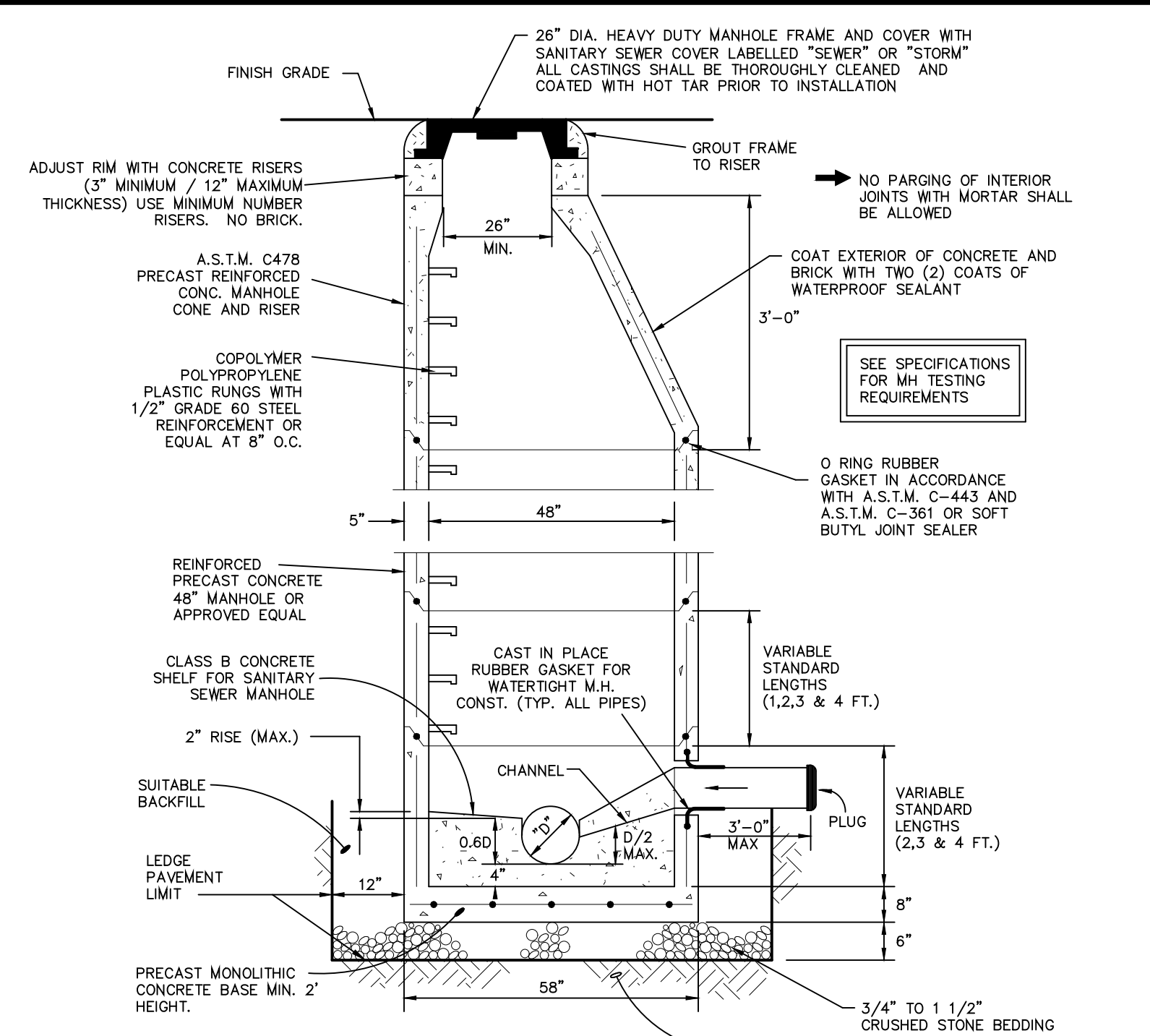
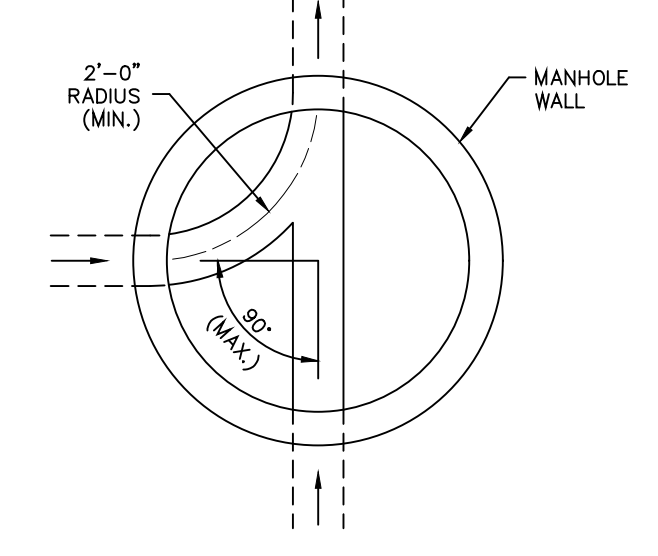


SANITARY & STORM SPECIFICATIONS

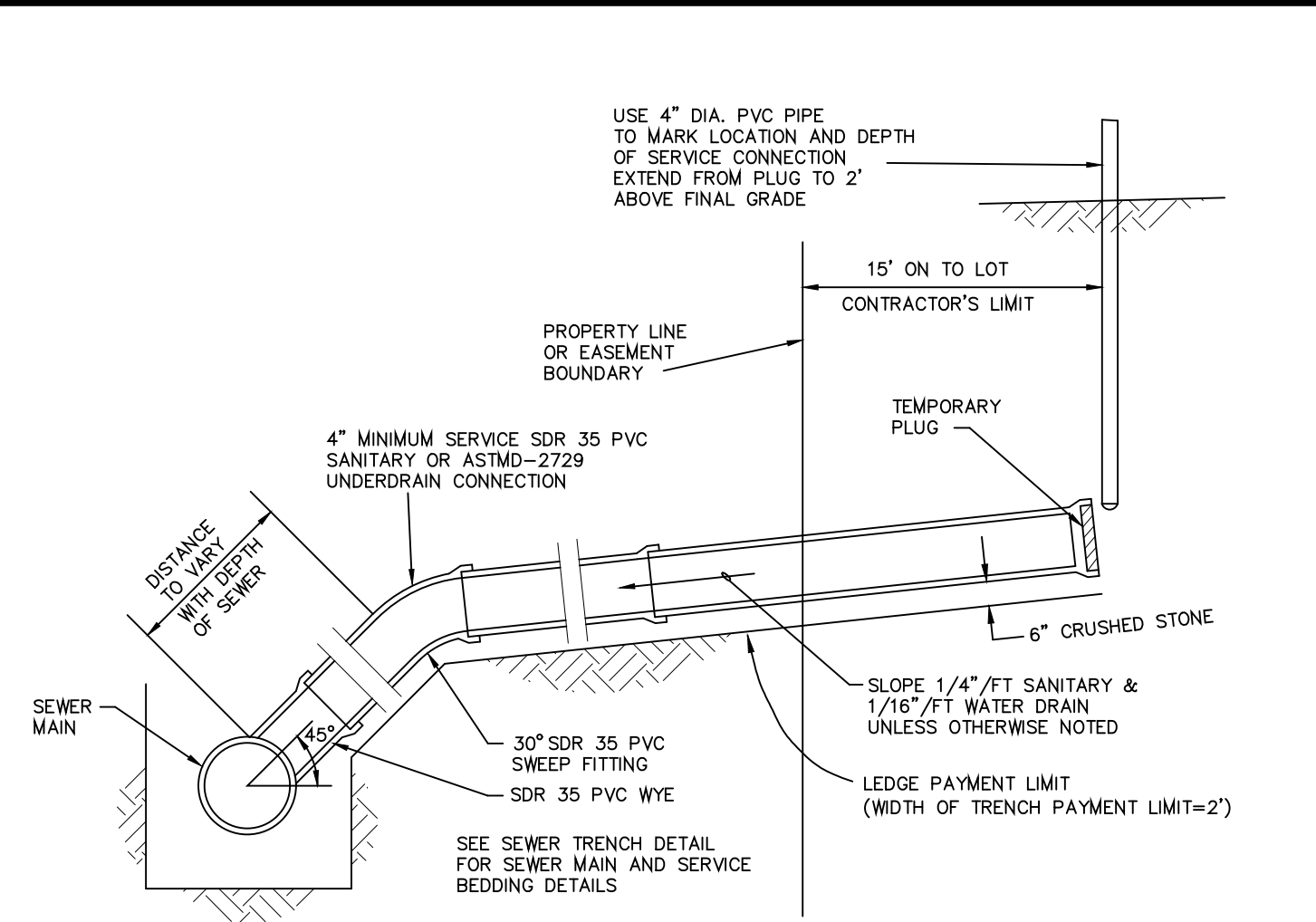
- THE HORIZONTAL AND VERTICAL SEPARATION FOR SEWER AND WATER LINES SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST EDITION OF THE "TEN STATE STANDARDS - RECOMMENDED STANDARDS FOR WATER WORKS".
- CONSTRUCTION OF THIS PROJECT MUST BE INSPECTED BY LAMOUREUX & DICKINSON CONSULTING ENGINEERS, INC., ESSEX JUNCTION, VT. TO ENSURE COMPLIANCE WITH THE PLANS.
- SANITARY AND STORM SEWER PIPES SHALL BE OF THE SIZE AND TYPE INDICATED ON THE PLANS. PVC PIPE SHALL BE SDR35 CONFORMING TO ASTM D-3034, ASTM D-3212, AND ASTM F-477. CORRUGATED POLYETHYLENE PIPE SHALL CONFORM TO AASHTO M294-90, TYPE S. PERFORATED UNDERDRAIN PIPE SHALL BE PVC SDR35 CONFORMING TO AASHTO M278-87 OR CORRUGATED POLYETHYLENE PIPE WITH SMOOTH INTERIOR WALL CONFORMING TO AASHTO M252-90.
- ALL GRAVITY SANITARY SEWER PIPE SHALL BE SDR 35 PVC CONFORMING TO ASTM D-3034, ASTM D-3212, AND ASTM F-477. FORCEMAIN SEWER PIPE SHALL BE PVC SDR26.
- ALL TRENCH FILL SHALL BE PLACED IN 6" LIFTS AND THOROUGHLY COMPACTED TO 95% OF MAXIMUM DENSITY OF OPTIMUM MOISTURE AS DETERMINED BY ASTM D968 STANDARD PROCTOR.
- ALL NEW GRAVITY SANITARY SEWER MAINS SHALL BE LEAK TESTED BY A LOW PRESSURE AIR TEST AND DEFLECTION TESTED. SEE THE BELOW TESTING PROCEDURE PRESCRIBED BY THE TOWN OF SHELBURNE. AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS, THE DEFLECTION TEST SHALL BE PERFORMED. NO PIPE SHALL EXCEED A DEFLECTION OF FIVE PERCENT (5%). IF THE DEFLECTION TEST IN RUN USING A RIGID BALL OR MANDREL, IT SHALL HAVE A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES. ALL MANHOLE AND PIPELINE MATERIALS, METHODS AND TESTING SHALL BE IN ACCORDANCE WITH TOWN STANDARDS, STATE STANDARDS AND WITH THESE PLANS. ALL TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER.
- ALL SANITARY SEWER MANHOLES SHALL BE TESTED PRIOR TO CONSTRUCTION OF THE INVERT BY THE VACUUM TEST METHOD. THE MINIMUM ALLOWED TIME FOR A VACUUM DROP FROM 10" OF MERCURY TO 9" OF MERCURY SHALL BE 2 MINUTES.
- ANY SURFACES, LINES, OR STRUCTURES WHICH HAVE BEEN DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO A CONDITION AT LEAST EQUAL TO THAT IN WHICH THEY WERE FOUND IMMEDIATELY PRIOR TO THE BEGINNING OF CONSTRUCTION.
- THE CONTRACTOR SHALL COORDINATE THE LOCATION AND INSTALLATION OF THE INDIVIDUAL LOT SERVICES WITH THE OWNER AT THE TIME OF CONSTRUCTION.
- ALL MANHOLES AND PIPELINE MATERIALS, METHODS, AND TESTING SHALL BE IN ACCORDANCE WITH THESE PLANS AND ANY APPLICABLE TOWN OR STATE STANDARDS.



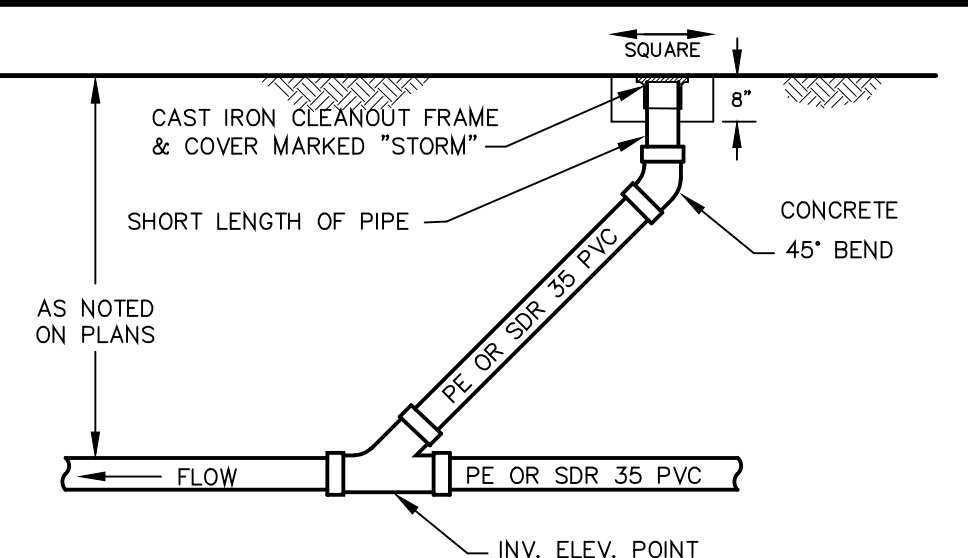
TYPICAL PRECAST SANITARY SEWER & STORM MANHOLE
NTS



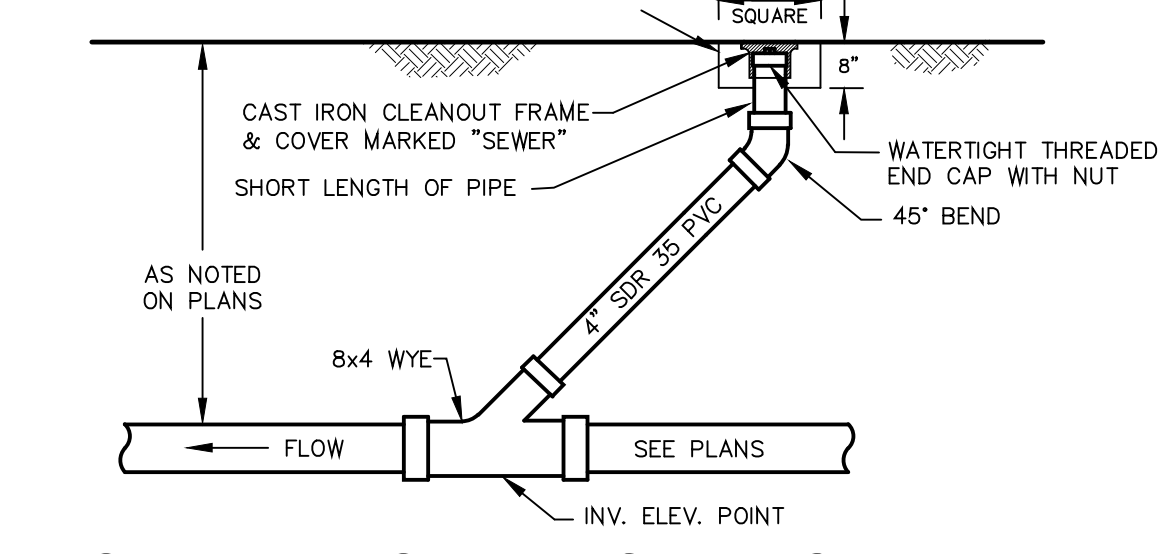
MANHOLE CHANNEL
NTS



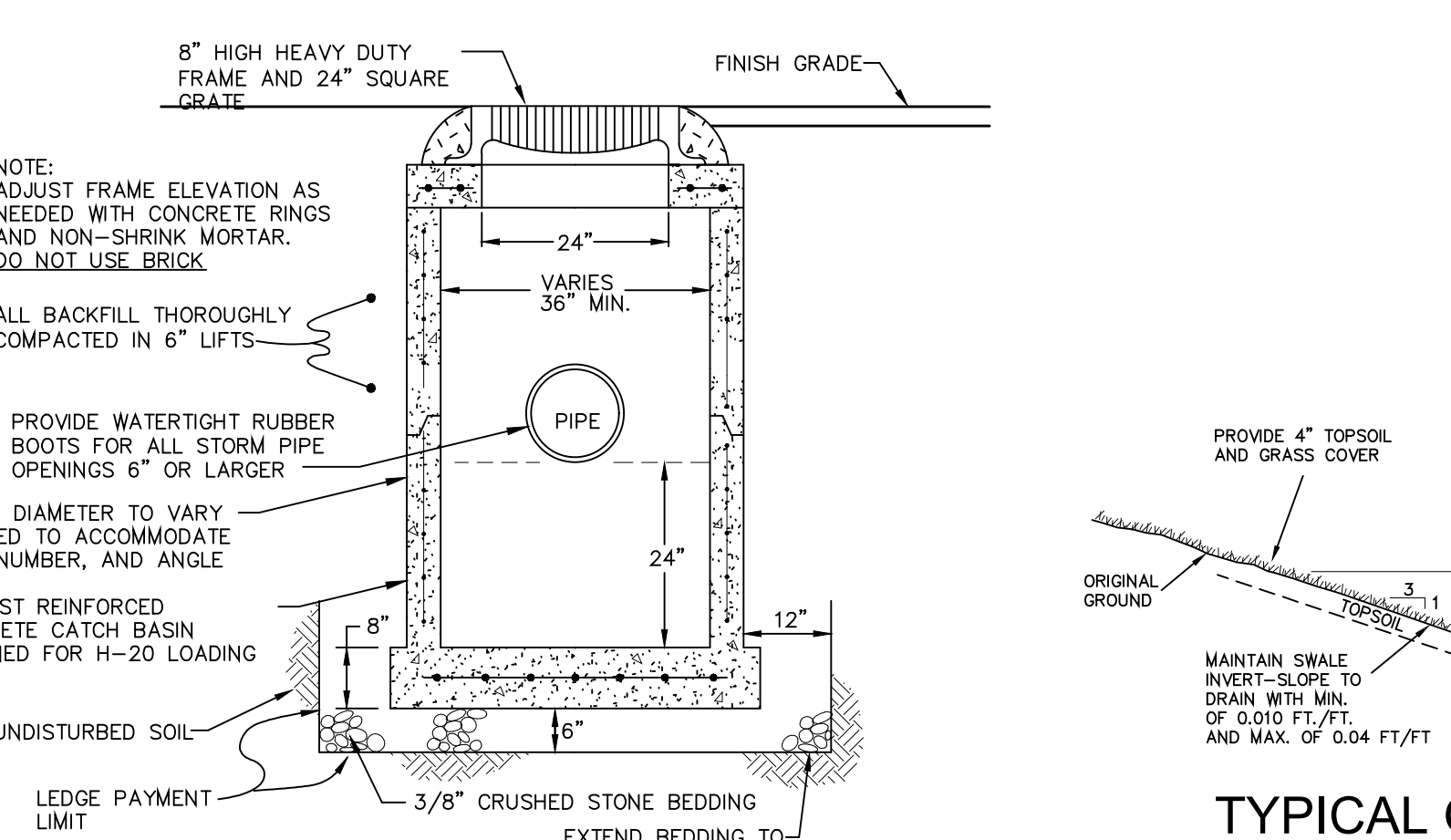
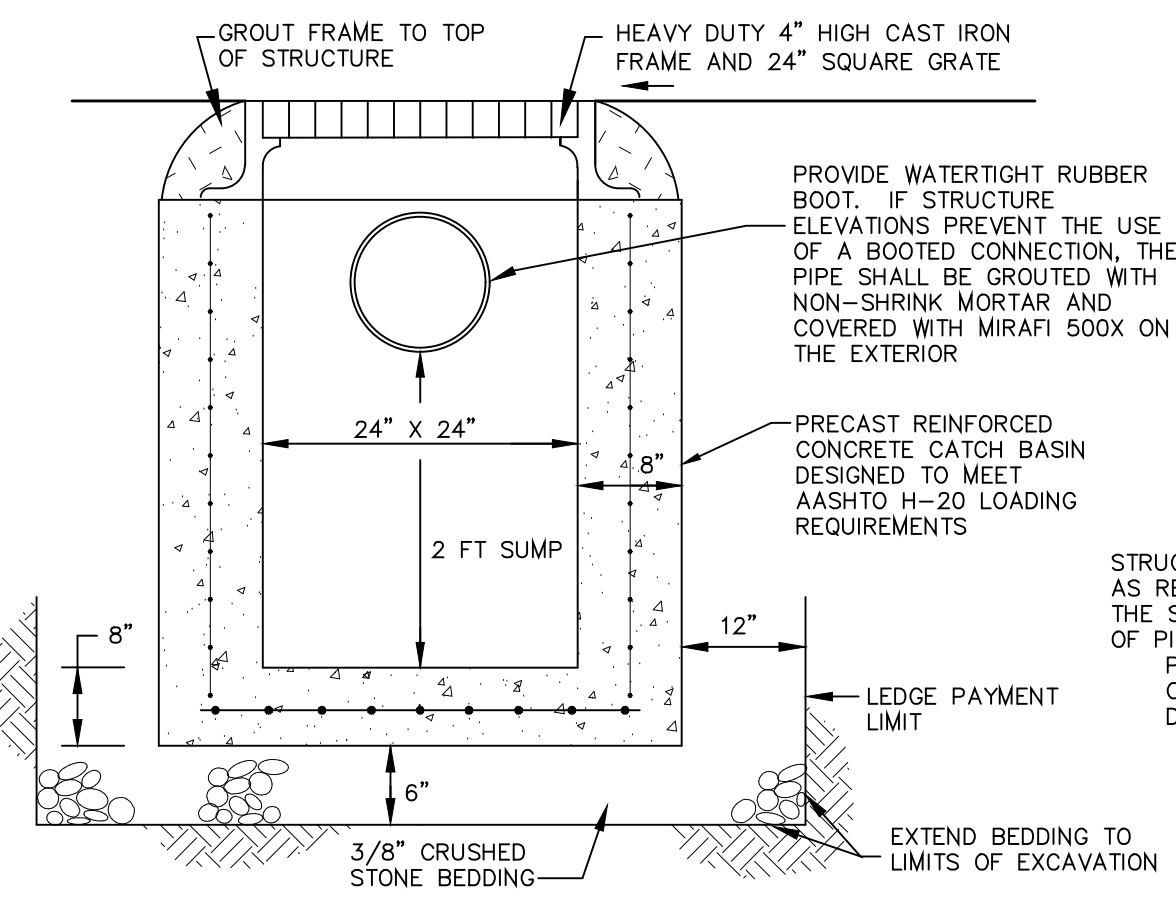
SANITARY SEWER OR UNDERDRAIN SERVICE CONNECTION
NTS



STORM/UD CLEANOUT DETAIL
NTS



SANITARY SEWER CLEANOUT DETAIL
NTS

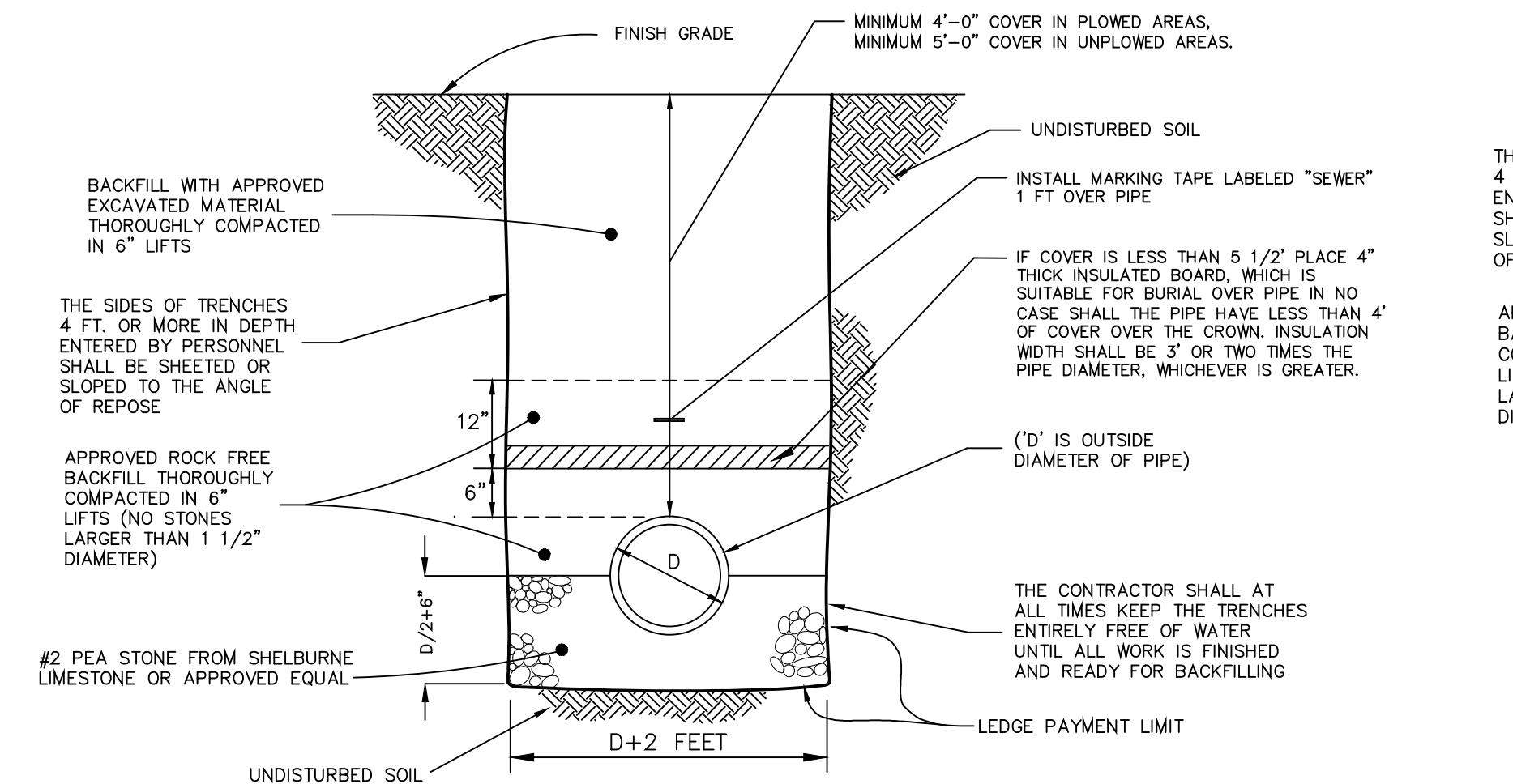


24"x24" SQUARE STRUCTURE

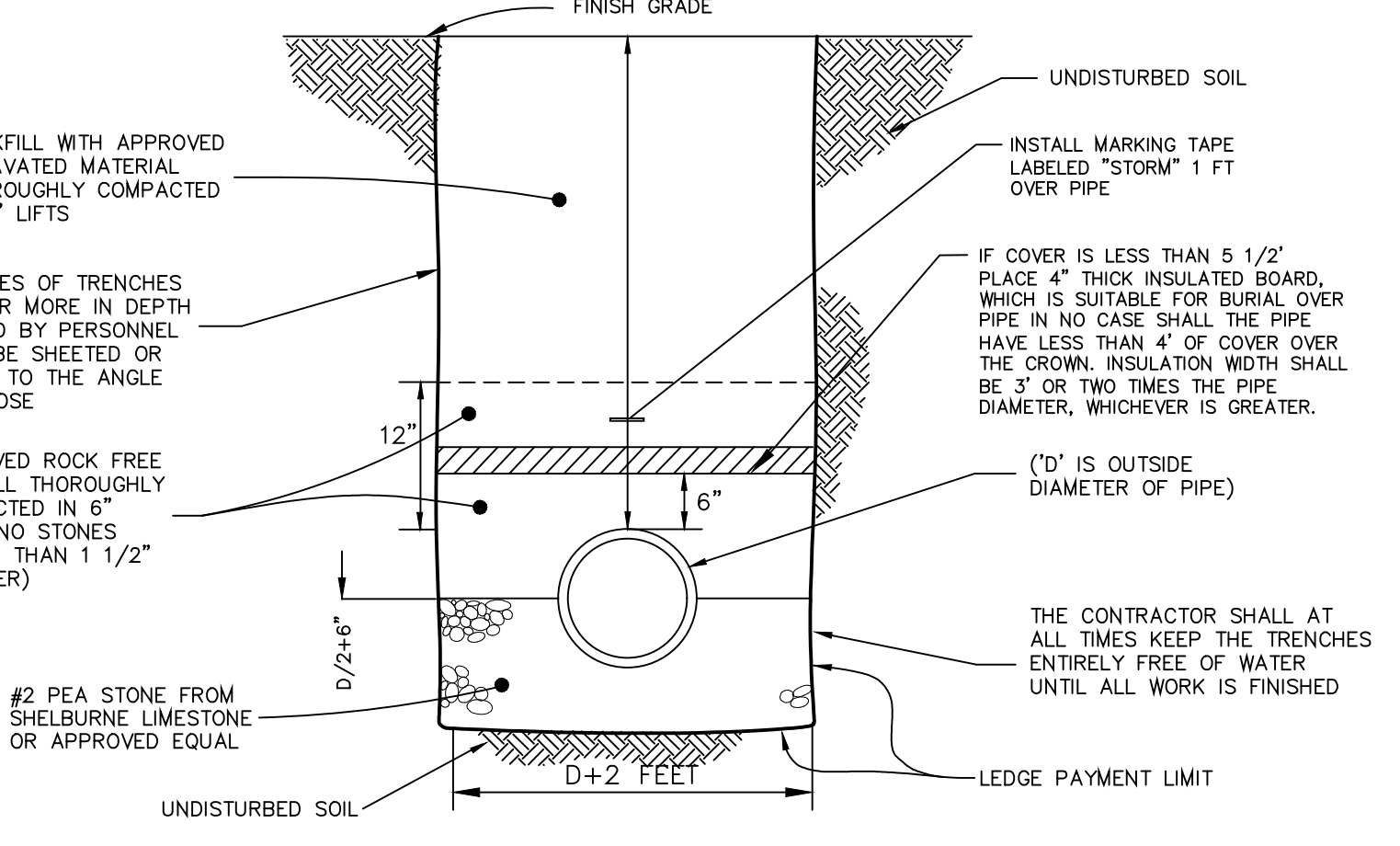
ROUND STRUCTURE

NOTE: CERTAIN CATCH BASINS MAY REQUIRE THE USE OF A 24"x24" SQUARE STRUCTURE BASED UPON THE VERTICAL DIFFERENCE BETWEEN THE RIM AND INVERT ELEVATIONS. OTHERWISE, THE CONTRACTOR MAY SELECT EITHER STRUCTURE THAT WILL ACCOMMODATE THE NUMBER, SIZE, AND ORIENTATION OF PIPE OPENINGS.

TYPICAL CATCH BASINS
NTS

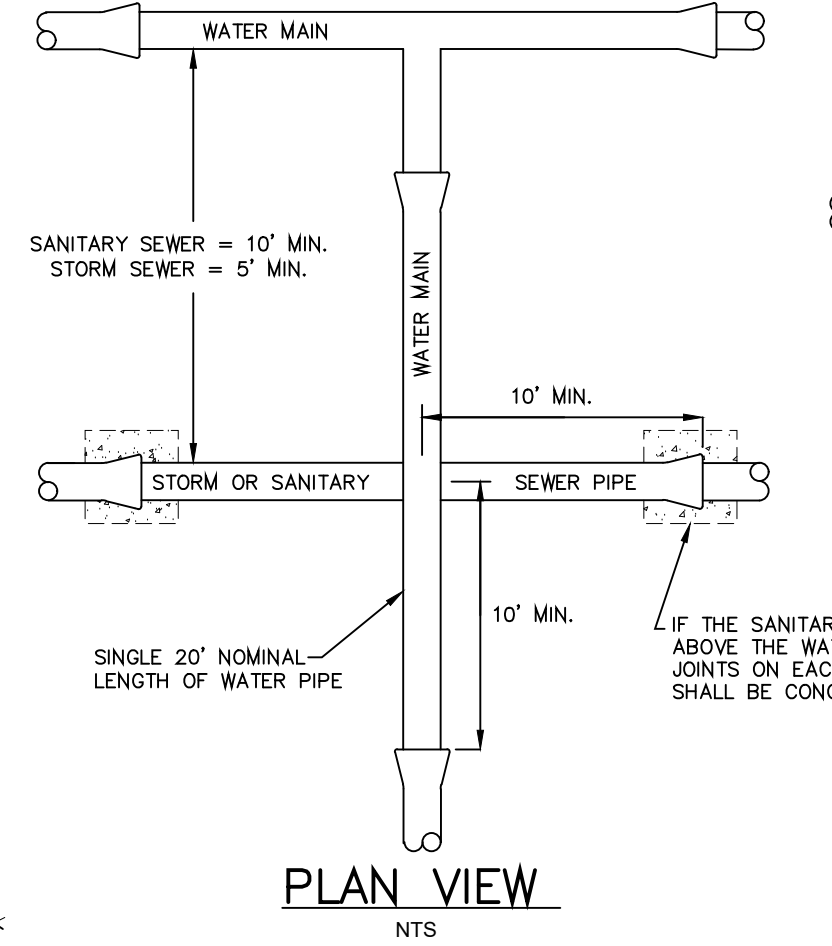


TYPICAL SANITARY SEWER TRENCH
NTS

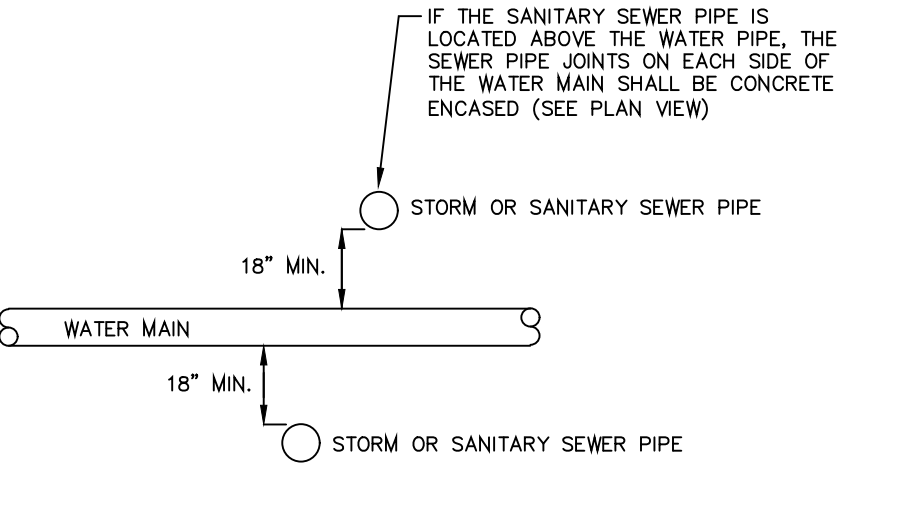


TYPICAL STORM SEWER TRENCH
NTS

TRENCH BACKFILL REQUIREMENTS
NO ROCK OR STONES LARGER THAN 1 1/2" SHALL BE PLACED WITHIN 18" OF THE TOP OF THE PIPE OR CONDUIT. NO STONE LARGER THAN 12" SHALL BE USED AS BACKFILL WITHIN THE REMAINDER OF THE TRENCH. THIS SHALL APPLY TO ALL PIPES AND CONDUITS (WATER, SEWER & STORM)

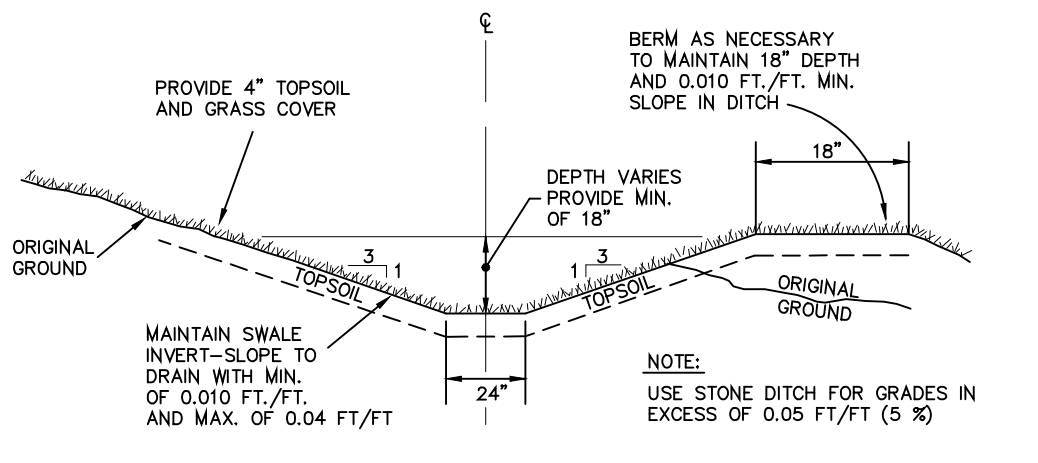


PLAN VIEW
NTS

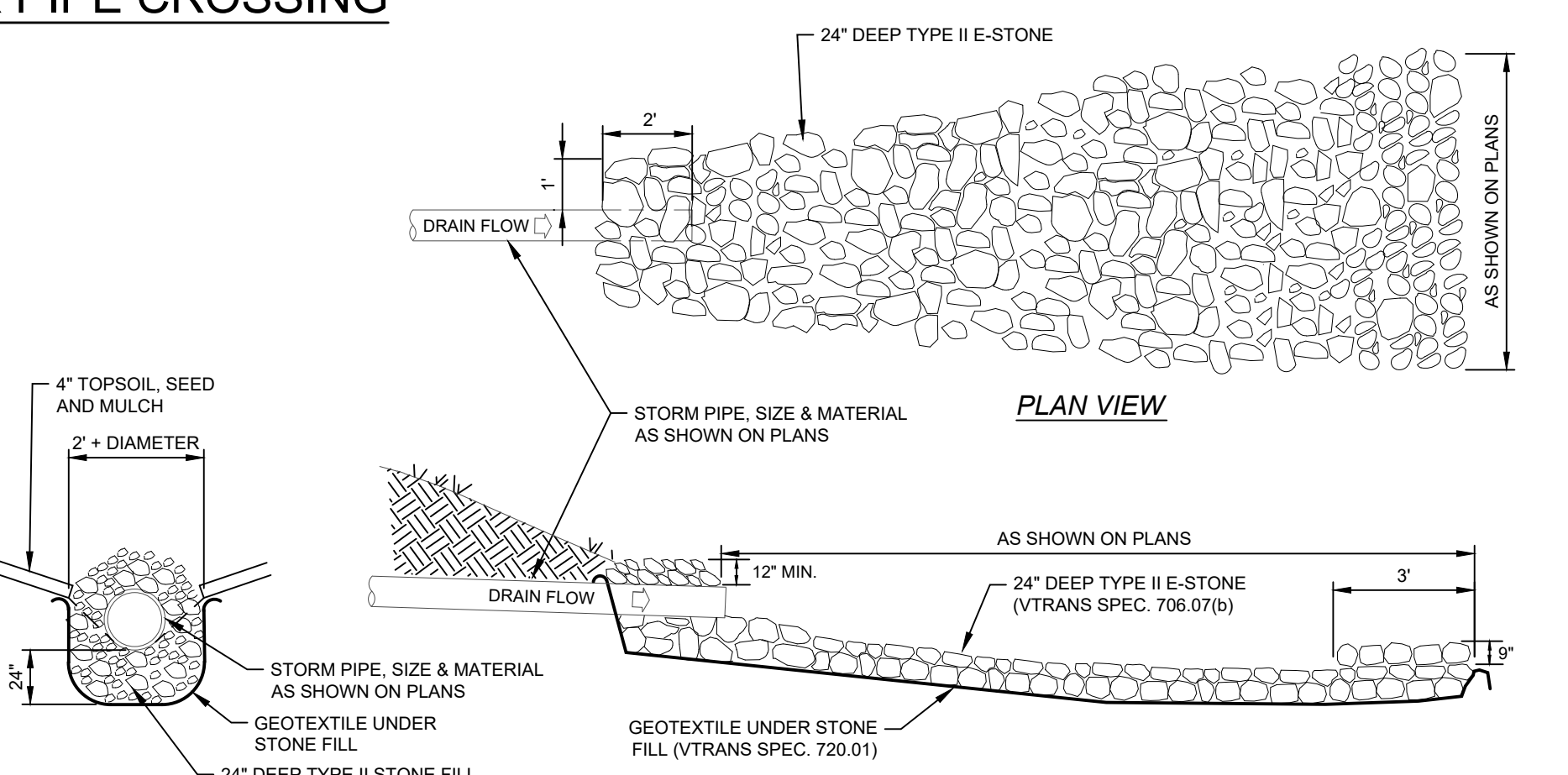


PROFILE VIEW
NTS

WATER / SEWER PIPE CROSSING
NTS



TYPICAL GRASS SWALE
NTS



SECTION VIEW (AT PIPE)

PROFILE

STORM OUTFALL DETAIL
NTS

THIS PLAN WAS ORIGINALLY PREPARED BY LAMOUREUX & DICKINSON CONSULTING ENGINEERS, INC. EDITS TO THIS PLAN AFTER MAY 16, 2022 WERE PERFORMED BY TCE, INC. CLIENT AGREES TO INDEMNIFY AND HOLD HARMLESS TCE, INC. FROM ANY DAMAGES, LIABILITIES OR COSTS, INCLUDING REASONABLE ATTORNEY'S FEES AND DEFENSE COSTS, ARISING OR ALLEGEDLY ARISING FROM ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS BY ANY PRIOR CONSULTANT RETAINED BY THE CLIENT FOR THIS PROJECT.



01/03/23 REV. STORM OUTFALL DETAIL		RD
Date	Revision	By
These plans shall only be used for the purpose shown below:		
<input type="checkbox"/> Sketch/Concept	<input type="checkbox"/> Act 250 Review	
<input type="checkbox"/> Preliminary	<input type="checkbox"/> Construction	
<input checked="" type="checkbox"/> Final	<input type="checkbox"/> Record Drawing	

LANDS OF HINESBURG CENTER, LLC VT Route 116 Hinesburg, VT		Project No. 19054 Survey N/A Design NDS/RD Drawn DLH Checked RJD Date 5/11/22 Scale AS NOTED Sheet number 7
SEWER AND STORM DETAILS & SPECIFICATIONS		
Lamoureux & Dickinson Consulting Engineers, Inc. 14 Morse Drive, Essex, VT 05452 802-878-4450 www.LDEngineering.com		