

- THE PERIMETER OF THE VOLUME CONTROL FACILITY SHALL MAINTAIN THE MINIMUM HORIZONTAL SEPARATION DISTANCE OF: 10-FEET FROM
  FOUNDATIONS, UNLESS WATERPROOFED; 20-FEET FROM ROADWAY GRAVEL SHOULDER; AND 100-FEET FROM POTABLE WATER WELLS, SEPTIC
  TANKS/FIELDS, OR OTHER UNDERGROUND TANKS.
- 2. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED WITHIN THE VOLUME CONTROL FACILITY. SANITARY OR COMBINED SEWERS SHALL NOT BE LOCATED BELOW THE FOOTPRINT OF THE VOLUME CONTROL FACILITY. WHEN LOCAL CONDITIONS PREVENT THE SEWER FROM BEING LOCATED OUTSIDE THE FOOTPRINT OF THE FACILITY THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN QUALITY STANDARDS, AND IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.
- 3. MINIMUM DISTANCE OF 2 FEET (3.5 FEET IN COMBINED SEWER AREAS) BETWEEN BOTTOM OF THE VOLUME CONTROL FACILITY AND SEASONALLY HIGH GROUNDWATER LEVEL.
- 4. STONE STORAGE OPTIONS ARE IDOT CA-1, IDOT CA-3, IDOT CA-7, OR APPROVED ALTERNATE. NO RECYCLED MATERIALS.
- 5. UNDERDRAINS ARE REQUIRED IN TYPICAL CLAYEY SOILS WHERE INFILTRATION RATES ARE LESS THAN 0.5 INCH/HOUR. NO MORE THAN 1 UNDERDRAIN EVERY 30 FEET ON CENTER. MINIMUM UNDERDRAIN BEDDING OF 2 INCHES, MAXIMUM OF 12 INCHES.
- 6. APPROPRIATE MAINTENANCE ACCESS SHALL BE PROVIDED TO ENSURE THAT EACH SEGMENT OF THE SYSTEM IS ACCESSIBLE BY A VACUUM, JET HOSE, OR A TELEVISING DEVICE. ACCESS IS RECOMMENDED NEAR ALL ENTRY/EXIT POINT FOR SEDIMENT REMOVAL. EGRESS RUNGS SHALL BE PROVIDED FOR SYSTEMS DEEPER THAN 42-INCHES.
- DRAINAGE OPENINGS SHOULD COVER AT LEAST 3% OF THE PAD'S FOOTPRINT. DESIGNER / MANUFACTURER RESPONSIBLE FOR THE STRUCTURAL INTEGRITY OF THE MANUFACTURED STORAGE UNIT.
- 8. COMBINED SEWER AREAS REQUIRE BACKFLOW PREVENTER.
- 9. AVOID COMPACTION OF NATIVE SOILS WITHIN THE VOLUME CONTROL FOOTPRINT TO MAXIMIZE INFILTRATION.

## **VOLUME CONTROL SUMMARY**

VOLUME TYPE	DEPTH	POROSITY	STORAGE VOLUME	VOLUME PROVIDED
V <sub>A</sub> : VAULT STORAGE (BELOW THE OUTLET)		1.00	1.00 X 0.50 X V <sub>A</sub>	
V <sub>B</sub> : COARSE AGGREGATE (ABOVE U.D. INVERT)		0.36	0.50 X 0.36 X V <sub>B</sub>	
V <sub>C</sub> : VAULT STORAGE (BELOW U.D. INVERT)		1.00	1.00 X V <sub>C</sub>	
V <sub>D</sub> : COARSE AGGREGATE (BELOW U.D. INVERT)		0.36	0.36 X V <sub>D</sub>	
* VOLUME INTENDED FOR DETENTION NOT INCLUDED * TOTAL				

\* VOLUME INTENDED FOR DETENTION NOT INCLUDED \*

NOT TO SCALE



TECHNICAL GUIDANCE MANUAL

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UNDERGROUND VAULT VOLUME CONTROL/DETENTION TYPICAL DETAIL

STD. DWG. NO.XX
PAGE NO.XX