

GUIDELINES FOR STANDARD PLAN MODIFICATION

January 15, 2020

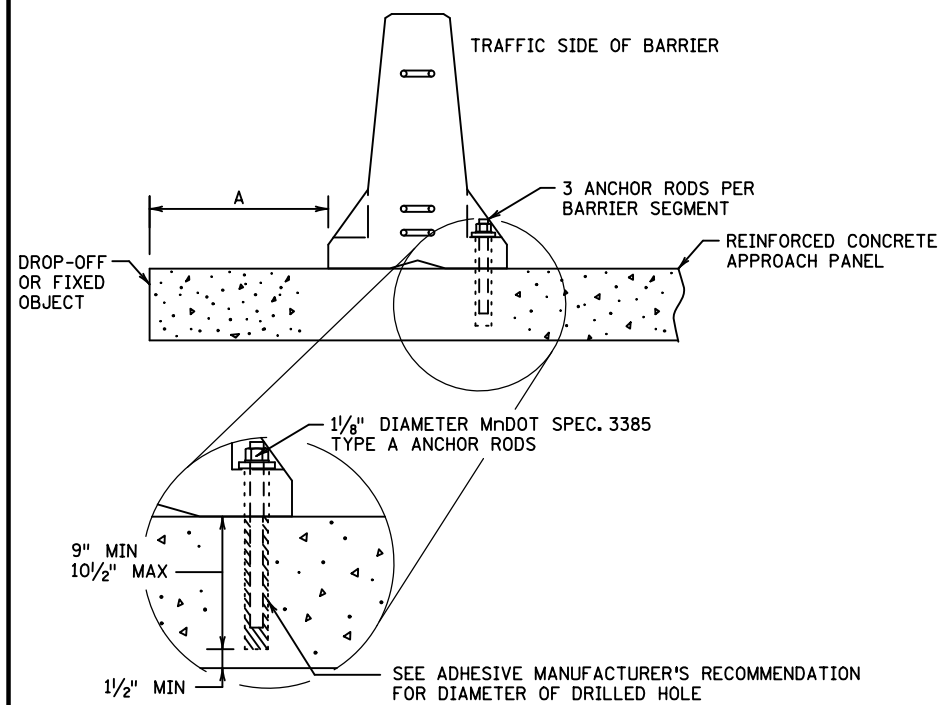
Use these guidelines when incorporating modified Standard Plans into your roadway plan sets.

If a Standard Plan sheet contains details not associated with your project, it is optional for designers to cross out the undesired details. However, if any changes are made to a Standard Plan sheet, including crossing out details as mentioned above, the following must be done to the plan sheet:

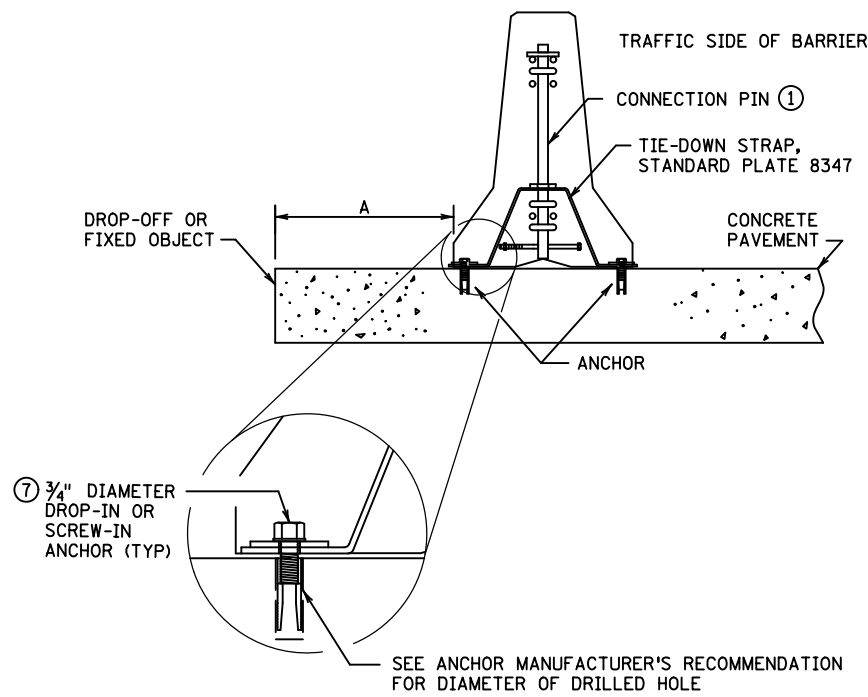
- Clearly cross-out the *STANDARD PLAN [NUMBER]* and the *Signature/Approval Date* box in the sheet border.
- Add “MODIFIED” text just above the Standard Sheet No. to indicate the standard plan has been modified.
- Add an “I HEREBY CERTIFY...” signature block to the left of the title block for engineer’s signature.
- Identify the changes made to the details:
 - Label the changes using italicized text.
 - Footnote the changes with an asterisk. Place the following footnote above the signature block in italics: ** DENOTES MODIFICATION FROM STANDARD PLAN*
 - Use the MicroStation custom line style **StdsPlnMod** to place a double line (thick/thin) box around the text to highlight/identify the modifications. You may need to adjust the scale of the line style.

MnDOT Internal Only: When accessing Standard Plan CADD files from ProjectWise, only those file versions marked APPROVED are suitable to be included as a Standard Plan. Those versions marked Historical or Working are not to be included as a Standard Plan.

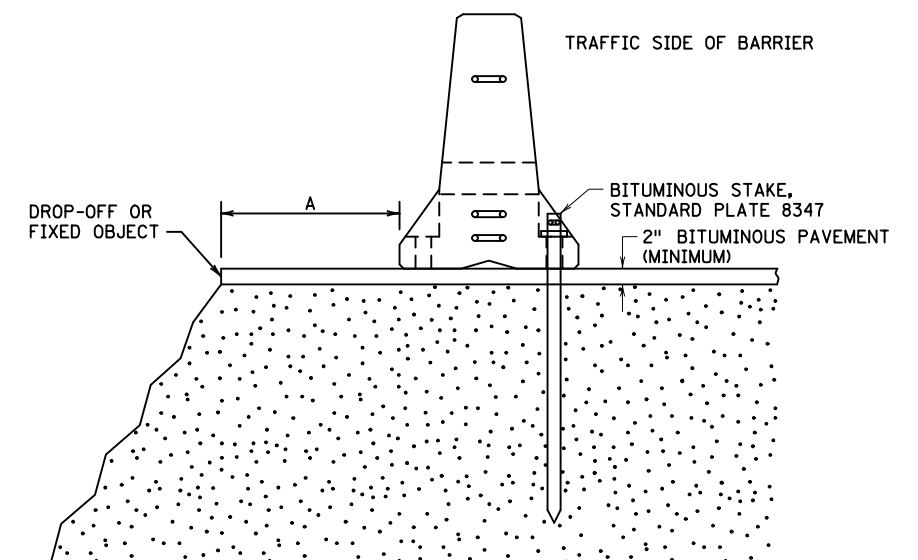
See example of Non-Modified and Modified Standard Plans on the following sheets.



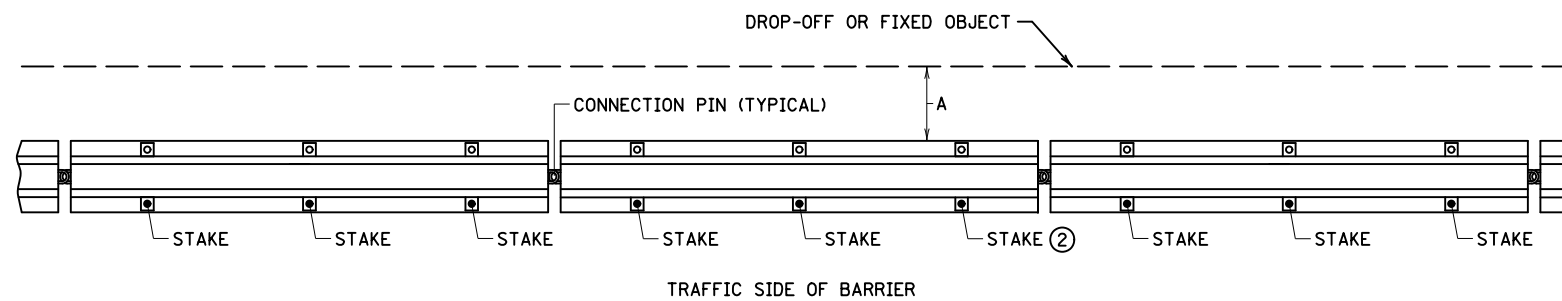
APPROACH PANEL BOLT-DOWN ANCHOR



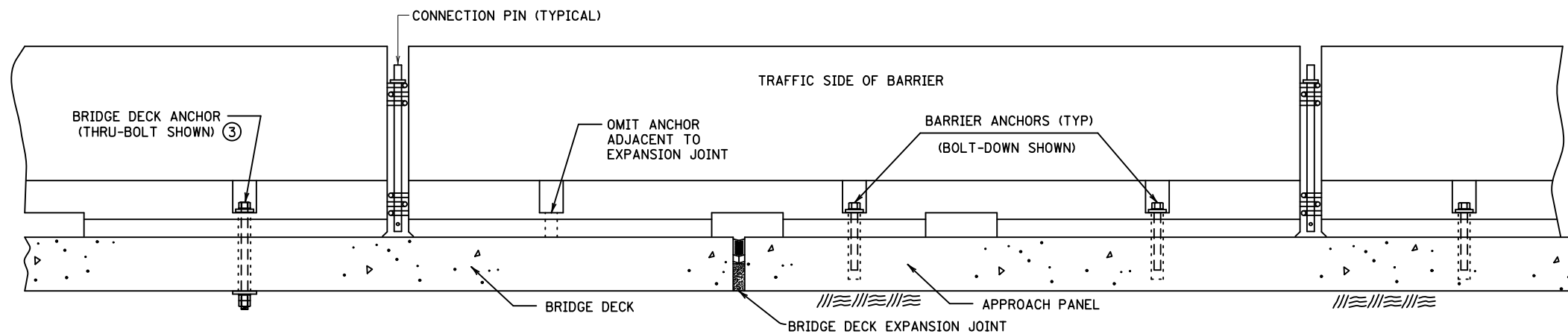
TIE-DOWN STRAP ANCHOR ⑧



BITUMINOUS ANCHORAGE



BITUMINOUS ANCHORAGE



ANCHOR TREATMENT AT BRIDGE DECK EXPANSION JOINT (EXPANSION LESS THAN 1 1/2")

POSTED SPEED LIMIT	MINIMUM REQUIRED DEFLECTION DISTANCE (A) BEHIND ANCHORED PORTABLE CONCRETE BARRIER				FIXED OBJECTS ⑥
	LONGITUDINAL DROP-OFF DEPTH				
	<1'	1'-3'	>3'-8'	EDGES OF BRIDGES AND DROP-OFFS >8'	
≤30 MPH	④	④	0.5'	0.5'	0.5'
35-50 MPH	0.5'	0.5'	1.0'	1.5' (2.0' ⑤⑧)	1.5' (2.0' ⑤)
≥55 MPH	0.5'	1.0'	2.0'	2.0' (4.0' ⑤⑧)	2.0' (4.0' ⑤)

NOTES:

BARRIER SECTIONS SHALL NOT BE PERMANENTLY INCORPORATED INTO CONSTRUCTION OR MAINTENANCE PROJECTS.

A DROP-OFF IS CONSIDERED A SLOPE STEEPER THAN 1(V):3(H).

FIXED OBJECTS ARE HAZARDS THAT ARE FIRM, UNYIELDING, AND GREATER THAN 4 INCHES IN HEIGHT.

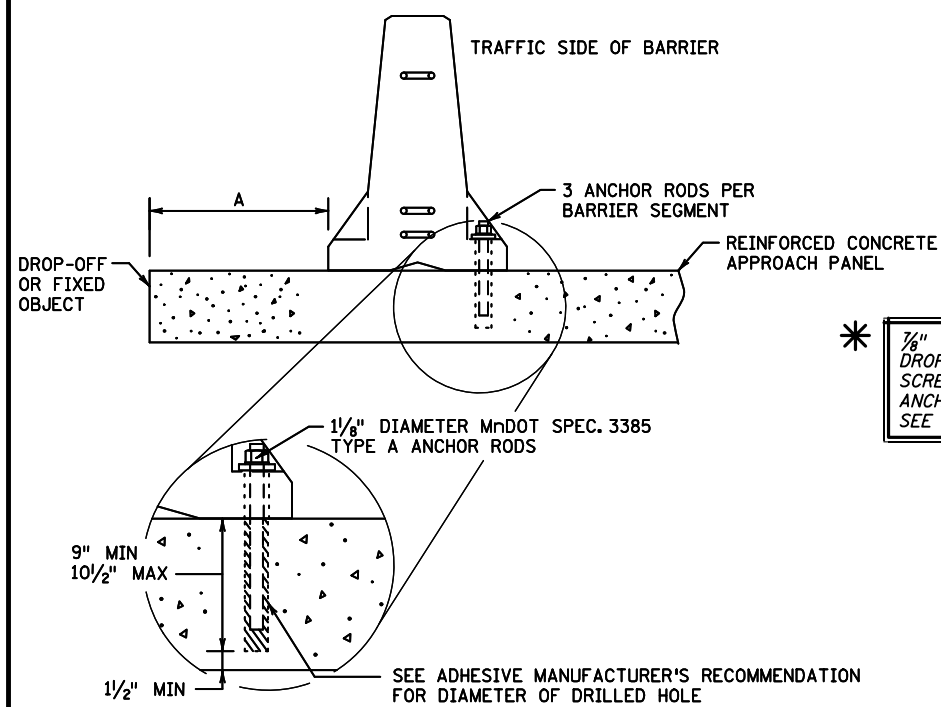
ALL BARRIERS ARE DESIGN 8337 AND SHALL HAVE CONNECTION PINS. SEE STANDARD PLATE 8337.

- ① RETAINER BOLT AND NUT REQUIRED. SEE STANDARD PLATE 8337 FOR DETAILS.
- ② 3 STAKES REQUIRED PER BARRIER SECTION, PLACED ON TRAFFIC SIDE OF BARRIER.
- ③ REFER TO MnDOT BRIDGE STANDARD DETAIL B920 FOR ANCHORING BARRIER ONTO BRIDGE.
- ④ BARRIER NOT REQUIRED FOR DROP-OFF PROTECTION.
- ⑤ DEFLECTION DISTANCE FOR TIE-DOWN STRAP ANCHOR SYSTEM.
- ⑥ IF THE FIXED OBJECT IS ≥1.5' BEYOND INPLACE CURB AND THE POSTED SPEED IS ≤35 MPH, TEMPORARY BARRIER IS OPTIONAL.
- ⑦ SEE SPEC. 2533.
- ⑧ TIE-DOWN STRAP ANCHOR IS NOT TO BE USED ON BRIDGE DECKS.

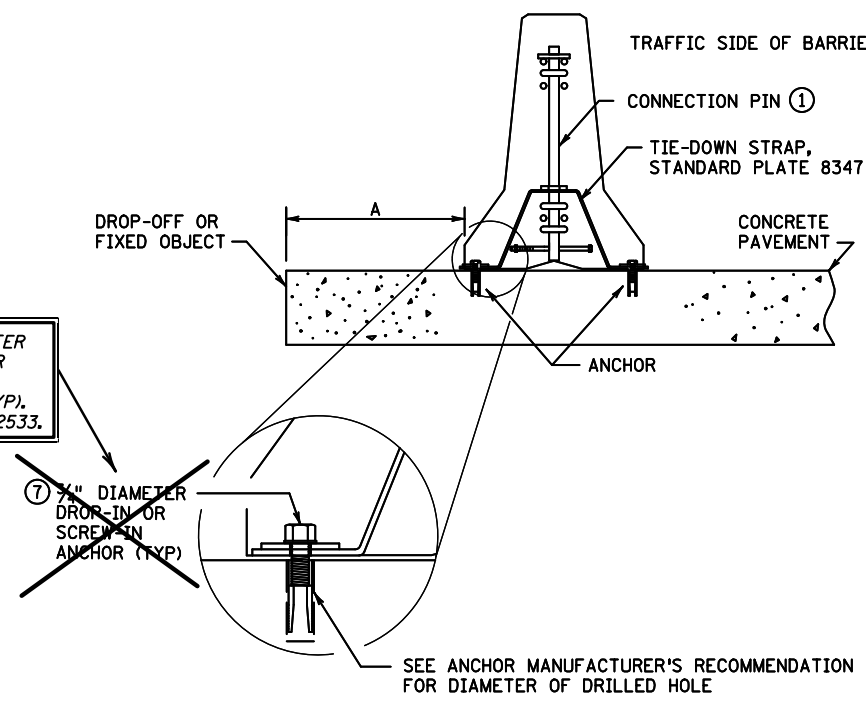
REVISION:
 APPROVED: JULY 16, 2019
Nancy Yoo
 NANCY YOO
 DESIGN SUPPORT DIRECTOR
 OFFICE OF PROJECT MANAGEMENT & TECHNICAL SUPPORT

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 DEPARTMENT OF TRANSPORTATION
 STANDARD PLAN 5-297.680 1 OF 2
 APPROVED: 7-16-2019
 REVISED:
Tom Styrbicki
 THOMAS STYRBICKI
 STATE DESIGN ENGINEER
 STATE PROJ. NO. (T.H.) SHEET NO. OF SHEETS

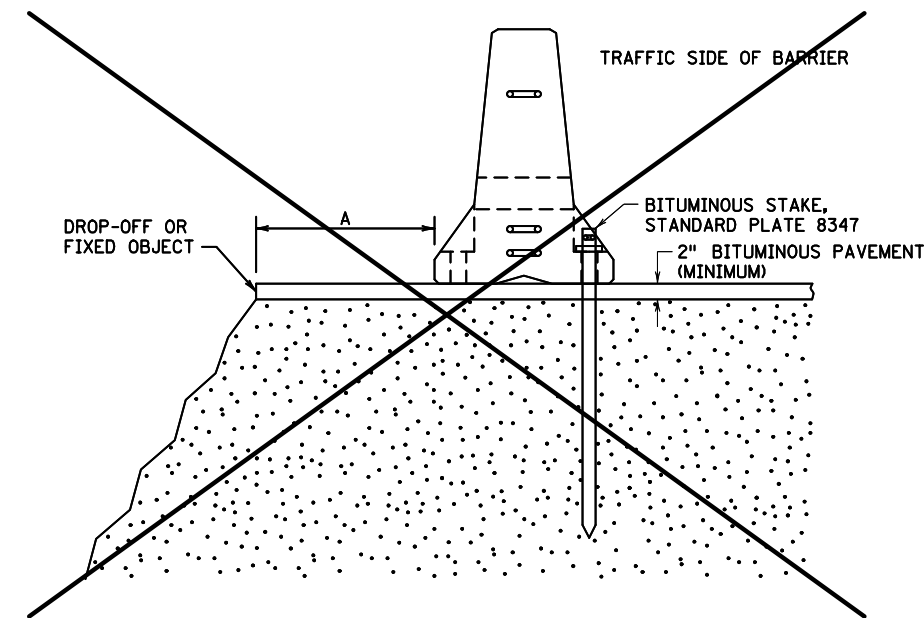
TEMPORARY PORTABLE PRECAST CONCRETE BARRIER ANCHORING



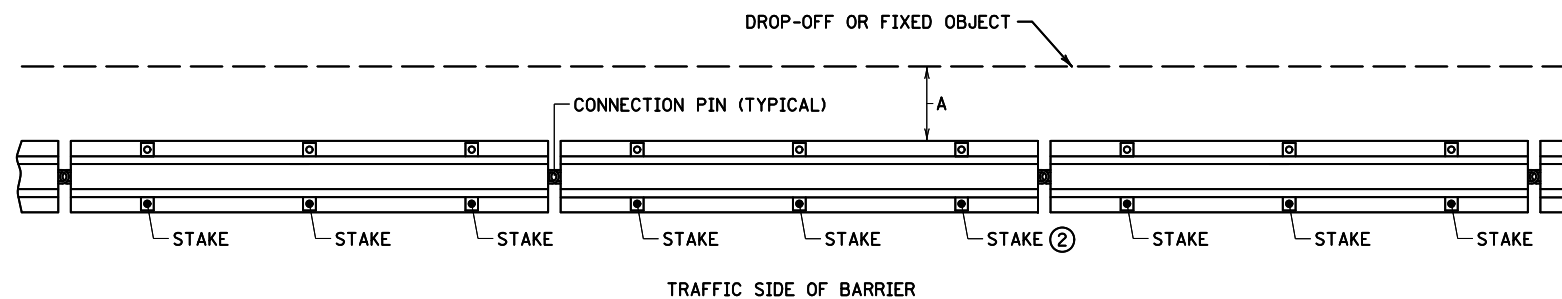
APPROACH PANEL BOLT-DOWN ANCHOR



TIE-DOWN STRAP ANCHOR ⑧



BITUMINOUS ANCHORAGE



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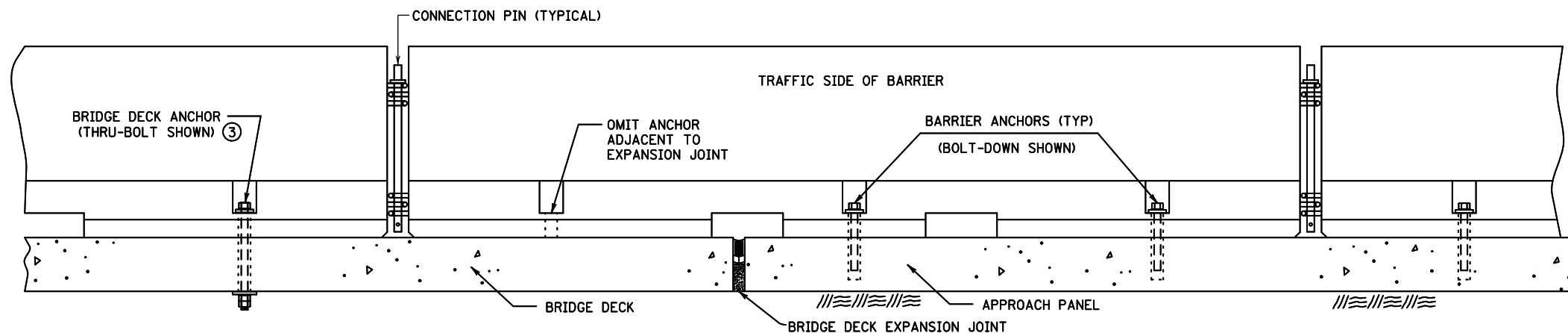
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MODIFIED

REVISION:

APPROVED: JULY 16, 2019

Nancy Yoo

NANCY YOO
DESIGN SUPPORT DIRECTOR
OFFICE OF PROJECT MANAGEMENT & TECHNICAL SUPPORT

* DENOTES MODIFICATION FROM STANDARD PLAN

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

CERTIFIED BY: _____ DATE _____
LICENSED PROFESSIONAL ENGINEER
NAME: _____ LICENSE NO.: _____

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MINNESOTA
DEPARTMENT OF TRANSPORTATION

STANDARD PLAN 5-207-580 1 OF 2

APPROVED: 7-16-2019
REVISION:

Tom Styrbicki
THOMAS STYRBICKI
STATE DESIGN ENGINEER

TEMPORARY PORTABLE PRECAST CONCRETE BARRIER ANCHORING

STATE PROJ. NO. _____ (T.H.) SHEET NO. _____ OF _____ SHEETS