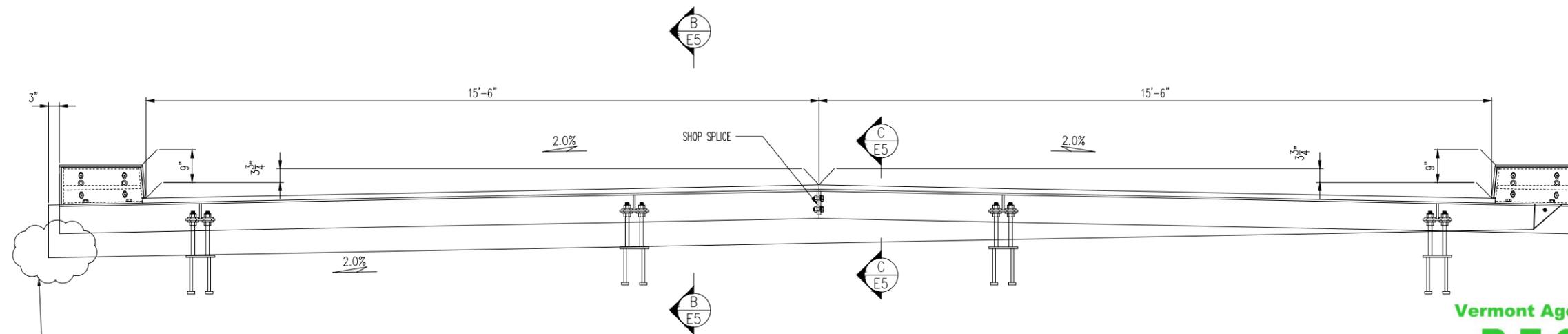


PLAN VIEW AT ABUTMENT 1 APPROACH SLAB EXPANSION DAM
LOOKING BACK STATION



SECTION "A-A"
LOOKING BACK STATION

APPROVER VERIFY:
IS IT ACCEPTABLE FOR
LOW END OF TROUGH TO
BE ON THE EAST SIDE.

No, Trough is to
outlet on the west
side. Trough to be
a mirror image of
what is shown in
this plan and
section

APPROVED: Approval of drawings and/or procedures indicates concurrence with the information presented and does not relieve the Contractor or Fabricator of compliance with all specifications and code requirements

APPROVED AS NOTED

REVISE AND RESUBMIT **X**

NOT REVIEWED

Date: 8/13/15

By: *John E. Kivler*

This review by Stantec Consulting Services Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that Stantec Consulting Services Inc approves the detail design inherent in the shop drawings, responsibility for which shall remain with the Contractor. Submitting same, and such review shall not relieve the Contractor of his responsibility for errors or omissions in the shop drawing or of his responsibility for meeting all requirements of the Contract Documents. The contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to the fabrication processes or to techniques of construction and installation and for coordination of the work of all subtrades.

Vermont Agency of Transportation
RECEIVED
CK'D BY Stantec OK'D BY D Bonneau
July 22, 2015
RESUBMIT Yes Rejected
BY D Bonneau DATE 08/12/15

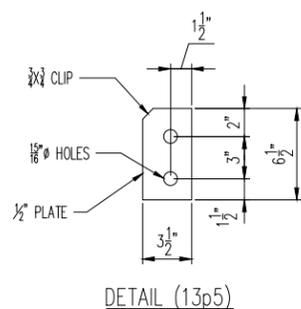
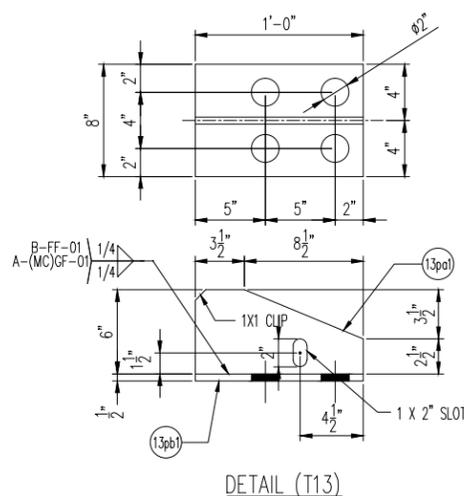
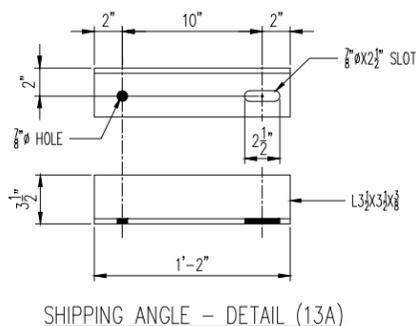
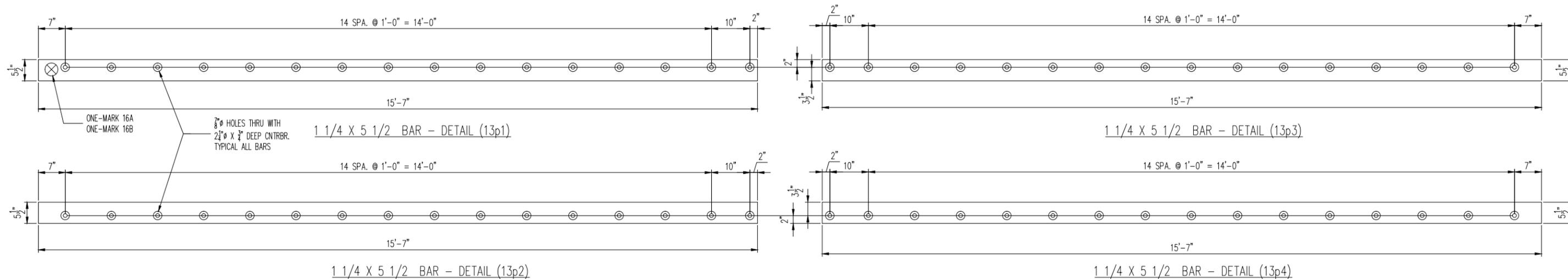
SEE SHEET 16 FOR JOINT ASSEMBLY AND GENERAL NOTES
SEE SHEET 17 FOR BILL OF MATERIAL

REV.	DESCRIPTION	DATE	DET.	CKD.

DESCRIPTION	ITEM	QUANTITY
LOCATION — TOWN OF WATERBURY		
BRIDGE — I-89 EXIT RAMP B OVER STOWE ST		
PROJECT — IM 089-2(43)		
BRIDGE NO. — 46A		
HIGHWAY NO. — INTERSTATE 89		
DESIGNER — VERMONT AGENCY OF TRANSPORTATION		
CUSTOMER — BECK AND BELLUCCI, INC		

SCALE: N.T.S.	DRAWN BY: JAC	CHECKED BY: JEB	DATE: 7/15/15	
PROJECT NUMBER: 44596	PRODUCT CODE: 1043	RELEASE: 1	SHEET: E4	

THE D.S. BROWN COMPANY
300 E. CHERRY STREET
NORTH BALTIMORE, OHIO 45872
419.257.3561
FAX: 419.257.0332
WWW.DSBROWN.COM



APPROVED: Approval of drawings and/or procedures indicates concurrence with the information presented and does not relieve the Contractor or Fabricator of compliance with all specifications and code requirements	X	
APPROVED AS NOTED		
REVISE AND RESUBMIT		
NOT REVIEWED		
Date: 8/13/15		
By: <i>John E. Kivle</i>		
<p><small>This review by Stantec Consulting Services Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that Stantec Consulting Services Inc approves the detail design inherent in the shop drawings, responsibility for which shall remain with the Contractor. Submitting same, and such review shall not relieve the Contractor of his responsibility for errors or omissions in the shop drawing or of his responsibility for meeting all requirements of the Contract Documents. The contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to the fabrication processes or to techniques of construction and installation and for coordination of the work of all trades.</small></p>		

SEE SHEET 16 FOR JOINT ASSEMBLY AND GENERAL NOTES
SEE SHEET 17 FOR BILL OF MATERIAL

REV.	DESCRIPTION	DATE	DET.	CKD.

DESCRIPTION	ITEM	QUANTITY
LOCATION — TOWN OF WATERBURY	—	—
BRIDGE — I-89 EXIT RAMP B OVER STOWE ST	—	—
PROJECT — IM 089-2(43)	—	—
BRIDGE NO. — 46A	—	—
HIGHWAY NO. — INTERSTATE 89	—	—
DESIGNER — VERMONT AGENCY OF TRANSPORTATION	—	—
CUSTOMER — BECK AND BELLUCCI, INC	—	—

SCALE: N.T.S.	DRAWN BY: JAC	CHECKED BY: JEB	DATE: 7/15/15
PROJECT NUMBER: 44596	PRODUCT CODE: 1043	RELEASE: 1	SHEET: 13

Vermont Agency of Transportation
RECEIVED

CK'D BY JWC/DEB OK'D BY D Bonneau
July 22, 2015

RESUBMIT No Approved
BY D Bonneau DATE 08/12/2015

MK	QTY	DESCRIPTION	MATERIAL	LENGTH	REMARKS	WT*	REV
16A	1	BOLT DOWN EXPANSION JOINT			35'-0"	3802	-
8a1	1	L8 X 4 X 1/2	M270 GR 50 (A709 OR A992)	17'-6"	M111-HDG (A123)	343	-
8a2	1	L8 X 4 X 1/2	M270 GR 50 (A709 OR A992)	17'-6"	M111-HDG (A123)	343	-
9a1	1	L8 X 4 X 1/2	M270 GR 50 (A709 OR A992)	17'-6"	M111-HDG (A123)	343	-
9a2	1	L8 X 4 X 1/2	M270 GR 50 (A709 OR A992)	17'-6"	M111-HDG (A123)	343	-
10g2	1	L5 X 5 X 1/2	M270 GR 36 (A709 OR A992)	1'-9 3/8"		29	-
10g3	1	1/2 X 5	M270 GR 36 OR 50 (A709)	0'-8 5/16"	M111-HDG (A123)	6	-
12b1	46	Ø3/4 X 2 1/4 HEX HEAD BOLT	M164 (A325)		M232-HDG (A153)	< 1	-
12b2	18	Ø3/4 X 3 3/4 HEX HEAD BOLT	M164 (A325)		SHIPPING HARDWARE; M232-HDG (A153)	< 1	-
12n1	64	Ø3/4 HEX NUT	M291-A, HEAVY HEX (A563 GR A)		M232-HDG (A153)	< 1	-
12p1	1	BUTYL RUBBER TAPE		70'-0"	SEE GENERAL NOTES;		-
12w1	64	Ø3/4 FLAT WASHER	M293 (F436)		M232-HDG (A153)	< 1	-
12ws1	34	Ø3/4 X 10 WELD STUD	M169 (A108)		M111-HDG (A123)	1	-
12ws2	38	Ø3/4 X 10 WELD STUD	M169 (A108)		M111-HDG (A123)	1	-
13p1	1	1 1/4 X 5 1/2	M270 GR 50 (A709)	15'-7"	M111-HDG (A123)	365	-
13p2	1	1 1/4 X 5 1/2	M270 GR 50 (A709)	15'-7"	M111-HDG (A123)	365	-
13p3	1	1 1/4 X 5 1/2	M270 GR 50 (A709)	15'-7"	M111-HDG (A123)	365	-
13p4	1	1 1/4 X 5 1/2	M270 GR 50 (A709)	15'-7"	M111-HDG (A123)	365	-
13pa1	8	1/2 X 6	M270 GR 50 (A709)	1'-0"	M111-HDG (A123)	10	-
13pa5	4	1/2 X 3 1/2	M270 GR 50 (A709)	0'-6 1/2"	M111-HDG (A123)	3	-
13pb1	8	1/2 X 8	M270 GR 50 (A709)	1'-0"	M111-HDG (A123)	14	-
13sa1	9	L3 1/2 X 3 1/2 X 3/8	M270 GR 36 (A709 OR A992)	1'-0 1/2"	SHIPPING ANGLE; M111-HDG (A123)	9	-
14a1	1	1/2 X 1 1/2	M270 GR 36 OR 50 (A709)	0'-10 5/8"	M111-HDG (A123)	2	-
14a2	1	1/2 X 1 1/2	M270 GR 36 OR 50 (A709)	0'-8 1/4"	M111-HDG (A123)	2	-
14a3	1	1/2 X 1 1/2	M270 GR 36 OR 50 (A709)	1'-10 3/4"	M111-HDG (A123)	5	-
14a4	1	1/2 X 10 1/16	M270 GR 36 OR 50 (A709)	1'-10 3/4"	M111-HDG (A123)	32	-
14b1	1	1/2 X 10 3/16	M270 GR 36 OR 50 (A709)	0'-11"	M111-HDG (A123)	16	-
14b2	1	1/2 X 11	M270 GR 36 OR 50 (A709)	1'-11"	M111-HDG (A123)	36	-
14b3	1	1/2 X 8 7/16	M270 GR 36 OR 50 (A709)	0'-11"	M111-HDG (A123)	13	-
14c1	1	1/2 X 10 3/16	M270 GR 36 OR 50 (A709)	1'-11"	M111-HDG (A123)	33	-
14d1	1	L5 X 5 X 1/2	M270 GR 36 (A709 OR A992)	1'-9 7/16"		29	-
14f1	1	L4 X 4 X 1/2	M270 GR 36 (A709 OR A992)	1'-9 13/16"		23	-
14g1	1	1/2 X 5	M270 GR 36 OR 50 (A709)	0'-10 1/16"	M111-HDG (A123)	7	-
14h1	1	L4 X 4 X 1/2	M270 GR 36 (A709 OR A992)	1'-9 13/16"		23	-
15a1	1	1/2 X 1 1/2	M270 GR 36 OR 50 (A709)	0'-10 1/16"	M111-HDG (A123)	2	-
15a2	1	1/2 X 1 1/2	M270 GR 36 OR 50 (A709)	0'-8 1/4"	M111-HDG (A123)	2	-
15a3	1	1/2 X 1 1/2	M270 GR 36 OR 50 (A709)	1'-10 3/4"	M111-HDG (A123)	5	-
15a4	1	1/2 X 10 1/16	M270 GR 36 OR 50 (A709)	1'-10 3/4"	M111-HDG (A123)	32	-
15b1	1	1/2 X 10 3/16	M270 GR 36 OR 50 (A709)	0'-11"	M111-HDG (A123)	16	-
15b2	1	1/2 X 11	M270 GR 36 OR 50 (A709)	1'-11"	M111-HDG (A123)	36	-
15b3	1	1/2 X 8 7/16	M270 GR 36 OR 50 (A709)	0'-11"	M111-HDG (A123)	13	-
15c1	1	1/2 X 10 3/16	M270 GR 36 OR 50 (A709)	1'-11"	M111-HDG (A123)	33	-
15d1	1	L5 X 5 X 1/2	M270 GR 36 (A709 OR A992)	1'-9 7/16"		29	-
15f1	1	L4 X 4 X 1/2	M270 GR 36 (A709 OR A992)	1'-9 13/16"		23	-
15g1	1	1/2 X 5	M270 GR 36 OR 50 (A709)	0'-10 1/16"	M111-HDG (A123)	7	-
15g2	1	L5 X 5 X 1/2	M270 GR 36 (A709 OR A992)	1'-8 13/16"		28	-
15g3	1	1/2 X 5	M270 GR 36 OR 50 (A709)	0'-8 5/16"	M111-HDG (A123)	6	-
15h1	1	L4 X 4 X 1/2	M270 GR 36 (A709 OR A992)	1'-9 13/16"		23	-
16b1	6	Ø3/4 X 2 SLOTTED FLAT CTSK HD CAP SCREW	A449		M232-HDG (A153)	< 1	-
16hb1	16	Ø3/4 X 2 1/4 HEX HEAD BOLT	M164 (A325)		M232-HDG (A153)	< 1	-
16hb2	8	Ø3/4 X 2 1/2 HEX HEAD BOLT	M164 (A325)		M232-HDG (A153)	< 1	-
16m1	6	Ø7/8 X 2 1/2 HEX HEAD BOLT	M164 (A325)		(2) ADDED FOR TESTING; M232-HDG (A153); ROCAP	< 1	-
16n1	36	Ø3/4 HEX NUT	M291-A, HEAVY HEX (A563 GR A)		M232-HDG (A153)	< 1	-
16n2	6	Ø7/8 HEX NUT	M291-A OR DH (A563 GR A OR GR DH)		(2) ADDED FOR TESTING; M232-HDG (A153); ROCAP	< 1	-
16p1	12	Ø7/8 FLAT WASHER	M293 (F436)		(4) ADDED FOR TESTING; M232-HDG (A153); ROCAP	< 1	-
16v1	4	Ø3/4 X 1 1/2 HEX HEAD BOLT	M164 (A325)		(2) ADDED FOR TESTING; M232-HDG (A153); ROCAP	< 1	-
16w1	32	Ø3/4 FLAT WASHER	M293 (F436)		M232-HDG (A153)	< 1	-
16ws1	8	Ø7/8 X 8 WELD STUD	M169 (A108)		M111-HDG (A123)	1	-

MK	QTY	DESCRIPTION	MATERIAL	LENGTH	REMARKS	WT*	REV
16B	1	BOLT DOWN EXPANSION JOINT			35'-0"	3801	-
8a1	1	L8 X 4 X 1/2	M270 GR 50 (A709 OR A992)	17'-6"	M111-HDG (A123)	343	-
8a2	1	L8 X 4 X 1/2	M270 GR 50 (A709 OR A992)	17'-6"	M111-HDG (A123)	343	-
9a1	1	L8 X 4 X 1/2	M270 GR 50 (A709 OR A992)	17'-6"	M111-HDG (A123)	343	-
9a2	1	L8 X 4 X 1/2	M270 GR 50 (A709 OR A992)	17'-6"	M111-HDG (A123)	343	-
10g2	1	L5 X 5 X 1/2	M270 GR 36 (A709 OR A992)	1'-9 3/8"		29	-
10g3	1	1/2 X 5	M270 GR 36 OR 50 (A709)	0'-8 5/16"	M111-HDG (A123)	6	-
12b1	46	Ø3/4 X 2 1/4 HEX HEAD BOLT	M164 (A325)		M232-HDG (A153)	< 1	-
12b2	18	Ø3/4 X 3 3/4 HEX HEAD BOLT	M164 (A325)		SHIPPING HARDWARE; M232-HDG (A153)	< 1	-
12n1	64	Ø3/4 HEX NUT	M291-A, HEAVY HEX (A563 GR A)		M232-HDG (A153)	< 1	-
12p1	1	BUTYL RUBBER TAPE		70'-0"	SEE GENERAL NOTES;		-
12w1	64	Ø3/4 FLAT WASHER	M293 (F436)		M232-HDG (A153)	< 1	-
12ws1	34	Ø3/4 X 10 WELD STUD	M169 (A108)		M111-HDG (A123)	1	-
12ws2	38	Ø3/4 X 10 WELD STUD	M169 (A108)		M111-HDG (A123)	1	-
13p1	1	1 1/4 X 5 1/2	M270 GR 50 (A709)	15'-7"	M111-HDG (A123)	365	-
13p2	1	1 1/4 X 5 1/2	M270 GR 50 (A709)	15'-7"	M111-HDG (A123)	365	-
13p3	1	1 1/4 X 5 1/2	M270 GR 50 (A709)	15'-7"	M111-HDG (A123)	365	-
13p4	1	1 1/4 X 5 1/2	M270 GR 50 (A709)	15'-7"	M111-HDG (A123)	365	-
13pa1	8	1/2 X 6	M270 GR 50 (A709)	1'-0"	M111-HDG (A123)	10	-
13pa5	4	1/2 X 3 1/2	M270 GR 50 (A709)	0'-6 1/2"	M111-HDG (A123)	3	-
13pb1	8	1/2 X 8	M270 GR 50 (A709)	1'-0"	M111-HDG (A123)	14	-
13sa1	9	L3 1/2 X 3 1/2 X 3/8	M270 GR 36 (A709 OR A992)	1'-0 1/2"	SHIPPING ANGLE; M111-HDG (A123)	9	-
14a1	1	1/2 X 1 1/2	M270 GR 36 OR 50 (A709)	0'-10 5/8"	M111-HDG (A123)	2	-
14a2	1	1/2 X 1 1/2	M270 GR 36 OR 50 (A709)	0'-8 1/4"	M111-HDG (A123)	2	-
14a3	1	1/2 X 1 1/2	M270 GR 36 OR 50 (A709)	1'-10 3/4"	M111-HDG (A123)	5	-
14a4	1	1/2 X 10 1/16	M270 GR 36 OR 50 (A709)	1'-10 3/4"	M111-HDG (A123)	32	-
14b1	1	1/2 X 10 3/16	M270 GR 36 OR 50 (A709)	0'-11"	M111-HDG (A123)	16	-
14b2	1	1/2 X 11	M270 GR 36 OR 50 (A709)	1'-11"	M111-HDG (A123)	36	-
14b3	1	1/2 X 8 7/16	M270 GR 36 OR 50 (A709)	0'-11"	M111-HDG (A123)	13	-
14c1	1	1/2 X 10 3/16	M270 GR 36 OR 50 (A709)	1'-11"	M111-HDG (A123)	33	-
14d1	1	L5 X 5 X 1/2	M270 GR 36 (A709 OR A992)	1'-9 7/16"		29	-
14f1	1	L4 X 4 X 1/2	M270 GR 36 (A709 OR A992)	1'-9 13/16"		23	-
14g1	1	1/2 X 5	M270 GR 36 OR 50 (A709)	0'-10 1/16"	M111-HDG (A123)	7	-
14h1	1	L4 X 4 X 1/2	M270 GR 36 (A709 OR A992)	1'-9 13/16"		23	-
15a1	1	1/2 X 1 1/2	M270 GR 36 OR 50 (A709)	0'-10 1/16"	M111-HDG (A123)	2	-
15a2	1	1/2 X 1 1/2	M270 GR 36 OR 50 (A709)	0'-8 1/4"	M111-HDG (A123)	2	-
15a3	1	1/2 X 1 1/2	M270 GR 36 OR 50 (A709)	1'-10 3/4"	M111-HDG (A123)	5	-
15a4	1	1/2 X 10 1/16	M270 GR 36 OR 50 (A709)	1'-10 3/4"	M111-HDG (A123)	32	-
15b1	1	1/2 X 10 3/16	M270 GR 36 OR 50 (A709)	0'-11"	M111-HDG (A123)	16	-
15b2	1	1/2 X 11	M270 GR 36 OR 50 (A709)	1'-11"	M111-HDG (A123)	36	-
15b3	1	1/2 X 8 7/16	M270 GR 36 OR 50 (A709)	0'-11"	M111-HDG (A123)	13	-
15c1	1	1/2 X 10 3/16	M270 GR 36 OR 50 (A709)	1'-11"	M111-HDG (A123)	33	-
15d1	1	L5 X 5 X 1/2	M270 GR 36 (A709 OR A992)	1'-9 7/16"		29	-
15f1	1	L4 X 4 X 1/2	M270 GR 36 (A709 OR A992)	1'-9 13/16"		23	-
15g1	1	1/2 X 5	M270 GR 36 OR 50 (A709)	0'-10 1/16"	M111-HDG (A123)	7	-
15g2	1	L5 X 5 X 1/2	M270 GR 36 (A709 OR A992)	1'-8 13/16"		28	-
15g3	1	1/2 X 5	M270 GR 36 OR 50 (A709)	0'-8 5/16"	M111-HDG (A123)	6	-
15h1	1	L4 X 4 X 1/2	M270 GR 36 (A709 OR A992)	1'-9 13/16"		23	-
16b1	6	Ø3/4 X 2 SLOTTED FLAT CTSK HD CAP SCREW	A449		M232-HDG (A153)	< 1	-
16hb1	16	Ø3/4 X 2 1/4 HEX HEAD BOLT	M164 (A325)		M232-HDG (A153)	< 1	-
16hb2	8	Ø3/4 X 2 1/2 HEX HEAD BOLT	M164 (A325)		M232-HDG (A153)	< 1	-
16m1	6	Ø7/8 X 2 1/2 HEX HEAD BOLT	M164 (A325)		(2) ADDED FOR TESTING; M232-HDG (A153); ROCAP	< 1	-
16n1	32	Ø3/4 HEX NUT	M291-A, HEAVY HEX (A563 GR A)		M232-HDG (A153)	< 1	-
16n2	6	Ø7/8 HEX NUT	M291-A OR DH (A563 GR A OR GR DH)		(2) ADDED FOR TESTING; M232-HDG (A153); ROCAP	< 1	-
16p1	12	Ø7/8 FLAT WASHER	M293 (F436)		(4) ADDED FOR TESTING; M232-HDG (A153); ROCAP	< 1	-
16v1	4	Ø3/4 X 1 1/2 HEX HEAD BOLT	M164 (A325)		(2) ADDED FOR TESTING; M232-HDG (A153); ROCAP	< 1	-
16w1	32	Ø3/4 FLAT WASHER	M293 (F436)		M232-HDG (A153)	< 1	-
16ws1	8	Ø7/8 X 8 WELD STUD	M169 (A108)		M111-HDG (A123)	1	-

MK	QTY	DESCRIPTION	MATERIAL	LENGTH	REMARKS	WT*	REV
16C	128	PLATE WASHERS			3"	< 1	-
16c1	128	3/8 X 3	M270 GR 36 OR 50 (A709)	0'-3"	M111-HDG (A123)	< 1	-
16D	128	FIELD HARDWARE				< 1	-
16d1	128	Ø1 HEX NUT	M291-DH (A563-DH) HEAVY HEX		M232-HDG (A153)	< 1	-
16F	8	PLATES				10	-
16f1	8	1/2 X 8	M270 GR 36 OR 50 (A709)	0'-9"	M111-HDG (A123)	10	-
16G	8	EMBEDS				15	

