

**Permit #:** 135

**Permit Date:** 01/25/24

**Permit Type:** Planning Commission

**Case Number:** PC 24-07

**PC Meeting Date:** b. 1st Tuesday of March

**BZA Meeting Date:**

**Assigned Meeting Date:** 03/05/2024

**Special Meeting Date:**

**Applicant Is:** Contractor

**Applicant Name:** Joshua White

**Applicant Address:** 2506 Winford Ave.

**Applicant City, State, ZIP:** Nashville, TN 37211

**Applicant Phone Number:** 6152569414

**Applicant Email:** josh.white@joshuabuilders.net

**Description:** Requesting approval of installation of pressurized sewer line through wooded area of 5021 Villa Crest Dr. and onto and across 1107 Ridgeview Dr., and into Metro sewer main to replace failing septic system at 5021 Villa Crest Dr. No trees are proposed to be removed, however some damage to root systems is anticipated due to trenching within the dripline. The work at this Villa Crest lot is in steep slope and Radnor Lake Natural Area Impact Zone (RLNAIZ) while the Ridgeview lot is not in the RLNAIZ.

**Project Cost:** 0

**Square Feet:** 0

**Lot Area:** 102366

**Lot Coverage:** 0

**Heat/cooled area:** 0

**Proposed Height(ft.):** 0

**#of stories:** 0

**Lot Depth/Width Ratio:**

**Avg. front setback of adjacent homes:**

**Zoning District:** Zone C

**Radnor Lake Impact Zone:** Yes

**Steep Slope:** Yes

**Plat/Subdivison:**

**Status:** Open

**Assigned To:** Stephen Snow

**Property**

Parcel #	Address	Legal Description	Owner Name	Owner Phone	Zoning
14508002600	5021 VILLA CREST DR	LOT 6 VILLA ESTATES	WOODARD, JAMES & REBEKAH		

**Fees**

January 23, 2024

City of Oak Hill  
5548 Franklin Pk, Suite 101  
Nashville, TN 37220

Letter of Description for Sewer Line Project  
5021, 5025, 5029 Villa Crest Dr and  
1107 Ridgeview Dr  
Nashville, TN 37220

To Oak Hill Planning Commission:

We are requesting approval for work within steep slopes areas located at 5021 and 5029 Villa Crest Dr and 1107 Ridgeview Dr and for work within the Radnor Preserve overlay for 5021, 5025, and 5029 Villa Crest Dr to allow the installation of a small, pressurized sewer line.

This project has been necessitated by the need for the installation of private sewer lines for the two properties located at 5021 and 5029 Villa Crest Drive. These homes are currently on very dated and failing septic systems and the septic fields are located on the steep slopes areas behind the houses. The owners are needing to abandon the old septic systems and connect to the Metro sewer. The largest complication to this basic sewer necessity is that no Metro sewer main exists on Villa Crest Drive.

The alternate plan for gaining Metro sewer access for the two properties has been to create and record private sewer utility easements from each residence to the nearest existing Metro sewer main located in Ridgeview Dr below the properties. The new private sewer lines will originate at the homes up on Villa Crest, travel down the backside of the 5021 property, pass into an easement that has been granted and recorded by the adjacent neighbor located at 1107 Ridgeview below 5021, and crossing the property at 1107 and tapping into the Metro sewer main in Ridgeview. All of the utility easements for the private sewer lines to originate at the Villa Crest properties and reach the sewer main at Ridgeview have been surveyed and defined and signed by the respective property owners granting access to the owners of 5021 and 5029.

The new force main sewer line system proposed for 5021 and 5029 consist of a 1 ½" PVC sewer line coming off of a gravity fed grinder tank located behind the homes. The grinder tank pressurizes the 1 ½" line pushing the sewage through the line. Being that the sewer line is only a 1 ½" PVC line, the installation can be done by an irrigation trencher rather than a large excavator. This also gives the ability to curve the sewer line around trees that may exist in the sewer easements. No tree removal is expected for the scope of this work. Also, if roots are encountered by a trencher, the roots are cut more cleanly which is healthier for trees than the roots being torn out by a larger excavator. A cross-section and design drawings by the civil engineer for the sewer line installation is included in the submittal drawings packet along with erosion control methods for the sewer line installation.

The overall designs by the civil engineer, regarding the installation method, trenching direction of the sewer line path, and included subterrain drainage method, have also been consulted with and evaluated by a geotechnical engineer. The geotechnical engineer has also studied the 4 lots and the existing site conditions. It is the conclusion of the geotechnical engineer that this work will not create a negative impact to the stabilization of the existing steep slope areas. In addition, abandoning the old septic fields currently located within the steep slope areas will actually reduce water infiltration into the steep slopes areas and improve overall stability in these areas. The geotechnical report is included in the submission packet.

In our due diligence, even though no trees are planned to be removed, we also hired an engineer to calculate the lot coverage of existing trees for each of the 4 involved properties. According to tree retention standards of section 905 of the Woodland and Tree Protection Ordinance for Oak Hill, even if every tree located in or directly beside the sewer easements were to be removed, all 4 lots would still be well above the minimum retention standards. Please see drawings included for tree retention calculations and sewer easement locations.

We have also consulted with the arborist tree experts at Parke Tree Company on the path of the sewer route to minimize impact to existing trees and reduce root damage to the greatest extent feasible. The letter of site observation and supporting conclusion by the arborist is also included.

Also noteworthy, we have successfully used this same pressurized sewer line installation method, being currently proposed, over 10 years ago to bring a sewer line down the steep slopes of the property at 5017 Villa Crest Dr to the sewer main located in Ridgeview Dr. The sewer path and work completed at 5017 is parallel and very similar to the currently proposed path next door at 5021 Villa Crest Dr. Both the geotechnical engineer and the consulted arborist have walked the installed sewer line path from 5017 Villa Crest Dr to Ridgeview Dr. to make current site observations. The existing sewer path of the installed pressurized line shows no signs of erosion or tree loss after 10 years of continuous service to the home at 5017.

Thank you for your time!

Josh

Joshua D. White  
President  
Joshua Builders, Inc.  
2506 Winford Ave.  
Nashville, TN 37211  
(P) 615-256-9414 ext. 106  
(F) 615-256-9415





## MEMORANDUM

To: Mr. Stephen Snow  
From: Zac Dufour, P.E.  
Kimley-Horn and Associates, Inc.  
Date: February 14, 2024  
Subject: PC Case 24-08, 24-09, 24-10, 24-11 Villa Crest Sewer Line

---

We have completed our review of the Steep Slope and Radnor Lake Impact Zone Site Plans for the installation of a private sewer line and removal of septic tanks for properties located at 5029 Villa Crest, 5025 Villa Crest, 5021 Villa Crest and 1107 Ridgeview.

Please see below for engineering comments.

### Comments

1. Provide better detail on slope stabilization and vegetation at the top of the trench on steep slopes. Seed and Straw is not sufficient for steep slopes.
  - a. Erosion control matting has been indicated and a detail has been provided.
2. Provide detail on the removal/filling/crushing of the septic tanks. Show location on the plans and provide construction process for this work.
  - a. Detail provided.
3. Geotechnical Engineer shall be on site during trenching operations and shall provide documentation to the City of Oak Hill regarding their observations and any additional recommendations that need to be implemented during construction. Geotechnical observations shall be completed once for 5029 Villa Crest and 5025 Villa Crest and at least twice for 5021 Villa Crest and 1107 Ridgeview.
  - a. Applicant has acknowledged the conditions.
4. The City of Oak Hill Geotechnical engineering consultant shall visit the site during trenching on steep slopes and shall be communicated with during construction by the applicants Geotechnical Engineer.
  - a. Applicant has acknowledged the conditions.

### Recommendation

This project is recommended for approval subject to the two geotechnical conditions stated above.

c: File

**GEO-TECHNOLOGY ASSOCIATES, INC.**  
GEOTECHNICAL AND  
ENVIRONMENTAL CONSULTANTS



*A Practicing Geoprofessional Business Association Member Firm*

February 14, 2024

Mr. Stephen Snow  
Code Enforcement Officer  
City of Oak Hill

Re: Report of Geotechnical Review Services  
1107 Ridgeview Dr, 5025 Villa Crest Dr. and 5029 Villa Crest Dr.  
Oak Hill, Tennessee

Mr. Snow:

At your request, Geo-Technology Associates, Inc. (GTA) has reviewed geotechnical information and discussed the project with the perspective contractor (Joshua Builders, Inc.). Further, we (principal with GTA) were involved in a similar construction project with the contractor for 5017 Villa Crest Dr. in 2013.

Based on our review of the data, we take no exceptions to the planned installation of the pressurized sewer line as provided. We offer the following comments below which are consistent with LaBella's Geotechnical Letter Report:

- The removal of mature trees should be limited. The clearing activities along the slope should be limited to the ground cover (brush), saplings and/or dead vegetation.
- To the extent possible, the trench excavation should be performed perpendicular to the existing slope.
- The trench excavation should include a perforated drain pipe installed below the 1 ½ pipe to provide an outlet for ground water and/or surface water that may accumulate within the trench during and after construction.
- The drain pipes should be day-lighted as needed to discharge any water that may enter the trench during and after construction.
- Upon completing the trench excavation, the trench should be lined with a filter fabric (Mirafi 140N, or equivalent) prior to the placement of any stone or pipe.
- The fabric should be lapped over the stone prior to the placement of topsoil.
- The trench excavation should not be allowed to remain open for a long period of time, and the contractor should be prepared to open only what can be backfilled within timely manner.

Further, the geotechnical engineer should be on site during the installation to confirm the conditions exposed, and to provide any additional recommendations as necessary. Upon completion of the

230 Great Circle Rd, Suite 211 Nashville, TN 37228 (615) 509-6012

◆ Abingdon, MD ◆ Baltimore, MD ◆ Laurel, MD ◆ Frederick, MD ◆ Waldorf, MD ◆ New Castle, DE ◆ Georgetown, DE ◆ Somerset, NJ  
◆ NYC Metro ◆ York, PA ◆ Quakertown, PA ◆ Beaver Falls, PA ◆ Malvern, OH ◆ Sterling, VA ◆ Nashville, TN ◆ Charlotte, NC ◆ Raleigh, NC

Visit us on the web at [www.gtaeng.com](http://www.gtaeng.com)

Report of Geotechnical Review Services  
1107 Ridgeview Dr, 5025 Villa Crest Dr. and 5029 Villa Crest Dr.  
Oak Hill, Tennessee

February 14, 2024  
Page 2 of 2

---

installation, the geotechnical engineer should issue a follow-up letter stating discussing the construction installation.

We trust that this letter meets your immediate needs. If you require additional information, please let us know.

Sincerely,

Geo-Technology Associates, Inc.



Daniel D. Terranova, PE



August 29, 2023  
Revised January 4, 2024

Joshua White  
Joshua Builders Inc.  
2506 Winford Avenue  
Nashville, TN 37211

**RE: Thorne Residence – Sewer Easement Letter**  
**5021 Villa Crest Drive, City of Oak Hill, Davidson County, Tennessee**  
**LaBella Project No: 223504**

Dear Mr. White,

As requested, on August 28, 2023, a representative from LaBella Associates D.P.C. (LaBella) performed a site visit to observe existing site conditions at 5021 Villa Crest Drive and to discuss proposed improvements relating to the sewer easement at the residences located at 5021, 5025, 5029 Villa Crest Drive and 1107 Ridgeview Drive in the City of Oak Hill, Davidson County, Tennessee, hereinafter referred to as the “project site”.

We understand the proposed improvements consist of a sewer system that will require installing two (2) 1.5-inch pipes extending from the residences noted above to an existing sewer system located along Ridgeview Drive located north of the project site.

The property of 5021 Villa Crest Drive is a 2.27-acre developed parcel containing a vacant one-story residence and an asphalt driveway to the south of the residence. Topographically, the residence sits atop a ridge with a crest elevation of approximate El. 1083-feet. To the south of the residence, the topography strongly slopes downward to Villa Crest Drive at an approximate elevation of El. 1050-feet. To the north of the residence, the topography very strongly slopes downward to an approximate elevation of El. 930-feet. The project site is bound by Villa Crest Drive to the south, and residential parcels to the north, east, and west. Elevations noted herein are taken from the survey titled “Boundary & Partial Topographic Survey of Lot No. 6 Villa Estates” prepared by Donlon Land Surveying, LLC referencing the North American Vertical Datum of 1988 (NAVD88).

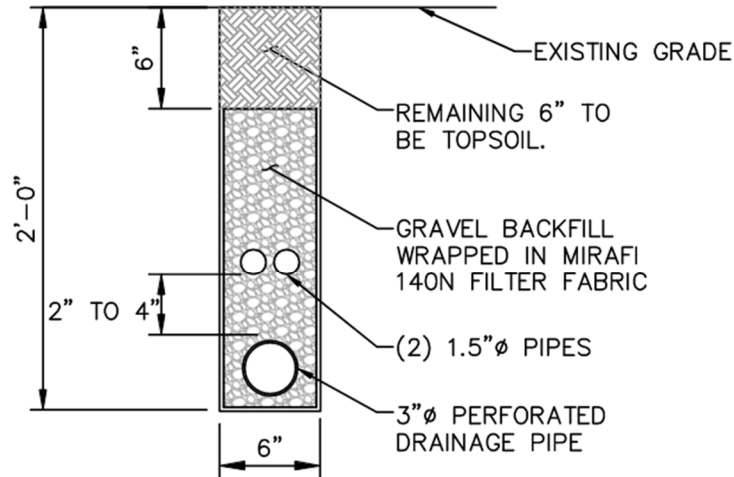
At the time of this correspondence, LaBella did not perform any field explorations to determine soil and rock conditions at the project site. Based on a review of geologic maps from the USGS Web Soil Survey and National Geologic Map Database, it is anticipated that a majority of the project site consists of Residuum overlying limestone of the Fort Payne Formation. Toward the adjacent property to the north, Colluvium may be present based on a review of the Web Soil Survey. Actual subsurface conditions may vary.

Based on a discussion with the Client, we understand that the pipes will be installed in a trench excavated approximately 6-inches wide to a depth of 24-inches. We recommend the trench be excavated perpendicular to the existing slope and away from mature trees to limit tree removal.

Exposed soil subgrades should be lightly compacted, and the trench should be filled with placed and compacted 57 Stone extending a minimum 6-inches above and below the pipes and wrapped in filter fabric (Mirafi 140N or equivalent). We recommend backfilling the remaining trench with topsoil to promote re-establishment of vegetation and placing erosion control blankets to prevent erosion. A drainage pipe, such as a 3-inch diameter perforated pipe, should be placed below the sewer pipes and



should daylight on the slope. Provisions to prevent erosion should be employed and existing drainage patterns should be considered.



TYPICAL TRENCH DETAIL

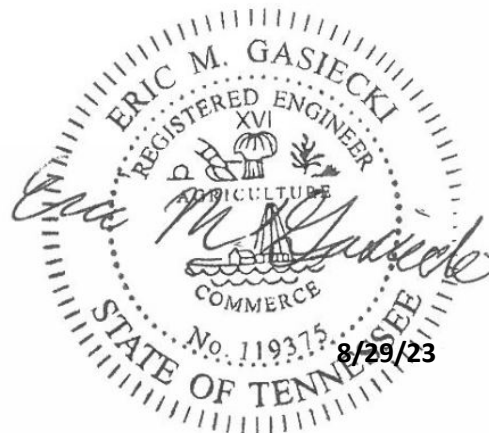
Due to the limited disturbance, it is our opinion that the proposed improvements will have limited impact on the stability of the existing slope.

These recommendations are based upon our understanding of the proposed improvements. Generally accepted soil engineering practices were used to develop the recommendations stated in this correspondence. No other warranty, expressed or implied, is made. If you have any comments or questions or require additional assistance, please contact our office.

Respectfully submitted,

**LaBella Associates**

Thomas M. Diver, EIT  
Geotechnical Engineer



Eric M. Gasiiecki, PE  
Senior Geotechnical Engineer/Office Manager





December 14, 2023

Joshua Builders  
2506 Winford Ave  
Nashville, TN 37211

Josh,

Pertaining to trenching and installation at 5021, 5025, 5029 Villa Crest Dr, and 1107 Ridgeview Dr, 37220:

After our review of the 4 lots, the proposed trenching and installation of 1.5 inch sewage line to be installed from the top of Villa Crest down to Ridgeview Dr. will not significantly impact the root systems of the trees surrounding the installation area. Although there is proximity within the dripline, the impact will be minimal. There is enough stem to root ratio to allow for compartmentalization of any root affected by an irrigation trencher. As a contractor and tree professional, we have performed this type of work with 100% success.

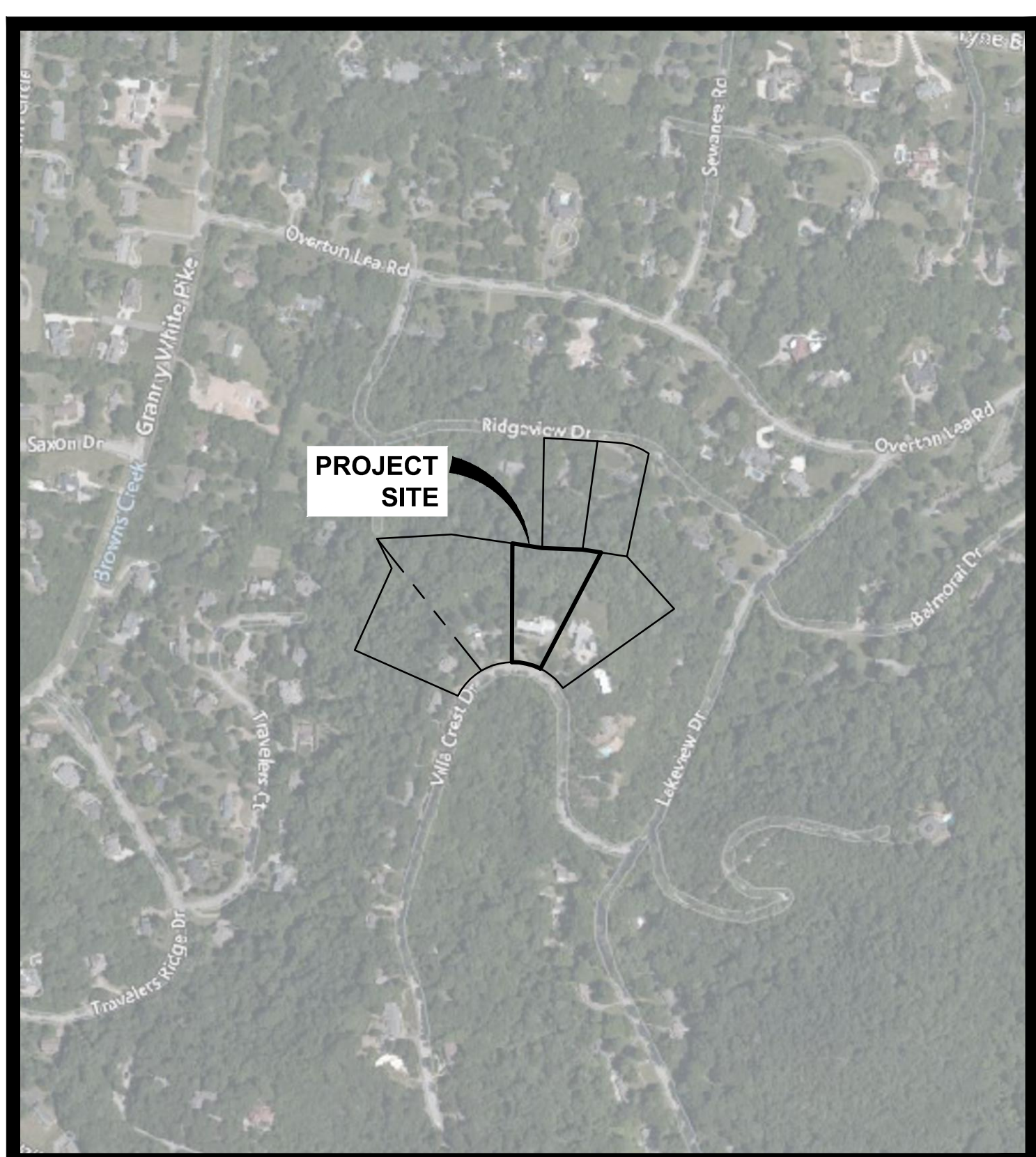
The same sewer installation and technique was successfully done on the adjacent property approximately 7 years ago with no visual impact to the of the health or structure of surrounding trees. We have reviewed the sewer line route chosen and have agreed that it has been diligently placed avoiding any and all buttress/support roots to minimize as much impact as possible.

If you have any questions, please contact us at The Parke Company at 615-350-6033.

Dan Beasley & Penn Mayhew (ISA Certified Arborist SO-10909A)



K:\02\_Projects\23001-23999\23999-23856 - Villa Crest\02\_DWG\03\_5021 Villa Crest DWG\_01\_C0\_00\_23856\_COVER.dwg  
 2/14/2024 10:44:35 AM  
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Collected Civil Engineering, LLC shall be without liability to Collected Civil Engineering, LLC.



**LOCATION MAP**  
 1"=500'

# VILLA CREST SEWER

## 5021 VILLA CREST DRIVE

### NASHVILLE, TN 37220

INDEX OF DRAWINGS	
SHEET NO.	DESCRIPTION
C0.00	COVER SHEET
C0.50	OVERALL SITE PLAN
C0.01	NOTES & LEGEND
C1.00	EXISTING VS PROPOSED TREE CANOPY COVER
C1.10	TREE PROTECTION FIGURE
C2.00	SANITARY SEWER EPSC PLANS
C6.00	SANITARY SEWER DESIGN PLANS

**PROJECT TEAM**

**CIVIL ENGINEER**

PETER ROMANO P.E.  
 COLLECTED CIVIL ENGINEERING  
 921B WOODLAND STREET  
 NASHVILLE, TN 37206  
 (615) 917-0191  
 PETER@COLLECTEDCIVIL.COM

**OWNER**

1765 TYNE FAMILY TRUST  
 5025 VILLA CREST DR  
 OAK HILL, TN 37220

**CONTRACTOR**

JOSH WHITE  
 JOSHUA BUILDERS, INC.  
 2506 WINFORD AVE.  
 NASHVILLE, TN 37211  
 615.256.9415  
 JOSH.WHITE@JOSHUABUILDERS.NET

**PROJECT INFORMATION**

PROJECT ADDRESS:  
 5021 VILLA CREST DRIVE  
 NASHVILLE, TN 37220  
 TAX MAP NO. 0H-25

EXISTING ZONING: RESIDENTIAL C  
 SURROUNDING ZONING: RESIDENTIAL C

**AREA**

TOTAL PROJECT AREA: 2.35± ACRES

TOTAL PROJECT DISTURBANCE AREA:  
 0.20± ACRES

TOTAL PROPOSED PROJECT IMPERVIOUS  
 AREA : 0.00 ACRES

**PROJECT DESCRIPTION**

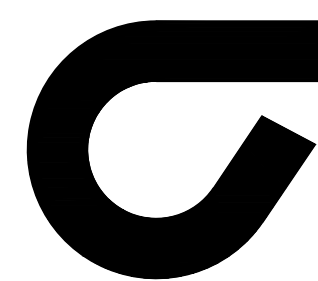
PROPOSED SANITARY SEWER DESIGN WITH TREE PROTECTION

**SURVEY**

BASE MAP INFORMATION TAKEN FROM A TOPOGRAPHIC, UTILITY AND BOUNDARY SURVEY PREPARED BY "DONLON LAND SURVEYING, INC" DATED 3/31/2023. COLLECTED CIVIL ENGINEERING, LLC AND ANY OF THEIR CONSULTANTS ASSUMES NO RESPONSIBILITY OR LIABILITY FOR ANY ERRORS OR OMISSIONS RESULTING FROM THE AFOREMENTIONED SURVEY.

**FLOODPLAIN**

ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP (FIRM), DAVIDSON COUNTY, TENNESSEE, COMMUNITY PANEL NUMBER 47037C0358H DATED APRIL 5, 2017, THE PROJECT SITE LIES WITHIN FLOOD ZONE X, AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN.



**COLLECTED  
 CIVIL ENGINEERING**

921B Woodland Street Nashville, TN 37206



All rights reserved. Copy or reproduction of this drawing or document, or any portion thereof, without the express written permission of Collected Civil Engineering, LLC, is prohibited. This drawing or document is not intended or represented to be suitable for any purpose other than the specific project, application and situation for which it was intended. Any modification of this drawing or document, or any use for any project, application or situation other than that for which it was intended, will be at user's sole risk and without liability to Collected Civil Engineering, LLC.

Except as provided by rule 0120-02-.08(5)(b) of the Tennessee state board of architecture and engineering examiners, any changes made to this drawing or document, after final revision and sealing by the registrant are prohibited by any person other than the profession registrant, including but not limited to owners/clients, contractors, subcontractors, other design professional or any of their agents, employees or assigns.

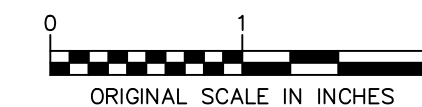
© 2023 Collected Civil Engineering, LLC

**VILLA CREST SEWER**

5021 VILLA CREST DR  
 NASHVILLE, TN 37220

ISSUED FOR:  
**LAND DISTURBANCE PERMIT**

PROJECT NUMBER: 23056-03	DATE: 1/30/24
DRAWN BY: PM	REVIEWED BY: PR
NORTH ARROW:	SCALE:



REVISIONS		
NO.	DATE	DESCRIPTION
1	2/14/24	RESPONSE TO CITY COMMENTS

DRAWING NAME:

**COVER SHEET**

DRAWING NUMBER:



# C0.00



K:\02\_Projects\2301-2399\2306 - Villa Crest\02\_DWG\03\_5021 Villa Crest DWG\03\_50\_2306\_Overall.dwg  
 2/14/2024 10:43:05 AM  
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Collected Civil Engineering, LLC shall be without liability to Collected Civil Engineering, LLC.



**COLLECTED  
CIVIL ENGINEERING**

921B Woodland Street Nashville, TN 37206



All rights reserved. Copy or reproduction of this drawing or document, or any portion thereof, without the express written permission of Collected Civil Engineering, LLC, is prohibited. This drawing or document is not intended or represented to be suitable for any purpose other than the specific project, application and situation for which it was intended. Any modification of this drawing or document, or any use for any project, application or situation other than that for which it was intended, will be at user's sole risk and without liability to Collected Civil Engineering, LLC.

Except as provided by rule 0120-02-.06(5)(b) of the Tennessee state board of architecture and engineering examiners, any changes made to this drawing or document, after final revision and sealing by the registrant are prohibited by any person other than the profession registrant, including but not limited to owners/clients, contractors, subcontractors, other design professional or any of their agents, employees or assigns.

© 2023 Collected Civil Engineering, LLC

**VILLA CREST SEWER**

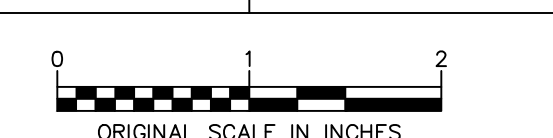
5021 VILLA CREST DR  
NASHVILLE, TN 37220

ISSUED FOR: **LAND DISTURBANCE PERMIT**

PROJECT NUMBER: 23056-03      DATE: 1/30/24

DRAWN BY: PM      REVIEWED BY: PR

NORTH ARROW:      SCALE: 1" = 50'



REVISIONS		
NO.	DATE	DESCRIPTION
1	2/14/24	RESPONSE TO CITY COMMENTS

DRAWING NAME:

**OVERALL SITE PLAN**

DRAWING NUMBER:



**C0.50**



COLLECTED CIVIL ENGINEERING

921B Woodland Street Nashville, TN 37206



All rights reserved. Copy or reproduction of this drawing or document, or any portion thereof, without the express written permission of Collected Civil Engineering, LLC, is prohibited. This drawing or document is not intended or represented to be suitable for any purpose other than the specific project, application and situation for which it was intended. Any modification of this drawing or document, or any use for any project, application or situation other than that for which it was intended, will be at user's sole risk and without liability to Collected Civil Engineering, LLC.

Except as provided by rule 0120-02-.08(5)(b) of the Tennessee state board of architecture and engineering examiners, any changes made to this drawing or document, after final revision and sealing by the registrant are prohibited by any person other than the profession registrant, including but not limited to owners/clients, contractors, subcontractors, other design professional or any of their agents, employees or assigns.

© 2023 Collected Civil Engineering, LLC

### VILLA CREST SEWER

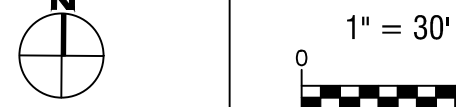
5021 VILLA CREST DR  
NASHVILLE, TN 37220

ISSUED FOR: LAND DISTURBANCE PERMIT

PROJECT NUMBER: 23056-03 DATE: 1/30/24

DRAWN BY: PM REVIEWED BY: PR

NORTH ARROW: SCALE: 1" = 30'



ORIGINAL SCALE IN INCHES

#### REVISIONS

NO.	DATE	DESCRIPTION
1	2/14/24	RESPONSE TO CITY COMMENTS

DRAWING NAME:

### EXISTING VS PROPOSED TREE CANOPY COVER

DRAWING NUMBER:

# C1.00

Existing Trees (Tree canopy cover as a percent of the Lot Area)	Minimum Percentage of Existing Trees that Shall be Retained and Protected (as a percent of the total predevelopment tree canopy cover)
91-100%	48%
81-90%	51%
71-80%	54%
61-70%	57%
51-60%	60%
41-50%	63%
31-40%	66%
21-30%	69%
11-20%	72%
10% or less	75%

**LEGEND:**

- PROPERTY LINE
- TREE COVER
- TREE COVER REMOVAL

2.35 AC SITE  
57,287 SF EXISTING CANOPY ON SITE  
16,318 SF EXISTING CANOPY REMOVED

57% OF THE SITE IS COVERED BY EXISTING TREES

PER TREE RETENTION STANDARDS, A MINIMUM OF 60% OF THE EXISTING TREES ON SITE SHALL REMAIN & BE PROTECTED

72% OF THE EXISTING TREES ON SITE ARE REMAINING

EXISTING TREE	CALIPER	TYPE	SPECIES
1	12"	CEGDAR	EXISTING TREE TO REMAIN & BE PROTECTED
4	6"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
6	3"	CREPE MYRTLE	EXISTING TREE TO REMAIN & BE PROTECTED
7	4"	CREPE MYRTLE	EXISTING TREE TO REMAIN & BE PROTECTED
8	3"	CREPE MYRTLE	EXISTING TREE TO REMAIN & BE PROTECTED
9	15"	HACKBERRY	EXISTING TREE TO REMAIN & BE PROTECTED
10	27"	OAK	EXISTING TREE TO BE POTENTIALLY REMOVED
11	6"	MAGNOLIA	EXISTING TREE TO REMAIN & BE PROTECTED
12	6"	MAGNOLIA	EXISTING TREE TO REMAIN & BE PROTECTED
13	6"	MAGNOLIA	EXISTING TREE TO REMAIN & BE PROTECTED
14	6"	MAPLE	EXISTING TREE TO REMAIN & BE PROTECTED
15	6"	MAPLE	EXISTING TREE TO REMAIN & BE PROTECTED
16	6"	MAPLE	EXISTING TREE TO REMAIN & BE PROTECTED
17	6"	MAPLE	EXISTING TREE TO REMAIN & BE PROTECTED
26	6"	MAPLE	EXISTING TREE TO REMAIN & BE PROTECTED
27	6"	PINE	EXISTING TREE TO REMAIN & BE PROTECTED
28	6"	CEDAR	EXISTING TREE TO REMAIN & BE PROTECTED
29	3"	CEDAR	EXISTING TREE TO REMAIN & BE PROTECTED
30	4"	CEDAR	EXISTING TREE TO REMAIN & BE PROTECTED
31	2"	ARBORVITAE	EXISTING TREE TO REMAIN & BE PROTECTED
32	2"	ARBORVITAE	EXISTING TREE TO REMAIN & BE PROTECTED
33	2"	ARBORVITAE	EXISTING TREE TO REMAIN & BE PROTECTED
34	2"	ARBORVITAE	EXISTING TREE TO REMAIN & BE PROTECTED
35	4"	ARBORVITAE	EXISTING TREE TO REMAIN & BE PROTECTED
36	2"	ARBORVITAE	EXISTING TREE TO REMAIN & BE PROTECTED
37	2"	ARBORVITAE	EXISTING TREE TO REMAIN & BE PROTECTED
38	8"	CEDAR	EXISTING TREE TO BE POTENTIALLY REMOVED
39	10"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
40	2"	CEDAR	EXISTING TREE TO REMAIN & BE PROTECTED
41	12"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
42	18"	HICKORY	EXISTING TREE TO BE POTENTIALLY REMOVED
43	18"	HICKORY	EXISTING TREE TO BE POTENTIALLY REMOVED
44	6"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
45	27"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
46	6"	OAK	EXISTING TREE TO REMAIN & BE PROTECTED
47	12"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
48	15"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
49	8"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
50	30"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
51	36"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
52	6"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
54	6"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
56	27"	HICKORY	EXISTING TREE TO REMAIN & BE PROTECTED
60	21"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
61	6"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
62	6"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
63	12"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
64	8"	BUCKEYE	EXISTING TREE TO REMAIN & BE PROTECTED
65	21"	HICKORY	EXISTING TREE TO BE POTENTIALLY REMOVED
66	12"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
67	10"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
68	12"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
69	12"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
70	18"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
71	6"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
72	15"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
73	6"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
74	15"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
75	15"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
76	18"	HICKORY	EXISTING TREE TO REMAIN & BE PROTECTED
77	4"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
78	27"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
79	18"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
80	15"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
81	15"	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
82	6"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
83	8"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
84	24"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
85	8"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
86	15"	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED

570 CALIPER INCHES TO BE POTENTIALLY REMOVED

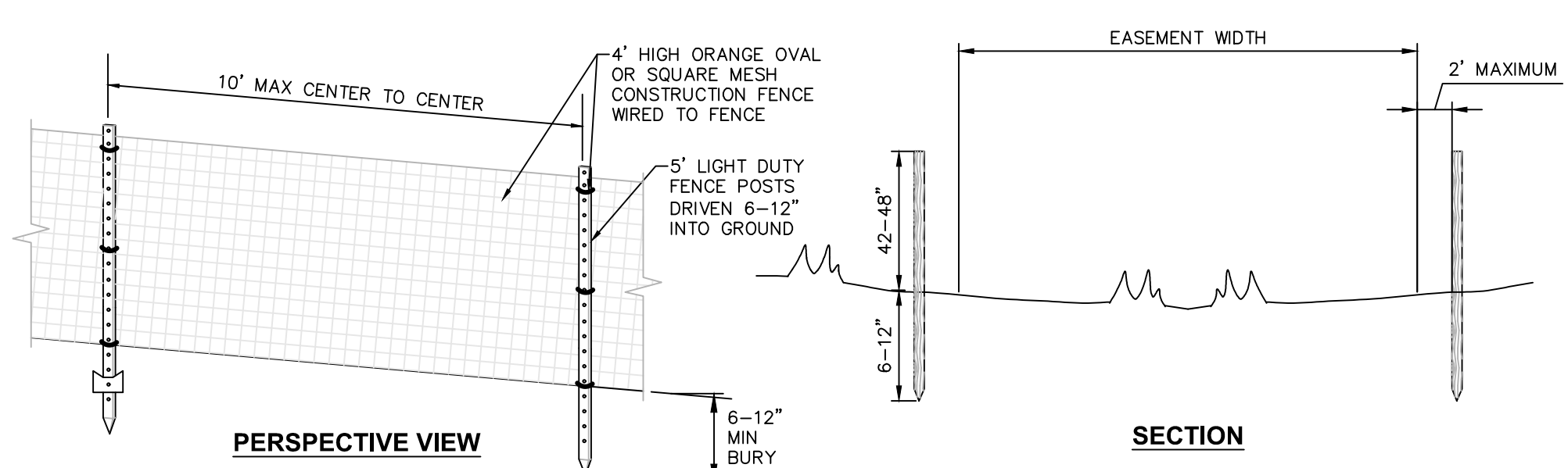
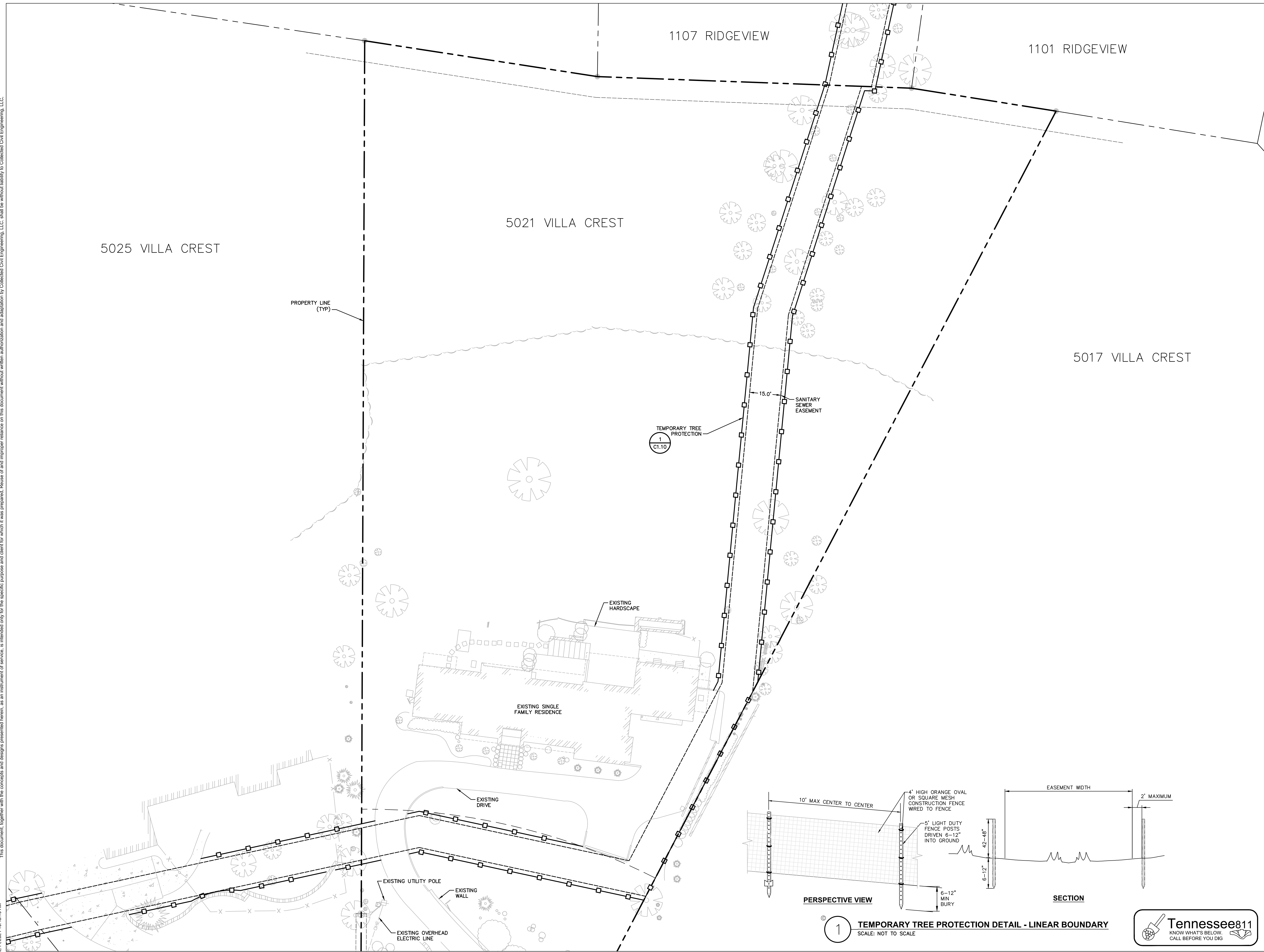
1 EXISTING TREE COVER  
C1.00 SCALE: 1"=30'

2 PROPOSED TREE COVER  
C1.00 SCALE: 1"=30'



K:\02\_Projects\23001-23056\23056 - Villa Crest\02\_DWG\03\_5021 Villa Crest DWG\01\_C1\_00\_23056\_Tree Canopy.dwg  
2/14/2024 10:45:14 AM  
This document, together with the concepts and designs presented herein, is an instrument of service, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Collected Civil Engineering, LLC, shall be without liability to Collected Civil Engineering, LLC.

K:\02\_Projects\23001-23099\23056 - Villa Crest\02\_DWG\03\_5021 Villa Crest DWG1\_C1.10\_23056\_Tree Protection.dwg  
2/14/2024 10:45:19 AM  
This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Collected Civil Engineering, LLC, shall be without liability to Collected Civil Engineering, LLC.



**1 TEMPORARY TREE PROTECTION DETAIL - LINEAR BOUNDARY**  
SCALE: NOT TO SCALE



**COLLECTED CIVIL ENGINEERING**

921B Woodland Street Nashville, TN 37206



All rights reserved. Copy or reproduction of this drawing or document, or any portion thereof, without the express written permission of Collected Civil Engineering, LLC, is prohibited. This drawing or document is not intended or represented to be suitable for any purpose other than the specific project, application and situation for which it was intended. Any modification of this drawing or document, or any use for any project, application or situation other than that for which it was intended, will be at user's sole risk and without liability to Collected Civil Engineering, LLC.

Except as provided by rule 0120-02-08(5)(b) of the Tennessee state board of architecture and engineering examiners, any changes made to this drawing or document, after final revision and sealing by the registrant are prohibited by any person other than the profession registrant, including but not limited to owners/clients, contractors, subcontractors, other design professional or any of their agents, employees or assigns.

© 2023 Collected Civil Engineering, LLC

**VILLA CREST SEWER**

5021 VILLA CREST DR  
NASHVILLE, TN 37220

ISSUED FOR: **LAND DISTURBANCE PERMIT**

PROJECT NUMBER: 23056-03	DATE: 1/30/24
DRAWN BY: PM	REVIEWED BY: PR
NORTH ARROW: 	SCALE: 1" = 20' 



REVISIONS		
NO.	DATE	DESCRIPTION
1	2/14/24	RESPONSE TO CITY COMMENTS

DRAWING NAME:

**TREE PROTECTION FIGURE**

DRAWING NUMBER:

**C1.10**



COLLECTED CIVIL ENGINEERING

921B Woodland Street Nashville, TN 37206



All rights reserved. Copy or reproduction of this drawing or document, or any portion thereof, without the express written permission of Collected Civil Engineering, LLC, is prohibited. This drawing or document is not intended or represented to be suitable for any purpose other than the specific project, application and situation for which it was intended. Any modification of this drawing or document, or any use for any project, application or situation other than that for which it was intended, will be at user's sole risk and without liability to Collected Civil Engineering, LLC.

Except as provided by rule 0120-02-08(5)(b) of the Tennessee state board of architecture and engineering examiners, any changes made to this drawing or document, after final revision and sealing by the registrant are prohibited by any person other than the profession registrant, including but not limited to owners/clients, contractors, subcontractors, other design professional or any of their agents, employees or assigns.

© 2023 Collected Civil Engineering, LLC

### VILLA CREST SEWER

5021 VILLA CREST DR  
NASHVILLE, TN 37220

ISSUED FOR: LAND DISTURBANCE PERMIT

PROJECT NUMBER: 23056-03 DATE: 1/30/24

DRAWN BY: PM REVIEWED BY: PR

NORTH ARROW: SCALE: 1" = 20'



ORIGINAL SCALE IN INCHES

#### REVISIONS

NO.	DATE	DESCRIPTION
1	2/14/24	RESPONSE TO CITY COMMENTS

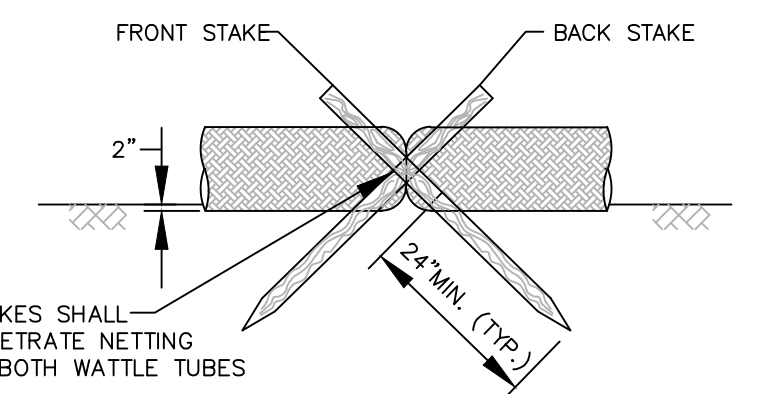
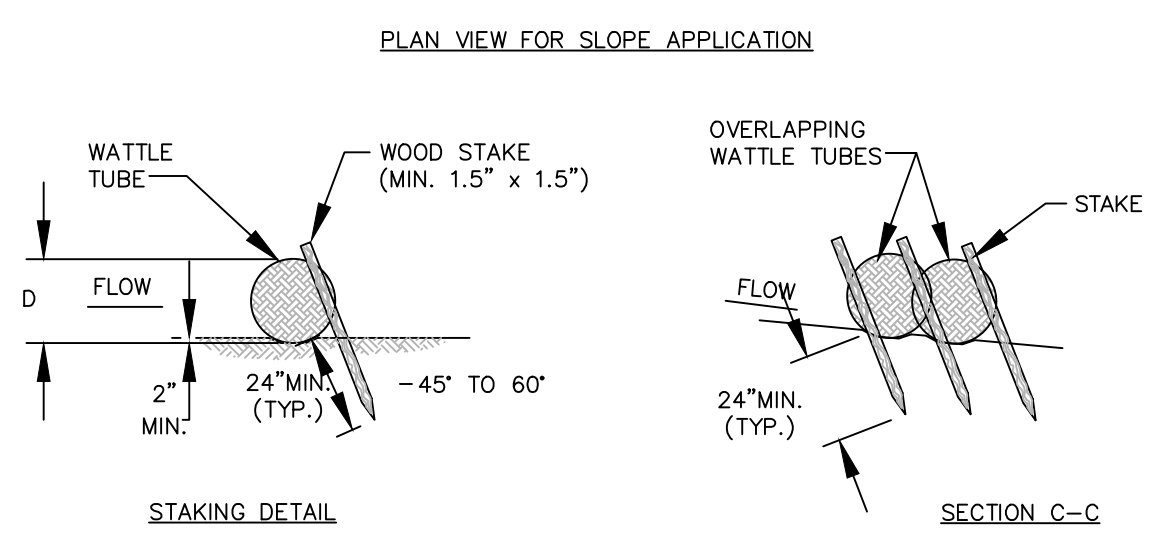
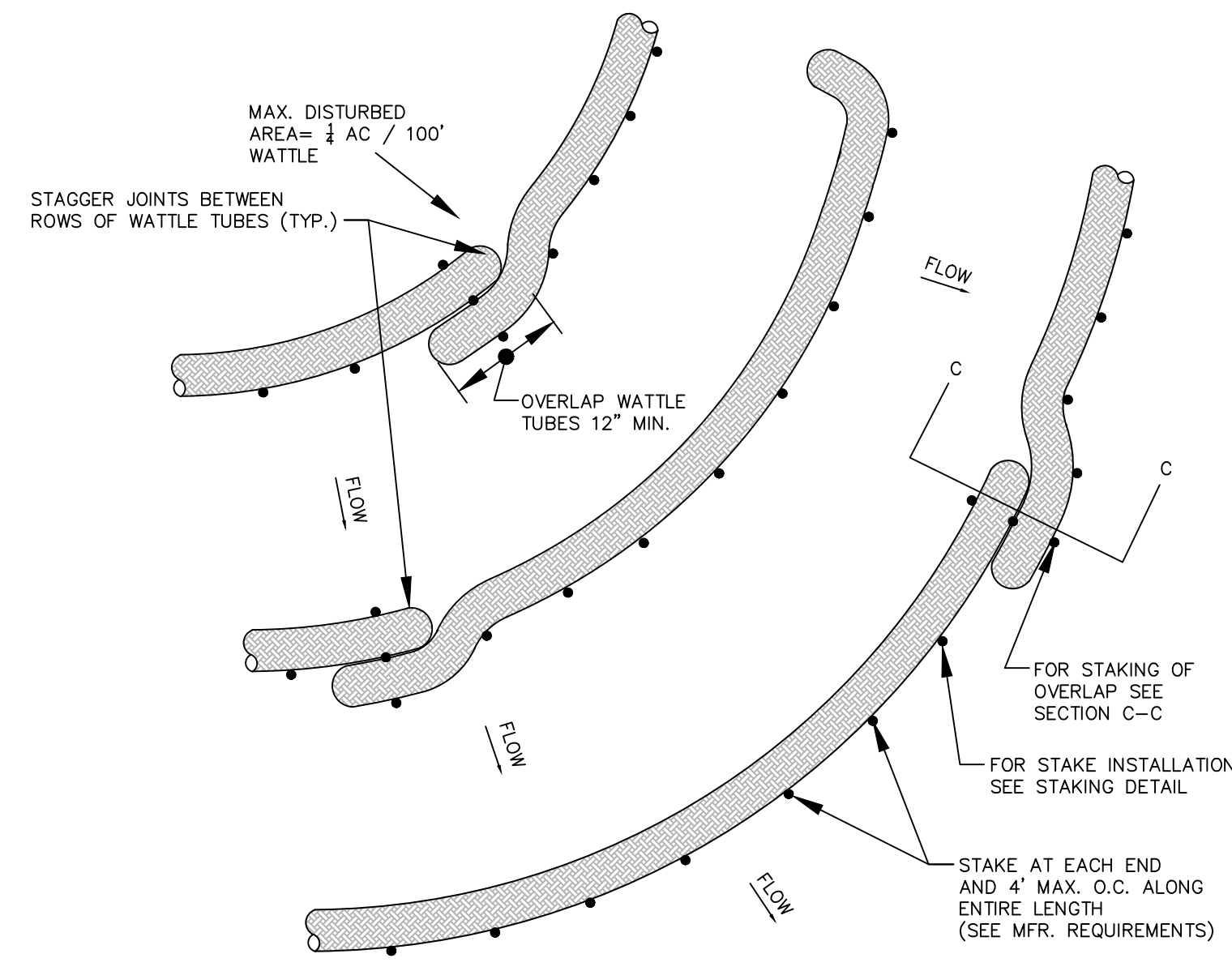
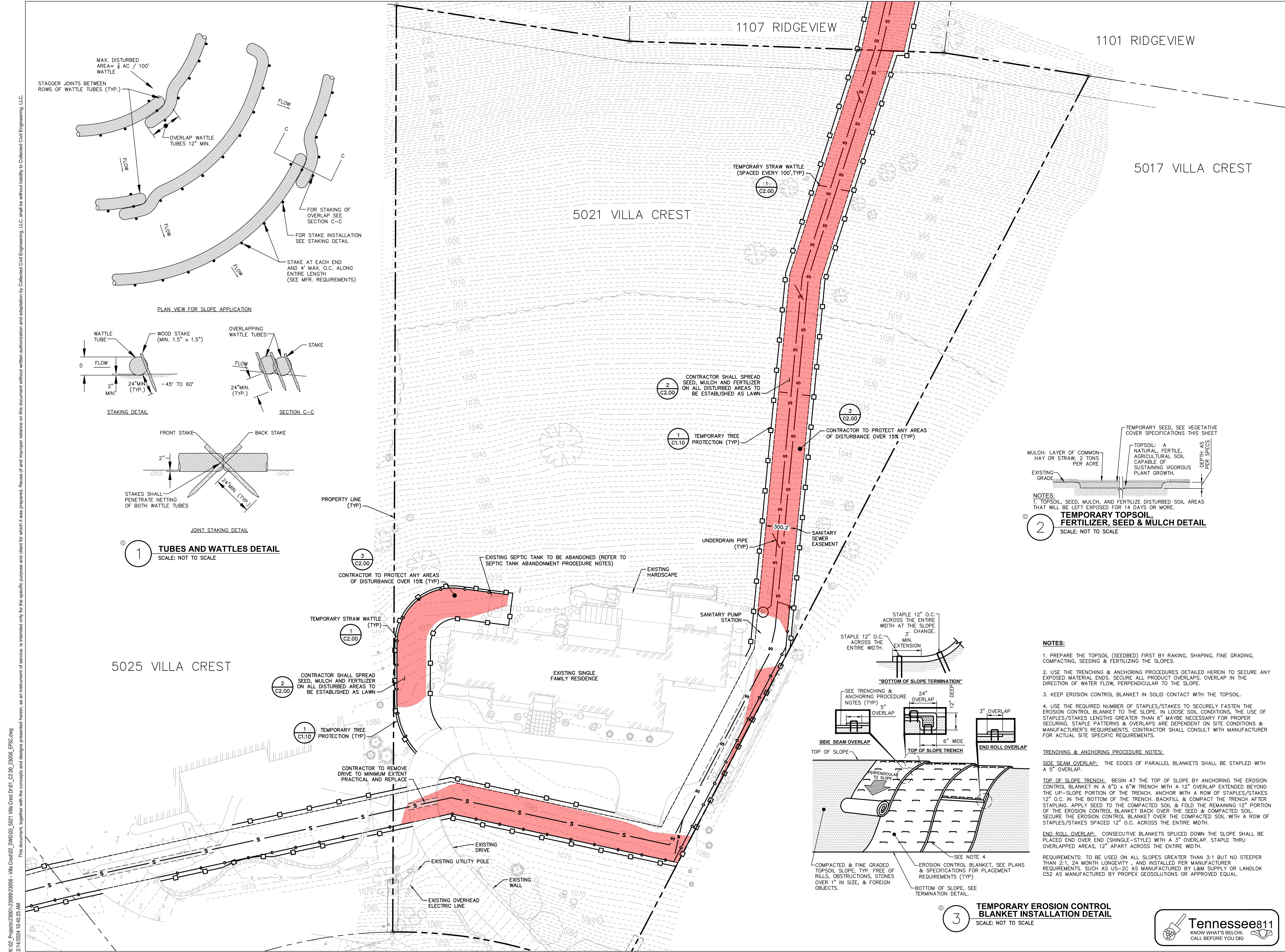
DRAWING NAME:

### DEMOLITION & EPSC PLAN

DRAWING NUMBER:



# C2.00

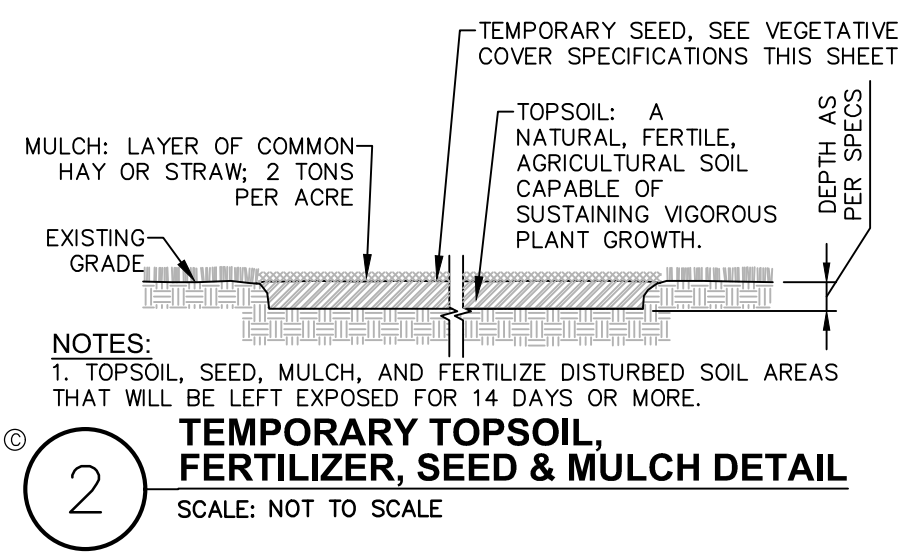


**1 TUBES AND WATTLES DETAIL**  
SCALE: NOT TO SCALE

**2 CONTRACTOR SHALL SPREAD SEED, MULCH AND FERTILIZER ON ALL DISTURBED AREAS TO BE ESTABLISHED AS LAWN**

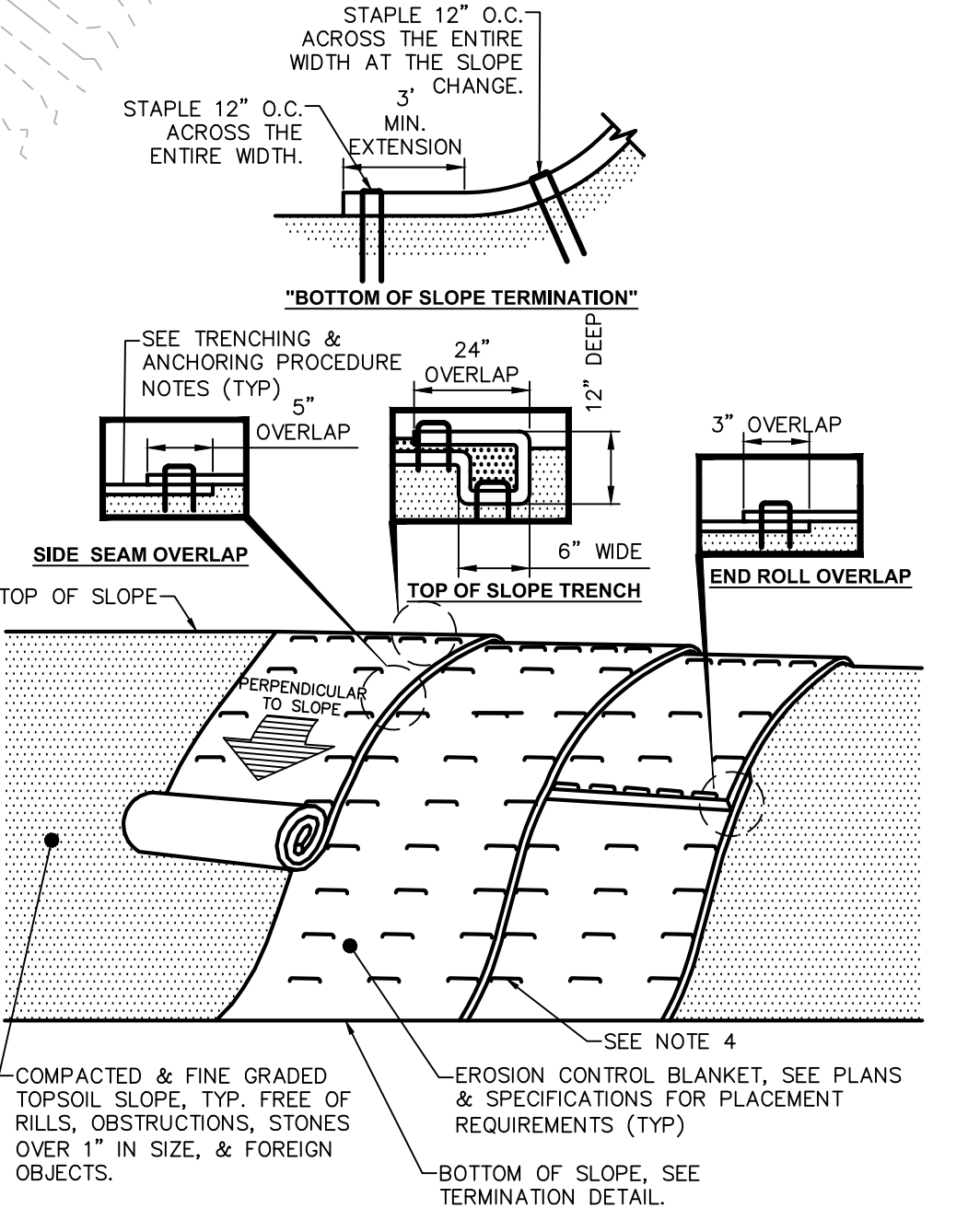
**1 TEMPORARY TREE PROTECTION (TYP)**

**3 CONTRACTOR TO PROTECT ANY AREAS OF DISTURBANCE OVER 15% (TYP)**



**2 TEMPORARY TOPSOIL, FERTILIZER, SEED & MULCH DETAIL**  
SCALE: NOT TO SCALE

- NOTES:**
1. PREPARE THE TOPSOIL (SEEDBED) FIRST BY RAKING, SHAPING, FINE GRADING, COMPACTING, SEEDING & FERTILIZING THE SLOPES.
  2. USE THE TRENCHING & ANCHORING PROCEDURES DETAILED HEREIN TO SECURE ANY EXPOSED MATERIAL ENDS. SECURE ALL PRODUCT OVERLAPS. OVERLAP IN THE DIRECTION OF WATER FLOW, PERPENDICULAR TO THE SLOPE.
  3. KEEP EROSION CONTROL BLANKET IN SOLID CONTACT WITH THE TOPSOIL.
  4. USE THE REQUIRED NUMBER OF STAPLES/STAKES TO SECURELY FASTEN THE EROSION CONTROL BLANKET TO THE SLOPE. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLES/STAKES LENGTHS GREATER THAN 6" MAYBE NECESSARY FOR PROPER SECURING. STAPLE PATTERNS & OVERLAPS ARE DEPENDENT ON SITE CONDITIONS & MANUFACTURER'S REQUIREMENTS. CONTRACTOR SHALL CONSULT WITH MANUFACTURER FOR ACTUAL SITE SPECIFIC REQUIREMENTS.

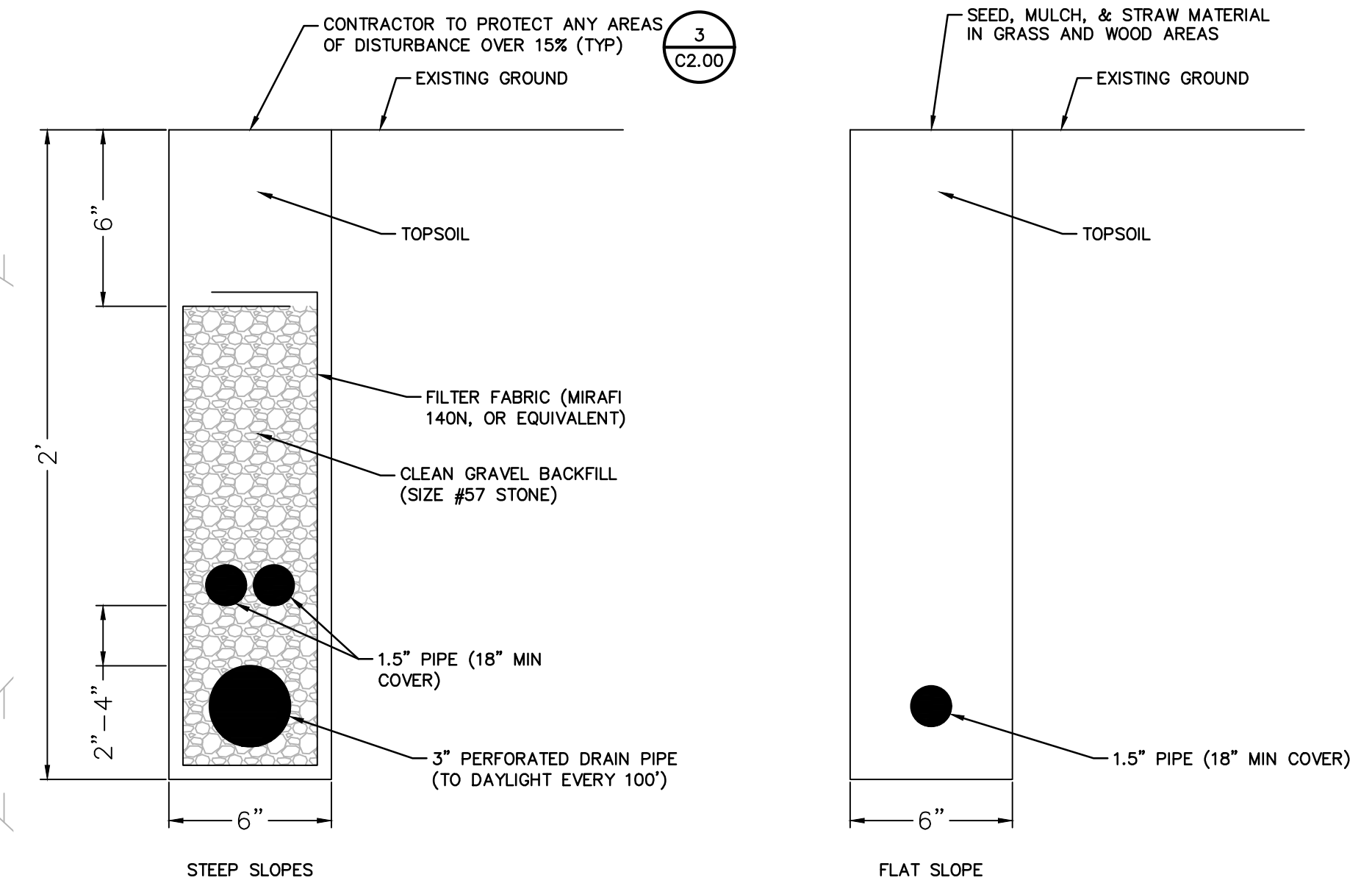
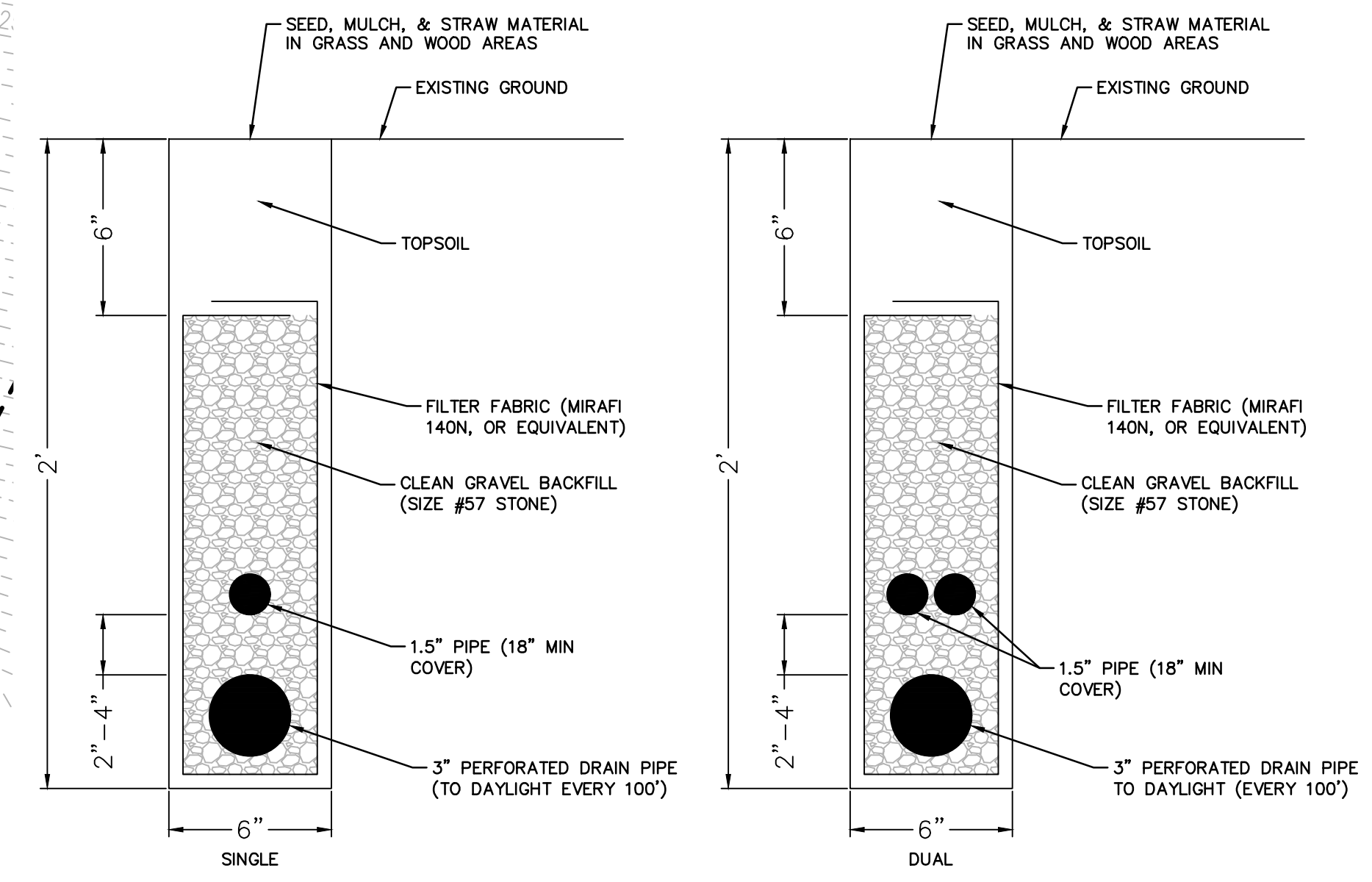
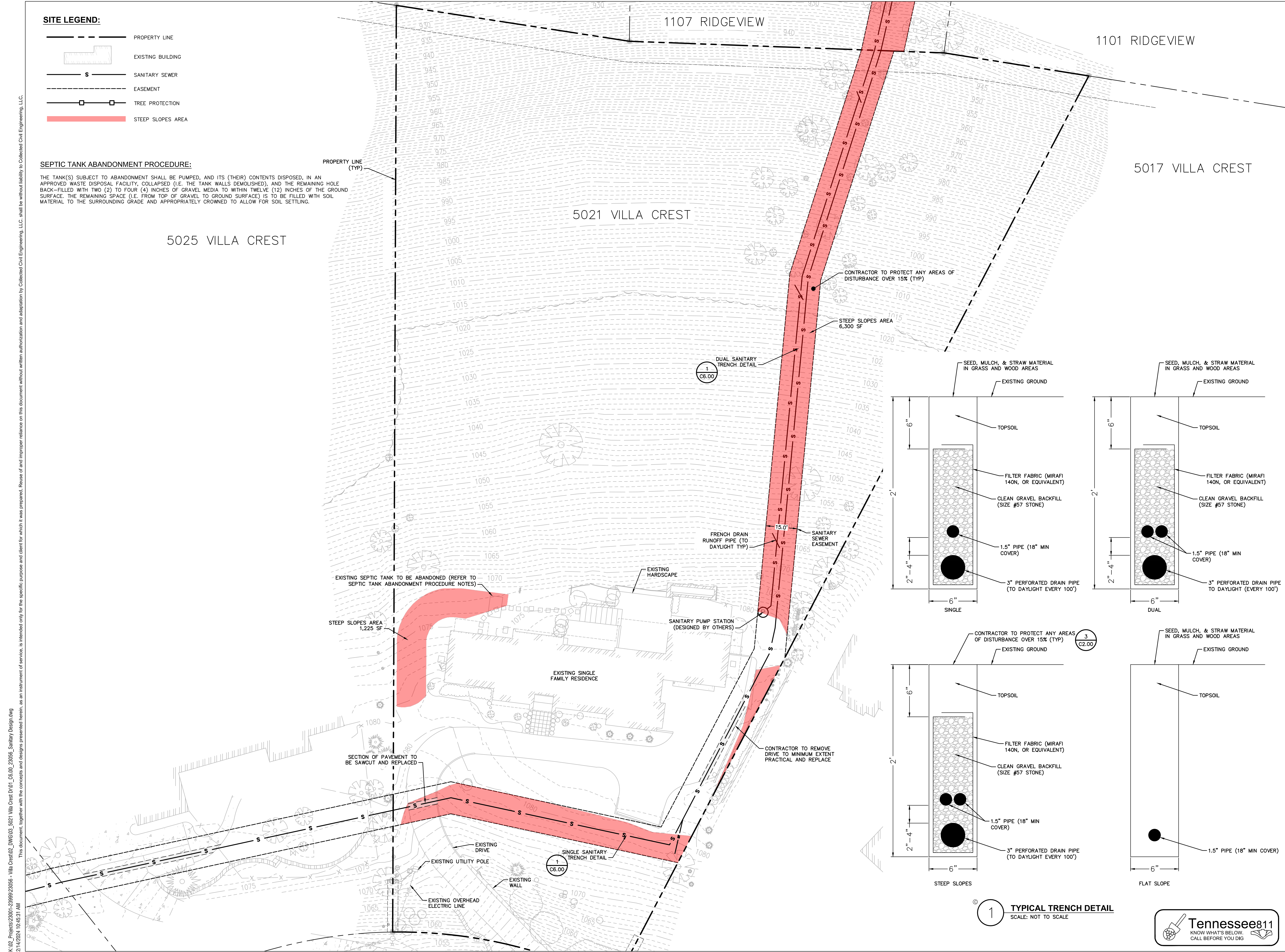


**3 TEMPORARY EROSION CONTROL BLANKET INSTALLATION DETAIL**  
SCALE: NOT TO SCALE

K:\02\_Projects\23001-23056\23056 - Villa Crest\02\_DWG\03\_5021 Villa Crest DWG1\_C2.00\_23056\_EPSC.dwg  
2/14/2024 10:43:25 AM

- SITE LEGEND:**
- PROPERTY LINE
  - EXISTING BUILDING
  - SANITARY SEWER
  - EASEMENT
  - TREE PROTECTION
  - STEEP SLOPES AREA

**SEPTIC TANK ABANDONMENT PROCEDURE:**  
 THE TANK(S) SUBJECT TO ABANDONMENT SHALL BE PUMPED, AND ITS (THEIR) CONTENTS DISPOSED, IN AN APPROVED WASTE DISPOSAL FACILITY, COLLAPSED (I.E. THE TANK WALLS DEMOLISHED), AND THE REMAINING HOLE BACK-FILLED WITH TWO (2) TO FOUR (4) INCHES OF GRAVEL MEDIA TO WITHIN TWELVE (12) INCHES OF THE GROUND SURFACE. THE REMAINING SPACE (I.E. FROM TOP OF GRAVEL TO GROUND SURFACE) IS TO BE FILLED WITH SOIL MATERIAL TO THE SURROUNDING GRADE AND APPROPRIATELY CROWNED TO ALLOW FOR SOIL SETTLING.



**1 TYPICAL TRENCH DETAIL**  
 SCALE: NOT TO SCALE

All rights reserved. Copy or reproduction of this drawing or document, or any portion thereof, without the express written permission of Collected Civil Engineering, LLC, is prohibited. This drawing or document is not intended or represented to be suitable for any purpose other than the specific project, application and situation for which it was intended. Any modification of this drawing or document, or any use for any project, application or situation other than that for which it was intended, will be at user's sole risk and without liability to Collected Civil Engineering, LLC.

Except as provided by rule 0120-02-08(5)(b) of the Tennessee state board of architecture and engineering examiners, any changes made to this drawing or document, after final revision and sealing by the registrant are prohibited by any person other than the profession registrant, including but not limited to owners/clients, contractors, subcontractors, other design professional or any of their agents, employees or assigns.

© 2023 Collected Civil Engineering, LLC

**VILLA CREST SEWER**  
 5021 VILLA CREST DR  
 NASHVILLE, TN 37220

ISSUED FOR: LAND DISTURBANCE PERMIT

PROJECT NUMBER: 23056-03	DATE: 1/30/24
DRAWN BY: PM	REVIEWED BY: PR
NORTH ARROW:	SCALE: 1" = 20'

REVISIONS		
NO.	DATE	DESCRIPTION
1	2/14/24	RESPONSE TO CITY COMMENTS

DRAWING NAME:

**SANITARY SEWER DESIGN PLANS**

DRAWING NUMBER:



**C6.00**

K:\02\_Projects\23056-03\_Villa\_Crest\03\_5021\_Villa\_Crest\DWG\_C6\_00\_23056\_Sanitary\_Design.dwg  
 2/14/2024 10:43:31 AM  
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Collected Civil Engineering, LLC, shall be without liability to Collected Civil Engineering, LLC.