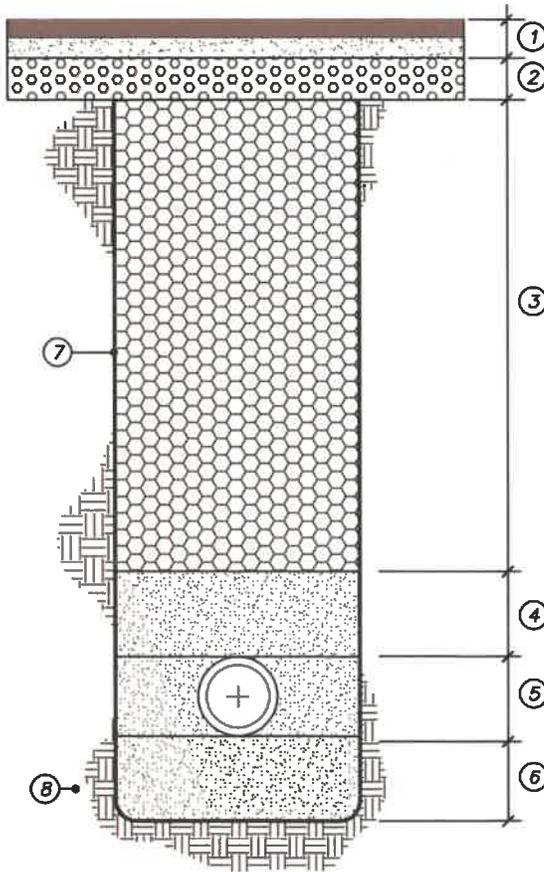


TRENCH NOTES:



- ①-MATCH EXISTING OR A MINMUM OF 4". SEE NOTE 3 and 6
- ②-5" CRUSHED SURFACING TOP COURSE AS PER WSDOT SECTION 9-03.9(3) SEE NOTE 3
- ③- GRAVEL BORROW PER WSDOT SECTION 9-03.14(1) COMPACTED TO 95 PERCENT OF MAX. DENSITY. PLACED IN 8" LOOSE LIFTS AND COMPACTED.
- ④- 6 INCHES OF PEA GRAVEL, BUCKSHOT OR GRAVEL PER WSDOT SECTION 9-03.12(3). HAND COMPACTED ABOVE CROWN OF PIPE. SEE NOTE 5.
- ⑤- HAND COMPACTED PEA GRAVEL, BUCKSHOT OR GRAVEL PER WSDOT SECTION 9-03.12(3). BACKFILL TO BE TAMPED AROUND THE PIPE THICKNESS EQUALS OUTSIDE DIAMETER OF PIPE. SEE NOTE 5.
- ⑥- 6 INCHES OF PEA GRAVEL, BUCKSHOT OR GRAVEL PER SECTION 9-03.12(3) BEDDING TO BE HAND COMPACTED. SEE NOTE 5.
- ⑦- TRENCH LINE.
- ⑧- UNDISTURBED EARTH.

GENERAL NOTES:

- NOTE-1- THIS UTILITY TRENCH DETAIL IS FOR RIGID OR FLEXIBLE PIPE INSTALLATIONS.
- NOTE-2- TRENCHES WHICH ARE OUTSIDE THE SIDE-WALK, ASPHALT OR HEAVY CONSTRUCTION TRAFFIC AREAS SHALL BE BACKFILLED TO WITHIN 1' OF THE TOP OF THE TRENCH AS INDICATED ON THIS DETAIL THE FINAL FOOT MAY BE BACKFILLED WITH NATIVE MATERIAL. RESTORATION SHALL CONSIST OF REMOVING ALL ROCKS GREATER THAT 1" AND BLENDING THE NATIVE SOIL TO THE SURROUNDING GRADE, RESEEDING ALL DISTURBED AND EXCAVATED AREAS.
- NOTE-3- ANY SPECIAL CONDITIONS MUST FIRST BE APPROVED BY THE CITY ENGINEER.
- NOTE-4- ALL DENSITIES FOR GRAVEL SHALL BE PROCTORED USING ASTM D-1557, ASPHALT SHALL BE PROCTORED USING STATE APPROVED METHODS. DENSITIES SHALL BE DETERMINED USING A NUCLEAR DENSOMETER CONFORMING TO ASTM D-2950.
- NOTE-5- ALL SEWER & STORM PIPE SHALL BE BEDDED WITH PEA GRAVEL OR BUCKSHOT ONLY.
- NOTE-6- MAINTAIN TRENCH WITH 4 INCHES OF PRE-MIXED MATERIAL(COLD MIX ASPHALT) AS A WEARING COURSE UNTIL SUCH TIME AS THE PAVEMENT CAN BE REPLACED TO THE SATISFACTION OF THE CITY ENGINEERING DEPARTMENT

TYPICAL TRENCH DETAIL

NOT TO SCALE

SANITARY SEWER SYSTEM CONSTRUCTION NOTES:

1. All work shall be in accordance with the approved plans. Any changes to the design require city approval.
2. All materials shall conform to the City of Burlington standards and specifications.
3. The City of Burlington Sewer Department shall be notified a minimum of 48 hours in advance and on-site of any work on the sanitary sewer system. Any sewer work backfilled without an inspection will not be approved.
4. The contractor is responsible for installing all components of the sanitary system in such a manner as to prevent any groundwater intrusion, to prevent water or debris from discharging into the city's existing sewer system. The contractor shall install a plug in the connection manhole or as directed by the city inspector. The plug shall not be removed until the sewer is accepted by the city.
5. All sewer lines shall maintain a minimum of 10 feet horizontal clearance and a minimum of 18 inches vertical clearance from water lines. See P.U.D. standards and specifications for additional requirements and alternatives.
6. Pipe bedding shall be in accordance with the City of Burlington standard and WSDOT standard specifications. 3/8-inch minus manufactured clean pea gravel OR buckshot is the required bedding material. All pipes shall be laid on a properly prepared foundation. This shall include necessary leveling of the trench bottom or the top of the foundation materials as well as placement and compaction of required bedding material to uniform grade so that a uniformly dense unyielding base will support the entire length of the pipe.
7. Cleanout assemblies within the sanitary sewer system shall be installed at the location and elevations identified on the civil plans and to accommodate each sanitary sewer service. Each cleanout shall be installed flush with the finished ground elevation.
8. Contractor shall pothole prior to excavation to determine locate existing utilities ahead of construction for exact locations and depth of existing utilities at all crossing and conflicts so horizontal and/or vertical alignment can be adjusted.
9. Pre-cast manholes shall meet the requirements of ASTM C-478. Joints shall be rubber gasketed and grouted both inside and outside of the manhole per City of Burlington standards and specifications. All lift holes cut through the walls of the manhole shall be grouted from the inside and outside of the manhole to be watertight. Additional waterproofing may be required.
10. The pipe installation shall be tested with low pressure air immediately following cleaning and flushing. Air shall be slowly supplied to the plugged pipe until the internal air pressure reaches 5.0 psi greater than the average back pressure of any ground water that may submerge the pipe. At least two minutes shall be allowed for temperature stabilization before proceeding further. After the internal air temperature stabilizes, the air shall be held for a 10-minute period with no loss of pressure.

11. Video Inspection, after the gravity sewer lines have been cleaned, flushed and manholes channeled. The developer is responsible for retaining skilled personnel to provide a video inspection and provide one copy to the City of Burlington.