

**RESIDENTIAL SYSTEM APPLICATION SPECIFICATIONS**

**1.0 GENERAL**

RESIDENTIAL STORMWATER MANAGEMENT IS THE PRACTICE OF CONTROLLING STORMWATER RUNOFF GENERATED BY RESIDENTIAL PROPERTIES. IMPERVIOUS SURFACES LIKE ROOFS, PATIOS, DRIVEWAYS, AND HEAVILY COMPACTED PERVIOUS SURFACES SUCH AS LAWNS PREVENT RAINFALL FROM BEING EVENLY DISTRIBUTED ACROSS THE GROUND AND EVENTUALLY ABSORBING INTO THE NATIVE SOIL. THESE IMPERVIOUS SURFACES INCREASE THE VOLUME OF RUNOFF AND THE RATE AT WHICH THE RUNOFF OCCURS. THE INCREASED VOLUME AND RUNOFF RATES CAN HAVE NEGATIVE IMPACTS DOWNSTREAM INCLUDING CHANNEL EROSION AND FLOODING OF ADJACENT PROPERTIES. ADDITIONALLY, RUNOFF FROM THESE SURFACES CAN CONTAIN SEDIMENT, NUTRIENTS, HEAVY METALS, AND OTHER POLLUTANTS THAT NEGATIVELY AFFECT THE DOWNSTREAM WATERCOURSES. A WELL-DESIGNED AND IMPLEMENTED RESIDENTIAL DRAINAGE SYSTEM WILL REDUCE THE OVERALL VOLUME OF DOWNSTREAM RUNOFF, REDUCE PEAK FLOWS FROM THE SITE AND WILL ACHIEVE WATER QUALITY CONTROLS THROUGH A VARIETY OF BEST MANAGEMENT PRACTICES.

**1.1 APPLICATIONS**

CULTEC CHAMBERS CAN BE USED IN THE FOLLOWING RESIDENTIAL APPLICATIONS:

- INFILTRATION OF STORMWATER RUNOFF
- DETENTION OF STORMWATER RUNOFF
- RAINWATER HARVESTING AND REUSE
- SUMP PUMP AND WATER SOFTENER DISCHARGE
- POOL BACKWASH AND DRAWDOWN DISCHARGE

**CULTEC STORMFILTER T-80 WATER QUALITY UNIT SPECIFICATIONS**

**2.0 GENERAL**

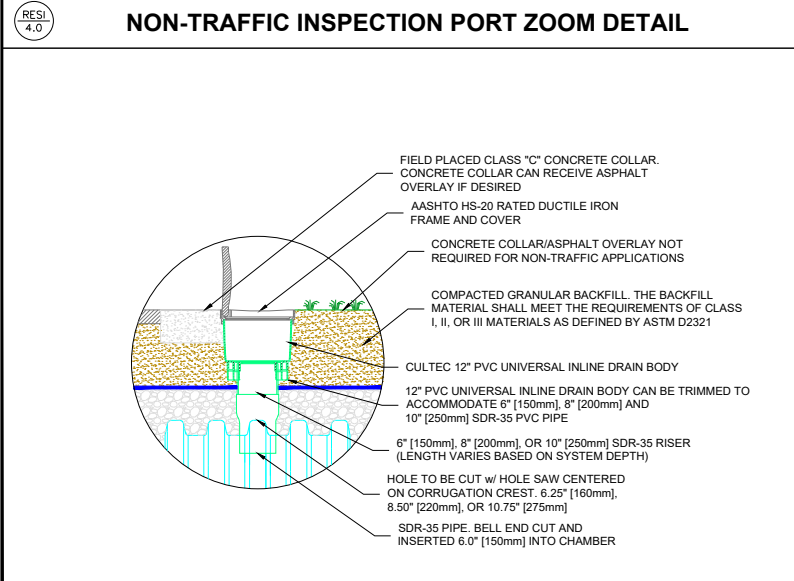
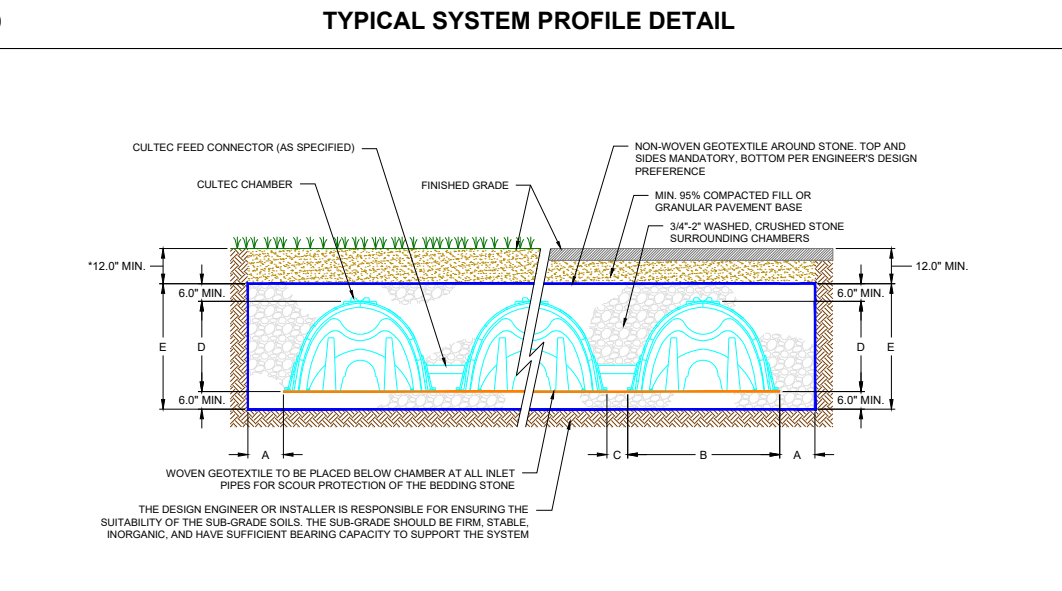
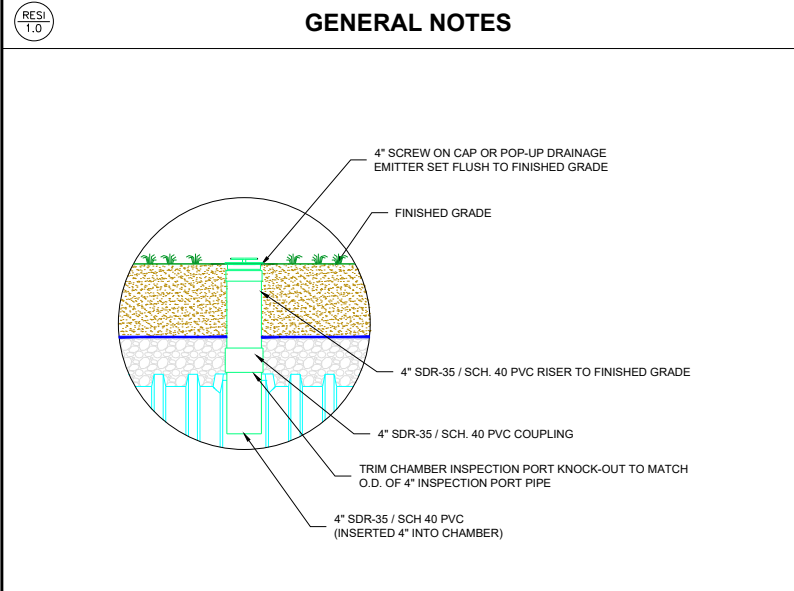
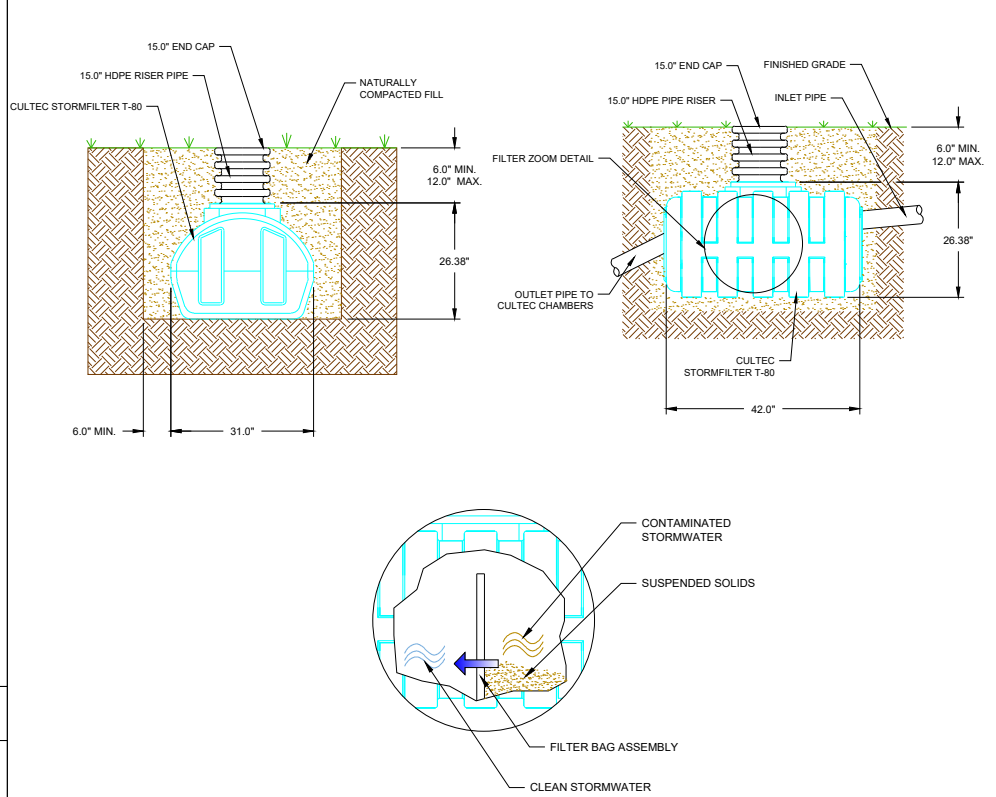
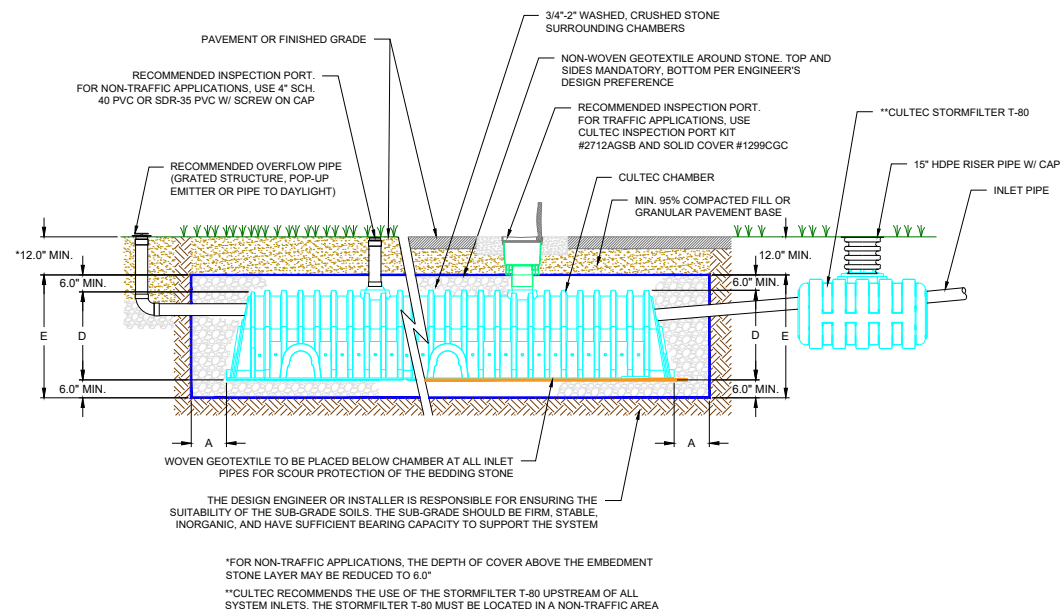
CULTEC STORMFILTER® T-80 MAY BE USED AS A STORMWATER FILTRATION UNIT, HOLDING TANK OR CATCH BASIN.

**2.1 CHAMBER PARAMETERS**

- THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, OF BROOKFIELD, CT (203-775-4416 OR 1-800-428-5832).
- THE CHAMBER SHALL BE FORMED OF BLACK POLYETHYLENE.
- THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC STORMFILTER® T-80 SHALL BE 26.38 INCHES (670 MM) TALL, 31 INCHES (787 MM) WIDE AND 42 INCHES (1067 MM) LONG.
- THE CHAMBER SHALL HAVE A 12.5 INCH (318 MM) DIAMETER ACCESS OPENING LOCATED AT THE TOP OF THE UNIT.
- MAXIMUM INLET OPENING ON THE CHAMBER END WALL IS 4 INCHES (100 MM).
- THE NOMINAL STORAGE VOLUME OF THE STORMFILTER™ T-80 SHALL BE 90 GAL / UNIT (340.7 L / UNIT).
- THE STORMFILTER® T-80 CHAMBER SHALL HAVE 5 CORRUGATIONS.
- THE STORMFILTER® T-80 SHALL HAVE A MAXIMUM FILTERING CAPACITY OF 315.1 GPM (1193 L/MIN).
- THE CHAMBER SHALL BE DESIGNED FOR NON-TRAFFIC APPLICATIONS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
- THE CHAMBER SHALL BE MANUFACTURED IN A FACILITY EMPLOYING CULTEC'S QUALITY CONTROL AND ASSURANCE PROCEDURES.

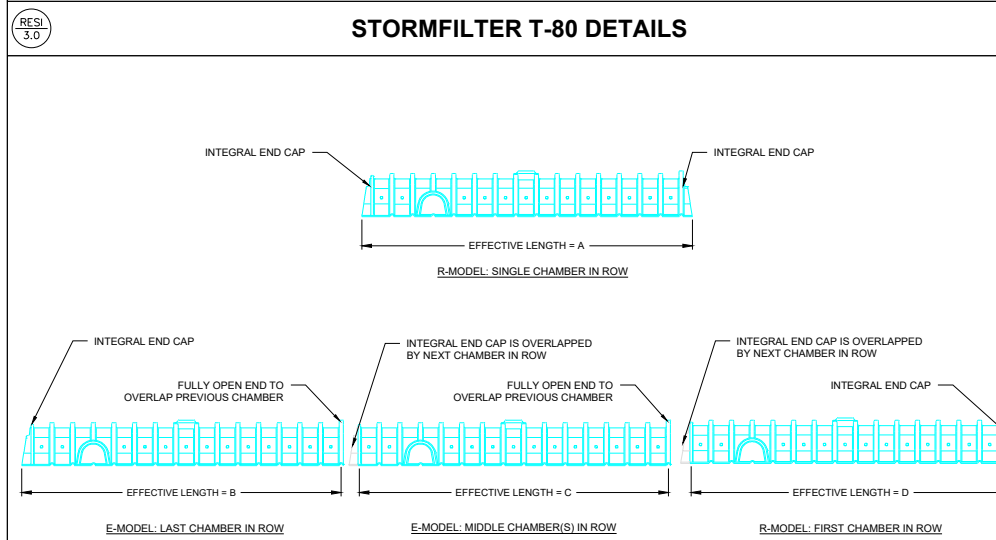
**2.2 FILTERING SPECIFICATIONS**

- THE FILTER REMOVES MORE THAN 70% OF THE TOTAL SUSPENDED SOLIDS TYPICALLY PRESENT IN STORMWATER RUNOFF.
- CONTINUOUS FILTRATION CAPABILITY FOR CLEAN FILTERS IS RATED AT 0.70 CFS (0.02 M3/S).
- TREATMENT CAPABILITY IS APPROXIMATELY 315.1 GPM (1193 L/MIN).



**\"FOR NON-TRAFFIC APPLICATIONS, THE DEPTH OF COVER ABOVE THE EMBEDMENT STONE LAYER MAY BE REDUCED TO 6.0\"**

SPECIFICATION TABLE				
		CONTACTOR 100HD	RECHARGER 180HD	RECHARGER 330XLHD
REF.	BARE CHAMBER VOLUME	1.87 FT <sup>3</sup> /FT 14.00 FT <sup>3</sup> /UNIT 105 GAL	3.45 FT <sup>3</sup> /FT 21.81 FT <sup>3</sup> /UNIT 163 GAL	7.46 FT <sup>3</sup> /FT 52.21 FT <sup>3</sup> /UNIT 391 GAL
A	STONE BORDER (IN)	12	12	12
B	CHAMBER WIDTH (IN)	36	36	52
C	ROW SPACING (IN)	6	6	6
D	CHAMBER HEIGHT (IN)	12	20	30
E	EFFECTIVE DEPTH (IN)	24	32	42



CHAMBER LENGTH TABLE				
REF.	LOCATION	CONTACTOR 100HD	RECHARGER 180HD	RECHARGER 330XLHD
A	SINGLE CHAMBER	96"	88"	102"
B	FIRST CHAMBER OF ROW	93"	82"	93"
C	MIDDLE CHAMBER(S)	90"	76"	84"
D	LAST CHAMBER OF ROW	93"	82"	93"

**CULTEC INSPECTION PORT - ZOOM DETAIL**

**TYPICAL SYSTEM CROSS-SECTION DETAIL & SPECIFICATION TABLE**

**CHAMBER LENGTH DETAIL & LENGTH TABLE**

**CULTEC STORMWATER CHAMBER**

PROJECT NO: 10/24

DATE: 10/24

DESIGNED BY: TECH

CHECKED BY: DPG

SCALE: N.T.S.

SHEET NO: 1 OF 1

RESIDENTIAL APPLICATION

TYPICAL DETAILS

**CULTEC**  
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**CULTEC**

THIS DRAWING WAS PREPARED TO SUPPORT THE PROJECT ENGINEER'S RECORD SET. THE DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO CULTEC UNDER THE DIRECTION OF THE PROJECT ENGINEER OF RECORD. CULTEC SYSTEMS DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS, REGULATIONS AND MANUFACTURER REQUIREMENTS.