GENERAL NOTES:

Width: 54'-7" face-to-face of rails.

Span layout: 45'-0" single span prestressed concrete voided slab beams

Capacity: HL-93 loading.

Drainage area: +/- 1.00 sq. mi.

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2016.

Design: AASHTO LRFD Bridge Design Specifications, 7th Edition, 2014; 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.

This project is to be constructed in accordance with the Virginia Department of Transportation Work Area Protection Manual, June 2011 and latest revisions.

Design loading includes 10 psf allowance for construction tolerances and construction methods.

Design loading includes 15 psf allowance for future wearing surface.

The use of metal stay-in-place forms will be permitted.

All steel, including bearings, shall be ASTM A709 Grade 36.

Concrete in superstructure shall be Class A5.
Concrete in deck and sidewalks shall be Class A4.
Concrete in parapets shall be Low Shrinkage Class A4 Modified.
Concrete in substructure shall be Class A3.

Prestressed concrete in voided slab beams shall be Class A5 having a minimum compressive cylinder strength at 28 days equal to 5,000 psi and a minimum compressive cylinder strength at time of release of strands equal to 4,0000 psi.

Low permeability concrete shall be used in this project.

Permeability testing does not apply to this project.

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 provision. 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 types (low carbon/chromium, stainless clad and solid stainless) listed in the special provision. The minimum yield strength shall be: 100 ksi for low carbon/chromium and 60 ksi for stainless clad steel and solid stainless steel.

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

Footings for abutments shall bear on H-Piles HP10x42.

H-Piles HP10x42 shall be ASTM A709 Grade 50 steel and have a design capacity of 30 tons per pile. H-Piles shall be driven to practical refusal and to the nominal axial resistance of 223 tons/pile. All piles shall be driven to or below minimum tip elevation(s), estimated between 893.00 and 903.00, unless otherwise directed or authorized by the Engineer. Nominal axial resistance shall be determined by wave equation analysis, without pile dynamic measurements or load tests, but with field conformation of hammer performance. Piles shall be fitted with a protective serrated steel point.

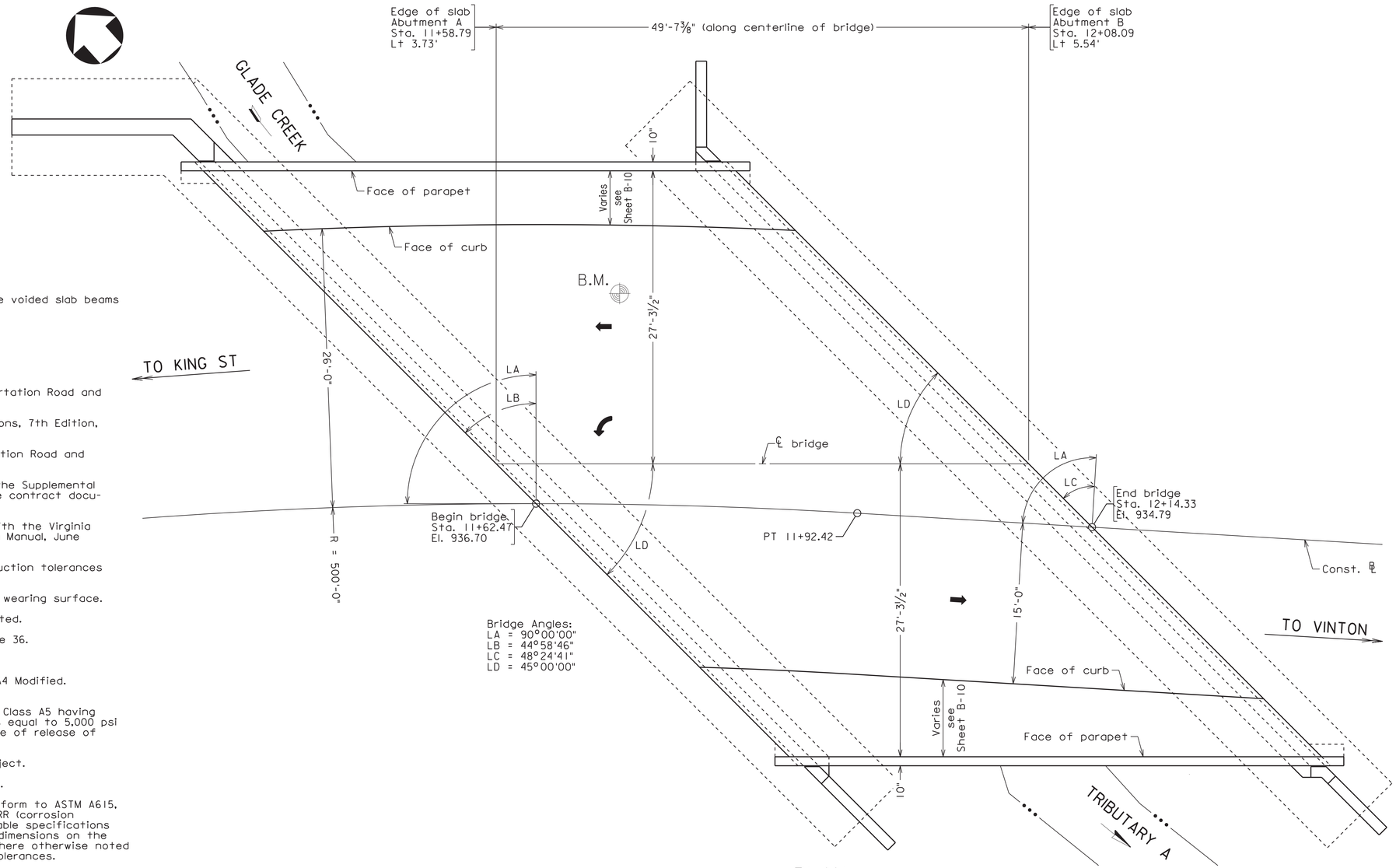
Backwall at each abutment shall be waterproofed in accordance with the requirements of Sec. 405 and Sec. 416.

Bridge No. of existing bridge 8014. There are no available existing plans.

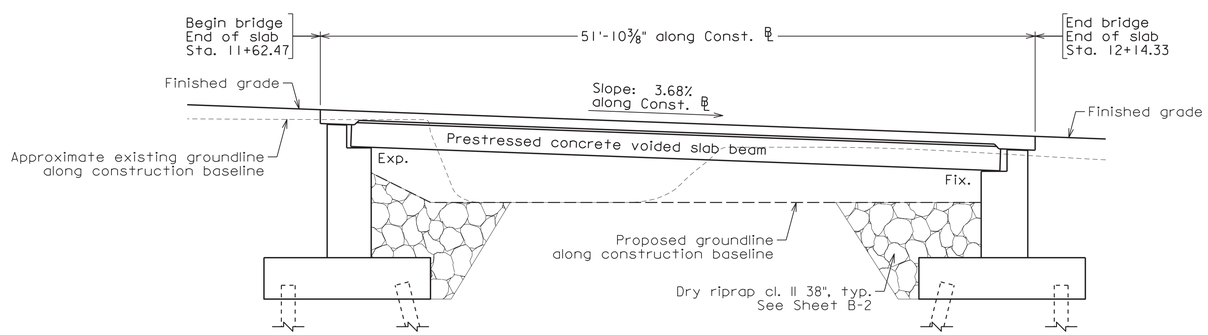
The existing structure is designated a Type B structure in accordance with Sec. 411.

B.M.: Chiseled square on top of the northwest (upstream) corner for the east bridge abutment of the existing structure. Elevation 936.23

Contractor shall coordinate installation of a replacement benchmark with the City of Roanoke prior to the removal of the existing structure.



PLAN
Scale: 3/16" = 1'-0"



DEVELOPED SECTION ALONG CONSTRUCTION BASELINE
Scale: 3/16" = 1'-0"

COMMONWEALTH OF VIRGINIA
CHAD M. THOMAS
Lic. No. 039662
PROFESSIONAL ENGINEER
03/10/2017

Date
Revisions

Issue Date: 03/10/17
Drawn By: DKA
Designed By: MLF
Checked By: CMT
Date: 03/10/17

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City of Roanoke
Planning, Building, & Development
COMPREHENSIVE DEVELOPMENT PLAN
APPROVED
by Adrian Gilbert 03/15/2018

BERKLEY ROAD OVER GLADE CREEK TRIBUTARY A
PLAN, PROFILE, AND GENERAL NOTES
CITY OF ROANOKE, VA

Vertical Scale: N/A
Horizontal Scale: AS NOTED
Commission Number: 34301
Sheet No.: B-1