All construction methods and materials shall conform to the Construction Standards and Specifications of Roanoke County, the Western Virginia

Water Authority, and the Virginia Department of Transportation. 2. Stormwater Management Agreements with an attached 8 1/2" x 11" or

8 1/2" x 14" plat must be approved and recorded prior to the pre-construction meeting. 3. Once all required items are submitted to the County of Roanoke, the developer must contact the Development Review Coordinator to indicate that a pre-construction meeting needs to be scheduled. The pre-construction meeting will be scheduled with the owner/developer two (2) working days later.

4. Please note the 2001 General Assembly revisions to Va Erosion and Sediment Control Law. Effective July 1, 2001, all land disturbing projects that require approval of an erosion and sediment control plan, grading or clearing permit shall require that the applicant provide the name of an individual who will be Responsible Land Disturber (RLD) Certificate from the Department of Conservation and responsible for land disturbing activities and that this individual hold a

Recreation. The Responsible Land Disturber can be anyone from the Project team that is certified by the State of Virginia to be in charge of carrying out the land disturbing activity for the project.

5. It is the responsibility of the owner/developer to notify the certified Responsible Land Disturber and the Utility Contractor to attend the pre-construction meeting.

6. The Development Review Coordinator will schedule the pre-construction meeting with the County Review Engineer, the County Inspector, and the Western Virginia Water Authority and the Town of Vinton Public Works Department if applicable.

7. An approved set of plans and all permits must be available at the construction site

8. The developer and/or contractor shall supply all utility companies with copies of approved plans, advising them that all grading and installation shall conform to approved plans.

9. The project engineer will inform the owner/developer verbally and in writing of the County's obligation to perform inspections on site. Everyone in the meeting will be required to sign a pre-construction checklist indicating their knowledge of Roanoke County's obligation to perform inspections on site.

10. The Erosion Control Permit is given to the developer at this pre-construction meeting.

11. The developer MUST contact the project inspector 24 hours before beginning any grading or construction on the property.

12. The project inspector will visit the site within 48 hours of the developer's call to ensure that all necessary erosion and sediment control measures are properly installed according to the approved plan.

13. All work shall be subject to inspection by Roanoke County, the Western Virginia Water Authority and the Virginia Department of Transportation Inspectors.

14. Contractors shall notify utilities of proposed construction at least two (2), but not more than ten (10) working days in advance. Area public utilities may be notified thru "Miss Utility": 1-800-552-7001.

15. 100 year Floodway and Floodplain information shall be shown where applicable. FIRM Index Date shall be shown on the plans. The 100 year Floodway shall be staked prior to any construction.

16. Grade stakes shall be set for all curb and gutter, culvert, sanitary sewer and storm sewer at all times of construction.

17. The Department of Community Development shall be notified when a spring is encountered during construction.

18. Construction debris shall be containerized in accordance with the Virginia Litter Control Act. No less than one litter receptacle shall be provided on site.

The contractor shall provide adequate means of cleaning mud from trucks and/or other equipment prior to entering public streets or rights of ways. It is the contractors responsibility to insure that the streets are in a clean, mud and dust free condition at all times.

20. Plan approval in no way relieves the developer or contractors of the responsibilities contained within the erosion and sediment control policies.

21. Field construction shall honor proposed drainage divides as shown on plans.

22. Field corrections shall be approved by the Roanoke County Engineering Division and/or the Western Virginia Water Authority and the Professional of Record. prior to such construction.

23. The developer or contractor shall supply the County and the Western Virginia Water Authority with correct As-Built plans before final acceptance.

VIRGINIA DEPARTMENT OF TRANSPORTATION:

24. Plan approval by Roanoke County does not guarantee issuance of any permits by the Virginia Department of Transportation.

25. A permit must be obtained from the Virginia Department of Transportation, Salem Residency Office prior to construction in the highway right-of-way.

26. The preliminary pavement designs should be based on a predicted sub-grade CDR value of 7.0 and with a Resiliency Factor (RF) of 2.0 as shown in Appendix I of the 2000 Virginia Department of Transportation Pavement Design Guide for Subdivision and Secondary Roads. The sub-grade soil is to be tested by an independent laboratory and the results submitted to the Virginia Department of Transportation prior to base construction. Should the sub-grade CBR value and/or the RF value be less than the predicted values, additional base material will be required in accordance with Departmental specifications. Refer to the same manual as the number and locations of the required soil samples to be tested. All pavement designs shall be submitted to the Department for review and approval. The sub-grade shall be approved by the Virginia Department of Transportation prior to placement of the base Base shall be approved by the Virginia Department of Transportation for depth, template, and compaction before the surface is applied.

27. Standard guardrail with safety end sections may be required on fills or in areas where hazards exist as deemed necessary. After completion of rough grading operations, the County Engineer and Virginia Department of Transportation shall be contacted to schedule a field review. Where guard rail is warranted, the standard shoulder width shall be provided and the guard rail shall be installed in accordance with the 2001 VDOT Road and Bridge Standards as part of this development.

28. Standard street and traffic control signs shall be erected at each intersection by the developer prior to final street acceptance.

29. All traffic devices shall be in accordance with current edition of the manual: "Uniform Traffic Control Devices (MUTCD)"

30. All unsuitable material shall be removed from the construction limits of the roadway

The Project Engineer shall provide electronic copies of the approved plans to the Development Review Coordinator within 5 working days of the pre-construction meeting. This sheet may not be modified.

See Sheet ____for Stormwater Site Statistics Table. See Sheet _____for New BMP Information Table.

The Project Engineer shall provide electronic copies of the approved plans to the Development Review Coordinator within 5 working days of the pre-construction The notes on this sheet shall not be modified.



County of Roanoke, VA

SITE BENCHMARKS				
POINT NAME	NORTHING	EASTING	ELEVATION	DESCRIPTION
BM#1	3614772.56	11031555.45	1127.60'	NAIL SET WITH STAKE

BONDABLE

QUANTITY & COST ESTIMATE

UNIT

ACRES -

LUMP SUM

C.Y.

EACH

EACH

EACH

LIN. FT.

LIN, FT.

LIN. FT.

LIN. FT.

LIN, FT,

Ş.Y.

EACH

EACH

EACH

LIN. FT.

S.F.

LIN. FT.

EACH

S.Y.

LIN. FT.

S.Y.

S.Y.

S.Y.

S.Y.

TONS

EACH

Lump Sum

LIN. FT.

LIN. FT.

LIN. FT.

LIN. FT.

EACH

EACH

EACH

EACH

EACH

LIN. FT.

LIN. FT.

LIN. FT.

LIN. FT.

EACH

EACH

EACH

TONS

LUMP SUM

LUMP SUM

LUMP SUM

LUMP SUM

LUMP SUM .

UNIT PRICE COST

2,000.00

1,500.00

11.500

8,128

2,400

19,000

4,750

4,050

105,000

45,000

2,500.00

2,000.00

1,140.00

15,600

5,250

2,250.00

1,000.00

440

15,120

9,040

500

5,000

5,000

5,000

20,000

1,500.00

1,500.00

\$314,168

\$31,416

\$345,584

.500.00

1,500.00

25.00

32.00

20.00

5.00

15.00

15.00

25.00

2,500.00

20.00

40.00

15.00

2,250.00

1,000.00

40.00

45.00

40.00

50

\$2500

5000

5000

\$20000

1,500.00

QUANTITY

4

6

460

254

950

950

270

7000

1

1

0

390

350

336

2

10%

HEREBY CERTIFY THAT THE FOREGOING ESTI<u>MATE REFLECTS THE CUR</u>RENT IMPROVEMENT COSTS OF THIS PROJECT.

ITEM

CLEARING AND GRUBBING

EXCAVATION/ DEMOLITION

NYLOPLAST GRATE INLETS

DROP INLET (VDOT STD DI-1)

18" NYLOPLAST MANHOLES

EMBANKMENT

CURB INLET DI-

15-IN. ADS PIPE

18 -IN. ADS PIPE

-IN. C.M. CULVERT -IN. C.M. CULVERT

BOX CULVERT

PAVED DITCH

RIPRAP - CLASS

SODDED SWALE

DUMPSTER PAD

-IN. END SECTION ES-

HEADER CURB & GUTTER CG-

CURB & GUTTER CG-6

CONCRETE SIDEWALK

CURB & GUTTER CG-2

VALLEY GUTTER

GRAVEL BASE

ASPHALT CURB

GRAVEL SHOULDER

TRAFFIC CONTROL

8" WATER LINE

2" WATER LINE,

PARKING LOT STRIPING

3" SEWER FORCEMAIN

15-INCH STEEL CASING

SAMPLING MANHOLE/PORT

SURFACE TREATMENT

-IN. BIT. CONC.: TYPE B-

-IN. SUBBASE MATERIAL

6" SS SERVICE CONNECTION

FIRE HYDRANT ASSEMBLIES

BLOW OFFS W/VAULT, FRAME & COVER

SDR-26 (8)-INCH SANITARY SEWER

8-IN. GATE VALVES, W/VAULT, FRAME & COVER

-IN. GATE VALVES, W/VAULT, FRAME & COVER

DOUBLE DETECTOR VALVE VAULT (4" WATER LINE)

DIP 12-INCH SANITARY SEWER WITH PROTECTO 401

6-INCH COMMERCIAL SEWER SERVICE CONNECTION

DIP 8-INCH SANITARY SEWER WITH PROTECTO 401

STANDARD MANHOLE W/FRAME & COVER

GREENWAY TRAIL SURFACE STONE

LANDSCAPING/PERMANENT SEEDING

AS-BUILT PLANS (STORM SEWER SYSTEMS)

AS-BUILT PLANS (STORMWATER MANAGEMENT)

STORMWATER MANAGEMENT

WATER QUALITY CONTROLS

SUBTOTAL

CONTINGENCY

ESTIMATED TOTAL

2 -IN, BIT, CONC.; TYPE SM-9.5A

6-IN. BASE MATERIAL (21-A's)

-IN. CONCRETE ENDWALL EW-

PIERSON ENGINEERING

DATE: 05/02/2014 <u>11/16/2015</u>

12/16/2015

07/12/2016

SURVEYING P.O. BOX 311 44 CATAWBA ROAD

DALEVILLE, VA 24083

(540) 966-3027 TEL (540) 966-5906 FAX e-mail: rpierson@rbnet.com

Ш SITE RIS \mathbf{C}

COVER

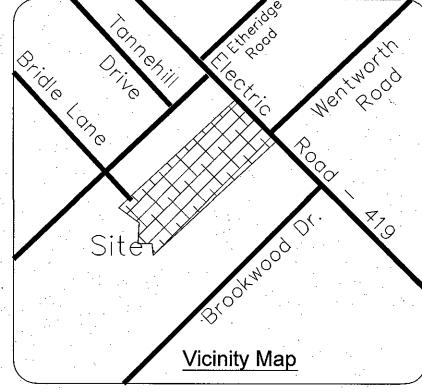
SHEET

RODERICK F. PIERSON 023842 **** COMMISSION R201410

SHEET

02/19/2019 See Sheet C5 - Utilies

1. CD Extension NAME OF DEVELOPMENT CHRIST THE KING PRESBYTERIAN CHURCH AM AWARE OF THE SITE DESIGN REQUIREMENTS IMPOSED BY THIS SITE DEVELOPMENT PLAN AND OTHER APPLICABLE TOWN OF VINTON AND ROANOKE COUNTY CODES. I HEREBY CERTIFY THAT I AGREE TO COMPLY WITH THESE REQUIREMENTS AND THE THIRTY (30) POINTS SHOWN ON THIS COVER SHEET WINDSOR HILLS MAGISTERIAL DISTRICT(S) UNLESS MODIFIED IN ACCORDANCE WITH LOCAL LAW. OWNER (name, address, telephone) 2335 ELECTRIC ROAD CHRIST THE KING PRESBYTERIAN CHURCH (ATTN: justin Davies) DEVELOPER (name, address, telephone) 2335 ELECTRIC ROAD Pierson Engineering and Surveying, Inc. Ph: 540-966-3027 ENGINEER, ARCHITECT OR SURVEYOR (name, address, telephone) P.O. Box 311 Fax: 540-966-5906 Daleville, VA 24083 Email: rpierson@rbnet.com TAX MAP NO(S) 076.11-03-76.00-0000 (CHURCH SITE) & 076.00-03-75.00-0000 (CHURCH OFFICE SITE)



SEWER NOTES

All sewer facilities shall be installed according to the Town of Vinton Water/ Western Virginia Regional Design and Construction Standards.

A minimum cover of three (3) feet is required over proposed lines.

Contractor shall be responsible for locating and uncovering all manholes after paving. Manhole tops shall be adjusted to grade if necessary.

All existing utilities may not be shown in their exact location. The contractor shall comply with (State Water Works Regulations, Section 12.05.03, where lines cross.)

All trenches in existing or future rights-of-way shall be compacted according to Virginia Department of Transportation standards.

Lines shall be staked prior to construction.

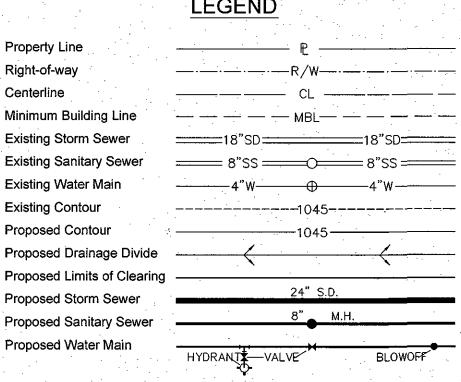
RETAINING WALLS

A separate review and building permit application are required for all retaining wall(s). A copy of the approved site plan must be submitted with the building permit application for the retaining wall(s) plan.

PRIVATE UTILITIES

Underground utilities installed on private property or in private utility easements and building related storm drains shall be designed and installed per the current edition of the Virginia Uniform Statewide Building Code. Design and installation requirements issued by the Vinton Public Works Department that meet or exceed the USBC requirements are acceptable for private utilities. All private utilities are to be permitted through and inspected by the Roanoke County Inspections Office. Vaults, valves and other devices installed by or under the control of the Vinton Public Works Department may not substituted for the code required devices.

LEGEND



SHEET LIST

COVER SHEET

2. ABBREVIATIONS, NOTES, AND LEGEND

DIMENSIONAL LAYOUT PLAN

GRADING PLAN

5. UTILITY PLAN

EROSION & SEDIMENT CONTROL PHASE EROSION & SEDIMENT CONTROL PHASE 2

8. EROSION & SEDIMENT CONTROL NOTES

9. EROSION & SEDIMENT CONTROL DETAILS 10. ENTRANCE & STORM DRAIN PIPING PROFILES

11. STORM DRAIN PIPING PROFILES

12. STORMWATER MANAGEMENT POND DETAILS 13. ADS, FILTERRA AND STORMDRAIN DETAILS

14.. WATER & SEWERLINE PROFILES

15. WATERLINE DETAILS

16. SANITARY SEWER DETAILS

17. MISCELLANEOUS NOTES AND DETAILS

18. EXISTING DRAINAGE DIVIDES

19. NEW DRAINAGE DIVIDES 20. IMPERVIOUS AREAS

21. 100 YEAR FLOODPLAIN

LANDSCAPING, PHASING AND ACCESS EASEMENT

LANDSCAPING DETAILS

SUGGESTED MAINTENANCE OF TRAFFIC PLAN

STRIPPING AND GUARDRAIL PLAN

WATER NOTES

All water facilities shall be installed according to the Town of Vinton Water/ Western Virginia Regional Design and Construction Standards.

A minimum cover of three (3) feet is required over proposed lines. Contractor shall be responsible for locating and uncovering valve vaults after paving and adjustment to final grade if necessary.

All existing utilities may not be shown in their exact location. The contractor shall comply with the (State Water Works Regulations, Section 12.05.03, where lines cross.

All trenches in existing or future highway right-of-ways shall be compacted according to Virginia Department of Transportation standards.

Lines shall be staked prior to construction. Water main shall be minimum Class 350 Ductile Iron in accordance to AWWA C151.

Availability Letter Number is 14-200.

Source of topographic mapping is:

Benchmark Information:

SURVEY INFORMATION

Horizontal and vertical control surveys were performed in year: __2014_ By: Pierson Engineering and Surveying, Inc. All vertical elevations must be referenced to the National Geodetic Vertical Datum of 1929 or 1988. All horizontal elevations must be referenced to the North American Datum of 1927 or 1983.

Pierson Engineering and Surveying, Inc.

Boundary was performed by Pierson Engineering dated:

The professional seal and signature certifies the boundary survey and topographic mapping to be accurate and correct.

FEB 1 4 2017

As-Built

4th Review