Permit #: 134
Permit Date: 01/25/24
Permit Type: Planning Commission
Case Number: PC 24-10
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 to allow installation of pressurized sewer line through wooded area of 1107 Ridgeview Dr., having originated from 5021 and 5029 (and having passed through 5025) Villa Crest Dr. The purpose of this work is to replace failing septic systems at 5021 and 5029 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 Villa Crest lots are in Radnor Lake Natural Area Impact Zone (RLNAIZ) while the Ridgeview lot is not in the RLNAIZ. The work proposed on the Ridgeview lot is in a steep slope.
Project Cost: 0
Square Feet: 0
Lot Area: 72745
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
14508000200	1107 RIDGEVIEW DR	LOT 14 3RD ADDN LEALAND MANOR	SUAREZ, ASHLEIGH MARIE REVOCABLE		

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 heathier 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

JOSHUA BUILDERS, INC.
BUILDERS of INTEGRITY

Kimley»Horn

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 ahs 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

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.

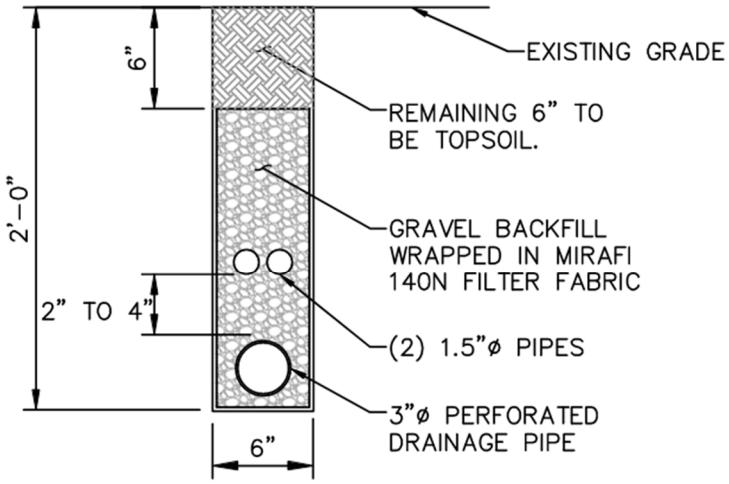
The property of 5021 Villa Crest Drive is a 2.27-acre developed parcel containing a vacant one-story residence and an asphalt driveway to the south of the residence. Topographically, the residence sits atop a ridge with a crest elevation of approximate El. 1083-feet. To the south of the residence, the 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

ERIC M. GASIECKI REGISTERED ENGINEER XVI AGRICULTURE COMMERCE No. 119375 STATE OF TENNESSEE

8/29/23

Thomas M. Diver, EIT
Geotechnical Engineer

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

THE PARKE COMPANY INCORPORATED

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)

CERTIFIED ARBORIST ISA

MEMBER ISA

P.O. BOX 158500 • NASHVILLE, TN 37215-8500 • PHONE: (615) 350-6033 • FAX: (615) 350-6022

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

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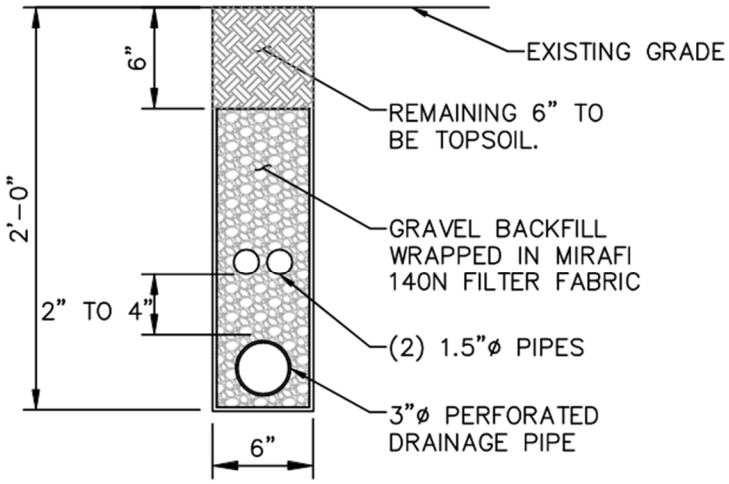


TYPICAL TRENCH DETAIL

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

ERIC M. GASIECKI REGISTERED ENGINEER XVI AGRICULTURE COMMERCE No. 119375 STATE OF TENNESSEE

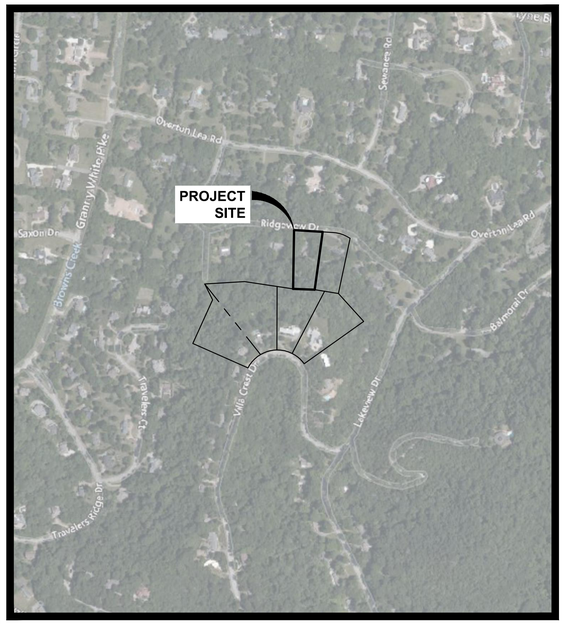
8/29/23

Thomas M. Diver, EIT
Geotechnical Engineer

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

VILLA CREST SEWER

1107 RIDGEVIEW DRIVE
NASHVILLE, TN 37220



LOCATION MAP
1"=500'

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

ASHLEIGH MARIE SUAREZ
REVOCABLE 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:
1107 RIDGEVIEW DRIVE
NASHVILLE, TN 37220
TAX MAP NO. OH-25

EXISTING ZONING: RESIDENTIAL C
SURROUNDING ZONING: RESIDENTIAL C

AREA

TOTAL PROJECT AREA: 1.67± ACRES

TOTAL PROJECT DISTURBANCE AREA:
0.21± 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.

Tennessee811
KNOW WHAT'S BELOW.
CALL BEFORE YOU DIG

COLLECTED
CIVIL ENGINEERING
921B Woodland Street Nashville, TN 37206

PETER ROMANO
REGISTERED ENGINEER
AGRICULTURE
No. 121341
STATE OF TENNESSEE
2/14/24

VILLA CREST SEWER
1107 RIDGEVIEW DR
NASHVILLE, TN 37220

ISSUED FOR:
LAND DISTURBANCE PERMIT

PROJECT NUMBER:	DATE:
23056-04	1/30/24
DRAWN BY: PM	REVIEWED BY: PR
NORTH ARROW:	SCALE:

0 1 2
ORIGINAL SCALE IN INCHES

REVISIONS

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

DRAWING NAME:

COVER SHEET

DRAWING NUMBER:

C0.00

GENERAL NOTES:

1. ALL UNDERGROUND UTILITIES ARE SHOWN IN THEIR RELATIVE POSITION AND ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO VERIFY THEIR ACTUAL LOCATION IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
2. ANY CONDITION ENCOUNTERED IN THE FIELD DIFFERING FROM THOSE SHOWN HEREON, SHALL BE REPORTED TO THE DESIGN ENGINEER BEFORE CONSTRUCTION IS TO PROCEED.

GENERAL CONSTRUCTION:

1. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AND UNDER THE SUPERVISION OF A TENNESSEE STATE LICENSED LAND SURVEYOR.
2. ALL PAVEMENT RESTORATION SHALL MEET AND MATCH EXISTING GRADES.
3. ALL SAWCUT LINES SHALL BE PARALLEL AND CURVILINEAR TO EXISTING OR PROPOSED CURBING AND SHALL BE A CONSTANT DISTANCE OF 18" MIN AWAY.
4. NOTIFY ENGINEER 48 HOURS PRIOR TO INITIALIZATION OF ANY WORK ON SITE.
5. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT PRIOR REVIEW FROM THE ENGINEER.
6. CONTRACTOR IS RESPONSIBLE FOR EMPLOYING AND MAINTAINING ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING CONSTRUCTION.
7. CONTRACTOR IS RESPONSIBLE FOR PROPERLY & SAFELY MAINTAINING AREA BETWEEN ALL ADJOINING PROPERTIES.
8. NO WORK, STORAGE OR TRESPASS SHALL BE PERMITTED BEYOND THE SITE PROPERTY LINES OR PUBLIC RIGHT-OF-WAY.
9. ALL EXISTING LAWN AREA, CURBING, PAVING, SIDEWALKS, CULVERTS OR OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED BY TRENCHING OR EXCAVATION OPERATIONS SHALL BE REPLACED OR REPAIRED TO A CONDITION EQUAL TO EXISTING AS ORDERED BY ENGINEER (AOBE). MAILBOXES, SIGN POSTS, ETC SHALL BE PROTECTED OR REMOVED AND REPLACED EXACTLY AS THEY WERE BEFORE BEING DISTURBED. REMOVE AND REPLACE AFFECTED CURBING AND SIDEWALK TO NEAREST JOINT. REMOVE PAVEMENT AND REPLACE TO SAW CUT LINE, SAW CUT IN STRAIGHT LINE TO POINT NEEDED TO BLEND GRADE, REMOVE LAWN AND REPLACE TO MINIMUM LIMIT OF EXCAVATION.

LAYOUT :

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL FIELD LAYOUT. THE CONTRACTOR SHALL TAKE TIES TO ALL UTILITY CONNECTIONS AND PROVIDE MARKED-UP AS BUILT PLANS FOR ALL UTILITIES SHOWING TIES TO CONNECTIONS, BENDS, VALVES, LENGTHS OF LINES AND INVERTS. AS-BUILT PLANS SHALL BE REVIEWED BY THE OWNER AND THE ENGINEER AND THE CONTRACTOR SHALL PROVIDE ANY CORRECTION OR ADDITIONS TO THE SATISFACTION OF THE OWNER AND THE ENGINEER BEFORE UTILITIES WILL BE ACCEPTED.

PAVING:

1. NO VEHICULAR TRAFFIC OF ANY SORT SHALL BE PERMITTED ON THE SURFACE OF SUBBASE COURSE MATERIAL ONCE IT HAS BEEN FINE GRADED, COMPACTED, AND IS READY FOR PAVING. SUBBASE MATERIAL SO PREPARED FOR PAVING SHALL BE PAVED WITHIN THREE DAYS OF PREPARATION.
2. SUBBASE AGGREGATE MATERIAL AND THE VARIOUS ASPHALT CONCRETE MATERIALS CALLED FOR IN THESE DRAWINGS SHALL CONFORM WITH THE REFERENCED SECTION OF THE TENNESSEE STATE DEPARTMENT OF TRANSPORTATION (TDOT) AND CITY OF CHATTANOOGA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, LATEST EDITION. CONSTRUCTION SHALL BE AS FURTHER SET FORTH IN THOSE SPECIFICATIONS AND AS OTHERWISE PROVIDED FOR IN THESE DRAWINGS.
3. PLACE ASPHALT CONCRETE MIXTURE ON PREPARED SURFACE, SPREAD AND STRIKE-OFF USING A SELF-PROPELLED PAVING MACHINE, WITH VIBRATING SCREED. PLACEMENT IN INACCESSIBLE AND SMALL AREAS MAY BE BY HAND.
4. PROVIDE JOINTS BETWEEN OLD AND NEW PAVEMENTS OR BETWEEN SUCCESSIVE DAY'S WORK.
5. TACK COAT WHEN SPECIFIED OR CALLED OUT ON THE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATION SHALL CONFORM WITH THE FOLLOWING:
   A. TACK COAT SHALL MEET THE MATERIAL REQUIREMENTS OF THE TENNESSEE STATE DEPARTMENT OF TRANSPORTATION (TDOT) AND CITY OF CHATTANOOGA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, LATEST EDITION. TACK COAT SHALL BE IN ACCORDANCE WITH THOSE SPECIFICATIONS AND AS OTHERWISE PROVIDED FOR IN THESE DRAWINGS.
   B. REMOVE LOOSE AND FOREIGN MATERIAL FROM ASPHALT SURFACE BEFORE PAVING NEXT COURSE. USE POWER BROOMS, BLOWERS OR HAND BROOM.
   C. APPLY TACK COAT TO ASPHALT PAVEMENT SURFACES & AND SURFACES OF CURBS, GUTTERS, MANHOLES, AND OTHER STRUCTURES PROJECTING INTO OR ABUTTING PAVEMENT. DRY TO A "TACKY" CONSISTENCY BEFORE PAVING.
   D. TACK COAT ENTIRE VERTICAL SURFACE OF ABUTTING EXISTING PAVEMENT.
6. AFTER COMPLETION OF PAVING AND SURFACING OPERATIONS, CLEAN SURFACES OF EXCESS OR SPILLED ASPHALT, GRAVEL OR STONE MATERIALS TO THE SATISFACTION OF THE ENGINEER.

STRIPING:

1. STRIPE PAVEMENT AS INDICATED ON THE PLANS AND/OR IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REQUIREMENTS.
2. COLOR: DOUBLE CENTER LINE – YELLOW
   EDGE LINES – WHITE
   CROSSWALKS – WHITE
   PARKING STALL – WHITE
3. PAINT SHALL BE THERMOPLASTIC PER TDOT STANDARD SPECIFICATIONS.

SANITARY SEWER NOTE:

1. SANITARY SEWER PUMP STATIONS AND FORCEMAIN SHOWN HEREON DESIGNED BY OTHERS

DEMOLITION NOTES:

1. REFER TO REQUIREMENTS OUTLINED IN THE EROSION & SEDIMENTS CONTROL PLANS & NOTES PRIOR TO COMMENCEMENT OF WORK.
2. PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
3. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
4. NOTIFY ADJACENT OWNERS OF WORK THAT MAY AFFECT THEIR PROPERTY, POTENTIAL NOISE, UTILITY OUTAGE, OR DISRUPTION. COORDINATE WITH OWNER.
5. PREVENT MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES. PROVIDE BRACING AND SHORING.
6. LOCATE AND IDENTIFY ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA. DISCONNECT AND SEAL OR CAP OFF UTILITY SERVICES THAT WILL BE AFFECTED BY THIS PROJECT. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED.
7. DEMOLISH AND REMOVE COMPONENTS IN AN ORDERLY AND CAREFUL MANNER.
8. PROTECT EXISTING FEATURES THAT ARE NOT TO BE DEMOLISHED.
9. CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC OR PRIVATE ACCESSES.
10. MAINTAIN EGRESS AND ACCESS AT ALL TIMES. DO NOT CLOSE OR OBSTRUCT ROADWAYS, OR SIDEWALKS WITHOUT PERMITS. COORDINATE W/ AUTHORITY HAVING JURISDICTION.
11. CEASE OPERATIONS IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER. NOTIFY AUTHORITY HAVING JURISDICTION.
12. ROUGH GRADE AND COMPACT AREAS AFFECTED BY DEMOLITION TO MAINTAIN SITE GRADES AND CONTOURS.
13. FIELD VERIFY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED ON DEMOLITION PLAN TO DETERMINE EXTENT OF SELECTIVE DEMOLITION REQUIRED.
14. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH SELECTIVE DEMOLITION OPERATIONS.
15. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA.
16. USE WATER MIST, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS. DO NOT USE WATER WHEN IT MAY DAMAGE EXISTING CONSTRUCTION, SUCH AS CAUSING ICING, FLOODING, AND TRANSPORTING POLLUTANTS.
17. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
18. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF SELECTIVE DEMOLITION.
19. PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. ALL DEBRIS RESULTING FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE AT A FACILITY APPROVED TO RECEIVE THE DEBRIS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE. DO NOT BURN DEMOLISHED MATERIALS ON-SITE.

ROCK BLASTING NOTES:

BLASTING OF BEDROCK IS NOT ANTICIPATED AT THIS SITE IN ORDER TO COMPLETE THE PROPOSED DEVELOPMENT. HOWEVER, THESE NOTES ARE INCLUDED SHOULD UNFORESEEN CONDITIONS REQUIRE THE NEED FOR BLASTING TO EXCAVATE BEDROCK.

1. ALL RECOMMENDED SAFETY REQUIREMENTS AND STANDARDS REFERENCED AND ANY LOCAL RESTRICTIONS SHALL BE APPLIED AS REQUIRED FOR SAFETY, SECURITY, AND SPECIFICALLY RELATED DETAILS FOR BLASTING PROCEDURES. AT ALL TIMES, FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES WILL BE FOLLOWED CONCERNING THE TRANSPORTATION AND STORAGE OF EXPLOSIVES.
2. A MINIMUM OF FOUR (4) WEEKS PRIOR TO COMMENCEMENT OF THE INITIAL BLASTING OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES AS APPROPRIATE: POLICE AGENCIES, GAS AND ELECTRIC SERVICE COMPANIES, TELEPHONE AND CABLE OPERATING COMPANIES, WATER AND SEWER, TDOT, AND LOCAL FIRE, RESCUE, AND AMBULANCE SERVICES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE RESULTING FROM THE USE OF EXPLOSIVES. EXPLOSIVES SHALL BE STORED IN A SECURE MANNER IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES.
4. THE CONTRACTOR SHALL NOTIFY EACH PROPERTY AND UTILITY OWNER HAVING A BUILDING, STRUCTURE, OR OTHER INSTALLATION ABOVE OR BELOW GROUND IN PROXIMITY TO THE SITE OF THE WORK OF HIS INTENTION TO USE EXPLOSIVES. NOTICE SHALL BE GIVEN SUFFICIENTLY IN ADVANCE TO ENABLE THE OWNERS TO TAKE STEPS TO PROTECT THEIR PROPERTY. NOTICE SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR DAMAGE RESULTING FROM HIS BLASTING OPERATIONS.
5. THE CONTRACTOR SHALL SCHEDULE AND CONDUCT PRE-BLAST SURVEYS WITH PROPERTY OWNERS LOCATED IN THE AREA POTENTIALLY AFFECTED BY AIRBLAST OVERPRESSURE AND GROUND VIBRATION OR AS REQUIRED.
6. THE CONTRACTOR SHALL IMPLEMENT ENGINEERING MEASURES IN ORDER TO MINIMIZE THE POTENTIAL IMPACTS OF DUST, NOISE AND GROUND VIBRATION. BLAST VIBRATION CONTROL WILL BE ACHIEVED BY LIMITING THE CHARGE PER DELAY SO THAT THE PEAK PARTICLE VELOCITY REMAINS BELOW THE SPECIFIED LEVELS.
7. A APPROPRIATELY QUALIFIED, LICENSED BLASTING SPECIALIST, WITH EXPERIENCE SHALL BE ONSITE AND SUPERVISE BLASTING OPERATIONS. AT ALL TIMES, THE BLASTING AREA SHALL BE RESTRICTED TO BLASTING OPERATIONS AND AUTHORIZED PERSONNEL ONLY.
8. PROTECTIVE MEASURES INCLUDING INSTALLATION OF SIGNAGE, NOTIFICATION OF NEARBY RESIDENTS, TRAFFIC CONTROL AS NECESSARY ALONG NEARBY ROADS, AUDIBLE PRE-BLAST WARNINGS, AND USE OF BLAST MATS SHALL BE IMPLEMENTED.
9. DELIVERY AND TRANSPORT OF EXPLOSIVES FROM THE POWDER MAGAZINES TO THE BLAST AREA WILL BE BY VEHICLES SPECIFICALLY DESIGNED FOR THIS USE BY THE CRITERIA OUTLINED IN THE SAFETY REQUIREMENTS. ONLY AUTHORIZED PERSONS WILL TRANSPORT AND HANDLE THE EXPLOSIVES AS DESIGNATED BY THE ISSUING AUTHORITY OF THOSE LICENSES FOR THIS PURPOSE.
10. MONITORING OF PEAK PARTICLE VELOCITY (INCHES/SECOND) AND PEAK AIRBLAST OVERPRESSURE (PSI) SHALL BE PERFORMED DURING ALL BLASTS.

UTILITY NOTES:

1. ALL UNDERGROUND UTILITIES ARE SHOWN IN THEIR RELATIVE POSITION AND ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO VERIFY THEIR ACTUAL LOCATION IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
2. ANY CONDITION ENCOUNTERED IN THE FIELD DIFFERING FROM THOSE SHOWN HEREON, SHALL BE REPORTED TO THE DESIGN ENGINEER BEFORE CONSTRUCTION IS TO PROCEED.
3. SEWER MAINS IN RELATION TO WATER MAINS: WHERE POSSIBLE, SEWERS SHALL BE LAID AT LEAST 10 (TEN) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. VERTICAL SEPARATION SHALL BE MAINTAINED TO PROVIDE 18 (EIGHTEEN) INCHES BETWEEN TOP OF SEWER AND BOTTOM OF THE WATER MAIN AT UTILITY CROSSINGS. WHEN NOT POSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION, SEWER PIPE SHALL BE PRESSURE RATED AND TESTED @ 150psi, 10 (TEN) FEET ON EACH SIDE OF THE WATER MAIN BEING CROSSED.
4. ALL PROPOSED UTILITIES SHALL TERMINATE 5 FEET FROM ANY PROPOSED BUILDING FACE. CONTRACTOR TO COORDINATE WITH BUILDING PLANS FOR ANY CONNECTIONS.
5. ALL STORM SEWER SHALL BE RCP (REINFORCED CONCRETE PIPE) UNLESS OTHERWISE SPECIFIED.
6. ALL SANITARY SEWER GRAVITY MAINS SHALL BE 8" PVC SDR 35 UNLESS OTHERWISE SPECIFIED.
7. ALL WATER PIPE SHALL BE STEEL PIPE UNLESS OTHERWISE SPECIFIED. COORDINATE W/ LOCAL WATER AUTHORITY.
8. CONTRACTOR TO VERIFY STATUS OF ALL UTILITY SERVICES PRIOR TO INTERRUPTION.
9. EXPLORATORY EXCAVATIONS SHALL BE PERFORMED BY THE CONTRACTOR AT ALL UTILITY CONNECTION LOCATIONS AND AS NEEDED TO VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING WORK.
10. BEFORE CONSTRUCTING LINES TO CONNECT TO EXISTING UTILITIES, VERIFY EXISTING UTILITY INVERTS AND NOTIFY THE ENGINEER IF ANY VARIATION FROM THE PLAN IS REQUIRED.
11. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES IN SERVICE FOR THE DURATION OF THE WORK.
12. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS AND ASSOCIATED CONDITIONS.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING UTILITY TRENCHES AND EXCAVATIONS AND FOR THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF THE WORK.

GRADING NOTES:

1. PRIOR TO SITE DISTURBANCE, CONTRACTOR TO INSTALL EROSION & SEDIMENT CONTROL MEASURES.
2. IF ROCK IS ENCOUNTERED DURING CONSTRUCTION & REMOVAL BY BLASTING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY APPROVALS AND PERMITS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
3. ALL BLASTING OPERATIONS WILL ADHERE TO TENNESSEE STATE AND LOCAL AUTHORITY ORDINANCES GOVERNING THE USE OF EXPLOSIVES. THE STATE REGULATIONS ARE CONTAINED IN TENNESSEE CODE – TITLE 68 CHAPTER 105 HEALTH, SAFETY AND ENVIRONMENTAL PROTECTION BLASTING AND EXPLOSIVES.
4. STRIP ALL TOPSOIL PRIOR TO COMMENCING EARTHWORK OPERATIONS. TOPSOIL MAY BE STORED AND REUSED IN LAWN AND PLANTING AREAS ONLY. TOPSOIL AND SEED ALL AREAS DISTURBED BY CONSTRUCTION THAT ARE TO REMAIN GREEN.
5. BOX ALL TREES AND HOUSE ALL SHRUBS AND HEDGES BEFORE PLACING EARTH AGAINST OR NEAR THEM. ORNAMENTAL TREES, SHRUBS AND HEDGES WHICH MUST BE REMOVED DURING CONSTRUCTION SHALL BE HEALED IN AND RE-PLANTED IN AS GOOD A CONDITION AS THEY WERE BEFORE THEIR REMOVAL. ANY DAMAGED TREES, SHRUBS, AND/OR HEDGES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. ALL EARTHWORK SHALL BE SMOOTHLY AND EVENLY BLENDED INTO EXISTING CONDITIONS. NO WORK, STORAGE OR TRESPASS SHALL BE PERMITTED BEYOND THE BOUNDARIES OF ANY EASEMENT OR PROPERTY LINE.
7. REMOVE ALL VEGETATION, TREES, STUMPS, GRASSES, ORGANIC SOILS, DEBRIS AND DELETERIOUS MATERIALS WITHIN THE AREAS SLATED FOR CONSTRUCTION.
8. IF PREVIOUSLY UNKNOWN CULTURAL, ARCHEOLOGICAL, OR HISTORIC REMAINS OR ARTIFACTS ARE DISCOVERED IN THE COURSE OF CONSTRUCTION OF THIS PROJECT, THE PROJECT SPONSORS SHALL SUSPEND CONSTRUCTION OPERATIONS IN THE PERTINENT AREA AND SHALL NOTIFY THE PROJECT ENGINEER. CONSTRUCTION IN THAT AREA SHALL RESUME ONLY AFTER COMPLETION OF FEDERAL, TRIBAL, AND STATE COORDINATION TO DETERMINE WHETHER PROTECTION OR RECOVERY OF THE REMAINS IS WARRANTED, OR WHETHER THE SITE IS ELIGIBLE FOR LISTING IN THE NATIONAL REGISTER OF HISTORIC PLACES.

TOPSOIL STOCKPILE AREA:

1. EXISTING EXCESS TOPSOIL SHALL BE REMOVED AND STORED IN TOPSOIL STOCKPILES SUFFICIENTLY REMOVED FROM OTHER EXCAVATION OR DISTURBANCE TO AVOID MIXING. SILT FENCE SHALL BE INSTALLED AROUND TOPSOIL STOCKPILE AREAS.

SITE PREPARATION:

1. COMPLETE ROUGH GRADING AND FINAL GRADE, ALLOWING FOR DEPTH OF TOPSOIL TO BE ADDED.
2. SCARIFY ALL COMPACT, SLOWLY PERMEABLE, MEDIUM AND FINE TEXTURED SUBSOIL AREAS. SCARIFY AT APPROXIMATELY RIGHT ANGLES TO THE SLOPE DIRECTION IN SOIL AREAS THAT ARE STEEPER THAN 5%.
3. REMOVE REFUSE, WOODY PLANT PARTS, STONES OVER 3 INCHES IN DIAMETER, AND OTHER LITTER.

PLANTING SOIL PREPARATION:

SOIL PREPARATION SHALL BE PROVIDED ON ALL AREAS TO BE PLANTED, AND ON TURF AREAS WHERE SPECIFIED. FUTURE SOIL MIXES AND TOPSOIL SHALL IMPROVE SOIL TEXTURE, TILTH, AND BIOLOGICAL ACTIVITY OF THE PLANTING BED SOIL. ALL PLANTING SOIL, TOPSOIL, MULCH, "SOIL CONDITIONERS" AND OTHER ADDITIVES AND AMENDMENTS ARE SUBJECT TO TESTING AND APPROVAL OF THE OWNER, PROJECT LANDSCAPE ARCHITECT AND/OR ENGINEER.

THE PLANTING SOIL SHALL BE TESTED AND SHALL MEET THE FOLLOWING CRITERIA:

PH RANGE	6.0–7.0
ORGANIC MATTER	25%
SOLUBLE SALTS NOT TO EXCEED	500PPM
SOLUBLE SALT CONCENTRATION	10DS/M MAX.
PHYSICAL CONTAMINANTS	<1%, DRY WEIGHT BASIS
CHEMICAL CONTAMINANTS	MEET OR EXCEED US EPA

SOIL TESTING:

TESTING SHALL BE DONE BY A QUALIFIED SOILS LABORATORY, IN ACCORDANCE WITH "METHODS OF SOILS ANALYSIS –AGRONOMY #9" AS PUBLISHED BY THE AMERICAN SOCIETY OF AGRONOMY, AND TESTING SHALL BE AT THE CONTRACTOR'S EXPENSE. UPON REQUEST OF THE OWNER, PROJECT LANDSCAPE ARCHITECT AND/OR ENGINEER, THE FOLLOWING INFORMATION SHALL BE PROVIDED:
–SPECIFIC LOCATIONS FROM WHICH THE MANURE AND ORGANIC COMPOST WERE OBTAINED
–AGRICULTURAL TEST RESULTS SHOWING MIXTURE COMPOSITION AND ANALYSIS

SOIL ADD MIXTURES:

ADDITIONAL SOIL MATERIALS AND AMENDMENTS SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS, STICKS, OR OTHER SIMILAR OBJECTS LARGER THAN 1". THE MIXTURE SHALL ALSO BE FREE FROM CLAY SUBSOIL, MOUNTAIN PEAT, LUMPS, PLANTS OR THEIR ROOTS, WEED STOLONS, AND SEEDS. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE PLANTING AREA THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. THE SOIL MATERIALS SHALL BE FREE OF NOXIOUS WEEDS.

SOIL AMENDMENTS:

SOIL MATERIAL AMENDMENTS SHALL BE A MIXTURE OF TWENTY-FIVE PERCENT (25%) GROUND AGED MANURE (OR COMPARABLE, APPROVED SUBSTITUTE) AND FIFTY PERCENT (50%) COMPOSTED ORGANIC MATTER. THE MANURE AND ORGANIC COMPOST SHALL BE COARSELY GROUND AND THOROUGHLY MIXED TOGETHER TO ENSURE AN EVEN COMPOSITION. THE MIX SHALL HAVE A CARBON TO NITROGEN RATIO RANGING FROM 15:1 TO 30:1, AND SHALL MEET THE FOLLOWING MECHANICAL ANALYSIS:

	%PASSING	%RETAINED
2" SCREEN	100	0
1" SCREEN	90–100	0–10
½" SCREEN	50–80	20–50
#100 MESH SIEVE	0–15	85–100

COMPOST:

COMPOST USED SHALL BE A WELL DECOMPOSED, STABLE, WEED FREE ORGANIC MATTER SOURCE. IT SHALL BE DERIVED FROM: YARD TRIMMINGS, AGRICULTURAL, FOOD, OR INDUSTRIAL RESIDUALS. THE PRODUCT SHALL CONTAIN NO SUBSTANCES TOXIC TO PLANTS, HUMANS, OR ANIMALS AND SHALL BE REASONABLY FREE (<1% BY DRY WEIGHT) OF MAN-MADE FOREIGN MATTER. THE COMPOSTED MATERIAL WILL POSSESS NO OBJECTIONABLE ODORS AND SHALL NOT RESEMBLE THE RAW MATERIAL FROM WHICH IT WAS DERIVED.

TOPSOIL:

GOOD TOPSOIL IS HIGHLY DESIRABLE, AND MAY EQUAL THE VALUE OF SOIL AMENDMENTS AS FAR AS ENCOURAGING GROWTH. WHEN GOOD TOPSOIL EXISTS ON SITE, THE CONTRACTOR MAY BE REQUIRED TO STRIP AND STOCK PILE TOPSOIL, AND REDISTRIBUTE TOPSOIL AT A LATER TIME IN THE CONSTRUCTION PROCESS. TOPSOIL SHALL BE A FERTILE SANDY CLAY LOAM. TOPSOIL SHALL BE TAKEN FROM THE TOP 18–24" OF A WELL-DRAINED SITE, AND BE FREE FROM CLAY SUBSOIL, STONES, LUMPS, PLANTS OR THEIR ROOTS, STICKS, STOLONS, SEEDS, HIGH SALT CONTENT, AND OTHER MATERIALS HARMFUL TO PLANT LIFE, AND SHALL BE SCREENED AND MEET THE FOLLOWING MECHANICAL ANALYSIS:

	%PASSING	%RETAINED
1"SCREEN	100	0
½"SCREEN	97–100	0–3
#100 MESH SIEVE	60–40	40–60

ROOT STOCK OF ALL MATERIAL TO BE PLANTED SHALL BE KEPT MOIST AT ALL TIMES DURING TRANSPORTATION AND ON-SITE STORAGE. SET AND MAINTAIN THE PLANTS UPRIGHT AND STRAIGHT THROUGHOUT THE ENTIRE ON SITE STORAGE AND PLANTING PROCESS. .

APPLICATION AND GRADING:

1. TOPSOIL SHALL BE DISTRIBUTED TO A MINIMUM UNIFORM DEPTH OF 4" OVER THE AREA. IT SHALL NOT BE PLACED WHEN IT IS PARTLY FROZEN, MUDDY, OR ON FROZEN SLOPES OR OVER ICE, SNOW, OR STANDING WATER.
2. TOPSOIL PLACED AND GRADED ON SLOPES STEEPER THAN 5% SHALL BE PROMPTLY FERTILIZED, SEEDED, MULCHED AND STABILIZED WITH A SLOPE STABILIZATION BLANKET.

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IN STRICT COMPLIANCE WITH TDEC'S "TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK" DATED AUGUST 2012 OR LATEST EDITION.
2. EXCESS SOIL TO BE STOCKPILED WITHIN THE LIMITS OF SITE DISTURBANCE IF NOT USED IMMEDIATELY FOR GRADING PURPOSES. INSTALL SILT FENCE AROUND SOIL STOCKPILES.
3. APPLY SURFACE STABILIZATION AND RESTORATION MEASURES.
   A. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS DELAYED, SUSPENDED, OR INCOMPLETE AND WILL NOT BE REDISTURBED FOR 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED (SEE SPECIFICATIONS FOR TEMPORARY VEGETATIVE COVER).
   B. STABILIZATION SHALL BE PROVIDED FOR SLOPES 35% OR GREATER WITHIN 7 DAYS IN AREAS WHERE CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED (SEE SPECIFICATIONS FOR TEMPORARY VEGETATIVE COVER).
   C. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS COMPLETE AND WILL NOT BE REDISTURBED SHALL BE STABILIZED AND RESTORED WITH PERMANENT VEGETATIVE COVER AS SOON AS SITE AREAS ARE AVAILABLE AND WITHIN 14 DAYS AFTER WORK IS COMPLETE. (SEE SPECIFICATIONS FOR PERMANENT VEGETATIVE COVER).
   D. SEEDING FOR PERMANENT VEGETATIVE COVER SHALL BE WITHIN THE SEASONAL LIMITATIONS. PROVIDE STABILIZATION WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER WORK IS COMPLETE, FOR SEEDING OUTSIDE PERMITTED SEEDING PERIODS.
4. SEEDED AREAS TO BE MULCHED WITH STRAW OR HAY MULCH IN ACCORDANCE WITH VEGETATIVE COVER SPECIFICATIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST BY SPRINKLING EXPOSED SOIL AREAS PERIODICALLY WITH WATER AS REQUIRED. THE CONTRACTOR IS TO SUPPLY ALL EQUIPMENT AND WATER.
7. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.
8. ALL SWALES SHALL HAVE STONE CHECK DAMS AT REGULAR INTERVALS PER RESPECTIVE DETAIL WHETHER INDICATED ON THE DRAWINGS OR NOT.

COMPACTION REQUIREMENTS

LOCATION	COMPACTION	TESTING FREQUENCY
PIPE TRENCH BACKFILL (IN PAVED AREAS)	95% ASTM D1557	1 SERIES OF TESTS FOR EACH 150 FT OR LESS OF TRENCH LENGTH. SERIES INCLUDE 3 COMPACTION TESTS SPREAD EVENLY ALONG TRENCH PROFILE.
PIPE TRENCH BACKFILL (IN UNPAVED AREAS)	90% ASTM D1557	1 SERIES OF TESTS FOR EACH 150 LF OR LESS OF TRENCH LENGTH. SERIES INCLUDE 3 COMPACTION TESTS SPREAD EVENLY ALONG TRENCH PROFILE.
PIPE BEDDING AND PIPE ZONE BACKFILL	95% ASTM D1557	1 TEST FOR EACH 150 FT OR LESS OF TRENCH LENGTH.
PAVEMENT SUBBASE AND LAST LIFT OF SELECT GRANULAR FILL (FILL BETWEEN SHEET PILES)	95% ASTM D1557	1 TEST FOR EVERY 2,000 SQ FT, OF LIFT AREA BUT NO FEWER THAN TWO TESTS PER LIFT

EROSION AND SEDIMENT CONTROL MEASURES:

1. DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION SHALL BE MINIMIZED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE DISCHARGES.
2. AS MUCH AS IS PRACTICAL, EXISTING VEGETATION SHALL BE PRESERVED. FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES IN ANY PORTION OF THE SITE, PERMANENT VEGETATION SHALL BE ESTABLISHED ON ALL
   EXPOSED SOILS.
3. SITE PREPARATION ACTIVITIES SHALL BE PLANNED TO MINIMIZE THE SCOPE AND DURATION OF SOIL DISRUPTION.
4. PERMANENT TRAFFIC CORRIDORS SHALL BE ESTABLISHED AND "ROUTES OF CONVENIENCE" SHALL BE AVOIDED. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL POINTS OF ENTRY ONTO THE PROJECT SITE.

MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES:

PERMANENT AND TEMPORARY VEGETATION:
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.

DUST CONTROL:
SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORK. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATER). STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS BEFORE SIGNIFICANT BLOWING PROBLEMS DEVELOP. WATER SHALL BE SPRAYED AS NEEDED. REPEAT AS NEEDED, BUT AVOID EXCESSIVE SPRAYING, WHICH COULD CREATE RUNOFF AND EROSION PROBLEMS.

PERMANENT VEGETATIVE COVER (AFTER CONSTRUCTION):

1. SITE PREPARATION
   A. BRING AREA TO BE SEEDED TO REQUIRED GRADE. A MINIMUM OF 4" OF TOPSOIL IS REQUIRED.
   B. PREPARE SEEDBED BY LOOSENING SOIL TO A DEPTH OF 4 INCHES.
   C. REMOVE ALL STONES OVER 1 INCH IN DIAMETER, STICKS AND FOREIGN MATTER FROM THE SURFACE.
   D. LIME TO PH OF 6.5.
   E. FERTILIZER: USE 5-10-5 (NPK) OR EQUIVALENT. APPLY AT RATE OF 4 LBS/1000 SF.
   F. INCORPORATE LIME AND FERTILIZER IN THE TOP 4 INCHES OF TOPSOIL.
   G. SMOOTH AND FIRM THE SEEDBED.
2. SEED MIXTURE FOR USE ARE SHOWN IN THE TABLE BELOW:

	Zone	Best	Marginal	Rate/Mix (lb/ac PLS)
Region II	>2500 FT ELEV; STEEP SLOPES	Mar 20 – Apr 30	Aug 15 – Aug 30 Mar 1 – Mar 20 Apr 20 – June 15	15 Browntop Millet* (nurse crop) 5 Agrostis perennans 10 little bluestem 2 black-eyed susan 0.5 monarda (bergamot) 4 Maryland senna
	<2500 ft elev; steep slopes	Aug 15 – Sept 1 Mar 1– Apr 1	Sept 1 – Sept 15 Apr 1 – June 10	
	>2500 ft elev.; Shallow soils	Mar 20 – Apr 20	Aug 15 – Aug 30 Mar 5 – Mar 20 April 20 – June 15	15 Browntop Millet* (nurse crop) 4 purpletop 10 little bluestem 2 partridge pea 2 black-eyed susan 0.5 monarda (bergamot)
	<2500 ft elev.; Shallow soils	Aug 15 – Sept 1 Mar 1 – Apr 1	Sept 1 – Sept 15 Apr 1 – June 10	
	>2500 ft elev.; Moderate slopes	Mar 20 – Apr 20	Aug 15 – Aug 30	15 Browntop Millet* (nurse crop) 5 Agrostis perennans 10 little bluestem 2 black-eyed susan 0.5 monarda (bergamot) 4 Maryland senna
	<2500 ft elev.; Moderate slopes	Aug 15 – Sept 1 Mar 1 – Apr 1	Sept 1 – Sept 15 Apr 1 – June 10	
(Allowable)	>2500 ft elev.; High maintenance	Mar 20 – Apr 1	Aug 15– Aug 30 Mar 5 – Mar 20 Apr 20 – June 15	15 Browntop Millet* (nurse crop) 45 red fescue* 100 hard fescue* 50 chewing fescue*
	<2500 ft elev.; High maintenance	Aug 15 – Sept 1 Mar 1 – Apr 1	Sept 1 – Sep 15 Apr 1 – June 10	

SOURCE: MODIFIED VERSION OF THE "PREFERRED" MIX TABLE 7.9-1 AND THE "ALLOWABLE" MIX TABLE 7.9-2 IN THE TDEC EROSION & SEDIMENT CONTROL HANDBOOK, DATED AUGUST 2012.

LEGEND:

LAYOUT:

- LOT LINE
- EASEMENT LINE
- PAVED ROAD
- ROAD CENTER LINE
- CURB
- GRAVEL DRIVEWAY
- WORKLIMITS
- GUIDERAIL
- CHAIN LINK FENCE
- RIPRAP
- CONCRETE
- ROAD LINING & STRIPING

UTILITIES:

- SANITARY SEWER LINE
- FM — FORCE MAIN
- W — WATER LINE
- STORM DRAIN LINE & STRUCTURES
- SIZE & TYPE — W/ HEADWALL
- E — ELECTRIC LINE
- G — GAS LINE

GRADING & EROSION CONTROL:

- XXX — 5 FT CONTOUR
- XXX — 1 FT CONTOUR
- XXX.XX X — SPOT ELEVATIONS
- TREE LINE
- DRAINAGE SWALE
- ORANGE CONSTRUCTION FENCE
- EROSION CONTROL BARRIER – STRAW WATTLE
- TD — TEMPORARY DIVERSION SWALE
- SPOILS STORAGE AREA
- STABILIZED CONSTRUCTION ENTRANCE
- RIPRAP
- EROSION CONTROL BLANKET

SYMBOLS:

- SIGN
- CATCH BASIN
- DRAINAGE MANHOLE
- CURB INLET–RIGHT
- CURB INLET–CENTER
- CURB INLET–LEFT
- SANITARY MANHOLE
- CLEANOUT
- WATER SHUT OFF VALVE
- WATER VALVE
- POST AND LUMINAIRE
- SOIL BORING
- TEST PIT

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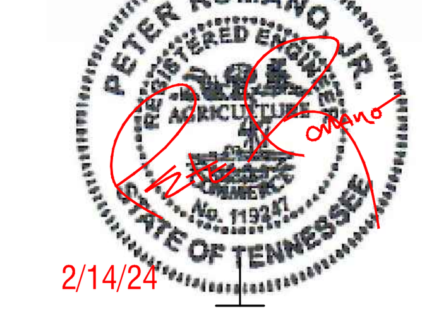

VILLA CREST SEWER

1107 RIDGEVIEW DR
NASHVILLE, TN 37220

ISSUED FOR: LAND DISTURBANCE PERMIT	
PROJECT NUMBER: 23056-04	DATE: 1/30/24
DRAWN BY: PM	REVIEWED BY: PR
NORTH ARROW:	SCALE:

0 1 2
ORIGINAL SCALE IN INCHES

REVISIONS

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

DRAWING NAME:

NOTES & LEGEND

DRAWING NUMBER:

C0.01

K:\02_Projects\23001-23999\23056 - Villa Crest\02_DWG\04_1107 Ridgeview Dr\01_C0.01_23056_LEGNOTE.dwg
2/14/2024 10:46:01 AM

COLLECTED
CIVIL ENGINEERING
921B Woodland Street Nashville, TN 37206

PETER ROMANO JR.
REGISTERED ENGINEER
AGRICULTURE
No. 113421
STATE OF TENNESSEE
2/14/24

VILLA CREST SEWER

1107 RIDGEVIEW DR
NASHVILLE, TN 37220

ISSUED FOR:
LAND DISTURBANCE PERMIT

PROJECT NUMBER:	DATE:
23056-04	1/30/24
DRAWN BY: PM	REVIEWED BY: PR
NORTH ARROW: N	SCALE: 1" = 50' (0 / 50)

0 1 2
ORIGINAL SCALE IN INCHES

REVISIONS

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

DRAWING NAME:

OVERALL SITE PLAN

DRAWING NUMBER:

C0.50

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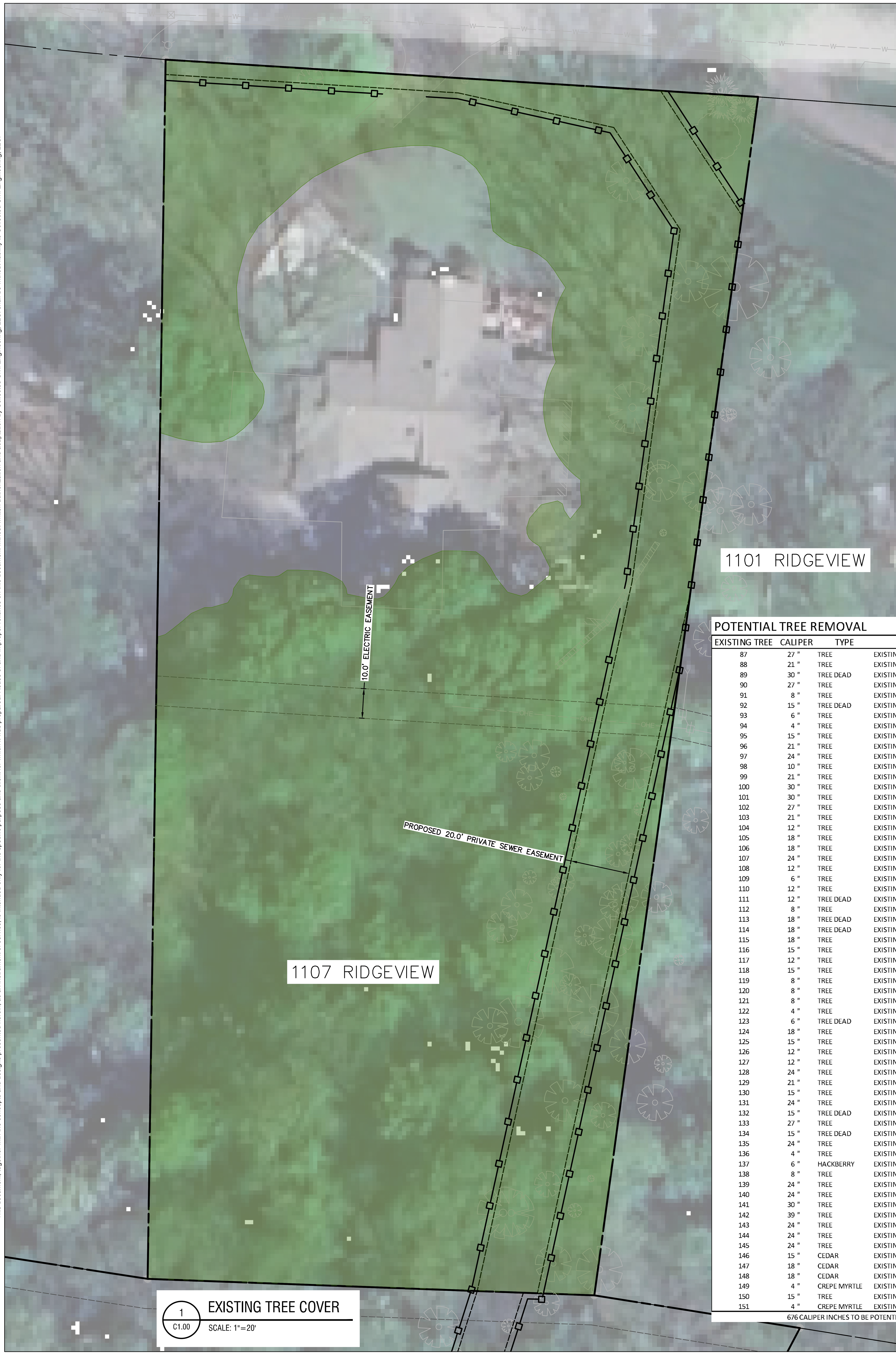
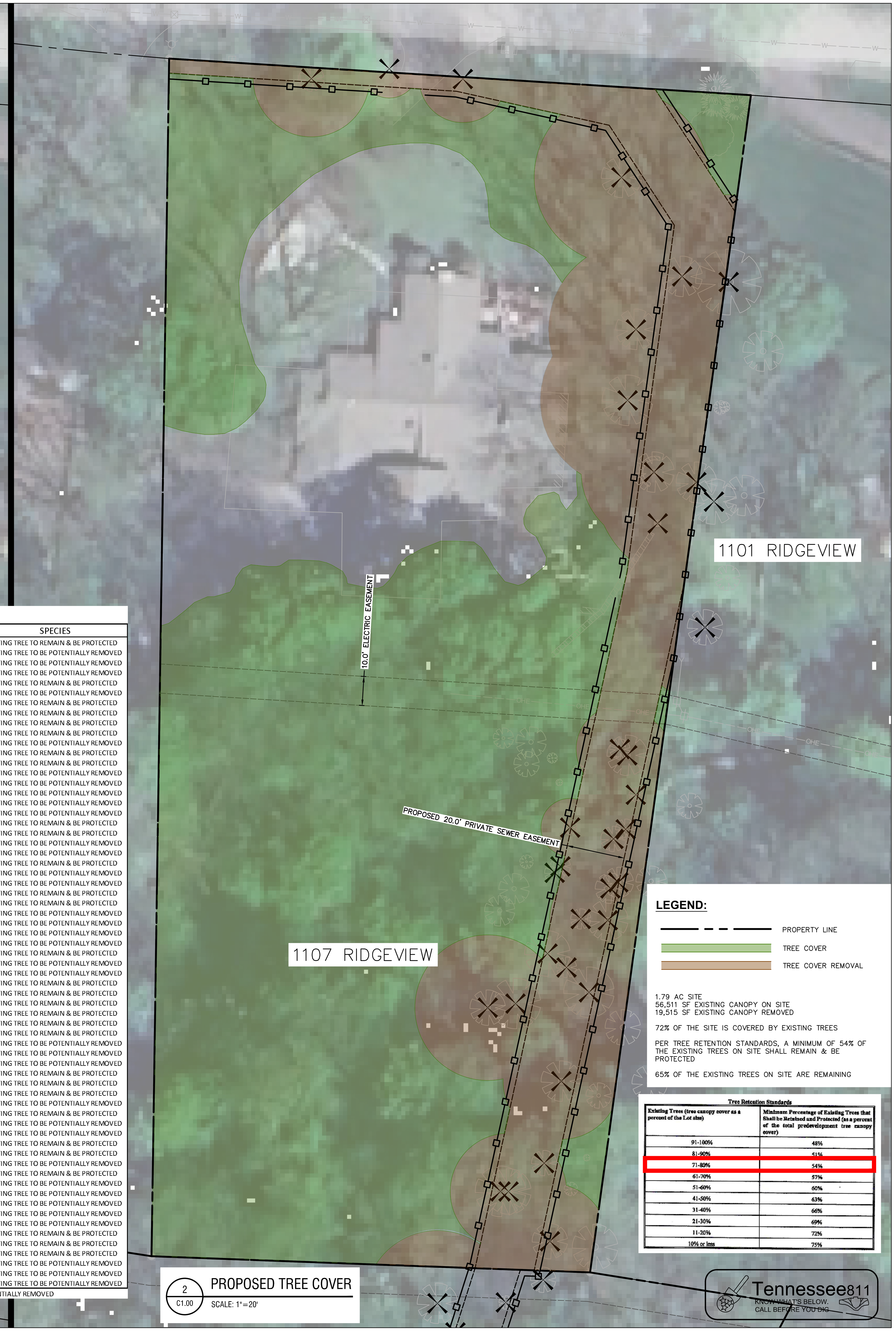


1 C1.00 EXISTING TREE COVER
SCALE: 1"=20'

POTENTIAL TREE REMOVAL

EXISTING TREE	CALIPER	TYPE	SPECIES
87	27 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
88	21 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
89	30 "	TREE DEAD	EXISTING TREE TO BE POTENTIALLY REMOVED
90	27 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
91	8 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
92	15 "	TREE DEAD	EXISTING TREE TO BE POTENTIALLY REMOVED
93	6 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
94	4 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
95	15 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
96	21 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
97	24 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
98	10 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
99	21 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
100	30 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
101	30 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
102	27 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
103	21 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
104	12 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
105	18 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
106	18 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
107	24 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
108	12 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
109	6 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
110	12 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
111	12 "	TREE DEAD	EXISTING TREE TO BE POTENTIALLY REMOVED
112	8 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
113	18 "	TREE DEAD	EXISTING TREE TO REMAIN & BE PROTECTED
114	18 "	TREE DEAD	EXISTING TREE TO BE POTENTIALLY REMOVED
115	18 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
116	15 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
117	12 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
118	15 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
119	8 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
120	8 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
121	8 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
122	4 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
123	6 "	TREE DEAD	EXISTING TREE TO REMAIN & BE PROTECTED
124	18 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
125	15 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
126	12 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
127	12 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
128	24 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
129	21 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
130	15 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
131	24 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
132	15 "	TREE DEAD	EXISTING TREE TO REMAIN & BE PROTECTED
133	27 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
134	15 "	TREE DEAD	EXISTING TREE TO REMAIN & BE PROTECTED
135	24 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
136	4 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
137	6 "	HACKBERRY	EXISTING TREE TO REMAIN & BE PROTECTED
138	8 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
139	24 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
140	24 "	TREE	EXISTING TREE TO REMAIN & BE PROTECTED
141	30 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
142	39 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
143	24 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
144	24 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
145	24 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
146	15 "	CEDAR	EXISTING TREE TO REMAIN & BE PROTECTED
147	18 "	CEDAR	EXISTING TREE TO REMAIN & BE PROTECTED
148	18 "	CEDAR	EXISTING TREE TO REMAIN & BE PROTECTED
149	4 "	CREPE MYRTLE	EXISTING TREE TO BE POTENTIALLY REMOVED
150	15 "	TREE	EXISTING TREE TO BE POTENTIALLY REMOVED
151	4 "	CREPE MYRTLE	EXISTING TREE TO BE POTENTIALLY REMOVED

676 CALIPER INCHES TO BE POTENTIALLY REMOVED



2 C1.00 PROPOSED TREE COVER
SCALE: 1"=20'

LEGEND:

- PROPERTY LINE
- TREE COVER
- TREE COVER REMOVAL

1.79 AC SITE
56,511 SF EXISTING CANOPY ON SITE
19,515 SF EXISTING CANOPY REMOVED

72% OF THE SITE IS COVERED BY EXISTING TREES

PER TREE RETENTION STANDARDS, A MINIMUM OF 54% OF THE EXISTING TREES ON SITE SHALL REMAIN & BE PROTECTED

65% OF THE EXISTING TREES ON SITE ARE REMAINING

Tree Retention Standards

Existing Trees (tree canopy cover as a percent of the Lot size)	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%

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921B Woodland Street Nashville, TN 37206

PETER ROMANO, JR. REGISTERED ENGINEER AGRICULTURE COMMERCE No. 119247 STATE OF TENNESSEE
2/14/24

VILLA CREST SEWER

1107 RIDGEVIEW DR
NASHVILLE, TN 37220

ISSUED FOR: LAND DISTURBANCE PERMIT

PROJECT NUMBER:	DATE:
23056-04	1/30/24
DRAWN BY: PM	REVIEWED BY: PR
NORTH ARROW: N	SCALE: 1" = 20' (0–20)

0 1 2
ORIGINAL SCALE IN INCHES

REVISIONS

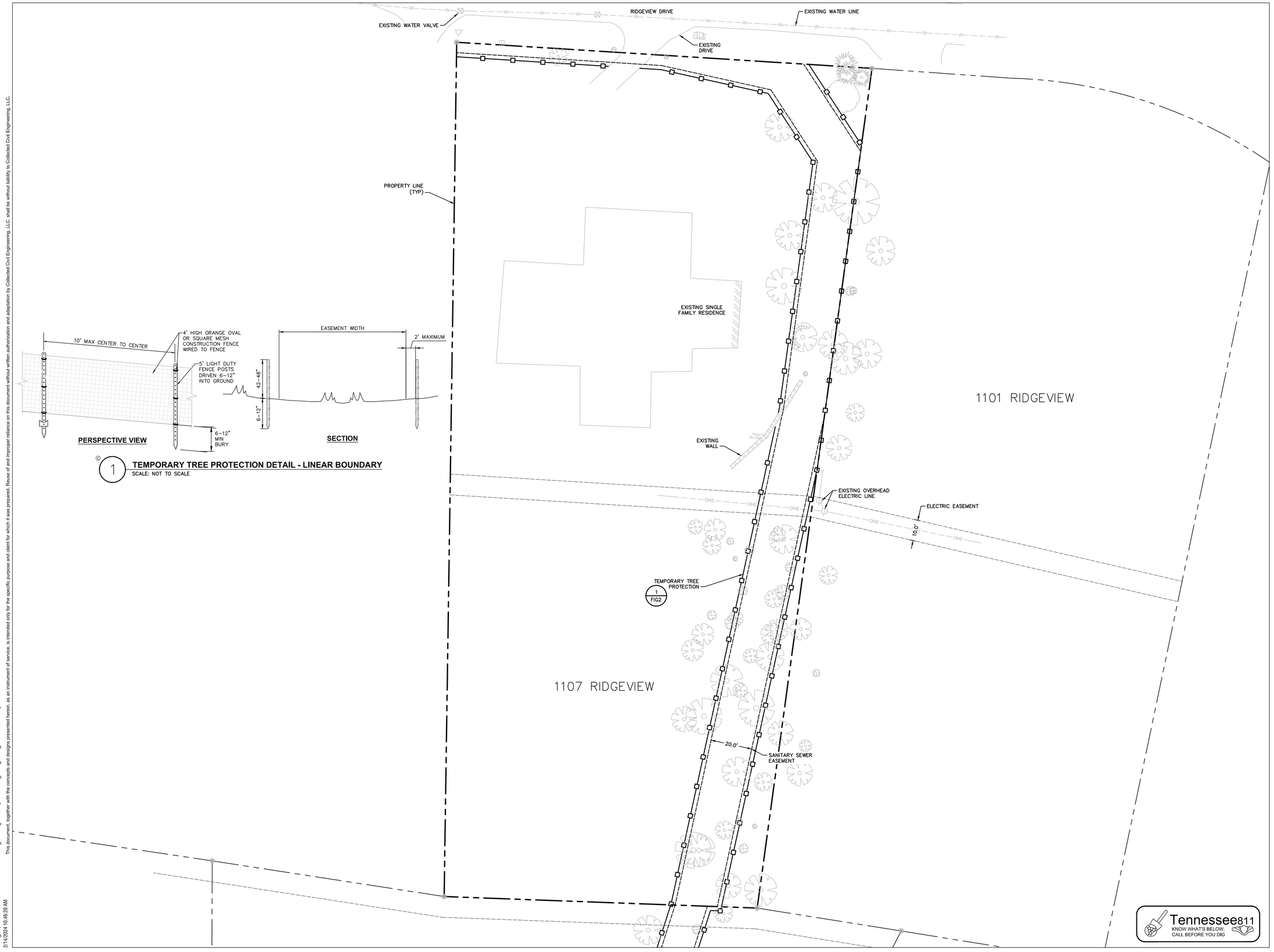
NO:	DATE:	DESCRIPTION:
1	2/14/24	RESPONSE TO CITY COMMENTS

DRAWING NAME:

EXISTING VS PROPOSED TREE CANOPY COVER

DRAWING NUMBER:

C1.00



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

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921B Woodland Street Nashville, TN 37206

PETER ROMANO
REGISTERED ENGINEER
AGRICULTURE
No. 113421
STATE OF TENNESSEE
2/14/24

VILLA CREST SEWER
1107 RIDGEVIEW DR
NASHVILLE, TN 37220

ISSUED FOR:	LAND DISTURBANCE PERMIT
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0 1 2
ORIGINAL SCALE IN INCHES

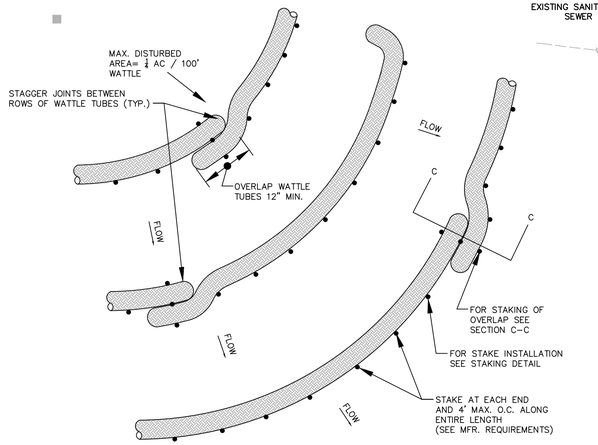
REVISIONS		
NO:	DATE:	DESCRIPTION:
1	2/14/24	RESPONSE TO CITY COMMENTS

DRAWING NAME:

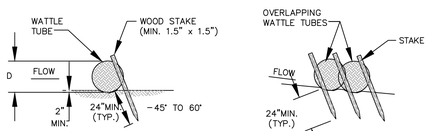
TREE PROTECTION FIGURE

DRAWING NUMBER:

C1.10

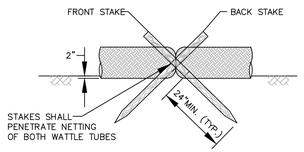


PLAN VIEW FOR SLOPE APPLICATION



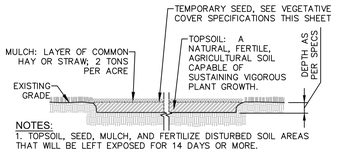
STAKING DETAIL

SECTION C–C



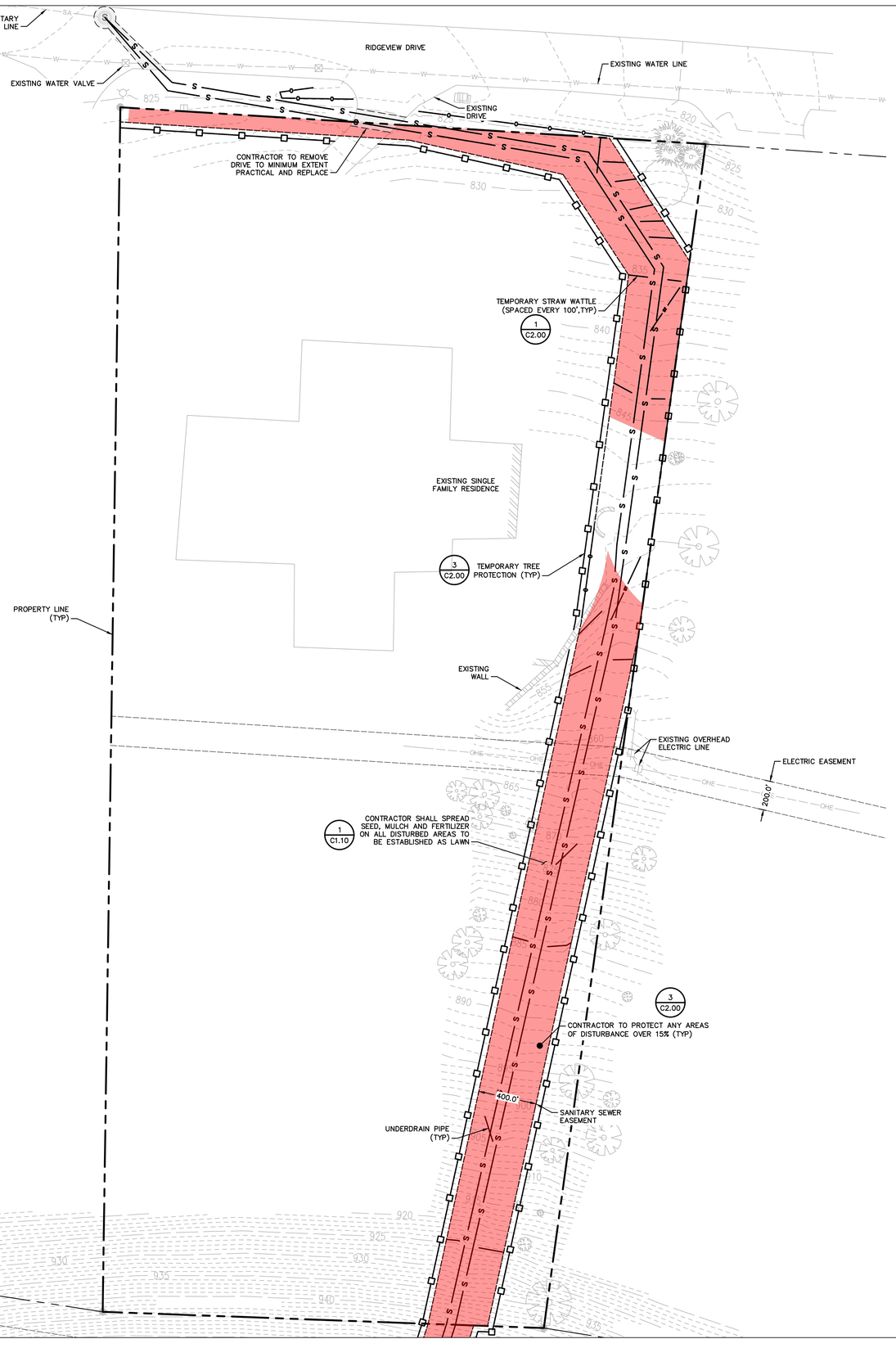
JOINT STAKING DETAIL

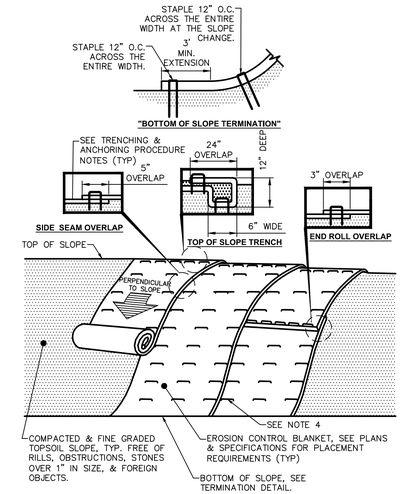
1 TUBES AND WATTLES DETAIL
SCALE: NOT TO SCALE



NOTES:
1. TOPSOIL, SEED, MULCH, AND FERTILIZE DISTURBED SOIL AREAS THAT WILL BE LEFT EXPOSED FOR 14 DAYS OR MORE.

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.

TRENCHING & ANCHORING PROCEDURE NOTES:

SIDE SEAM OVERLAP: THE EDGES OF PARALLEL BLANKETS SHALL BE STAPLED WITH A 5" OVERLAP.

TOP OF SLOPE TRENCH: BEGIN AT THE TOP OF SLOPE BY ANCHORING THE EROSION CONTROL BLANKET IN A 6"D x 6"W TRENCH WITH A 12" OVERLAP EXTENDED BEYOND THE UP–SLOPE PORTION OF THE TRENCH. ANCHOR WITH A ROW OF STAPLES/STAKES 12" O.C. IN THE BOTTOM OF THE TRENCH. BACKFILL & COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL & FOLD THE REMAINING 12" PORTION OF THE EROSION CONTROL BLANKET BACK OVER THE SEED & COMPACTED SOIL. SECURE THE EROSION CONTROL BLANKET OVER THE COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED 12" O.C. ACROSS THE ENTIRE WIDTH.

END ROLL OVERLAP: CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE SHALL BE PLACED END OVER END (SHINGLE–STYLE) WITH A 3" OVERLAP. STAPLE THRU OVERLAPPED AREAS, 12" APART ACROSS THE ENTIRE WIDTH.

REQUIREMENTS: TO BE USED ON ALL SLOPES GREATER THAN 3:1 BUT NO STEEPER THAN 2:1, 24 MONTH LONGEVITY , AND INSTALLED PER MANUFACTURER REQUIREMENTS. SUCH AS US–2C AS MANUFACTURED BY L&M SUPPLY OR LANDLOK C52 AS MANUFACTURED BY PROPEX GEOSOLUTIONS OR APPROVED EQUAL.

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

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921B Woodland Street Nashville, TN 37206

PETER ROMANO JR. REGISTERED ENGINEER AGRICULTURE No. 113426 STATE OF TENNESSEE
2/14/24

VILLA CREST SEWER
1107 RIDGEVIEW DR
NASHVILLE, TN 37220

ISSUED FOR:
LAND DISTURBANCE PERMIT

PROJECT NUMBER:	DATE:
23056-04	1/30/24
DRAWN BY:	REVIEWED BY:
PM	PR
NORTH ARROW:	SCALE: 1" = 20'

0 1 2
ORIGINAL SCALE IN INCHES

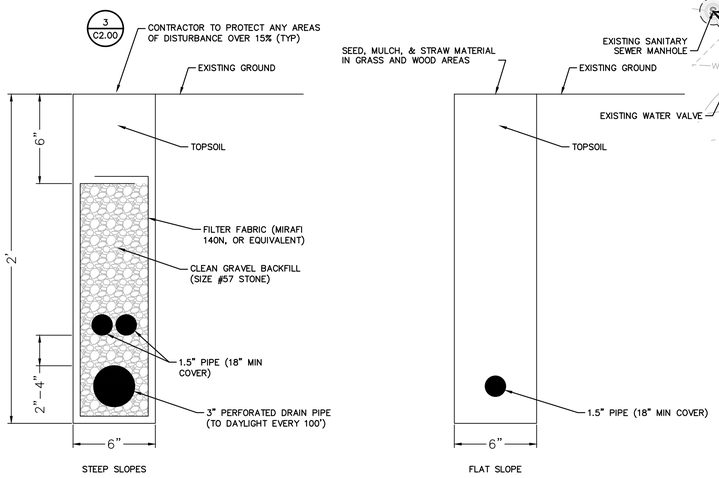
REVISIONS		
NO:	DATE:	DESCRIPTION:
1	2/14/24	RESPONSE TO CITY COMMENTS

DRAWING NAME:

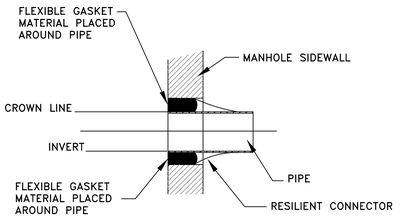
SANITARY SEWER EPSC PLANS

DRAWING NUMBER:

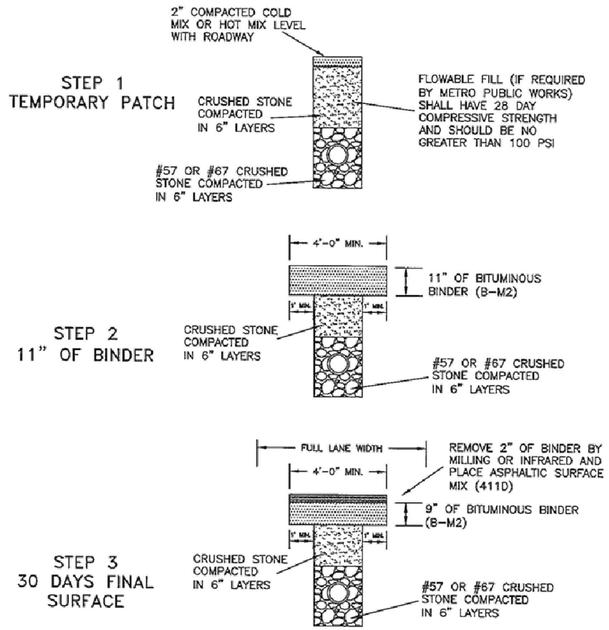
C2.00



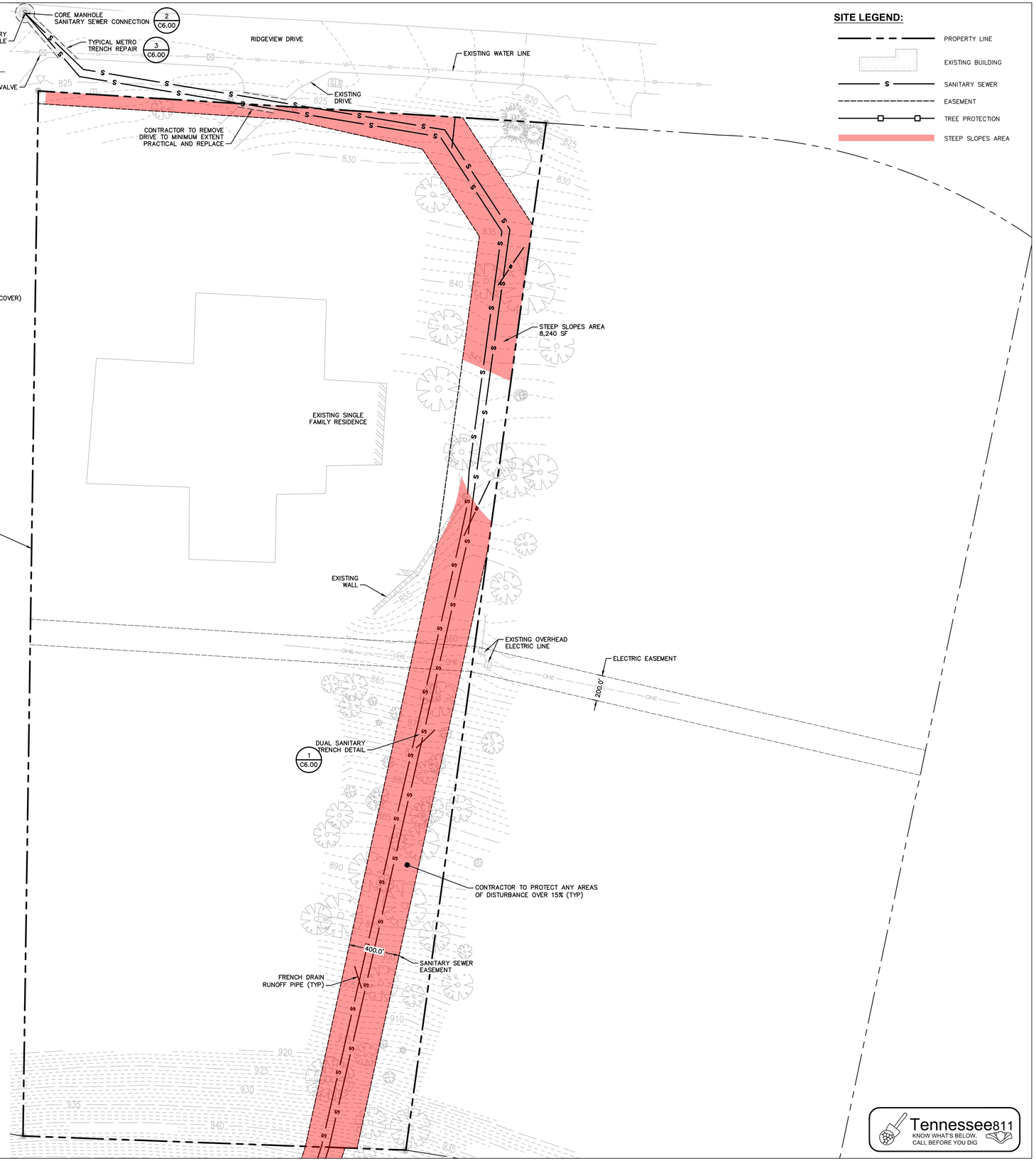
© 1 **TYPICAL TRENCH DETAIL**
SCALE: NOT TO SCALE



© 2 **TYPICAL MANHOLE CONNECTION (METRO DWG. NO:SDET008)**
SCALE: NOT TO SCALE



© 3 **TYPICAL METRO TRENCH REPAIR (METRO DWG. NO:ST-270a)**
SCALE: NOT TO SCALE



SITE LEGEND:

- PROPERTY LINE
- EXISTING BUILDING
- SANITARY SEWER
- EASEMENT
- TREE PROTECTION
- STEEP SLOPES AREA

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PETER ROMANO JR. REGISTERED ENGINEER AGRICULTURAL CIVIL No. 113241 STATE OF TENNESSEE
2/14/24

VILLA CREST SEWER
1107 RIDGEVIEW DR
NASHVILLE, TN 37220

ISSUED FOR: LAND DISTURBANCE PERMIT

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NORTH ARROW: N	SCALE: 1" = 20' (0, 20)

0 1 2
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REVISIONS		
NO:	DATE:	DESCRIPTION:
1	2/14/24	RESPONSE TO CITY COMMENTS

DRAWING NAME:

SANITARY SEWER DESIGN PLANS

DRAWING NUMBER:

C6.00