

July 3, 2002

HSA-10/CC54C

Mr. Rodney A. Boyd
Trinity Industries, Inc.
2525 Stemmons Freeway
Dallas, Texas 75207

Dear Mr. Boyd:

In his March 7 letter to Mr. Richard Powers of my staff, Mr. James Albritten requested formal Federal Highway Administration acceptance of several transition designs. These designs were developed for use at locations where your TRACC impact attenuator is connected to a concrete safety shape or to a w-beam or Thrie-beam median barrier, thus making it susceptible to wrong-way hits. He requested further that my reply be addressed to you.

Mr. Dwight A. Horne's November 13, 1998 acceptance of the TRACC attenuator inferred acceptance of some conceptual transition designs, but requested detailed drawings for our files. Mr. Albritten's letter included copies of the TRACC Design Manual and the TRACC Installation and Repair Manual. The former document included detailed transition drawings.

Following staff review of your proposed transitions, several modifications were recommended for the connection to the New Jersey concrete shape. The final design, as shown in the enclosed drawing dated 05/10/02, is considered acceptable for use on the National Highway System and replaces the drawing previously included in the TRACC Design Manual. The w-beam and Thrie-beam transition designs are acceptable as currently shown in the TRACC Design Manual. The reduced post spacings shown for the metal-beam median barriers are consistent with several bridge rail transition designs that have been successfully crash tested to NCHRP Report 350 criteria. In lieu of the 10-gauge w-beam sections shown in your transition drawings, nested 12-gauge w-beam could be used, just as it is in all crashworthy bridge rail transition designs.

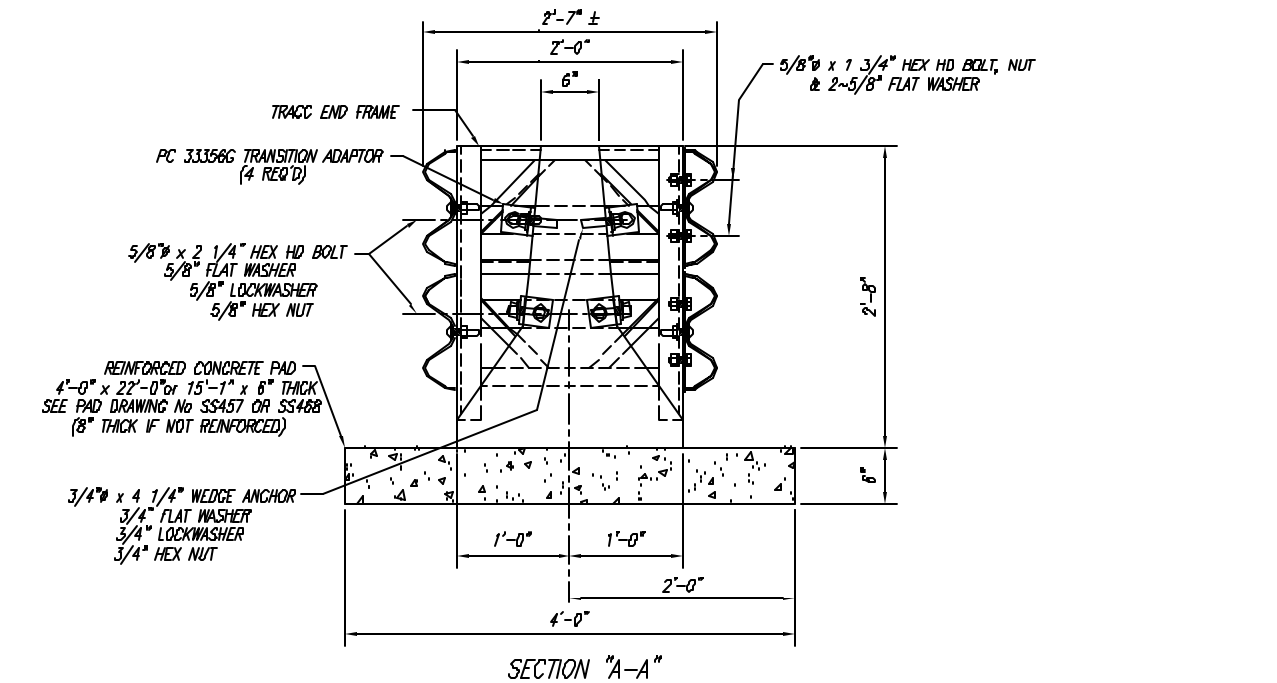
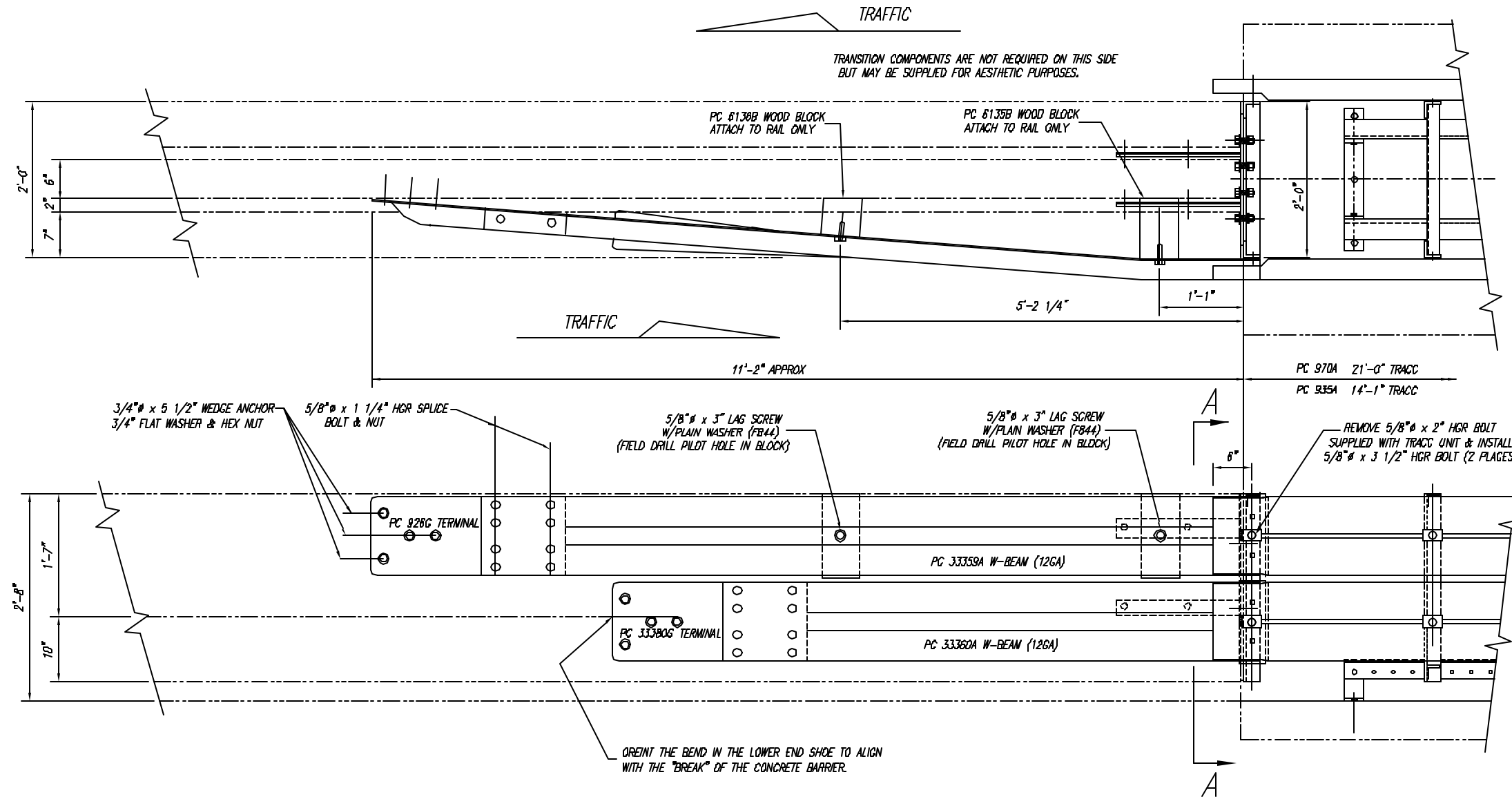
Sincerely yours,

(original signed by Harry W. Taylor)

for

Carol H. Jacoby, P.E.
Director, Office of Safety Design

Enclosure



TRACC TRANSITION BILL OF MATERIAL

PRODUCT CODE	QTY	DESCRIPTION
026G	1	10/END SHOE/EXTRA HOLE (UPPER)
6135B	1	TAPERED WD BLK 1'-1" (6 x 8 1/2)
6136B	1	TAPERED WD BLK 1'-1" (6 x 5 3/4)
33358C	4	TRANSITION ADAPTOR PLATE
33359A	1	12/10'0"/TRACC (UPPER GUARDRAIL)
33360A	1	12/6'10.5"/TRACC (LOWER GUARDRAIL)
33380G	1	10/END SHOE/EXTRA HOLE/BEND (LOWER)
HARDWARE		
3380G	16	5/8" x 1 1/4" HGR SPLICE BOLT
3435G	2	5/8" x 3 1/2" HGR POST BOLT
4412G	2	5/8" x 3" LAG SCREW
5306G	4	5/8" x 2 1/4" HEX HD BOLT (A325)
3381G	4	5/8" x 1 3/4" HEX HD BOLT (A325)
3300G	2	5/8" WASHER (F844)
3340G	16	5/8" HGR NUT
4372G	12	5/8" WASHER (F436)
3310G	4	5/8" LOCKWASHER
3361G	8	5/8" HEX NUT (A563 DH)
4688G	8	3/4" x 5 1/2" WEDGE ANCHOR
4709G	8	3/4" x 4 1/4" WEDGE ANCHOR
4689G	8	3/4" LOCKWASHER
3701G	16	3/4" WASHER
3710G	16	3/4" HEX NUT

REV.	CHKD	BY	DATE	REMARKS
5	LH		6-18-02	CHANGED BLOCK POSITION ON TOP PANEL; ADDED LOWER END SHOE NOTE
4	BT		8-2-00	DELETED PC4717, PC33361 & 62, ADDED PC926 & PC33380, CHG QTY HARDWARE
3	BT		3-29-00	DELETED PC4421, ADDED PC4412
2	BT		11-5-99	DELETED PC6139, 6140, 5307 & 4441, ADDED PC6135, 6136 & 4412
1	BT		6-30-99	DELETED PC33357G & 33358L, ADDED 2 MORE PC33356, CHGD SECT A-A & HDWR

TRACC

TRACC TRANSITION TO
CONCRETE SAFETY SHAPE BARRIER
PLAN, ELEVATION & SECTIONS

DRAWN	BT
CHECKED	
APPROVED	
DATE	05/10/02
ENG. FILE #	SS461-01E
SHT. NO.	EI OF 1
DRAWING NO.	SS 461
REV.	5

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TRINITY INDUSTRIES, INC.
HIGHWAY SAFETY PRODUCTS
2525 STEMMONS FREEWAY, DALLAS, TX 75207