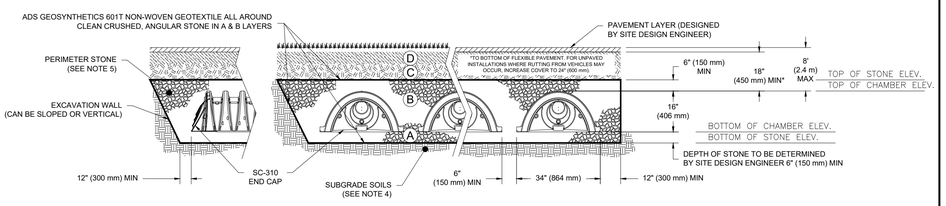
ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/%, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

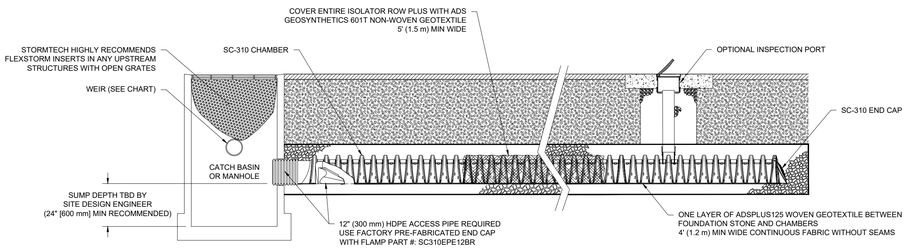
**THIS CROSS SECTION DETAIL REPRESENTS MINIMUM REQUIREMENTS FOR INSTALLATION. PLEASE SEE THE LAYOUT SHEET(S) FOR PROJECT SPECIFIC REQUIREMENTS.

STRUCTURE	TOP, CHAMBER ELEV.	TOP, STONE ELEV.	BOT, CHAMBER ELEV.	BOT, STONE ELEV.
COMMERCIAL CHAMBERS	14.63'	15.13'	13.30'	12.30'

SC-310 CROSS SECTION DETAIL

11/23 | DR #29
N.T.S. | NEWLINES

STRUCTURE
CS COMMERCIAL 1&8
CS COMMERCIAL 2-1
CS COMMERCIAL 2-2
CS COMMERCIAL 3
CS COMMERCIAL 4-1
CS COMMERCIAL 4-2
CS COMMERCIAL 4-3
CS COMMERCIAL 5
CS COMMERCIAL 6
CS COMMERCIAL 7
CS COMMERCIAL 9



SC-310 ISOLATOR ROW PLUS DETAIL

11/23 | DR #30
N.T.S. | NEWLINES

NOTE:
UNLESS OTHERWISE NOTED THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY DE-WATERING OF STRUCTURES, SEWER LINE, DRAINAGE PIPE AND WATER LINES.

ALL CONCRETE TO BE CLASS 'B' 3500 PSI (UNLESS OTHERWISE NOTED)

STRUCTURE	UPSTREAM PIPE DIAMETER	UPSTREAM PIPE INVERT ELEV.	DOWNSTREAM PIPE DIAMETER	DOWNSTREAM PIPE INVERT ELEV.	BLEEDER DIAMETER	BLEEDER INVERT ELEV.	WEIR DIMENSIONS	WEIR CREST ELEV.	GRATE ELEV.	GRATE DIMENSIONS	BUBBLEUP GRATE ELEV.	BUBBLEUP GRATE DIMENSIONS	STORMWATER MANAGEMENT TRACT
PHASE 1													
CS 1-1 EAST	-	-	18"	10.55	-	-	9x9"	12.30	14.00	24x36	-	-	POND #1-2
CS 1-2 WEST	-	-	18"	10.55	-	-	8x7"	12.30	15.00	24x36	-	-	POND #1-3
CSC 1 & 8	-	-	18"	8.00	-	-	3"	15.13	-	-	-	-	-
CSC 2-1	-	-	12"	8.00	-	-	3"	15.13	-	-	-	-	-
CSC 2-2	-	-	12"	8.00	-	-	3"	16.13	-	-	-	-	-
CSC 3	-	-	12"	8.00	-	-	3"	15.13	-	-	-	-	-
CSC 4-1	-	-	12"	8.00	-	-	3"	15.13	-	-	-	-	-
CSC 4-2	-	-	12"	8.00	-	-	3"	15.13	-	-	-	-	-
CSC 4-3	-	-	12"	8.00	-	-	3"	15.13	-	-	-	-	-
CSC 5	-	-	12"	8.00	-	-	3"	15.13	-	-	-	-	-
CSR 1-1	-	-	18"	8.80	3"	12.30	-	15.13	15.10	24x36	-	-	POND #1-2
CSR 1-2	-	-	18"	8.80	3"	12.30	-	15.13	15.10	24x36	-	-	POND #1-2
CSR 1-3	-	-	18"	8.80	3"	12.30	-	15.13	15.10	24x36	-	-	POND #1-3
CSR 1-4	-	-	18"	8.80	3"	12.30	-	15.13	15.10	24x36	-	-	POND #1-3
CSW 5	18"	7.00	-	7.00	6"	12.30	-	15.13	14.00	24x36	12.80	24x36	POND #1-1
CSW 6	18"	7.00	-	7.00	6"	12.30	-	15.13	15.00	24x36	12.80	24x36	POND #1-3
PHASE 2													
CS 2	-	-	18"	10.55	-	-	11x10"	12.30	13.90	24x36	-	-	POND #2
CSC 6	-	-	12"	8.00	-	-	3"	15.13	-	-	-	-	-
CSC 7	-	-	12"	8.00	-	-	3"	15.13	-	-	-	-	-
CSR 2-1	-	-	18"	8.80	3"	12.30	-	-	15.10	24x36	-	-	POND #2
CSR 2-2	-	-	18"	8.80	3"	12.30	-	-	15.10	24x36	-	-	POND #2
PHASE 3													
CS 3	-	-	18"	8.00	-	-	10x9"	12.30	14.45	24x36	-	-	POND #3-1
CSR 3-1	-	-	18"	8.80	3"	12.30	-	-	15.10	24x36	-	-	POND #3-2
CSR 3-2	-	-	18"	8.80	3"	12.30	-	-	15.10	24x36	-	-	POND #3-1
CSW 2	18"	7.00	-	7.00	3"	12.30	-	-	14.45	24x36	12.80	24x36	POND #3-1
CSW 3	18"	7.00	-	7.00	3"	12.30	-	-	14.45	24x36	12.80	24x36	POND #3-1
PHASE 4													
CS 4	-	-	18"	10.55	-	-	6x5"	12.30	15.45	24x36	-	-	POND #4
CSC 9	-	-	12"	8.00	-	-	3"	15.13	-	-	-	-	-
CSR 4-1	-	-	18"	8.80	3"	12.30	-	-	15.10	24x36	-	-	POND #4
CSR 4-2	-	-	18"	8.80	3"	12.30	-	-	15.10	24x36	-	-	POND #4
CSW 10	18"	12.30	18"	7.00	4"	12.30	-	-	15.45	24x36	12.80	24x36	POND #4

CONTROL STRUCTURE SUMMARY

05/23 | DR #1
N.T.S. | NEWLINES

4/20/26	REVISED GRADING PER FDOT MODIFICATIONS	TL	PDC
1/08/26	REVISED PER WWTP SITE	TL	GL
8/29/23	REVISED PER CONTRACTOR COMMENTS	TL	PDC/JQ
8/2/23	REVISED WETLAND GRADIENT AND IMPERMEABLE BARRIERS COMMENTS	TL	PDC
7/5/23	REVISED PER SFWMD LETTER COMMENTS DATED 6/26/23	TL	PDC/CC
4/25/23	REVISED AS PER COUNTY LETTER DATED 4/25/23	SLD	JCS/AA
DATE	DESCRIPTION	ENGINEER	CAD

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STORM NOTES & DETAILS

PHASE 1 - COMMERCIAL AREAS
LOCATED IN SECTIONS 34&35, TOWNSHIPS 38&39 SOUTH, RANGE 34 EAST, GLADES COUNTY, FLORIDA

NEWLINES LAND CONSULTANTS
STEVEN L. DOBBS, P.E.
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00029206
STEVEN L. DOBBS ENGINEERING, LLC
1062 JAKES WAY OKEECHOBEE, FL 34974, PHONE (863) 824-7644

PROJECT No.	21534
DRAWN BY	YB/MB
SCALE	NTS
DATE	4/28/2026
SHEET No.	14 OF 21

Z:\2021\21534-Steven Dobbs- Harvey Estates\CAD (2)\04-COMMERCIAL\1.1 SHUL AND MIKVAH\1.1 COMMERCIAL SHEET.DWG 2026-04-28