Construction Notes

1. The methods and materials of construction shall conform to the latest standards of the State of Vermont. All work shall be in conformance with all permits and approvals issued for the project. In case of conflict, the more stringent specification shall apply as directed by Engineer. All work shall be done in a workmanlike manner and completed in the time specified by Owner.

2. The Contractor shall be responsible for all work and materials shown and required to make the job complete. These drawings do not show every fitting or appurtenance. Materials shall be as specified on the drawings. Manufacturer's product specifications shall be submitted for all materials to the Engineer for approval prior to installation.

3. The location and size of existing underground utilities is not warranted to be exact or complete. The Contractor shall field locate all utilities and shall contact the affected utility company, the Engineer and the State of Vermont prior to making any hook ups. The Contractor shall be solely responsible for all existing utilities and their uninterrupted services. All off-site backfill, sheeting and shoring, dewatering, clearing and grubbing, erosion control, dust control, traffic control, grading, and all incidentals shall be included as part of the required work.

4. Repair of all disturbed areas, grading, seeding, mulching, repair of roads and curbs, paving, and other incidentals are included as part of the required work. All disturbed areas shall be loamed and mulched until permanent ground cover is established.

5. The Contractor shall verify all horizontal control and temporary bench marks before use.

6. The workmen and public shall be protected by the Contractor from any and all hazards connected with the construction work. Open trenches, materials, or equipment within the working limits are to be guarded by the use of adequate barricades or flagmen. All barricades left in position overnight are to be properly lighted. Kerosene pots are not acceptable. When work narrows the usable pavement, flagmen shall be employed to aid the flow of traffic so that there will be no undue delays. The Contractor shall be held responsible for the safety of all workmen and the general public and all damages to property occurring from or upon the work occasioned by negligence or otherwise growing out of a failure on the part of the Contractor to protect persons or property from hazards of open trenches, materials, or equipment at any time of the day or night within the working area. All work shall be in conformance to OSHA regulations, Title 19, Parts 1926.651 and 1926.652, and applicable to VOSHA regulations.

7. The Contractor shall verify all utility intersections and contact Engineer and Owner with conflicts.

8. The Contractor shall call Dig Safe prior to any excavation.

9. Layout of site plan was provided by Northern Architects.

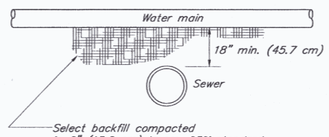
10. The Contractor shall coordinate final location and inverts for water, sewer, and storm building connections with the Architect, Structural Engineer, and Mechanical Engineer.

11. All new storm pipes greater than 10" shall be laid with a laser to elevation and slope as shown on the plans.

12. The Contractor shall sawcut all existing pavement to be removed. The Contractor shall minimize the pavement area disturbance from trench excavation and/or regrading.

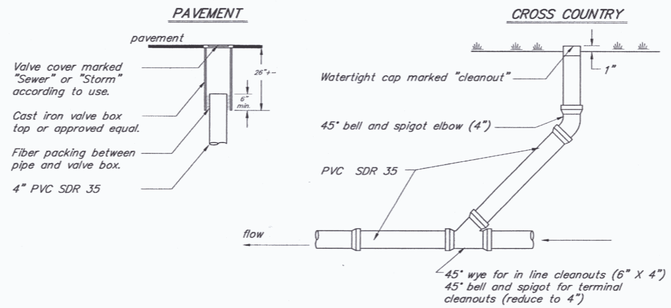
13. The Contractor shall be responsible for all construction layout.

NOTES:
1. The location of sewer mains in relation to water mains shall be in accordance with the "Recommended Standards for Sewage Works" so-called Ten State Standards and Water Supply Rules.
2. Sewers shall be laid at least 10 feet (3.0 m) horizontally from any existing or proposed water main. The distance shall be measured edge to edge. If this distance cannot be obtained, then the pipes shall be installed according to EPR, Chapter 1, Appendix 1A, 11a.
3. 18" (45.7 cm) separation shall be maintained whether water is over or under sewer. If this distance cannot be obtained, then the pipes shall be installed according to EPR Chapter 1, 11b.

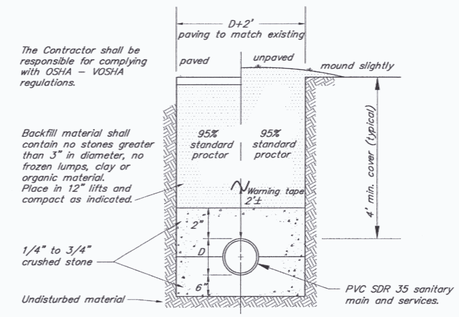


Crossings:
Sewers crossing water mains shall be laid beneath the water main with at least 18 inches vertical clearance between the outside of the sewer and the outside of the water main. When it is possible to maintain the 18" vertical separation:
1.) the crossing shall be arranged so that one full length of sewer is centered above or below the water line with sewer joints as far as possible from water joints;
2.) the sewer pipe must be constructed to water main standards for a minimum distance of 20 feet either side of the crossing or a total of three pipe lengths, whichever is greater;
3.) the section constructed to water standards must be pressure tested to maintain 50 psi for 15 minutes without leakage prior to backfilling beyond one foot above the pipe to assure water tightness;
4.) where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to prevent damage to the water main.

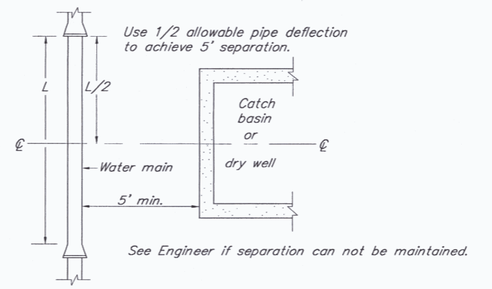
Sewer / Water Separation Detail
N.T.S.



Sanitary / Storm Cleanout Detail
N.T.S.



Typical Sanitary Trench Details
N.T.S.



Catch Basin / Water Separation
N.T.S.

General Grading and Site Work Notes

1. Temporary silt fence shall be erected prior to any clearing or construction. Fencing may be erected in phases, but in no case shall construction of clearing proceed fencing. Special areas may be designated by the Owner for preservation of existing trees. These areas shall be the Contractor's responsibility to insure no damage is done to designated trees.

2. Existing plantings are located in general areas as shown on this plan. Contractor shall protect plantings so as not to damage these or their root systems.

3. Slope stability based upon unsaturated soil conditions. If during construction saturated soils are encountered, contact the Engineer immediately.

* See Conservation Grass Establishment Specifications - Section 02955

Sanitary & Storm Mains

1. The pipe and fittings for sanitary sewer shall meet the requirements of ASTM specification D3034 for 4" - 15" SDR 35 and F679 for 18" - 27". All pipe shall be laid to the line and grade shown on the plans.

2. The pipe for storm sewer shall be as shown on the plans and detailed below: All pipe shall be laid to the line and grade as shown on the plans.

RCP	-	Reinforced concrete pipe	- Pipe shall conform to Vermont Standard Specifications for Construction, Section 710, and AASHO, N170.
ADS N12	-	Corrugated polyethylene pipe	- Pipe shall conform to AASHTO M294-90, Type S. (ADS N12 or approved equal)
PVC SDR 35	-	Polyvinyl chloride pipe	- Pipe shall conform to ASTM Specification D-3034 or F679, (PVC) Sewer Pipe and Fittings, SDR35.
ACCGMP	-	Corrugated galvanized metal pipe	- Pipe shall conform to standard specifications for CGM pipe, AASHTO, M190. Pipe shall have a polymeric coating conforming to AASHTO M 246 Type B. Where indicated, Contractor shall install 24" wide bands with a watertight gasket in lieu of standard pipe collars.

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REVISIONS

PROJECT

DERBY WELCOME CENTER
PROJECT #IM 091-3(8)

NEW FACILITY

DERBY
VERMONT

DATE: 01/07/02
SCALE: - AS NOTED
CHECKED:
PROJECT NO: 00137

DETAILS

SC-27

00137 - SC-27.dwg