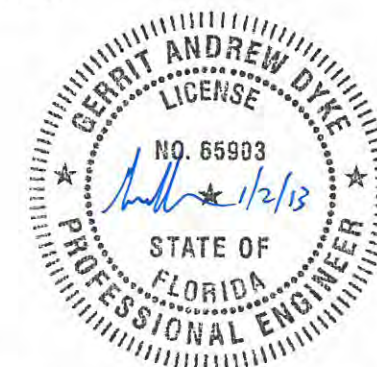


DRAWING INDEX

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UNIVERSAL TAU-II GENERAL NOTES - PERMANENT

1. THE ENERGY ABSORBING SYSTEM REPRESENTED ON THIS QUALIFIED PRODUCT LIST (QPL) IS A PROPRIETARY DESIGN BY BARRIER SYSTEMS, INC (BSI) AND MARKETED UNDER THE TRADE NAME UNIVERSAL TAU-II.
2. THE UNIVERSAL TAU-II IS A REDIRECTIVE, NON-GATING CRASH CUSHION DESIGNED TO SHIELD HAZARD UP TO 8.5 FEET IN WIDTH. THE BEGINNING LENGTH OF NEED SHALL BE AT THE POINT OF INTERSECTION BETWEEN THE FACE OF THE CRASH CUSHION AND THE TRANSVERSE CENTERLINE OF THE DIAPHRAGM BACK OF THE FIRST CARTRIDGE.
3. THE UNIVERSAL TAU-II 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 UNIVERSAL TAU-II 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 UNIVERSAL TAU-II IS AVAILABLE IN 30", 36", 42", 48", 54", 60", 66", 72", 78", 84", 90", 96" AND 102" NOMINAL WIDTHS. THE SYSTEM WIDTH WILL BE AS CALLED OUT IN THE PLANS, PERMIT OR OTHER CONTRACT DOCUMENT FOR EACH LOCATION.
6. THE UNIVERSAL TAU-II SHALL BE CONSTRUCTED PARALLEL TO THE APPROACH TRAVEL LANE AND ON CROSS SLOPES 1:10 OR FLATTER.
7. METALLIC COMPONENTS SHALL MEET THE GALVANIZING REQUIREMENTS FOR GUARDRAIL, SECTION 967 OF THE FDOT SPECIFICATIONS.
8. ONLY THE UNIVERSAL TAU-II TYPE A AND TYPE B ENERGY ABSORBING CARTRIDGES SHALL BE USED AS SHOWN ON THE DRAWINGS.
9. A YELLOW TYPE I OBJECT MARKER SHALL BE CENTERED 3 FEET IN FRONT OF THE UNIVERSAL TAU-II. MOUNTING HARDWARE SHALL BE IN CONFORMANCE WITH SECTION 993 OF THE FDOT SPECIFICATION. AS AN ALTERNATIVE THE CONTRACTOR HAS THE OPTION TO INSTALL REFLECTIVE SHEETING ON THE NOSE OF THE CRASH CUSHION IN LIEU OF THE OBJECT MARKER. THE SHEETING MUST BE SOLID YELLOW, TYPE III OR BETTER, AND MUST BE A PRODUCT LISTED ON THE DEPARTMENT'S QPL. THE MARKER OR SHEETING SHALL BE INCLUDED IN THE COST OF THE UNIVERSAL TAU-II SYSTEM. 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.
10. 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 THE UNIVERSAL TAU-II SYSTEM.
11. IN COMPLIANCE WITH THE AASHTO 2011 ROADSIDE DESIGN GUIDE, REMOVE ALL CURBS AND ISLANDS TO ENSURE PROPER IMPACT PERFORMANCE.
12. SUPPLY ADEQUATE TRANSITION FROM THE UNIVERSAL TAU-II SYSTEM TO THE OBJECT BEING SHIELDED.
13. UNITS OF MEASURE ARE IN ENGLISH UNITS.



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APPROVALS		THIRD ANGLE PROJECTION		TITLE		UNIVERSAL TAU-II, STATE OF FLORIDA DOT QPL NO. S544-0045	
DRAWN BY:	JMT			SIZE	DWG NO.	REV.	
DRAWN DATE:	12/19/12			B	BSI-1209009-AP	0	
APPR'D BY:	GAD			0	AP 00856	12/19/12	
APPR'D DATE:	12/19/12	DO NOT SCALE DRAWING	REV	ECN#	DATE	SCALE	NTS
						FDOT QPL S544-0045	SHEET 1 OF 28

TL-2

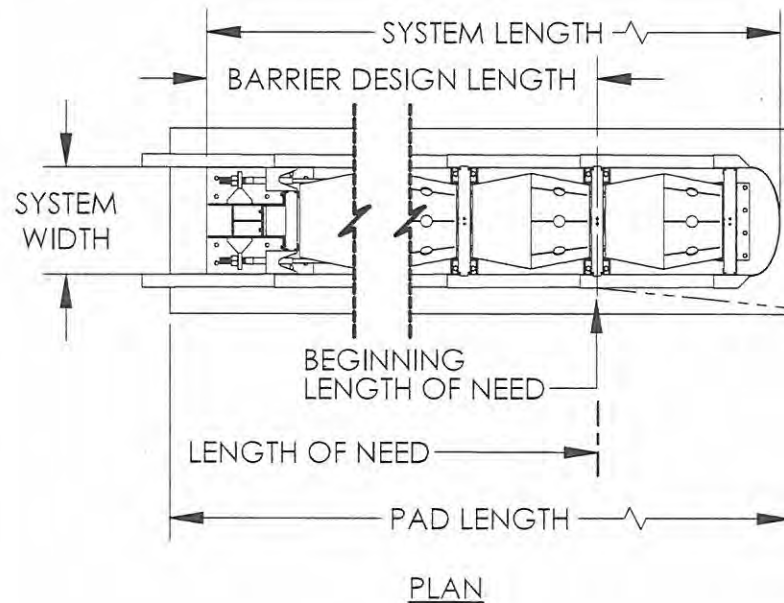
SYSTEM WIDTH	DESIGN SPEED: 30 mph					DESIGN SPEED: 35 mph					DESIGN SPEED: 45 mph				
	MODEL NUMBER	SYSTEM LENGTH	BARRIER DESIGN LENGTH	GUARDRAIL DESIGN LENGTH	CONCRETE PAD LENGTH	MODEL NUMBER	SYSTEM LENGTH	BARRIER DESIGN LENGTH	GUARDRAIL DESIGN LENGTH	CONCRETE PAD LENGTH	MODEL NUMBER	SYSTEM LENGTH	BARRIER DESIGN LENGTH	GUARDRAIL DESIGN LENGTH	CONCRETE PAD LENGTH
30"	30T050PBC	6'-10"	2'-11"		7'-2"	30T060PBC	9'-9"	5'-10"		10'-0"	30T070PBC	12'-7"	8'-8"		12'-10"
30"	30T050FBC	7'-3"	3'-4"		7'-0"	30T060FBC	10'-2"	6'-3"		9'-10"	30T070FBC	13'-0"	9'-1"		12'-8"
30"	30T050CBC	8'-6"	4'-7"	5'-10"	9'-8"	30T060CBC	11'-5"	7'-6"	8'-9"	12'-6"	30T070CBC	14'-3"	10'-4"	11'-7"	15'-4"
36"	36T050PBC	6'-10"	2'-11"		7'-2"	36T060PBC	9'-9"	5'-10"		10'-0"	36T070PBC	12'-7"	8'-8"		12'-10"
36"	36T050FBC	7'-3"	3'-4"		7'-0"	36T060FBC	10'-2"	6'-3"		9'-10"	36T070FBC	13'-0"	9'-1"		12'-8"
36"	36T050CBC	8'-6"	4'-7"	5'-10"	9'-8"	36T060CBC	11'-5"	7'-6"	8'-9"	12'-6"	36T070CBC	14'-3"	10'-4"	11'-7"	15'-4"

NOTES:

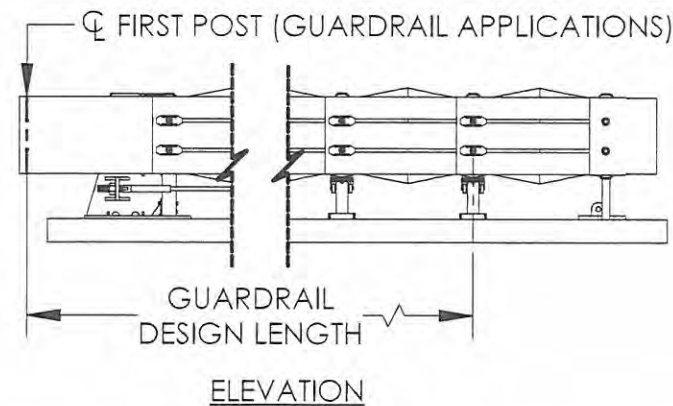
1. SYSTEM WIDTH IS NOMINAL, MEASURED AT THE BACKSTOP.
2. COMPACT BACKSTOP SHOWN FOR REFERENCE.
3. PAD LENGTHS ARE ROUNDED TO THE NEAREST INCH.

TL-3

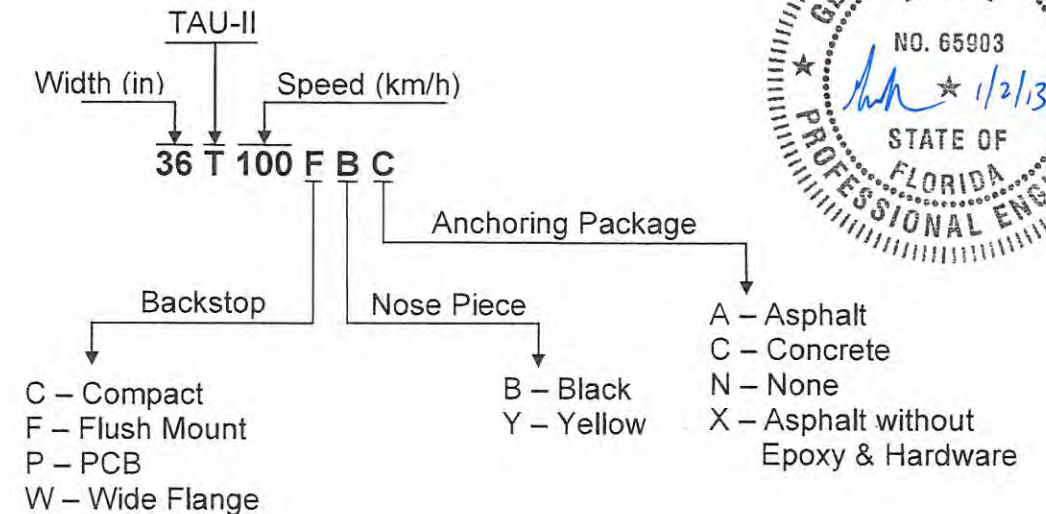
SYSTEM WIDTH	DESIGN SPEED: 50 mph					DESIGN SPEED: 55 mph					DESIGN SPEED: 60 mph				
	MODEL NUMBER	SYSTEM LENGTH	BARRIER DESIGN LENGTH	GUARDRAIL DESIGN LENGTH	CONCRETE PAD LENGTH	MODEL NUMBER	SYSTEM LENGTH	BARRIER DESIGN LENGTH	GUARDRAIL DESIGN LENGTH	CONCRETE PAD LENGTH	MODEL NUMBER	SYSTEM LENGTH	BARRIER DESIGN LENGTH	GUARDRAIL DESIGN LENGTH	CONCRETE PAD LENGTH
30"	30T080PBC	15'-5"	11'-6"		15'-8"	30T090PBC	21'-1"	17'-2"		21'-4"	30T100PBC	23'-11"	20'-0"		24'-3"
30"	30T080FBC	15'-10"	11'-11"		15'-6"	30T090FBC	21'-6"	17'-7"		21'-2"	30T100FBC	24'-4"	20'-5"		24'-0"
30"	30T080CBC	17'-1"	13'-2"	14'-5"	18'-2"	30T090CBC	22'-9"	18'-10"	20'-1"	23'-10"	30T100CBC	25'-7"	21'-8"	22'-11"	26'-8"
36"	36T080PBC	15'-5"	11'-6"		15'-8"	36T090PBC	21'-1"	17'-2"		21'-4"	36T100PBC	23'-11"	20'-0"		24'-3"
36"	36T080FBC	15'-10"	11'-11"		15'-6"	36T090FBC	21'-6"	17'-7"		21'-2"	36T100FBC	24'-4"	20'-5"		24'-0"
36"	36T080CBC	17'-1"	13'-2"	14'-5"	18'-2"	36T090CBC	22'-9"	18'-10"	20'-1"	23'-10"	36T100CBC	25'-7"	21'-8"	22'-11"	26'-8"



DEPARTURE LINE
 1:16 FOR SPEEDS ≤ 45 MPH
 1:13 FOR SPEEDS ≥ 50 MPH



UNIVERSAL TAU-II SYSTEM LENGTHS (NARROW SYSTEMS)

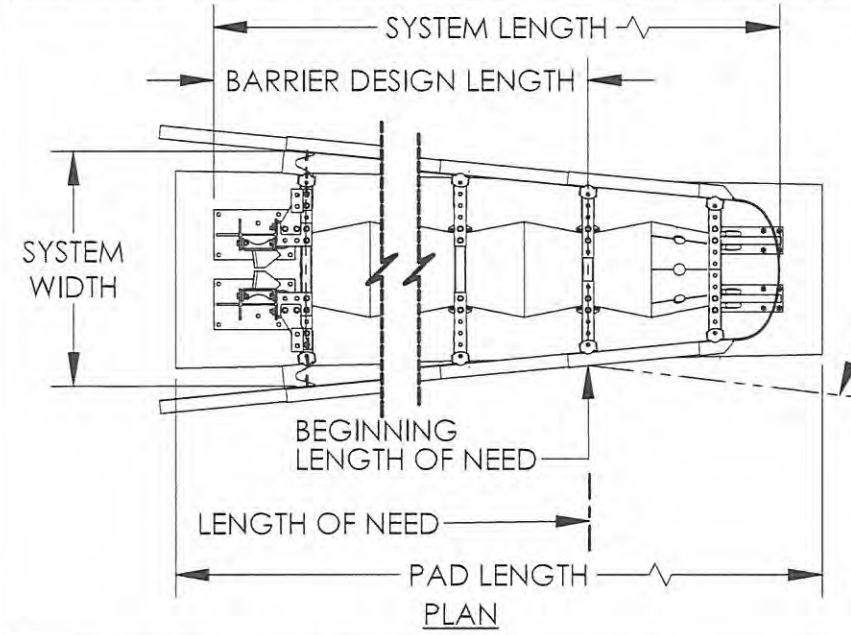


UNIVERSAL TAU-II IDENTIFICATION NUMBER

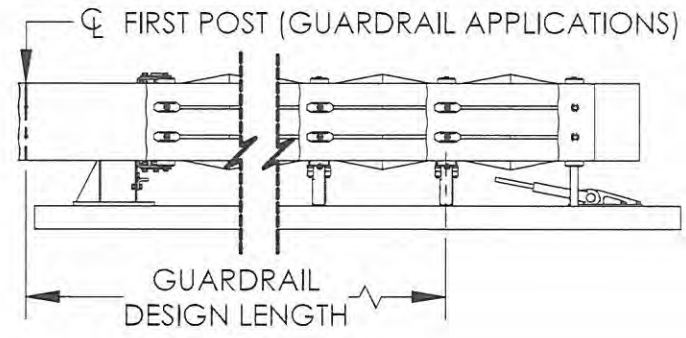
SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:48	FDOT QPL S544-0045	SHEET 2 OF 28

TL-2															
DESIGN SPEED: 30 mph						DESIGN SPEED: 35 mph					DESIGN SPEED: 45 mph				
SYSTEM WIDTH	MODEL NUMBER	SYSTEM LENGTH	BARRIER DESIGN LENGTH	GUARDRAIL DESIGN LENGTH	CONCRETE PAD LENGTH	MODEL NUMBER	SYSTEM LENGTH	BARRIER DESIGN LENGTH	GUARDRAIL DESIGN LENGTH	CONCRETE PAD LENGTH	MODEL NUMBER	SYSTEM LENGTH	BARRIER DESIGN LENGTH	GUARDRAIL DESIGN LENGTH	CONCRETE PAD LENGTH
42"	42T050WBC	8'-8"	4'-9"	5'-9"	10'-5"	42T060WBC	11'-5"	7'-6"	8'-6"	13'-3"	42T070WBC	14'-4"	10'-5"	11'-5"	16'-1"
48"	48T050WBC	8'-8"	4'-9"	5'-9"		48T060WBC	11'-5"	7'-6"	8'-6"		48T070WBC	14'-4"	10'-5"	11'-5"	
54"	54T050WBC	8'-6"	4'-7"	5'-7"		54T060WBC	11'-5"	7'-6"	8'-6"		54T070WBC	14'-4"	10'-5"	11'-5"	
60"	60T050WBC	8'-6"	4'-7"	5'-7"		60T060WBC	11'-5"	7'-6"	8'-6"		60T070WBC	14'-4"	10'-5"	11'-5"	
66"						66T060WBC	8'-6"	4'-7"	5'-7"	10'-5"	66T070WBC	11'-5"	7'-6"	8'-6"	13'-3"
72"						72T060WBC	8'-6"	4'-7"	5'-7"	72T070WBC	11'-5"	7'-6"	8'-6"		
78"						78T060WBC	8'-6"	4'-7"	5'-7"	78T070WBC	11'-5"	7'-6"	8'-6"		
84"										84T070WBC	11'-5"	7'-6"	8'-6"		
90"										90T070WBC	11'-5"	7'-6"	8'-6"		
96"										96T070WBC	11'-5"	7'-6"	8'-6"		

TL-3															
DESIGN SPEED: 50 mph						DESIGN SPEED: 55 mph					DESIGN SPEED: 60 mph				
SYSTEM WIDTH	MODEL NUMBER	SYSTEM LENGTH	BARRIER DESIGN LENGTH	GUARDRAIL DESIGN LENGTH	CONCRETE PAD LENGTH	MODEL NUMBER	SYSTEM LENGTH	BARRIER DESIGN LENGTH	GUARDRAIL DESIGN LENGTH	CONCRETE PAD LENGTH	MODEL NUMBER	SYSTEM LENGTH	BARRIER DESIGN LENGTH	GUARDRAIL DESIGN LENGTH	CONCRETE PAD LENGTH
42"	42T080WBC	17'-1"	13'-2"	14'-2"	18'-11"	42T090WBC	22'-10"	18'-11"	19'-11"	24'-7"	42T100WBC	25'-7"	21'-10"	22'-10"	27'-5"
48"	48T080WBC	17'-1"	13'-2"	14'-2"		48T090WBC	22'-10"	18'-11"	19'-11"		48T100WBC	25'-7"	21'-10"	22'-10"	
54"	54T080WBC	17'-1"	13'-2"	14'-2"		54T090WBC	22'-10"	18'-11"	19'-11"		54T100WBC	25'-7"	21'-10"	22'-10"	
60"	60T080WBC	17'-1"	13'-2"	14'-2"		60T090WBC	22'-10"	18'-11"	19'-11"		60T100WBC	25'-7"	21'-10"	22'-10"	
66"	66T080WBC	14'-4"	10'-5"	11'-5"	16'-1"	66T090WBC	19'-11"	16'-0"	17'-0"	21'-9"	66T100WBC	22'-11"	19'-0"	20'-0"	24'-7"
72"	72T080WBC	14'-4"	10'-5"	11'-5"		72T090WBC	17'-1"	13'-2"	14'-2"	18'-11"	72T100WBC	22'-11"	19'-0"	20'-0"	
78"	78T080WBC	14'-4"	10'-5"	11'-5"		78T090WBC	17'-1"	13'-2"	14'-2"		78T100WBC	22'-11"	19'-0"	20'-0"	
84"	84T080WBC	14'-4"	10'-5"	11'-5"		84T090WBC	17'-1"	13'-2"	14'-2"	84T100WBC	22'-11"	19'-0"	20'-0"		
90"	90T080WBC	14'-4"	10'-5"	11'-5"		90T090WBC	17'-1"	13'-2"	14'-2"	90T100WBC	22'-11"	19'-0"	20'-0"		
96"	96T080WBC	14'-4"	10'-5"	11'-5"		96T090WBC	17'-1"	13'-2"	14'-2"	96T100WBC	22'-11"	19'-0"	20'-0"		

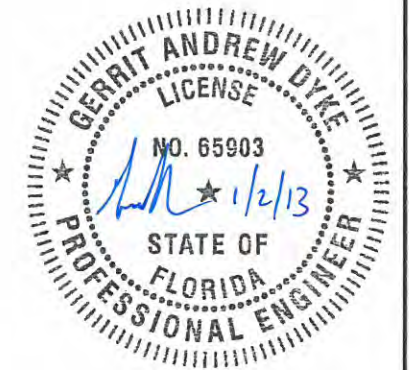


DEPARTURE LINE
 1:16 FOR SPEEDS < 45 MPH
 1:13 FOR SPEEDS ≥ 50 MPH



ELEVATION

UNIVERSAL TAU-II SYSTEM LENGTHS (WIDE SYSTEMS)



NOTES:

- SYSTEM WIDTH IS NOMINAL, MEASURED AT THE BACKSTOP.
- PAD LENGTHS ARE ROUNDED TO THE NEAREST INCH.

SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:48	FDOT QPL S544-0045	SHEET 3 OF 28

4

3

2

1

BACKSTOP WIDTH	MAX HAZARD WIDTH	(TL-2) SYSTEM CAPACITY			(TL-3) SYSTEM CAPACITY		
		30 MPH	35 MPH	45 MPH	50 MPH	55 MPH	60 MPH AND GREATER
PARALLEL UP TO 30"	30"						
36" BACKSTOP	41"						
42" BACKSTOP	47"						
48" BACKSTOP	53"						
54" BACKSTOP	59"						
60" BACKSTOP	65"						
66" BACKSTOP	71"						
72" BACKSTOP	77"						
78" BACKSTOP	83"						
84" BACKSTOP	89"						
90" BACKSTOP	95"						
96" BACKSTOP	101"						

UNIVERSAL TAU-II SYSTEM CONFIGURATION MATRIX

NOTES:

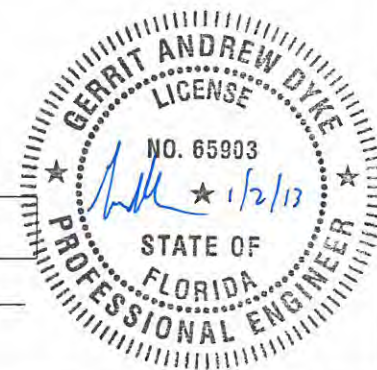
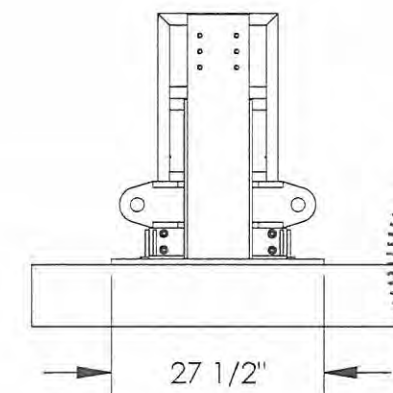
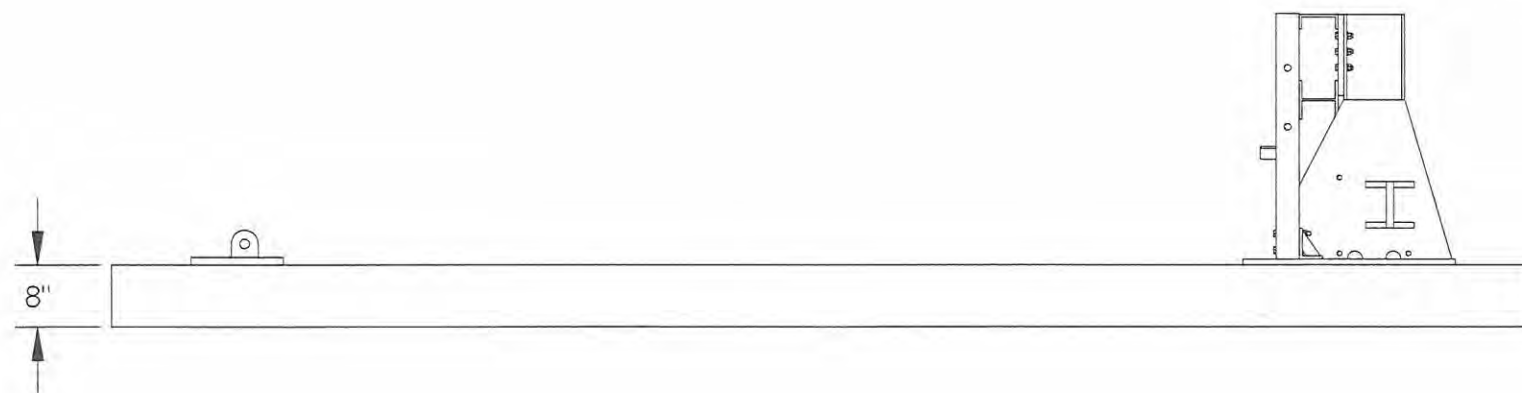
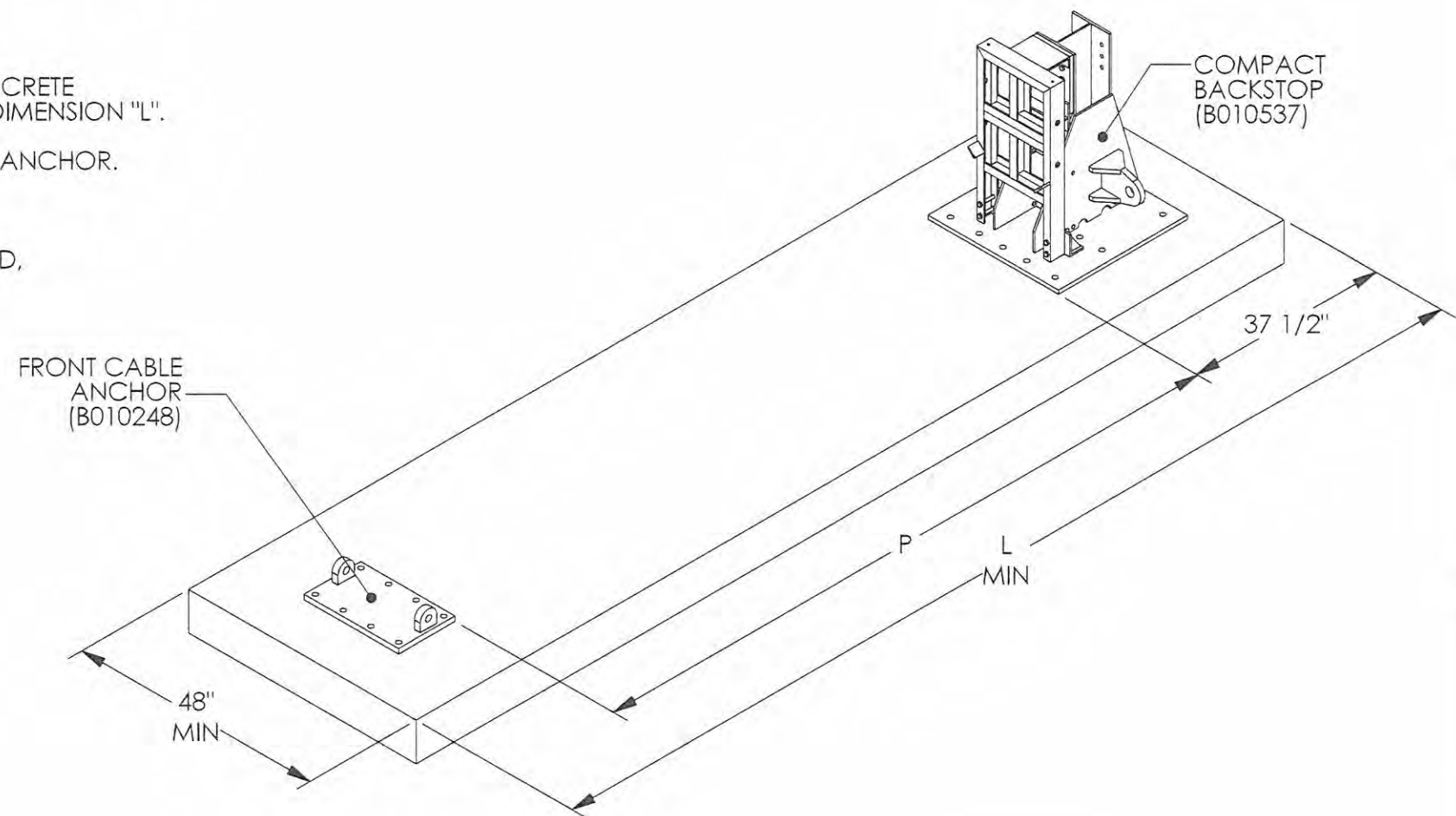
1. MAX HAZARD WIDTH MEASURED AT REAR OF COMPACT AND WIDE FLANGE BACKSTOPS. ACTUAL CONFIGURATIONS MAY VARY.



SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE NTS	FDOT QPL S544-0045	SHEET 4 OF 28

NOTES:

1. REFER TO UNIVERSAL TAU-II FOUNDATION DIMENSION CHART FOR SPECIFIC SYSTEM FOUNDATION DIMENSIONS. SEE SHEET 9.
2. FOUNDATION MATERIAL, SPECIFICATIONS, AND ANCHORAGE MUST BE IN ACCORDANCE WITH FOUNDATION SPECIFICATIONS FOR A CONCRETE PAD. SEE SHEET 8.
3. NO REBAR IS NEEDED IN 8" THICK CONCRETE PAD.
4. IF FOUNDATION ABUTS A CONCRETE CURB, WALL, ABUTMENT, OR OTHER CONCRETE HAZARD, PLACE BACKSTOP AGAINST THE HAZARD AND SUBTRACT 10" FROM DIMENSION "L".
5. BACKSTOP ANCHORS REQUIRE 6" EMBEDMENT FOR 3/4" X 8 1/4" GALVANIZED ANCHOR.
6. TORQUE ANCHORS TO 120 FT-LBF.
7. FOR A 6" CONCRETE PAD, FOUNDATION REINFORCING (#5 REBAR) IS REQUIRED, SEE ASSEMBLY AND INSTALLATION MANUAL FOR ADDITIONAL DETAILS.

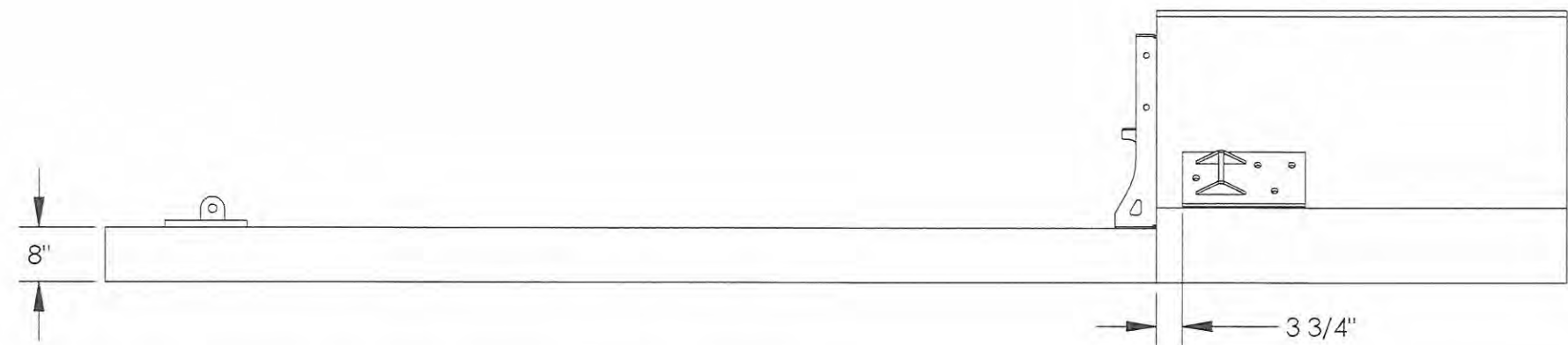
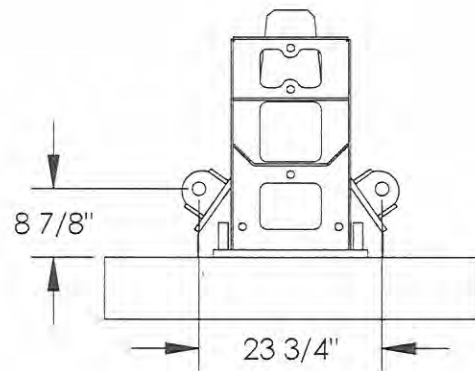
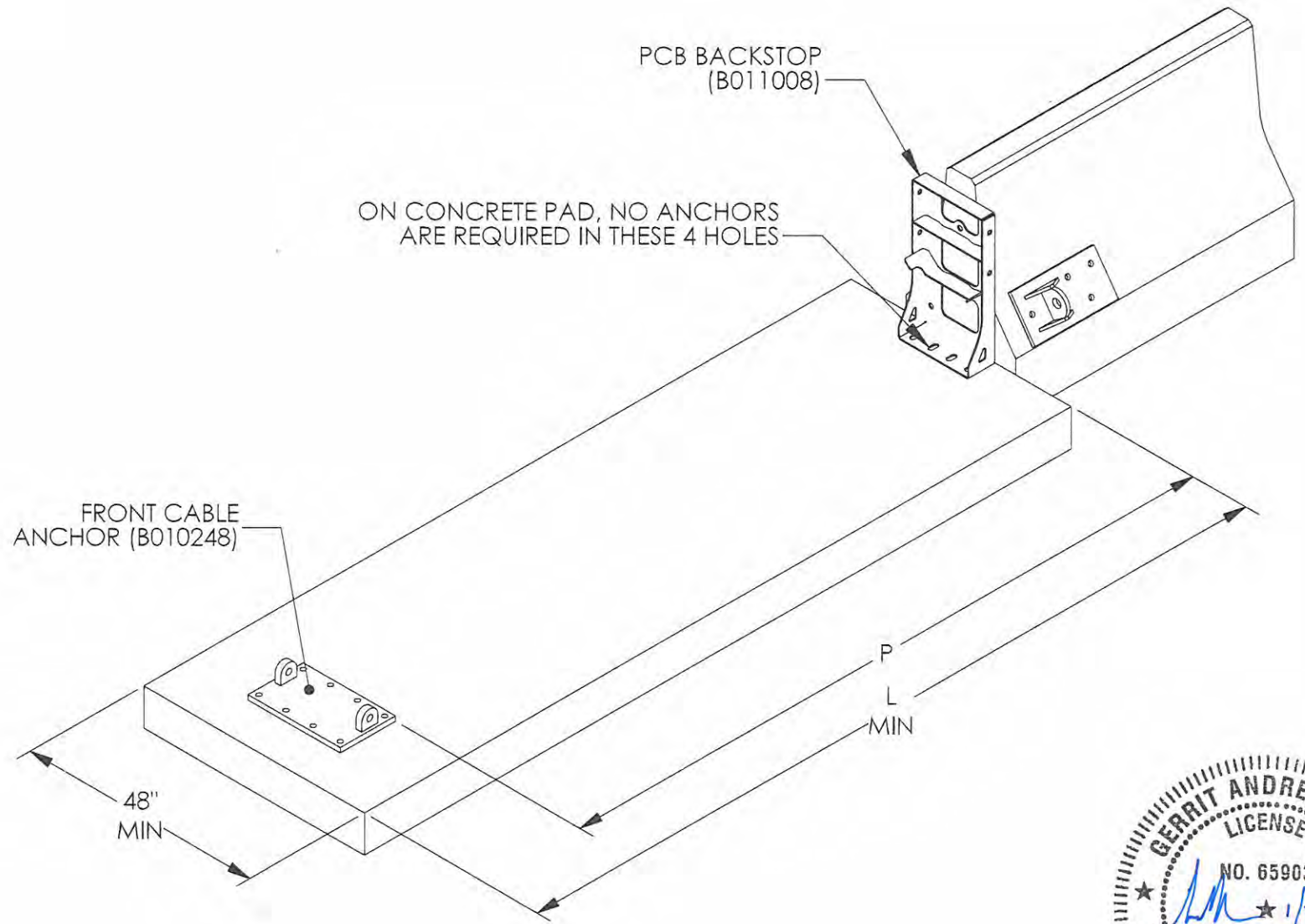


UNIVERSAL TAU-II FOUNDATION, CONCRETE PAD, COMPACT BACKSTOP

SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:24	FDOT QPL S544-0045	SHEET 5 OF 28

NOTES:

1. REFER TO UNIVERSAL TAU-II FOUNDATION DIMENSION CHART FOR SPECIFIC SYSTEM FOUNDATION DIMENSIONS. SEE SHEET 9.
2. FOUNDATION MATERIAL, SPECIFICATIONS, AND ANCHORAGE MUST BE IN ACCORDANCE WITH FOUNDATION SPECIFICATIONS FOR A CONCRETE PAD AND PORTLAND CEMENT CONCRETE. SEE SHEET 8.
3. NO REBAR IS NEEDED IN 8" THICK CONCRETE PAD.
4. CONCRETE BARRIER WALL DOES NOT NEED TO TIE INTO FOUNDATION PAD. HOWEVER, THE PAD AND BACKSTOP MUST CONTACT EACH OTHER.
5. BACKSTOP ANCHORS REQUIRE 6" EMBEDMENT FOR 3/4" X 8 1/4" GALVANIZED ANCHOR.
6. TORQUE ANCHORS TO 120 FT-LBF.
7. FOR A 6" CONCRETE PAD, FOUNDATION REINFORCING (#5 REBAR) IS REQUIRED, SEE ASSEMBLY AND INSTALLATION MANUAL FOR ADDITIONAL DETAILS.

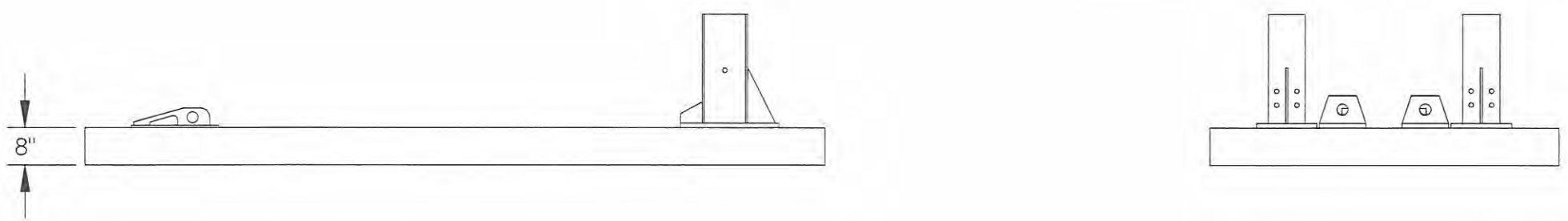
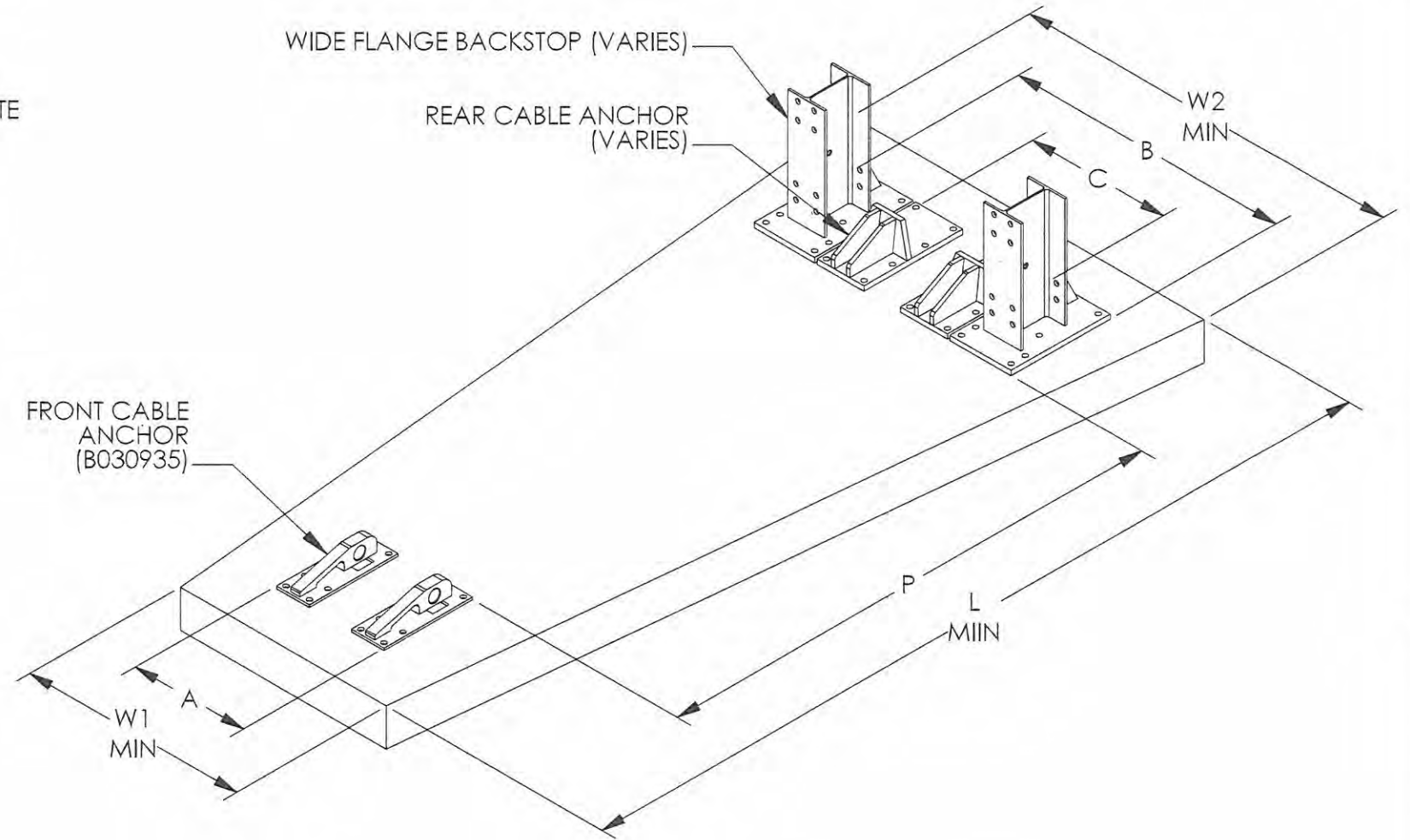


UNIVERSAL TAU-II FOUNDATION, CONCRETE PAD, PCB BACKSTOP

SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:24	FDOT QPL S544-0045	SHEET 6 OF 28

NOTES:

1. REFER TO UNIVERSAL TAU-II FOUNDATION DIMENSION CHART FOR SPECIFIC SYSTEM FOUNDATION DIMENSIONS. SEE SHEETS 10-11.
2. FOUNDATION MATERIAL, SPECIFICATIONS, AND ANCHORAGE MUST BE IN ACCORDANCE WITH FOUNDATION SPECIFICATIONS FOR A CONCRETE PAD. SEE SHEET 8.
3. NO REBAR IS NEEDED IN 8" THICK CONCRETE PAD.
4. IF FOUNDATION ABUTS A CONCRETE CURB, WALL, ABUTMENT, OR OTHER CONCRETE HAZARD, PLACE BACKSTOP AGAINST THE HAZARD AND SUBTRACT 10" FROM DIMENSION "L".
5. TORQUE ANCHORS TO 120 FT-LBF.
6. BACKSTOP ANCHORS REQUIRE 6" EMBEDMENT FOR 3/4" X 8 1/4" GALVANIZED ANCHOR.
7. FOR A 6" CONCRETE PAD, FOUNDATION REINFORCING (#5 REBAR) IS REQUIRED, SEE ASSEMBLY AND INSTALLATION MANUAL FOR ADDITIONAL DETAILS.



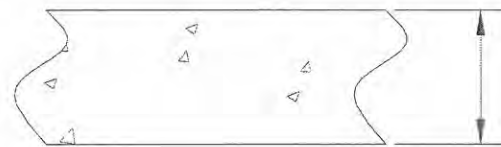
UNIVERSAL TAU-II FOUNDATION, CONCRETE PAD, WIDE FLANGE BACKSTOP

SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:24	FDOT QPL S544-0045	SHEET 7 OF 28

NOTES:

1. THE UNIVERSAL TAU-II CRASH CUSHION SYSTEM HAS BEEN DESIGNED TO ATTACH TO CONCRETE OR ASPHALT FOUNDATIONS. FOR PERMANENT APPLICATIONS, FDOT REQUIRES THE USE OF A CONCRETE FOUNDATION. USE THE ANCHORAGE SPECIFIED BELOW DEPENDING ON THE FOUNDATION AT THE JOB SITE. REFER TO TAU-II FOUNDATION DRAWINGS, SHEETS 5-7 FOR FURTHER DETAIL.
2. FOR CHEMICAL ANCHORS, USE 3/4" GRADE 2 THREADED ROD WITH EPOXY MEETING THE ASTM C307 TENSILE STRENGTH OF 2,000 PSI AND COMPRESSIVE STRENGTH OF 10,000 PSI PER ASTM C109 OR C579. THE ANCHORING COMPOUND SHOULD PROVIDE A MINIMUM PULL OUT STRENGTH OF 20,000 LBF IN 4,000 PSI CONCRETE.

CONCRETE PAD



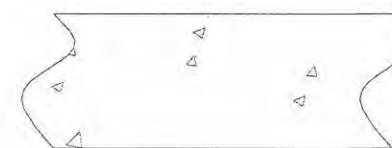
6 IN. REINFORCED OR
8 IN. NONREINFORCED

FOUNDATION: MINIMUM 6 IN. REINFORCED CONCRETE PAD OR 8 IN. NONREINFORCED CONCRETE PAD

ANCHORAGE: 3/4 IN. X 8 1/4 IN. GALVANIZED ANCHOR WITH 6 IN. EMBEDMENT OR 3/4" MECHANICAL ANCHORS WITH AN EMBEDMENT THAT IS IN ACCORDANCE WITH ANCHOR MANUFACTURER'S SPECIFICATIONS

MATERIAL SPECIFICATIONS

PORTLAND CEMENT CONCRETE (PCC)



STONE AGGREGATE CONCRETE MIX, 4,000 PSI MINIMUM COMPRESSIVE STRENGTH (SAMPLING PER ASTM C31-84 OR ASTM C42-84A, TESTING PER ASTM C39-84)

THE CONTRACTOR IS TO FURNISH A CERTIFICATION THAT THE CONCRETE INSTALLED MEETS THE REQUIRED STRENGTH AND TESTING REQUIREMENTS



UNIVERSAL TAU-II FOUNDATION SPECIFICATIONS

SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE NTS	FDOT QPL S544-0045	SHEET 8 OF 28

SYSTEM WIDTH (IN)	SYSTEM SPEED CAPACITY (MPH)						SHEET NUMBER
	(TL-2)			(TL-3)			
	30	35	45	50	55	60	
UP TO 30" CONCRETE PCB BACKSTOP	30T050PBC 30T050PYC	30T060PBC 30T060PYC	30T070PBC 30T070PYC	30T080PBC 30T080PYC	30T090PBC 30T090PYC	30T100PBC 30T100PYC	6
L (PAD LENGTH), MIN	85 1/2	119 1/2	154	188	256	290 1/2	
P	65	99 1/8	133 1/4	167 3/8	235 5/8	269 3/4	
W (PAD WIDTH), MIN	48	48	48	48	48	48	
UP TO 30" CONCRETE COMPACT BACKSTOP	30T050CBC 30T050CYC	30T060CBC 30T060CYC	30T070CBC 30T070CYC	30T080CBC 30T080CYC	30T090CBC 30T090CYC	30T100CBC 30T100CYC	5
L (PAD LENGTH), MIN	115 1/2	149 1/2	183 1/2	217 1/2	286	320	
P	55 1/2	89 5/8	123 3/4	157 7/8	226 1/8	260 1/4	
W (PAD WIDTH), MIN	48	48	48	48	48	48	
36" CONCRETE PCB BACKSTOP	36T050PBC 36T050PYC	36T060PBC 36T060PYC	36T070PBC 36T070PYC	36T080PBC 36T080PYC	36T090PBC 36T090PYC	36T100PBC 36T100PYC	6
L (PAD LENGTH), MIN	85 1/2	119 1/2	154	188	256	290 1/2	
P	65	99 1/8	133 1/4	167 3/8	235 5/8	269 3/4	
W (PAD WIDTH), MIN	48	48	48	48	48	48	
36" CONCRETE COMPACT BACKSTOP	36T050CBC 36T050CYC	36T060CBC 36T060CYC	36T070CBC 36T070CYC	36T080CBC 36T080CYC	36T090CBC 36T090CYC	36T100CBC 36T100CYC	5
L (PAD LENGTH), MIN	115 1/2	149 1/2	183 1/2	217 1/2	286	320	
P	55 1/2	89 5/8	123 3/4	157 7/8	226 1/8	260 1/4	
W (PAD WIDTH), MIN	48	48	48	48	48	48	



UNIVERSAL TAU-II PARALLEL SYSTEMS FOUNDATION LAYOUT
(ALL DIMENSIONS IN INCHES)

SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE NTS	FDOT QPL S544-0045	SHEET 9 OF 28

SYSTEM WIDTH (IN)	SYSTEM SPEED CAPACITY (MPH)						SHEET NUMBER
	(TL-2)			(TL-3)			
	30	35	45	50	55	60	
42" WF BACKSTOP	42T050WBC 42T050WYC	42T060WBC 42T060WYC	42T070WBC 42T070WYC	42T080WBC 42T080WYC	42T090WBC 42T090WYC	42T100WBC 42T100WYC	7
L (PAD LENGTH), MIN	125	159	193	227	295	329	
W1 (PAD WIDTH, FRONT), MIN	44	44	44	44	44	44	
W2 (PAD WIDTH, REAR), MIN	51	51	51	51	51	51	
P	65	99	133	167	235	269	
A	22	22	22	22	22	22	
B	31	31	31	31	31	31	
C	NA	NA	NA	NA	NA	NA	
48" WF BACKSTOP	48T050WBC 48T050WYC	48T060WBC 48T060WYC	48T070WBC 48T070WYC	48T080WBC 48T080WYC	48T090WBC 48T090WYC	48T100WBC 48T100WYC	7
L (PAD LENGTH), MIN	125	159	193	227	295	329	
W1 (PAD WIDTH, FRONT), MIN	44	44	44	44	44	44	
W2 (PAD WIDTH, REAR), MIN	51	51	51	51	51	51	
P	65	99	133	167	235	269	
A	22	22	22	22	22	22	
B	31	31	31	31	31	31	
C	NA	NA	NA	NA	NA	NA	
54" WF BACKSTOP	54T050WBC 54T050WYC	54T060WBC 54T060WYC	54T070WBC 54T070WYC	54T080WBC 54T080WYC	54T090WBC 54T090WYC	54T100WBC 54T100WYC	7
L (PAD LENGTH), MIN	125	159	193	227	295	329	
W1 (PAD WIDTH, FRONT), MIN	44	44	44	44	44	44	
W2 (PAD WIDTH, REAR), MIN	51	51	51	51	51	51	
P	65	99	133	167	235	269	
A	22	22	22	22	22	22	
B	31	31	31	31	31	31	
C	NA	NA	NA	NA	NA	NA	
60" WF BACKSTOP	60T050WBC 60T050WYC	60T060WBC 60T060WYC	60T070WBC 60T070WYC	60T080WBC 60T080WYC	60T090WBC 60T090WYC	60T100WBC 60T100WYC	7
L (PAD LENGTH), MIN	125	159	193	227	295	329	
W1 (PAD WIDTH, FRONT), MIN	44	44	44	44	44	44	
W2 (PAD WIDTH, REAR), MIN	51	51	51	51	51	51	
P	65	99	133	167	235	269	
A	22	22	22	22	22	22	
B	31	31	31	31	31	31	
C	NA	NA	NA	NA	NA	NA	
66" WF BACKSTOP		66T060WBC 66T060WYC	66T070WBC 66T070WYC	66T080WBC 66T080WYC	66T090WBC 66T090WYC	66T100WBC 66T100WYC	7
L (PAD LENGTH), MIN		125	159	193	261	295	
W1 (PAD WIDTH, FRONT), MIN		69	44	44	44	44	
W2 (PAD WIDTH, REAR), MIN		75	75	75	75	75	
P		65	99	133	201	235	
A		48 5/8	22	22	22	22	
B		54 3/4	54 3/4	54 3/4	54 3/4	54 3/4	
C		NA	27 3/4	27 3/4	27 3/4	27 3/4	
D		42 5/8	16	16	16	16	
E		NA	41 3/4	41 3/4	41 3/4	41 3/4	



**UNIVERSAL TAU-II WIDE SYSTEMS FOUNDATION LAYOUT
(ALL DIMENSIONS IN INCHES)**

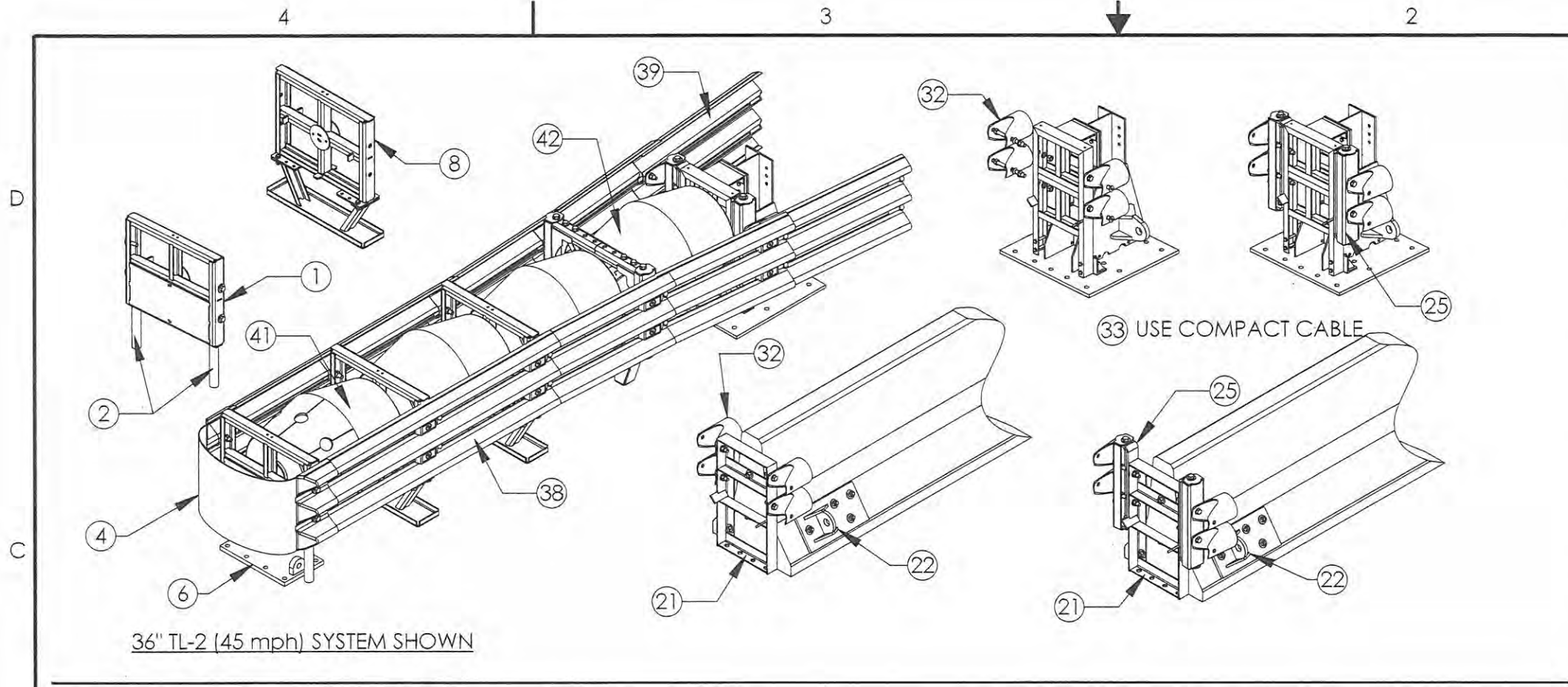
SIZE	DWG NO.	REV.
B	BSI-1209009-AP	0
SCALE	FDOT QPL S544-0045	SHEET 10 OF 28

SYSTEM WIDTH (IN)	SYSTEM SPEED CAPACITY (MPH)						SHEET NUMBER
	(TL-2)			(TL-3)			
	30	35	45	50	55	60	
72" WF BACKSTOP							7
L (PAD LENGTH), MIN	72T060WBC	72T070WBC	72T080WBC	72T090WBC	72T100WBC	72T100WBC	
W1 (PAD WIDTH, FRONT), MIN	72T060WYC	72T070WYC	72T080WYC	72T090WYC	72T100WYC	72T100WYC	
W2 (PAD WIDTH, REAR), MIN	125	159	193	227	295	295	
P	69	69	44	44	44	44	
A	75	75	75	75	75	75	
B	65	99	133	167	235	235	
C	48 5/8	48 5/8	22	22	22	22	
78" WF BACKSTOP							7
L (PAD LENGTH), MIN	78T060WBC	78T070WBC	78T080WBC	78T090WBC	78T100WBC	78T100WBC	
W1 (PAD WIDTH, FRONT), MIN	78T060WYC	78T070WYC	78T080WYC	78T090WYC	78T100WYC	78T100WYC	
W2 (PAD WIDTH, REAR), MIN	125	159	193	227	295	295	
P	69	69	69	44	44	44	
A	75	75	75	75	75	75	
B	65	99	133	167	235	235	
C	48 5/8	48 5/8	48 5/8	22	22	22	
84" WF BACKSTOP							7
L (PAD LENGTH), MIN			84T070WBC	84T080WBC	84T090WBC	84T100WBC	
W1 (PAD WIDTH, FRONT), MIN			84T070WYC	84T080WYC	84T090WYC	84T100WYC	
W2 (PAD WIDTH, REAR), MIN			159	193	227	295	
P			69	69	69	44	
A			75	75	75	75	
B			99	133	167	235	
C			48 5/8	48 5/8	48 5/8	22	
90" WF BACKSTOP							7
L (PAD LENGTH), MIN			90T070WBC	90T080WBC	90T090WBC	90T100WBC	
W1 (PAD WIDTH, FRONT), MIN			90T070WYC	90T080WYC	90T090WYC	90T100WYC	
W2 (PAD WIDTH, REAR), MIN			159	193	227	295	
P			69	69	69	44	
A			99	99	99	99	
B			99	133	167	235	
C			48 5/8	48 5/8	48 5/8	22	
96" WF BACKSTOP							7
L (PAD LENGTH), MIN			96T070WBC	96T080WBC	96T090WBC	96T100WBC	
W1 (PAD WIDTH, FRONT), MIN			96T070WYC	96T080WYC	96T090WYC	96T100WYC	
W2 (PAD WIDTH, REAR), MIN			159	193	227	295	
P			93	69	69	69	
A			99	99	99	99	
B			99	133	167	235	
C			72 5/8	48 5/8	48 5/8	48 5/8	

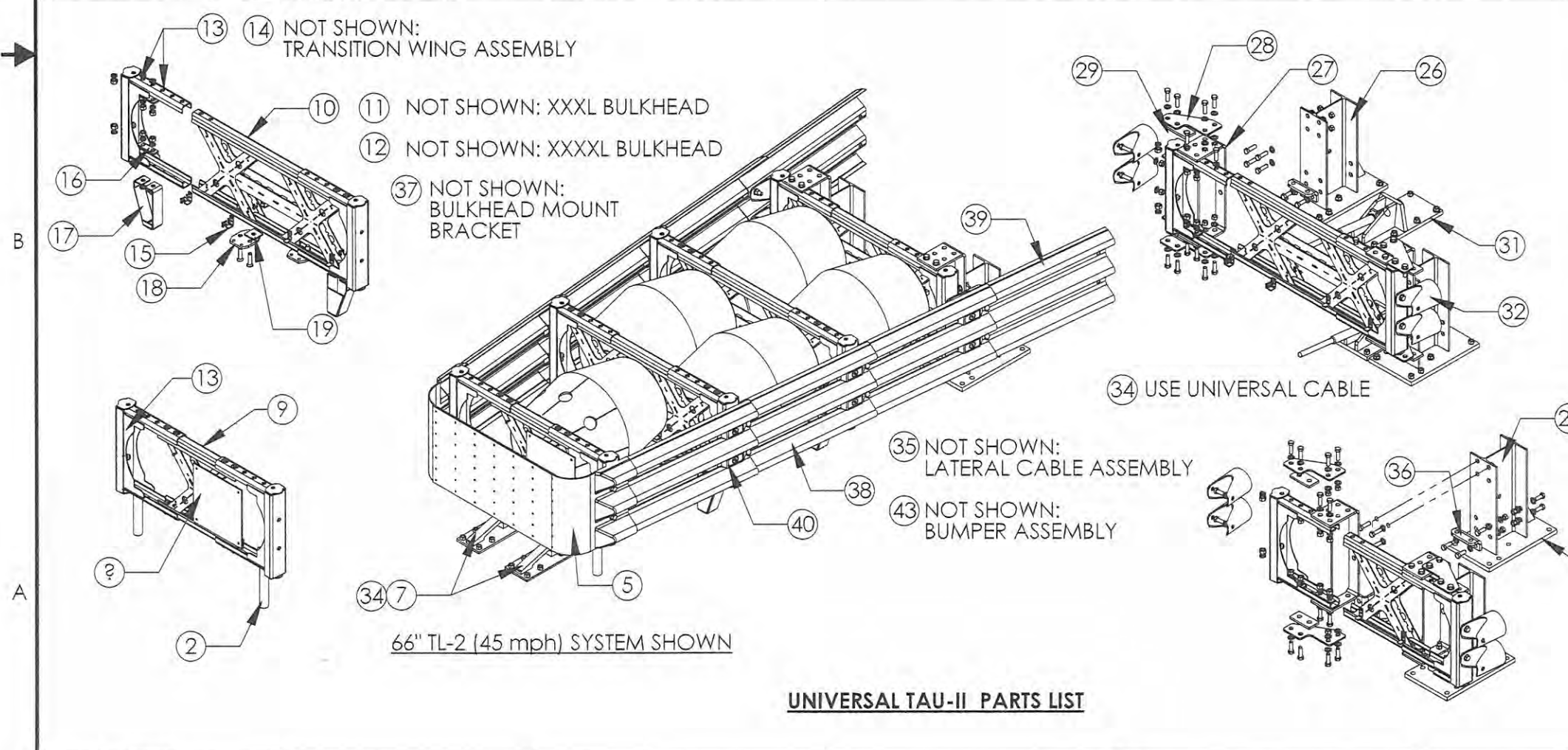


UNIVERSAL TAU-II WIDE SYSTEMS FOUNDATION LAYOUT
(ALL DIMENSIONS IN INCHES)

SIZE	DWG NO.	REV.
B	BSI-1209009-AP	0
SCALE	FDOT QPL S544-0045	SHEET 11 OF 28
NTS		



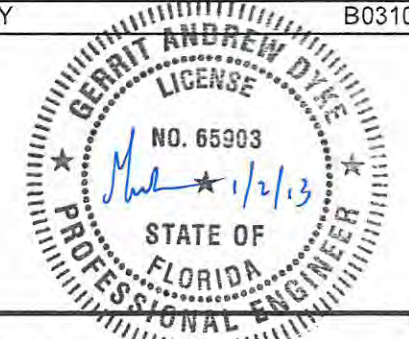
36" TL-2 (45 mph) SYSTEM SHOWN



66" TL-2 (45 mph) SYSTEM SHOWN

UNIVERSAL TAU-II PARTS LIST

ITEM	PART DESCRIPTION	PART #
1	FRONT SUPPORT	B010528
2	FRONT SUPPORT LEG KIT	K001005
3	FRONT COLLISION PLATE	B030801
4	NOSE PIECE, NARROW	B010711
5	NOSE PIECE WIDE	B030902
6	FRONT CABLE ANCHOR, COMPACT	B010248
7	FRONT CABLE ANCHOR, UNIVERSAL	B010935
8	MIDDLE SUPPORT ASSEMBLY	B010530
9	XL BULKHEAD	B030521
10	XXL BULKHEAD	B030528
11	XXXL BULKHEAD	B030529
12	XXXXL BULKHEAD	B030532
13	WING ASSEMBLY	B030509
14	TRANSITION WING ASSEMBLY	B030910
15	EAC LOCATING TAB	B031112
16	BACKING PLATE	B030543
17	LEG	B030425
18	CABLE GUIDE MOUNT	B030411
19	LEVEL SPACER	B030551
20	CABLE GUIDE ASSEMBLY KIT	K001004
21	PCB BACKSTOP	B011007
22	REAR CABLE ANCHOR "R" (PCB)	B010929
23	REAR CABLE ANCHOR "L" (PCB)	B011041
24	COMPACT BACKSTOP	B010537
25	36" ADAPTER (PCB & COMPACT)	B031201
26	WIDE FLANGE BACKSTOP	B030668
27	BACKSTOP BLOCKOUT (WF)	B030713
28	WING BRACE (WF)	B030821
29	WING BRACE SPACER (WF)	B030823
30	REAR CABLE ANCHOR, WF	B031020
31	REAR CABLE ANCHOR, IND (WF)	B030938
32	PIPE PANEL MOUNT	B010651
33	CABLE, COMPACT	VARIES
34	CABLE, UNIVERSAL	VARIES
35	LATERAL CABLE ASSEMBLY	B031034
36	LATERAL SUPPORT MOUNT (WF)	B031011
37	BULKHEAD MOUNT BRACKET	B031010
38	SLIDING PANEL	B010202
39	END PANEL	B010659
40	SLIDING BOLT ASSEMBLY	K001003
41	ENERGY ABSORBING CARTRIDGE, TYPE A	B010802
42	ENERGY ABSORBING CARTRIDGE, TYPE B	B010722
43	BUMPER ASSEMBLY	B031035



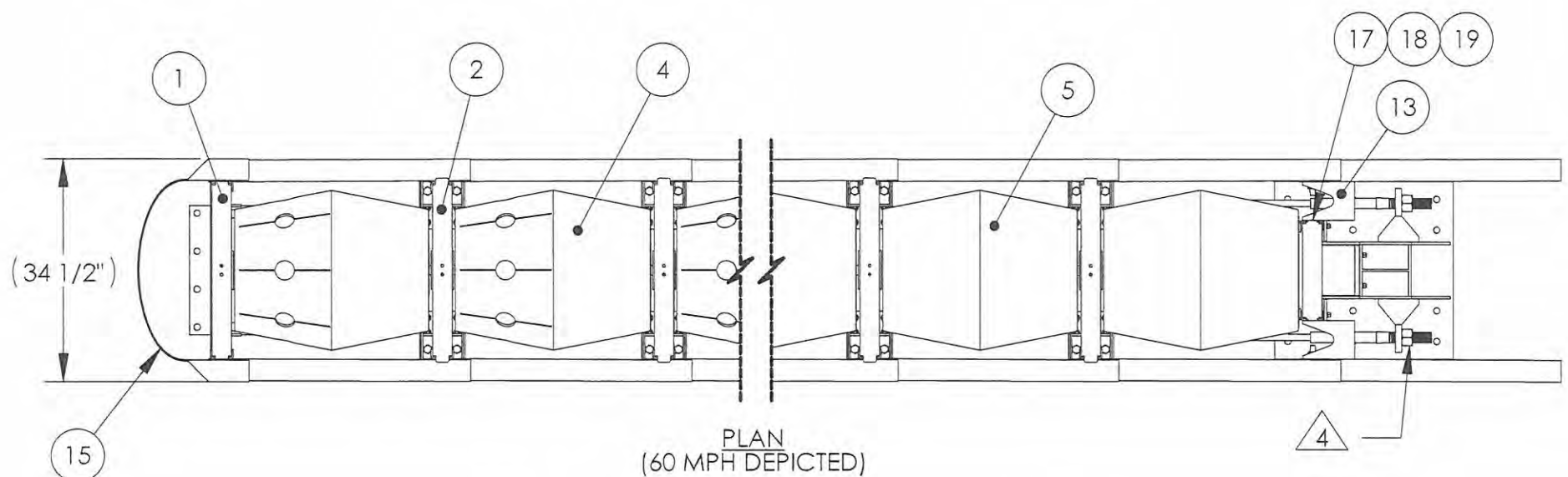
SIZE	DWG NO.	REV.
B	BSI-1209009-AP	0
SCALE	FDOT QPL 544-0045	SHEET 12 OF 28
1:30		

NOTES:

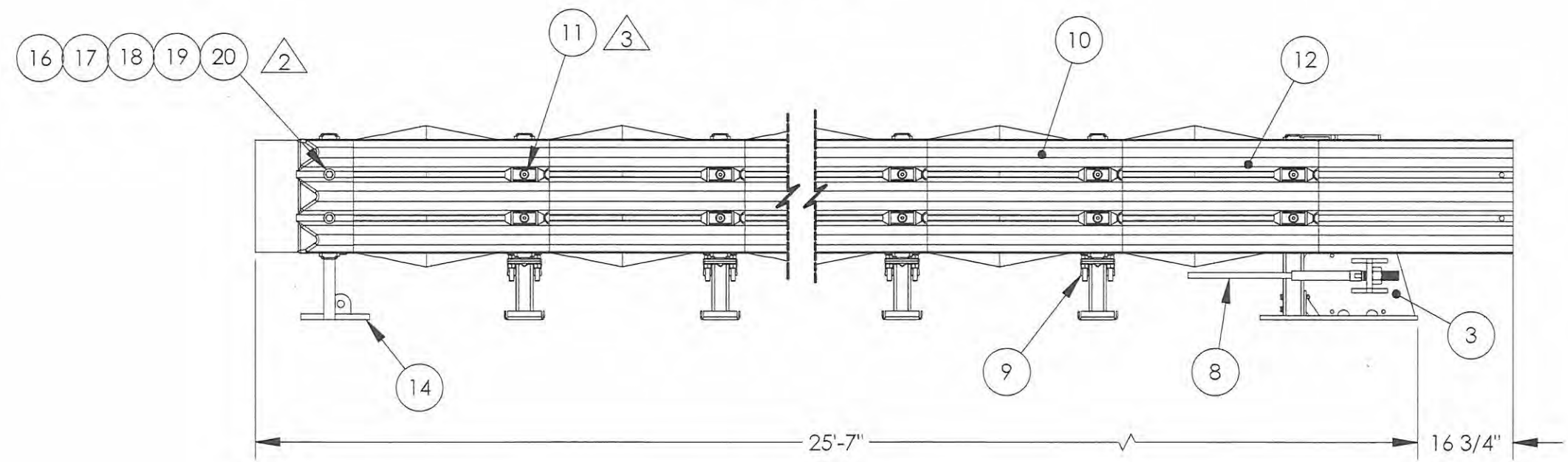
1. THIS DRAWING ILLUSTRATES AN 8-BAY TL-3 TAU-II WITH A COMPACT BACKSTOP TO DEPICT THE OVERALL SYSTEM COMPONENT LAYOUT.

- 2. TORQUE NOSE ATTACHING HARDWARE TO 200 FT-LBF.
- 3. TORQUE SLIDER ATTACHING HARDWARE TO 20 FT-LBF.
- 4. TORQUE CABLES TO 500 FT-LBF.

ITEM	QTY	PART DESCRIPTION	PART #
1	1	FRONT SUPPORT ASSEMBLY	B010528
2	7	MIDDLE SUPPORT ASSEMBLY	B010530
3	1	COMPACT BACKSTOP	B034011
4	3	ENERGY ABSORBING CARTRIDGE, TYPE A	B010802
5	5	ENERGY ABSORBING CARTRIDGE, TYPE B	B010722
6	1	ANCHORING PACKAGE	B010713
7	2	FRONT SUPPORT LEG	B010712
8	2	COMPACT CABLE	B010916
9	24	CABLE GUIDE ASSEMBLY	B010721
10	16	SLIDING PANEL	B010202
11	32	SLIDING BOLT	B010842
12	2	END PANEL	B010659
13	4	PIPE PANEL MOUNT	B010651
14	14	FRONT CABLE ANCHOR	B010248
15	1	NOSE PIECE	B010711
16	4	EXTRA THICK FLAT WASHER	2001009
17	8	HEX BOLT	2001449
18	12	WASHER	2001450
19	8	HEX NUT	2001451
20	4	FENDER WASHER	2001009



PLAN
(60 MPH DEPICTED)



ELEVATION
(60 MPH DEPICTED)

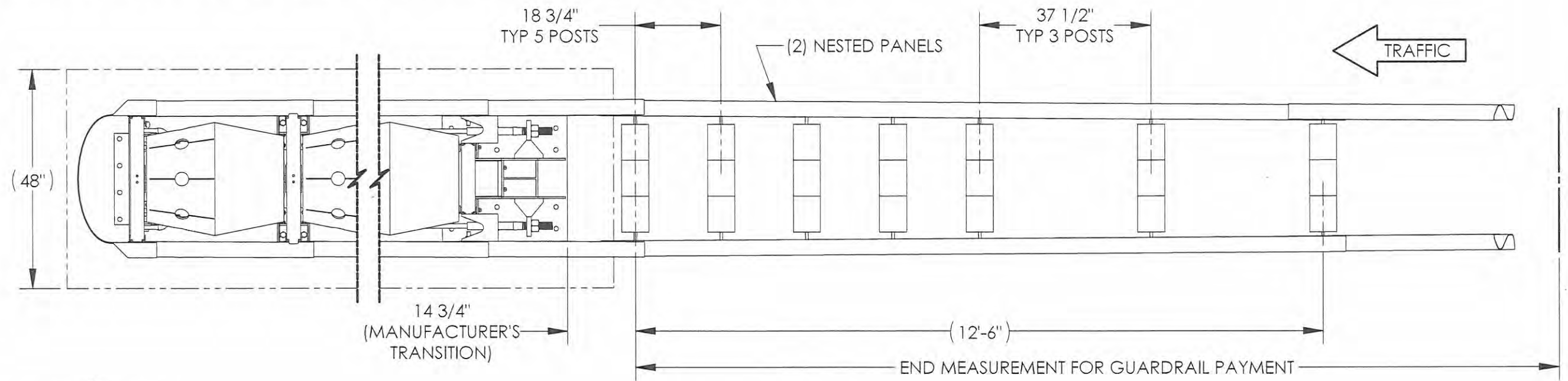
UNIVERSAL TAU-II PARALLEL SYSTEM LAYOUT



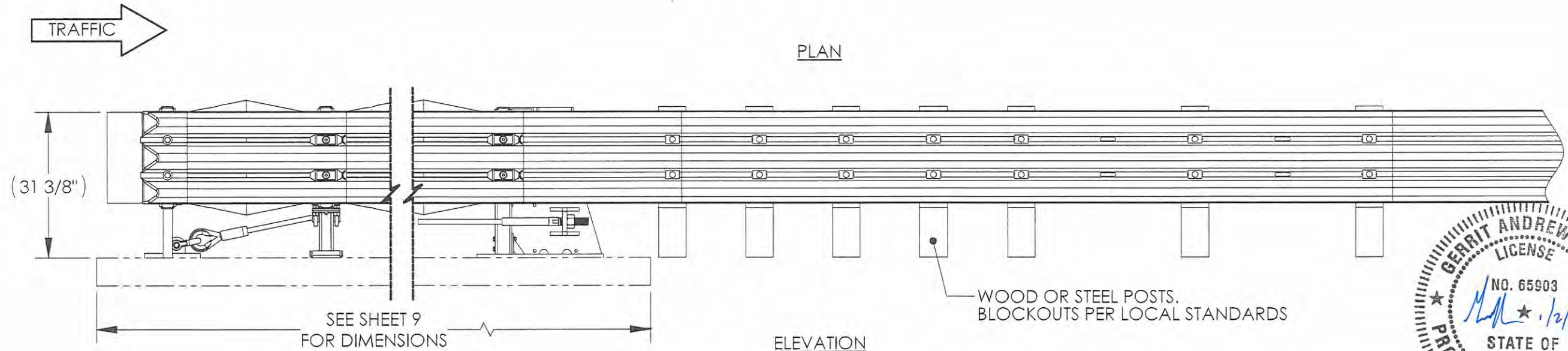
SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:24	FDOT QPL S544-0045	SHEET 13 OF 28

NOTES:

1. TAU-II SYSTEM TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. REFER TO SHEET 8 FOR FOUNDATION SPECIFICATIONS.
2. USE HARDWARE, POSTS AND BLOCKOUTS IN ACCORDANCE WITH FLORIDA DOT SPECIFICATIONS. SUPPORT POSTS AND BLOCKOUTS SHALL MEET THE REQUIREMENTS OF FLORIDA DOT INDEX 400 AND FLORIDA SPECIFICATIONS.
3. 4-SPACE THRIE BEAM GUARDRAIL PER AASHTO HARDWARE SPECIFICATION RTM04. GALVANIZE IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.
4. TWO NESTED 4-SPACE THRIE BEAM GUARDRAIL PANELS PER AASHTO RTM04, ONE INSIDE THE OTHER FOR BI-DIRECTIONAL TRAFFIC CONDITIONS. ONLY NEEDED ON SIDE WHERE THE TAU-II SYSTEM IS DOWNSTREAM OF TRANSITION.
5. WHERE REAMING IS NECESSARY TO FIT NESTED BEAMS, THE REAMED SURFACES SHALL BE METALLIZED IN ACCORDANCE WITH FDOT INDEX 400.
6. ALL HARDWARE AND FASTENERS TO BE GALVANIZED IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.



PLAN



ELEVATION

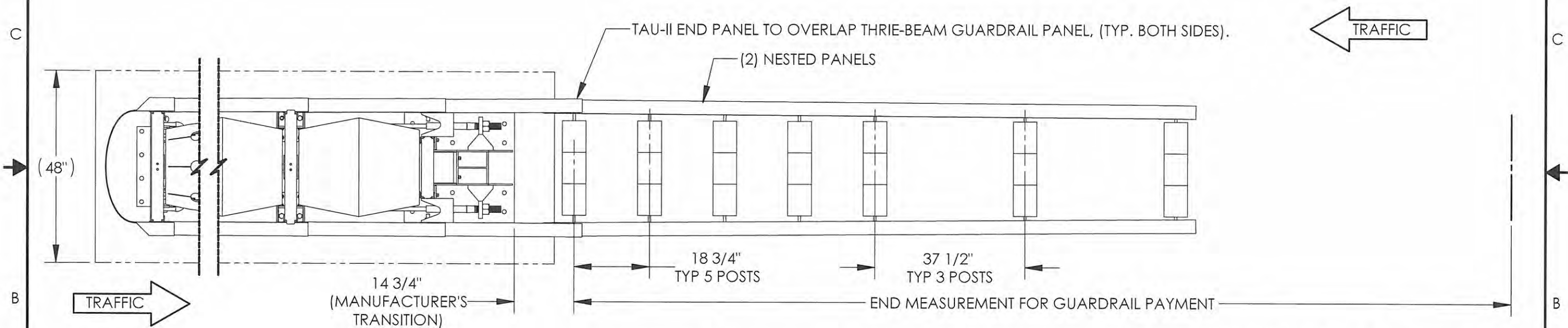
UNIVERSAL TAU-II WITH COMPACT BACKSTOP, TRANSITION TO THRIE BEAM GUARDRAIL



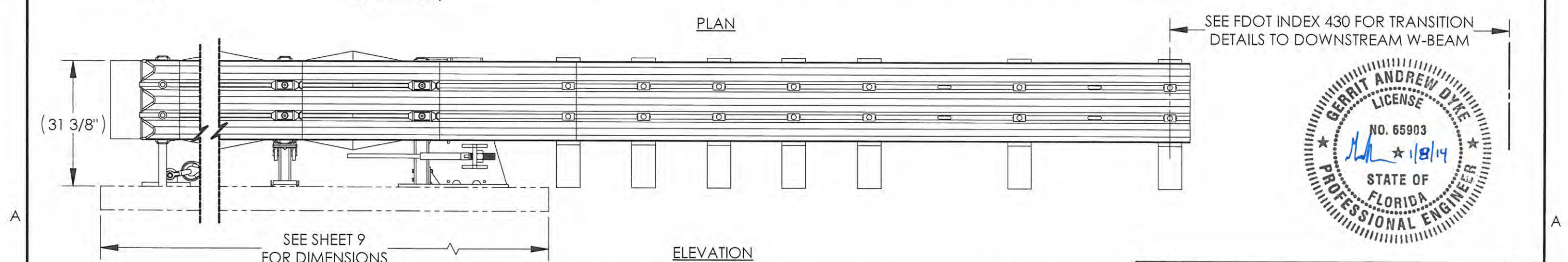
SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:24	FDOT QPL S544-0045	SHEET 14 OF 28

NOTES:

1. TAU-II SYSTEM TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. REFER TO SHEET 8 FOR FOUNDATION SPECIFICATIONS.
2. USE HARDWARE, POSTS AND BLOCKOUTS IN ACCORDANCE WITH FLORIDA DOT SPECIFICATIONS. SUPPORT POSTS AND BLOCKOUTS SHALL MEET REQUIREMENTS OF FLORIDA DOT INDEX 400 AND FLORIDA SPECIFICATIONS.
3. 4-SPACE THRIE BEAM GUARDRAIL PER AASHTO HARDWARE SPECIFICATION RTM04. GALVANIZE IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.
4. TWO NESTED 4-SPACE THRIE BEAM GUARDRAIL PANELS PER AASHTO RTM04, ONE INSIDE THE OTHER FOR BI-DIRECTIONAL TRAFFIC CONDITIONS. ONLY NEEDED ON SIDE WHERE THE TAU-II SYSTEM IS DOWNSTREAM OF TRANSITION.
5. W-THRIE BEAM TRANSITION SECTION PER AASHTO HARDWARE SPECIFICATION RWT01. GALVANIZE IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.
6. FLORIDA DOT W-BEAM GUARDRAIL.
7. 5/8" DIA BUTTON HEAD BOLT WITH BEAM WASHER AND NUT, AND NUT WITH WASHER AND BEAM WASHER. BOLT LENGTH DETERMINED BY SECTION WIDTH.
8. WHERE REAMING IS NECESSARY TO FIT NESTED BEAMS, THE REAMED SURFACES SHALL BE METALLIZED IN ACCORDANCE WITH FLORIDA INDEX 400.
9. ALL HARDWARE AND FASTENERS TO BE GALVANIZED IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.

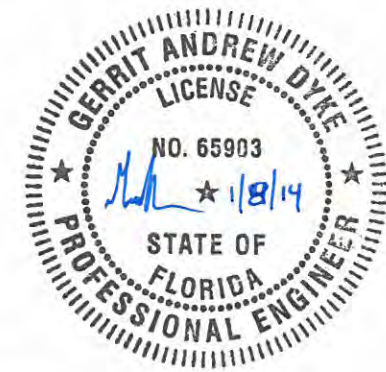


PLAN



ELEVATION

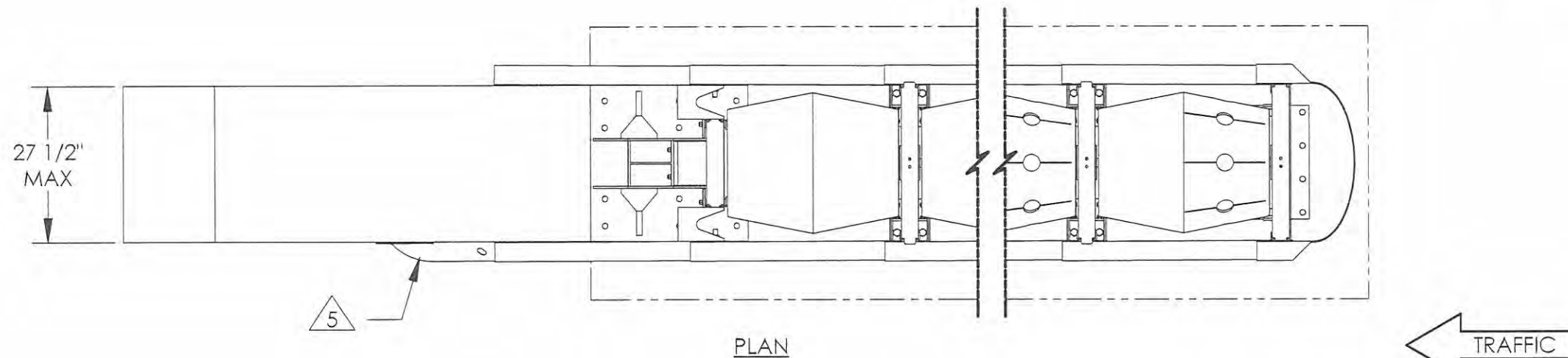
UNIVERSAL TAU-II WITH COMPACT BACKSTOP, TRANSITION TO DOUBLE FACE W-BEAM



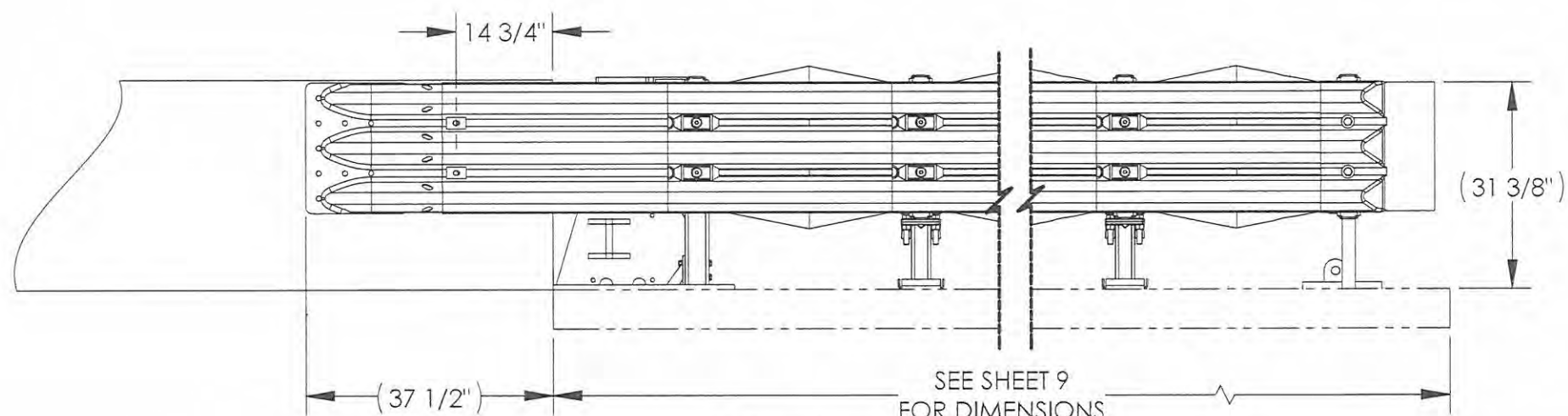
SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:24	FDOT QPL S544-0045	SHEET 15 OF 28

NOTES:

1. TAU-II SYSTEM TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. REFER TO SHEET 8 FOR FOUNDATION SPECIFICATIONS.
2. USE HARDWARE IN ACCORDANCE WITH FLORIDA DOT SPECIFICATIONS. REFERENCE INDEX 400 DETAIL J.
3. WHERE REAMING IS NECESSARY TO FIT NESTED BEAMS, THE REAMED SURFACES SHALL BE METALLIZED IN ACCORDANCE WITH FLORIDA INDEX 400.
4. ALL HARDWARE AND FASTENERS TO BE GALVANIZED IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.
5. USE END SHOE FOR BIDIRECTIONAL CONDITION, ATTACH THRIE BEAM TERMINAL CONNECTOR TO CONCRETE BLOCK WITH (7) 7/8" X 28 1/2" LONG HS HEX BOLTS AND NUTS WITH 7/8" PLAIN ROUND WASHERS UNDER HEADS AND NUTS, OR USE 3/4" THREADED ROD AND EPOXY WITH MINIMUM 6" EMBEDMENT. THRIE BEAM TERMINAL CONNECTOR PER AASHTO HARDWARE SPECIFICATION RTE01. GALVANIZE IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.
6. THIS DRAWING IS FOR GENERAL APPLICATION PURPOSES ONLY. LAYOUT SHOWN ALSO APPLIES WHEN THE FLUSH MOUNT BACKSTOP IS USED (MAX HAZARD WIDTH: 36").



PLAN



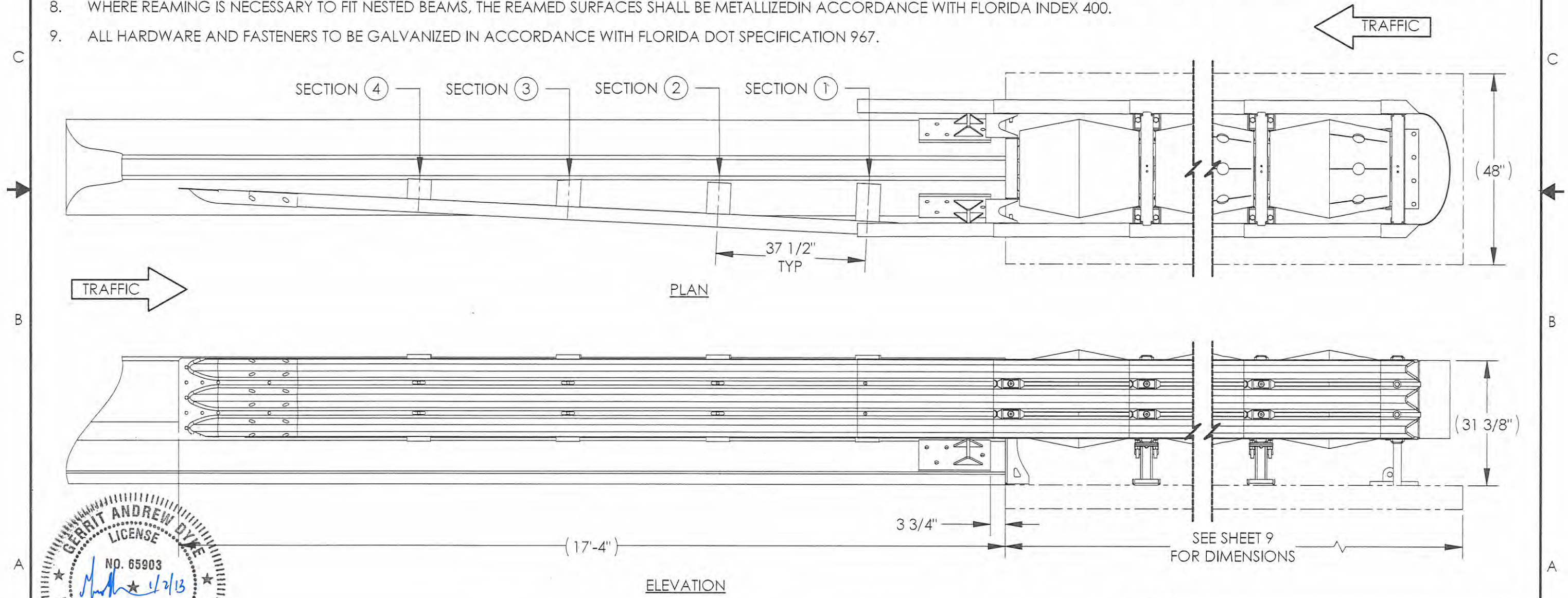
ELEVATION



UNIVERSAL TAU-II WITH COMPACT BACKSTOP, TRANSITION TO CONCRETE BLOCK

SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:24	FDOT QPL S544-0045	SHEET 16 OF 28

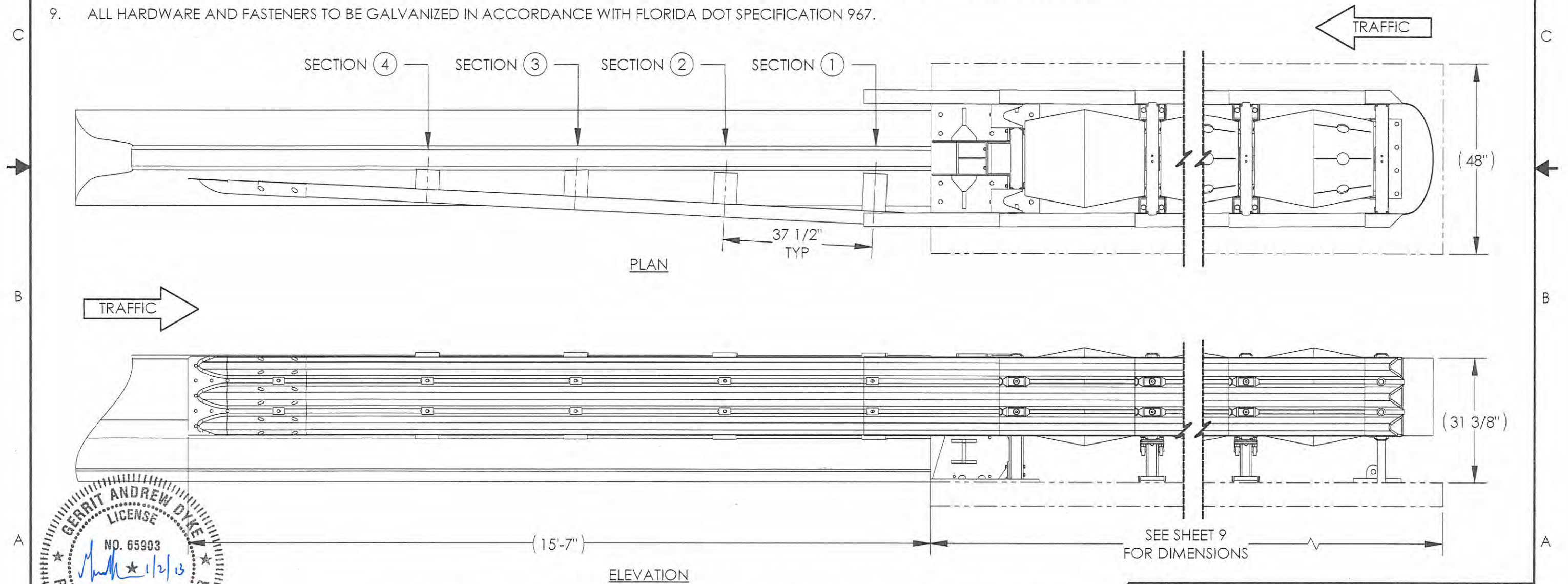
- NOTES:
1. TAU-II SYSTEM TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. REFER TO SHEET 8 FOR FOUNDATION SPECIFICATIONS. REINFORCEMENT OF SAFETY SHAPE BARRIER MAY BE NEEDED.
 2. USE HARDWARE AND BLOCKOUTS IN ACCORDANCE WITH FLORIDA DOT SPECIFICATIONS. REFER TO INDEX 400 DETAIL J.
 3. 4-SPACE THRIE BEAM GUARDRAIL PER AASHTO HARDWARE SPECIFICATION RTM04. GALVANIZE IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.
 4. THRIE BEAM TERMINAL CONNECTOR PER AASHTO HARDWARE SPECIFICATION RTE01. GALVANIZE IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.
 5. STANDARD TIMBER OFFSET BLOCKS FIELD TRIMMED FOR USE AT SECTIONS 1-4. REFER TO SHEET 19 FOR BLOCKOUT DETAILS. BLOCKOUTS SHALL MEET REQUIREMENTS OF FLORIDA DOT INDEX 400, 410, AND FLORIDA SPECIFICATIONS.
 6. 5/8" DIA BUTTON HEAD BOLT WITH BEAM WASHER AND NUT. BOLT LENGTH DETERMINED BY SECTION WIDTH. (1) : 28 1/2", (2) : 24 1/2", (3) : 20 1/2", AND (4) : 16 1/2". LENGTHS MAY VARY WITH DIFFERENT BARRIER SHAPES. HOLES DRILLED THROUGH CONCRETE BARRIER ARE 3/4" DIA.
 7. ATTACH THRIE BEAM TERMINAL CONNECTOR TO MEDIAN BARRIER WALL WITH (5) 7/8" X 15" LONG HS HEX BOLTS AND NUTS WITH 7/8" PLAIN ROUND WASHERS UNDER HEADS AND NUTS. ATTACH TO SHOULDER BARRIER WALL WITH 21" X 12" X 5/8" THRIE BEAM TERMINAL CONNECTOR PLATE AND (5) 7/8" X 12" LONG HS HEX BOLTS AND NUTS WITH 7/8" PLAIN ROUND WASHERS UNDER HEADS AND NUTS.
 8. WHERE REAMING IS NECESSARY TO FIT NESTED BEAMS, THE REAMED SURFACES SHALL BE METALLIZED IN ACCORDANCE WITH FLORIDA INDEX 400.
 9. ALL HARDWARE AND FASTENERS TO BE GALVANIZED IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.



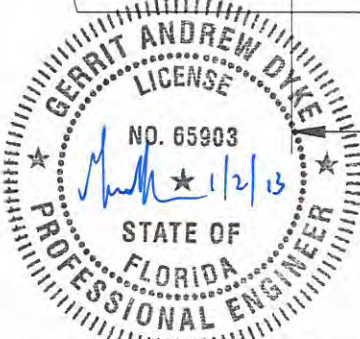
UNIVERSAL TAU-II WITH PCB BACKSTOP, TRANSITION TO CONCRETE BARRIER

SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:24	FDOT QPL S544-0045	SHEET 17 OF 28

- NOTES:
1. TAU-II SYSTEM TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. REFER TO SHEET 8 FOR FOUNDATION SPECIFICATIONS. REINFORCEMENT OF SAFETY SHAPE BARRIER MAY BE NEEDED.
 2. USE HARDWARE AND BLOCKOUTS IN ACCORDANCE WITH FLORIDA DOT SPECIFICATIONS. REFER TO INDEX 400 DETAIL J.
 3. 4-SPACE THRIE BEAM GUARDRAIL PER AASHTO HARDWARE SPECIFICATION RTM04. GALVANIZE IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.
 4. THRIE BEAM TERMINAL CONNECTOR PER AASHTO HARDWARE SPECIFICATION RTE01. GALVANIZE IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.
 5. STANDARD TIMBER OFFSET BLOCKS FIELD TRIMMED FOR USE AT SECTIONS 1-4. REFER TO SHEET 19 FOR BLOCKOUT DETAILS. BLOCKOUTS SHALL MEET REQUIREMENTS OF FLORIDA DOT INDEX 400, 410, AND FLORIDA SPECIFICATIONS.
 6. 5/8" DIA BUTTON HEAD BOLT WITH BEAM WASHER AND NUT. BOLT LENGTH DETERMINED BY SECTION WIDTH. (1) : 20", (2) : 18", (3) : 16", AND (4) : 14". LENGTHS MAY VARY WITH DIFFERENT BARRIER SHAPES. HOLES DRILLED THROUGH CONCRETE BARRIER ARE 3/4" DIA.
 7. ATTACH THRIE BEAM TERMINAL CONNECTOR TO MEDIAN BARRIER WALL WITH (5) 7/8" X 15" LONG HS HEX BOLTS AND NUTS WITH 7/8" PLAIN ROUND WASHERS UNDER HEADS AND NUTS. ATTACH TO SHOULDER BARRIER WALL WITH 21" X 12" X 5/8" THRIE BEAM TERMINAL CONNECTOR PLATE AND (5) 7/8" X 12" LONG HS HEX BOLTS AND NUTS WITH 7/8" PLAIN ROUND WASHERS UNDER HEADS AND NUTS.
 8. WHERE REAMING IS NECESSARY TO FIT NESTED BEAMS, THE REAMED SURFACES SHALL BE METALLIZED IN ACCORDANCE WITH FLORIDA INDEX 400.
 9. ALL HARDWARE AND FASTENERS TO BE GALVANIZED IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.



UNIVERSAL TAU-II WITH COMPACT BACKSTOP, TRANSITION TO CONCRETE BARRIER, SINGLE SIDE



SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:24	FDOT QPL S544-0045	SHEET 18 OF 28

4

3

2

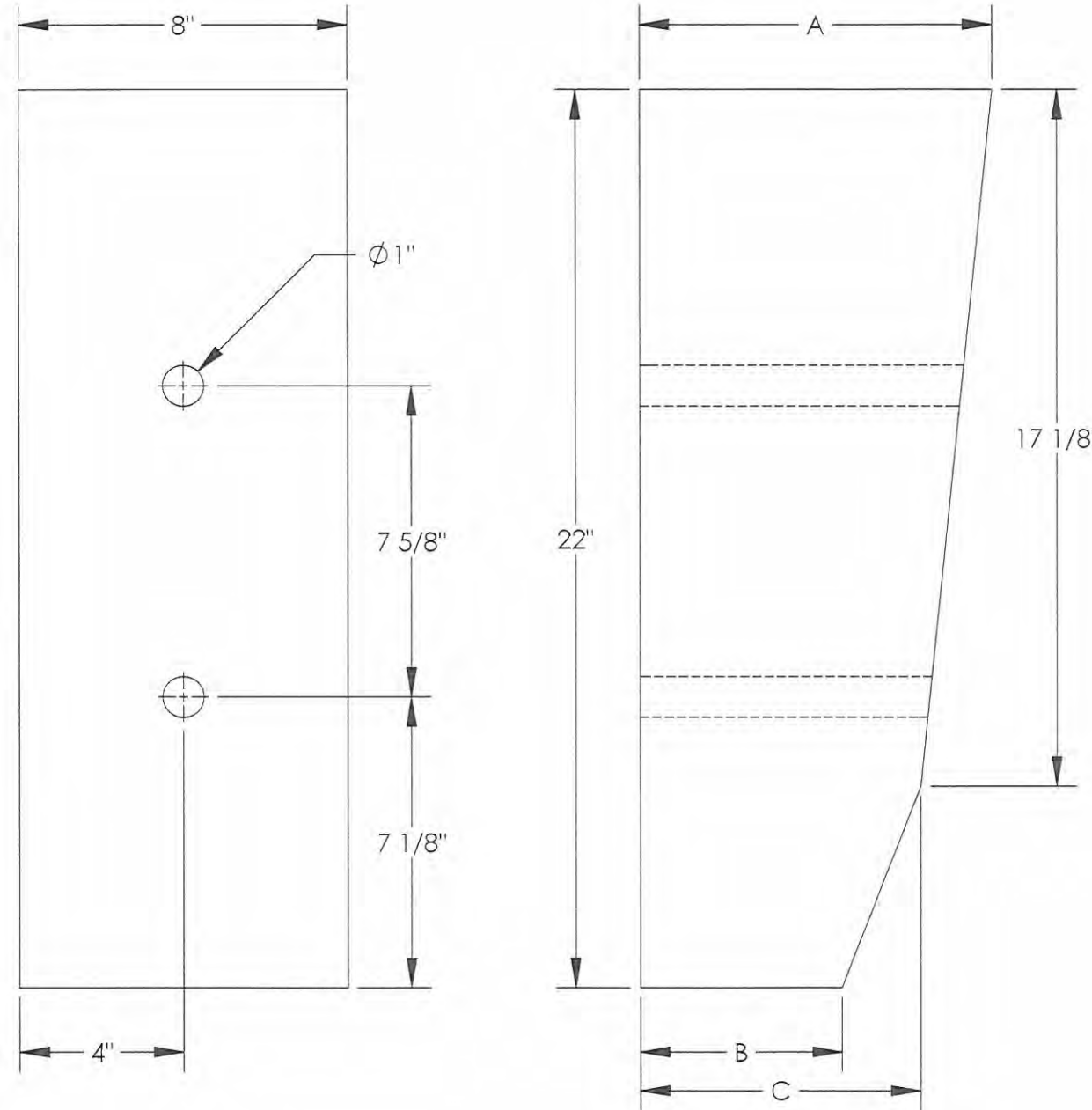
1

NOTES:

- 1. TIMBER BLOCKOUTS SHALL MEET THE REQUIREMENTS OF FLORIDA DOT INDEX 400 AND FLORIDA SPECIFICATIONS. REFERENCE INDEX 400, DETAIL J AND INDEX 410.
- 2. REFER TO SHEETS 17-18.
- 3. THRIE BEAM OFFSET BLOCKS FIELD TRIMMED FOR USE AT SECTIONS 1 THROUGH 4.

TRANSITION BLOCKOUT DIMENSIONS (in)

SECTION	A	B	C
1	10 3/4	7	9
2	8 5/8	5	6 7/8
3	6 1/2	2 3/4	4 3/4
4	4 3/8	1	2 5/8



TRANSITION BLOCKOUT



SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:4	FDOT QPL S544-0045	SHEET 19 OF 28

4

3

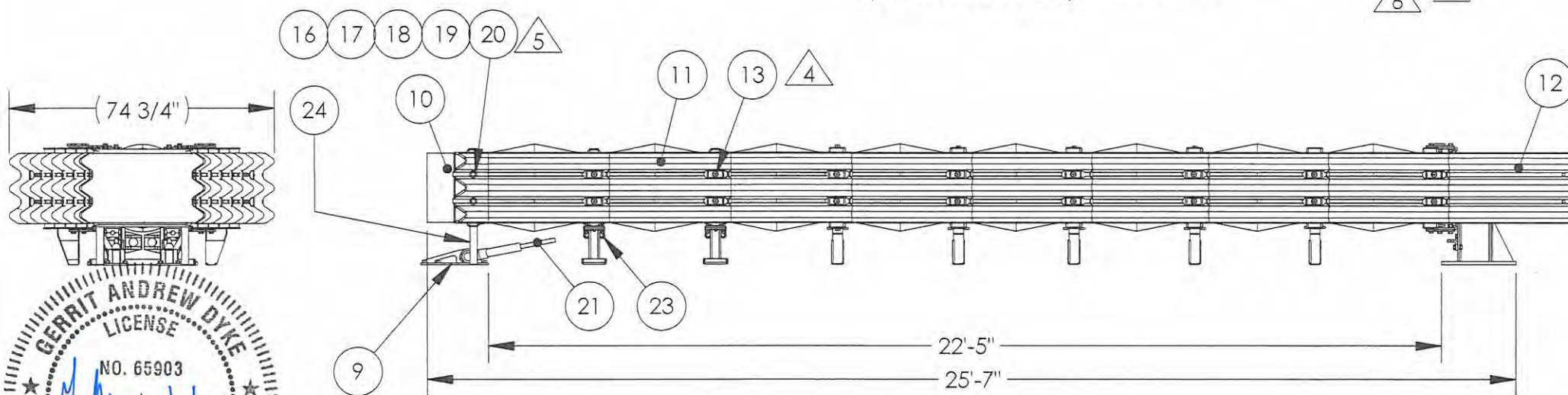
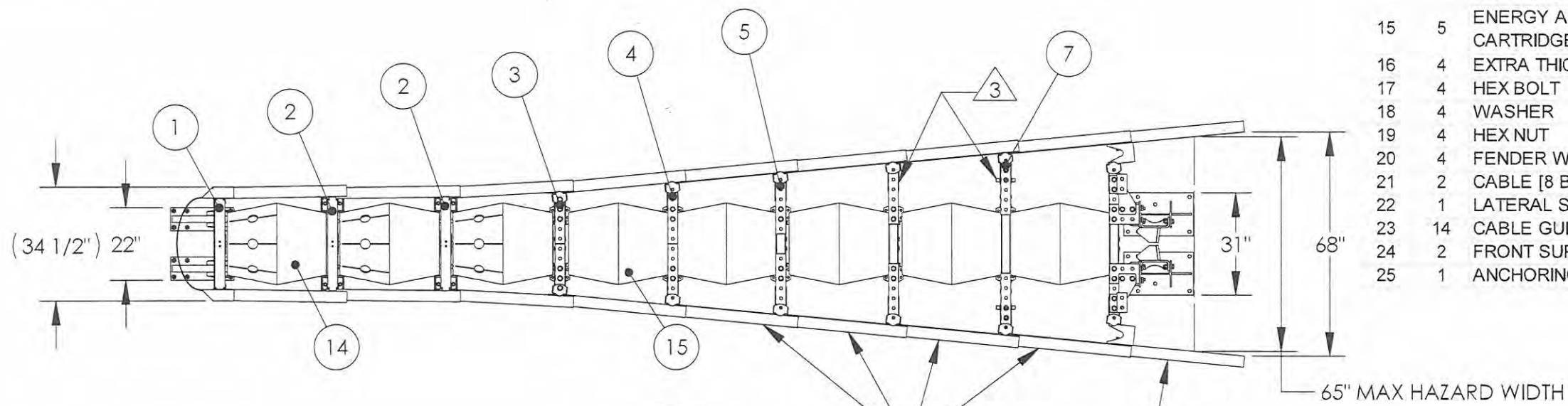
2

1

NOTES:

1. NEST (2) PANELS ON LAST (4) BAYS.
2. TENSION CABLE TO APPROXIMATELY 20,000 LBF. FOR 2.0" - 6.0 THREAD, TORQUE NUT TO 500 FT-LBF.
3. LATERAL RESTRAINT CABLES (NOT SHOWN) CONNECT THE BACKSTOPS TO THE OPPOSITE ENDS OF THE LAST (2) BULKHEADS. SEE LATERAL SUPPORT KIT B031027 FOR DETAILS AND SPECIFIC BULKHEAD ASSEMBLYS FOR MOUNTING LOCATIONS.
4. TORQUE SLIDER BOLTS TO 20 FT-LBF.
5. TORQUE NOSE PIECE ATTACHMENT HARDWARE TO 200 FT-LBF.
6. TRANSITIONS MUST NOT CREATE AN EDGE CAPABLE OF SNAGGING A VEHICLE AND SHOULD REMAIN PARALLEL TO THE END PANELS AT THE CONNECTIONS. FOR BI-DIRECTIONAL TRAFFIC A STANDARD AASHTO THRIE BEAM TRANSITION SHOULD BE USED TO PREVENT SNAGGING OF THE END PANELS. THE LATERAL STIFFNESS OF THE TRANSITION SHOULD BE EQUAL TO OR STRONGER THAN THAT OF THE TAU-II SYSTEM.
7. ITEMS 22 AND 25 NOT SHOWN.

ITEM	QTY	PART DESCRIPTION	PART #
1	1	FRONT SUPPORT	B010528
2	2	MIDDLE SUPPORT	B010530
3	1	XL BULKHEAD	B034004
4	1	XL BULKHEAD	B034005
5	1	XL BULKHEAD	B034006
6	1	XL BULKHEAD	B034007
7	1	XXL BULKHEAD	B034016
8	1	60" BACKSTOP	B034011
9	2	FRONT CABLE ANCHOR	B030935
10	1	NOSE / DELINATION MARKER	B010711
11	24	SLIDING PANEL	B010202
12	2	END PANEL	B010659
13	32	SLIDING BOLT	B010842
14	3	ENERGY ABSORBING CARTRIDGE, TYPE A	B010802
15	5	ENERGY ABSORBING CARTRIDGE, TYPE B	B010722
16	4	EXTRA THICK FLAT WASHER	2001009
17	4	HEX BOLT	2001449
18	4	WASHER	2001450
19	4	HEX NUT	2001451
20	4	FENDER WASHER	2001009
21	2	CABLE [8 BAY]	B034106
22	1	LATERAL SUPPORT KIT	B031027
23	14	CABLE GUIDE	B010721
24	2	FRONT SUPPORT LEG	B010712
25	1	ANCHORING PACKAGE	B031029



SPECIFICATIONS:

1. ALL STEEL COMPONENTS ARE ASTM A36 OR EQUIVALENT UNLESS OTHERWISE STATED.
2. ALL STEEL COMPONENTS ARE HOT DIPPED GALVANIZED IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.
3. ALL FASTENERS ARE GRADE 2 OR EQUIVALENT AND GALVANIZED IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967 UNLESS OTHERWISE STATED.
4. STANDARD TORQUE SPECIFICATION FOR 20MM-2.5 FASTENERS WHEN NOT SPECIFIED IS 120 FT-LBF.
5. ALL FASTENERS WILL INCORPORATE A POSITIVE THREAD LOCKING DEVICE.



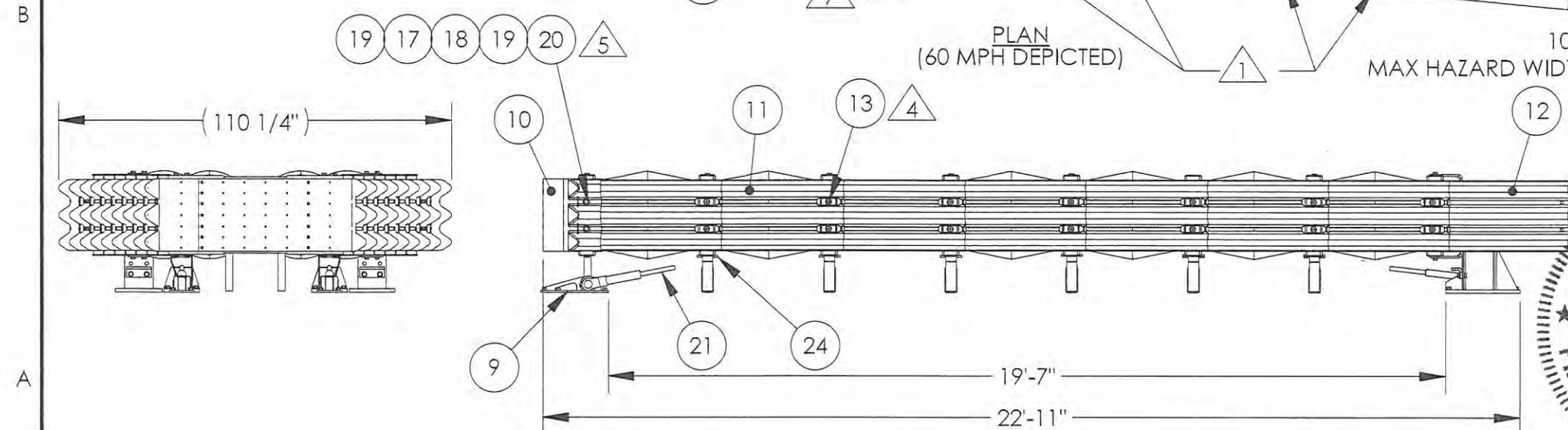
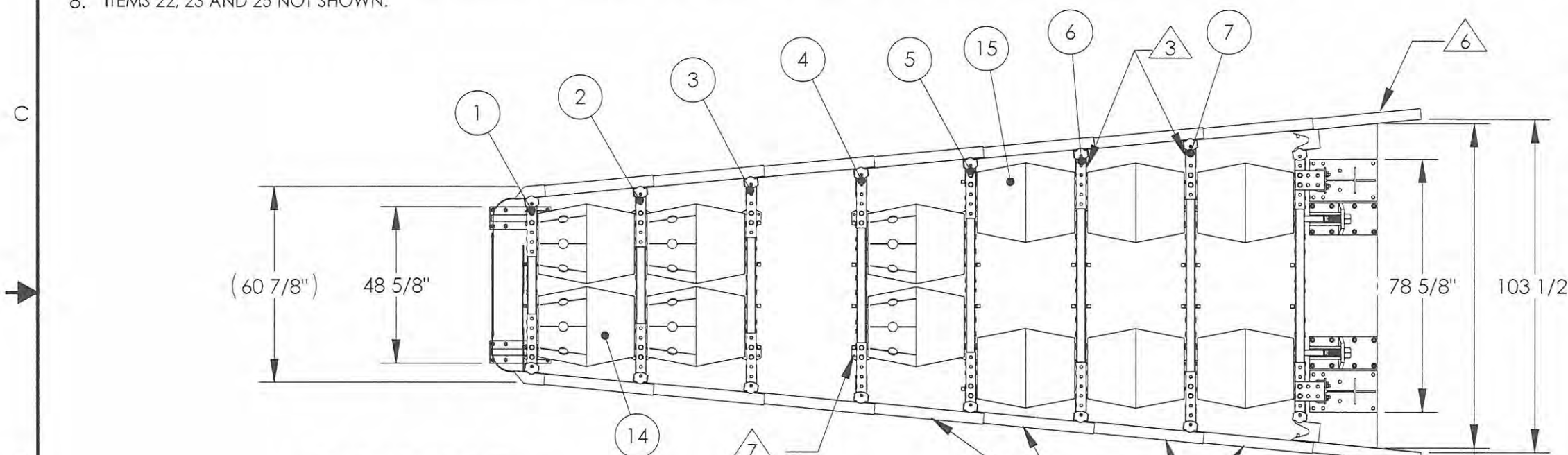
UNIVERSAL TAU-II TL-3, 60" WIDE FLANGE BACKSTOP

SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:40	FDOT QPL S544-0045	SHEET 20 OF 28

NOTES:

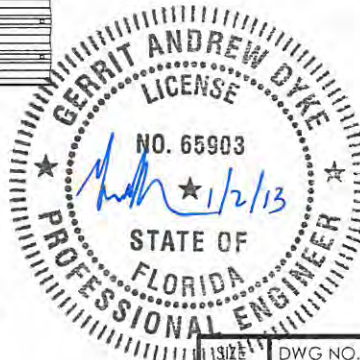
1. NEST (2) PANELS ON LAST (4) BAYS.
2. TENSION CABLE TO APPROXIMATELY 20,000 LBF. FOR 2.0" - 6.0 THREAD, TORQUE NUT TO 500 FT-LBF.
3. LATERAL RESTRAINT CABLES (NOT SHOWN) CONNECT THE BACKSTOPS TO THE OPPOSITE ENDS OF THE LAST (2) BULKHEADS. SEE LATERAL SUPPORT KIT B031027 FOR DETAILS AND SPECIFIC BULKHEAD ASSEMBLY FOR MOUNTING LOCATIONS.
4. TORQUE SLIDER BOLTS TO 20 FT-LBF.
5. TORQUE NOSE PIECE ATTACHMENT HARDWARE TO 200 FT-LBF.
6. TRANSITIONS MUST NOT CREATE AN EDGE CAPABLE OF SNAGGING A VEHICLE AND SHOULD REMAIN PARALLEL TO THE END PANELS AT THE CONNECTIONS. FOR BI-DIRECTIONAL TRAFFIC A STANDARD AASHTO THRIE BEAM TRANSITION SHOULD BE USED TO PREVENT SNAGGING OF THE END PANELS. THE LATERAL STIFFNESS OF THE TRANSITION SHOULD BE EQUAL TO OR STRONGER THAN THAT OF THE TAU-II SYSTEM.
7. BUMPER KIT MOUNTS IN THE EMPTY BAY. SEE BUMPER KIT B031028 FOR DETAILS AND SPECIFIC BULKHEAD ASSEMBLY FOR MOUNTING LOCATIONS.
8. ITEMS 22, 23 AND 25 NOT SHOWN.

ITEM	QTY	PART DESCRIPTION	PART #
1	1	XXL BULKHEAD	B034012
2	1	XXL BULKHEAD	B034021
3	1	XXL BULKHEAD	B034022
4	1	XXL BULKHEAD	B034023
5	1	XXXL BULKHEAD	B034040
6	1	XXXL BULKHEAD	B034041
7	1	XXXL BULKHEAD	B034042
8	1	96" BACKSTOP	B034053
9	2	FRONT CABLE ANCHOR	B030935
10	2	NOSE / DELINIATION MARKER	B030902
11	22	SLIDING PANEL	B010202
12	2	END PANEL	B010659
13	28	SLIDING BOLT	B010842
14	6	ENERGY ABSORBING CARTRIDGE, TYPE A	B010802
15	6	ENERGY ABSORBING CARTRIDGE, TYPE B	B010722
16	4	EXTRA THICK FLAT WASHER	2001009
17	4	HEX BOLT	2001449
18	4	WASHER	2001450
19	4	HEX NUT	2001451
20	4	FENDER WASHER	2001009
21	2	CABLE [7 BAY]	B034105
22	1	LATERAL SUPPORT KIT	B031027
23	1	BUMPER KIT	B031028
24	12	CABLE GUIDE	B010721
25	1	ANCHORING PACKAGE	B031030



SPECIFICATIONS:

1. ALL STEEL COMPONENTS ARE ASTM A36 OR EQUIVALENT UNLESS OTHERWISE STATED.
 2. ALL STEEL COMPONENTS ARE HOT DIPPED GALVANIZED IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.
 3. ALL FASTENERS ARE GRADE 2 OR EQUIVALENT AND GALVANIZED IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967 UNLESS OTHERWISE STATED.
- STANDARD TORQUE SPECIFICATION FOR 20MM-2.5 FASTENERS WHEN NOT SPECIFIED IS 120 FT-LBF.
- ALL FASTENERS WILL INCORPORATE A POSITIVE THREAD LOCKING DEVICE.



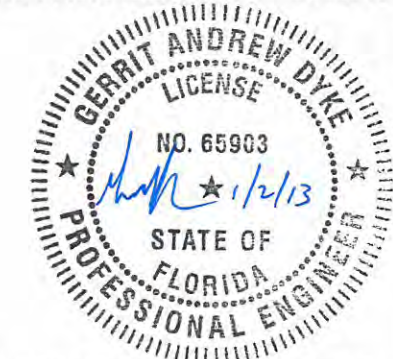
ELEVATION (60 MPH DEPICTED)
UNIVERSAL TAU-II TL-3, 96" WIDE FLANGE BACKSTOP

B	DWG NO.	BSI-1209009-AP	REV.	0
	SCALE	1:40	FDOT QPL S544-0045	SHEET 21 OF 28

NOTES:

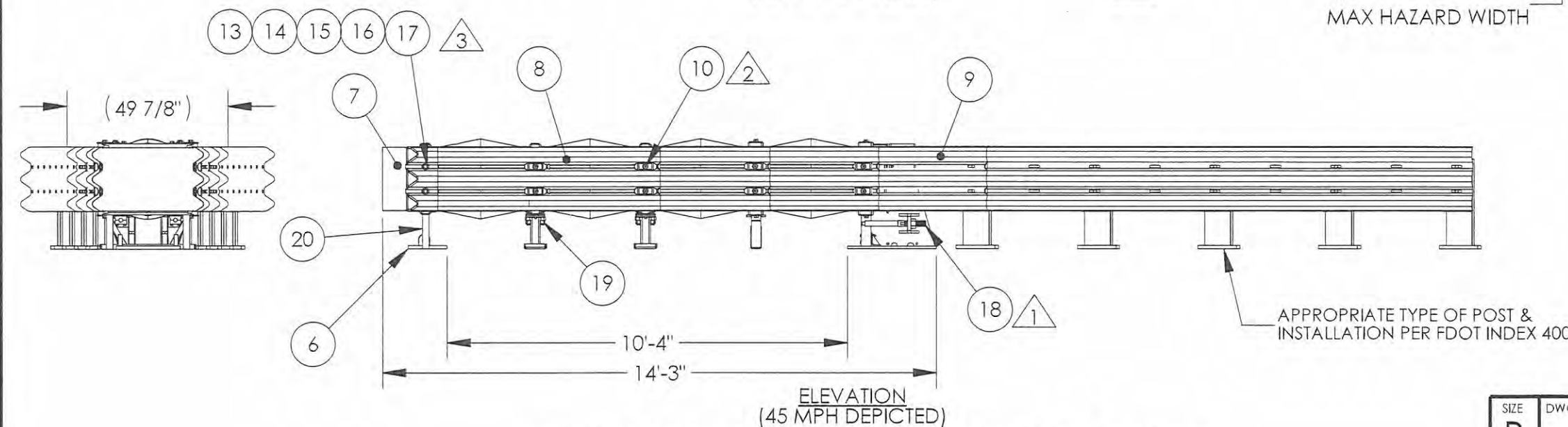
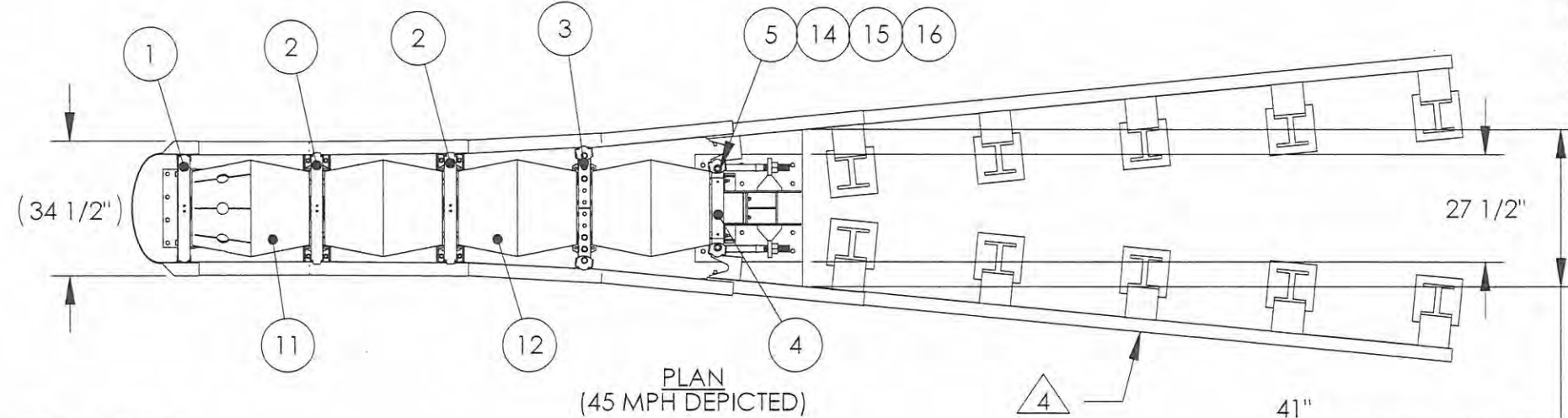
- 1. TORQUE CABLES TO 500 FT-LBF.
- 2. TORQUE SLIDER BOLTS TO 20 FT-LBF.
- 3. TORQUE NOSE PIECE ATTACHMENT HARDWARE TO 200 FT-LBF.
- 4. TRANSITIONS MUST NOT CREATE AN EDGE CAPABLE OF SNAGGING A VEHICLE AND SHOULD REMAIN PARALLEL TO THE END PANELS AT THE CONNECTIONS. FOR BI-DIRECTIONAL TRAFFIC A STANDARD AASHTO THRIE BEAM TRANSITION SHOULD BE USED TO PREVENT SNAGGING OF THE END PANELS. THE LATERAL STIFFNESS OF THE TRANSITION SHOULD BE EQUAL TO OR STRONGER THAN THAT OF THE TAU-II SYSTEM.
- 5. TRANSITION TO W-BEAM PANELS CAN BE MADE USING A W-THRIE BEAM TRANSITION SECTION AFTER THE FIRST FULL PIECE OF THRIE-BEAM SHOWN BELOW.
- 6. ITEM 21 NOT SHOWN.

ITEM	QTY	PART DESCRIPTION	PART #
1	1	FRONT SUPPORT	B010528
2	2	MIDDLE SUPPORT	B010530
3	1	XL BULKHEAD	B034004
4	1	COMPACT BACKSTOP	B010537
5	2	ADAPTER	B031201
6	1	FRONT CABLE ANCHOR	B010248
7	1	NOSE / DELINIATION MARKER	B010711
8	8	SLIDING PANEL	B010202
9	2	END PANEL	B010659
10	16	SLIDING BOLT	B010842
11	1	ENERGY ABSORBING CARTRIDGE, TYPE A	B010802
12	3	ENERGY ABSORBING CARTRIDGE, TYPE B	B010722
13	4	EXTRA THICK FLAT WASHER	2001009
14	8	HEX BOLT	2001449
15	8	WASHER	2001450
16	8	HEX NUT	2001451
17	4	FENDER WASHER	2001009
18	2	CABLE [4 BAY]	B010917
19	6	CABLE GUIDE	B010721
20	2	FRONT SUPPORT LEG	B010712
21	1	ANCHORING PACKAGE	B010713



SPECIFICATIONS:

- 1. ALL STEEL COMPONENTS ARE ASTM A36 OR EQUIVALENT UNLESS OTHERWISE STATED.
- 2. ALL STEEL COMPONENTS ARE HOT DIPPED GALVANIZED IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.
- 3. ALL FASTENERS ARE GRADE 2 OR EQUIVALENT AND GALVANIZED IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967 UNLESS OTHERWISE STATED.
- 4. STANDARD TORQUE SPECIFICATION FOR 20MM-2.5 FASTENERS WHEN NOT SPECIFIED IS 120 FT-LBF.
- 5. ALL FASTENERS WILL INCORPORATE A POSITIVE THREAD LOCKING DEVICE.



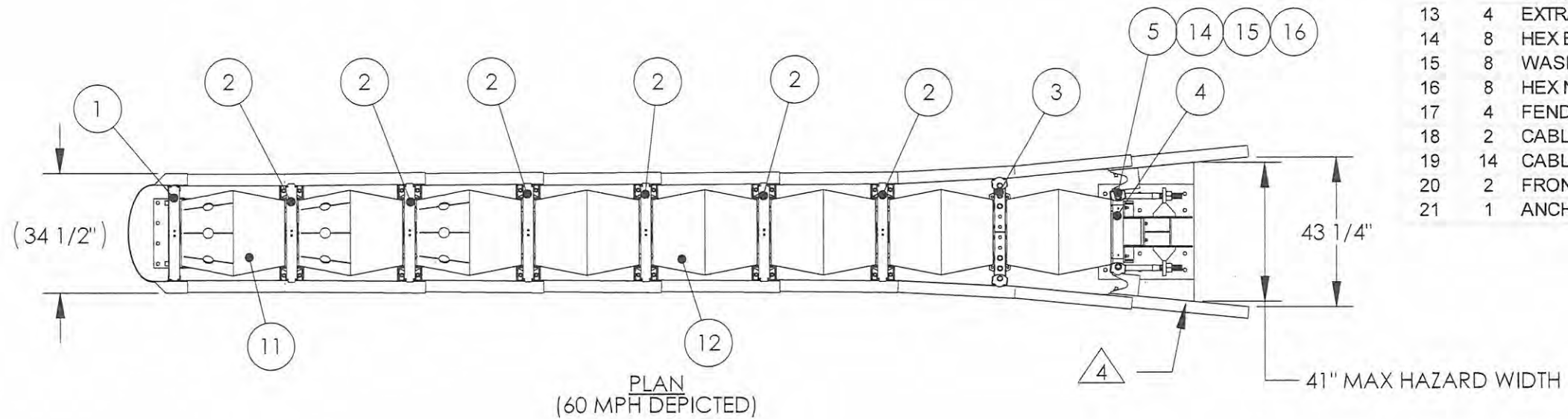
UNIVERSAL TAU-II TL-2, 36", TRANSITION TO CONVERGING GUARDRAIL

SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:40	FDOT QPL S544-0045	SHEET 22 OF 28

NOTES:

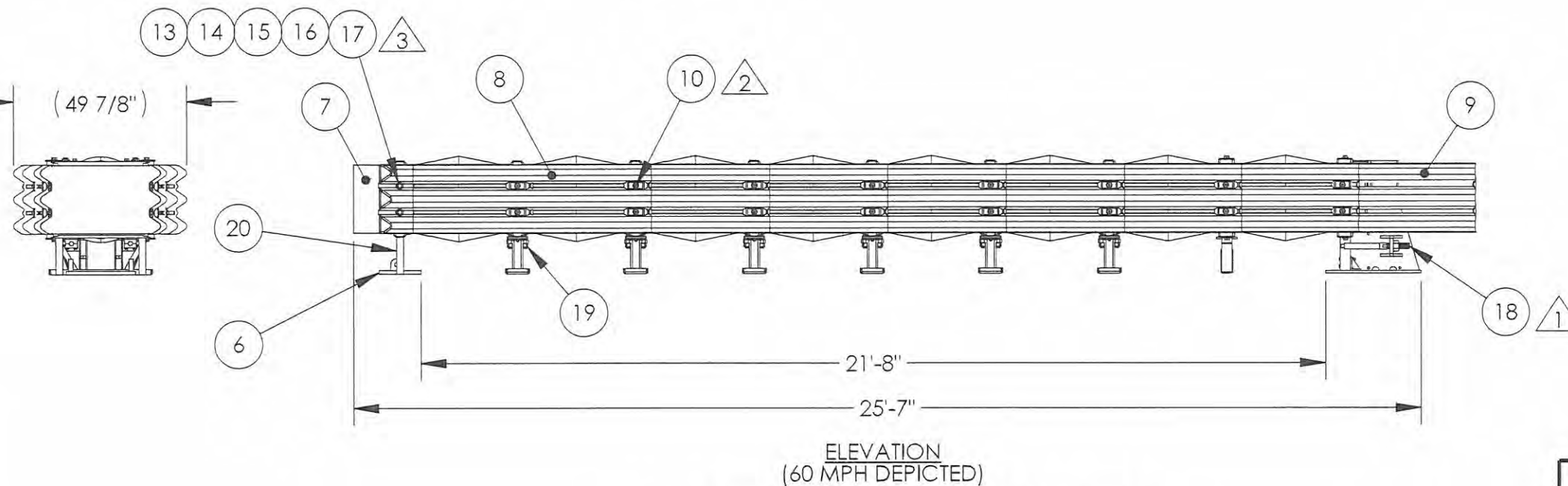
- 1. TORQUE CABLES TO 500 FT-LBF.
- 2. TORQUE SLIDER BOLTS TO 20 FT-LBF.
- 3. TORQUE NOSE PIECE ATTACHMENT HARDWARE TO 200 FT-LBF.
- 4. TRANSITIONS MUST NOT CREATE AN EDGE CAPABLE OF SNAGGING A VEHICLE AND SHOULD REMAIN PARALLEL TO THE END PANELS AT THE CONNECTIONS. FOR BI-DIRECTIONAL TRAFFIC A STANDARD AASHTO THREE BEAM TRANSITION SHOULD BE USED TO PREVENT SNAGGING OF THE END PANELS. THE LATERAL STIFFNESS OF THE TRANSITION SHOULD BE EQUAL TO OR STRONGER THAN THAT OF THE TAU-II SYSTEM.
- 5. ITEM 21 NOT SHOWN

ITEM	QTY	PART DESCRIPTION	PART #
1	1	FRONT SUPPORT	B010528
2	6	MIDDLE SUPPORT	B010530
3	1	XL BULKHEAD	B034004
4	1	COMPACT BACKSTOP	B010537
5	2	ADAPTER	B031201
6	1	FRONT CABLE ANCHOR	B010248
7	1	NOSE / DELINIATION MARKER	B010711
8	16	SLIDING PANEL	B010202
9	2	END PANEL	B010659
10	32	SLIDING BOLT	B010842
11	3	ENERGY ABSORBING CARTRIDGE, TYPE A	B010802
12	5	ENERGY ABSORBING CARTRIDGE, TYPE B	B010722
13	4	EXTRA THICK FLAT WASHER	2001009
14	8	HEX BOLT	2001449
15	8	WASHER	2001450
16	8	HEX NUT	2001451
17	4	FENDER WASHER	2001009
18	2	CABLE [8 BAY]	B010916
19	14	CABLE GUIDE	B010721
20	2	FRONT SUPPORT LEG	B010712
21	1	ANCHORING PACKAGE	B010713



SPECIFICATIONS:

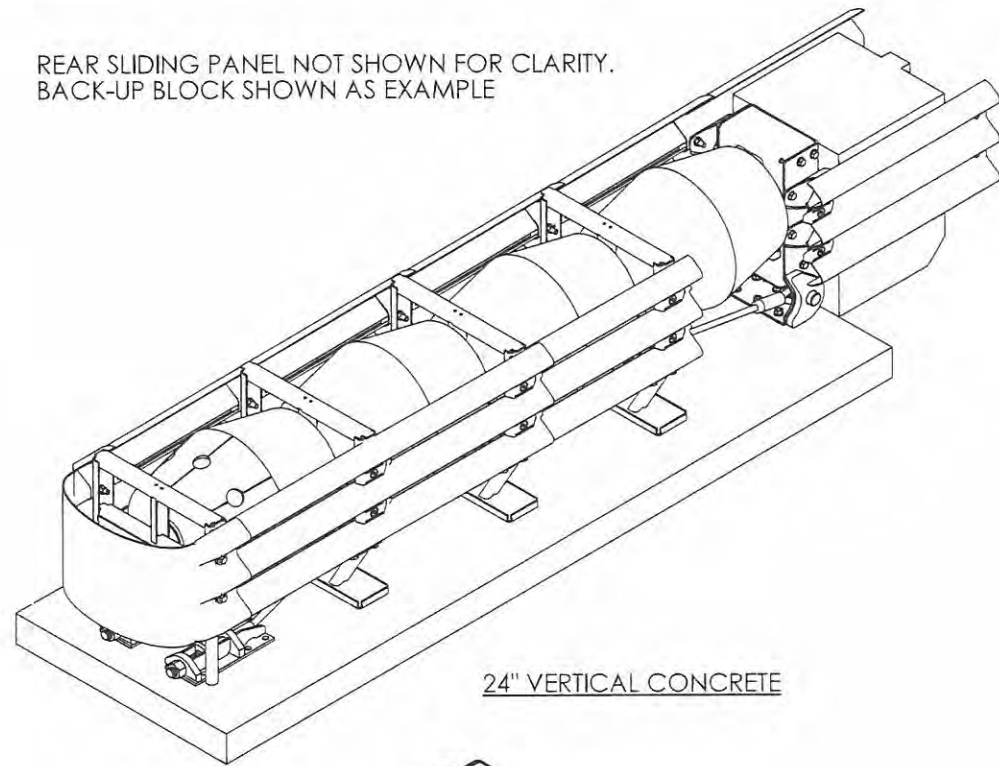
- 1. ALL STEEL COMPONENTS ARE ASTM A36 OR EQUIVALENT UNLESS OTHERWISE STATED.
- 2. ALL STEEL COMPONENTS ARE HOT DIPPED GALVANIZED IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.
- 3. ALL FASTENERS ARE GRADE 2 OR EQUIVALENT AND GALVANIZED IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967 UNLESS OTHERWISE STATED.
- 4. STANDARD TORQUE SPECIFICATION FOR 20MM-2.5 FASTENERS WHEN NOT SPECIFIED IS 120 FT-LBF.
- 5. ALL FASTENERS WILL INCORPORATE A POSITIVE THREAD LOCKING DEVICE.



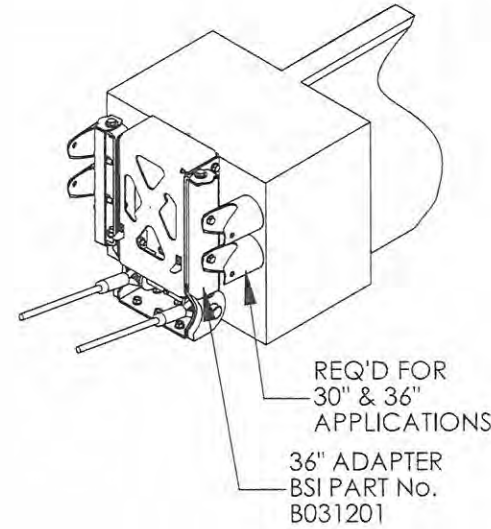
UNIVERSAL TAU-II TL-3, 36", COMPACT BACKSTOP

SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:40	FDOT QPL S544-0045	SHEET 23 OF 28

REAR SLIDING PANEL NOT SHOWN FOR CLARITY.
BACK-UP BLOCK SHOWN AS EXAMPLE



24" VERTICAL CONCRETE



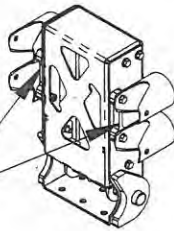
36" VERTICAL CONCRETE

REQ'D FOR
30" & 36"
APPLICATIONS
36" ADAPTER
BSI PART No.
B031201

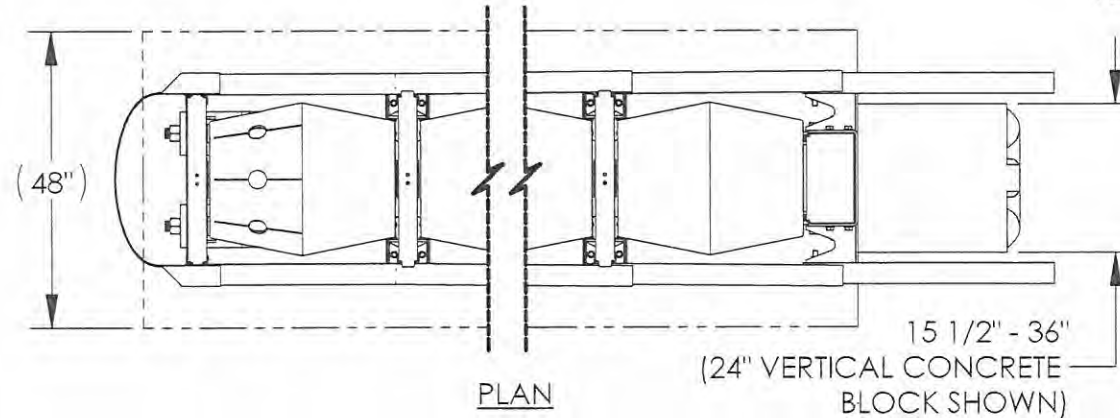
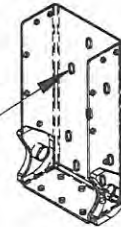
NOTES:

1. FLUSH MOUNT BACKSTOP SYSTEMS ARE INTENDED FOR APPLICATIONS WHERE THE HAZARD WIDTH EXCEEDS THE LIMITATIONS OF THE PCB BACKSTOP. FLUSH MOUNT SYSTEMS ARE ALSO APPLICABLE IN LOCATIONS WITH LIMITED FOUNDATION SIZE.
2. THE FLUSH MOUNT BACKSTOP MAY BE ATTACHED TO REINFORCED SAFETY SHAPE OR VERTICAL CONCRETE STRUCTURES UP TO 36" [914] WIDE. STRUCTURES (OR BLOCKS), SHOULDER BARRIER WALLS OR ENDS OF CONVERGING BARRIER WALLS OVER 24" WIDE REQUIRE 36" ADAPTER B031201.
3. THE FLUSH MOUNT BACKSTOP IS ATTACHED TO THE CONCRETE FOUNDATION WITH SIX (6) ANCHORS AND TO THE CONCRETE WALLS, BLOCK, OR STRUCTURE WITH A MINIMUM OF SIX (6) ANCHORS. THE FOUNDATION PAD TO BE IN ACCORDANCE WITH BSI SPECIFICATIONS SHOWN ON SHEET 8. USE SAME TECHNIQUES TO ANCHOR FLUSH MOUNT BACKSTOP TO CONCRETE BARRIER AS SHOWN FOR CONCRETE PAD ON SHEET 8. THE CENTERLINE OF TAU-II CAN BE OFFSET FROM CENTERLINE OF BARRIER IN ORDER TO FACILITATE THE NECESSARY ANCHORAGE. AS AN OPTION, SEE SHEET 28 FOR BRACKET ATTACHMENT TO CONCRETE BARRIER.
4. VERTICAL SLOTS ON THE BACKSTOP ALLOW REMOVAL/REPLACEMENT OF THE BACKSTOP. ANCHORS MUST BE PLACED AT THE TOP OF SAID SLOTS TO BE EFFECTIVE.
5. FLUSH MOUNT BACKSTOP SYSTEMS USE THE SAME CABLE USED IN ALL PARALLEL SYSTEMS. THE CABLE IS INSTALLED WITH THE THREADED TENSIONING END FORWARD. THE LOOPED END IS PINNED IN PLACE AT THE BACKSTOP.
6. THE FRONT CABLE ANCHOR USES AN INSERTED KEY TO KEEP THE THREADED STUD FROM ROTATING DURING TENSIONING.
7. IN A BI-DIRECTIONAL APPLICATION, THE END PANEL CAN BE SUBSTITUTED WITH AN END SHOE. THE CENTERLINE OF TAU-II CAN BE OFFSET FROM THE CENTERLINE OF BARRIER IN ORDER FOR THE END SHOE TO LAY FLAT ON THE VERTICAL CONCRETE BLOCK.

30in SPACER (B041102)
TO BE USED WITH 30"
APPLICATIONS ONLY
WHEN HAZARD EXCEEDS
A WIDTH OF 27 1/2"

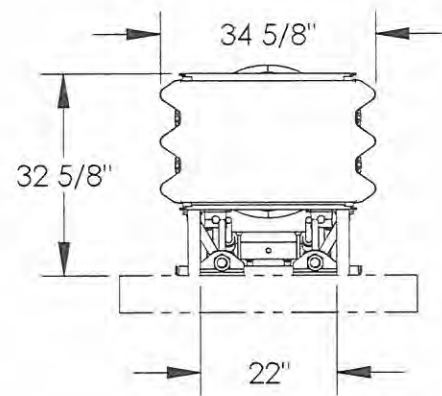


EIGHT (8) SLOTTED HOLES ARE
PROVIDED ON THE BACK OF
THE FLUSH MOUNT BACKSTOP
IN ORDER TO ANCHOR
TO CONCRETE BACKSTOP.
SEE NOTE 3 FOR ANCHORAGE
REQUIREMENTS.

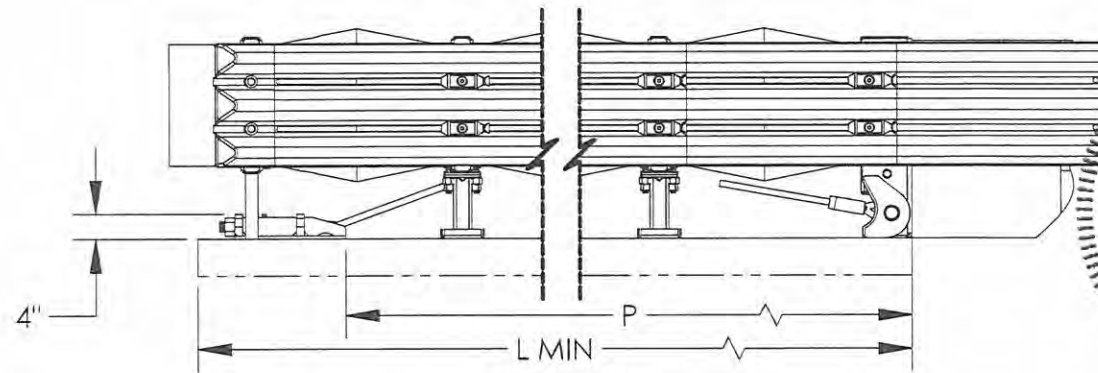


PLAN

15 1/2" - 36"
(24" VERTICAL CONCRETE
BLOCK SHOWN)



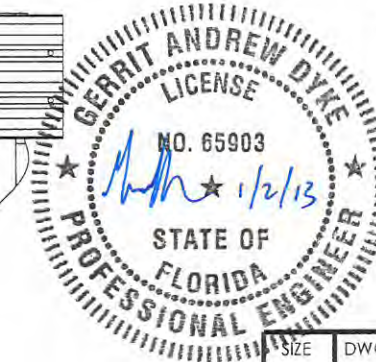
ELEVATION



UNIVERSAL TAU-II FLUSH MOUNT BACKSTOP APPLICATION

FOUNDATION PAD LENGTH DIMENSION "L" (MINIMUM)			
BAY No.	CAPACITY (mph)	L (ft-in)	
2	30	6' - 11 1/2"	
3	(TL-2) 35	9' - 9 1/2"	
4	45	12' - 7 1/2"	
5	50	15' - 5 1/2"	
7	(TL-3) 55	21' - 2"	
8	60	24' - 0"	

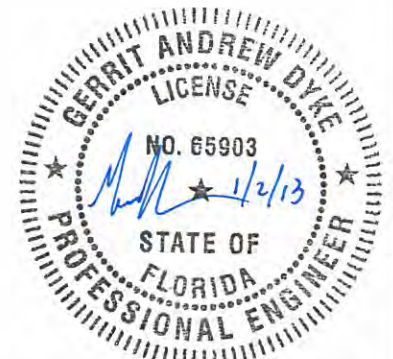
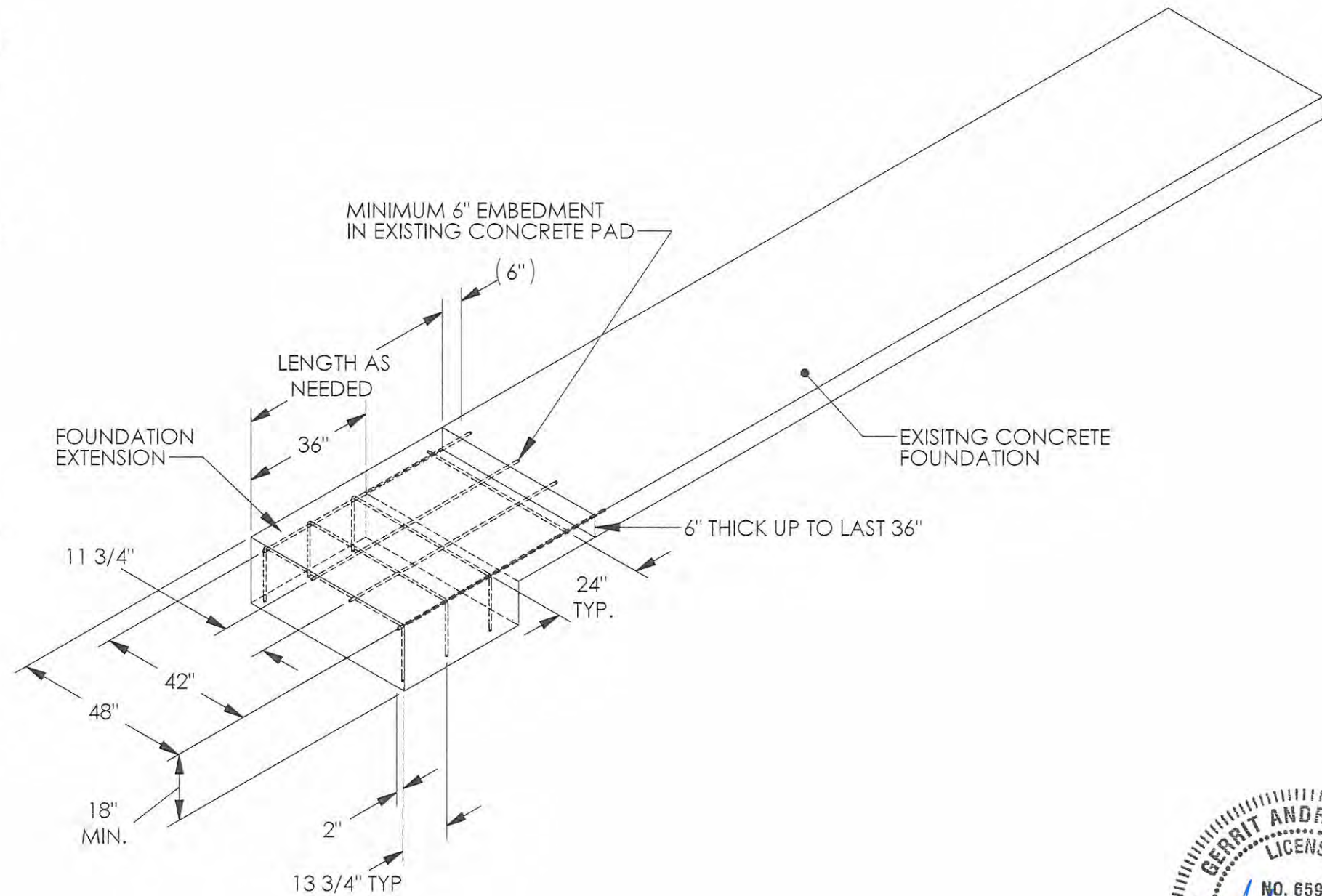
FRONT ANCHOR PLACEMENT DIMENSION "P"			
BAY No.	CAPACITY (mph)	P (ft-in)	
2	30	4' - 11 1/2"	
3	(TL-2) 35	7' - 9 1/2"	
4	45	10' - 7 1/2"	
5	50	13' - 5 1/2"	
7	(TL-3) 55	19' - 2"	
8	60	22' - 0"	



SIZE	DWG NO.	REV.
B	BSI-1209009-AP	0
SCALE	FDOT QPL S544-0045	SHEET 24 OF 28
1:30		

NOTES UNLESS OTHERWISE SPECIFIED:

1. THE DETAILED METHOD FOR EXTENDING AN EXISTING CONCRETE PAD FOR USE WITH A UNIVERSAL TAU-II SYSTEM IS RECOMMENDED TO ENSURE ADEQUATE FOUNDATION INTEGRITY FOR PROPER IMPACT PERFORMANCE. VARIATIONS MAY BE REVIEWED AND DETERMINATIONS MADE AS TO EQUIVALENCE BY PROJECT ENGINEER.
2. REFERENCE UNIVERSAL TAU-II INSTALLATION MANUAL FOR FOUNDATION DIMENSIONS REQUIRED PER SPECIFIC SYSTEM. EXTEND FOUNDATION PAD AS SHOWN FOR THE LENGTH REQUIRED.
3. THE REINFORCEMENT IN THE FOUNDATION EXTENSION IS #5 REBAR. THE LONGITUDINAL REINFORCEMENT IS EMBEDDED A MINIMUM OF 6" INTO THE EDGE OF THE EXISTING CONCRETE PAD AND BONDED IN PLACE. USE ANCHORING COMPOUND APPROVED FOR USE WITH THE UNIVERSAL TAU-II SYSTEM.
4. FOUNDATION MATERIAL, SPECIFICATIONS, AND ANCHORAGE MUST BE IN ACCORDANCE WITH BSI FOUNDATION SPECIFICATIONS FOR A CONCRETE PAD AND PORTLAND CEMENT CONCRETE AS SHOWN ON SHEET 8.
5. DETAIL BELOW SHOWS A 5 FT EXTENSION ON A 19 FT EXISTING CONCRETE PAD.
6. EXTENSIONS UP TO 3 FT LONG TO BE MINIMUM 18" THICK AND REINFORCED AS SHOWN. EXTENSIONS OVER 3 FT SHALL BE MINIMUM 6" THICK UP TO THE LAST 36" WHERE IT IS MINIMUM 18". REINFORCE AS INDICATED.

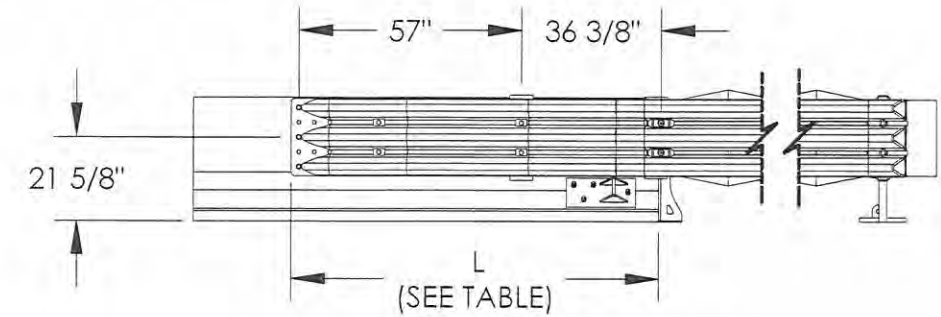


UNIVERSAL TAU-II FOUNDATION EXTENSION, CONCRETE

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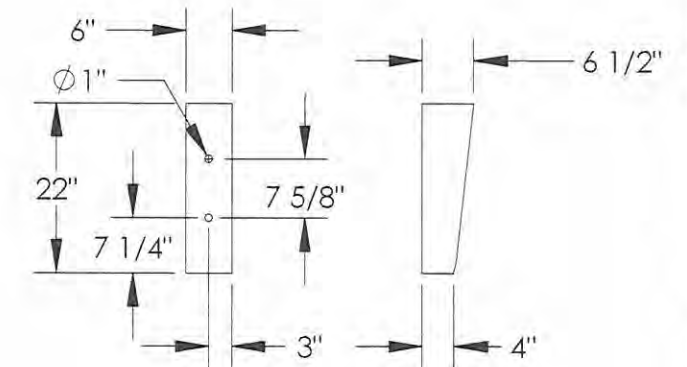
NOTES:

- UNIVERSAL TAU-II SYSTEM TO BE INSTALLED PER MANUFACTURERS INSTRUCTIONS.
- TRANSITION SHOWN IS COMPATIBLE WITH COMPACT BACKSTOP, FLUSH MOUNT BACKSTOP, PCB BACKSTOP (SHOWN), AND WIDE FLANGE BACKSTOP. IT IS APPLICABLE WITH ASPHALT ANCHORING PACKAGES FOR PCB BACKSTOP AND PCB BRACE KIT FOR COMPACT BACKSTOP.
- THRIE BEAM TERMINAL CONNECTOR PER AASHTO HARDWARE SPECIFICATION RTE01. GALVANIZE IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.
- STANDARD TIMBER OFFSET BLOCKS FIELD TRIMMED FOR USE. BLOCK OUT DETAIL SHOWS DIMENSIONS FOR F-SHAPE SAFETY SHAPED BARRIER. ACTUAL DIMENSIONS SHOULD REFLECT SHAPE OF BARRIER TRANSITIONED TO. BLOCK OUTS SHALL MEET THE REQUIREMENTS OF FLORIDA DOT INDEX 400, 410, AND FLORIDA DOT SPECIFICATIONS.
- PANELS AND BLOCKOUT ATTACHED TO BARRIER WALL WITH 5/8" BOLTS WITH BEAM WASHER, AND NUT WITH WASHER AND BEAM WASHER. 20" BOLTS MAY BE FIELD TRIMMED. LENGTH MAY VARY WITH DIFFERENT BARRIER SHAPES. HOLES DRILLED THROUGH MEDIAN BARRIER ARE 3/4". CHEMICALLY BONDED OR MECHANICAL ANCHORS MAY BE USED THAT MEET OR EXCEED 15,000 LBF SHEAR AND PULL OUT STRENGTH.
- ATTACH THRIE BEAM TERMINAL CONNECTOR TO MEDIAN BARRIER WITH (3) 5/8" BOLTS WITH WASHERS AND NUT WITH WASHERS AND BEAM WASHERS. REFERENCE NOTE 5 FOR DETAILS.
- ATTACH THRIE BEAM TERMINAL CONNECTOR TO UNIVERSAL TAU-II END PANEL WITH 5/8" X 2" BOLTS WITH BEAM WASHER AND NUT WITH WASHER.
- TRANSITION BRACKET TO BE INSTALLED OVER PIPE PANEL MOUNTS UNDER THE (2) NESTED ANGLED END PANELS AND THE SLIDING PANEL. BEND IN TRANSITION BRACKET FACES REARWARD AND FITS AROUND PIPE PANEL MOUNTS. JOINT IS SECURED WITH SLIDING BOLTS. SLIDING BOLTS TO BE TORQUED PER MANUFACTURERS SPECIFICATIONS.
- WHERE REAMING IS NECESSARY TO FIT NESTED BEAMS AND TERMINAL CONNECTORS THE REAMED SURFACES SHALL BE METALIZED IN ACCORDANCE WITH FLORIDA DOT INDEX 400.
- ALL HARDWARE AND FASTENERS TO BE GALVANIZED IN ACCORDANCE WITH FLORIDA DOT SPECIFICATION 967.

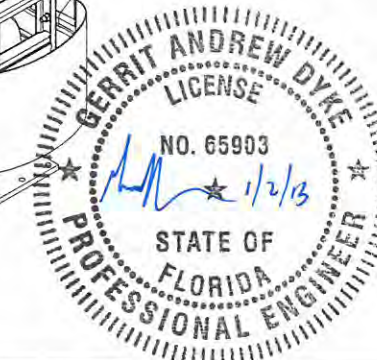
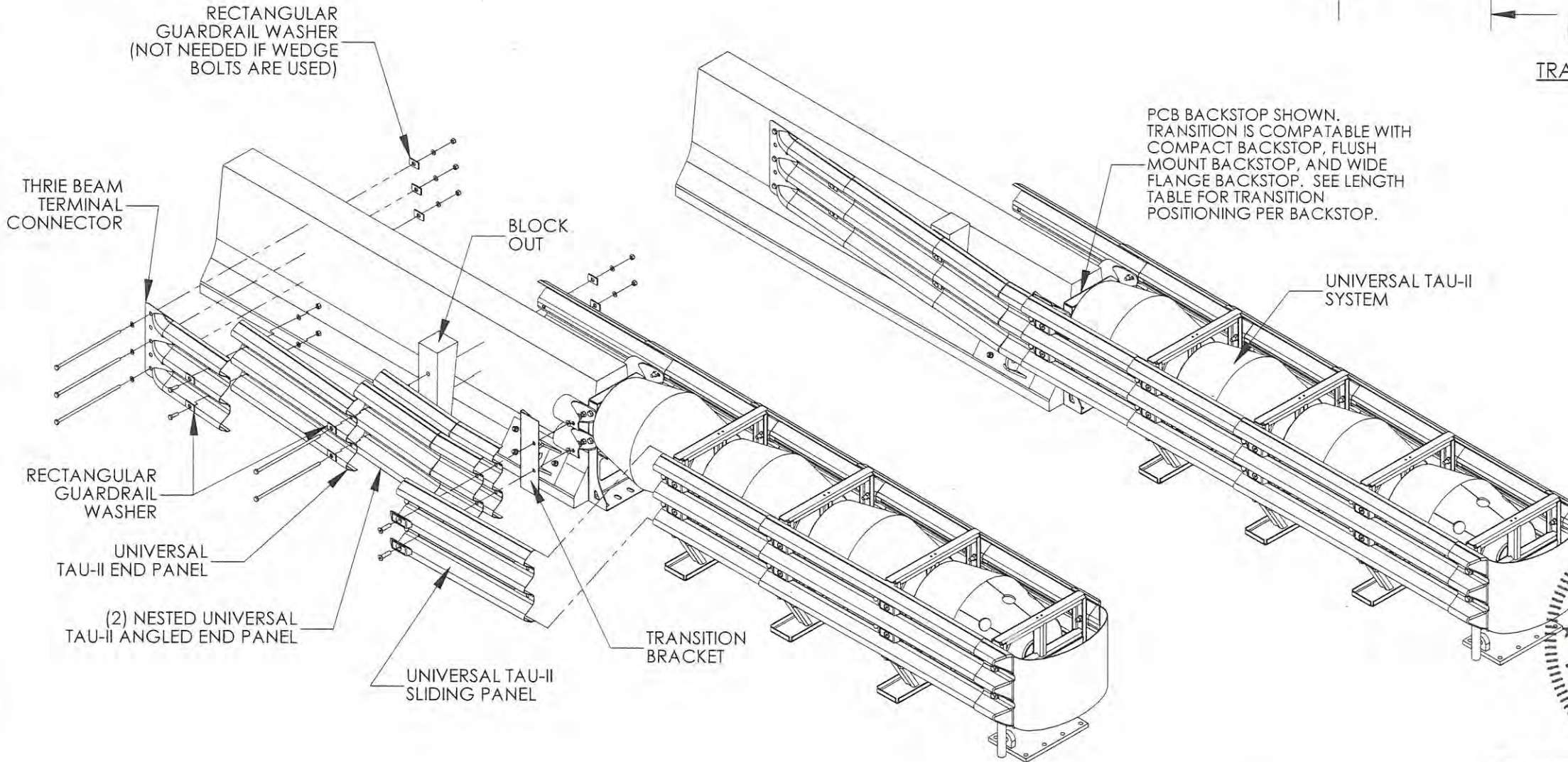


TRANSITION LENGTH DETAIL
(SCALE 1:48)

PCB BACKSTOP SHOWN. TRANSITION IS COMPATIBLE WITH COMPACT BACKSTOP, FLUSH MOUNT BACKSTOP, AND WIDE FLANGE BACKSTOP. SEE LENGTH TABLE FOR TRANSITION POSITIONING PER BACKSTOP.



BLOCKOUT DETAIL
(SCALE 1:24)



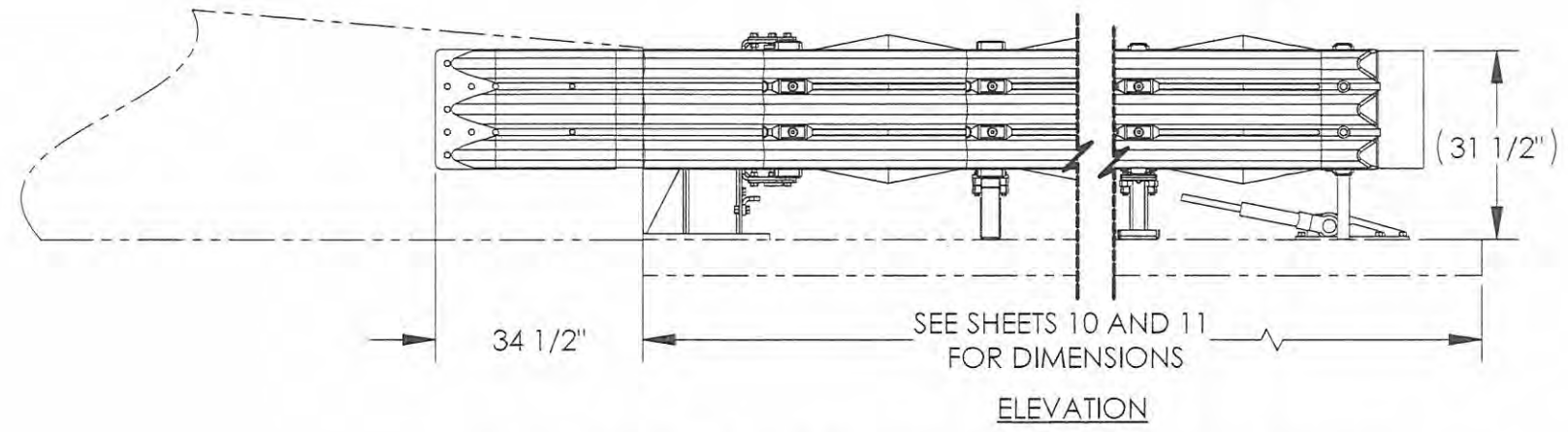
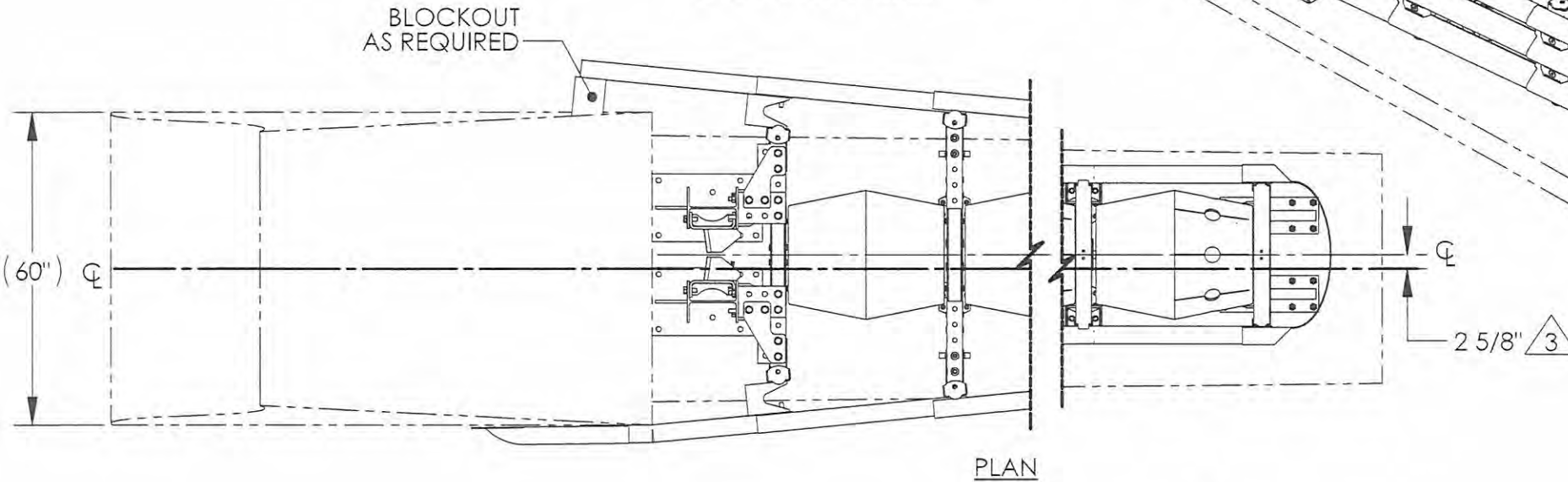
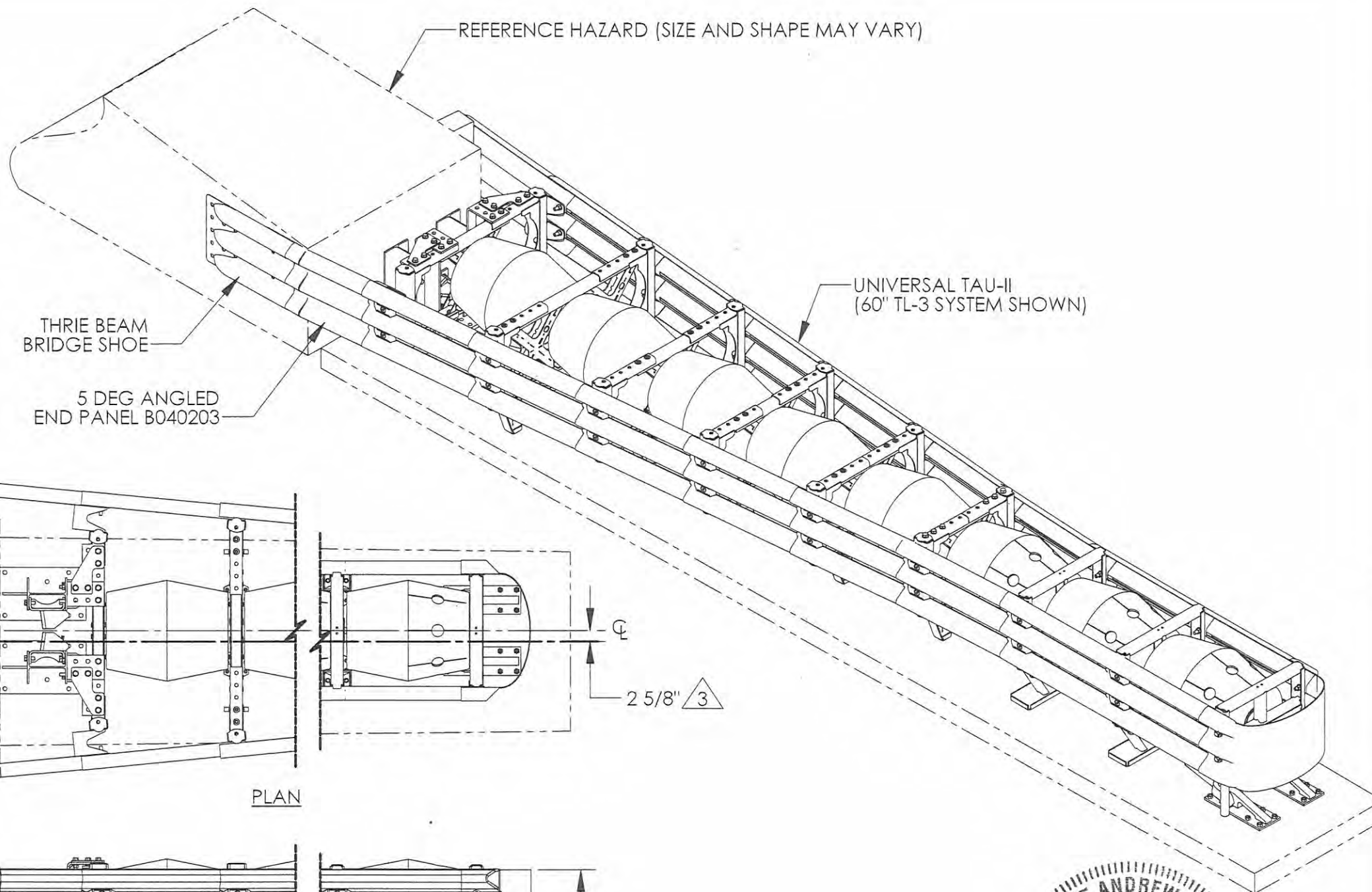
LENGTH "L"	
BACKSTOP	IN
COMPACT	74 3/4
PCB	94 3/4
FLUSH MOUNT	89 3/8
WIDE FLANGE	73 3/4

UNIVERSAL TAU-II BI-DIRECTIONAL TRANSITION KIT

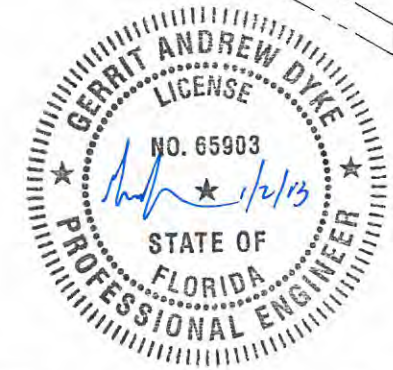
SIZE	DWG. NO.	REV.
B	BSI-1209009-AP	0
SCALE	FDOT QPL S544-0045	SHEET 26 OF 28
1:30		

NOTES UNLESS OTHERWISE SPECIFIED:

1. UNIVERSAL TAU-II TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
2. SYSTEM SHOWN IS TL-3, 60" SYSTEM WITH AN ANGLED END PANEL AND STANDARD THRIE BEAM BRIDGE SHOE TO PROVIDE TRANSITION FOR BI-DIRECTIONAL TRAFFIC.
3. SYSTEM IS OFFSET 2 5/8" IN FROM TRANSITION SIDE TO PROVIDE FLUSH TRANSITION ATTACHMENT. TRANSITION IS ONLY REQUIRED ON REVERSE TRAFFIC SIDE.
4. SEE INSTALLATION MANUAL FOR FOUNDATION DETAILS.



UNIVERSAL TAU-II WIDE FLANGE BACKSTOP BIDIRECTIONAL TRANSITION TO CONCRETE BLOCK



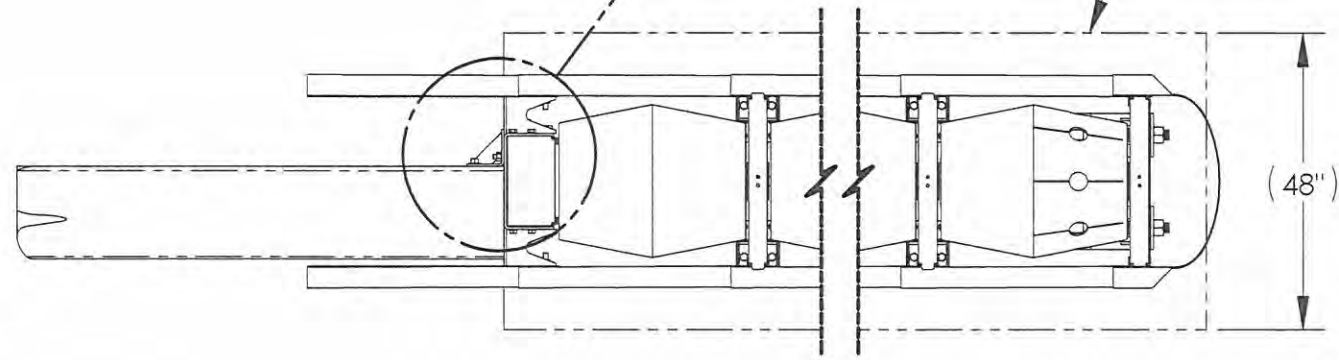
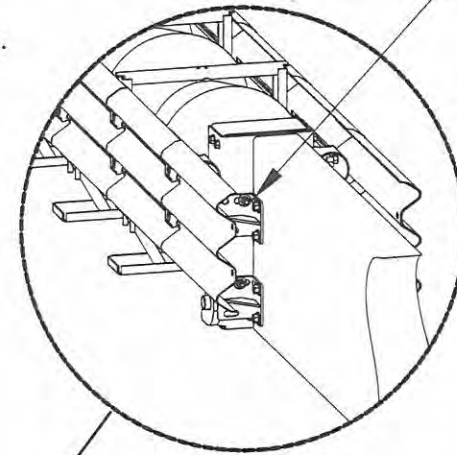
SIZE B	DWG NO. BSI-1209009-AP	REV. 0
SCALE 1:30	FDOT QPL S544-0045	SHEET 27 OF 28

NOTES UNLESS OTHERWISE SPECIFIED:

1. UNIVERSAL TAU-II SYSTEM TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS. REFER TO INSTALLATION MANUAL.
2. ALL ANCHORS INTO CONCRETE BARRIER FOR BACKSTOP, BRACKETS TO BE IN ACCORDANCE WITH BSI SPECIFICATIONS FOR PC CONCRETE FOUNDATIONS. REFER TO INSTALLATION MANUAL FOR ADDITIONAL DETAILS.
3. SYSTEM SHOWN INSTALLED ON FLORIDA DOT L-WALL, INDEX NO. 410.

2X BRACKET, BSI P/N: B060106
 USE ALL AVAILABLE ANCHORS TO SECURE FLUSH MOUNT BACKSTOP TO CONCRETE BARRIER, USE BSI BRACKET B060106 TO SECURE EXPOSED ANCHOR POINTS TO BARRIER AS SHOWN (REAR PANEL NOT SHOWN FOR CLARITY).

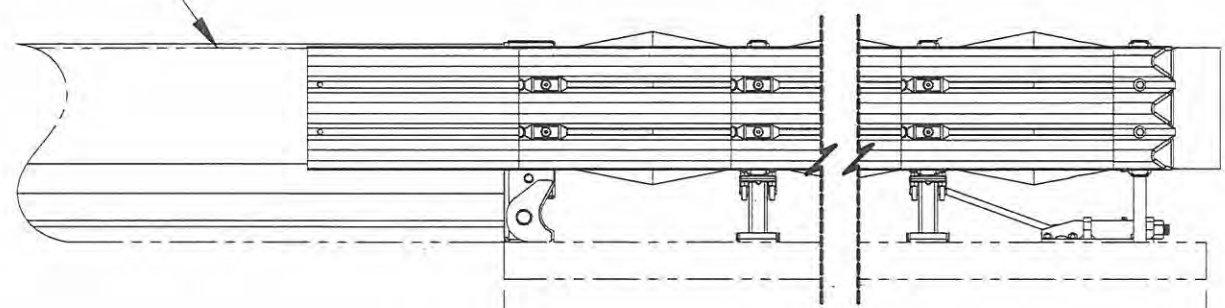
UNIVERSAL TAU-II FOUNDATION
 (SEE ASSEMBLY AND INSTALLATION MANUAL FOR ADDITIONAL DETAILS).



PLAN

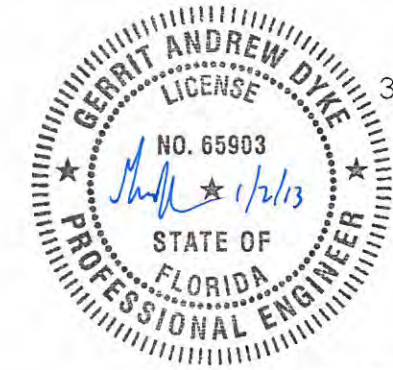
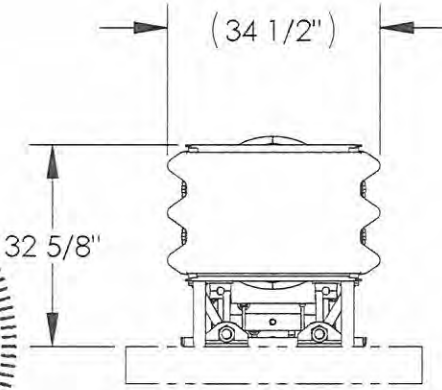


FLORIDA DOT HALF WALL



SEE SHEET 9 FOR DIMENSIONS

ELEVATION



UNIVERSAL TAU-II FLUSH MOUNT BACKSTOP APPLICATION, HALF WALLS

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