CULTEC HVLV® SFCx2 FEED CONNECTOR CULTEC CONTACTOR® 100HD CHAMBER PRODUCT SPECIFICATIONS MODEL 100RHD STARTER 6.0" [150 mm] DIA. INSPECTION PORT KNOCK-OUT SMALL RIB LARGE RIB CULTEC HVLV SFCx2 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC CONTACTOR 100HD STORMWATER CHAMBERS. CULTEC CONTACTOR 100HD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR **CHAMBER PARAMETERS** CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF. 1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832) CHAMBER PARAMETERS 2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH 1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR. (203-775-4416 OR 1-800-428-5832) 36.0" [914mm] 3. THE CHAMBER SHALL BE ARCHED IN SHAPE. 2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH MODEL 100EHD MIDDLE/END 4. THE CHAMBER SHALL BE OPEN-BOTTOMED DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR. SMALL RIB 5. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV SFCX2 FEED CONNECTOR SHALL BE 3. THE CHAMBER SHALL BE ARCHED IN SHAPE. 7.6 INCHES (194 mm) TALL, 12 INCHES (305 mm) WIDE AND 19.7 INCHES (500 mm) LONG. 6. THE NOMINAL STORAGE VOLUME OF THE HVLV SFCX2 FEED CONNECTOR SHALL BE 0.294 FT3 / 4. THE CHAMBER SHALL BE OPEN-BOTTOMED. FT (0.027 m3/m) - WITHOUT STONE. MODEL 100RHD IS A STARTER/STAND ALONE UNIT 7. THE HVLV SFCX2 FEED CONNECTOR CHAMBER SHALL HAVE 3 CORRUGATIONS. THE CHAMBER SHALL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD THEY ARE USED TO START ROWS OR CAN BE USED SINGULARLY. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE 8. THE HVLV SFCX2 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO COUPLINGS OR SEPARATE END WALLS. OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT INSTALLED LENGTH = 90.0" [2286mm] SHALL FIT INTO THE SIDE PORTALS OF THE CONTACTOR 100HD STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD 6. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC CONTACTOR 100HD SHALL BE 12.5 INCHES (318 mm) TALL, 36 INCHES (914 mm) WIDE AND 8 FEET (2.44 m) LONG. THE - MAXIMUM PIPE SIZE IN END WALL: 9. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED INSTALLED LENGTH OF A JOINED CONTACTOR 100HD SHALL BE 7.5 FEET (2.29 m). ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. 10" [250 mm] HDPE LARGE RIB -10" [250 mm] PVC 10. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY. 7. MAXIMUM INLET OPENING ON THE CHAMBER ENDWALL IS 10 INCHES (250 mm). **CULTEC NO. 410™ NON-WOVEN GEOTEXTILE** 8. THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV® SFCX2 FEED 12.5" [318mm] CULTEC NO. 410™ NON-WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR® AND RECHARGER® CONNECTORS TO CREATE AN INTERNAL MANIFOLD. THE NOMINAL INSIDE DIMENSIONS STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL INTRUSION INTO THE STONE. 6.0" [152mm] OF EACH SIDE PORTAL SHALL BE 5.75 INCHES (146 mm) HIGH BY 7.5 INCHES (191 mm) WIDE. MAXIMUM ALLOWABLE OUTER DIAMETER (O.D.) PIPE SIZE IN THE SIDE PORTAL IS 6.9 INCHES (175 mm) 1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832) 9. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV SFCX2 FEED CONNECTOR 2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE. MODEL 100EHD IS A MIDDLE/END UNIT. SHALL BE 7.6 INCHES (194 mm) TALL, 12 INCHES (305 mm) WIDE AND 19.7 INCHES (500 mm) ∠ SIDE PORTAL FOR OPTIONAL INTERNAL MANIFOLD THEY ARE USED TO CONTINUE ROWS AND ALSO USED TO END A ROW. 3. THE GEOTEXTILE SHALL HAVE A TYPICAL WEIGHT OF 4.5 OZ/SY (142 G/M). (ACCOMMODATES CULTEC HVLV SFCx2 FEED CONNECTOR OR STORM PIPE) CULTEC CONTACTOR 100HD CHAMBER STORAGE = 1.866 CF/FT [0.173 m³/m] 4. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM D4632 MAX. PIPE: INSTALLED LENGTH ADJUSTMENT = 0.5' [0.15 m] TESTING METHOD. 10. THE NOMINAL STORAGE VOLUME OF THE CONTACTOR 100HD CHAMBER SHALL BE 1.866 6" [150 mm] HDPE 5. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632 TESTING FT3 / FT (0.173 m3 / m) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED 6" [150 mm] PVC CONTACTOR 100HD SHALL BE 13.995 FT3 / UNIT (0.396 m3 / UNIT) - WITHOUT STONE. METHOD. 6. THE GEOTEXTILE SHALL HAVE A MULLEN BURST VALUE OF 225 PSI (1551 KPA) PER ASTM D3786 11. THE NOMINAL STORAGE VOLUME OF THE HVLV SFCX2 FEED CONNECTOR SHALL BE 0.294 FT³ / FT (0.027 m³ / m) - WITHOUT STONE. 7. THE GEOTEXTILE SHALL HAVE A PUNCTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM D4833 TESTING METHOD. **CULTEC CONTACTOR 100HD HEAVY DUTY END DETAIL INFORMATION CULTEC CONTACTOR 100HD HEAVY DUTY THREE VIEW** 12. THE CONTACTOR 100HD CHAMBER SHALL HAVE FORTY-FOUR DISCHARGE HOLES BORED 8. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D6241 INTO THE SIDEWALLS OF THE UNIT'S CORE TO PROMOTE LATERAL CONVEYANCE OF TESTING METHOD. 9. THE GEOTEXTILE SHALL HAVE A TRAPEZOID TEAR VALUE OF 50 LBS (222 N) PER ASTM D4533 TESTING 13. THE CONTACTOR 100HD CHAMBER SHALL HAVE 16 CORRUGATIONS. 10. THE GEOTEXTILE SHALL HAVE A AOS VALUE OF 70 U.S. SIEVE (0.212 MM) PER ASTM D4751 TESTING METHOD. 14. THE ENDWALL OF THE CHAMBER, WHEN PRESENT, SHALL BE AN INTEGRAL PART OF THE 11. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING HIDDEN END CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH THIS 12. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/MIN/SF (5500 L/MIN/SM) PER CULTEC HVLV SFCx2 FEED CONNECTOR -ASTM D4491 TESTING METHOD. WHERE SPECIFIED 1-2 INCH [25-50 mm] WASHED, CRUSHED STONE 15. THE CONTACTOR 100RHD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER 13. THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 500 HOURS VALUE OF 70% PER ASTM D4355 CULTEC NO. 410 NON-WOVEN GEOTEXTILE HAVING TWO FULLY FORMED INTEGRAL ENDWALLS AND HAVING NO SEPARATE END TESTING METHOD. CULTEC CONTACTOR 100HD -AROUND STONE. TOP AND SIDES MANDATORY, PLATES OR SEPARATE END WALLS. - MIN. 95% COMPACTED FILL HEAVY DUTY CHAMBER BOTTOM PER ENGINEER'S DESIGN PREFERENCE **CULTEC NO. 4800™ WOVEN GEOTEXTILE** 16. THE CONTACTOR 100EHD MIDDLE/END UNIT MUST BE FORMED AS A WHOLE CHAMBER CULTEC NO. 4800 WOVEN GEOTEXTILE IS DESIGNED AS A UNDERLAYMENT TO PREVENT SCOURING CAUSED BY - PAVEMENT OR FINISHED GRADE HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE FULLY OPEN END WALL AND WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC 8.0" [203 mm] MIN. FOR PAVED MODEL 100EHD HAVING NO SEPARATE END PLATES OR END WALLS. MANIFOLD FEATURE. IT MAY ALSO BE USED AS A COMPONENT OF THE CULTEC SEPARATOR ROW TO ACT AS A 10.0" [254 mm] MIN. FOR UNPAVED BARRIER TO PREVENT SOIL/CONTAMINANT INTRUSION INTO THE STONE WHILE ALLOWING FOR MAINTENANCE. 17. THE HVLV SFCX2 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING **GEOTEXTILE PARAMETERS** TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END 12.0' [3.66 m] MAX THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE CONTACTOR 100HD AND COVER DEPTH (203-775-4416 OR 1-800-428-5832) ACT AS CROSS FEED CONNECTIONS. 6.0" [152 mm] MIN. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE. 3. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 550 X 550 LBS (2,448 X 2,448 N) PER ASTM 18. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN D4632 TESTING METHOD. THE RIBS. MODEL 100EHD 4. THE GEOTEXTILE SHALL HAVE A ELONGATION @ BREAK RESISTANCE OF 20 X 20% PER ASTM D4632 12.5" [318 mm] 19. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED 5. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE OF 5,070 X 5,070 LBS/FT ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. (74 X 74 KN/M) PER ASTM D4595 TESTING METHOD. 6.0" [152 mm] MIN. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 2% STRAIN OF 960 X 1,096 20. HEAVY DUTY UNITS ARE DESIGNATED BY A COLORED STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER. (14 X 16 KN/M) PER ASTM D4595 TESTING METHOD. 7. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 5% STRAIN OF 2,740 X 2, 740 21. THE CHAMBER SHALL HAVE A RAISED INTEGRAL CAP AT THE TOP OF THE ARCH IN THE LBS/FT (40 X 40 KN/M) PER ASTM D4595 TESTING METHOD. CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT. 8. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 10% STRAIN OF 4,800 X 4,800 - CULTEC NO. 4800 WOVEN GEOTEXTILE TO BE PLACED BENEATH MODEL 100EHD LBS/FT (70 X 70 KN/M) PER ASTM D4595 TESTING METHOD. INTERNAL MANIFOLD FEATURE AND BENEATH ALL INLET/OUTLET PIPES 40.0" [1016 mm] MIN. 22. THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY 9. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 1,700 LBS (7,560 N) PER ASTM D6241 (FOR SCOUR PROTECTION) 12.0" [305mm] MIN. → 36.0" [914mm] CENTER-TO-CENTER 10. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 180 X 180 LBS (801 X 801 N) PER 23. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY ASTM D4533 TESTING METHOD. CULTEC HVLV SFCx2 11. THE GEOTEXTILE SHALL HAVE AN APPARENT OPENING SIZE OF 40 US STD. SIEVE (0.425 MM) PER ASTM PROJECT ENGINEER OF RECORD OR GEOTECHNICAL CONSULTANT IS RESPONSIBLE FOR **FEED CONNECTOR** TRIM PORTAL TO UTILIZE INTERNAL D4751 TESTING METHOD. ENSURING THAT THE REQUIRED BEARING CAPACITY OF SUB-GRADE SOILS HAS BEEN MET 24. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED TO MEET THE MATERIAL AND MANIFOLD FEATURE THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.15 SEC-1 PER ASTM D4491 TESTING STRUCTURAL REQUIREMENTS OF IAPMO PS 63-2019, INCLUDING RESISTANCE TO AASHTO H-10 AND H-20 HIGHWAY LIVE LOADS, WHEN INSTALLED IN ACCORDANCE WITH CULTEC'S 13. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 11.5 GPM/FT2 (470 LPM/M2) PER ASTM D4491 INSTALLATION INSTRUCTIONS. MODEL 100RHD TESTING METHOD. 14. THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 80% @ 500 HRS. PER ASTM D4355 TESTING 25. MAXIMUM ALLOWED COVER ON TOP OF UNIT SHALL BE 12.0 FEET [3.66 m] $\left(\frac{100\text{HD}}{5.0}\right)$ **GENERAL NOTES CULTEC CONTACTOR 100HD HEAVY DUTY SYSTEM CROSS SECTION** CULTEC CONTACTOR 100HD HEAVY DUTY TYPICAL INTERLOCK INLET/OUTLET PIPE PER ENGINEER DESIGN PAVEMENT OR FINISHED GRADE PIPE TO BE INSERTED 12.0" [305 mm] MIN. INTO CHAMBER PAVEMENT SUB-BASE 10.0" [250 mm] HDPE 10.0" [250 mm] PVC — PAVEMENT OR FINISHED GRADE CULTEC HVLV SFCx2 FEED CONNECTOR → 19.7" [500 mm] → MIN. 95% COMPACTED FILL - 1-2 INCH [25-50 mm] WASHED, CRUSHED STONE WHERE SPECIFIED --- MIN. 95% COMPACTED FILL OPTIONAL INSPECTION PORT CULTEC NO. 410 NON-WOVEN GEOTEXTILE AROUND (SEE DETAIL (100HD) CULTEC NO. 410 NON-WOVEN GEOTEXTILE AROUND STONE. TOP AND SIDES MANDATORY. BOTTOM PER STONE. TOP AND SIDES MANDATORY, BOTTOM PER 12.0" [305 mm] — -FIELD PLACED CLASS "C" CONCRETE ENGINEER'S DESIGN PREFERENCE FIELD PLACED CLASS "C" CONCRETE COLLAR ENGINEER'S DESIGN PREFERENCE COLLAR (OPTION 1) 1.50" [40 mm] BELOW PAVEMENT (OPTION 2) FLUSH WITH PAVEMENT - 6.0 INCH [152 mm] MIN. DEPTH OF 1-2 INCH [25-50 mm] PAVEMENT OR FINISHED GRADE WASHED, CRUSHED STONE ABOVE CHAMBERS MIN. 95% COMPACTED CULTEC NO. 4800 WOVEN GEOTEXTILE - CULTEC CONTACTOR 100HD 8.0" [200 mm] MIN PLACED BENEATH FEED CONNECTORS HEAVY-DUTY CHAMBER AASHTO HS-25 RATED CAST IRON FRAME AND SOLID COVER 6.0 INCH [152 mm] MIN. DEPTH OF 1-2 INCH [25-50 mm] WASHED, CRUSHED STONE BELOW CHAMBERS 6.0" [150 mm] MIN 12" X 6" [300 mm X 150 mm] CULTEC INLINE DRAIN / CLEAN-OU 12.0" [305 mm] MIN. CULTEC CONTACTOR 100HD BASIN w/ GASKETED SDR-35 CONNECTION 10.0' [3.0 m] MIN. HEAVY DUTY CHAMBER 6" [150 mm] SDR-35 RISER (LENGTH VARIES) CULTEC NO. 4800 WOVEN GEOTEXTILE PROJECT ENGINEER OF RECORD OR GEOTECHNICAL CONSULTANT 6.25" [160 mm] HOLE TO BE CUT w/ HOLE PLACED BENEATH INLET PIPES IS RESPONSIBLE FOR ENSURING THAT THE REQUIRED BEARING SAW CENTERED ON CORRUGATION CREST CAPACITY OF SUB-GRADE SOILS HAS BEEN MET - 12.0 INCH [305 mm] MIN. WIDTH OF 6" [150 mm] SDR-35 BELL END SIDE PORTAL TO BE CUT IN FIELD TO ALLOW FOR HVLV SFCx2 FEED 1-2 INCH [25-50 mm] WASHED, CRUSHED JT FOR 6" [150 mm] OF INSERTED PIPE CONNECTOR OR STORM PIPE AS NEEDED (SEE FIGURE 1). CUT SHALL STONE BORDER SURROUNDING ALL CHAMBERS BE WITHIN 1/4" [6 mm] TOLERANCE OF SIDE PORTAL TRIM GUIDELINE FIGURE 1 MAX. PIPE: CULTEC NO. 4800 WOVEN GEOTEXTILE TO BE PLACED 6" [150 mm] HDPE BENEATH INTERNAL MANIFOLD FEATURE AND BENEATH 6" [150 mm] PVC ALL INLET/OUTLET PIPES (FOR SCOUR PROTECTION) - PIPE PER ENGINEER DESIGN. PIPE TO BE INSERTED 12.0 INCHES [305 mm] MIN. INTO CHAMBER. 10.0" [250 mm] HDPE 10.0" [250 mm] PVC **ZOOM OF SIDE PORTAL SHOWING MAX. PIPE O.D. CULTEC HVLV SFCx2 CULTEC CONTACTOR 100HD HEAVY DUTY PLAN VIEW OPTIONAL INSPECTION PORT - ZOOM DETAIL CULTEC MANIFOLD - OPTIONAL INSPECTION PORT DETAIL** FEED CONNECTOR CULTEC, Inc. **CULTEC STORMWATER CHAMBER CONTACTOR 100HD** THIS DRAWING WAS PREPARED TO SUPPORT THE PROJECT ENGINEER OF RECORD FOR THE PROPOSED SYSTEM. IT IS Subsurface Stormwater Management Systems THE ULTIMATE RESPONSIBILITY OF THE PROJECT ENGINEER OF RECORD TO ENSURE THAT THE CULTEC SYSTEM'S **DETAIL SHEET** PROJECT NO: 2019 PH: (203) 775-4416 P.O. Box 280 DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IT IS THE PROJECT ENGINEER OF TRAFFIC APPLICATION RECORD'S RESPONSIBILITY TO ENSURE THAT THE CULTEC PRODUCTS ARE DESIGNED IN ACCORDANCE WITH PH: (800) 4-CULTEC 878 Federal Road CULTEC, INC CHECKED BY: TECH DRAWN BY: CULTEC'S MINIMUM REQUIREMENTS. CULTEC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS FX: (203) 775-1462 Brookfield, CT 06804 tech@cultec.com www.cultec.com SCALE: N.T.S. SHEET NO: 1 OF 1

CULTEC HVLV® SFCx2 FEED CONNECTOR CULTEC CONTACTOR® 100HD CHAMBER PRODUCT SPECIFICATIONS MODEL 100RHD STARTER 6.0" [150 mm] DIA. INSPECTION PORT KNOCK-OUT SMALL RIB LARGE RIB LARGE RIE CULTEC HVLV SFCx2 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD CULTEC CONTACTOR 100HD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER FOR CULTEC CONTACTOR 100HD STORMWATER CHAMBERS. MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF. 1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832) **CHAMBER PARAMETERS** 2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH 1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR. (203-775-4416 OR 1-800-428-5832) 36.0" [914mm] 3. THE CHAMBER SHALL BE ARCHED IN SHAPE. MODEL 100EHD MIDDLE/END 2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH 4. THE CHAMBER SHALL BE OPEN-BOTTOMED. DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR. SMALL RIB 5. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV SFCX2 FEED CONNECTOR SHALL BE 3. THE CHAMBER SHALL BE ARCHED IN SHAPE. 7.6 INCHES (194 mm) TALL, 12 INCHES (305 mm) WIDE AND 19.7 INCHES (500 mm) LONG. 6. THE NOMINAL STORAGE VOLUME OF THE HVLV SFCX2 FEED CONNECTOR SHALL BE 0.294 FT3 / THE CHAMBER SHALL BE OPEN-BOTTOMED. FT (0.027 m3/m) - WITHOUT STONE. MODEL 100RHD IS A STARTER/STAND ALONE UNIT 5. THE CHAMBER SHALL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. 7. THE HVLV SFCX2 FEED CONNECTOR CHAMBER SHALL HAVE 3 CORRUGATIONS. THEY ARE USED TO START ROWS OR CAN BE USED SINGULARLY. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE 8. THE HVLV SFCX2 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO COUPLINGS OR SEPARATE END WALLS. INSTALLED LENGTH = 90.0" [2286mm] OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT HALL FIT INTO THE SIDE PORTALS OF THE CONTACTOR 100HD STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD. 6. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC CONTACTOR 100HD SHALL BE 12.5 - MAXIMUM PIPE SIZE IN END WALL: INCHES (318 mm) TALL, 36 INCHES (914 mm) WIDE AND 8 FEET (2.44 m) LONG. THE 9. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED INSTALLED LENGTH OF A JOINED CONTACTOR 100HD SHALL BE 7.5 FEET (2.29 m). 10" [250 mm] HDPE LARGE RIB -ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. 10" [250 mm] PVC . MAXIMUM INLET OPENING ON THE CHAMBER ENDWALL IS 10 INCHES (250 mm). 10. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY. 8. THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV® SFCX2 FEED **CULTEC NO. 410™ NON-WOVEN GEOTEXTILI** 12.5" [318mm] CONNECTORS TO CREATE AN INTERNAL MANIFOLD. THE NOMINAL INSIDE DIMENSIONS CULTEC NO. 410™ NON-WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR® AND RECHARGER® STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL INTRUSION INTO THE STONE. 6.0" [152mm] OF EACH SIDE PORTAL SHALL BE 5.75 INCHES (146 mm) HIGH BY 7.5 INCHES (191 mm) WIDE. MAXIMUM ALLOWABLE OUTER DIAMETER (O.D.) PIPE SIZE IN THE SIDE PORTAL IS **GEOTEXTILE PARAMETERS** 6.9 INCHES (175 mm). 1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832) 9. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV SFCX2 FEED CONNECTOR MODEL 100EHD IS A MIDDLE/END UNIT. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE. SHALL BE 7.6 INCHES (194 mm) TALL, 12 INCHES (305 mm) WIDE AND 19.7 INCHES (500 mm) ∠ SIDE PORTAL FOR OPTIONAL INTERNAL MANIFOLD THEY ARE USED TO CONTINUE ROWS AND ALSO USED TO END A ROW. THE GEOTEXTILE SHALL HAVE A TYPICAL WEIGHT OF 4.5 OZ/SY (142 G/M). (ACCOMMODATES CULTEC HVLV SFCx2 FEED CONNECTOR OR STORM PIPE) CULTEC CONTACTOR 100HD CHAMBER STORAGE = 1.866 CF/FT [0.173 m³/m] 4. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM D4632 MAX. PIPE: INSTALLED LENGTH ADJUSTMENT = 0.5' [0.15 m] 10. THE NOMINAL STORAGE VOLUME OF THE CONTACTOR 100HD CHAMBER SHALL BE 1.866 6" [150 mm] HDPE TESTING METHOD. FT3 / FT (0.173 m3 / m) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED 5. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632 TESTING 6" [150 mm] PVC CONTACTOR 100HD SHALL BE 13.995 FT3 / UNIT (0.396 m3 / UNIT) - WITHOUT STONE. 6. THE GEOTEXTILE SHALL HAVE A MULLEN BURST VALUE OF 225 PSI (1551 KPA) PER ASTM D3786 11. THE NOMINAL STORAGE VOLUME OF THE HVLV SFCX2 FEED CONNECTOR SHALL BE 0.294 TESTING METHOD. FT³ / FT (0.027 m³ / m) - WITHOUT STONE. 7. THE GEOTEXTILE SHALL HAVE A PUNCTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM D4833 TESTING METHOD **CULTEC CONTACTOR 100HD HEAVY DUTY END DETAIL INFORMATION CULTEC CONTACTOR 100HD HEAVY DUTY THREE VIEW** 12. THE CONTACTOR 100HD CHAMBER SHALL HAVE FORTY-FOUR DISCHARGE HOLES BORED 8. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D6241 INTO THE SIDEWALLS OF THE UNIT'S CORE TO PROMOTE LATERAL CONVEYANCE OF 9. THE GEOTEXTILE SHALL HAVE A TRAPEZOID TEAR VALUE OF 50 LBS (222 N) PER ASTM D4533 TESTING METHOD. 13. THE CONTACTOR 100HD CHAMBER SHALL HAVE 16 CORRUGATIONS. 10. THE GEOTEXTILE SHALL HAVE A AOS VALUE OF 70 U.S. SIEVE (0.212 MM) PER ASTM D4751 TESTING 14. THE ENDWALL OF THE CHAMBER, WHEN PRESENT, SHALL BE AN INTEGRAL PART OF THE 11. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING HIDDEN END CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH THIS CULTEC HVLV SFCx2 FEED CONNECTOR - 1-2 INCH [25-50mm] WASHED, CRUSHED STONE 12. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/MIN/SF (5500 L/MIN/SM) PER WHERE SPECIFIED ASTM D4491 TESTING METHOD. 15. THE CONTACTOR 100RHD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER CULTEC NO. 410 NON-WOVEN GEOTEXTILE HAVING TWO FULLY FORMED INTEGRAL ENDWALLS AND HAVING NO SEPARATE END 13. THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 500 HOURS VALUE OF 70% PER ASTM D4355 AROUND STONE. TOP AND SIDES MANDATORY, - NATURALLY COMPACTED FILL PLATES OR SEPARATE END WALLS. CULTEC CONTACTOR 100HD -BOTTOM PER ENGINEER'S DESIGN PREFERENCE HEAVY DUTY CHAMBER FINISHED GRADE 16. THE CONTACTOR 100EHD MIDDLE/END UNIT MUST BE FORMED AS A WHOLE CHAMBER CULTEC NO. 4800 WOVEN GEOTEXTILE IS DESIGNED AS A UNDERLAYMENT TO PREVENT SCOURING CAUSED BY 6.0" [152 mm] MIN. HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE FULLY OPEN END WALL AND MODEL 100EHD WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC HAVING NO SEPARATE END PLATES OR END WALLS. MANIFOLD FEATURE. IT MAY ALSO BE USED AS A COMPONENT OF THE CULTEC SEPARATOR ROW TO ACT AS A BARRIER TO PREVENT SOIL/CONTAMINANT INTRUSION INTO THE STONE WHILE ALLOWING FOR MAINTENANCE 17. THE HVLV SFCX2 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING 12.0' [3.66 m] MAX. COVER DEPTH TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END 6.0" [152 mm] MIN. 1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE CONTACTOR 100HD AND (203-775-4416 OR 1-800-428-5832) ACT AS CROSS FEED CONNECTIONS. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE 3. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 550 X 550 LBS (2,448 X 2,448 N) PER ASTM 12.5" [318 mm] 18. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN D4632 TESTING METHOD. MODEL 100EHD THE RIBS. 4. THE GEOTEXTILE SHALL HAVE A ELONGATION @ BREAK RESISTANCE OF 20 X 20% PER ASTM D4632 TESTING METHOD. 19. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED 6.0" [152 mm] MIN. 5. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE OF 5,070 X 5,070 LBS/FT ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. (74 X 74 KN/M) PER ASTM D4595 TESTING METHOD. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 2% STRAIN OF 960 X 1,096 20. HEAVY DUTY UNITS ARE DESIGNATED BY A COLORED STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER. (14 X 16 KN/M) PER ASTM D4595 TESTING METHOD. - CULTEC NO. 4800 WOVEN GEOTEXTILE TO BE PLACED. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 5% STRAIN OF 2,740 X 2, 740 21. THE CHAMBER SHALL HAVE A RAISED INTEGRAL CAP AT THE TOP OF THE ARCH IN THE BENEATH INTERNAL MANIFOLD FEATURE AND BENEATH ALL LBS/FT (40 X 40 KN/M) PER ASTM D4595 TESTING METHOD. CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT. INLET/OUTLET PIPES (FOR SCOUR PROTECTION) THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 10% STRAIN OF 4,800 X 4,800 12.0" [305 mm] MIN. - - 36.0" [914 mm] -MODEL 100EHD CENTER-TO-CENTER LBS/FT (70 X 70 KN/M) PER ASTM D4595 TESTING METHOD. 22. THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY 9. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 1,700 LBS (7,560 N) PER ASTM D6241 PROJECT ENGINEER OF RECORD OR GEOTECHNICAL CONSULTANT IS RESPONSIBLE FOR 10. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 180 X 180 LBS (801 X 801 N) PER ENSURING THAT THE REQUIRED BEARING CAPACITY OF SUB-GRADE SOILS HAS BEEN MET CULTEC HVLV SFCx2 23. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY **FEED CONNECTOR** .. THE GEOTEXTILE SHALL HAVE AN APPARENT OPENING SIZE OF 40 US STD. SIEVE (0.425 MM) PER ASTM TRIM PORTAL TO UTILIZE INTERNAL 24. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED TO MEET THE MATERIAL AND MANIFOLD FEATURE STRUCTURAL REQUIREMENTS OF IAPMO PS 63-2019, INCLUDING RESISTANCE TO AASHTO 12. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.15 SEC-1 PER ASTM D4491 TESTING H-10 AND H-20 HIGHWAY LIVE LOADS, WHEN INSTALLED IN ACCORDANCE WITH CULTEC'S 13. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 11.5 GPM/FT2 (470 LPM/M2) PER ASTM D4491 INSTALLATION INSTRUCTIONS. MODEL 100RHD TESTING METHOD. 14. THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 80% @ 500 HRS. PER ASTM D4355 TESTING 25. MAXIMUM ALLOWED COVER ON TOP OF UNIT SHALL BE 12.0 FEET [3.66 m] $\left(\frac{100\text{HD}}{5.0}\right)$ $\left(\frac{100\text{HD}}{1.0}\right)$ **GENERAL NOTES CULTEC CONTACTOR 100HD HEAVY DUTY TYPICAL INTERLOCK CULTEC CONTACTOR 100HD HEAVY DUTY SYSTEM CROSS SECTION** INLET/OUTLET PIPE PER ENGINEER DESIGN. FINISHED GRADE PIPE TO BE INSERTED 12.0" [305 mm] MIN. INTO CHAMBER MAXIMUM PIPE SIZE CULTEC HVLV SFCx2 FEED CONNECTOR 10.0" [250 mm] HDPE WHERE SPECIFIED 10.0" [250 mm] PVC NATURALLY COMPACTED FILL → 19.7" [500 mm] → — 1-2 INCH [25-50 mm] WASHED, CRUSHED STONE — FINISHED GRADE 6.0" [150 mm] SDR-35 / SCH. 40 PVC ENDCAP CULTEC NO. 410 NON-WOVEN GEOTEXTILE AROUND CLEAN-OUT ADAPTER W/ SCREW-IN CAP STONE. TOP AND SIDES MANDATORY, BOTTOM PER NATURALLY COMPACTED FILL CULTEC CONTACTOR 100HD ENGINEER'S DESIGN PREFERENCE CULTEC NO. 410 NON-WOVEN GEOTEXTILE 12.0" [305 mm] — | - AROUND STONE. TOP AND SIDES MANDATORY, FINISHED GRADE 6.0 INCH [152 mm] MIN. DEPTH OF 1-2 INCH [25-50 mm] BOTTOM PER ENGINEER'S DESIGN INSPECTION PORT (SEE DETAIL 100HD WASHED, CRUSHED STONE ABOVE CHAMBERS 7.5' [2.29 m] MIN. CULTEC NO. 4800 WOVEN GEOTEXTILE PLACED BENEATH FEED CONNECTORS - CULTEC CONTACTOR 100HD HEAVY-DUTY CHAMBER 6.0 INCH [152 mm] MIN. DEPTH OF 1-2 INCH [25-50 mm] WASHED, CRUSHED STONE BELOW CHAMBERS - 6.0" [150 mm] SDR-35 / SCH. 40 PVC RISER 10.0' [3.0 m] MIN. CULTEC NO. 4800 WOVEN GEOTEXTILE PLACED BENEATH INLET PIPES —- 12.0" [305 mm] MIN. 6.0" [150 mm] SDR-35 / SCH. 40 PVC CULTEC NO. 4800 WOVEN GEOTEXTILE TO BE PLACED - 12.0 INCH [305 mm] MIN. WIDTH OF BENEATH INTERNAL MANIFOLD FEATURE AND BENEATH 1-2 INCH [25-50 mm] WASHED, CRUSHED ALL INLET/OUTLET PIPES (FOR SCOUR PROTECTION) STONE BORDER SURROUNDING ALL CHAMBERS TRIM CHAMBER INSPECTION PORT KNOCK-OUT TO MATCH O.D. OF 6.0" [150 mm] INSPECTION PORT PIPE PROJECT ENGINEER OF RECORD OR GEOTECHNICAL CONSULTANT FIGURE 1 IS RESPONSIBLE FOR ENSURING THAT THE REQUIRED BEARING CAPACITY OF SUB-GRADE SOILS HAS BEEN MET 6" [150 mm] HDPE 6.0" [150 mm] SDR-35 / SCH 40 PVC 6" [150 mm] PVC NSERTED 8.0" [203 mm] INTO CHAMBER) - PIPE PER ENGINEER DESIGN. SIDE PORTAL TO BE CUT IN FIELD TO ALLOW FOR HVLV SFCx2 FEED PIPE TO BE INSERTED 12.0 INCHES [305 mm] MIN. INTO CHAMBER. CONNECTOR OR STORM PIPE AS NEEDED (SEE FIGURE 1). CUT SHALL MAXIMUM PIPE SIZE: BE WITHIN 1/4" [6 mm] TOLERANCE OF SIDE PORTAL TRIM GUIDELINE 10.0" [250 mm] HDPE 10.0" [250 mm] PVC **ZOOM OF SIDE PORTAL SHOWING MAX. PIPE O.D. CULTEC HVLV SFCx2 CULTEC CONTACTOR 100HD HEAVY DUTY PLAN VIEW OPTIONAL INSPECTION PORT - ZOOM DETAIL CULTEC MANIFOLD - OPTIONAL INSPECTION PORT DETAIL** FEED CONNECTOR CULTEC, Inc. **CULTEC STORMWATER CHAMBER**

Subsurface Stormwater Management Systems

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THIS DRAWING WAS PREPARED TO SUPPORT THE PROJECT ENGINEER OF RECORD FOR THE PROPOSED SYSTEM. IT IS THE ULTIMATE RESPONSIBILITY OF THE PROJECT ENGINEER OF RECORD TO ENSURE THAT THE CULTEC SYSTEM'S DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IT IS THE PROJECT ENGINEER OF RECORD'S RESPONSIBILITY TO ENSURE THAT THE CULTEC PRODUCTS ARE DESIGNED IN ACCORDANCE WITH CULTEC'S MINIMUM REQUIREMENTS. CULTEC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS.

CONTACTOR 100HD DETAIL SHEET NON-TRAFFIC APPLICATION PROJECT NO: 2019 CHECKED BY: TECH CULTEC, INC DRAWN BY: SHEET NO: SCALE: N.T.S. 1 OF 1