## **ENGINEERS NOTES**

BALZER AND ASSOCIATES, INC. ASSUMES NO RESPONSIBILITY FOR ADEQUACY OF PLANS OR FOR INFORMATION ON PLANS UNTIL SUCH PLANS HAVE BEEN APPROVED BY THE REQUIRED PUBLIC AGENCIES.

HANDICAP PARKING SIGN

SYMBOL OF ACCESS ON

WITH INTERNATIONAL

--- CONDITION AT CONC WALK

- CONDITION AT PLANTER AREA

DIA CONC FOOTING

BLUE BACKGROUND. PROVIDE THEFT PROOF BOLTS, WASHERS & NUTS.

STEEL TUBE PIPE

HANDICAP SIGNPOST DETAIL

VAN ACCESSIBLE

PENALT \$100-500 FINE TOW-AWAY ZONE

ANY WORK COMMENCED ON A PROJECT PRIOR TO PLAN APPROVAL IS AT SOLE RISK OF THE DEVELOPER.

BALZER AND ASSOCIATES, INC. WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE PLANS AND WILL NOT BE RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.

## SITE CONSTRUCTION PLAN GENERAL NOTES

ALL MATERIALS AND CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH CURRENT VIRGINIA DEPARTMENT OF TRANSPORTATION'S STANDARDS AND

LAND USE PERMITS (CE-7P) MUST BE OBTAINED FROM THE VIRGINIA DEPARTMENT OF TRANSPORTATION PRIOR TO BEGINNING ANY CONSTRUCTION WITHIN THE EXISTING STATE MAINTAINED RIGHT-OF-WAY (INCLUDING ACCESS). VDOT IS TO RECEIVE WRITTEN NOTIFICATION 48 HOURS PRIOR TO COMMENCING WITH INITIAL CONSTRUCTION ACTIVITIES WITHIN SAID RIGHT-OF-WAYS.

THE CONTRACTOR SHALL VERIFY THE ELEVATIONS OF ALL POINTS OF CONNECTION OR PROPOSED WORK TO EXISTING CURBS, SANITARY LINES, WATER LINES, ETC., PRIOR TO CONSTRUCTION,

UPON THE DISCOVERY OF SOILS THAT ARE UNSUITABLE FOR FOUNDATIONS, SUBGRADES, OR OTHER ROADWAY CONSTRUCTION PURPOSES. THE CONTRACTOR SHALL IMMEDIATELY CONTACT A GEOTECHNICAL ENGINEER AND VDOT. THESE AREAS SHALL BE EXCAVATED BELOW PLAN GRADE AS DIRECTED BY THE GEOTECHNICAL ENGINEER, BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED IN ACCORDANCE WITH CURRENT VDOT SPECIFICATIONS.

ALL STORM SEWER DESIGN AND CONSTRUCTION TO BE IN ACCORDANCE WITH VDOT STANDARDS AND SPECIFICATIONS.

ALL CONCRETE SHALL BE CLASS A3-AE (AIR ENTRAINED 3,000 PSI).

HANDICAP SIGN NOTES:

VAN ACCESSIBLE

\$100~\$500 FINE

**USDA WEB SOIL SURVEY SOIL INFORMATION** 

Soil Map—Roanoke County and the Cities of Roanoke and Salem, Virginia

. ALL SIGNS SHALL BE REFLECTORIZED

1. THE PROPOSED SIGNAGE SHALL BE INSTALLED PER ADA STANDARDS.

3. ALL HANDICAP PARKING SPACE SIGNS SHALL HAVE THE BOTTOM

EDGE OF THE SIGN NO LOWER THAN FOUR FEET NOR HIGHER

NO SCALE

37° 20' 49" N

THAN SEVEN FEET ABOVE THE PARKING SURFACE.

HANDICAP SIGN DETAIL

CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT ENGINEER IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON PLAN. IF THERE APPEARS TO BE A CONFLICT. AND/OR UPON DISCOVERY OF ANY UTILITY SHOWN ON THIS PLAN. CALL MISS UTILITY OF CENTRAL VIRGINIA AT 1-800-552-7001. THE DEVELOPER SHALL BE RESPONSIBLE FOR THE RELOCATION OF ANY UTILITY WITHIN EXISTING AND/OR PROPOSED RIGHT-OF-WAY REQUIRED BY THE DEVELOPMENT.

THE INSTALLATION OF SEWER, WATER, AND GAS MAINS (INCLUDING SERVICES LATERALS AND SLEEVES) SHALL BE COMPLETED PRIOR TO PLACEMENT OF AGGREGATE BASE COURSE.

A PRIME COAT SEAL BETWEEN THE AGGREGATE BASE AND BITUMINOUS CONCRETE WILL BE REQUIRED AT A RATE OF 0.30 GALLONS PER SQUARE YARD (REC-250 PRIME COAT) PER VDOT STANDARDS AND SPECIFICATIONS.

THE SCHEDULING OF AGGREGATE BASE INSTALLATION AND SUBSEQUENT PAVING ACTIVITIES SHALL ACCOMMODATE FORECAST WEATHER CONDITIONS PER SECTION 315 OF THE ROAD AND BRIDGE

ALL VEGETATION AND ORGANIC MATERIAL IS TO BE REMOVED FROM THE PAVEMENT LIMITS PRIOR TO CONDITIONING OF THE SUBGRADE.

CERTIFICATION AND SOURCE OF MATERIALS SHALL BE IN ACCORDANCE WITH THE VDOT ROAD AND BRIDGE SPECIFICATIONS AND VDOT ROAD AND BRIDGE STANDARDS.

## STANDARD VIRGINIA DEPARTMENT OF TRANSPORTATION NOTES

#### UTILITIES

ALL NECESSARY UTILITY LATERALS ALONG WITH PROVISIONS FOR CONDUIT (i.e. WATER, SEWER, STORM, GAS AND TELEPHONE) SHALL BE CONSTRUCTED PRIOR TO PLACEMENT OF THE BASE MATERIAL.

EROSION CONTROL AND LANDSCAPING CARE SHALL BE TAKEN DURING CONSTRUCTION TO PREVENT EROSION, DUST AND MUD FROM DAMAGING ADJACENT PROPERTY, CLOGGING DITCHES, TRACKING PUBLIC STREETS AND OTHERWISE CREATING A PUBLIC NUISANCE TO SURROUNDING AREAS.

THE ENTIRE CONSTRUCTION AREA INCLUDING DITCHES, CHANNELS, BACK OF CURBS AND/OR PAVEMENT IS TO BE BACKFILLED AND SEEDED IN A TIMELY FASHION AFTER FINAL GRADING.

ALL VEGETATION AND OVERBURDEN SHALL BE REMOVED FROM THE PAVEMENT LIMITS PRIOR TO CONDITIONING (CUTTING AND/OR PREPARATION) OF THE SUB-GRADE.

AN INSPECTOR WILL NOT BE FURNISHED BY THE VIRGINIA DEPARTMENT OF TRANSPORTATION EXCEPT FOR PERIODIC PROGRESS INSPECTIONS, THE ABOVE MENTIONED FIELD REVIEWS AND CHECKING FOR REQUIRED STONE DEPTHS. THE DEVELOPER WILL BE REQUIRED TO POST A SURETY TO GUARANTEE THE ROAD FREE OF DEFECTS FOR ONE YEAR AFTER ACCEPTANCE BY THE DEPARTMENT OF TRANSPORTATION.

#### UNDERGROUND UTILITIES

THE CONTRACTOR SHALL VERIFY BY CONTACTING "MISS UTILITY" AND THE TOWN OF VINTON PUBLIC WORKS, THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON THE PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT THE SITE ENGINEER IMMEDIATELY IF LOCATIONS OR ELEVATIONS IS DIFFERENT FROM THAT SHOWN ON THE PLANS. IF THERE APPEARS TO BE A CONFLICT, OR UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THE PLAN, CALL "MISS UTILITY" AND/OR THE TOWN OF VINTON PUBLIC WORKS.

THE DEVELOPER SHALL BE RESPONSIBLE FOR INSTALLATION OF ALL TRAFFIC CONTROL DEVICES, STOP SIGNS, YIELD SIGNS, SPEED LIMIT SIGNS, PAVEMENT STRIPING, ETC., REQUIRED BY THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). THE DEVELOPER SHALL BE RESPONSIBLE OF REINSTALLING AND MAINTAINING ALL TRAFFIC CONTROL DEVICES REQUIRED AS PART OF THIS DEVELOPMENT UNTIL THE STREETS ARE TAKEN INTO THE SECONDARY SYSTEM. ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED ACCORDING TO THE "MUTCD".

INSTALLATION OF ALL STORM PIPES SHALL CONFORM TO THE VDOT ROAD AND BRIDGE STANDARDS, LATEST

STEPS ARE REQUIRED IN STRUCTURES EXCEEDING 4.0' IN DEPTH (VDOT STD. 106.09) AND SAFETY SLABS ARE REQUIRED IN STRUCTURES EXCEEDING 12.0' IN DEPTH (VDOT STD. 106.14).

INLET SHAPING IS REQUIRED WITHIN ALL STRUCTURES AND MUST CONFORM TO VDOT STANDARD 106.08 IS-1, INLET SHAPING.

## GENERAL NOTES

PROVIDE NEW MATERIALS AND WORKMANSHIP IN CONFORMANCE WITH ALL APPLICABLE CODES. STATE AND FEDERAL LAWS, LOCAL ORDINANCES, INDUSTRY STANDARDS, AND OTHER CRITERIA WHICH WOULD NORMALLY APPLY TO WORK OF THIS NATURE. NOTIFY THE ENGINEER IMMEDIATELY UPON DISCOVERING A CONFLICT IN CODES, ORDINANCES, STANDARDS, OR OTHER CRITERIA. APPLICABLE CODES AND STANDARDS INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO. THE FOLLOWING:

- BOCA BASIC CODES
- ROANOKE COUNTY VDOT - VIRGINIA DEPARTMENT OF TRANSPORTATION,
- ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS AND HANDBOOK
- OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
- ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS WVWA - WESTERN VIRGINIA WATER AUTHORITY

MAINTAIN A SET OF APPROVED PLANS ON SITE AT ALL TIMES DURING CONSTRUCTION.

OBTAIN EACH REQUIRED PERMIT PRIOR TO COMMENCING THAT PART OF THE WORK. PAY REQUIRED FEES.

NOTIFY THE ENGINEER IMMEDIATELY UPON DISCOVERY OF CONDITIONS WHICH DIFFER FROM THOSE SHOWN ON THE PLANS.

COMPLY WITH LOCAL ORDINANCES FOR BURNING OF WASTE. TRANSPORT WASTE MATERIALS AND UNSUITABLE MATERIALS FROM OWNER'S PROPERTY.

COORDINATE BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS.

A PRECONSTRUCTION MEETING MUST TAKE PLACE PRIOR TO COMMENCING WORK. AS A MINIMUM, THE CONTRACTOR, OWNER'S AGENT AND COUNTY'S AGENT MUST ATTEND.

VERIFY THE LOCATION AND ELEVATION OF EACH EXISTING UNDERGROUND UTILITY IN AREAS OF CONSTRUCTION PRIOR TO COMMENCEMENT OF WORK. CONTACT ENGINEER IMMEDIATELY IF THERE APPEARS TO BE A CONFLICT, UPON DISCOVERY OF A UTILITY WHICH IS NOT SHOWN. AND UPON DISCOVERY OF A LOCATION OR ELEVATION WHICH DIFFERS FROM THAT SHOWN. TO LOCATE UTILITIES, CALL "MISS UTILITY", 1-800-552-7001. UTILITY LOCATIONS SHOWN ARE THE RESULT OF A COMBINATION OF FIELD LOCATION AND EXISTING INFORMATION. LOCATIONS ARE APPROXIMATE.

REPAIR ALL DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, CAUSED AS A RESULT OF CONSTRUCTION ACTIVITIES. AT NO ADDITIONAL COST TO OWNER.

NOTIFY OWNERS OF UTILITIES IN AREAS OF CONSTRUCTION PRIOR TO COMMENCEMENT OF EXCAVATION.

SIGNAGE SHALL COMPLY WITH THE APPLICABLE REGULATIONS OF THE COUNTY OF ROANOKE ZONING ORDINANCE, SECTION 30-93. A SEPARATE PERMIT IS REQUIRED.

ANY SITE DEVELOPMENT OUTSIDE OF THE SCOPE OF THIS PLAN WILL REQUIRE SITE PLAN

ADDITIONAL DRAINAGE STRUCTURES AND EASEMENTS MAY BE REQUIRED BY THE VIRGINIA DEPARTMENT OF TRANSPORTATION DUE TO AND DEVIATION BETWEEN THE APPROVED PROPOSED CONTOURS AND THE AS-BUILT CONDITIONS OR ANY OTHER TOPOGRAPHIC CHANGES.

## **GRADING NOTES**

REFER TO BUILDING PLANS FOR SUBGRADE AND UTILITY TRENCHES WITHIN 5' OF THE BUILDING ENVELOPE. REMOVE TREES, SHRUBS, GRASS, AND OTHER VEGETATION, IMPROVEMENTS OR OBSTRUCTIONS AS REQUIRED

TO PERMIT INSTALLATION OF NEW CONSTRUCTION, REMOVE TREES AND OTHER VEGETATION, INCLUDING STUMPS AND ROOTS, COMPLETELY IN AREAS REQUIRED FOR SUBSEQUENT SEEDING. CUT OFF TREES AND STUMPS IN AREAS TO RECEIVE FILL MORE THAN THREE FEET IN DEPTH TO WITHIN EIGHT INCHES OF THE ORIGINAL GROUND SURFACE.

BARRICADE OPEN EXCAVATIONS OCCURRING AS PART OF THIS WORK AND OPERATE WARNING LIGHTS AS RECOMMENDED BY AUTHORITIES HAVING JURISDICTION.

#### **EXCAVATION FOR STRUCTURES:**

a. CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN WITHIN A TOLERANCE OF 0.1' b. PROVIDE TRUE AND STRAIGHT FOOTING EXCAVATIONS WITH UNIFORM AND LEVEL BOTTOMS OF THE WIDTH INDICATED TO ENSURE PROPER PLACEMENT AND COVER OF ALL REINFORCEMENT.

c. REMOVE ALL LOOSE MATERIALS FROM THE EXCAVATION PRIOR TO PLACEMENT OF CONCRETE. d. FOOTINGS WHICH SUPPORT CONCRETE MASONRY UNITS MAY BE STEPPED PROVIDED THE VERTICAL STEP DOES NOT EXCEED ONE HALF OF THE HORIZONTAL DISTANCE BETWEEN STEPS AND HORIZONTAL DISTANCE BETWEEN STEPS IS NOT LESS THAN TWO FEET. e. IF ROCK IS ENCOUNTERED IN A FOOTING EXCAVATION, UNDERCUT IT A MINIMUM EXCAVATION WITH CONTROLLED FILL.

CUT SURFACE UNDER PAVEMENTS TO COMPLY WITH CROSS SECTIONS, ELEVATIONS, AND GRADES AS

EXCAVATE TRENCHES TO UNIFORM WIDTH CONFORMING TO VDOT STANDARD PB-1 FOR STORM DRAINAGE

PREVENT SURFACE WATER AND SUBSURFACE OR GROUND WATER FROM FLOWING INTO EXCAVATIONS AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. DO NOT ALLOW WATER TO ACCUMULATE IN EXCAVATIONS. REMOVE WATER TO PREVENT SOFTENING OF FOUNDATION BOTTOMS, UNDERCUTTING FOOTINGS, AND SOIL CHANGES DETRIMENTAL TO STABILITY OF SUBGRADES AND FOUNDATIONS. CONVEY WATER WHEN ATMOSPHERIC TEMPERATURE IS LESS THEN 35°F (1°C).

PROTECT EXCAVATED BOTTOMS OF ALL FOOTINGS AND TRENCHES AGAINST FREEZING WHEN ATMOSPHERIC TEMPERATURE IS LESS THEN 35°F (1°).

#### BACKFILLING:

a. COMPACT THE BACKFILL AROUND THE OUTSIDE OF EACH BUILDING TO A MINIMUM OF 85% OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D 698 STANDARD PROCTOR. DO NOT ALLOW HEAVY COMPACTION EQUIPMENT SUCH AS ROLLERS, ETC., CLOSER TO ANY FOOTING THAN THE HORIZONTAL DISTANCE SUBTENDED BY A 45° ANGLE WITH THE TOP EDGE OF THE FOOTINGS AND THE SURFACE OF THE

b. BACKFILL BEHIND WALLS AFTER PERMANENT CONSTRUCTION WHICH BRACES THE WALL IS IN PLACE OR TEMPORARY BRACING OF THE WALL IS PROPERLY INSTALLED, AND AFTER ACCEPTANCE OF CONSTRUCTION BELOW FINISH GRADE INCLUDING DAMP-PROOFING, REMOVAL OF CONCRETE FORMWORK, AND REMOVAL OF TRASH AND DEBRIS.

FINISH LAWN AREAS TO WITHIN ONE INCH ABOVE OR BELOW REQUIRED SUBGRADE ELEVATIONS. SHAPE SURFACE UNDER WALKS AND PAVEMENTS TO LINE, GRADE, AND CROSS SECTION, WITH NOT MORE THAN 1/2" ABOVE OR BELOW REQUIRED SUBGRADE ELEVATION.

GRADE SURFACE UNDER BUILDING SLABS SMOOTH AND EVEN, FREE OF VOIDS. PROVIDE FINAL GRADES WITHIN 1/2" OF THOSE INDICATED WHEN TESTED WITH A 10' STRAIGHT EDGE.

PROTECT GRADED AREAS FROM TRAFFIC AND EROSION. REPAIR AREAS WHICH HAVE SETTLED, ERODED, OR BECOME DAMAGED DUE TO CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO OWNER.

PLACE ALL FILL AND BACKFILL AS CONTROLLED FILL AS FOLLOWS:

a. ESTABLISH SUITABLE SUBGRADE CONDITIONS PRIOR TO PLACING FILL BY PROOFROLLING, UNDERCUTTING AND COMPACTING AS NECESSARY

b. PLACE FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH FOR HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4" FOR HAND TAMPERS. c. PRIOR TO COMPACTION, PROVIDE MOISTURE CONTENT TO WITHIN 3% OF OPTIMUM BY MOISTENING OR

AERATING EACH LAYER. DO NOT PLACE FILL MATERIAL ON SURFACES WHICH ARE MUDDY, FROZEN OR CONTAIN FROST OR ICE. d. COMPACT SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D 698 (STANDARD PROCTOR):

. 95% UNDER BUILDINGS AND PAVEMENT ii. 85% UNDER LAWN OR UNPAVED AREAS

SPREAD TOPSOIL TO A DEPTH OF 4" OVER ALL DISTURBED AREAS NOT RECEIVING WALKS, PAVEMENT, WALLS OR BUILDING, INCLUDING TRENCHES. IMMEDIATELY FOLLOWING PLACEMENT OF TOPSOIL, DISK THE ENTIRE TOPSOILED AREA AND RAKE FREE OF STONES AND DEBRIS OVER 1/2" IN ANY DIMENSION. PROVIDE A FINISHED SURFACE FREE OF DEPRESSIONS OR HIGH SPOTS. SEED IMMEDIATELY.

OWNER (CONTRACTOR) SHALL EMPLOY QUALIFIED SOILS TESTING LABORATORY TO INSPECT EARTHWORK

S

**∞** NOT OLLINS

**SCALE** 

USDA Natural Resources
Conservation Service

Map Unit Description: Frederick-Urban land complex, 2 to 15 percent slopes---Roanoke Map Unit Description: Udorthents-Urban land complex---Rosnoke County and the Cities of County and the Cities of Roanoke and Salem, Virginia

# Roanoke County and the Cities of Roanoke and Salem,

#### 52-Udorthents-Urban land complex

National map unit symbol: kgg9 Mean annual precipitation: 30 to 45 inches Mean armual air temperature: 50 to 57 degrees F Frost-free period: 171 to 207 days Farmland classification: Not prime farmland

Map Unit Composition "Udorthents and similar soils: 60 percent Urban land: 25 percent

Estimates are based on observations, descriptions, and transects of the

### Description of Udorthents

Parent material: Fill materia Properties and qualities Slope: 0 to 30 percent

#### Frequency of flooding: None Frequency of ponding: None

Description of Urban Land Properties and qualities

Slope: 0 to 30 percent Depth to restrictive feature: 40 inches to

## Data Source Information

Soil Survey Area: Roanoke County and the Cities of Roanoke and Salem, Virginia

Survey Area Data: Version 10, Sep 22, 2015

Natural Resources Conservation Service National Cooperative Soil Survey

Map Scale: 1:581 if printed on A landscape (11" x 8.5") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS8

Page 1 of 3

Web Soil Survey Page 1 of 2 OPERATIONS. NOTIFY LABORATORY PRIOR TO PERFORMING EARTHWORK OPERATIONS.

Depth to restrictive feature: More than 80 inches Depth to water table: More than 80 inches

Properties and qualities Slope: 2 to 15 percent Interpretive groups

Land capability classification (irrigated): None specified Depth to restrictive feature: More than 80 inches Natural drainage class: Well drained Land capability classification (nonimigated): 8s

> Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr) Depth to water table: More than 80 inches Frequency of flooding: None Frequency of ponding: None

Typical profile

Available water storage in profile: High (about 9.6 inches) Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 3e Hydrologic Soil Group: B

Roanoke County and the Cities of Roanoke and

21C—Frederick-Urban land complex, 2 to 15 percent slopes

Estimates are based on observations, descriptions, and transects of

Landform position (two-dimensional): Shoulder, summit, backslope

Landform position (three-dimensional): Interfluve, nose slope, side

Parent material: Residuum weathered from limestone and dolomite

Salem, Virginia

Map Unit Setting

**Map Unit Composition** 

Urban land: 35 percent

the mapunit.

Landform: Hills

**Description of Frederick** 

National map unit symbol: kgc2

Frost-free period: 171 to 207 days

Frederick and similar soils: 45 percent

Down-slope shape: Convex

Across-slope shape: Convex

H1 - 0 to 12 inches: silt loam

H2 - 12 to 72 inches: clay

Runoff class: Medium

Hydric soil rating: No

Mean annual precipitation: 30 to 45 inches

Farmland classification: Not prime farmland

Mean annual air temperature: 50 to 57 degrees F

Elevation: 900 to 2,600 feet

REFLECTING TOMORRO

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**New River Valley** 

Richmond

Staunton

Harrisonburg

RESIDENTIAL LAND DEVELOPMENT ENGINEERING

SITE DEVELOPMENT ENGINEERING

LAND USE PLANNING & ZONING

LANDSCAPE ARCHITECTURE

LAND SURVEYING

ARCHITECTURE

STRUCTURAL ENGINEERING

TRANSPORTATION ENGINEERING

ENVIRONMENTAL & SOIL SCIENCE

WETLAND DELINEATIONS & STREAM EVALUATIONS

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DRAWN BY DESIGNED BY CHECKED BY CPB 02/21/2018

**REVISIONS:** 3/20/2018