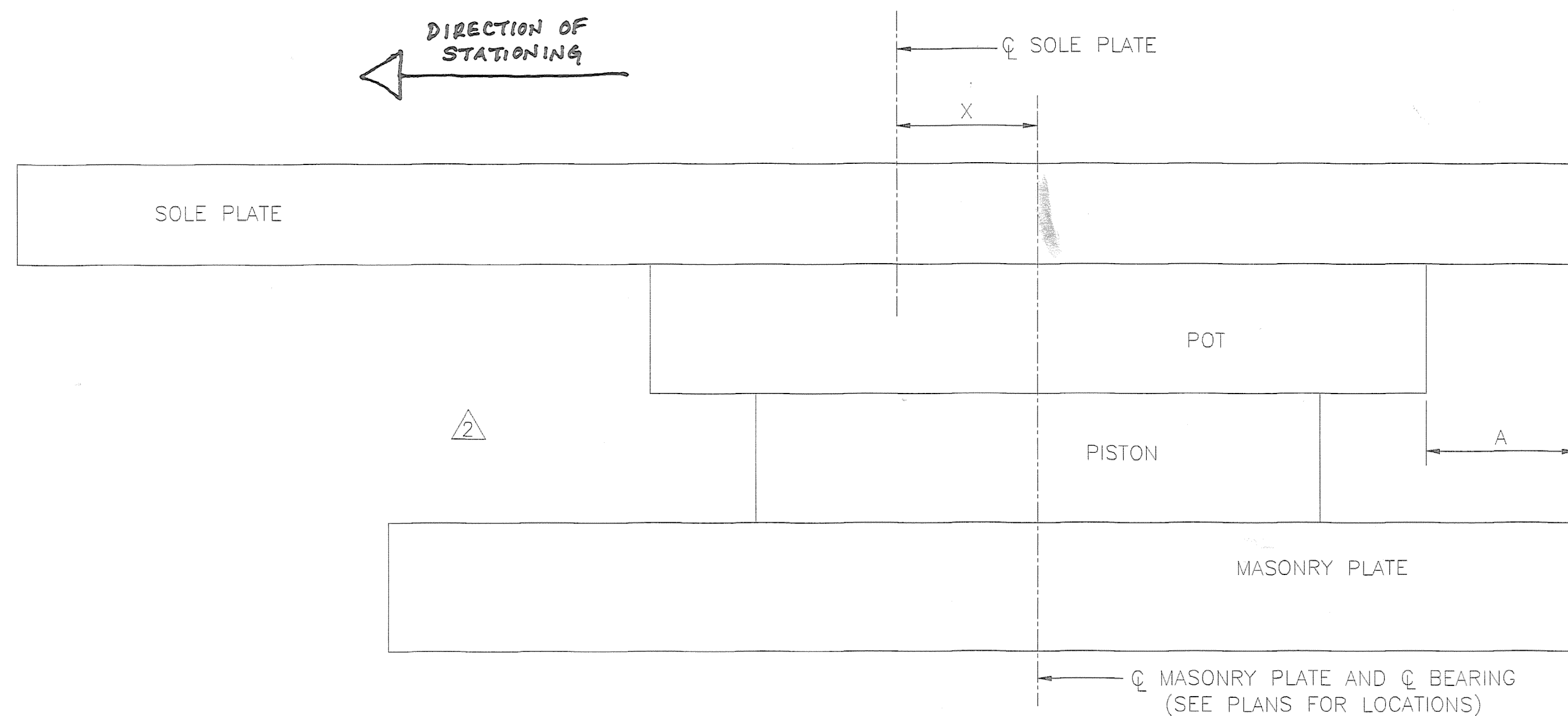


TEMPERATURE ADJUSTMENT TABLE - "X"(mm) & "A"(mm)
 STRUCTURE TEMPERATURE (DEGREES F)

LOC.	25		35		45		55		65		75		85	
	"X"	"A"	"X"	"A"	"X"	"A"	"X"	"A"	"X"	"A"	"X"	"A"	"X"	"A"
ABUT. 1	-22	131	-11	142	0	153	11	164	22	175	32	185	43	196
PIER 1	-15	104	-8	111	0	119	8	127	15	134	23	142	31	150
PIER 2	-9	91	-5	95	0	100	5	105	9	109	14	114	18	118
PIER 3	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A
PIER 4	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A
PIER 5	9	109	5	105	0	100	-5	95	-9	91	-14	86	-18	82
PIER 6	15	134	8	127	0	119	-8	111	-15	104	-23	96	-31	88
PIER 7 SPAN 7	22	175	11	164	0	153	-11	142	-22	131	-32	121	-43	110
PIER 7 SPAN 8	-25	128	-12	141	0	153	12	165	25	178	37	190	49	202
PIER 8	-18	101	-9	110	0	119	9	128	18	137	28	147	37	156
PIER 9	-12	88	-6	94	0	100	6	106	12	112	18	118	25	125
PIER 10	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A
PIER 11	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A
PIER 12	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A
PIER 13	12	112	6	106	0	100	-6	94	-12	88	-18	82	-25	75
PIER 14	18	137	9	128	0	119	-9	110	-18	101	-28	91	-37	82
PIER 15 SPAN 15	25	178	12	165	0	153	-12	141	-25	128	-37	116	-49	104
PIER 15 SPAN 16	-25	128	-12	141	0	153	12	165	25	178	37	190	49	202
PIER 16	-18	101	-9	110	0	119	9	128	18	137	28	147	37	156
PIER 17	-12	88	-6	94	0	100	6	106	12	112	18	118	25	125
PIER 18	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A
PIER 19	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A
PIER 20	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A
PIER 21	12	112	6	106	0	100	-6	94	-12	88	-18	82	-25	75
PIER 22	18	137	X 9	X 128	0	119	-9	110	-18	101	-28	91	-37	82
ABUT. 2	25	178	X 12	X 165	0	153	-12	141	-25	128	-37	116	-49	104

NEGATIVE DIMENSIONS SHOWN FOR "X" INDICATE THAT THE CENTERLINE OF THE SOLE PLATE IS TO BE POSITIONED AHEAD OF THE CENTERLINE BEARING
 POSITIVE DIMENSIONS INDICATE THAT THE CENTERLINE OF THE SOLE PLATE IS TO BE POSITIONED BEHIND THE CENTERLINE BEARING



SUGGESTED PROCEDURE AND HANDLING INSTRUCTIONS FOR FUTURE
 REMOVAL AND REPLACEMENT OF COSMEC POT BEARINGS

FIXED BEARING - REMOVAL

- CUT ANCHOR BOLTS ABOVE MASONRY PLATES AND BELOW SOLE PLATE AND REMOVE.
- REMOVE WELD CONNECTING THE SOLE PLATE TO GIRDER FLANGE, PISTON TO SOLE PLATE & POT TO MASONRY PLATE.
- JACK STRUCTURE A MAXIMUM OF 5/16". USE JACKING PROCEDURE APPROVED BY THE ENGINEER.
- LIFT SOLE PLATE OFF PISTON & SLIDE IT OUT FROM UNDER GIRDER.
- SLIDE POT/PISTON ASSEMBLY OFF MASONRY PLATE TAKING CARE TO LIFT POT FROM ITS UNDERSIDE. IF POT IS TO BE RE-USED EXERCISE CAUTION THAT THE INSIDE CAVITY IS NOT DAMAGED, IN PARTICULAR THE CAVITY WALLS AND RIM.
- CAREFULLY REMOVE PISTON FROM THE POT. IF PISTON IS TO BE RE-USED TAKE PRECAUTIONS SO AS NOT TO DAMAGE THE PISTON RIM (THE PORTION WITHIN THE POT).
- LIFT MASONRY PLATE OFF PROJECTING ANCHOR BOLTS.
- REMOVE ANCHOR BOLTS.

EXPANSION BEARING - REMOVAL

- REMOVE HOLD DOWNS IF APPLICABLE.
- REMOVE WELDS CONNECTING THE SOLE PLATE TO THE GIRDER FLANGE.
- JACK STRUCTURE A MAXIMUM OF 5/16"[8]. USE JACKING PROCEDURE APPROVED BY THE ENGINEER.
- REMOVE SOLE PLATE BY SLIDING IT OUT HORIZONTALLY. SINCE THE NATURE OF THIS BEARING IS TO ALLOW EASY MOVEMENT THROUGH STAINLESS STEEL AND PTFE SLIDING SURFACES DO NOT ALLOW THE PLATES TO TILT WHILE DISASSEMBLING.
- LIFT THE PISTON AND POT ASSEMBLY OUT OF THE MASONRY PLATE RECESS.
- LIFT THE MASONRY PLATE OFF OF THE ANCHOR BOLTS.

EXPANSION BEARING - REPLACEMENT/INSTALLATION

FIXED BEARING - REPLACEMENT/INSTALLATION

- ANCHOR BOLTS FROM PREVIOUS BEARINGS SHOULD BE COMPLETELY REMOVED OR AT THE LEAST CUT FLUSH WITH BEARING PEDESTAL. IF ANCHOR BOLTS HAVE BEEN CUT FLUSH IT WILL BE NECESSARY TO RELOCATE ANCHOR BOLTS ON NEW BEARING MASONRY PLATES. NEW LOCATIONS SHOULD BE COORDINATED WITH THE BEARING MANUFACTURER.
- POT AND PISTON ASSEMBLY SHOULD COME FROM THE BEARING MANUFACTURER ALREADY ASSEMBLED. CENTER POT/PISTON ASSEMBLY ON THE MASONRY PLATE.
- CENTER THE SOLE PLATE ON THE PISTON.
- LOWER STRUCTURE.
- WELD PISTON TO SOLE PLATE & POT TO MASONRY PLATE (SEE NOTES 7 & 8)
- WELD SOLE PLATE TO GIRDER FLANGE AND INSTALL ANCHOR BOLTS. TAKE CARE THAT THE SOLE PLATE IS ORIENTATED CORRECTLY WITH REGARDS TO THE BEVELS.
- WHEN FIELD WELDING DO NOT ALLOW WELDING CURRENT TO PASS THROUGH THE PISTON/POT ASSEMBLY OR DAMAGE MAY OCCUR.
- WHEN FIELD WELDING EXERCISE CAUTION THAT THE TEMPERATURE OF THE ELASTOMER AND THE PTFE BOND AREA DOES NOT EXCEED 250° F. OR DAMAGE MAY OCCUR. USE TEMPERATURE INDICATING WAX PENCILS OR OTHER SUITABLE MEANS.

- THE BEARING ASSEMBLY SHOULD COME FROM THE BEARING MANUFACTURER FULLY ASSEMBLED.
- REMOVE THE MASONRY PLATE AND INSTALL IT OVER THE EXISTING ANCHOR BOLTS.
- PLACE PISTON AND POT ASSEMBLY IN THE MASONRY PLATE RECESS.
- SLIDE THE SOLE PLATE ON TO THE POT ASSEMBLY. MAKE SURE THAT THE SOLE PLATE IS ORIENTATED CORRECTLY WITH RESPECT TO THE DIRECTION OF MOVEMENT AND THE THICK END OF THE BEVEL.
- AT ALL TIMES USE CAUTION SO AS NOT TO DAMAGE THE SLIDING SURFACES.
- PER THE ENGINEER, OFFSET THE SOLE PLATE AS REQUIRED FOR TEMPERATURE.
- LOWER THE STRUCTURE.
- WELD THE SOLE PLATE TO THE GIRDER FLANGE.
- WHEN FIELD WELDING DO NOT ALLOW WELDING CURRENT TO PASS THROUGH THE POT AND PISTON ASSEMBLY OR DAMAGE MAY OCCUR.
- WHEN FIELD WELDING EXERCISE CARE THAT THE TEMPERATURE OF THE ELASTOMER AND THE PTFE BOND AREA DOES NOT EXCEED 250° F. OR DAMAGE MAY OCCUR. USE TEMPERATURE INDICATING WAX PENCILS OR OTHER SUITABLE MEANS.

SHOP DRAWING REVIEW

REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

REJECTED REVISE AND RESUBMIT FURNISH AS CORRECTED

CORRECTIONS OR COMMENTS MADE ON THE SHOP DRAWINGS DURING THIS REVIEW DO NOT RELIEVE CONTRACTOR FROM COMPLIANCE WITH REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. THIS CHECK IS ONLY FOR REVIEW OF GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR CORRECTING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, SELECTING FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATING HIS WORK WITH THAT OF ALL OTHER TRADES, AND PERFORMING HIS WORK IN A SAFE AND SATISFACTORY MANNER.

VHB Venasse Hangen Brustin, Inc.
 Engineers, Planners, and Scientists
 515 Beckford Farms, Milton Rd.
 Eastford, VT 05728-4444-0898

Job Number: 50911
 Reviewed By: JTT
 Date: 11-11-2004

STATE OF VERMONT
 AGENCY OF TRANSPORTATION
 PROJECT NO. BRF 036-1(1)
 TOWN OF ALBURG-SWANTON
 VT 78 OVER MISSISQUOI BAY
 BRIDGE NO. 2
 ALL PIERS
 POT BEARING DETAILS

COSMEC, INC. 70 SOUTH STREET
 WALPOLE, MA. 02081

SCALE: N.T.S.	DRAWN BY: MCM	CHECKED BY: NH
REV. 1: ADDED TABLE FOR TEMPERATURE ADJUSTMENT & DETAIL	BY: MK	DATE: 10/29/04
REV. 2: REV. NOTES & CHANGED SCALE & ADDED SHEET 7 OF 7	BY: MK	DATE: 10/13/04
DATE: 10/29/04	DATE: 10/14/04	DATE: 9/7/04
DATE: 10/29/04	DATE: 10/14/04	DATE: 9/7/04
SHEET 7 OF 7		
COSMEC POT BEARINGS		
CUSTOMER: CIANBRO CORP.	S.O. NUMBER: 60093	DRAWING NUMBER: 4302
REV. 2		