

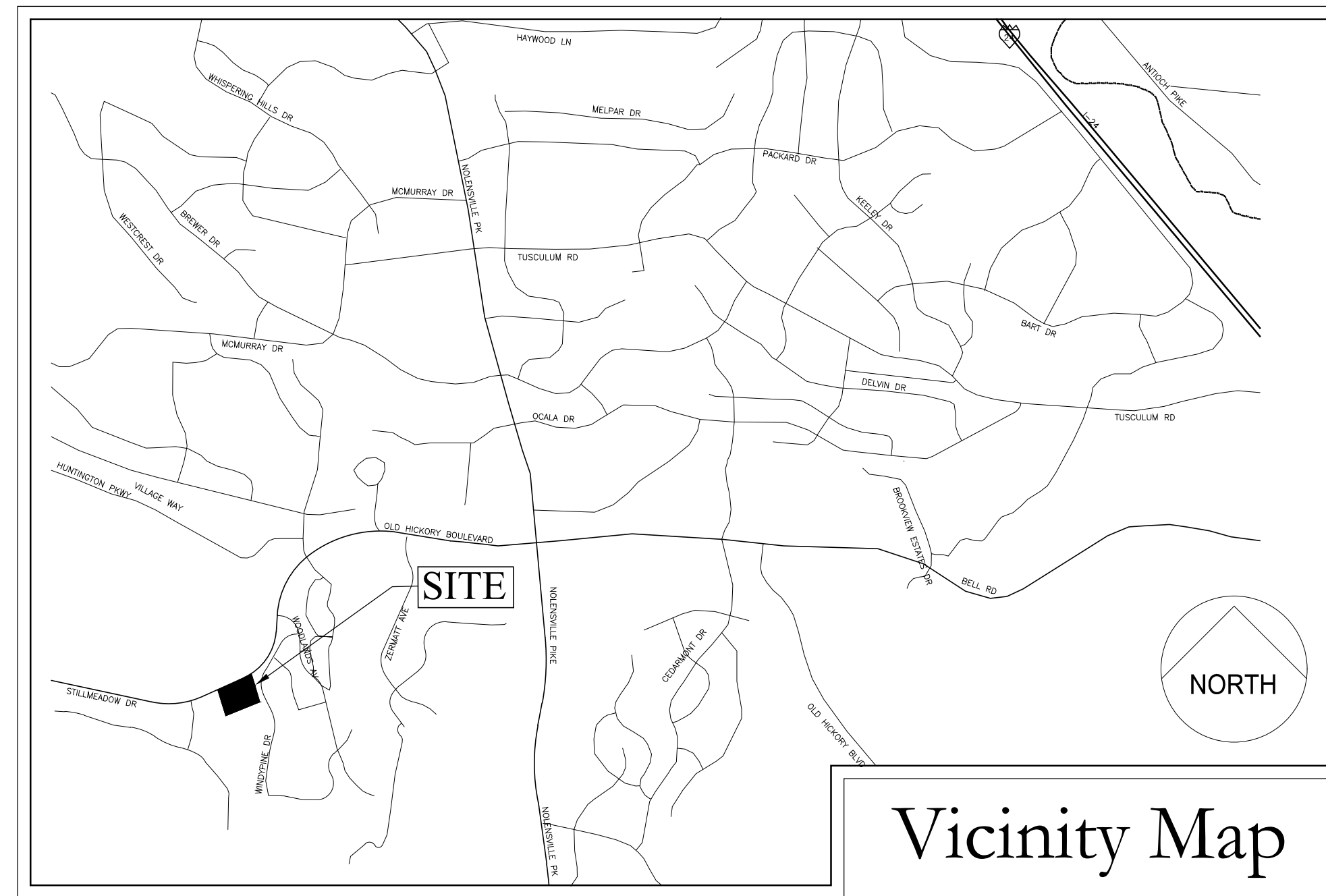
Development Plans

0 Old Hickory Boulevard

Map 161, Parcel 90-07
 Nashville, Davidson Co., Tennessee
 Case No. 2022S-151-002

General Development Plan Notes

- The purpose of this Development Plan is to create 5 lots.
- The base zoning district is R15.
- All lots to be served by public water and sewer. Individual water and/or sanitary sewer service lines are required for each lot.
- Any excavation, fill or disturbance of the existing ground elevation must be done in accordance with Storm Water Management Ordinance no. 78-840 and approved by the Metropolitan Department of Water Services.
- This property does not lie in a flood hazard zone as identified by FEMA Maps 47037C0386H April 5, 2017.
- All public sidewalks are to be constructed in conformance with Metro Public Works' sidewalk design standards.
- Wheelchair accessible curb ramps, complying with applicable Metro Public Works standards, shall be constructed at street crossings.
- The required fire flow shall be determined by the Metropolitan Fire Marshal's office, prior to the issuance of a building permit. Fire hydrants shall be in service before any combustible material is brought on site.
- No part of any building shall be more than 500 feet from a fire hydrant via an approved hard surfaced road. Metro Ordinance 095-1541 Section 1568.020 B.
- Size driveway culverts per the design criteria set forth by the Metro Stormwater Manual. (Minimum driveway culvert in Metro R.O.W. is 18" RCP).
- Metro Water Services shall be provided sufficient and unencumbered ingress and egress at all times in order to maintain, repair, replace, and inspect any stormwater facilities within the property.
- No building permit may be issued on any lot until street name signs are installed and verified by the Metropolitan Department of Public Works on all streets on which the lot depends for access.
- Solid waste pickup to be provided via individual roll-away containers. Plan & pickup to be coordinated with the Metro Public Works Solid Waste Department.
- All work within the public right-of-way shall require a permit from the Department of Public Works.
- Provide the full water quality treatment of 80% Tv. Various quantity/quality GIPS shall be utilized.
- All setbacks shall be per Metro Zoning Code.
- Prior to the issuance of any building permit for a lot designed as a critical lot on this plan, a grading plan know as a 'critical lot plan,' must be submitted to the Metro Planning Department as required by Appendix C of the Metro Subdivision Regulations. The critical lot plan will be evaluated for consistency with the regulations, including, but not limited to, the degree to which grading is minimized to preserve the natural features of the lot and the amount of cut/fill required to prepare the lot for construction. It is emphasized that a typical house design may not be suitable for a critical lot.
- All utilities shall be placed underground as required by Section 17.28.103 of the Metro Zoning Code.
- This parcel is located within the Airport Overlay District.
- The development of this project shall comply with the requirements of the adopted tree ordinance 2008-328 (Metro Code Chapter 17.24, Article II, Tree Protection and Replacement; and Chapter 17.40, Article X, Tree Protection and Replacement Procedures.
- The final site plan/building permit site plan shall depict the required public sidewalks, any required grass strip or frontage zone and the location of all existing and proposed vertical obstructions within the required sidewalk and grass strip or frontage zone. Prior to the issuance of use and occupancy permits, existing vertical obstructions shall be relocated outside of the required sidewalk. Vertical obstructions are only permitted within the required grass strip or frontage zone.



Vicinity Map

SHEET SCHEDULE

Confirm with Metro Nashville Waste Services on location of pickup. If cans are to be picked up after ROW within shared easement area a private hauler would be needed.

- C0.0 Project Notes and Standards
- C1.0 Existing Conditions Plan
- C2.0 Site Layout Plan
- C3.0 Initial Erosion Control Plan
- C3.1 Intermediate & Final Erosion Control Plan
- C4.0 Grading and Drainage Plan
- C4.1 Storm Water Details
- C5.0 Public Sewer Plan
- C5.1 Public Sewer Plan & Profile

Site Details:

Area:	2.50 Acres
Current Use:	Residential
Proposed Use:	Residential
Property Zoning:	R15
Surrounding Zoning:	R15, RM6

Site Criteria: Required

Lot Size:	Min. 15,000 sf
Maximum Building Coverage:	Max 35%
Street Setbacks:	Per Metro Zoning Code
Side Yard:	5' Side Setbacks / 15' Side Setback Along Eastern Windypine Dr.
Rear Yard:	80' 4" Minimum Rear Setback
Height Standards:	Max 3 stories

Parking: Required

Required parking:	Single Family: 2 Stalls per Lot
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Access to Windypine Drive:

Access drives allowed:	1 - Access Easement off Old Hickory Boulevard
Access drives proposed:	1 - Access Easement off Old Hickory Boulevard

Property Information
 Tax Map 151, Parcel 90-07
 Old Hickory Boulevard (Unnumbered)
 Nashville, Tennessee 37211
 2.50 Acres (2.22 Acres Disturbed)
 Council District 04: Robert Swope

Property Owner
 Alemayehu Tesfaye
 860 Dover Glen Drive
 Antioch, Tennessee 37013

Civil Engineer
 Dale & Associates
 516 Heather Place
 Nashville, Tennessee 37204
 Contact: Michael Garrigan, PE
 Phone: 615.297.5166
 Email: michael@daleandassociates.net

Surveyor
 Dale & Associates
 516 Heather Place
 Nashville, Tennessee 37204
 Contact: Steven Matthews, RLS
 Phone: 615.297.5166
 Email: Steve@daleandassociates.net

Flood Note
 This property is not located within a Flood Hazard Area as depicted on the current Flood Insurance Rate Map (FIRM) Number 47037C0386H dated April 5, 2017.

Site Benchmark
 Spike set in Utility Pole located along Site Frontage. NAVD 88 Elevation 739.19

Nashville Department of Transportation
 And Mobility Infrastructure
EXCEPTION TAKEN AS NOTED
 This review does not relieve the applicant (s) from compliance with the rules, regulations, and specifications of this department and other governmental agencies. This check is only for general conformance with the requirements of the Nashville Department of Transportation.
 Christopher Gregory 08/21/2023
 Signed Date

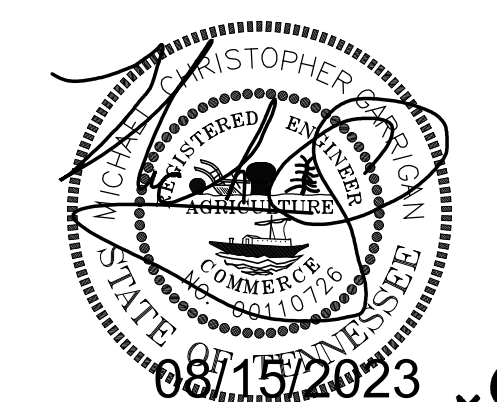
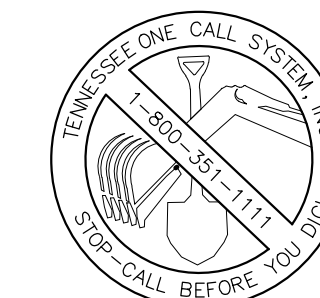
INSPECTIONS REQUIRED
 Proof-rolling of street subgrades and concrete ramp forms inspection by the NDOT inspector are required prior to placing stone or pouring concrete, 24 hour advance notice required.
 CALL 615-262-5792

ADA COMPLIANCE REQUIRED
 All activities shall be in compliance with the requirements of The Americans with Disabilities Act (ADA) in effect at the time in which the activities are performed.

Note: all references to Metro Public Works (MPW) within plan set are now in reference to Nashville Department of Transportation (NDOT).

Adjacent Hydrant Test
 Existing hydrants, tag bolt numbers XXXXX & XXXXX along with Pike and Brick Drive were flow tested on 8/15/2023 by [redacted] services, below is a summary of the flow results:
 Static Pressure: XX psi
 Residual Pressure: XX psi
 Flow: XXXX gpm
 Flow @ 20 psi: XXXX gpm
 Based on table H.5.1 of the current NFPA, [redacted] will not require a fire suppression system.

PERMITS:
 Case No. 2022S-151-002
 SWGR 2023000749
 MWS 23-SL-0008 (2023001753)





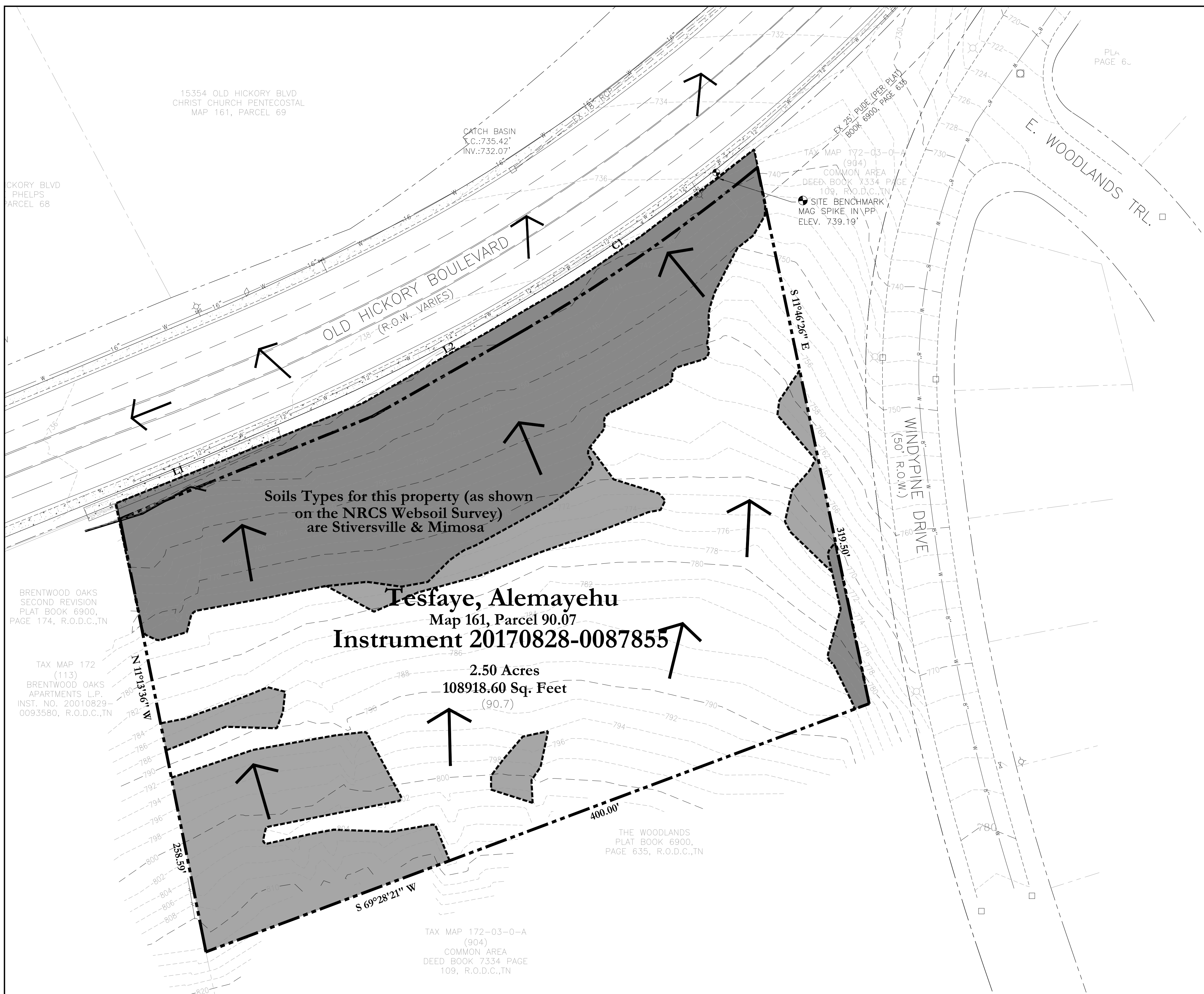
Dale & Associates
 Civil Engineering & Land Surveying
 516 Heather Place
 Nashville, TN 37204
 (615) 297-5166
 D&A Project #20162
 0 Old Hickory Boulevard
C0.0

Drawing Date:
December 2022

Revisions

SLOPES:

-  = REPRESENTS SLOPES 20 - 25%
-  = REPRESENTS SLOPES 25% OR GREATER



Soils Types for this property (as shown on the NRCS Websoil Survey) are Stiversville & Mimosa

Tesfaye, Alemayehu
Map 161, Parcel 90.07
Instrument 20170828-0087855

2.50 Acres
108918.60 Sq. Feet
(90.7)

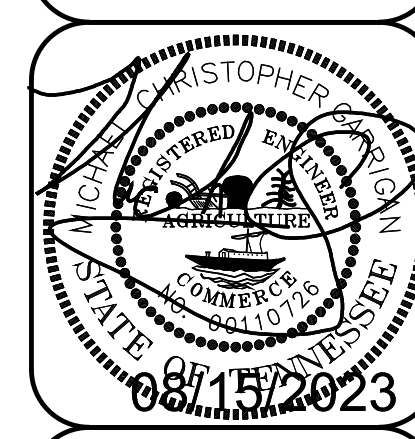
Line Table

LINE	BEARING	DISTANCE
L1	N 67°54'46" E	151.80'
L2	N 60°24'47" E	85.21'
L3	N 67°54'46" E	154.12'
L4	N 60°24'47" E	85.80'

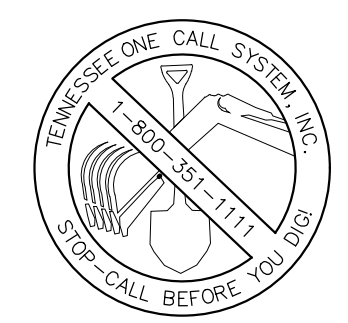
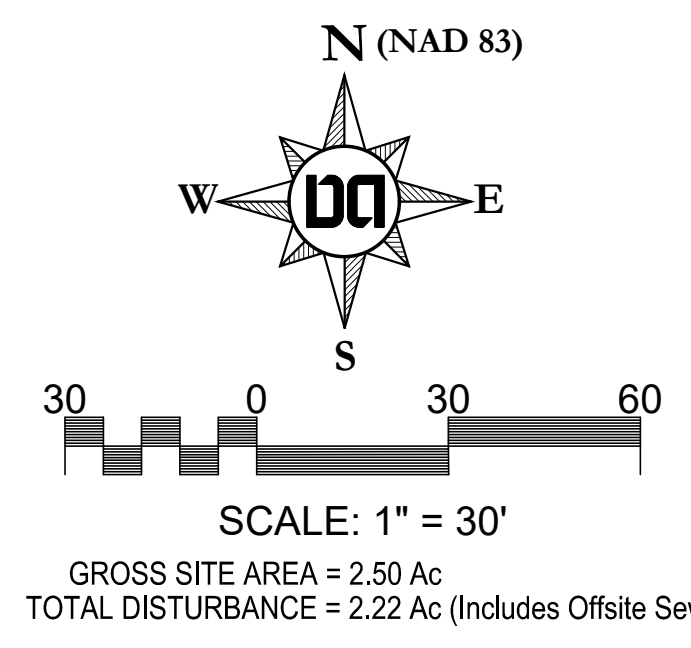
Curve Table

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	176.50'	996.93'	10°08'38"	N 55°20'27" E	176.27'
C2	173.32'	1005.93'	9°52'20"	N 55°28'37" E	173.11'

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Existing Conditions Plan



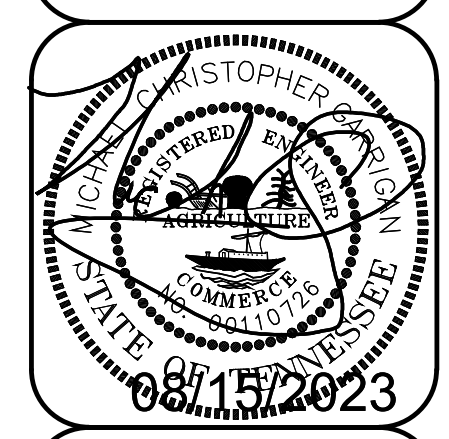
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Civil Engineering & Surveying
Land Planning & Zoning
516 Heather Place
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0 Old Hickory Boulevard
C1.0

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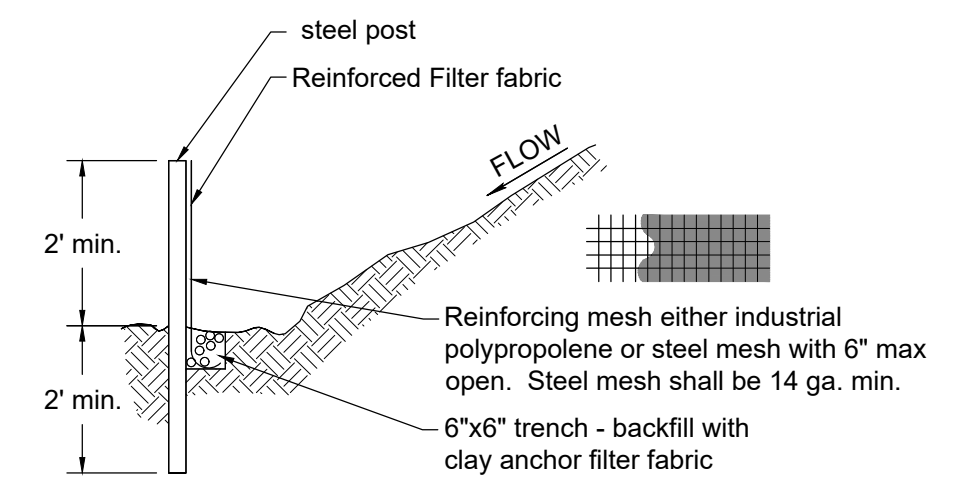
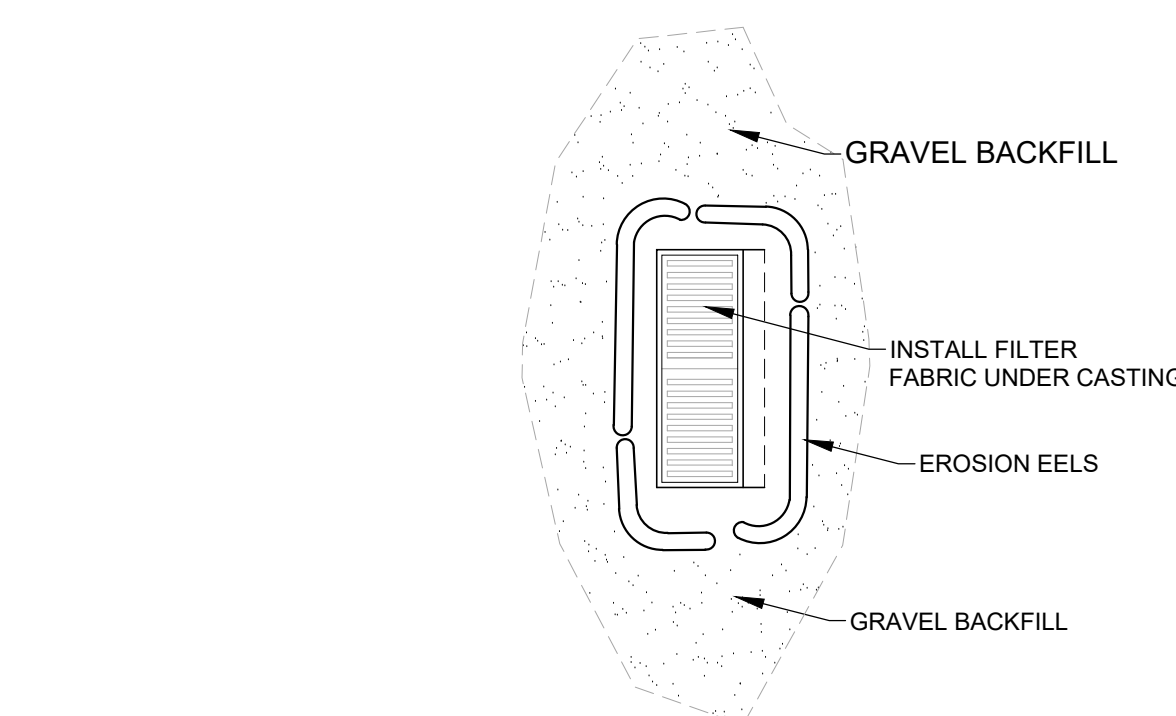
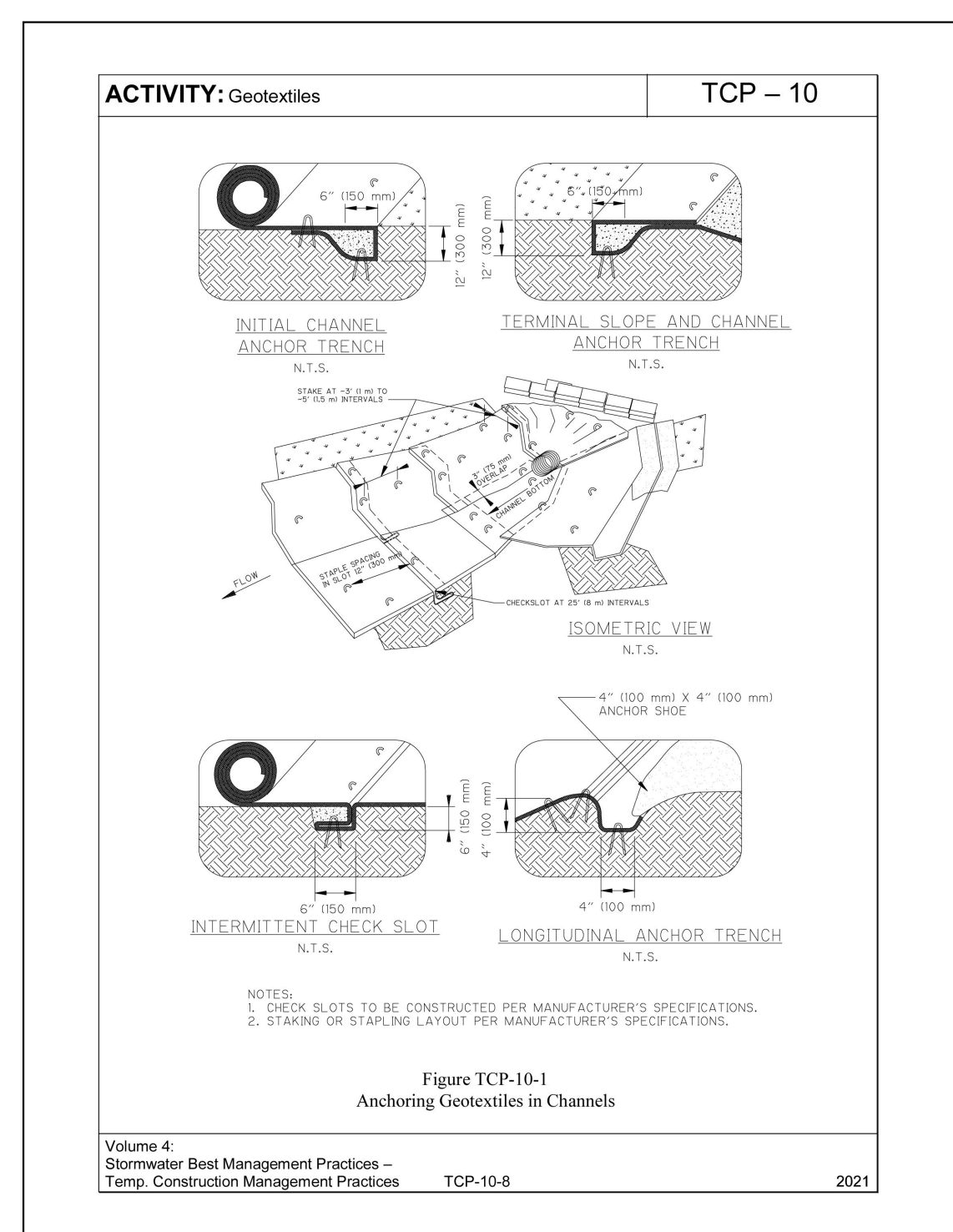
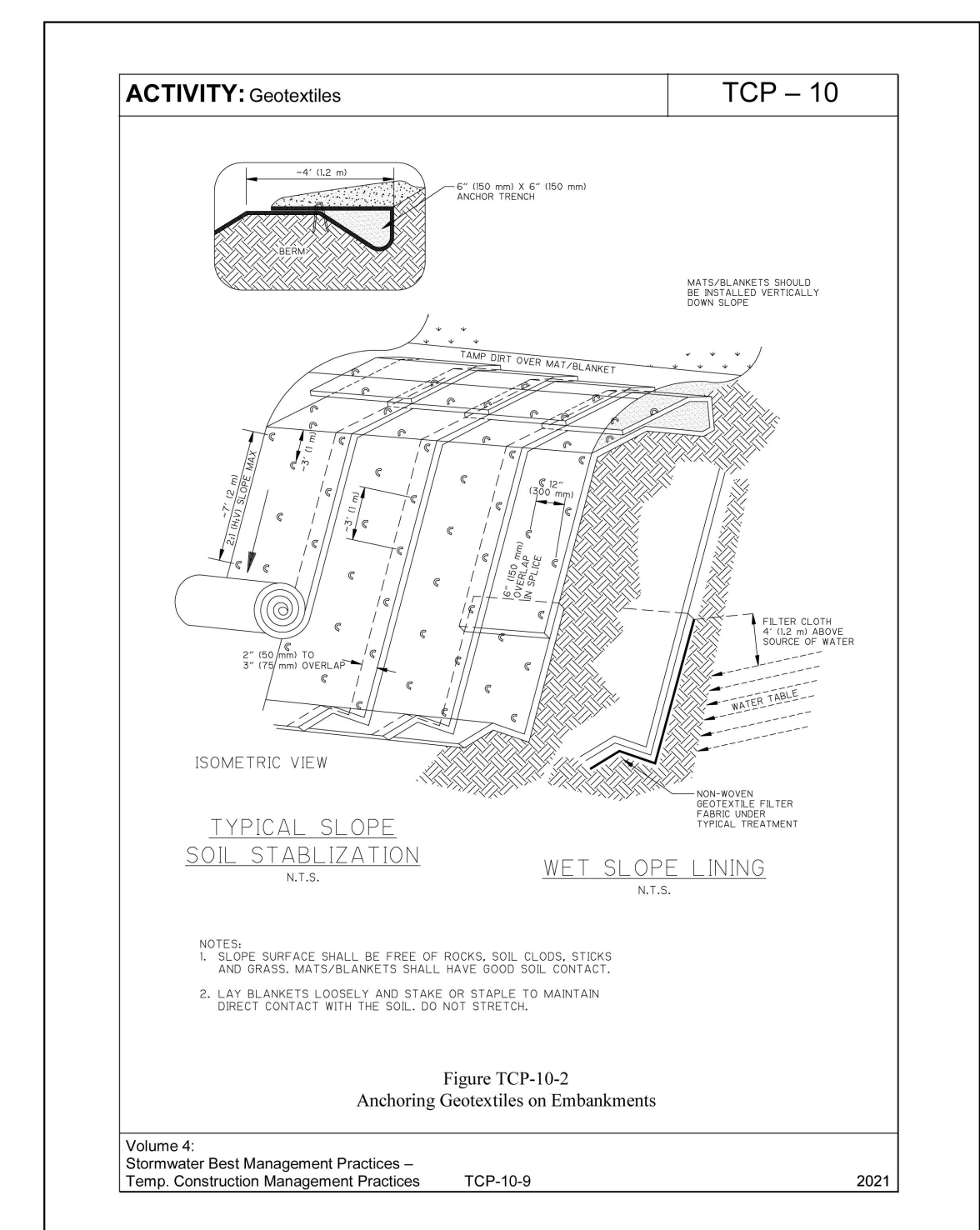


Intermediate &
Final Erosion
Control Plan

Dale DA & Associates
Civil Engineering & Surveying
Lead Planning & Zoning
516 Hickory Place
Nashville, TN 37204
(615) 259-5166

D&A Project #20162
0 Old Hickory Boulevard

C3.1



- Silt Fence Maintenance Notes:**
1. Inspect weekly and after each rainfall.
 2. Repair wherever fence is damaged.
 3. Remove sediment when it reaches 1/3 the height of the fence.
 4. Inspect silt fence when rain is forecast. Perform required maintenance before the storm event.
 5. Remove silt fence when no longer needed. Fill and compact past holes and anchor trench remove sediment accumulation, and grade alignment to blend with adjacent ground.
- Silt Fence Notes:**
1. Filter fabric fence to be placed prior to start of rough grading.
 2. Steel posts shall be approved by owner prior to use.
 3. Wood posts shall be 2"x 2" min., oak or similar hardwood.
 4. Posts shall be spaced at 6' intervals.
 5. Filter fabric shall be securely bound to posts with either staples or wire ties.
 6. Filter fabric shall be polypropylene fabric by Corps of Engineers guide spec CW 02215. With equivalent opening size (eos) of no. 100 sieve min., no. 40 sieve max., as determined.
 7. J-Hooks to be used when silt fence is not installed along a contour.

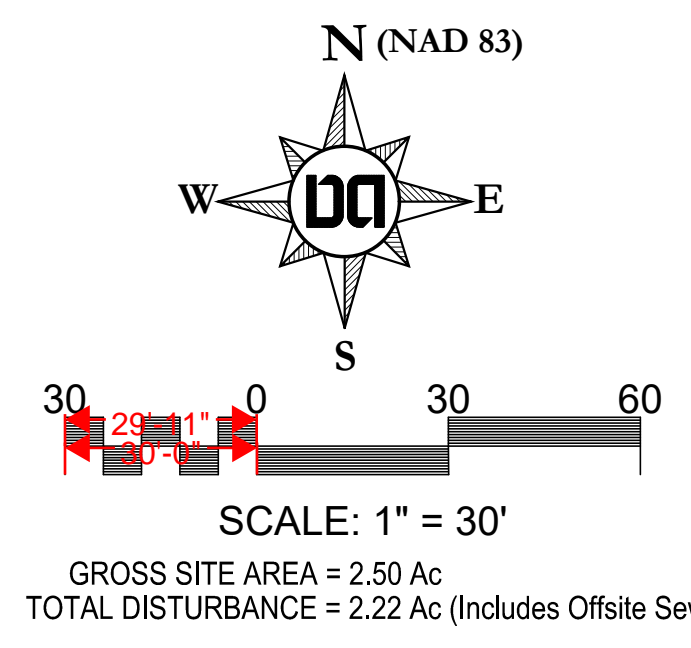
The Project associates with these submitted plans is covered under Tennessee Construction General Permit TNR 246554. The Total Disturbed Area is **2.22** acres.

Check all that apply: This site discharges into waters identified by TDEC as:

Impaired for siltation Impaired for habitat alteration
 Exceptional

Engineer: *[Signature]* Date: **5/17/23**

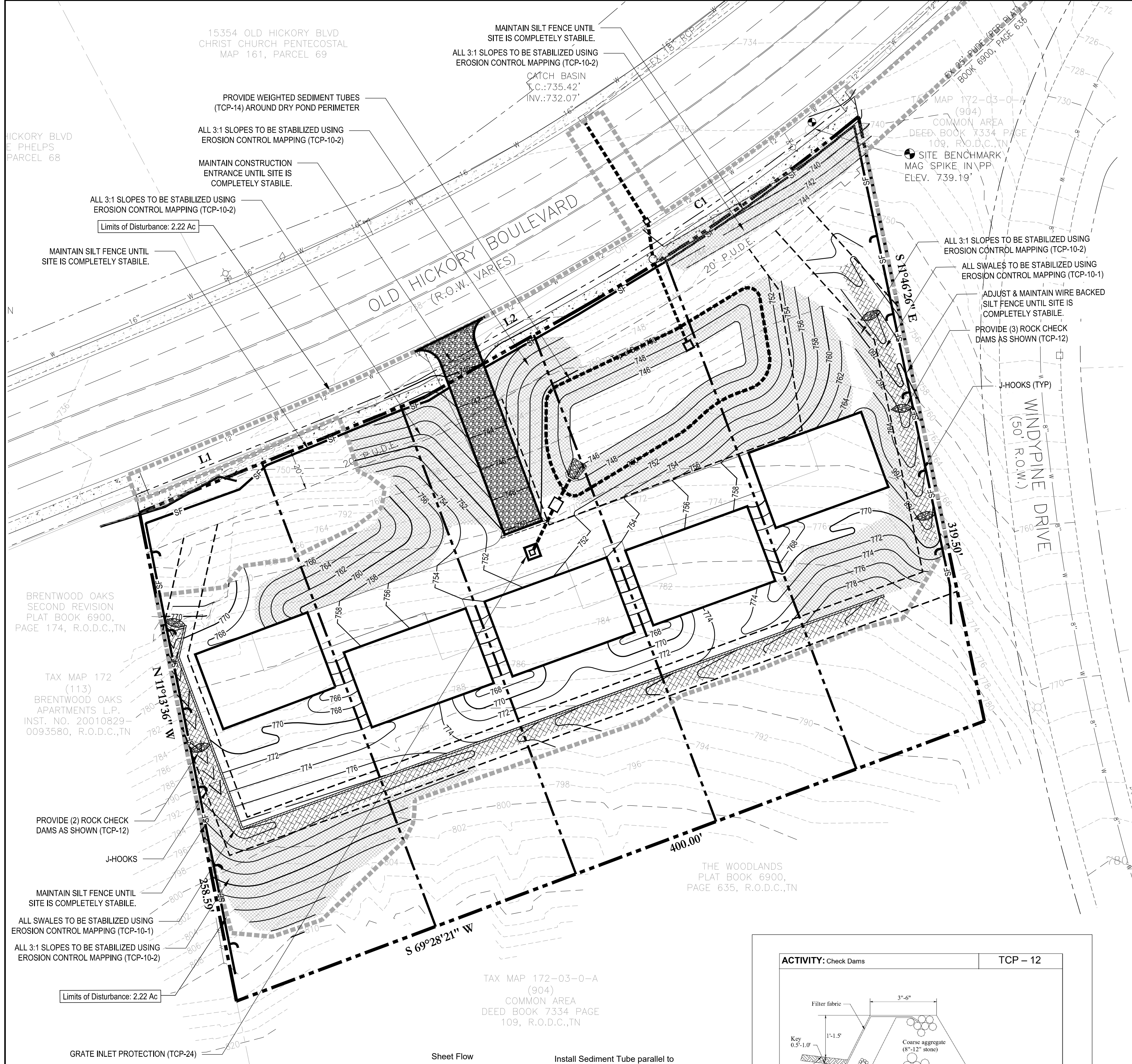
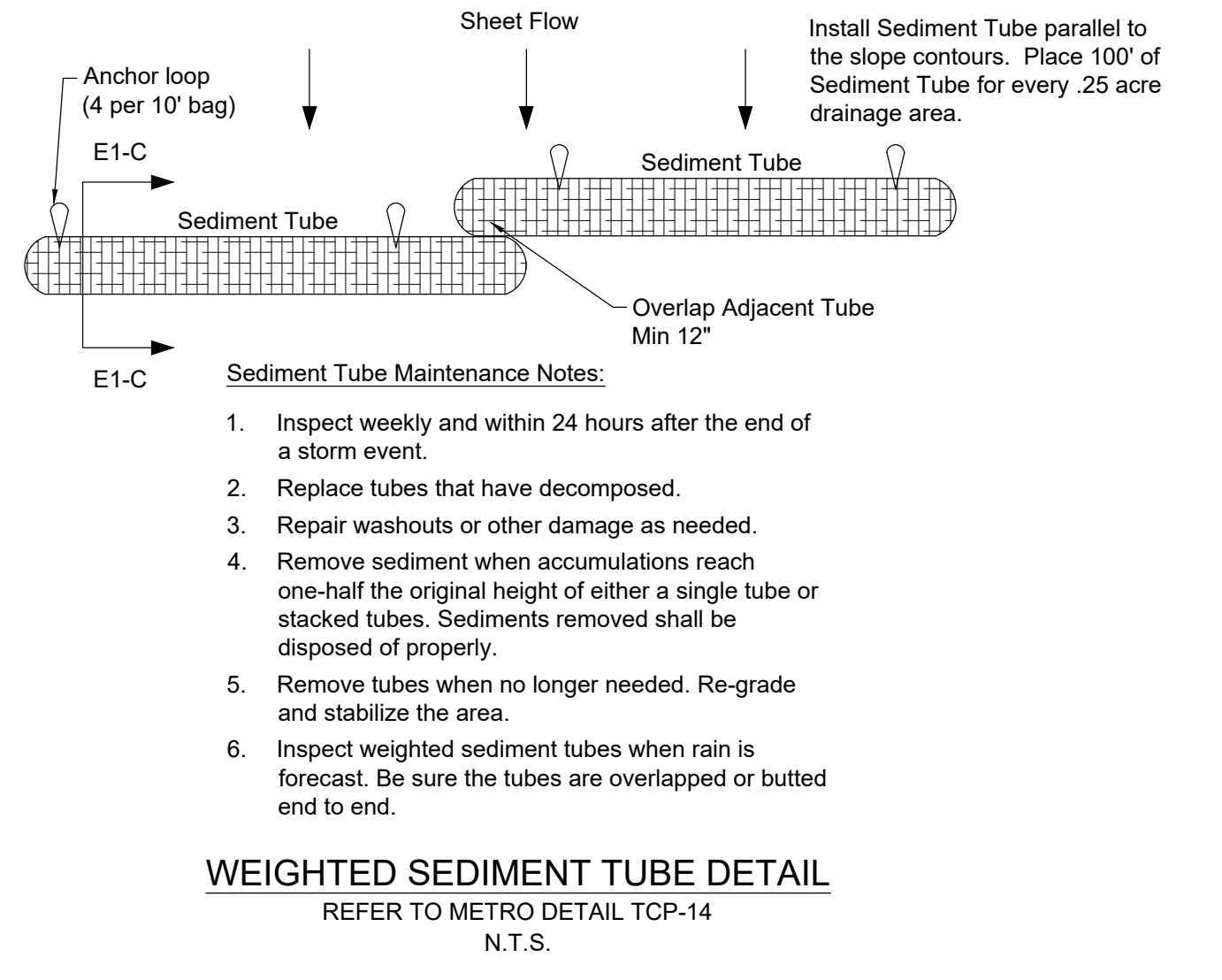
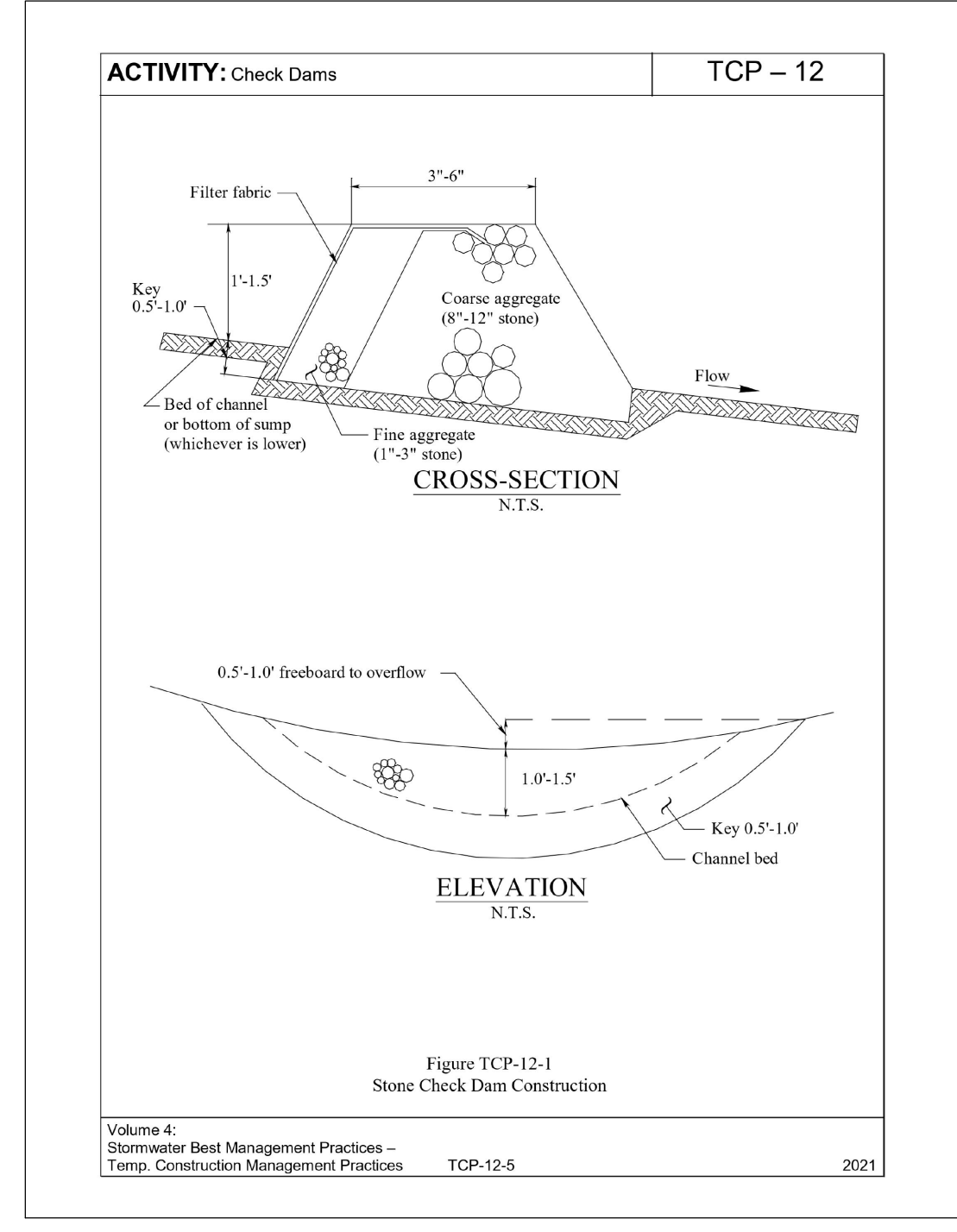
I, *[Signature]*, as the "Certified" Erosion Control Specialist for this Site, have Reviewed and Approved the Erosion Prevention and Sediment Control BMP's of these Plans on **5/17/23**



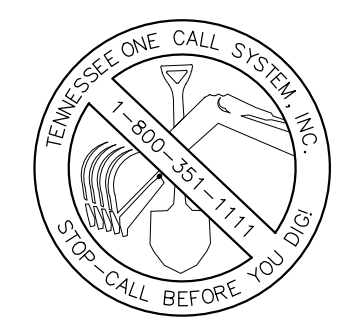
PERMITS:

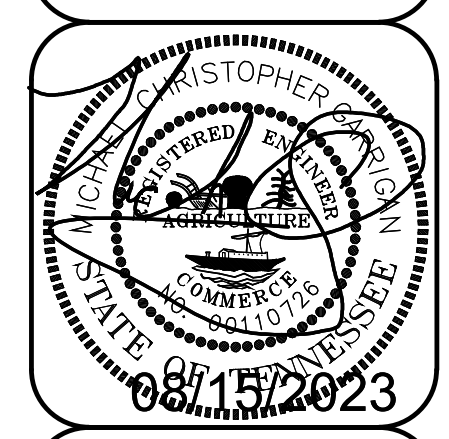
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- EPSC NOTES**
1. ALL PERIMETER EPSC MEASURES MUST BE IN PLACE PRIOR TO GRADING.
 2. ALL SLOPES 3:1 OR GREATER AND CHANNEL SIDE SLOPES TO RECEIVE EROSION CONTROL MATTING.
 3. CONTRACTOR SHALL PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT FUELING IN ACCORDANCE WITH METRO CP-10 AND CP-13 RESPECTIVELY. CONTRACTOR TO COORDINATE EXACT LOCATION WITH NPDES DEPARTMENT DURING PRE-CONSTRUCTION MEETING. CONTROL OF OTHER SITE WASTES SUCH AS DISCARDED BUILDING MATERIALS, CHEMICALS, LITTER AND SANITARY WASTES THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY ARE ALSO REQUIRED BY THE GRADING PERMITTEE.



- Sediment Tube General Notes:**
1. Weighted sediment tubes have not been as effective due to improper use. These barriers have been placed in swales and drainageways where runoff volumes and velocities have caused the tubes to wash out. In addition, failure to stake the sediment tube will allow undercutting and end flow.
 2. Weighted sediment tubes are not to be used for extended periods of time because they tend to rot and fall apart.
 3. Limit length of any single row of tubes to 500 ft. (157 m).
 4. Not appropriate for large drainage areas, limit to five acres or less.
 5. Sediment tubes may lose their effectiveness due to degradation, thus constant maintenance is required.
 6. Not intended for inlet protection or streams.
 7. Tube bindings of jute or cotton not recommended as they quickly deteriorate and fail.
 8. Limit to locations suitable for temporary ponding or deposition of sediment.
 9. Slopes of 3:1 (H:V) or flatter are preferred. If the slope exceeds 3:1 (H:V), use a different management practice or limit the length of slope upstream of the tube to less than 25 ft (15.7 m).





Developer As-Built Note

Prior to the issuance of a Use and Occupancy (U&O) permit or the full release of the performance bond for a development or for any structure in a development (unless exempted by Sections 3.4 and 3.5), a Tennessee registered engineer shall submit to MWS a certification letter stating that the site has been inspected and that the stormwater management system and stormwater control measures (both structural and non-structural) are complete and functional in accordance with the plans approved by MWS. Any deviations from the approved plans shall be noted on as-built drawings submitted. The as-built plan should be submitted electronically as a CAD file and should be registered to the TN State Plane Coordinate System, North American Datum 1983 (NAD83). Data should be placed in separate layers and should be labeled for easy identification.

To ensure the adequacy of stormwater quantity detention facilities, stormwater quantity management practices, and public infrastructure, the certification submittal shall also include the following as a part of the as-built package:

- An engineer sealed certification letter from TN registered P.E. stating that the site has been inspected and that the stormwater management system and stormwater control measures (both structural and non-structural) are complete and functional in accordance with the plans approved by MWS.
- An as-built LID spreadsheet, as warranted from changes.
- Hydrologic and hydraulic calculations for as-built conditions, as required.
- As-built drawings showing final topographic features of all these facilities. This shall include invert elevations of outlet control structures.
- Any deviations from the approved plans shall be noted on as-built drawings submitted.
- Copy of as-built plan CAD file registered to the TN State Plane Coordinate System, North American Datum 1983 (NAD83) and vertical elevations are to be tied to the North American Vertical Datum 1988 (NAVD88). Data should be submitted electronically and be placed in separate layers and should be labeled / named for easy identification.
- Cut and fill balance certification for floodplain and sinkhole alterations.
- Water quality buffers shall be surveyed and included with the as-built submittal.
- Any public (to become the responsibility of Metro to maintain) stormwater infrastructure shall be video-inspected to verify proper installation with the video recording and any associated inspection report submitted as part of as-built record. In general, video ratings of 1 and 2 are usually minor and don't need to be addressed. However, MWS reserves the right to require remedy or repair to the structure(s) rated 1 and 2 as deemed necessary by the design engineer or MWS reviewer.
- Additional testing may be required as/warranted by video inspection. Prior to the issuance of a U&O permit or the full release of the performance bond for any new or substantially improved structure subject to minimum floor elevation requirements, a registered engineer and/or registered land surveyor shall submit to MWS certification of the elevation (in relation to mean sea level) of the lowest floor (including basement), or if the structure has been floodproofed, the elevation (in relation to mean sea level) to which the structure was floodproofed. This information must be provided on a FEMA Elevation Certificate. To ensure that floodplain cut and fill balances have been achieved, as-built plans, cross-sections, and related calculations must be submitted for all floodplain manipulations.

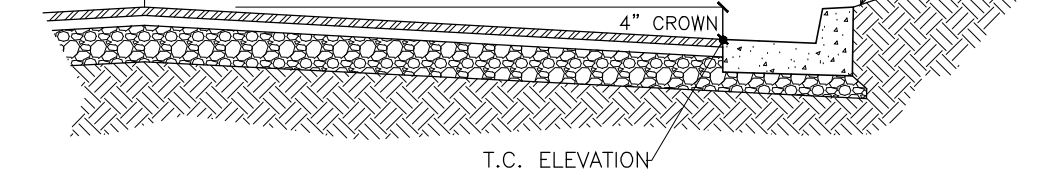
Wall Schedule

Section	Station	Top Elev	Bottom Elev	Height
A1	0+00	780	780	0'
A2	0+78	788	775	13'
A3	1+53	792	774	18'
A4	2+28	794	775	19'
A5	3+43	792	778	14'
A6	4+50	771	771	0'

Drainage Structure Schedule

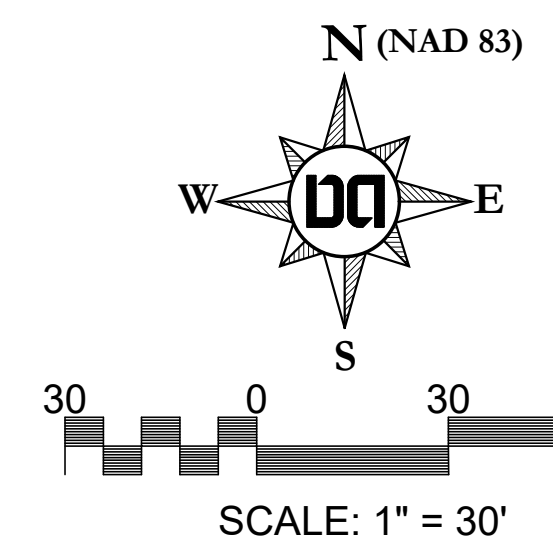
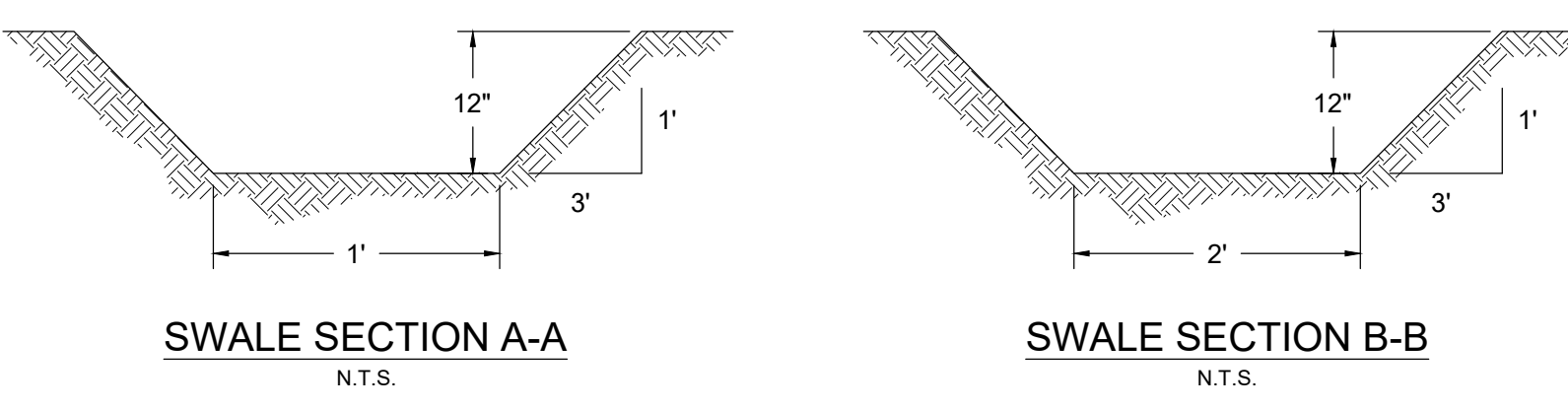
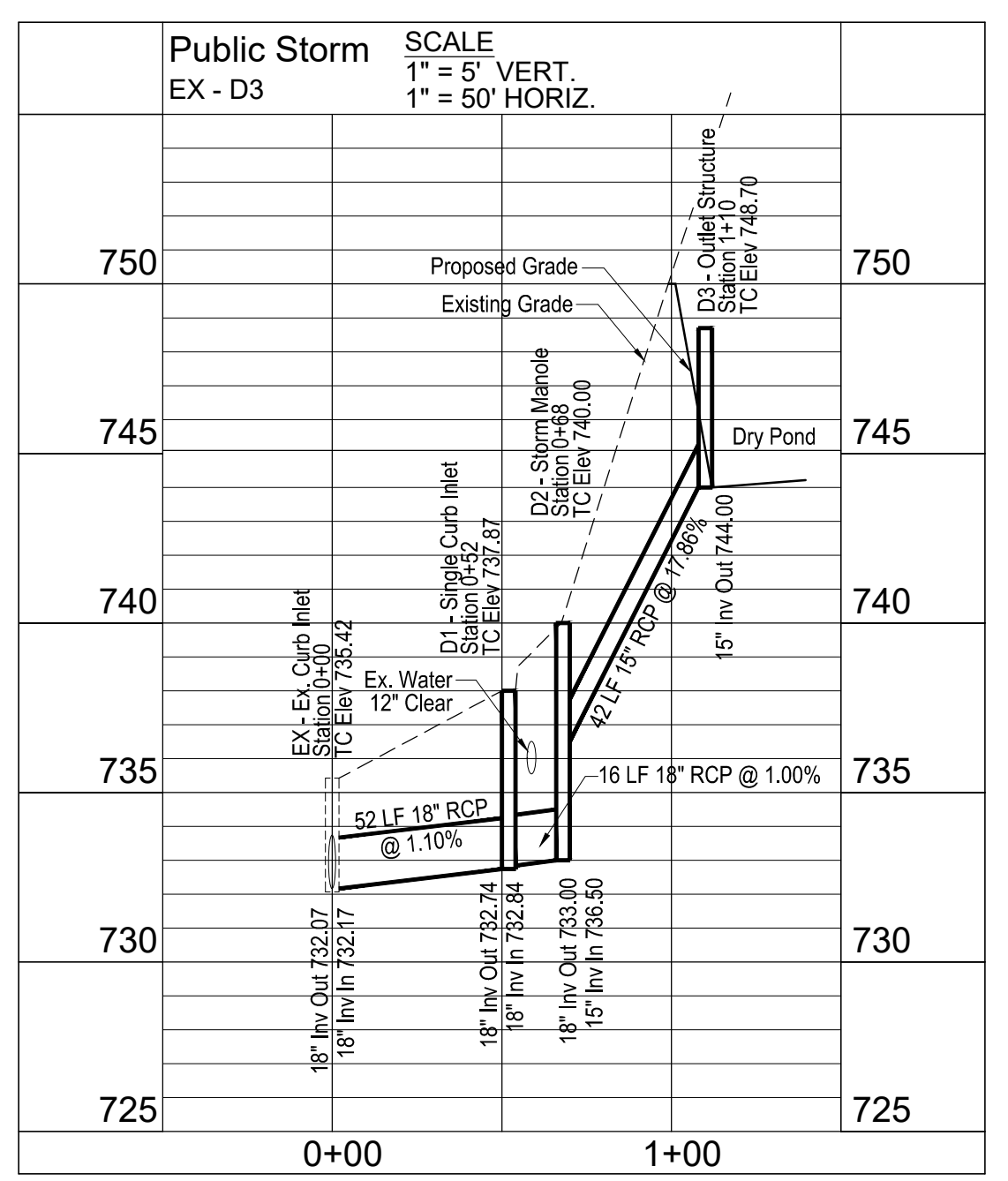
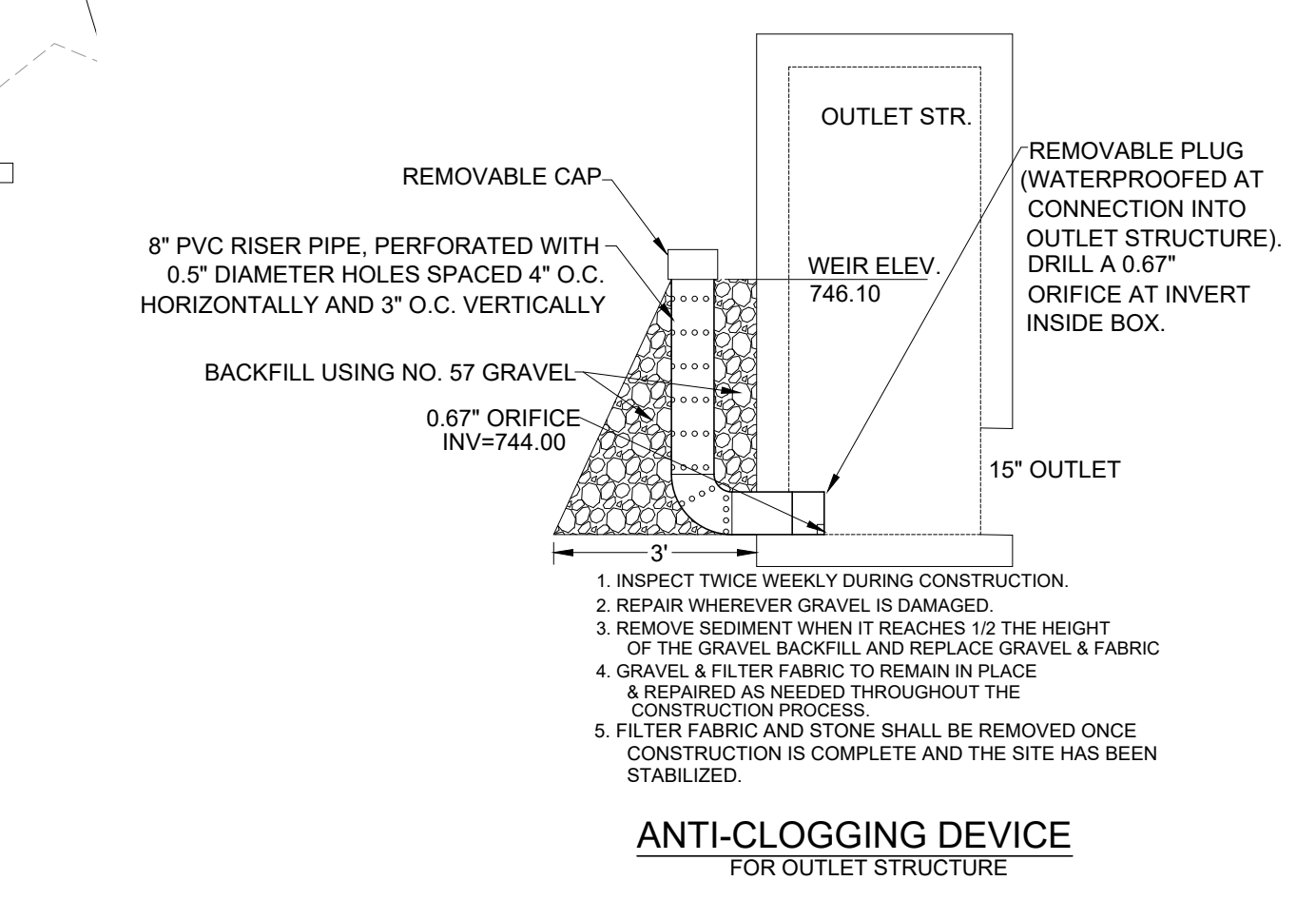
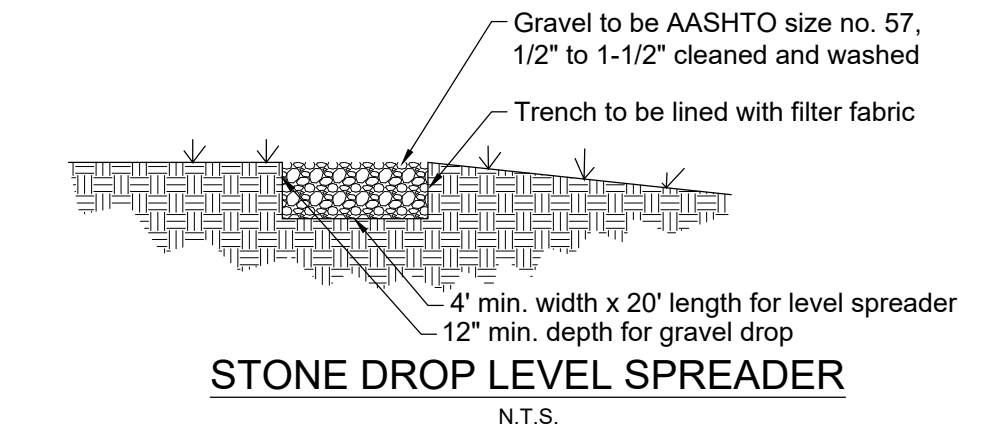
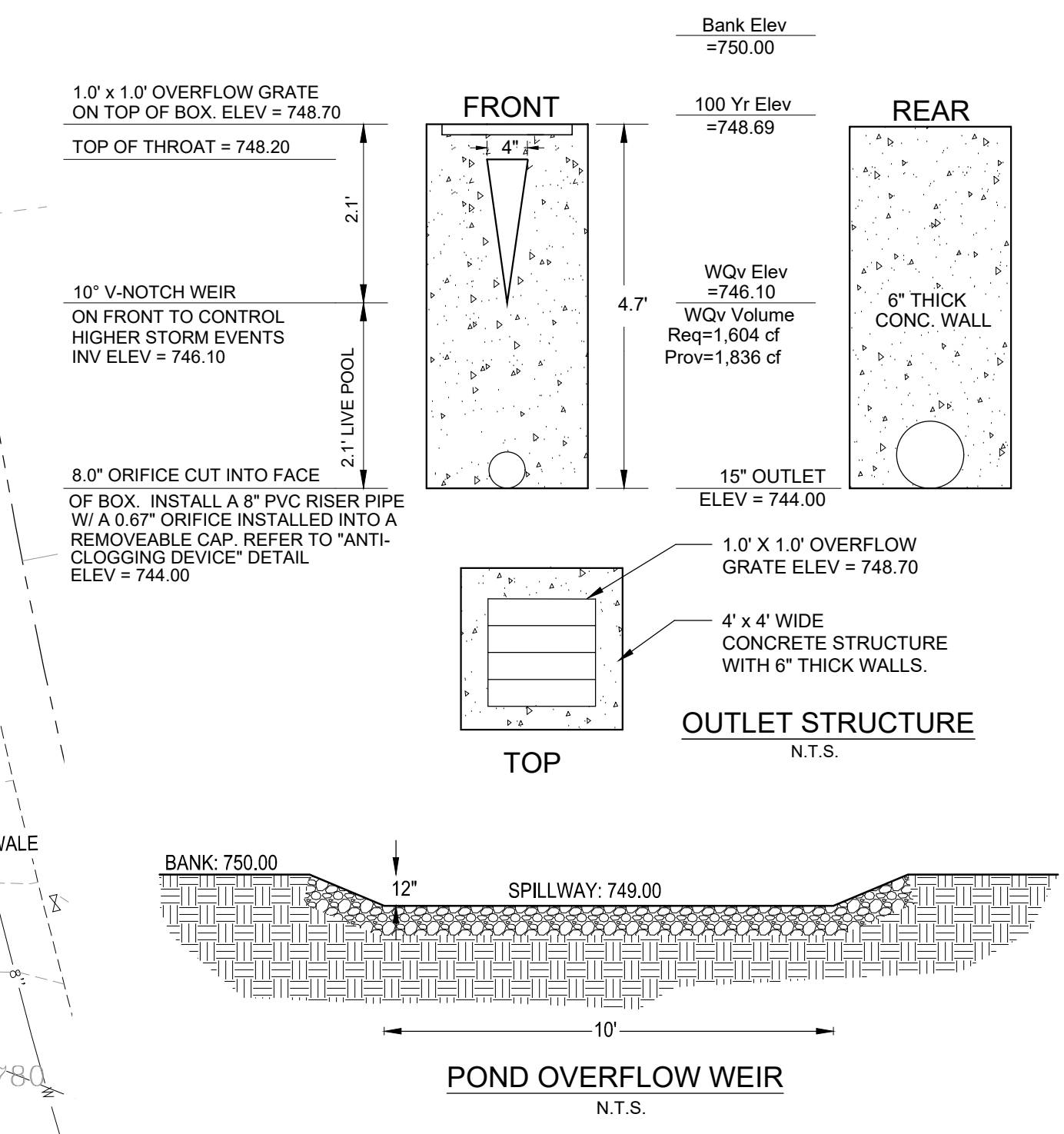
Structure Label	Structure Type	T.C. Elev.	Invert In	Invert Out
EX	Ex. Single Inlet	735.42	732.17	732.07
D1	Single Curb Inlet	737.82	732.84	732.74
D2	Storm Manhole	740.00	736.50	733.00
D3	Outlet Structure	748.70	-----	744.00
D4	Headwall	748.55	746.05	-----
D5	Water Quality Vault	750.50	746.17	746.17
D6	Double Grate Inlet	750.20	-----	746.70
D7	12" Trench Drain	750.25	-----	-----

T.C. ELEVATION DETAIL



Pipe Schedule

Downstream Structure	Invert	Upstream Structure	Invert	Pipe Size	Length (ft)	Slope (%)
EX	732.17	D1	732.74	18" RCP	52	1.10
D1	732.84	D2	733.00	18" RCP	16	1.00
D2	736.50	D3	744.00	15" RCP	42	17.9
D4	746.05	D5	746.17	18" HDPE	12	1.00
D5	746.17	D6	746.70	18" HDPE	22	2.41

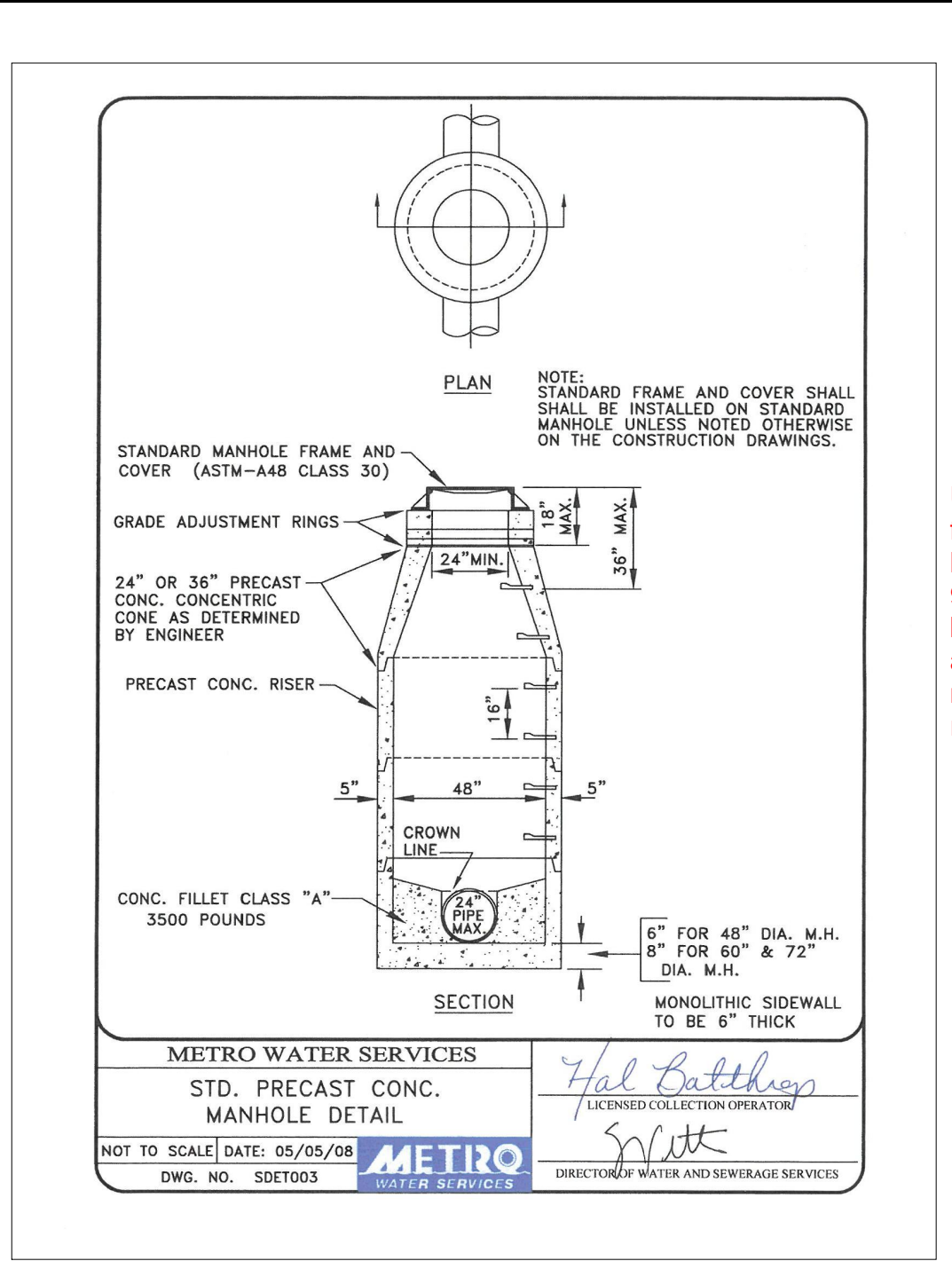
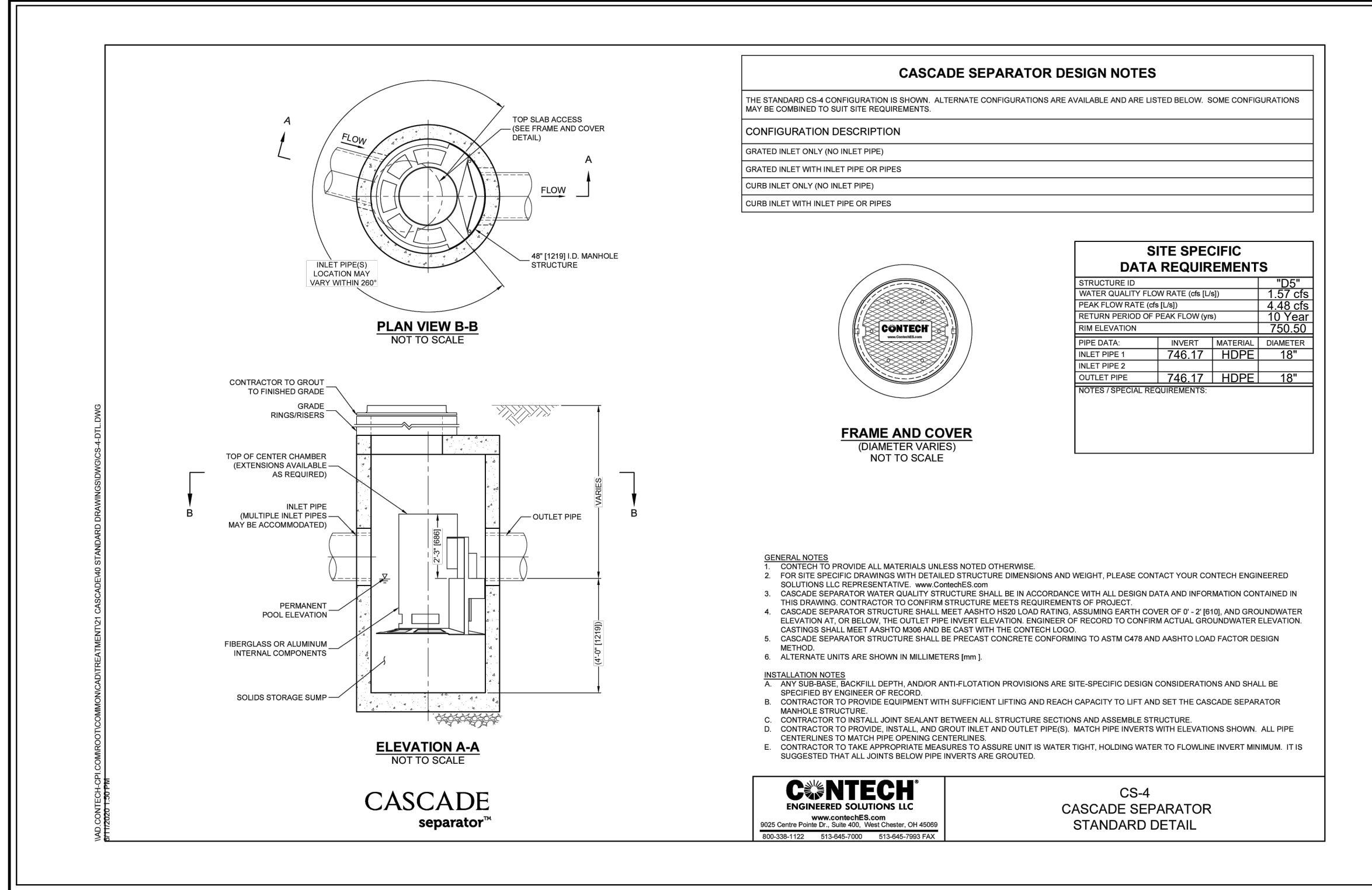
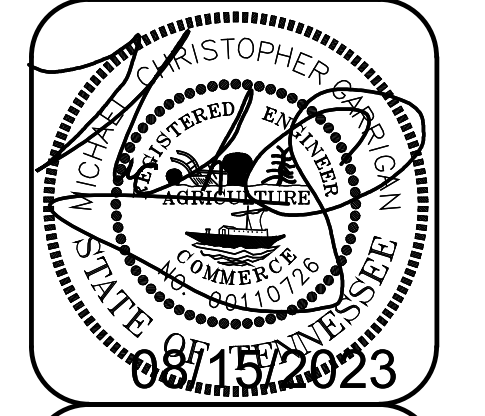


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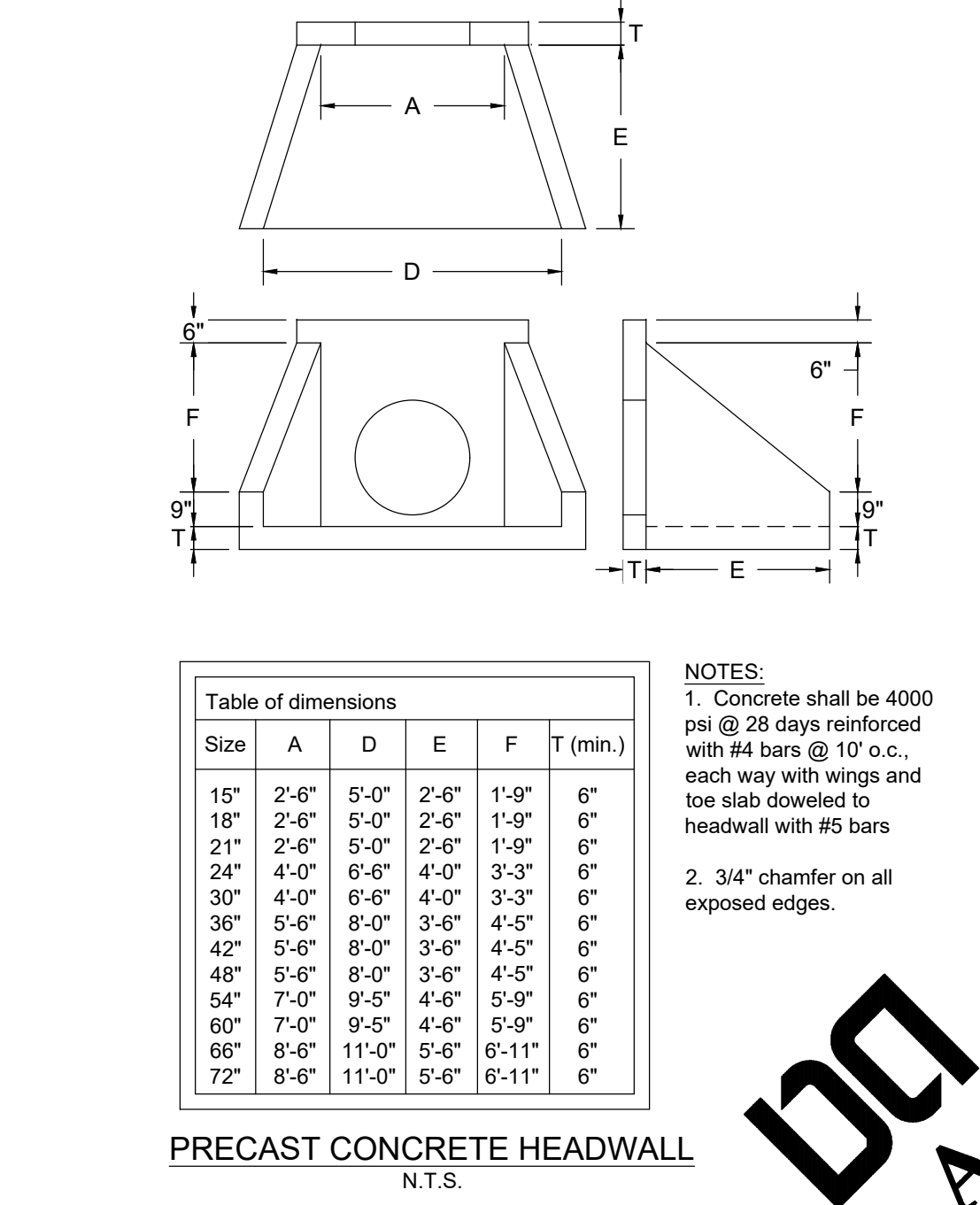
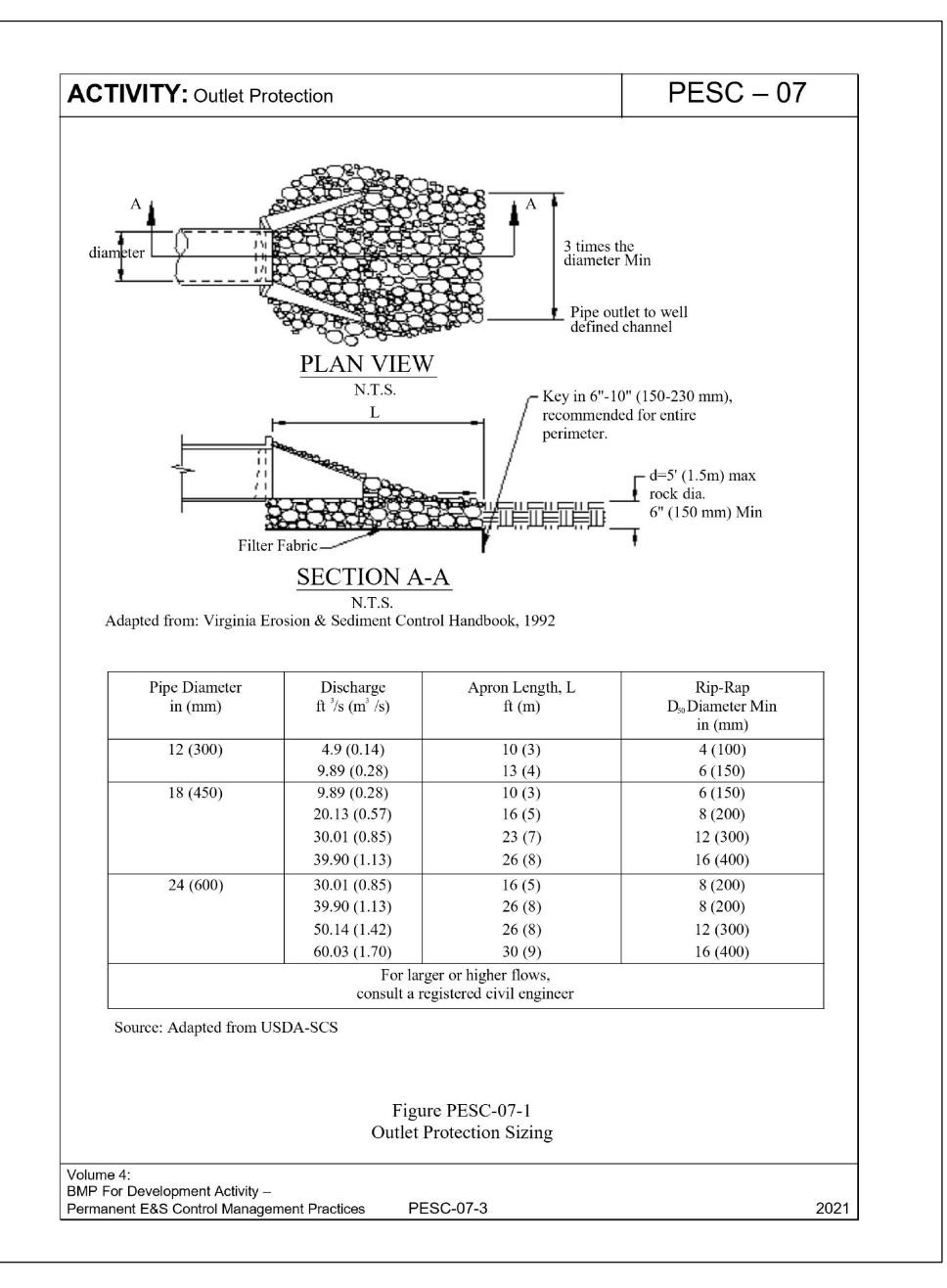
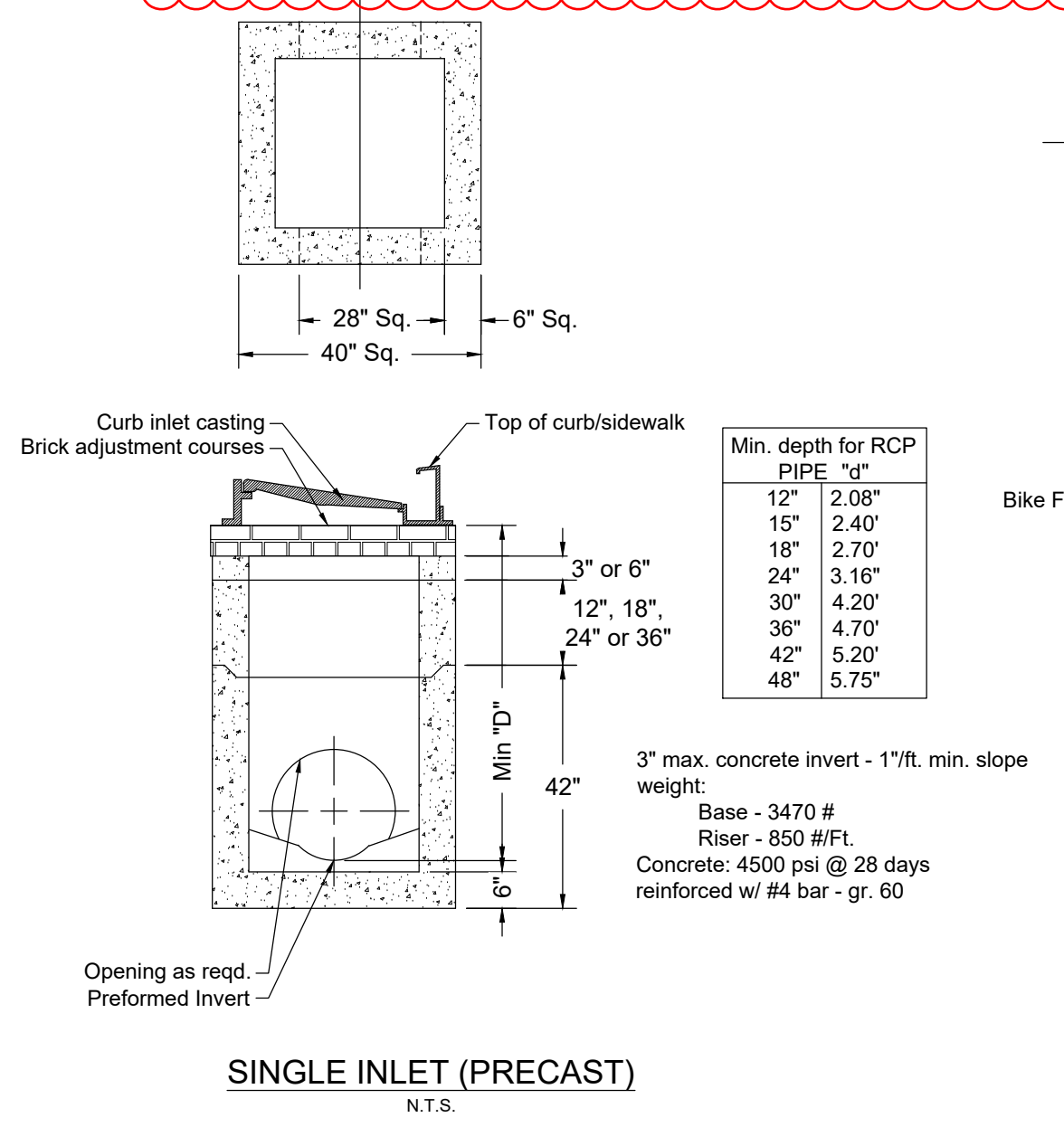
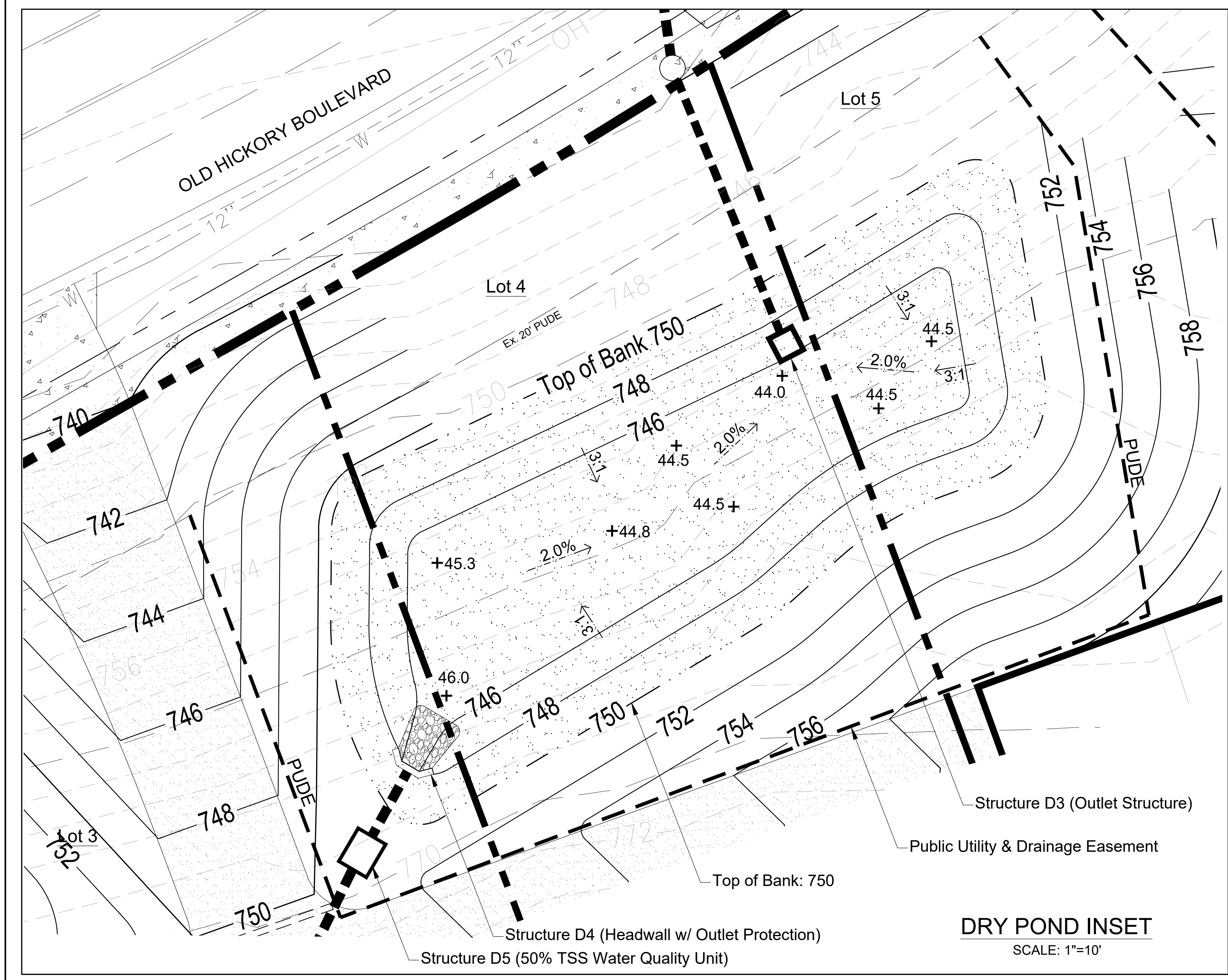
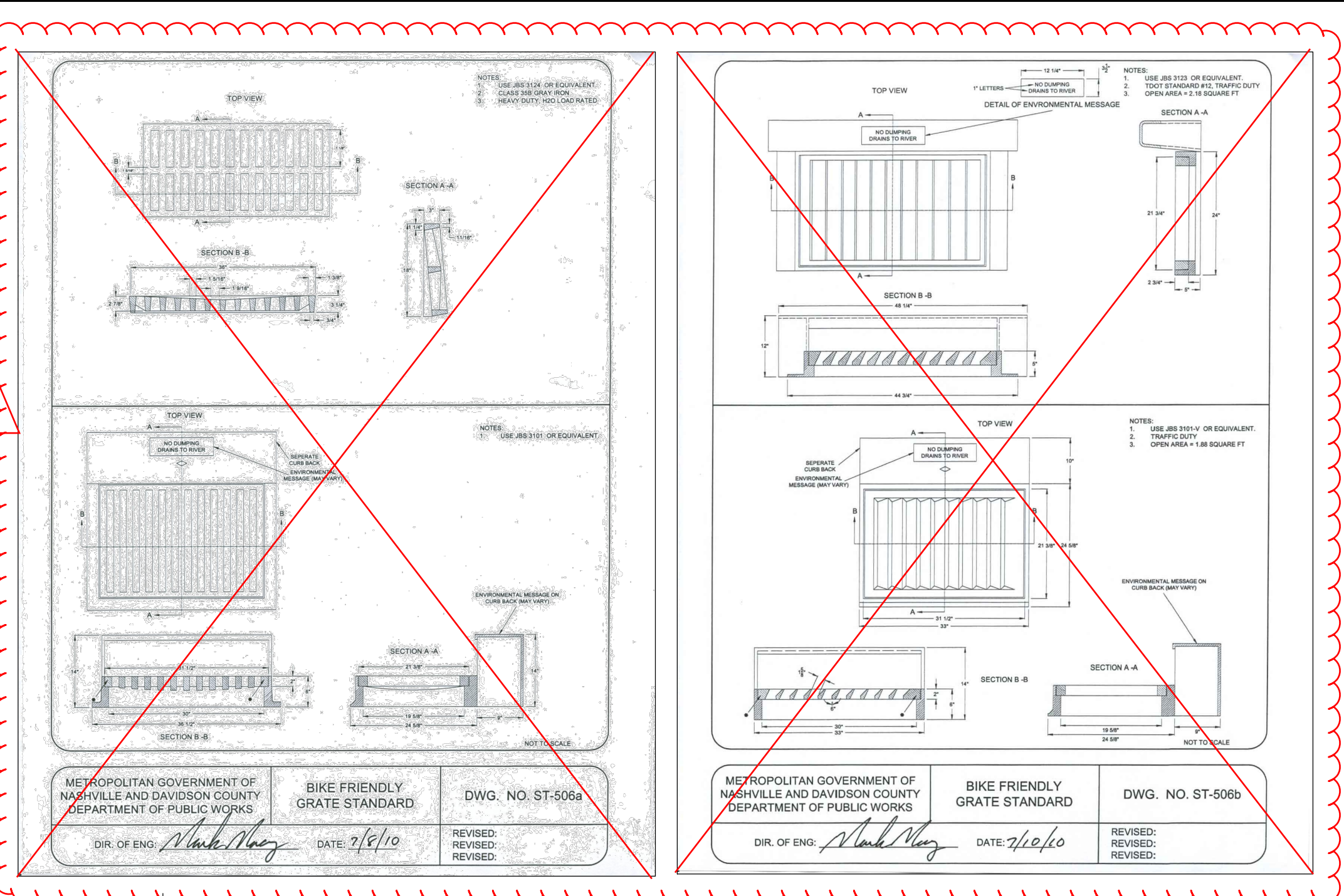
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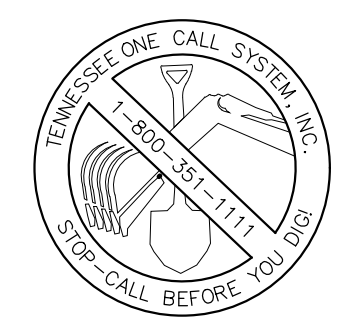
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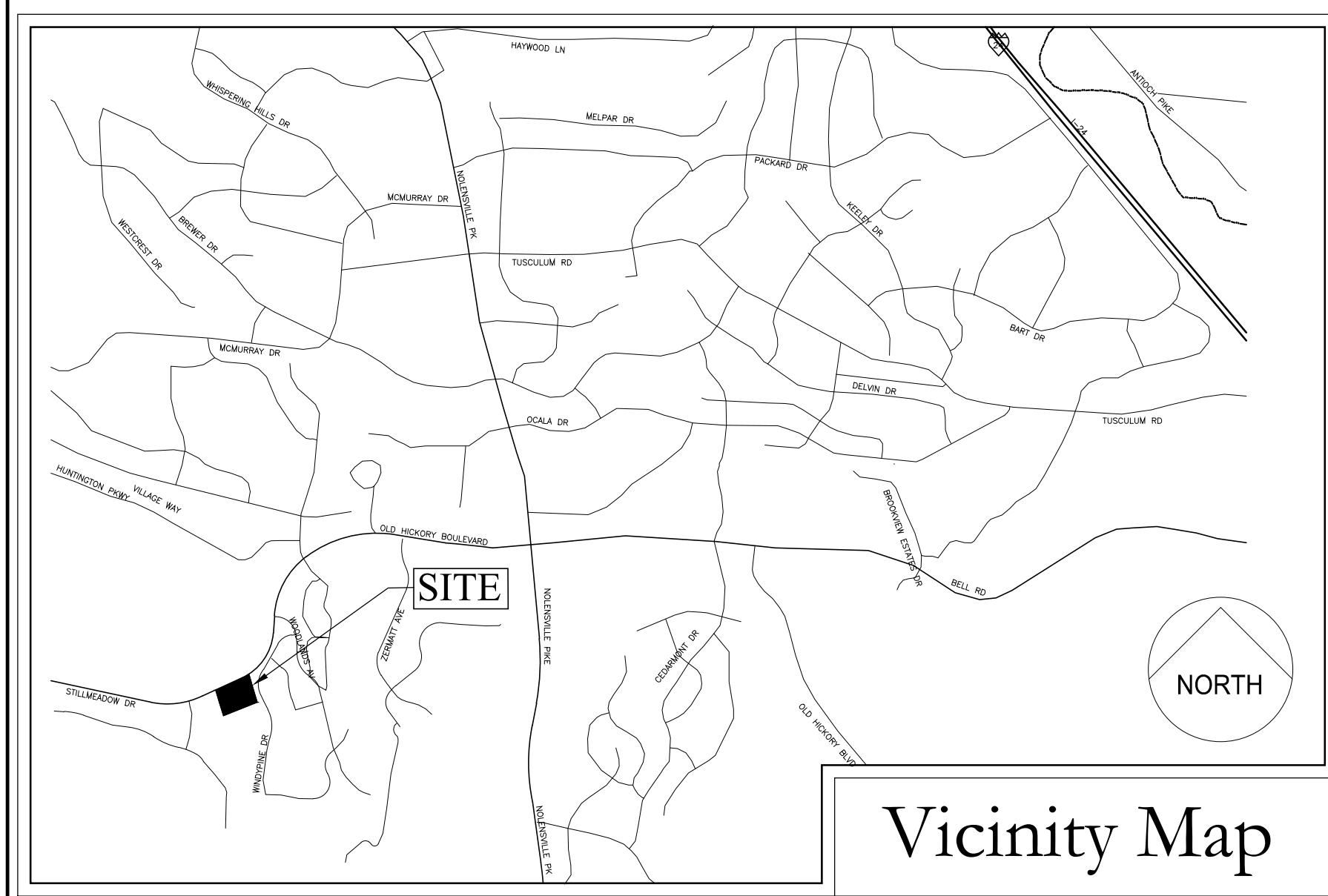


Use JBS 3300V bike friendly grate /w 6" hood. DO NOT use 9" hood. With road being state route 254, a TDOT equivalent may be used if required by the state.

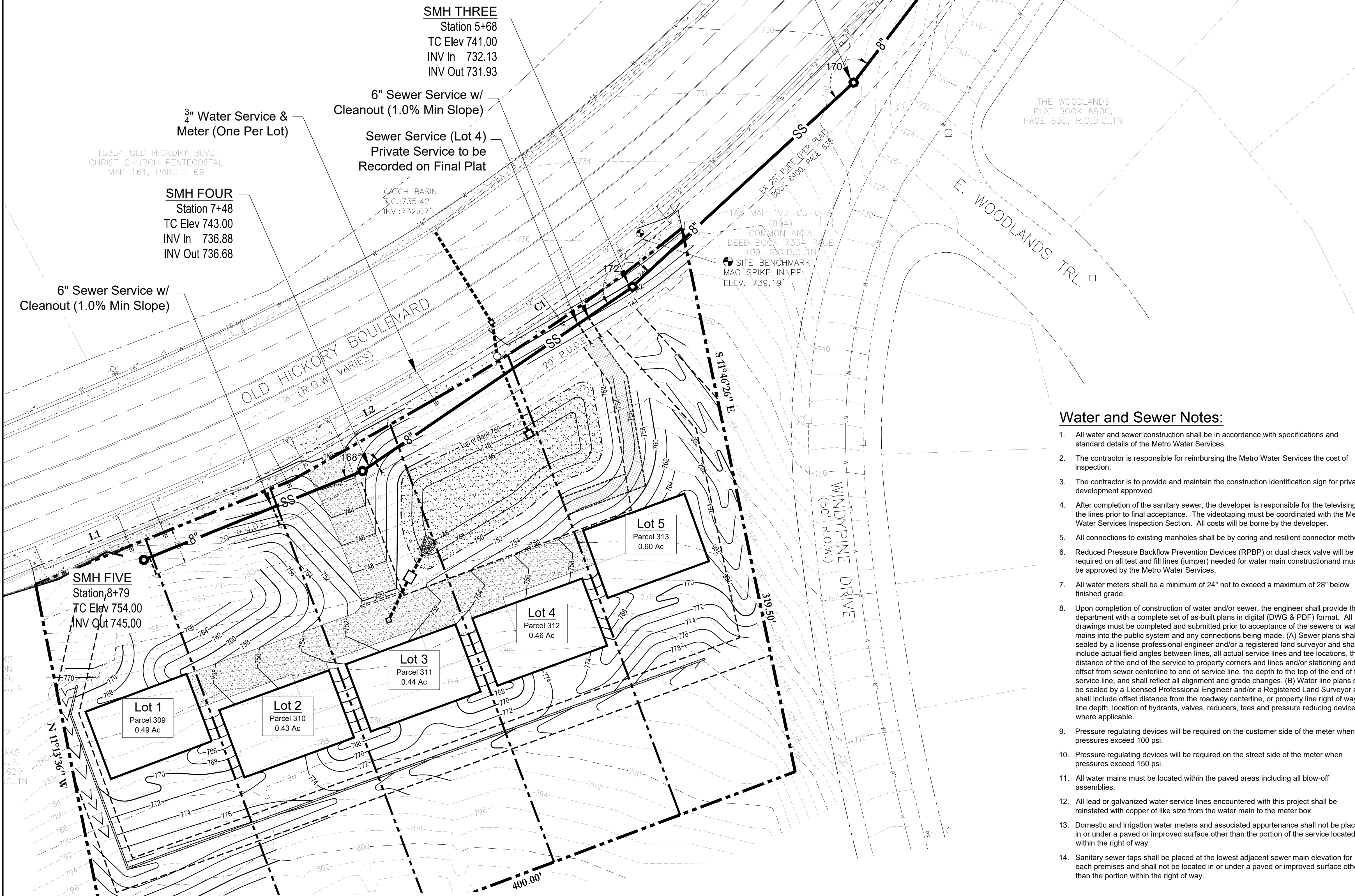


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Vicinity Map



SMH ONE
Station 1+61
TC Elev 706.00
INV In 697.26
INV Out 697.06

SMH TWO
Station 4+00
TC Elev 728.48
INV In 717.70
INV Out 717.50

SMH THREE
Station 5+68
TC Elev 741.00
INV In 732.13
INV Out 731.93

SMH FOUR
Station 7+48
TC Elev 743.00
INV In 736.88
INV Out 736.68

SMH FIVE
Station 8+79
TC Elev 754.00
INV Out 745.00

EXISTING SMH
Station 0+00
TC Elev 691.99
INV In 684.86
INV Out 684.66

6" Sewer Service w/
Cleanout (1.0% Min Slope)

Sewer Service (Lot 4)
Private Service to be
Recorded on Final Plat

3/4" Water Service &
Meter (One Per Lot)

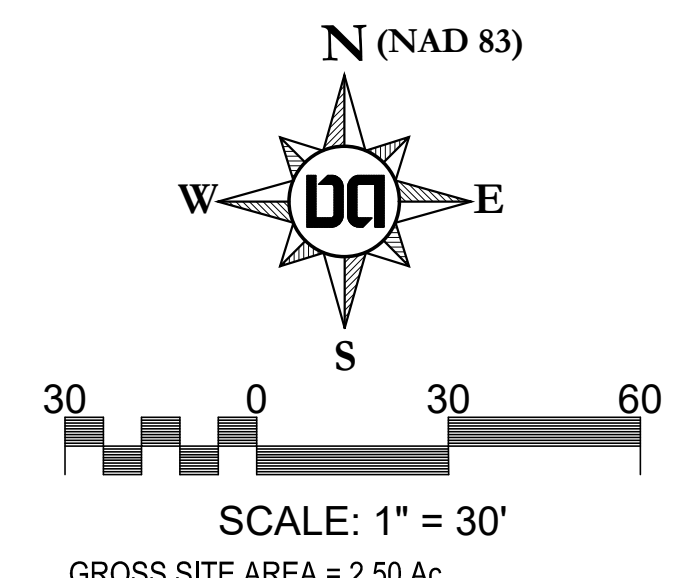
6" Sewer Service w/
Cleanout (1.0% Min Slope)

Water and Sewer Notes:

- All water and sewer construction shall be in accordance with specifications and standard details of the Metro Water Services.
- The contractor is responsible for reimbursing the Metro Water Services the cost of inspection.
- The contractor is to provide and maintain the construction identification sign for private development approved.
- After completion of the sanitary sewer, the developer is responsible for the televising of the lines prior to final acceptance. The videotaping must be coordinated with the Metro Water Services Inspection Section. All costs will be borne by the developer.
- All connections to existing manholes shall be by coring and resilient connector method.
- Reduced Pressure Backflow Prevention Devices (RPBP) or dual check valve will be required on all test and fill lines (jumper) needed for water main construction and must be approved by the Metro Water Services.
- All water meters shall be a minimum of 24" not to exceed a maximum of 28" below finished grade.
- Upon completion of construction of water and/or sewer, the engineer shall provide the department with a complete set of as-built plans in digital (DWG & PDF) format. All drawings must be completed and submitted prior to acceptance of the sewers or water mains into the public system and any connections being made. (A) Sewer plans shall be sealed by a license professional engineer and/or a registered land surveyor and shall include actual field angles between lines, all actual service lines and tee locations, the distance of the end of the service to property corners and lines and/or stationing and offset from sewer centerline to end of service line, the depth to the top of the end of the service line, and shall reflect all alignment and grade changes. (B) Water line plans shall be sealed by a Licensed Professional Engineer and/or a Registered Land Surveyor and shall include offset distance from the roadway centerline, or property line right of way, line depth, location of hydrants, valves, reducers, tees and pressure reducing devices where applicable.
- Pressure regulating devices will be required on the customer side of the meter when pressures exceed 100 psi.
- Pressure regulating devices will be required on the street side of the meter when pressures exceed 150 psi.
- All water mains must be located within the paved areas including all blow-off assemblies.
- All lead or galvanized water service lines encountered with this project shall be reinstated with copper of like size from the water main to the meter box.
- Domestic and irrigation water meters and associated appurtenance shall not be placed in or under a paved or improved surface other than the portion of the service located within the right of way.
- Sanitary sewer taps shall be placed at the lowest adjacent sewer main elevation for each premises and shall not be located in or under a paved or improved surface other than the portion within the right of way.

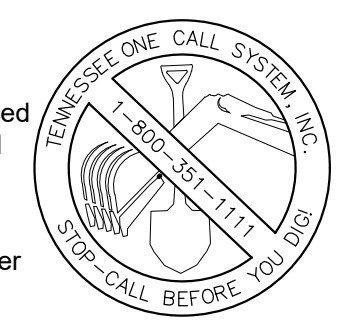
MWS Standard Private Utility Plan Notes

- All water and sewer construction shall be in accordance with specifications and standard details of the Metro Water Services.
- All connections to existing manholes shall be by coring and resilient connector method.
- Vertical Double Check Valve Assemblies, that are located in interior rooms, can only be used for fire services.
- All water meters shall be a minimum of 24" not to exceed a maximum of 28" below finished grade.
- Irrigation line shall be copper from the meter to the backflow preventer.
- The minimum fees outlined in the capacity letter must be paid before commercial construction plans can be reviewed.
- All sewer services shall be minimum 6 inches in diameter, from connection at the main until the fires clean out assembly.
- Backflow device to remain accessible at all times.
- Plan size shall be 24" x 36" and shall show contours around meter boxes.
- Any unused existing water meters must be cut and capped at the public main.
- All lead or galvanized water service lines encountered with the project shall be reinstated with copper of like size from the water main to the meter box.
- Domestic and irrigation water meters and associated appurtenances shall be placed in or under a paved or improved surface other than the portion of the service located within the right of way.
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PERMITS:

Case No.	2022S-151-002
SWGR	2023000749
MWS	23-SL-0008 (2023001753)



Dale & Associates
Civil Engineering
Land Planning & Zoning
Surveying

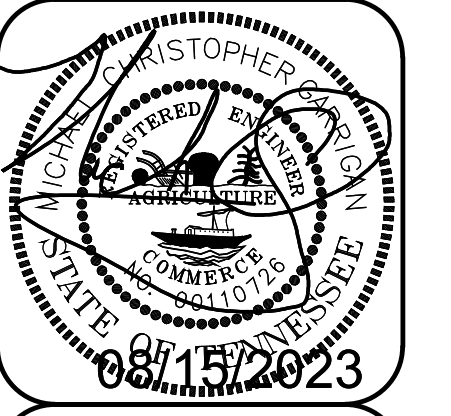
516 Hickory Place
Nashville, TN 37204
(615) 251-5166

D&A Project #20162
0 Old Hickory Boulevard
C5.0

Drawing Date:
December 2022

Revisions

Development Plans
0 Old Hickory Boulevard
Map 161 Parcel 90.07
Nashville, Davidson County, Tennessee



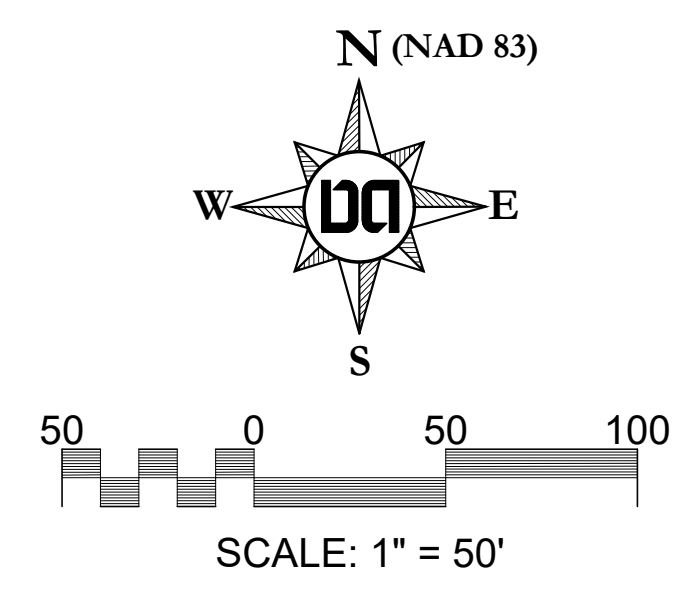
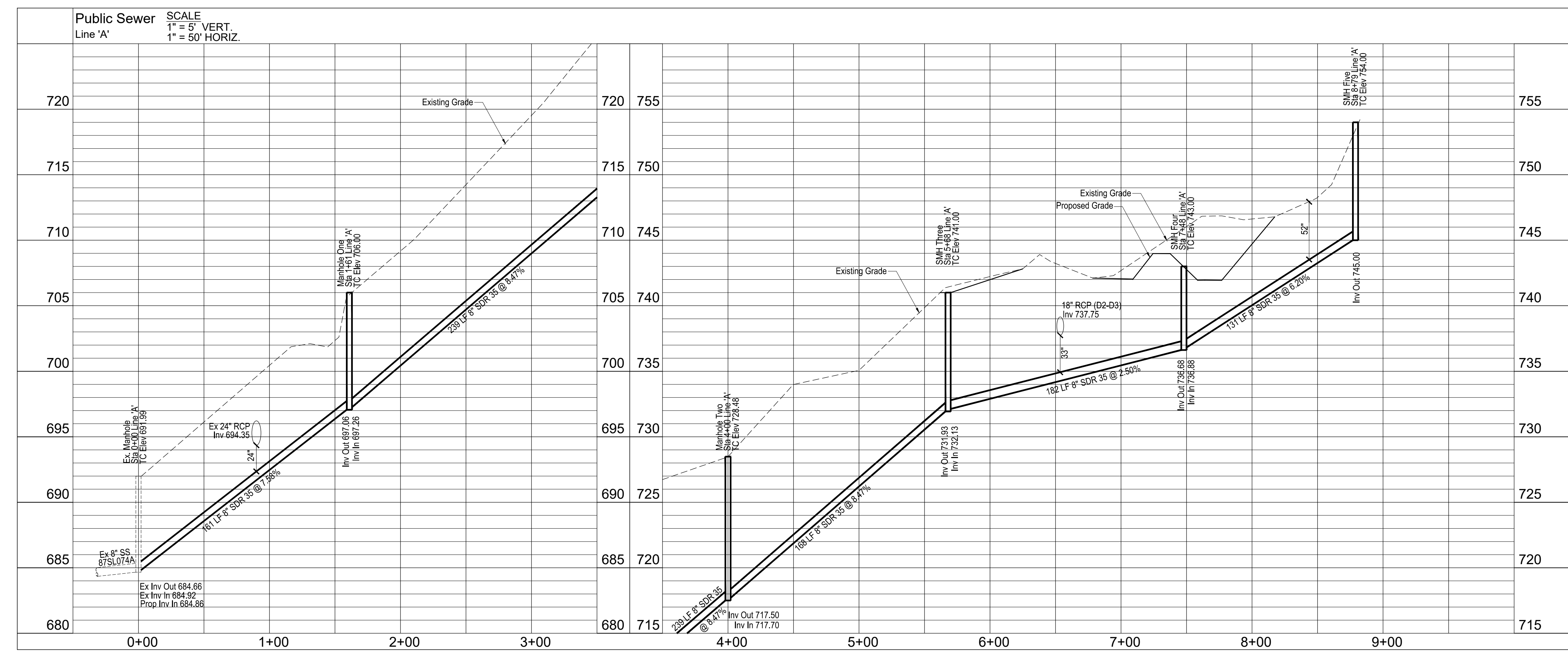
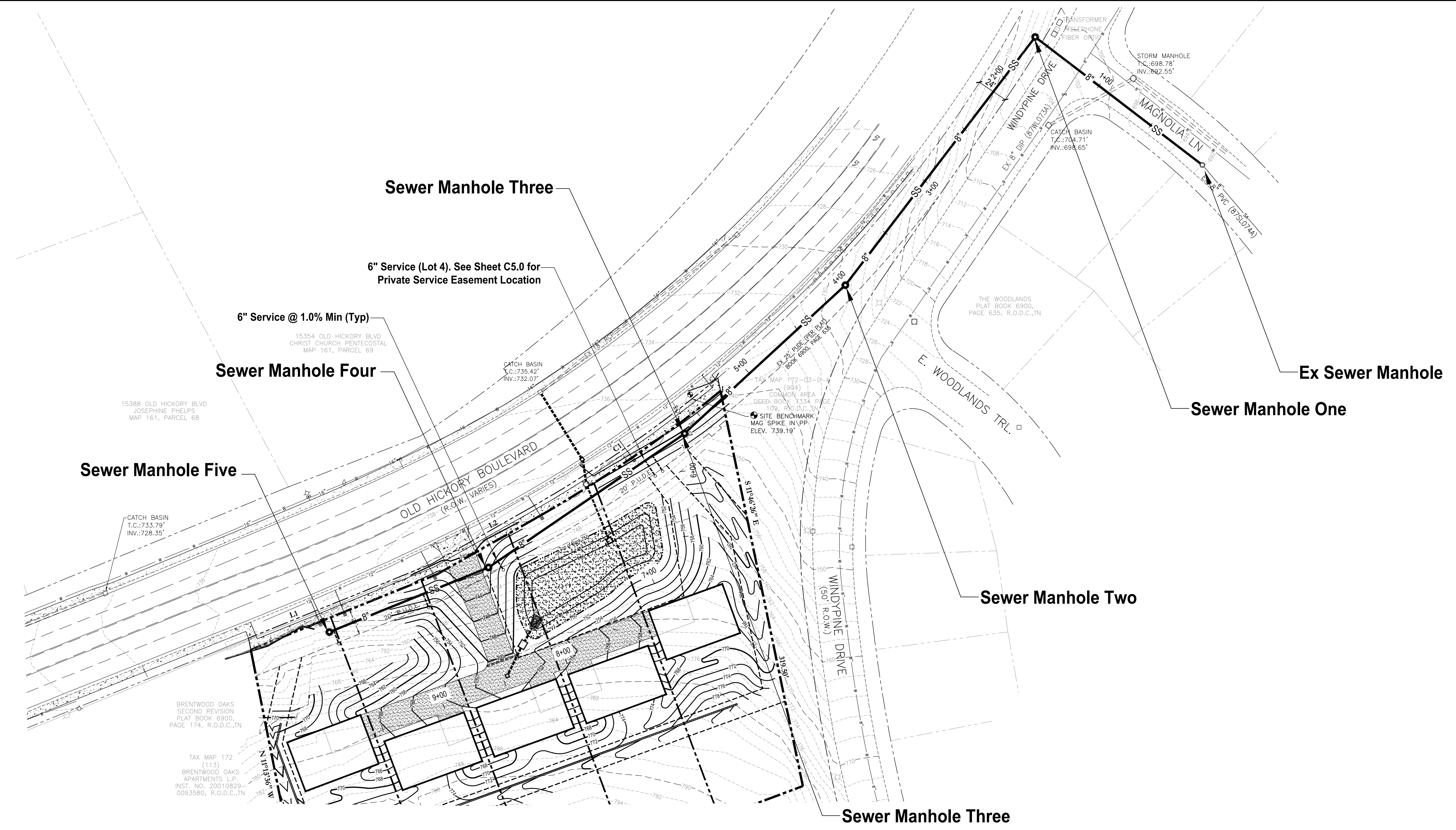
**Offsite Public
Sewer
Extention**

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PERMITS:	
Case No.	2022S-151-002
SWGR	2023000749
MWS	23-SL-0008 (2023001753)

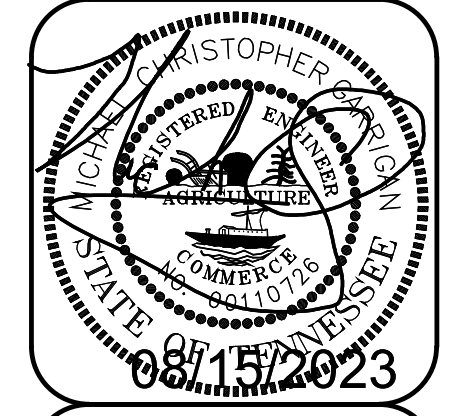
Dale DA Associates
Civil Engineering
Land Planning & Zoning
Surveying

516 Heather Place
Nashville, TN 37204
(615) 297-5166

D&A Project #20162
0 Old Hickory Boulevard

C5.1

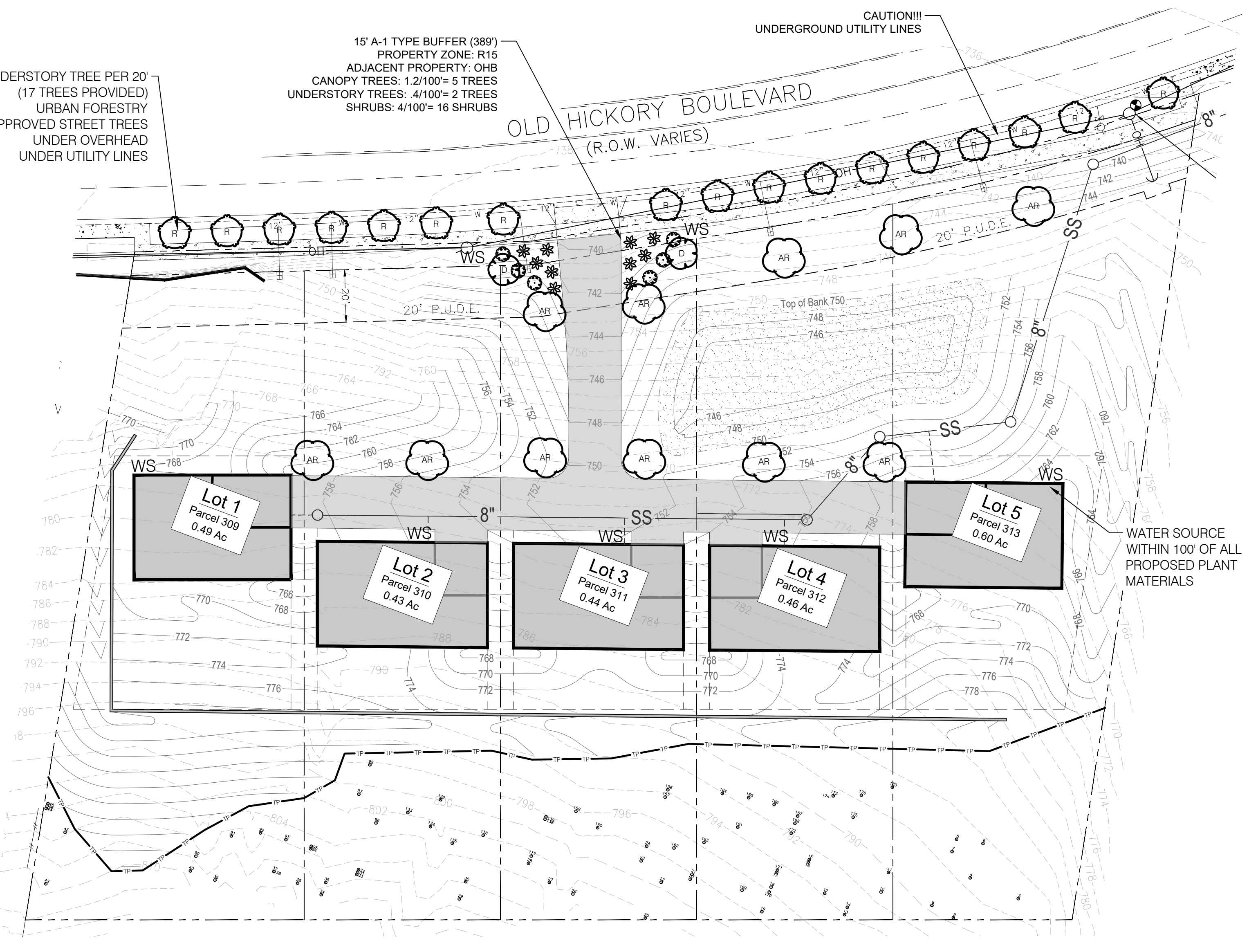
Development Plans
0 Old Hickory Boulevard
 Map 161 Parcel 90.07
 Nashville, Davidson County, Tennessee



**Public Sewer
Plan & Profile**



Job # - 28115
BY: cb



TREE REMOVAL PLAN

NUMBER	SIZE	TYPE	REMOVE	41	8	ash	REMOVE	81	15	red oak	REMOVE	121	6	cedar	REMOVE	161	18	ash	5.4
0	6	Hackberry	REMOVE																
1	6	ash	REMOVE	41	8	ash	REMOVE	81	15	red oak	REMOVE	121	6	cedar	REMOVE	161	18	ash	5.4
2	6	ash	REMOVE	42	14	ash	REMOVE	82	7	cedar	REMOVE	122	7	cedar	REMOVE	162	6	cedar	1.8
3	9	cedar	REMOVE	43	7	elm	REMOVE	83	11	ash	REMOVE	123	6	cedar	REMOVE	163	8	ash	2.4
4	15	ash	REMOVE	44	11	ash	REMOVE	84	13	red oak	REMOVE	124	11	ash	REMOVE	164	9	cedar	2.7
5	9	cedar	REMOVE	45	11	ash	REMOVE	85	19	ash	REMOVE	125	7	cedar	REMOVE	165	8	sugar maple	2.4
6	8	cedar	REMOVE	46	6	cedar	REMOVE	86	11	ash	REMOVE	126	14	ash	REMOVE	166	8	cedar	2.4
7	7	cedar	REMOVE	47	16	ash	REMOVE	87	6	black locust	REMOVE	127	14	ash	REMOVE	167	21	ash	6.3
8	16	ash	REMOVE	48	9	ash	REMOVE	88	8	cedar	REMOVE	128	7	cedar	REMOVE	168	6	ash	1.8
9	6	cedar	REMOVE	49	7	cedar	REMOVE	89	6	cedar	REMOVE	129	20	ash	REMOVE	169	14	ash	4.2
10	10	cedar	REMOVE	50	12	cedar	REMOVE	90	9	ash	REMOVE	130	19	ash	REMOVE	170	7	ash	2.1
11	7	redbud	REMOVE	51	9	cedar	REMOVE	91	8	elm	REMOVE	131	7	cedar	REMOVE	171	6	ash	1.8
12	14	ash	REMOVE	52	11	elm	REMOVE	92	12	ash	REMOVE	132	7	cedar	REMOVE	172	7	swamp white oak	2.1
13	12	ash	REMOVE	53	8	red oak	REMOVE	93	7	cedar	REMOVE	133	14	ash	REMOVE	173	6	cedar	1.8
14	7	cedar	REMOVE	54	17	cedar	REMOVE	94	11	ash	REMOVE	134	8	cedar	REMOVE	174	9	cedar	2.7
15	13	ash	REMOVE	55	9	swamp white oak	REMOVE	95	11	ash	REMOVE	135	7	ash	REMOVE	175	13	cedar	3.9
16	16	ash	REMOVE	56	6	elm	REMOVE	96	6	cedar	REMOVE	136	7	elm	REMOVE	176	11	ash	3.3
17	7	cedar	REMOVE	57	10	swamp white oak	REMOVE	97	7	ash	REMOVE	137	8	cedar	REMOVE	177	8	cedar	REMOVE
18	6	cedar	REMOVE	58	14	elm	REMOVE	98	6	cedar	REMOVE	138	6	cedar	REMOVE	178	19	ash	REMOVE
19	7	cedar	REMOVE	59	17	ash	REMOVE	99	7	black locust	REMOVE	139	12	elm	REMOVE	179	7	redbud	REMOVE
20	8	cedar	REMOVE	60	9	cedar	REMOVE	100	16	ash	REMOVE	140	10	ash	REMOVE	180	9	redbud	REMOVE
21	12	ash	REMOVE	61	6	walnut	REMOVE	101	15	ash	REMOVE	141	8	cedar	REMOVE	181	6	redbud	REMOVE
22	16	ash	REMOVE	62	17	red oak	REMOVE	102	6	cedar	REMOVE	142	7	cedar	REMOVE	182	6	redbud	REMOVE
23	12	ash	REMOVE	63	17	red oak	REMOVE	103	6	elm	REMOVE	143	6	cedar	REMOVE	183	10	ash	3
24	6	cedar	REMOVE	64	6	black locust	REMOVE	104	11	elm	REMOVE	144	12	cedar	REMOVE	184	6	black locust	REMOVE
25	11	ash	REMOVE	65	7	Hackberry	REMOVE	105	11	ash	REMOVE	145	22	ash	REMOVE	185	7	ash	REMOVE
26	15	ash	REMOVE	66	6	Hackberry	REMOVE	106	14	ash	REMOVE	146	8	elm	REMOVE				
27	12	cedar	REMOVE	67	6	ash	REMOVE	107	10	ash	REMOVE	147	6	cedar	REMOVE				
28	17	ash	REMOVE	68	7	red oak	REMOVE	108	8	cedar	REMOVE	148	7	cedar	REMOVE				
29	6	cedar	REMOVE	69	6	ash	REMOVE	109	7	cedar	REMOVE	149	8	cedar	REMOVE				
30	9	elm	REMOVE	70	6	ash	REMOVE	110	6	cedar	REMOVE	150	7	cedar	REMOVE				
31	9	ash	REMOVE	71	6	black locust	REMOVE	111	7	cedar	REMOVE	151	16	elm	REMOVE				
32	10	ash	REMOVE	72	6	black locust	REMOVE	112	12	elm	REMOVE	152	9	cedar	REMOVE				
33	10	ash	REMOVE	73	6	Hackberry	REMOVE	113	7	ash	REMOVE	153	7	black locust	REMOVE				
34	11	ash	REMOVE	74	6	redbud	REMOVE	114	12	ash	REMOVE	154	6	cedar	REMOVE				
35	8	ash	REMOVE	75	10	cedar	REMOVE	115	6	cedar	REMOVE	155	8	cedar	REMOVE				
36	15	ash	REMOVE	76	6	cedar	REMOVE	116	17	ash	REMOVE	156	7	elm	REMOVE				
37	12	ash	REMOVE	77	10	elm	REMOVE	117	8	cedar	REMOVE	157	6	cedar	REMOVE				
38	8	red oak	REMOVE	78	8	cedar	REMOVE	118	10	cedar	REMOVE	158	18	ash	REMOVE				
39	12	ash	REMOVE	79	10	cedar	REMOVE	119	10	ash	REMOVE	159	7	cedar	REMOVE				
40	10	cedar	REMOVE	80	14	red oak	REMOVE	120	6	cedar	REMOVE	160	14	ash	REMOVE				

LANDSCAPE PLAN

TREE DENSITY UNIT (TDU) WORKSHEET (Ordinance 94-1104) REV Sept-2019

Date: 10/1/2019
Map: 1610000907 LOT 1- PARCEL 309
Application Number: 1610000907
Project Name: 0 OLD HICKORY BLVD
Address: 0 OLD HICKORY BLVD

Site Acreage: 0.49
Minus Dedicated City ROW & PW Drainage EASW: 0
Minus Building Coverage Area: 0.05
Equals Adjusted Acreage: 0.44
Multiply by Required Tree Density Unit per acre: 22
Required TDU for Project: 9.68

REPLACEMENT TREE(S)- LARGE & MEDIUM CANOPY TREES			
DBH	# of Trees	Value	TDU
2"	0	x.5	0
3"	0	x.6	0
Total	0		0

Total TDU for Protected Trees: 42.6
Total TDU for Replacement: 9.68
Total Density Units Provided: 43.35

Interior Green Space: NA
IRRIGATION TO BE PROVIDED BY HOSE BIBS
Tree Cut Permit Required

TREE DENSITY UNIT (TDU) WORKSHEET (Ordinance 94-1104) REV Sept-2019

Date: 10/1/2019
Map: 1610000907 LOT 2- PARCEL 310
Application Number: 1610000907
Project Name: 0 OLD HICKORY BLVD
Address: 0 OLD HICKORY BLVD

Site Acreage: 0.43
Minus Dedicated City ROW & PW Drainage EASW: 0
Minus Building Coverage Area: 0.05
Equals Adjusted Acreage: 0.38
Multiply by Required Tree Density Unit per acre: 22
Required TDU for Project: 8.36

REPLACEMENT TREE(S)- LARGE & MEDIUM CANOPY TREES			
DBH	# of Trees	Value	TDU
2"	2	x.5	1
3"	0	x.6	0
Total	2		1

Total TDU for Protected Trees: 44.1
Total TDU for Replacement: 1.75
Total Density Units Provided: 45.85

Interior Green Space: NA
IRRIGATION TO BE PROVIDED BY HOSE BIBS
Tree Cut Permit Required

TREE DENSITY UNIT (TDU) WORKSHEET (Ordinance 94-1104) REV Sept-2019

Date: 10/1/2019
Map: 1610000907 LOT 3- PARCEL 311
Application Number: 1610000907
Project Name: 0 OLD HICKORY BLVD
Address: 0 OLD HICKORY BLVD

Site Acreage: 0.44
Minus Dedicated City ROW & PW Drainage EASW: 0
Minus Building Coverage Area: 0.05
Equals Adjusted Acreage: 0.39
Multiply by Required Tree Density Unit per acre: 22
Required TDU for Project: 8.58

REPLACEMENT TREE(S)- LARGE & MEDIUM CANOPY TREES			
DBH	# of Trees	Value	TDU
2"	4	x.5	2
3"	0	x.6	0
Total	4		2

Total TDU for Protected Trees: 52.5
Total TDU for Replacement: 3
Total Density Units Provided: 55.5

Interior Green Space: NA
IRRIGATION TO BE PROVIDED BY HOSE BIBS
Tree Cut Permit Required

TREE DENSITY UNIT (TDU) WORKSHEET (Ordinance 94-1104) REV Sept-2019

Date: 10/1/2019
Map: 1610000907 LOT 4- PARCEL 312
Application Number: 1610000907
Project Name: 0 OLD HICKORY BLVD
Address: 0 OLD HICKORY BLVD

Site Acreage: 0.46
Minus Dedicated City ROW & PW Drainage EASW: 0
Minus Building Coverage Area: 0.05
Equals Adjusted Acreage: 0.41
Multiply by Required Tree Density Unit per acre: 22
Required TDU for Project: 9.02

REPLACEMENT TREE(S)- LARGE & MEDIUM CANOPY TREES			
DBH	# of Trees	Value	TDU
2"	3	x.5	1.5
3"	0	x.6	0
Total	3		1.5

Total TDU for Protected Trees: 78
Total TDU for Replacement: 2.5
Total Density Units Provided: 80.5

Interior Green Space: NA
IRRIGATION TO BE PROVIDED BY HOSE BIBS
Tree Cut Permit Required

TREE DENSITY UNIT (TDU) WORKSHEET (Ordinance 94-1104) REV Sept-2019

Date: 10/1/2019
Map: 1610000907 LOT 5- PARCEL 313
Application Number: 1610000907
Project Name: 0 OLD HICKORY BLVD
Address: 0 OLD HICKORY BLVD

Site Acreage: 0.6
Minus Dedicated City ROW & PW Drainage EASW: 0
Minus Building Coverage Area: 0.05
Equals Adjusted Acreage: 0.55
Multiply by Required Tree Density Unit per acre: 22
Required TDU for Project: 12.1

REPLACEMENT TREE(S)- LARGE & MEDIUM CANOPY TREES			
DBH	# of Trees	Value	TDU
2"	2	x.5	1
3"	5	x.3	0
Total	7		1

Total TDU for Protected Trees: 21
Total TDU for Replacement: 1.75
Total Density Units Provided: 22.75

Interior Green Space: NA
IRRIGATION TO BE PROVIDED BY HOSE BIBS
Tree Cut Permit Required

SEE SHEET L1.1 FOR NOTES, DETAILS, AND PLANT SCHEDULES

NORTH SCALE: 1" = 30'

PLANT STANDARDS
The standards set forth in "American Standard for Nursery Stock" represent general guideline specifications only and will constitute minimum quality requirements for plant material. All plants must meet minimum size noted at the materials schedule. And meet the characteristics stated on this drawing. All material installed on the site MUST meet or exceed these specifications. Any trees or shrubs not meeting these standards can be rejected at time of inspection.

- TREE SPECIFICATIONS: ALL TREES SHALL HAVE THE FOLLOWING CHARACTERISTICS:**
- Deciduous trees shall have one dominant single straight trunk with the tip of the leader on the main trunk left intact and the terminal bud on the central leader is at the highest point on the tree.
 - Trees with forked trunks are acceptable if all the following conditions are met:
 - The fork occurs in the upper 1/3 of the tree.
 - One fork is less than 2/3 the diameter of the dominant fork.
 - The top 1/3 of the smaller fork is removed at the time of planting.
 - No branch is greater than 2/3 the diameter of the trunk directly above the branch.
 - The trunk and/or major branches shall not touch.
 - Several branches are larger in diameter and obviously more dominant.
 - Branching habit is more horizontal than vertical, and no branches are oriented nearly vertical to the trunk.
 - Branches are evenly distributed around the trunk with no more than one major branch located directly above another and the crown is full of foliage evenly distributed around the tree.
 - Crown spread shall look proportional to the tree.
 - NO flush cuts or open trunk wounds or other bark injury.
 - Root ball meets all ANSI standards and is appropriately sized.

DEFICIENCIES NOT ACCEPTED:

- Tip dieback on 5% of branches
- Crown thin sparsely foliated
- Included bark
- Major branches touching
- Asymmetrical branching

Landscape shall not obstruct visibility or access to fire protection equipment including, but not limited to, fire hydrants and fire department connections

PLANTING NOTES:

- Refer to all written specifications; adhere to Plans and Specifications for all phases of work.
- Verify all utility locations in the field before work begins. Repair damaged utilities to owners satisfaction at no additional cost.
- Verify all material quantities on the drawing during bidding and pricing. In the event of a discrepancy, the quantities drawn on the plan will take precedence over the material schedule.
- All materials are subject to the approval of the Landscape Architect, City, and Owner.
- Once unloaded from truck, immediately stand all trees up. DO NOT lie the trees down. This will reduce the risk of sunscald.
- Plants shall meet specifications. Root balls shall meet or exceed size standards as set forth by "American Standards for Nursery Stock". Main leaders of all trees shall remain intact.
- Mulch plant pits and planting beds with specified mulch to the depth indicated on drawings.
- Prepare all topsoil used in tree, shrub, and seed mixes in accordance with the specifications. Discard any material which turns brown or deliquesces within 5 days after planting. Replace immediately with approved specified material at no additional cost.
- Maintain all plant material and lawns until project is accepted in full by the City.
- Guarantee all workmanship and materials for a period of 1 calendar year.
- Install all plant material in accordance with all local codes and ordinances. Obtain any required permits necessary to complete the work.
- Provide 6" of topsoil for lawn areas (12" min. over rock), min. 24" of topsoil for shrub zones, and min. 48" deep for tree pits. Refer to specific root ball sizes for the min. diameter tree pit.
- Trees shall be first quality representatives of their species and shall meet all requirements otherwise stipulated. The Landscape Architect reserves the right to reject plant materials in the field, at the growing location, or at the job site at any time during the project.
- Test all tree pits for drainage. Any tree pit that holds water for more than 24 hours shall be installed using filter fabric wrapped perforated drainage tube (sloped to low point) and a washed pea gravel pit well drain

LANDSCAPE NOTES:

- Contractor responsible for locating and protecting all underground utilities prior to digging.
- Contractor responsible for protecting existing trees from damage during construction as shown on plans.
- Contractor to install 6" minimum depth of clean, friable topsoil at all planting beds and lawn areas prior to fine grading. see topsoil specification sheet I-1.3.
- All shrub beds (existing and new) to be mulched with a 3-4 inch minimum layer of mulch.
- Existing grass in proposed planting areas to be killed and removed and area to be hand raked to remove all rocks and debris larger than 1 inch in diameter prior to planting shrubs or laying sod. Landscape contractor to provide fine grading.
- Any existing grass disturbed during construction to be fully removed, re-graded and replaced. All tire marks and indentation to be repaired.
- Soil to be tested to determine fertilizer and lime requirements and distributed prior to laying sod.
- Sod to be delivered fresh (cut less than 24 hours prior to arriving on site), laid immediately, rolled, and watered thoroughly immediately after planting. edge of sod adjacent to mulch beds to be shovel cut. All sod to be delivered in largest rolls available. there shall be no gaps between sod joints.
- Planting mix to be provided as specified in the landscape specifications.
- The landscape contractor shall guarantee all plants installed for one full year from date of acceptance. All plants shall be alive and at a vigorous rate of growth at the end of the guarantee period. The landscape contractor shall not be responsible for acts of god or vandalism.
- Any plant that is determined dead, in an unhealthy or unsightly condition, lost its shape due to dead branches or other symptoms of poor, non-vigorous growth, as determined by the landscape architect, shall be replaced by the landscape contractor at no cost to owner.
- Prior to installation, the landscape contractor shall inspect the subgrade, general site conditions, verify elevations, utility locations, irrigation, approve topsoil provided by general contractor and observe the site conditions under which the work is to be done. Notify general contractor of any unsatisfactory conditions, and work shall not proceed until such conditions have been corrected.
- Water all plant material that are newly planted thoroughly twice in first 24 hours and apply mulch immediately.
- All trees and shrubs shall be coordinated with lighting plan prior to installation.
- All shrubs to be 3' back of curb.
- All areas of disturbance outside of landscape beds shall be repaired with turf.
- Any utility structure, light poles, sign, or other feature may not be added to any required landscape island in such a manner that would displace the required element(s) (trees, shrubs, etc.)

SUBSTITUTION NOTE:

- Requirements shown are per the City Zoning Ordinance. Substitutions are not allowed unless approved by the City and Heibert+Ball Land Design

TO AVOID OVERHEAD LIGHT POLE CONFLICTS:

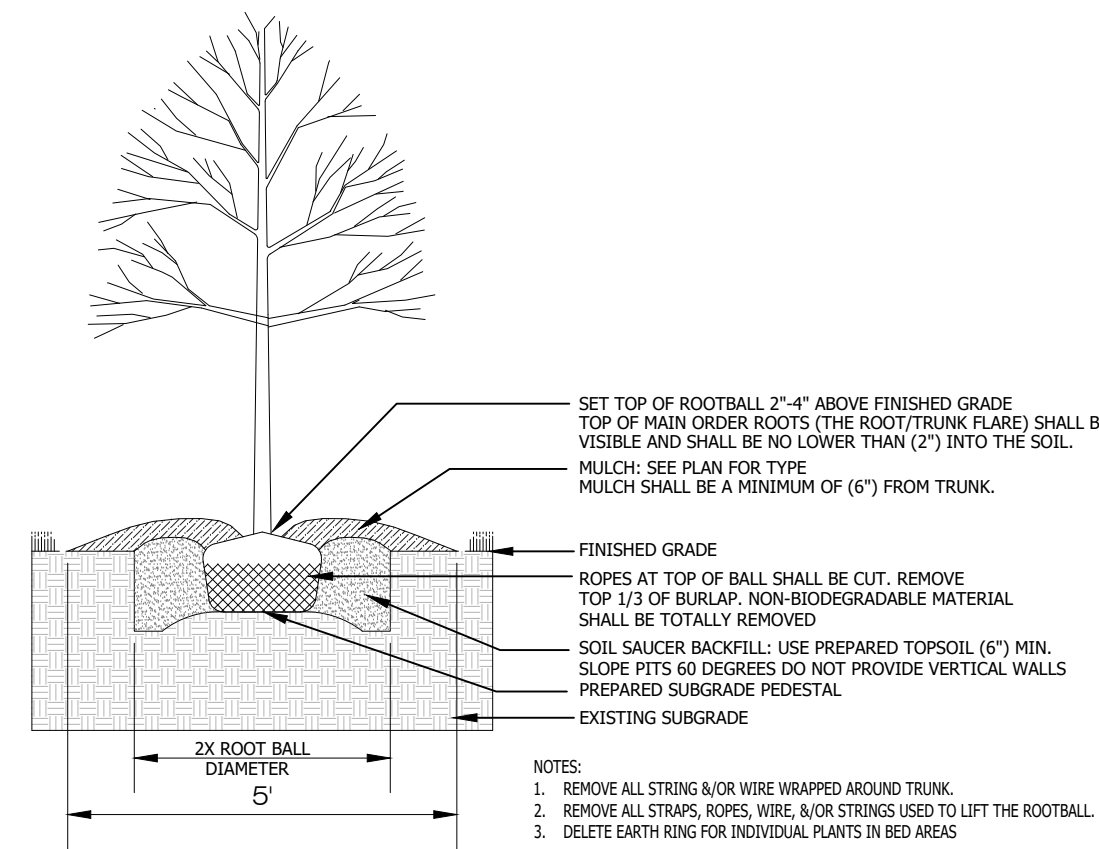
In the event proposed canopy trees are in conflict (within 15') with proposed or existing light pole locations, the landscape contractor shall stop work and contact Heibert+Ball Land Design immediately for coordination and field adjustment

TO AVOID OVERHEAD UTILITY CONFLICTS:

In the event proposed canopy trees are in conflict (within 25') with proposed or existing overhead utility locations, the landscape contractor shall stop work and contact Heibert+Ball Land Design immediately for coordination and field adjustment.

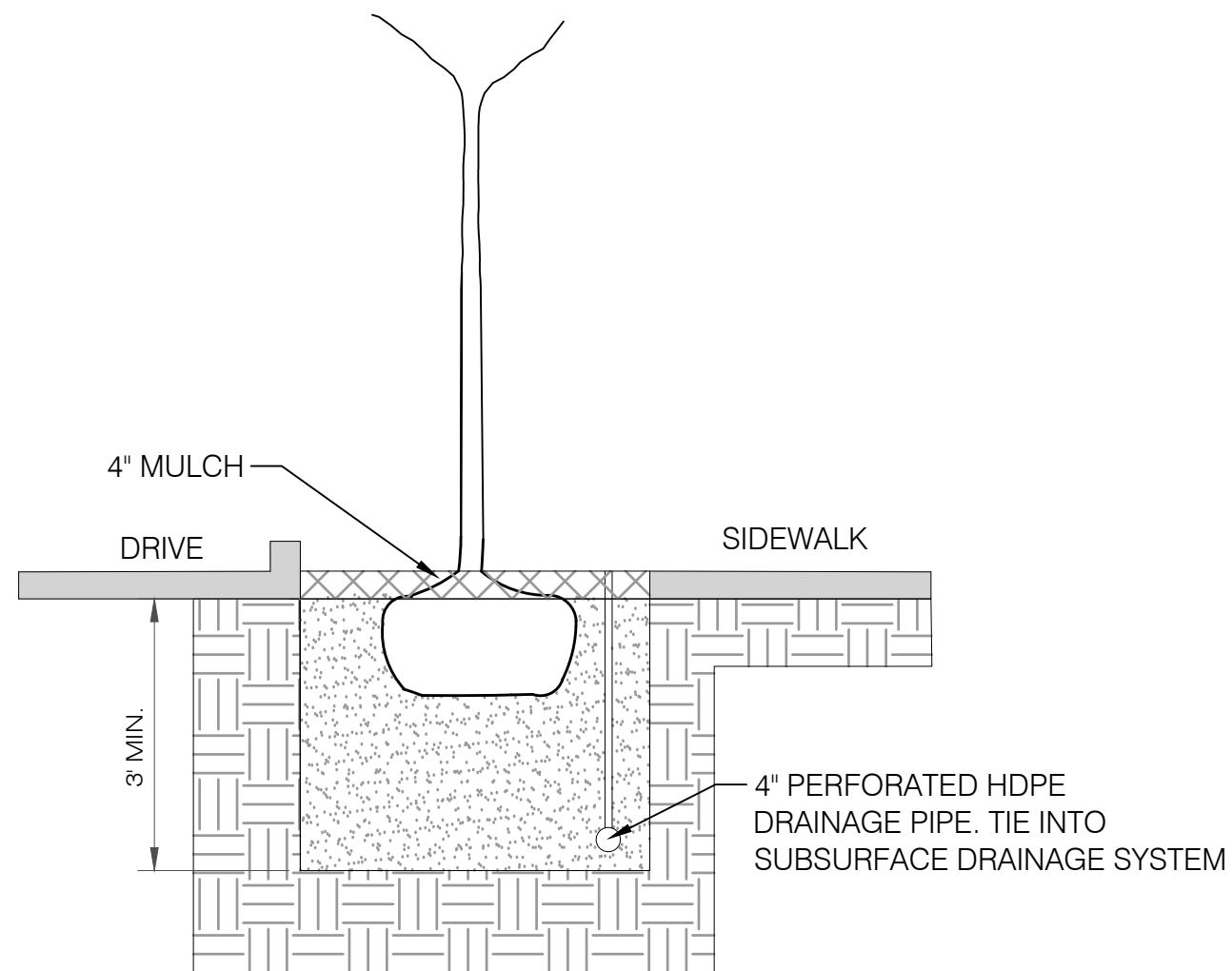
UTILITY SCREEN

All utility structures, transformers, meters, and/or units shall be screened with plant material tall enough to provide an effective screen. Structures not shown on landscape plans will be required to be screened. If utilities are added to the site, contact Heibert+Ball Land Design for screening recommendations



DECIDUOUS TREE PLANTING

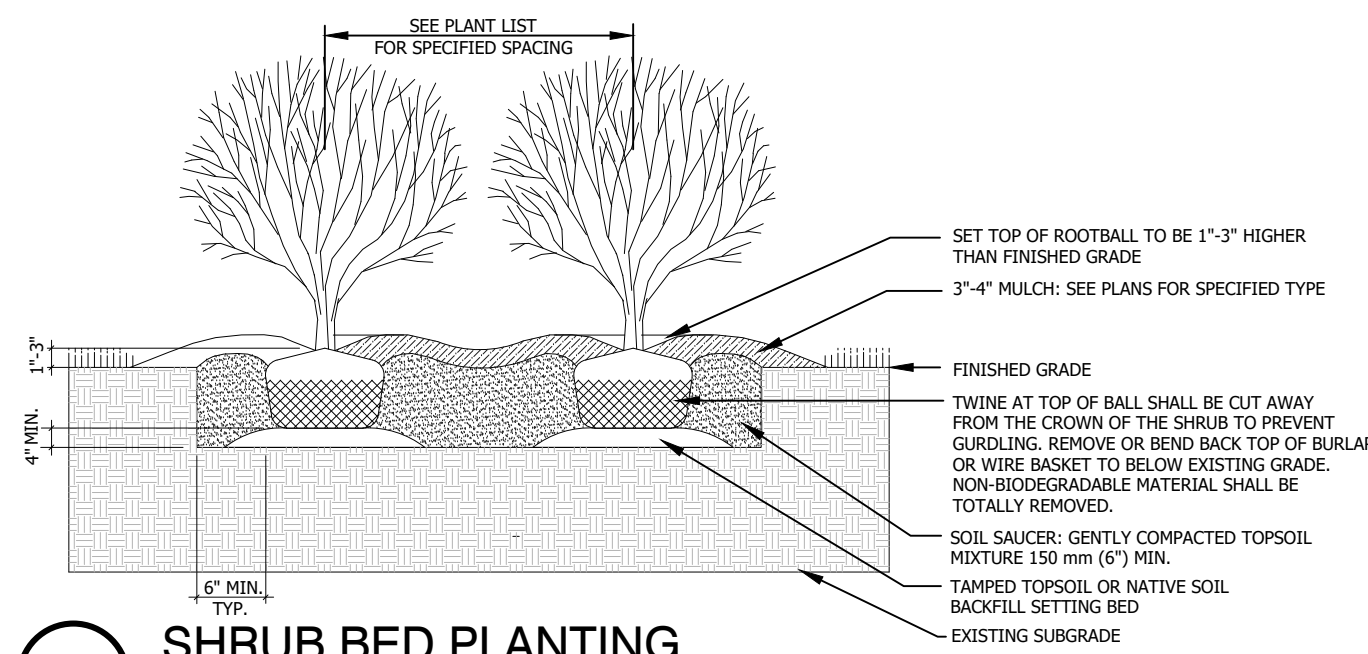
P-NO-12



STREET TREE PLANTING

- AT PLANTING, TREES SHALL MEET THE REQUIREMENTS FOR STREET TREES SET OUT IN AMERICAN STANDARD FOR NURSERY STOCK
- ALL NURSERY STOCK USED AS STREET TREES SHALL BE VIGOROUS, HEALTHY AND FREE OF DISEASES OR INFESTATIONS
- TREES SHALL NE ACCOMMODATED IN PLANTING AREAS WITH A MINIMUM DEPTH OF 3 FEET AND A MINIMUM VOLUME OF 400 CUBIC FEET

STREET TREES SHALL HAVE A CLEAR HEIGHT OF 80 INCHES WHERE THE TREE CANOPY IS WITHIN A PATH OF TRAVEL, AND NO MORE THAN 50% OF THE TREE HEIGHT SHALL BE CLEARED TO MEET THE ADA CLEARANCE REQUIREMENTS



SHRUB BED PLANTING



Know what's below.
Call before you dig.

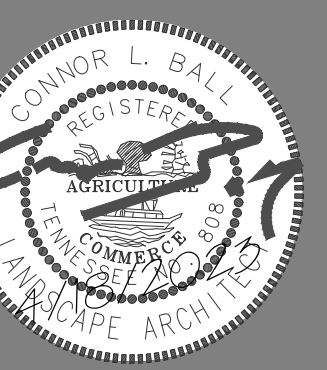
PLANT SCHEDULE

CANOPY TREES	QTY	COMMON / BOTANICAL NAME	CONT	CAL	SIZE
AR	11	Summer Red Maple / <i>Acer rubrum</i> 'HOGR' TM 5' Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2"Cal	12'-14' HT
UNDERSTORY/COLUMNAR TREES	QTY	COMMON / BOTANICAL NAME	CONT	CAL	SIZE
R	17	Eastern Redbud / <i>Cercis canadensis</i> 4' Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2"Cal	10'-12' HT
D	2	Dogwood / <i>Cornus florida</i> 4' Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2"Cal	8'-10' HT
BUFFER SHRUBS	QTY	COMMON / BOTANICAL NAME	HT / CONT.	WIDTH	
	6	Snow Queen Oakleaf Hydrangea / <i>Hydrangea quercifolia</i> 'Snow Queen' Full; Dense; Well Rooted	24" HT		
	10	Grey Owl Juniper / <i>Juniperus virginiana</i> 'Grey Owl' Full. Heavy. Well Branched.	18" HT		

PLAN NOTES:

- ALL LANDSCAPE BEDS SHALL BE NEATLY TRENCHED WITH A BED EDGE AND HAVE 3" MINIMUM DEPTH OF PINE BARK MULCH.
- ALL TREES AND SHRUBS SHALL BE COORDINATED WITH LIGHTING PLAN PRIOR TO INSTALLATION. LIGHT POLES MUST NOT BE LOCATED IN TREE ISLANDS. ALL TREES TO BE INSTALLED 15' FROM ANY LIGHT POLE.
- ALL AREAS OF DISTURBANCE SHALL BE SODDED WITH REBEL III TALL FESCUE UNLESS OTHERWISE NOTED ON GRADING PLANS
- ANY CHANGES TO TREE SPECIES OR LOCATIONS MAY REQUIRE THE CONTRACTOR TO PROVIDE AN AS-BUILT OF THE INSTALLED LANDSCAPE AND POSSIBLY DELAY APPROVAL OF THE SITE BY THE URBAN FORESTRY DEPARTMENT.

PROPOSED SITE FOR:
0 Old Hickory Boulevard
NASHVILLE, DAVIDSON COUNTY, TENNESSEE



Job # - 23145

BY: cb