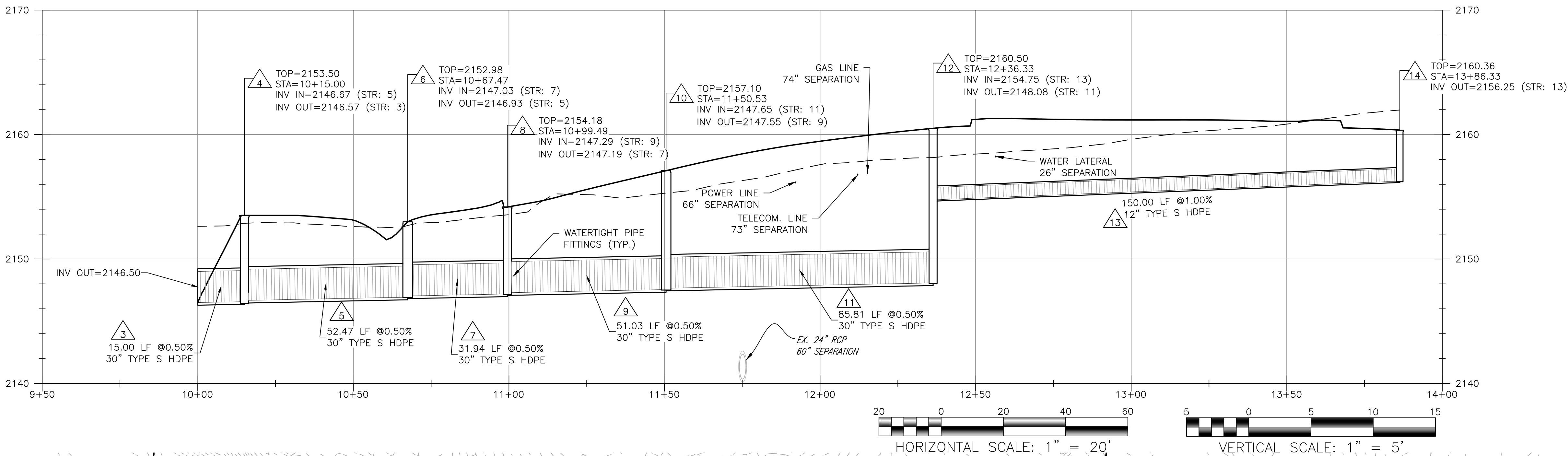


STRUCTURE SCHEDULE

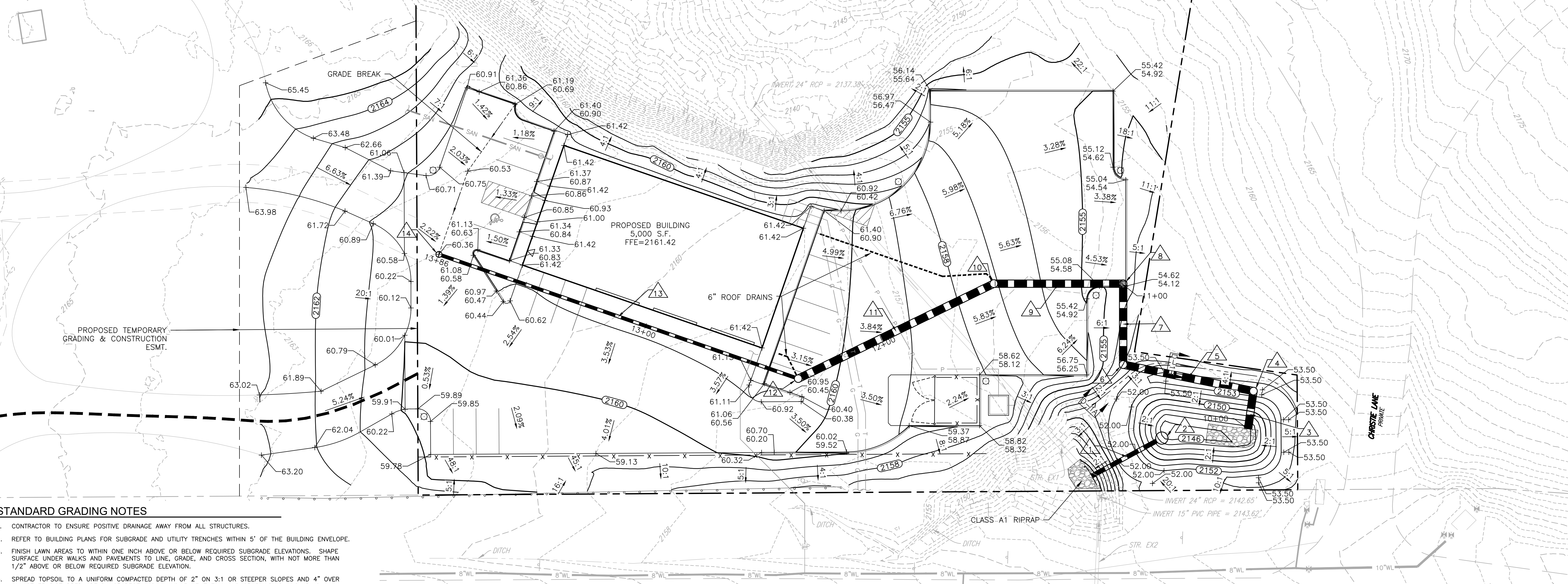
- 31.22 LF OF 15" CL. III RCP @ 2.46%
INV. UPPER=2144.90 INV. LOWER=2144.13
- 48" RISER STRUCTURE
OUTLET CONTROL FLOW STRUCTURE
SEE DETAIL SHEET C7
TOP=2149.50
15" CL. III RCP OUT=2144.90
- 15.00 OF 30" TYPE "S" HDPE @ 0.50%
INV. UPPER=2146.57 INV. LOWER=2145.50
- 30" NYLOPLAST DRAINAGE BASIN W/ SOLID TOP
TOP=2153.50 H=6.93'
30" HDPE IN=2146.67
30" HDPE OUT=2146.57
- 52.47 LF OF 30" TYPE "S" HDPE @ 0.50%
INV. UPPER=2146.93 INV. LOWER=2146.67
- 36" NYLOPLAST DRAINAGE BASIN W/ SOLID TOP & LADDER
TOP=2152.98 H=6.05'
30" HDPE IN=2147.03
30" HDPE OUT=2146.93
- 31.94 LF OF 30" TYPE "S" HDPE @ 0.50%
INV. UPPER=2147.19 INV. LOWER=2147.03
- 30" NYLOPLAST DRAINAGE BASIN W/
2'x2' NYLOPLAST CURB INLET
TOP=2154.18 H=6.99'
30" HDPE IN=2147.29
30" HDPE OUT=2147.19
- 51.03 LF OF 30" TYPE "S" HDPE @ 0.50%
INV. UPPER=2147.55 INV. LOWER=2147.29
- 36" NYLOPLAST DRAINAGE BASIN W/ SOLID TOP & LADDER
TOP=2157.10 H=9.55'
30" HDPE IN=2147.65
30" HDPE OUT=2147.55
- 65.81 LF OF 30" TYPE "S" HDPE @ 0.50%
INV. UPPER=2148.06 INV. LOWER=2147.65
- 30" NYLOPLAST DRAINAGE BASIN W/ SOLID TOP
TOP=2160.50 H=12.42'
12" HDPE IN=2154.75
30" HDPE OUT=2147.08
- 150.00 LF OF 12" TYPE "S" HDPE @ 1.00%
INV. UPPER=2156.25 INV. LOWER=2154.75
- 24" NYLOPLAST DRAINAGE BASIN W/ STANDARD GRATE
TOP=2160.36 H=4.11'
12" HDPE OUT=2156.25

STORM A PROFILE



HORIZONTAL SCALE: 1" = 20'

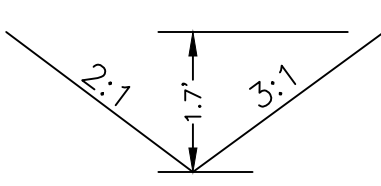
VERTICAL SCALE: 1" = 5'



STANDARD GRADING NOTES

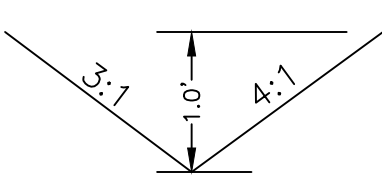
- CONTRACTOR TO ENSURE POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.
- REFER TO BUILDING PLANS FOR SUBGRADE AND UTILITY TRENCHES WITHIN 5' OF THE BUILDING ENVELOPE.
- FINISH LAWN AREAS TO WITHIN ONE INCH ABOVE OR BELOW REQUIRED SUBGRADE ELEVATIONS. SHAPE SURFACE UNDER WALKS AND PAVEMENTS TO LINE, GRADE, AND CROSS SECTION, WITH NOT MORE THAN 1/2" ABOVE OR BELOW REQUIRED SUBGRADE ELEVATION.
- SPREAD TOPSOIL TO A UNIFORM COMPACTED DEPTH OF 2" ON 3:1 OR STEEPER SLOPES AND 4" OVER ALL OTHER DISTURBED AREAS NOT RECEIVING WALKS, PAVEMENT, WALLS OR BUILDING, INCLUDING TRENCHES (SEE TABLE 3.30-A). CARE SHALL BE TAKEN ENSURE PROPER BONDING AND NOT TO APPLY TOPSOIL TO SUBSOIL IF THE TWO SOILS HAVE CONTRASTING TEXTURES (CLAYEY VS. SANDY). 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.
- YARD DRAINS SHALL BE INSTALLED WHEN POSITIVE DRAINAGE (5.0% MINIMUM SLOPE) AWAY FROM BUILDINGS CAN NOT BE ACHIEVED OR IS IN DOUBT. DRAINS TO OUTFALL INTO PROPOSED STORM SEWER. CONTRACTOR MAY ADD ADDITIONAL DRAINS IF SITE CONDITIONS ALLOW/REQUIRE AS NEEDED.
- ALL ROOF DOWNSPOUTS SHALL DISCHARGE TO A 6" HDPE ROOF DRAIN. ROOF DRAINS SHALL CONNECT UNDERGROUND TO AN 8" MIN. HDPE COLLECTION PIPE. DRAIN PIPES SHALL HAVE A MINIMUM SLOPE OF 1.0% AND DISCHARGE INTO STORM SEWER.
- YARD DRAINS SHALL BE 12" NYLOPLAST INLINE DRAINS WITH STANDARD GRATE OR EQUIVALENT.
- MINIMUM COVER OVER COLLECTION PIPES SHALL CONFORM TO MANUFACTURER'S STANDARD.
- HANDICAP PARKING AREA SHALL HAVE A MAXIMUM SLOPE OF 1:48 IN ANY DIRECTION.
- HANDICAP ACCESS ROUTE SHALL HAVE A MAXIMUM RUNNING SLOPE OF 1:20 AND A MAXIMUM CROSS SLOPE OF 1:48 IN ACCORDANCE WITH ADA GUIDELINES. RAMPS SHALL BE IN ACCORDANCE WITH THE ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.

D-1A
DRAINAGE AREA=6.21 AC.



MIN. CONSTRUCTED DEPTH = 1.7 FT
PROFILE GRADE = 2.00%
LINING=TREATMENT 2 / EC-3
Q₂ =9.73 cfs
V₂ =4.12 fps
Q₁₀ =13.20 cfs
D₁₀ =1.10 ft

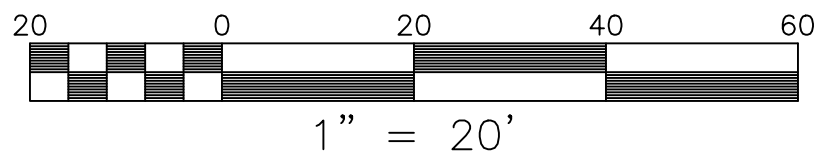
D-1B
DRAINAGE AREA=0.08 AC.



MIN. CONSTRUCTED DEPTH = 1.0 FT
PROFILE GRADE = 2.00%
LINING=TREATMENT 1 / EC-2
Q₂ =0.13 cfs
V₂ =1.31 fps
Q₁₀ =0.17 cfs
D₁₀ =0.20 ft

STORM SEWER INSTALLATION NOTES

- THE MINIMUM DEPTH OF COVER FOR ALL STORM SEWER PIPE 4" TO 48" DIAMETER SHALL BE 12 INCHES FROM THE TOP OF THE PIPE TO THE BOTTOM OF FLEXIBLE PAVEMENT (OR TOP OF RIGID PAVEMENT). FOR 54" AND 60" DIAMETER PIPE, THE MINIMUM DEPTH OF COVER SHALL BE 24".
- ALL STORM INLET/MANHOLE BOTTOMS SHALL HAVE INLET SHAPING (IS-1) PER VDOT STANDARDS. NYLOPLAST BASINS SHALL HAVE THE SUMP FILLED WITH CONCRETE.
- ALL PIPE CROSSINGS SHALL MEET THE VERTICAL SEPARATION REQUIREMENTS IN ACCORDANCE WITH THE TOWN'S WATER AND SANITARY SEWER SPECIFICATIONS. THE GENERAL CONTRACTOR SHALL EXERCISE CARE TO VERIFY THE VERTICAL SEPARATION OF UTILITIES IN THE FIELD PRIOR TO INSTALLATION. SHOULD ANY CONFLICTS WITH PROPOSED AND/OR EXISTING UTILITIES ARISE, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY.
- CONTRACTOR SHALL USE PIPE WITH WATERTIGHT GASKETS OR MARMAC POLYSEAL COUPLES TO CREATE A WATERTIGHT SEAL AT ALL PIPE JOINTS. ALL PIPE CONNECTIONS TO MANHOLE SHALL BE WATERTIGHT UTILIZING A WATERSTOP GASKET OR FLEXIBLE BOOT FITTING.



APPROVED: Engineering Date

APPROVED: Planning Date

ALL NATURAL TREE EXPERTS

4600 ROANOKE STREET
GRADING PLAN

SHAWSVILLE MAGISTERIAL DISTRICT
TOWN OF CHRISTIANBURG, VIRGINIA

DRAWN BY AWC
DESIGNED BY AWC
CHECKED BY JRT
DATE 4/24/25
SCALE AS STATED
REVISIONS

C6
PROJECT NO. 24230007.00