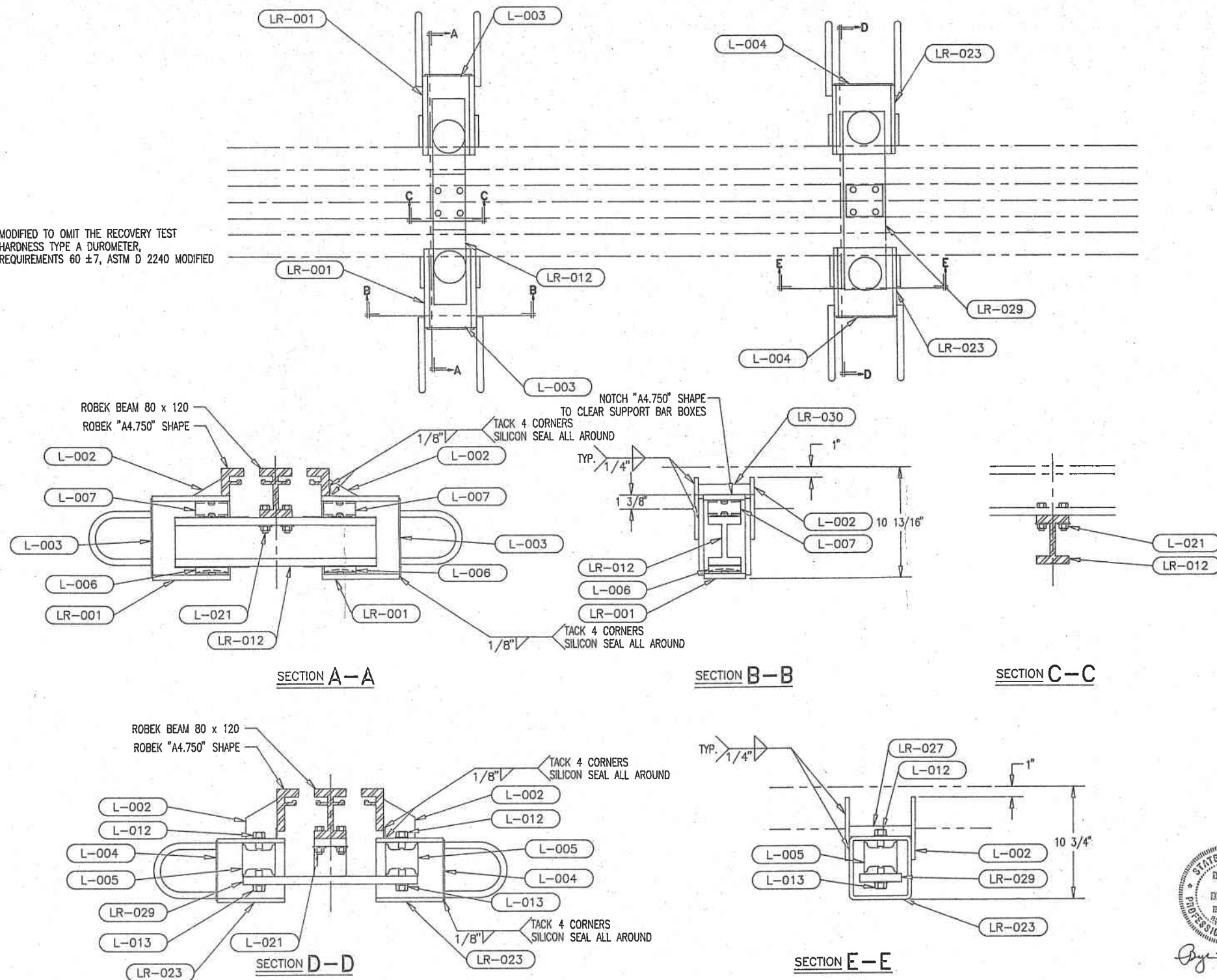


CONTRACT #:	PROJECT #:	IR-76-2(45)21
REFERENCE #:	BRIDGE #	SUM-76-1366
LOCATION:	1-76 OVER GENERAL STREET SUMMIT COUNTY, AKRON, OHIO	
CUSTOMER:	RUHLIN CONSTRUCTION	NO. DATE REMARKS
ITEM DESCRIPTION:	2-CELL EXPANSION JOINT ASSEMBLY	REVISIONS
DRN. BLW	TechStar, Inc	
CHKD.	SHEET 5 OF 14	
DRAWING TITLE		DRAWING NO.
ABUTMENT 2 - PHASE 2		AO-1300

DISTANCE TO NEUTRAL POINT	TEMP	TEMPERATURE SETTING CHART (IN DEGREES F)														
		-15°	-10°	0°	10°	20°	30°	40°	45°	50°	60°	70°	80°	90°	100°	105°
ABUTMENT 2 - WBL 419'	"A"	5/32"	6"	5/8"	5/16"	7/32"	5/8"	5/16"	5/32"	6"	11/16"	5/16"	15/16"	5/8"	5/16"	5/32"
ABUTMENT 2 - EBL 582'	"A"	9/32"	8 15/16"	8 1/2"	8 1/2"	7 1/2"	7 1/8"	6 3/8"	6 5/32"	6 15/16"	6 7/16"	6"	6 9/16"	4 7/8"	4 3/8"	3 23/32"

TOTAL QUAN.	MARK	DESCRIPTION	LENGTH	MATERIAL	REMARKS
02	*	ROBEK "A4.750" SHAPE	80'-2 9/16"	ASTM A 36	SPLICE AS REQ'D (MAT. LENGTH LIM. 20')
01	*	ROBEK BH. 80 x 120	80'-3 3/16"	ASTM A 588	SPLICE AS REQ'D (MAT. LENGTH LIM. 32')
02	*	ROBEK "A4.750" SHAPE	1'-2 3/32"	ASTM A 36	UPTURN (1) MIRROR IMAGE REQUIRED
02	*	ROBEK BH. 80 x 120	1'-2 15/32"	ASTM A 588	UPTURN
174	*	BAR 1/2" x 2"	6"	ASTM A 36	LOOP ANCHORS FOR "A4.750" SHAPE
	*	RND. BAR 5/8" DIA.	1'-5"	ASTM A 36	
120	L-002	BAR 3/8" x 3"	6"	ASTM A 36	GUSSET PLATE
32	L-003	PLATE 1/8" x 4 1/2"	7 3/4"	ASTM A 36	SUPPORT BOX COVER PLATE
28	L-004	PLATE 1/8" x 5 5/8"	5 5/8"	ASTM A 36	SHEAR SPRING BOX COVER PLATE
28	L-005	ROBEK SHEAR SPRING	3 3/16"	70 DURO NAT. RUBBER	
32	L-006	ROBEK SLIDE BEARING	3/4"	NYLATRON	
32	L-007	ROBEK SLIDE SPRINGS	1 9/16"	NATURAL RUBBER & PTFE	
02,02	L-009	ROBEK STRIP SEAL	31',53'	ASTM D 2628	3" MOVEMENT RATING
28	L-012	5/8" DIA. H.S. BOLT	1"	ASTM A 325	NO NUT, 1 WASHER
28	L-013	5/8" DIA. H.S. BOLT	1 1/4"	ASTM A 325	NO NUT, 1 WASHER
10	L-015	ANGLE 1/2" x 3" x 4"	10 3/8"	ASTM A 36	(2)-ANGLES PER ADJUSTING ASSEMBLY
120	L-021	1/2" DIA. H.S. BOLT	2 1/4"	ASTM A 325	1 NUT, 1 WASHER
32	LR-001	SUPPORT BAR BOX			SEE DWG AO-5100
64	a	PLATE 1/2" x 4"	7 1/2"	ASTM A 36	
64	b	PLATE 1/2" x 7 1/2"	7 1/2"	ASTM A 36	
64	c	RND. BAR 5/8" DIA.	1'-5"	ASTM A 36	LOOP ANCHORS
64	d	3/4" DIA. BAR	9/16"	ASTM A 36	
16	LR-012	SUPPORT BAR			SEE DWG AO-5100
16	a	ROBEK BH. 80 x 120	1'-7 1/2"	ASTM A 588	
64	b	PLATE 16 GA. x 3 1/8"	7 1/8"	ASTM A 167, ALLOY 304	20 MICRO-INCH R.M.S. FINISH
28	LR-023	SHEAR SPRING BOX			SEE DWG AO-5100
28	a	TUBE 3/8" x 6" x 6"	6 1/2"	ASTM A 500 GR. B	
56	b	RND. BAR 5/8" DIA.	1'-5"	ASTM A 36	LOOP ANCHORS
28	LR-027	SHEAR SPRING BOX FILL PLATE			SEE DWG AO-5100
28	a	PLATE 1/8" x 1"	6"	ASTM A 36	
14	LR-029	SHEAR SPRING CONN. PLATE			SEE DWG AO-5100
14	a	PLATE 3/4" x 3"	3 1/2"	ASTM A 36	
14	b	PLATE 1/2" x 2 13/16"	3"	ASTM A 36	
14	c	PLATE 3/4" x 4"	1'-4 7/8"	ASTM A 36	
32	LR-030	SUPPORT BOX FILL PLATE			SEE DWG AO-5100
32	a	PLATE 1/8" x 1"	4 1/2"	ASTM A 36	
11	DB	* ORDER INTERFACE ASSY		ASTM A 36	SEE DWG AO-3100
11	DB	* ADJUSTMENT INTERFACE ASSY		ASTM A 36	SEE DWG AO-3100

* MODIFIED TO OMIT THE RECOVERY TEST HARDNESS TYPE A DUROMETER, REQUIREMENTS 60 ± 7, ASTM D 2240 MODIFIED



Weld per AWS D1.5-88 minimums

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- ✓ COMPLIED AS QUOTED
- COMPLIED AS NOTED
- DOES NOT COMPLY
- RESUBMIT

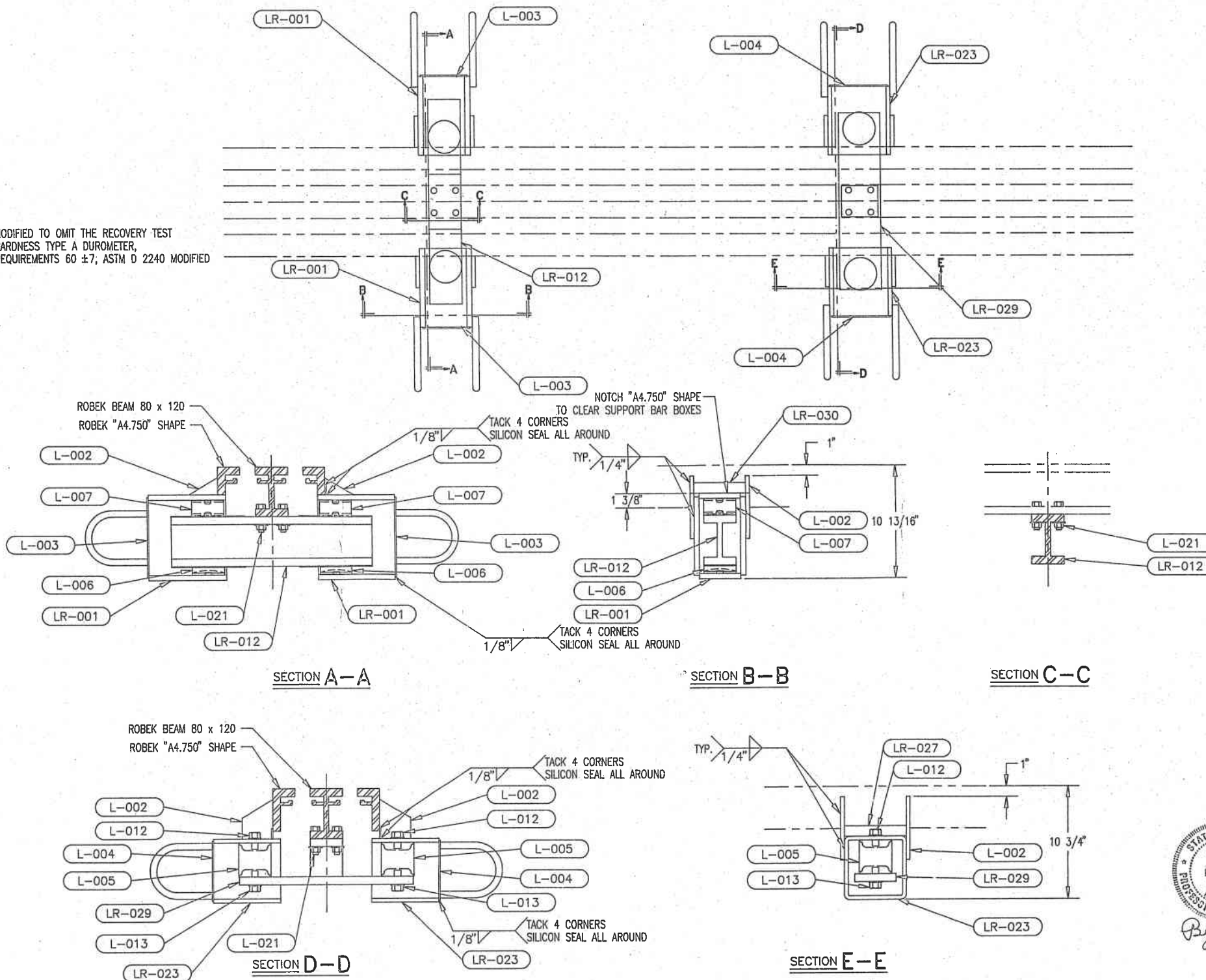
CLAUS, PYLE, SCHOMER, BURNS & DENAVEN, INC.
 ARCHITECTS AND CONSULTING ENGINEERS
 DATE 05/20/14 CHECKED BY A.D.



CONTRACT #:	PROJECT #:	IR-76-2(45)21
REFERENCE #:	BRIDGE #	SUM-76-1366
LOCATION:	I-76 OVER GENERAL STREET SUMMIT COUNTY, AKRON, OHIO	
CUSTOMER:	RUHLIN CONSTRUCTION	NO. DATE REMARKS
ITEM DESCRIPTION:	2-CELL EXPANSION JOINT ASSEMBLY	
DRN. BLW	TechStar, Inc	
CHKD.	SHEET 6 OF 14	
DRAWING TITLE	DRAWING NO.	
BILL OF MATERIAL LIST FOR AO-1300	AO-1310	

TOTAL QUAN.	MARK	DESCRIPTION	LENGTH	MATERIAL	REMARKS
02	*	ROBEK "A4.750" SHAPE	63'-2 1/2"	ASTM A 36	SPLICE AS REQ'D (MAT. LENGTH LIM. 20')
01	*	ROBEK BIL. 80 x 120	63'-3 1/4"	ASTM A 588	SPLICE AS REQ'D (MAT. LENGTH LIM. 32')
02	*	ROBEK "A4.750" SHAPE	1'-2 3/32"	ASTM A 36	UPTURN (1) MIRROR IMAGE REQUIRED
02	*	ROBEK BIL. 80 x 120	1'-2 15/32"	ASTM A 588	UPTURN
136	*	BAR 1/2" x 2"	6"	ASTM A 36	LOOP ANCHORS FOR "A4.750" SHAPE
	*	RND. BAR 5/8" DIA.	1'-5"	ASTM A 36	
96	L-002	BAR 3/8" x 3"	6"	ASTM A 36	GUSSET PLATE
24	L-003	PLATE 1/8" x 4 1/2"	7 3/4"	ASTM A 36	SUPPORT BOX COVER PLATE
24	L-004	PLATE 1/8" x 5 5/8"	5 5/8"	ASTM A 36	SHEAR SPRING BOX COVER PLATE
24	L-005	ROBEK SHEAR SPRING	3 3/16"	70 DURO NAT. RUBBER	
24	L-006	ROBEK SLIDE BEARING	3/4"	NYLATRON	
24	L-007	ROBEK SLIDE SPRINGS	1 9/16"	NATURAL RUBBER & PTFE	
02,02	L-009	ROBEK STRIP SEAL	65',85'	ASTM D 2628	3" MOVEMENT RATING
24	L-012	5/8" DIA. H.S. BOLT	1"	ASTM A 325	NO NUT, 1 WASHER
24	L-013	5/8" DIA. H.S. BOLT	1 1/4"	ASTM A 325	NO NUT, 1 WASHER
10	L-015	ANGLE 1/2" x 3" x 4"	10 3/8"	ASTM A 36	(2)-ANGLES PER ADJUSTING ASSEMBLY
96	L-021	1/2" DIA. H.S. BOLT	2 1/4"	ASTM A 325	1 NUT, 1 WASHER
24	LR-001	SUPPORT BAR BOX			SEE DWG AO-5100
48	a	PLATE 1/2" x 4"	7 1/2"	ASTM A 36	
48	b	PLATE 1/2" x 7 1/2"	7 1/2"	ASTM A 36	
48	c	RND. BAR 5/8" DIA.	1'-5"	ASTM A 36	LOOP ANCHORS
48	d	3/4" DIA. BAR	9/16"	ASTM A 36	
12	LR-012	SUPPORT BAR			SEE DWG AO-5100
12	a	ROBEK BIL. 80 x 120	1'-7 1/2"	ASTM A 588	
48	b	PLATE 16 GA. x 3 1/8"	7 1/8"	ASTM A 167, ALLOY 304	20 MICRO-INCH R.M.S. FINISH
24	LR-023	SHEAR SPRING BOX			SEE DWG AO-5100
24	a	TUBE 3/8" x 6" x 6"	6 1/2"	ASTM A 500 GR. B	
48	b	RND. BAR 5/8" DIA.	1'-5"	ASTM A 36	LOOP ANCHORS
24	LR-027	SHEAR SPC BOX FILL PLATE			SEE DWG AO-5100
24	a	PLATE 1/8" x 1"	6"	ASTM A 36	
12	LR-029	SHEAR SPRING CONN. PLATE			SEE DWG AO-5100
12	a	PLATE 3/4" x 3"	3 1/2"	ASTM A 36	
12	b	PLATE 1/2" x 2 13/16"	3"	ASTM A 36	
12	c	PLATE 3/4" x 4"	1'-4 7/8"	ASTM A 36	
24	LR-030	SUPPORT BOX FILL PLATE			SEE DWG AO-5100
24	a	PLATE 1/8" x 1"	4 1/2"	ASTM A 36	
08	*	GIRDER INTERFACE ASSY		ASTM A 36	SEE DWG AO-3100
08	*	ABUTMENT INTERFACE ASSY		ASTM A 36	SEE DWG AO-3100

* MODIFIED TO OMIT THE RECOVERY TEST
HARDNESS TYPE A DUROMETER,
REQUIREMENTS 60 ± 7; ASTM D 2240 MODIFIED



weld per AWS D1.5-88 min

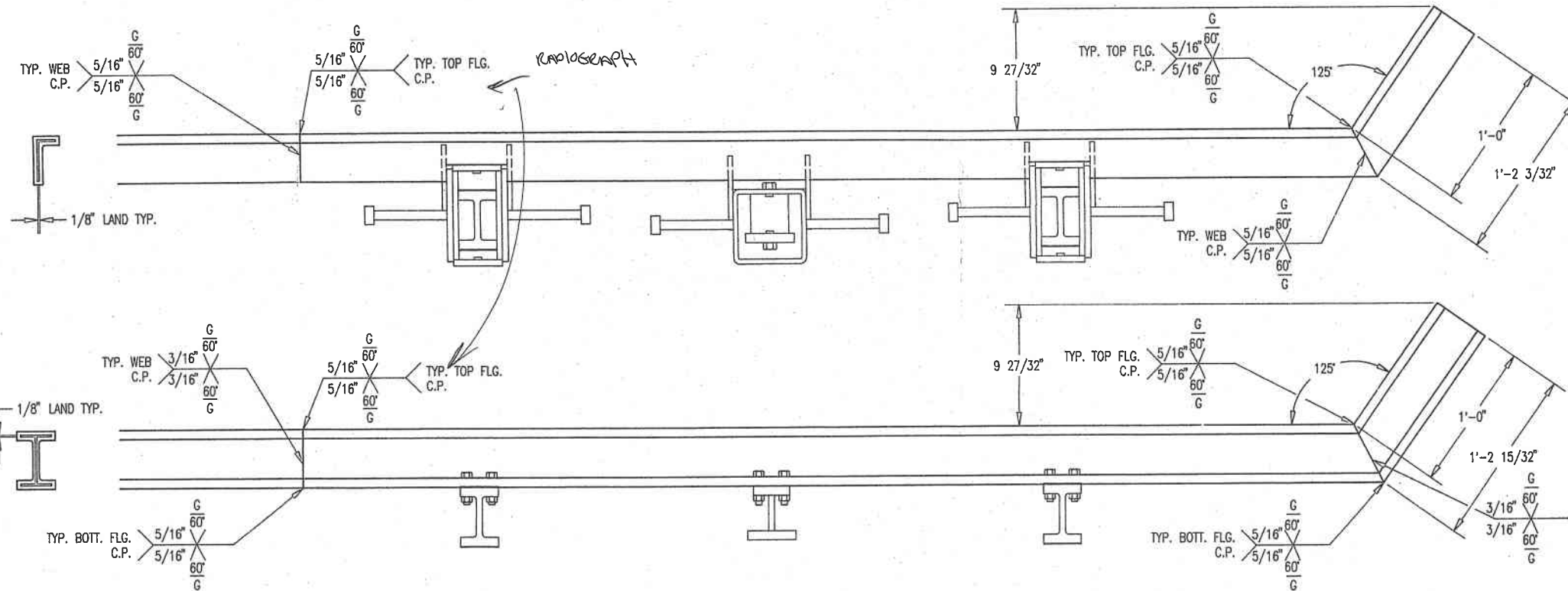
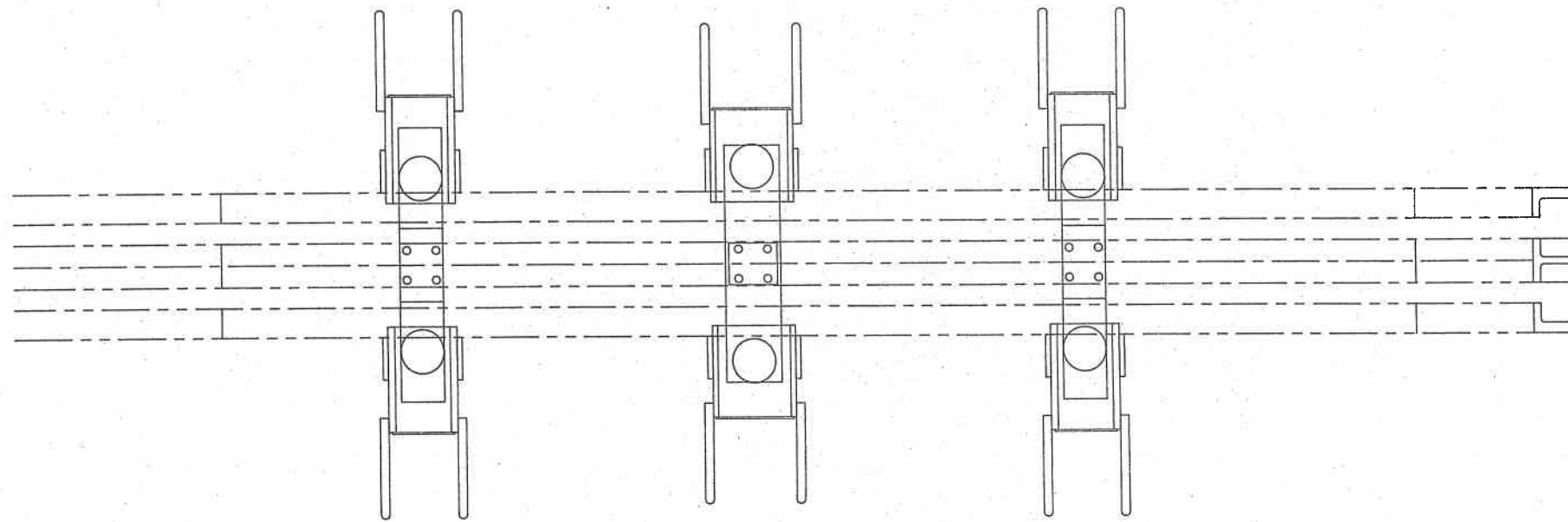
THIS SUBMISSION HAS BEEN REVIEWED FOR
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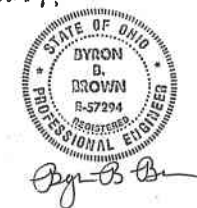
CLAUS, PYLE, SCHOMER, BURNS & DEHAVEN, INC.
CLAUS PYLE DEHAVEN ASSOCIATES, INC.
ARCHITECTS AND CONSULTING ENGINEERS
DATE 06/20/94 CHECKED BY A.D.

CONTRACT #:	PROJECT #:	IR-76-2(45)21
REFERENCE #:	BRIDGE #	SUM-76-1366
LOCATION:	I-76 OVER GENERAL STREET SUMMIT COUNTY, AKRON, OHIO	
CUSTOMER:	RUHLIN CONSTRUCTION	NO. DATE REMARKS
ITEM DESCRIPTION:	2-CELL EXPANSION JOINT ASSEMBLY	
DRN. BLW	TechStar, Inc	
CHKD.	SHEET 8 OF 14	
DRAWING TITLE	DRAWING NO.	
BILL OF MATERIAL LIST FOR AO-1400	AO-1410	



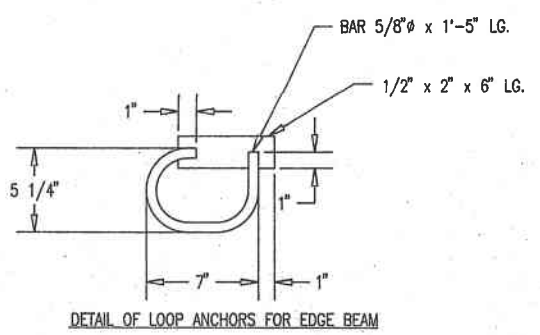


re-weld: curbing: POSSIBLE TO WELD SPIKES PRIOR TO PLACING RETAINER. SO CUTTING RETAINER NOT NECESSARY?



- NOTES:**
- RETAINER BAR OMITTED FOR CLARITY.
 - NO WELD PERMITTED ABOVE RETAINER BAR. REMOVE 3"-4" OF RETAINER WHEN SPlicing ANGLES AND BEAMS. WHEN FULL PENETRATION SPlice IS COMPLETE, WELD RETAINER BAR IN PLACE.

TYPICAL WELD AND SPLICE DETAILS
SCALE: 3" = 2'-0"

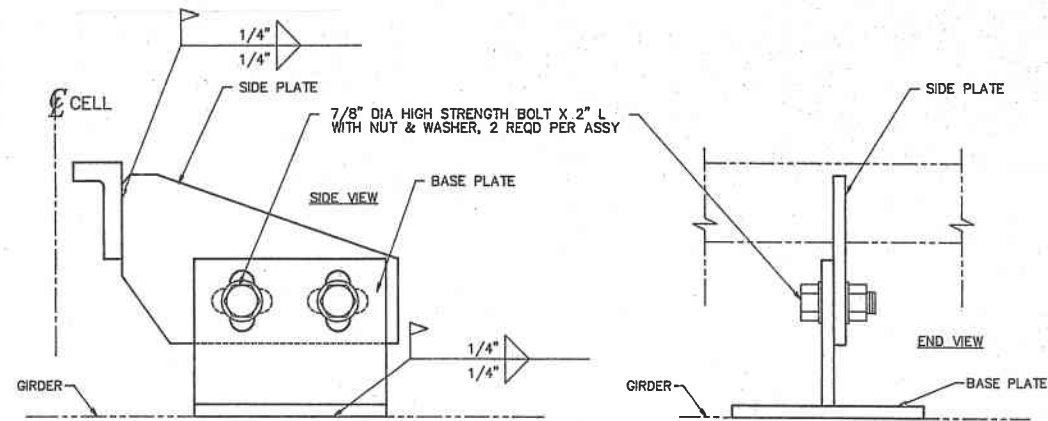


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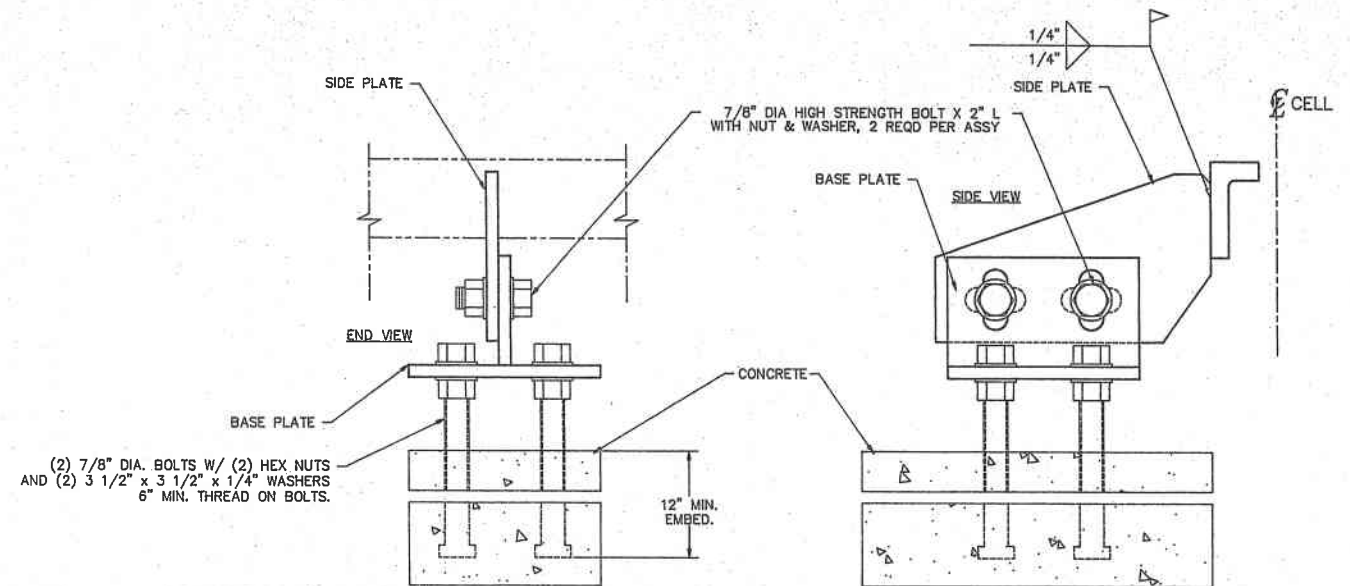
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GLAUS, PYLE, SCHOMER, BURNS & DEHAVEN, INC.
GLAUS PYLE DEHAVEN ASSOCIATES, INC.
ARCHITECTS AND CONSULTING ENGINEERS
DATE 06/20/14 CHECKED BY A.D.

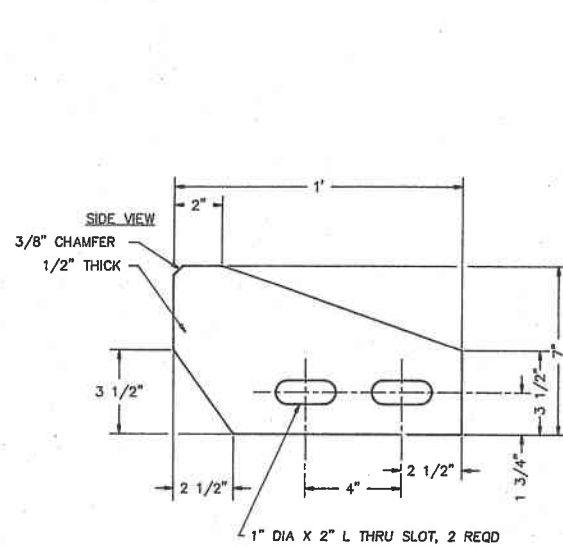
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REFERENCE #: BRIDGE # SUM-76-1366			
LOCATION: 1-76 OVER GENERAL STREET SUMMIT COUNTY, AKRON, OHIO			
CUSTOMER: RUHLIN CONSTRUCTION		NO.	DATE
ITEM DESCRIPTION: EXPANSION JOINT WELDMENT			REMARKS
		REVISIONS	
DRN. BLW	TechStar, Inc		SHEET 9 OF 14
CHKD.			DRAWING NO. AO-2100
DRAWING TITLE WELD, SPLICE & UPTURN DETAILS			



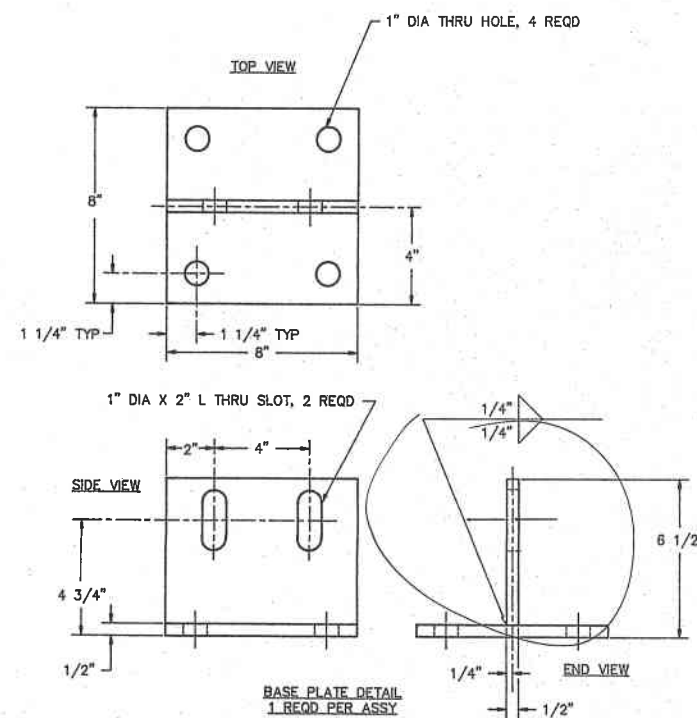
TYPICAL SECTION @ GIRDER
 BASE PLATE MAY BE MOVED
 TO CLEAR BOXES. SHIMS MAY
 BE ADDED WHEN NEEDED TO
 REACH CROSS FRAME MEMBER



TYPICAL SECTION @
 ABUTMENT BACKWALL
 LOCATED OPPOSITE OF
 GIRDER INTERFACE
 DEVICE ON GIRDER OR
 CROSS FRAME MEMBER



SIDE PLATE DETAIL
 1 REQD PER ASSY



BASE PLATE DETAIL
 1 REQD PER ASSY

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GLAUS, PYLE, SCHOMER, BURNS & DEHAVEN, INC.
 GLAUS PYLE DEHAVEN ASSOCIATES, INC.
 ARCHITECTS AND CONSULTING ENGINEERS
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NOTES:
 1. ALL MATERIAL TO BE ASTM A 36 U.N.O.

CONTRACT #:	PROJECT #: IR-76-2(45)21		
REFERENCE #: BRIDGE # SUM-76-1366			
LOCATION: I-76 OVER GENERAL STREET SUMMIT COUNTY, AKRON, OHIO			
CUSTOMER: RUHLIN CONSTRUCTION		NO.	DATE
ITEM DESCRIPTION: MODULAR JOINT ASSEMBLY			REMARKS
REVISIONS			
DRN. BLW	TechStar, Inc		
CHKD.	SHEET 10 of 14		
DRAWING TITLE GIRDER INTERFACE ASSEMBLIES		DRAWING NO. AO-3100	

INSTALLATION PROCEDURE

1. SITE ENGINEER TO CALCULATE JOINT OPENING SETTING BASED ON AMBIENT TEMPERATURE OF BRIDGE DECK AND ANTICIPATED CREEP, SHRINKAGE, AND ELASTIC SHORTENING.
2. BLOW OUT ANY DIRT OR DEBRIS THAT MAY HAVE ACCUMULATED IN BLOCKOUT AREA.
3. LOWER THE ENTIRE ASSEMBLY INTO THE BLOCKOUT. BEND ANY REBAR THAT MAY INTERFERE. COPE BEAM OR GIRDER AS NEEDED TO CLEAR SUPPORT BOXES.
4. POSITION JOINT ASSEMBLY SUCH THAT THE UPTURNS ENTER THE BARRIER CORRECTLY.
5. LAYOUT AND DRILL EXPANSION ANCHORS, BASED ON EXACT LOCATION FOUND ON EXPANSION JOINT ASSEMBLY. WELD GIRDER INTERFACE VERTICAL PLATES AT GIRDER, BEAM OR ANCHORAGE LOCATIONS. ATTACH GIRDER INTERFACE "T" PLATE TO ANCHORAGE BOLTS, OR WELD TO BEAM/GIRDER.
6. ADJUST THE ELEVATION OF THE EXPANSION JOINT ASSEMBLY. THE TOP SURFACE MUST ALIGN WITH THE ROADWAY GRADE. TACK GIRDER INTERFACE BOLTS WHEN EXPANSION JOINT IS SET TO PROPER ELEVATION AND GRADE.
7. PLACE ANY ADDITIONAL REBAR THAT MAY BE REQUIRED.
8. FORM THE FRONT FACE OF THE JOINT OPENING. PAY SPECIAL ATTENTION TO THE EXPANSION JOINT SUPPORT BOXES. CONCRETE MUST NOT ENTER THE BOXES, AS IT WILL INTERFERE WITH THE FUNCTIONING OF THE SYSTEM.
9. TAPE OFF THE NEOPRENE STRIP SEAL GLANDS TO PROTECT FROM CONCRETE INTRUSION.
10. FILL BLOCKOUT WITH APPROVED CONCRETE. VIBRATE THE CONCRETE TO ASSURE THAT CONCRETE FLOWS BELOW THE SUPPORT BOXES AND AROUND ANCHORAGE.
11. FINISH THE CONCRETE TO THE SAME GRADE AND ELEVATION AS THE ROADWAY SURFACE.
12. REMOVE TEMPORARY SHIPPING ANGLES AS SOON AS THE CONCRETE TAKES ITS INITIAL SET. GRIND TOP OF JOINT SMOOTH AFTER REMOVAL.

SEAL INSTALLATION/REPLACEMENT

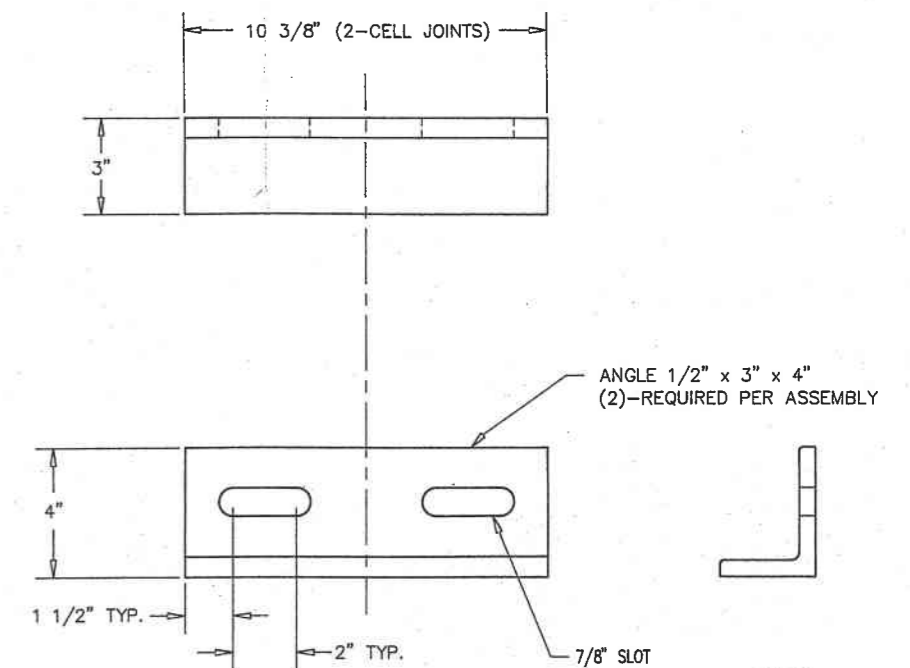
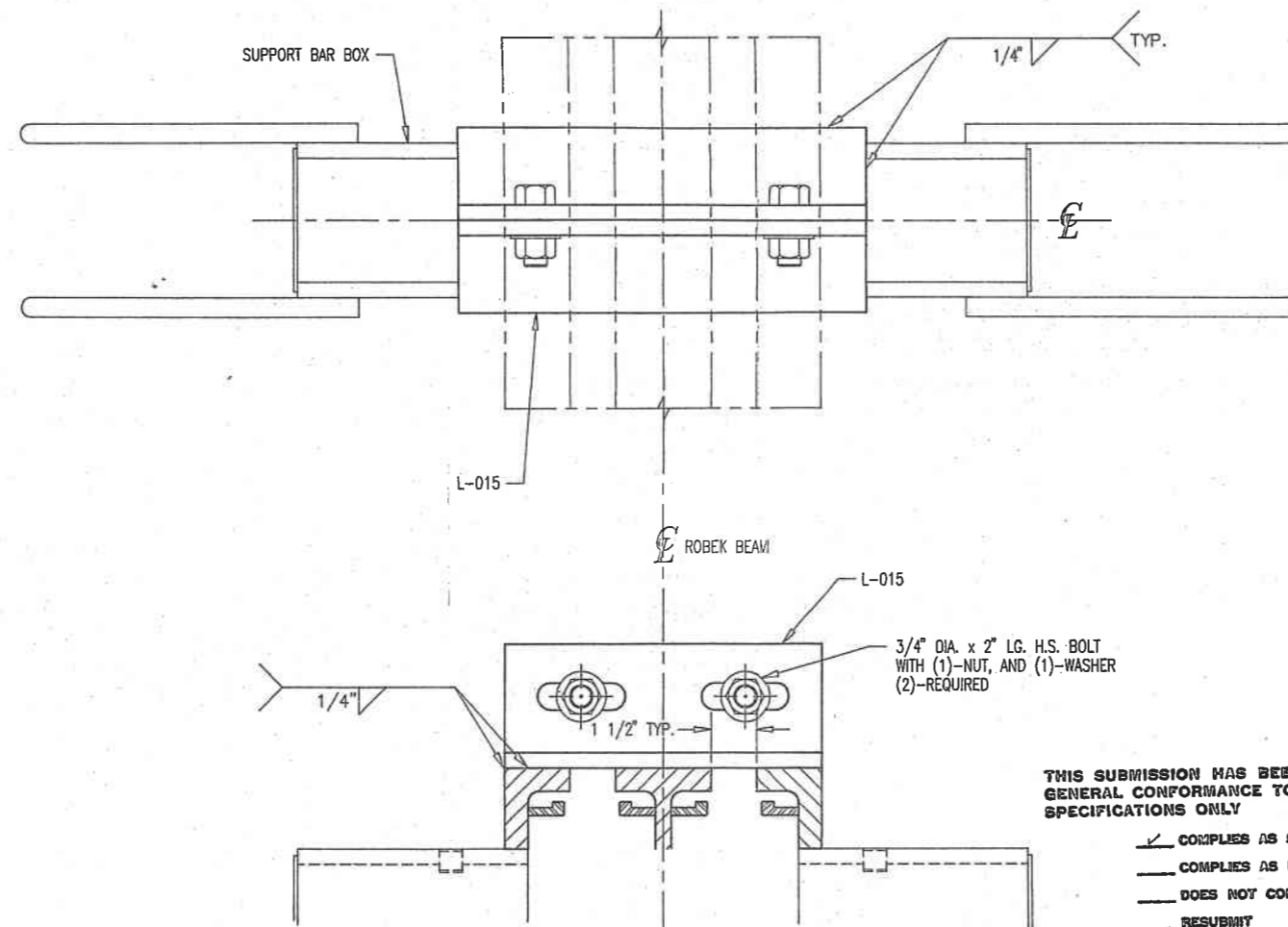
1. TO REMOVE AN EXISTING SEAL PRY END OF SEAL OUT OF RETAINER USING A SCREWDRIVER. ONCE THE INITIAL 1'-0" HAS BEEN REMOVED THE REMAINDER OF THE SEAL MAY BE REMOVED BY PULLING LONGITUDINALLY, PEELING OUT AS IT IS PULLED.
2. TO INSTALL THE SEAL, CLEAN THE CHANNEL THAT THE SEAL WILL FIT INTO. IT MUST BE CLEAN OF ANY FOREIGN MATERIALS. ONCE THIS IS ACCOMPLISHED THE CHANNEL MUST BE LUBRICATED WITH THE AUTHORIZED LUBRICANT (TECTYL). WITH WHAT?
3. THE ARROWS OF THE SEAL, ALSO COATED WITH THE LUBRICANT, AND THE SEAL IS FOLDED INTO A "V" CONFIGURATION AND FORCED INTO THE JOINT OPENING. THE OPENING SHOULD BE AT LEAST 1 1/2" FOR EASY INSTALLATION. I-BEAMS CAN BE FORCED ONE WAY OR ANOTHER TO MEET THIS REQUIREMENT.
4. THE ARROW SHOULD BE FORCED JUST BELOW THE STEEL FLANGE AND THEN WITH A TIRE IRON OR INSTALLATION MACHINE THE SEAL WILL BE FORCED INTO THE CHANNEL.

SLIDE BEARINGS/SPRINGS REPLACEMENT

1. REMOVE NEOPRENE SEAL FROM ALL CELLS.
2. PLACE A U-SHAPED BRACKET AROUND SUPPORT BAR. THIS BRACKET SHOULD BE BOLTED TO A BEAM WHICH SPANS THE JOINT.
3. JACK UPWARD ON THE ENDS OF THE BEAM THUS COMPRESSING THE SLIDE SPRING TO AN OVERCOMPRESSED CONDITION. ONCE ENOUGH OVERCOMPRESSION OCCURS THE BEARING BELOW CAN BE LIFTED OFF THE DOWEL. RELEASE THE JACK AND THE SPRING CAN NOW BE REMOVED.
4. TO REINSTALL COMPONENTS, REVERSE THE ABOVE PROCEDURE.

SHEAR SPRING REPLACEMENT

1. REMOVE NEOPRENE SEAL FROM ALL CELLS.
2. BLOCK ONE SIDE OF JOINT AND JACK THE OPPOSING CENTER BEAM TO OBTAIN A "NEUTRAL" CONDITION IN SHEAR SPRINGS. USUALLY A SPACING OF 1 1/2" BETWEEN BEAMS WILL ACHIEVE THIS. REFER TO SHOP DRAWINGS FOR EXACT DIM.
3. ONCE A "NEUTRAL" CONDITION IS OBTAINED, THE BOLT BELOW THE SPRING CAN BE REMOVED.
4. THE SHEAR SPRING CAN THEN BE TURNED FROM ITS BOLT MAKING IT POSSIBLE TO REMOVE THE SPRING.
5. TO REINSTALL COMPONENTS, REVERSE THE ABOVE PROCEDURE.



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CLAUS, PYLE, SCHOMER, BURNS & DEHAVEN, INC.
 CLAUS PYLE DEHAVEN ASSOCIATES, INC.
 ARCHITECTS AND CONSULTING ENGINEERS
 DATE 06/20/94 CHECKED BY A.D.

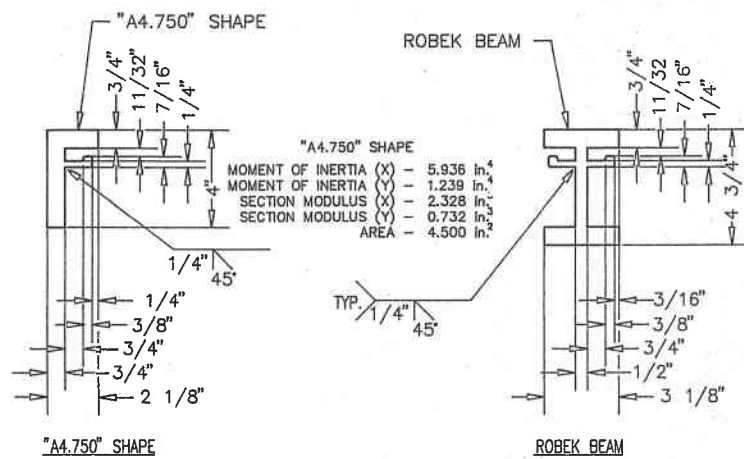
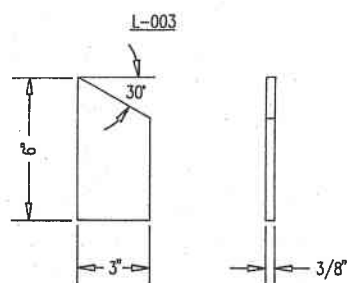
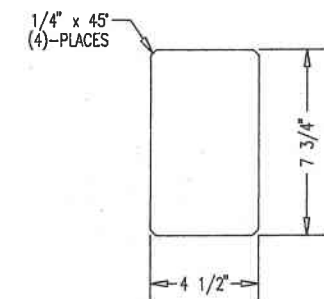
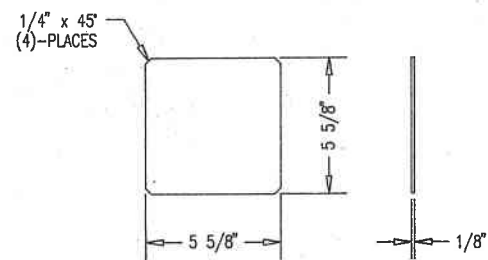
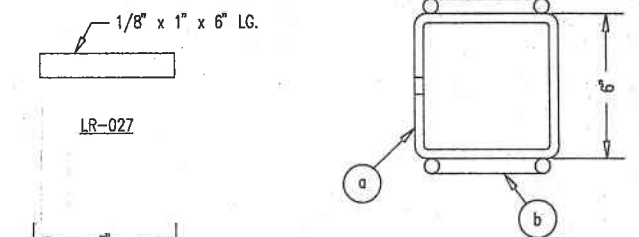
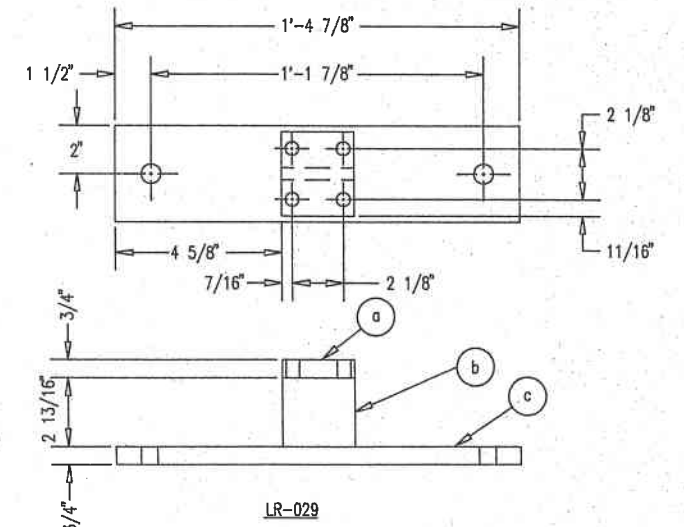
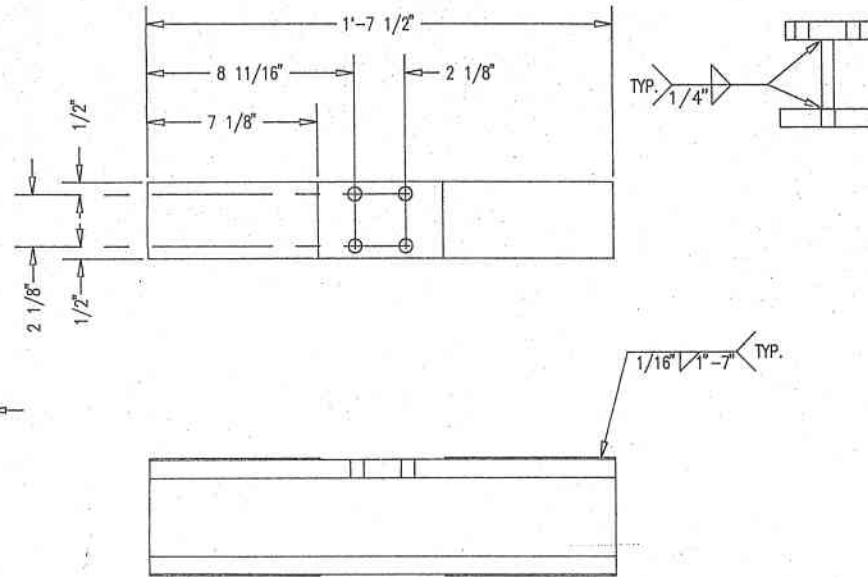
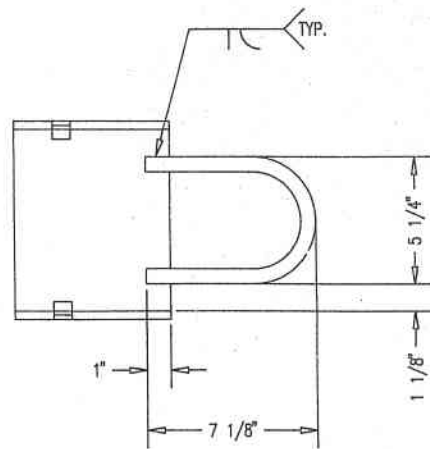
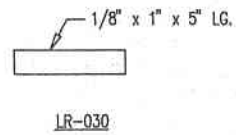
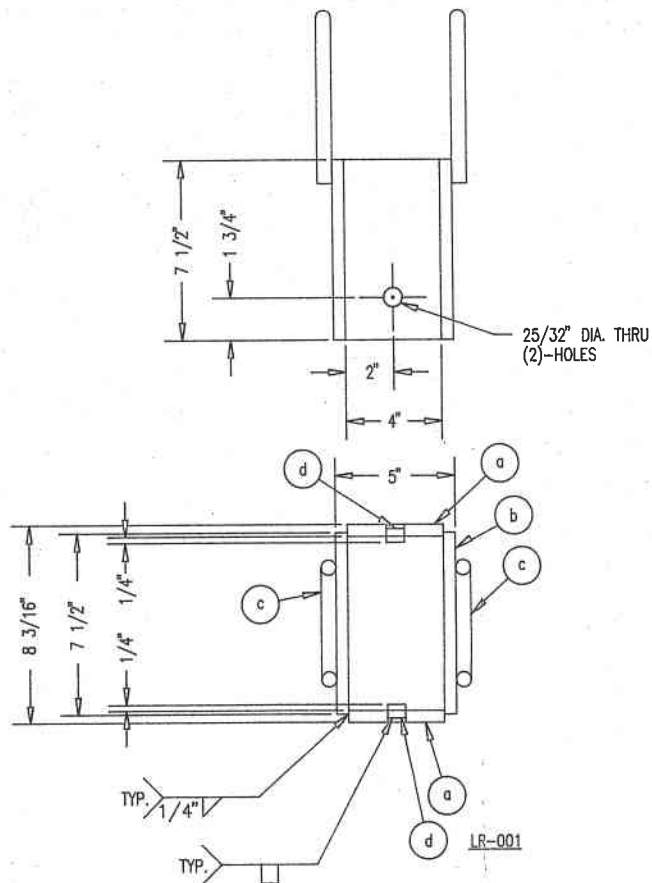
NOTES:

1. WELD ANGLE PERPENDICULAR TO ANGLES & I-BEAM AS SHOWN REGARDLESS OF ANGULAR DISPLACEMENT OF SUPPORT BAR BOXES.
2. THIS DWG FOR 2-CELL MODULAR TYPE JOINTS.

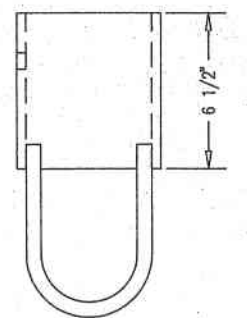
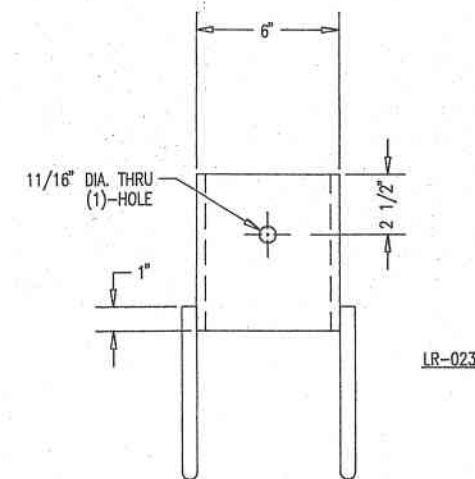
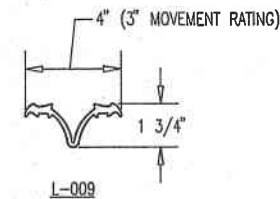
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REFERENCE #:	BRIDGE #	SUM-76-1366
LOCATION:	I-76 OVER GENERAL STREET SUMMIT COUNTY, AKRON, OHIO	
CUSTOMER:	RUHLIN CONSTRUCTION	
ITEM DESCRIPTION:	2-CELL EXPANSION JOINT ASSEMBLY	
DRN. BLW		
CHKD.		
DRAWING TITLE		DRAWING NO.
ADJUSTING ANGLE, NOTES		AO-4100



Byron D. Brown



ROBEK BEAM
 MOMENT OF INERTIA (X) - 21.590 in.⁴
 MOMENT OF INERTIA (Y) - 4.670 in.⁴
 SECTION MODULUS (X) - 8.801 in.³
 SECTION MODULUS (Y) - 2.965 in.³
 AREA - 7.33 in.²



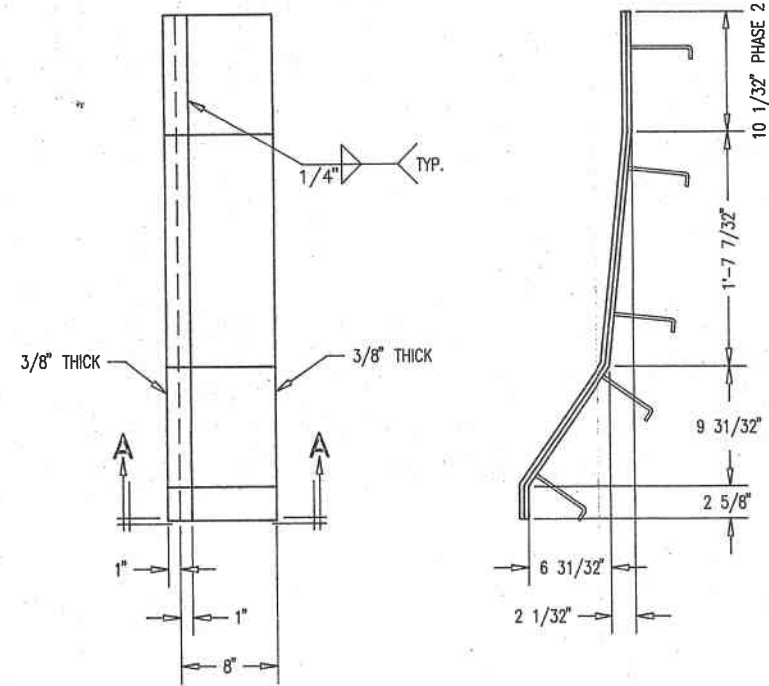
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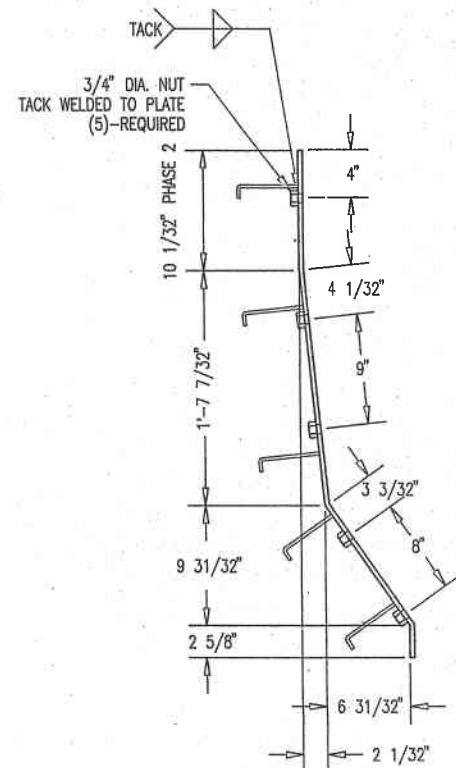
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 GLAUS PYLE DEHAVEN ASSOCIATES, INC.
 ARCHITECTS AND CONSULTING ENGINEERS
 DATE 06/22/84 CHECKED BY A.D.



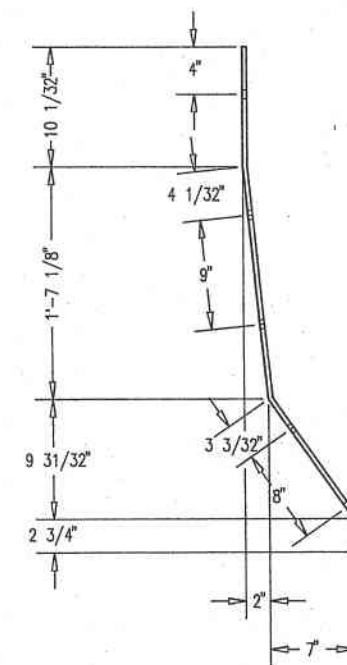
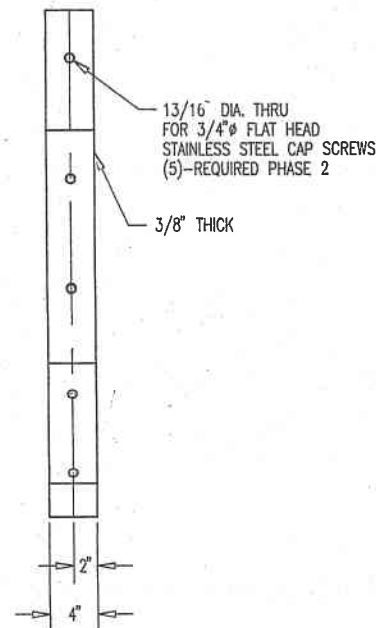
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REFERENCE #:	IR-76-2(45)21		
BRIDGE # SUM-76-1366			
LOCATION: I-76 OVER GENERAL STREET SUMMIT COUNTY, AKRON, OHIO			
CUSTOMER:	RUHLIN CONSTRUCTION	NO.	DATE
ITEM DESCRIPTION:		REVISIONS	
2-CELL EXPANSION JOINT ASSEMBLY			
DRN. BLW	TechStar, Inc		SHEET 12 OF 14
CHKD.	DRAWING TITLE		DRAWING NO.
STANDARD COMPONENT DETAILS		AO-5100	



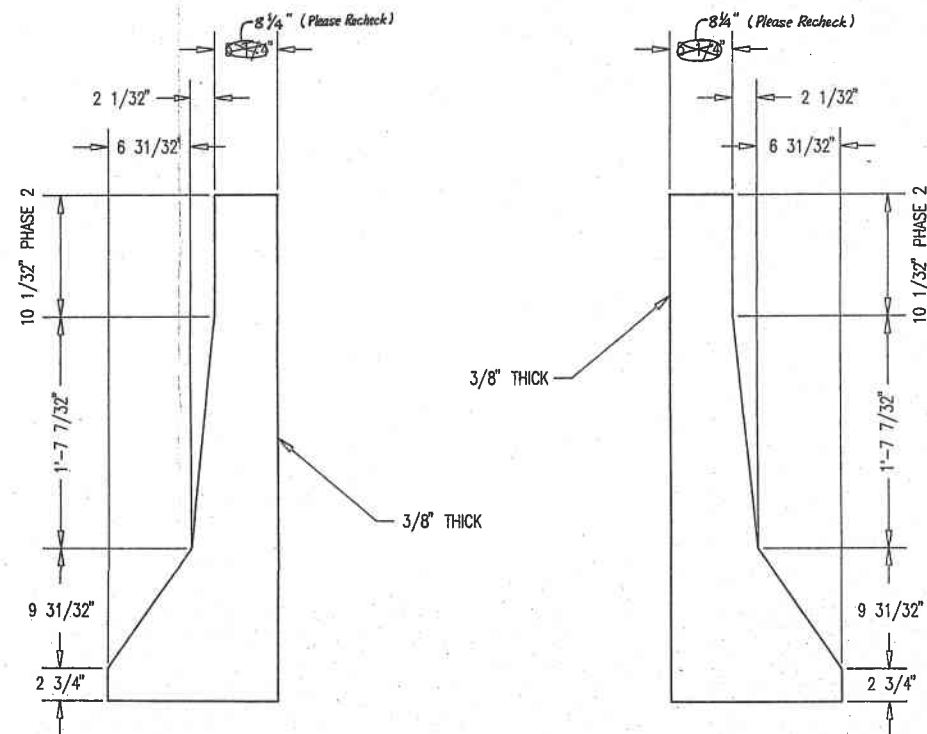
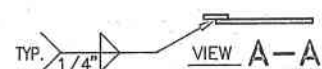
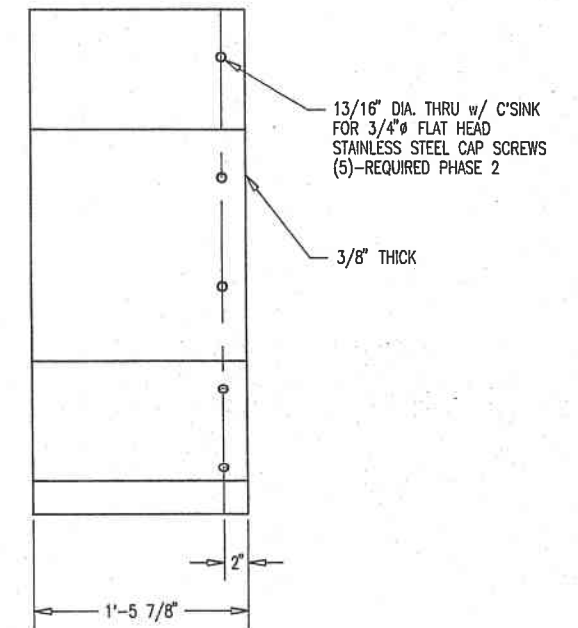
VIEW A-A
DETAIL OF LEFT INSIDE SLIDE PLATE



DETAIL OF RIGHT INSIDE SLIDE PLATE

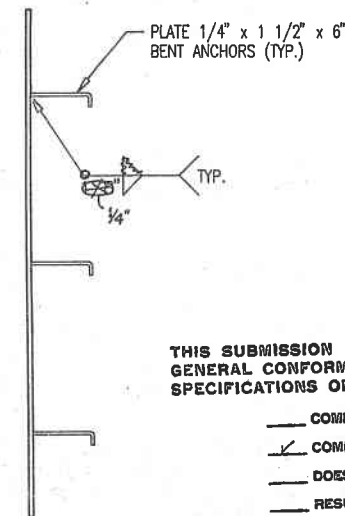


DETAIL OF OUTSIDE SLIDE PLATE



DETAIL OF LEFT AND RIGHT ENDPLATES

WELD PER AWS D1.5-88 min.



THIS SUBMISSION HAS BEEN REVIEWED FOR
GENERAL CONFORMANCE TO THE PLANS AND
SPECIFICATIONS ONLY

- COMPLIES AS SUBMITTED
- COMPLIES AS NOTED
- DOES NOT COMPLY
- RESUBMIT

GLAUS, PYLE, SCHOMER, BURNS & DEHAVEN, INC.
GLAUS PYLE DEHAVEN ASSOCIATES, INC.
ARCHITECTS AND CONSULTING ENGINEERS
DATE 06/20/94 CHECKED BY A.D.

NOTE:

1. ALL COVER PLATES DETAILED HEREIN SHALL BE OF ASTM A 36.
2. (4)-BARRIER COVER PLATES REQUIRED AS SHOWN.



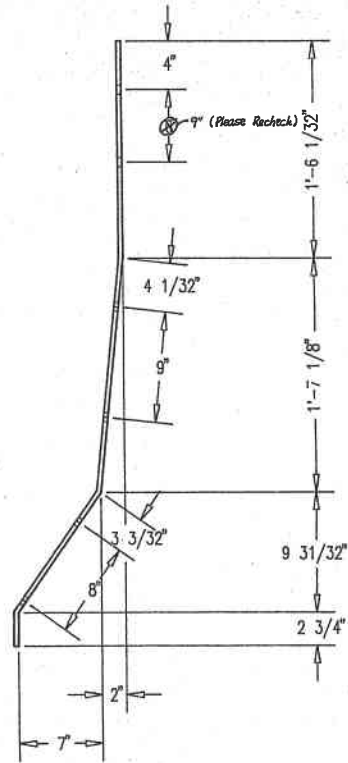
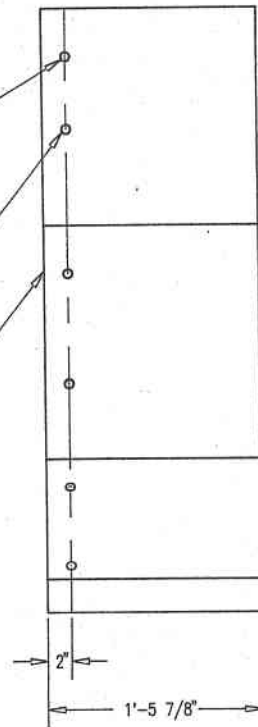
Byron D. Brown

CONTRACT #:	PROJECT #: IR-76-2(45)21		
REFERENCE #: BRIDGE # SUM-76-1366			
LOCATION: 1-76 OVER GENERAL STREET SUMMIT COUNTY, AKRON, OHIO			
CUSTOMER: RUHLIN CONSTRUCTION		NO.	DATE
ITEM DESCRIPTION: 2-CELL EXPANSION JOINT ASSEMBLY			REMARKS
		REVISIONS	
DRN. BLW	<i>TechStar, Inc</i>		SHEET 13 OF 14
CHKD.			DRAWING NO. AO-6100
DRAWING TITLE BARRIER PLATE DETAILS PHASE 2		DRAWING NO. AO-6100	

13/16" DIA. THRU w/ C'SINK FOR 3/4" FLAT HEAD STAINLESS STEEL CAP SCREWS (6)-REQUIRED PHASE 3 (2)-REQUIRED PHASE 2

THIS HOLE NOT ON PHASE 2

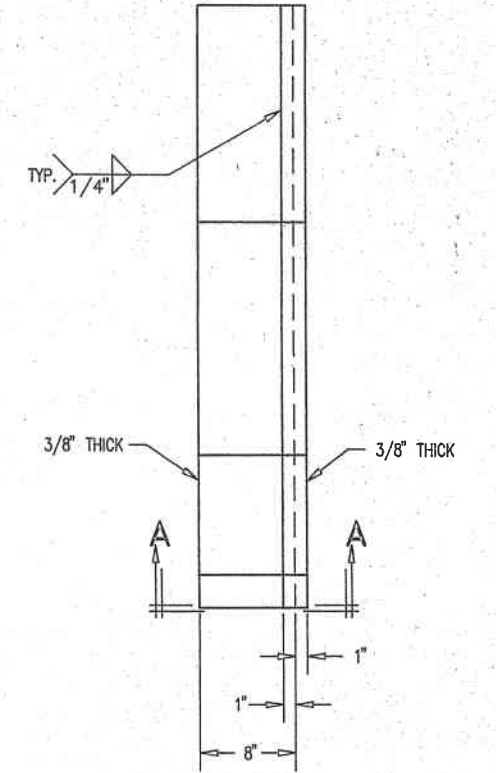
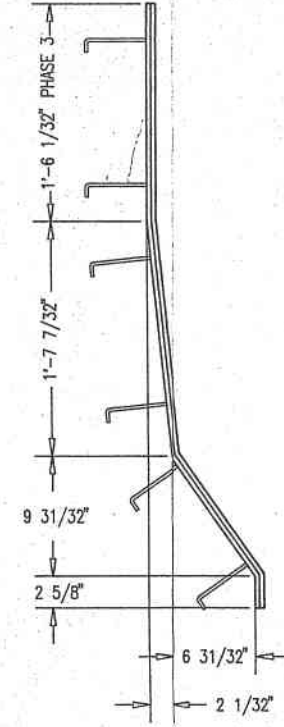
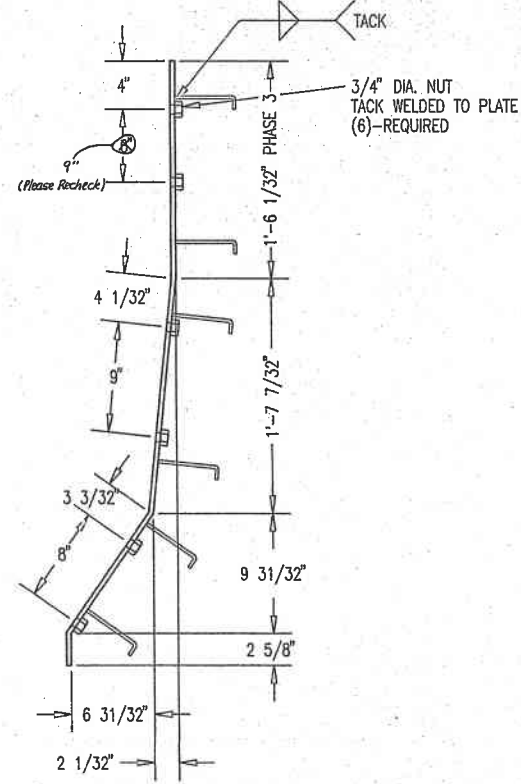
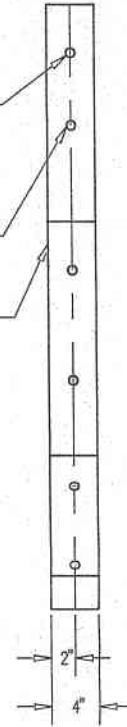
3/8" THICK



13/16" DIA. THRU FOR 3/4" FLAT HEAD STAINLESS STEEL CAP SCREWS (6)-REQUIRED PHASE 3 (2)-REQUIRED PHASE 2

THIS HOLE NOT ON PHASE 2

3/8" THICK

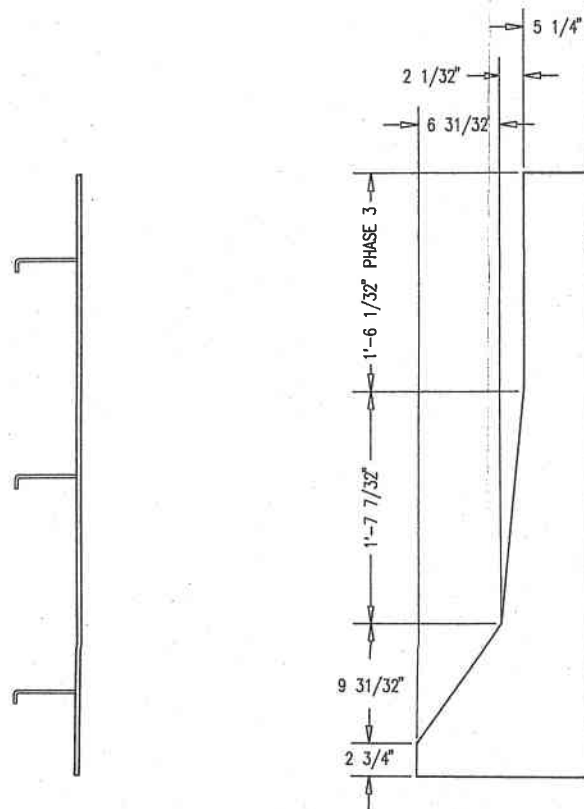


VIEW A-A 1/4" TYP.

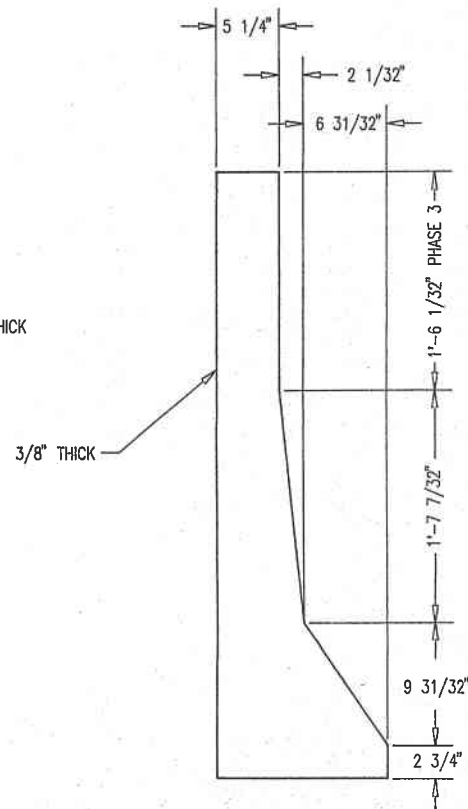
DETAIL OF OUTSIDE SLIDE PLATE

DETAIL OF RIGHT INSIDE SLIDE PLATE

DETAIL OF LEFT INSIDE SLIDE PLATE

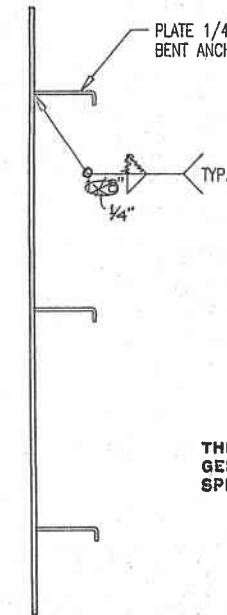


DETAIL OF LEFT AND RIGHT ENDPLATES



WELDS PER AWS D1.5-88.

PLATE 1/4" x 1 1/2" x 6" BENT ANCHORS (TYP.)



THIS SUBMISSION HAS BEEN REVIEWED FOR GENERAL CONFORMANCE TO THE PLANS AND SPECIFICATIONS ONLY

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- COMPLIES AS NOTED
- DOES NOT COMPLY
- RESUBMIT

GLAUS, PYLE, SCHOMER, BURNS & DEHAVEN, INC.
GLAUS PYLE DEHAVEN ASSOCIATES, INC.
ARCHITECTS AND CONSULTING ENGINEERS
DATE 06/20/94 CHECKED BY A.D.

NOTE:

1. ALL COVER PLATES DETAILED HEREIN SHALL BE OF ASTM A 36.
2. (4)-BARRIER COVER PLATES REQUIRED AS SHOWN.

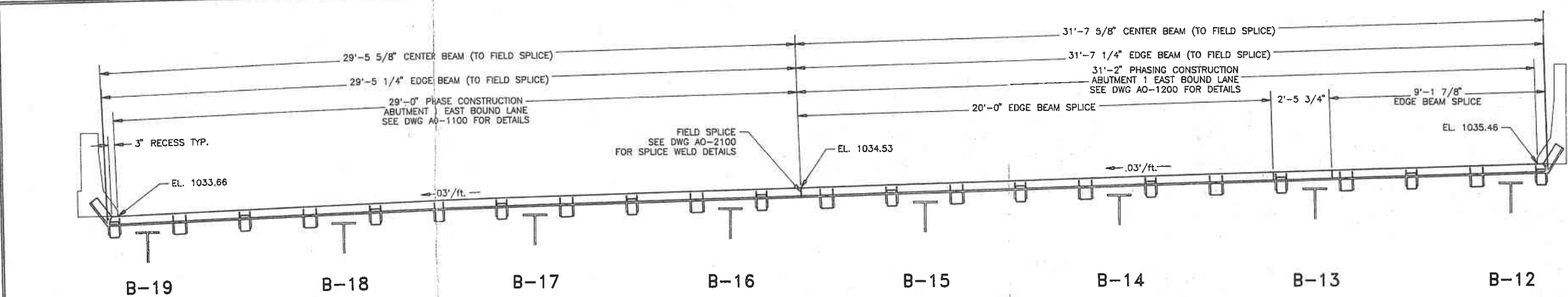


By: B.B.

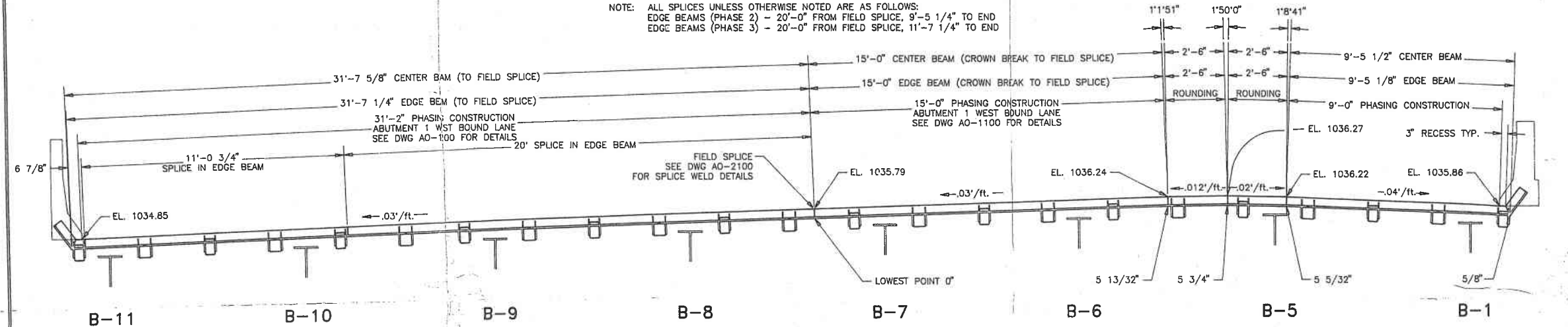
CONTRACT #	PROJECT #		
	IR-76-2(45)21		
REFERENCE #	BRIDGE #		
	SUM-76-1366		
LOCATION:	1-76 OVER GENERAL STREET SUMMIT COUNTY, AKRON, OHIO		
CUSTOMER:	RUHLIN CONSTRUCTION	NO.	DATE
ITEM DESCRIPTION:	2-CELL EXPANSION JOINT ASSEMBLY	REVISIONS	
DRN. BLW	TechStar, Inc		SHEET 14 OF 14
CHKD.	DRAWING TITLE		DRAWING NO.
	BARRIER COVER PLATE DETAILS		AO-6200



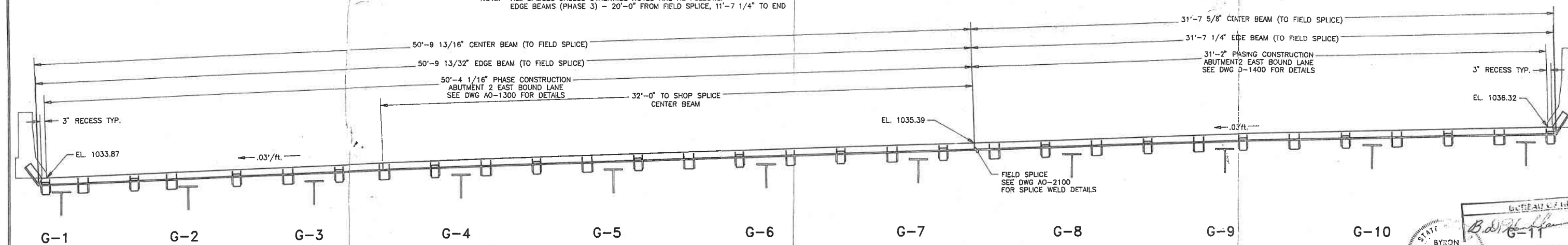
MID-OHIO PRODUCTS, INC.
4329 REYNOLDS DRIVE
HILLIARD, OHIO 43026
(614) 771-2795



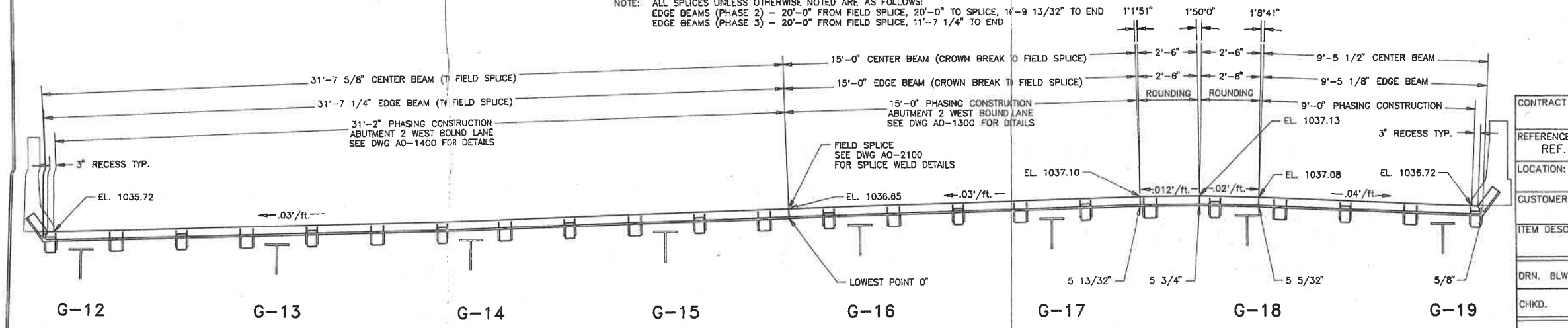
NOTE: ALL SPLICES UNLESS OTHERWISE NOTED ARE AS FOLLOWS:
EDGE BEAMS (PHASE 2) - 20'-0" FROM FIELD SPLICE, 9'-5 1/4" TO END
EDGE BEAMS (PHASE 3) - 20'-0" FROM FIELD SPLICE, 11'-7 1/4" TO END



NOTE: ALL SPLICES UNLESS OTHERWISE NOTED ARE AS FOLLOWS:
EDGE BEAMS (PHASE 3) - 20'-0" FROM FIELD SPLICE, 11'-7 1/4" TO END



NOTE: ALL SPLICES UNLESS OTHERWISE NOTED ARE AS FOLLOWS:
EDGE BEAMS (PHASE 2) - 20'-0" FROM FIELD SPLICE, 20'-0" TO SPLICE, 11'-9 13/32" TO END
EDGE BEAMS (PHASE 3) - 20'-0" FROM FIELD SPLICE, 11'-7 1/4" TO END



NOTE: ALL SPLICES UNLESS OTHERWISE NOTED ARE AS FOLLOWS:
EDGE BEAMS (PHASE 3) - 20'-0" FROM FIELD SPLICE, 11'-7 1/4" TO END

STATE OF OHIO
BYRON B. BROWN
E-37294
APPROVED
Professional Engineer
Civil Engineering
No. 10247

CONTRACT #	PROJECT #	SUM 996(93)	
REFERENCE	REF. #552; BRIDGE # SUM-76-1366		
LOCATION:	176 OVER GENERAL STREET SUMMIT COUNTY, AKRON, OHIO		
CUSTOMER:	RHLIN CONSTRUCTION	NO.	DATE
ITEM DESCRIPTION:	2-CELL EXPANSION JOINT ASSEMBLY	REVISIONS	
DRN. BLW	TechStar, Inc		
CHKD.	SHEET 1 OF 1		
DRAWING TITLE		DRAWING NO.	
EXPANSION JOINT "LAY-DOWN" SHEET		AO-0000	