

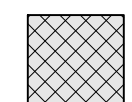

GRADING NOTES

- G.C. SHALL ENSURE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS.
- 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:
 - CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN WITHIN A TOLERANCE OF 0.1'
 - PROVIDE TRUE AND STRAIGHT FOOTING EXCAVATIONS WITH UNIFORM AND LEVEL BOTTOMS OF THE WIDTH INDICATED TO ENSURE PROPER PLACEMENT AND COVER OF ALL REINFORCEMENT.
 - REMOVE LOOSE MATERIALS FROM THE EXCAVATION PRIOR TO PLACEMENT OF CONCRETE.
 - 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.
 - 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 INDICATED.
- EXCAVATE TRENCHES TO UNIFORM WIDTH CONFORMING TO VDOT STANDARD PB-1 FOR STORM DRAINAGE PIPING.
- 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.
- PROTECT EXCAVATED BOTTOMS OF ALL FOOTINGS AND TRENCHES AGAINST FREEZING WHEN ATMOSPHERIC TEMPERATURE IS LESS THEN 35°F (1°).
- BACKFILLING SHALL BE A SUITABLE MATERIAL THAT IS CAPABLE ACHIEVING THE REQUIRED COMPACTIONS INDICATED ON THE DETAILS PAGE.
- 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:
 - ESTABLISH SUITABLE SUBGRADE CONDITIONS PRIOR TO PLACING FILL BY PROOFROLLING, UNDERCUTTING AND COMPACTING AS NECESSARY.
 - PLACE FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH FOR HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4" FOR HAND TAMPERS.
 - 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.
 - COMPACT SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D 698 (STANDARD PROCTOR):
 - 95% UNDER PAVEMENT
 - 85% UNDER LAWN OR UNPAVED AREAS
- PREPARE AREA FOR PERMANENT STABILIZATION 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. PREPARE FOR SOD IMMEDIATELY.
- OWNER (CONTRACTOR) SHALL EMPLOY QUALIFIED SOILS TESTING LABORATORY TO INSPECT EARTHWORK OPERATIONS. NOTIFY LABORATORY PRIOR TO PERFORMING EARTHWORK OPERATIONS.

ROAD C.L. - LINE TABLE				
LINE #	LENGTH	BEARING	START STATION	END STATION
L1	135.28	S52°32'59"E	0+00.00	1+35.28
L2	31.50	S18°41'31"E	3+33.24	3+64.74
L3	150.96	N83°04'58"E	8+22.11	9+73.07

ROAD C.L. - CURVE TABLE						
CURVE #	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH	START STATION
C1	197.96'	335.00'	33°51'28"	S35° 37' 15.13"E	195.09'	1+35.28
C2	457.37'	335.00'	78°13'31"	S57° 48' 16.49"E	422.67'	3+64.74
C3	624.20'	900.00'	39°44'17"	S77° 02' 53.40"E	611.77'	9+73.07

PAVEMENT LEGEND

-  ROUTE 220 PAVEMENT SECTION (SEE DETAILS)
-  PROP. ROADWAY PAVEMENT SECTION (SEE DETAILS)

ex. GUARDRAIL TO REMAIN
(IF MODIFICATION IS REQUIRED THE
ENTIRE RUN IS TO BE REMOVED AND
REPLACED PER THE REQUIREMENTS
OF THE CURRENT VDOT ROAD AND
BRIDGE STANDARDS)

APPROX. LOCATION OF EXISTING
12" W.L. G.C. TO CONFIRM
PRIOR TO CONSTRUCTION.

LAND USE PERMIT SHALL
BE OBTAINED BEFORE
ANY CONSTRUCTION IN
RIGHT OF WAY.

PROP. 12" W.L. WITH
CASING PIPE
W.L. WITH CASING PIPE TO
BE INSTALLED BY
DIRECTIONAL DRILL OR
BORE AND JACK PER
WVWA STANDARDS.

12" TEE W/ 12" G.V. & (2)
G.V. ON EX. 12" W.L. COORD.
CONNECTION WITH WVWA

NEW LEFT TURN ARROWS NOT TO
BE INCLUDED IN CONTRACTOR
BID AT THIS TIME. SEE SHEET
C24 FOR TEMPORARY LEFT TURN
LANE STRIPING.

TRANSITION FROM
CG-6 TO CG-7
PROPOSED SIGNALIZED
INTERSECTION IMPROVEMENTS
SEE FIELDSTONE INTERSECTION
IMPROVEMENTS PLANS FOR
ADDITIONAL DETAILS (N.I.C.)

VDOT ST'D GR-MGS-3
END SECTION

VDOT ST'D CG-7

ex. 15"CMP
inv. in= 1348.01'
inv. out= 1346.66'

ex. 15"CMP
inv. in= 1346.43'
inv. out= 1340.25'

ROUTE 220 - ROANOKE ROAD
R/W VARIES

PROP. RIGHT
TURN LANE
AND TAPER

VDOT STD
GR-MGS-1,1A
GUARDRAIL

VDOT ST'D GR-MGS-2
END SECTION

PROP. 8" S.S.

SEE SHEET C19 FOR S.S.
EXTENSION PLAN & PROFILE

LAND USE PERMIT SHALL BE
OBTAINED BEFORE ANY
CONSTRUCTION IN RIGHT OF
WAY.

SEE SHEET C17
FOR S.S. PROFILE

2' CURB TAPER

PROP. DRAINAGE SWALE
WITH VDOT STD. EC-1,
CLASS 1 RIPRAP

PROP. 15'x20' PUBLIC
DRAINAGE EASEMENT

3:1 SLOPE MAX

VDOT STD. CG-12B ADA RAMP

12"x12" TEE & 12" G.V.

PROP. FIRE HYDRANT W/ 6"

G.V. & 12" G.V. ON MAIN LINE

STATIC=90 PSI

FIRE FLOW=2,560 GPM @ 20

PSI RESIDUAL

PROP. 20' PUBLIC D.E.

2' CURB TAPER

TEMP. END OF LINE ASSEMBLY

VDOT ST'D CG-7

VDOT STD. CG-12B ADA RAMP

12"x12" TEE & 12" G.V.

PROP. FIRE HYDRANT W/ 6"

G.V. & 12" G.V. ON MAIN LINE

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FIRE FLOW=2,560 GPM @ 20

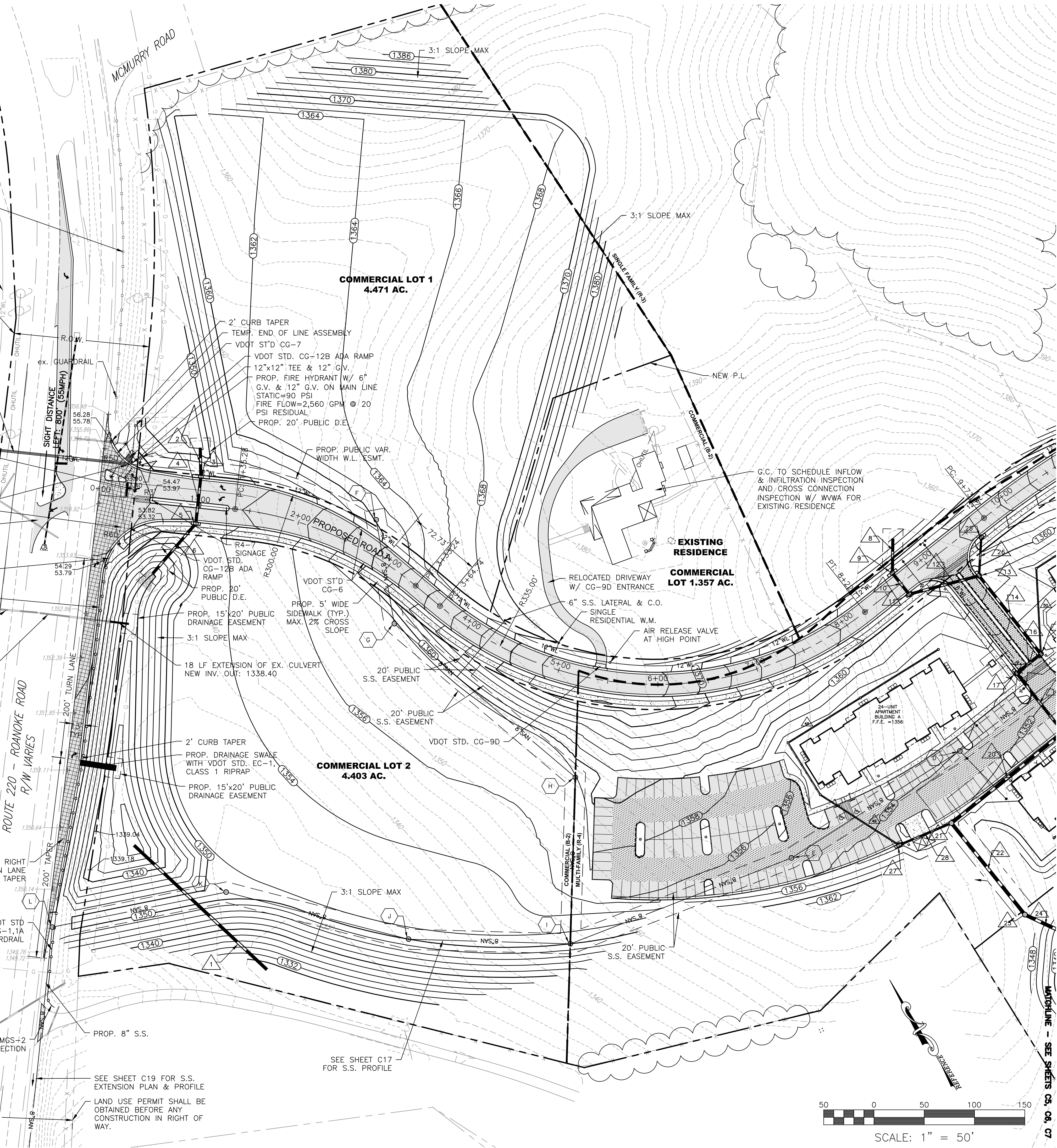
PSI RESIDUAL

PROP. 20' PUBLIC D.E.

2' CURB TAPER

TEMP. END OF LINE ASSEMBLY

VDOT ST'D CG-7

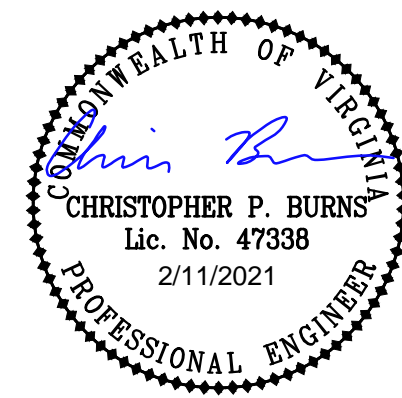


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Roanoke, VA 24018
540.772.9580



FIELDSTONE PHASE I

GRADING, LAYOUT, & UTILITY PLAN - AREA I

AMSTERDAM DISTRICT
BOYD COUNTY, VIRGINIA

DRAWN BY: CLL
DESIGNED BY: CPB
CHECKED BY: CPB
DATE: 1/25/2019
SCALE: 1" = 50'
REVISIONS:
4/30/2019
10/8/2019
12/5/2019
10/14/2020
2/11/2021

C4
PROJECT NO. 04170078.01