PRESERVATION FRIENDLY DESIGN

David W. Fish, P.E.
Managing Engineer, Bridge Engineering
Rhode Island Department of Transportation

Thomas H. Pechillo, Jr., P.E.
Regional Manager
COLLINS ENGINGINEERING, Inc.

Kevin Viveiros, P.E.
Vice President
PARE CORPORATION

NEBPP MEETING 2012
Newport, Rhode Island

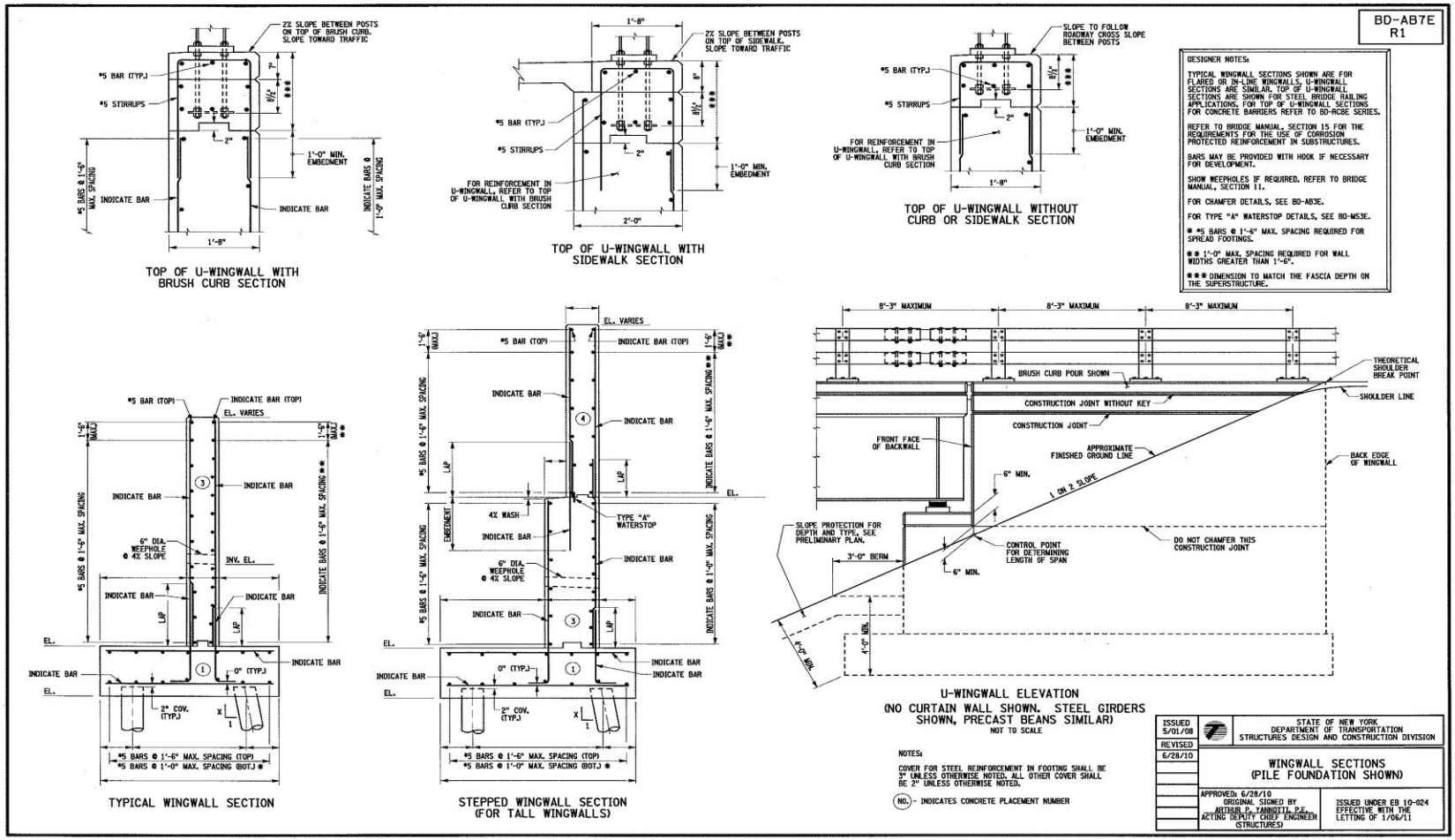
PRESERVATION FRIENDLY DESIGN

PROJECT APPROACH

- REVIEW STATE STANDARD DETAIL DRAWINGS
- PREPARE LONGEVITY SURVEY

PRESERVATION FRIENDLY DESIGN

Berm @ Bearing Area for Inspection - NY



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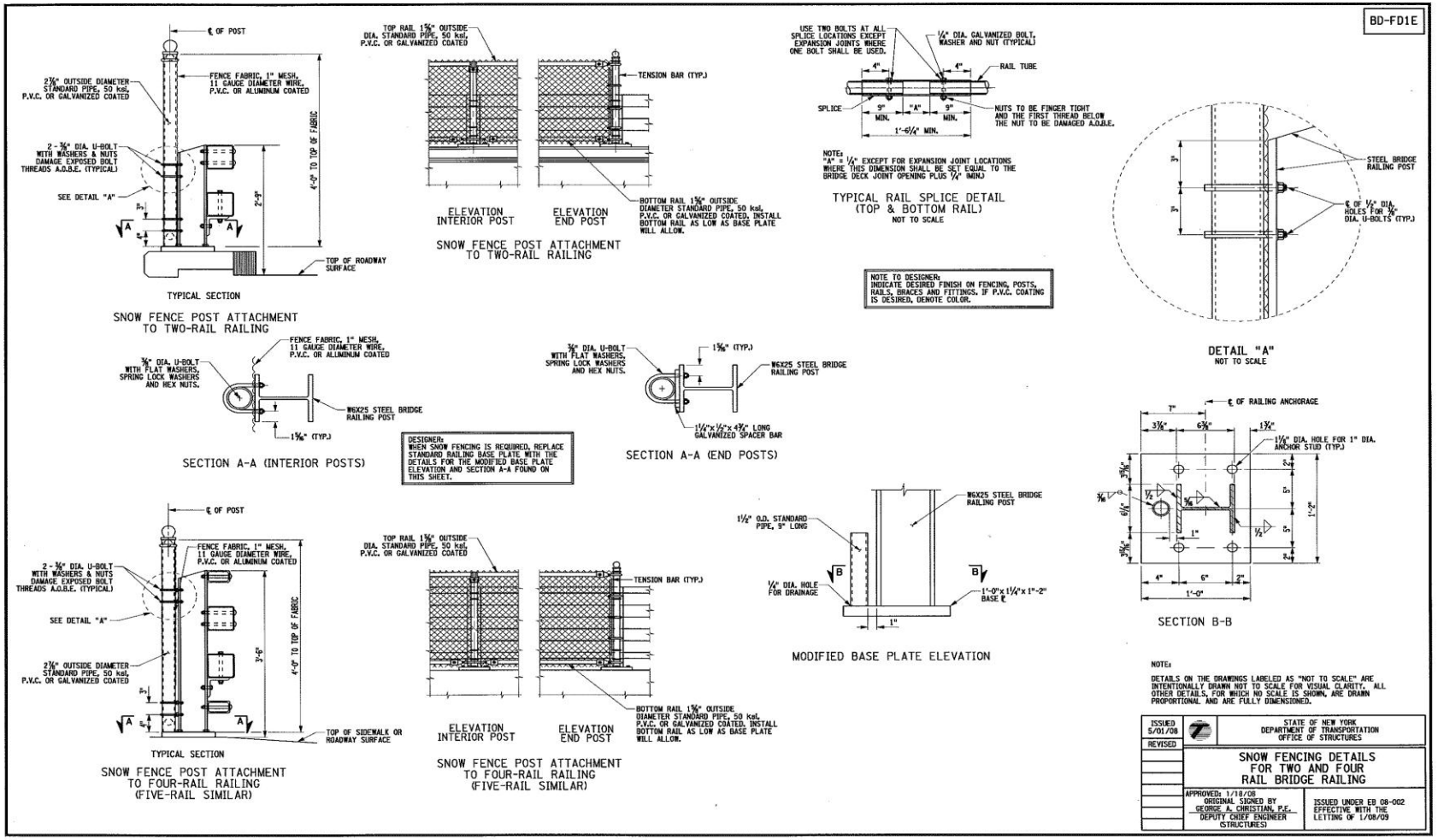
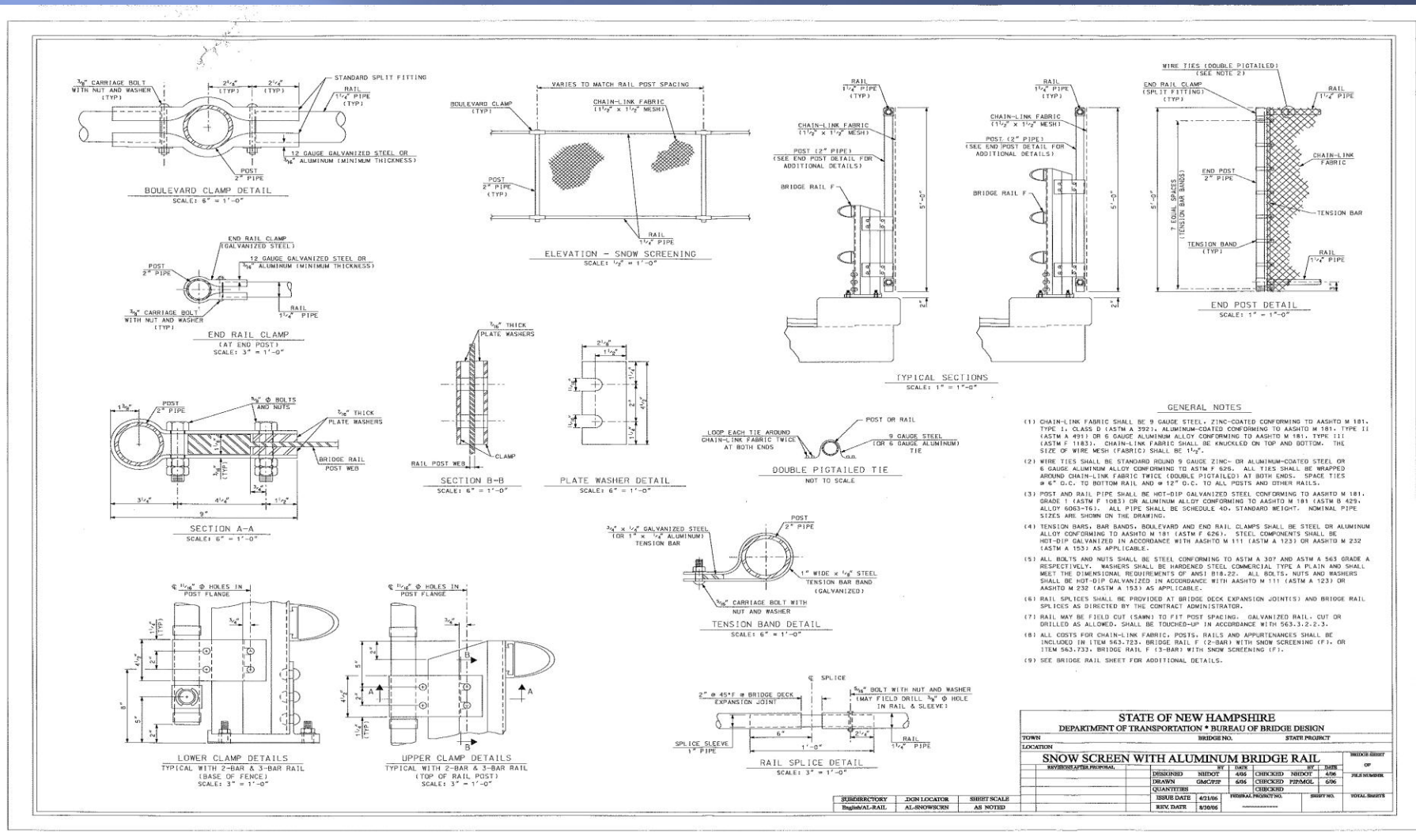
Snow Fence - NY



PRESERVATION FRIENDLY DESIGN

Snow Fence - NH



NEBPP MEETING 2012
Newport, Rhode Island

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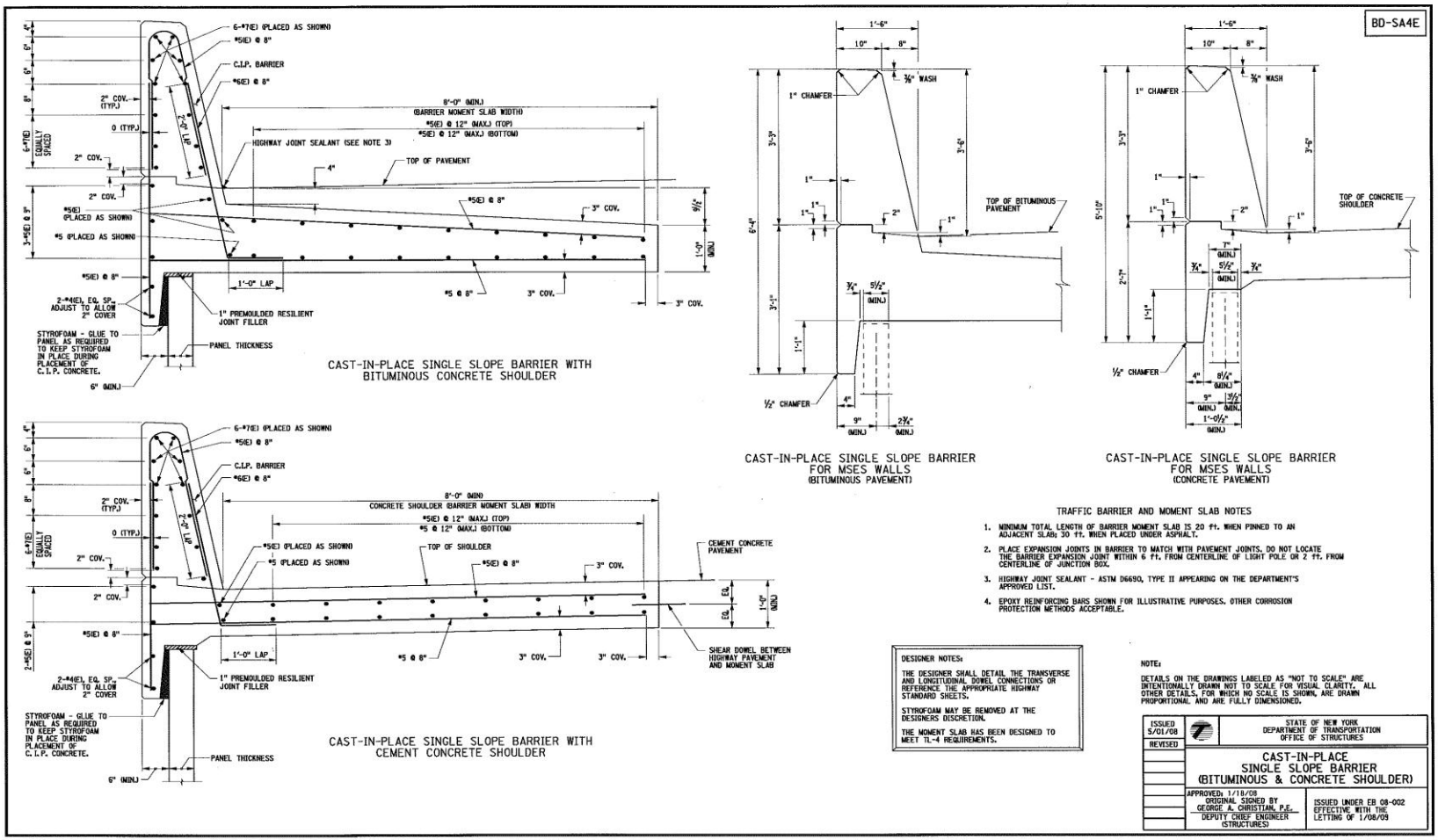
BARRIER OVER MSE WALL DETAIL - NY



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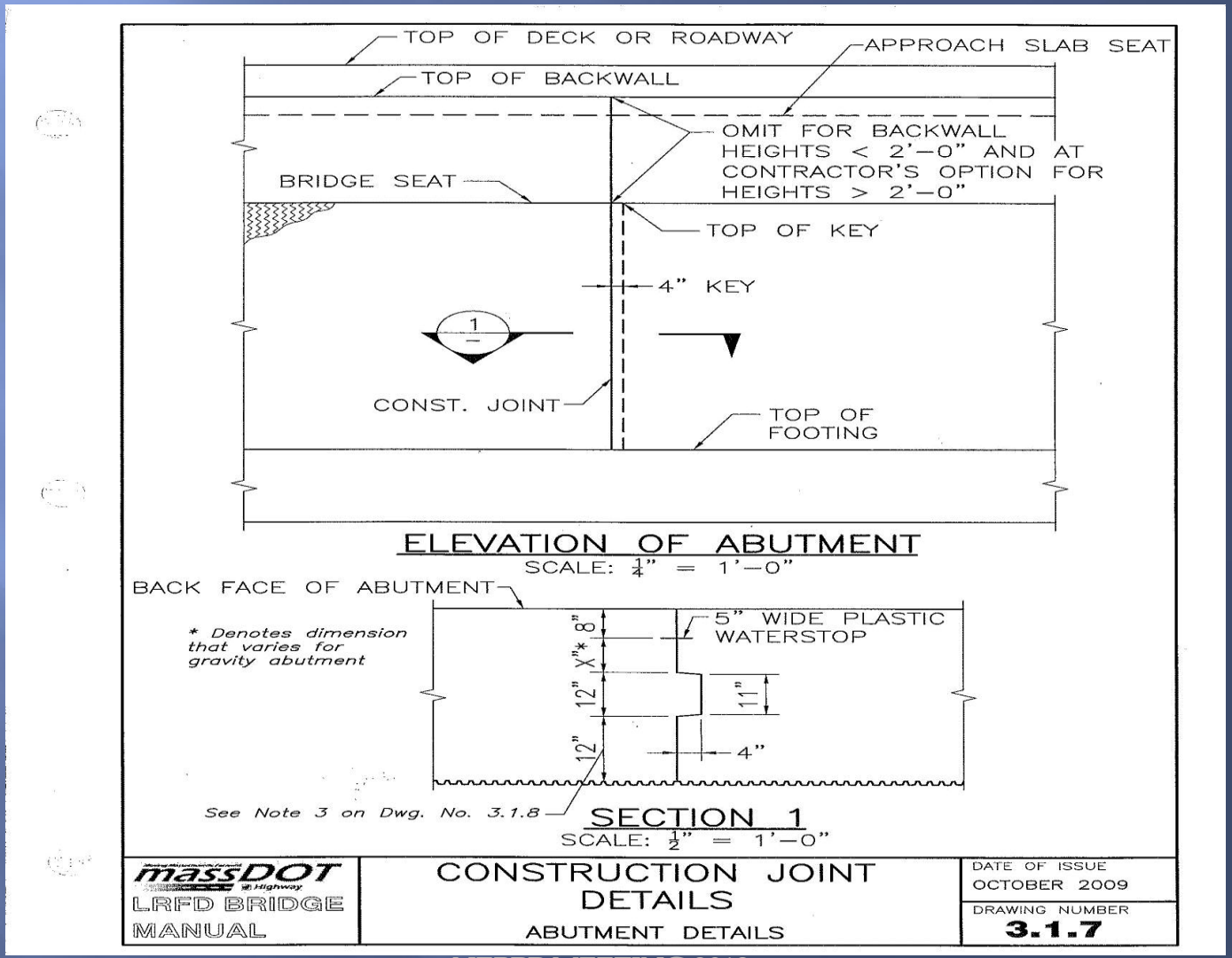
WATER STOP DETAIL - MA



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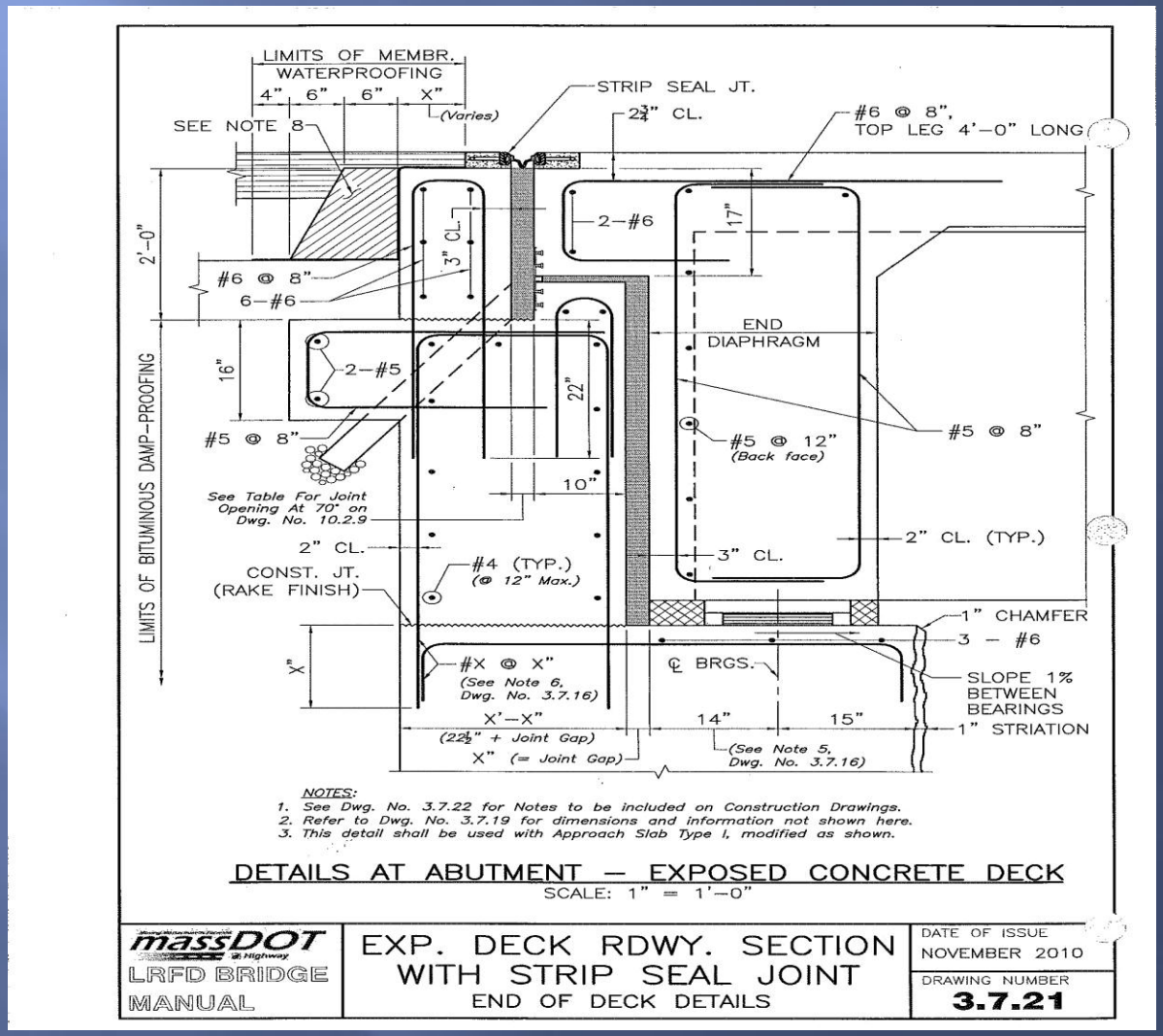
BACKWALL DRAIN - MA



PRESERVATION FRIENDLY DESIGN

DETAILING PRACTICES FOR LONGEVITY - SURVEY

AASHTO TSP-2

Northeast Bridge Preservation Partnership

Design for Bridge Preservation Subcommittee

David Fish, P.E. – Chair

State Agency Survey on Detailing Practices for Longevity

July 23, 2012

1. Please indicate the types of overlays that your state typically incorporates on new or replacement bridge decks.

New Decks:

Standard bituminous Thickness = ____"

Superpave Thickness = ____"

Latex modified concrete Thickness = ____"

Epoxy Thickness = ____"

Other (please indicate type and thickness):

Replacement Decks:

Standard bituminous Thickness = ____"

Superpave Thickness = ____"

Latex modified concrete Thickness = ____"

Epoxy Thickness = ____"

Other (please indicate type and thickness):

2. Please indicate the types of membrane that your state typically incorporates on new or replacement bridge decks.

New Decks:

Spray-on

Sheet

Other (please indicate type):

Replacement Decks:

Spray-on

Sheet

Other (please indicate type):

3. Does your state utilize standard details for treatments of membrane at the gutterlines?

Yes No

4. Does your state typically utilize deck weepholes?

Yes

No

5. Does your state typically utilize stay-in-place forms?

Yes No

If so, are the flutes filled with Styrofoam to reduce weight? Yes No

PRESERVATION FRIENDLY DESIGN

DETAILING PRACTICES FOR LONGEVITY - SURVEY

(if stainless steel is used, please indicate grade):

Bottom Mat: Black Cover = _____"

Epoxy-coated Cover = _____"

Galvanized Cover = _____"

Stainless steel clad Cover = _____"

MMFX Cover = _____"

Stainless Steel Cover = _____"

(if stainless steel is used, please indicate grade):

7. Please indicate whether your state typically uses sealant on its bridge decks and/or parapets:

Bridge Decks: Yes No If yes, type:

Parapets: Yes No If yes, type:

8. Please indicate your state's preferred expansion joint type for various ranges of thermal expansion:

Range 1 ____" to ____" Joint Type:

Range 2 ____" to ____" Joint Type:

Range 3 ____" to ____" Joint Type:

Range 4 ____" to ____" Joint Type:

9. Does your state routinely utilize integral abutment bridges?

Yes No

If yes, please indicate maximum allowable span = _____ feet and skew = _____ degrees.

10. Does your state routinely utilize "slab over backwall" or similar types of details?

6. Please indicate the types of reinforcing and associated cover that your state uses in its bridge decks.

New Decks:

Top Mat: Black Cover = _____"

Epoxy-coated Cover = _____"

Galvanized Cover = _____"

Stainless steel clad Cover = _____"

MMFX Cover = _____"

Stainless Steel Cover = _____"

(if stainless steel is used, please indicate grade):

Bottom Mat: Black Cover = _____"

Epoxy-coated Cover = _____"

Galvanized Cover = _____"

Stainless steel clad Cover = _____"

MMFX Cover = _____"

Stainless Steel Cover = _____"

(if stainless steel is used, please indicate grade):

Replacement Decks:

Top Mat: Black Cover = _____"

Epoxy-coated Cover = _____"

Galvanized Cover = _____"

Stainless steel clad Cover = _____"

MMFX Cover = _____"

Stainless Steel Cover = _____"

PRESERVATION FRIENDLY DESIGN

DETAILING PRACTICES FOR LONGEVITY - SURVEY

Bottom Mat: Black Cover = _____"

Epoxy-coated Cover = _____"

Galvanized Cover = _____"

Stainless steel clad Cover = _____"

MMFX Cover = _____"

Stainless Steel Cover = _____"

(if stainless steel is used, please indicate grade):

13. For concrete substructures, please indicate what your state typically uses for treatments:

Bridge Seat:

Top cover: ____"

Reinforcing type: Black Epoxy Coated Other

Front face of abutment stems in splash/salt zone:

Cover: ____"

Reinforcing type: Black Epoxy Coated Other

Front face of abutment stems outside splash/salt zone:

Cover: ____"

Reinforcing type: Black Epoxy Coated Other

Pier columns/walls in splash/salt zone:

Cover: ____"

Reinforcing type: Black Epoxy Coated Other

Pier columns/walls outside splash/salt zone:

Cover: ____"

Reinforcing type: Black Epoxy Coated Other

Yes No

If yes, please indicate maximum allowable span = _____ feet and skew = _____ degrees

11. For steel superstructures, please indicate how often your state utilizes the following types of protection:

Painted Steel:	Nearly Always	Frequently	Occasionally	Rarely	Never
Weathering Steel:	Nearly Always	Frequently	Occasionally	Rarely	Never
Galvanized Steel:	Nearly Always	Frequently	Occasionally	Rarely	Never
Other:	Nearly Always	Frequently	Occasionally	Rarely	Never

If other, please indicate type:

If your state uses weathering steel, please indicate if you provide the following:

Painted Girder Ends

Drip Bars at low end(s) of girders

12. For concrete superstructures, please indicate the types of reinforcing and associated cover that your state uses.

Top Mat: Black Cover = _____"

Epoxy-coated Cover = _____"

Galvanized Cover = _____"

Stainless steel clad Cover = _____"

MMFX Cover = _____"

Stainless Steel Cover = _____"

(if stainless steel is used, please indicate grade):

PRESERVATION FRIENDLY DESIGN

DETAILING PRACTICES FOR LONGEVITY - SURVEY

14. Please indicate the type of scour protection your state typically uses:

Abutments on piles:	Rip-rap	Articulated Concrete Block	Other
Abutments on spread footings:	Rip-rap	Articulated Concrete Block	Other
Piers on piles:	Rip-rap	Articulated Concrete Block	Other
Piers on spread footings:	Rip-rap	Articulated Concrete Block	Other

15. Please indicate if your state routinely uses other types of preservation-friendly design details, and if so, briefly explain: