STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0016

JOHN ELIAS BALDACCI
GOVERNOR

DAVID A. COLE
COMMISSIONER

March 24, 2009
Subject: **Message Signs, Statewide**
Federal Project No. ITS-1244(801)X
State Pin No.012448.01
Amendment No. 2

Dear Sir/Ms:

Make the following change to the Bid Document:

In the Bid Book, after page 57, **INSERT** the attached Dynamic Message Sign information sheets, 5 pages.

NOTE: The signs are available for inspection in Fairfield, Maine at the John Dority Maine Department of Transportation Training facility.

The following question has been received:

Question: Can you please provide some information regarding the DMS Signs provided by DOT? Specifically, to detail the support structures correctly, we need the unit sizes and weights, as well as anything else that may be required (catwalks, attachments details, etc.).

Response: Please see the above attachment and note.

Consider this information prior to submitting your bid on **April 1, 2009**.

Sincerely,

FOR Scott Bickford
Contracts & Specifications Engineer

CALCULATION COVER SHEET

NGC STRUCTURAL, LLC 241 TOLEND ROAD DOVER, NH 03820	**CLIENT:** Highway Tech Signal Equipment Sales **PROJECT:** MDOT Dynamic Message Signs **JOB NO.:** 08-781

DESCRIPTION:

Structural calculations for connections of dynamic message sign to support structure provided by MDOT. Scope of work does not include analysis of message sign, support structure or foundations.

INFORMATION SOURCES:

Adaptive Micro Systems, LLC of Milwaukee, WI. Drawing 15080301 DR
Sign is 27 X 90 pixel arrangement

DESIGN CRITERIA:

Wind speed 100 mph
Sign size is 89 inches X 253 inches
Sign Weight without shipping brackets = 1450 lbs.
Sign is to be supported by upper and lower head rails or horizontal aluminum (6061-T6) Wide Flange Sections.

CODES AND STANDARDS:

AASHTO 2001 Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals with 2003 Interim Revisions

PRODUCT TECHNICAL SPECIFICATIONS:

Provide a minimum of (8) 1/2 inch dia A316 Stainless Steel Bolts evenly distributed along top and bottom sign rails or as otherwise required by sign support geometry. **Sign support geometry and connection interface locations must be provided by Maine DOT for our review.**

Calculated By: NG Cote Checked By: NG Cote

SHOP DRAWING REVIEW
HNTB CORPORATION

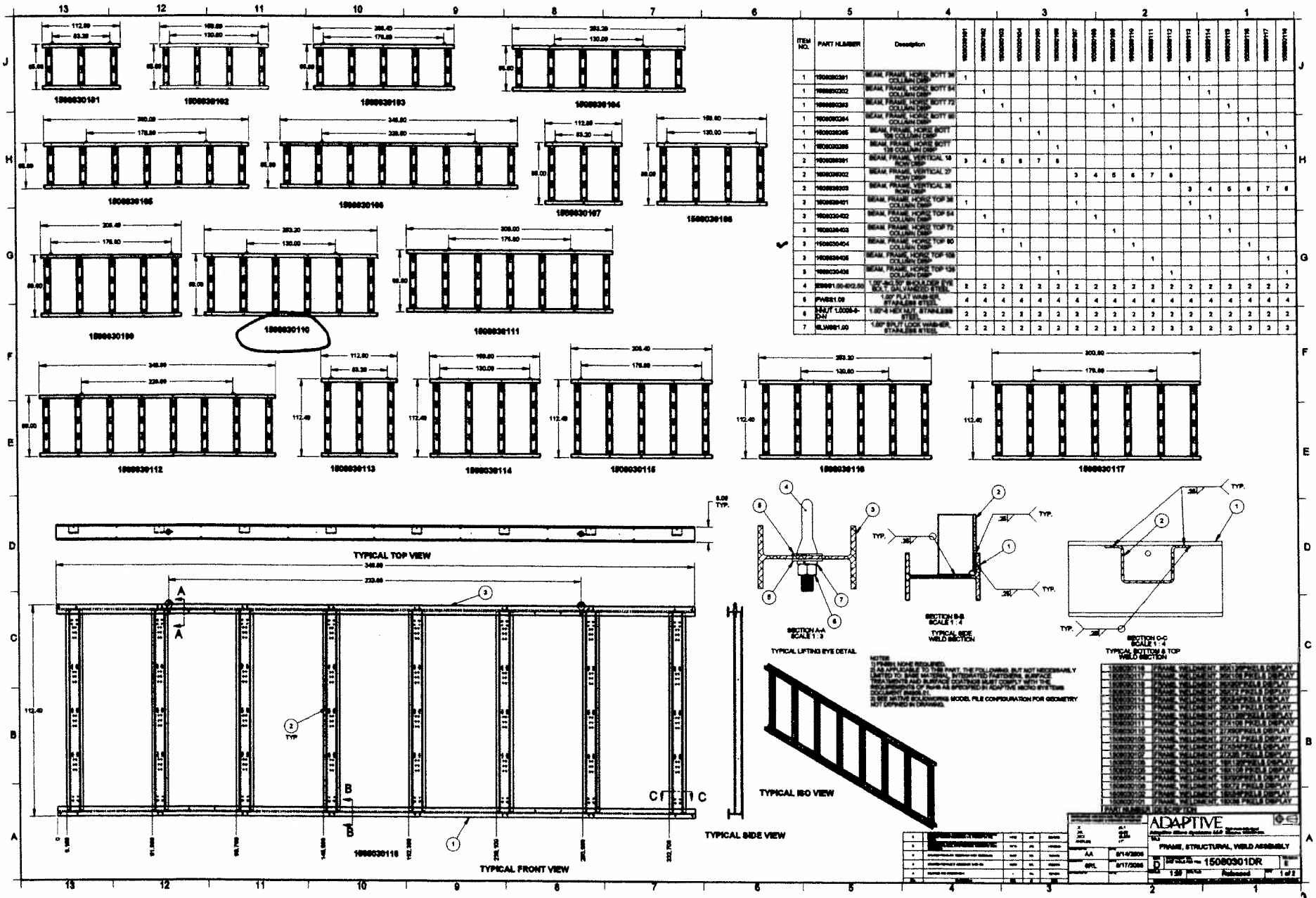
Review is for general compliance with contract documents. Sole responsibility for correctness of dimensions, details, quantities and safety during fabrication and erection shall remain with the contractor.

- ☒ No Exceptions Taken TRC 8/26/08
- ☐ Make Corrections Noted By _____
- ☐ Amend and Resubmit
- ☐ Rejected - See Remarks Date _____

STATE OF MAINE
NORMAND G. COTE, JR.
No. 5177
LICENSED PROFESSIONAL ENGINEER

AUG 11 2008

Rev.	Pages revised	Pages added	Pages deleted	by	date	Check	date	approved	date

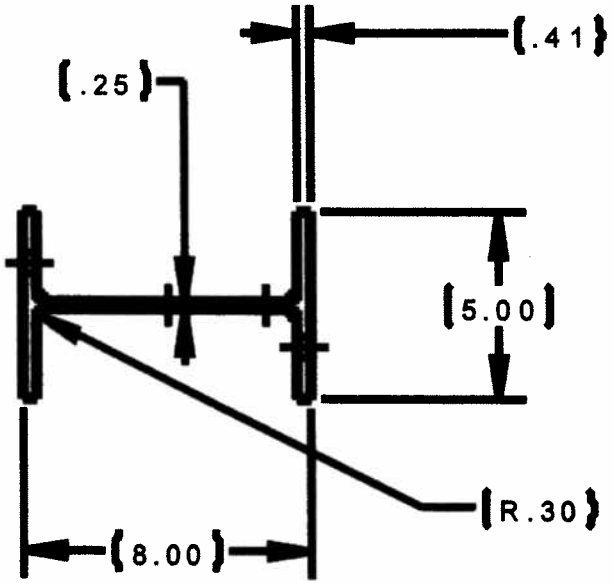


ITEM NO.	PART NUMBER	Description	1808030101	1808030102	1808030103	1808030104	1808030105	1808030106	1808030107	1808030108	1808030109	1808030110	1808030111	1808030112	1808030113	1808030114	1808030115	1808030116	1808030117
1	1808030301	BEAM, FRAME, HORIZ, BOTT 36" COLUMN DISP.	1						1					1					
1	1808030302	BEAM, FRAME, HORIZ, BOTT 54" COLUMN DISP.		1						1					1				
1	1808030303	BEAM, FRAME, HORIZ, BOTT 72" COLUMN DISP.			1						1					1			
1	1808030304	BEAM, FRAME, HORIZ, BOTT 90" COLUMN DISP.				1						1					1		
1	1808030305	BEAM, FRAME, HORIZ, BOTT 108" COLUMN DISP.					1						1					1	
1	1808030306	BEAM, FRAME, HORIZ, BOTT 126" COLUMN DISP.						1											1
2	1808030301	BEAM, FRAME, VERTICAL 18" ROW DISP.	3	4	5	6	7	8											
2	1808030302	BEAM, FRAME, VERTICAL 27" ROW DISP.							3	4	5	6	7	8					
2	1808030303	BEAM, FRAME, VERTICAL 36" ROW DISP.													3	4	5	6	7
3	1808030401	BEAM, FRAME, HORIZ TOP 36" COLUMN DISP.	1						1					1					
3	1808030402	BEAM, FRAME, HORIZ TOP 54" COLUMN DISP.		1						1					1				
3	1808030403	BEAM, FRAME, HORIZ TOP 72" COLUMN DISP.			1						1					1			
3	1808030404	BEAM, FRAME, HORIZ TOP 90" COLUMN DISP.				1						1					1		
3	1808030405	BEAM, FRAME, HORIZ TOP 108" COLUMN DISP.					1						1					1	
3	1808030406	BEAM, FRAME, HORIZ TOP 126" COLUMN DISP.						1					1					1	
4	899901.00-002.00	1.00" BLIV, SHOULDER EYE BOLT, 5,000 LB, STEEL	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
5	PWS1.00	1.00" FLAT WASHER, STAINLESS STEEL	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
6	2NUT 1.0000-8-2A	1.00-8 HEX NUT, STAINLESS STEEL	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
7	WLW01.00	1.00" SPLIT LOCK WASHER, STAINLESS STEEL	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

8700

6061-T6 $\rho = 0.41$

8 X 5 x 7.023 plt. $t_{w} = .25$



53" DIAMETER HOLES	11398	TMS	8/31/2007
08030401 THRU 04	10659	SRL	12/14/06
CIS 1508030401 THRU 04	10533	SRL	08/28/06
RON	-	SRL	08/17/06
	ECO	BY	DATE

1508030401	BEAM, FRAME, HORIZ TOP 36 COLUMN DISP
PART NUMBER	DESCRIPTION

DIMENSIONS ARE INCH AND TOLERANCES ARE AS FOLLOWS UNLESS OTHERWISE SPECIFIED

.X	±0.1
.XX	±0.02
.XXX	±0.008
ANGLES	±1°

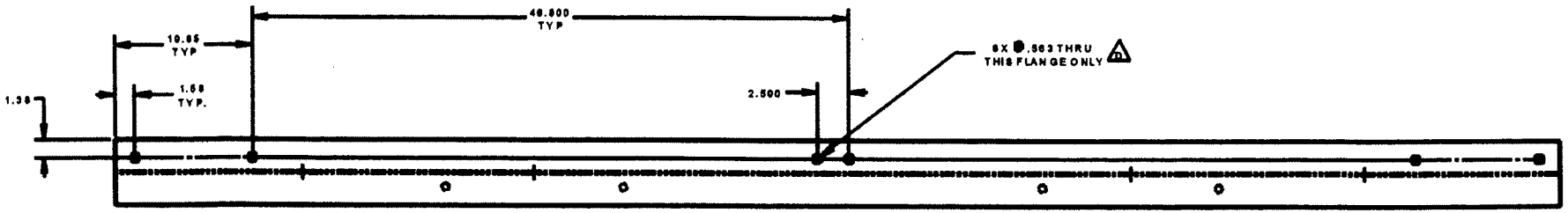
DESIGNED BY: AA	DATE: 8/14/2006
DRAWN BY: SRL	DATE: 8/17/2006
APPROVED BY:	DATE:

7840 North 86th Street
Milwaukee, WI 53224 USA

TITLE

BEAM, FRAME, HORIZ TOP,

SIZE: D	DOCUMENT NO. (SEE TABLE FOR P/N): 15080304DR		REVISION: D
SCALE: 1:6	STATUS: Released	SHT: 1 of 6	



TOP/BOT HEAD RAIL

NOTES:
1) MATERIAL: 6X 5 (7.823 LBS/FT) 6061-T6 ALUMINUM BEAM, ALUMINUM ASSOCIATION STANDARD.
2) MATERIAL THICKNESS: SEE NOTE
3) NO BURRS OR SHARP EDGES PERMITTED.
4) FINISH: DEGREASED MILL UNLESS OTHERWISE NOTED.
5) AS APPLICABLE TO THIS PART, THE FOLLOWING, BUT NOT NECESSARILY LIMITED TO: BASE MATERIAL, INTEGRATED FASTENERS, SURFACE TREATMENTS AND SURFACE COATINGS MUST COMPLY WITH THE REQUIREMENTS OF RoHS AS SPECIFIED IN ADAPTIVE MICRO SYSTEMS DOCUMENT SM 605.01.
6) SEE NATIVE SOLIDWORKS MODEL FILE CONFIGURATION FOR GEOMETRY NOT DEFINED IN DRAWING.