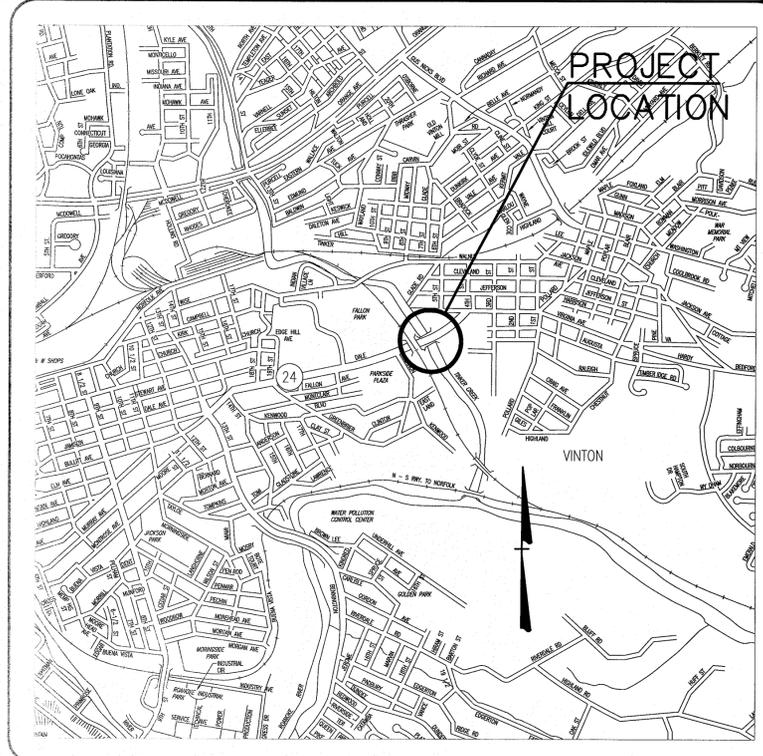


**PROJECT LOCATION MAP**

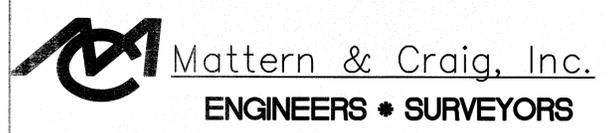


OFFICE OF THE CITY ENGINEER  
 215 CHURCH AVENUE, SW  
 ROOM 350  
 ROANOKE, VIRGINIA 24011-1587  
 PHONE: (540) 853-2731  
 FAX: (540) 853-1364  
 ENGINEER@ROANOKEVA.GOV

**INDEX OF SHEETS**

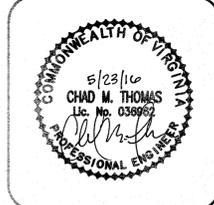
- G-1 - COVER SHEET
- G-2 - GENERAL NOTES AND MISCELLANEOUS NOTES
- S-1 - BRIDGE REPAIRS PLAN AND FINISHED DECK ELEVATIONS
- S-2 - DECK SLAB EXTENSION AND CLOSURE DETAILS
- S-3 - TERMINAL WALLS
- S-4 - BRIDGE DECK OVERLAY
- S-5 - DRAIN DETAILS
- S-6 - MISCELLANEOUS DETAILS AND REINFORCING STEEL SCHEDULE
- S-7 - DEMOLITION

**CONSULTING ENGINEERS**



701 FIRST STREET, S.W.  
 ROANOKE, VIRGINIA 24016  
 (540) 345-9342  
 (540) 345-7691 FAX

COMMISSION NUMBER: 3430H



**PROJECT NAME**

**ROUTE 24 (DALE AVENUE OVER TINKER CREEK)  
 BRIDGE REHABILITATION**

CITY PLAN NUMBER: 6822

**APPROVED FOR CONSTRUCTION**

_____ CITY ENGINEER	_____ DATE
_____ DIRECTOR OF PUBLIC WORKS	_____ DATE
_____ ASSISTANT CITY MANAGER FOR OPERATIONS	_____ DATE

_____ REVISION BY	DESCRIPTION:	_____ DATE

TAX PARCEL NUMBER: 4311401

SHEET NUMBER: G-1 OF 9

ROUTE 24 (DALE AVE) BRIDGE OVER TINKER CREEK BRIDGE REHABILITATION

**GENERAL NOTES:**

STANDARDS: VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS, 2008

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROJECTION MANUAL, AUGUST 2011, AND LATEST REVISIONS. THIS PROJECT IS ALSO TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ROANOKE SPECIFICATIONS, THESE PLANS, AND THE VDOT ROAD AND BRIDGE SPECIFICATIONS DATED 2007, INCLUDING SPECIAL PROVISIONS.

THE CONTRACTOR SHALL NOTIFY THE CITY'S PROJECT MANAGER 24 HOURS BEFORE COMMENCING CONSTRUCTION.

THE PLAN SET IS INCOMPLETE UNLESS ACCOMPANIED BY THE CITY OF ROANOKE PROJECT MANUAL. LIKEWISE, THE PROJECT MANUAL IS INCOMPLETE UNLESS ACCOMPANIED BY THE PLANS.

ALL REINFORCING STEEL SHALL BE CRR (CORROSION RESISTANT REINFORCEMENT) WHICH SHALL CONFORM TO THE APPLICABLE SPECIFICATIONS NOTED IN THE VDOT SPECIAL PROVISIONS. ALL REINFORCING STEEL BEND DIMENSIONS ARE MEASURED TO THE OUTSIDE OF THE BAR.

ALL STEEL USED IN CONSTRUCTION OF THE SIDEWALK DECK DRAINS, EXCEPT FOR THE HSS MEMBERS OF THE DOWNSTREAM DRAINS, SHALL BE GALVANIZED ASTM A36. THE STEEL HSS MEMBERS FOR THE DOWNSTREAM DRAINS AND THE 8" Ø PIPE DRAINS FOR THE UPSTREAM CURB SHALL BE GALVANIZED ASTM A500, GRADE B. ALL DECK DRAIN ASSEMBLIES SHALL BE FABRICATED PRIOR TO INSTALLATION. SEE SHEET S-4 FOR DECK DRAIN DETAILS.

CONCRETE USED FOR THE REPAIRS SHALL MEET THE REQUIREMENTS OF THE PROJECT DOCUMENTS.

THE LATEX MODIFIED CONCRETE (LMC) OVERLAY SHALL BE IN ACCORDANCE WITH THE VDOT STANDARD SPECIFICATIONS. SEE SHEET S-4 FOR OVERLAY REQUIREMENTS.

THE LATEX MODIFIED CONCRETE VERY EARLY STRENGTH (LMCVES) SHALL BE PERMITTED FOR ALL DECK EXTENSIONS AND JOINT CLOSURES AND SHALL BE IN ACCORDANCE WITH THE VDOT SPECIAL PROVISION FOR LATEX MODIFIED CONCRETE VERY EARLY STRENGTH. SEE SHEET S-2 FOR LMCVES REQUIREMENTS.

FINAL SURFACE PAVEMENT SM-12.5D SHALL BE PERFORMED AS THE LAST STAGE OF PAVING. ALL SURFACE PAVING SHALL BE PLACED AT THIS TIME.

ALL PAVING SHALL BE PERFORMED IN SUCH A MANNER AS TO ELIMINATE FALSE GUTTERS AND/OR PONDED WATER.

ALL PAVEMENT MARKINGS AND TRAFFIC FLOW ARROWS SHOWN ON THE ROADWAY CONSTRUCTION PLANS ARE SCHEMATIC ONLY. THE ACTUAL LOCATION AND APPLICATION OF PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH SECTION 704 OF VDOT ROAD AND BRIDGE SPECIFICATIONS, MUTCD 2009 EDITION, OR AS DIRECTED BY THE CITY OF ROANOKE.

CONSTRUCTION SURVEYING IS TO BE INCLUDED IN CONSTRUCTION STAKEOUT.

CONTRACTOR SHALL RE-SET ALL SPEED LIMIT SIGNS, TRAFFIC WARNING SIGNALS, MAIL BOXES, NEWSPAPER BOXES, AND ANY OTHER INCIDENTAL ITEMS AS REQUIRED.

CONTRACTOR SHALL TOPSOIL, MULCH AND SEED ALL DISTURBED AREAS NOT PAVED IN ACCORDANCE WITH THE SPECIFICATIONS.

CONTRACTOR SHALL SAWCUT ALL EXISTING PAVEMENT ABUTTING NEW CONSTRUCTION.

THE COST OF REMOVAL OF ALL EXISTING ITEMS LOCATED IN THE WORK AREA INCLUDING, BUT NOT LIMITED TO THE FOLLOWING, SHALL BE INCLUDED IN THE PRICE BID FOR ITEMS REQUIRING THE REMOVAL OF EXISTING ITEMS: SIDEWALK, CURB AND GUTTER, CONCRETE, JOINT MATERIAL, ALUMINUM RAILING AND ASPHALT.

UTILITY RELOCATIONS, ADJUSTMENTS, AND COORDINATION WITH UTILITY OWNERS IS REQUIRED.

CONTRACTOR SHALL CONTACT "MISS UTILITY" (1-800-552-7001) AT LEAST 48 HOURS BEFORE BEGINNING LAND DISTURBING ACTIVITIES TO OBTAIN FIELD UTILITY LOCATIONS. CERTAIN UTILITIES WITHIN THE VICINITY OF THE PROJECT AREA ARE SHOWN ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATION OF ALL UTILITIES AT HIS EXPENSE, INCLUDING WATER LATERALS, AND SANITARY SEWER LATERALS ETC. AND LIGHTING SYSTEMS BEFORE PROCEEDING WITH WORK.

ROANOKE GAS WILL POTHOLE THE GAS LINE PRIOR TO GUARDRAIL INSTALLATION. THE CONTRACTOR SHALL COORDINATE WITH THE CITY AND ROANOKE GAS FOR PROPER NOTIFICATION.

ALL UTILITIES, INCLUDING BUT NOT LIMITED TO GAS, STORM SEWER, OVERHEAD UTILITIES, ETC., WHICH ARE DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED BY THE RESPECTIVE UTILITY COMPANY(S) AT THE EXPENSE OF THE CONTRACTOR.

ACCESS TO PRIVATE ENTRANCES SHALL BE MAINTAINED AT ALL TIMES.

B.M.: CHISELED SQUARE IN THE TOP OF THE DOWNSTREAM WINGWALL AT ABUTMENT A. ELEVATION = 904.58'

**MISCELLANEOUS ITEMS:**

1. MODIFIED FOA-1 SHALL CONSIST OF A PIECE OF W BEAM GUARDRAIL AND FOA-1 ATTACHMENT TO CONNECT THE EXISTING GUARDRAIL TO THE NEW TERMINAL WALL. EXISTING GUARDRAIL SHALL REMAIN AS IS FROM THE END OF THE MODIFIED FOA-1.
2. THE APPROACH MEDIANS AND THE UPSTREAM APPROACH CURBS AND GUTTERS ADJACENT TO BOTH ABUTMENTS SHALL BE DEMOLISHED AND REMOVED IN ANTICIPATION OF THE CONCRETE DECK EXTENSIONS. THE NEW APPROACH MEDIANS AND THE NEW UPSTREAM APPROACH CURBS AND GUTTERS SHALL BE REPLACED IN KIND AND THE TOP ELEVATIONS OF THE APPROACH MEDIANS AND CURBS ADJACENT TO THE BRIDGE SHALL MATCH THE TOP ELEVATIONS OF THE MEDIAN AND CURBS ON THE BRIDGE.
3. THE SETTLED APPROACH CURB AND GUTTER AT THE DOWNSTREAM END OF ABUTMENT A SHALL BE DEMOLISHED AND REMOVED. THE SETTLEMENT OF THE ASPHALT ADJACENT TO THE CURB AND GUTTER SHALL BE CORRECTED AND REPAIRED IN CONJUNCTION WITH MILLING AND PAVING OPERATIONS. THE APPROACH CURB AND GUTTER SHALL BE RECONSTRUCTED AS DETAILED AND EXPLAINED IN DETAIL CG-6 (COMBINATION 6" CURB AND GUTTER) OF THE VDOT 2008 ROAD AND BRIDGE STANDARDS.
4. THE CONTRACTOR SHALL VERIFY EXISTING ELEVATIONS PRIOR TO MILLING THE ASPHALT FROM THE BRIDGE. THE APPROACH ASPHALT SHALL BE MILLED OR A RAMP SHALL BE INSTALLED TO TRANSITION FROM EXISTING GRADE TO MILLED GRADE. THE TRANSITION SHALL BE A MINIMUM OF 3 FEET HORIZONTAL PER 1 INCH OF MILLED DEPTH. MILLING OPERATIONS SHALL EXTEND 40'-0" FROM THE END OF THE BRIDGE AT BOTH ABUTMENTS.

**CITY OF ROANOKE CONSTRUCTION NOTES:**

**NOTICE: ALL LANDOWNERS, DEVELOPERS AND CONTRACTORS**

FAILURE TO COMPLY WITH THE CONSTRUCTION PROCEDURE REQUIREMENTS LISTED BELOW MAY RESULT IN THE COSTLY REMOVAL OF STRUCTURES, TIME DELAYS OR THE ISSUANCE OF A STOP WORK ORDER.

**CONSTRUCTION PROCEDURE REQUIREMENTS**

- PLANS AND PERMITS:** A COPY OF THE PLANS AS APPROVED BY THE CITY (SIGNED BY THE PROPER CITY OFFICIALS) AND ALL PERMITS ISSUED BY THE CITY SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES OF ONGOING CONSTRUCTION.
- LOCATION OF UTILITIES:** THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.
- CONSTRUCTION ENTRANCE:** THE CONTRACTOR SHALL INSTALL AN ADEQUATE CONSTRUCTION ENTRANCE FOR ALL CONSTRUCTION RELATED EGRESS FROM THE SITE. SIZE AND COMPOSITION OF CONSTRUCTION ENTRANCE SHALL BE AS SHOWN ON THE PLANS.
- STREETS TO REMAIN CLEAN:** IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT THE PUBLIC STREET ADJACENT TO THE CONSTRUCTION ENTRANCE REMAINS FREE OF MUD, DIRT, DUST, AND/OR ANY TYPE OF CONSTRUCTION MATERIALS OR LITTER AT ALL TIMES.
- BARRICADES/DITCHES:** THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF ALL EXCAVATED DITCHES AND SHALL FURNISH AND ENSURE THAT ALL BARRICADES PROPER AND NECESSARY FOR THE SAFETY OF THE PUBLIC ARE IN PLACE.
- PAVEMENT REPLACEMENT:** THE REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH APPROVED STANDARDS AND SPECIFICATIONS OF THE CITY OF ROANOKE.
- APPROVED PLANS/CONSTRUCTION CHANGES:** ANY CHANGE OR VARIATION FROM CONSTRUCTION DESIGN AS SHOWN ON THE OFFICIALLY APPROVED PLANS SHALL BE APPROVED BY THE EROSION AND SEDIMENT CONTROL AGENT PRIOR TO SAID CHANGES OR VARIATION IN CONSTRUCTION BEING MADE.

**SEQUENCE OF CONSTRUCTION NOTES:**

CONTRACTOR SHALL PERFORM ALL WORK ON EASTBOUND LANES BEFORE MILLING FOR WESTBOUND LANES. THEREFORE, ONLY ONE SIDE OF THE BRIDGE WILL BE UNDER CONSTRUCTION AT A TIME, WITH THE EXCEPTION OF GROOVING OPERATIONS AND PAVEMENT MARKING.

ALL WORK CONDUCTED BELOW THE BRIDGE DECK, AND WORK THAT DOES NOT IMPEDE TRAFFIC, MAY BE COMPLETED IN AN ORDER CHOSEN BY THE CONTRACTOR AND APPROVED BY THE CITY.

THE SEQUENCE OF CONSTRUCTION FOR OPERATIONS WITHIN THE TRAFFIC LANES SHALL BE AS FOLLOWS:

1. MILL EASTBOUND LANES.
2. PERFORM DECK CLOSURES ON EASTBOUND LANES.
3. PERFORM TYPE B AND C PATCHING ON EASTBOUND LANES.
4. PERFORM DOWNSTREAM TERMINAL WALL MODIFICATIONS.
5. PERFORM LMC OVERLAY ON EASTBOUND LANES.
6. PERFORM APPROACH PAVING ON EASTBOUND LANES.
7. COMPLETE ALL OTHER WORK ASSOCIATED WITH EASTBOUND LANES.
8. MILL WESTBOUND LANES.
9. PERFORM DECK CLOSURES AND SLAB EXTENSIONS ON WESTBOUND LANES.
10. REPEAT STEPS 3 THRU 7, AS INDICATED ABOVE ON EASTBOUND LANES, FOR WESTBOUND LANES.
11. GROOVE ENTIRE BRIDGE.
12. INSTALL PAVEMENT MARKINGS ON ENTIRE BRIDGE.



Date	
Revisions	

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Drawn By:	DKA
Designed By:	MLF
Checked By:	CMT
Date:	5/23/16

**Mattern & Craig**  
ENGINEERS/SURVEYORS  
701 FIRST STREET, S.W.  
ROANOKE, VIRGINIA 24016  
(540) 346-5942  
FAX (540) 346-7681

ROUTE 24 (DALE AVE OVER TINKER CREEK) BRIDGE  
REHABILITATION  
**GENERAL NOTES AND MISCELLANEOUS NOTES**  
CITY OF ROANOKE, VIRGINIA

Vertical Scale:  
N/A

Horizontal Scale:  
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Commission Number:  
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**G-2**



Date	
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**Mattem & Craig**  
 ENGINEERS-SURVEYORS  
 701 FIRST STREET, S.W.  
 ROANOKE, VIRGINIA 24016  
 (404) 345-7501  
 FAX (540) 345-7691

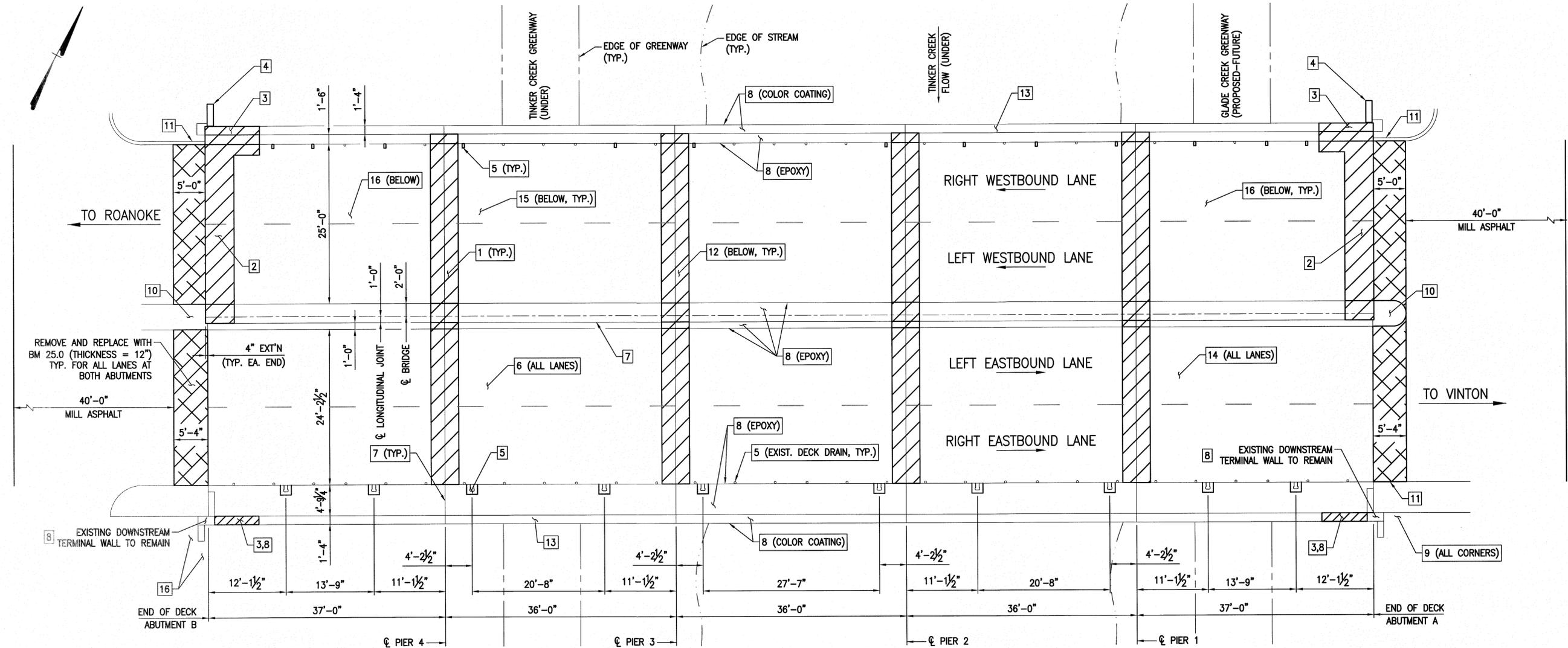
ROUTE 24 (DALE AVE OVER TINKER CREEK) BRIDGE  
 REHABILITATION  
**BRIDGE REPAIRS PLAN AND FINISHED  
 DECK ELEVATIONS**  
 CITY OF ROANOKE, VIRGINIA

Vertical Scale:  
N/A

Horizontal Scale:  
AS SHOWN

Commission Number:  
3430H

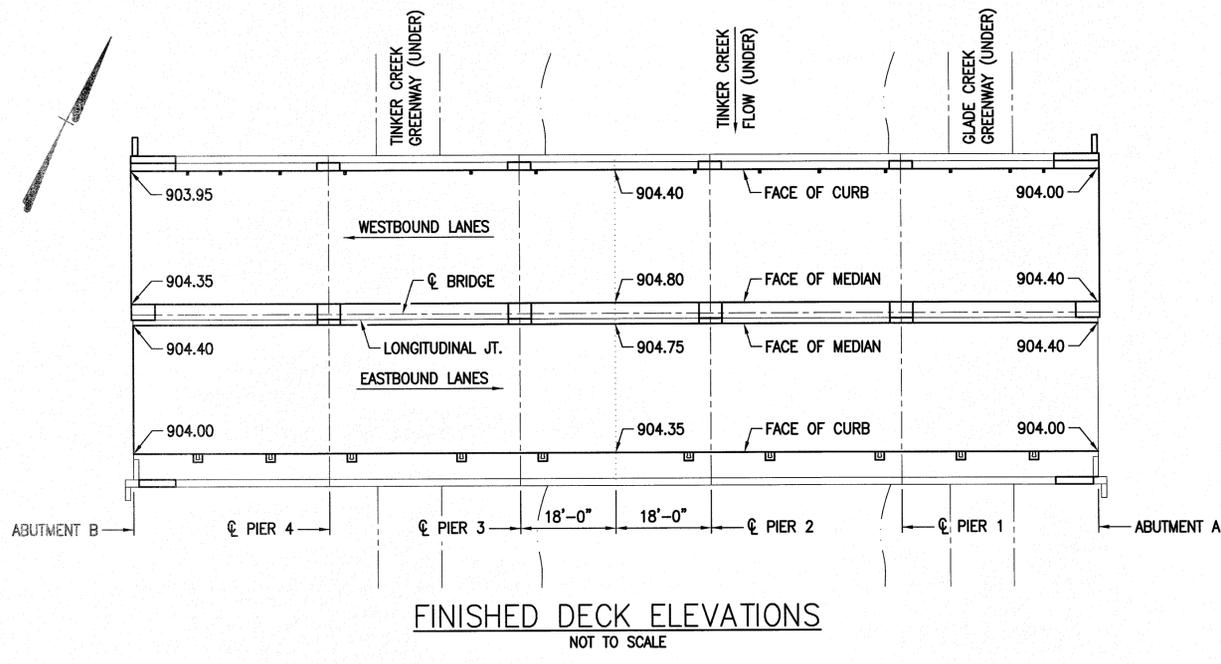
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**S-1**



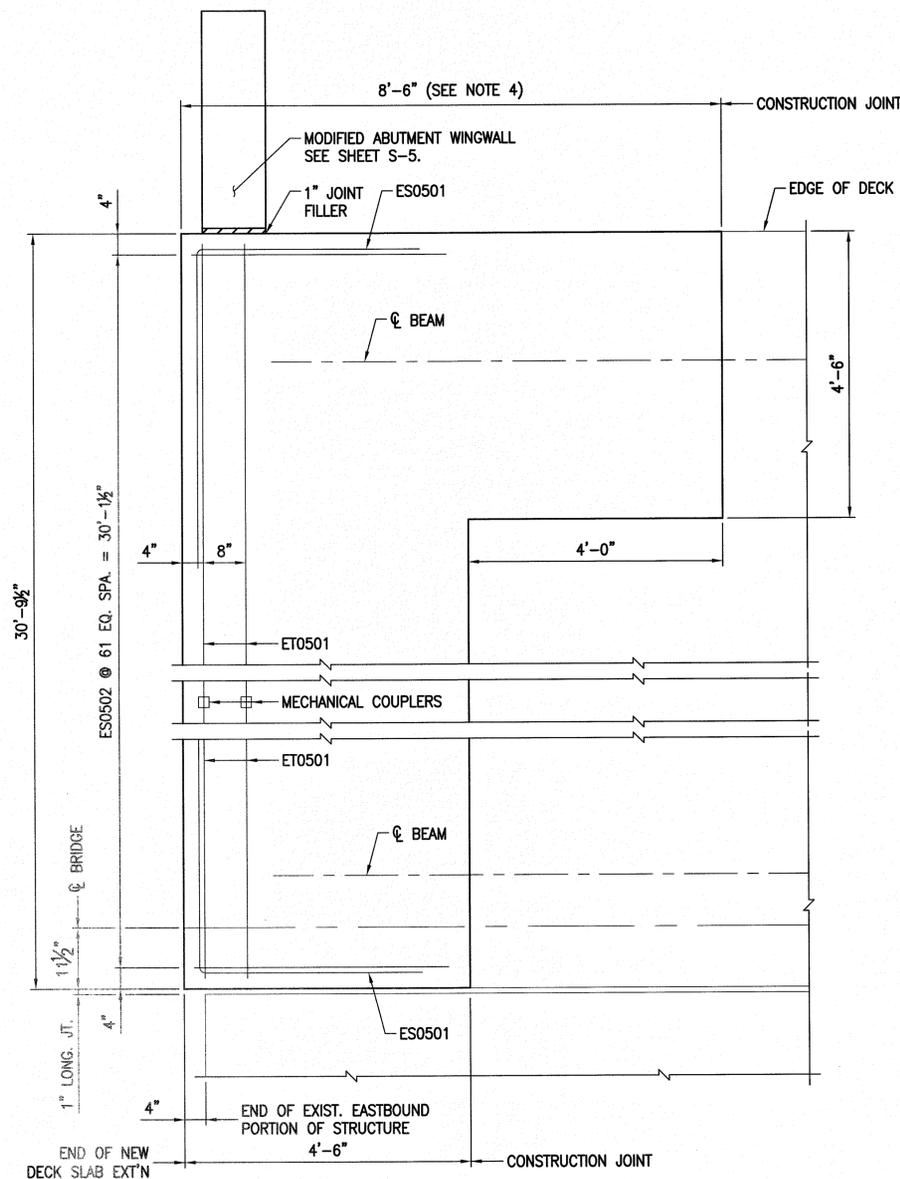
**BRIDGE REPAIRS PLAN**  
 SCALE: 1/8" = 1'-0"

**NOTES:**

- 1 PROPOSED JOINT CLOSURE. CLOSE ALL TRANSVERSE EXPANSION JOINTS TO THE LIMITS SHOWN ABOVE, EXCEPT THROUGH THE LONGITUDINAL JOINT, AS SHOWN IN DECK CLOSURE DETAILS ON SHEET S-2. JOINT CLOSURES SHALL NOT BE PERMITTED IN THE DOWNSTREAM CURB AND SIDEWALK.
- 2 PROPOSED DECK SLAB EXTENSION. EXTEND WESTBOUND TRAFFIC SECTION OF THE CONCRETE DECK AT EACH ABUTMENT AS SHOWN ON SHEET S-2.
- 3 PROPOSED TERMINAL WALL. REMOVE AND REPLACE EXISTING UPSTREAM TERMINAL WALLS AND PORTIONS OF BOTH ALUMINUM RAILINGS, AND EXTEND DOWNSTREAM TERMINAL WALLS AS SHOWN ON SHEET S-3.
- 4 PROPOSED WINGWALL MODIFICATION. MODIFY EXISTING UPSTREAM WINGWALLS AS SHOWN ON SHEET S-6.
- 5 PROPOSED DECK DRAIN REPLACEMENT. REPLACE EXISTING DECK DRAINS ALONG THE UPSTREAM CURB AND THE DOWNSTREAM SIDEWALK AT LOCATIONS IN 'BRIDGE REPAIRS PLAN' THIS SHEET AND BY DETAILS AS SHOWN ON SHEET S-5. ABANDONED EXISTING DRAINS SHALL BE FILLED WITH NON-SHRINK GROUT, CAPPED AND COVERED WITH LMC OVERLAY. ABANDONED EXISTING SCUPPER DRAIN PIPES SHALL BE CUT OFF UNDER THE STRUCTURE. FOLLOWING THE MILLING OPERATIONS, THE CONTRACTOR SHALL ENSURE THERE IS PROPER DRAINAGE AT ALL TIMES. DRILLING TEMPORARY HOLES THROUGH THE EXISTING CONCRETE DECK MAY BE REQUIRED.
- 6 PROPOSED LATEX MODIFIED CONCRETE (LMC) OVERLAY. MILL EXISTING ASPHALT TO THE TOP SURFACE OF THE EXIST. CONCRETE DECK. MILL EXIST. CONCRETE DECK TO A DEPTH OF 1/2" BELOW ITS TOP SURFACE. INSTALL LMC OVERLAY TO ELEVATIONS SHOWN IN 'FINISHED DECK ELEVATIONS' THIS SHEET. SEE SHEET S-4 FOR DECK OVERLAY DETAILS.
- 7 PROPOSED JOINT SEALER. INSTALL JOINT SEALER FULL LENGTH OF THE LONGITUDINAL JOINT AND FULL LENGTH OF ALL TRANSVERSE JOINTS IN THE DOWNSTREAM SIDEWALK ABOVE THE PIERS AS SHOWN IN 'JOINT DETAIL' ON SHEET S-6.
- 8 PROPOSED EPOXY AND COLOR COATING PLACEMENT. APPLY EPOXY AND COLOR COATING TO THE LIMITS SHOWN ON SHEET S-6. COLOR COATING OPERATIONS SHALL INCLUDE ALL FACES OF ALL TERMINAL WALLS AND ALL FACES OF THE EXISTING SUBSTRUCTURE MEMBERS ABOVE THE GROUNDLINE AND WATERLINE.
- 9 PROPOSED MODIFIED FOA-TYPE I. INSTALL MODIFIED FOA-TYPE I AS NOTED IN 'MISCELLANEOUS NOTES' ON SHEET G-2.
- 10 PROPOSED APPROACH MEDIAN REPLACEMENT. REPLACE APPROACH MEDIAN AT BOTH ABUTMENTS AS NOTED IN 'MISCELLANEOUS NOTES' ON SHEET G-2.
- 11 PROPOSED APPROACH CURB AND GUTTER REPLACEMENT. REPLACE APPROACH CURB AND GUTTER AS NOTED IN 'MISCELLANEOUS NOTES' ON SHEET G-2.
- 12 PROPOSED RETAINER ANGLE REPLACEMENT. REPLACE RETAINER ANGLES AND INSTALL NEW ANCHOR BOLTS FOR CONCRETE BEAMS IN THE WESTBOUND (UPSTREAM) PORTION OF THE BRIDGE AS SHOWN ON SHEET S-6.
- 13 REPLACE BENT/DAMAGED SECTIONS OF ALUMINUM RAILING AS DIRECTED BY THE OWNER.
- 14 PROPOSED TYPE B AND C PATCHING. REPAIR AREAS TO RECEIVE TYPE B AND C PATCHING AS DIRECTED BY THE OWNER, FOLLOWING MILLING OPERATIONS.
- 15 PROPOSED EROSION PROTECTION. PLACE AN EROSION PROTECTION (CONCRETE) SLAB UNDER STRUCTURE AND ADJACENT TO EACH SIDE OF THE TINKER CREEK GREENWAY IN SPAN 4 AS SHOWN ON SHEET S-6.
- 16 PROPOSED CLASS 1 RIPRAP WITH GEOTEXTILE FABRIC. PLACE RIPRAP UNDER THE STRUCTURE IN SPAN 1 AND SPAN 5 (BETWEEN ABUTMENT B BREASTWALL AND CONCRETE ENCASED SEWER LINE ONLY), AND AROUND THE DOWNSTREAM WINGWALL AT ABUTMENT B.

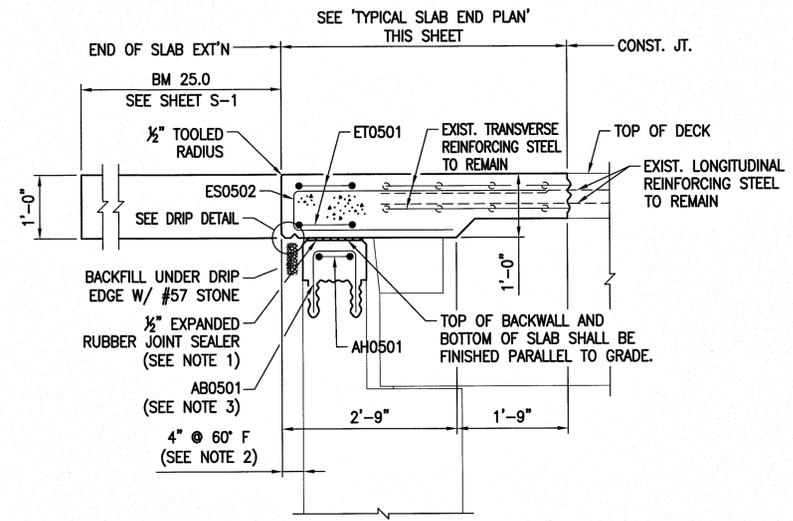


**FINISHED DECK ELEVATIONS**  
 NOT TO SCALE



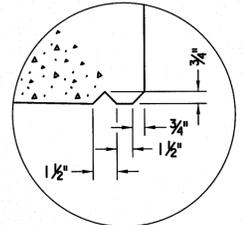
TYPICAL SLAB END PLAN  
SCALE: 3/4" = 1'-0"

- DECK SLAB PLAN NOTES:
1. DETAILS SHOWN ABOVE ARE AT ABUTMENT B AND ARE SIMILAR AT ABUTMENT A.
  2. EXISTING REINFORCING STEEL NOT SHOWN FOR CLARITY.
  3. ET0501 MAY BE CUT AND SPLICED WITH MECHANICAL COUPLERS ALONG THE CONSTRUCTION JOINT.
  4. SEE SHEET S-3. THIS DIMENSION SHALL MATCH THE TERMINAL WALL.

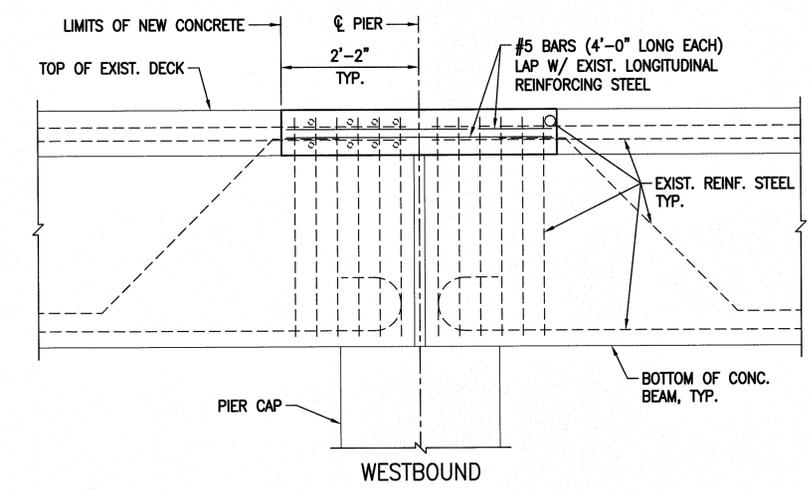
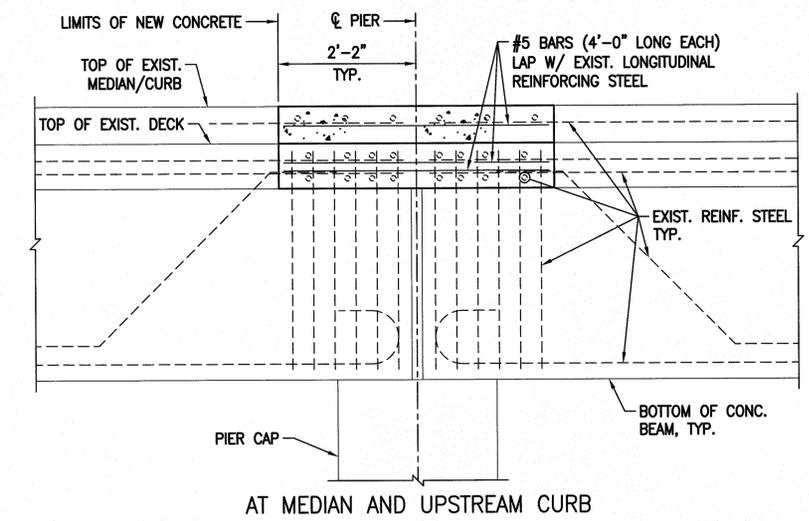
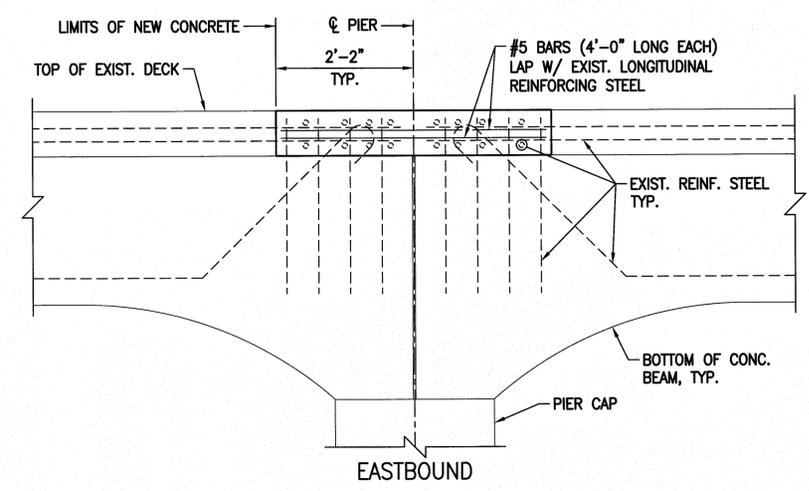


TYPICAL SLAB END DETAIL  
SCALE: 3/4" = 1'-0"

- DECK SLAB DETAIL NOTES:
1. THE 1/2" EXPANDED RUBBER JOINT FILLER SHALL EXTEND THE FULL LENGTH OF THE DECK SLAB EXTENSION.
  2. PROVIDE DIMENSION AS NECESSARY TO MAINTAIN 4" MINIMUM AT 60" F. ADJUSTMENTS TO DIMENSION SHALL BE VARIED BY 1/8" FOR EACH 10' VARIATION FROM 60".
  3. DRILL 6" AND SET AB0501 BARS IN EPOXY EP5 AT 12" O.C.
  4. ALL EXISTING REINFORCING STEEL SHALL REMAIN. ALL EXISTING REINFORCING STEEL SHALL BE BLAST CLEANED AND COATED WITH "DAREX CORROSION INHIBITOR (DCI)" PRIOR TO NEW CONCRETE PLACEMENT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR SHALL TAKE PRECAUTION TO NOT CUT OR DAMAGE THE EXISTING REINFORCING STEEL. ANY DAMAGED REINFORCING STEEL SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
  5. AH SERIES AND ET SERIES BARS PLACED DURING CONSTRUCTION PHASE 2 SHALL HAVE MECHANICAL COUPLERS CAPABLE OF DEVELOPING 125% OF THE STRENGTH OF THE SPLICED BARS. THE CONTRACTOR SHALL SUBMIT SAMPLES OF THE PROPOSED SPLICE SYSTEM TO THE ENGINEER FOR REVIEW AND APPROVAL. WELDED SPLICES MAY NOT BE SUBSTITUTED FOR MECHANICAL COUPLERS. THE COST OF MECHANICAL COUPLERS SHALL BE INCLUDED IN THE BID PRICE FOR DECK SLAB EXTENSION. THE CONTRACTOR SHALL COORDINATE BAR LENGTH REQUIREMENTS FOR THE SPLICE SYSTEM.
  6. THE CONTRACTOR SHALL ENSURE THAT THE LONGITUDINAL JOINT IS MAINTAINED DURING THE DECK SLAB EXTENSION OPERATIONS.
  7. THE VEHICLE TRAVEL LANES OF THE DECK SLAB EXTENSION SHALL RECEIVE A RAKED FINISH. THE UPSTREAM CURB OF THE DECK SLAB EXTENSION SHALL RECEIVE A BROOM FINISH.
  8. LATEX MODIFIED CONCRETE VERY EARLY STRENGTH (LMCVES) SHALL BE PERMITTED FOR ALL DECK EXTENSIONS AND SHALL BE IN ACCORDANCE WITH THE VDOT SPECIAL PROVISION FOR LATEX MODIFIED CONCRETE VERY EARLY STRENGTH.



DRIP DETAIL  
NOT TO SCALE



DECK CLOSURE DETAILS  
SCALE: 3/4" = 1'-0"

- DECK CLOSURE NOTES:
1. ALL EXISTING REINFORCING STEEL SHALL REMAIN. ALL EXISTING REINFORCING STEEL SHALL BE BLAST CLEANED AND COATED WITH "DAREX CORROSION INHIBITOR (DCI)" PRIOR TO CONCRETE PLACEMENT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR SHALL TAKE PRECAUTION TO NOT CUT OR DAMAGE THE EXISTING REINFORCING STEEL. ANY DAMAGED REINFORCING STEEL SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
  2. THE CONTRACTOR SHALL ENSURE THAT THE LONGITUDINAL JOINT IS MAINTAINED DURING THE DECK CLOSURE OPERATIONS.
  3. THE DECK CLOSURE IN THE TRAVEL LANES SHALL RECEIVE A RAKED FINISH. THE DECK CLOSURE IN THE SIDEWALKS AND MEDIAN SHALL RECEIVE A BROOM FINISH.
  4. LATEX MODIFIED CONCRETE VERY EARLY STRENGTH (LMCVES) SHALL BE PERMITTED FOR ALL JOINT CLOSURES AND SHALL BE IN ACCORDANCE WITH THE VDOT SPECIAL PROVISION FOR LATEX MODIFIED CONCRETE VERY EARLY STRENGTH.



Date	
Revisions	

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 Date: 5/23/16

**Mattem & Craig**  
 ENGINEERS-SURVEYORS  
 701 FIRST STREET, S.W.  
 ROANOKE, VIRGINIA 24016  
 (540) 345-9342  
 FAX (540) 345-7691

ROUTE 24 (DALE AVE OVER TINKER CREEK) BRIDGE  
 REHABILITATION  
 DECK SLAB EXTENSION AND  
 CLOSURE DETAILS  
 CITY OF ROANOKE, VIRGINIA

Vertical Scale:  
N/A

Horizontal Scale:  
AS SHOWN

Commission Number:  
3430H

Sheet No.:

S-2



Date	Revisions

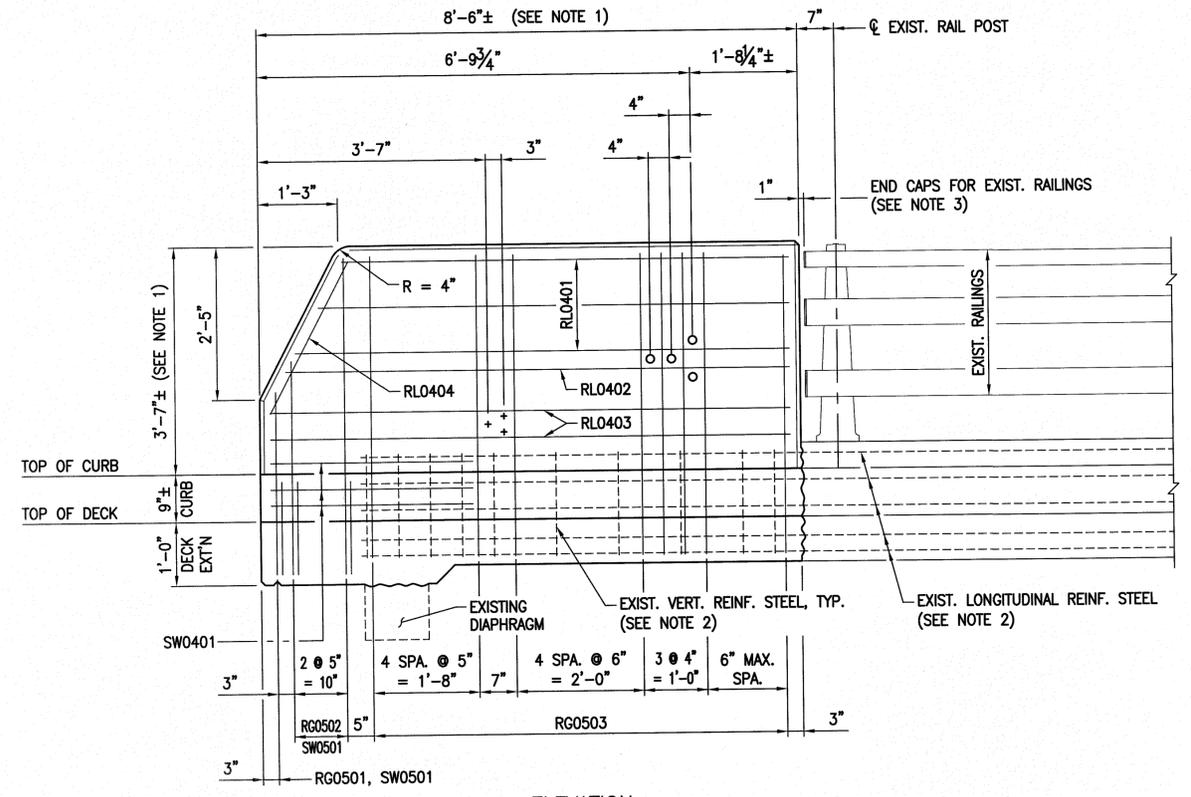
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**Mattern & Craig**  
 ENGINEERS/SURVEYORS  
 701 FIRST STREET, S.W.  
 ROANOKE, VIRGINIA 24016  
 (540) 345-9342  
 FAX (540) 345-7891

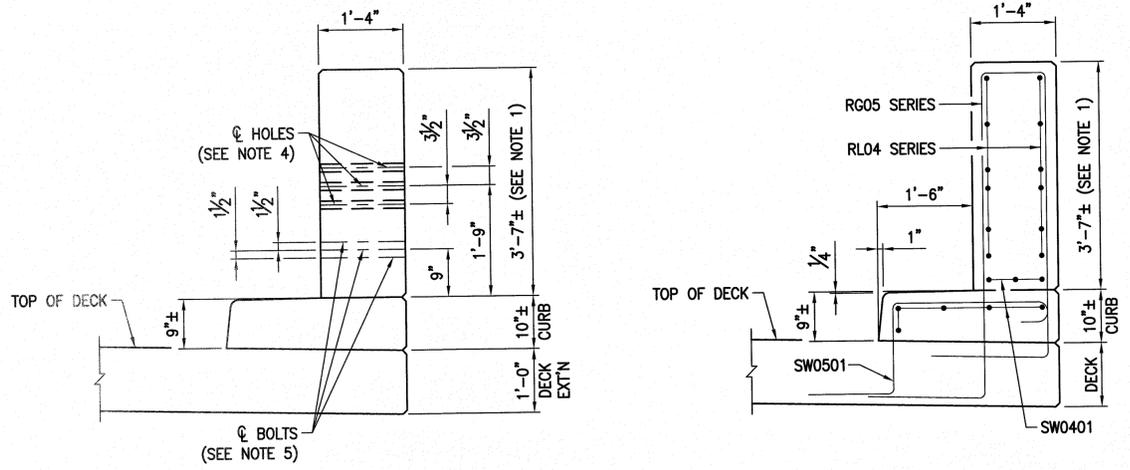
ROUTE 24 (DALE AVE OVER TINKER CREEK) BRIDGE  
 REHABILITATION  
**TERMINAL WALLS**  
 CITY OF ROANOKE, VIRGINIA

Vertical Scale: N/A  
 Horizontal Scale: AS SHOWN  
 Commission Number: 3430H

Sheet No.: **S-3**



ELEVATION

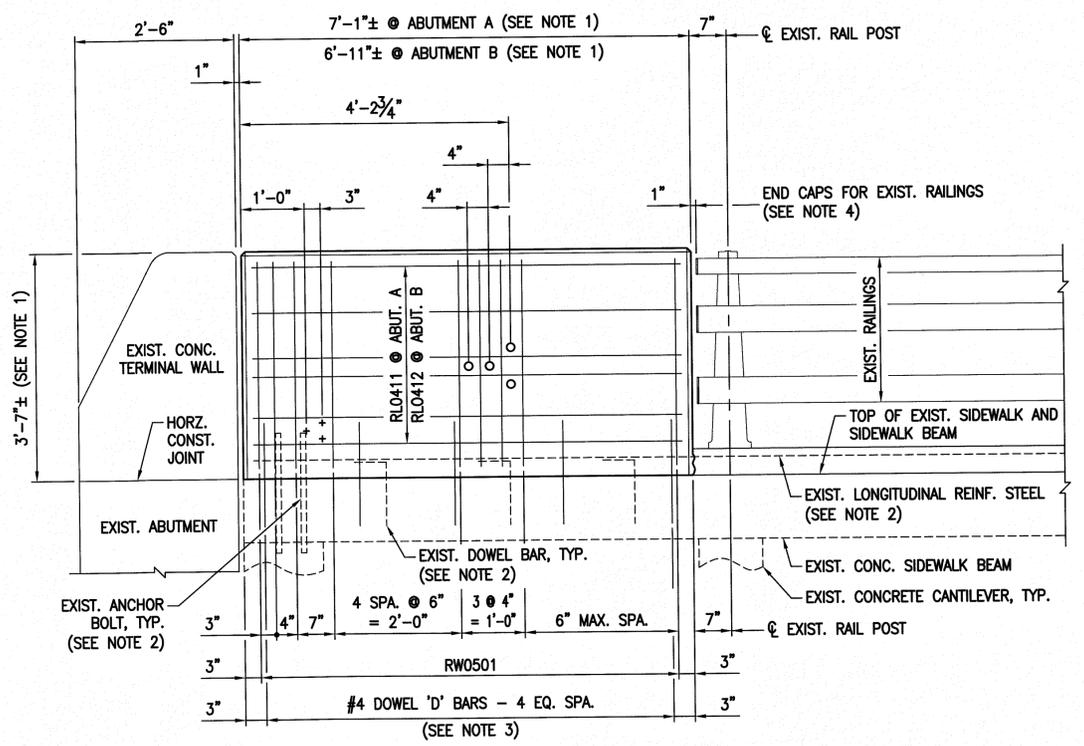


TERMINAL END VIEW

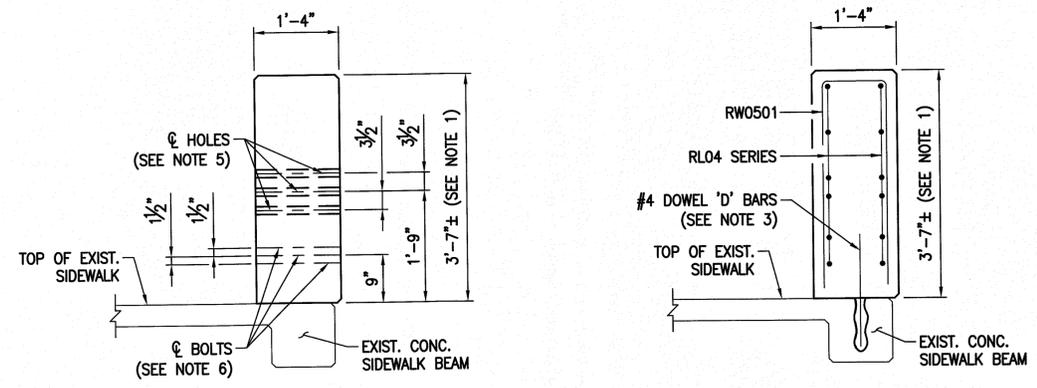
TERMINAL SECTION

UPSTREAM TERMINAL WALL  
 SCALE: 3/4" = 1'-0"

- NOTES:
- CONTRACTOR SHALL FIELD VERIFY DIMENSIONS PRIOR TO CONSTRUCTION. TERMINAL WALL LENGTH SHALL END 7" FROM  $\phi$  OF EXISTING RAIL POST. TERMINAL WALL HEIGHT SHALL MATCH HEIGHT OF EXISTING RAIL POST. ALL BEVELS FOR CONCRETE SHALL BE  $\frac{3}{4}$ " UNLESS OTHERWISE NOTED. TERMINAL WALLS ARE DETAILED TO TAKE GUARDRAIL ATTACHMENT GR-FOA-1.
  - ALL EXISTING REINFORCING STEEL, SHOWN OR NOT SHOWN ON THESE PLANS, SHALL REMAIN. ALL EXISTING REINFORCING STEEL SHALL BE BLAST CLEANED AND COATED WITH "DAREX CORROSION INHIBITOR (DCI)" PRIOR TO CONCRETE PLACEMENT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR SHALL TAKE PRECAUTION TO NOT CUT OR DAMAGE THE EXISTING REINFORCING STEEL. ANY DAMAGED REINFORCING STEEL SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
  - CUT AND CAP EXIST. RAILINGS TO MAINTAIN 1" GAP BETWEEN CAP AND TERMINAL WALL. CAP MATERIAL AND DIMENSIONS SHALL MATCH EXISTING CONDITIONS.
  - HOLDS, WHERE SHOWN, SHALL BE FORMED WITH SLEEVES OF  $\frac{1}{2}$ " DIAMETER NOMINAL PIPE.
  - BOLTS FOR GUARDRAIL ATTACHMENT, WHERE SHOWN, SHALL BE  $\frac{5}{8}$ " DIAMETER EXPANSION ANCHOR BOLTS, 6" LONG, TO BE DRILLED AND INSTALLED WHERE RUB RAIL IS ATTACHED.
  - DECK EXTENSION REINFORCING STEEL NOT SHOWN FOR CLARITY. FOR DETAILS OF DECK EXTENSION REINFORCING STEEL, SEE SHEET S-2.
  - SEE "WINGWALL ELEVATION" ON SHEET S-5 FOR MODIFICATIONS TO EACH UPSTREAM WINGWALL.
  - CONTRACTOR SHALL USE VDOT A4 POST AND RAIL CONCRETE FOR TERMINAL WALLS.



ELEVATION



TERMINAL END VIEW

TERMINAL SECTION

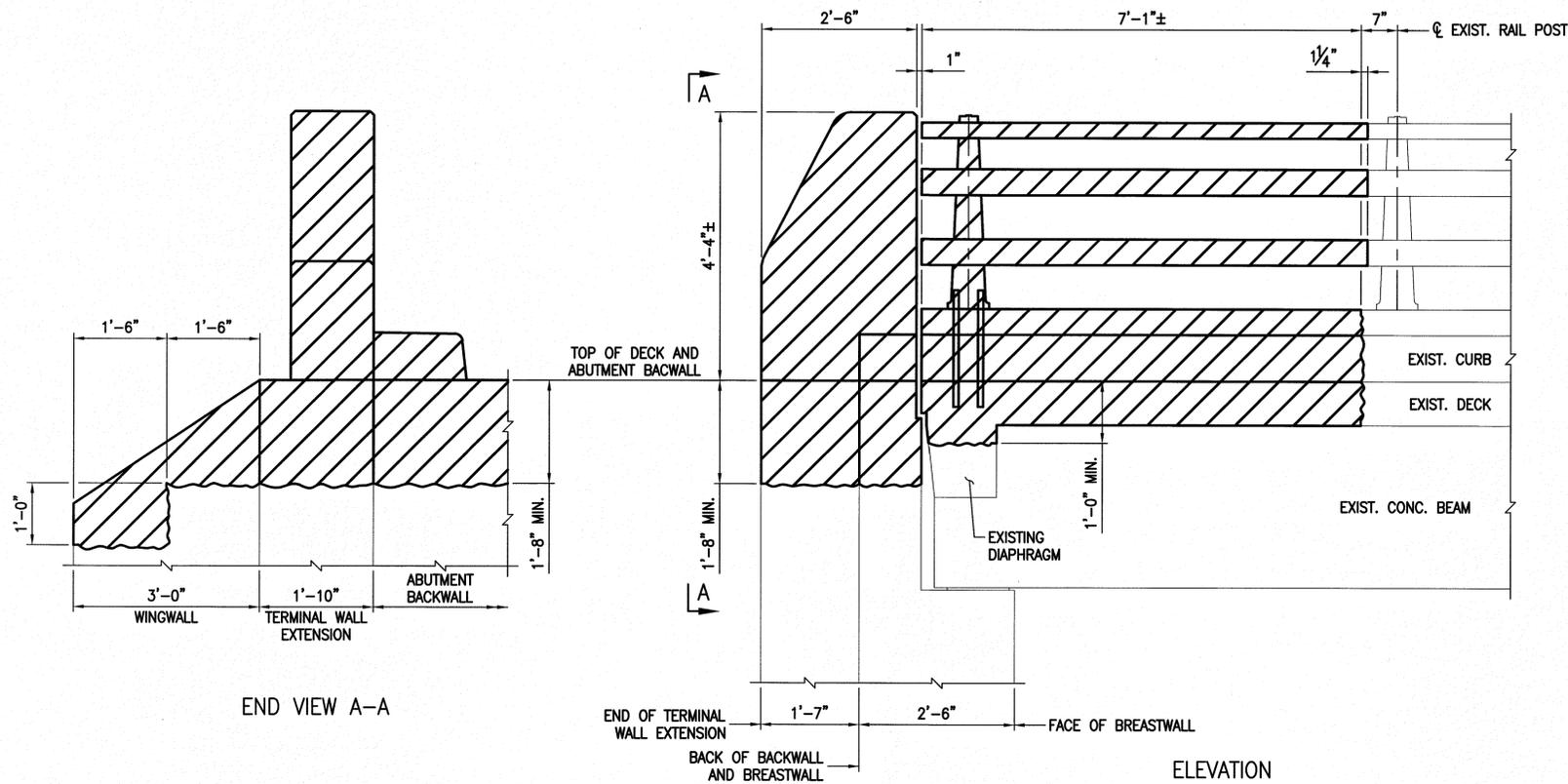
DOWNSTREAM TERMINAL WALL  
 SCALE: 3/4" = 1'-0"

- NOTES:
- CONTRACTOR SHALL FIELD VERIFY DIMENSIONS PRIOR TO CONSTRUCTION. TERMINAL WALL LENGTH SHALL END 7" FROM  $\phi$  OF EXISTING RAIL POST. TERMINAL WALL HEIGHT SHALL MATCH HEIGHT OF EXISTING RAIL POST. ALL BEVELS FOR CONCRETE SHALL BE  $\frac{3}{4}$ " UNLESS OTHERWISE NOTED. TERMINAL WALLS ARE DETAILED TO TAKE GUARDRAIL ATTACHMENT GR-FOA-1.
  - ALL REINFORCING STEEL, INCLUDING DOWEL BARS AND RAIL POST ANCHOR BOLTS, SHOWN OR NOT SHOWN ON THESE PLANS, SHALL REMAIN. EXISTING DOWEL BARS SHALL BE STRAIGHTENED. ALL EXISTING REINFORCING STEEL, INCLUDING DOWEL BARS AND RAIL POST ANCHOR BOLTS, SHALL BE BLAST CLEANED AND COATED WITH "DAREX CORROSION INHIBITOR (DCI)" PRIOR TO CONCRETE PLACEMENT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR SHALL TAKE PRECAUTION TO NOT CUT OR DAMAGE THE EXISTING REINFORCING STEEL. ANY DAMAGED REINFORCING STEEL SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
  - DRILL DOWEL 20" LONG (MIN.) "D" BARS 8" INTO EXISTING CONCRETE AND SET IN EPOXY.
  - CUT AND CAP EXIST. RAILINGS TO MAINTAIN 1" GAP BETWEEN CAP AND TERMINAL WALL. CAP MATERIAL AND DIMENSIONS SHALL MATCH EXISTING CONDITIONS.
  - HOLDS, WHERE SHOWN, SHALL BE FORMED WITH SLEEVES OF  $\frac{1}{2}$ " DIAMETER NOMINAL PIPE.
  - BOLTS FOR GUARDRAIL ATTACHMENT, WHERE SHOWN, SHALL BE  $\frac{5}{8}$ " DIAMETER EXPANSION ANCHOR BOLTS, 6" LONG, TO BE DRILLED AND INSTALLED WHERE RUB RAIL IS ATTACHED.
  - CONTRACTOR SHALL USE VDOT A4 POST AND RAIL CONCRETE FOR TERMINAL WALLS.



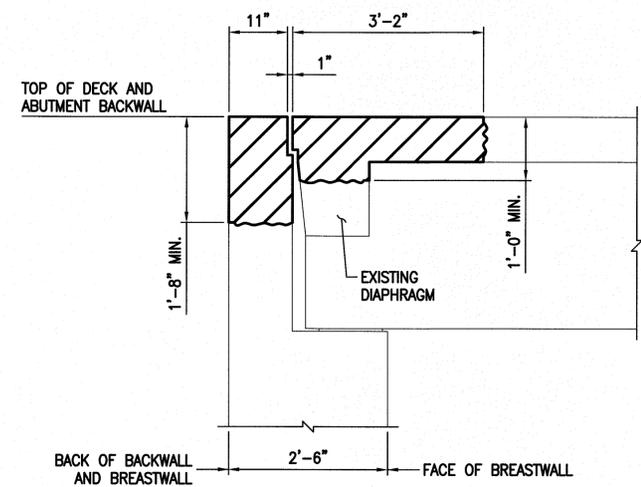






END VIEW A-A

TYPICAL SLAB END AND RAILING DEMOLITION (UPSTREAM SIDE ONLY)  
NOT TO SCALE

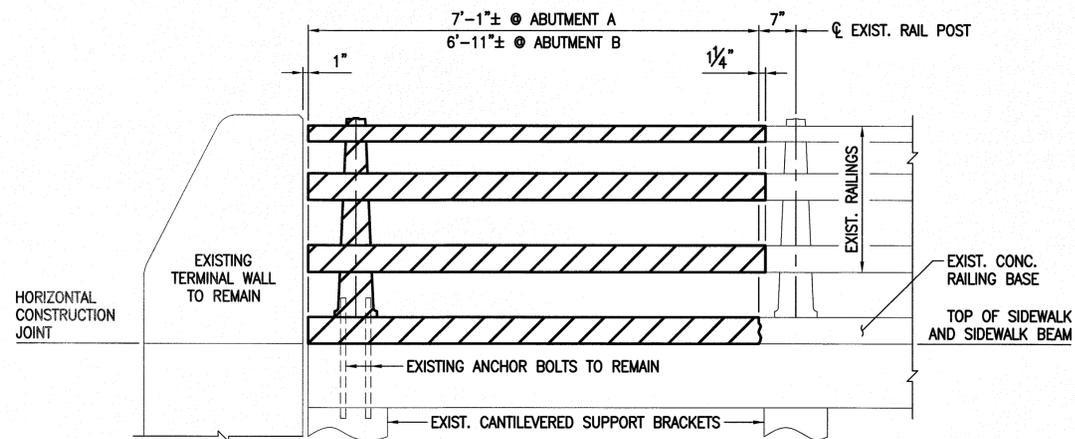


TYPICAL SLAB END DEMOLITION (WBL ONLY)  
NOT TO SCALE

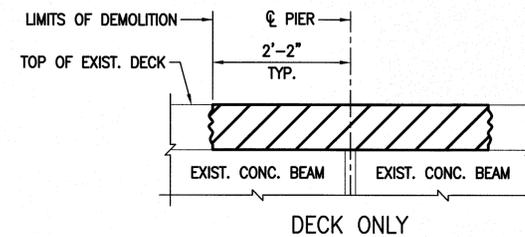
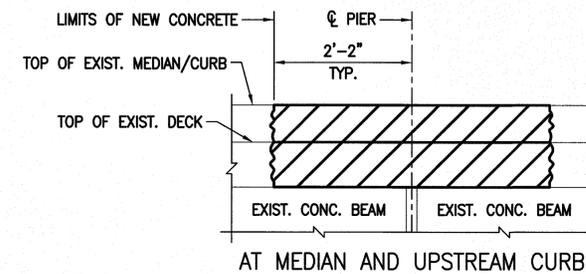
DENOTES LIMITS OF DEMOLITION

NOTES:

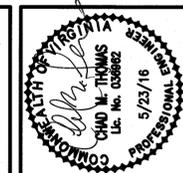
1. SAW CUT 1" DEEP AND REMOVE EXISTING CONCRETE TO THE LIMITS SHOWN IN ACCORDANCE WITH SECTION 412 AND 413 OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS. PROVIDE ROUGHENED SURFACE WITH 1/4" MIN. PROFILE AND APPLY A VDOT APPROVED BONDING AGENT PRIOR TO PLACEMENT OF NEW CONCRETE. ALL EXISTING REINFORCING STEEL, AND ANCHOR BOLTS NOT REMOVED, SHALL REMAIN AND SHALL BE BLAST CLEANED AND COATED WITH "DAREX CORROSION INHIBITOR (DCI)" PRIOR TO CONCRETE PLACEMENT. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS NOT TO CUT OR DAMAGE EXISTING STEEL. ANY DAMAGED REINFORCING STEEL SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
2. CUT AND REMOVE EXISTING ALUMINUM RAILINGS AND RAIL POSTS TO THE LIMITS SHOWN.



TYPICAL RAILING DEMOLITION (DOWNSTREAM SIDE ONLY)  
NOT TO SCALE



DECK CLOSURE DEMOLITION  
NOT TO SCALE



Date:	
Revisions:	

Issue Date:	5/23/16
Drawn By:	DKA
Designed By:	MLF
Checked By:	CMT
Date:	5/23/16

**Mattem & Craig**  
ENGINEERS & SURVEYORS  
701 FIRST STREET, S.W.  
ROANOKE, VIRGINIA 24016  
(540) 345-9342  
FAX (540) 345-7891

ROUTE 24 (DALE AVE OVER TINKER CREEK) BRIDGE  
REHABILITATION  
**DEMOLITION**  
CITY OF ROANOKE, VIRGINIA

Vertical Scale:  
N/A

Horizontal Scale:  
AS SHOWN

Commission Number:  
3430H

Sheet No.:  
**S-7**