

## SITE GRADING NOTES:

1. NO CONSTRUCTION/FIELD CHANGES WITHOUT THE APPROVAL OF THE CONSULTING ENGINEER AND CITY OF ROANOKE PLANNING, BUILDING, AND DEVELOPMENT DEPARTMENT.
2. CONTRACTOR TO ENSURE POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES WITH EXISTING UTILITIES ARE LOCATED DURING THE GRADING PROCESS FOR THE SITE PRIOR TO PROCEEDING WITH ANY FURTHER WORK.
4. PROPOSED CONCRETE SIDEWALKS SHALL HAVE A 2% CROSS SLOPE TOWARDS THE PUBLIC ROADWAYS AND AWAY FROM THE PROPOSED BUILDING.
5. PROPERTY IS NOT LOCATED WITHIN A FEMA DEFINED FLOOD ZONE.
6. G.C. SHALL BE RESPONSIBLE FOR CONFIRMING ALL TIE IN LOCATIONS & ELEVATIONS PRIOR TO ANY CONSTRUCTION TO CONFIRM EXISTING CONDITIONS. G.C. SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY QUESTIONS/CONCERNS OR DISCREPANCIES FOUND ON-SITE.

## GENERAL GRADING NOTES

1. G.C. SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS AND REFER TO BUILDING PLANS FOR SUBGRADE AND UTILITY TRENCHES WITHIN 5' OF THE BUILDING ENVELOPE.
2. 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.
3. BARRICADE OPEN EXCAVATIONS OCCURRING AS PART OF THIS WORK AND OPERATE WARNING LIGHTS AS RECOMMENDED BY AUTHORITIES HAVING JURISDICTION.
4. 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 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.
5. CUT SURFACE UNDER PAVEMENTS TO COMPLY WITH CROSS SECTIONS, ELEVATIONS, AND GRADES AS INDICATED.
6. EXCAVATE TRENCHES TO UNIFORM WIDTH CONFORMING TO VDOT STANDARD PB-1 FOR STORM DRAINAGE PIPING.
7. 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).
8. PROTECT EXCAVATED BOTTOMS OF ALL FOOTINGS AND TRENCHES AGAINST FREEZING WHEN ATMOSPHERIC TEMPERATURE IS LESS THEN 35°F (1°C).
9. BACKFILLING SHALL BE A SUITABLE MATERIAL THAT IS CAPABLE ACHIEVING THE REQUIRED COMPACTIONS INDICATED ON THE DETAILS PAGE.
10. 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.
11. 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.
12. 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.
13. PREPARE AREA FOR SEEDING BY SPREADING 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.
14. G.C. SHALL BE RESPONSIBLE FOR ENSURING ALL SPECIFIC COMPACTION REQUIREMENTS FOR THE DIFFERENT ELEMENTS OF THE SITE ARE MET INCLUDING THE BUILDING, PARKING LOT, SIDEWALK, CURBING, ETC.

### STORM STRUCTURE SCHEDULE:

- 15 LF OF 15" RCP AT 2%
- VDOT STD DI-1 TOP:1100.75 INV IN:1098.00 (6" R.D.) INV OUT:1097.8

#### NOTES:

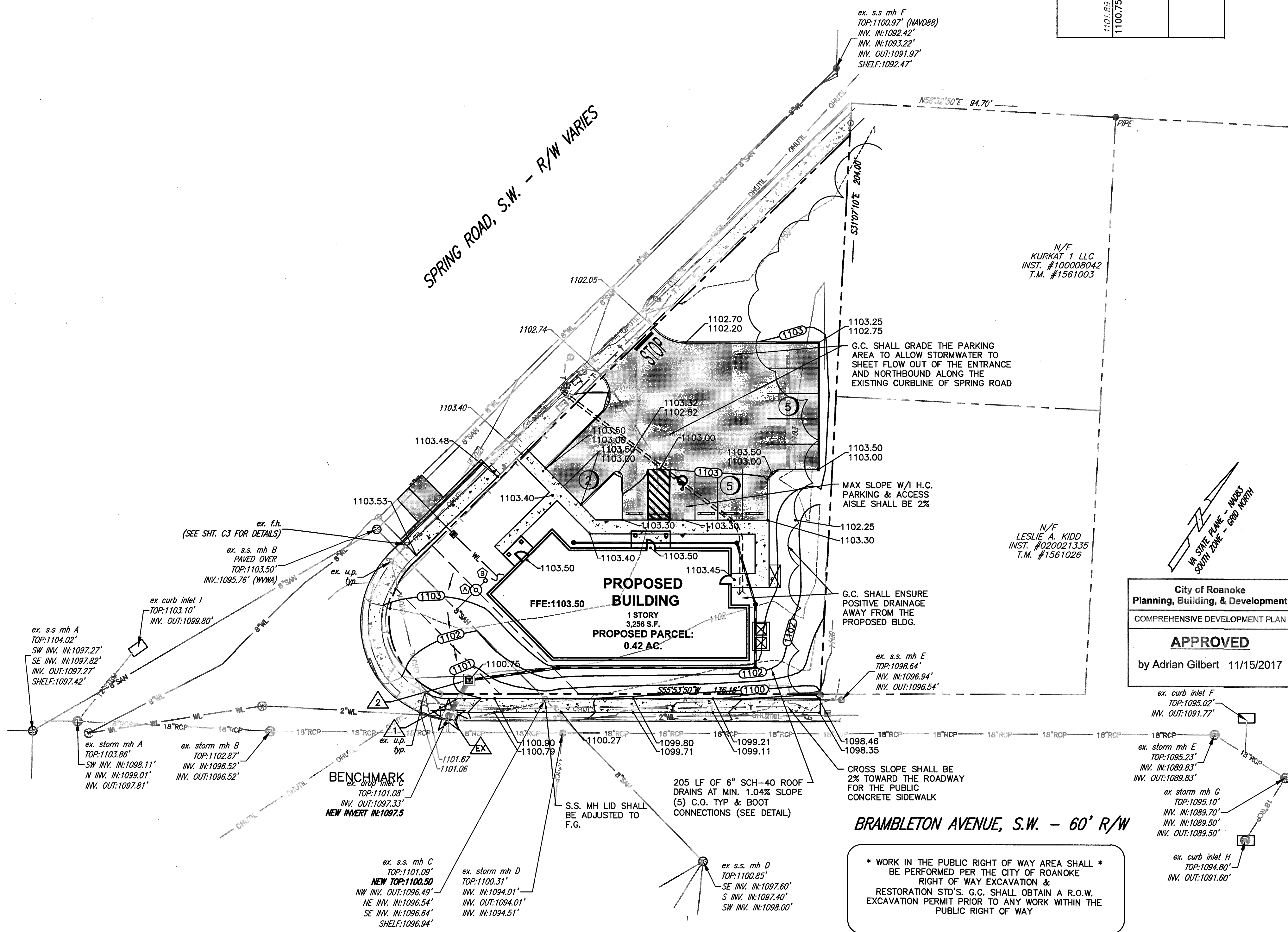
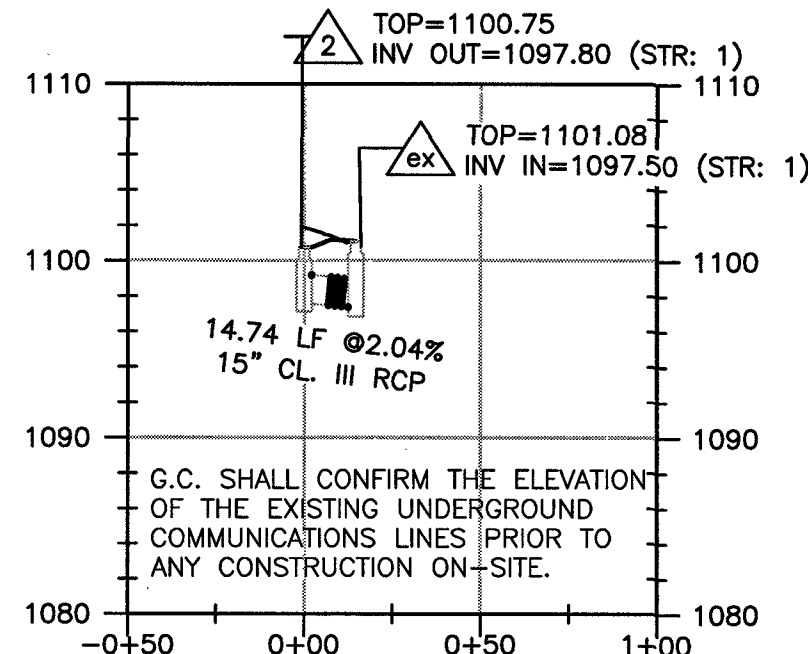
1. VDOT STD IS-1 INLET SHAPING SHALL BE PROVIDED IN ALL PROPOSED STRUCTURES
2. NON-SHRINK GROUT SHALL BE USED FOR ALL STORM SEWER PIPE CONNECTIONS.

### SANITARY SEWER SCHEDULE:

- INV. OUT=1096.11
- 10 LF OF 6" PVC SDR-35 AT 8.9%
- S.S. MH (SAMPLING MANHOLE) TOP=1103.0 INV.=1097.0
- 5 LF OF 6" PVC SDR-35 AT 10.0%
- S.S. C.O. TOP=1103.00 INV.=1097.5

(G.C. TO CONFIRM & COORDINATE ALL TIE IN LOCATIONS W/M.E.P. & ARCH. DRAWINGS PRIOR TO ANY INTERIOR OR EXTERIOR S.S. PIPE BEING INSTALLED. NOTIFY ENGINEER IMMEDIATELY IF DISCREPANCIES ARE DISCOVERED PRIOR TO ANY CONSTRUCTION)

## STORM PROFILE



**BALZER**  
AND ASSOCIATES, INC.  
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www.balzer.cc

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New River Valley  
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Staunton  
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COMMONWEALTH OF VIRGINIA  
CHRISTOPHER P. BURNS  
Lic. No. 047338  
9/20/17  
PROFESSIONAL ENGINEER

ACHARYA PERIODONTICS & DENTAL IMPLANTS

2651 Brambleton Avenue S.W.

GRADING PLAN

CITY OF ROANOKE, VIRGINIA

City of Roanoke  
Planning, Building, & Development  
COMPREHENSIVE DEVELOPMENT PLAN  
**APPROVED**  
by Adrian Gilbert 11/15/2017

DRAWN BY BTC  
DESIGNED BY BTC  
CHECKED BY CPB  
DATE 6/21/2017  
SCALE 1"=20'  
REVISIONS:  
8/7/2017  
9/20/2017

SHEET NO.  
**C4**  
JOB NO. 03170047.00