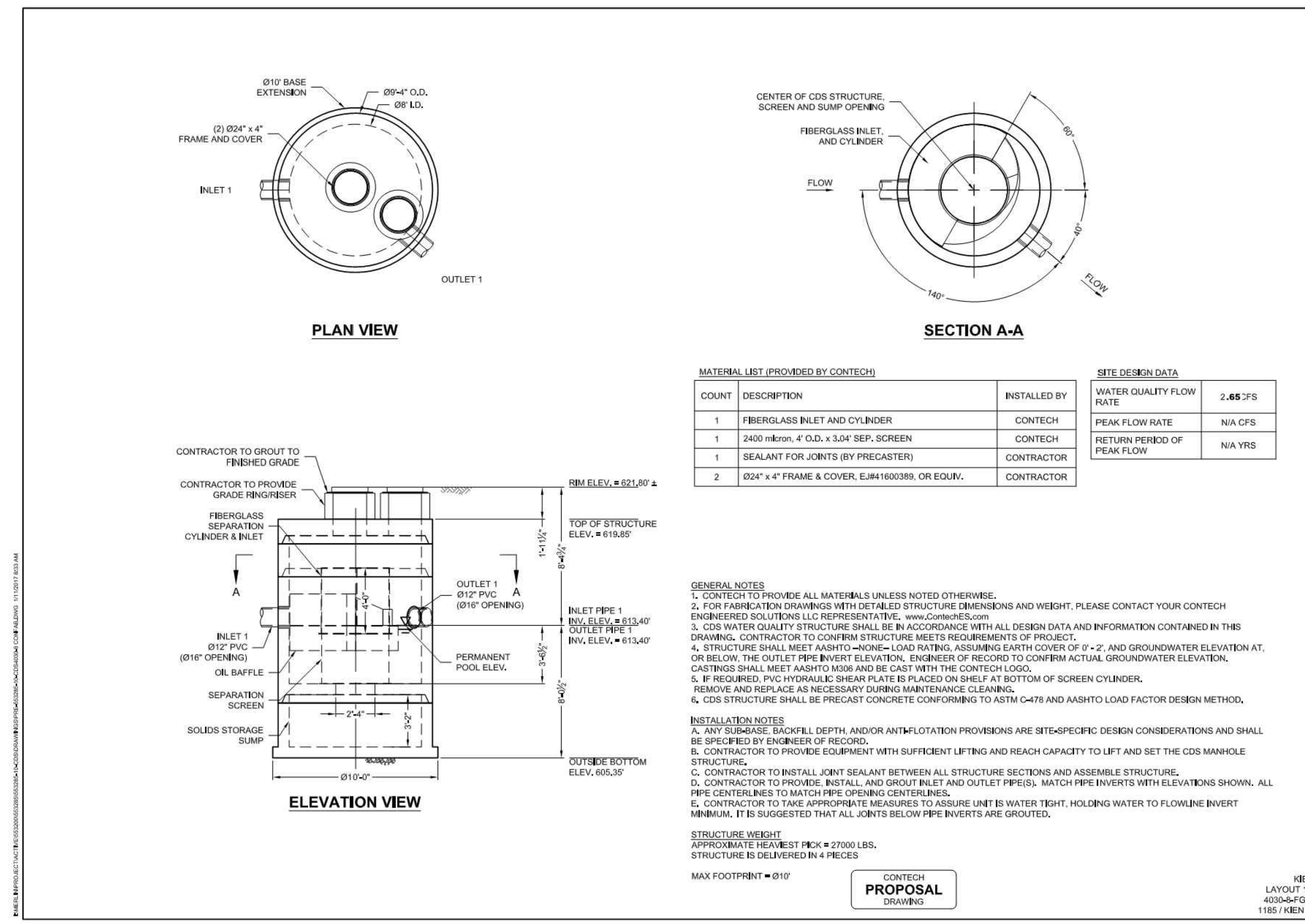


FILE LOCATION: \\161105 - QuikTrip #662 - Bryan Road and Veterans Memorial Parkway\Civil\06-0662\Civil.dwg TAB NAME: C301 Water Quality Details USER: rkyer SAVED: 6/12/2018 11:52 AM PLOTTED: 6/12/2018 12:41 PM

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

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MATERIAL LIST (PROVIDED BY CONTECH)

COUNT	DESCRIPTION	INSTALLED BY
1	FIBERGLASS INLET AND CYLINDER	CONTECH
1	2400 micron, 4' O.D. x 3.04' SEP. SCREEN	CONTECH
1	SEALANT FOR JOINTS (BY PRECASTER)	CONTRACTOR
2	Ø24" x 4" FRAME & COVER, EJ#41600389, OR EQUIV.	CONTRACTOR

SITE DESIGN DATA

WATER QUALITY FLOW RATE	2.65 CFS
PEAK FLOW RATE	N/A CFS
RETURN PERIOD OF PEAK FLOW	N/A YRS

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
- CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- STRUCTURE SHALL MEET AASHTO-NONE-LOAD RATING, ASSUMING EARTH COVER OF 0'-2" AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
- IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
- CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

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.
- CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
- 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.

STRUCTURE WEIGHT
APPROXIMATE HEAVIEST PICK = 27000 LBS.
STRUCTURE IS DELIVERED IN 4 PIECES

MAX FOOTPRINT = Ø10'

CONTECH
PROPOSAL
DRAWING

KIEN
LAYOUT 1A
4030-8-FG15
1185 / KIEN10

DATE	SCALE	DESCRIPTION
11/17/16	3/16" = 1'-0"	DATE
CMF	CMF	DESIGNER
XXX		CHECKED
		APPROVED
PROJECT # 553285	SEQUENCE # 10	PROJECT
SHEET 1	OF 1	SHEET

CDS4030-8-C - 553285-10
QUIK TRIP #662
OF FALLON, MO
for SYSTEM: #2-11

Project Name: QuikTrip#662
Location: OFallon MO
Project No.: 161105
Structure No.: 2-11
Prepared For: QuikTrip Corp
Prepared By: RKF

Drainage Area	1.89 acre	Impervious Area	1.53 acre
	82,329 ft ²		66,647 ft ²
	1.89 acre		1.53 acre
	0.00295313 m ²		0.0023906 m ²
% Impervious	81.0%	% Impervious Over-ride	0
P	1.14 in		
Rv	0.779	volumetric runoff coefficient	
Qa	0.89	watershed inches	
WQV	6.0894 ft ³		
	0.140	acre-ft	
CN	97.6		
Tc	5	min	
	0.08	hr	
Rainfall Type	II		
Potential Abstraction, "S"	0.25	inches	
Initial Abstraction, "Ia"	0.05	inches	
Treatment System	Vortechs		
Micron Rating	110		
qu	1010.41		
WQF	2.65	cfs	



PROJECT NO.: 161105
NAME: MICHAEL J. VELLOFF
LICENSE NUMBER: E-2000161862
DISCIPLINE: CIVIL
CORPORATION AUTHORITY NUMBER: 001194

THE SEAL OF MICHAEL J. VELLOFF ON THIS DRAWING APPLIES ONLY TO THE CIVIL/SITE ENGINEERING SHOWN. IT DOES NOT APPLY, NOR 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. 0662
955 BRYAN ROAD
OF FALLON, MO 63366



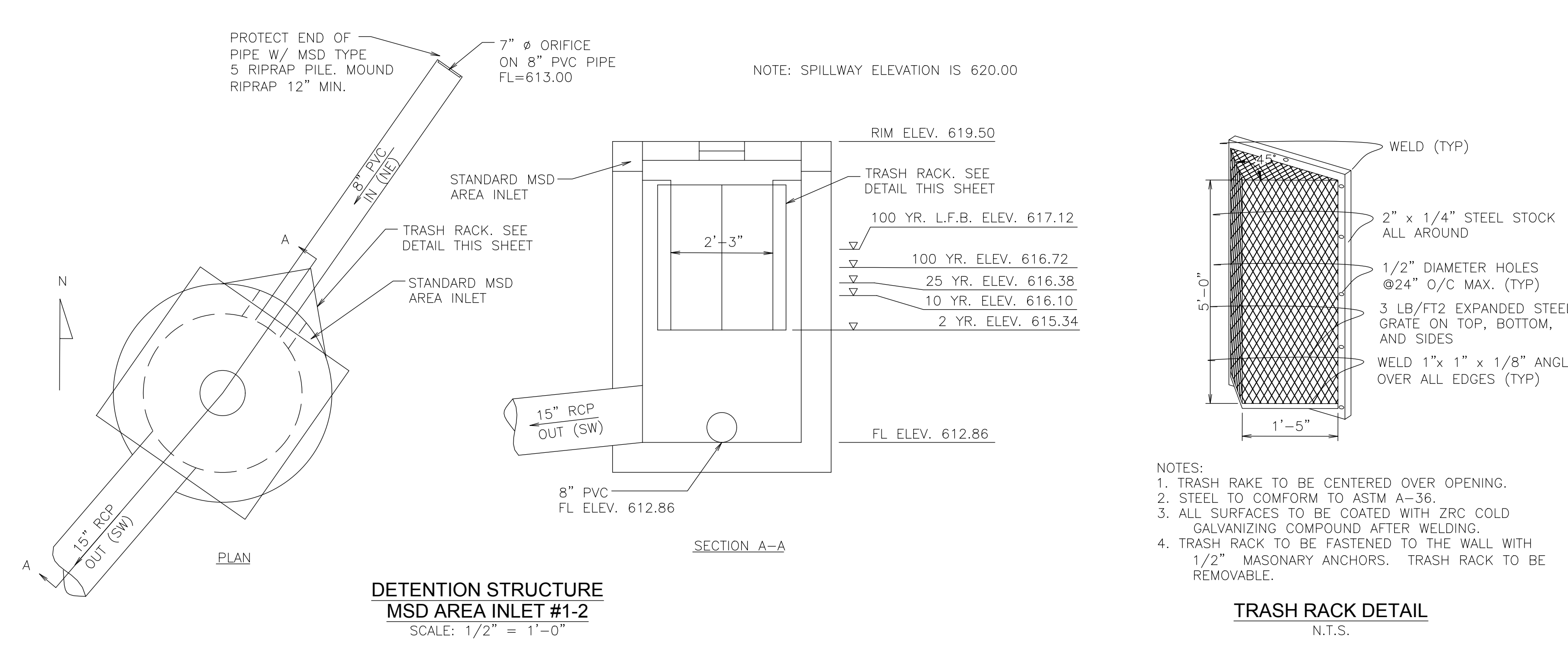
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PROTOTYPE:	P-94-01
DIVISION:	06
VERSION:	001
DESIGNED BY:	RKF
DRAWN BY:	RKF
REVIEWED BY:	MJV

REV	DATE	DESCRIPTION

SHEET TITLE:
WATER QUALITY DETAILS

SHEET NUMBER:
C301



TRASH RAKE DETAIL
N.T.S.

NOTES:
1. TRASH RAKE TO BE CENTERED OVER OPENING.
2. STEEL TO CONFORM TO ASTM A-36.
3. ALL SURFACES TO BE COATED WITH ZRC COLD GALVANIZING COMPOUND AFTER WELDING.
4. TRASH RAKE TO BE FASTENED TO THE WALL WITH 1/2" MASONRY ANCHORS. TRASH RAKE TO BE REMOVABLE.

ORIGINAL ISSUE DATE: 06/18/18