

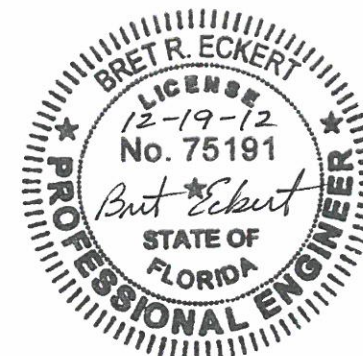
**PRODUCT GENERAL NOTES
TRACC 05 SYSTEM
S544-0034**



1. The energy absorbing system represented on these Qualified Products List (QPL) drawings is a proprietary design by Trinity Highway Products, LLC., and marketed under the name TRACC[®], SHORTRACC[®], & WIDETRACC[®].
2. The TRACC[®] is a non-gating, redirective crash cushion which is suited for shielding hazards. The TRACC[®] is used for permanent installations. The beginning length of need shall be at the point of intersection between the face of the crash cushion and the departure line.
3. The TRACC[®] has been evaluated to NCHRP-350 crash test criteria and is suitable for Test Level 2 and Test Level 3 crash cushion applications.
4. The TRACC[®] shall be assembled and installed in accordance with the manufacturer's detailed drawings, procedures, specifications, product manual, or installation guide. Information and copies of the above manual are available on the Qualified Product List (QPL).
5. The TRACC[®] is available in 24", & 30" nominal widths. The WideTRACC[®] system is available in 31", 37", 39", 52.5", & 58" nominal widths. The system width will be called out in the plans, permit or other contract document for each location.
6. Metallic compounds shall meet the galvanizing requirements for guardrail, Section 967 of the FDOT Specifications .
7. A yellow Type 1 Object Marker shall be centered 3' in front of the nose of the TRACC[®]. Mounting hardware shall be in conformance with Section 993 of the FDOT Specifications. The cost of the Object Marker shall be included in the cost of the TRACC[®]. As an option, the contractor may install reflective sheeting on the nose of the crash cushion. The sheeting to be used must be solid yellow, Type III or better and must be a product listed on the Department's Qualified Products List (QPL). The sheeting to be applied to the nose of the crash cushion shall be a minimum of 360 square inches with a minimum height of 15 inches.
8. Quantity for payment is based on each independent location as called for in the plans or as directed by the Engineer. The cost of foundations, subgrade preparation, and other appurtenant construction will be included in the cost for TRACC[®].
9. In compliance with the AASHTO 2011 Roadside Design Guide, remove all curbs and islands to ensure proper impact performance.
10. Supply adequate transition from the TRACC[®] System to the object being shielded.
11. Units of measure are in English units.

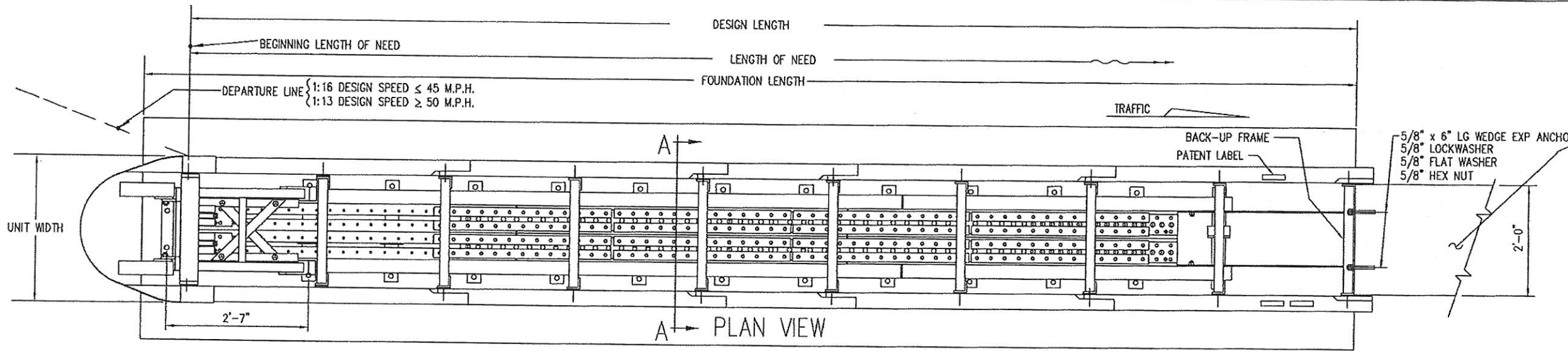
TABLE OF CONTENTS

SHEET #	TITLE
1	COVER SHEET
2	TRACC 05 INSTALLATION (CONCRETE BARRIER WALL)
3	TRACC 05 WITH TRANSITION INSTALLATION (GUARDRAIL)
4	SHORTRACC INSTALLATION (CONCRETE BARRIER WALL)
5	SHORTRACC WITH TRANSITION INSTALLATION (GUARDRAIL)
6	58" WIDETRACC DOUBLE FLARE INSTALLATION
7	TRACC 05 22'-0" CONCRETE FOUNDATION
8	SHORTRACC 15'-0" CONCRETE FOUNDATION
9	WIDETRACC 22'-0" CONCRETE FOUNDATION
10	TRACC 05 TRANS. TO THRIE BEAM MEDIAN BARRIER(DRIVEN POSTS)
11	TRACC 05 TRANS. TO VERTICAL CONCRETE WALL, PARAPET
12	TRACC 05 TRANS. TO CONCRETE BARRIER (Fla. Index 410)
13	WIDETRACC DOUBLE FLARE WING EXTENSION

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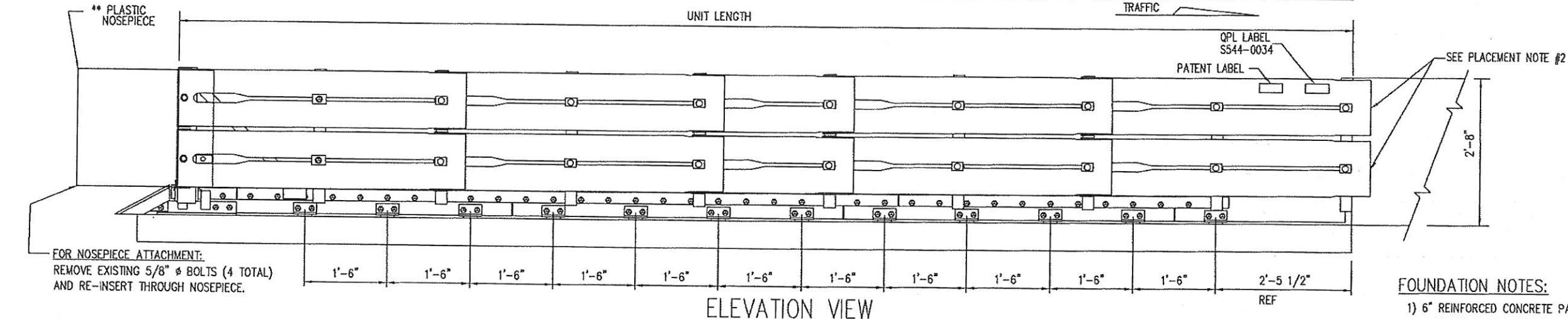
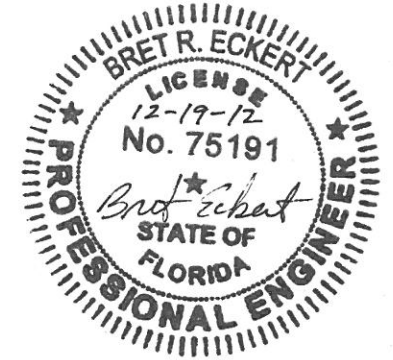


REV.	CHK'D	BY	DATE	REMARKS
 TRACC 05				
TRACC 05 QPL S544-0034				DRAWN LH CHECKED BT SCALE N.T.S. DATE 12/17/12 ENG. FILE # S544-0034(P) SS # S544-0034
 TRINITY HIGHWAY PRODUCTS LLC. 2625 STEMMONS FREEWAY DALLAS, TX 75207				SHEET NO. 1 of 13 REV. 0



ATTACHMENT SHOWN IS TO SHAPES WITH RECTANGULAR CROSS SECTIONS SUCH AS: PIERS, PARAPETS AND MODIFIED CONCRETE BARRIER. TRAFFIC FLOW IS UNIDIRECTIONAL. ATTACHMENTS AND TRANSITIONS TO OTHER SHAPES, BARRIERS, RAILINGS AND BIDIRECTIONAL TRAFFIC FLOWS ARE AVAILABLE.

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FOUNDATION NOTES:

- 1) 6" REINFORCED CONCRETE PAD IS SHOWN; OTHER OPTION: 8" THICK MINIMUM UNREINFORCED CONCRETE. The contractor is to furnish a certification that concrete installed meets the specified strength requirement of 4000 PSI.
- 2) The cross slope of the TRACC system foundation pad should be 1V:10H or flatter and should be the same or flatter than shoulder or surrounding pavement cross slope. The longitudinal slope should be the same slope (2% plus or minus) over the length of the pad as the roadway in the direction of the traffic. The pad slope in either or both directions can be level if the site conditions warrant it.

PLACEMENT NOTE:

- 1) TRACC placement recommendations shall be in accordance with AASHTO "Roadside Design Guide", 2011 edition, section 8.4.6 on page 8-51.
- 2) TRACC placement shall be situated so the rear fender panels have room to slide past object being protected, upon impact; (60" minimum)

EACH TRACC UNIT SHIPS 100% ASSEMBLED (PLASTIC NOSE INSTALLED AFTER PLACEMENT)

TRACC BILL OF MATERIAL		
PART NUMBER	QTY	DESCRIPTION
25980A	1	TRACC UNIT (FULLY ASSEMBLED)
3310G	4	5/8" LOCKWASHER
4451G	4	5/8" x 6" WEDGE EXP ANCHOR
6668B	4	REFLECTIVE TAPE
6531B	1	PLASTIC NOSEPIECE
** ANCHOR HARDWARE (FULL CONCRETE BASE)		
5225G	26	5/8" x 7 1/2" HAS ROD
3310G	26	5/8" LOCKWASHER
3361G	26	5/8" HEX NUT
3300G	26	5/8" FLAT WASHER
★ 5448B	4	ADHESIVE HIT HY 150(CARTRIDGE)
** ANCHOR HARDWARE (ASPHALT BASE)		
6380G	26	5/8" x 18" ALL THD ROD
3310G	26	5/8" LOCKWASHER
3361G	26	5/8" HEX NUT
3300G	26	5/8" FLAT WASHER
★ 5448B	8	ADHESIVE HIT HY 150(CARTRIDGE)

** SEE PRODUCT MANUAL

★ EACH CARTRIDGE INCLUDES 1 EACH: MIXER HY 150 CARTRIDGE (NOZZLE) FILLER HIT HY 150 (FILLER TUBE)

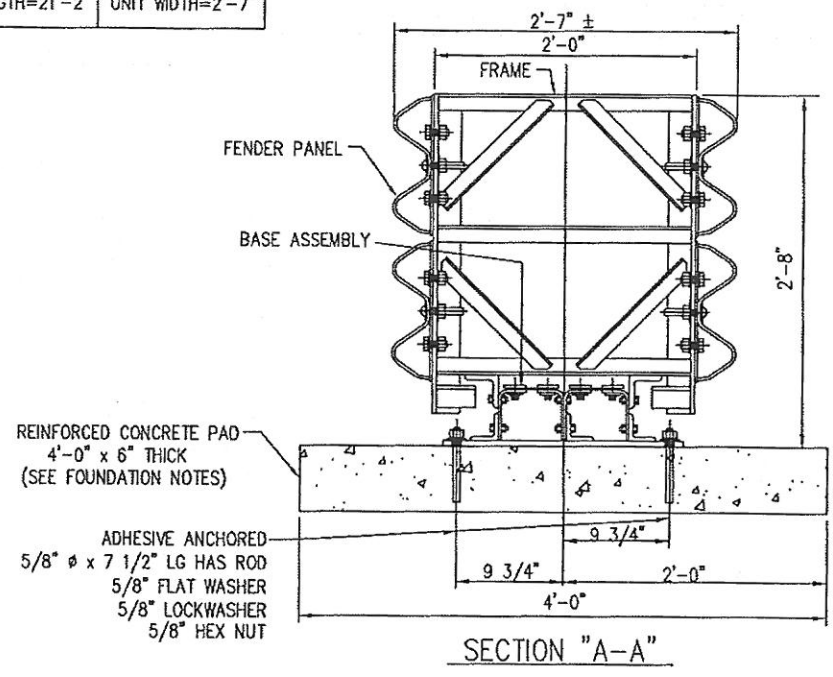
TRACC 05						
24" WIDE PT#	DESIGN SPEED	TESTED TO	UNIT LENGTH=21'-3"	FOUNDATION LENGTH=22'-0"	DESIGN LENGTH=21'-2"	UNIT WIDTH=2'-7"
25980A	≥ 50 M.P.H.	TL-3				

GENERAL NOTES:

1. For High Speed Facilities with a Design Speed ≥ 50 MPH, Use a TL-3 System.
2. TRACC is a NCHRP Test Level 3 unit. FHWA acknowledges that highway safety hardware tested to NCHRP Report 350 TL-3 at 62 MPH is eligible for FHWA matching funds when installed on highways with posted speeds greater than 62 MPH.

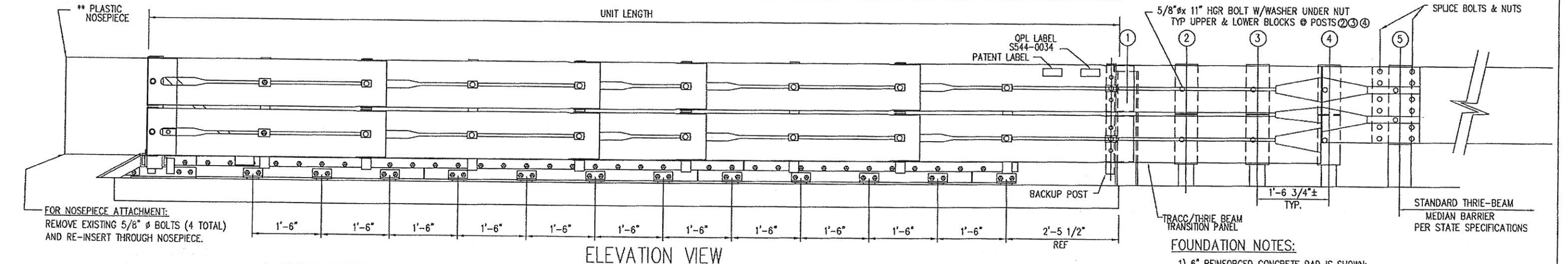
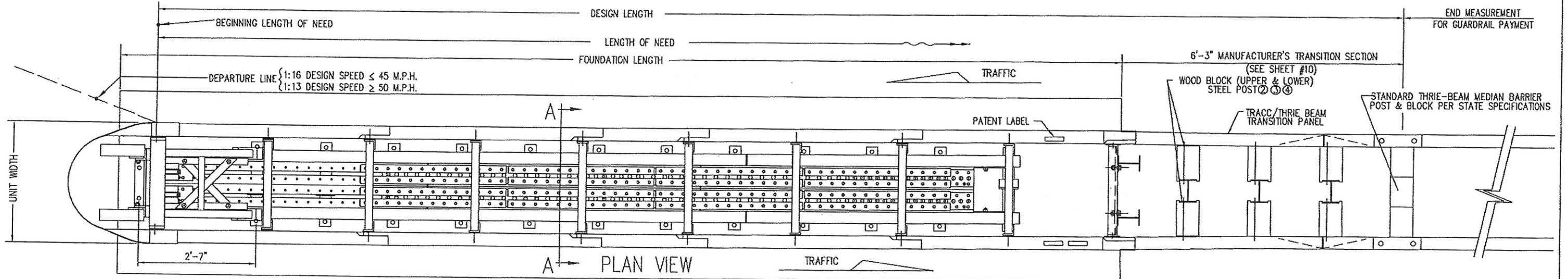
OPTIONAL TRACC ANCHOR ITEMS

PART NUMBER	DESCRIPTION
5449B	ADHESIVE DISPENSER
5450B	MIXER HIT HY150 (NOZZLE)
5208B	FILLER HIT HY150 (FILLER TUBE)
5209B	BIT TE-C+ 11/16-18 (11/16" BIT)



TRACC 05 INSTALLATION (CONCRETE BARRIER WALL)

REV.	CHK'D	BY	DATE	REMARKS
TRACC 05				
TRACC 05 QPL S544-0034 CRASH-CUSHION ATTENUATING TERMINAL PLAN, ELEVATION & SECTIONS (UNIDIRECTIONAL, DIRECT ATTACHMENT) TL-3				DRAWN LH CHECKED BT SCALE N.T.S. DATE 12/17/12 ENG. FILE # SS1003FL(P) S.S. # SS-1003-1 SHEET NO. 2 of 13
TRINITY HIGHWAY PRODUCTS LLC. 2525 STEMMONS FREEWAY, DALLAS, TX 75207				REV. 0



TRACC 05						
24" WIDE PT#	DESIGN SPEED	TESTED TO	UNIT LENGTH=21'-3"	FOUNDATION LENGTH=22'-0"	DESIGN LENGTH=27'-5"	UNIT WIDTH=2'-7"
25980A	≥ 50 M.P.H.	TL-3				

- FOUNDATION NOTES:**
- 6" REINFORCED CONCRETE PAD IS SHOWN;
OTHER OPTION: 8" THICK MINIMUM UNREINFORCED CONCRETE
The contractor is to furnish a certification that concrete installed meets the specified strength requirement of 4000 PSI.
 - The cross slope of the TRACC system foundation pad should be 1V:10H or flatter and should be the same or flatter than shoulder or surrounding pavement cross slope. The longitudinal slope should be the same slope (2% plus or minus) over the length of the pad as the roadway in the direction of the traffic. The pad slope in either or both directions can be level if the site conditions warrant it.

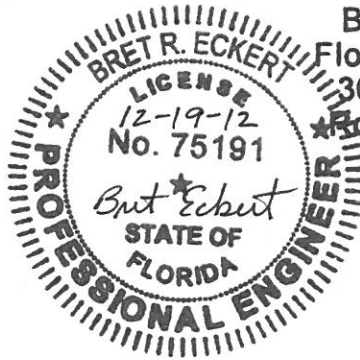
- PLACEMENT NOTE:**
- TRACC placement recommendations shall be in accordance with AASHTO "Roadside Design Guide", 2011 edition, section 8.4.6 on page 8-51.
 - TRACC placement shall be situated so the rear fender panels have room to slide past object being protected, upon impact; (60" minimum)

EACH TRACC UNIT SHIPS 100 % ASSEMBLED (PLASTIC NOSE INSTALLED AFTER PLACEMENT)

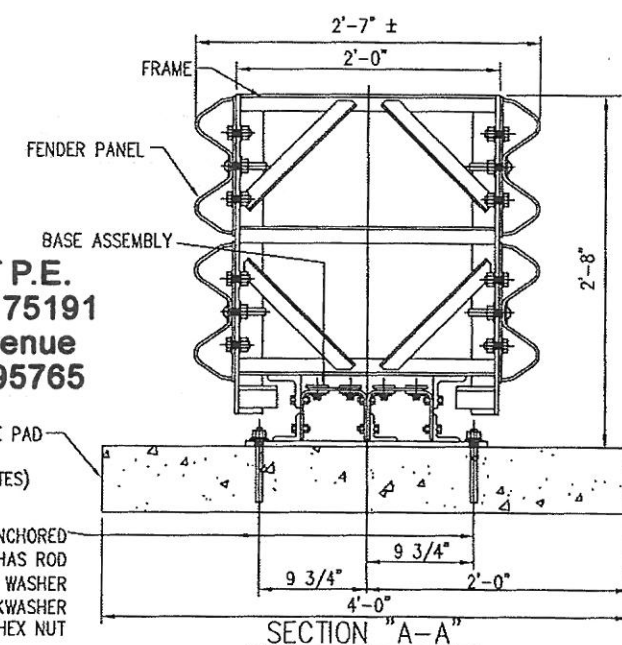
TRACC BILL OF MATERIAL		
PART NUMBER	QTY	DESCRIPTION
25980A	1	TRACC UNIT (FULLY ASSEMBLED)
3310G	4	5/8" LOCKWASHER
4451G	4	5/8" x 6" WEDGE EXP ANCHOR
6668B	4	REFLECTIVE TAPE
6531B	1	PLASTIC NOSEPIECE
SS454	1	TRANSITION TO THRIE BEAM UNIT
** ANCHOR HARDWARE (FULL CONCRETE BASE)		
5225G	26	5/8" x 7 1/2" HAS ROD
3310G	26	5/8" LOCKWASHER
3361G	26	5/8" HEX NUT
3300G	26	5/8" FLAT WASHER
★ 5448B	4	ADHESIVE HIT HY 150(CARTRIDGE)
** ANCHOR HARDWARE (ASPHALT BASE)		
6380G	26	5/8" x 18" ALL THD ROD
3310G	26	5/8" LOCKWASHER
3361G	26	5/8" HEX NUT
3300G	26	5/8" FLAT WASHER
★ 5448B	8	ADHESIVE HIT HY 150(CARTRIDGE)

- GENERAL NOTES:**
- For High Speed Facilities with a Design Speed ≥ 50 MPH, Use a TL-3 System.
 - TRACC is a NCHRP Test Level 3 unit. FHWA acknowledges that highway safety hardware tested to NCHRP Report 350 TL-3 at 62 MPH is eligible for FHWA matching funds when installed on highways with posted speeds greater than 62 MPH.

OPTIONAL TRACC ANCHOR ITEMS	
PART NUMBER	DESCRIPTION
5449B	ADHESIVE DISPENSER
5450B	MIXER HIT HY150 (NOZZLE)
5208B	FILLER HIT HY150 (FILLER TUBE)
5209B	BIT TE-C+ 11/16-18 (11/16" Ø BIT)



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** SEE PRODUCT MANUAL
★ EACH CARTRIDGE INCLUDES 1 EACH: MIXER HY 150 CARTRIDGE (NOZZLE) FILLER HIT HY 150 (FILLER TUBE)

TRACC 05 W/TRANSITION INSTALLATION(GUARDRAIL)

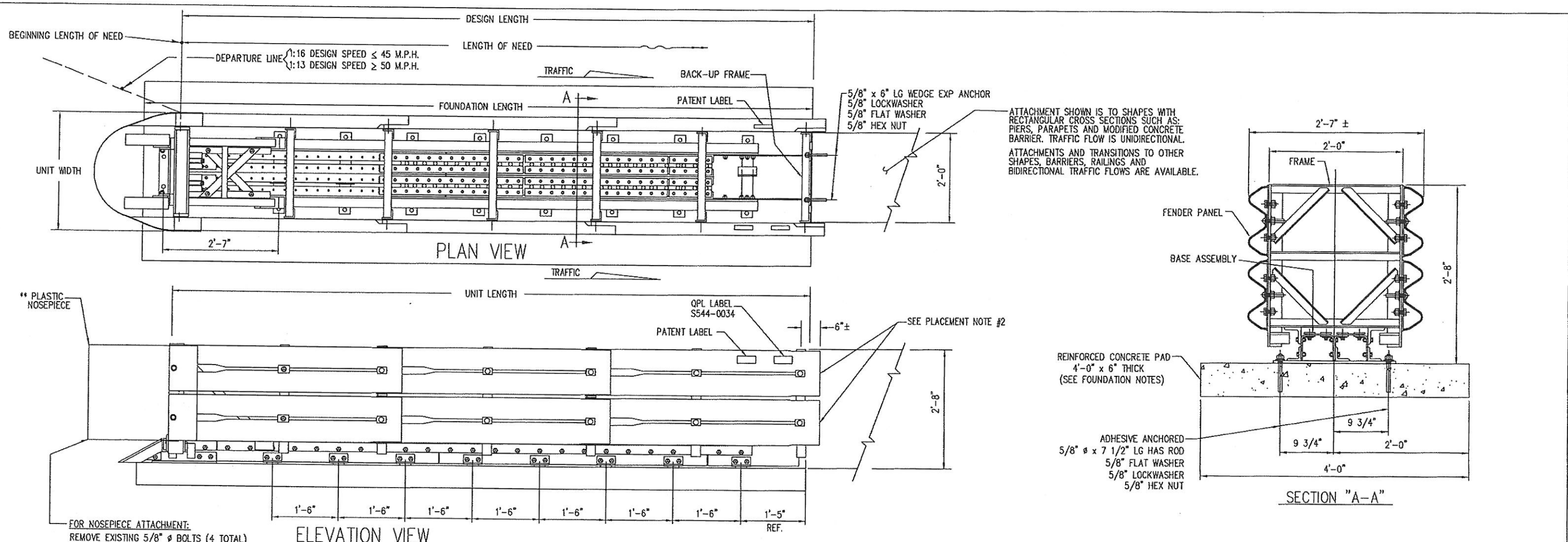
REV.	CHK'D	BY	DATE	REMARKS

TRACC 05

TRACC 05 QPL S544-0034
TL-3 TRANSITION TO THRIE BEAM
CRASH-CUSHION ATTENUATING TERMINAL
PLAN, ELEVATION & SECTIONS
(GUARDRAIL ATTACHMENT)

TRINITY HIGHWAY PRODUCTS LLC.
2525 STEMMONS FREEWAY,
DALLAS, TX 75207

DRAWN	LH
CHECKED	BT
SCALE	N.T.S.
DATE	12/17/12
ENG. FILE #	SS1003FL(P)
S.S. #	SS-1003-2
SHEET NO.	3 of 13
REV.	0



ATTACHMENT SHOWN IS TO SHAPES WITH RECTANGULAR CROSS SECTIONS SUCH AS: PIERS, PARAPETS AND MODIFIED CONCRETE BARRIER. TRAFFIC FLOW IS UNIDIRECTIONAL. ATTACHMENTS AND TRANSITIONS TO OTHER SHAPES, BARRIERS, RAILINGS AND BIDIRECTIONAL TRAFFIC FLOWS ARE AVAILABLE.

REINFORCED CONCRETE PAD
4'-0" x 6" THICK
(SEE FOUNDATION NOTES)
ADHESIVE ANCHORED
5/8" ϕ x 7 1/2" LG HAS ROD
5/8" FLAT WASHER
5/8" LOCKWASHER
5/8" HEX NUT

FOR NOSEPIECE ATTACHMENT:
REMOVE EXISTING 5/8" ϕ BOLTS (4 TOTAL)
AND RE-INSERT THROUGH NOSEPIECE.

ELEVATION VIEW

SECTION "A-A"

TRACC BILL OF MATERIAL		
PART NUMBER	QTY	DESCRIPTION
25997A	1	TRACC UNIT (FULLY ASSEMBLED)
3310G	4	5/8" LOCKWASHER
4451G	4	5/8" x 6" WEDGE EXP ANCHOR
6668B	4	REFLECTIVE TAPE
6531B	1	PLASTIC NOSEPIECE
** ANCHOR HARDWARE (FULL CONCRETE BASE)		
5225G	18	5/8" x 7 1/2" HAS ROD
3310G	18	5/8" LOCKWASHER
3361G	18	5/8" HEX NUT
3300G	18	5/8" FLAT WASHER
★ 5448B	3	ADHESIVE HIT HY 150(CARTRIDGE)
** ANCHOR HARDWARE (ASPHALT BASE)		
6380G	18	5/8" x 18" ALL THD ROD
3310G	18	5/8" LOCKWASHER
3361G	18	5/8" HEX NUT
3300G	18	5/8" FLAT WASHER
★ 5448B	6	ADHESIVE HIT HY 150(CARTRIDGE)

EACH TRACC UNIT SHIPS 100% ASSEMBLED
(PLASTIC NOSE INSTALLED AFTER PLACEMENT)

SHORTRACC 05						
24" WIDE PT#	DESIGN SPEED	TESTED TO	UNIT LENGTH=14'-3"	FOUNDATION LENGTH=15'-0"	DESIGN LENGTH=14'-2"	UNIT WIDTH=2'-7"
25997A	≤ 45 M.P.H.	TL-2				

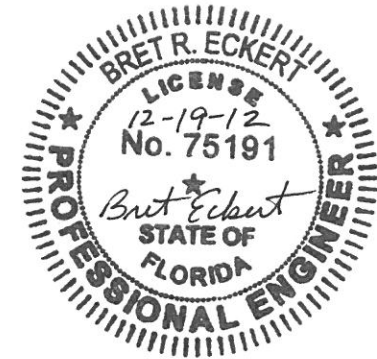
NOTE:
For Low Speed Facilities with a Design Speed ≤ 45 MPH, Use a TL-2 System.

OPTIONAL TRACC ANCHOR ITEMS	
PART NUMBER	DESCRIPTION
5449B	ADHESIVE DISPENSER
5450B	MIXER HIT HY150 (NOZZLE)
5208B	FILLER HIT HY150 (FILLER TUBE)
5209B	BIT TE-C+ 11/16-18 (11/16" ϕ BIT)

** SEE PRODUCT MANUAL
★ EACH CARTRIDGE INCLUDES 1 EACH: MIXER HY 150 CARTRIDGE (NOZZLE)
FILLER HIT HY 150 (FILLER TUBE)

- FOUNDATION NOTES:**
- 6" REINFORCED CONCRETE PAD IS SHOWN:
OTHER OPTION IS: 8" THICK MINIMUM UNREINFORCED CONCRETE
The contractor is to furnish a certification that concrete installed meets the specified strength requirement of 4000 PSI.
 - The cross slope of the TRACC system foundation pad should be 1V:10H or flatter and should be the same or flatter than shoulder or surrounding pavement cross slope.
The longitudinal slope should be the same slope (2% plus or minus) over the length of the pad as the roadway in the direction of the traffic. The pad slope in either or both directions can be level if the site conditions warrant it.
- PLACEMENT NOTE:**
- TRACC placement recommendations shall be in accordance with AASHTO "Roadside Design Guide", 2011 edition, section 8.4.6 on page 8-51.
 - TRACC placement shall be situated so the rear fender panels have room to slide past object being protected, upon impact; (60" minimum)

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SHORTRACC INSTALLATION(CONCRETE BARRIER WALL)

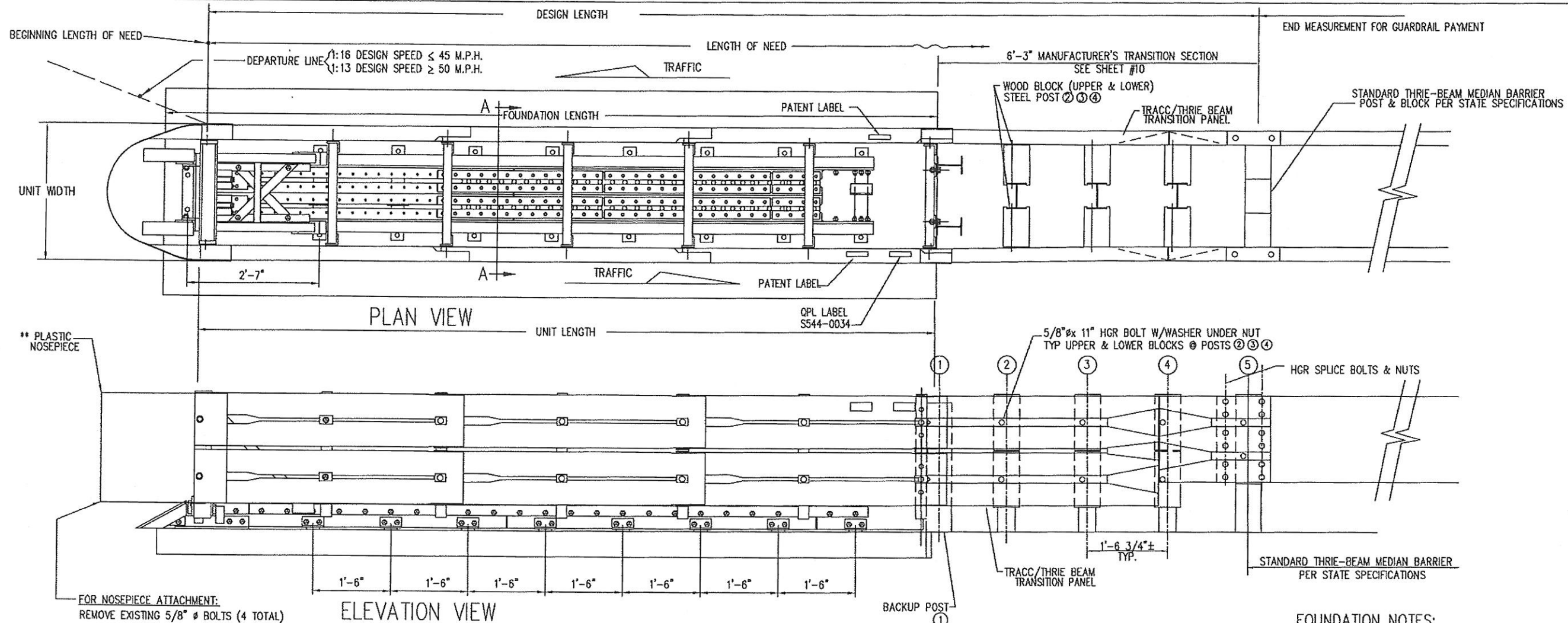
REV.	CHK'D BY	DATE	REMARKS

TRACC 05

TRACC 05 QPL S544-0034
SHORTRACC TL-2
CRASH-CUSHION ATTENUATING TERMINAL
PLAN, ELEVATION & SECTIONS
(UNIDIRECTIONAL, DIRECT ATTACHMENT)

TRINITY HIGHWAY PRODUCTS LLC.
2525 STEMMONS FREEWAY,
DALLAS, TX 75207

DRAWN	LH
CHECKED	BT
SCALE	N.T.S.
DATE	12/17/12
ENG. FILE #	SS1006FL(P)
S.S. #	SS-1006-1
SHEET NO.	4 of 13
REV.	0



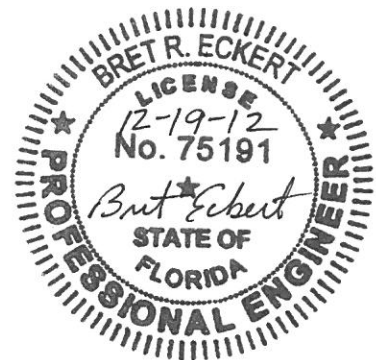
FOR NOSEPIECE ATTACHMENT:
REMOVE EXISTING 5/8" Ø BOLTS (4 TOTAL)
AND RE-INSERT THROUGH NOSEPIECE.

EACH TRACC UNIT SHIPS 100% ASSEMBLED
(PLASTIC NOSE INSTALLED AFTER PLACEMENT)

SHORTRACC 05						
24" WIDE PT#	DESIGN SPEED	TESTED TO	UNIT LENGTH=14'-3"	FOUNDATION LENGTH=15'-0"	DESIGN LENGTH=20'-5"	UNIT WIDTH=2'-7"
25997A	≤ 45 M.P.H.	TL-2				

NOTE:
For Low Speed Facilities with a Design Speed ≤ 45 MPH, Use a TL-2 System.

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OPTIONAL TRACC ANCHOR ITEMS	
PART NUMBER	DESCRIPTION
5449B	ADHESIVE DISPENSER
5450B	MIXER HIT HY150 (NOZZLE)
5208B	FILLER HIT HY150 (FILLER TUBE)
5209B	BIT TE-C+ 11/16-18 (11/16" Ø BIT)

TRACC BILL OF MATERIAL		
PART NUMBER	QTY	DESCRIPTION
25997A	1	TRACC UNIT (FULLY ASSEMBLED)
3310G	4	5/8" LOCKWASHER
4451G	4	5/8" x 6" WEDGE EXP ANCHOR
6668B	4	REFLECTIVE TAPE
6531B	1	PLASTIC NOSEPIECE
SS454	1	TRANSITION TO THRIE BEAM UNIT
** ANCHOR HARDWARE (FULL CONCRETE BASE)		
5225G	18	5/8" x 7 1/2" HAS ROD
3310G	18	5/8" LOCKWASHER
3361G	18	5/8" HEX NUT
3300G	18	5/8" FLAT WASHER
★ 5448B	3	ADHESIVE HIT HY 150(CARTRIDGE)
** ANCHOR HARDWARE (ASPHALT BASE)		
6380G	18	5/8" x 18" ALL THD ROD
3310G	18	5/8" LOCKWASHER
3361G	18	5/8" HEX NUT
3300G	18	5/8" FLAT WASHER
★ 5448B	6	ADHESIVE HIT HY 150(CARTRIDGE)

** SEE PRODUCT MANUAL

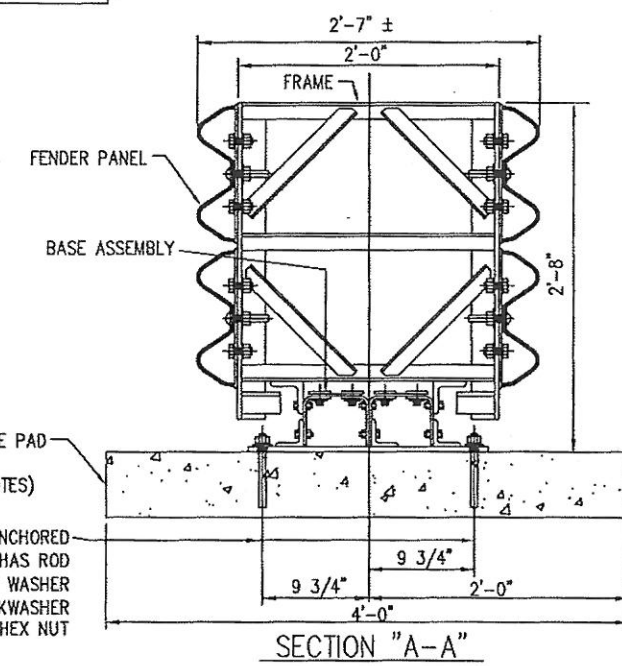
★ EACH CARTRIDGE INCLUDES 1 EACH: MIXER HY 150 CARTRIDGE (NOZZLE)
FILLER HIT HY 150 (FILLER TUBE)


FOUNDATION NOTES:

- 6" REINFORCED CONCRETE PAD IS SHOWN:
OTHER OPTION IS: 8" THICK MINIMUM UNREINFORCED CONCRETE
The contractor is to furnish a certification that concrete installed meets the specified strength requirement of 4000 PSI.
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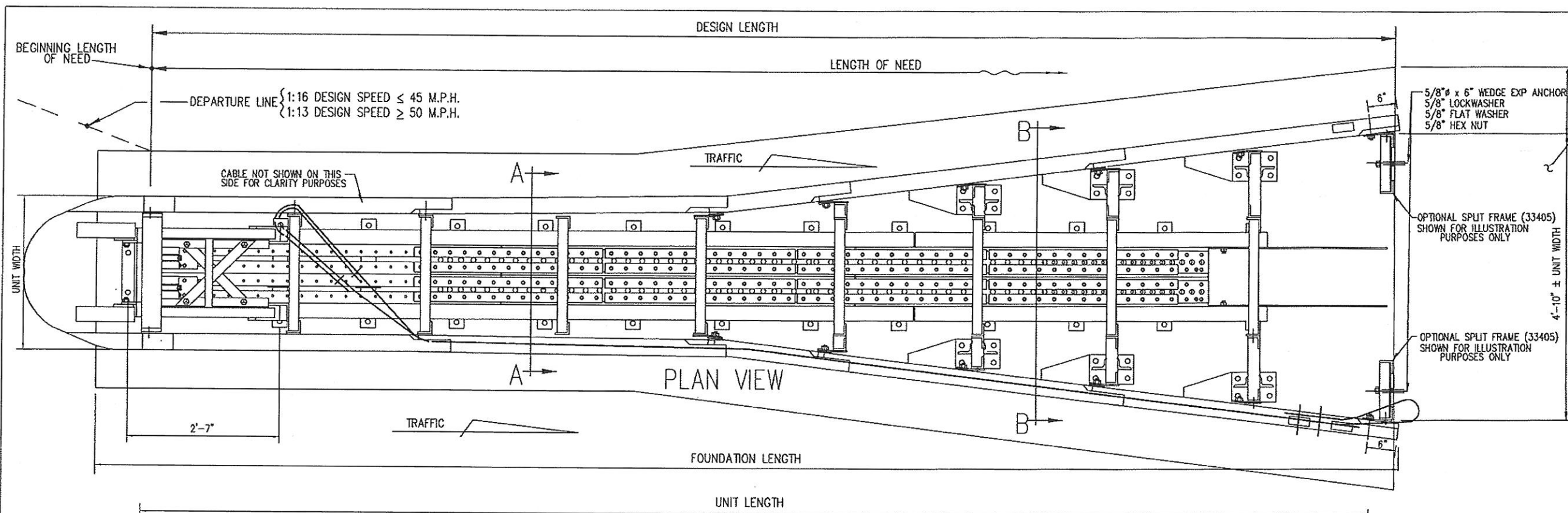
PLACEMENT NOTE:

- TRACC placement recommendations shall be in accordance with AASHTO "Roadside Design Guide", 2011 edition, section 8.4.6 on page 8-51.
- TRACC placement shall be situated so the rear fender panels have room to slide past object being protected, upon impact; (60" minimum)



REV.	CHK'D	BY	DATE	REMARKS
TRACC 05				
TRACC 05 QPL S544-0034				DRAWN LH
TL-2 SHORTRACC TRANSITION TO THRIE BEAM				CHECKED BT
CRASH-CUSHION ATTENUATING TERMINAL				SCALE N.T.S.
PLAN, ELEVATION & SECTIONS				DATE 12/17/12
(GUARDRAIL ATTACHMENT)				ENG. FILE # SS1006FL(P)
 TRINITY HIGHWAY PRODUCTS LLC. 2525 STEMMONS FREEWAY, DALLAS, TX 75207				SHEET NO. SS-1006-2
				5 of 13
				REV. 0

SHORTRACC W/TRANSITION INSTALLATION(GUARDRAIL)



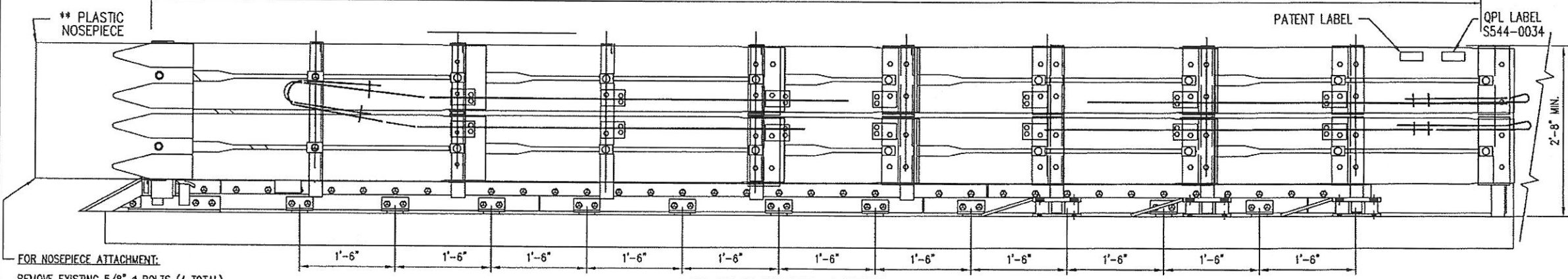
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OTHER UNIT WIDTHS AVAILABLE

39" DOUBLE FLARE	31" SINGLE FLARE
52 1/2" DOUBLE FLARE	37" SINGLE FLARE



- FOUNDATION NOTES:**
- 6" REINFORCED CONCRETE PAD IS SHOWN. OTHER OPTION IS: 8" THICK MINIMUM UNREINFORCED CONCRETE. The contractor is to furnish a certification that concrete installed meets the specified strength requirement of 4000 PSI.
 - The cross slope of the TRACC system foundation pad should be 1V:10H or flatter and should be the same or flatter than shoulder or surrounding pavement cross slope. The longitudinal slope should be the same slope (2% plus or minus) over the length of the pad as the roadway in the direction of the traffic. The pad slope in either or both directions can be level if the site conditions warrant it.

FOR NOSEPIECE ATTACHMENT:
REMOVE EXISTING 5/8" Ø BOLTS (4 TOTAL)
AND RE-INSERT THROUGH NOSEPIECE.

TRACC 05

58" WIDE PT#	DESIGN SPEED	TESTED TO	UNIT LENGTH=21'-0"	FOUNDATION LENGTH=22'-0"	DESIGN LENGTH=20'-11"	UNIT WIDTH=2'-7"
25939A	≥ 50 M.P.H.	TL-3				

NOTE: For High Speed Facilities with a Design Speed > 50 MPH, Use a TL-3 System.

WIDE TRACC BILL OF MATERIAL

PRODUCT CODE	QTY	DESCRIPTION
25939A	1	58" WIDE TRACC UNIT ASS'LY
66688	4	REFLECTIVE TAPE
6531B	1	PLASTIC NOSEPIECE

EACH TRACC UNIT SHIPS 100% ASSEMBLED (PLASTIC NOSE INSTALLED AFTER PLACEMENT)
★ EACH CARTRIDGE INCLUDES 1 EACH: MIXER HY 150 CARTRIDGE (NOZZLE) : FILLER HIT HY 150 (FILLER TUBE)

** ANCHOR HARDWARE (CONCRETE BASE)

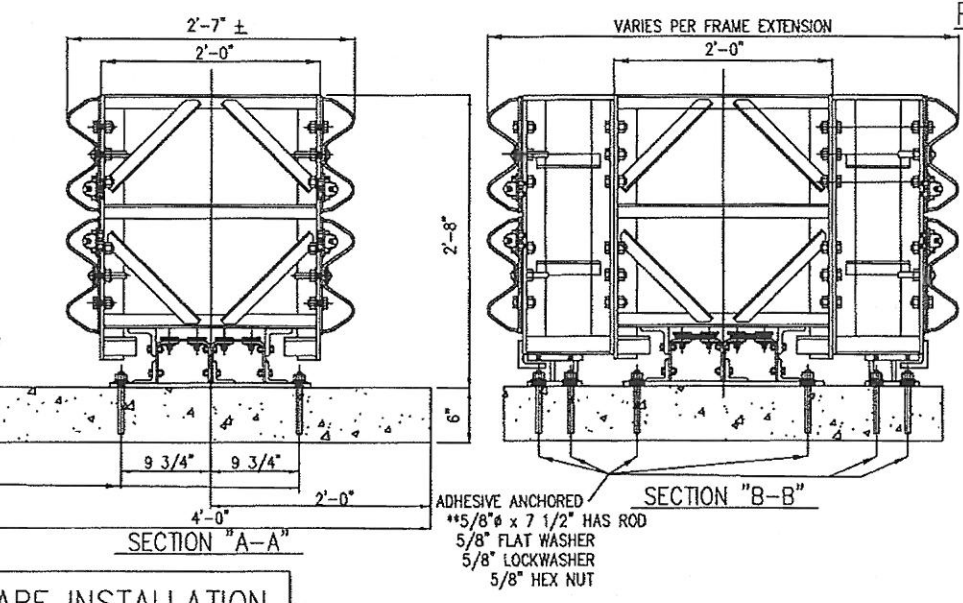
5225B	50	5/8" Ø x 7 1/2" HAS ROD
3310G	50	5/8" LOCKWASHER
3361G	50	5/8" HEX NUT
3300G	50	5/8" FLAT WASHER
★ 5448B	7	ADHESIVE HIT HY150(CARTRIDGE)

** ANCHOR HARDWARE (ASPHALT BASE)

6380G	50	5/8" Ø x 18" ALL THD ROD
3310G	50	5/8" LOCKWASHER
3361G	50	5/8" HEX NUT
3300G	50	5/8" FLAT WASHER
★ 5448B	14	ADHESIVE HIT HY150(CARTRIDGE)

** SEE PRODUCT MANUAL

REINFORCED CONCRETE PAD 6" THICK REINFORCEMENT DRAWINGS FOR THIS PAD AND OTHER SIZES ARE AVAILABLE. (SEE FOUNDATION NOTES)



- PLACEMENT NOTE:**
- TRACC placement recommendations shall be in accordance with AASHTO "Roadside Design Guide", 2011 edition, section 8.4.6 on page 8-51.
 - TRACC placement shall be situated so the rear fender panels have room to slide past object being protected, upon impact; (60" minimum)

OPTIONAL TRACC ANCHOR ITEMS

PRODUCT CODE	DESCRIPTION
5449B	ADHESIVE DISPENSER
5450B	MIXER HIT HY150 (NOZZLE)
5208B	FILLER HIT HY150 (FILLER TUBE)
5209B	BIT TE-C+ 11/16-18 (11/16" Ø BIT)

58" WIDE TRACC DOUBLE FLARE INSTALLATION

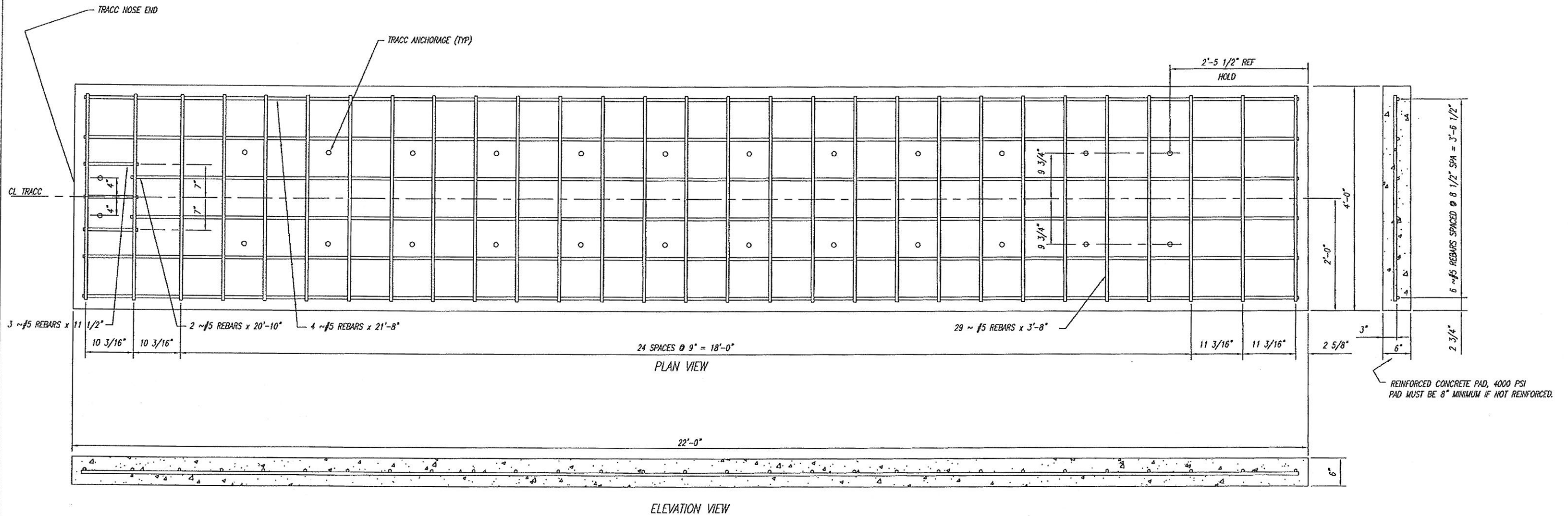
REV.	CH'D	BY	DATE	REMARKS

TRACC 05

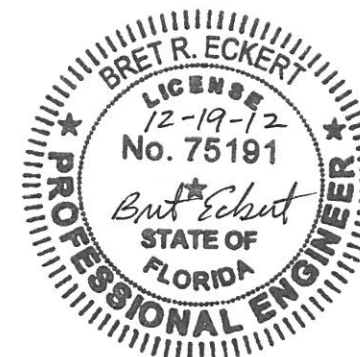
TRACC 05 QPL S544-0034
58" WIDE TRACC DOUBLE FLARE
CRASH-CUSHION ATTENUATING TERMINAL
PLAN, ELEVATION & SECTIONS
(UNIDIRECTIONAL, DIRECT ATTACHMENT)

TRINITY HIGHWAY PRODUCTS LLC.
2525 STEMMONS FREEWAY,
DALLAS, TX 75207

DRAWN	LH
CHECKED	BT
SCALE	N.T.S.
DATE	12/17/12
ENG. FILE #	SS1019FL(P)
S.S. #	SS-1019
SHEET NO.	6 OF 13
REV.	0

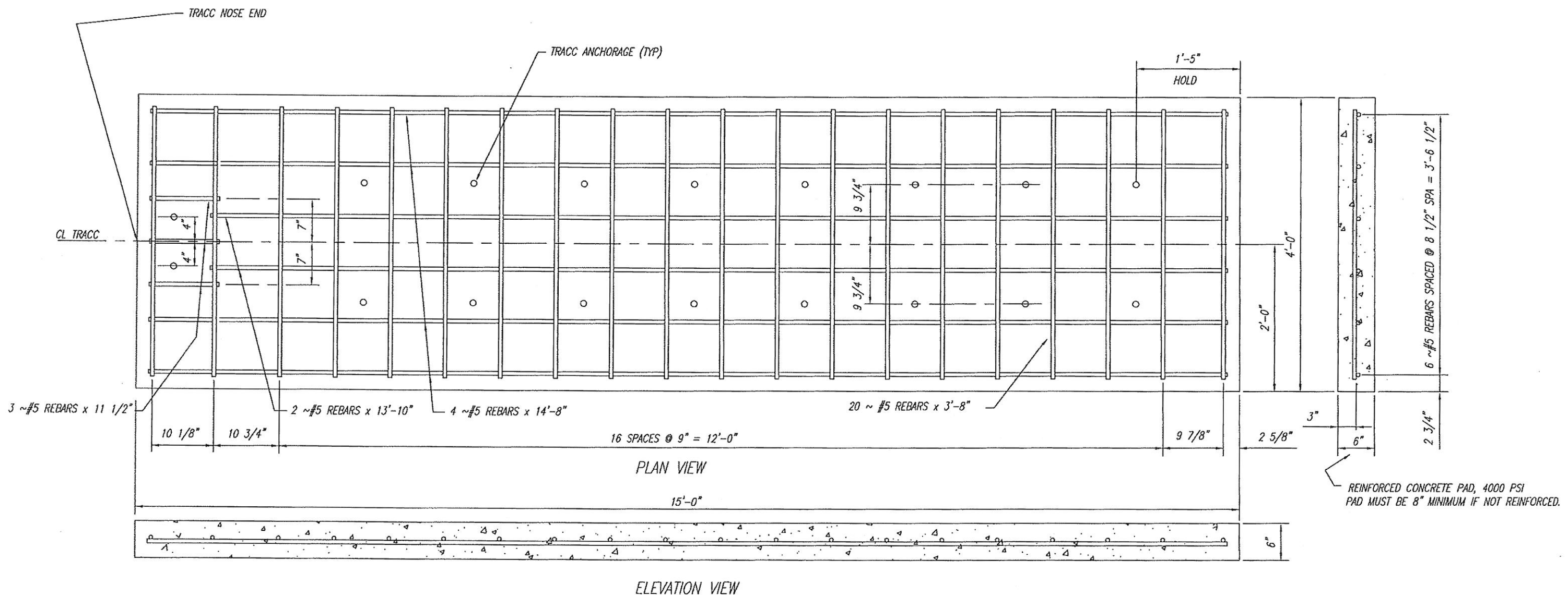


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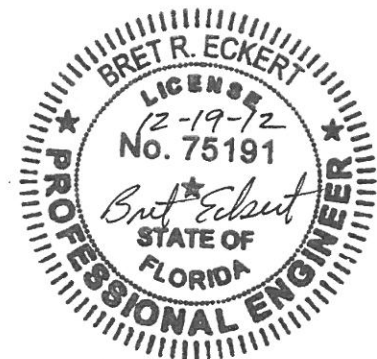


TRACC 05 22'-0" CONCRETE FOUNDATION

REV.	CHK'D	BY	DATE	REMARKS
				TRACC 05
TRACC 05 TL-3 QPL S544-0034 CRASH-CUSHION ATTENUATING TERMINAL 22'-0" CONCRETE FOUNDATION PLAN				DRAWN LH CHECKED BT SCALE N.T.S. DATE 12/17/12 ENG. FILE # SS1010FL(P) SS # SS-1010 SHEET NO. 7 OF 13 REV. 0
TRINITY HIGHWAY PRODUCTS LLC. 2525 STEMMONS FREEWAY, DALLAS, TX 75207				



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SHORTRACC 15'-0" CONCRETE FOUNDATION

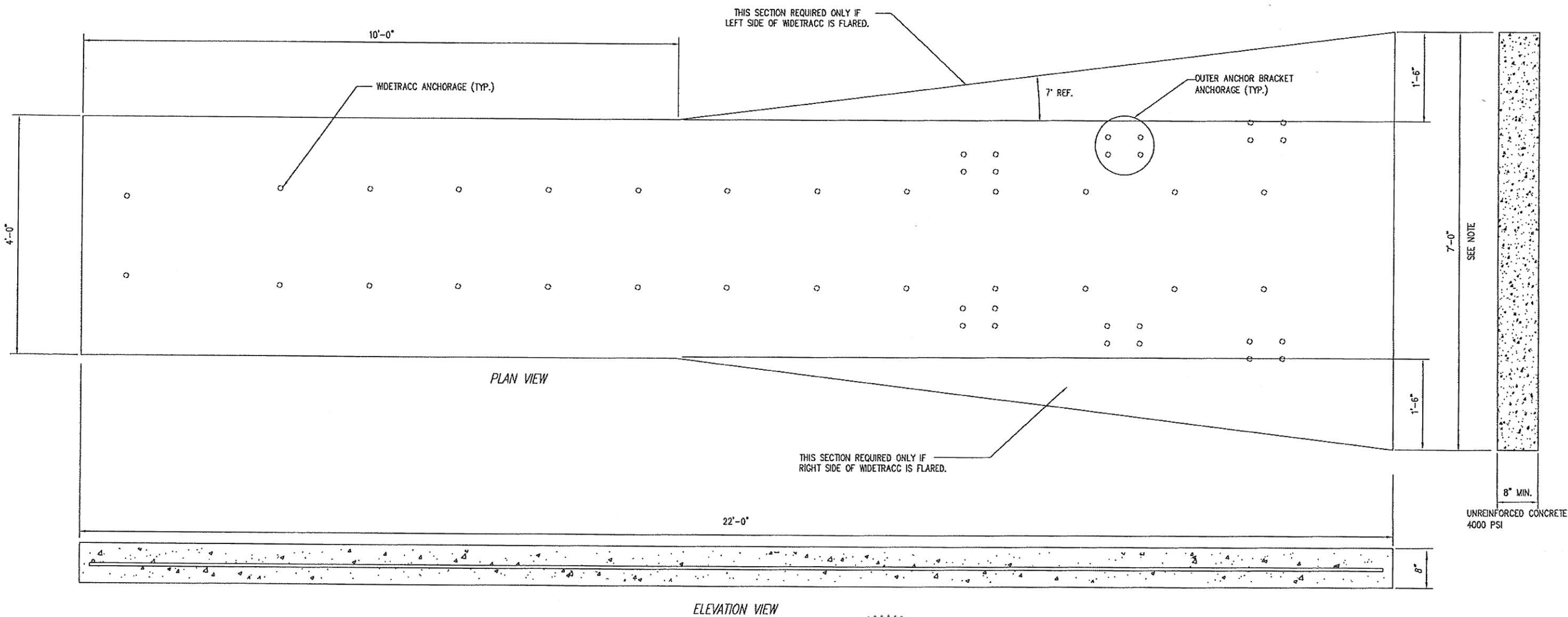
REV.	CHK'D	BY	DATE	REMARKS

TRACC 05

TRACC 05 QPL S544-0034
 SHORTRACC TL-2
 CRASH-CUSHION ATTENUATING TERMINAL
 15' CONCRETE FOUNDATION PLAN

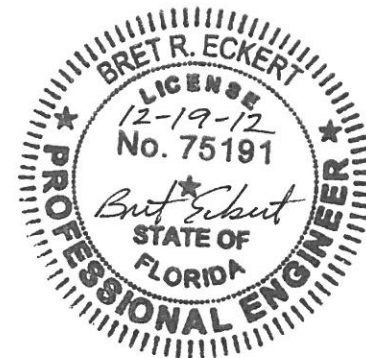
TRINITY HIGHWAY PRODUCTS LLC.
 2525 STEMMONS FREEWAY,
 DALLAS, TX 75207

DRAWN	LH
CHECKED	BT
SCALE	N.T.S.
DATE	12/17/12
ENG. FILE #	SS1013FL(P)
SS #	SS 1013
SHEET NO.	8 OF 13
REV.	0



NOTE:

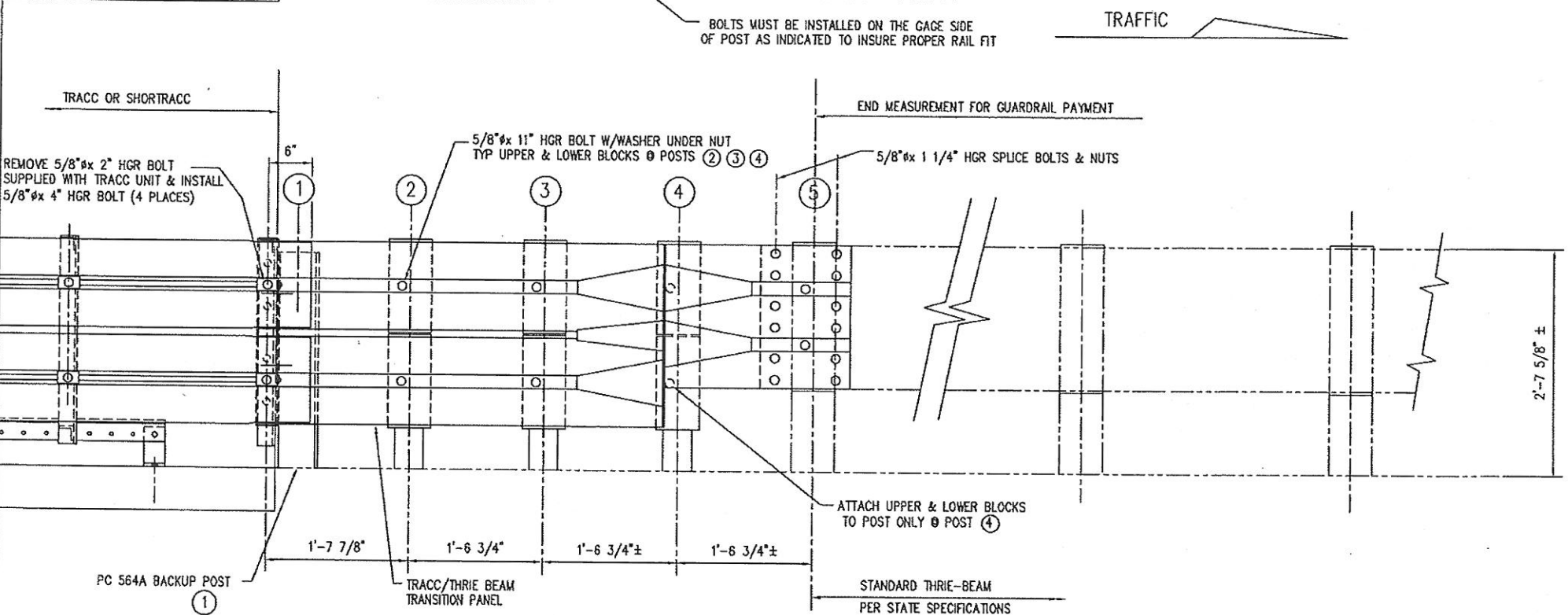
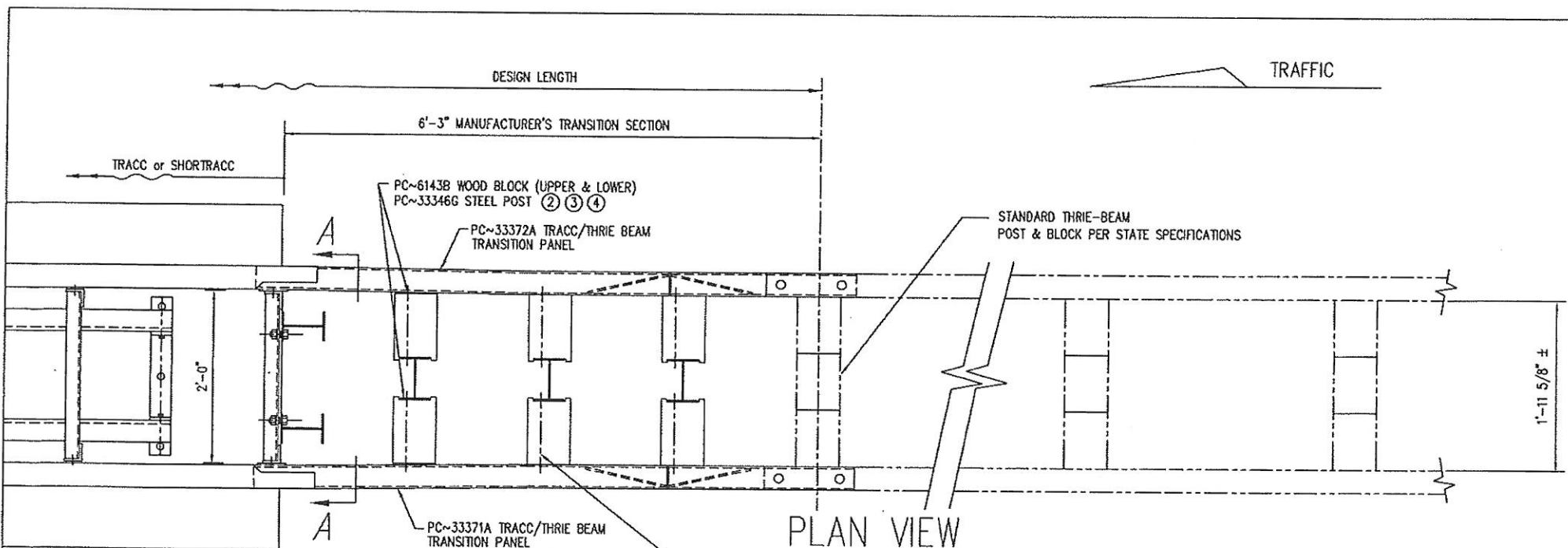
FOR LONGER/WIDER WIDETRACC SYSTEMS WITH WING EXTENSIONS, ADD CONCRETE BEYOND PLAN SHOWN ABOVE, CONTINUING 7" LINE THROUGH ENTIRE LENGTH OF CUSHION. OVERALL WIDTH OF EXTENDED CONCRETE SHOULD EQUAL WIDTH OF CUSHION PLUS TWO(2) FEET.



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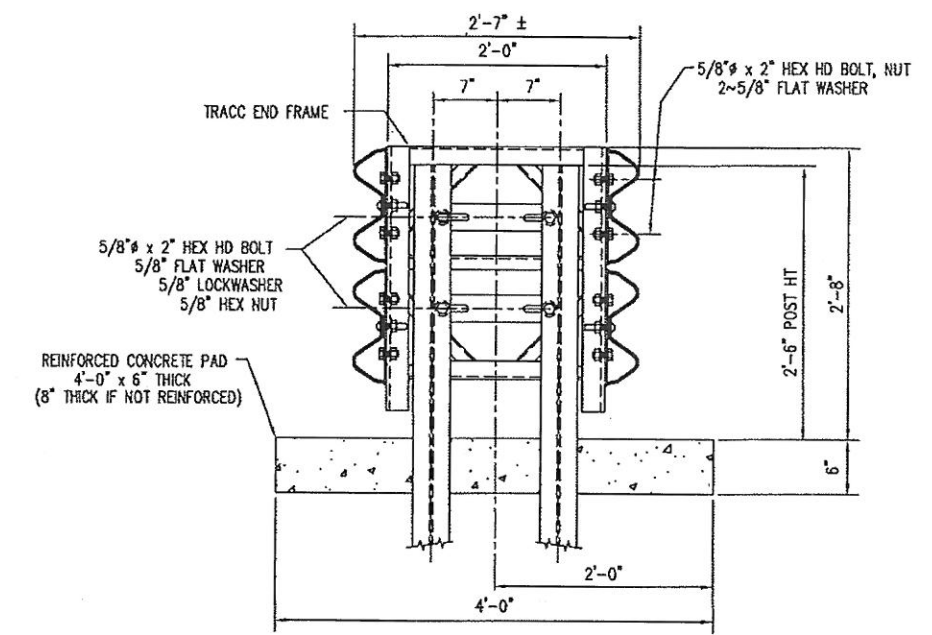
WIDETRACC 22'-0" CONCRETE FOUNDATION

REV.	CHK'D	BY	DATE	REMARKS
				TRACC 05
TRACC 05 QPL S544-0034				DRAWN LH
58" WIDETRACC				CHECKED BT
22' FOUNDATION PLAN				SCALE N.T.S.
CRASH-CUSHION ATTENUATING TERMINAL				DATE 12/17/12
UNREINFORCED CONCRETE				ENG. FILE # SS1012FL(P)
TRINITY HIGHWAY PRODUCTS LLC.				SS # SS-1012
2525 STEMMONS FREEWAY,				SHEET NO. 9 OF 13
DALLAS, TX 75207				REV. 0



ELEVATION VIEW

TRACC TRANSITION BILL OF MATERIAL		
PRODUCT CODE	QTY	DESCRIPTION
564G	2	POST W6 x 8.5 x 6'-6"
6143B	12	RTD WD BLOCK 1'-1 (6 x 9 1/4)
33346G	3	POST W6 x 8.5 x 6'-6"
33371A	1	TRACC/THRIE BEAM TRANSITION PANEL
33372A	1	TRACC/THRIE BEAM TRANSITION PANEL
HARDWARE		
4432G	4	5/8" x 4" HGR POST BOLT
3510G	12	5/8" x 11" HGR POST BOLT
3360G	24	5/8" x 1 1/4" HGR SPLICE BOLT
3340G	36	5/8" HGR HEX NUT
3300G	12	5/8" FLAT WASHER (Ø HGR POST BOLTS)
3404G	12	5/8" x 2" HEX HD BOLT (A325)
4372G	20	5/8" WASHER
3310G	4	5/8" LOCKWASHER
3361G	12	5/8" HEX NUT

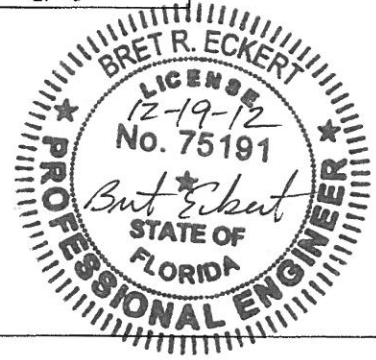


SECTION "A-A"

DESIGN LENGTH TABLE		
SPEED	TESTED TO:	DESIGN LENGTH W/CRASH CUSHION
≤ 45 MPH	TL-2	20'-5"
≥ 50 MPH	TL-3	27'-5"

GENERAL NOTE:
 1. For Low Speed Facilities with a Design Speed ≤ 45 MPH, Use a TL-2 System.
 2. For High Speed Facilities with a Design Speed ≥ 50 MPH, Use a TL-3 System.

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TRACC 05 TRANSITION TO THRIE-BEAM
 MEDIAN BARRIER(DRIVEN POSTS)

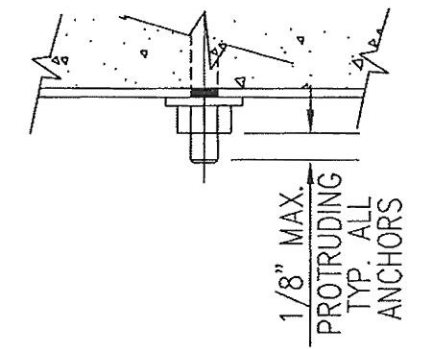
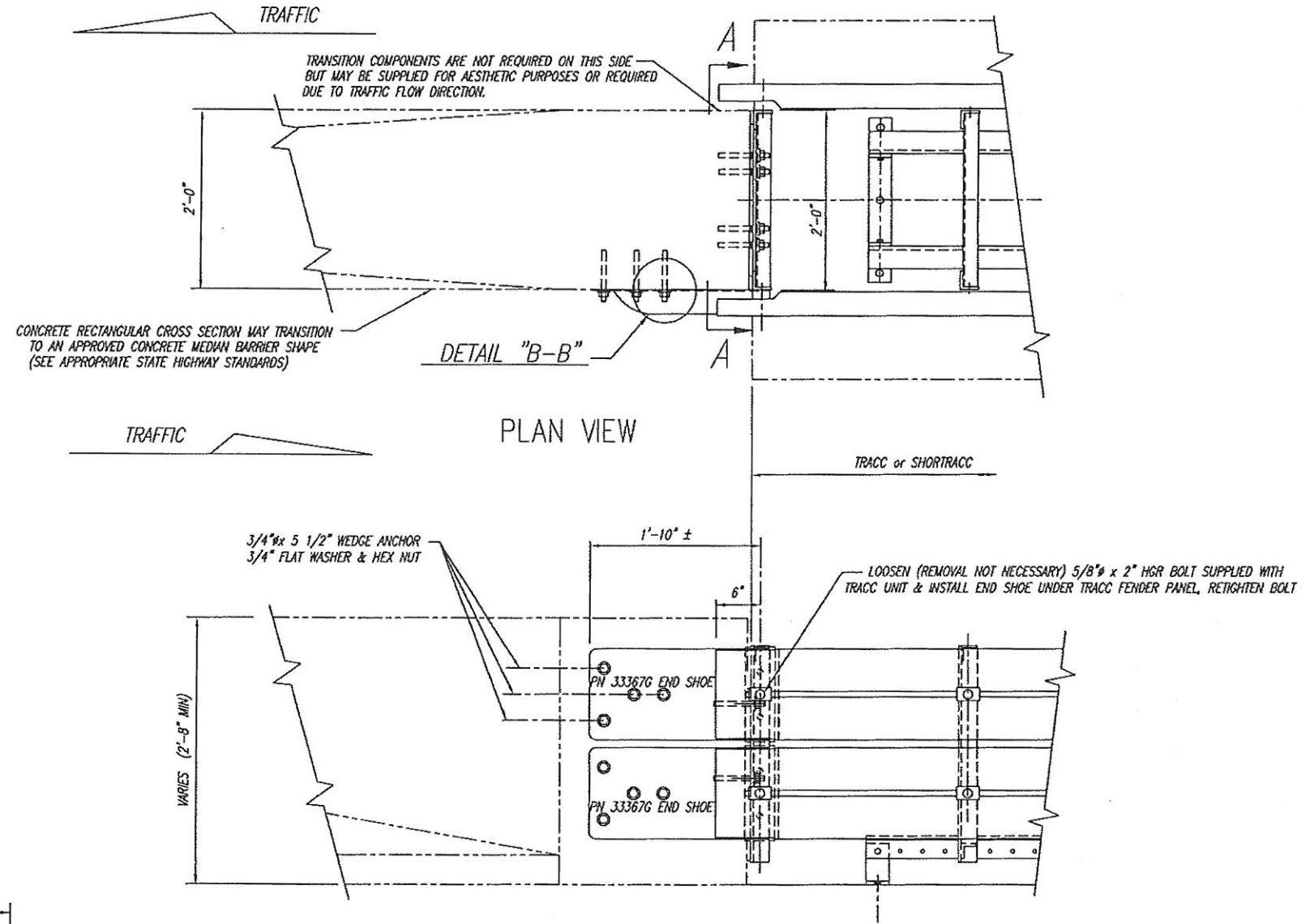
REV.	CH'D	BY	DATE	REMARKS

TRACC 05

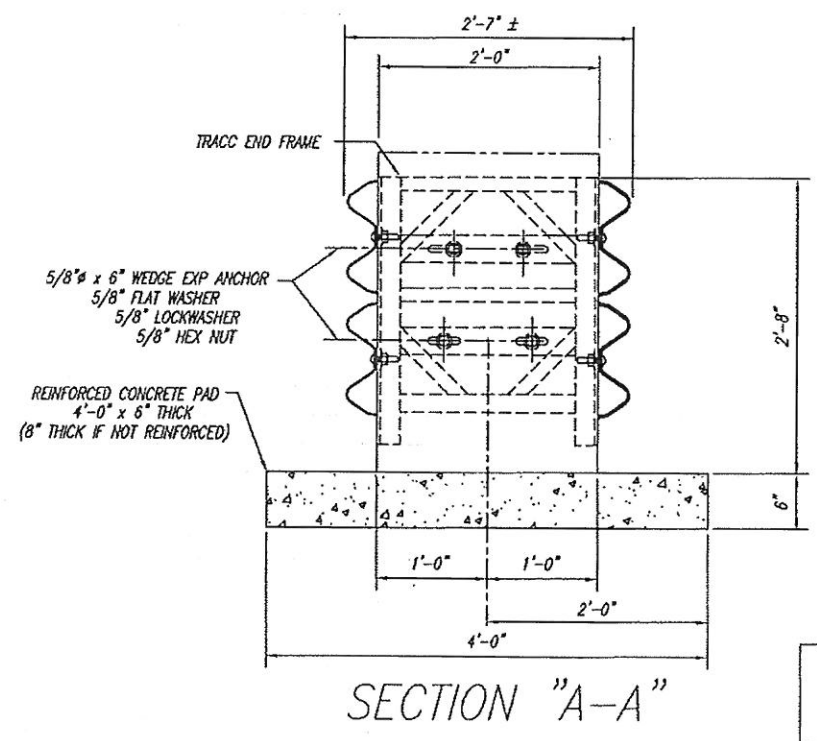
TRACC 05 QPL S544-0034
 TRACC TRANSITION TO
 THRIE BEAM MEDIAN BARRIER (ALL DRIVEN POSTS)
 PLAN, ELEVATION & SECTIONS
 TRINITY HIGHWAY PRODUCTS LLC.
 2525 STEMMONS FREEWAY,
 DALLAS, TX 75207

DRAWN	LH
CHECKED	BT
SCALE	N.T.S.
DATE	12/17/12
ENG. FILE #	SS454FL(P)
S.S. #	SS-454
SHEET NO.	10 OF 13
REV.	0

TRACC TRANSITION BILL OF MATERIAL		
PRODUCT CODE	QTY	DESCRIPTION
33367G	2	TRACC 10GA END SHOE
HARDWARE		
3310G	4	5/8" LOCKWASHER
4451G	4	5/8" x 6" WEDGE EXP ANCHOR
4688G	8	3/4" x 5 1/2" WEDGE EXP ANCHOR



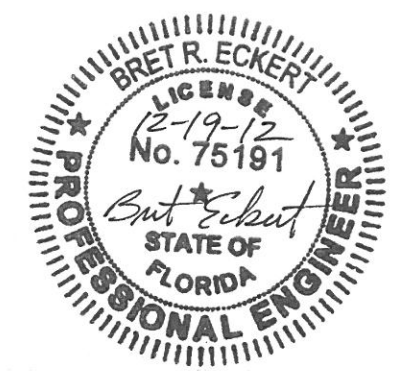
DETAIL "B-B"



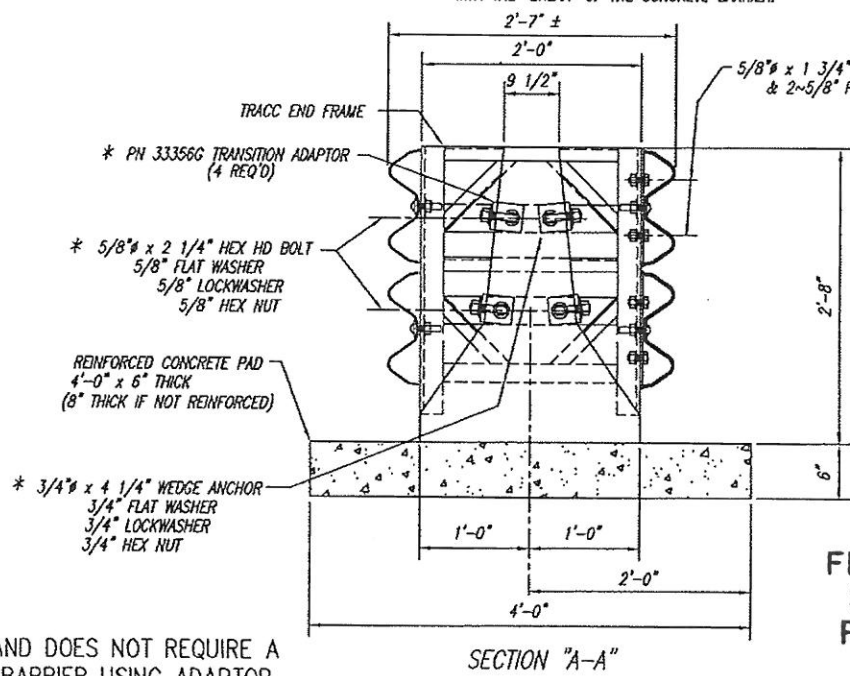
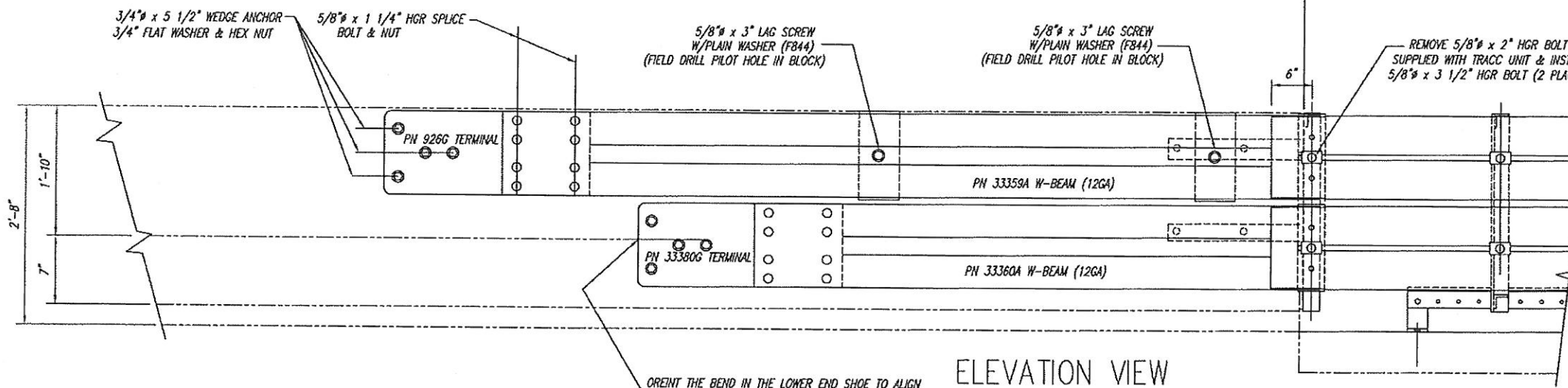
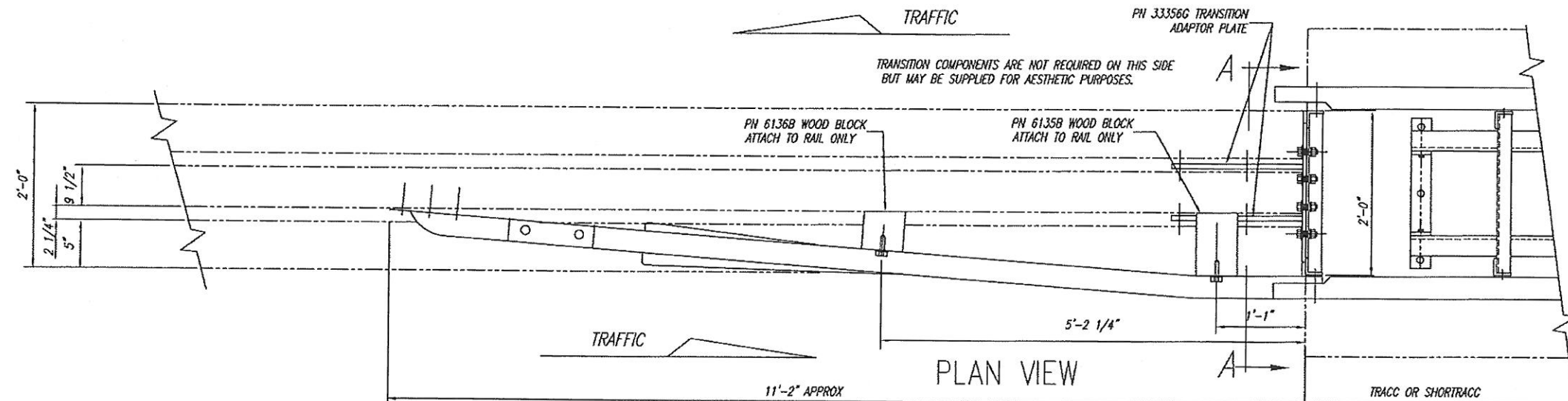
SECTION "A-A"

TRACC 05 TRANSITION TO VERTICAL CONCRETE WALL; PARAPET

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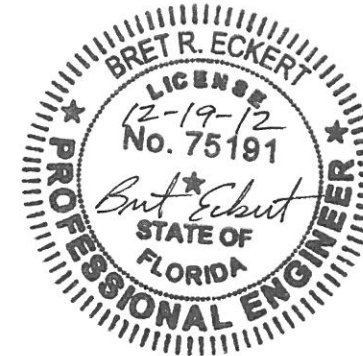
REV.	CHK'D	BY	DATE	REMARKS
TRACC 05 QPL S544-0034 TRACC TRANSITION TO VERTICAL CONCRETE WALL, PIER, PARAPET OR BARRIER PLAN, ELEVATION & SECTIONS				DRAWN LH CHECKED BT SCALE N.T.S. DATE 12/17/12 ENG. FILE # SS456FL(P) S.S. # SS-456 SHEET NO. 11 of 13
TRINITY HIGHWAY PRODUCTS LLC. 2525 STEMMONS FREEWAY, DALLAS, TX 75207				REV. 0



***-NOTE**

WHEN SITE HAS UNIDIRECTIONAL TRAFFIC, AND DOES NOT REQUIRE A TRANSITION, ATTACH TRACC TO CONCRETE BARRIER USING ADAPTOR BRACKETS & HARDWARE PER SECTION A-A.

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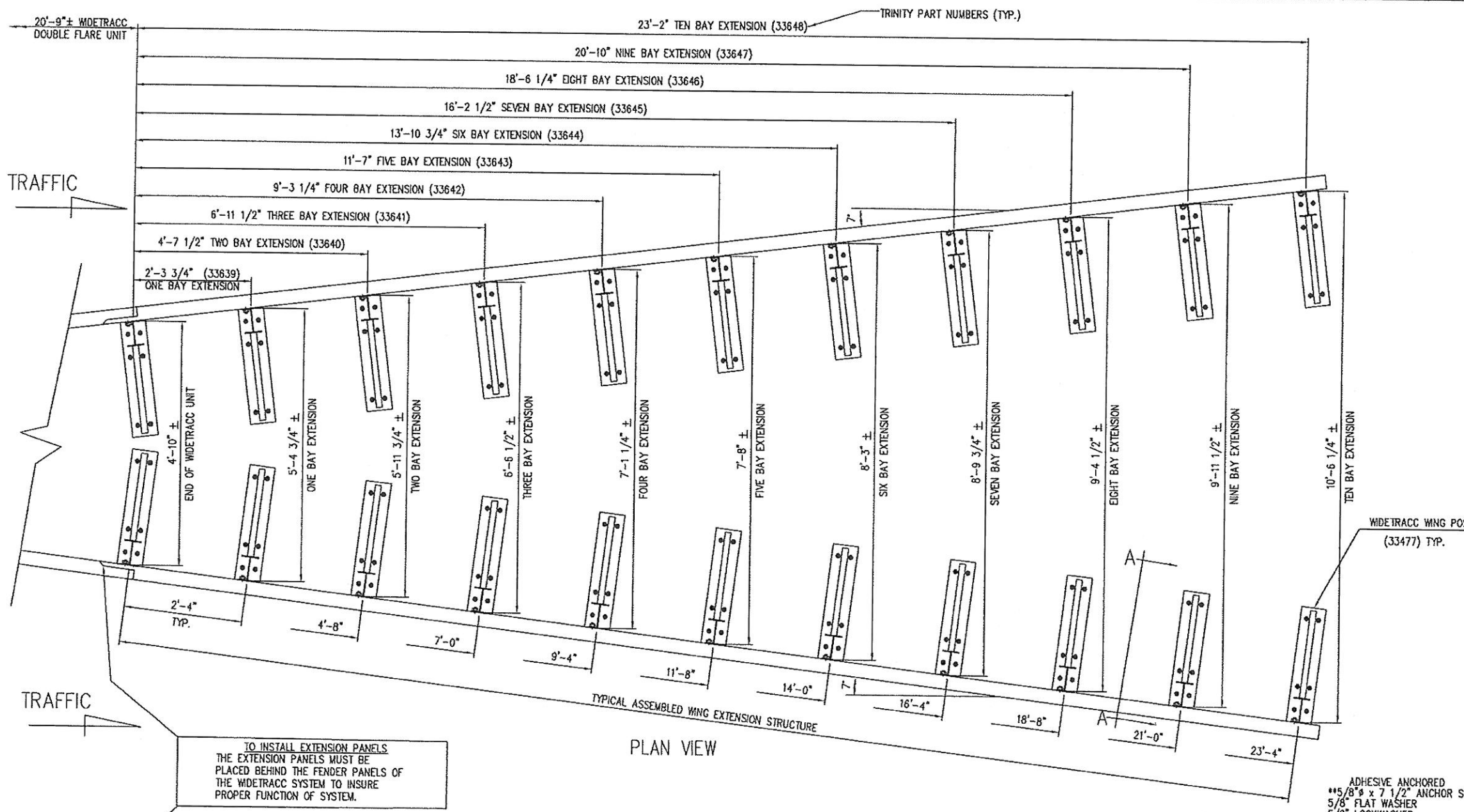
TRACC 05 TRANSITION TO CONCRETE BARRIER (FLA. INDEX 410)

TRACC TRANSITION BILL OF MATERIAL

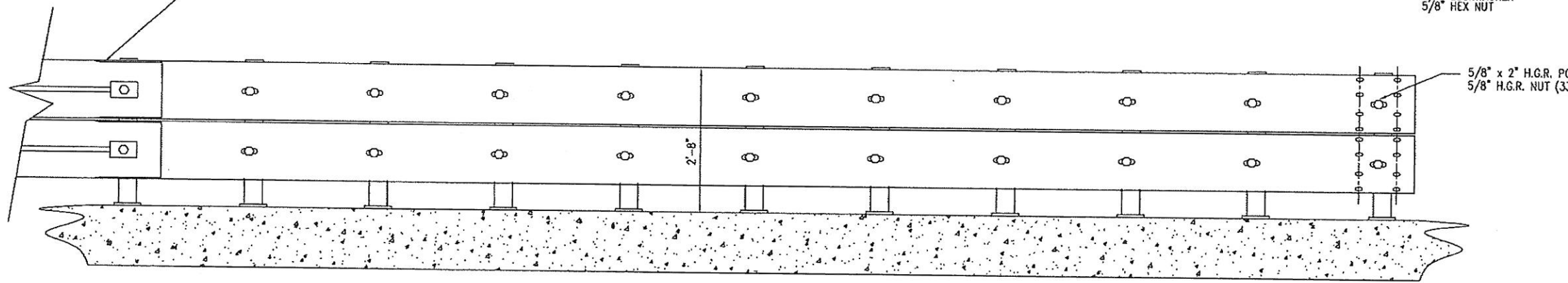
PRODUCT NUMBER	QTY	DESCRIPTION
926G	1	10/END SHOE/EXTRA HOLE (UPPER)
6135B	1	TAPERED WD BLK 1'-1" (6 x 8 1/2)
6136B	1	TAPERED WD BLK 1'-1" (6 x 5 3/4)
33356G	4	TRANSITION ADAPTOR PLATE
33359A	1	12/10.0"/TRACC (UPPER GUARDRAIL)
33360A	1	12/6"10.5"/TRACC (LOWER GUARDRAIL)
33380G	1	10/END SHOE/EXTRA HOLE/BEND (LOWER)
HARDWARE		
3360G	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)
3391G	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 (AS63 DH)
4688G	8	3/4" x 5 1/2" WEDGE ANCHOR
4709G	8	3/4" x 4 1/4" WEDGE ANCHOR
4699G	8	3/4" LOCKWASHER
3701G	16	3/4" WASHER
3710G	16	3/4" HEX NUT

REV.	CHK'D	BY	DATE	REMARKS
TRACC 05		QPL S544-0034		DRAWN LH
TRACC TRANSITION TO CONCRETE FLA. INDEX 410 BARRIER PLAN, ELEVATION & SECTIONS				CHECKED BT
				SCALE N.T.S.
				DATE 12/17/12
TRINITY HIGHWAY PRODUCTS LLC. 2525 STEMMONS FREEWAY, DALLAS, TX 75207				ENG. FILE # SS461FL(P)
				S.S. # SS-461
				SHEET NO. 12 of 13
				REV. 0

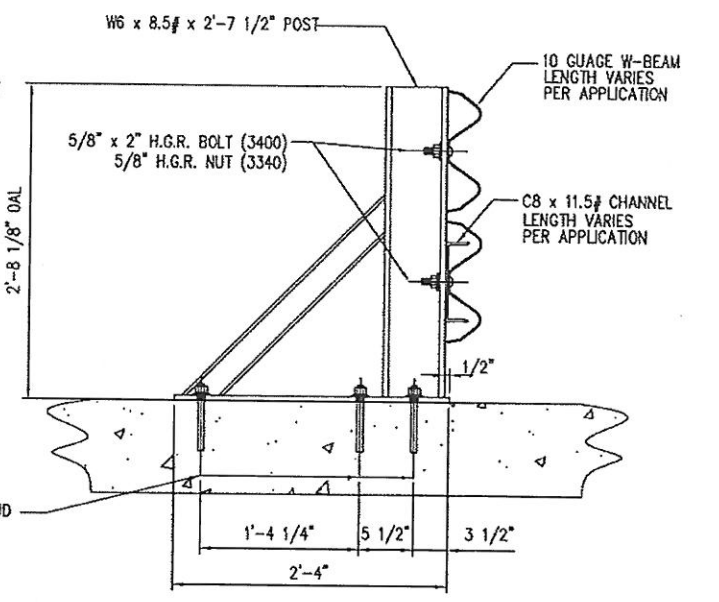
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PLAN VIEW



ELEVATION VIEW



SECTION A-A
(PN 33477)

WIDETRACC DOUBLE FLARE WING EXTENSION

REV.	CHKD	BY	DATE	REMARKS

TRACC 05

TRACC 05 QPL S544-0034
 WIDETRACC DOUBLE FLARE
 WING EXTENSION STRUCTURES
 CRASH-CUSHION ATTENUATING TERMINAL
 PLAN, ELEVATION

DRAWN	L.H.
CHECKED	BT
SCALE	N.T.S.
DATE	12/17/12
ENG. FILE #	SS497FL(P)
S.S. #	SS 497
SHEET NO.	13 OF 13
REV.	0

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