MULTIMODAL ACCESS CLOSURE EXCEPTION APPLICATION FORM AND CHECKLIST

Submittal Date: 9/24/2025 ☑ **New Submittal** ☐ **Re-Submittal No:**_____

Related Building Permit No:_____

Project Name: Port Drive - Stormwater System Improvements

Street Name Location: Port Drive

Between: 113 Port Drive **And:** 611 Westchester Drive

Applicant Name: Walker Building Group

Address: 2617 Locust Street

Phone: 615-829-1276 **Fax:**_____ **Contact:** Eric Ricker

Email: Ericker@walkerbuildinggroup.com

Project Description: Removal of 50LF double barrel 66" CMP and Replacing it with a 42LF Box Culvert

Start Date: 10/13/2025 **End Date:** 11/28/2025 **Project Length:** 46 Days

Describe Type of Closure: 24 Hour Full Road Closure during Removal of double barrel CMP and replacing it with a new Box Culvert span across Port Drive.

Provide Reasons why Project cannot be completed without closures and what other options were considered (attach documents as needed): Excavation to demo the double barrel CMP and install the new Box will be 28ft wide. We would not be able to span that width with steel street plates.

PROJECT INFORMATION CHECKLIST:

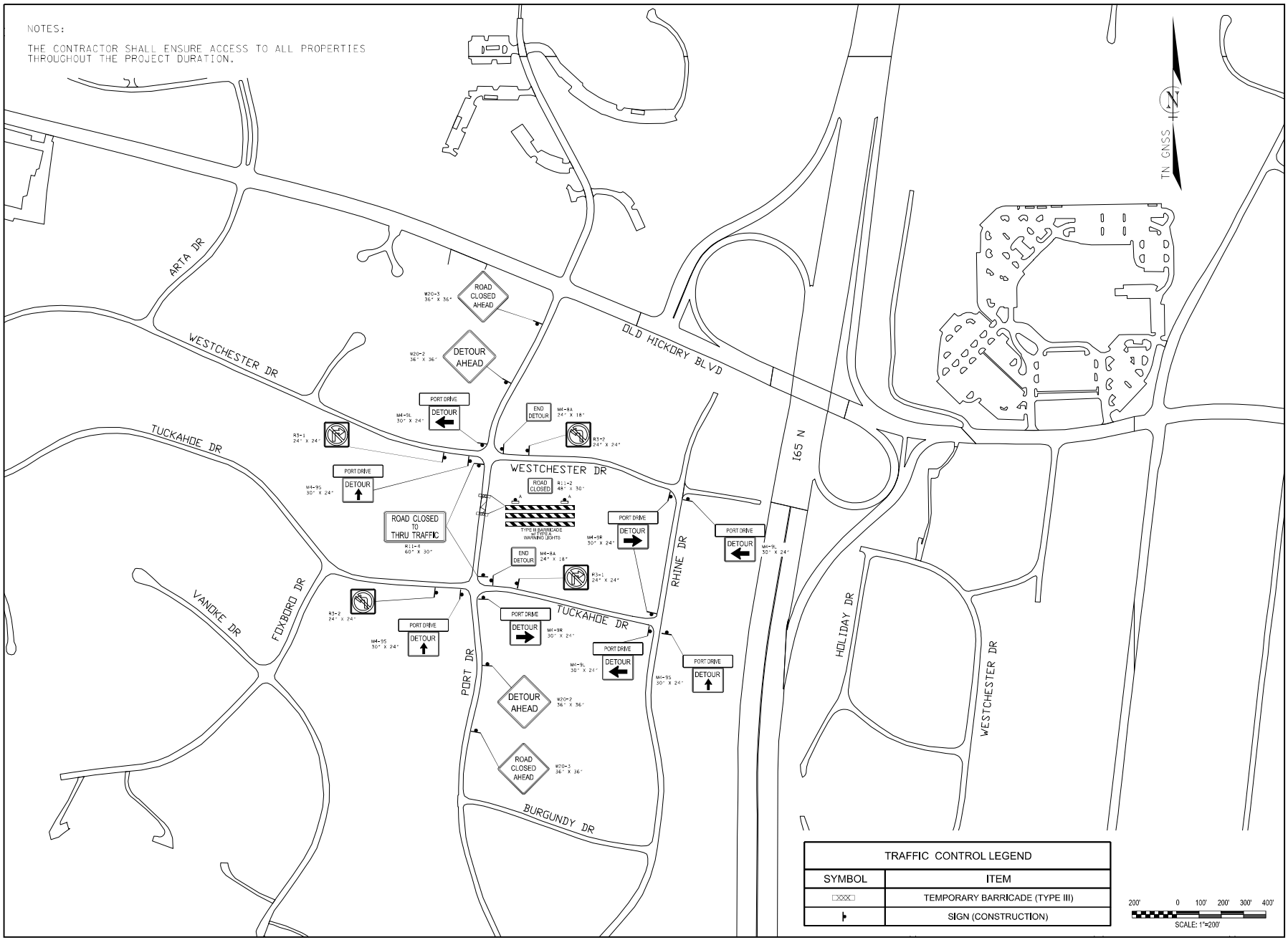
Included	Not Applicable	
☑	☐	Project Vicinity Map with Project Area shown, street names, property information, existing pavement and striping, gutter and building locations, north arrow, and scale.
☑	☐	Planned work hours included.
☑	☐	Exact location and dimensions of the construction work zone shown.
☑	☐	If multiple phases are necessary, include perimeter impact of each phase, phase number, anticipated work hours and phase duration.
☑	☐	Details on construction activity and equipment being used as part of construction included for each phase.
☑	☐	Specify if any on-street parking, and/or metered parking, is to be restricted and if bus zone will need to be relocated.
☑	☐	Specify if trash pickup will be impacted.
☑	☐	Provide information on all utility work and utility connections.
☑	☐	List all affected residents, businesses, agencies, and schools and any conversations/agreements taken place.
☑	☐	Show ongoing construction projects within vicinity of proposed project impact.
☑	☐	Provide plan to address conflicts with other nearby projects.
☑	☐	Provide traffic control plan for each phase of construction (see traffic control checklist for more information).
☑	☐	Provide information on work vehicle parking locations.
☑	☐	Show construction trucks ingress/egress to project location.
☑	☐	Provide information on any traffic signals, traffic signal loops, and traffic signal cabinets in close proximity to project.

TRAFFIC CONTROL PLAN CHECKLIST:

Included	Not Applicable	
☑	☐	All temporary traffic control plans shall be designed in accordance with the most recent ADA regulations and requirements of the Manual of Uniform Traffic Control Devices.
☑	☐	Clearly show the locations of all existing signs (including speed limit) as well as the proposed signs for each construction phase.
☑	☐	Show the location of all existing pedestrian paths and pedestrian detour route of each stage of construction.
☑	☐	Show dimensions of travel lane width, shoulder width, sidewalk of each phase, and overall roadway width along the length of affected area.
☑	☐	Show all existing striping and markings to remain, to be removed, and all proposed striping and markings for each construction stage.
☑	☐	Provide detour plan clearly showing detour route for any roadway or pedestrian/bike path closures.
☑	☐	Specify placement of all temporary traffic control devices.
☑	☐	Specify spacing of all temporary traffic control devices.
☑	☐	Show all existing traffic signals and streetlights in the work zone location.
☑	☐	Lighting provided for all pedestrian detour routes.
☑	☐	Provide minimum eleven (11) foot travel lanes at all times.
☑	☐	Show size, height, and location of all channelizing devices, warning lights, flag trees, barriers, etc.
☑	☐	Label all taper lengths and widths.
☑	☐	Provide locations of police officers for each phase as needed.
☑	☐	Temporary Traffic Control Plan has been stamped and signed by a TN licensed Civil Engineer.

NOTES:

THE CONTRACTOR SHALL ENSURE ACCESS TO ALL PROPERTIES THROUGHOUT THE PROJECT DURATION.



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
XXX	TEMPORARY BARRICADE (TYPE III)
	SIGN (CONSTRUCTION)

200' 0 100' 200' 300' 400'
SCALE: 1"=200'

FILE NO.	PORT DRIVE
DATE:	10-31-2024
DESIGNED BY:	AOS
DRAWN BY:	AOS
CHECKED BY:	DWG

REVISION BLOCK

DATE:	9-30-2025
DATE:	
DATE:	

9-30-2025: UPDATED TCP LAYOUT

CONSOR ENGINEERS, LLC
101 WESTPARK DRIVE, SUITE 300
BRENTWOOD, TN 37027
(615)-425-2000

SEALED BY

10/05/2025

METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
METRO WATER SERVICES
STORMWATER DIVISION

PORT DRIVE STORMWATER IMPROVEMENTS

TCP LAYOUT

SCALE: 1" = 200'

SHEET 07 OF 11

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY, TENNESSEE
DEPARTMENT OF WATER AND SEWERAGE SERVICES

FILE NO.	PORT DRIVE
DATE:	10/31/2024
DESIGNED BY:	AOS
DRAWN BY:	AOS
CHECKED BY:	DWG
REVISION BLOCK	
DATE:	
DATE:	
DATE:	

INDEX

DAVIDSON COUNTY
DISTRICT 03

PORT DRIVE
STORMWATER SYSTEM IMPROVEMENTS

PROJECT LOCATION

SCALE: 1"=200'

MWS PROJECT NUMBERS:

24-SWC-140

Metro Water Services Nashville, TN
* Approved for Construction *
Under authority delegated by the Tennessee Department of Environment and Conservation Division of Water Resources, this document has been reviewed by theDepartment of Water and Sewerage Services or contracted professional and is hereby approved for construction.
This approval shall not be construec as an assurance that the improvements depicted in the document bearing this stamp will function as intended.
Public Sewer
Public Water
Date
JWS Engineer
This approval expires one year from date shown below

DOUGLAS W. OSTERLAN
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
STATE OF TENNESSEE
11/01/2024

FREDDIE O'CONNELL
METROPOLITAN MAYOR

METRO WATER SERVICES STORM WATER

SCOTT A. POTTER
DIRECTOR OF WATER & SEWERAGE SERVICES

ENGINEERING BY - METROPOLITAN DEPARTMENT OF WATER AND SEWERAGE SERVICES
STORMWATER DIVISION
1600 SECOND AVENUE NORTH
NASHVILLE, TN 37208

PREPARED BY:
CONSOR ENGINEERS, LLC
101 WESTPARK DRIVE, SUITE 300, BRENTWOOD, TN 37027
(615) 425-2000

UNLESS OTHERWISE NOTED, ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT REQUIREMENTS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (TDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, TDOT DESIGN STANDARDS AND STANDARD DRAWINGS, METROPOLITAN DEPARTMENT OF PUBLIC WORKS DETAILS AND SPECIFICATIONS, AND METROPOLITAN DEPARTMENT OF WATER SERVICES DETAILS AND SPECIFICATIONS

GENERAL NOTES:

1. UNLESS OTHERWISE NOTED, ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT REQUIREMENTS OF TENNESSEE DEPARTMENT OF TRANSPORTATION (TDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, METROPOLITAN DEPARTMENT OF WATER AND SEWERAGE SERVICES STORMWATER MANAGEMENT MANUAL, AND NASHVILLE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND DETAILS, AND METRO WATER SERVICES SPECIFICATIONS AND DETAILS FOR WATER AND SEWER CONSTRUCTION.

2. WATER LINE LOCATIONS WERE ESTIMATED FROM VALVE BOXES AND WATER METERS LOCATED BY SURVEYORS AND FROM BASE MAPPING PROVIDED BY MADISON SUBURBAN UTILITIES DISTRICT. WATER LINES MAY BE LOCATED BY TENNESSEE ONE CALL PRIOR TO THE SURVEY IN SOME CASES. WATER LINES THAT WERE LOCATED BY TENNESSEE ONE CALL WILL BE NOTED ON THE EXISTING SITE PLAN(S). POTENTIAL CONFLICTS WITH MAIN SEWER LINES WERE ESTIMATED BY ASSUMING A CONSTANT SLOPE FROM THE UPSTREAM MANHOLE TO THE DOWNSTREAM MANHOLE. THE LOCATION OF SANITARY SERVICE LINES WERE ESTIMATED FROM AS-BUILT DRAWINGS PROVIDED BY MWS, AND CLEAN-OUTS LOCATED BY THE SURVEYORS, IF PRESENT. USE APPROXIMATE LOCATION OF SEWER SERVICE LINES AS GUIDANCE ONLY. LOCATION MAY OR MAY NOT BE ACCURATE. ADDITIONAL SERVICE LINES MAY BE PRESENT. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES AND PROTECTING UTILITIES PROPOSED TO REMAIN. CONSOR ENGINEERS, LLC ASSUMES NO RESPONSIBILITY FOR ACCURACY OR COMPLETENESS OF THIS INFORMATION. REPAIRS AND/OR REPLACEMENTS TO ANY UTILITIES DAMAGED BY CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO ADDITIONAL PAYMENT WILL BE MADE.

3. THE CONTRACTOR SHALL USE TRAFFIC CONTROL METHODS AS APPROVED BY THE TENNESSEE DEPARTMENT OF TRANSPORTATION, THE NASHVILLE DEPARTMENT OF TRANSPORTATION, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).

4. THE CONTRACTOR SHALL COORDINATE, KNOW, AND HAVE WORK SCHEDULED FOR ALL APPLICABLE UTILITY RELOCATIONS PRIOR TO PROJECT WORK BEGINNING. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF SCHEDULE.

5. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY OWNER'S REPRESENTATIVE OF DIFFERING CONDITIONS PRIOR TO PROCEEDING WITH WORK.

6. THE CONTRACTOR SHALL REPAIR ALL DAMAGE TO STREETS, YARDS, MAILBOXES, FENCES, SIGNS, DRIVEWAYS, TREES, LANDSCAPING, IRRIGATION SYSTEMS, ETC. AT NO ADDITIONAL COST TO OWNER.

7. ALL DRIVEWAY REPAIRS SHALL MATCH EXISTING DRIVEWAYS IN WIDTH, DEPTH, AND MATERIAL UNLESS OTHERWISE SPECIFIED.

8. ALL PROPOSED ASPHALT TO GRADE TO NEW INLET(S).

9. EROSION AND SEDIMENT (E&S) CONTROL MEASURES TO BE INSTALLED PER METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY BEST MANAGEMENT PRACTICES (BMP), LATEST EDITION.

10. ONCE WORK HAS STARTED, THE CONTRACTOR SHALL PURSUE WORK DILIGENTLY UNTIL COMPLETE.

11. AREAS DESIGNATED FOR MILLING (COLD PLANING) SHALL BE SAW CUT TO A DEPTH OF TWO INCHES (2"). ALL OTHER JOINTS SHALL BE SAW CUT TO FULL DEPTH (ASPHALT AND CONCRETE) UNLESS OTHERWISE SHOWN ON THE PLANS OR CONTRACT DOCUMENTS.

12. THE UNIT PRICE BID FOR EACH ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND ALL APPURTENANCES NECESSARY FOR A COMPLETE INSTALLATION OF THE ITEMS SHOWN ON THE PLANS, IN THE DETAILS AND TYPICAL SECTIONS, AND AS CALLED OUT IN THE STANDARDS AND SPECIFICATIONS.

13. ALL PIPE SHALL BE BACKFILLED WITH #57 OR #67 CRUSHED STONE WHEN UNDER ANY PAVED OR RIGID SURFACE, PER METRO STANDARD DETAIL DR-180, DR-270a/b, DR-271a/b, AND/OR ST-272 AS APPLICABLE. WHEN NOT UNDER PAVEMENT, ALL PIPE SHALL BE BACKFILLED WITH #57 OR #67 CRUSHED STONE TO AT LEAST SIX INCHES (6") ABOVE THE PIPE, PER METRO STANDARD DETAIL DR-180.

14. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY ARRANGEMENTS MADE WITH PROPERTY OWNERS THAT ARE ADJACENT TO ANY PROPOSED WORK. THIS INCLUDES ARRANGEMENTS FOR UTILIZING PRIVATE PROPERTY FOR STORAGE (EQUIPMENT OR EXCAVATED MATERIALS), PARKING AREA, OR ACCESS. ALL COSTS ASSOCIATED WITH THIS WORK WILL NOT BE PAID FOR.

15. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN ACCESS TO RESIDENCES AND BUSINESSES, AND SHALL BE REQUIRED TO KEEP ONE (1) LANE OF TRAFFIC OPEN AT ALL TIMES FOR THRU TRAFFIC AND EMERGENCY VEHICLES/EQUIPMENT.

16. THE CONTRACTOR SHALL ASSURE THAT ALL SERVICES THROUGH THIS CONTRACT SHALL BE COMPLETED IN FULL COMPLIANCE WITH AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION, AS HAS BEEN ADOPTED BY METRO.

17. METRO WATER SERVICES WILL RETAIN OWNERSHIP OF ALL EXISTING DRAINAGE STRUCTURE GRATES THAT ARE NOT BEING UTILIZED FOR THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL DELIVER THE GRATES TO MWS STORMWATER MAINTENANCE YARD, 1607 COUNTY HOSPITAL ROAD. CONTACT JOE FEDUN AT 615-862-4164 FOR ACCESS AND SCHEDULING DELIVERY.

18. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS NEEDED FOR WORK, EXCAVATION, ROAD CLOSURE, ETC. FROM THE NASHVILLE DEPARTMENT OF TRANSPORTATION. THE CONTRACTOR WILL BE REIMBURSED FOR NDOT PERMIT FEES. ALL WORK SHALL CONFORM TO THE MOST CURRENT NDOT REQUIREMENTS AND SPECIFICATIONS FOR PAVEMENT REPLACEMENT/ PATCHING. REFER TO METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY STANDARD DETAILS ST-270a/b AND/OR ST-271a/b. ALL DRIVEWAY RAMPS, SIDEWALKS, SIDEWALK RAMPS, AND ROADWAY PAVEMENT REPLACEMENT WILL BE INSPECTED BY NDOT DURING AND AFTER CONSTRUCTION. IF THE NDOT INSPECTOR DETERMINES THAT CONSTRUCTION DOES NOT MEET CURRENT NDOT SPECIFICATIONS, THE CONTRACTOR SHALL DEMOLISH AND REPLACE ALL NON-COMPLIANT CONSTRUCTION AT NO ADDITIONAL COST TO METRO WATER SERVICES.

19. WHERE APPLICABLE, CONSTRUCTION SHALL CONFORM TO TDEC AQUATIC RESOURCE ALTERATION PERMIT PROGRAM REQUIREMENTS.

20. THE CONTRACTOR SHALL NOTIFY METRO WATER SERVICES CONSTRUCTION MANAGER OF ALL WATER LINE AND SANITARY SEWER RELOCATIONS. THE CONSTRUCTION MANAGER WILL COORDINATE PRE-CONSTRUCTION MEETINGS, ETC. AS NEEDED.

21. PLACEMENT OF SEED, MULCH, SOD, MATTING, AND TOPSOIL OUTSIDE THE LIMITS OF THE RIGHT-OF-WAY AND EASEMENTS, ON PRIVATE PROPERTY, WILL NOT BE PAID FOR SEPARATELY. ALL COSTS ASSOCIATED WITH PLACEMENT OF THESE ITEMS ON PRIVATE PROPERTY, FOR ACCESS OF WORK AREA, OR MATERIAL STORAGE SHALL BE BORNE BY THE CONTRACTOR.

22. FOR BIDDING PURPOSES, THE CULVERT LENGTHS SHOWN ON THE PLANS ARE FROM CENTER TO CENTER OF STORM STRUCTURES, AND TO THE INLET OR OUTLET END OF PIPES WITH HEADWALLS. ACTUAL LENGTHS MAY BE SHORTER THAN DEPICTED ON THE PLANS. THE CONTRACTOR SHALL VERIFY REQUIRED LENGTHS WITH CONSTRUCTION MANAGER PRIOR TO PIPE INSTALLATION. PAYMENT WILL BE MADE FOR THE LINEAR FOOT OF CULVERT INSTALLED AND ACCEPTED. THE GROUTING OF THE ANNULUS AROUND ALL PIPE PENETRATIONS SHALL BE AN INCIDENTAL COST.

23. THE CONTRACTOR SHALL HAVE PROPERTY LINES AND EASEMENTS (EXISTING AND PROPOSED) LOCATED AND STAKED BY A LICENSED SURVEYOR PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR HAVING A LICENSED SURVEYOR LAY OUT PROPOSED STRUCTURES, RETAINING WALLS, AND DITCH LINES; LAY OUT GRADE OR ALIGNMENT SENSITIVE CONSTRUCTION ITEMS; RELOCATE ANY PROPERTY BOUNDARY IRON PINS OR MONUMENTS THAT ARE DISTURBED DURING CONSTRUCTION; GENERATE STAMPED AS-BUILT DRAWING(S); REPLACEMENT OF DISTURBED IRON PINS AND/OR MONUMENTS; AND SUBMISSION OF STAMPED AS-BUILT DRAWING(S) BEFORE FINAL PAYMENT TO THE CONTRACTOR IS ISSUED. THE CONTRACTOR SHALL SUBMIT AS-BUILT DRAWINGS, SEALED BY A LICENSED SURVEYOR IN ADOBE (PDF) FORMAT AND A DRAWING FILE IN AUTOCAD (DWG), VERSION 2016 (OR EARLIER) FORMAT. ALL WORK PERFORMED BY THE LICENSED SURVEYOR SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR CONSTRUCTION STAKE, LINE, AND GRADE.

24. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH 29 CFR PART 1926, SUBPART P- EXCAVATIONS (LATEST EDITION).

25. ALL DRAINAGE STRUCTURES, BOX BRIDGES, BOX CULVERTS, RETAINING WALLS, AND OTHER MAJOR STRUCTURES SHALL BE DONE BY THE CAST-IN-PLACE METHOD. SHOULD THE CONTRACTOR ELECT TO USE PRE-CAST METHOD, THE CONTRACTOR SHALL BEAR ALL MODIFICATION/ADJUSTMENT/RELOCATION COSTS INCURRED FOR A COMPLETE INSTALLATION. THE GROUTING OF THE ANNULUS AROUND ALL PIPE PENETRATIONS SHALL BE AN INCIDENTAL COST.

26. ALL COSTS (INCLUDING LABOR, MATERIAL, EXCAVATION, INCIDENTALS, AND EQUIPMENT) NECESSARY TO PERFORM THE WORK AS SHOWN AND DESCRIBED IN THE DRAWINGS, STANDARD DETAILS, AND SPECIFICATIONS FOR WHICH A SEPARATE PAY ITEM IS NOT INCLUDED SHALL BE MERGED INTO PAY ITEMS SHOWN.

27. ALL MAJOR DRAINAGE STRUCTURES WILL REQUIRE QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) IN ACCORDANCE WITH TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT EDITION), PART 6, SECTION 604. A MAJOR DRAINAGE STRUCTURE, FOR THIS PURPOSE, WILL BE DEFINED AS ANY STRUCTURE REQUIRING REINFORCING STEEL. THIS WILL INCLUDE ALL BOX CULVERTS, SLAB BRIDGES, RETAINING WALLS, VERTICAL WALLED CHANNELS, INLETS, JUNCTION BOXES, AND HEADWALLS/ENDWALLS FOR PIPE DIAMETERS ≥ FORTY-EIGHT INCHES (48"). CONSTRUCTION ITEMS REQUIRING WELDED WIRE FABRIC, SUCH AS SIDEWALKS AND SWALES, WILL NOT REQUIRE QUALITY CONTROL FIELD TESTING. THE CONTRACTOR WILL BE FULLY RESPONSIBLE FOR RETAINING AN APPROVED INDEPENDENT TESTING LABORATORY TO PERFORM ALL REQUIRED CONCRETE STRENGTH AND FIELD TESTING AND FOR SUBMITTING THE RESULTS OF SUCH TESTING TO THE CONSTRUCTION MANAGER.

28. ALL PRECAST DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH THE CURRENT TDOT SOP 5-3, MANUFACTURE AND ACCEPTANCE OF PRE-CAST DRAINAGE STRUCTURES, NOISE WALL PANELS, AND EARTH RETAINING WALL PRODUCTS FOR QUALITY AND ASSURANCE PURPOSES ONLY. NOTE THAT ALL PRE-CAST DRAINAGE STRUCTURES SHALL HAVE A "QC" STAMP OR ETCHING ON PRODUCT. ALL PRODUCTS USED SHALL BE ON THE CURRENT TDOT QUALIFIED PRODUCT LIST (QPL), LOCATED AT http://www.tn.gov/tdot/topic/qualified-products. THE PRODUCERS AND/OR SUPPLIERS SHALL BE ON THE CURRENT TDOT PRODUCER/SUPPLIER REPORT LOCATED AT https://www.tdot.tn.gov/applications/producersupplier.

29. TREE REMOVALS FOR LINEAR STORMWATER PROJECTS SHALL BE AT A TWO TO ONE REPLACEMENT RATIO. THIS POLICY WILL NOT APPLY TO THE REMOVAL OF TREES THAT ARE DEAD, DISEASED, INVASIVE, POTENTIALLY HAZARDOUS, BRADFORD PEAR (PYRUS CALLERYANA), OR ASH (FRAXINUS) SPECIES. TREES THAT CANNOT BE PLANTED NEAR THE REMOVAL SITE CAN BE PLANTED AT AN ALTERNATE LOCATION APPROVED BY MWS. HACKBERRIES WILL BE REPLACED ON A ONE TO ONE BASIS. REPLACEMENT TREES SHALL BE AT LEAST ONE INCH DIAMETER AT BREAST HEIGHT (DHB) AND SIX FEET IN HEIGHT FOR CANOPY SPECIES. DOWNWARD ADJUSTMENTS CAN BE MADE FOR UNDERSTORY AND ORNAMENTAL TREES. SUCH TREES SHOULD BE CHOSEN FROM THE URBAN FORESTRY RECOMMENDED LIST (https://www.nashville.gov/Codes/Land-Use-and-Zoning-Information/Urban-Forestry/Tree-and-Shrub-List) AND SHALL BE OF A FORM AND QUALITY SET OUT IN THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1, LATEST EDITION).

NASHVILLE DEPARTMENT OF TRANSPORTATION GENERAL NOTES:

1. ALL ASPHALT ROADWAY REPAIRS SHALL INCLUDE FULL LANE WIDTH RESURFACING.

2. ALL ASPHALT ROADWAY REPAIRS SHALL UTILIZE A 2-FOOT CUTBACK ON ALL SIDES EXCEPT THE EDGE OF PAVEMENT.

3. NEW UTILITY CUTS WILL BE MILLED AND PAVED TO ANY EXISTING UTILITY CUT OR DAMAGED PAVEMENT WITHIN 10 FEET. IF THE EXISTING CUT OR DAMAGED PAVEMENT IS LESS THAN 10 FEET IN LENGTH, THE EXISTING CUT SHALL ALSO BE MILLED AND PAVED.

4. ASPHALT REPAIR GREATER THAN 24-INCHES, ADJACENT TO CURB & GUTTER ALONG A ROADWAY SHALL HAVE FULL LANE WIDTH PAVING.

5. FLOWABLE FILL IS REQUIRED ON ALL DOWNTOWN STREETS, COLLECTORS, AND ARTERIAL STREETS. FLOWABLE FILL MAY ALSO BE REQUIRED ON OTHER STREETS AT THE DISCRETION OF THE UTILITY INSPECTORS.

6. ALL REPAIRS WILL HAVE A 1-YEAR WARRANTY.

7. PERMIT OFFICE WILL NEED TO BE NOTIFIED WHEN REPAIRS ARE FINISHED TO START WARRANTY PERIOD.

8. SEE NDOT STANDARDS 270 THROUGH 275. IF ANY CUTS ARE MADE IN THE ROADWAY, THE UTILITY CUT GUIDELINES MUST BE FOLLOWED. UTILITY CUT GUIDELINES CAN BE FOUND IN THE PERMIT OFFICE OR AT WWW.MPW.NASHVILLE.GOV/IMS/PAVING/DOCUMENTS/APPENDIX_D.PDF.

FILE NO.	PORT DRIVE
DATE:	10-31-2024
DESIGNED BY:	AOS
DRAWN BY:	AOS
CHECKED BY:	DWG

REVISION BLOCK

DATE:	
DATE:	
DATE:	

CONSOR ENGINEERS, LLC
101 WESTPARK DRIVE, SUITE 300
BRENTWOOD, TN 37027
(615)-425-2000

SEALED BY

METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
METRO WATER SERVICES
STORMWATER DIVISION

PORT DRIVE STORMWATER IMPROVEMENTS

GENERAL NOTES

SCALE: N.T.S.

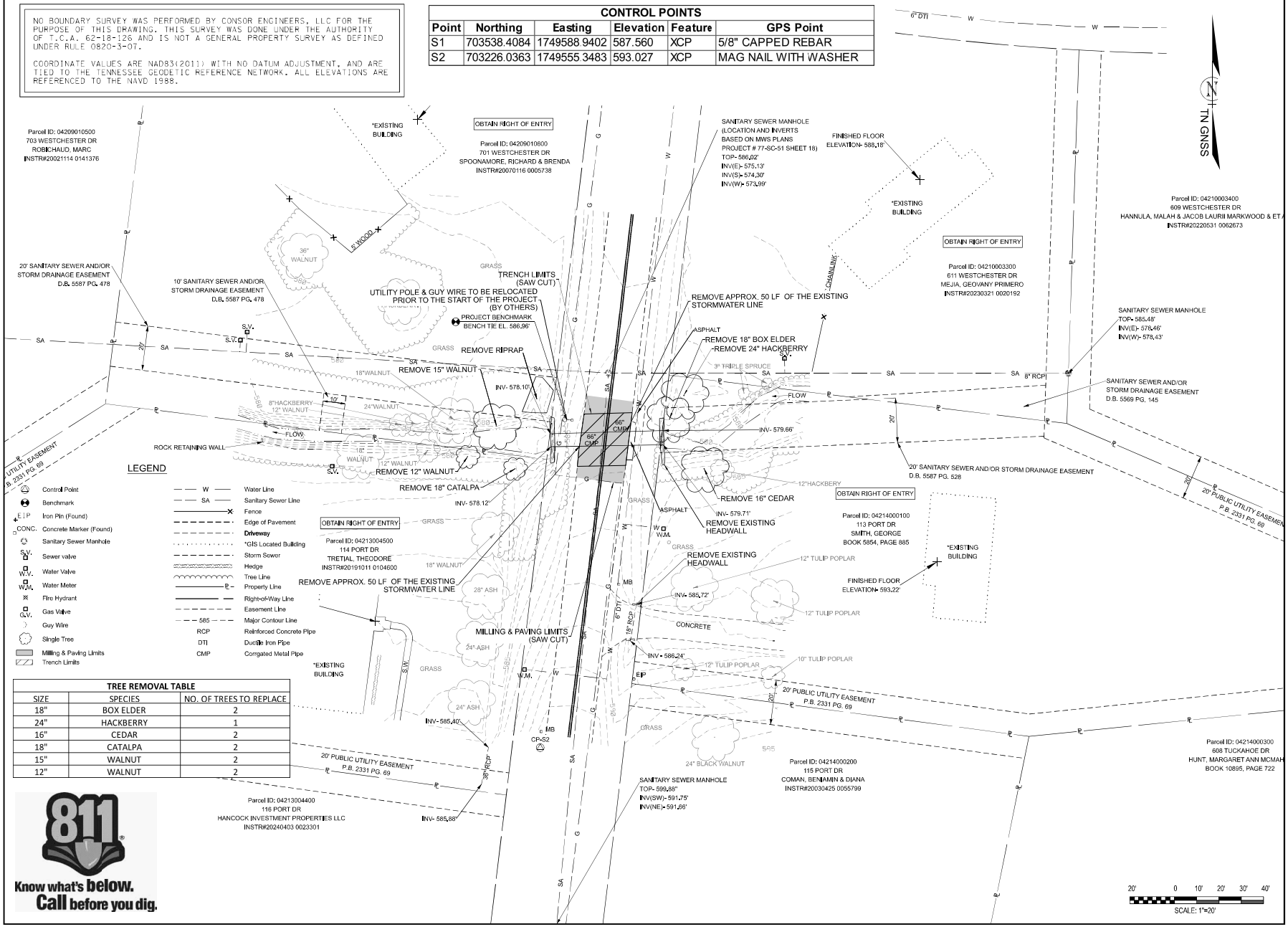
SHEET: 02 OF 11

NO BOUNDARY SURVEY WAS PERFORMED BY CONSOR ENGINEERS, LLC FOR THE PURPOSE OF THIS DRAWING. THIS SURVEY WAS DONE UNDER THE AUTHORITY OF T.C.A. 62-18-126 AND IS NOT A GENERAL PROPERTY SURVEY AS DEFINED UNDER RULE 0820-3-07.

COORDINATE VALUES ARE NAD83(2011) WITH NO DATUM ADJUSTMENT, AND ARE TIED TO THE TENNESSEE GEODETIC REFERENCE NETWORK. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

CONTROL POINTS

Point	Northing	Easting	Elevation	Feature	GPS Point
S1	703538.4084	1749588.9402	587.560	XCP	5/8" CAPPED REBAR
S2	703226.0363	1749555.3483	593.027	XCP	MAG NAIL WITH WASHER



TREE REMOVAL TABLE

SIZE	SPECIES	NO. OF TREES TO REPLACE
18"	BOX ELDER	2
24"	HACKBERRY	1
16"	CEDAR	2
18"	CATALPA	2
15"	WALNUT	2
12"	WALNUT	2

811 Know what's below. Call before you dig.

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CONSOR ENGINEERS, LLC
101 WESTPARK DRIVE, SUITE 300
BRENTWOOD, TN 37027
(615)-425-2000

SEALED BY

DOUGLAS W. GUTMAN
REGISTERED ENGINEER
No. 116137
STATE OF TENNESSEE
11/01/2024

METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
METRO WATER SERVICES
STORMWATER DIVISION

PORT DRIVE STORMWATER IMPROVEMENTS

PRESENT LAYOUT AND DEMOLITION PLAN

SCALE: 1" = 20'

SHEET 03 OF 11

NOTES:

1. ALL DIMENSIONS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO VERIFY THE SUITABILITY OF A SLAB BRIDGE.
3. NOG S-250 COMPOSITE TURF REINFORCEMENT MAT SHOULD BE INSTALLED ON THE STREAM BANKS ONLY. THE STREAM BED SHALL BE BROUGHT BACK TO ITS ORIGINAL CONDITION WITH NATURAL STREAM BOTTOM MATERIALS.
4. CONTRACTOR TO COORDINATE WITH THE PROPERTY OWNER FOR THE EXACT TREE LOCATIONS AND TO VERIFY TREE SPACING PER THE TREE SPECIES' RECOMMENDATION.

LEGEND

- Control Point
- Benchmark
- IP Iron Pin (Found)
- CONC. Concrete Marker (Found)
- Sanitary Sewer Manhole
- S.V. Sewer valve
- W.V. Water Valve
- W.M. Water Meter
- Fire Hydrant
- G.V. Gas Valve
- Guy Wire
- Single Tree
- Milling & Paving Limits
- Trench Limits
- Erosion Control Mat
- W — Water Line
- SA — Sanitary Sewer Line
- Fence
- Edge of Pavement
- Driveway
- *GIS Located Building
- Storm Sewer
- Hedge
- Tree Line
- Property Line
- Right-of-Way Line
- Easement Line
- 585 — Major Contour Line
- RCP Reinforced Concrete Pipe
- DTI Ductile Iron Pipe
- CMP Corrugated Metal Pipe

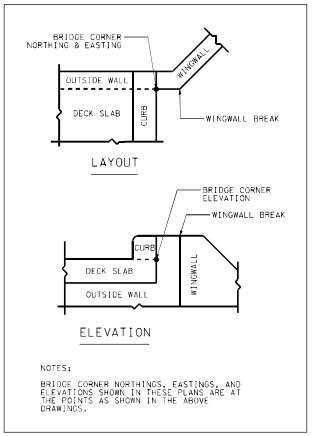
CONTROL POINTS					
Point	Northing	Easting	Elevation	Feature	GPS Point
S1	703538.4084	1749588.9402	587.560	XCP	5/8" CAPPED REBAR
S2	703226.0363	1749555.3483	593.027	XCP	MAG NAIL WITH WASHER

WINGWALL	ANGLE	LENGTH
NW WINGWALL	90°	10.0'
NE WINGWALL	82°	13.0'
SE WINGWALL	90°	10.0'
SW WINGWALL	82°	13.5'

POINT	LOCATION	NORTHING	EASTING	ELEVATION
1	SE WINGWALL CORNER	703348.07	1749605.45	584.00
2	SE WINGWALL BREAK	703357.97	1749605.16	586.04
3	SE BRIDGE CORNER	703357.94	1749604.14	585.54
4	NE BRIDGE CORNER	703372.00	1749606.08	585.54
5	NE WINGWALL BREAK	703372.03	1749607.08	586.04
6	NE WINGWALL CORNER	703384.94	1749608.60	584.00
7	NW WINGWALL CORNER	703380.74	1749563.02	583.00
8	NW WINGWALL BREAK	703370.74	1749563.32	584.48
9	NW BRIDGE CORNER	703370.77	1749564.31	583.98
10	SW BRIDGE CORNER	703356.70	1749562.37	583.98
11	SW WINGWALL BREAK	703356.67	1749561.37	584.48
12	SW WINGWALL CORNER	703343.30	1749559.84	584.00

Storm Sewer Structure Schedule							
Structure	Type	From	To	Length (ft)	Upstream Invert (ft)	Downstream Invert (ft)	Slope
1	14'x 5' Box Culvert	Inlet	Outlet	42.0	579.66	578.10	3.7%

DRAINAGE STRUCTURE SCHEDULE								
STRUCTURE NO.	STRUCTURE TYPE	HW DETAIL DIMENSION "A" (FT)	TOP ELEV (FT)	INVERT IN (FT)	INVERT OUT (FT)	REMARKS	NORTHING	EASTING
HW-01	STRAIGHT HEADWALL	7.75	588.47	-	585.72	SEE DETAIL ON SHEET 11	1749598.57	703290.4612



20' 0 10' 20' 30' 40'
SCALE: 1"=20'

FILE NO.	PORT DRIVE
DATE:	10-31-2024
DESIGNED BY:	AOS
DRAWN BY:	AOS
CHECKED BY:	DWG

REVISION BLOCK

DATE:	
DATE:	
DATE:	

CONSOR ENGINEERS, LLC
101 WESTPARK DRIVE, SUITE 300
BRENTWOOD, TN 37027
(615)-425-2000

SEALED BY

DOUGLAS W. GUTMAN
REGISTERED ENGINEER
No. 118511
STATE OF TENNESSEE
11/01/2024

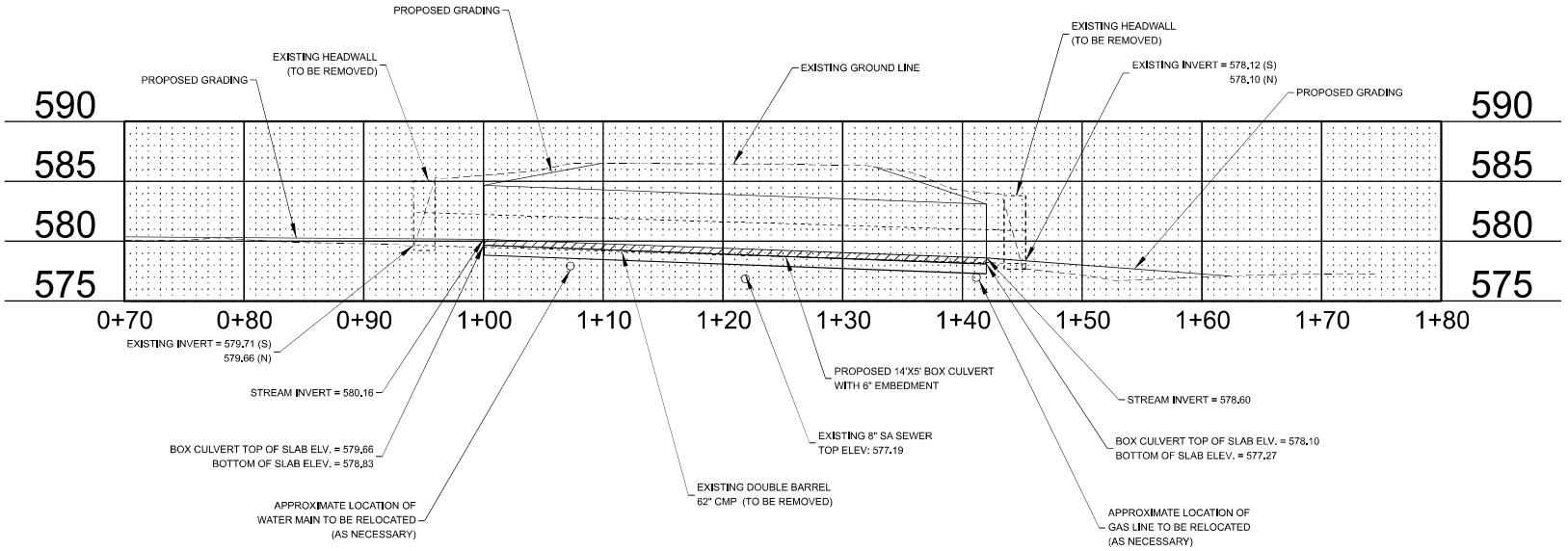
METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
METRO WATER SERVICES
STORMWATER DIVISION

PORT DRIVE STORMWATER IMPROVEMENTS

PROPOSED LAYOUT

SCALE: 1" = 20'

SHEET 04 OF 11



PROFILE VIEW
CULVERT

FILE NO.	PORT DRIVE
DATE:	10-31-2024
DESIGNED BY:	AOS
DRAWN BY:	AOS
CHECKED BY:	DWG
REVISION BLOCK	
DATE:	
DATE:	
DATE:	

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OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
METRO WATER SERVICES
STORMWATER DIVISION

PORT DRIVE
STORMWATER
IMPROVEMENTS

PROFILE VIEW

SCALE: 1" = 5' H
1" = 5' V

SHEET 05 OF 11

EROSION PREVENTION & SEDIMENT CONTROL (E.P.S.C.) NOTES:

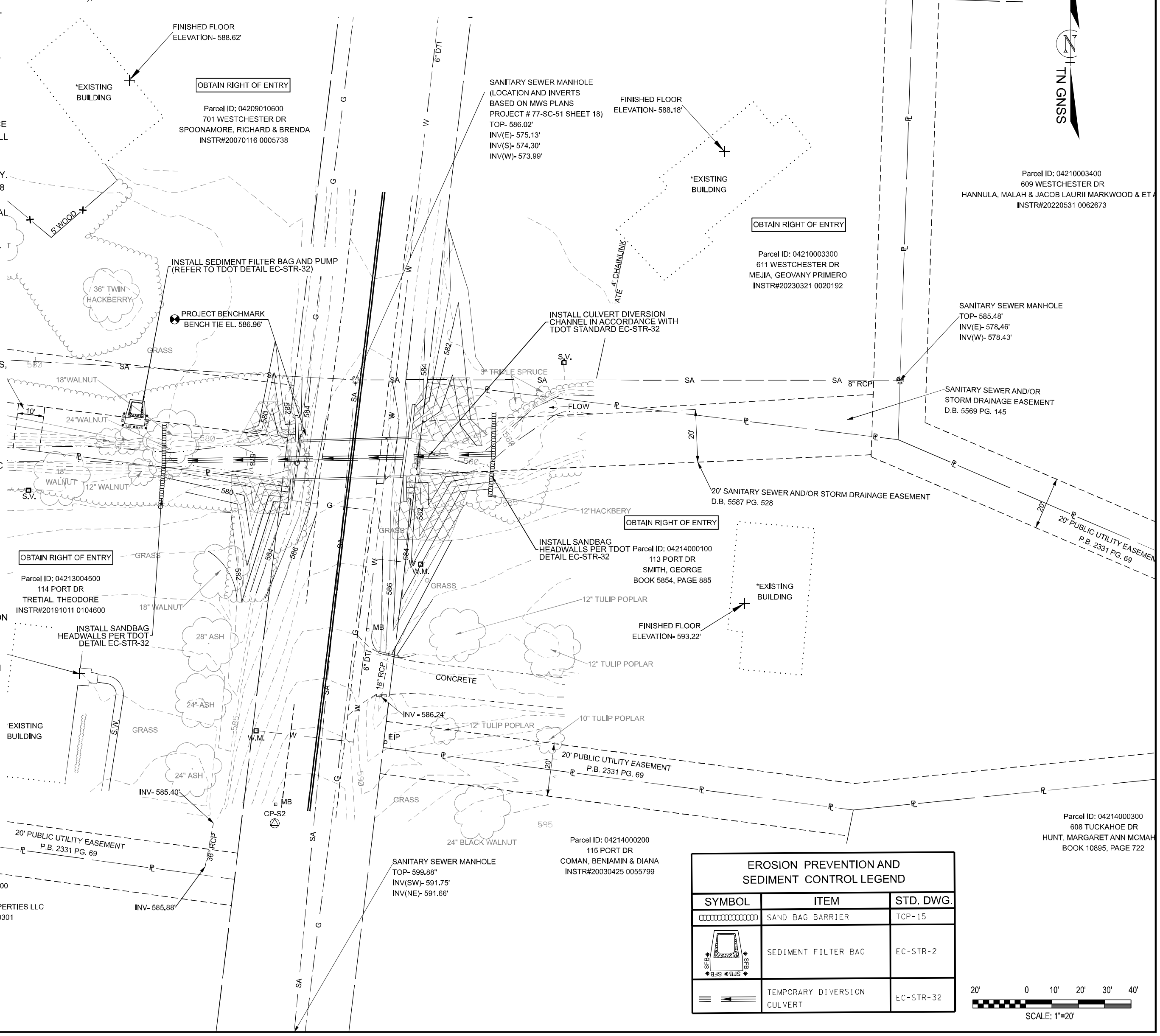
1. THE USE AND PLACEMENT OF EROSION CONTROL DEVICES SHALL BE IN ACCORDANCE WITH METRO WATER SERVICES BEST MANAGEMENT PRACTICES, LATEST EDITION, AND/OR APPLICABLE TDEC ARAP, USACE NWP, AND/OR TDOT STANDARDS. THE MOST STRINGENT PRACTICE SHALL GOVERN.
2. NO WORK WILL BE INITIATED ON THE PROJECT UNTIL THE EROSION/ SILTATION MEASURE SHOWN ON THE PLANS AND DETAILS ARE PROPERLY IN PLACE.
3. IF, AT ANY TIME DURING THE CONSTRUCTION PHASE OF THIS PROJECT, METRO REPRESENTATIVE DEEMS THAT THE EROSION/SILTATION MEASURES INSTALLED FAIL TO FUNCTION PROPERLY, NEED MAINTENANCE OR REPAIR, OR NEED REPLACEMENT IN KIND, THE CONTRACTOR WILL EFFECT SUCH ACTIONS AS ARE NEEDED TO CORRECT THE SITUATION AT NO ADDITIONAL COST TO THE OWNER. NECESSARY REPAIRS OR REPLACEMENT OF EPSC MEASURES SHALL BE ACCOMPLISHED PROMPTLY. WHEN NOTIFIED OF DEFICIENT EPSC MEASURES, THE CONTRACTR HAS 48 HOURS OR BEFORE THE NEXT RAIN EVENT TO REGAIN COMPLIANCE OR OTHERWISE RUN THE RISK OF THE JOB BEING SHUTDOWN. NO ADDITIONAL CONTRACT DAYS WILL BE GIVEN IN THIS INSTANCE.
4. AREAS AND TIME OF EXPOSURE OF UNPROTECTED SOILS SHALL BE KEPT TO A MAXIMUM OF 15 DAYS.
5. USE TEMPORARY VEGETATION AND/OR MULCH TO PROTECT BARE AREAS FROM EROSION DURING CONSTRUCTION.
6. KEEP DUST WITHIN TOLERABLE LIMITS BY SPRINKLING OR OTHER ACCEPTABLE METHODS.
7. DISTURBED AREAS ARE TO BE GRADED TO DRAIN TO SEDIMENT BARRIERS, AS INDICATED ON PLAN, DURING AND UPON COMPLETION OF CONSTRUCTION.
8. UPON STABILIZATION OF THE PROJECT SITE WITH A GOOD (ACCEPTABLE) STAND OF GRASS AND/OR GROUND COVER, THE EROSION/SILTATION INSTALLATIONS WILL BE REMOVED AND THE AREA DISTURBED WILL BE SEEDED AND MULCHED WITH THE SAME TREATMENT AS OTHER NEW GRASSED AREAS OF THE PROJECT. INCLUDE COSTS OF REMOVAL OF ESC MEASURES IN OTHER ITEMS.
9. ALL ESC MEASURES SHALL BE CHECKED BEFORE AND AFTER ALL RAIN EVENTS, AND DAILY DURING PROLONGED RAINFALL, TO ENSURE MEASURES ARE WORKING PROPERLY.
10. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
11. AS NECESSARY, PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. MAINTAIN PUBLIC ROADWAYS FREE OF TRACKED MUD AND DIRT.
12. STRIP TOPSOIL FROM ALL CUT AND FILL AREAS AND STOCKPILE. UPON COMPLETION OF GENERAL GRADING COVER ALL DISTURBED AREAS WITH TOPSOIL, TO A MINIMUM DEPTH OF 4". CONTRACTOR SHALL SUPPLY ADDITIONAL TOPSOIL IF INSUFFICIENT QUANTITIES EXIST ON SITE. ADDITIONAL TOPSOIL SHALL BE PAID FOR UNDER ITEM 203-08.01 "FURNISHING AND SPREADING TOPSOIL (4"THICK)" IN SQUARE YARDS.
13. ALL ESC MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED.
14. STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS.

NOTE:

1. INSTALL EROSION CONTROL MATTING (TCP-09) ON ALL SLOPES 3:1 OR GREATER, IN PROPOSED CHANNELS (NOT BLUE-LINE STREAMS), AND AROUND THE PROPOSED WINGWALLS.

CONTROL POINTS

Point	Northing	Easting	Elevation	Feature	GPS Point
S1	703538.4084	1749588.9402	587.560	XCP	5/8" CAPPED REBAR
S2	703226.0363	1749555.3463	593.027	XCP	MAG NAIL WITH WASHER



FINISHED FLOOR ELEVATION- 588.62'
*EXISTING BUILDING
OBTAIN RIGHT OF ENTRY
Parcel ID: 04209010600
701 WESTCHESTER DR
SPOONAMORE, RICHARD & BRENDA
INSTR#20070116 0005738
SANITARY SEWER MANHOLE (LOCATION AND INVERTS BASED ON MWS PLANS PROJECT # 77-SC-51 SHEET 18)
TOP- 586.02'
INV(E)- 575.13'
INV(S)- 574.30'
INV(W)- 573.99'
FINISHED FLOOR ELEVATION- 588.18'
TN GNSS
Parcel ID: 04210003400
609 WESTCHESTER DR
HANNULA, MALAH & JACOB LAURII MARKWOOD & ET AL
INSTR#20220531 0062673
Parcel ID: 04210003300
611 WESTCHESTER DR
MEJIA, GEOVANY PRIMERO
INSTR#20230321 0020192
5' WOOD
36" TWIN HACKBERRY
INSTALL SEDIMENT FILTER BAG AND PUMP (REFER TO TDOT DETAIL EC-STR-32)
PROJECT BENCHMARK
BENCH TIE EL. 586.96'
INSTALL CULVERT DIVERSION CHANNEL IN ACCORDANCE WITH TDOT STANDARD EC-STR-32
SANITARY SEWER MANHOLE
TOP- 585.48'
INV(E)- 578.46'
INV(W)- 578.43'
SANITARY SEWER AND/OR STORM DRAINAGE EASEMENT
D.B. 5569 PG. 145
8" RCP
FLOW
20' SANITARY SEWER AND/OR STORM DRAINAGE EASEMENT
D.B. 5587 PG. 528
20' PUBLIC UTILITY EASEMENT
P.B. 2331 PG. 69
12"HACKBERRY
INSTALL SANDBAG HEADWALLS PER TDOT DETAIL EC-STR-32
Parcel ID: 04214000100
113 PORT DR
SMITH, GEORGE
BOOK 5854, PAGE 885
*EXISTING BUILDING
FINISHED FLOOR ELEVATION- 593.22'
12" TULIP POPLAR
Parcel ID: 04213004500
114 PORT DR
TRETIAL, THEODORE
INSTR#20191011 0104600
18" WALNUT
24"WALNUT
12" WALNUT
28" ASH
24" ASH
INSTALL SANDBAG HEADWALLS PER TDOT DETAIL EC-STR-32
CONCRETE
18" RCP
6" DTI
INV.- 586.24'
12" TULIP POPLAR
10" TULIP POPLAR
EIP
20' PUBLIC UTILITY EASEMENT
P.B. 2331 PG. 69
INV- 585.40'
CP-S2
36" RCP
Parcel ID: 04213004400
116 PORT DR
HANCOCK INVESTMENT PROPERTIES LLC
INSTR#20240403 0023301
INV- 585.88'
SANITARY SEWER MANHOLE
TOP- 599.88"
INV(SW)- 591.75'
INV(NE)- 591.66'
24" BLACK WALNUT
Parcel ID: 04214000200
115 PORT DR
COMAN, BENIAMIN & DIANA
INSTR#20030425 0055799
Parcel ID: 04214000300
608 TUCKAHOE DR
HUNT, MARGARET ANN MCMAHAN
BOOK 10895, PAGE 722
GRASS
S.V.
W.M.
MB
SCALE: 1"=20'

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
(sand bag symbol)	SAND BAG BARRIER	TCP-15
(SFB symbol)	SEDIMENT FILTER BAG	EC-STR-2
(arrow symbol)	TEMPORARY DIVERSION CULVERT	EC-STR-32

FILE NO.	PORT DRIVE
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DATE:	

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BRENTWOOD, TN 37027
(615)-425-2000

SEALED BY

DOUGLAS W. GUTMAN, REGISTERED ENGINEER, AGRICULTURE, COMMERCE, STATE OF TENNESSEE
11/01/2024

METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
METRO WATER SERVICES
STORMWATER DIVISION

PORT DRIVE STORMWATER IMPROVEMENTS

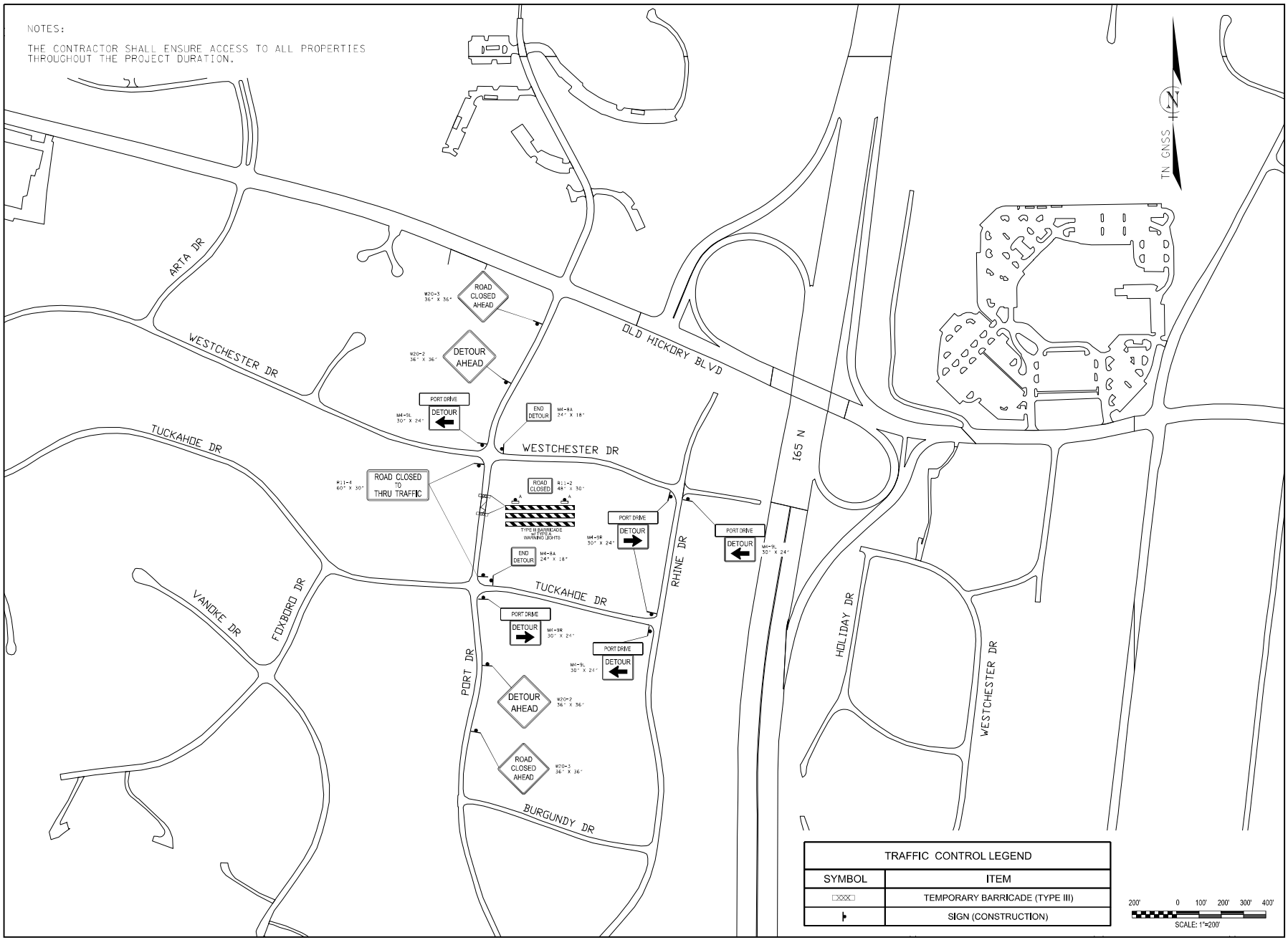
EPSC LAYOUT

SCALE: 1" = 20'

SHEET 06 OF 11

NOTES:

THE CONTRACTOR SHALL ENSURE ACCESS TO ALL PROPERTIES THROUGHOUT THE PROJECT DURATION.



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
XXX	TEMPORARY BARRICADE (TYPE III)
	SIGN (CONSTRUCTION)

200' 0 100' 200' 300' 400'
SCALE: 1"=200'

FILE NO.	PORT DRIVE
DATE:	10-31-2024
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CHECKED BY:	DWG
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DATE:	
DATE:	

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(615)-425-2000

SEALED BY

DOUGLAS W. GUTMAN
REGISTERED ENGINEER
STATE OF TENNESSEE
11/01/2024

METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
METRO WATER SERVICES
STORMWATER DIVISION

PORT DRIVE STORMWATER IMPROVEMENTS

TCP LAYOUT

SCALE: 1" = 200'

GENERAL NOTES:

1. All sewer construction shall conform to the current standard specifications and details of the Metropolitan Government of Nashville and Davidson County Department of Water and Sewerage Services (MWS).

2. The Contractor shall obtain and comply with all necessary standards and permits from any federal, state, and/or local authority having jurisdiction over any phase of construction associated with the project.

3. The types and locations of existing utilities shown on the drawings are approximate and shall be independently verified by the Contractor. The Contractor shall be responsible for the location and preserving existing utilities prior to and during construction. Repairs or replacements to any MWS utility damaged by construction activities shall be the responsibility of the Contractor with no additional payment allowed.

4. The Contractor shall bring to the attention of MWS and document any pre-existing damage or conditions prior to beginning work. Repairs or replacements to any items damaged by water and sewer construction activities shall be the responsibility of the Contractor with no additional payment allowed.

5. Maintain proper vertical and horizontal separation between water and sanitary sewer mains. For more information, see TDEC Design Criteria for Sewage Works Section 2.4.1.2 Relation to Water Mains & Community Public Water Systems Design Critera Section 9.2 Separation of Water Mains and Sewers. When a conflict exists and proper separation is not attainable, the Contractor shall coordinate with MWS for the necessary measures to ensure system integrity.

6. The Contractor shall verify the size and material for each water service line and reconnect all live water services, whether indicated on the drawing or not, per MWS.

7. Water service lines 2-1/2 inches in diameter and smaller shall be replaced from the water main to the meter with copper.

8. Water service lines greater than 2-1/2 inches in diameter shall be replaced from the water main to the property line valve or meter with ductile iron pipe.

9. Contact MWS if lead services are discovered. The Contractor shall follow the current MWS lead service replacement procedure. This may cause some delays and additional coordination. Replacement of lead service lines requires an additional sampling protocol that will delay the replacement of the service line until the protocol can be coordinated with the customer.

10. When existing meter boxes require adjusting and/or relocating, water meters and shutoffs shall be a minimum of 24" not to exceed a maximum of 32" below finished grade.

11. The Contractor is responsible for notifying MWS Inspection personnel prior to any work or connections being conducted on the MWS System.

12. The Contractor shall not operate any valves on the existing water system and/or water mains placed in service without prior approval and only under the supervision of MWS. Operating valves shall be scheduled in writing by the Contractor and must be approved in advance by MWS.

13. Metro Water Services will make every reasonable effort to isolate and shut down the flow of water when required for the work; however, there may be circumstances that prevent timely water shut downs such as: faulty valves, water main breaks, lack of forces due to higher priority situations, etc. The cost for Contractor standby time due to these types of delays is considered incidental and should be incorporated into the price of other bid items with no additional payment allowed.

14. The Contractor shall not make connections to the existing water system until applicable tests, including: disinfection, hydrostatic, etc., have been performed and reported to MWS and found to be in compliance. Reduced Pressure Backflow Prevention Devices (RPBP) or dual check valves will be required on all test and fill lines needed for water main construction and must be approved by MWS.

15. All pipe, pipe fittings, plumbing fittings, and fixtures including, but not limited to, coated or uncoated brass or bronze materials that could come in contact with drinking water shall be in accordance with the 2011 reduction of lead in drinking water act that amends the Safe Drinking Water Act, Section 1417 effective January 4, 2014. The following internet link provides further clarification and direction on the requirement: http://nepis.epa.gov/adobe/pdf/p100grdz.pdf.

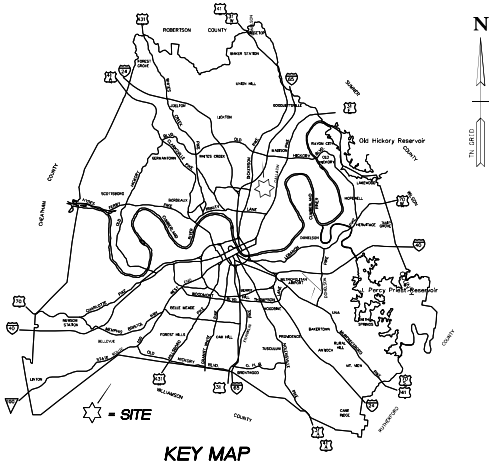
16. If a water main, or other MWS system component, requires relocation or addition and is not indicated on the approved drawings, the Contractor shall notify MWS immediately. Prior to relocation, the drawings shall require: modification depicting the relocation, approval from a registered professional engineer and the appropriate regulatory agencies, and a MWS based project number assigned.

17. If a water service line is disconnected, the proper MWS disinfection protocol shall be implemented prior to the service line being reconnected to the existing water system.

18. No discharge of wastewater or debris shall be released to the environment. Should the Contractor's actions cause an overflow or bypass of wastewater to the environment, site cleanup will be the responsibility of the Contractor consistent with MWS' Spill and Overflow Response Plan.

19. Prior to implementing the plugging of any line, bypass pumping, or similar actions, the Contractor shall provide a detailed plan of approach to MWS for review and comment. MWS approval of any such plan does not relieve the contractor of the responsibility for the adequacy of the plan or proper execution.

20. The Contractor shall complete all work in full compliance with the Metro Stormwater Management Regulations, so as to create no stormwater quality or quantity compliance issues. Illicit discharges of pollutants, either direct or indirect, to a storm sewer, stormwater conveyance, or stream within Metro Nashville Davidson County are prohibited, per Metro ordinance 15.64.205 (Non-Stormwater Discharges).



KEY MAP

CONSTRUCTION DETAILS:

Contractor shall comply with all applicable and current MWS details located on the webpage. See Approved Construction Specifications and Details: (https://www.nashville.gov/Water-Services/Developers/Water-and-Sewer.aspx)

Applicable details of note for this project include:

Sewer Details
- SDET006 (Concrete Encasement)

NOTE:

See Sheet 09 for notes and details for the water utilities which belong to Madison Suburban Utility District.

UTILITY OWNERS

WATER:	SANITARY SEWER:	STORM WATER:	STREETS:	NASHVILLE DEPT. OF TRANSPORTATION:	ADA:
MADISON SUBURBAN UTILITY DISTRICT	METRO WATER & SEWER	METRO WATER & SEWER	NASHVILLE DEPT. OF TRANSPORTATION	NASHVILLE DEPT. OF TRANSPORTATION:	ADA COMPLIANCE DIVISION
108 WEST WEBSTER STREET	1600 2nd AVENUE NORTH	1600 2nd AVENUE NORTH	740 SOUTH 5TH STREET	750 SOUTH 5TH STREET	730 2ND AVE S
MADISON, TN 37115	NASHVILLE, TN 37208	NASHVILLE, TN 37208	NASHVILLE, TN 37206	NASHVILLE, TN 37206	NASHVILLE, TN 37210
CONTACT PERSON:	CONTACT PERSON:	CONTACT PERSON:	CONTACT PERSON:	CONTACT PERSON:	CONTACT PERSON:
CINDY ELLIS	MICHAEL MORRIS	RICKY SWIFT	MIKE DAVIS	RORY ROWAN	JERRY HALL
(615) 868-3201	(615) 862-4570	(615) 862-4784	(615) 862-8760	(615) 862-8782	(615) 862-8744
cellis@msud.net	michael.morris@nashville.gov	ricky.swift@nashville.gov	mike.davis@nashville.gov	rory.rowan@nashville.gov	jerry.hall@nashville.gov
TELEPHONE:	**ELECTRIC:**	**GAS:**	**CABLE:**	**FIBER:**	**TELECOMMUNICATIONS:**
AT&T	NASHVILLE ELECTRIC SERVICE	PIEDMONT GAS	COMCAST	GOOGLE FIBER	VERIZON
333 COMMERCE ST., 23RD FLOOR	1214 CHURCH STREET	33 CENTURY BLVD	660 MAINSTREAM DRIVE	1101 MCGAVOCK STREET, STE 200	101 MOLLOY STREET
NASHVILLE, TN 37201	NASHVILLE, TN 37203	NASHVILLE, TN 37214	NASHVILLE, TN 37228	NASHVILLE, TN 37203	NASHVILLE, TN 37201
CONTACT PERSON:	CONTACT PERSON:	CONTACT PERSON:	CONTACT PERSON:	CONTACT PERSON:	CONTACT PERSON:
WILL DAVENPORT	JON SIPES	DON LAMONT NEVILS	GARY MCKINNEY	RICK BOLTON	DEREK DEE
(615) 801-6960	(615) 747-2530	(615) 335-7929	(615) 244-7462 EXT. 1115332	(629) 888-2258	(615) 915-5470
wd5635@att.com	jsipes@nespower.com	don.nevils@duke-energy.com	NAS-NashvilleConstructionBetterments@comcast.com	gfiber-tna-relocations@google.com	derek.r.dee@verizon.com

Metro Water Services Nashville, TN
*** Approved for Construction ***
Under authority delegated by the Tennessee Department of Environment and Conservation Division of Water Resources, this document has been reviewed by the Department of Water and Sewerage Services or contracted professional and is hereby approved for construction.
This approval shall not be construed as an assurance that the improvements depicted in the document bearing this stamp will function as intended.
Public Sewer _____
Public Water _____
Date _____ MWS Engineer _____
This approval expires one year from date shown below

MWS PROJECT NUMBER:
24-SWC-140

FILE NO.	PORT DRIVE
DATE:	10-31-2024
DESIGNED BY:	AOS
DRAWN BY:	AOS
CHECKED BY:	DWG
REVISION BLOCK	
DATE:	
DATE:	
DATE:	

CONSOR ENGINEERS, LLC
101 WESTPARK DRIVE, SUITE 300
BRENTWOOD, TN 37027
(615)-425-2000

SEALED BY

DOUGLAS W. GUTMAN — REGISTERED ENGINEER — AGRICULTURE — No. 116211 — STATE OF TENNESSEE
11/01/2024

METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
METRO WATER SERVICES
STORMWATER DIVISION

PORT DRIVE STORMWATER IMPROVEMENTS

UTILITY NOTES & DETAILS

SCALE: N.T.S.

SHEET: 08 OF 11

GENERAL NOTES FOR WATER LINE CONSTRUCTION

1. ALL WATER LINE CONSTRUCTION AND MATERIALS WILL BE IN STRICT COMPLIANCE WITH THE CURRENT APPROVED SPECIFICATIONS FOR THE MADISON SUBURBAN UTILITY DISTRICT (MSUD) AS ON FILE WITH THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, DIVISION OF WATER QUALITY CONTROL.

2. BEFORE ANY WATER LINE WORK IS INITIATED ON THIS PROJECT, THE CONTRACTOR SHOULD CONTACT MSUD AND SATISFY ALL REQUIREMENTS OF MSUD. UPON COMPLETION OF THE WATER LINE INSTALLATION, THE CONTRACTOR WILL PERFORM A PRESSURE TEST AND DISINFECT THE LINE UNDER THE INSPECTION OF MSUD. THE OWNER / DEVELOPER SHALL BE RESPONSIBLE FOR THE COST OF REASONABLE INSPECTION FEES OF MSUD.

3. ANY AND ALL FEES, LICENSES, AND PERMITS NECESSARY FOR THIS CONSTRUCTION AND ARE TO BE OBTAINED AND PAID PRIOR TO THE INITIATION OF CONSTRUCTION AND THE COST THEREFORE WILL BE BORNE BY THE CONTRACTOR.

4. MSUD WILL SUPPLY THE APPROPRIATE WATER METER(S) AND SHALL BE REIMBURSED BY THE CONTRACTOR FOR MATERIAL COSTS.

5. WATER LINE CONSTRUCTION IS TO BE COMPLETED BY THE CONTRACTOR EXCEPT FOR THE ACTUAL CONNECTIONS TO EXISTING WATER LINE. AT LEAST 72 HOURS PRIOR TO CONNECTING PROPOSED WATER LINE TO THE SYSTEM, THE CONTRACTOR WILL NOTIFY MSUD AND COORDINATE METHOD OF CONNECTION AND TIME TO SHUT DOWN EXISTING WATER LINE IF REQUIRED.

6. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UTILITIES (INCLUDING STORM DRAINAGE PIPES OR STRUCTURES) BEFORE COMMENCEMENT OF CONSTRUCTION.

7. WATER LINE MATERIAL WILL BE DUCTILE IRON PIPE, CLASS "52 WITH DUCTILE IRON FITTINGS AND DUCTILE IRON OR BRASS TAPS AS APPROPRIATE.

8. THE CONTRACTOR IS REQUIRED TO LOCATE ALL NEW TIE-INS, FITTINGS, VALVES, VAULTS, PRESSURE REDUCING VALVES, WATER UTILITY CROSSINGS OF OTHER UTILITIES OR STREAMS, CASING PIPE ENDS, CONCRETE ENCASEMENT ENDS, AND FIRE HYDRANTS UTILIZING THE GLOBAL POSITIONING SYSTEM (GPS). POINTS ON THE WATER MAIN EVERY 50 FEET BETWEEN THESE ITEMS SHALL ALSO BE LOCATED. ELEVATIONS AND COORDINATES (NORTHING AND EASTING BASED UPON THE TENNESSEE RECTANGULAR GRID SYSTEM, 1983 NORTH AMERICA DATUM OR UPDATED VERSION) OF EACH OF THESE ITEMS SHALL BE OBTAINED AND PROVIDED TO THE MADISON SUBURBAN UTILITY DISTRICT. THIS GPS INFORMATION SHALL INCLUDE REAL TIME SIGNAL CORRECTION. THE CONTRACTOR SHALL COORDINATE THE DEVELOPMENT OF THIS DATA WITH THE M.S.U.D. PROJECT INSPECTOR. FINAL ACCEPTANCE OF THE NEW FACILITIES BY M.S.U.D. IS CONTINGENT UPON RECEIPT OF THIS INFORMATION. TWO (2) 24" x 36" HARD COPIES AND ONE (1) ELECTRONIC COPY (MICROSTATION V7 OR AUTOCAD2000) OF THE AS-BUILT PLANS, INCLUDING THIS GPS DATA, ARE TO BE PROVIDED TO M.S.U.D., ONCE CONSTRUCTION IS COMPLETED. THE ELECTRONIC COPY SHALL BE UTILIZED SOLELY FOR THE PURPOSE OF TRANSFERRING AS-BUILT INFORMATION TO M.S.U.D.'s WATER SYSTEM DISTRIBUTION MAPS.

9. ALL BENDS, TEES, CROSSES, PLUGS, AND PRESSURE CONNECTIONS, ETC., SHALL BE BACKED UP AND ANCHORED WITH CONCRETE BLOCKING.

10. BACKFLOW PREVENTER ARE TO BE INSTALLED BY TENNESSEE CERTIFIED INSTALLERS WHO SPECIALIZE IN BACKFLOW PREVENTION. ALL INSTALLATIONS ARE TO MEET M.S.U.D.'s REQUIREMENTS. ALSO, THE CONTRACTOR MUST SCHEDULE A TIME FOR TESTING OF THE DEVICE WITH THE DISTRICT'S INSPECTOR BEFORE COMPLETION OF THE PROJECT. IT IS NECESSARY FOR THE CONTRACTOR TO BE PRESENT DURING THIS TEST IN ORDER TO CORRECT ANY POTENTIAL PROBLEMS PRIOR TO OCCUPANCY OF THE PROPERTY.

11. BE SURE TO NOTIFY THE STATE, WHEN REQUIRED BY STATE REGULATIONS, BEFORE YOU BEGIN ANY WATER LINE CONSTRUCTION.

12. ALL VALVES SHALL OPEN BY TURNING TO THE LEFT AND BE SECURED USING MEGA-LUGS. ALL PIPE FITTINGS SHALL BE SECURED USING MEGA-LUGS.

13. IF STATE REVIEW AND APPROVAL REQUIRED, OWNER/DEVELOPER SHALL SUBMIT A STATE APPROVED SET OF PLANS TO M.S.U.D. A MINIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL MAINTAIN A SET OF STATE APPROVED PLANS AND SPECIFICATIONS ON THE PROJECT SITE AT ALL TIMES.

14. UNLESS WRITTEN AUTHORIZATION FROM MSUD PROVIDES OTHERWISE, ALL WATER METERS SHALL BE PLACED IN AN ALIGNMENT THAT IS PERPENDICULAR TO THE ROAD FRONTING THE STRUCTURE BEING SERVED; THEY SHALL BE PLACED A MINIMUM OF 2'-0" FROM ANY STRUCTURE, INCLUDING, BUT NOT LIMITED TO SIDEWALKS, DRIVEWAYS, MAILBOXES, TREES, ETC.; AND THEY SHALL BE LOCATED AT THE FRONT OF THE STRUCTURE.

15. UNLESS WRITTEN AUTHORIZATION FROM MSUD PROVIDES OTHERWISE, NO FIRE HYDRANTS SHALL BE PLACED BETWEEN A SIDEWALK AND THE ROAD OR CURBING.

16. UNLESS WRITTEN AUTHORIZATION FROM MSUD PROVIDES OTHERWISE, NO WATER MAINS SHALL BE PLACED UNDER A SIDEWALK, EXTENDING PARALLEL TO THE SIDEWALK.

17. ANY WATER MAINS INSTALLED CROSSING UNDER PAVEMENT CARRYING VEHICULAR TRAFFIC SHALL BE BACKFILLED WITH STONE, PER MSUD TRENCH DETAIL - TYPE B. ANY PAVEMENT CARRYING VEHICULAR TRAFFIC, PLACED OVER EXISTING WATER MAINS, SHALL REQUIRE THE MAIN TO BE BEDDED WITH STONE, PER MSUD TRENCH DETAIL-TYPE B.

18. UNLESS WRITTEN AUTHORIZATION FROM MSUD PROVIDES OTHERWISE, NO WATER VALVES SHALL BE PLACED IN SIDEWALKS OR RESIDENTIAL DRIVEWAYS.

19. UNLESS WRITTEN AUTHORIZATION FROM MSUD PROVIDES OTHERWISE, WATER MAINS IN RESIDENTIAL DEVELOPMENTS SHALL BE PLACED IN THE MIDDLE OF ONE LANE OF A STREET.

20. ON-SITE MSUD APPROVAL OF A PART OF A PROJECT'S WATER SYSTEM INSTALLATION DOES NOT CONSTITUTE THE DISTRICT'S APPROVAL OF ALL OF THE PROJECT'S WATER SYSTEM INSTALLATION. FINAL ON-SITE APPROVAL OF THE PROJECT'S TOTAL WATER SYSTEM INSTALLATION MUST BE OBTAINED BEFORE THE MSUD WILL RECEIVE OWNERSHIP OF THAT WATER SYSTEM. FROM THE TIME OF THE ON-SITE INSPECTION AND FINAL APPROVAL OF THE TOTAL WATER SYSTEM INSTALLATION BY A REPRESENTATIVE OF THE MSUD, FURTHER CHANGES IMPACTING THE CONDITIONS OF OR THE ACCESSIBILITY TO THE WATER SYSTEM FACILITIES ARE STRICTLY FORBIDDEN, WITHOUT THE PRIOR APPROVAL OF THE MSUD. THESE INCLUDE, BUT ARE NOT LIMITED TO, CHANGES IN OVERBURDEN SLOPE OR DEPTH ON THE WATER MAIN, CHANGES THAT ADVERSELY EFFECT, IN THE OPINION OF THE MSUD, VEHICULAR OR EQUIPMENT ACCESS TO THE WATER MAINS, THE PLANTING OF TREES, SHRUBS, ETC. IN THE WATER UTILITIES EASEMENT OR THE LATER CONSTRUCTION OR PLACEMENT OF STRUCTURES CONSTRICTING THE WIDTH OF THE WATER UTILITIES EASEMENT. SHOULD THESE OR OTHER TYPES OF CHANGES BE MADE WITHOUT PRIOR APPROVAL OF THE MSUD, THEY SHALL BE RETURNED BACK TO THE ORIGINAL CONDITIONS AT THE TIME OF FINAL APPROVAL, AT THE COST OF THE PROPERTY OWNER DURING THOSE CHANGES.

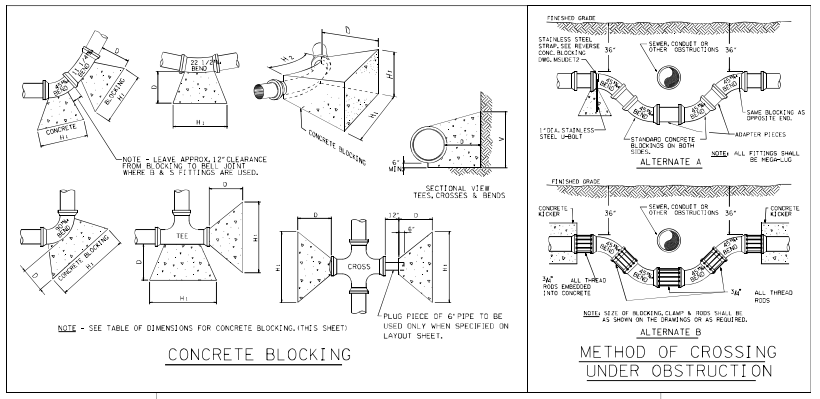
21. THE ENGINEER OR ARCHITECT OF THE PROJECT PLANS BEING SUBMITTED TO THE MSUD FOR APPROVAL OF THE WATER SYSTEM INSTALLATION SHALL BE RESPONSIBLE FOR INSURING THAT THOSE PLANS INCLUDE ALL ASPECTS OF THE PROJECT IMPACTING THE WATER SYSTEM ADDITIONS OR MODIFICATIONS. ANY SUBSEQUENT CHANGES IN PLANS, ADVERSELY IMPACTING THE WATER SYSTEM INSTALLATION, IN THE OPINION OF THE MSUD, AFTER APPROVAL OF THE ORIGINAL PLANS SUBMITTED TO THE MSUD, SHALL NEGATE THE PRIOR APPROVAL AND GIVE CAUSE FOR A RESUBMITTAL OF THE REVISED PLANS TO THE MSUD FOR APPROVAL. THE PLAN SHEETS OF THE WATER SYSTEM ADDITIONS OR MODIFICATIONS SHALL BE THE CONTROL SHEETS FOR THE REVIEW OF THE MSUD FOR APPROVAL AND SHALL INCLUDE ALL PROPER CROSS-REFERENCE NOTES TO ANY OTHER SHEETS SHOWING INFORMATION RELATED TO PIPE DEPTH, GROUND SLOPE, ETC. THE WATER MAIN DEPTH, AT ALL TIMES, SHALL BE THREE (3) FEET FROM THE GROUND ELEVATION TO THE TOP OF THE PIPE, UNLESS OTHER PROJECT ISSUES, SUCH AS EXISTING UTILITIES, ETC., REQUIRE A GREATER DEPTH FOR THE WATER MAIN. UNLESS APPROVAL HAS BEEN PROVIDED BY THE MSUD, NO WATER MAIN DEPTH SHALL BE GREATER THAN SIX (6) FEET UPON FINAL CONSTRUCTION OF THE PROJECT.

22. THE ENGINEER OR ARCHITECT OF THE PROJECT PLANS BEING SUBMITTED TO THE MSUD FOR APPROVAL OF THE WATER SYSTEM / FIRE SPRINKLER INSTALLATION SHALL INCLUDE ONE COPY OF THE SPRINKLER CALCULATIONS FOR REVIEW AND APPROVAL BY THE MSUD.

23. NEW WATER MAINS TO BE OWNED AND MAINTAINED BY THE M.S.U.D., OUTSIDE OF ROAD RIGHT-OF-WAYS, SHALL NOT BE INSTALLED UNDER PAVEMENT AND/OR PAVERS IN PRIVATE PROPERTY, UNLESS THERE ARE NO OTHER OPTIONS FOR THE ROUTE OF THE MAIN. SHOULD THE WATER MAIN HAVE TO BE INSTALLED UNDER PAVEMENT AND/OR PAVERS, OUTSIDE THE ROAD RIGHT-OF-WAY, THE PROPERTY OWNER AGREES TO ASSUME ALL COSTS AND RESPONSIBILITIES OF RESTORING THE PAVEMENT, AND/OR PAVERS SHOULD THE M.S.U.D. BE REQUIRED TO ACCESS THE WATER MAIN FOR MAINTENANCE, REPAIR OR REVISION.

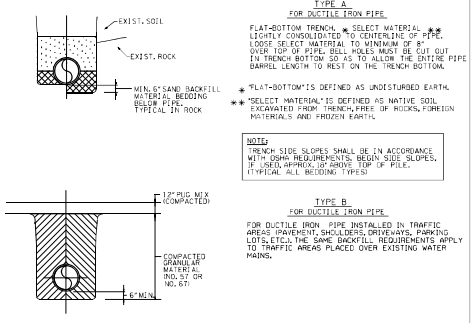
CONSTRUCTION DETAILS

Contractor shall comply with all applicable and current MSUD details located on the webpage. See Approved Construction Specifications and Details: (https://msud.net/construction-information/)



CONCRETE BLOCKING

METHOD OF CROSSING UNDER OBSTRUCTION



TRENCH DETAILS

TABLE OF DIMENSIONS FOR CONCRETE BLOCKING

SIZE OF PIPE	TAPPING SLEEVES TEES & PLUGS					90° BENDS					45° BENDS					22 ½° BENDS					11 ¼° BENDS				
	H1	H2	V	D	CU. FT.	H1	H2	V	D	CU. FT.	H1	H2	V	D	CU. FT.	H1	H2	V	D	CU. FT.	H1	H2	V	D	CU. FT.
2"x2½"	18"	10"	12"	18"	1.90	18"	10"	12"	18"	1.90	18"	6"	12"	18"	1.50	18"	6"	12"	18"	1.50	18"	6"	12"	18"	1.50
3"&4"	24"	12"	12"	18"	2.25	24"	12"	12"	18"	2.25	18"	8"	12"	18"	1.60	18"	8"	12"	18"	1.60	18"	8"	12"	18"	1.60
6"	24"	16"	18"	18"	3.50	30"	16"	18"	18"	4.05	24"	10"	16"	18"	3.20	24"	10"	16"	18"	3.20	24"	10"	16"	18"	3.20
8"	36"	18"	18"	18"	5.05	39"	18"	24"	18"	7.30	30"	11"	18"	18"	3.95	24"	11"	18"	18"	3.40	24"	11"	16"	18"	3.40
10"	48"	24"	18"	24"	7.15	54"	32"	12"	18"	10.25	24"	18"	21"	18"	4.60	24"	18"	21"	18"	4.60	24"	18"	21"	18"	4.60
12"	54"	30"	24"	24"	13.40	54"	36"	26"	24"	18.15	42"	18"	24"	24"	9.60	24"	18"	24"	24"	6.80	24"	18"	21"	24"	6.10
16"	66"	34"	36"	24"	22.05	69"	48"	48"	24"	29.0	48"	30"	36"	24"	17.0	24"	30"	27"	24"	11.8	27"	24"	27"	24"	9.10
24"	84"	48"	46"	30"	75.4	88"	68"	68"	36"	126.8	60"	36"	52"	36"	48.0	36"	30"	42"	36"	22.7	36"	30"	42"	36"	22.7

TABLE IS BASED ON 225 P.S.I. OR 150 P.S.I. WORKING PRESSURE PLUS 50% WATER HAMMER.

NOTE: CONCRETE USED FOR BLOCKING SHALL BE 3500#/sq. in

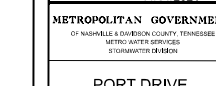
EARTH PRESSURES ARE FIGURED AT 4000# PER SQ. FT. BEARING AREA OF KICKERS SHALL BE INCREASED WHEN POURED AGAINST SAND, LOOSE FILL, WET EARTH, CINDERS, ETC.

TABLE OF DIMENSIONS FOR CONCRETE BLOCKING

FILE NO.	PORT DRIVE
DATE:	10-31-2024
DESIGNED BY:	AOS
DRAWN BY:	AOS
CHECKED BY:	DWG
REVISION BLOCK	
DATE:	
DATE:	
DATE:	

CONSOR ENGINEERS, LLC
101 WESTPARK DRIVE, SUITE 300
BRENTWOOD, TN 37027
(615)-425-2000

SEALED BY



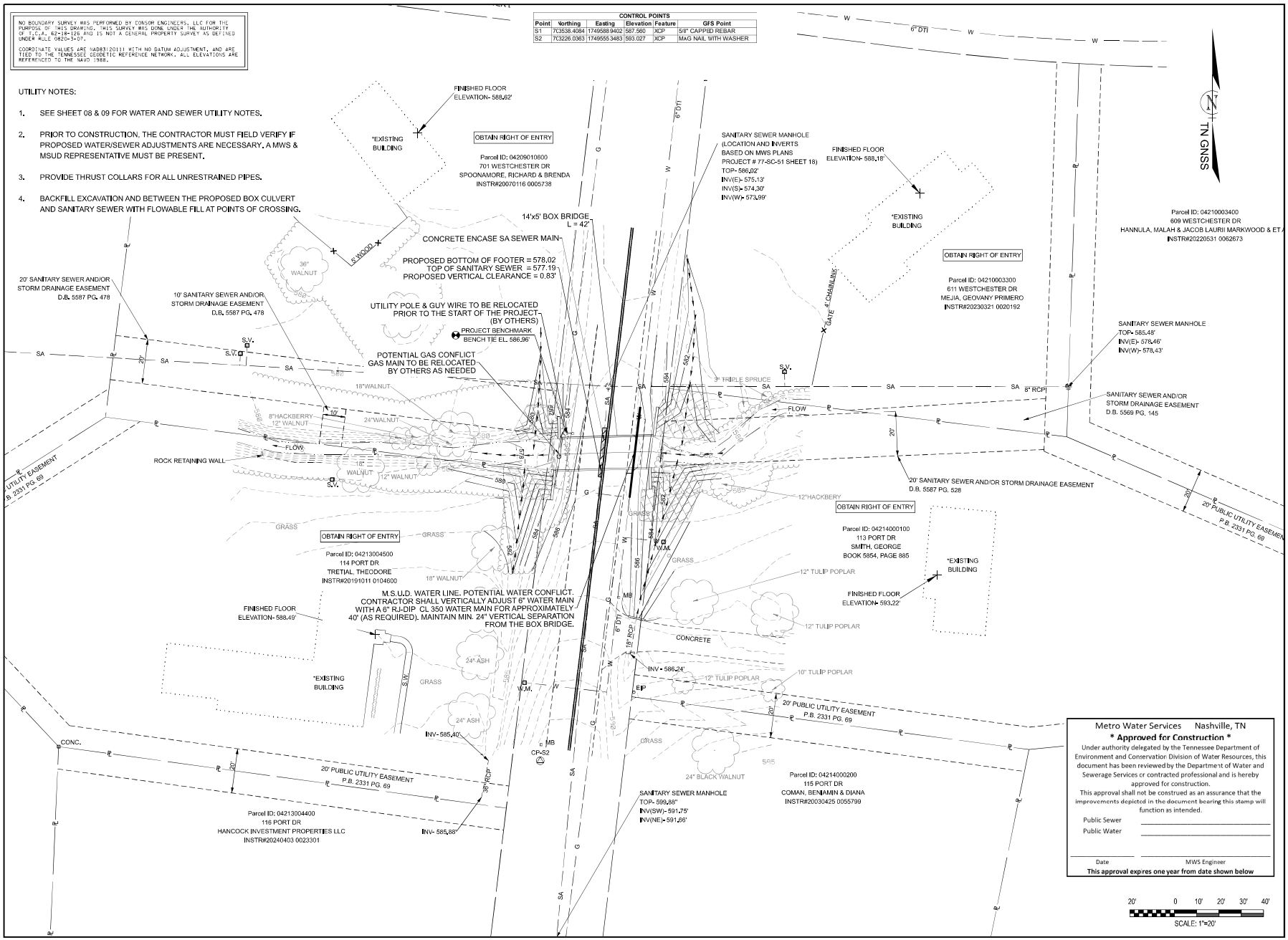
METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
METRO WATER SERVICES
STORMWATER DIVISION

PORT DRIVE STORMWATER IMPROVEMENTS

UTILITY NOTES & DETAILS

SCALE: N.T.S.

SHEET: 09 OF 11



Metro Water Services Nashville, TN

*** Approved for Construction ***

Under authority delegated by the Tennessee Department of Environment and Conservation Division of Water Resources, this document has been reviewed by the Department of Water and Sewerage Services or contracted professional and is hereby approved for construction.

This approval shall not be construed as an assurance that the improvements depicted in the document bearing this stamp will function as intended.

Public Sewer _____

Public Water _____

Date _____ MWS Engineer _____

This approval expires one year from date shown below

FILE NO.	PORT DRIVE
DATE:	10-31-2024
DESIGNED BY:	AOS
DRAWN BY:	AOS
CHECKED BY:	DWG
REVISION BLOCK	
DATE:	
DATE:	
DATE:	

CONSOR ENGINEERS, LLC
101 WESTPARK DRIVE, SUITE 300
BRENTWOOD, TN 37027
(615)-425-2000

MWS PROJECT NUMBER:
24-SWC-140

SEALED BY

DOUGLAS W. GUTMAN
REGISTERED ENGINEER
No. 118337
STATE OF TENNESSEE
11/01/2024

METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
METRO WATER SERVICES
STORMWATER DIVISION

PORT DRIVE STORMWATER IMPROVEMENTS

UTILITY LAYOUT

SCALE: 1" = 20'

SHEET 10 OF 11

STANDARD DETAILS:

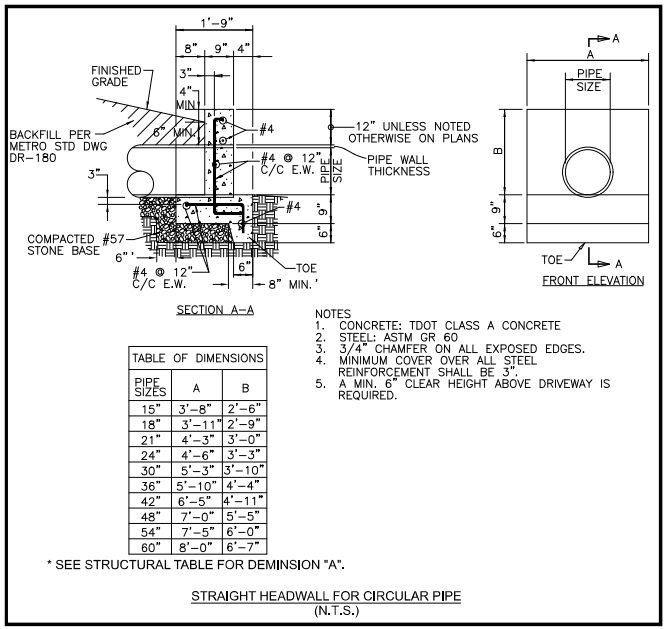
Applicable details for this project include:

MWS/NDOT DETAILS:

- DR-180 (Trench Backfill)
- TCP-14 (Weighted Sediment Tube)
- TCP-15 (Sand Bag Barrier)
- ST-252 (Residential Medium Density Minor and Local Street (50' ROW))
- ST-271A (Recessed Trench Repair with Crushed Stone)

TDOT DETAILS:

- EC-STR-1 (Dewatering Structure)
- EC-STR-2 (Sediment Filter Bag)
- EC-STR-32 (Temporary Diversion Culverts)
- STD-17-1 (Index of Drawings)
- STD-17-2 (Terminology of Drawings)
- STD-17-3 (General Notes)
- STD-17-4 (Design Section Limits)
- STD-17-5 (Typical Sections and Details)
- STD-17-6 (Typical Elevation)
- STD-17-9 (Interior Wall End Treatments)
- STD-17-10 (Typical Wingwall Details and Notes)
- STD-17-12 (Wingwall Dimensions for Concrete Bridge Box with 75 Degree Skew)
- STD-17-15 (Wingwall and Special Retaining Wall Design Sections)
- STD-17-16 (Wingwall Design Sections)
- STD-17-17 (Backfill and Drainage Details)
- STD-17-18 (Backfill Details)
- STD-17-25 (Stage Construction Joint Detail (Fill Above Top of Slab Not Greater Than 5'-6"))
- STD-17-28 (End Section Details)
- STD-17-59 (Standard Reinforced Concrete Box Bridge Interior Section: 1 Barrel At 14'-0" Clear Height 5'-0" through 7'-0" Thru 60' Fill)

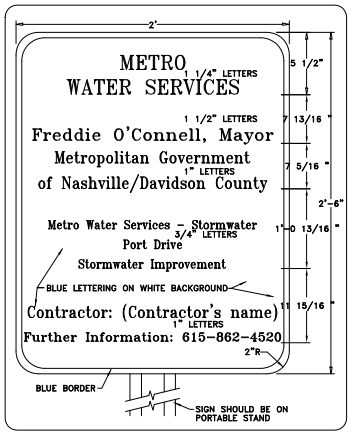


NOTES
1. CONCRETE: TDOT CLASS A CONCRETE
2. STEEL: ASTM GR 60
3. 3/4" CHAMFER ON ALL EXPOSED EDGES.
4. MINIMUM COVER OVER ALL STEEL REINFORCEMENT SHALL BE 3".
5. A MIN. 6" CLEAR HEIGHT ABOVE DRIVEWAY IS REQUIRED.

TABLE OF DIMENSIONS		
PIPE SIZES	A	B
15"	3'-8"	2'-6"
18"	3'-11"	2'-9"
21"	4'-3"	3'-0"
24"	4'-6"	3'-3"
30"	5'-3"	3'-10"
36"	5'-10"	4'-4"
42"	6'-5"	4'-11"
48"	7'-0"	5'-5"
54"	7'-5"	6'-0"
60"	8'-0"	6'-7"

* SEE STRUCTURAL TABLE FOR DEMINSION "A".

STRAIGHT HEADWALL FOR CIRCULAR PIPE
(N.T.S.)



METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY DEPARTMENT OF WATER AND SEWERAGE SERVICES		SMALL CONSTRUCTION SIGN
NOT TO SCALE	DATE: 12/27/01	DWG. NO. CON-SIGN-SM

FILE NO.	PORT DRIVE
DATE:	10-31-2024
DESIGNED BY:	AOS
DRAWN BY:	AOS
CHECKED BY:	DWG

REVISION BLOCK

DATE:	
DATE:	
DATE:	

CONSOR ENGINEERS, LLC
101 WESTPARK DRIVE, SUITE 300
BRENTWOOD, TN 37027
(615)-425-2000

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METROPOLITAN GOVERNMENT
OF NASHVILLE & DAVIDSON COUNTY, TENNESSEE
METRO WATER SERVICES
STORMWATER DIVISION

PORT DRIVE STORMWATER IMPROVEMENTS

STANDARD DETAILS

SCALE: N.T.S.

SHEET: 11 OF 11