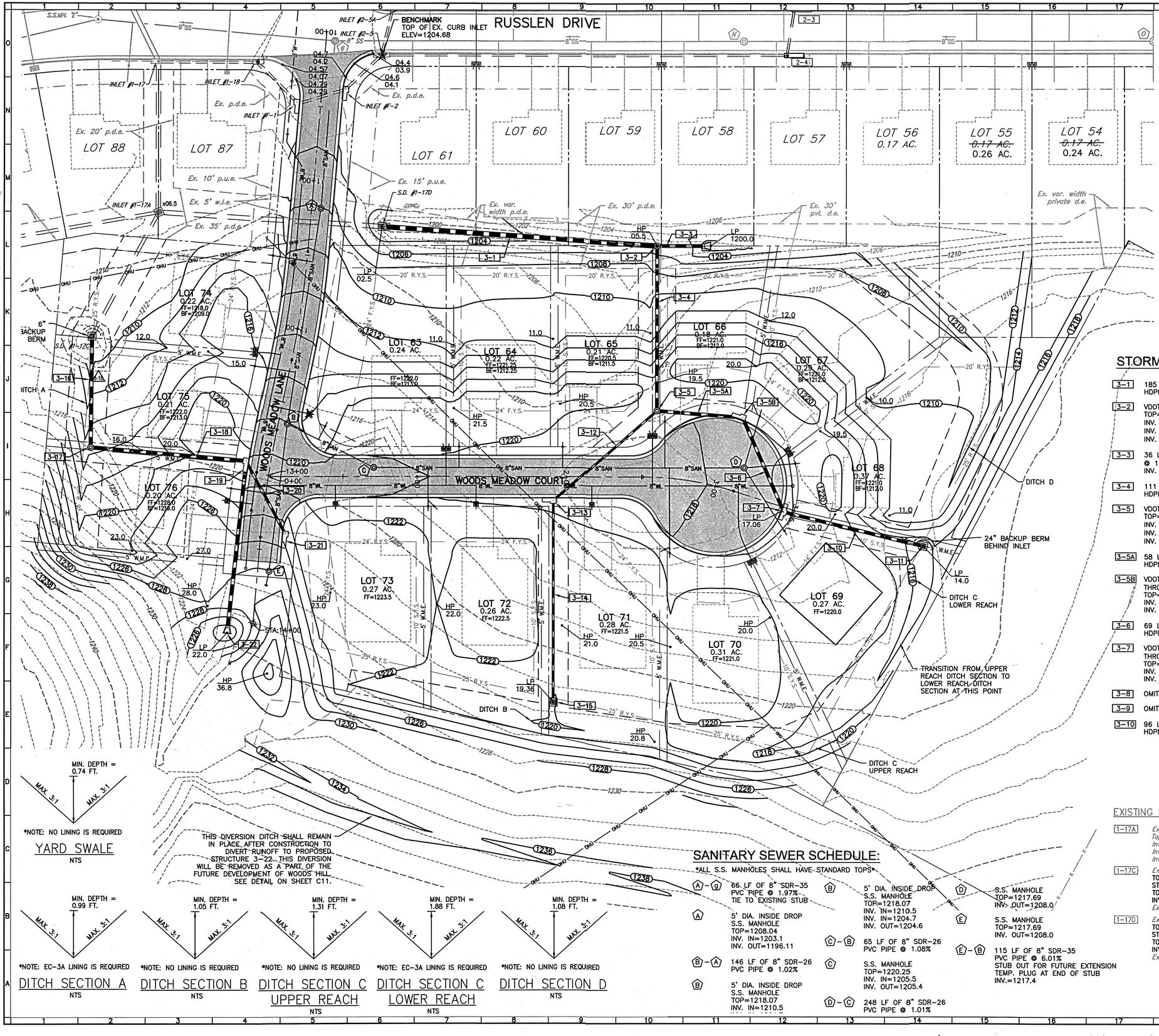

SCALE: 1" = 30'

GRADING NOTES:

1. G.C. SHALL ENSURE POSITIVE DRAINAGE AWAY FROM ALL PROPOSED DWELLINGS.
2. OVERLOT GRADING, HOUSE LOCATIONS AND FINISHED FLOOR ELEVATIONS SHALL BE ADHERED TO. A BPPP SHALL BE SUBMITTED FOR EACH LOT TO ENSURE THAT THE LOTS ARE IN GENERAL COMPLIANCE WITH THIS OVERLOT GRADING PLAN.
3. WATERPROOFING SHALL BE PROVIDED AS NECESSARY FOR ALL BASEMENT WALLS WHERE THE FINISHED FLOOR WILL BE LOCATED BELOW FINISHED GRADE.
4. SEE TABLE ON SHEET C14 FOR MINIMUM SEWERABLE ELEVATIONS FOR DWELLINGS.
5. SOIL GROUPS ARE AS SHOWN ON SHEETS C10 AND C11. SEE ESC NARRATIVE ON SHEET C12 FOR ADDITIONAL INFORMATION.
6. THE STORMWATER QUALITY ORIFICE IN THE EXISTING STORMWATER MANAGEMENT POND SHALL BE UPSIZED TO A 3.0" ORIFICE AS A PART OF THIS DEVELOPMENT.
7. THE YARD SWALE DETAIL ON THIS SHEET SHALL BE USED FOR PROPOSED SWALES BETWEEN HOUSES.
8. G.C. SHALL PROVIDE A SOIL TIGHT CONNECTION BETWEEN STORM SEWER PIPES AND STRUCTURES. IN THIS APPLICATION, A BRICK AND MORTAR CONNECTION THAT COVERS A MINIMUM OF 2 CORRUGATIONS IS RECOMMENDED.

STORM SEWER SCHEDULE:

- 3-1 185 LF 36" TYPE S HDPE PIPE @ 0.57%
- 3-2 VDOT STD. MH-2 TOP=1205.5 INV. IN=1199.5 (STR: 3-3) INV. IN=1199.5 (STR: 3-4) INV. OUT=1199.4 (STR: 3-1)
- 3-3 36 LF 24" TYPE S HDPE PIPE @ 1.38% W/ END SECTION INV. IN=1200.0
- 3-4 111 LF 24" TYPE S HDPE PIPE @ 6.69%
- 3-5 VDOT STD. MH-2 TOP=1219.18 INV. IN=1210.0 (STR: 3-12) INV. IN=1207.0 (STR: 3-5A) INV. OUT=1206.9 (STR: 3-4)
- 3-5A 58 LF 24" TYPE S HDPE PIPE @ 1.56%
- 3-5B VDOT STD. DI-3BB THROAT=8' TOP=1218.15 INV. IN=1208.0 INV. OUT=1207.9
- 3-6 69 LF 24" TYPE S HDPE PIPE @ 1.30%
- 3-7 VDOT STD. DI-3CC THROAT=10' TOP=1217.56 INV. IN=1209.0 INV. OUT=1208.9
- 3-8 OMITTED
- 3-9 OMITTED
- 3-10 96 LF 24" TYPE S HDPE PIPE @ 1.98%
- 3-11 VDOT STD. DI-7 TYPE I GRATE TOP=1214.0 INV. OUT=1210.9
- 3-12 92 LF 15" TYPE S HDPE PIPE @ 2.07%
- 3-13 VDOT STD. DI-3B THROAT=8' TOP=1219.3 INV. IN=1212.0 INV. OUT=1211.9
- 3-14 135 LF 15" TYPE S HDPE PIPE @ 2.95%
- 3-15 VDOT STD. DI-7 TYPE III GRATE TOP=1219.36 INV. OUT=1216.0
- 3-16 74 LF 24" TYPE S HDPE PIPE @ 5.24%
- 3-17 VDOT STD. MH-2 TOP=1215.50 INV. IN=1209.1 INV. OUT=1209.0
- 3-18 104 LF 24" TYPE S HDPE PIPE @ 4.71%
- 3-19 VDOT STD. DI-3B THROAT=8' TOP=1220.73 INV. IN=1216.4 (STR: 3-20) INV. IN=1214.1 (STR: 3-22) INV. OUT=1214.0 (STR: 3-18)
- 3-20 56 LF 15" TYPE S HDPE PIPE @ 8.27%
- 3-21 VDOT STD. DI-3B THROAT=10' TOP=1225.35 INV. OUT=1221.0
- 3-22 116 LF 24" TYPE S HDPE PIPE @ 6.79% W/ END SECTION INV. IN=1222.0

EXISTING STORM SEWER STRUCTURES

- 1-17A *Ex. Drop Inlet Top=1206.5 Inv. In=1200.1 Inv. In=1196.8 Inv. Out=1196.7*
- 1-17C *Ex. End Section* TO BE CONVERTED TO VDOT STD. DI-1 INLET STRUCTURE TOP=1209.0 INV. IN=1205.1 *Ex. Inv. Out=1205.00*
- 1-17D *Ex. End Section* TO BE CONVERTED TO VDOT STD. DI-1 INLET STRUCTURE TOP=1202.5 INV. IN=1198.35 *Ex. Inv. Out=1198.25*
- F-1 *Ex. Drop Inlet* TOP TO BE CONVERTED TO VDOT STD. DI-3B THROAT=8' *Ex. Top=1203.00* NEW TOP=1205.08 *Inv. In=1196.95 Inv. Out=1195.94*
- F-2 *Ex. Drop Inlet* TOP TO BE CONVERTED TO VDOT STD. DI-3B THROAT=8' *Ex. Top=1202.80* NEW TOP=1204.79 *Inv. In=1196.57 Inv. Out=1196.53*

SANITARY SEWER SCHEDULE:

ALL S.S. MANHOLES SHALL HAVE STANDARD TOPS

- A-g 66 LF OF 8" SDR-35 PVC PIPE @ 1.97% TIE TO EXISTING STUB
- A 5' DIA. INSIDE DROP S.S. MANHOLE TOP=1208.04 INV. IN=1203.1 INV. OUT=1196.11
- B-A 146 LF OF 8" SDR-26 PVC PIPE @ 1.02%
- B 5' DIA. INSIDE DROP S.S. MANHOLE TOP=1218.07 INV. IN=1210.5
- B 5' DIA. INSIDE DROP S.S. MANHOLE TOP=1218.07 INV. IN=1210.5 INV. IN=1204.7 INV. OUT=1204.6
- C-B 65 LF OF 8" SDR-26 PVC PIPE @ 1.08%
- C S.S. MANHOLE TOP=1220.25 INV. IN=1205.5 INV. OUT=1205.4
- D-C 248 LF OF 8" SDR-26 PVC PIPE @ 1.01%
- D S.S. MANHOLE TOP=1217.69 INV. OUT=1208.0
- E S.S. MANHOLE TOP=1217.69 INV. OUT=1208.0
- E-B 115 LF OF 8" SDR-35 PVC PIPE @ 6.01% STUB OUT FOR FUTURE EXTENSION TEMP. PLUG AT END OF STUB INV.=1217.4

*NOTE: NO LINING IS REQUIRED

YARD SWALE
NTS

THIS DIVERSION DITCH SHALL REMAIN IN PLACE AFTER CONSTRUCTION TO DIVERT RUNOFF TO PROPOSED STRUCTURE 3-22. THIS DIVERSION WILL BE REMOVED AS A PART OF THE FUTURE DEVELOPMENT OF WOODS HILL. SEE DETAIL ON SHEET C11.

*NOTE: EC-3A LINING IS REQUIRED

DITCH SECTION A
NTS

*NOTE: NO LINING IS REQUIRED

DITCH SECTION B
NTS

*NOTE: NO LINING IS REQUIRED

DITCH SECTION C
UPPER REACH
NTS

*NOTE: EC-3A LINING IS REQUIRED

DITCH SECTION C
LOWER REACH
NTS

*NOTE: NO LINING IS REQUIRED

DITCH SECTION D
NTS

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COMMONWEALTH OF VIRGINIA
CHRISTOPHER P. BURNS
Lic. No.047338
10/20/16
PROFESSIONAL ENGINEER

WOODS HILL
SECTION 3

GRADING PLAN

CATAWBA
COUNTY, VIRGINIA

DRAWN BY LAR
DESIGNED BY CPB
CHECKED BY CPB
DATE 6/13/2016
SCALE 1" = 30'

REVISIONS:
8/1/2016
9/7/2016
10/20/2016

APPROVED

SHEET NO.
C5

JOB NO. R0500271.03