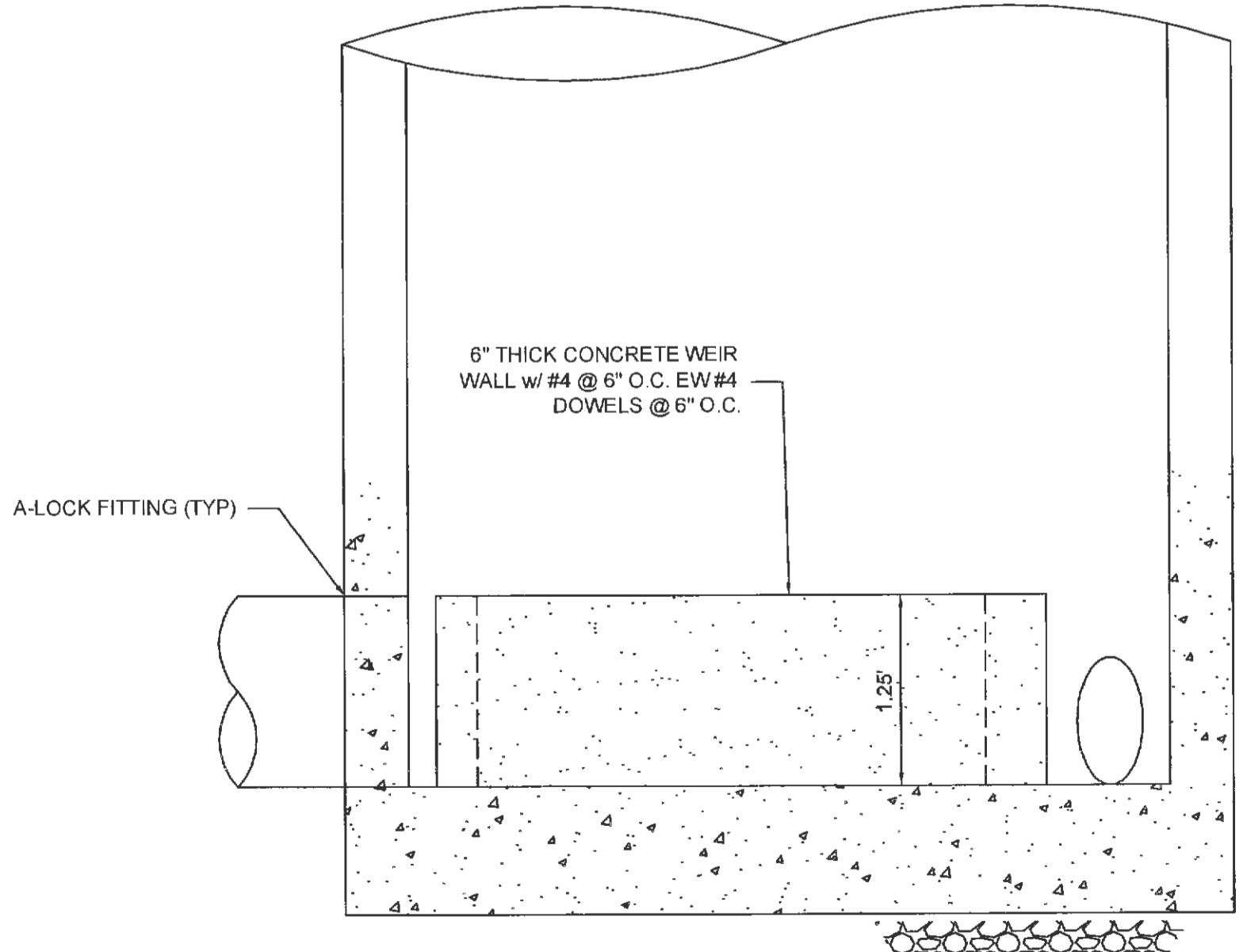
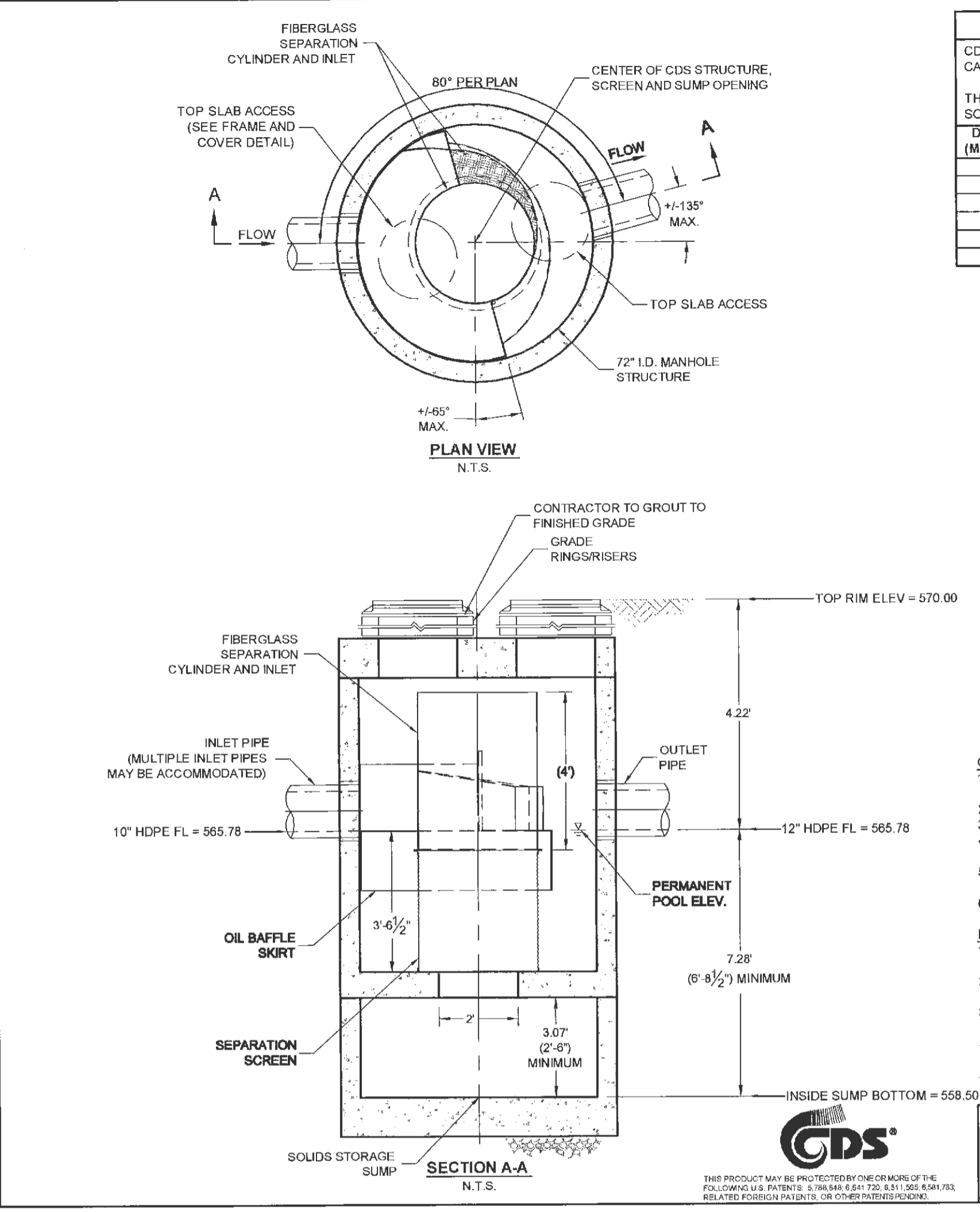


**FLOW SPLITTER #1 (DGI 1-2) - PLAN VIEW**  
SCALE: 1"=1'



**FLOW SPLITTER #1 (DGI 1-2) - SECTION A-A VIEW**  
SCALE: 1"=1'

**HDS UNIT #1 - WATER QUALITY AREA #1**



**CDS3030 DESIGN NOTES**

CDS3030 RATED TREATMENT CAPACITY IS 3.0 CFS, OR PER LOCAL REGULATIONS: MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY IS 20.0 CFS. IF THE SITE CONDITIONS EXCEED 20.0 CFS, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

THE STANDARD CDS3030 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

DESIGNATION (MODEL SUFFIX)	CONFIGURATION DESCRIPTION
G	GRATED INLET ONLY (NO INLET PIPE)
GP	GRATED INLET WITH INLET PIPE OR PIPES
K	CURB INLET ONLY (NO INLET PIPE)
KP	CURB INLET WITH INLET PIPE OR PIPES
B	SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
W	SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS

**SITE SPECIFIC DATA REQUIREMENTS**

STRUCTURE ID	HDS #1
WATER QUALITY FLOW RATE (CFS)	2.38
PEAK FLOW RATE (CFS)	-
RETURN PERIOD OF PEAK FLOW (YRS)	-
SCREEN APERTURE (2400 OR 4700)	-

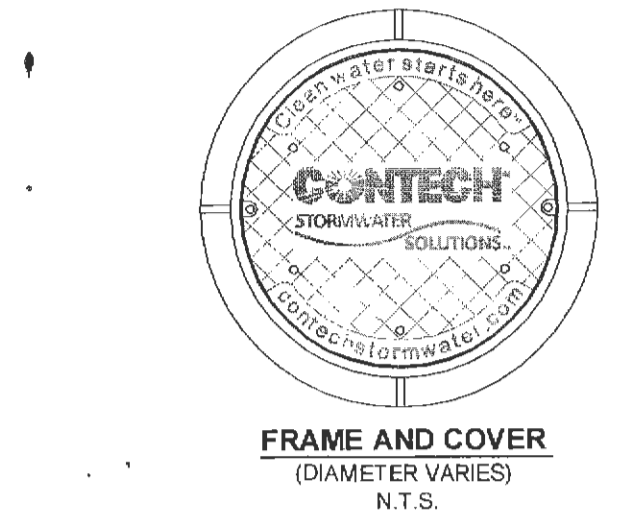
  

PIPE DATA	TYPE	MATERIAL	DIAMETER
INLET PIPE 1	565.77	HDPE	10"
INLET PIPE 2	n/a	n/a	n/a
OUTLET PIPE	565.77	HDPE	12"

ANTI-FLOTATION BALLAST	WIDTH	HEIGHT

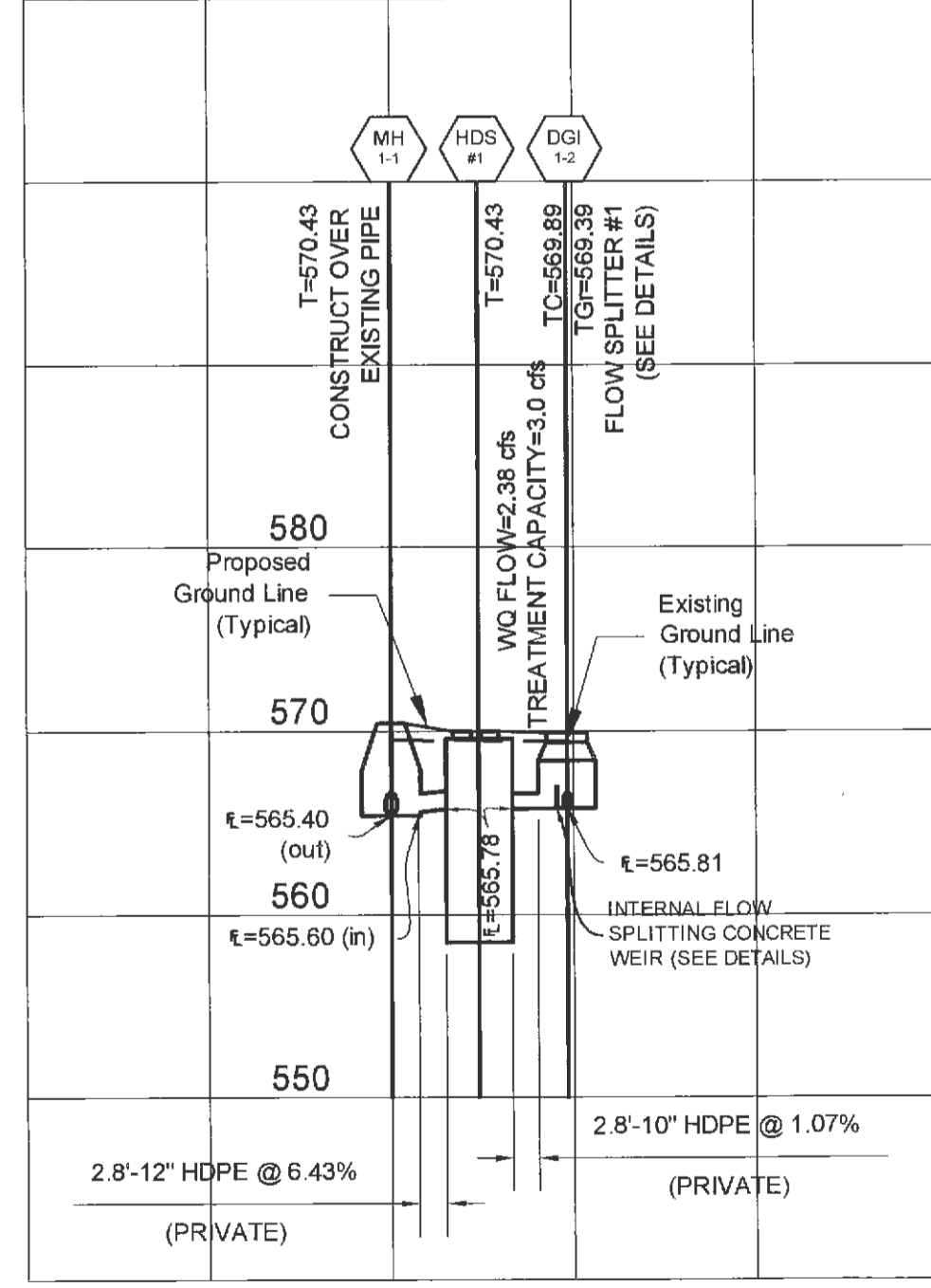
NOTES/SPECIAL REQUIREMENTS:  
\* PER ENGINEER OF RECORD



- GENERAL NOTES**
- INSTALLATION TO FOLLOW CDS STORMWATER TREATMENT DEVICE SPECIFICATIONS AVAILABLE FROM CONTECH.
  - CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
  - DIMENSIONS MARKED WITH (1) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
  - FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH STORMWATER SOLUTIONS REPRESENTATIVE. [www.contechstormwater.com](http://www.contechstormwater.com)
  - CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
  - STRUCTURE AND CASTINGS SHALL MEET AASHTO HS20 LOAD RATING.
- INSTALLATION NOTES**
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
  - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
  - CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
  - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
  - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT. HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

**CDS3030 PRECAST CONCRETE WATER QUALITY SYSTEM STANDARD DETAIL**

CONTECH STORMWATER SOLUTIONS



- HDS UNIT NOTES:**
- HDS UNIT = HYDRODYNAMIC SEPARATOR UNIT (WATER QUALITY PROPRIETARY DEVICE)
  - THE PIPE SLOPES IN AND OUT OF THE HYDRODYNAMIC SEPARATOR ARE CALCULATED BASED ON THE DISTANCE BETWEEN THE OUTSIDE OF A 60" (I.D.) STRUCTURE AND THE INTAKE/DISCHARGE CONNECTION POINT OF THE HDS UNIT. THE PIPE SLOPES ARE THE CRITICAL FACTOR FOR INSTALLATION, AS THIS GENERATES THE PROPER FLOW RATE TO TREAT THE WATER QUALITY DESIGN STORM. THESE PIPES MUST BE INSTALLED AT THE LISTED SLOPE. SHOULD A DIFFERENT DIAMETER (+/- 3) STRUCTURE BE REQUIRED FOR DGI 1-2 AND/OR MH 1-1, THEN THE DESIGN WILL BE REVIEWED BY THE PROJECT ENGINEER AFTER THE CONTRACTOR SUPPLIES SHOP DRAWINGS. NO STORM STRUCTURE FABRICATION SHALL OCCUR PRIOR TO SHOP DRAWING APPROVAL.

**HDS UNIT PROFILE VIEW**  
SCALE: 1"=20' V  
1"=10' H

**SHOP DRAWINGS REQUIRED**  
CONTRACTOR TO PROVIDE SIGNED AND SEALED SHOP DRAWINGS TO BE APPROVED BY THE PROJECT ENGINEER & CITY.

**IMPORTANT:** INSTALLATION OF THE HYDRODYNAMIC SEPARATOR BMP SHALL ONLY BE PERFORMED WITH THIS BMP KEPT OFFLINE, WITH NO RUNOFF PASSING THROUGH IT. IT CAN NOT BE BROUGHT ONLINE UNTIL THE PAVEMENT AND GROUND SURFACE, INCLUDING VEGETATION, IS ESTABLISHED OVER THE AREA THAT DRAINS TO IT. CONSTRUCTION SITE RUNOFF SHALL NOT FLOW INTO THIS BMP. ALL STORMWATER FLOW TO THIS BMP SHALL BE DIVERTED PLUGGED OR DISCONNECTED AT THE UPSTREAM METERING STRUCTURE OR TEMPORARY GRADING UNTIL THE CONSTRUCTION SITE IS STABLE AND THE MSD INSPECTOR PROVIDES APPROVAL TO PLACE THE BMP'S ONLINE.

**BMP Maintenance & Operation Plan**  
The Property Owner's appointed Maintenance Staff shall be responsible for cleaning and maintaining the Hydrodynamic Separator.

The specific methods and practices required for the maintenance and operation of these stormwater facilities is explained in the "Stormwater Management Facilities Report" - dated NOVEMBER 2013, or latest edition, by The Clayton Engineering Company, Inc.

The signed and sealed original of this drawing is on file at the offices of The Clayton Engineering Company, Inc. The signed and sealed original is the official document and shall take precedence over any digital version.

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Underground facilities, structures & utilities have been plotted from available surveys, records & information, and therefore, do not necessarily reflect the actual existence, nonexistence, size, type, number of, or location of these facilities, structures, & utilities.

The Contractor shall be responsible for verifying the actual location of all underground facilities, structures, & utilities, either shown or not shown on these plans. The underground facilities, structures, & utilities shall be located in the field prior to any grading, excavation or construction of improvements. These provisions shall in no way absolve any party from complying with the Underground Facility Safety and Damage Prevention Act, Chapter 319, RSMO.

**PROJECT TITLE:**  
SITE CONSTRUCTION PLANS  
DIRT CHEAP OF FALLON  
#708 MO. STATE HIGHWAY K  
OF FALLON, MISSOURI 63366

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MO Cert. of Authority - Professional Engineering #000667  
& Professional Surveying #002014

Erik J. Staley - Professional Engineer  
PE-200600132

9-4-14

- Plan Date:** November 8, 2013  
**Revision Date:** April 28, 2014  
**Revision Date:** May 22, 2014  
**Revision Date:** August 1, 2014  
**Revision Date:** Sept. 4, 2014

**Developer / Owner Information:**  
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**WATER QUALITY DETAILS**

**P+Z No:** (23-13.02)  
**Approval Date:** 10/03/13  
**City No.**

**Page No.**  
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