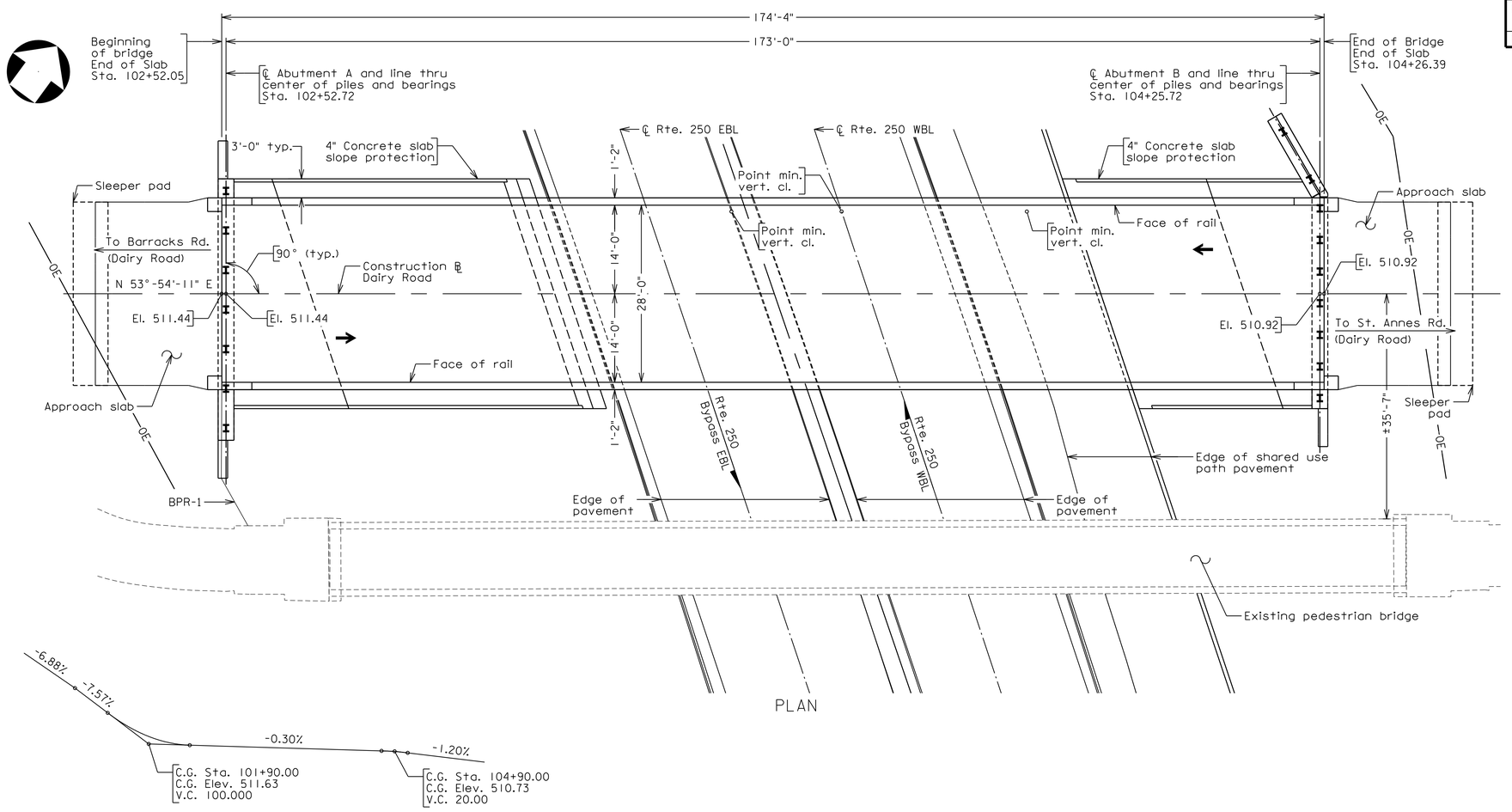
STATE	FEDERAL AID ROUTE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	1
Federal Structure No. 20073			FHWA Construction and Scour Code:	X271-SN	
Federal Stewardship and Oversight Code:				UPC No. 118295	



DEVELOPED SECTION ALONG CONSTRUCTION ℄

Scale: 1" = 10'-0"

DESIGN EXCEPTION(S):

None

GENERAL NOTES:

Width: 3'-0" shoulder, 22'-0" roadway, 28'-0" face-to-face of curbs.
30'-4" overall width

Span layout: 173'-0" steel girder, single span

Capacity: HL-93 loading.

Specifications:

Construction: Virgina Department of Transportation Road and Bridge Specifications, 2020; and SP407-000500 (Special Provision for Superstructure Erection Stability).

Design: AASHTO LRFD Bridge Design Specifications 8th Edition, 2017; and VDOT Modifications.

Standards: Virginia Department of Transportation Road and Bridge Standards, 2016; including all current revisions.

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.

All structural steel shall be ASTM A709 Grade 50W and shall be unpainted, except the elements specified on sheet XX.

Finish paint color shall be brown, Federal Standard Color No. 595-20059.

Concrete in superstructure, rails, terminal walls, and integral backwalls shall be Low Shrinkage Class A4 Modified in accordance with Section 217.12(a); in abutments and wingwalls, Class A3.

All reinforcing steel shall be deformed and shall conform to ASTM A615 Grade 60 except for steels noted as Corrosion Resistant Reinforcing (CRR) which shall conform to Section 223 of the Specifications. 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.

The Class(es) of CRR Steel(s) required on this project is/are noted on plan sheets and in the reinforcing steel schedule. Class III may be substituted for Class I.

All H-piles shall be ASTM A709 Grade 50 steel. All piles shall be driven to the required nominal axial resistance. For axial resistance requirements, see the Pile Data Table on Sheet 10.

Bridge No. of existing bridge is 104-8000. Existing bridge not shown for clarity.

CITY OF CHARLOTTESVILLE
DEPARTMENT OF PUBLIC WORKS

PROPOSED BRIDGE ON

DAIRY ROAD
OVER ROUTE 250 BYPASS
ALBEMARLE CO. - 0.4 MI. E. RUGBY RD.

PROJ. U000-104-365, B620, C501, P101

Recommended for Approval: _____ City Engineer _____ Date

Approved: _____ Chief Engineer _____ Date

XXX-XX

Date: January 2026

Sheet 1 of 30

KIMLEY-HORN & ASSOC.
RICHMOND, VA
STRUCTURAL ENGINEER

PLANS BY:	Kimley-Horn & Associates, Inc.
COORDINATED:	Jonathan H. Oliver
SUPERVISED:	Daniel G. Davis
DESIGNED:	Levon C. Hoomes
DRAWN:	Donald A. Matthews
CHECKED:	Grant S. Curtiss

90% PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

No.	Description	Date
	REVISIONS	
	For Table of Revisions, see Sheet 2.	

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__

INDEX OF SHEETS

Sheet No.	Description
1	Title sheet; Plan, profile, design exceptions and general notes
2	Estimated quantities and index of sheets
3	Substructure layout, and slope protection
4	Sequence of construction - Overhead Utility Locations
5	Sequence of construction - Demolition 1 of 4
6	Sequence of construction - Demolition 2 of 4
7	Sequence of construction - Demolition 3 of 4
8	Sequence of construction - Demolition 4 of 4
9	Sequence of construction - Erection Plan
10	Abutment A
11	Abutment A section and details
12	Abutment B
13	Abutment B section and details
14	Miscellaneous abutment details
15	Transverse section
16	Framing plan
17	Girder details
18	Bolted splice details
19	Camber diagram
20	Dead load deflections and slab elevations
21	Cross frame details
22	Deck plan
23	42" Railing CPSR-1-AT
24	42" Terminal wall CPSRT-3-AT
25***	Reinforcing Steel Schedule - Abutments
26***	Reinforcing Steel Schedule - Superstructure
27***	Engineering Geology - 1
28***	Engineering Geology - 2
29***	Engineering Geology - 3
30	Approach slabs BAS-AG-1

***Not included in this submittal.

ESTIMATED QUANTITIES - SUBSTRUCTURE ONLY

		Concrete Class A3 CY	Reinforcing Steel LB	Corrosion Resistant Reinf. Steel, Class I LB	Steel Piles 12" LF	Preboring LF	Struct. Excav. CY ⊗	Select Backfill (Abutment Zone) TON	Geocomposite Wall Drain SY	Concrete Slab Slope Protection 4" SY ⊗	Pipe Underdrain 6" LF
Abutment A	Neat	——	——	——	——	——	——	——	——	——	——
	Footing	11.5	1,160	2,296	210	243	582	869	16	208	70
Abutment B	Neat	——	——	——	——	——	——	——	——	——	——
	Footing	22.2	639	2,630	270	362	506	683	——	131	——
Total		33.7	1,800	4,926	480	605	1,088	1,542	16	339	70

⊗ Denotes items to be paid for on the basis of plan quantities in accordance with current Road and Bridge Specifications.

ESTIMATED QUANTITIES - SUPERSTRUCTURE ONLY

Item	Units	Quantity
Concrete Low Shrinkage Class A4 Modified	CY	207.1
Concrete Class A4 Bridge Appr. Slab ⊗	CY	70.0
Corrosion Resistant Reinf. Steel, Class I ⊗	LB**	41,540
Structural Steel Plate Girders ASTM A709 Grade 50W	LB*	251,319
Railing, CPSR-1-AT, rail ⊗	LF	350
Railing, CPSRT-3-AT, terminal wall ⊗	LF	28
Elastic Inclusion (22")	CY	24.0
Cover Depth Survey ⊗	SY	721
Bridge Deck Grooving ⊗	SY	667

* Lump Sum
** Weight includes 11,460 lbs. of approach slabs.

⊗ Denotes items to be paid for on the basis of plan quantities in accordance with current Road and Bridge Specifications.

Bid Item Bridge Deck Grooving includes the quantity for approach slabs.

MISCELLANEOUS / ROAD ITEMS

Item	Units	Quantity
NBIS Access, Under Bridge	Day	1

LUMP SUM BID ITEMS

Mobilization	LS
Construction Surveying	LS
Dismantle and Remove Existing Structure Number 104-8000	LS

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Rev. No.	Sheets Revised	Date

TABLE OF REVISIONS

KIMLEY-HORN & ASSOC.
RICHMOND, VA
STRUCTURAL ENGINEER

No.	Description	Date

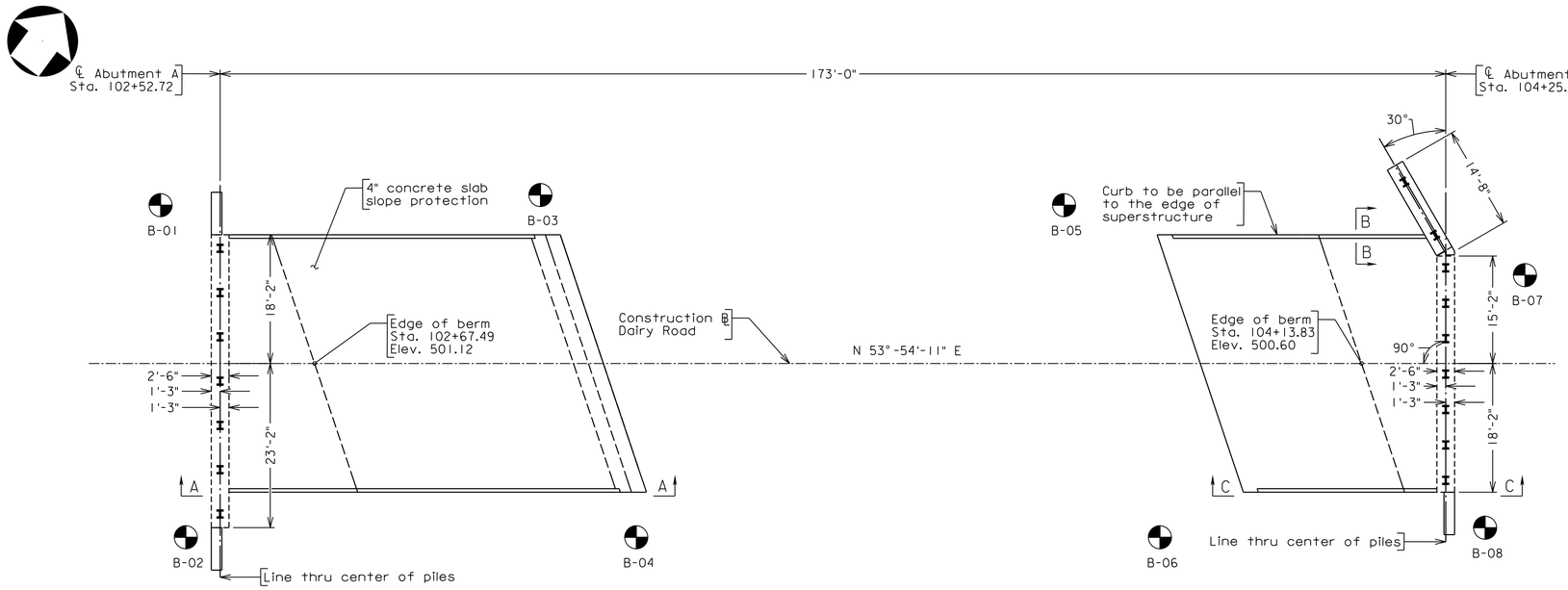
Revisions

CITY OF CHARLOTTESVILLE

ESTIMATED QUANTITIES
INDEX OF SHEETS

Designed: GSC	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		2 of 30
Checked: LCH			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



SUBSTRUCTURE LAYOUT

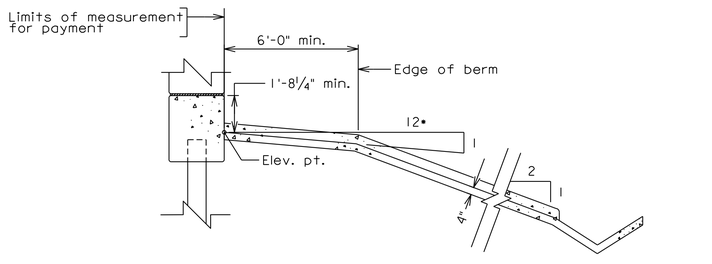
Notes:

This layout is to be used only for the purpose of locating fill slopes and footings. For details not shown, see abutment details.

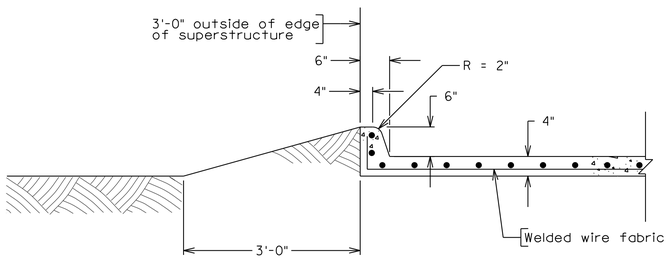
Materials in the abutment select backfill zone shall be Select Material Type I, minimum CBR 30, and shall be compacted in accordance with Sections 303 and 305 of the VDOT Road and Bridge Specifications. 21A or 21B may be substituted for Select Material Type I, minimum CBR 30, at no additional cost to the Department.

◓ = Boring locations, for details see sheets XX thru XX.

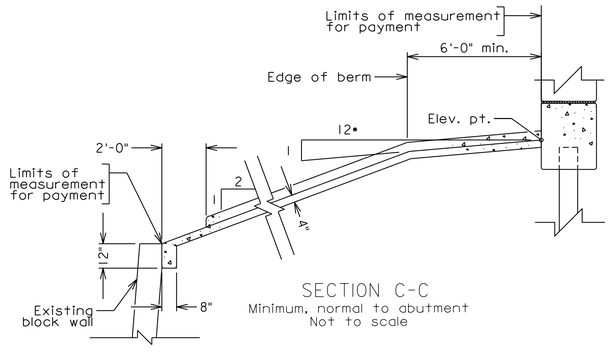
Location	Elev. pt.
Abutment A	501.62
Abutment B	501.10



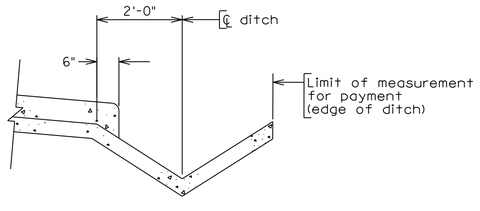
SECTION A-A
Minimum, normal to abutment
Not to scale



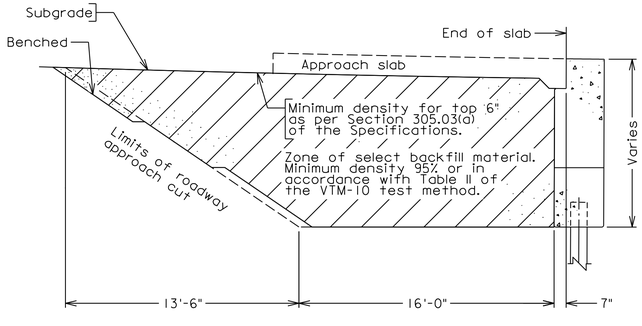
SECTION B-B
Normal to abutment
Not to scale



SECTION C-C
Minimum, normal to abutment
Not to scale



PART SECTION A-A
Normal to abutment
Not to scale



SECTION THROUGH ABUTMENT
Abutment drainage not shown
Not to scale

▨ To be paid for as structure excavation

Scale: 1" = 1'-0" unless otherwise noted.

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STRUCTURAL ENGINEER

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THESE PLANS NOT TO BE USED FOR CONSTRUCTION

No.	Description	Date
Revisions		

CITY OF CHARLOTTESVILLE

SUBSTRUCTURE LAYOUT, AND SLOPE PROTECTION

Designed: GSC	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		3 of 30
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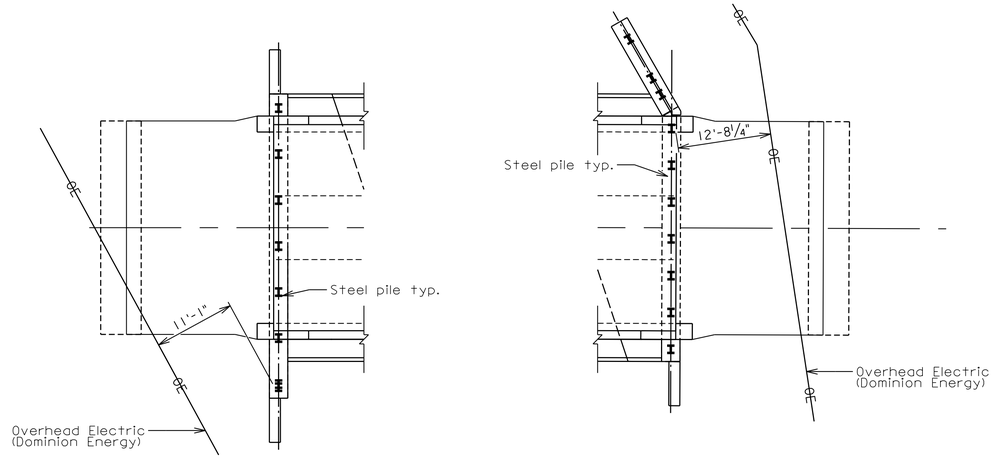
STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



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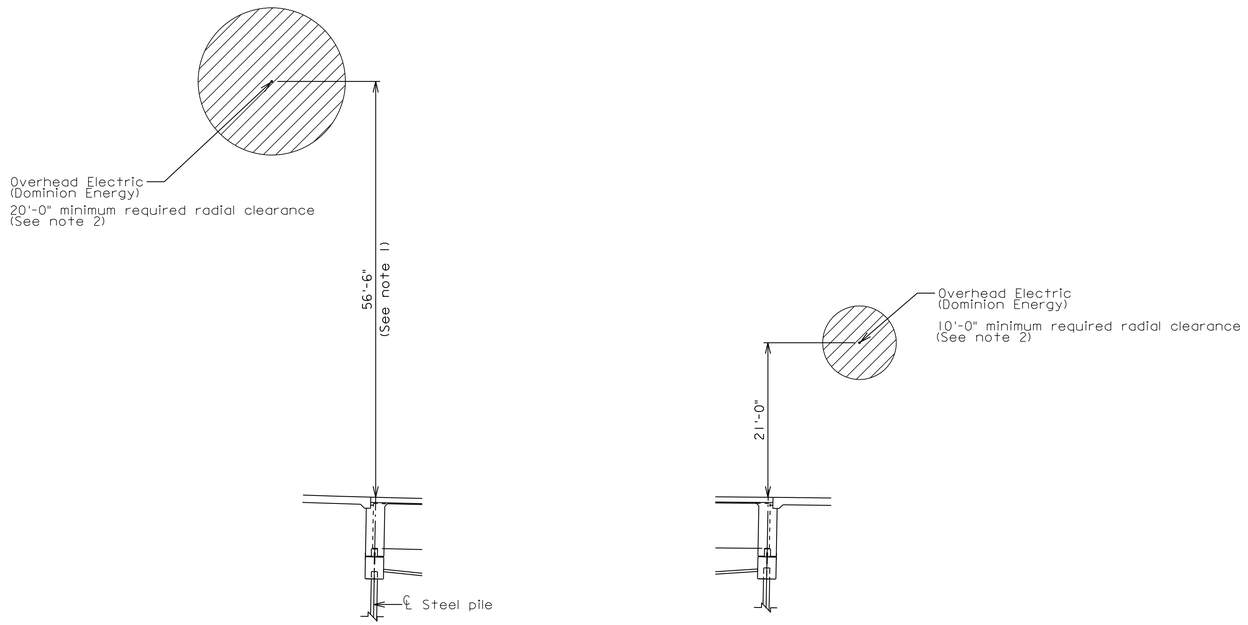

ABUTMENT A

ABUTMENT B

DEVELOPED SECTION ALONG CONSTRUCTION ℄

Notes:

1. Dimension verification: The dimensions, elevations, and intersecting angles shown are based on survey of the existing utilities and may not represent as-built conditions. It is the contractor's responsibility to verify this data before beginning construction and notify the engineer of any discrepancies.

2. Minimum required clearances provided in these plans are given based on 29 CFR Section 1926.1408, Table A and voltage information provided by the utility owner (Dominion Energy).

3. Contractor shall coordinate with Dominion Power for clearance requirements prior to begining pile driving operations.

Note:

This is a schematic only. It is not a working drawing. The contractor shall submit complete details of the proposed erection methods and equipment in accordance with the specifications.

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RICHMOND, VA
STRUCTURAL ENGINEER

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Scale: ⅜" = 1'-0" unless otherwise noted

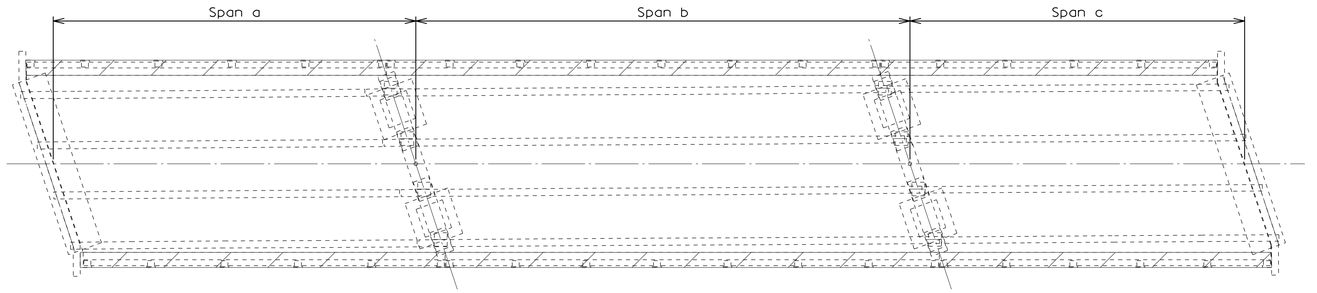
No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

SEQUENCE OF CONSTRUCTION
OVERHEAD UTILITY LOCATIONS

Designed: GSC	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		4 of 30
Checked: LCH			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



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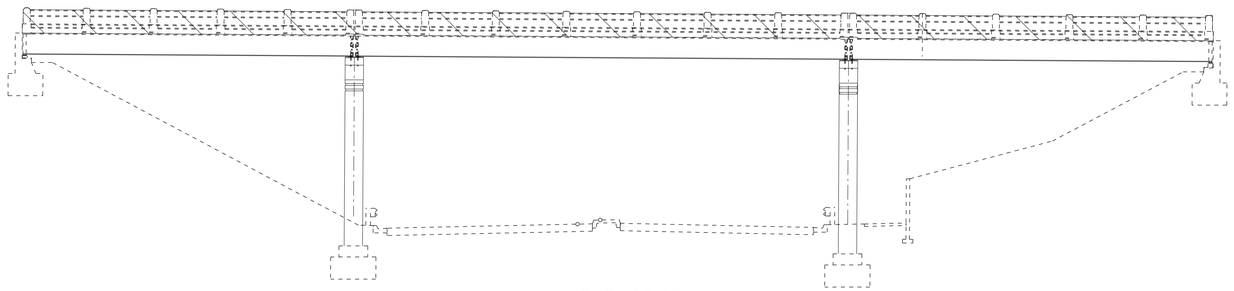
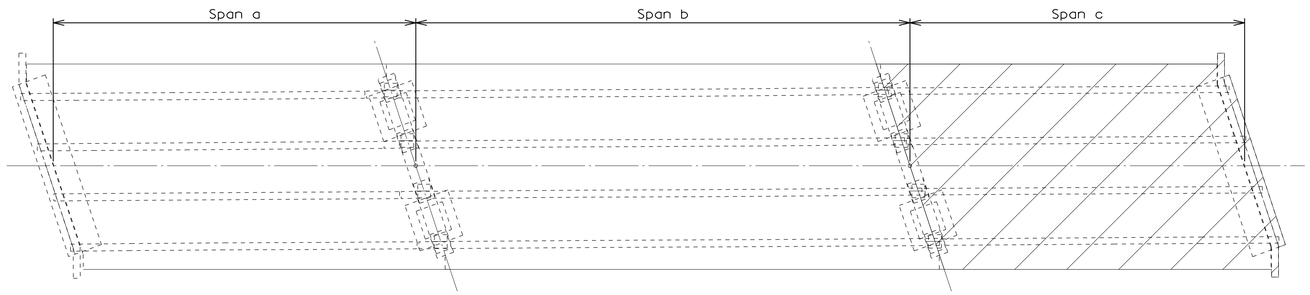


ELEVATION
PHASE 1



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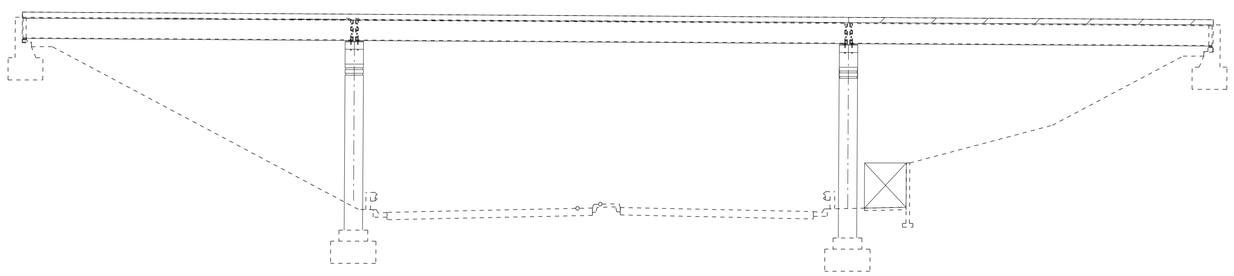


ELEVATION
PHASE 2a

PHASE 1:

1. Close Dairy Road bridge to traffic
2. Remove railing and curb for both sides of bridge.

PHASE 2a:

1. Close Shared path.
2. Remove slab on Span c.

Note: Contractor to check stability of Pier 2 prior to the removal of slab on Span c.

Note:

This is a schematic only. It is not a working drawing. The contractor shall submit complete details of the proposed erection methods and equipment in accordance with the specifications.

90% PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

KIMLEY-HORN & ASSOC.
RICHMOND, VA
STRUCTURAL ENGINEER

Scale: 1" = 10'-0"

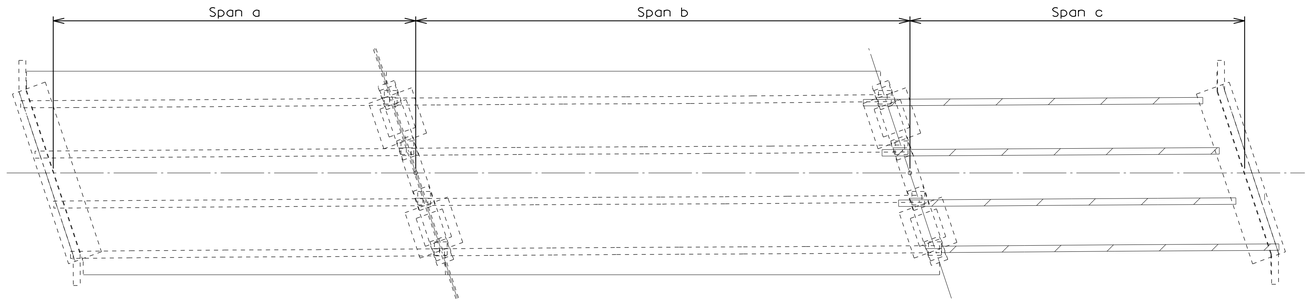
No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

SEQUENCE OF CONSTRUCTION DEMOLITION PLAN 1 OF 4

Designed: KMR	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		5 of 30
Checked: GSC			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



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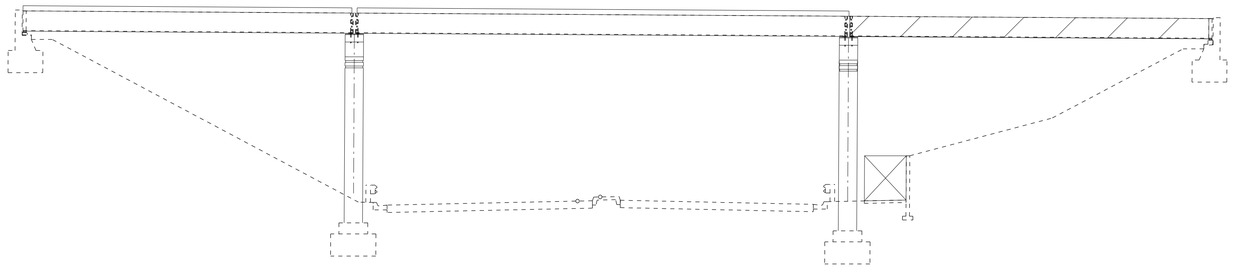


ELEVATION
PHASE 2b

PHASE 2b:

1. Remove diaphragms in center bay.
2. Remove Girders 1 and 2.
3. Remove Girders 3 and 4.

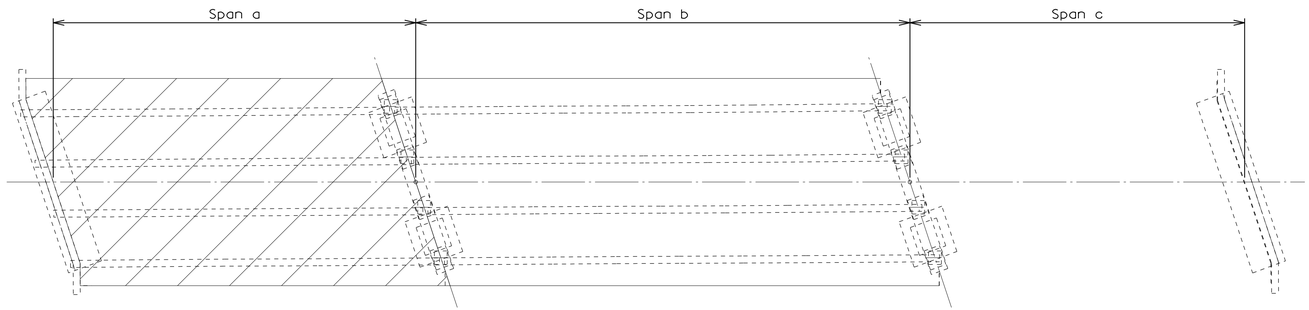
PHASE 3a:

1. Remove slab on Span a.

Note: Contractor to check stability of Pier 2 prior to the removal of girders in Span c. Contractor to ckeck stability of Pier 1 prior to the removal of slab on Span a.

Note:

This is a schematic only. It is not a working drawing. The contractor shall submit complete details of the proposed erection methods and equipment in accordance with the specifications.



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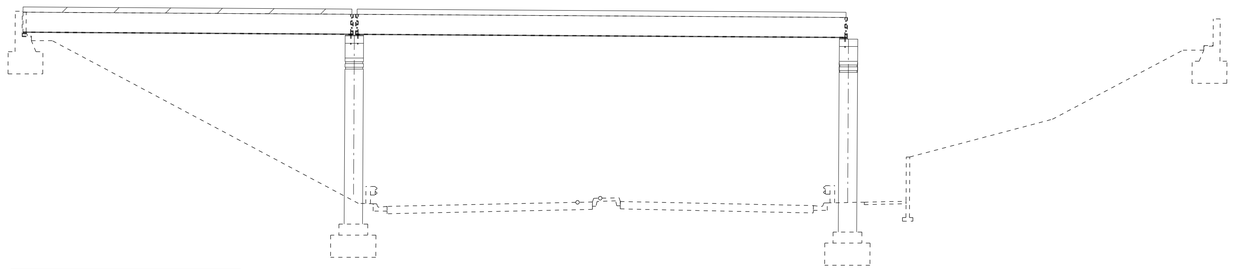

ELEVATION
PHASE 3a

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RICHMOND, VA
STRUCTURAL ENGINEER

Scale 1" = 10'-0"

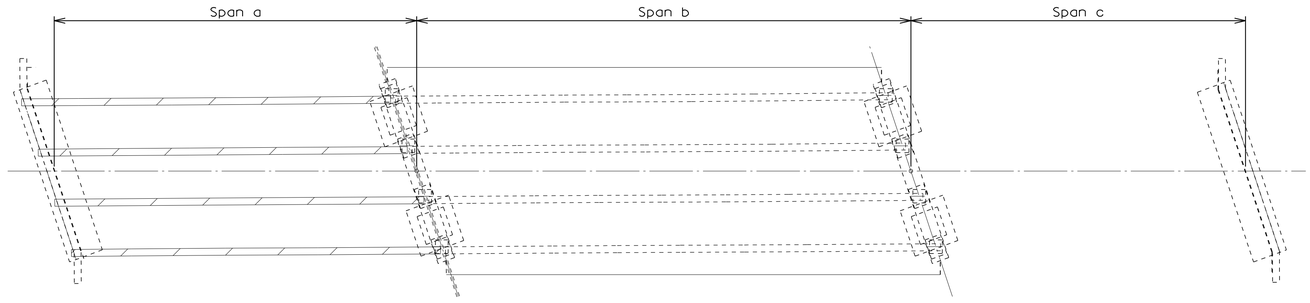
No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

SEQUENCE OF CONSTRUCTION DEMOLITION PLAN 2 OF 4

Designed: KMR	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		6 of 30
Checked: KMR			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



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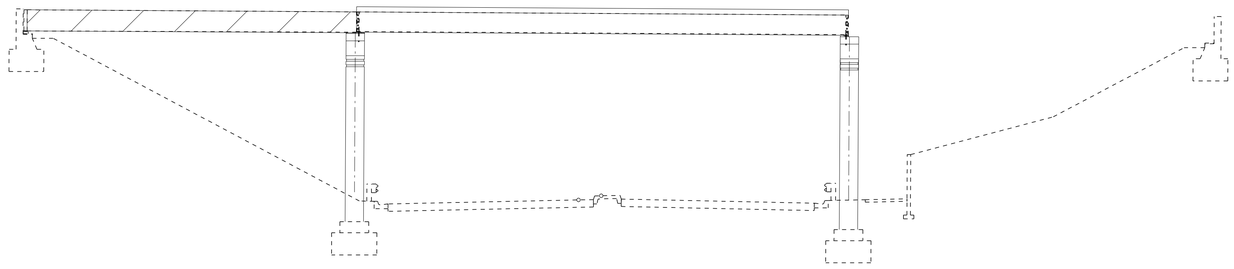
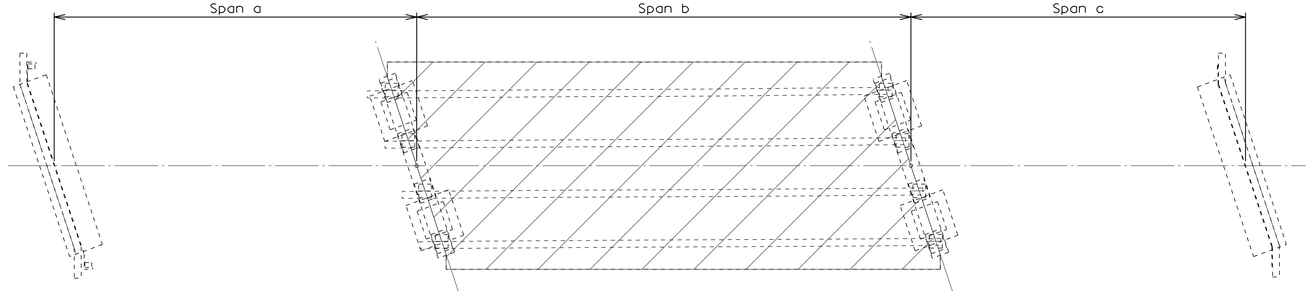


ELEVATION
PHASE 3b



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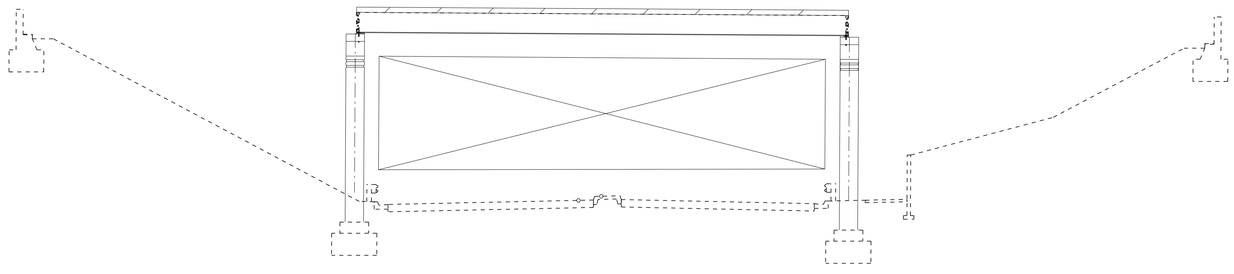

ELEVATION
PHASE 4a

PHASE 3b:

1. Remove diaphragms in center bay.
2. Remove Girders 1 and 2.
3. Remove Girders 3 and 4.

PHASE 4a:

1. Close Route 250.
2. Remove slab for Span b.

Note: Constrator to check stability of Pier 1 prior to the removal of girders in Span a.

Note:

This is a schematic only. It is not a working drawing. The contractor shall submit complete details of the proposed erection methods and equipment in accordance with the specifications.

90% PLANS

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KIMLEY-HORN & ASSOC.
RICHMOND, VA
STRUCTURAL ENGINEER

Scale 1" = 10'-0"

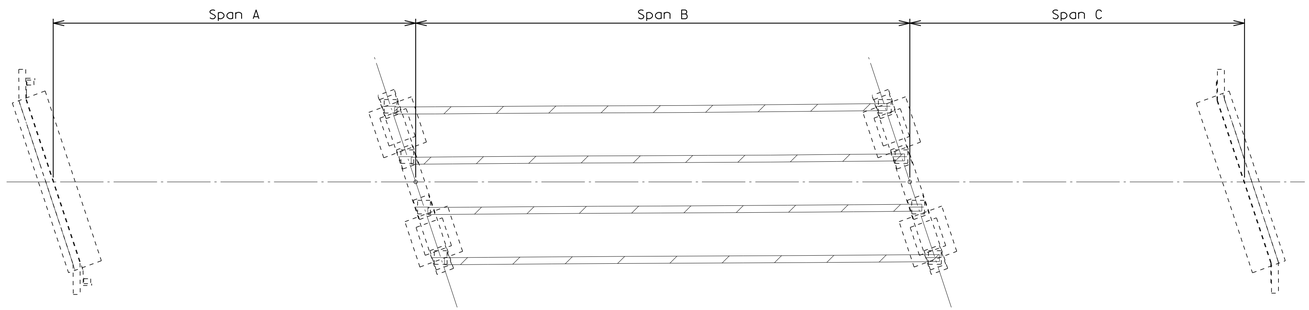
No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

SEQUENCE OF CONSTRUCTION DEMOLITION PLAN 3 OF 4

Designed: KMR	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		7 of 30
Checked: KMR			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



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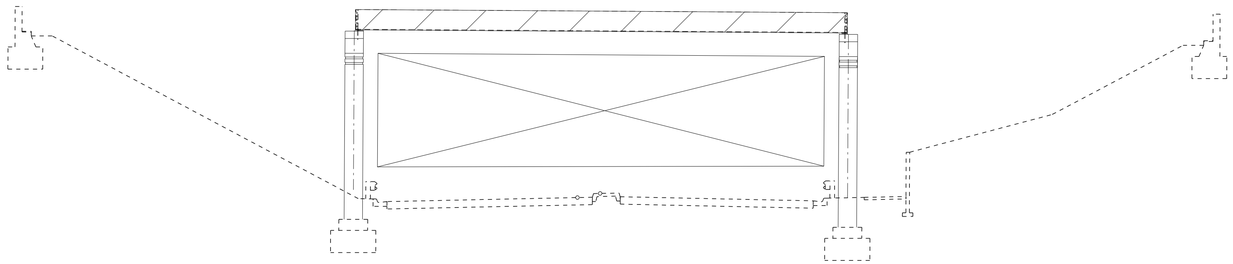


ELEVATION
PHASE 4b

PHASE 4b:

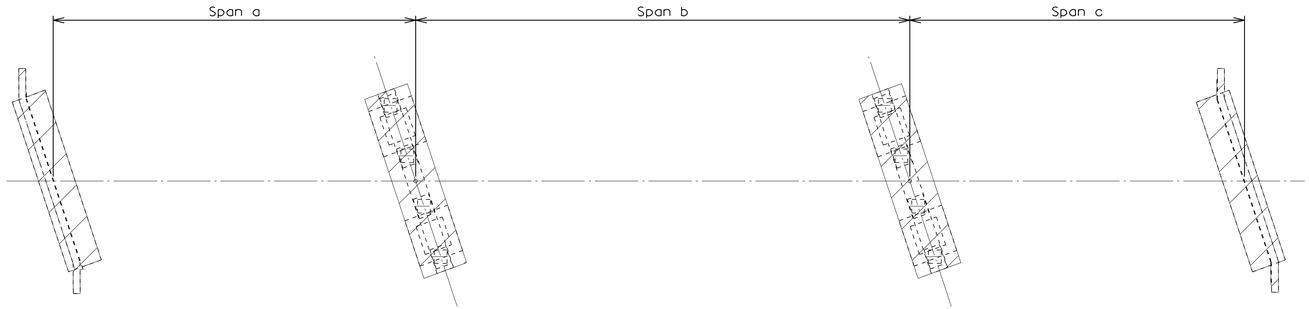
1. Remove diaphragms in center bay.
2. Remove Girders 1 and 2.
3. Remove Girders 3 and 4.

PHASE 5:

1. Demo Piers to 2ft below ground.
2. Remove Abutments.

Note:

This is a schematic only. It is not a working drawing. The contractor shall submit complete details of the proposed erection methods and equipment in accordance with the specifications.



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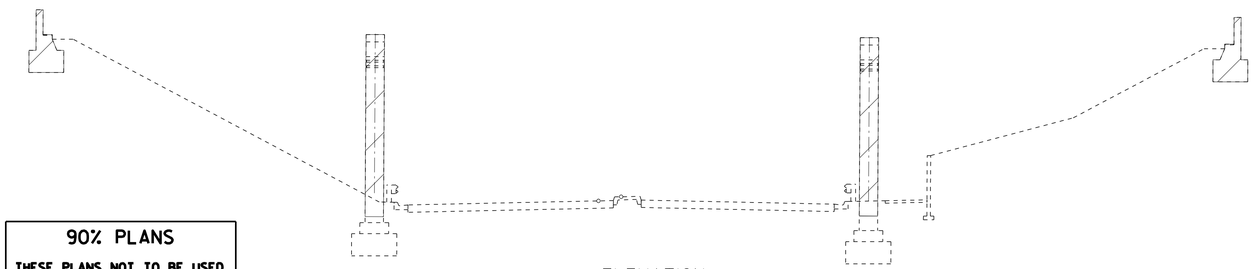

ELEVATION
PHASE 5

90% PLANS

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RICHMOND, VA
STRUCTURAL ENGINEER

Scale 1" = 10'-0"

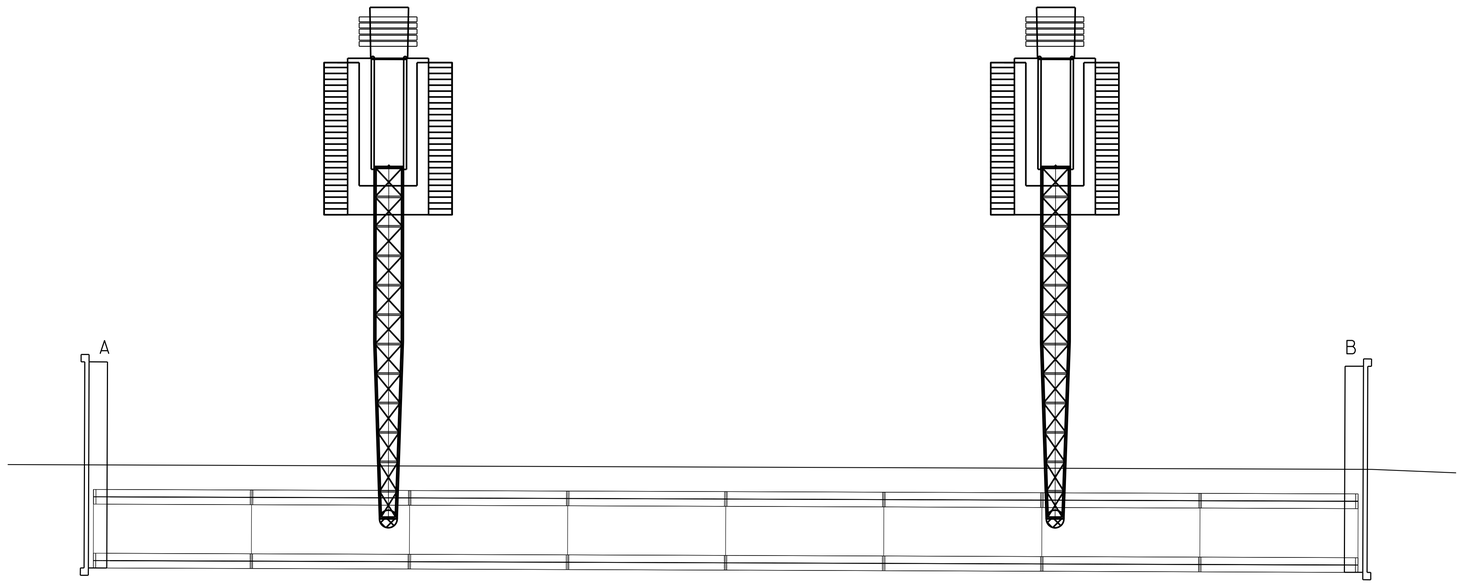
No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

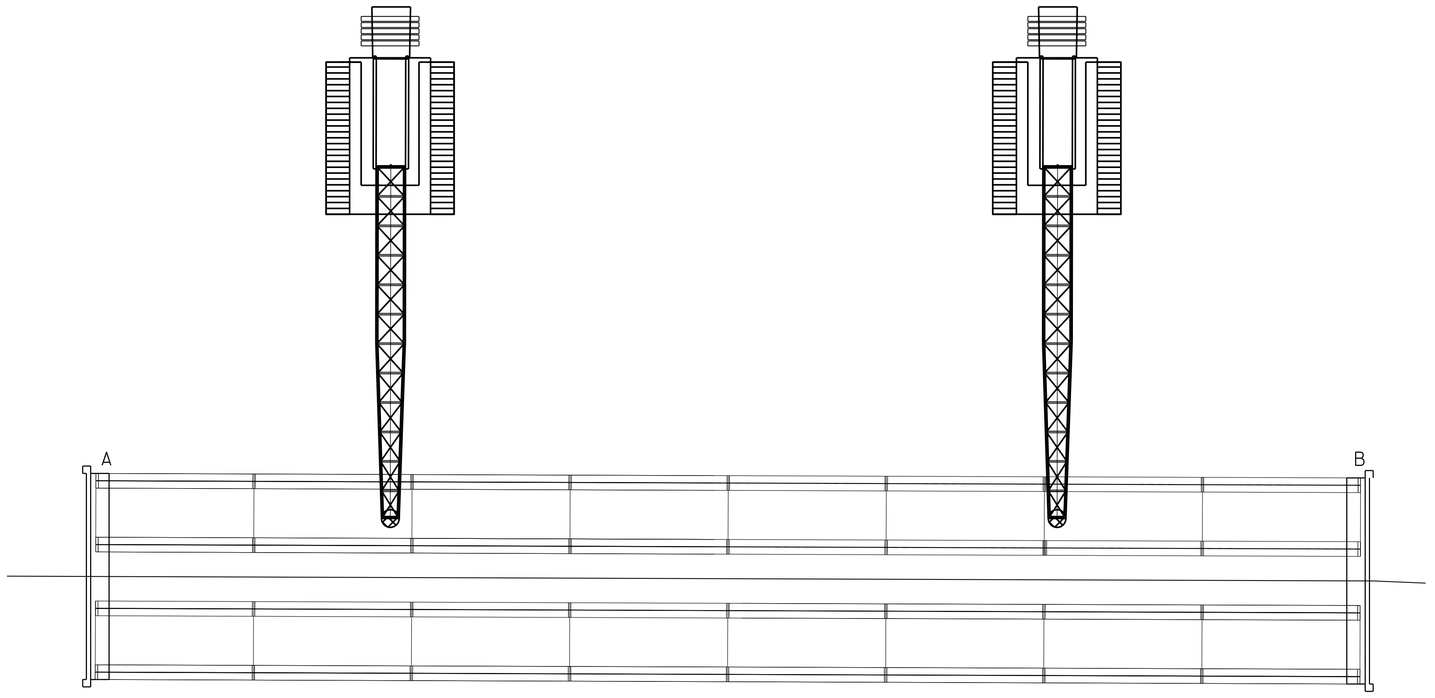
SEQUENCE OF CONSTRUCTION DEMOLITION PLAN 4 OF 4

Designed: KMR	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		8 of 30
Checked: KMR			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



PLAN
PHASE 2



PLAN
PHASE 4

GENERAL NOTES:

Phase 1

1. Close Rte. 250 Bypass EB.
2. Deliver Girders 3 and 4.
3. Complete assembly of Girders 3 and 4 with Field Splices.
4. Install Cross Frames between Girders 3 and 4.

Phase 2

1. Close Rte. 250 Bypass EB and WB and Shared Use Path during nighttime closure allowance times.
2. Pick Girders 3 and 4 with Cross Frames using 2 - XXXXW Cranes - XXXft Boom. Min. : Boom Angle = 62 Deg., Oper. Rad. = XX'.
3. Secure Girders in place.
4. Open Rte. 250 Bypass EB and WB.

Phase 3

1. Close Rte. 250 Bypass EB.
2. Deliver Girders 1 and 2.
3. Complete assembly of Girders 1 and 2 with Field Splices.
4. Install Cross Frames betrween Girders 1 and 2.

Phase 4

1. Close Rte. 250 Bypass EB and WB and Shared Use Path during nighttime closure allowance times.
2. Pick Giders 1 and 2 with Cross Frames using 2 - XXXXW Cranes - XXXft Boom. Min. : Boom Angel = 62 Deg., Oper. Rad. = XX'.
2. Secure Girders in place.
4. Open Rte. 250 Bypass EB and WB.

Phase 5

1. Install Cross Frames between Girders 2 and 3. No installation is allowed over live traffic (pedestrian traffic included).
2. Install Stay-in-place forms between Girders 1, 2, 3, and 4. No installation is allowed over live traffic (pedestrian traffic included).

Erection will occur at night with a total lane closer of Route 250 Bypass.

Note:
This is a schematic only. It is not a working drawing. The Contractor shall submit complete details of proposed erection methods and equipment in accordance with the specifications.

90% PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

KIMLEY-HORN & ASSOC.
RICHMOND, VA
STRUCTURAL ENGINEER

Scale 1" = 10'-0"

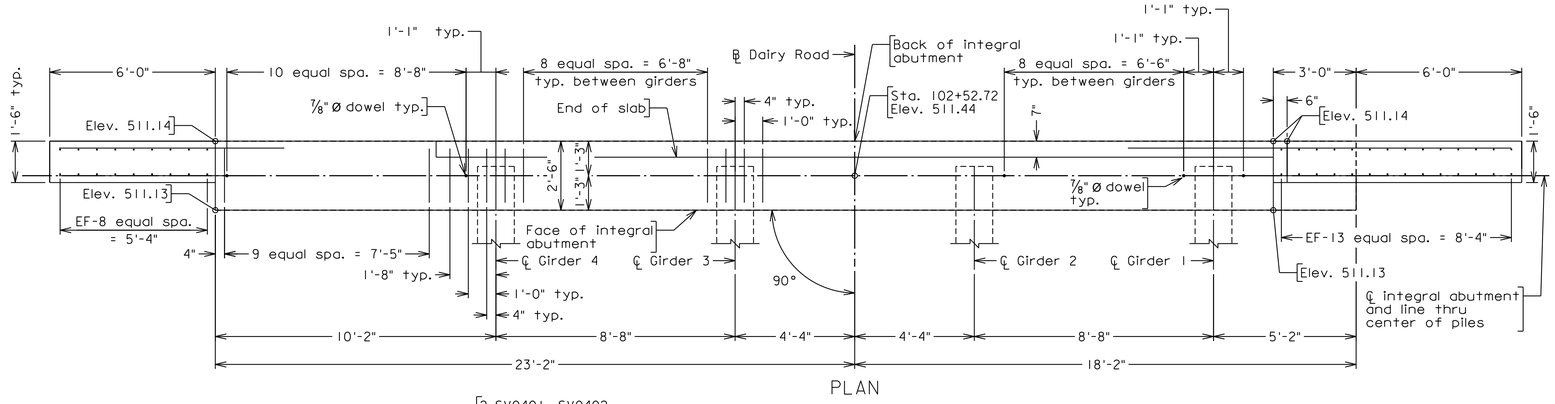
No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

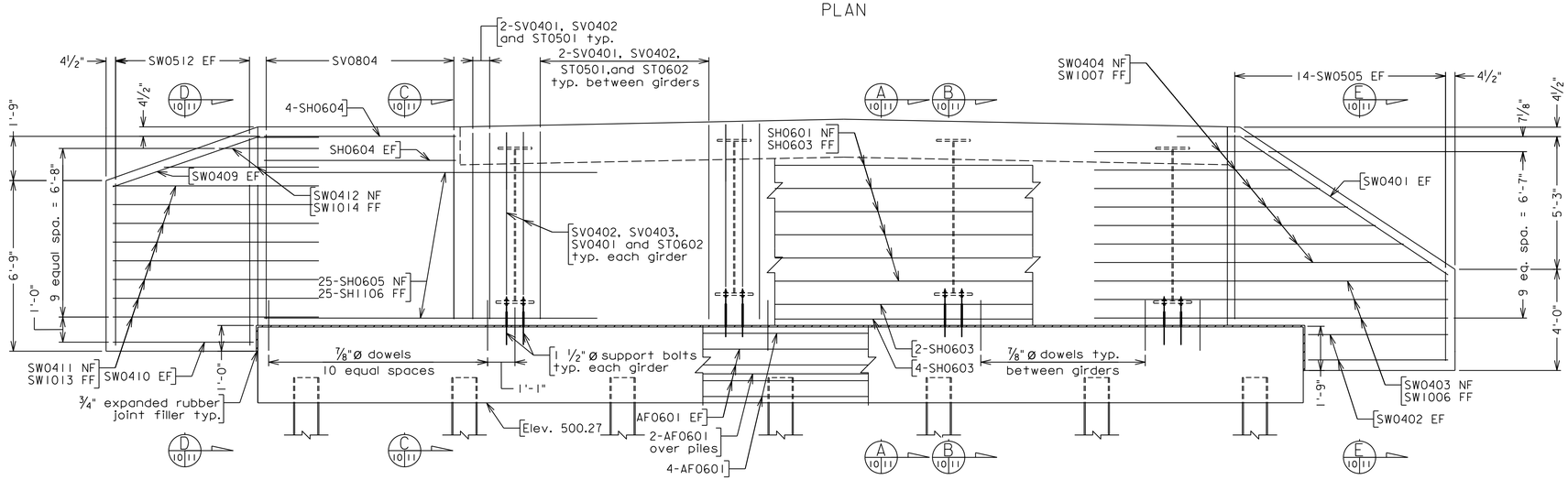
SEQUENCE OF CONSTRUCTION ERECTION PLAN

Designed: KMR	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		9 of 30
Checked: KMR			

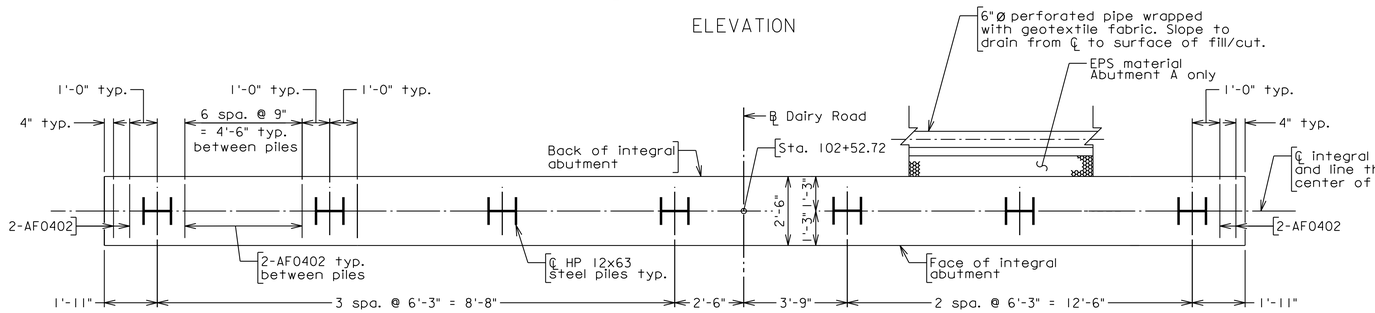
STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



PLAN



ELEVATION



PILE AND FOOTING REINFORCEMENT PLAN
AF0601 bars are not shown for clarity

TABLE OF BOTTOM OF GIRDER ELEVATIONS			
Girder 1	Girder 2	Girder 3	Girder 4
504.12	504.29	504.29	504.12

For location of Point of Elevation on bottom of girders, see Support Bolt Detail, sheet 14.

Notes:

Portion of the integral abutment above the hinge shall be placed and cured to a minimum compressive strength of 3000 psi prior to the placement of the deck concrete.

Girders shall not be placed until girder support concrete gains a minimum strength of 3000 psi.

Backfill behind integral abutment footing shall not be placed until concrete in upper portion of the integral abutment attains a minimum compressive strength of 3000 psi. The remainder of the backfill behind both bridge abutments shall be placed such that the differential in the height of fill at each abutment shall not exceed 6".

The portion of abutment above the hinge shall be cast when the least thermal movement of the superstructure can be expected during the period of initial set of concrete, e.g. at dusk or during an expected uniformly cloudy day.

Tolerence for driving piles shall be specified for "Column supports for bent caps" in Section 403, Table IV-1 of the Specifications.

See sheet 15 for end of girder details.

All chamfers shall be ¾".

Elevations in plan view are at top of slab.

KIMLEY-HORN & ASSOC.
RICHMOND, VA
STRUCTURAL ENGINEER

90% PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

Scale: 3/8" = 1'-0" unless otherwise noted

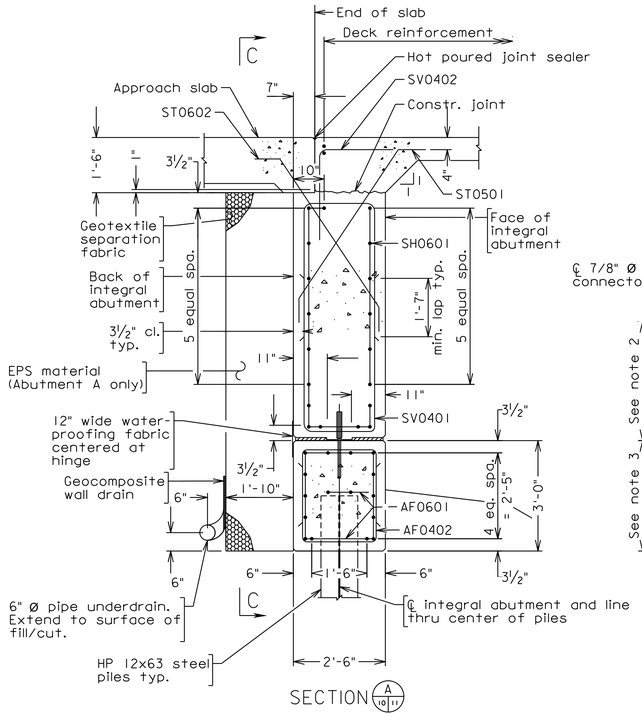
No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

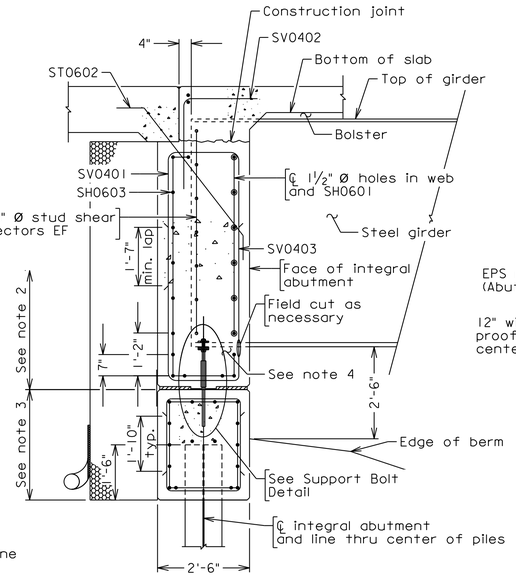
ABUTMENT A

Designed: GSC	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		10 OF 30
Checked: LCH			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__

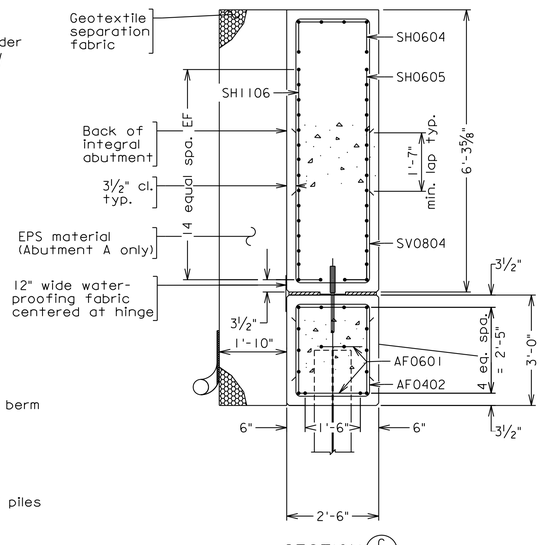


SECTION A 10|11



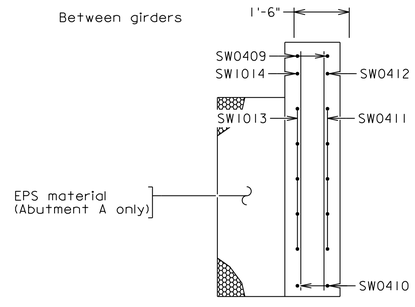
SECTION B 10|11

At girders
For details not shown, see Section A



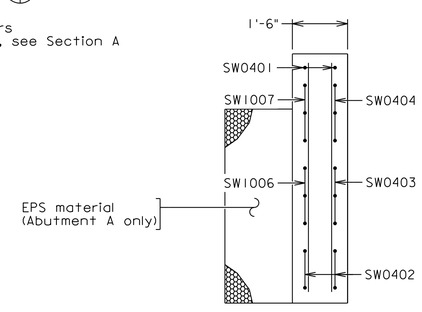
SECTION C 10|11

Extended Backwall



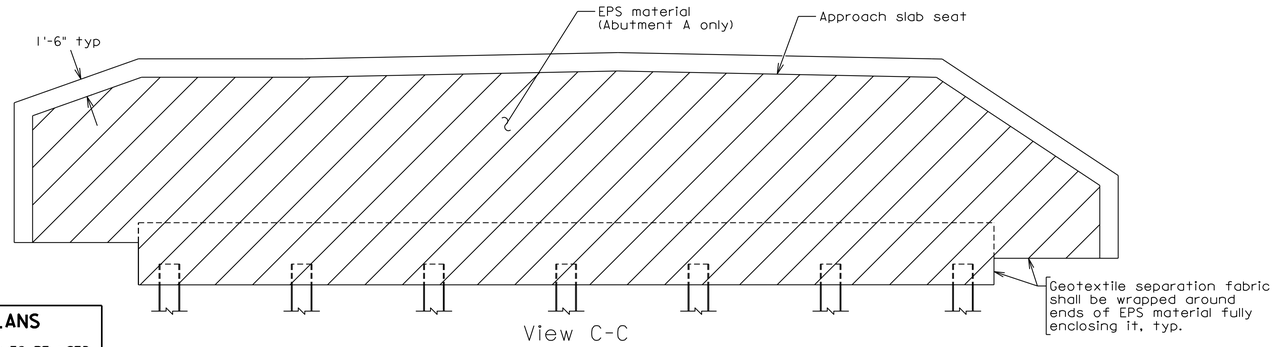
SECTION D 10|11

East Wingwall



SECTION E 10|11

West Wingwall



View C-C
Abut A shown
Not to scale

Notes:

1. All Chamfers shall be ¾".

2. Low Shrinkage Class A4 Modified concrete and Corrosion Resistant Reinforcing (CRR) steel, same Class as deck, is included with superstructure quantities.

3. Class A3 concrete and CRR steel, Class I, is included with sub-structure quantities.

4. Extreme care must be taken, when placing concrete, to eliminate any voids under girder flanges.

5. Costs of dowels shall be included in the bid price for structural steel. Cost of neoprene and roofing felt are to be included in other bid items.

90% PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

KIMLEY-HORN & ASSOC.
RICHMOND, VA
STRUCTURAL ENGINEER

Scale: ½" = 1'-0"

No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

ABUTMENT A
SECTIONS AND DETAILS

Designed: GSC	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		11 of 30
Checked: LCH			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__

Notes:

Portion of the integral abutment above the hinge shall be placed and cured to a minimum compressive strength of 3000 psi prior to the placement of the deck concrete.

Girders shall not be placed until girder support concrete gains a minimum strength of 3000 psi.

Backfill behind integral abutment footing shall not be placed until concrete in upper portion of the integral abutment attains a minimum compressive strength of 3000 psi. The remainder of the backfill behind both bridge abutments shall be placed such that the differential in the height of fill at each abutment shall not exceed 6".

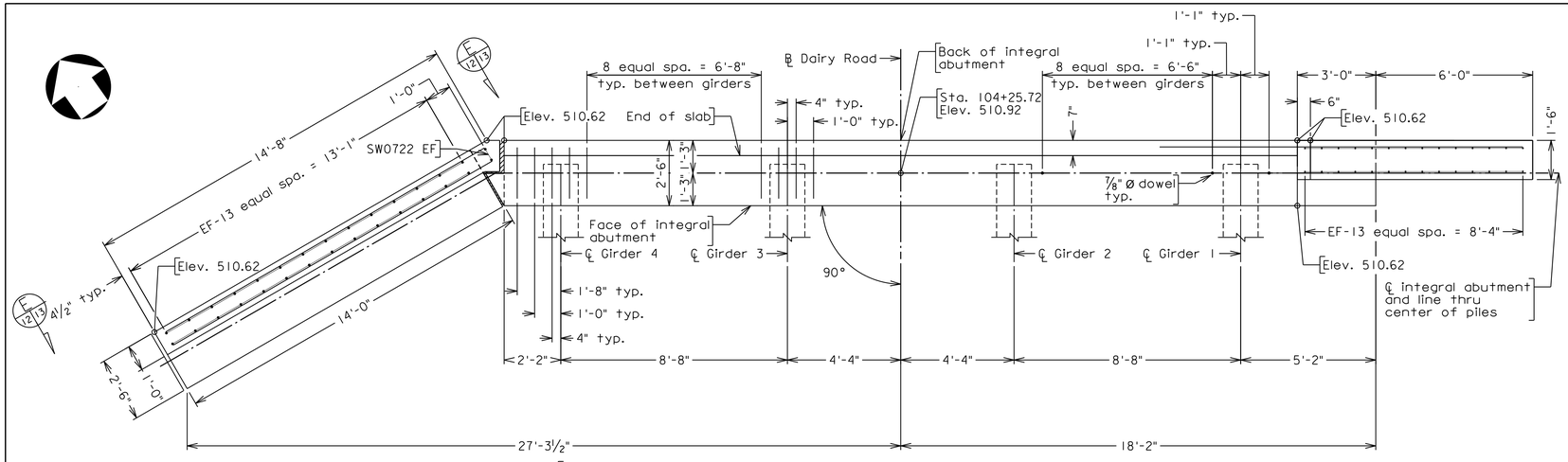
The portion of abutment above the hinge shall be cast when the least thermal movement of the superstructure can be expected during the period of initial set of concrete, e.g. at dusk or during an expected uniformly cloudy day.

Tolerence for driving piles shall be specified for "Column supports for bent caps" in Section 403, Table IV-1 of the Specifications.

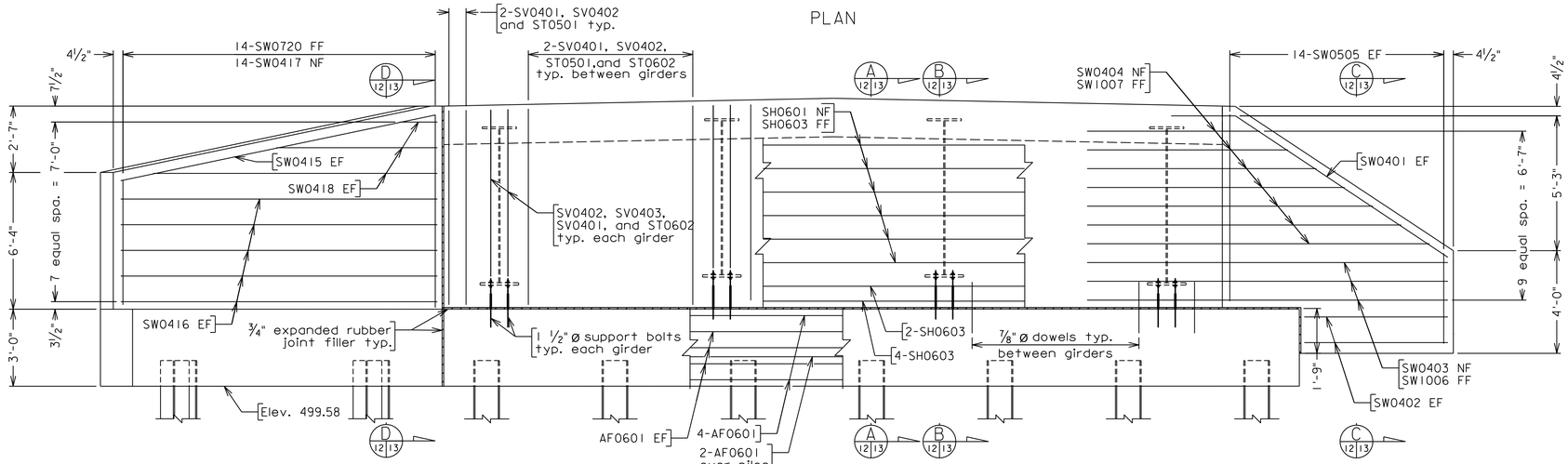
See sheet 15 for end of girder details.

All chamfers shall be ¾".

Elevations in plan view are at top of slab.



PLAN



ELEVATION

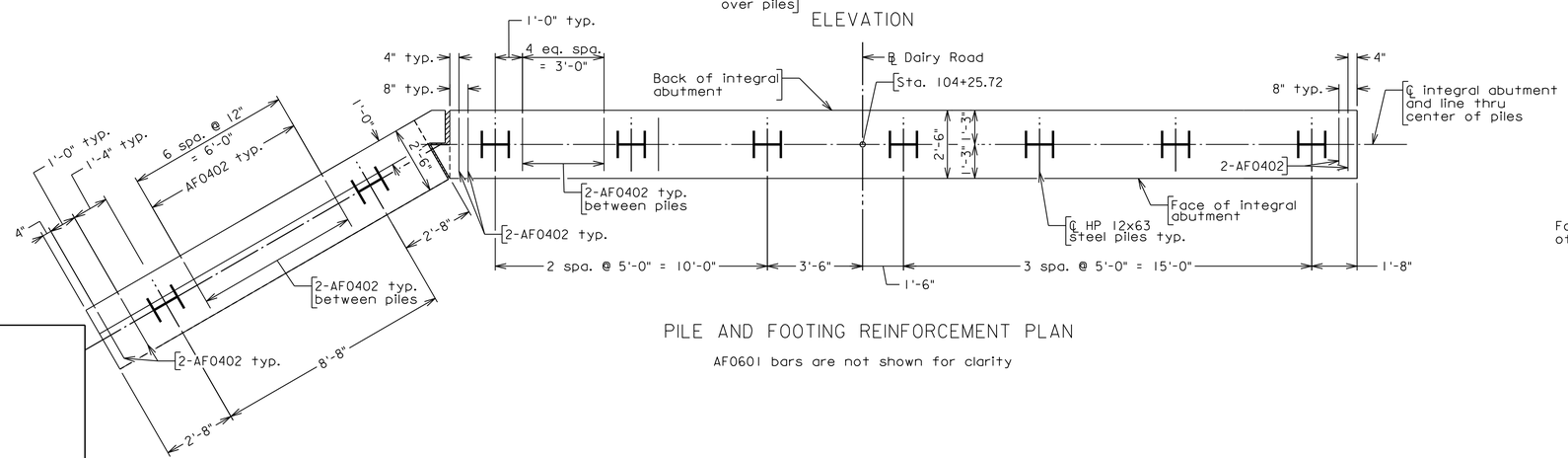


TABLE OF BOTTOM OF GIRDER ELEVATIONS			
Girder 1	Girder 2	Girder 3	Girder 4
503.60	503.77	503.77	503.60

For location of Point of Elevation on bottom of girders, see Support Bolt Detail, sheet 14.

PILE AND FOOTING REINFORCEMENT PLAN

AF0601 bars are not shown for clarity

90% PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

KIMLEY-HORN & ASSOC.
RICHMOND, VA
STRUCTURAL ENGINEER

Scale: 3/8" = 1'-0" unless otherwise noted

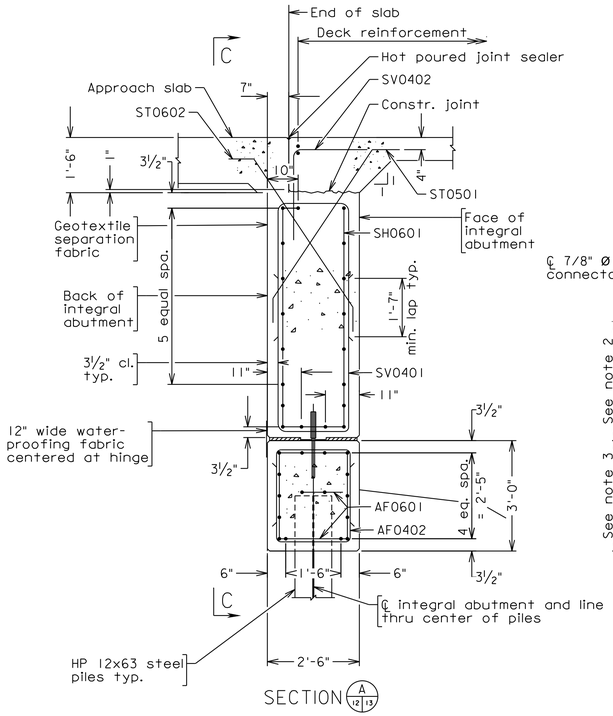
No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

ABUTMENT B

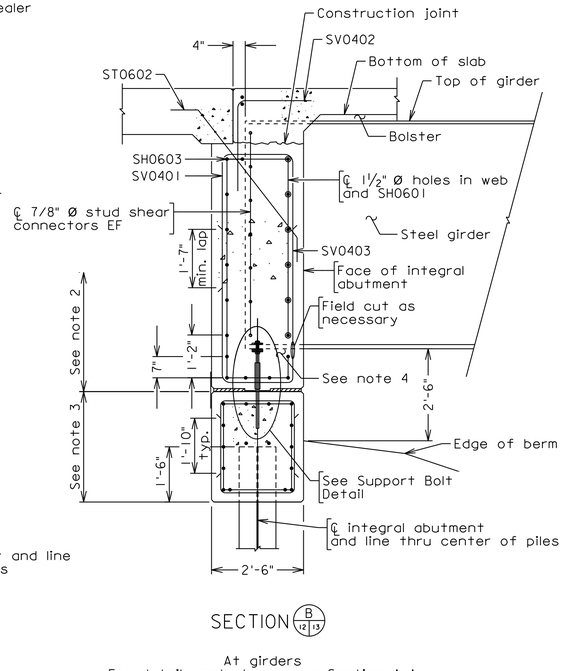
Designed: GSC	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		12 of 30
Checked: LCH			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



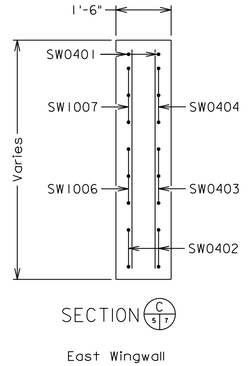
SECTION A 12 13

Between girders



SECTION B 12 13

At girders
For details not shown, see Section A-A



SECTION C 5 7

East Wingwall

Notes:

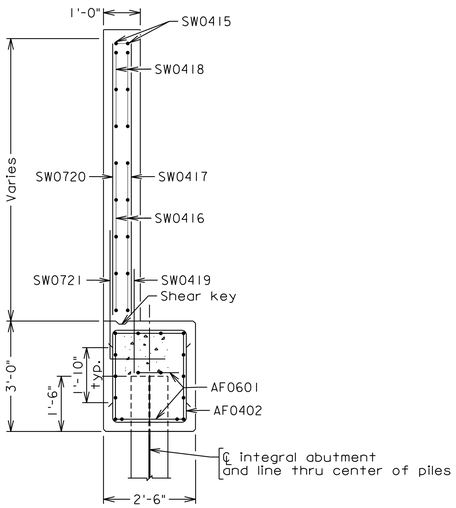
1. All Chamfers shall be ¾".

2. Low Shrinkage Class A4 Modified concrete and Corrosion Resistant Reinforcing (CRR) steel, same Class as deck, is included with superstructure quantities.

3. Class A3 concrete and CRR steel, Class I, is included with sub-structure quantities.

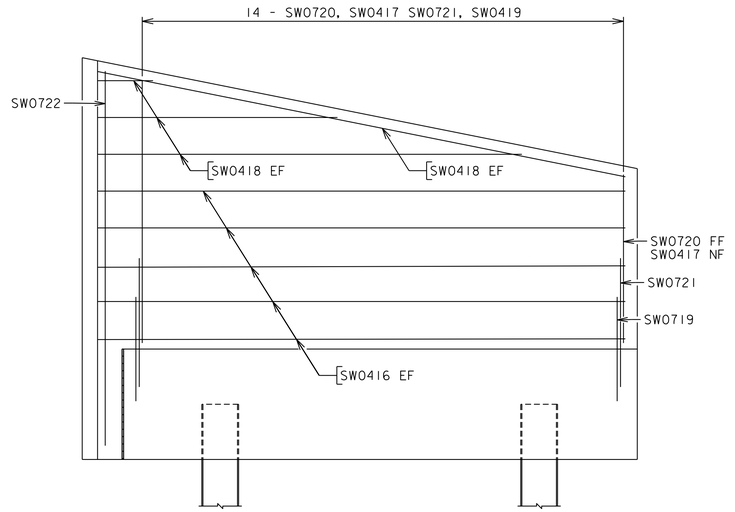
4. Extreme care must be taken, when placing concrete, to eliminate any voids under girder flanges.

5. Costs of dowels shall be included in the bid price for structural steel. Cost of neoprene and roofing felt are to be included in other bid items.



SECTION D 12 13

At retaining wall



SECTION E 12 13

At retaining wall

90% PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

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RICHMOND, VA
STRUCTURAL ENGINEER

Scale: ½" = 1'-0"

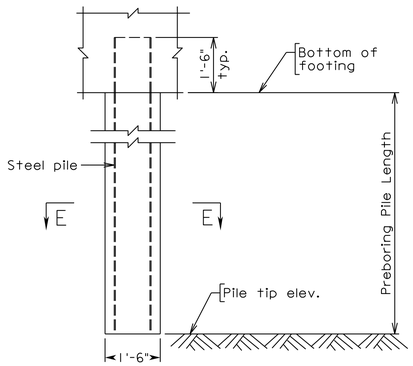
No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

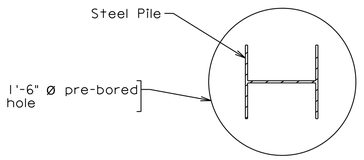
ABUTMENT B
SECTIONS AND DETAILS

Designed: GSC	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		13 of 30
Checked: LCH			

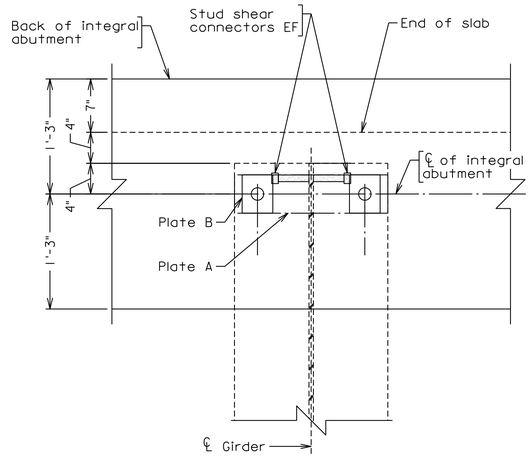
STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



PRE-BORED PILE DETAIL
Not to scale



Section E-E
Not to scale



TYPICAL DETAIL FOR GIRDER END AT ABUTMENTS
Not to scale

Notes:

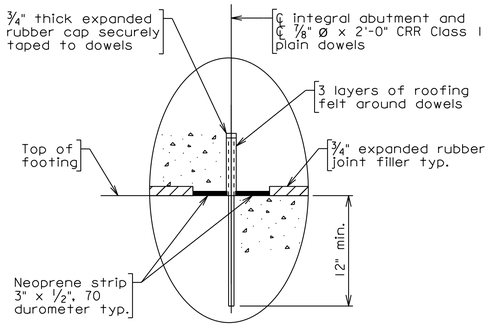
1. All Chamfers shall be ¾".

2. Low Shrinkage Class A4 Modified concrete and Corrosion Resistant Reinforcing (CRR) steel, same Class as deck, is included with superstructure quantities.

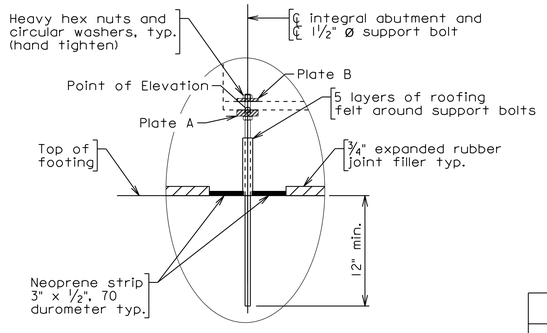
3. Class A3 concrete and CRR steel, Class 1, is included with substructure quantities.

4. Extreme care must be taken, when placing concrete, to eliminate any voids under girder flanges.

5. Costs of dowels shall be included in the bid price for structural steel. Cost of neoprene and roofing felt are to be included in other bid items.



HINGE DETAIL
Not to scale



SUPPORT BOLT DETAIL
Not to scale

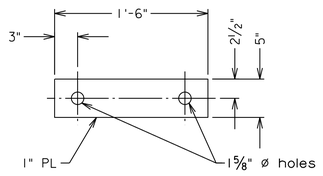


PLATE A
Not to scale

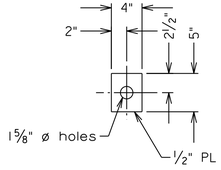


PLATE B
Not to scale

PILE DATA TABLE

Substructure Unit	Rock Socket Bearing Material	Rock Socket Length (ft)	Class T3 Concrete Fill Elevation (ft)	Factored Axial Resistance (Tons/pile)	Tip Elevation (ft)	Steel Pile Size	Pre-Bored Hole Diameter (ft)
Abutment A	N/A	N/A	N/A	184	475.27	12x63	1'-6"
Abutment B	N/A	N/A	N/A	184	•	12x63	1'-6"

The Strength Limit State controls the design.

- IGM and Rock elevations vary across the abutment. Pile tip elevations are anticipated between 474.58 (B-07) and 469.00 (B-08). Piles to be driven to refusal a minimum of 5 feet into IGM or Rock.

KIMLEY-HORN & ASSOC.
RICHMOND, VA
STRUCTURAL ENGINEER

90% PLANS
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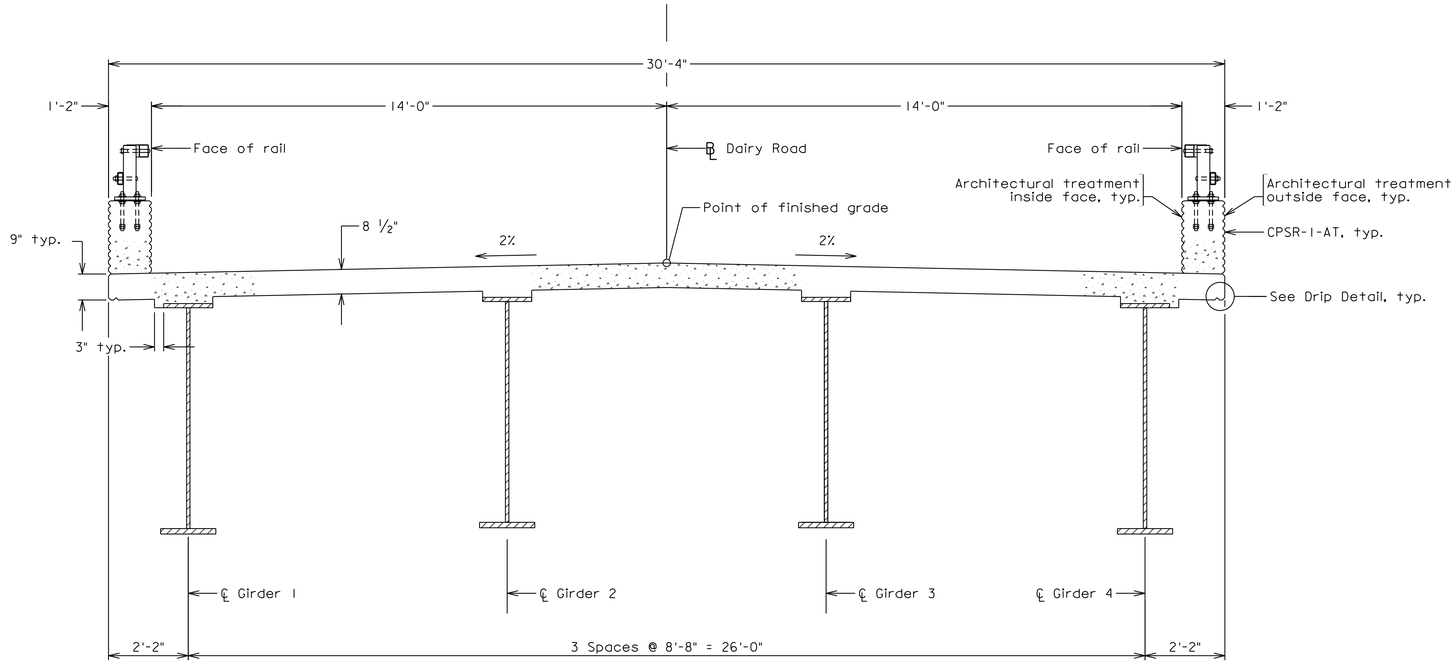
No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

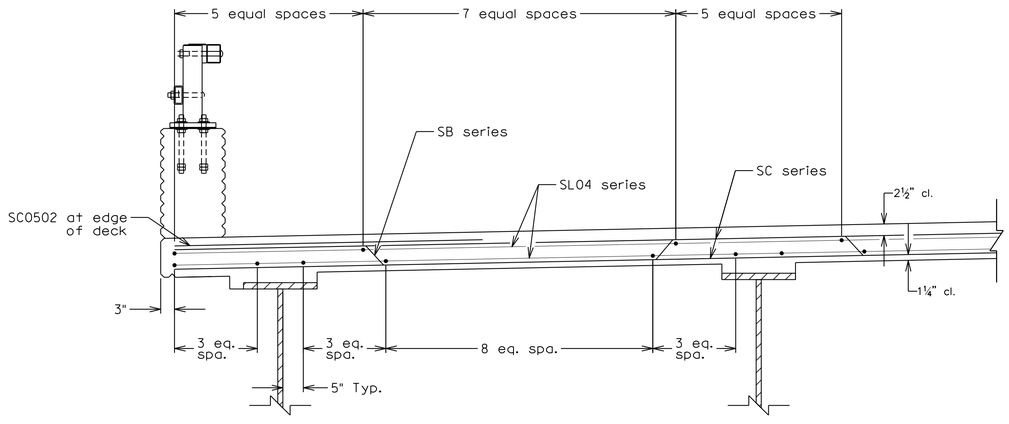
MISCELLANEOUS ABUTMENT DETAILS

Designed: GSC	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		14 of 30
Checked: LCH			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__

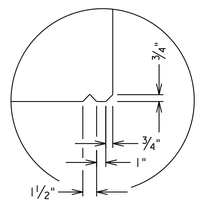


TRANSVERSE SECTION



PART SECTION AT MIDSPAN

SCALE: ½" = 1'-0"



DETAIL

SCALE: 1½" = 1'-0"

Notes:

For additional reinforcing steel details, see Deck Plan on sheet 22.

For rail details, see sheet 23.

90% PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

KIMLEY-HORN & ASSOC.
RICHMOND, VA
STRUCTURAL ENGINEER

Scale: ¾" = 1'-0" unless otherwise shown

No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

TRANSVERSE SECTION

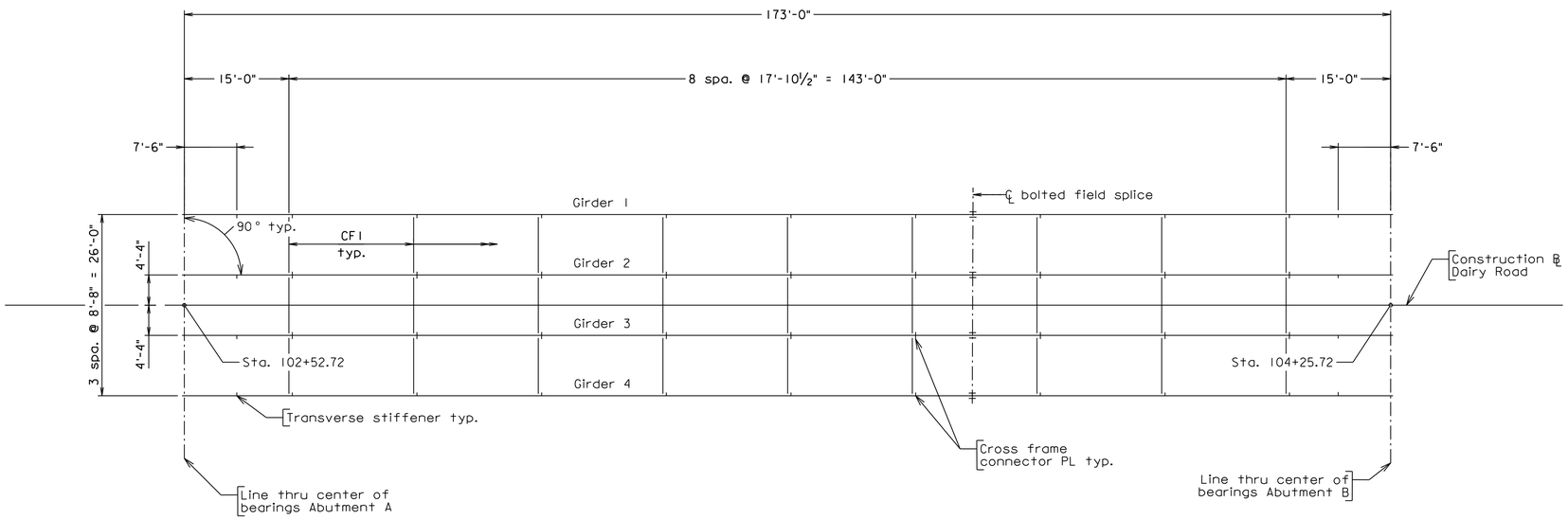
Designed: KMR	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		15 of 30
Checked: GSC			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__

Notes:

For bolted splice details, see Sheet 18.

For girder details, see Sheet 17.



FRAMING PLAN

KIMLEY-HORN & ASSOC.
RICHMOND, VA
STRUCTURAL ENGINEER

90% PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

Scale: 1" = 10'-0"

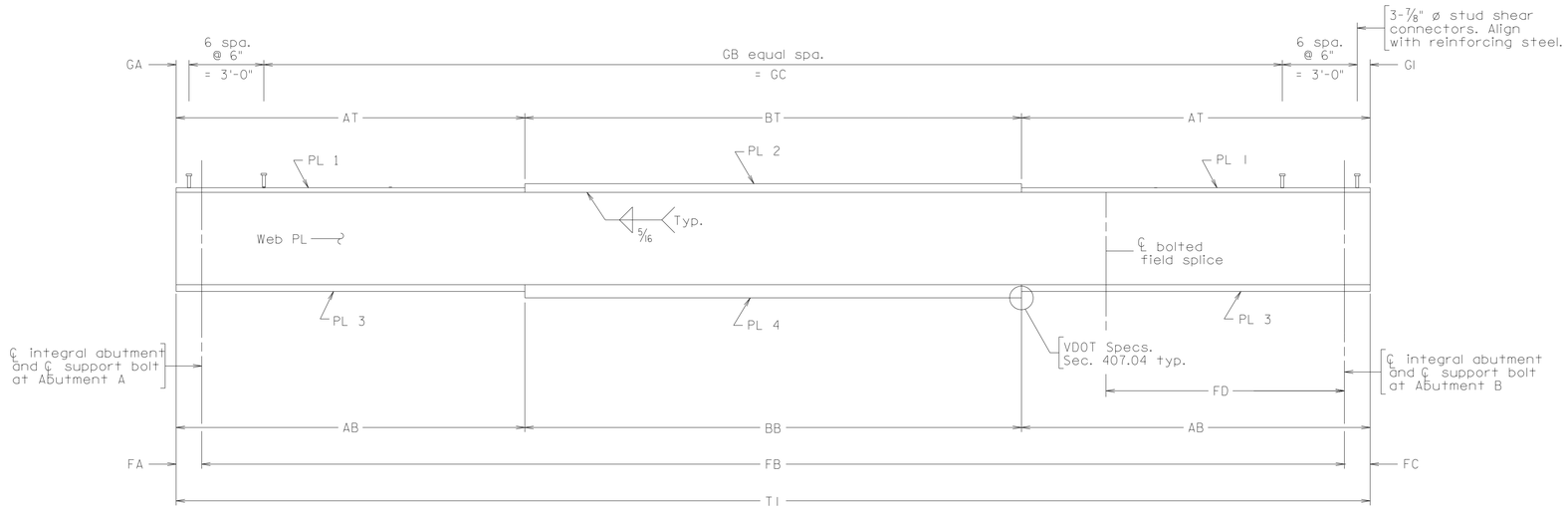
No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

FRAMING PLAN

Designed: KMR	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		16 of 30
Checked: DGD			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



GIRDER ELEVATION
Scale: 1/8" = 1'-0" horizontal only

Notes:

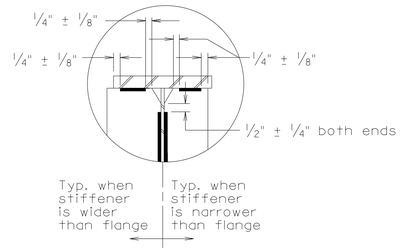
For spacing of intermediate diaphragm connector plates and transverse stiffener plates, see Framing Plan, sheet 16.

For stud shear connector spacing in vicinity of bolted field splice, see Bolted Splice Details, sheet 18.

The bottom flange, web, and all splice plates are areas of tensile stress for Charpy V-Notch impact requirements.

If the Contractor chooses to eliminate one or more bolted field splice(s), the Contractor shall submit their shipping and erection plans along with the shop drawings to the Deparment for review and approval. The shipping and erection plans shall be signed and sealed by a Professional Engineer, holding a valid license to practice engineeering in the Commonwealth of Virginia. Approval for eliminiating of a bolted field splice does not imply issuance of a hauling permit.

Symbol ø = diameter

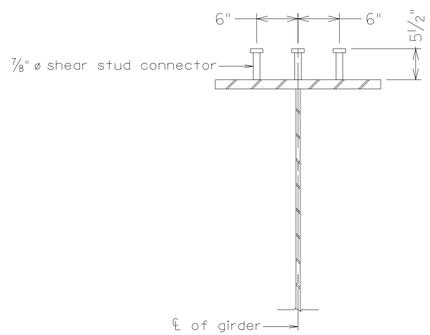


DETAIL A

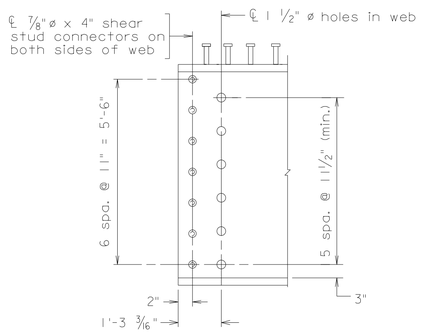
PLATE DIMENSION TABLE					
Girder	Web PL	PL 1	PL 2	PL 3	PL 4
All	5/16 × 72	7/8 × 18	1 3/8 × 18	1 7/8 × 18	1 7/8 × 18

GIRDER DIMENSION TABLE																
Girder	AB	AT	BB	BT	FA	FB	FC	FD	GA	GB	GC	GD	GE	GF	GH	GI
All	51'-10"	51'-10"	70'-0"	70'-0"	4"	173'-0"	4"	40'-0"	3"	168	1'-0"					3"

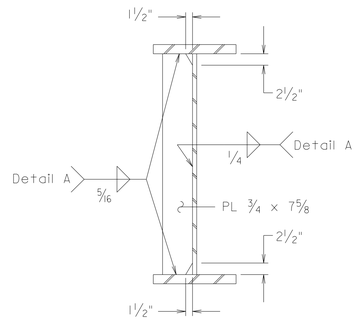
TENSION FLANGES	
Girder	TI
All	173'-8"



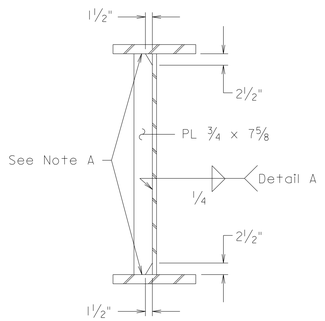
TYPICAL SHEAR STUD CONNECTOR DETAIL



TYPICAL BEAM END DETAIL
(Bearing stiffeners not shown for clarity)



CROSS FRAME CONNECTOR PLATE



TRANSVERSE INTERMEDIATE STIFFENER

Note A: 5/16" fillet weld (both sides) to compression flange(s). Tight fit to tension flange(s).

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STRUCTURAL ENGINEER

90% PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

Not to scale unless otherwise noted

No.	Description	Date
	Revisions	

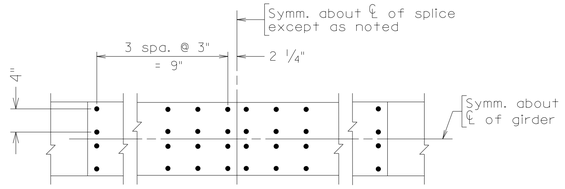
CITY OF CHARLOTTESVILLE

STRUCTURE AND BRIDGE DIVISION

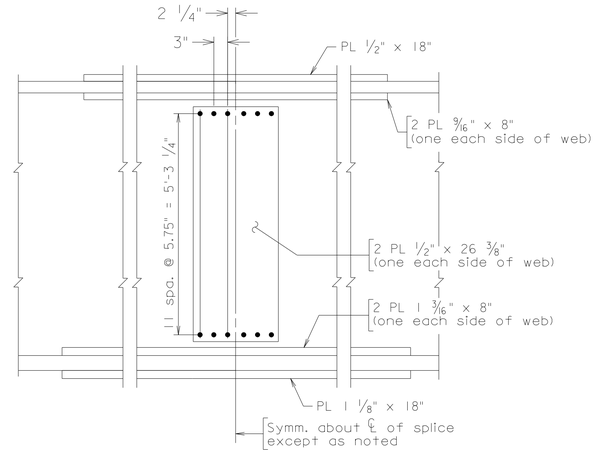
GIRDER DETAILS

Designed: KMR	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		17 of 30
Checked: GSC			

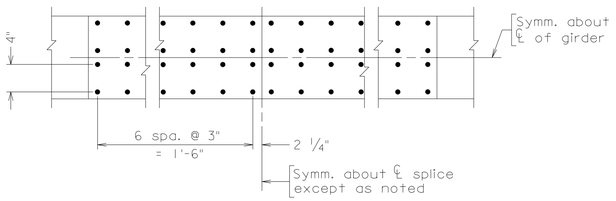
STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



TOP FLANGE



WEB



BOTTOM FLANGE
BOLTED SPLICE DETAILS

Notes:

Stud shear connectors on top flange not shown. For spacing, see girder details, sheet 17.

If Contractor increases the girder web thickness in order to eliminate the transverse stiffeners, no change will be made in the web splice.

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No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

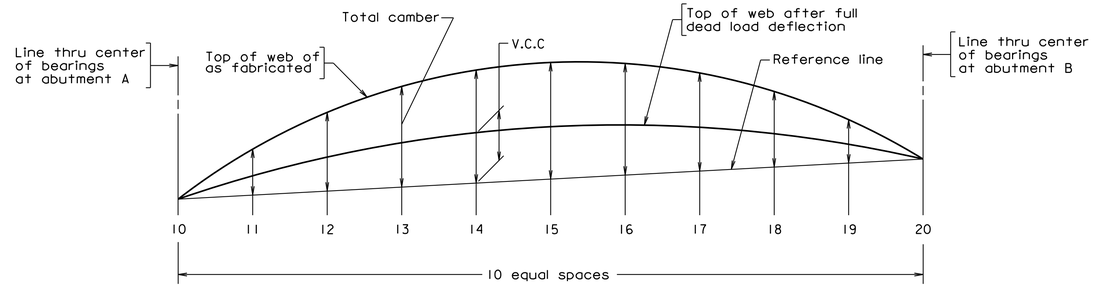
STRUCTURE AND BRIDGE DIVISION

BOLTED SPLICE DETAILS

Designed:	KMR
Drawn:	DAM
Checked:	GSC

Date	Plan No.	Sheet No.
January 2026		18 of 30

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



	Point	10	11	12	13	14	15	16	17	18	19	20
Girder 1	$\triangle_S$	0.00	0.88	1.65	2.23	2.59	2.71	2.59	2.23	1.65	0.88	0.00
	$\triangle'_S$	0.00	2.52	4.73	6.41	7.44	7.79	7.44	6.41	4.73	2.52	0.00
	$\triangle_C$	0.00	0.25	0.47	0.64	0.75	0.79	0.75	0.64	0.47	0.25	0.00
	V.C.C.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	3.64	6.85	9.28	10.77	11.29	10.77	9.28	6.85	3.64	0.00
Girder 2	$\triangle_S$	0.00	0.88	1.65	2.23	2.59	2.71	2.59	2.23	1.65	0.88	0.00
	$\triangle'_S$	0.00	2.53	4.75	6.42	7.45	7.80	7.45	6.42	4.75	2.53	0.00
	$\triangle_C$	0.00	0.25	0.47	0.64	0.75	0.78	0.75	0.64	0.47	0.25	0.00
	V.C.C.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	3.65	6.86	9.29	10.79	11.30	10.79	9.30	6.86	3.65	0.00
Girder 3	$\triangle_S$	0.00	0.88	1.65	2.23	2.59	2.71	2.59	2.23	1.65	0.88	0.00
	$\triangle'_S$	0.00	2.51	4.73	6.40	7.50	7.78	7.43	6.40	4.73	2.52	0.00
	$\triangle_C$	0.00	0.25	0.47	0.64	0.75	0.79	0.75	0.64	0.47	0.25	0.00
	V.C.C.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	3.64	6.84	9.27	10.77	11.28	10.77	9.27	6.84	3.64	0.00
Girder 4	$\triangle_S$	0.00	0.88	1.65	2.23	2.59	2.71	2.59	2.23	1.65	0.88	0.00
	$\triangle'_S$	0.00	2.51	4.73	6.40	7.43	7.78	7.43	6.40	4.78	2.52	0.00
	$\triangle_C$	0.00	0.25	0.47	0.64	0.75	0.79	0.75	0.64	0.47	0.25	0.00
	V.C.C.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	3.64	6.84	9.27	10.76	11.28	10.77	9.27	6.84	3.64	0.00

CAMBER DIAGRAM

Reference line = line between top of web at abutment A and top of web at abutment B (℄ bearing to ℄ bearing).

$\triangle_S$ = Deflection of girder from its own weight after erection including diaphragms, connectors, etc.

$\triangle'_S$ = Deflection of girder from dead load of concrete deck slab, bolster and construction tolerance.

$\triangle_C$ = Deflection of girder from permanent dead load added after deck slab is cast (e.g. parapet).

V.C.C = Vertical curve camber = Distance between the reference line and top of web after full dead load deflection.

Total camber = $\triangle_S + \triangle'_S + \triangle_C$ + V.C.C.

Sign convention: Deflections are positive if downward; negative if upward.

V.C.C. is positive if the top of web after full dead load deflection is above the reference line; and negative if below the reference line.

Total camber is positive if the top of web as fabricated is above the reference line; and negative if below the reference line.

Diagram depicts all values being positive, and is not meant to reflect actual conditions.

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Not to scale

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RICHMOND, VA
STRUCTURAL ENGINEER

No.	Description	Date

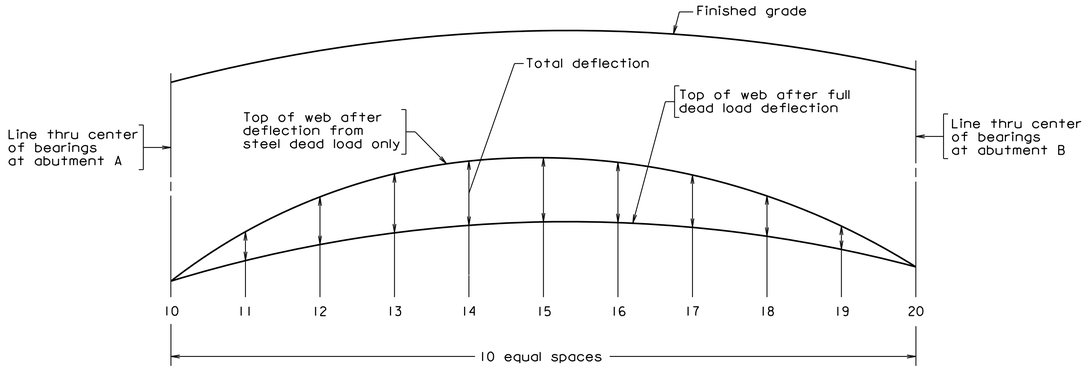
Revisions

CITY OF CHARLOTTESVILLE

CAMBER DIAGRAM

Designed: KMR	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		19 of 30
Checked: GSC			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



	Point	10	11	12	13	14	15	16	17	18	19	20
Girder 1	$\triangle'_S$	0.00	2.52	4.73	6.41	7.44	7.79	7.44	6.41	4.73	2.52	0.00
	$\triangle_C$	0.00	0.25	0.47	0.64	0.75	0.79	0.75	0.64	0.47	0.25	0.00
	Total	0.00	2.77	5.20	7.05	8.19	8.58	8.19	7.05	5.20	2.77	0.00
Girder 2	$\triangle'_S$	0.00	2.53	4.75	6.42	7.45	7.80	7.45	6.42	4.75	2.53	0.00
	$\triangle_C$	0.00	0.25	0.47	0.64	0.75	0.78	0.75	0.64	0.47	0.25	0.00
	Total	0.00	2.78	5.22	7.06	8.20	8.58	8.20	7.06	5.22	2.78	0.00
Girder 3	$\triangle'_S$	0.00	2.51	4.73	6.40	7.43	7.78	7.43	6.40	4.73	2.52	0.00
	$\triangle_C$	0.00	0.25	0.47	0.64	0.75	0.79	0.75	0.64	0.47	0.25	0.00
	Total	0.00	2.76	5.20	7.04	8.18	8.57	8.18	7.04	5.20	2.77	0.00
Girder 4	$\triangle'_S$	0.00	2.51	4.73	6.40	7.43	7.78	7.43	6.40	4.73	2.52	0.00
	$\triangle_C$	0.00	0.25	0.47	0.64	0.75	0.79	0.75	0.64	0.47	0.25	0.00
	Total	0.00	2.76	5.20	7.04	8.18	8.57	8.18	7.04	5.20	2.77	0.00

$\triangle'_S$ = Deflection of girder from dead load of concrete deck slab, bolster and construction tolerance.
$\triangle_C$ = Deflection of girder from permanent dead load added after deck slab is cast (e.g. parapet).

DEAD LOAD DEFLECTIONS

TOP OF DECK ELEVATIONS ALONG ℄ GIRDER											
Point	10	11	12	13	14	15	16	17	18	19	20
Girder 1	511.18	511.13	511.08	511.03	510.97	510.92	510.87	510.82	510.77	510.72	510.66
Girder 2	511.36	511.30	511.25	511.20	511.15	511.10	511.04	510.99	510.94	510.89	510.84
Girder 3	511.36	511.30	511.25	511.20	511.15	511.10	511.04	510.99	510.94	510.89	510.84
Girder 4	511.18	511.13	511.08	511.03	510.97	510.92	510.87	510.82	510.77	510.72	510.66

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RICHMOND, VA
STRUCTURAL ENGINEER

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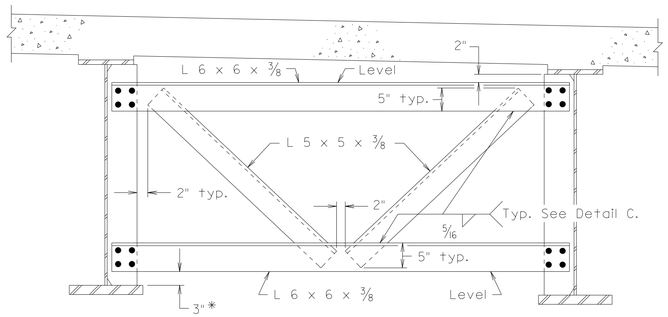
No.	Description	Date
Revisions		

CITY OF CHARLOTTESVILLE

DEAD LOAD DEFLECTIONS AND SLAB ELEVATIONS

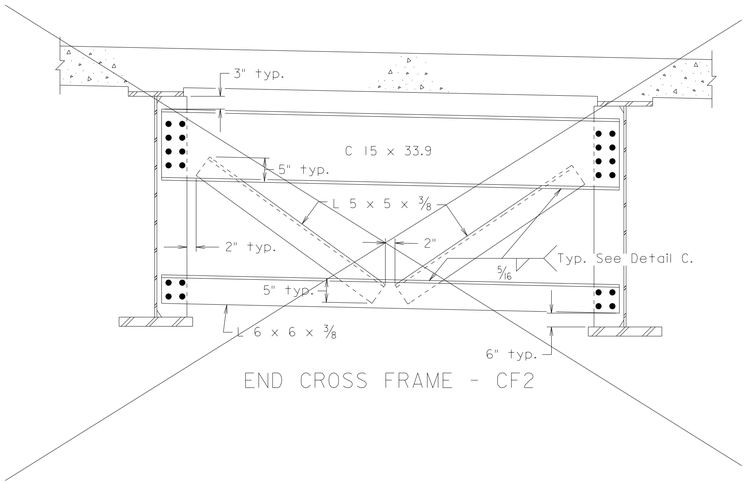
Designed: KMR	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		20 of 30
Checked: GSC			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__

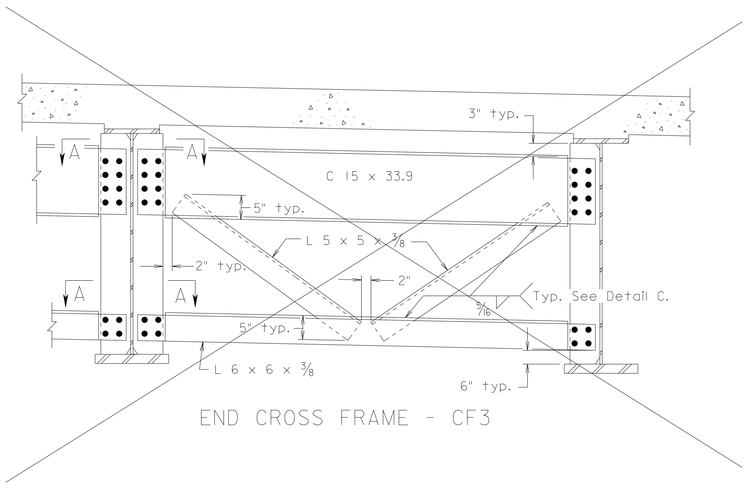


INTERMEDIATE CROSS FRAME - CF1

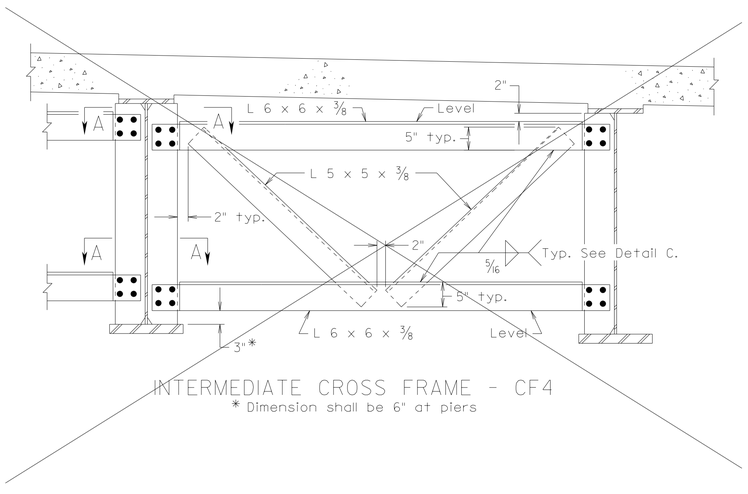
* Dimension shall be 6" at piers



END CROSS FRAME - CF2

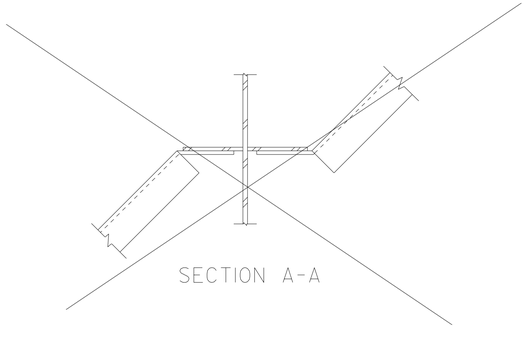


END CROSS FRAME - CF3

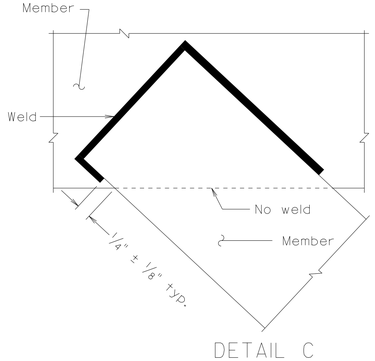


INTERMEDIATE CROSS FRAME - CF4

* Dimension shall be 6" at piers



SECTION A-A



DETAIL C

Note:

All welding of structural steel and quality control inspection of welds, including field welding and quality control inspection of field welding, shall be the responsibility of the Contractor in accordance with Section 407.04(l) of the Specifications.

Sealed and Signed by:
Junyi Meng
Lic. No. 033572
On the date of
April 30, 2020

A copy of the original sealed and signed standard drawing is on file in the Central Office.

KIMLEY-HORN & ASSOC.
RICHMOND, VA
STRUCTURAL ENGINEER

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Not to scale

No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

CROSS FRAME DETAILS

Designed: S&B DIV	Date	Plan No.	Sheet No.
Drawn: S&B DIV	January 2026		21 of 30
Checked: S&B DIV			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__

Notes:

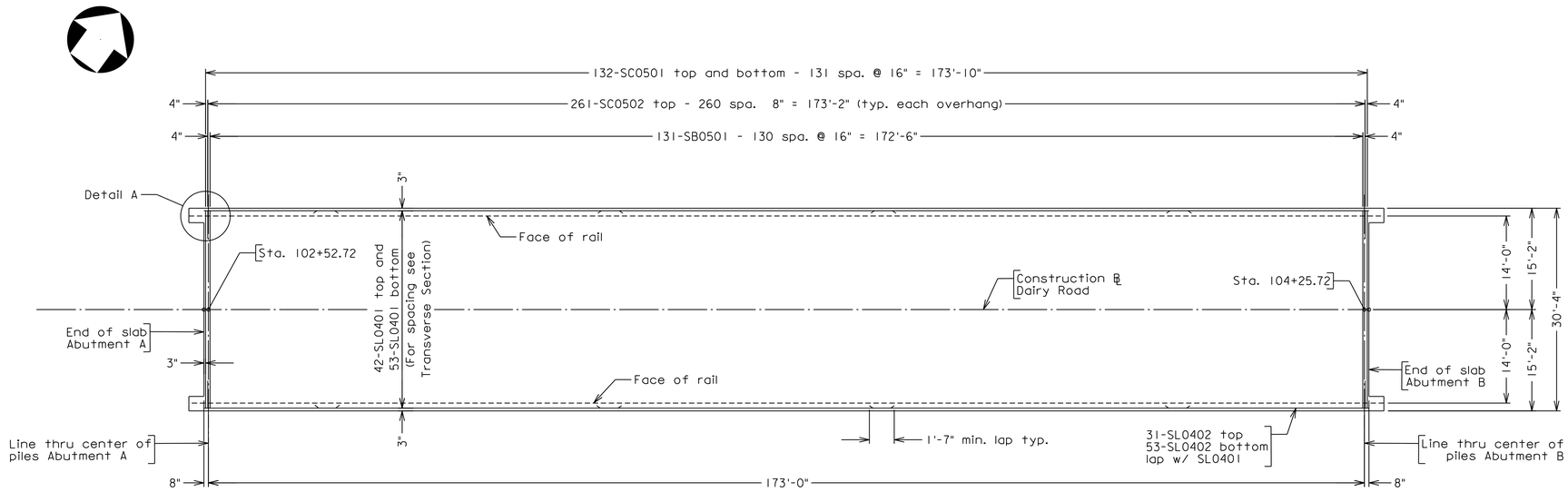
Deck slab elevations are on top of finished roadway at face of rails. Those shown on ℄ Dairy Road are at point of finished grade denoted on Transverse Section.

Straight line interpolation for intermediate elevations on top of finished roadway may be made in any direction between any two adjacent points.

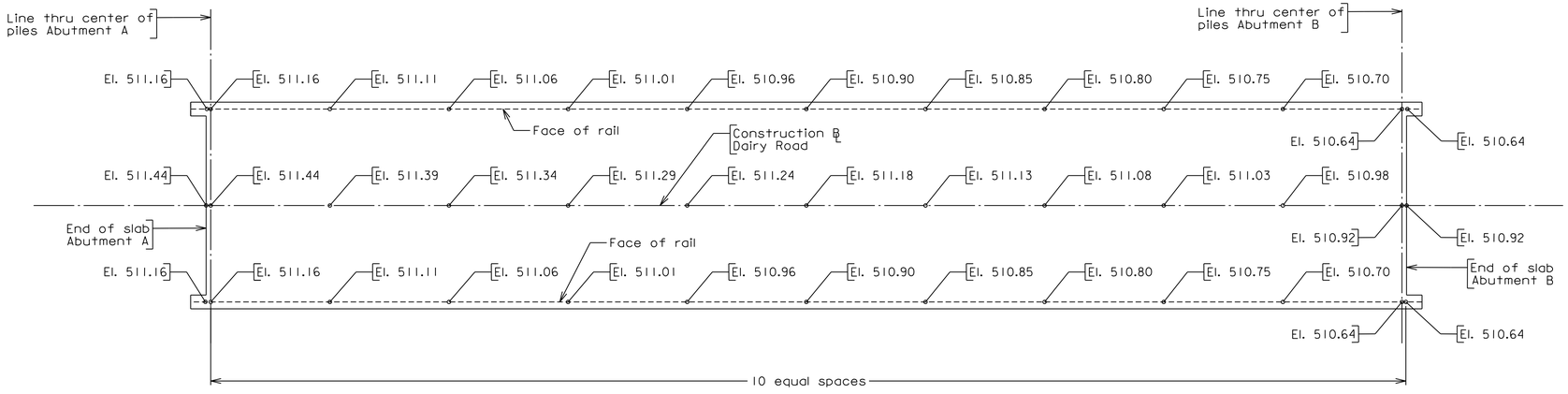
For spacing of SL0401 and SL0402 bars, see sheet 15.

For parapet and terminal wall details, see sheet 23 and 24.

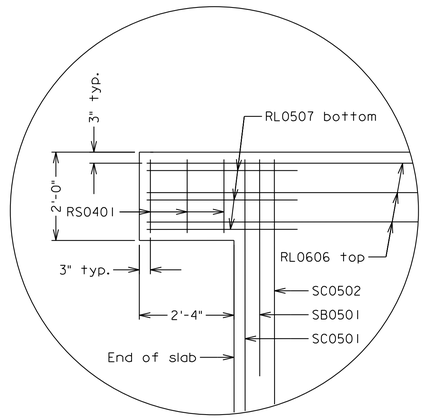
For spacing of RL series and RS0401 bars, see sheet 24.



DECK SLAB PLAN



DECK SLAB ELEVATIONS



DETAIL A

Only deck corner reinforcement shown for clarity
Abutment A shown, Abutment B similar
Not to scale

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Scale: 1" = 10'-0"

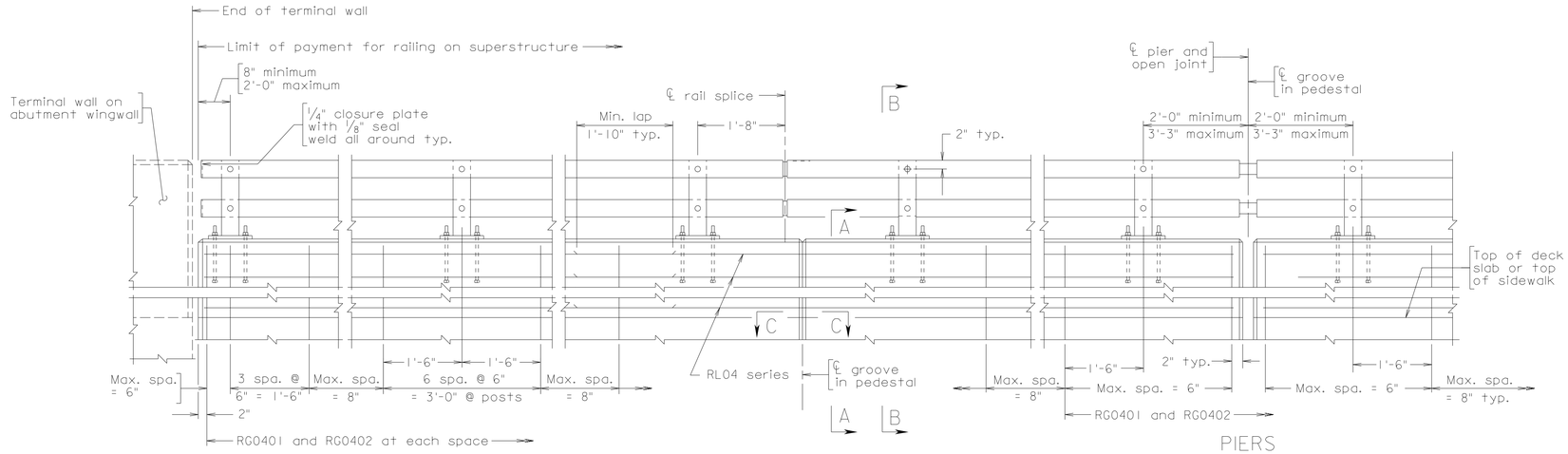
No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

DECK PLAN

Designed: KMR	Date	Plan No.	Sheet No.
Drawn: DAM	January 2026		22 of 30
Checked: DGD			

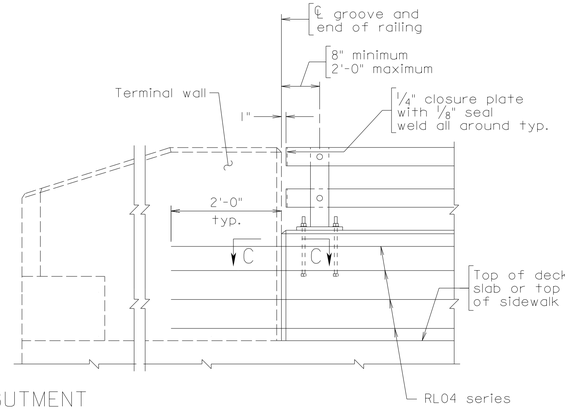
STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



ABUTMENTS
Terminal Wall on Wingwall

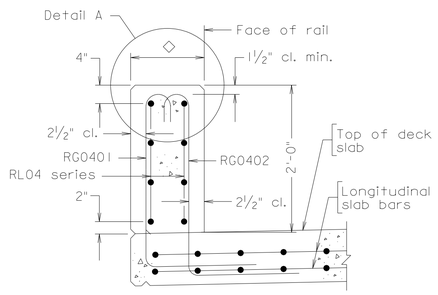
ELEVATION

PIERS
With joint in deck slab



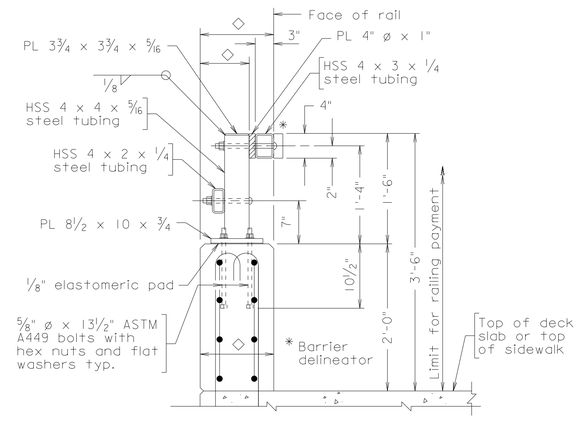
ABUTMENT

PART ELEVATION
Terminal Wall
on Superstructure

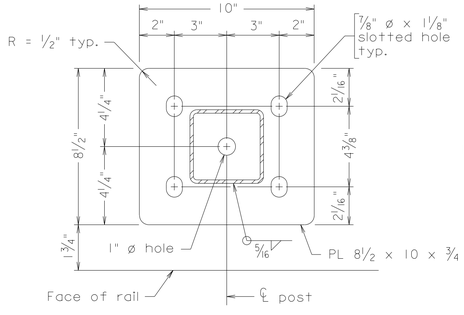


SECTION A-A
Scale: 1" = 1'-0"

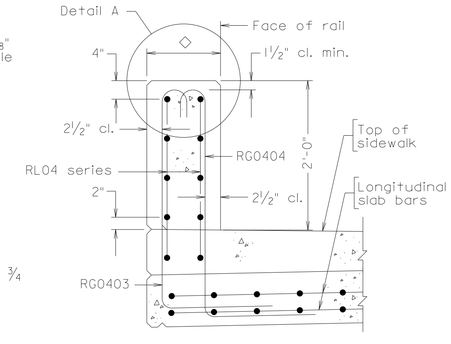
Transverse rebars in deck slab not shown for clarity



SECTION B-B
Scale: 1" = 1'-0"
Bolts through base plate shall be contained inside rebar cage

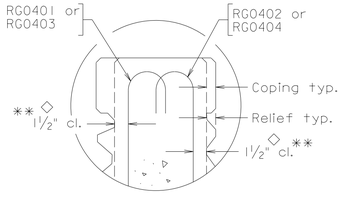


BASE PLATE DETAIL
Not to scale

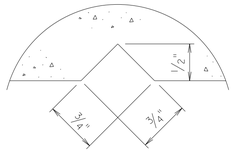


SECTION A-A
(With sidewalk)
Not to scale

Reinforcement in sidewalk and transverse rebars in deck slab not shown for clarity



DETAIL A
Shown with architectural treatment on both sides



SECTION C-C
Full scale

Groove detail for both sides of rail

◇ For dimensions and architectural treatment details, see sheet XX. For minimum cover, see Detail A.

** The cover tolerance referenced in the VDOT Road and Bridge Specifications as -0" to +1/2" is shifted to -1/4" to +1/4" for placement of the RG04 series bars.

Notes:

Plan dimensions shown are measured in the respective horizontal and vertical planes.

The Contractor shall determine all dimensions and details necessary for installation.

All concrete shall be Low Shrinkage Class A4 Modified.

All bevels for concrete shall be 3/4".

All reinforcing steel shall be Corrosion Resistant Reinforcing Steel, Class 1.

For details and reinforcing steel schedule of terminal wall, see sheet 20.

Posts and rail members, including pipe sleeves, shall be ASTM A500 Grade B steel. Plates shall be ASTM A36 steel. Charpy V-notch testing is not required for HSS members.

Bolts for attaching rails to post are 3/4" diameter round head (with slot in head), ASTM A449.

For bolts attaching rails to posts, bolt extensions beyond nut shall be limited to the smaller of one and a half finishing turns or 1/4". If the extension is longer, excess shall be cut off and the edges of the bolt end ground so that no sharp edges remain. Cold galvanizing shall be applied to damaged galvanized areas.

All bolts shall be snug tightened.

All steel, including hardware, shall be hot dip galvanized.

Posts shall be equally spaced within a span. Maximum spacing is 6'-8".

Posts shall be seated on neoprene pads 1/8" minimum thickness, having a nominal durometer hardness of 60. Pads shall conform to post base dimensions.

Posts shall be vertical in transverse direction and normal to longitudinal profile grade. Cut bottom of posts to meet these configurations.

Rails to be continuous over a minimum of 3 posts before splicing.

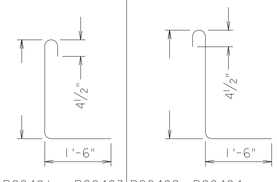
Bid price for architectural treatment includes concrete in relief and coping.

For additional notes, see sheet for the CPSR-3.

After galvanizing, all exposed surfaces, including all hardware (except hardware attaching the post base plates), shall be powder coated in accordance with the Special Provision for Powder Coated Galvanized Material. Finished color shall be brown, Federal Standard Color No. 595-20059.

After railing installations are completed, galvanized hardware used in the attachment of post base plates shall be field coated using System F. The coating shall match the specified railing color.

REINFORCING STEEL SCHEDULE



RG0401, RG0403 RG0402, RG0404

Mark	Size	No.	Length	Pin ø	Location
RG0401	#4			3"	Parapet
RG0402	#4			3"	Parapet
RG0403	#4			3"	Parapet
RG0404	#4			3"	Parapet
RL04	#4			—	Parapet

Dimensions in bending diagram are out-to-out of bars.

Sealed and Signed by:
Junyi Meng
Lic. No. 033572
On the date of
October 31, 2023

A copy of the original sealed and signed standard drawing is on file in the Central Office.

KIMLEY-HORN & ASSOC.
RICHMOND, VA
STRUCTURAL ENGINEER

90% PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

Scale: 3/4" = 1'-0" unless otherwise noted

No.	Description	Date
Revisions		

CITY OF CHARLOTTESVILLE

STRUCTURE AND BRIDGE DIVISION

42" RAILING CPSR-1-AT

Designed: S&B DIV	Date	Plan No.	Sheet No.
Drawn: S&B DIV	January 2026		23 of 30
Checked: S&B DIV			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__

Notes:

Plan dimensions shown are measured in the respective horizontal and vertical planes.

The Contractor shall determine all dimensions and details necessary for installation.

All concrete shall be Low Shrinkage Class A4 Modified.

All bevels for concrete shall be ¾".

All reinforcing steel shall be Corrosion Resistant Reinforcing Steel, Class 1.

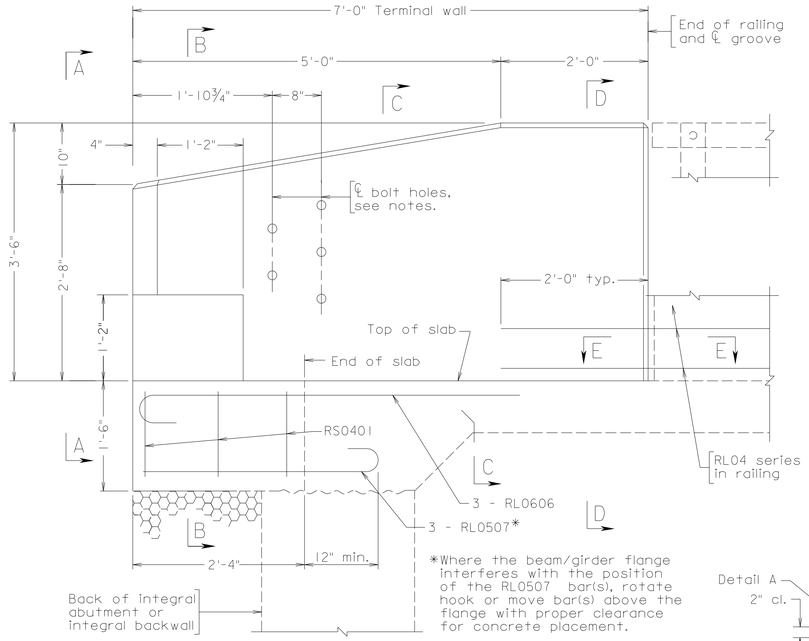
For details and reinforcing steel schedule of railing, see sheet 19.

Each terminal wall shall be cast as one piece.

Terminal walls are detailed to take guardrail attachment for MGS.

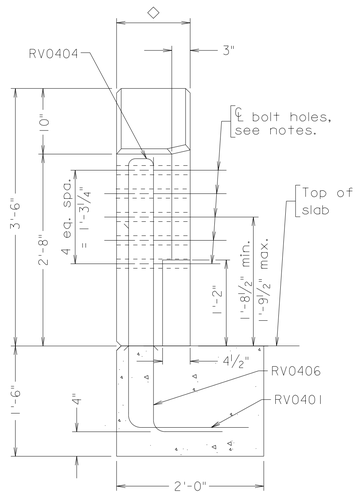
Holes, where shown, shall be formed with sleeves of 1¼" diameter nominal pipe.

Bid price for architectural treatment includes concrete in relief and coping.



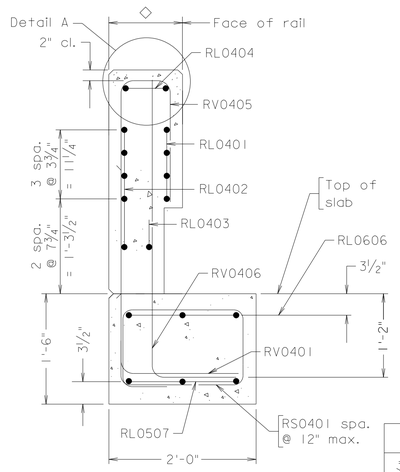
*Where the beam/girder flange interferes with the position of the RL0507 bar(s), rotate hook or move bar(s) above the flange with proper clearance for concrete placement.

FULL INTEGRAL OR SEMI-INTEGRAL ABUTMENT

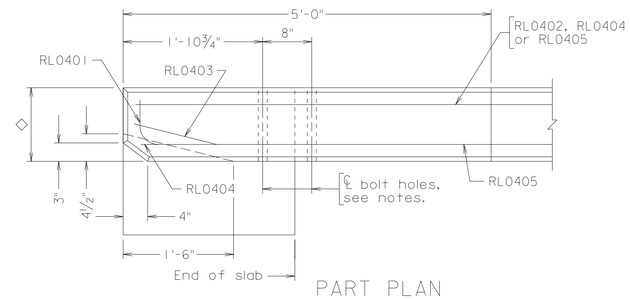


VIEW A-A

Showing RV04 bars only for clarity

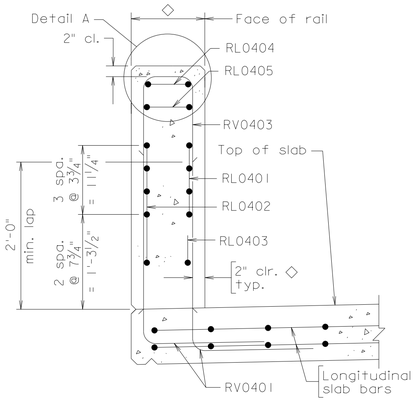


SECTION B-B



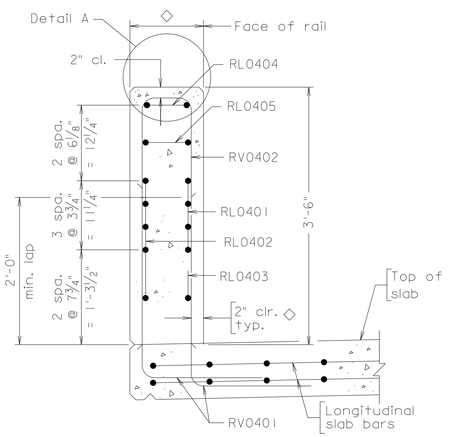
PART PLAN

RV04 series bars not shown for clarity



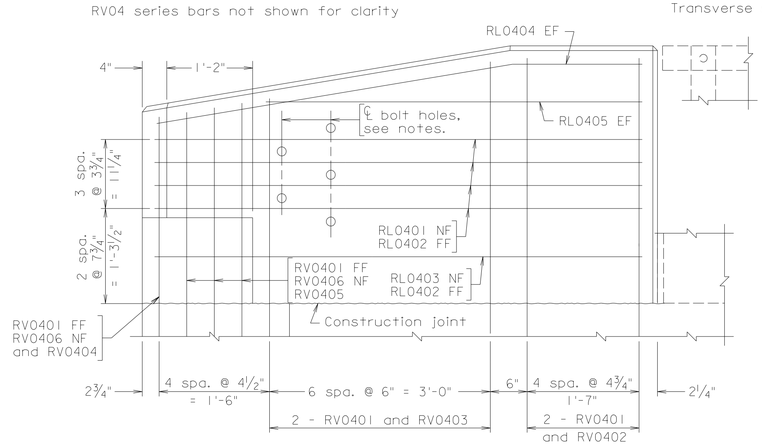
SECTION C-C

Transverse slab bar not shown for clarity

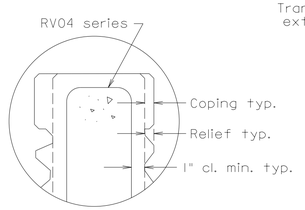


SECTION D-D

Transverse bars in deck slab and RL04 series extended from railing not shown for clarity



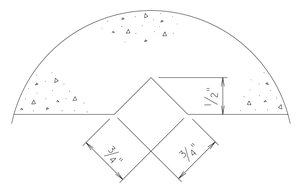
TERMINAL WALL - ELEVATION



DETAIL A

Not to scale

Shown with architectural treatment on both sides



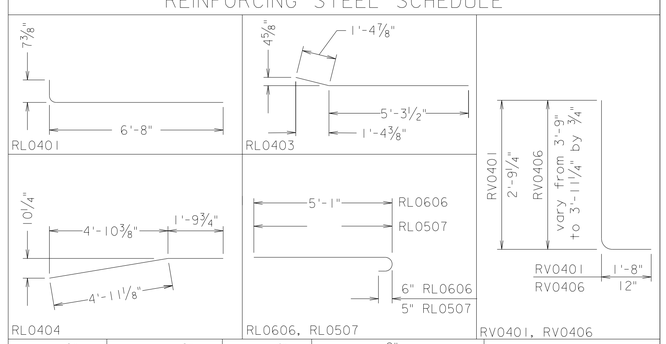
SECTION E-E

Full scale

Groove detail for both sides of rail

◇ For dimensions and architectural treatment details, see sheet XX. For minimum cover, see Detail A.

REINFORCING STEEL SCHEDULE



Mark	Size	No.	Pin ø	Length	Location
RL0401	#4		6"	7'-2"	Terminal wall
RL0402	#4		—	6'-8"	Terminal wall
RL0403	#4		3"	6'-8½"	Terminal wall
RL0404	#4		3"	6'-9"	Terminal wall
RL0405	#4		—	5'-2"	Terminal wall
RL0606	#6		4½"	5'-9½"	Terminal wall end support
RL0507	#5		3¾"		Terminal wall end support
RS0401	#4		3"	6'-2"	Terminal wall end support
RV0401	#4		3"	4'-4"	Terminal wall
RV0402	#4		3"	7'-1½"	Terminal wall
RV0403	#4		3"	From 6'-0½" to 7'-0½"	Terminal wall
RV0404	#4		3"	5'-2"	Terminal wall
RV0405	#4		3"	From 4'-3½" to 4'-6½"	Terminal wall
RV0406	#4		3"	From 4'-7¾" to 4'-10"	Terminal wall

Dimensions in bending diagram are out-to-out of bars.

Sealed and Signed by:
Junyi Meng
Lic. No. 033572
On the date of
April 30, 2024

A copy of the original sealed and signed standard drawing is on file in the Central Office.

KIMLEY-HORN & ASSOC.
RICHMOND, VA
STRUCTURAL ENGINEER

No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

42" TERMINAL WALL CPSRT-3-AT

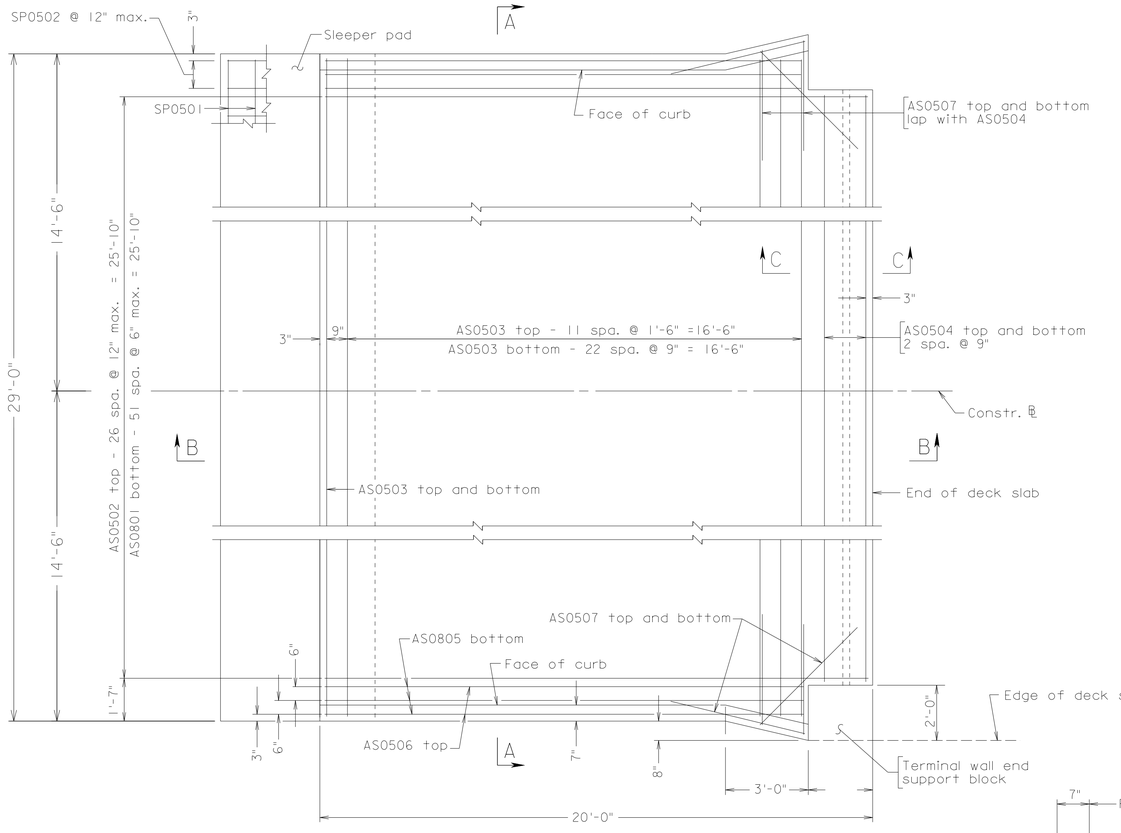
Designed: S&B DIV	Date	Plan No.	Sheet No.
Drawn: S&B DIV	January 2026		24 of 30
Checked: S&B DIV			

90% PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

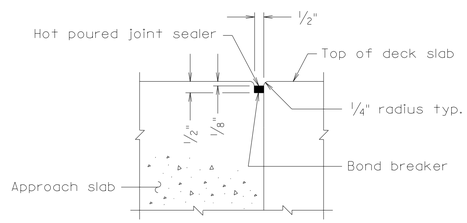
Scale: 1" = 1'-0" unless otherwise noted.

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	STP-5104 (326)	—	U000-104-365, B620, C501, P101	__



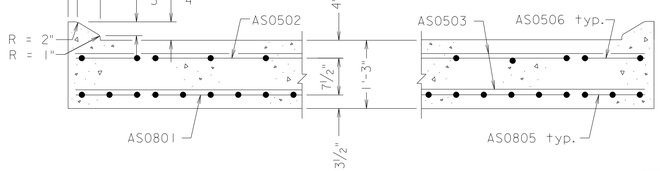
PLAN

Details typical on each side of Constr. ℄



SECTION C-C

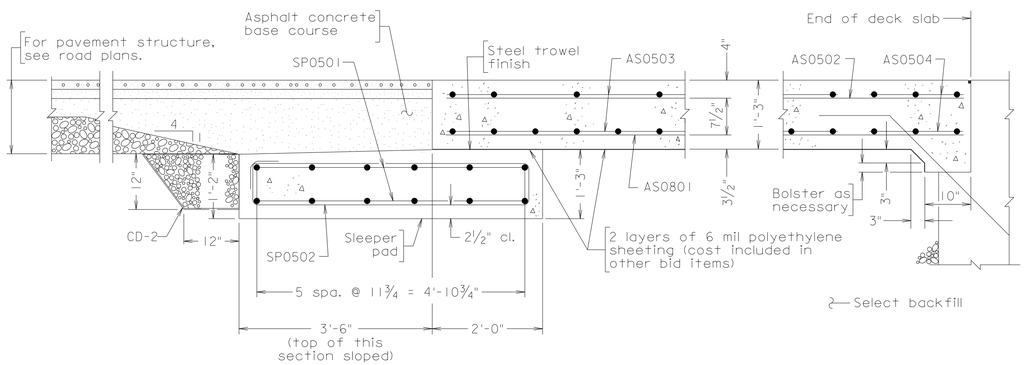
Scale: 3" = 1'-0"



SECTION A-A

Curb details typical

Scale: ¾" = 1'-0"



SECTION B-B

Scale: ¾" = 1'-0"

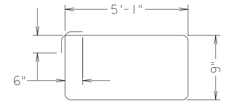
Notes:

If material under approach slab will be exposed for more than two weeks, prime the material with 0.35 gal per sq. yd. liquid asphalt material type RC-70, RC-250 or MC-250. Cost included in select backfill (see sheet__).

Approach slab shall be grooved in accordance with Section 404.07(f) of the Specifications. Payment for grooving is included in bridge deck grooving quantities.

Payment for the CD-2 and the asphalt on top of sleeper pad is included in the road plans.

REINFORCING STEEL SCHEDULE



SP0502

Mark	No.	Size	Pin ø	Length	Location
AS0801	52	#8	——	19'-8"	Bottom longitudinal
AS0502	27	#5	——	19'-8"	Top longitudinal
AS0503	37	#5	——	28'-8"	Top and bottom transverse
AS0504	6	#5	——	25'-8"	Top and bottom transverse
AS0805	6	#8	——	17'-5"	Bottom longitudinal
AS0506	4	#5	——	17'-5"	Top longitudinal
AS0507	16	#5	——	5'-0"	Near terminal wall end block
SP0501	12	#5	——	28'-8"	Sleeper pad
SP0502	30	#5	2½"	12'-2"	Sleeper pad

Dimensions in bending diagram are out-to-out of bars.
Number of bars shown is for one approach slab and sleeper pad.

ESTIMATED QUANTITIES

		Concrete Class A4 Bridge Approach Slab ⊗ CY	Corrosion Resistant Reinforcing Steel Class I, Grade 60 min. ⊗ LB
Abutment A	Approach slab	27.8	4990
	Sleeper pad	7.2	740
Abutment B	Approach slab	27.8	4990
	Sleeper pad	7.2	740
Totals		70.0	11460

⊗ Denotes items to be paid for on basis of plan quantities in accordance with Road and Bridge Specifications.

Sealed and Signed by:
Junyi Meng
Lic. No. 033572
On the date of
April 28, 2023

A copy of the original sealed and signed standard drawing is on file in the Central Office.

KIMLEY-HORN & ASSOC.
RICHMOND, VA
STRUCTURAL ENGINEER

90% PLANS

THESE PLANS NOT TO BE USED FOR CONSTRUCTION

Scale: ⅜" = 1'-0" unless otherwise noted

No.	Description	Date
	Revisions	

CITY OF CHARLOTTESVILLE

APPROACH SLABS
BAS-AG-1

Designed: S&B DIV	Date	Plan No.	Sheet No.
Drawn: S&B DIV	January 2026		30 of 30
Checked: S&B DIV			