MUSEUM OF THE SHENANDOAH VALLEY
901 AMHERST STREET
WINCHESTER, VIRGINIA 22601

PUBLIC TRAILS - SITE IMPROVEMENTS
SITE DEVELOPMENT PLAN

GENERAL NOTES

1. The property delineated on this plan is located on the property of the Glass–Glen Burnie Foundation at 901 Amherst Street within the limits of the City of Winchester, Virginia. The Museum of the Shenandoah Valley (MSV) is proposing to construct the Phase II improvements portion of the site as part of their continued development of this facility. This phase shall include a new entrance across from Wood Avenue, the main access roadway, a new service roadway, revitalization and expansion of the existing parking facility, and new fitness trails throughout the MSV parcel. This plan addresses these site improvements for the Phase II expansion.

2. Property Owner :
Glass Glen Burnie Foundation
P.O. Box 2400
Owasso, Oklahoma 74055

Trustees:
Mr. John B. Adams, Jr., Mr. Todd Brockwell,
Dr. Peter G. Bullough, Mr. James T. Holland,
Mr. Allan G. Paterson, Jr., & Mr. David H. O. Roth

3. Developer:
Museum of the Shenandoah Valley
901 Amherst Street
Winchester, Virginia 22601

Contacts: Ms. Dana Evans, Executive Director
Mr. Perry Mathewes, Director of Gardens
Telephone: (540) 662–1473

City of Winchester, Virginia
Department of Public Utilities:
Rouss City Hall
15 North Cameron Street
Winchester, Virginia 22601

Contact: Mr. Perry Eisenach
Public Services Director
Telephone: (540) 667–1815

4. Engineer/Surveyor:
PAINTER–LEWIS, P.L.C.
817 Cedar Creek Grade, Suite 120
Winchester, Virginia 22601

Contact: Mr. Timothy G. Painter, P.E.
Telephone: (540) 662–5792

5. Topographic information shown on these plans was taken from an aerial survey that was performed by Virginia Mapping, Inc. and compiled by the Survey Division of Painter–Lewis, P.L.C., in March, 2015. Additional and supplemental field surveying for this facility development was done by Survey Division of Painter–Lewis, P.L.C.

6. Site Data:

Tax Map Numbers:	171–1–21	
Parcel Area:	195.0712 Acres	
Zoning:	Education, Institution and Public Use District – EIP	
Existing Use:	Museum	
Proposed Use:	Museum	
Front Yard Setback (R.O.W.)	Required: 35'	Provided: Existing
Side Yard Setback:	Required: 10'	Provided: Existing
Rear Yard Setback:	Required: 25'	Provided: Existing
Maximum Building Height:	Allowed: 35'	Provided: Existing

7. Proposed Site Development:

Impervious Areas:	Entrance Area:	28,294.51 Sq. Ft. (0.650 Ac.)
	Main Access Roadways:	102,334.88 Sq. Ft. (2.349 Ac.)
	Service Roadway:	38,700.76 Sq. Ft. (0.888 Ac.)
	Event Lawn:	36,496.62 Sq. Ft. (0.838 Ac.)
	Paved Parking Areas:	18,962.92 Sq. Ft. (0.435 Ac.)
	Paver Parking Areas:	73,705.09 Sq. Ft. (1.692 Ac.)
Landscaping Requirement Areas: Subtotal	Impervious Areas:	298,494.78 Sq. Ft. (6.852 Ac.)
	Buildings (Ex. & Pr.):	88,728.00 Sq. Ft. (2.037 Ac.)
	Ex. Stone Drives:	22,613.41 Sq. Ft. (0.519 Ac.)
	Paved Fitness Trails:	89,797.01 Sq. Ft. (2.061 Ac.)
Building & Miscellaneous Areas: Subtotal:	Impervious Areas:	201,138.42 Sq. Ft. (4.618 Ac.)
Total Impervious Areas:		499,633.20 Sq. Ft. (11.470 Ac.)

CONSTRUCTION GENERAL NOTES:

1. All work and materials shall conform to the current standards of the City of Winchester, Virginia, the Virginia Department of Transportation (V.D.O.T.), the 2016 edition of the V.D.O.T. Standards and Specifications, the Virginia Uniform Statewide Building Code, and the rules and regulations of the Americans with Disabilities Act, and Buy American standards, where applicable.

2. Erosion and sediment control shall conform to the standards and specification of the Commonwealth of Virginia and the City of Winchester, Virginia, where applicable. The U.S. Army Corps of Engineers – Norfolk District has reviewed the proposed scope of work and has authorized the Museum of the Shenandoah Valley to proceed under the Norfolk District's Regional Permit 11–RP–5.

3. It shall be the responsibility of the contractor to notify "Miss Utility" at 811 at least two (2) working days prior to commencement of any land disturbing activity.

4. All existing utilities have been shown based upon the best available information. However, there may be existing utilities which are not shown and should be located. Therefore, it shall be the responsibility of the contractor to verify the location of all existing utilities prior to construction. Verification shall be done by way of a field survey or excavated test pits. Any discrepancies between these plans and the actual field conditions shall be reported immediately to the engineer or the City of Winchester, Virginia.

5. All proposed utilities shall be installed underground.

6. It shall be the responsibility of the contractor to obtain all permits necessary for construction prior to commencement of work. An approved set of construction documents shall be present on the site at all times.

7. Topographic information was derived based upon U.S.G.S. datum by a field survey performed by Survey Division of Painter–Lewis, P.L.C. with an established two foot (2') contour interval. Confirm vertical elevation benchmark information with the project surveyor.

8. No Geo–technical report has been furnished for this project.

9. All radii designations indicate centerline of the trail, face of curb, edge of pavement, or edge of stone pavement, where applicable.

10. The contractor shall coordinate the relocation of and the connection to all existing utilities with the appropriate utility company, if applicable.

UTILITY COMPANIES:

Verizon	(540) 665–3156
Shenandoah Valley Elec. Coop.	(540) 722–5830
Shenandoah Gas Company	(540) 869–1111
Water and Sewer	(540) 667–1815

11. Where plans call for matching existing concrete or pavement, the CONTRACTOR shall provide cut joint or asphalt overlay as required to provide a smooth transition.

12. All property corner markers disturbed or otherwise obscured by construction are to be replaced and verified by a certified land surveyor at the CONTRACTOR's expense.

13. Pavement construction and material items called for on the plans refer to V.D.O.T. standards and specifications and shall meet the requirements of the current 2016 edition.

14. Fire lanes shall be delineated as directed by the Winchester Fire Marshal.

15. The CONTRACTOR shall obtain permission from adjoining property owners prior to conducting any off–site construction activities.

16. The CONTRACTOR shall coordinate the relocation of the existing utilities with the appropriate utility company as necessary.

17. The CONTRACTOR shall obtain a Land Disturbance Permit from the Winchester Public Utilities Department prior to initiating any site work.

18. All exterior lights shall be positioned to preclude direct illumination off site.

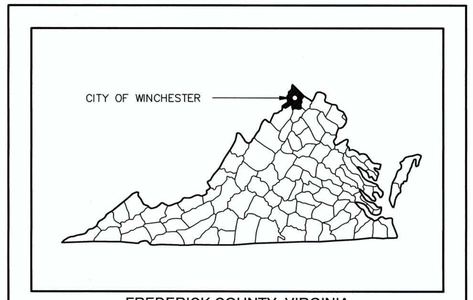
19. Add topsoil adjacent to the trail and sidewalks as required to account for soil settlement.

20. Provide a separation of at least three feet from any site feature more than six inches above or below the elevation of the closest point in any parking area.

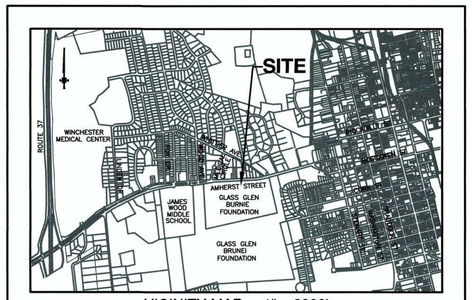
21. Provide traffic controls during construction activities in the public rights–of–way.

22. Provide "as–built" drawings for all improvements as required by the City of Winchester. Coordinate the scope and format of the as–builts with the City of Winchester Utility Department prior to beginning construction.

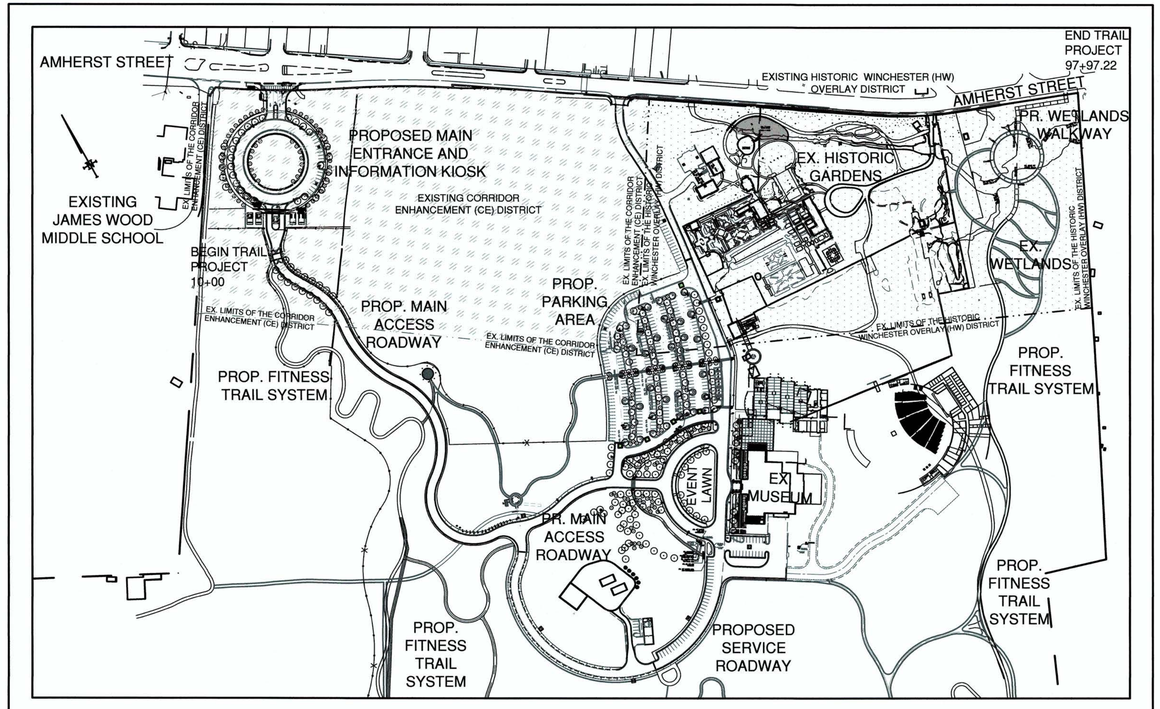
23. Construction of this project may not begin until plans have been approved and a pre–construction meeting has been held.



FREDERICK COUNTY, VIRGINIA



VICINITY MAP 1" = 2000'



PROJECT OVERVIEW
1" = 200.0'

CITY OF WINCHESTER, VIRGINIA
VDOT PROJECT EN17-138-111; UPC 111418

LIST OF DRAWINGS:

SHEET 1/19: PUBLIC TRAILS – COVER SHEET
SHEET 2/19: PUBLIC TRAILS – TOTAL PARCEL: GENERAL SITE OVERVIEW PLAN
SHEET 3/19: PUBLIC TRAILS – PARTIAL GENERAL LAYOUT PLAN (FRONT)
SHEET 4/19: PUBLIC TRAILS – PARTIAL GENERAL LAYOUT PLAN (REAR)
SHEET 5/19: PUBLIC TRAILS – PARTIAL GENERAL GRADING PLAN (FRONT)
SHEET 6/19: PUBLIC TRAILS – PARTIAL GENERAL GRADING PLAN (REAR)
SHEET 7/19: PUBLIC TRAILS – PARTIAL GRADING PLAN (SECTION A)
SHEET 8/19: PUBLIC TRAILS – PARTIAL GRADING PLAN (SECTION B)
SHEET 9/19: PUBLIC TRAILS – PARTIAL GRADING PLAN (SECTION C)
SHEET 10/19: PUBLIC TRAILS – PARTIAL GRADING PLAN (SECTION D)
SHEET 11/19: PUBLIC TRAILS – PARTIAL GRADING PLAN (SECTION E)
SHEET 12/19: PUBLIC TRAILS – WETLANDS AREA: TRAIL & FLOATING WALKWAYS
SHEET 13/19: PUBLIC TRAILS – JOHN KERR SCHOOL TRAIL CONNECTIONS
SHEET 14/19: PUBLIC TRAILS – WETLANDS AREA: BRIDGE & DOCK DETAILS
SHEET 15/19: PUBLIC TRAILS – SITE PEDESTRIAN BRIDGE PLANS & DETAILS
SHEET 16/19: PUBLIC TRAILS – MAIN ENTRANCE LAYOUT & LANDSCAPING PLAN
SHEET 17/19: PUBLIC TRAILS – E&S CONTROL NARRATIVE AND DETAILS
SHEET 18/19: PUBLIC TRAILS – WETLANDS AREA: WETLANDS ELEMENTS DETAILS
SHEET 19/19: PUBLIC TRAILS – MISCELLANEOUS CONSTRUCTION DETAILS

UTILITY LEGEND

—W— W—	EX. WATER LINE
—W— W—	PR. WATER LINE
	STORM SEWER LINE
	SANITARY SEWER LINE
—GAS— GAS—	GAS LINE
—UGE—	UNDERGROUND ELECTRIC LINE
—OHE&T—	OVERHEAD ELECTRIC AND TELEPHONE LINE

RESPONSIBLE LAND DISTURBER

NAME: _____
CERTIFICATION #: _____
DATE: _____

THE RESPONSIBLE LAND DISTURBER IS THE PARTY RESPONSIBLE FOR CONSTRUCTION & MAINTENANCE OF ALL THE LAND DISTURBING ACTIVITIES AS SET FORTH IN THESE PLANS.

APPROVED

PLANNING DIRECTOR DATE

SITE PLAN EXPIRES FIVE (5) YEARS FROM DATE OF APPROVAL

MUSEUM OF THE SHENANDOAH VALLEY
901 AMHERST STREET
WINCHESTER, VIRGINIA 22601
PUBLIC TRAILS - IMPROVEMENTS PLAN
VDOT PROJECT EN17-138-111; UPC 111418

COMMONWEALTH OF VIRGINIA
TIMOTHY G. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

PAINTER-LEWIS, P.L.C.
CONSULTING ENGINEERS
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
Telephone: (540) 662–5792
Facsimile: (540) 662–5793
Email: office@painterlewis.com

JOB NO.: 1709011
SEPTEMBER 10, 2018
LATEST REVISION DATE: MAY 20, 2019

SHEET: 1/19

ABBREVIATIONS

ASSY.	ASSEMBLY
B.F.	BASEMENT FLOOR
BLK.	BLOCK
BC	BOTTOM OF CURB
BML	BUILDING MOUNTED LIGHT
BP	BREAK POINT
BSBD.	BASEBOARD
CG-2	VDOT CURB
CG-6	VDOT CURB & GUTTER
CIP	CAST IN PLACE CONCRETE
CL	CLASS
CMF	CONCRETE MONUMENT FOUND
CPP	CORRUGATED POLYETHYLENE PIPE
CMP	CORRUGATED METAL PIPE
CMPA	CORRUGATED METAL PIPE ARCH
CO	CLEAN OUT
DIA.	DIAMETER
DS	DOWNSPOUT
EOP	EDGE OF PAVEMENT
EOG	EDGE OF GRAVEL
EX.	EXISTING
F.F.	FIRST FLOOR
F.F.E.	FINISHED FLOOR ELEVATION
FDC	FIRE DEPARTMENT CONNECTION
FG	FACE OF GUTTER
FH	FIRE HYDRANT
F.L.S.	FIRE LANE SIGN
F.LT.	FLOOD LIGHT
Ga.	GAUGE
GM	GAS METER
GV	GAS VALVE or GATE VALVE
HCR	HANDICAP RAMP
HB	HOSE BIB
HDR CURB	6" HEADER CURB
HP	HIGH POINT
HTR.	HEATER
INC	INCREASER
INV	INVERT
IPF	IRON PIPE FOUND
IPS	IRON PIPE SET
LP	LOW POINT
LT.	LIGHT
MLP	METAL LIGHT POLE
MPD	MULTI-PRODUCT DISPENSER
MP	METAL POST
MH	MANHOLE
NDC	NOSE DOWN CURB
N.P.S.	NO PARKING SIGN
NLT	NO LEFT TURN
NRT	NO RIGHT TURN
N.T.S.	NOT TO SCALE
OHE	OVERHEAD ELECTRIC
OHT	OVERHEAD TELEPHONE
PIV	POST INDICATOR VALVE
PL	PROPERTY LINE
PP	POWER POLE
PROP.	PROPOSED
PVMT	PAVEMENT
RCP	REINFORCED CONCRETE PIPE
R.D.	ROOF DRAIN
RED.	REDUCER
R.O.	ROCK OUTCROP
SAN.	SANITARY
SEW.	SEWER
STD.	STANDARD
T.B.D.	TO BE DEMOLISHED
T.B.R.	TO BE REMOVED or TO BE REMOVED & RELOCATED
T.B.P.	TO BE PRESERVED or PROTECTED
TB or T.B.	THRUST BLOCK
TC	TOP OF CURB
TEL.	TELEPHONE
TRB	TELEPHONE RISER BOX
TVRB	TELEVISION RISER BOX
TYP. or TYP.	TYPICAL
UGE	UNDERGROUND ELECTRIC
UGG	UNDERGROUND GAS
UG CATV	UNDERGROUND CABLE T.V.
UGT	UNDERGROUND TELEPHONE
USWMF	UNDERGROUND STORM WATER MANAGEMENT FACILITY
XFMR	ELECTRIC TRANSFORMER
WL	WATERLINE
WM	WATER METER
WPP	WOOD POWER POLE
WTP	WOOD TELEPHONE POLE
WV	WATER VALVE
5'R	RADIUS IN FEET
*00.00	PROPOSED SPOT ELEVATION
x(00.00)	EXISTING SPOT ELEVATION
	HATCHING INDICATES REVERSED PITCH IN THE GUTTER PAN: PITCH TO BE 1/2" PER FOOT. TRANSITION THE GUTTER OVER A 10' LENGTH (TYP).

US ARMY CORP OF ENGINEERS: LETTER OF ACCEPTANCE

DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1096

Reply to Attention of

June 6, 2018

Northern Virginia Regulatory Section
NAO-2014-00783 (Town Run)

Mr. Timothy G. Painter PE
Painter-Lewis PLC
817 Cedar Creek Grade, Suite 120
Winchester, VA 22601

Dear Mr. Painter:

This letter is in reference to a request, on behalf of The Museum of the Shenandoah Valley, to perform work in waters of the United States on the property at 901 Amherst Street in Winchester, Virginia. The project consists of the construction of a walking trail and boardwalk at the subject location. The project is a portion of the Phase II Site Improvements.

This activity has been reviewed and found to satisfy the criteria contained in the Corps Nationwide Permit Number 42 (Reissuance of the Corps Nationwide Permits was published in the Federal Register (72 FR 11092) on January 6, 2017 and the regulations governing their use can be found in 33 CFR 330 published in Volume 56, Number 226 of the Federal Register dated November 22, 1991. The Nationwide Permits can be found at www.nao.usace.army.mil/Missions/Regulatory)

Provided the work is performed in accordance with the submittal dated April 16, 2018 and the conditions of the Nationwide Permits are met, an individual Department of the Army Permit will not be required. In addition, the Virginia Department of Environmental Quality has provided 401 certification for Nationwide Permit Number 42. You may contact the Virginia Marine Resources Commission at 757-247-2200 for further information concerning their permit requirements.

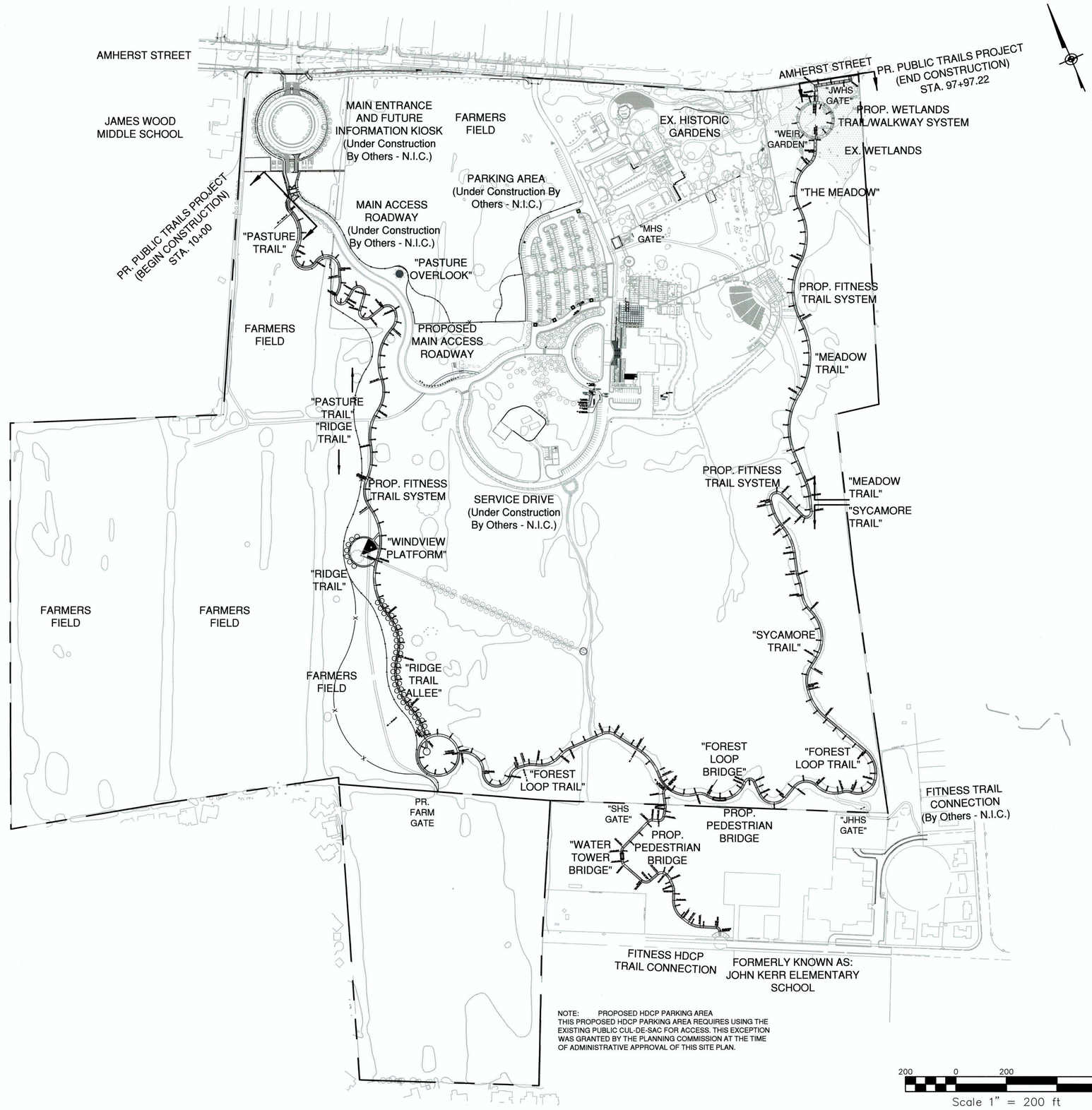
This verification is valid until March 18, 2022, unless the Norfolk District Engineer uses discretionary authority to modify, suspend or revoke this verification. The Chief of Engineers will periodically review the nationwide permits and their conditions and will decide to modify, reissue or revoke the permits. If the nationwide permit verified in this letter is reissued without modification or if your activity complies with any subsequent nationwide permit, the expiration date of this verification will not change. However, if the nationwide permit verified in the letter is modified or revoked so that the activity listed above would no longer be authorized and you have commenced or are under contract to commence the work, you will have twelve months from the date of that permit change to complete the activity. Activities completed under the authorization of a nationwide permit which was in effect at the time the activity was completed continue to be authorized by that nationwide permit. It is your responsibility to remain informed of changes to the nationwide permits. We will issue a special public notice announcing any changes to the nationwide permits when they occur.

If you have any questions, please contact me at ron.h.stouffer@usace.army.mil or 757-201-7124.

Sincerely,

Ronald H. Stouffer, Jr.
Environmental Scientist
Northern Virginia Regulatory Section

Enclosure



NOTE: PROPOSED HDCP PARKING AREA
THIS PROPOSED HDCP PARKING AREA REQUIRES USING THE EXISTING PUBLIC CUL-DE-SAC FOR ACCESS. THIS EXCEPTION WAS GRANTED BY THE PLANNING COMMISSION AT THE TIME OF ADMINISTRATIVE APPROVAL OF THIS SITE PLAN.

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	05-20-19	V.D.O.T. COMMENTS	TGP

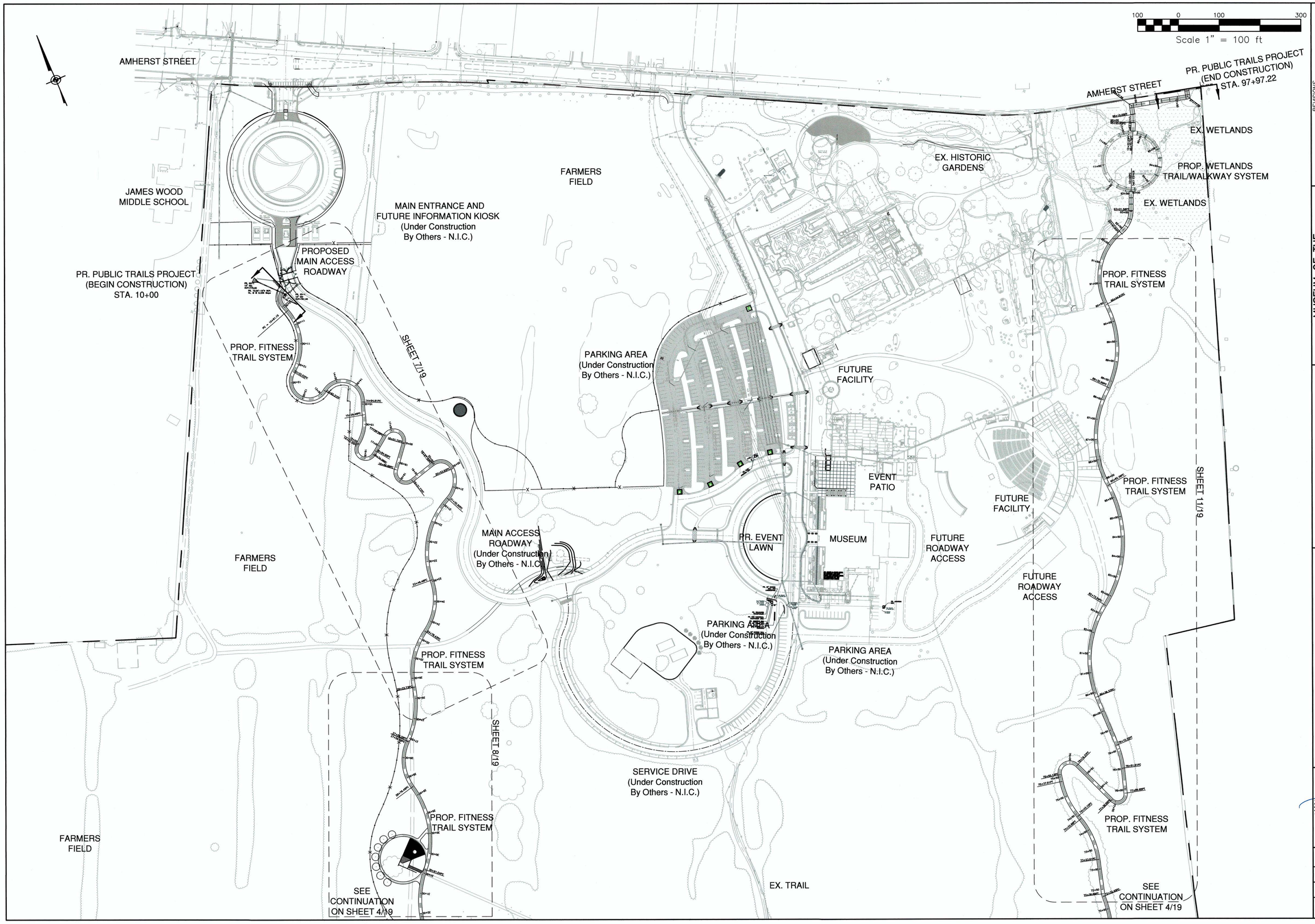
TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS-SITE IMPROVEMENTS
VDOT PROJECT: EN17-138-111; UPC 111418
TOTAL PARCEL AREA
GENERAL SITE OVERVIEW PLAN

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY
901 AMHERST STREET
WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
Telephone: (540) 662-5792
Facsimile: (540) 662-5793
Email: office@painterlewis.com
CONSULTING ENGINEERS

COMMONWEALTH OF VIRGINIA
TIMOTHY G. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

SURVEY: P-L PLC	C.I.: 1'
DRAWN BY: TGP	JOB NO.: 1709011
SCALE: 1"=200.0'	DATE: 09-10-18
SHEET: 2/19	



REVISIONS

NO.	DATE	DESCRIPTION	BY
1	05-20-19	V.D.O.T. COMMENTS	TGP

TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS-SITE IMPROVEMENTS VDOT PROJECT: EN17-138-111; UPC 111418 PARTIAL GENERAL LAYOUT PLAN (FRONT)

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY 901 AMHERST STREET WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
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TIMOTHY G. PAINTER
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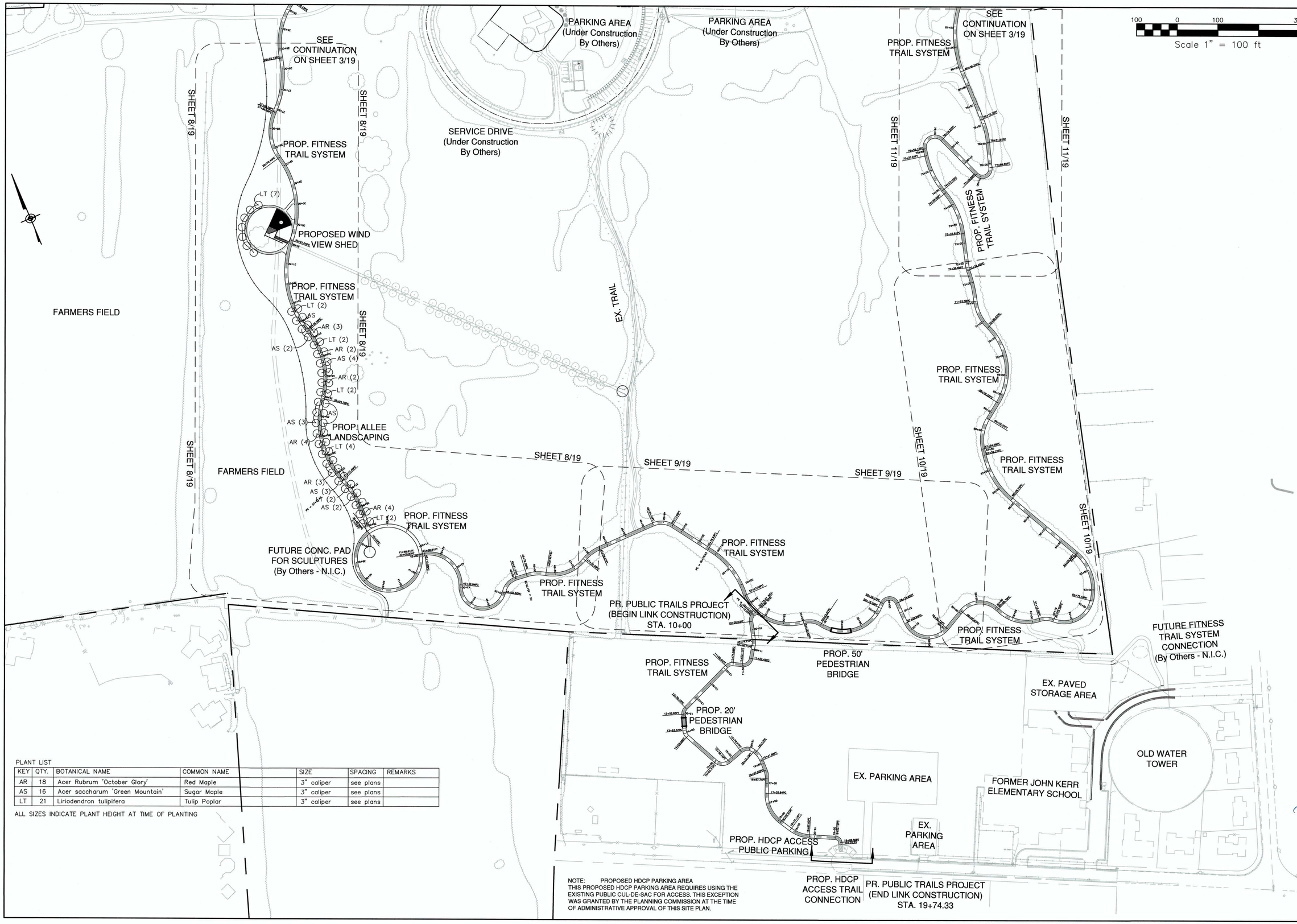
05/20/19
PROFESSIONAL ENGINEER

SURVEY: P-L PLC	C.I.: 1'
DRAWN BY: TGP	JOB NO.: 1709011
SCALE: 1"=100.0'	DATE: 09-10-18
SHEET: 3/19	



PLANT LIST

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
AR	18	Acer Rubrum 'October Glory'	Red Maple	3" caliper	see plans	
AS	16	Acer saccharum 'Green Mountain'	Sugar Maple	3" caliper	see plans	
LT	21	Liriodendron tulipifera	Tulip Poplar	3" caliper	see plans	

ALL SIZES INDICATE PLANT HEIGHT AT TIME OF PLANTING

NOTE: PROPOSED HDCP PARKING AREA
THIS PROPOSED HDCP PARKING AREA REQUIRES USING THE EXISTING PUBLIC CUL-DE-SAC FOR ACCESS. THIS EXCEPTION WAS GRANTED BY THE PLANNING COMMISSION AT THE TIME OF ADMINISTRATIVE APPROVAL OF THIS SITE PLAN.

REVISIONS

NO.	DATE	DESCRIPTION	BY
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TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS-SITE IMPROVEMENTS VDOT PROJECT: EN17-138-111; UPC 111418 PARTIAL GENERAL LAYOUT PLAN (REAR)

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY 901 AMHERST STREET WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
Telephone: (540) 662-5792
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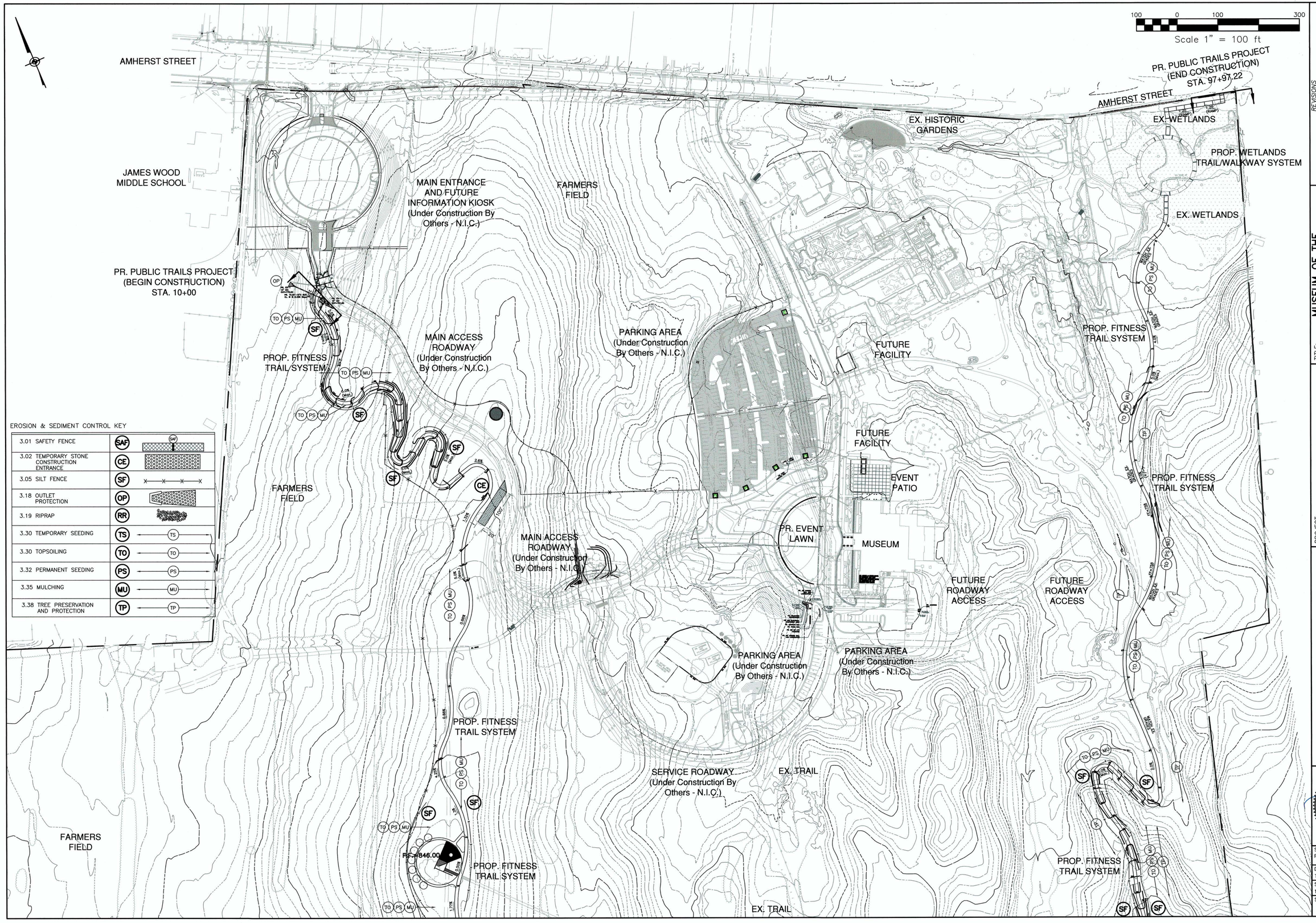
Email: office@painterlewis.com
CONSULTING ENGINEERS

COMMONWEALTH OF VIRGINIA
TIMOTHY G. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

SURVEY: P-L PLC	C.I.: 1'
DRAWN BY: TGP	JOB NO.: 1709011
SCALE: 1"=100.0'	DATE: 09-10-18
SHEET: 4/19	



REVISIONS

NO.	DATE	DESCRIPTION	BY
1	05-20-19	V.D.O.T. COMMENTS	TGP

TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS-SITE IMPROVEMENTS VDOT PROJECT: EN17-138-111; UPC 111418 PARTIAL GENERAL GRADING PLAN (FRONT)

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY 901 AMHERST STREET WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
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TIMOTHY G. PAINTER
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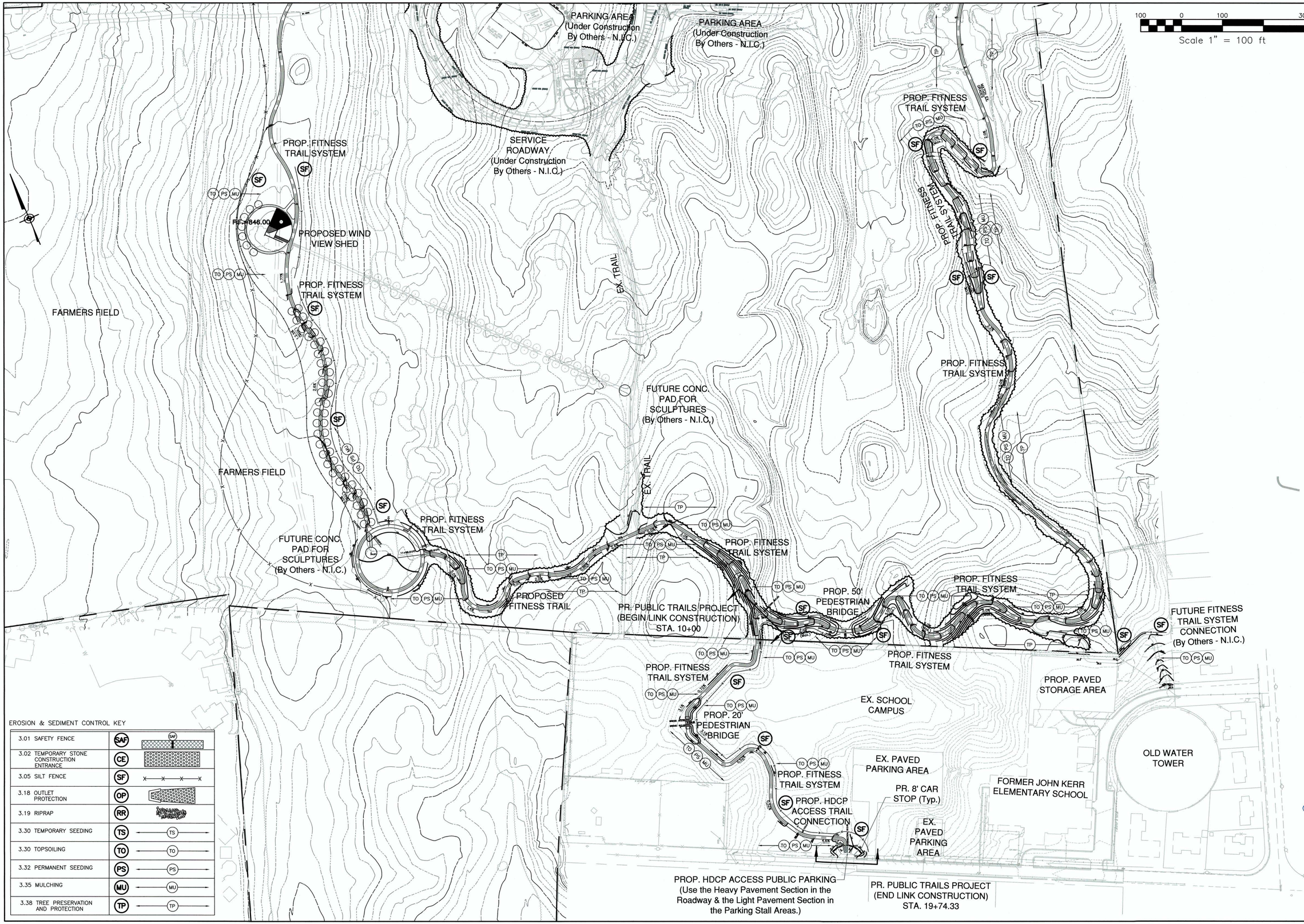
PROFESSIONAL ENGINEER

SURVEY: P-L PLC	C.I.: 1'
DRAWN BY: TGP	JOB NO.: 1709011
SCALE: 1"=100.0'	DATE: 09-10-18
SHEET: 5/19	



REVISIONS

NO.	DATE	DESCRIPTION	BY
1	05-20-19	V.D.O.T. COMMENTS	TGP

TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS-SITE IMPROVEMENTS VDOT PROJECT: EN17-138-111; UPC 111418 PARTIAL GENERAL GRADING PLAN (REAR)

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY 901 AMHERST STREET WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
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COMMONWEALTH OF VIRGINIA
TIMOTHY G. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

SURVEY: P-L PLC	C.I.: 1'
DRAWN BY: TGP	JOB NO.: 1709011
SCALE: 1"=100.0'	DATE: 09-10-18
SHEET: 6/19	

FARMERS FIELD

AMHERST STREET

SERVICE DRIVE (Under Construction By Others - N.I.C.)

EX. SILO

PROPOSED MAIN ACCESS ROADWAY

EX. FARM ROAD

PROP. FITNESS TRAIL SYSTEM

MAIN ACCESS ROADWAY (Under Construction By Others - N.I.C.)

PARKING AREA (Under Construction By Others - N.I.C.)

MAIN ENTRANCE AND FUTURE INFORMATION KIOSK (Under Construction By Others - N.I.C.)

PR. PUBLIC TRAILS PROJECT (BEGIN CONSTRUCTION)

JAMES WOOD MIDDLE SCHOOL

NOTE: FITNESS TRAIL
-THE PROPOSED FITNESS TRAIL SHALL BE 8' IN WIDTH
(See Detail on Sheet 19/19)

50 0 50 150
Scale 1" = 50 ft

NO.	DATE	REVISIONS	BY
1	05-20-19	V.D.O.T. COMMENTS	TGP

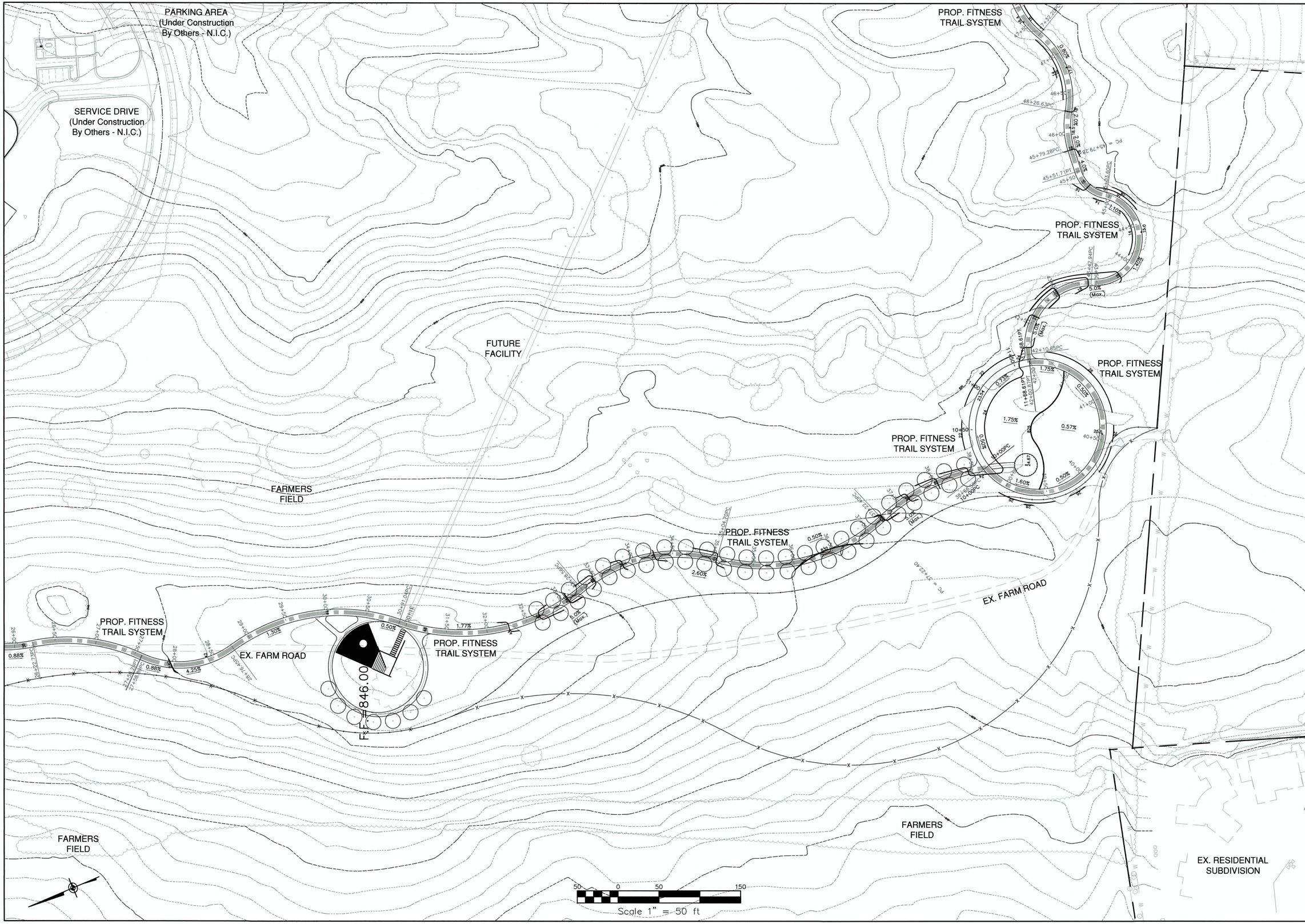
TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS-SITE IMPROVEMENTS VDOT PROJECT: EN17-138-111; UPC 111418 PARTIAL GRADING PLAN (SECTION A)

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY 901 AMHERST STREET WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
Telephone: (540) 662-5792
Facsimile: (540) 662-5793
Email: office@painterlewis.com
CONSULTING ENGINEERS

COMMONWEALTH OF VIRGINIA
TIMOTHY G. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

SURVEY: P-L PLC	C.I.: 1'
DRAWN BY: TGP	JOB NO.: 1709011
SCALE: 1"=50.0'	DATE: 09-10-18
SHEET: 7/19	



REVISIONS

NO.	DATE	DESCRIPTION	BY
1	05-20-19	V.D.O.T. COMMENTS	TGP

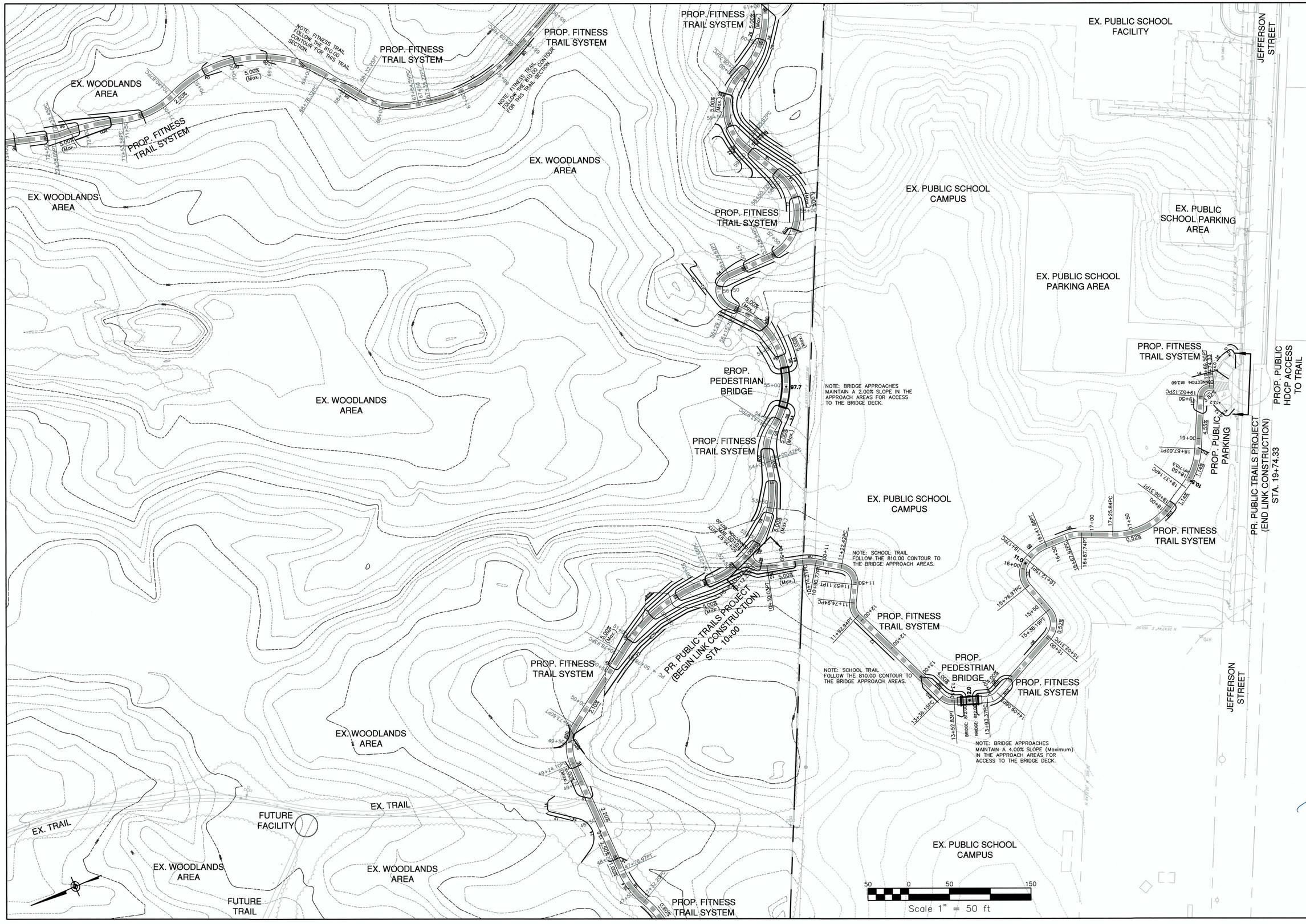
TITLE:
MUSEUM OF THE
SHENANDOAH VALLEY:
PUBLIC TRAILS-SITE IMPROVEMENTS
VDOT PROJECT:
EN17-138-111; UPC 111418
PARTIAL GRADING PLAN
(SECTION B)

PROJECT:
THE MUSEUM OF THE
SHENANDOAH VALLEY
901 AMHERST STREET
WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
Telephone: (540) 662-5792
Facsimile: (540) 662-5793
Email: office@painterlewis.com
CONSULTING ENGINEERS

COMMONWEALTH OF VIRGINIA
TIMOTHY Q. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

SURVEY: P-L PLC	C.I.: 1'
DRAWN BY: TGP	JOB NO.: 1709011
SCALE: 1"=50.0'	DATE: 09-10-18
SHEET: 8/19	



REVISIONS

NO.	DATE	DESCRIPTION	BY
1	05-20-19	V.D.O.T. COMMENTS	TGP

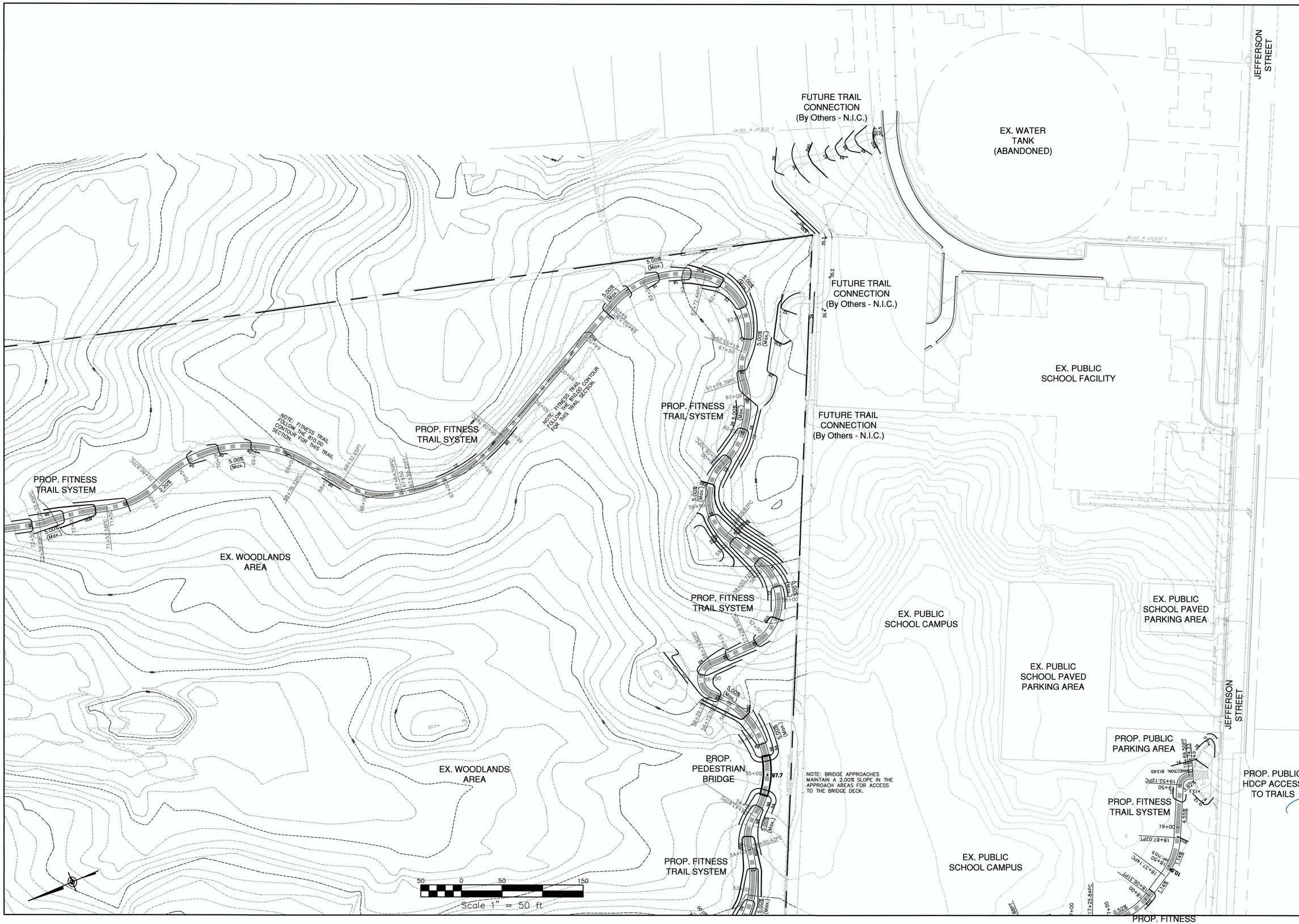
TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS-SITE IMPROVEMENTS VDOT PROJECT: EN17-138-111; UPC 111418 PARTIAL GRADING PLAN (SECTION C)

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY 901 AMHERST STREET WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
CONSULTING ENGINEERS
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
Telephone: (540) 662-5792
Facsimile: (540) 662-5793
Email: office@painterlewis.com

COMMONWEALTH OF VIRGINIA
TIMOTHY G. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

SURVEY: P-L PLC	C.I.: 1'
DRAWN BY: TGP	JOB NO.: 1709011
SCALE: 1"=50.0'	DATE: 09-10-18
SHEET: 9/19	



REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	05-20-19	V.D.O.T. COMMENTS	TGP

TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS-SITE IMPROVEMENTS VDOT PROJECT: EN17-138-111; UPC 111418 PARTIAL GRADING PLAN (SECTION D)

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY 901 AMHERST STREET WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
Telephone: (540) 662-5792
Facsimile: (540) 662-5793
Email: office@painterlewis.com
CONSULTING ENGINEERS

COMMONWEALTH OF VIRGINIA
TIMOTHY G. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

SURVEY: P-L PLC	C.I.: 1'
DRAWN BY: TGP	JOB NO.: 1709011
SCALE: 1"=50.0'	DATE: 09-10-18
SHEET: 10/19	

EX. WETLANDS

EX. WOODLANDS AREA

EX. WOODLANDS AREA

PROP. FITNESS TRAIL SYSTEM

PROP. FITNESS TRAIL SYSTEM

EX. WETLANDS

PROP. FITNESS TRAIL SYSTEM

NOTE: FITNESS TRAIL THE FINISHED GRADES SHALL MATCH THE EXISTING GRADES IN THIS SECTION OF THE TRAIL

PROP. FITNESS TRAIL SYSTEM

NOTE: FITNESS TRAIL THE FINISHED GRADES SHALL MATCH THE EXISTING GRADES IN THIS SECTION OF THE TRAIL

PROP. FITNESS TRAIL SYSTEM

PROP. FITNESS TRAIL SYSTEM

EX. HISTORIC GARDENS

FUTURE FACILITY

FUTURE FACILITY

FUTURE ROADWAY ACCESS

FUTURE ROADWAY ACCESS

FUTURE FACILITY

FUTURE FACILITY

EX. WOODLANDS AREA

FUTURE FACILITY

EVENT PATIO

MUSEUM

PARKING AREA (Under Construction By Others - N.I.C.)

FARMERS FIELD

PARKING AREA (Under Construction By Others - N.I.C.)

SERVICE DRIVE (Under Construction By Others - N.I.C.)

50 0 50 150

Scale 1" = 50 ft

NO.	DATE	DESCRIPTION	BY
1	05-20-19	V.D.O.T. COMMENTS	TGP

REVISIONS

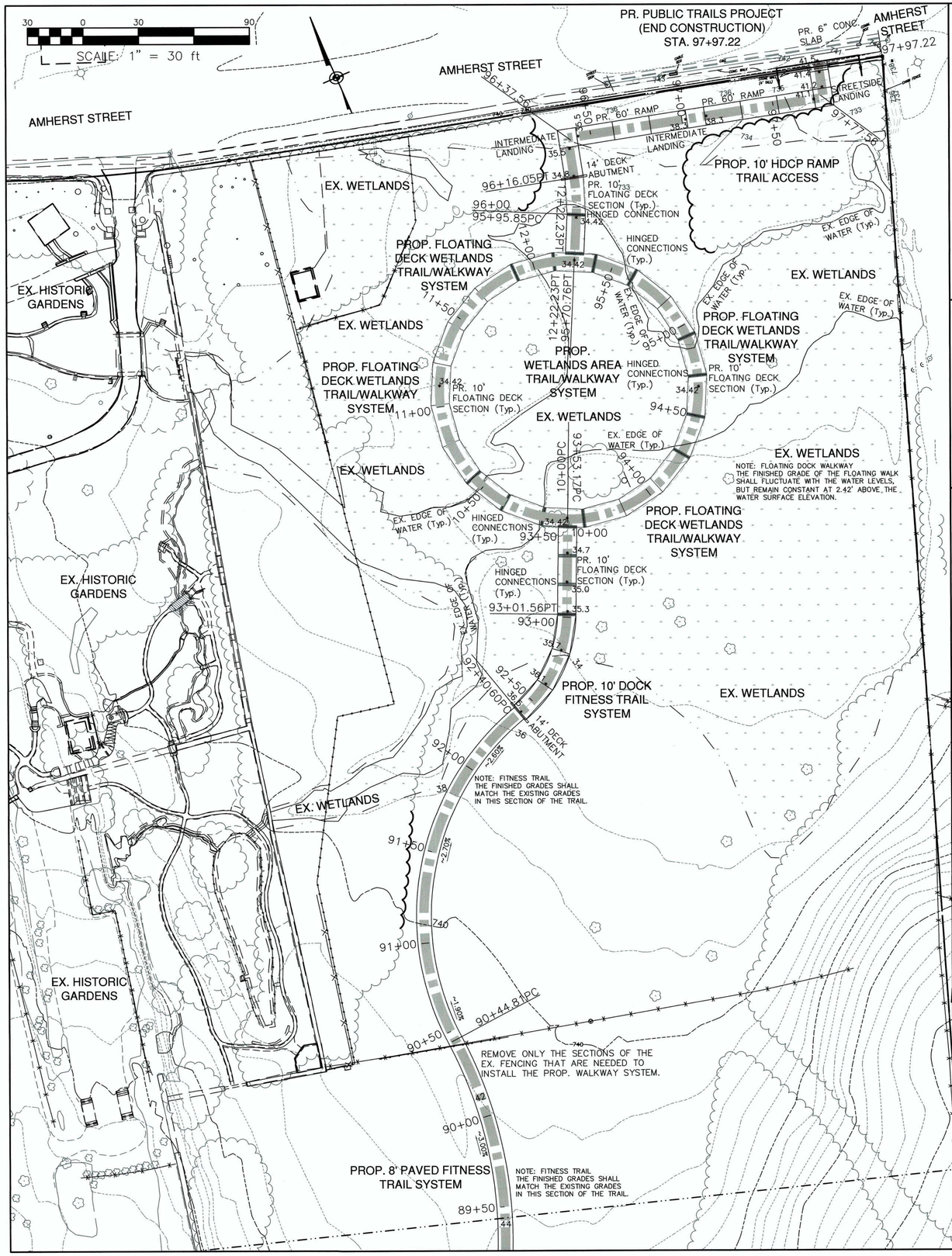
TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS-SITE IMPROVEMENTS VDOT PROJECT: EN17-138-111; UPC 111418 PARTIAL GRADING PLAN (SECTION E)

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY 901 AMHERST STREET WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
Telephone: (540) 662-5792
Facsimile: (540) 662-5793
Email: office@painterlewis.com
CONSULTING ENGINEERS

COMMONWEALTH OF VIRGINIA
TIMOTHY G. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

SURVEY: P-L PLC	C.I.: 1'
DRAWN BY: TGP	JOB NO.: 1709011
SCALE: 1"=50.0'	DATE: 09-10-18
SHEET: 11/19	



GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH INTERNATIONAL BUILDING CODE, 2015 EDITION (IBC) AND THE STANDARDS AND CRITERIA AS ESTABLISHED BY THE CITY OF WINCHESTER, VIRGINIA.
- A BUILDING PERMIT SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF WORK.
- ALL WORK SHALL BE PERFORMED IN AN EXPEDITIOUS AND WORKMANLIKE MANNER AND IN ACCORDANCE WITH ALL GENERALLY ACCEPTED TRADE PRACTICES.
- LOADS

LIVE LOADS:	85 PSF (PEDESTRIAN BRIDGES) 60 PSF (WALKWAYS)
DEAD LOADS:	ACTUAL MATERIAL WEIGHTS
EQUIVALENT LATERAL EARTH PRESSURES	45.0 PSF/FT (EARTH – ACTIVE) 400 PSF/FT (EARTH – PASSIVE)

- FOUNDATION DESIGN WAS BASED ON A MINIMUM SOIL BEARING CAPACITY OF 2000 PSF.
- ALL FOOTINGS SHALL BE INSPECTED BY A LICENSED GEOTECHNICAL ENGINEER OR CERTIFIED STRUCTURAL INSPECTOR PRIOR TO PLACEMENT OF THE CONCRETE.
- CONCRETE MATERIALS SHALL HAVE THE MINIMUM COMPRESSIVE STRENGTH AT A 28 DAY CURING PERIOD, AS SPECIFIED BELOW:

FOUNDATION FOOTINGS:	3000 PSF
WALL STRUCTURE:	3000 PSF
SLABS–ON–GRADE:	3500 PSF

- ALL REINFORCING STEEL SHALL BE DEFORMED BARS IN ACCORDANCE WITH ASTM 615 SPECIFICATIONS, GRADE 60 STEEL (fy=60,000 PSI).
- ALL TUBULAR STEEL SECTIONS SHALL BE A500 GRADE B STEEL.
- ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES.
- ALL FRAMING BOLTS SHALL BE STAINLESS STEEL OR MECHANICALLY GALVANIZE COATED MATERIAL TO THE SIZE AND TYPE, AS SPECIFIED.
- ALL STEEL BRIDGE/DOCK FRAMING COMPONENTS SHALL BE BLAST CLEANED IN ACCORDANCE WITH SSPC–SP6 SPECIFICATIONS. ALL STEEL FRAMING COMPONENTS SHALL BE COATED WITH A MULTIPLE–COAT ZINC RICH PAINTING SYSTEM. THIS SYSTEM SHALL BE AS FOLLOWS:
  - TWO BASE COATS CONSISTING OF 4 WET MILS OF TNEM–ZINC SERIES 90E–92 MATERIAL.

(THE BASE COAT MAY SERVE AS THE TOP COAT, IF THE COLOR IS APPROVED BY THE OWNER.)
  - OPTIONAL TOP COAT CONSISTING OF 4–6 WET MILS OF TNEME–TUFCOAT SERIES 113.

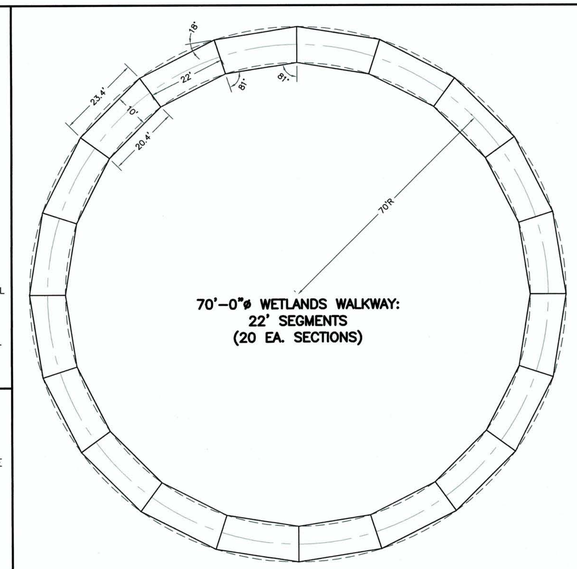
(COLOR MUST BE APPROVED BY THE OWNER.)

ABBREVIATIONS:

CONC.	CONCRETE
CONT. or Cont.	CONTINUOUS
E.W.	EACH WAY
EX.	EXISTING
EQ.	EQUAL
FIN.	FINISH OR FINISHED
HORIZ. or Horiz.	HORIZONTAL
MAX. or Max.	MAXIMUM
MIN.	MINIMUM
O.C.	ON CENTER
P.T.	PRESSURE–TREATED
PROP. or PR.	PROPOSED
PSF	POUNDS PER SQUARE FOOT
S.Y.P. or SYP	SOUTHERN YELLOW PINE
TYP. or Typ.	TYPICAL
VERT. or Vert.	VERTICAL
W.S.E.	WATER SURFACE ELEVATION

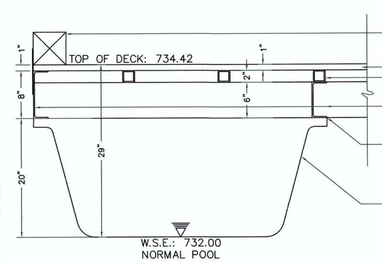
SYMBOLS:

ø	DIAMETER
#	NUMBER
	ELEVATION
	WATER SURFACE



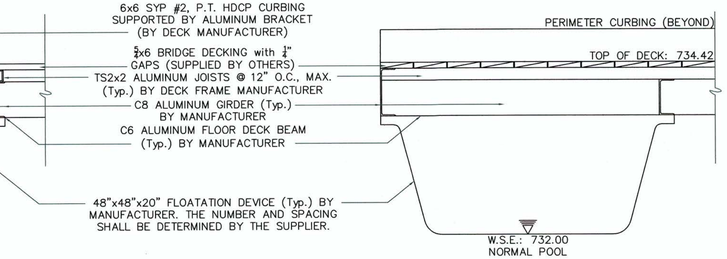
WETLANDS WALKWAY: TYPICAL FLOATING DECK SECTIONS

SCALE: 1" = 20'–0"



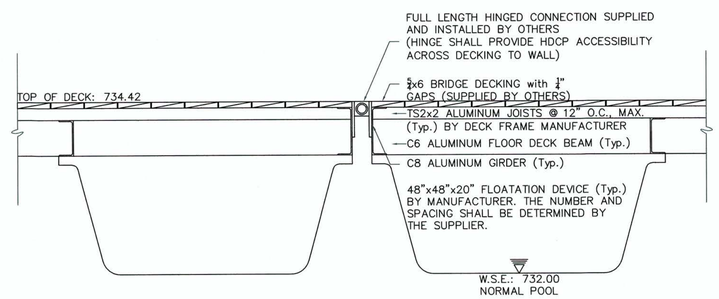
TYPICAL FLOATING DECK SECTION

SCALE: 1"=1'–0"



TYPICAL FLOATING DECK SECTION

SCALE: 1"=1'–0"



TYPICAL FLOATING DECK HINGED SECTION DETAIL

SCALE: 1"=1'–0"

NOTE: DECKING & FINISHES
ALL DECKING AND TRIM FINISHES SHALL BE INSTALLED USING TREX MATERIALS, AS DIRECTED BY THE OWNER. THE FLOATING DOCK AND BRIDGE DECKS SHALL HAVE A 1x12 FASCIA APPLIED TO THE EXPOSED VERTICAL PORTIONS OF THE DECK DIAPHRAGMS. THE TYPE AND CONNECTIONS SHALL BE AS DIRECTED BY THE TREX SUPPLIER.

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	05–20–19	V.D.O.T. COMMENTS	TGP

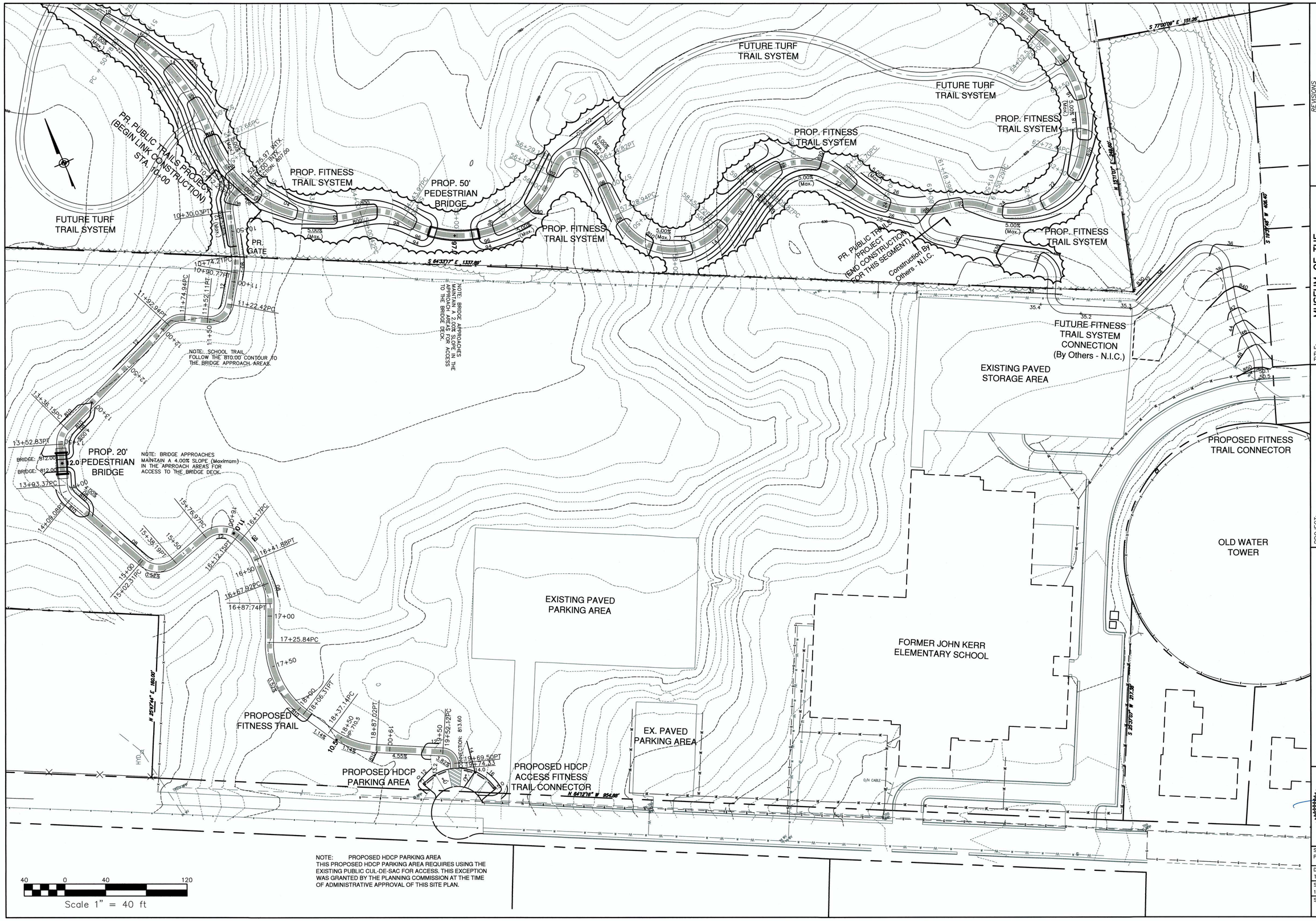
TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS–SITE IMPROVEMENTS VDOT PROJECT: EN17–138–111; UPC 111418 WETLANDS AREA: MAIN TRAIL and FLOATING WALKWAYS PLANS & DETAILS

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY 901 AMHERST STREET WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
Telephone: (540) 662–5792
Facsimile: (540) 662–5793
Email: office@painterlewis.com
CONSULTING ENGINEERS

COMMONWEALTH OF VIRGINIA
TIMOTHY G. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

SURVEY: P–L PLC	C.I.: 1'
DRAWN BY: TGP	JOB NO.: 1709011
SCALE: AS NOTED	DATE: 09–10–18
SHEET: 12/19	



NOTE: PROPOSED HDCP PARKING AREA
THIS PROPOSED HDCP PARKING AREA REQUIRES USING THE EXISTING PUBLIC CUL-DE-SAC FOR ACCESS. THIS EXCEPTION WAS GRANTED BY THE PLANNING COMMISSION AT THE TIME OF ADMINISTRATIVE APPROVAL OF THIS SITE PLAN.

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	05-20-19	V.D.O.T. COMMENTS	TGP

TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS-SITE IMPROVEMENTS
VDOT PROJECT: EN17-138-111; UPC 111418
THE FORMER JOHN KERR ELEMENTARY SCHOOL SITE

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY
901 AMHERST STREET
WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
Telephone: (540) 662-5792
Facsimile: (540) 662-5793
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CONSULTING ENGINEERS

COMMONWEALTH OF VIRGINIA
TIMOTHY G. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

SURVEY: P-L PLC	C.I.: 1'
DRAWN BY: TGP	JOB NO.: 1709011
SCALE: 1"=40.0'	DATE: 09-10-18
SHEET: 13/19	

GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH INTERNATIONAL BUILDING CODE, 2015 EDITION (IBC) AND THE STANDARDS AND CRITERIA AS ESTABLISHED BY THE CITY OF WINCHESTER, VIRGINIA.
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- LOADS

LIVE LOADS:	85 PSF (PEDESTRIAN BRIDGES)
	60 PSF (WALKWAYS)
DEAD LOADS:	ACTUAL MATERIAL WEIGHTS
EQUIVALENT LATERAL EARTH PRESSURES	45.0 PSF/FT (EARTH – ACTIVE)
	400 PSF/FT (EARTH – PASSIVE)

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SLABS–ON–GRADE:	3500 PSF

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- ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES.
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  - OPTIONAL TOP COAT CONSISTING OF 4–6 WET MILS OF TNEME–TUFCOAT SERIES 113. (COLOR MUST BE APPROVED BY THE OWNER.)

ABBREVIATIONS:

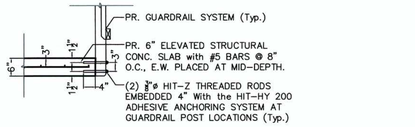
CONC.	CONCRETE
CONT. or Cont.	CONTINUOUS
E.W.	EACH WAY
EX.	EXISTING
EQ.	EQUAL
FIN.	FINISH OR FINISHED
HORIZ. or Horiz.	HORIZONTAL
MAX. or Max.	MAXIMUM
MIN.	MINIMUM
O.C.	ON CENTER
P.T.	PRESSURE–TREATED
PROP. or PR.	PROPOSED
PSF	POUNDS PER SQUARE FOOT
S.Y.P. or SYP	SOUTHERN YELLOW PINE
TYP. or Typ.	TYPICAL
VERT. or Vert.	VERTICAL
W.S.E.	WATER SURFACE ELEVATION

SYMBOLS:

ø	DIAMETER
#	NUMBER
	ELEVATION
	WATER SURFACE

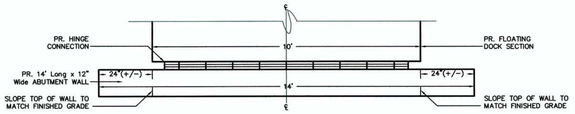
NOTE: DECKING & FINISHES
ALL DECKING AND TRIM FINISHES SHALL BE INSTALLED USING TREX MATERIALS, AS DIRECTED BY THE OWNER. THE FLOATING DOCK AND BRIDGE DECKS SHALL HAVE A 1x12 FASCIA APPLIED TO THE EXPOSED VERTICAL PORTIONS OF THE DECK DIAPHRAGMS. THE TYPE AND CONNECTIONS SHALL BE AS DIRECTED BY THE TREX SUPPLIER.

NOTE: STEEL PRODUCTS
"BUY AMERICAN" REQUIREMENTS SHALL APPLY TO ALL STEEL PRODUCTS INCLUDING THE STEEL REQUIRED FOR THE PEDESTRIAN BRIDGES.



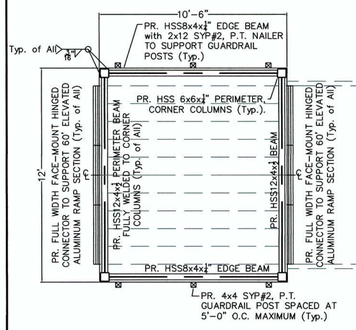
PEDESTRIAN WALKWAY: GUARDRAIL–to–SLAB CONNECTION DETAIL – TYPICAL SECTION

SCALE: 1/2"=1'–0"



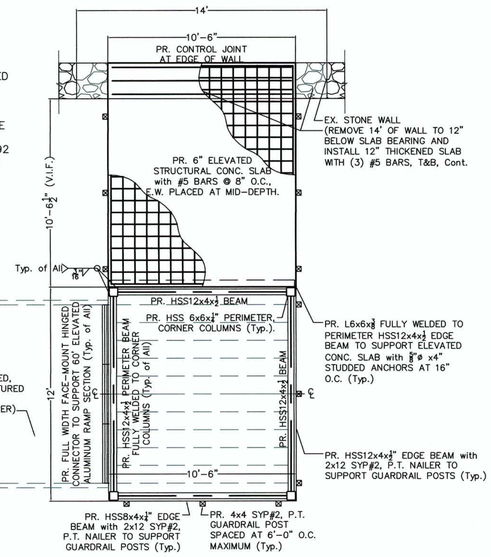
WETLANDS WALKWAY: PARTIAL PLAN VIEW

SCALE: 3/8"=1'–0"



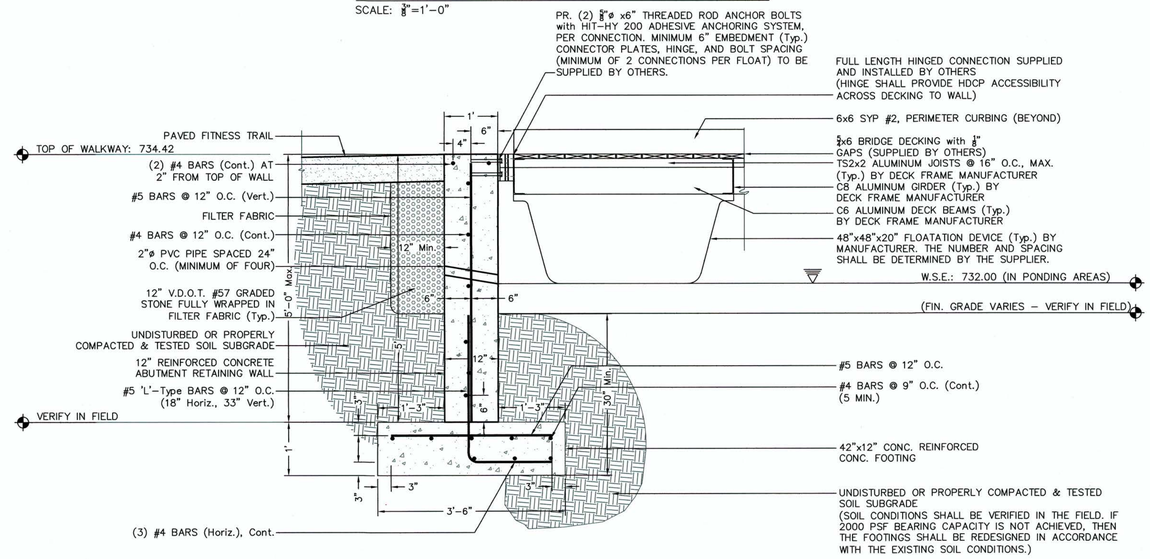
PEDESTRIAN WALKWAY: INTERMEDIATE LANDING – PLAN VIEW

SCALE: 1/4"=1'–0"



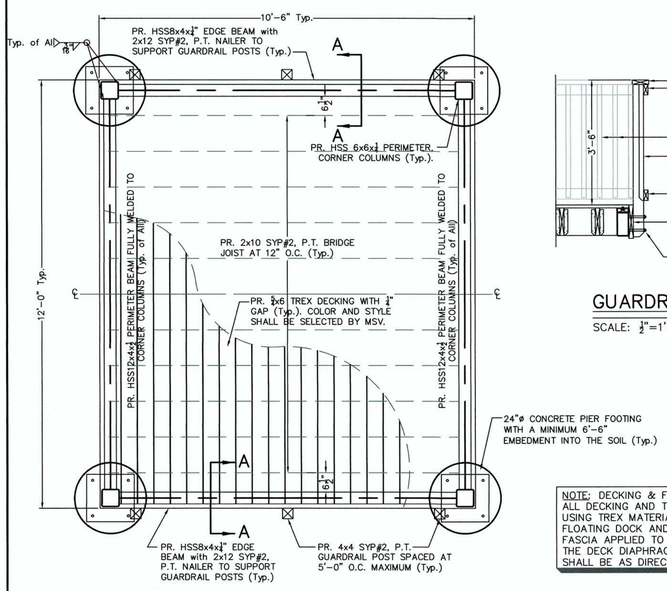
PEDESTRIAN WALKWAY: STREETSIDE LANDING – PLAN VIEW

SCALE: 1/4"=1'–0"



WETLANDS WALKWAY: TYPICAL FLOATING DECK ABUTMENT SECTION

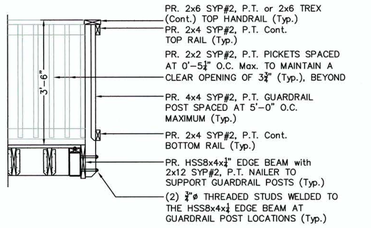
SCALE: 3/4"=1'–0"



PEDESTRIAN WALKWAY LANDING (PARTIAL) – PLAN VIEW

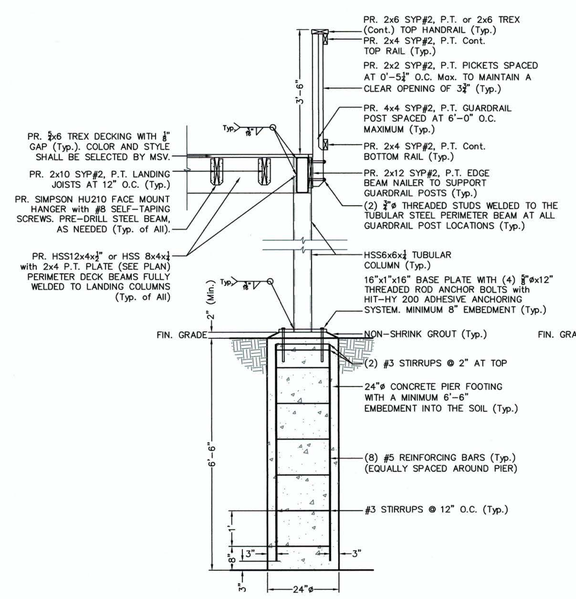
SCALE: 1/2"=1'–0"

NOTE: DECKING & FINISHES
ALL DECKING AND TRIM FINISHES SHALL BE INSTALLED USING TREX MATERIALS, AS DIRECTED BY THE OWNER. THE FLOATING DOCK AND BRIDGE DECKS SHALL HAVE A 1x12 FASCIA APPLIED TO THE EXPOSED VERTICAL PORTIONS OF THE DECK DIAPHRAGMS. THE TYPE AND CONNECTIONS SHALL BE AS DIRECTED BY THE TREX SUPPLIER.



GUARDRAIL SECTION A–A

SCALE: 1/2"=1'–0"



TYPICAL SECTION

SCALE: 1/2"=1'–0"

PEDESTRIAN WALKWAY DETAILS – ELEVATION

SCALE: 1/2"=1'–0"

NO.	DATE	DESCRIPTION	BY
1	05–20–19	V.D.O.T. COMMENTS	TGP

REVISIONS

TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS–SITE IMPROVEMENTS VDOT PROJECT: EN17–138–111; UPC 111418 WETLANDS AREA: PEDESTRIAN BRIDGE and DECK & DOCK PLANS AND DETAILS

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY 901 AMHERST STREET WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
Telephone: (540) 662–5792
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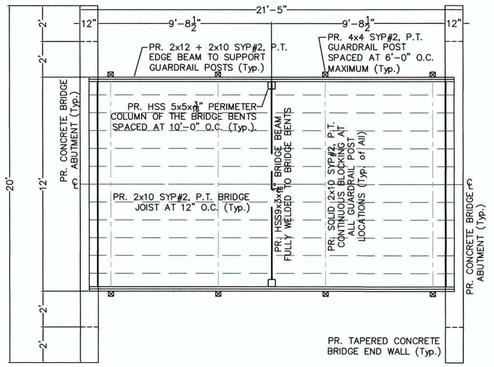
CONSULTING ENGINEERS

COMMONWEALTH OF VIRGINIA
TIMOTHY G. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

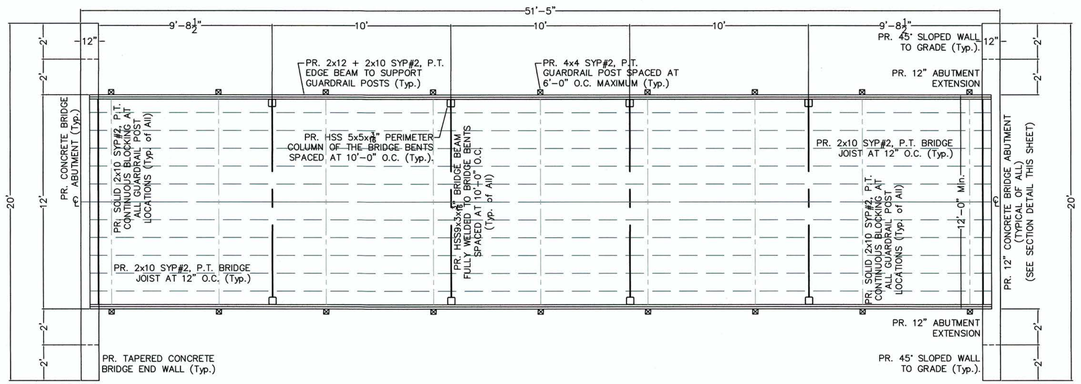
DRAWN BY:	JOB NO.:
TGP	1709011

DATE: 09/10/18
SCALE: AS NOTED
SHEET: 14/19



PEDESTRIAN BRIDGE (20') – PLAN VIEW

SCALE: ¼"=1'-0"



PEDESTRIAN BRIDGE (50') – PLAN VIEW

SCALE: ¼"=1'-0"

GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH INTERNATIONAL BUILDING CODE, 2015 EDITION (IBC) AND THE STANDARDS AND CRITERIA AS ESTABLISHED BY THE CITY OF WINCHESTER, VIRGINIA.
- A BUILDING PERMIT SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF WORK.
- ALL WORK SHALL BE PERFORMED IN AN EXPEDITIOUS AND WORKMANLIKE MANNER AND IN ACCORDANCE WITH ALL GENERALLY ACCEPTED TRADE PRACTICES.
- LOADS

LIVE LOADS:	85 PSF (PEDESTRIAN BRIDGES)
	60 PSF (WALKWAYS)
DEAD LOADS:	ACTUAL MATERIAL WEIGHTS
EQUIVALENT LATERAL EARTH PRESSURES	45.0 PSF/FT (EARTH – ACTIVE)
	400 PSF/FT (EARTH – PASSIVE)

- FOUNDATION DESIGN WAS BASED ON A MINIMUM SOIL BEARING CAPACITY OF 2000 PSF.
- ALL FOOTINGS SHALL BE INSPECTED BY A LICENSED GEOTECHNICAL ENGINEER OR CERTIFIED STRUCTURAL INSPECTOR PRIOR TO PLACEMENT OF THE CONCRETE.
- CONCRETE MATERIALS SHALL HAVE THE MINIMUM COMPRESSIVE STRENGTH AT A 28 DAY CURING PERIOD, AS SPECIFIED BELOW:

FOUNDATION FOOTINGS:	3000 PSF
WALL STRUCTURE:	3000 PSF
SLABS-ON-GRADE:	3500 PSF

- ALL REINFORCING STEEL SHALL BE DEFORMED BARS IN ACCORDANCE WITH ASTM 615 SPECIFICATIONS, GRADE 60 STEEL (Fy=60,000 PSI).
- ALL TUBULAR STEEL SECTIONS SHALL BE A500 GRADE B STEEL.
- ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES.
- ALL FRAMING BOLTS SHALL BE STAINLESS STEEL OR MECHANICALLY GALVANIZE COATED MATERIAL TO THE SIZE AND TYPE, AS SPECIFIED.
- ALL STEEL BRIDGE/DOCK FRAMING COMPONENTS SHALL BE BLAST CLEANED IN ACCORDANCE WITH SSPC-SP6 SPECIFICATIONS. ALL STEEL FRAMING COMPONENTS SHALL BE COATED WITH A MULTIPLE-COAT ZINC RICH PAINTING SYSTEM. THIS SYSTEM SHALL BE AS FOLLOWS:
  - TWO BASE COATS CONSISTING OF 4 WET MILS OF TNEM-ZINC SERIES 90E-92 MATERIAL. (THE BASE COAT MAY SERVE AS THE TOP COAT, IF THE COLOR IS APPROVED BY THE OWNER.)
  - OPTIONAL TOP COAT CONSISTING OF 4-6 WET MILS OF TNEME-TUFCOAT SERIES 113. (COLOR MUST BE APPROVED BY THE OWNER.)

ABBREVIATIONS:

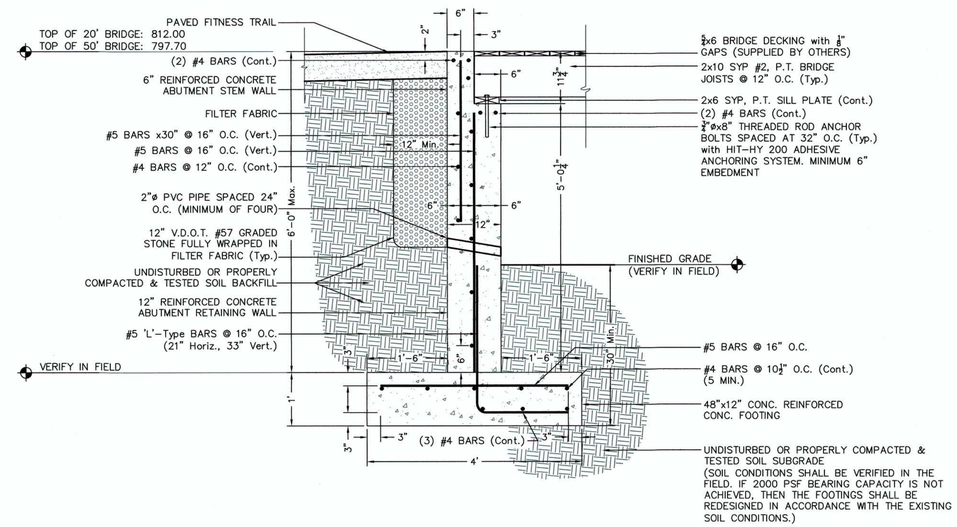
CONC.	CONCRETE
CONT. or Cont.	CONTINUOUS
E.W.	EACH WAY
EX.	EXISTING
EQ.	EQUAL
FIN.	FINISH OR FINISHED
HORIZ. or Horiz.	HORIZONTAL
MAX. or Max.	MAXIMUM
MIN.	MINIMUM
O.C.	ON CENTER
P.T.	PRESSURE-TREATED
PROP. or PR.	PROPOSED
PSF	POUNDS PER SQUARE FOOT
S.Y.P. or SYP	SOUTHERN YELLOW PINE
TYP. or Typ.	TYPICAL
VERT. or Vert.	VERTICAL
W.S.E.	WATER SURFACE ELEVATION

SYMBOLS:

ø	DIAMETER
#	NUMBER
◆	ELEVATION

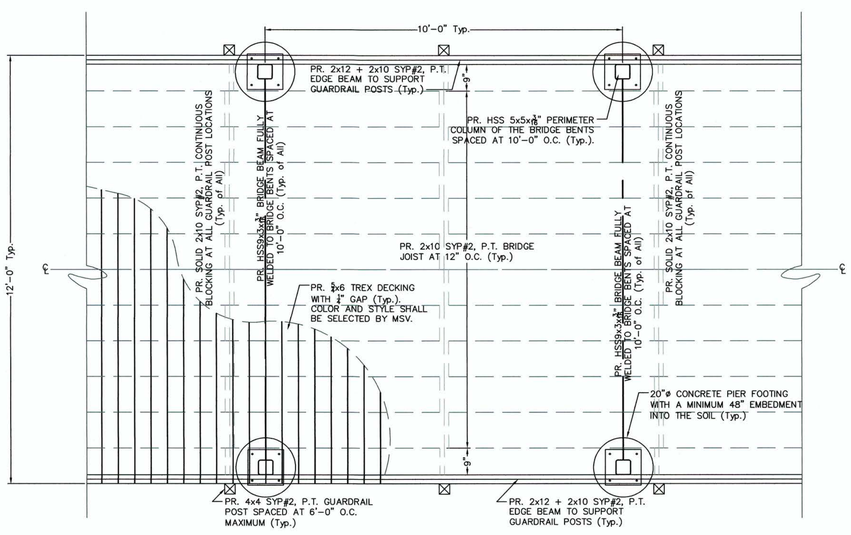
NOTE: DECKING & FINISHES
ALL DECKING AND TRIM FINISHES SHALL BE INSTALLED USING TREX MATERIALS, AS DIRECTED BY THE OWNER. THE FLOATING DOCK AND BRIDGE DECKS SHALL HAVE A 1x12 FASCIA APPLIED TO THE EXPOSED VERTICAL PORTIONS OF THE DECK DIAPHRAGMS. THE TYPE AND CONNECTIONS SHALL BE AS DIRECTED BY THE TREX SUPPLIER.

NOTE: STEEL PRODUCTS
"BUY AMERICAN" REQUIREMENTS SHALL APPLY TO ALL STEEL PRODUCTS INCLUDING THE STEEL REQUIRED FOR THE PEDESTRIAN BRIDGES.



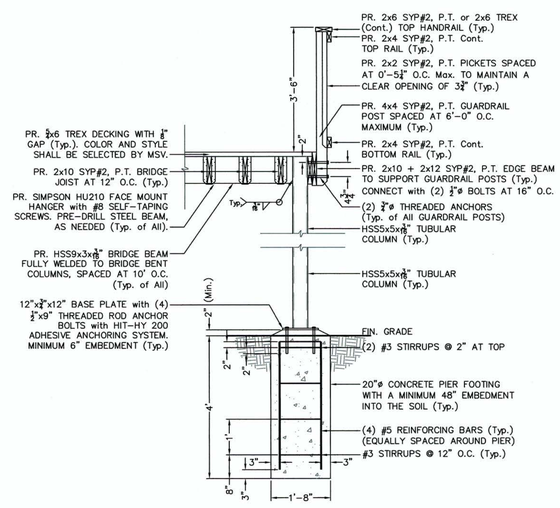
PEDESTRIAN BRIDGE: TYPICAL BRIDGE ABUTMENT SECTION

SCALE: ¾"=1'-0"



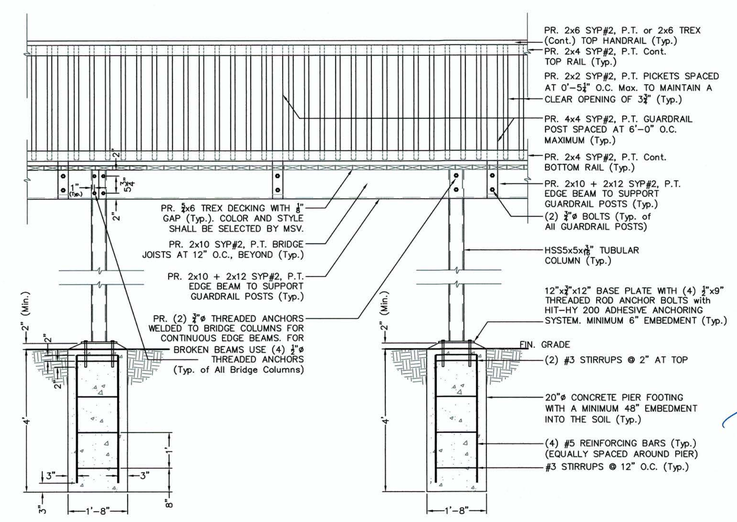
PEDESTRIAN BRIDGE DECK (PARTIAL) – PLAN VIEW

SCALE: ½"=1'-0"



TYPICAL SECTION

SCALE: ½"=1'-0"



PEDESTRIAN BRIDGE DETAILS – ELEVATION

SCALE: ½"=1'-0"

NO.	DATE	DESCRIPTION	BY
1	05-20-19	V.D.O.T. COMMENTS	TGP

REVISIONS

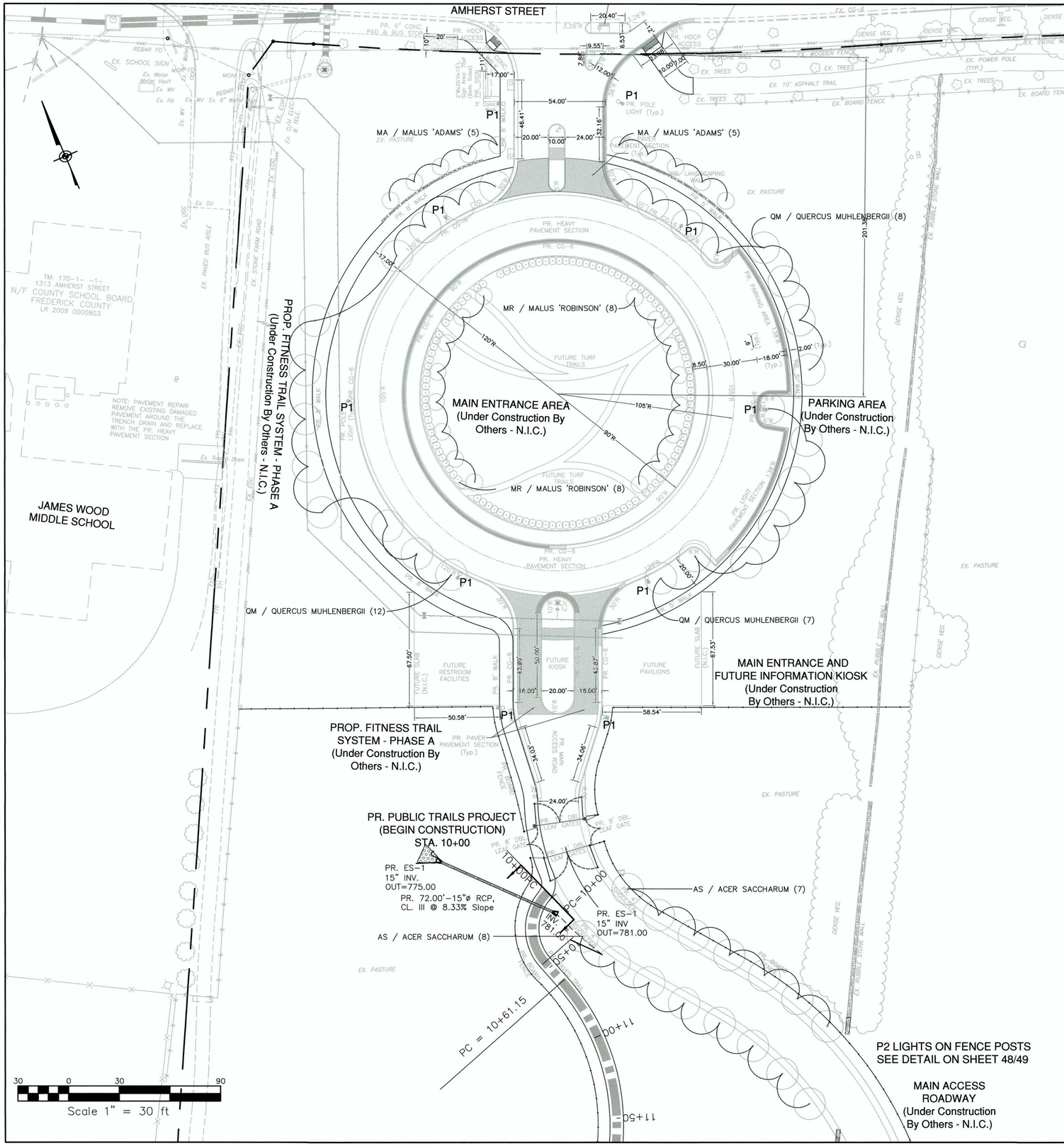
TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS-SITE IMPROVEMENTS VDOT PROJECT: EN17-138-111; UPC 111418 PEDESTRIAN BRIDGE PLANS AND DETAILS

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY 901 AMHERST STREET WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
Telephone: (540) 662-5792
Facsimile: (540) 662-5793
Email: office@painterlewis.com
CONSULTING ENGINEERS

COMMONWEALTH OF VIRGINIA
TIMOTHY G. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

DRAWN BY: TGP	JOB NO.: 1709011
DATE: 09/10/18	
SCALE: AS NOTED	
SHEET: 15/19	



NOTE: MSV PHASE II DEVELOPMENT

- THE LANDSCAPING DESIGNS INDICATED ON THESE PLANS ARE PART OF THE COMPLETE LANDSCAPING DESIGN THAT HAS BEEN PREPARED FOR THE PHASE II DEVELOPMENT OF THIS PROJECT. FOR MORE INFORMATION PLEASE REVIEW THE COMPLETE LANDSCAPING PLAN SET ENTITLED PHASE I SITE PROJECTS, AS PREPARED BY OWSW SITEWORKS OF CHARLOTTESVILLE, VIRGINIA, AND DATED 1/15/19. ALL QUESTIONS SHOULD BE DIRECTED TO MR. PETER O'SHEA, LANDSCAPE ARCHITECT FOR THIS PROJECT.

OWSW - OSHEA+WILSON SITEWORKS
702 RIDGE ST.
CHARLOTTESVILLE, VIRGINIA 22902
Telephone: (434) 923-8100
Email: oshea@siteworks-studio.com

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	05-20-19	V.D.O.T. COMMENTS	TGP

TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS-SITE IMPROVEMENTS VDOT PROJECT: EN17-138-111; UPC 111418 MAIN ENTRANCE: GENERAL LAYOUT and LANDSCAPING PLAN

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY 901 AMHERST STREET WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
Telephone: (540) 662-5792
Facsimile: (540) 662-5793
Email: office@painterlewis.com
CONSULTING ENGINEERS

COMMONWEALTH OF VIRGINIA
TIMOTHY G. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

SURVEY: P-L PLC	C.I.: 1'
DRAWN BY: TGP	JOB NO.: 1709011
SCALE: 1"=30.0'	DATE: 09-10-18
SHEET: 16/19	

9VAC25-840-40. MINIMUM STANDARDS 1-19:
A VESCP must be consistent with the following criteria, techniques and methods:

1. Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site. Temporary soil stabilization shall be applied within seven days to denuded areas that may not be at final grade but will remain dormant for longer than 140 days. Permanent stabilization shall be applied to areas that are to be left dormant for more than one year.

2. During construction of the project, soil stockpiles and borrow areas shall be stabilized or protected with sediment trapping measures. The applicant is responsible for the temporary protection and permanent stabilization of all soil stockpiles on site as well as borrow areas and soil intentionally transported from the project site.

3. A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until a ground cover is achieved that is uniform, mature enough to survive and will inhibit erosion.

4. Sediment basins and traps, perimeter dikes, sediment barriers and other measures intended to trap sediment shall be constructed as a first step in any land-disturbing activity and shall be made functional before upslope land disturbance takes place.

5. Stabilization measures shall be applied to earthen structures such as dams, dikes and diversions immediately after installation.

6. Sediment traps and sediment basins shall be designed and constructed based upon the total drainage area to be served by the trap or basin.

a. The minimum storage capacity of a sediment trap shall be 134 cubic yards per acre of drainage area and the trap shall only control drainage areas less than three acres.
b. Surface runoff from disturbed areas that is comprised of flow from drainage areas greater than or equal to three acres shall be controlled by a sediment basin. The minimum storage capacity of a sediment basin shall be 134 cubic yards per acre of drainage area. The outfall system shall, at a minimum, maintain the structural integrity of the basin during a 25-year storm of 24-hour duration. Runoff coefficients used in runoff calculations shall correspond to a bare earth condition or those conditions expected to exist while the sediment basin is utilized.

7. Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. Slopes that are found to be eroding excessively within one year of permanent stabilization shall be provided with additional slope stabilizing measures until the problem is corrected.

8. Concentrated runoff shall not flow down cut or fill slopes unless contained within an adequate temporary or permanent channel, flume or slope drain structure.

9. Whenever water seeps from a slope face, adequate drainage or other protection shall be provided.
10. All storm sewer inlets that are made operable during construction shall be protected so that sediment-laden water cannot enter the conveyance system without first being filtered or otherwise treated to remove sediment.

10. All storm sewer inlets that are made operable during construction shall be protected so that sediment-laden water cannot enter the conveyance system without first being filtered or otherwise treated to remove sediment.

11. Before newly constructed stormwater conveyance channels or pipes are made operational, adequate outlet protection and any required temporary or permanent channel lining shall be installed in both the conveyance channel and receiving channel.

12. When work in a live watercourse is performed, precautions shall be taken to minimize encroachment, control sediment transport and stabilize the work area to the greatest extent possible during construction. Nonerodible material shall be used for the construction of causeways and cofferdams. Earthen fill may be used for these structures if armored by nonerodible cover materials.

13. When a live watercourse must be crossed by construction vehicles more than twice in any six-month period, a temporary vehicular stream crossing constructed of nonerodible material shall be provided.

14. All applicable federal, state and local regulations pertaining to working in or crossing live watercourses shall be met.

15. The bed and banks of a watercourse shall be stabilized immediately after work in the watercourse is completed.

16. Underground utility lines shall be installed in accordance with the following standards in addition to other applicable criteria:

a. No more than 500 linear feet of trench may be opened at one time.
b. Excavated material shall be placed on the uphill side of trenches.
c. Effluent from dewatering operations shall be filtered or passed through an approved sediment trapping device, or both, and discharged in a manner that does not adversely affect flowing streams or off-site property.
d. Material used for backfilling trenches shall be properly compacted in order to minimize erosion and promote stabilization.
e. Restabilization shall be accomplished in accordance with these regulations.
f. Applicable safety regulations shall be complied with.

17. Where construction vehicle access routes intersect paved or public roads, provisions shall be made to minimize the transport of sediment by vehicular tracking onto the paved surface. Where sediment is transported onto a paved or public road surface, the road surface shall be cleaned thoroughly at the end of each day. Sediment shall be removed from the roads by shoveling or sweeping and transported to a sediment control disposal area. Street washing shall be allowed only after sediment is removed in this manner. This provision shall apply to individual development lots as well as to larger land-disturbing activities.

18. All temporary erosion and sediment control measures shall be removed within 30 days after final site stabilization or after the temporary measures are no longer needed, unless otherwise authorized by the VESCP. Trapped sediment and the disturbed soil areas resulting from the disposition of temporary measures shall be permanently stabilized to prevent further erosion and sedimentation.

19. Properties and waterways downstream from development sites shall be protected from sediment deposition, erosion and damage due to increases in volume, velocity and peak flow rate of stormwater runoff for the stated frequency storm of 24-hour duration in accordance with the following standards and criteria. Stream restoration and relocation projects that incorporate natural channel design concepts are not man-made channels and shall be exempt from any flow rate capacity and velocity requirements for natural or man-made channels:

a. Concentrated stormwater runoff leaving a development site shall be discharged directly into an adequate natural or man-made receiving channel, pipe or storm sewer system. For those sites where runoff is discharged into a pipe or pipe system, downstream stability analyses at the outfall of the pipe or pipe system shall be performed.
b. Adequacy of all channels and pipes shall be verified in the following manner:
(1) The applicant shall demonstrate that the total drainage area to the point of analysis within the channel is one hundred times greater than the contributing drainage area of the project in question; or
(2) (a) Natural channels shall be analyzed by the use of a two-year storm to verify that stormwater will not overtop channel banks nor cause erosion of channel bed or banks.
(b) All previously constructed man-made channels shall be analyzed by the use of a ten-year storm to verify that stormwater will not overtop its banks and by the use of a two-year storm to demonstrate that stormwater will not cause erosion of channel bed or banks; and
(c) Pipes and storm sewer systems shall be analyzed by the use of a ten-year storm to verify that stormwater will be contained within the pipe or system.
c. If existing natural receiving channels or previously constructed man-made channels or pipes are not adequate, the applicant shall:
(1) Improve the channels to a condition where a ten-year storm will not overtop the banks and a two-year storm will not cause erosion to the channel bed or banks; or
(2) Improve the pipe or pipe system to a condition where the ten-year storm is contained within the appurtenances;
(3) Develop a site design that will not cause the pre-development peak runoff rate from a two-year storm to increase when runoff outfalls into a natural channel or will not cause the pre-development peak runoff rate from a ten-year storm to increase when runoff outfalls into a man-made channel; or
(4) Provide a combination of channel improvement, stormwater detention or other measures which is satisfactory to the VESCP authority to prevent downstream erosion.
d. The applicant shall provide evidence of permission to make the improvements.
e. All hydrologic analyses shall be based on the existing watershed characteristics and the ultimate development of the subject project.
f. If the applicant chooses an option that includes stormwater detention, he shall obtain approval from the VESCP of a plan for maintenance of the detention facilities. The plan shall set forth the maintenance requirements of the facility and the person responsible for performing the maintenance.
g. Outfall from a detention facility shall be discharged to a receiving channel, and energy dissipators shall be placed at the outfall of all detention facilities as necessary to provide a stabilized transition from the facility to the receiving channel.
h. All on-site channels must be verified to be adequate.
i. Increased volumes of sheet flows that may cause erosion or sedimentation on adjacent property shall be diverted to a stable outlet, adequate channel, pipe or pipe system, or to a detention facility.
j. In applying these stormwater management criteria, individual lots or parcels in a residential, commercial or industrial development shall not be considered to be separate development projects. Instead, the development, as a whole, shall be considered to be a single development project. Hydrologic parameters that reflect the ultimate development condition shall be used in all engineering calculations.
k. All measures used to protect properties and waterways shall be employed in a manner which minimizes impacts on the physical, chemical and biological integrity of rivers, streams and other waters of the state.
l. Any plan approved prior to July 1, 2014, that provides for stormwater management that addresses any flow rate capacity and velocity requirements for natural or man-made channels shall satisfy the flow rate capacity and velocity requirements for natural or man-made channels if the practices are designed to (i) detain the water quality volume and to release it over 48 hours; (ii) detain and release over a 24-hour period the expected rainfall resulting from the one year, 24-hour storm; and (iii) reduce the allowable peak flow rate resulting from the 1.5, 2, and 10-year, 24-hour storms to a level that is less than or equal to the peak flow rate from the site assuming it was in a good forested condition, achieved through multiplication of the forested peak flow rate by a reduction factor that is equal to the runoff volume from the site when it was in a good forested condition divided by the runoff volume from the site in its proposed condition, and shall be exempt from any flow rate capacity and velocity requirements for natural or man-made channels as defined in any regulations promulgated pursuant to 62.1-44.15:54 or 62.1-44.15:65 of the Act.
m. For plans approved on and after July 1, 2014, the flow rate capacity and velocity requirements of 62.1-44-15:52A of the Act and this subsection shall be satisfied by compliance with water quantity requirements in the Stormwater Management Act (62.1-44.15:24 et seq. of the Code of Virginia) and attendant regulations, unless such land disturbing activities are in accordance with 9VAC25-870-48 of the Virginia Stormwater Management Program (VSMP) Regulations.
n. Compliance with the water quality standards set out in 9VAC25-870-66 of the Virginia Stormwater Management Program (VSMP) Regulations shall be deemed to satisfy the requirements of subdivision 19 of this subsection.

EROSION AND SEDIMENT CONTROL GENERAL NOTES
1. All work shall be done in accordance with the current edition of the Virginia Erosion and Sediment Control Handbook and the standards and specifications of the City of Winchester, Virginia.

2. A City of Winchester Land Disturbance permit shall be required for this project. In accordance with the requirements of the City Engineer, a pre-construction meeting with the local program administrator is required prior to commencement of construction of this project.

3. The local program administrator shall be given at least a one (1) week notice prior to the pre-construction conference, the commencement of any land disturbing activity, and to the final inspection.

4. The contractor is responsible for the installation of any additional erosion control measures as may be deemed necessary by the local program administrator.

SEDIMENT AND EROSION CONTROL NARRATIVE
1. Project Description:

This project shall consist of the construction of the Phase II site improvements of the Museum of the Shenandoah Valley (MSV) master development plan. The work shall include the construction of a new main entrance with main access roadway and an accessory service roadway. The existing parking area shall be enhanced and expanded and a new event lawn area shall be developed in front of the main museum facility. Additionally, new fitness trails shall be constructed throughout this parcel for use by the patrons of MSV and the general public. The total area of disturbance shall be approximately 22.2 acres; consisting of approximately 3.5 acres of disturbance at the new entrance, 4.0 acres for the new main roadway, 9.7 acres for the service roadway and enhanced parking areas, and approximately 5.0 acres for the walking trail network.

2. Existing Conditions:

The proposed site is located on the southern boundary of Amherst Street right-of-way within the city limits of the City of Winchester, Virginia. This project proposes to remove and stockpile the topsoil at varying locations throughout the parcel, cut and fill excavations for the proposed facilities, install storm water management facilities, and pave the proposed roadways and parking areas for use by the patrons of MSV. This parcel is both open for farming and pasture areas and heavily wooded in its natural state. These areas will be disturbed for the proposed improvements. The areas of distubance shall be limited to the greatest extent possible to preserve the areas for farming and preservation of the natural woodlands. There are several rock outcroppings throughout this site which will impact construction, so areas of disturbance shall be limited to remove the least amount of rock, as possible. The limits of construction have been shown on these plans and the construction access to the site shall be provided from the new entry driveway adjacent to the existing James Wood Middle School and the existing main access roadway that currently provided access to the MSV.

3. Adjacent Areas:

The site is bounded to the east by the 525 Amherst Street office complex and to the west by James Wood Middle School. Amherst Street coincides with the northern boundary line of the parcel and a large residential neighborhood surrounds the remainder of the site. This area of disturbance shall be distributed throughout the site, but the majority of the work shall be adjacent to James Wood Middle School and in the middle of the Glass-Glen Burnie site which will limit its visual impacts on the perimeter parcels.

4. Off-Site Areas:

No off site areas will be affected.

5. Soils:

The soils map of Frederick County does not include the soil types within the boundaries of the City of Winchester Corporate Limits.

6. Critical Areas:

The existing storm sewer system adjacent to James Wood Middle School located under Amherst Street.

7. Construction Sequencing:

1. Site Preparation:
a. Hand dig test pits over existing utilities to determine their depth and actual locations.
b. Installation of the construction entrance.

2. Phase I Controls:
a. Installation of protective screening around the trees, the existing utilities, and along the pedestrian walkways and perimeter boundaries.
b. Installation of the silt fence along the individual site boundaries, as indicated on the plans, and the silt trap devices.
c. Clearing and grubbing of the immediate site areas only, as indicated by the clearing limits. Only the trees that affect the work area will be disturbed.
d. Rough grading of parking, roadways, and trail areas to the grades shown.
e. Rough grading of the adjacent slopes and lawn areas.
f. Installation of the storm sewer systems and sanitary and water systems.
g. Installation of all service utilities and site lighting utilities and structures.
h. Stabilization of all disturbed areas until the full development of the site occurs.

3. Phase II:
a. Final grading of all disturbed areas.
b. installation of garden walls, curb and gutter systems, and perimeter walkways.
c. Installation of stone base and pavement structures for all roadway, access areas, and parking facilities.
d. Installation of lighting fixtures and all landscaping.
e. Stabilization of all disturbed areas.
f. Final site cleanup and demobilization.

8. Maintenance:

The contractor shall be responsible for the installation and maintenance of all erosion and sediment control measures. All measures shall be inspected daily and after each significant rainfall by the site superintendent or his representative. Any damaged structures shall be repaired or replaced by the end of work that day.

a. The construction entrance shall be maintained so as to control the amount of soil materials that may get caught on the existing pavement. If the pavement becomes too soiled with soil, mud, and debris that it will not prevent tracking onto the right-of-way, then it shall be cleaned and/or washed, as may be deemed necessary. A trash rack shall be installed as part of the construction entrance construction. If this measure fails to properly clean the construction vehicles, then a wash rack must be installed as directed by the local program administrator.

b. The silt fencing and sediment trap devices shall be checked regularly for deposited sediment. If sediment is trapped, it shall be cleaned carefully so as not to release the trapped sediment downstream or on adjacent properties.

c. All seeded and sodded areas shall be checked regularly to ensure that a good stand of grass is maintained. Areas shall be repaired, fertilized, and reseeded or resodded, as required.

9. Erosion and Sediment Control Measures:

a. Erosion and Sediment Control Measures shall be installed prior to any land disturbing activities. The work shall be confined to the designated limits of clearing and grading. For this project, the limits of clearing and grading are defined by the grading limits of the storage shed site area. All perimeter sediment control devices shall be erected prior to any land disturbing activities and shall remain in place until the site is fully stabilized.

b. No disturbed areas shall be denuded for more than thirty (30) days. The contractor shall stabilize all exposed areas within seven (7) days after the end of construction of that phase of the work. If possible, all natural vegetation and/or mulching shall be used to protect areas exposed during development of the site. The existing vegetation along the limits of clearing and grading shall remain in place and be protected during the construction process to the greatest possible extent.

c. Soil stockpiles must be stabilized or protected with sediment trapping measures to prevent soil loss. Utility trenches located outside of paved areas shall be seeded and mulched within two (2) weeks of backfilling.

d. Upon completion of construction, all permanent erosion and sediment control measures shall be installed. After stabilization, the temporary erosion control measures shall be removed, as approved by the local program administrator. All vegetative cover shall be checked regularly and any damaged areas shall be repaired, fertilized, replanted, and mulched, as needed.

e. All property areas immediately adjacent to the work site shall be protected from sediment deposition. This shall be accomplished by installing perimeter controls such as silt fence barriers, diversion dikes, filters or check dams, or a combination of such measures, as indicated on the plans.

f. The contractor shall be responsible for the installation and maintenance of all erosion and sediment control measures.

g. The contractor shall perform over lot grading to provide positive drainage and preclude ponding of water. All off site grading and construction is to be done with the property owner's consent.

h. Cut and fill slopes shall be graded at a maximum of 3 horizontal to 1 vertical unless otherwise indicated on these plans.

3.01 Safety fence shall be installed in selected locations to ensure that the safety of the public is maintained at all times by segregation of the construction area from the public.

3.02 A 20'w by 70'l temporary stone construction entrance will be constructed off of Pleasant Valley Road. The entrance shall be maintained in a condition which will prevent tracking or flow of soil or mud onto the public rights-of-way. This may require periodic top dressing with additional stone or the washing and reworking of existing stone, as conditions demand, and repair or cleanout of any structures used to trap sediment. All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains must be removed immediately. The use of water trucks to remove materials dropped, washed, or tracked onto roadways will not be permitted under any circumstances.

3.05 Silt fence will be installed in selected locations downstream from the construction areas as a first measure of construction. Silt fence will be installed around the downstream side of topsoil stockpiles. Silt fences shall be inspected after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately. Damaged, decomposed or otherwise ineffective silt fence shall be replaced immediately. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately one-half the height of the barrier. Any sediment deposits remaining in place after the silt fence is no longer needed shall be dressed to conform with the existing grade and stabilized.

3.07 A gravel and wire mesh drop inlet sediment filter will be installed around each of the existing storm water drop inlets. The structures shall be inspected after each rain and repairs made as needed. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to one half the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode. Structures shall be removed and the area stabilized when the remaining drainage area has been properly stabilized.

3.13 A temporary sediment trap will be constructed on the site to control sediment generated from the clearing operation. The trap berms will be constructed with on-site materials and will be seeded with the temporary seeding mix immediately after installation. This facility will be inspected after each rain storm and repairs made as necessary.

3.30 Topsoil shall be uniformly placed on all disturbed areas. The topsoil shall be clean and workable and shall promote growth of all seeding, sodding, or any other protective vegetative cover.

3.32 All disturbed areas will be stabilized by permanent seeding in accordance with the schedule included herein. The anticipated time for clearing is Spring 2018.

3.35 All seeded areas will be mulched in accordance with the schedule included herein.

3.36 All cut slopes and fill slopes along the proposed roadways and trails, in excess of 2:1 slopes, will be stabilized with matting to promote the establishment of a vegetative cover. The mat areas will be inspected after each significant rainfall event and repairs will be made as required.

3.38 All tree protection measures shall be checked daily to ensure that they are secure and functioning properly. These measures shall remain in place until completion of the construction process.

Temporary Seeding:

SEED TYPE	RATE	MIN. PURITY(%)	MIN. GERM.(%)
Sept 1 – Feb 15:			
Annual Ryegrass	50 lb/ac	98	85
Winter Rye	50 lb/ac	98	85
May 1 – Aug 31:			
German Millet	50 lb/ac	98	85
or			
Feb 16 – Apr 30:			
Annual ryegrass	75 lb/ac	98	85
Mulch:	1.5 ton/ac small grain straw		
Fertilizer:	1000 lb/ac 10-10-10		

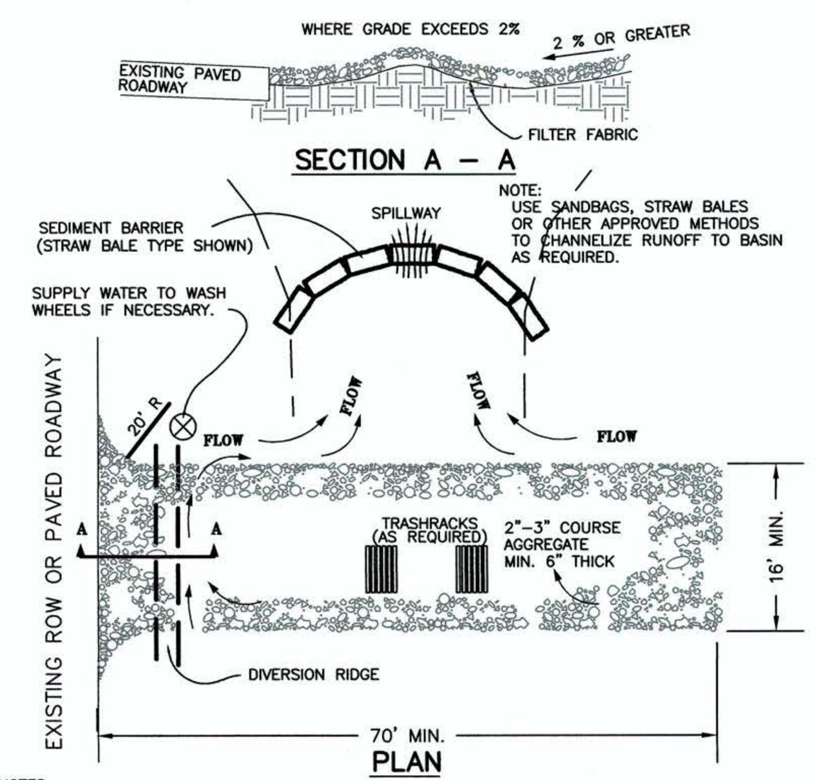
Permanent Stabilization:
The contractor shall stabilize all denuded land within 7 days after the end of construction. Permanent stabilization shall be applied to areas that are to be left dormant for more than one year. During construction of the project, soil stockpiles shall be stabilized or protected with sediment trapping measures. The contractor is responsible for the temporary protection and permanent stabilization of all soil stockpiles on site as well as soil intentionally transported from the project site. No soil testing is required. The contractor shall establish vegetation on all areas not otherwise stabilized according the following specification:

Seedbed Preparation:
a. Scarify top 1" to 2" of soil after final grades have been achieved.
b. Add 3 tons per acre pulverized agricultural limestone(140lb/1000sf)

SEED TYPE	RATE	MIN. PURITY(%)	MIN. GERM.(%)
Tall fescue	60 lb/ac	97	85
Red clover	8 lb/ac	95	65
Ladino clover	8 lb/ac	95	65

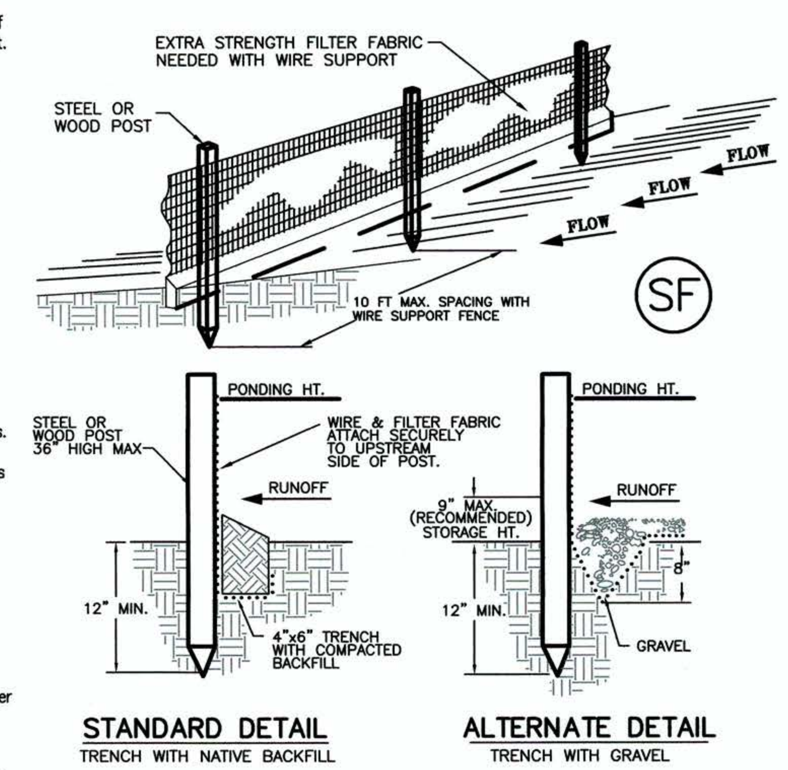
Nurse Grass-(season dependent)

Sept 1 – Feb 15:			
Annual Ryegrass	12 lb/ac	98	85
Winter Rye	12 lb/ac	98	85
May 1 – Aug 31:			
German Millet	12 lb/ac	98	85
or			
Feb 16 – Apr 30:			
Annual ryegrass	12 lb/ac	98	85
Mulch:	1.5 ton/ac small grain straw		
Fertilizer:	1000 lb/ac 10-10-10		



NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. INSTALL CATTLE GUARDS AS CALLED FOR ON THE PLANS.

(CE) TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT

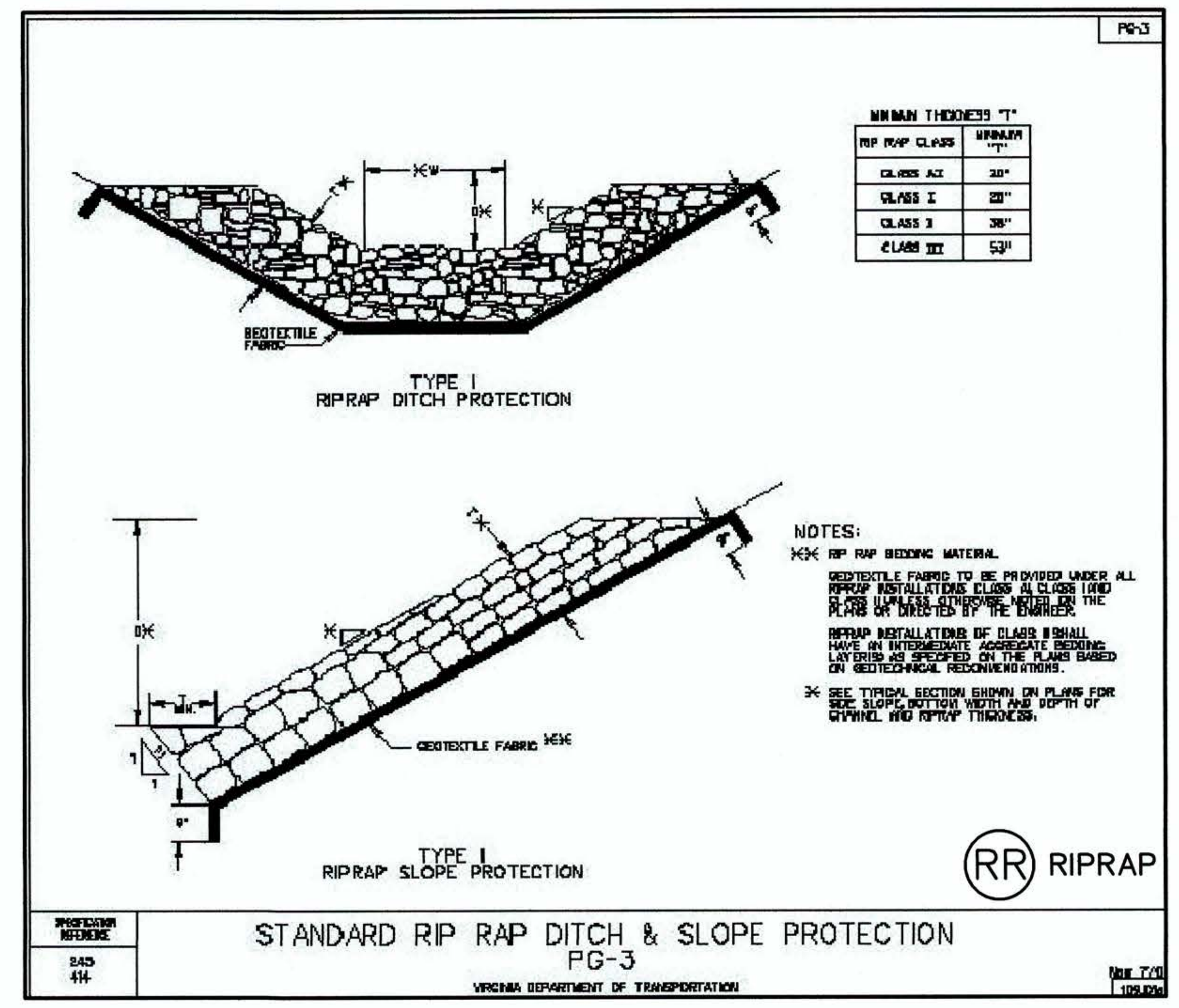


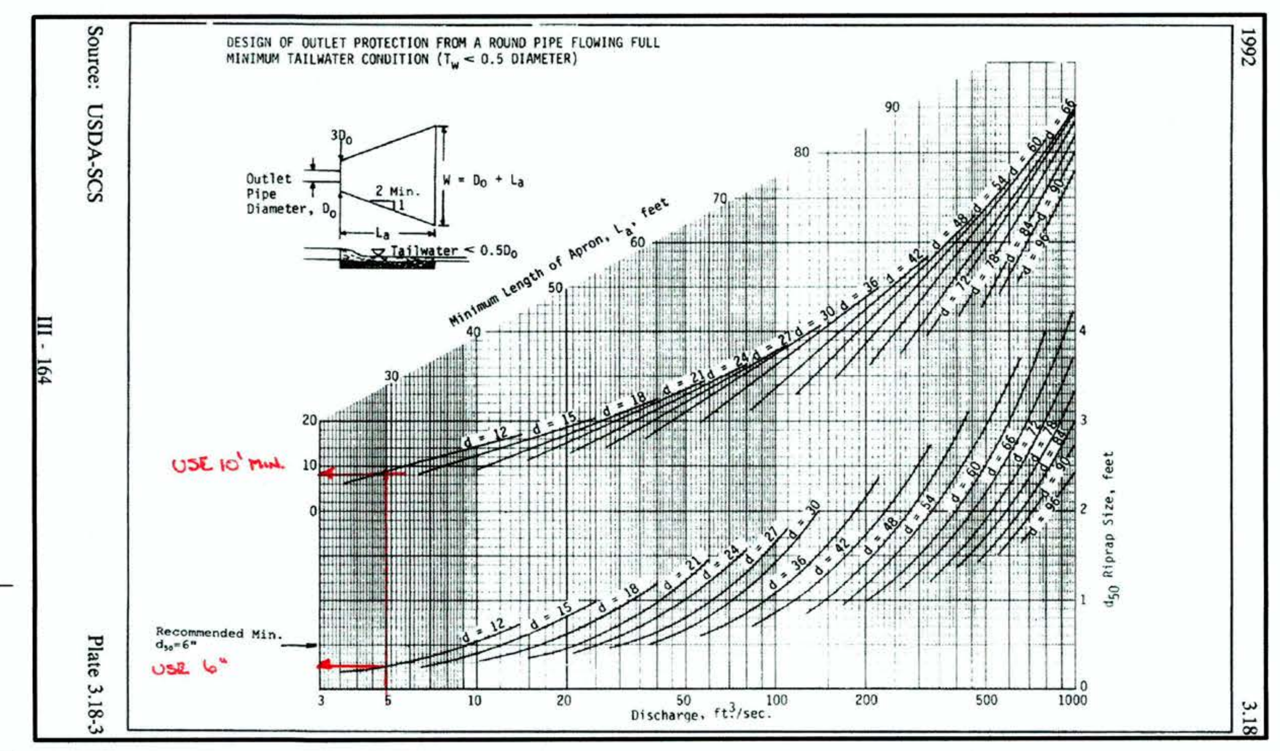
STANDARD DETAIL
TRENCH WITH NATIVE BACKFILL

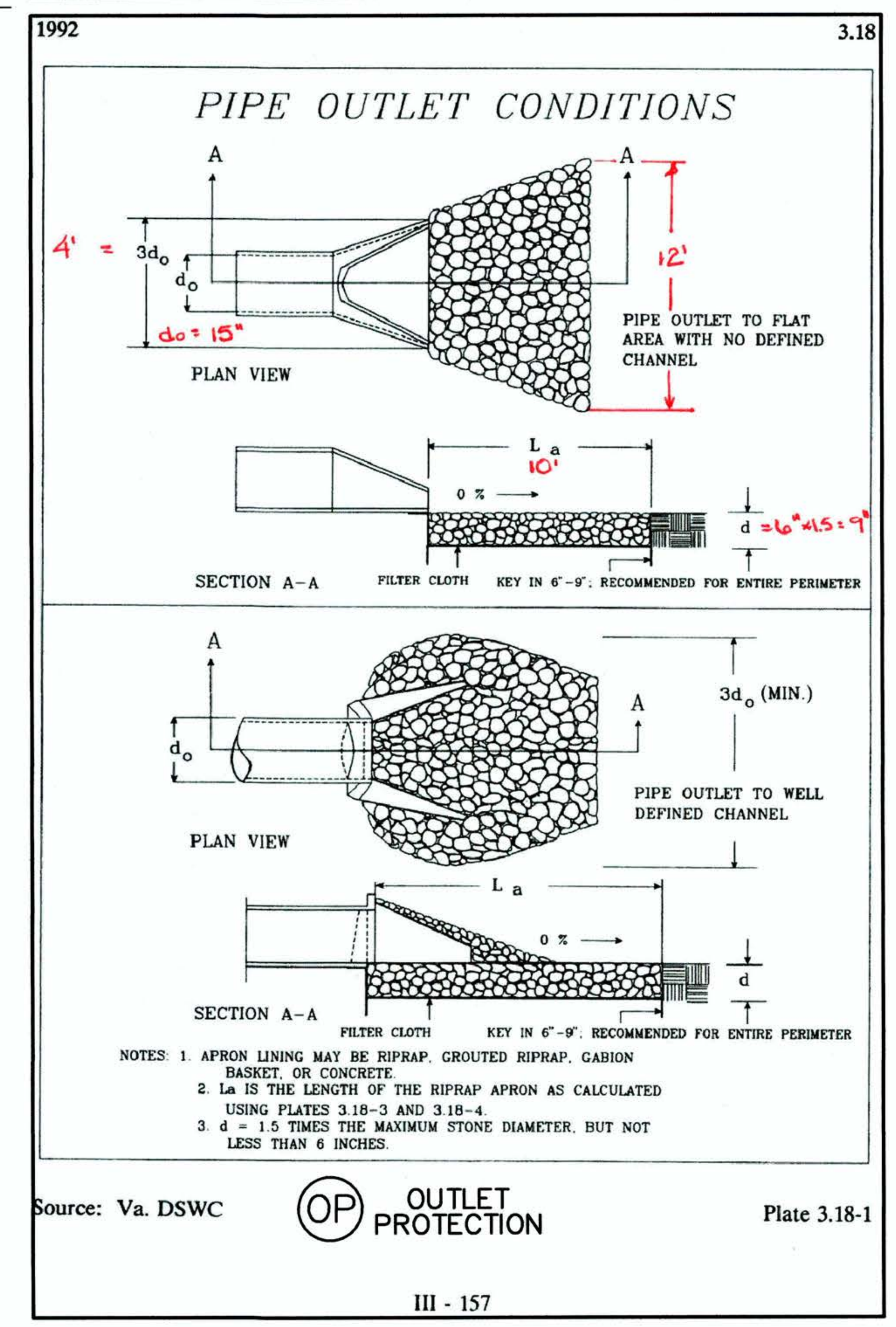
ALTERNATE DETAIL
TRENCH WITH GRAVEL

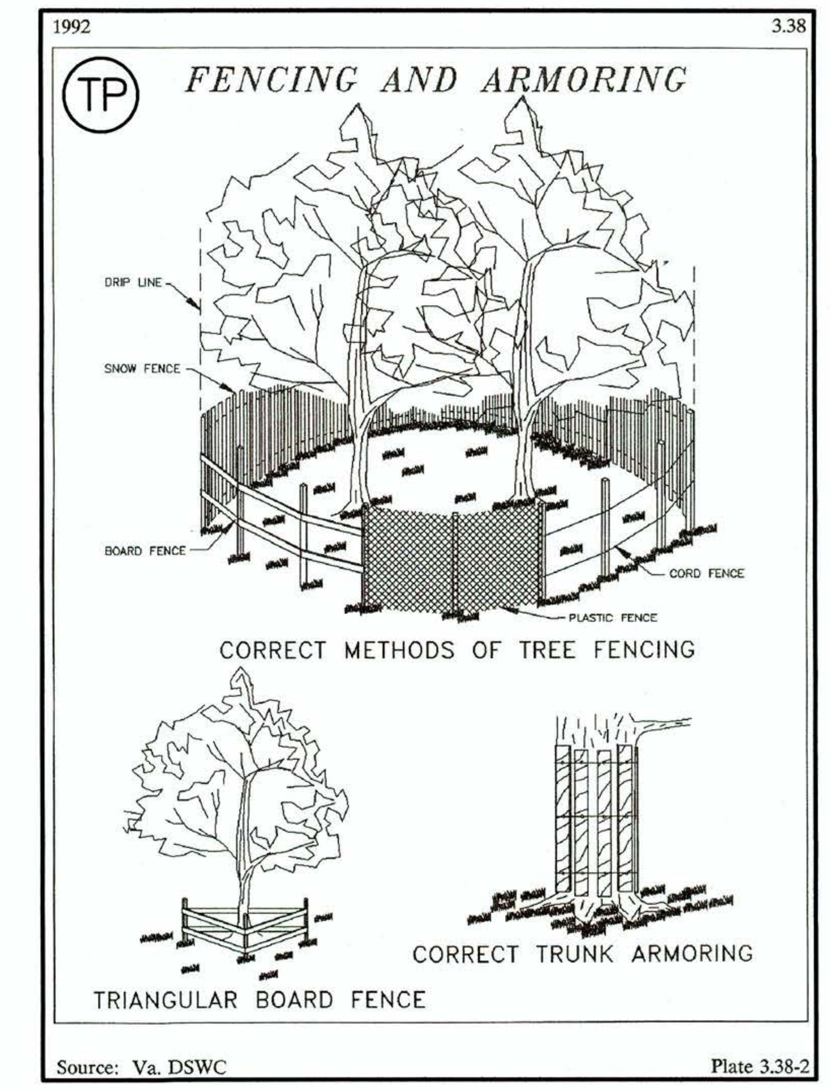
NOTE:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
4. SET POSTS AND EXCAVATE A 4"x4" TRENCH UPSLOPE ANLONG THE LINE OF POSTS.
5. STAPLE WIRE FENCING TO THE POSTS.
6. ATTACH WIRE FILTER FABRIC TO THE WIRE FENCING AND EXTEND IT INTO THE TRENCH.
7. BACKFILL AND COMPACT THE EXCAVATED SOIL.

SILT FENCE DETAIL WITH WIRE SUPPORT
NOT TO SCALE — ADDAPTED FROM: 1992 VA E&S CONTROL HANDBOOK 3.05









EROSION & SEDIMENT CONTROL KEY

3.01 SAFETY FENCE	SAF	
3.02 TEMPORARY STONE CONSTRUCTION ENTRANCE	CE	
3.05 SILT FENCE	SF	X——X——X——X
3.18 OUTLET PROTECTION	OP	
3.19 RIPRAP	RR	
3.30 TEMPORARY SEEDING	TS	——TS——
3.30 TOPSOILING	TO	——TO——
3.32 PERMANENT SEEDING	PS	——PS——
3.35 MULCHING	MU	——MU——
3.38 TREE PRESERVATION AND PROTECTION	TP	——TP——

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	05-20-19	V.D.O.T. COMMENTS	TGP

TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS-SITE IMPROVEMENTS VDOT PROJECT: EN17-138-111; UPC 111418 EROSION & SEDIMENT CONTROL NARRATIVE AND DETAILS

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY 901 AMHERST STREET WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
Telephone: (540) 662-5792
Facsimile: (540) 662-5793
Email: office@painterlewis.com
CONSULTING ENGINEERS

COMMONWEALTH OF VIRGINIA
TIMOTHY G. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

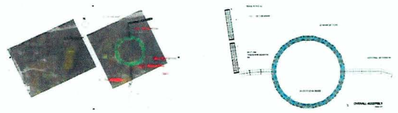
SURVEY: P-L PLC	C.I.: 1'
DRAWN BY: TGP	JOB NO.: 1709011
SCALE: AS NOTED	DATE: 09-10-18
SHEET: 17/19	

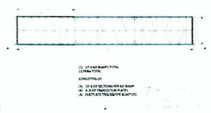
FLOTATION SYSTEMS, INC.

2700 ALABAMA HIGHWAY 69 SOUTH | CULLMAN, ALABAMA | 35057

"MUSEUM OF THE SHENANDOAH VALLEY"

PROJECT PROPOSAL AND DESIGN SUMMARY (1)





(2) 9'-6" x 60' **RAMPS** WITH (4) ATTACHMENTS FOR CONCRETE BULKHEAD CONNECTION

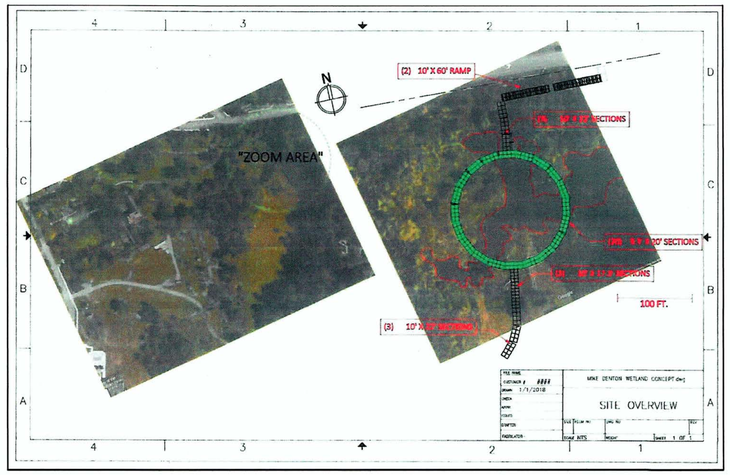
(20) 9'-6" X 20' **MAIN FRAMES** WITH WEDGE FRAME CONNECTION

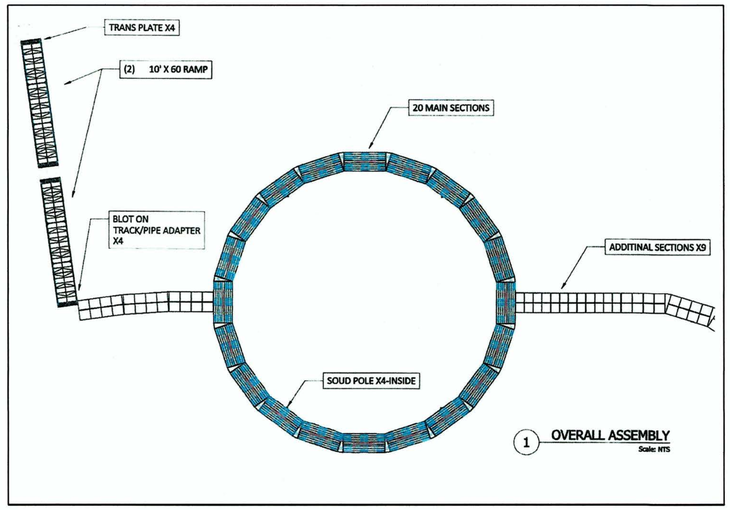
(8) 9'-6" X 22' **SECONDARY ACCESS FRAMES**

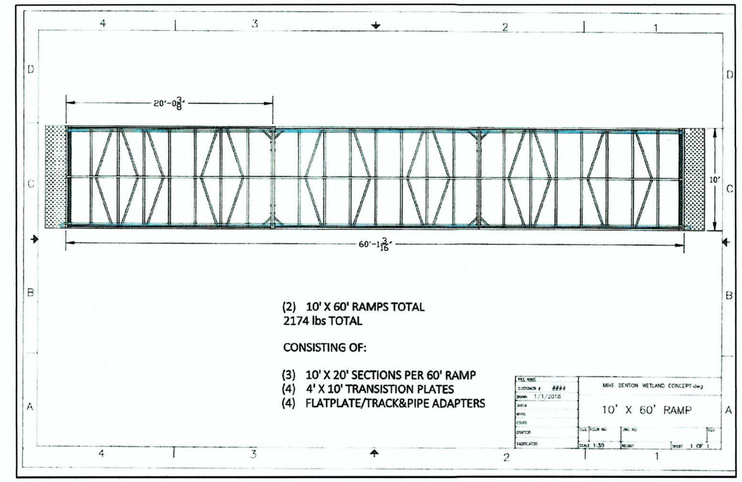
- 10" HEAVY WEIGHT C-CHANNEL WITH GUSSETING WILL BE USED ON ALL FRAMING
- 2"X 2" SUPPORT ON 12" CENTERS WILL BE PROVIDED TO ACCOMMODATE TREX DECKING
- (18) TRACK/PIPE/HINGED CONNECTIONS WILL BE USED AS SPECIFIED
- ASSEMBLY WILL ACCOMMODATE (6) 48" X 48" X 20" FLOATS PER FRAME (150 TOTAL)
- (4) 3' COLLAR/POLE (SPUD POLE) ANCHORING SYSTEMS WILL BE USED
- POWDER COATING OF MILL FINISH AS REQUIRED
- ALL STAINLESS STEEL HARDWARE WILL BE USED THROUGHOUT
- PRELIMINARY AND FINAL MANUFACTURING DRAWINGS WILL BE PROVIDED

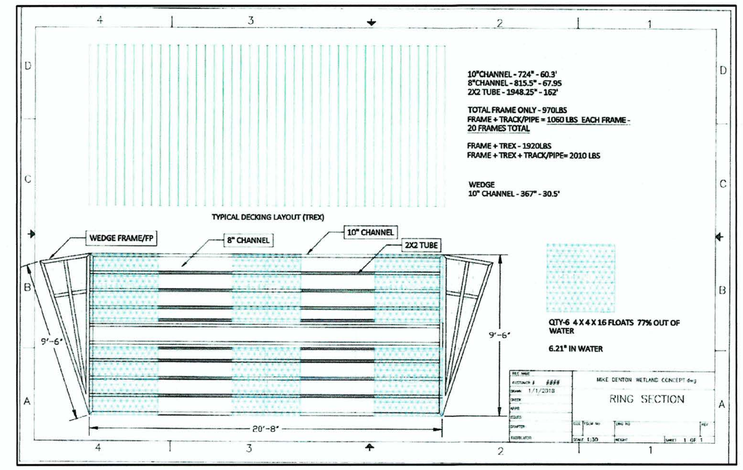
NOTE: WETLANDS DOCK & RAMP FACILITIES

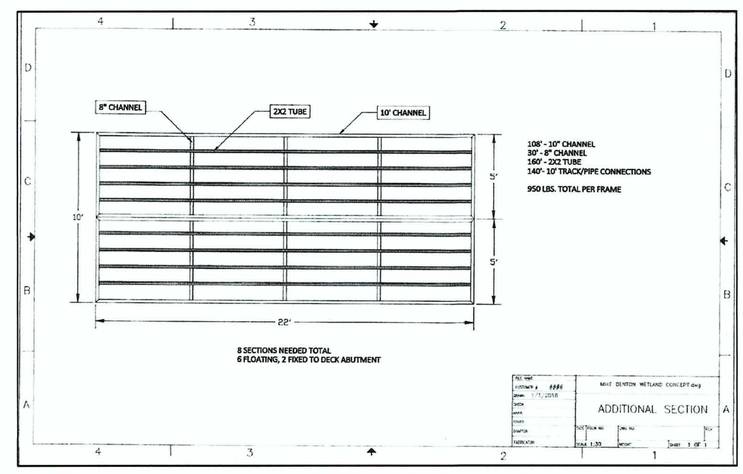
- FLOTATION SYSTEMS, INC. LOCATED AT 2700 ALABAMA HIGHWAY 69 SOUTH IN CULLMAN, ALABAMA IN ASSOCIATION WITH BUGGS ISLAND DOCK SERVICE LOCATED AT 11632 HIGHWAY 15 IN CLARKSVILLE, VIRGINIA HAVE DEVELOPED THE FLOTATION DEVISES AND ALUMINUM RAMP DESIGNS NEEDED TO DEVELOP THE PROPOSED WALKWAY IN THE WETLANDS AREA OF THIS PROJECT.
- THESE DESIGN ELEMENTS HAVE BEEN INDICATED ON THIS SHEET AND SHALL BE USED AS THE BASE DESIGN AND STANDARD OF QUALITY TO BE USED IN THE DESIGN DEVELOPMENT AND BIDDING PROCESS OF THIS PROJECT. THIS PORTION OF THE PROJECT IS A DESIGN-BUILD CONCEPT AND SHALL BE BASED ON THE DESIGN DOCUMENTS ILLUSTRATED ON THESE PLANS.
- IN ADDITION TO ALL OF THE ELEMENTS SHOWN, THE DESIGN AND PROVISION OF THESE FACILITIES SHALL ALSO INCLUDE INSTALLATION OVERSIGHT AND FACTORY DESIGNED CONNECTIONS TO BE INSTALLED BY THE PROJECT CONTRACTOR IN THE FIELD.
- THE SUPPLIER SHOULD INCLUDE THE FOLLOWING AS PART OF THE TOTAL DESIGN-BUILD PRICING TO BE INCLUDED WITH THIS PROJECT:
  - ON SITE SUPERVISION TO DIRECT THE CONTRACTOR IN THE INSTALLATION OF THESE FLOTATION ELEMENTS, FOR THE DURATION OF THIS PHASE OF THE PROJECT.
  - THE ASSUMPTION THAT YOU WILL INSTRUCT AND WORK WITH CARPENTRY LEVEL TRADESMEN FOR THE INSTALLATION OF THESE ELEMENTS AND DIRECTING THEM ACCORDINGLY.
  - THE INCLUSION OF PLASTIC SLEEVES AND HINGED CONNECTIONS, AS INDICATED ON THESE PLANS, TO ALLOW FOR MOVEMENT OF THE SECTIONS UNDER VARIABLE WATER ELEVATIONS FOR THE LIFE OF THIS FACILITY. ADDITIONALLY, THE SECTIONS AND CONNECTIONS SHALL BE ABLE TO RESIST THE APPLICABLE WIND LOADING CONDITIONS AS ESTABLISHED BY THE INTERNATIONAL BUILDING CODE FOR THIS AREA.
  - THE ALLOWANCE OF MOVABLE (SLIDING) CONNECTIONS WHERE THE PRE-MANUFACTURED RAMPS CONNECT TO THE BUILT-IN-PLACE LANDINGS OF THE ENTRY RAMP FROM THE STREET.
  - THE INCLUSION AND SUPPLY OF THE APPROPRIATE HARDWARE TO CONNECT THE FLOTATION DEVICES TO THE ALUMINUM FRAMES, AND INSTRUCTION FOR INSTALLATION.
  - THE ALUMINUM FRAMES SHALL BE POWDER-COATED WITH A BRONZE FINISH, AS APPROVED BY THE OWNER, TO SERVE AS A FINISHED PRODUCT.
  - THE FINISHED SURFACE SHALL BE SUPPLIED BY THE TREX COMPANY TO BE INSTALLED BY THE INSTALLATION CONTRACTOR. ALLOWANCES SHALL BE MADE FOR THE COORDINATION AND INSTALLATION.











REVISIONS

NO.	DATE	DESCRIPTION	BY
1	05-20-19	V.D.O.T. COMMENTS	TGP

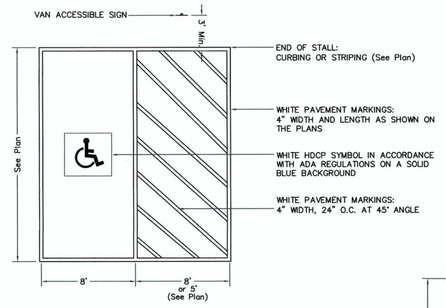
TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS-SITE IMPROVEMENTS VDOT PROJECT: EN17-138-111; UPC 111418 WETLANDS ELEMENT DETAILS

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY 901 AMHERST STREET WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
Telephone: (540) 662-5792
Facsimile: (540) 662-5793
Email: office@painterlewis.com
CONSULTING ENGINEERS

COMMONWEALTH OF VIRGINIA
TIMOTHY G. PAINTER
Lic. No. 018260
05/20/19
PROFESSIONAL ENGINEER

SURVEY: P-L PLC	C.I.: 1'
DRAWN BY: TGP	JOB NO.: 1709011
SCALE: AS NOTED	DATE: 09-10-18
SHEET: 18/19	



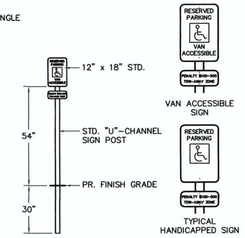
NOTES:
ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE ADA ACCESSIBILITY REGULATIONS FOR BUILDINGS AND FACILITES

THE PAINT SHALL BE NON-REFLECTORIZED, ACRYLIC LATEX, TYPE #42XX TRAFFIC MARKING PAINT BY DEVOE, LOUISVILLE, KY, OR APPROVED EQUAL.

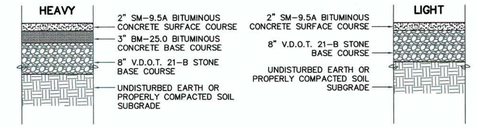
THE SIGNAGE MAY BE INSTALLED ON THE BUILDINGS WILL PROPER APPROVAL FROM THE LOCAL BUILDING OFFICIAL.

PLEASE REFER TO THE SITE PLAN FOR THE PROPOSED LAYOUT AND ORIENTATION OF THE ACCESSIBLE PARKING AREAS.

HANDICAPPED SPACES: PARKING LOT STRIPING DETAILS
N.T.S.

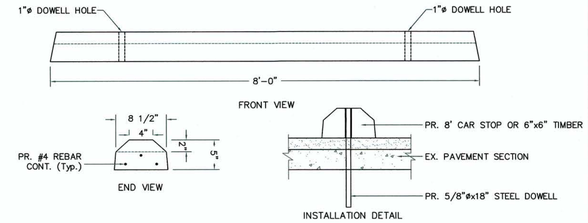


HANDICAP SIGN DETAIL
N.T.S.

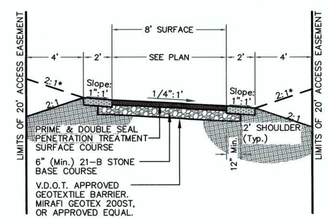


NOTE:
-THE HEAVY PAVEMENT SECTION SHALL BE APPLIED TO THE MAIN ENTRANCE AND ACCESS ROADWAY, AS INDICATED ON THE PLANS, AND THE LOADING AREA.
-THE LIGHT PAVEMENT SECTION SHALL BE APPLIED TO THE FUTURE PARKING STALL AREAS AND AISLES.
-THE STONE PAVEMENT SECTION SHALL BE APPLIED TO THE PROPOSED DRIVEWAY ACCESS & STORAGE ACCESS AREAS.
(SEE PLANS FOR ADDITIONAL INFORMATION)

ON-SITE PAVEMENT DETAILS
N.T.S.

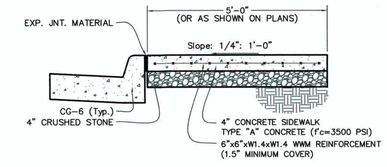


TIMBER OR PRE-CAST CONCRETE CURB DETAIL
N.T.S.

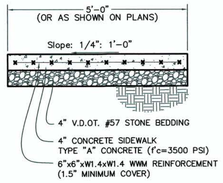


NOTES: TRAIL SECTION
*CUT SIDE SLOPES
- ALL CUT & FILL SLOPES SHALL BE 2:1 or FLATTER.
- 1½ :1 SLOPE PERMITTED IN ROCK.
PAVEMENT SECTION:
- THE GEOTEXTILE SHALL BE INSTALLED AS SITE CONDITIONS WARRANT.
SHOULDERS:
- AS AN ALTERNATE BID ITEM, THE 2' SHOULDERS SHALL BE PAVED WITH A MINIMUM OF 4" OF V.D.O.T. 21-B STONE.

MUSEUM: PEDESTRIAN/FITNESS PAVED TRAIL TYPICAL SECTION DETAIL
N.T.S.



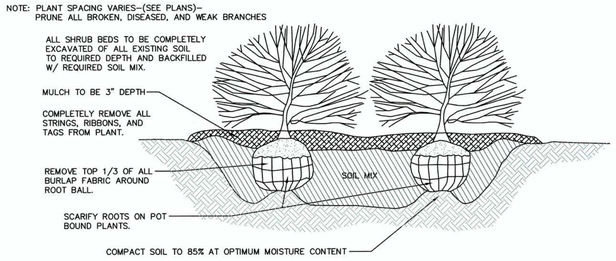
ON-SITE 4" CONCRETE SIDEWALK DETAIL
N.T.S.



PUBLIC STREET: 4" CONCRETE SIDEWALK DETAIL
N.T.S.

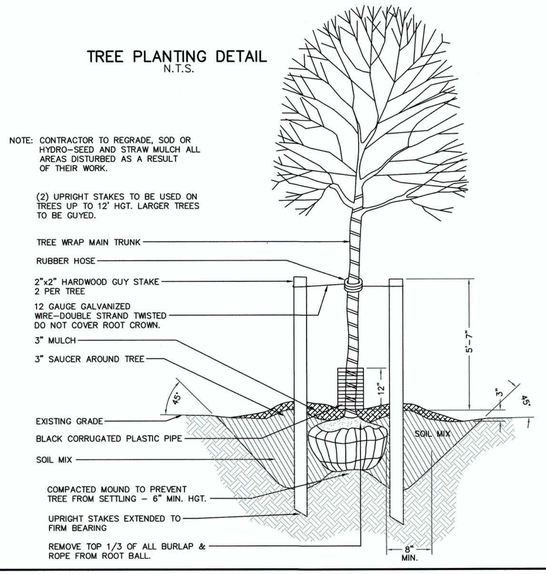
SHRUB PLANTING DETAIL
N.T.S.

NOTE: PLANT SPACING VARIES-(SEE PLANS)-
PRUNE ALL BROKEN, DISEASED, AND WEAK BRANCHES

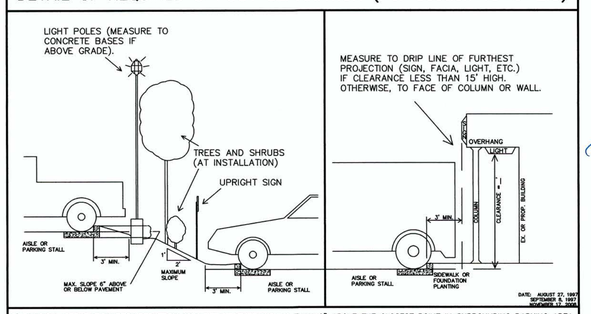


TREE PLANTING DETAIL
N.T.S.

NOTE: CONTRACTOR TO REGRADE, SOD OR HYDRO-SEED AND STRAW MULCH ALL AREAS DISTURBED AS A RESULT OF THEIR WORK.



CITY OF WINCHESTER, VIRGINIA
DETAIL OF REQUIRED 3-FOOT SEPARATION (Per Section 18-6-2.3)



3' PHYSICAL SEPARATION REQUIRED FROM ANY SITE FEATURE HIGHER THAN 6" ABOVE THE CLOSEST POINT IN SURROUNDING PARKING AREA. MINOR DEVIATIONS TO THE MAXIMUM SLOPE WITHIN THE 3-FOOT AREA WILL BE CONSIDERED ON A CASE BY CASE BASIS.

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	05-20-19	V.D.O.T. COMMENTS	TGP

TITLE: MUSEUM OF THE SHENANDOAH VALLEY: PUBLIC TRAILS-SITE IMPROVEMENTS VDOT PROJECT: EN17-138-111; UPC 111418 MISCELLANEOUS CONSTRUCTION DETAILS

PROJECT: THE MUSEUM OF THE SHENANDOAH VALLEY 901 AMHERST STREET WINCHESTER, VIRGINIA 22601

PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE, SUITE 120
WINCHESTER, VIRGINIA 22601
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