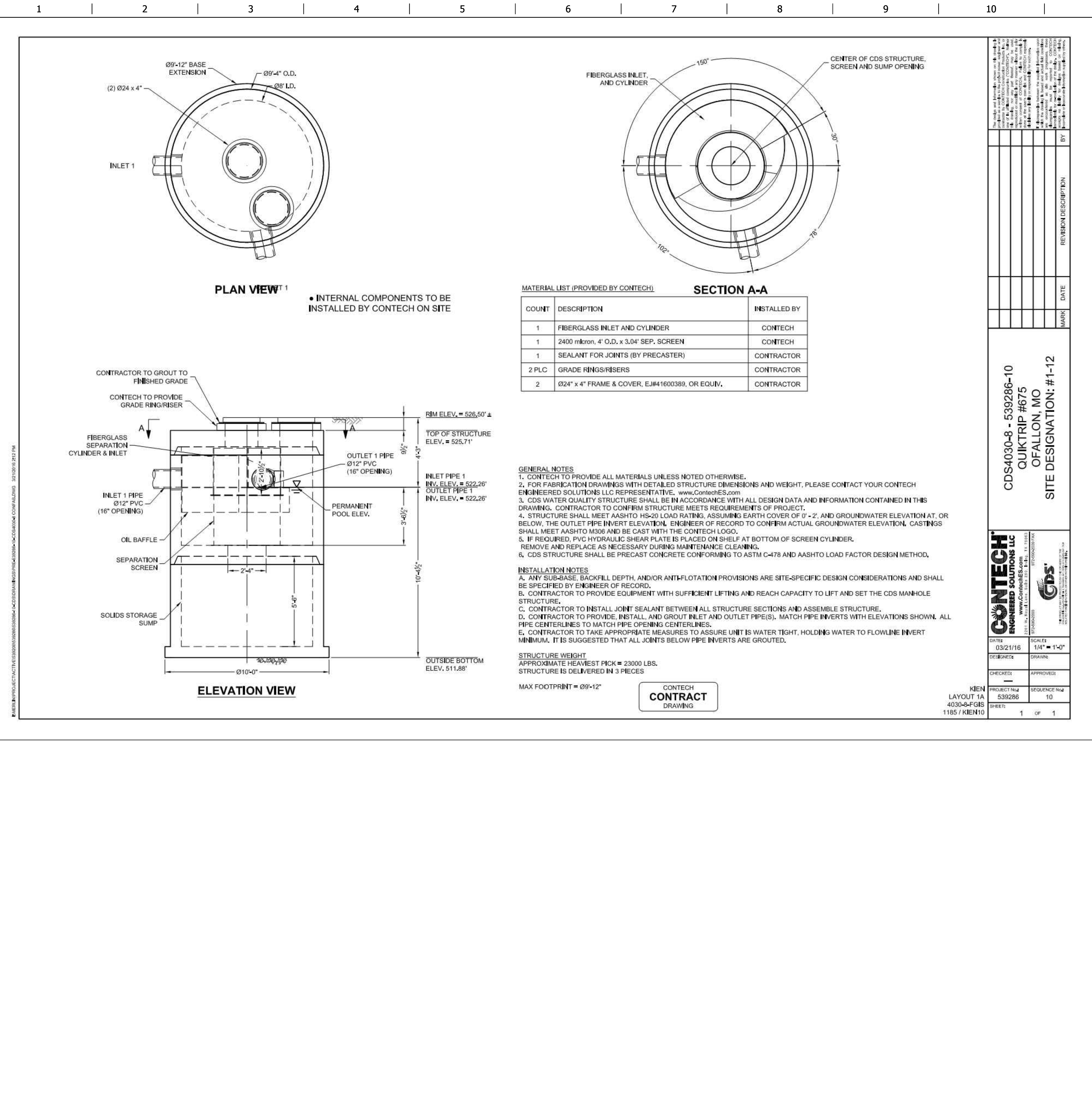


FILE LOCATION: \\151054 - QuikTrip #0675 - Highway K and Fallon Parkway\Civil\06-0675 Civil.dwg, 9/15/2016 9:23:15 AM, DWG To PDF.pc3



CONTECH ENGINEERED SOLUTIONS LLC

CDS Inspection and Maintenance Guide

Maintenance

The CDS system should be inspected at regular intervals and maintained when necessary to ensure optimum performance. The unit should be inspected annually and cleaned as needed. The unit should be inspected from the outside. The unit should be inspected from the inside. The unit should be inspected from the top. The unit should be inspected from the bottom. The unit should be inspected from the side. The unit should be inspected from the front. The unit should be inspected from the back. The unit should be inspected from the top. The unit should be inspected from the bottom. The unit should be inspected from the side. The unit should be inspected from the front. The unit should be inspected from the back.

Cleaning

Cleaning of CDS systems should be done during the winter months when there is less snow on the ground. The unit should be cleaned from the outside. The unit should be cleaned from the inside. The unit should be cleaned from the top. The unit should be cleaned from the bottom. The unit should be cleaned from the side. The unit should be cleaned from the front. The unit should be cleaned from the back.

Inspection

Inspection of the CDS system should be done at regular intervals. The unit should be inspected from the outside. The unit should be inspected from the inside. The unit should be inspected from the top. The unit should be inspected from the bottom. The unit should be inspected from the side. The unit should be inspected from the front. The unit should be inspected from the back.

CDS Inspection & Maintenance Log

Date	Water depth to sediment	Floatable Layer (Thickness)	Screen Maintenance Performed	Maintenance Personnel	Comments

Table 1: CDS Maintenance Indicators and Sediment Storage Capacities

CDS Model	Diameter (ft)	Distance from Water Surface to Top of Sediment Pan (ft)	Sediment Storage Capacity (cu ft)
CD3014	4	1.2	3.0
CD3016	6	1.2	3.6
CD3018	8	1.2	4.8
CD3020	10	1.2	6.0
CD3022	12	1.2	7.2
CD3024	14	1.2	8.4
CD3026	16	1.2	9.6
CD3028	18	1.2	10.8
CD3030	20	1.2	12.0
CD3032	22	1.2	13.2
CD3034	24	1.2	14.4
CD3036	26	1.2	15.6
CD3038	28	1.2	16.8
CD3040	30	1.2	18.0
CD3042	32	1.2	19.2
CD3044	34	1.2	20.4
CD3046	36	1.2	21.6
CD3048	38	1.2	22.8
CD3050	40	1.2	24.0

Project Name: QuikTrip#675
Location: O'Fallon MO
Project No.: 151054
Structure No.: 1-12
Prepared For: QuikTrip Corp
Prepared By: RKF

Drainage Area: 1.43 acre
62,291 ft²
1.43 acre
0.00223438 mi²

Impervious Area: 1.36 acre
59,242 ft²
1.36 acre
0.002125 mi²

% Impervious: 95.1%
% Impervious Over-ride: 0

P: 1.14 in
Rv: 0.906 volumetric runoff coefficient
Qa: 1.03 watershed inches

WQV: 5,361.1 ft³
0.123 acre-ft

CN: 99.1
Tc: 6 min
0.10 hr

Rainfall Type: II

Potential Abstraction, "S": 0.10 inches
Initial Abstraction, "Ia": 0.02 inches

Treatment System: Vortechs
Micron Rating: 110

qu: 1010.41
WQF: 2.33 cfs

CONTECH ENGINEERED SOLUTIONS LLC

QUICKTRIP #675

O'FALLON, MO

SITE DESIGNATION: #1-12

CONTECH ENGINEERED SOLUTIONS LLC

www.conteches.com

DATE: 03/21/16
SCALE: 1/4" = 1'-0"

DESIGNED: DRAWING
CHECKED: APPROVED:

PROJECT NO: 539286
SEQUENCE NO: 10

SHEET: 1 OF 1

KIEN LAYOUT 1A
4030-8-FGIS
1185 / KIEN10

PROFESSIONAL SEAL

MICHAEL J. VELLOFF
REGISTERED PROFESSIONAL ENGINEER
E-2000161862

PROJECT NO.: 151054

NAME: MICHAEL J. VELLOFF
LICENSE NUMBER: E-2000161862
DISCIPLINE: CIVIL
CORPORATION AUTHORITY NUMBER: 00194

THE SEAL OF MICHAEL J. VELLOFF ON THIS DRAWING APPLIES ONLY TO THE CIVIL SITE ENGINEERING WORK SHOWN. IT DOES NOT APPLY TO ANY OTHER WORK SHOWN ON THIS DRAWING. THE SEAL IS ANY RESPONSIBILITY TAKEN FOR ENVIRONMENTAL, GEOTECHNICAL (INCLUDING BUT NOT LIMITED TO SLOPE STABILITY), STRUCTURAL, HVAC, PLUMBING, ELECTRICAL, FIRE PROTECTION, TRAFFIC ENGINEERING, SURVEYING (BOUNDARY AND TOPOGRAPHIC), OR ARCHITECTURAL (BUILDING OR LANDSCAPE).

QuikTrip No. 0675

140 FALLON LOOP ROAD
O'FALLON, MISSOURI 63368

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PROTOTYPE: P-87
DIVISION: 06
VERSION: 001
DESIGNED BY: RKF
DRAWN BY: RKF
REVIEWED BY: MJV

REV	DATE	DESCRIPTION
1	09-15-16	BID SET
2	09-15-16	CONSTRUCTION SET

ORIGINAL ISSUE DATE: 04-14-16

SHEET TITLE:
WATER QUALITY DETAILS

SHEET NUMBER:
C301