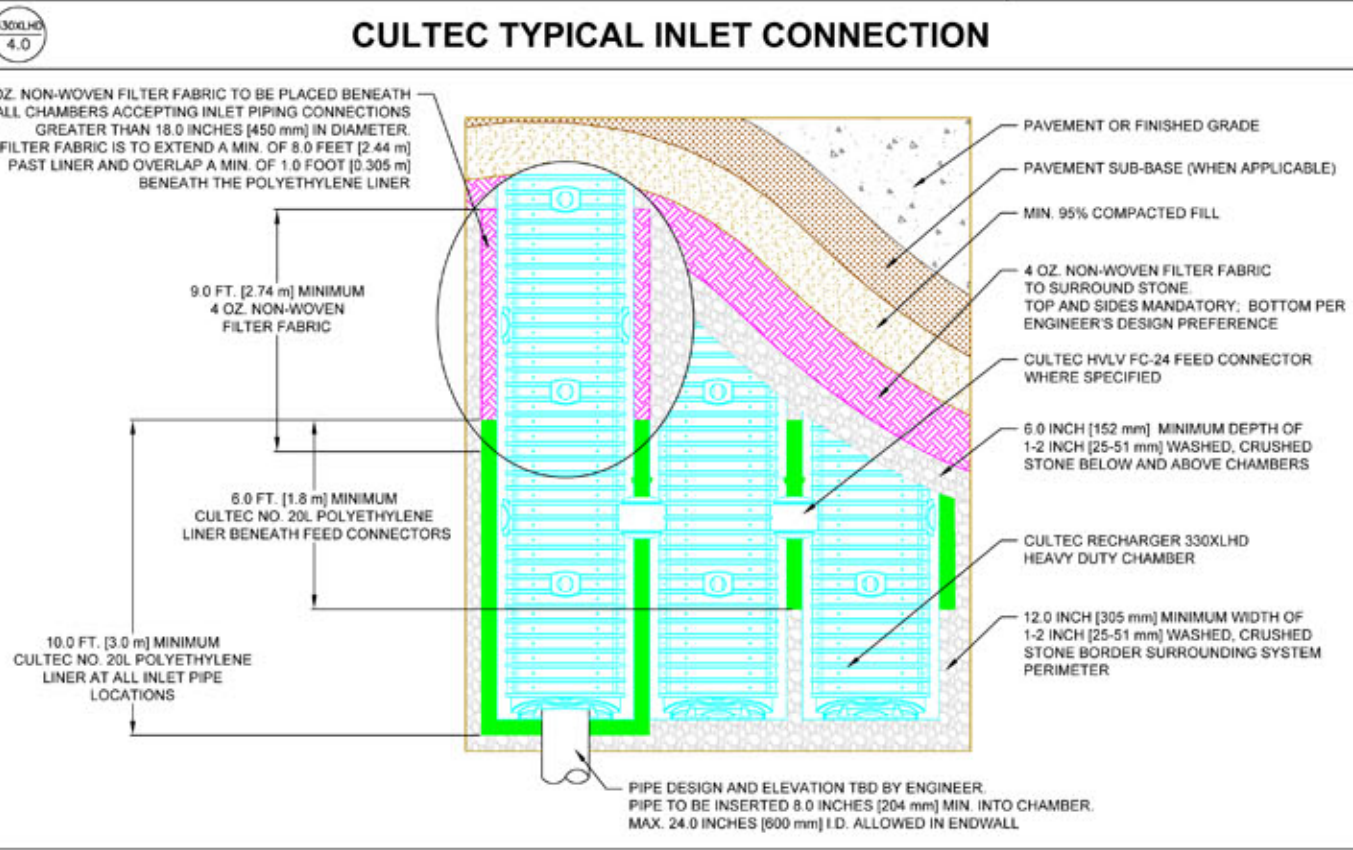
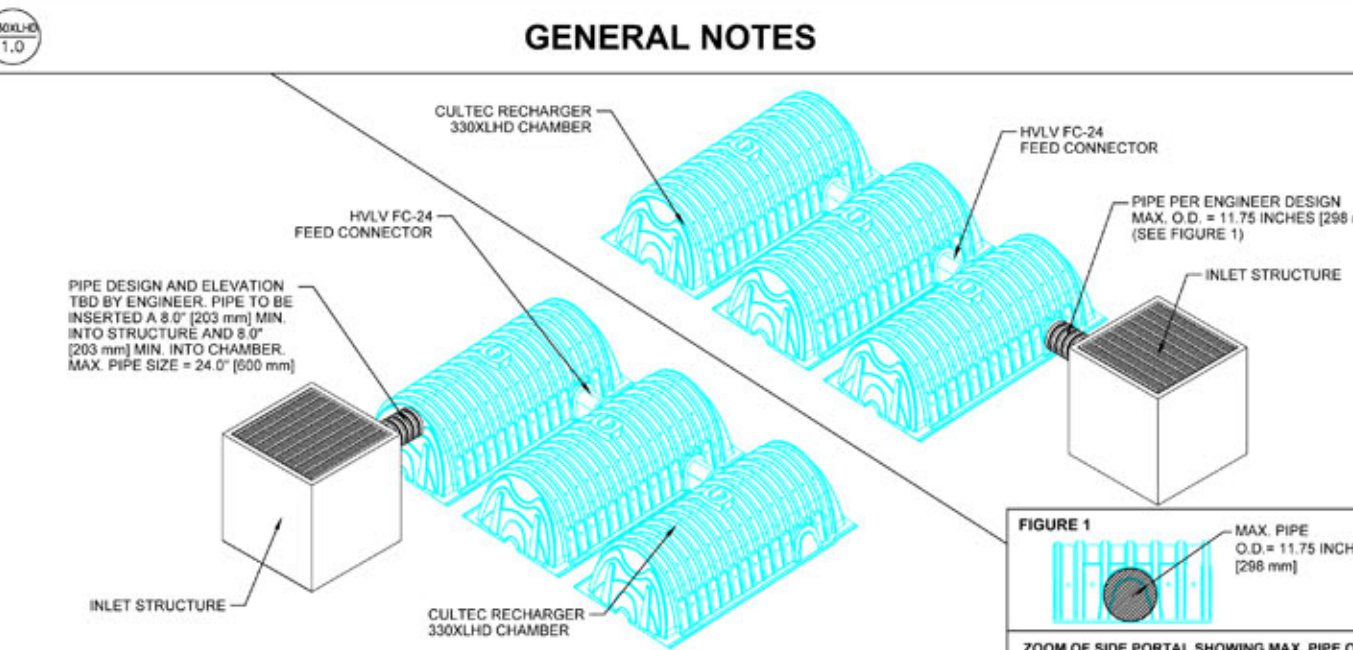


CULTEC RECHARGER 330XLHD PRODUCT SPECIFICATIONS

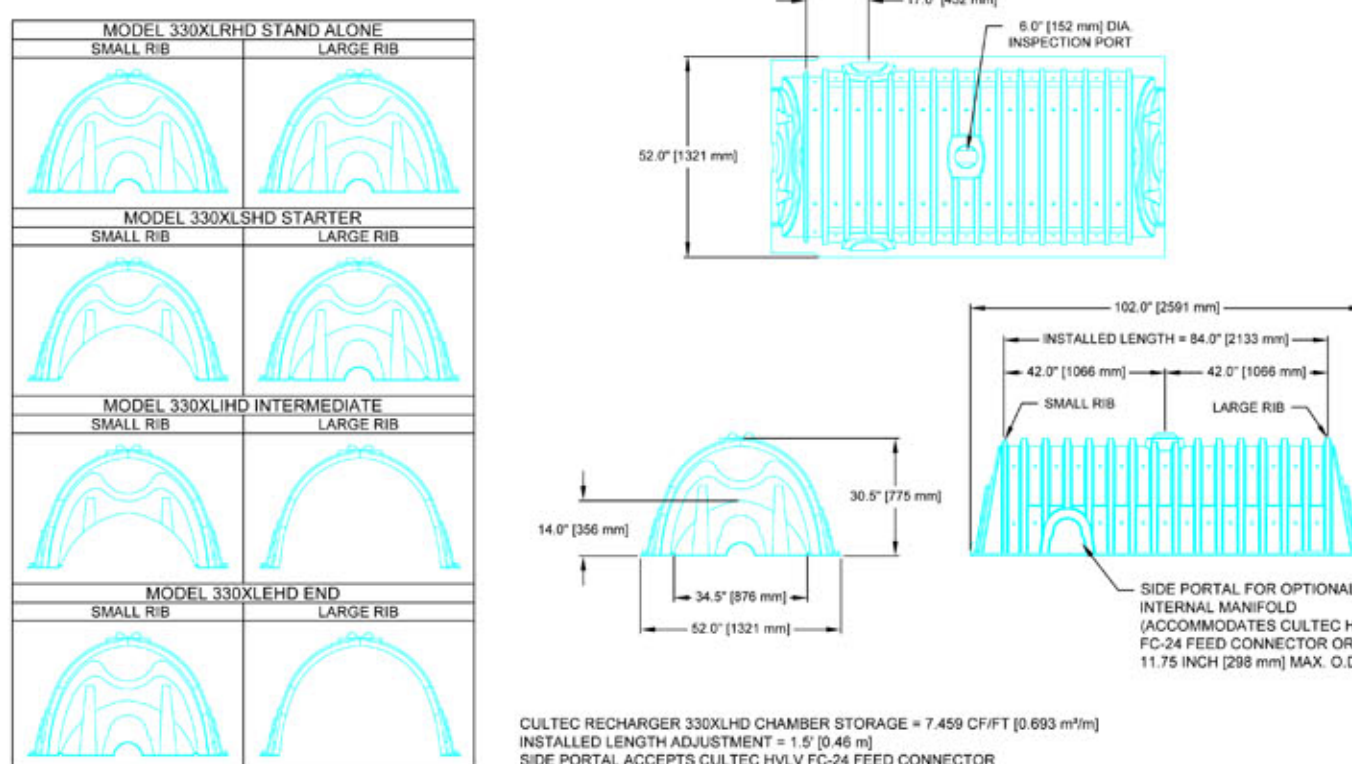
GENERAL
CULTEC RECHARGER 330XLHD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBER MAY BE USED FOR RETENTION, FLOODING, LIFTING OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

CHAMBER PARAMETERS

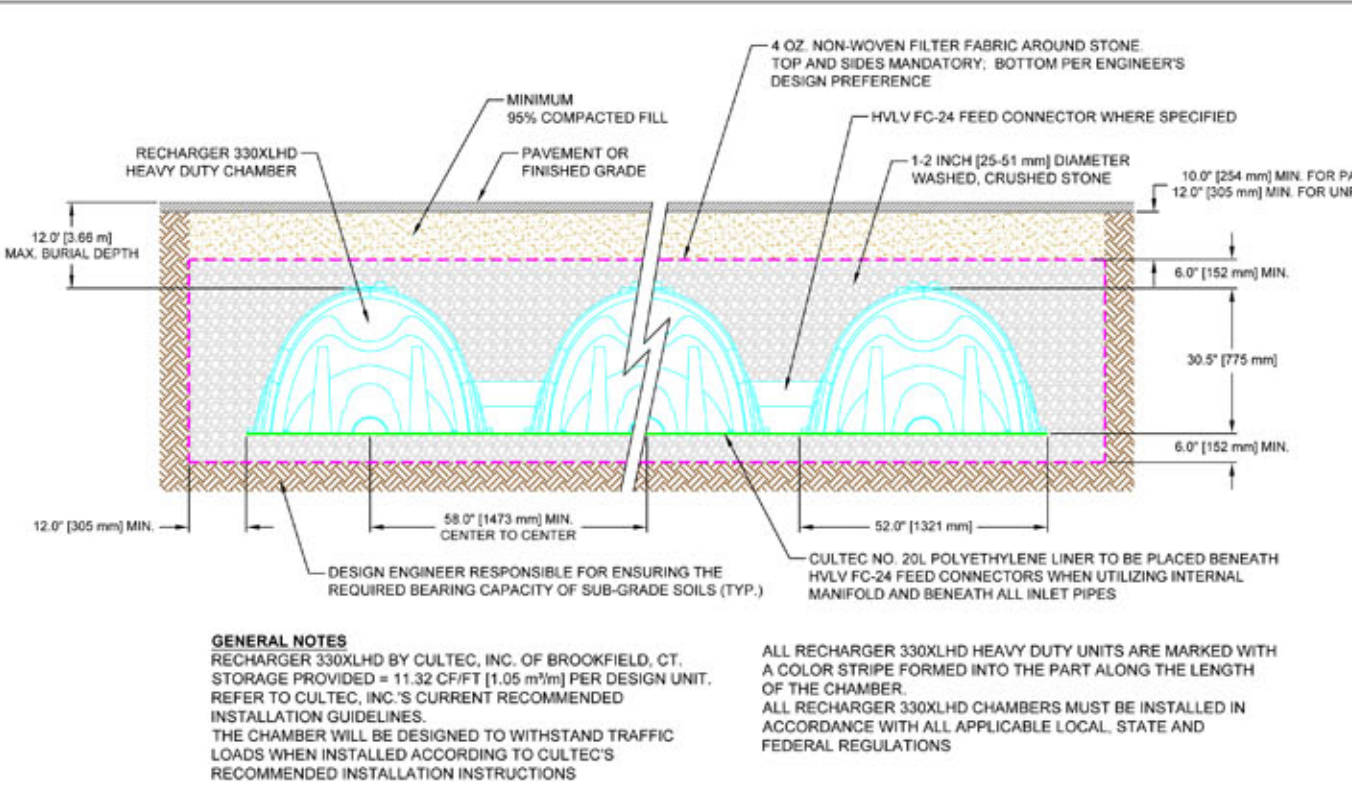
1. THE CHAMBERS WILL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT (203-775-4416 OR 1-800-428-5832).
2. THE CHAMBER WILL BE VACUUM THERMOFORMED OF BLACK POLYETHYLENE.
3. THE CHAMBER WILL BE ARCHED IN SHAPE.
4. THE CHAMBER WILL BE OPEN BOTTOMED.
5. THE CHAMBER WILL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS. HAVING NO SEPARATE JOINTS OR SEPARATE END WALLS.
6. THE NORMAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER 330XLHD SHALL BE 30.5 INCHES (776 mm) TALL, 52 INCHES (1321 mm) WIDE AND 8.5 FEET (2.59 m) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER 330XLHD SHALL BE 12 FEET (3.66 m).
7. MAXIMUM INLET OPENING ON THE CHAMBER END WALL IS 24 INCHES (600 mm).
8. THE CHAMBER WILL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV FC-24 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. THE NOMINAL DIMENSIONS OF EACH SIDE PORTAL WILL BE 18.5 INCHES (467 mm) HIGH BY 11.5 INCHES (293 mm) WIDE. MAXIMUM ALLOWABLE OUTER DIAMETER (O.D.) PIPE SIZE IN THE SIDE PORTAL IS 11.75 INCHES (298 mm).
9. THE NORMAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 18 INCHES (457 mm) WIDE AND 24.2 INCHES (614 mm) LONG.
10. THE NORMAL STORAGE VOLUME OF THE RECHARGER 330XLHD CHAMBER WILL BE 7.459 CF/FT (0.267 m³/m) WITHOUT STONE. THE NORMAL STORAGE VOLUME OF A JOINED RECHARGER 330XLHD SHALL BE 52.0 CF/FT (1.478 m³/m) WITHOUT STONE.
11. THE NORMAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR WILL BE 6.933 CF/FT (0.247 m³/m) WITHOUT STONE.
12. THE RECHARGER 330XLHD CHAMBER WILL HAVE FIFTY-SIX DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNITS CORE TO PROMOTE LATERAL CONVEYANCE OF WATER.
13. THE RECHARGER 330XLHD CHAMBER SHALL HAVE 18 CORRUGATIONS.
14. THE END WALL OF THE CHAMBER WHEN PRESENT, WILL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH THIS UNIT.
15. THE RECHARGER 330XLHD STAND ALONE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTERNAL END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
16. THE RECHARGER 330XLHD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTERNAL END WALL AND ONE PARTIALLY FORMED INTEGRAL END WALL WITH ALLOWER TRIM OPENING OF 14 INCHES (356 mm) HIGH BY 34.5 INCHES (876 mm) WIDE.
17. THE RECHARGER 330XLHD INTERMEDIATE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY OPEN END WALL AND ONE PARTIALLY FORMED INTEGRAL END WALL WITH A LOWER TRIM OPENING OF 14 INCHES (356 mm) HIGH BY 34.5 INCHES (876 mm) WIDE.
18. THE RECHARGER 330XLHD END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTERNAL END WALL AND ONE FULLY OPEN END WALL WITH ALLOWER TRIM OPENING OF 14 INCHES (356 mm) HIGH BY 34.5 INCHES (876 mm) WIDE.
19. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT WILL FIT INTO THE SIDE PORTALS OF THE RECHARGER 330XLHD AND AS CROSS FEED CONNECTIONS.
20. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN THE RIBS.
21. HEAVY DUTY UNITS ARE DESIGNATED BY A COLORED STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.
22. THE CHAMBER WILL HAVE A 1 INCH (25.4 mm) DIAMETER RASSED INTEGRAL CAP LOCATED ON TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT.
23. THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION.
24. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY.
25. MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12 FEET (3.66 m).
26. THE CHAMBER WILL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.



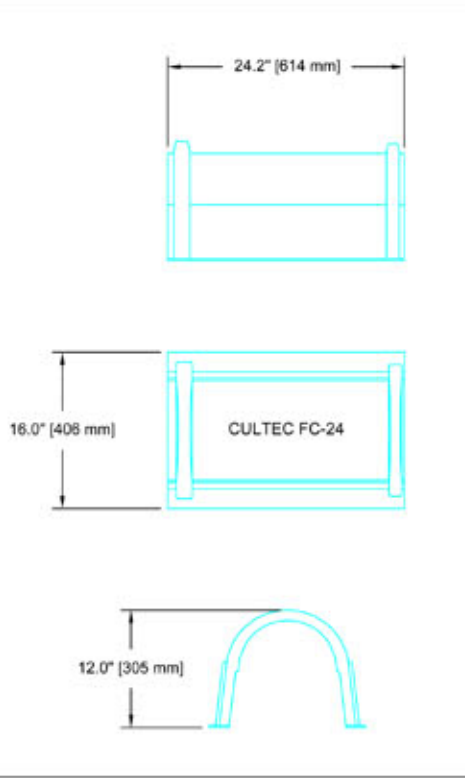
CULTEC RECHARGER 330XLHD HEAVY DUTY PLAN VIEW



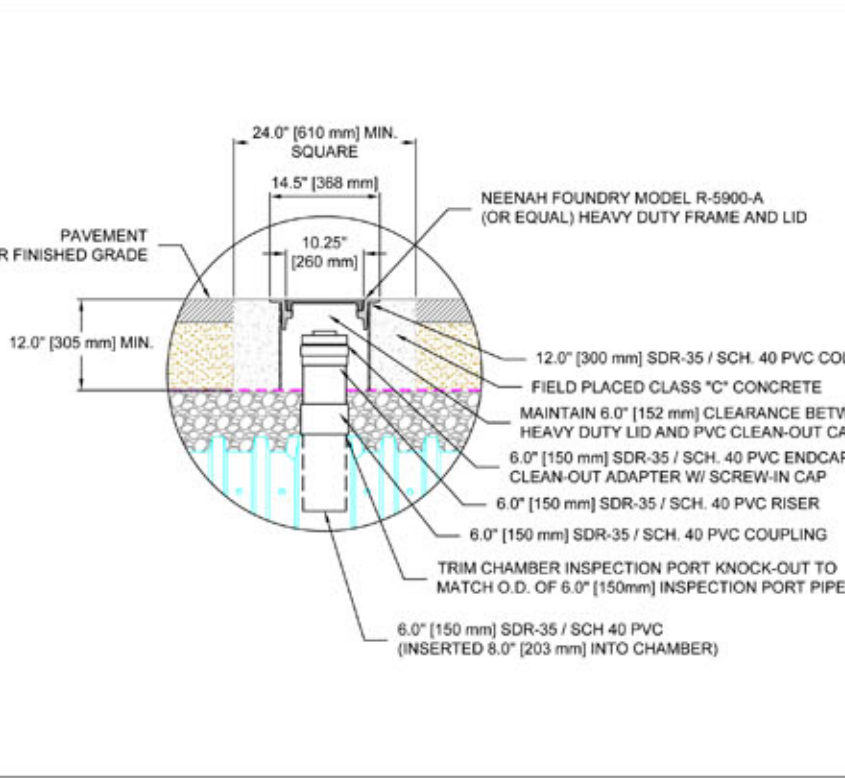
CULTEC RECHARGER 330XLHD HEAVY DUTY THREE VIEW



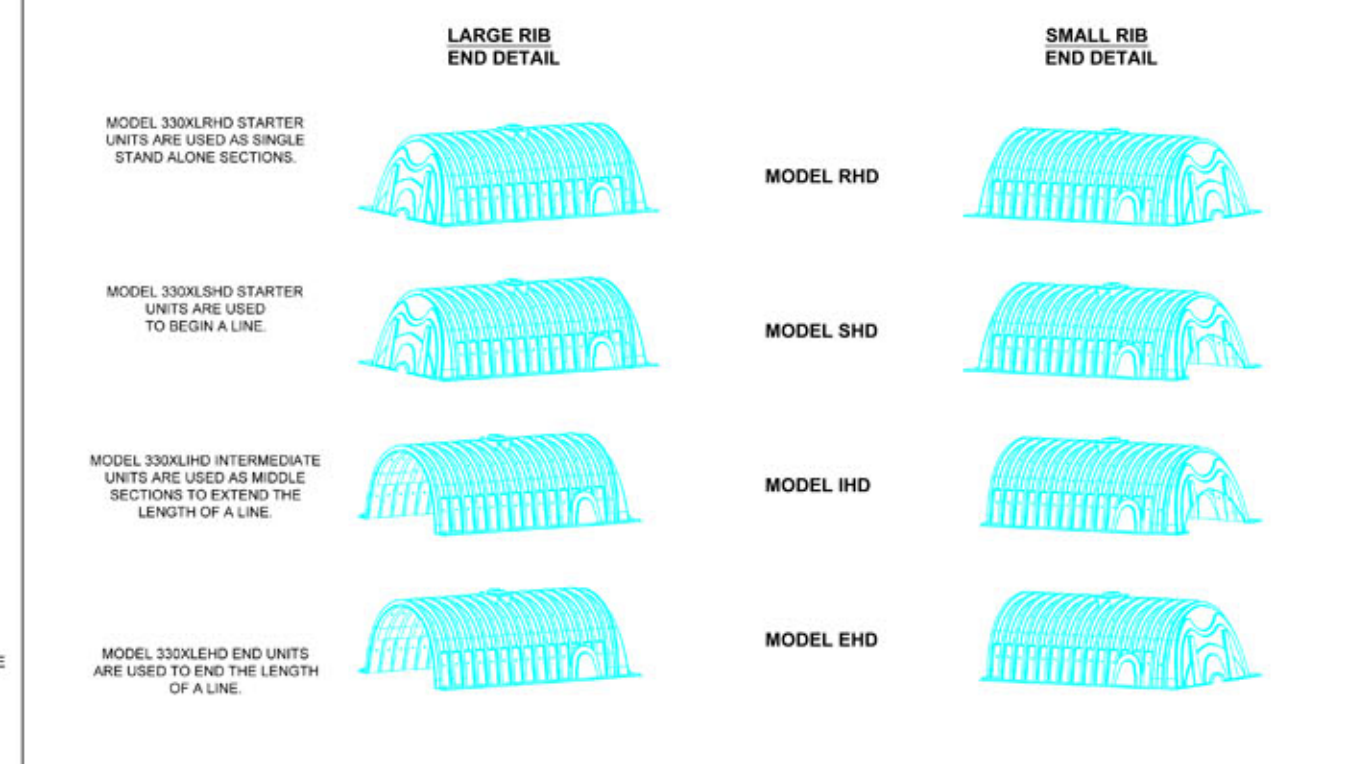
CULTEC RECHARGER 330XLHD HEAVY DUTY TYPICAL CROSS SECTION



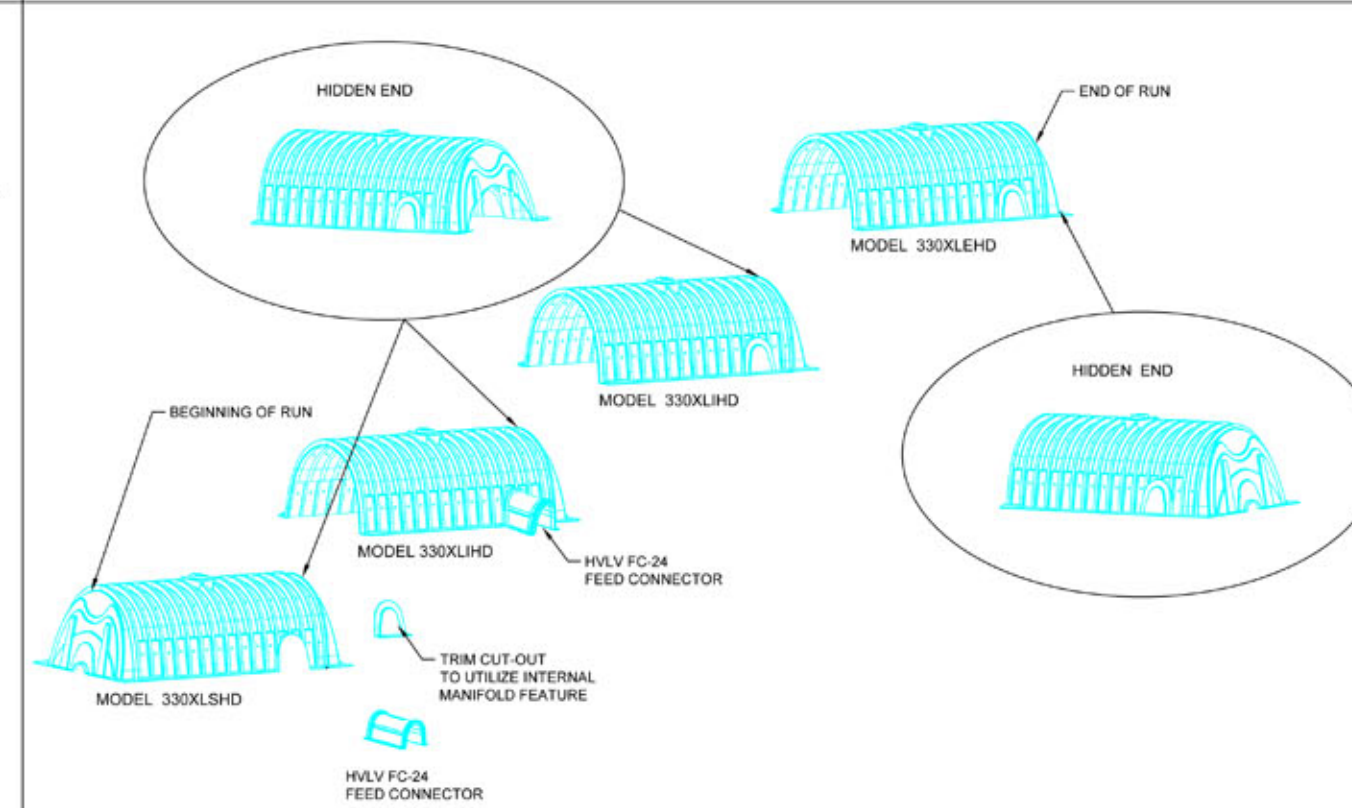
CULTEC HVLV FC-24 FEED CONNECTOR THREE VIEW



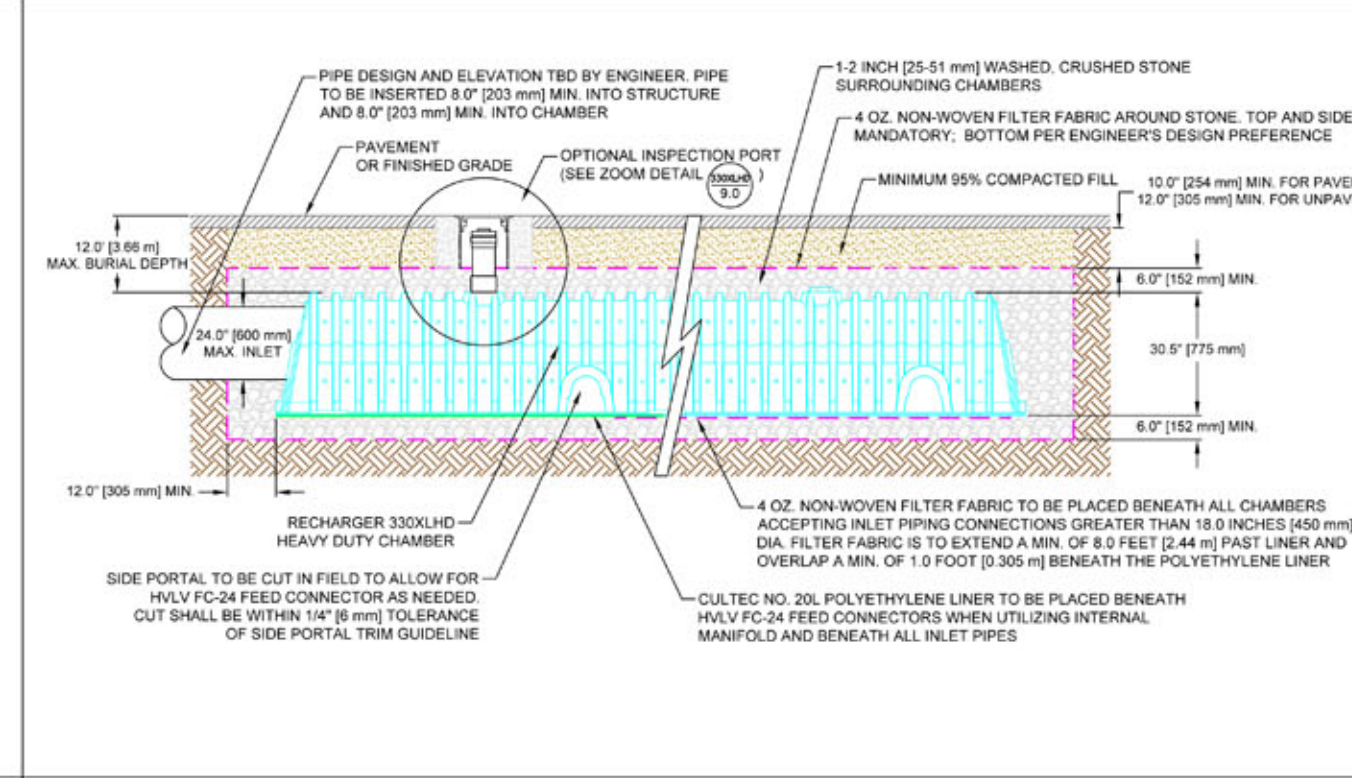
OPTIONAL INSPECTION PORT- ZOOM DETAIL



CULTEC RECHARGER 330XLHD HEAVY DUTY END DETAIL INFORMATION



CULTEC RECHARGER 330XLHD HEAVY DUTY TYPICAL INTERLOCK



CULTEC INTERNAL MANIFOLD- OPTIONAL INSPECTION PORT DETAIL

CULTEC, Inc.
Subsurface Stormwater Management Systems

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FX: (203) 775-1462
tech@cultec.com

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

RECHARGER 330XLHD
DETAIL SHEET
TRAFFIC APPLICATION

TiSALES

36 Hudson Rd
Sudbury MA 01776

800-225-4616
www.tisales.com

CULTEC RECHARGER® 330XLHD			
PROJECT NO:	-	DATE:	02/2015
DESIGNED BY:	CULTEC, INC	DRAWN BY:	TECH
SCALE:	N.T.S.	SHEET NO:	1 OF 2

CULTEC RECHARGER 330XLHD PRODUCT SPECIFICATIONS

GENERAL
CULTEC RECHARGER 330XLHD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

CHAMBER PARAMETERS

1. THE CHAMBERS WILL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT (203-775-4416 OR 1-800-428-5832).
2. THE CHAMBER WILL BE VACUUM THERMOFORMED OF BLACK POLYETHYLENE.
3. THE CHAMBER WILL BE ARCHED IN SHAPE.
4. THE CHAMBER WILL BE OPEN-BOTTOMED.
5. THE CHAMBER WILL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS OR SEPARATE END WALLS.
6. THE NORMAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER 330XLHD SHALL BE 30.5 INCHES (775 mm) TALL, 52 INCHES (1321 mm) WIDE AND 8.5 FEET (2.59 m) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER 330XLHD SHALL BE 1 FEET (0.30 m).
7. MAXIMUM INLET OPENING ON THE CHAMBER END WALL IS 24 INCHES (600 mm).
8. THE CHAMBER WILL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV FC-24 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. THE NOMINAL DIMENSIONS OF EACH SIDE PORTAL WILL BE 10.5 INCHES (267 mm) HIGH BY 11.5 INCHES (293 mm) WIDE. MAXIMUM ALLOWABLE OUTER DIAMETER (O.D.) PIPE SIZE IN THE SIDE PORTAL IS 11.75 INCHES (298 mm).
9. THE NORMAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 18 INCHES (457 mm) WIDE AND 24.2 INCHES (614 mm) LONG.
10. THE NORMAL STORAGE VOLUME OF THE RECHARGER 330XLHD CHAMBER SHALL BE 7.488 CF/FT (0.263 m³/m), WITHOUT STONE. THE NORMAL STORAGE VOLUME OF A JOINED RECHARGER 330XLHD SHALL BE 82.113 FT³ UNIT (1.478 m³ UNIT), WITHOUT STONE.
11. THE NORMAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³/FT (0.085 m³/m), WITHOUT STONE.
12. THE RECHARGER 330XLHD CHAMBER WILL HAVE FIFTY-SIX DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNITS CORE TO PROMOTE LATERAL CONVEYANCE OF WATER.
13. THE RECHARGER 330XLHD CHAMBER SHALL HAVE 18 CORRUGATIONS.
14. THE END WALL OF THE CHAMBER, WHEN PRESENT, WILL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH THIS UNIT.
15. THE RECHARGER 330XLHD STAND ALONE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTERNAL END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
16. THE RECHARGER 330XLHD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTERNAL END WALL AND ONE PARTIALLY FORMED INTEGRAL END WALL WITH A LOWER TRANSFER OPENING OF 14 INCHES (356 mm) HIGH X 34.5 INCHES (876 mm) WIDE.
17. THE RECHARGER 330XLHD INTERMEDIATE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY OPEN END WALL AND ONE PARTIALLY FORMED INTEGRAL END WALL WITH A LOWER TRANSFER OPENING OF 14 INCHES (356 mm) HIGH X 34.5 INCHES (876 mm) WIDE.
18. THE RECHARGER 330XLHD END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTERNAL END WALL AND ONE FULLY OPEN END WALL AND HAVING NO SEPARATE END PLATES OR END WALLS.
19. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT WILL FIT INTO THE SIDE PORTALS OF THE RECHARGER 330XLHD AND ACT AS CROSS FEED CONNECTIONS.
20. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN THE RIBS.
21. HEAVY DUTY UNITS ARE DESIGNATED BY A COLORED STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.
22. THE CHAMBER WILL HAVE A 4 INCH (102 mm) DIAMETER RAISED INTEGRAL CAP LOCATED ON TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT.
23. THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION.
24. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY.
25. MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12 FEET (3.66 m).
26. THE CHAMBER WILL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.

CULTEC HVLV FC-24 FEED CONNECTOR PRODUCT SPECIFICATIONS

GENERAL
CULTEC HVLV FC-24 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER MODEL 330XLHD STORMWATER CHAMBERS.

CHAMBER PARAMETERS

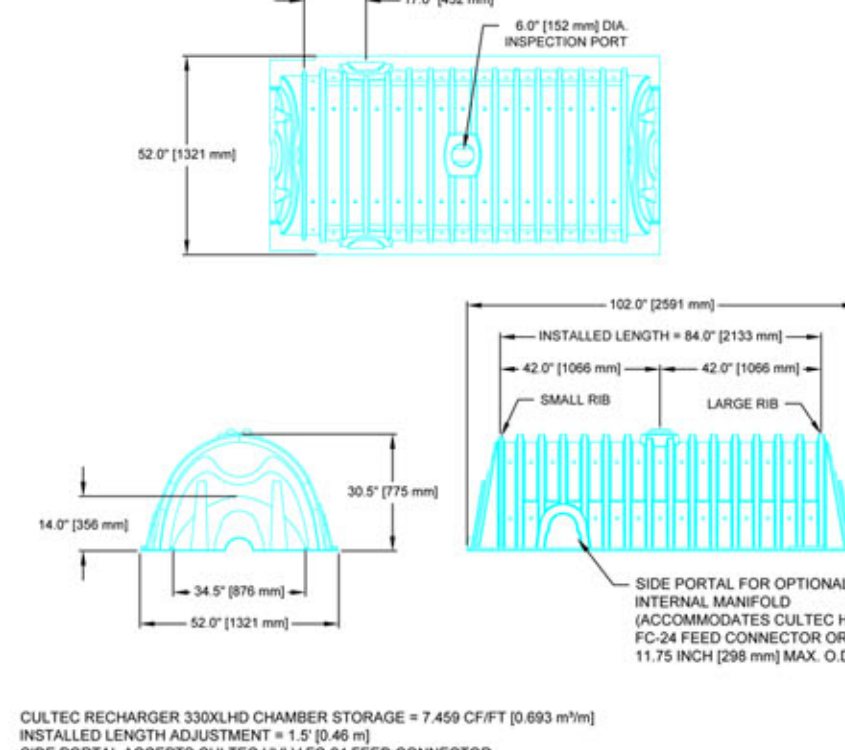
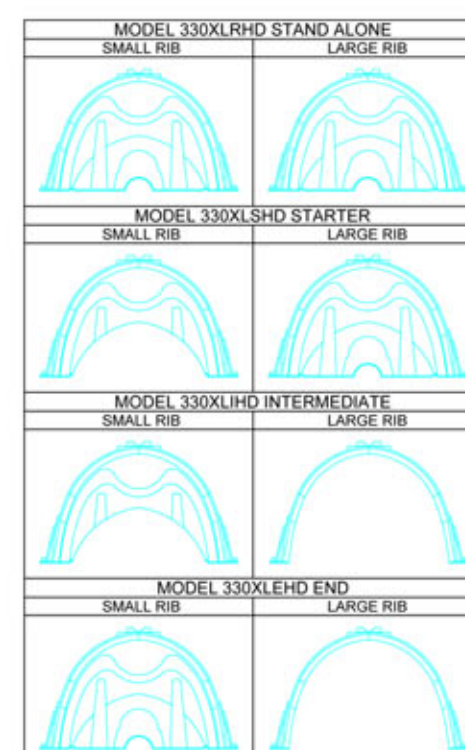
1. THE CHAMBERS WILL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT (203-775-4416 OR 1-800-428-5832).
2. THE CHAMBER WILL BE VACUUM THERMOFORMED OF BLACK HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HDPE).
3. THE CHAMBER WILL BE ARCHED IN SHAPE.
4. THE CHAMBER WILL BE OPEN-BOTTOMED.
5. THE NORMAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 18 INCHES (457 mm) WIDE AND 24.2 INCHES (614 mm) LONG.
6. THE NORMAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³/FT (0.085 m³/m), WITHOUT STONE.
7. THE HVLV FC-24 FEED CONNECTOR CHAMBER SHALL HAVE 2 CORRUGATIONS.
8. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT WILL FIT INTO THE SIDE PORTALS OF THE CULTEC RECHARGER STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.
9. THE CHAMBER WILL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
10. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY.

CULTEC NO. 20L POLYETHYLENE LINER PRODUCT SPECIFICATIONS

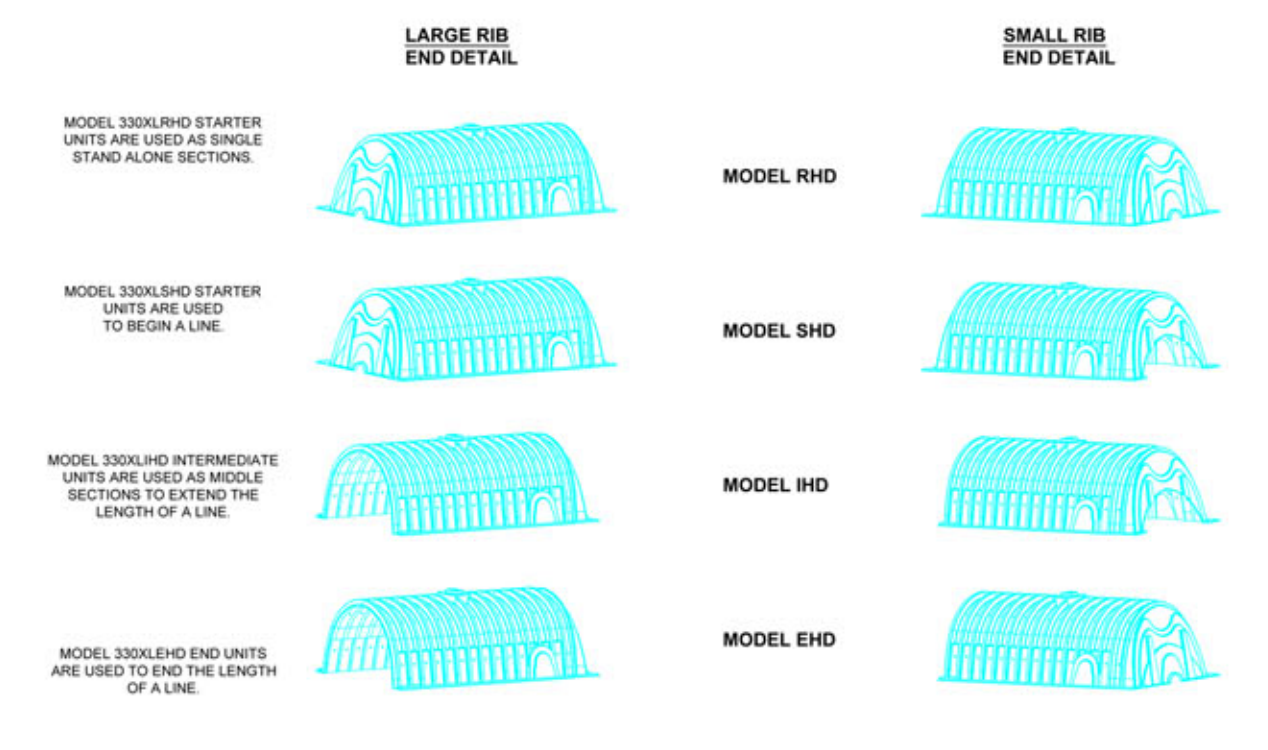
GENERAL
CULTEC NO. 20L POLYETHYLENE LINER IS DESIGNED AS AN IMPERVIOUS UNDERLAYMENT TO PREVENT SEEPAGE OF THE STONE BASE CAUSED BY WATER MOVEMENT WITHIN THE CULTEC SYSTEM. CULTEC NO. 20L POLYETHYLENE LINER IS TO BE PLACED BENEATH HVLV FC-24 FEED CONNECTORS WHEN UTILIZING INTERNAL MANIFOLD AND BENEATH ALL INLET PIPES.

LINER PARAMETERS

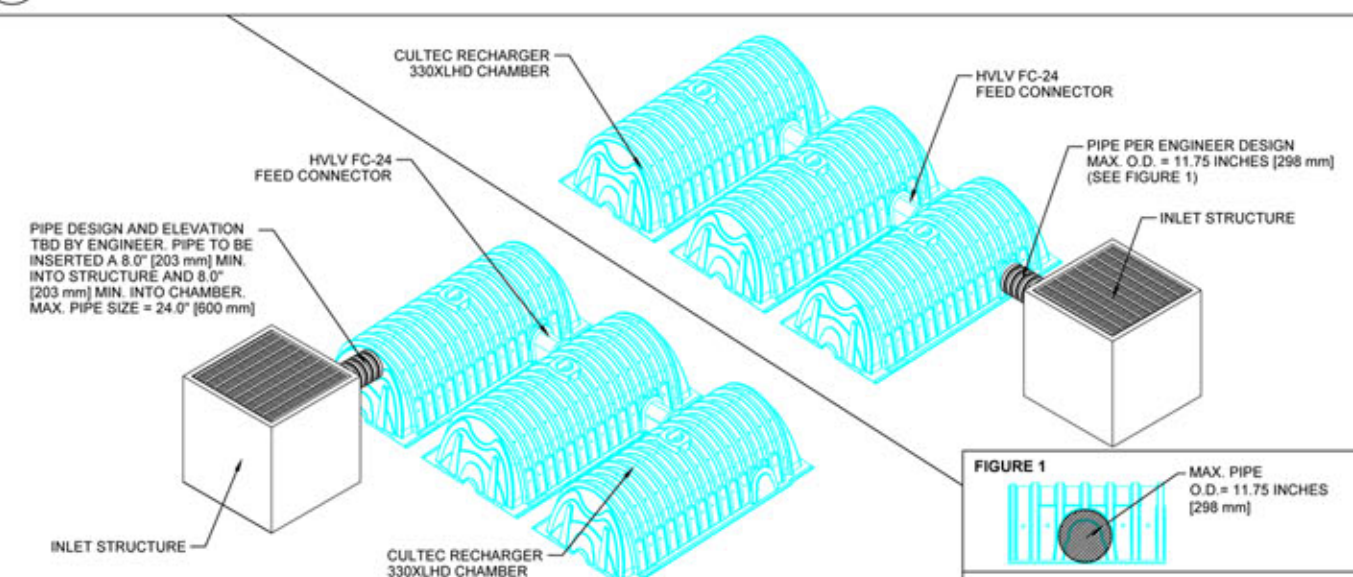
1. THE LINER WILL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT (203-775-4416 OR 1-800-428-5832).
2. THE LINER WILL BE BLACK IN APPEARANCE.
3. THE LINER WILL HAVE A NOMINAL THICKNESS OF 20 MIL (0.51 mm).
4. THE LINER WILL HAVE A WEIGHT OF 90 LBS/MSF (403 g/m²).
5. THE LINER WILL HAVE A TENSILE STRENGTH @ BREAK 1" (2.54 cm) OF 75 LBS (34 N) PER ASTM D6693 TESTING METHOD.
6. THE LINER WILL HAVE AN ELONGATION AT BREAK OF 800% PER ASTM D6693 TESTING METHOD.
7. THE LINER WILL HAVE A TEAR RESISTANCE OF 11 LBF (49 N) PER ASTM D1004 TESTING METHOD.
8. THE LINER WILL HAVE A HYDROSTATIC RESISTANCE OF 100 PSI (689 kPa) PER ASTM D315 TESTING METHOD.
9. THE LINER WILL HAVE A PUNCTURE RESISTANCE OF 30 LBF (133 N) PER ASTM D4833 TESTING METHOD.
10. THE LINER WILL HAVE A VOLATILE LOSS OF +1% PER ASTM D1303 TESTING METHOD.
11. THE LINER WILL HAVE A DIMENSIONAL STABILITY OF -2% PER ASTM D1204 TESTING METHOD.
12. THE LINER WILL HAVE A MAXIMUM USE TEMPERATURE OF 180° F (82° C).
13. THE LINER WILL HAVE A MINIMUM USE TEMPERATURE OF -70° F (-57° C).
14. THE LINER WILL HAVE A PERM RATING OF 0.041 U.S. PERMS (0.027 METRIC PERMS) PER ASTM E96 METHOD A.
15. THE LINER WILL CONSIST OF A BLENDED LINEAR POLYETHYLENE.
16. THE LINER WILL NOT CONTAIN PLASTICIZERS.



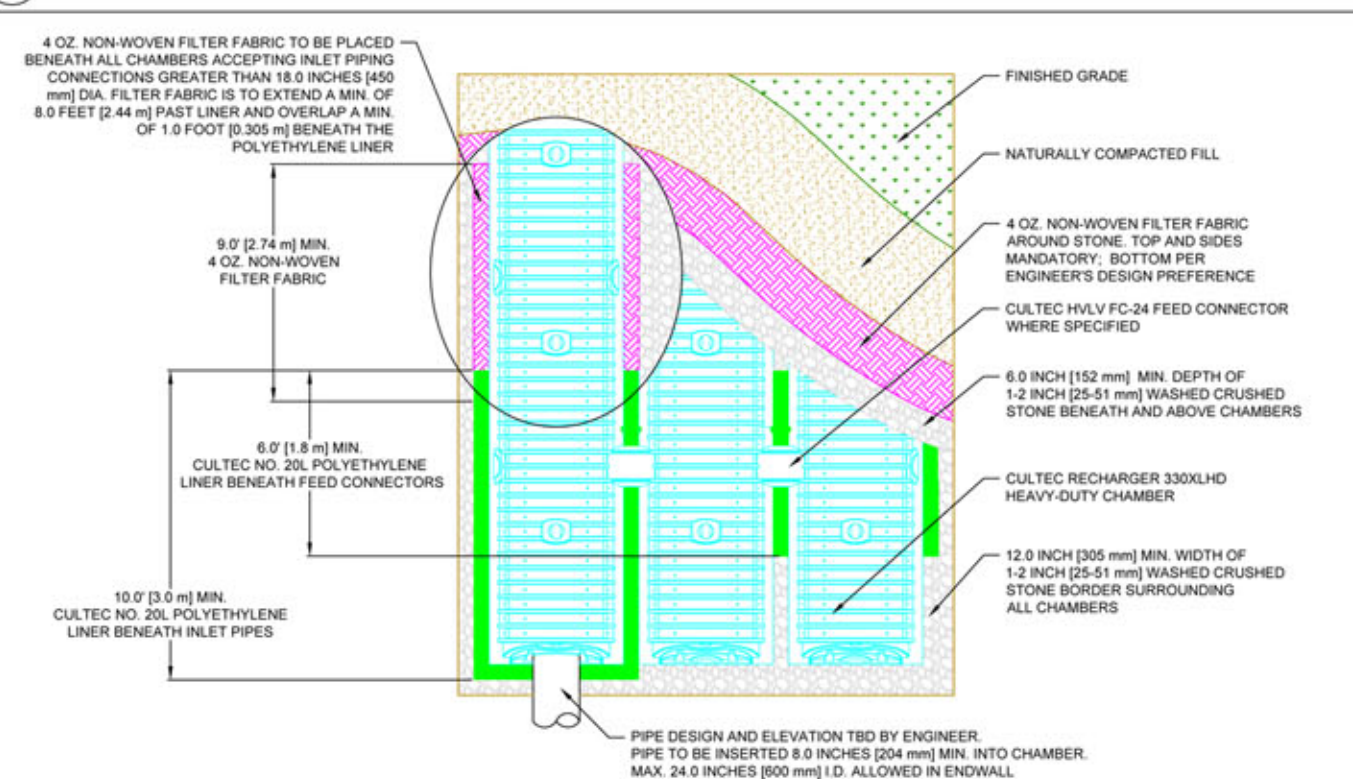
CULTEC RECHARGER 330XLHD CHAMBER STORAGE = 7.458 CF/FT [0.693 m³/m]
INSTALLED LENGTH ADJUSTMENT = 1.5' [0.46 m]
SIDE PORTAL ACCEPTS CULTEC HVLV FC-24 FEED CONNECTOR



GENERAL NOTES

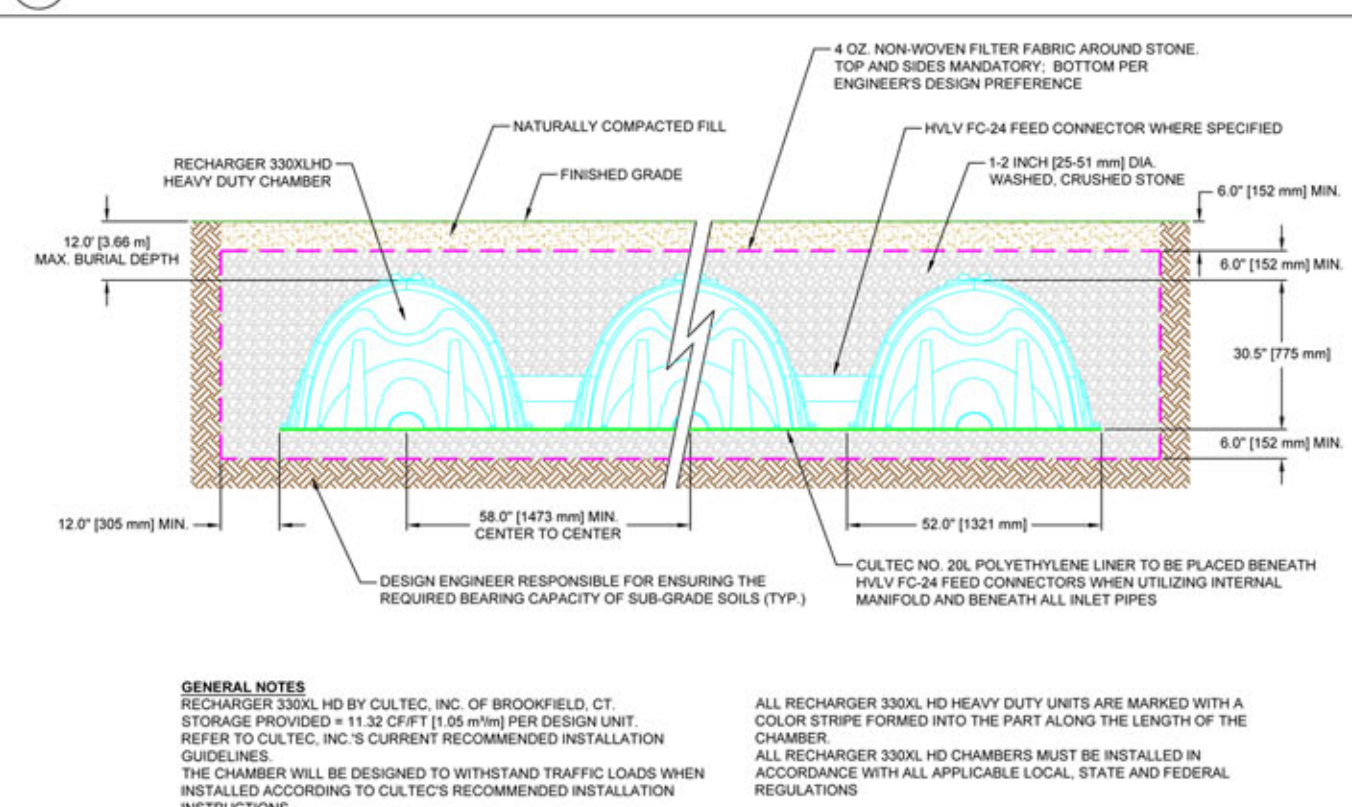


CULTEC TYPICAL INLET CONNECTION



CULTEC RECHARGER 330XLHD HEAVY DUTY PLAN VIEW

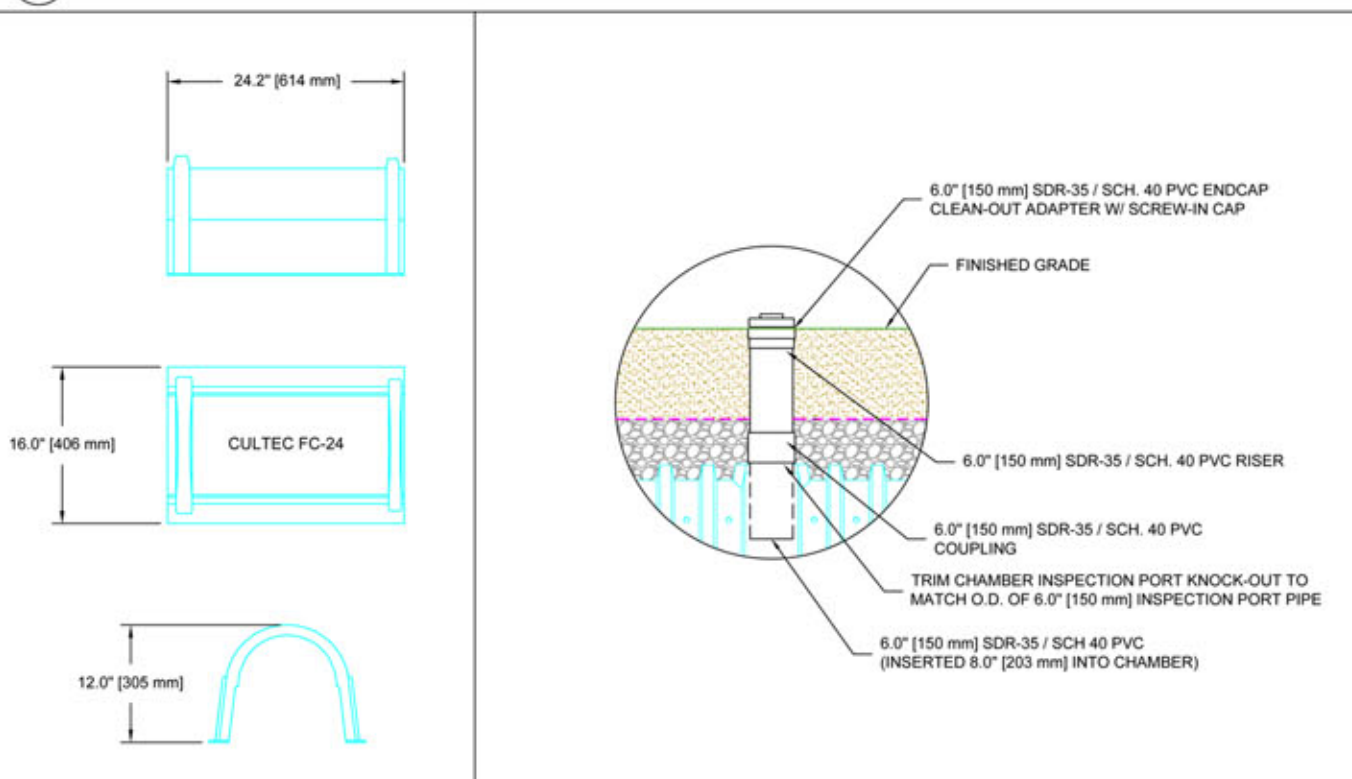
CULTEC RECHARGER 330XLHD HEAVY DUTY THREE VIEW



GENERAL NOTES
RECHARGER 330XLHD BY CULTEC, INC. OF BROOKFIELD, CT. STORAGE PROVIDED = 11.32 CF/FT (1.05 m³/m) PER DESIGN UNIT. REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
THE CHAMBER WILL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.

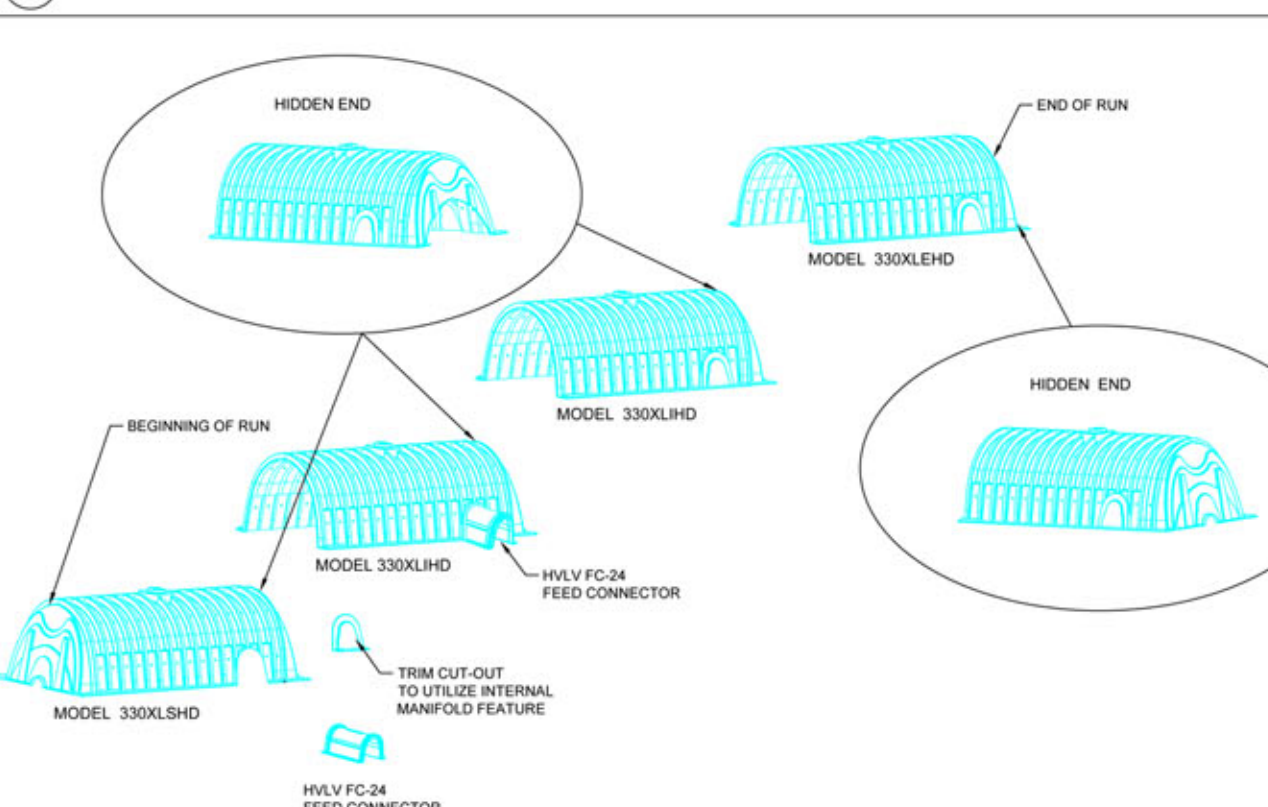
ALL RECHARGER 330XLHD HEAVY DUTY UNITS ARE MARKED WITH A COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.
ALL RECHARGER 330XLHD CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

CULTEC RECHARGER 330XLHD HEAVY DUTY TYPICAL CROSS SECTION

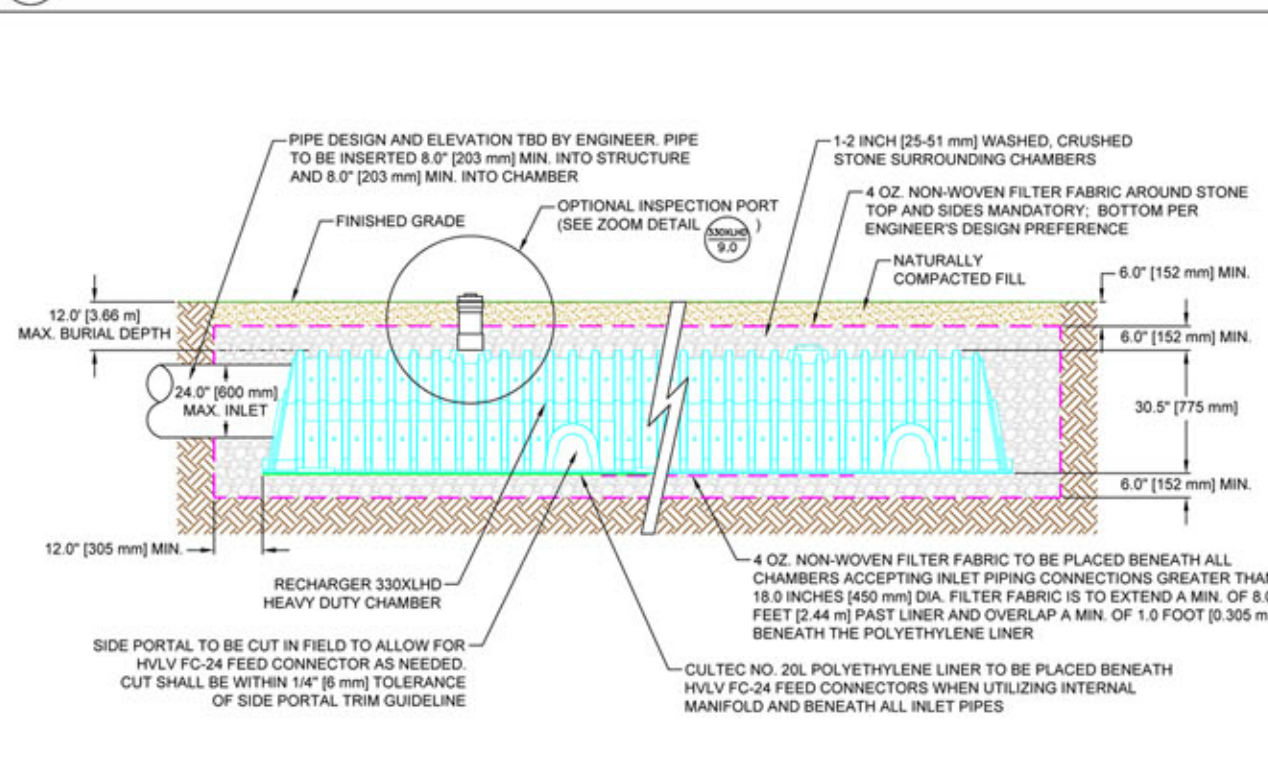


CULTEC HVLV FC-24 FEED CONNECTOR THREE VIEW

CULTEC RECHARGER 330XLHD HEAVY DUTY END DETAIL INFORMATION



CULTEC RECHARGER 330XLHD HEAVY DUTY TYPICAL INTERLOCK



CULTEC INTERNAL MANIFOLD- OPTIONAL INSPECTION PORT DETAIL

CULTEC, Inc.
Subsurface Stormwater Management Systems
P.O. Box 280
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Brookfield, CT 06804
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PH: (800) 4-CULTEC
FX: (203) 775-1462
tech@cultec.com

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RECHARGER 330XLHD
DETAIL SHEET
NON- TRAFFIC APPLICATION

CULTEC RECHARGER® 330XLHD	
PROJECT NO: -	DATE: 02/2015
DESIGNED BY: CULTEC, INC	DRAWN BY: TECH
SCALE: N.T.S.	SHEET NO: 2 OF 2