

STATE	FEDERAL AID	STATE	SHEET NO.
VA.	IM/NH-395-4(178)	395	0395-100-722, B687
NBIS Number:	00000000029980	UPC No.	96261
Federal Oversight Code:	FO	FHWA Construction and Scour Code:	X781-SN

DESIGN EXCEPTION(S):

None.

GENERAL NOTES:

The original approved sheet, including original signatures, is filed in the VDOT Central Office. Any misuse of electronic files, including scanned signatures is illegal. Violators will be prosecuted to the full extent of the applicable laws.

Width: Varies from 28'-0" to 36'-0" face-to-face of curbs

Span layout: 120' - 120' - 120' - 120' - 120' - 120' - 120' - 120' - 120' simple prestressed concrete 69" deep bulb-T beam spans continuous for live load;

Capacity: HL-93 loading.

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2007.

Design: AASHTO LRFD Bridge Design Specifications, 5th Edition, 2010; 2010 Interim Specifications; and VDOT Modifications.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

Design loading includes 20 psf allowance for construction tolerances and construction methods and 15 psf allowance for future wearing surface.

The use of prestressed deck panels as stay-in-place forms will not be permitted.

Concrete in superstructure including end diaphragm, closure diaphragms, integral backwall, and parapets shall be Class A4; all other concrete shall be Class A3.

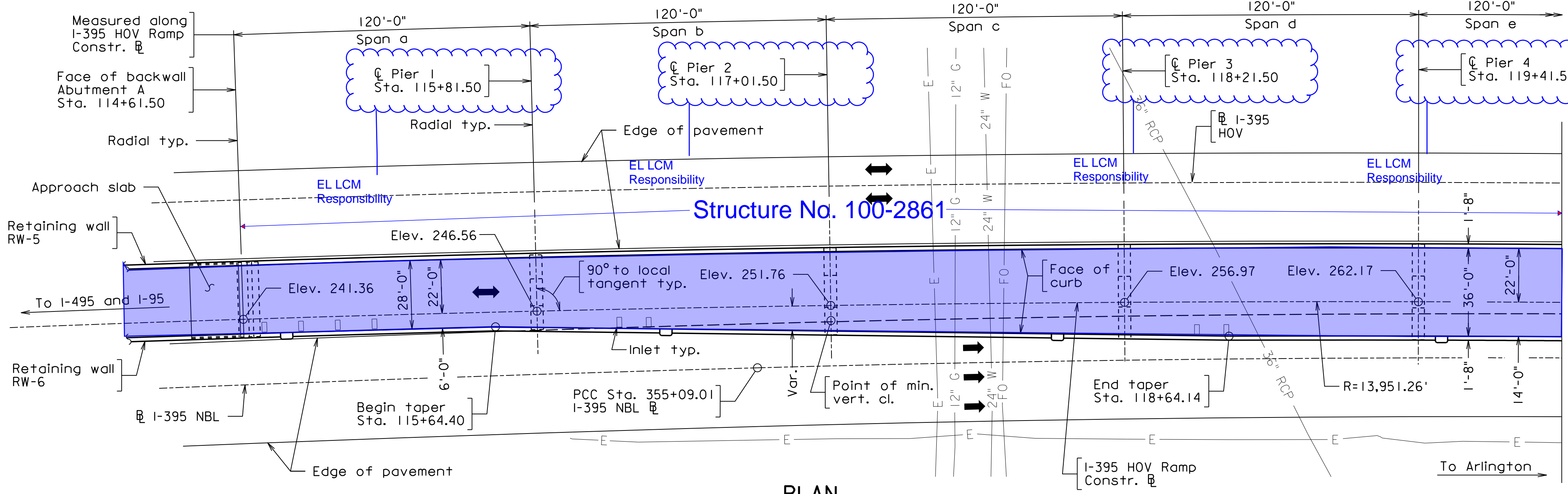
Concrete in abutment A seat shall conform to the requirements of mass concrete as specified in the Special Provisions.

Prestressed concrete in bulb-T beams shall be Class A5 having a minimum compressive cylinder strength at 28 days equal to 7000 psi and a minimum compressive cylinder strength at time of release of strands equal to 5600 psi.

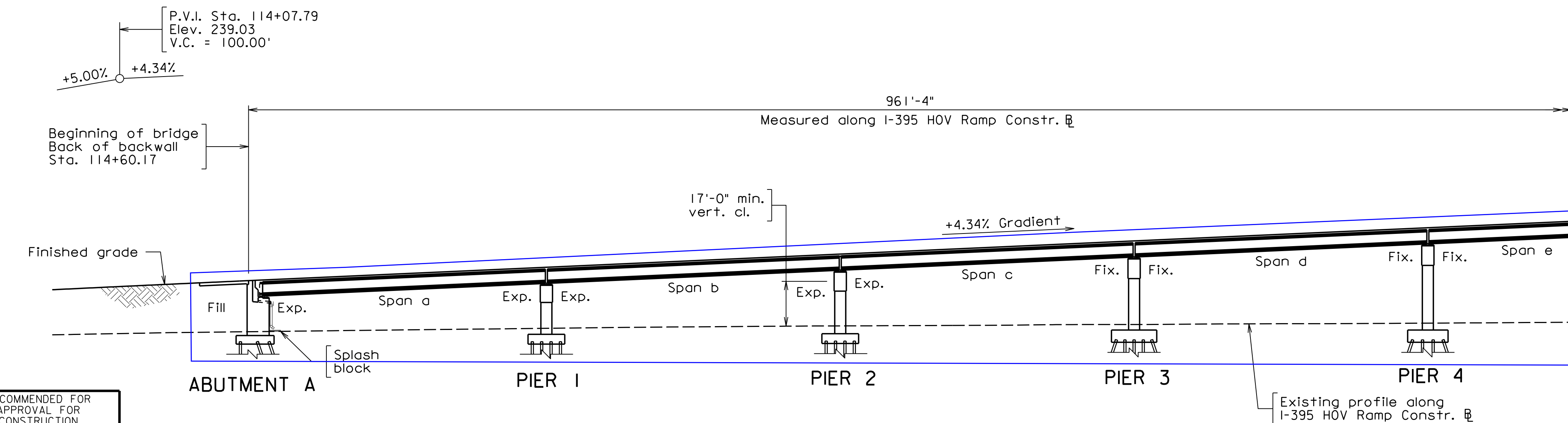
Low permeability concrete shall be used in this project.

Concrete surface color coating shall be gray, similar to Federal Standard Color No. 595-26307.

General notes continues on sheet 2.



PLAN
Express Lanes Major Maintenance Responsibility



DEVELOPED SECTION ALONG I-395 HOV RAMP CONSTR. \mathbb{R}
Express Lanes Major Maintenance Responsibility

Note: Pier protection barrier is not shown. For limits and details, see sheets 27 to 29.

Finals posted for the Northern Virginia District Bridge Office by Athavale, Lystad & Associates on May 23, 2016.

b2937200.rab.dgn

RECOMMENDED FOR APPROVAL FOR CONSTRUCTION
Larry Tomlinson, P.E.
VDOT PROJECT MANAGER
Susan Shaw, P.E.
DISTRICT CONSTRUCTION MANAGER
Sealed and signed by: Tewolde Iyob License No. 0402 17408 on the date of April 16, 2014
A copy of this sealed and signed sheet is available in the Central Office
ATHAVALE, LYSTAD & ASSOC. Inc. McLean, Virginia STRUCTURAL ENGINEER
PLANS BY: Consultant
COORDINATED: Deryck Krofft
SUPERVISED: Tewolde Iyob
DESIGNED: Khaled Alamdeen
DRAWN: David Escoto
CHECKED: Dan Walsh

No.	Description	Date
1	As-built corrections	5/18/16
2	Approved for Construction	7/14/14
REVISIONS		
For Table of Revisions, see Sheet 3.		

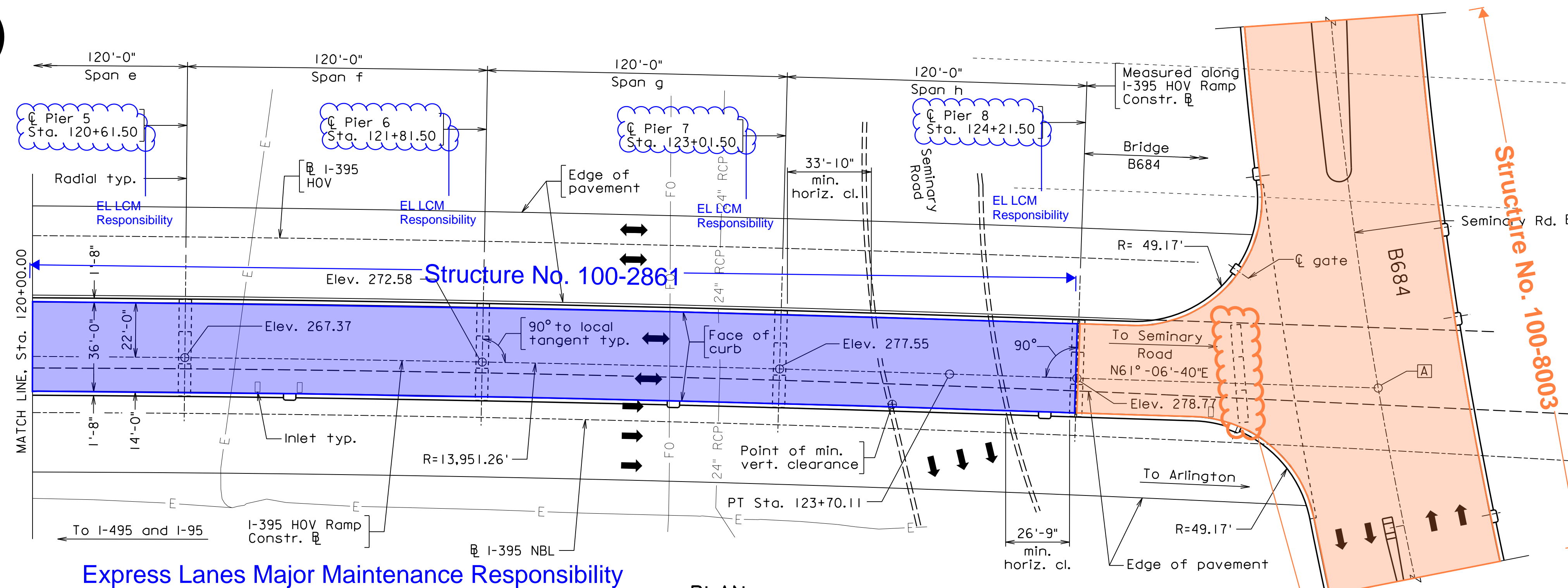
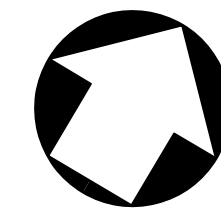
Scale: 1" = 30'-0"



COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
AS-BUILT PROPOSED BRIDGE ON
I-395 HOV RAMP TO SEMINARY ROAD
CITY OF ALEXANDRIA - 0.1 MI. N. SANGER AVE.
PROJ. 0395-100-722, B687

Recommended for Approval:	Brian Quinlan	6/11/14
	Archer - Western	Date
Approved:	Garrett Moore	7/14/14
	Chief Engineer	Date
Date:	April 16, 2014	© 2014, Commonwealth of Virginia

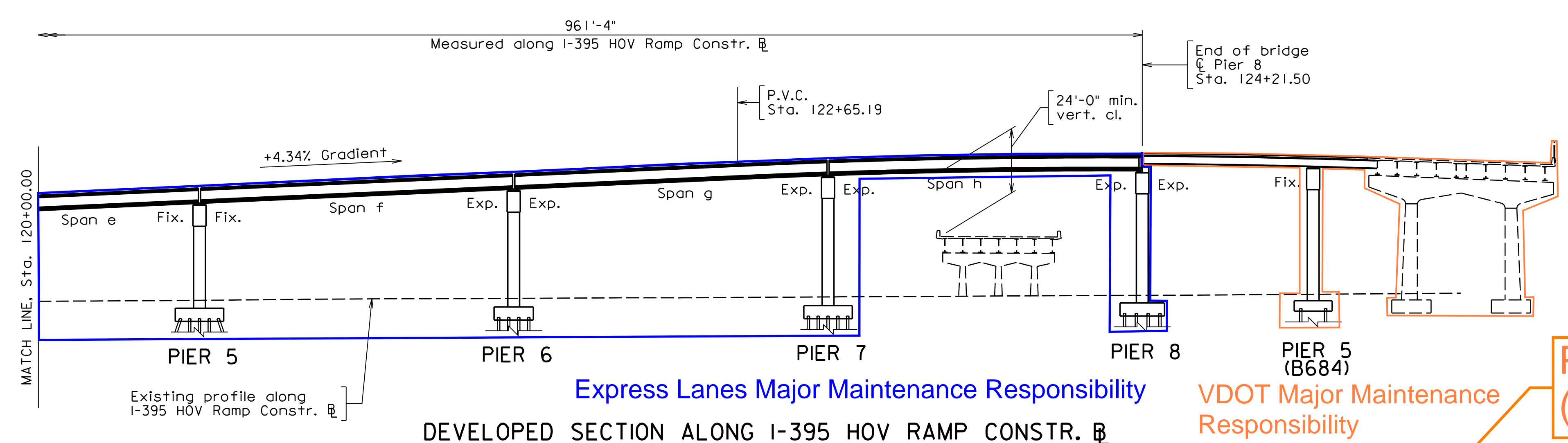
STATE	FEDERAL AID	STATE	SHEET
VA.	IM/NH-395-4(178)	395	0395-100-722, B687
			2



Express Lanes Major Maintenance Responsibility
PLAN

[A] POT Sta. 125+43.11 I-395 HOV Ramp
POC Sta. 512+85.74 Seminary Rd.
 $\Delta = 78^\circ-27'-35''$ Rt.

P.V.I. Sta. 123+86.19
Elev. 281.45
V.C. = 242.00'
+4.34% -4.00%



Express Lanes Major Maintenance Responsibility
DEVELOPED SECTION ALONG I-395 HOV RAMP CONSTR. \mathbb{B}

VDOT Major Maintenance Responsibility

Pier 5
(100-8003)

Pier 8
(100-2861)



GENERAL NOTES: (Continued)
All reinforcing steel shall be deformed and shall conform to ASTM A615, Grade 60 except for reinforcing steels noted as CRR (corrosion resistant reinforcing) which shall conform to applicable specifications noted in the special provisions. All reinforcing bar dimensions on the detailed drawings are to centers of bars except where otherwise noted and are subject to fabrication and construction tolerances.

Corrosion resistant reinforcing (CRR) steels shall conform to one or more of the three Classes listed in the special provision. The minimum yield strength shall be: 100 ksi for low carbon/chromium and 60 ksi for stainless clad steel or solid stainless steel. The Class(es) of CRR steel(s) required on this project is/are noted on the plan sheets and in the reinforcing steel schedule. Corrosion Resistant Reinforcing Steel, Class II or Class III may be substituted for Class I. Corrosion Resistant Reinforcing Steel, Class III, may be substituted for Class II.

Prestressing strands shall be uncoated, seven-wire, low-relaxation steel strands conforming to ASTM A416 Grade 270.

H-Piles in piers and abutment have been designed using a factored axial resistance of 100 tons per pile. The nominal axial resistance as measured during pile driving shall be 155 tons per pile.

Structural approach slab are included in the bridge contract.

B.M.: Control Station I.D. 96-A-2301 is a standard disk set in concrete on south side of I-395 NB, about 1.2 miles northeast of Duke Street Interchange. Station coordinate is E 3674112.666 and N 425293.767, and elevation is 179.96'. Horizontal datum is based on NAD83(93) and vertical datum is based on NAVD88.

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ATHAVALE, LYSTAD & ASSOC. Inc.
McLean, Virginia
STRUCTURAL ENGINEER

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION			
STRUCTURE AND BRIDGE DIVISION			
GENERAL PLAN AND ELEVATION - 2			
DESIGNED BY	DATE	PLAN NO.	SHEET NO.
Drawn: J.L.K.	April 2014	293-72	2 of 83
REVISIONS			
NO.	DESCRIPTION	DATE	
1	No as-built corrections	5/18/16	
2	Approved for Construction	7/14/14	

STATE	FEDERAL AID		STATE		SHEET
ROUTE	PROJECT		ROUTE	PROJECT	NO.
VA.	IM/NH-395-4(178)		395	0395-100-722, B684	1
NBIS Number:	00000000019902		UPC No.	96261	
Federal Oversight Code:	FO		FHWA Construction and Scour Code:	X771-SN	

DESIGN EXCEPTION(S):

None.

GENERAL NOTES:

The original approved sheet, including original signatures, is filed in the VDOT Central Office. Any misuse of electronic files, including scanned signatures is illegal. Violators will be prosecuted to the full extent of the applicable laws.

Width: 27'-0" EB roadway, varies 2'-0" to 16'-0" median, varies 27'-0" to 40'-0" WB roadway. Overall width 70'-0" face-to-face of curbs.

Span layout: 1 Unit 107.41' - 125.77' - 90.94' - 91.81' - 104.54' continuous curved steel plate girder spans, 1 unit 66.00' - 18.20' continuous steel rolled beam spans.

Capacity: HL-93 loading for superstructure. HS20-44 loading and alternate military loading for substructure.

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2007.

Design: AASHTO LRFD Bridge Design Specifications, 5th Edition, 2010; 2010 Interim Specifications; and VDOT Modifications.

Standards: Virginia Department of Transportation Road and Bridge Standards, 2008.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

Design loading includes 20 psf allowance for construction tolerances and construction methods.

Design loading includes 15 psf allowance for future wearing surface.

The use of prestressed decks panels as stay-in-place forms will not be permitted.

All structural steel, including bearings, shall be ASTM A709 Grade 50W and shall be unpainted except as required by Section 407 of the Specifications.

Finish paint color shall be brown, 595-20059.

Plate girders shall be curved by cutting the flanges to the proper curvature radius. Heat-curving is not allowed.

The spacing and height of stud shear connectors shall be shown on the shop plans (working drawings).

Concrete in deck slab shall be light-weight concrete class A4. Max. unit weight of light-weight concrete shall be 110 pcf. Concrete in median and parapets shall be normal-weight concrete class A4. All other concrete shall be class A3.

Low permeability concrete shall be used in this project.

General notes continues on sheet 2.

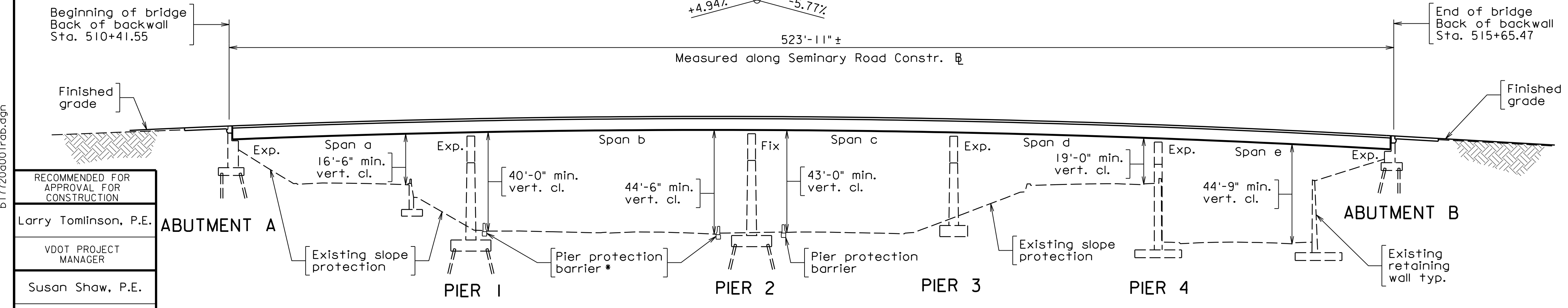
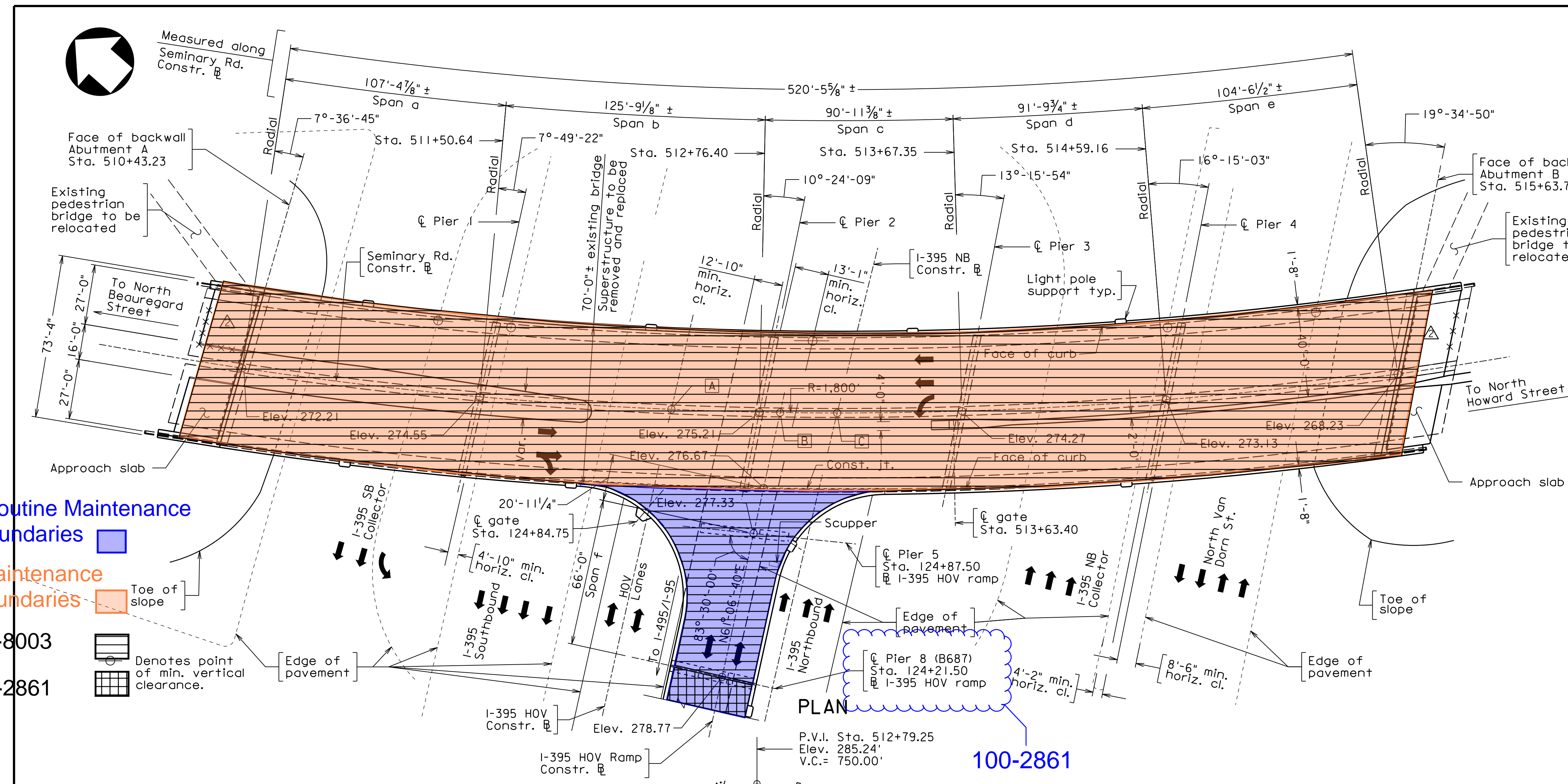


**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**
 AS-BUILT ~~PROPOSED~~ BRIDGE ON
 SEMINARY ROAD OVER I-395
 CITY OF ALEXANDRIA
 0.36 MI. E. OF N. BEAUREGARD ST.
 PROJ. 0395-100-722, B684

Recommended for Approval: Brian Quinlan 6/11/14
 Archer - Western Date

Approved: Garrett Moore 7/14/14
 Chief Engineer Date

Date: May 30, 2014 © 2014, Commonwealth of Virginia Sheet 1 of 98



SECTION ALONG SEMINARY RD. CONSTR.

*For pier protection details at Pier 1, see pedestrian bridge plans.

- [A] POC Sta. 512+36.89 Seminary Rd. $\Delta = 79^{\circ}-39'-51''$ Rt.
 POT Sta. 243+89.30 I-395 HOV $\Delta = 78^{\circ}-27'-35''$ Rt.
- [B] POC Sta. 512+85.74 Seminary Rd. $\Delta = 78^{\circ}-27'-35''$ Rt.
 POT Sta. 125+43.11 I-395 HOV Ramp $\Delta = 76^{\circ}-26'-58''$ Rt.
- [C] POC Sta. 513+11.34 Seminary Rd. $\Delta = 76^{\circ}-26'-58''$ Rt.
 POT Sta. 343+85.18 I-395 NB $\Delta = 76^{\circ}-26'-58''$ Rt.

Note:
 For Section along I-395 HOV Ramp Constr. see sheet 2.

Finals posted for the Northern Virginia District Bridge Office by Athavale, Lystad & Associates on June 6, 2016.

RECOMMENDED FOR APPROVAL FOR CONSTRUCTION
 Larry Tomlinson, P.E.
 VDOT PROJECT MANAGER

Susan Shaw, P.E.
 DISTRICT CONSTRUCTION MANAGER

Sealed and signed by:
 Tewolde Iyob
 License No. 0402 17408
 on the date of November 11, 2015

A copy of this sealed and signed sheet is available in the Central Office

ATHAVALE, LYSTAD & ASSOC. Inc.
 McLean, Virginia
 STRUCTURAL ENGINEER

PLANS BY: Consultant
 COORDINATED: Deryck Krafft
 SUPERVISED: Tewolde Iyob
 DESIGNED: Khaled Alamdeen
 DRAWN: Angelica Vang
 CHECKED: Daniel Walsh

No.	Description	Date
[AB]	As-built corrections	6/6/16
[A]	NDC-087 Revised WB Approach Slabs	11/10/15
[A]	Approved for Construction	7/14/14
REVISIONS		
For Table of Revisions, see Sheet 2.		

Scale: 1" = 30'-0"