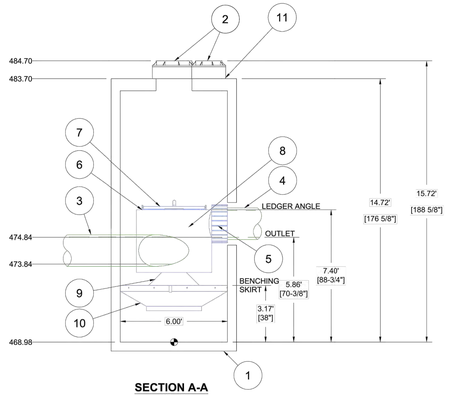
PARTS LIST: 6' DOWNSTREAM DEFENDER

ITEM	SIZE (IN)	MATERIAL	DESCRIPTION
1	72	CONCRETE	I.D. PRECAST MANHOLE
2	18 & 24	-	FRAME & COVER
3	12	PVC	INLET PIPE (BY OTHERS)
4	12	PVC	OUTLET PIPE (BY OTHERS)
5	18x12	-	PIPE COUPLING (BY OTHERS)
6	-	-	LEDGER ANGLE
7	-	-	SUPPORT FRAME
8	-	-	DIP PLATE
9	-	-	CENTER SHAFT & CONE
10	-	-	BENCHING SKIRT
11	-	-	MATERIALS & LABOR TO ACHIEVE FINAL GRADE (BY OTHERS)

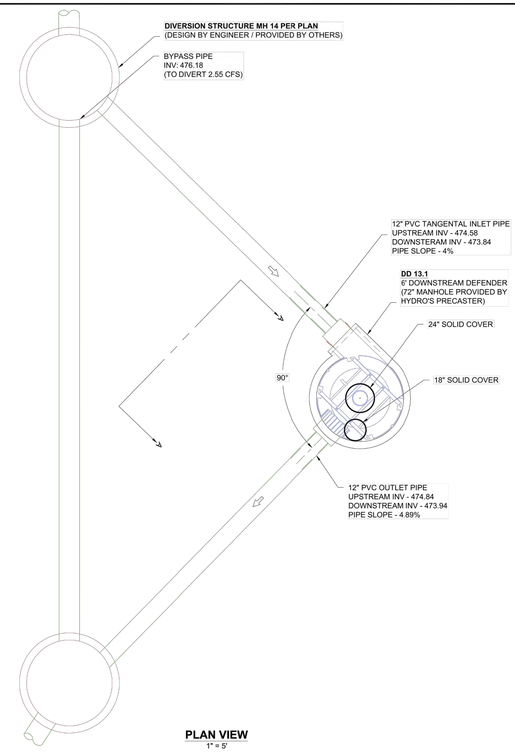
NOTES:
*ENGINEER / CONTRACTOR TO CONFIRM PIPE MATERIALS.
*ALL CONNECTIONS TO DOWNSTREAM DEFENDER TO BE A-LOK CONNECTIONS.



SECTION A-A
1/4" = 1'

CAPACITIES
1. PEAK TREATMENT FLOW: 8.0 CFS (227 L/S)
2. SEDIMENT STORAGE CAPACITY: 2.10 YD³ (1.61 m³)
3. OIL STORAGE CAPACITY: 216 GALLONS (818 LITERS)

ADDITIONAL DESIGN INFORMATION
1. THE OUTLET PIPE STUB IS A ROTO-MOLDED PRODUCT WITH AN I.D. OF 18" THAT CANNOT BE MODIFIED. TO AVOID THE USE OF A REDUCER OR EXPANDER ON THE OUTLET AN 18" OUTLET PIPE SHOULD BE USED IF POSSIBLE.
2. ONLY SMALLER INLET PIPES MAY BE USED. THE INLET PIPE INVERT SHOULD BE PLACED ONE INLET PIPE DIAMETER BELOW THE OUTLET PIPE INVERT. THE I.D. OF THE INLET PIPE SHOULD BE PLACED TANGENT TO THE I.D. OF THE MANHOLE. HEADLOSS AT 8.0 CFS WITH AN 18" INLET: 12" (305 mm). HEADLOSS WILL INCREASE WITH SMALLER INLET PIPES.
3. SEDIMENT SHALL BE STORED IN A ZONE THAT IS ISOLATED FROM THE MAIN FLOW PATH AND PROTECTED FROM RE-ENTRAINMENT BY THE BENCHING SKIRT.



PLAN VIEW
1" = 5'

BROOKSIDE ADDITION
O'FALLON, MO
DATE: 12/22/20 DRAWN: GDL
PROJECT #: S215042 CHECKED: KM

DATE	DRWN	CHKD	DESCRIPTION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS, EQUIPMENT, SAFETY, SCHEDULING, AND PROJECT REQUIREMENTS.

Hydro International
STORMWATER SOLUTIONS
2365 PARK AVENUE
TUSTIN, CALIFORNIA 92782
(800) 848-8240
WWW.HYDROINTLUSA.COM

THE CONTRACTOR SHALL VERIFY ALL INFORMATION PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS, EQUIPMENT, SAFETY, SCHEDULING, AND PROJECT REQUIREMENTS.

DS STORM WATER SOLUTIONS
DESIGN SERVICES, INC.
4640 TRUEMAN BLVD
HILLIARD, OH 43026

AS NOTED

2 SHEET OF 3

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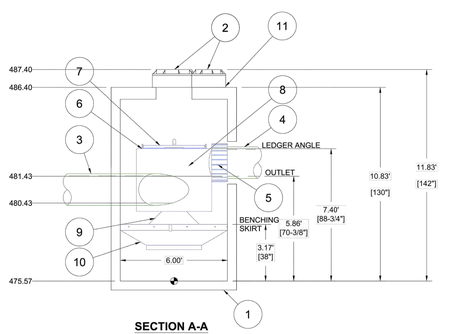

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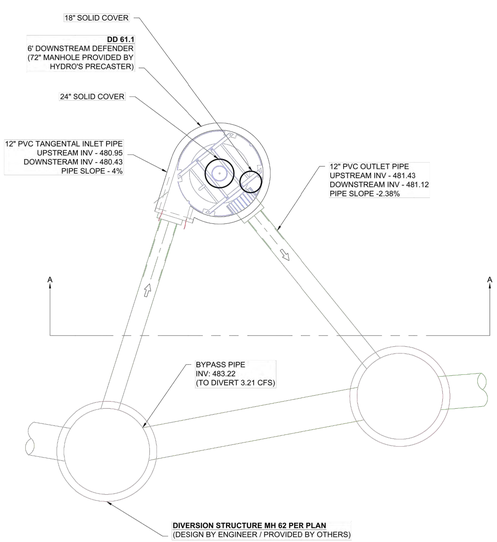

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O'FALLON, MO
DATE: 12/22/20 DRAWN: GDL
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ISSUE	REMARKS/DATE
1	2020-12-31 INITIAL SUBMITTAL
2	2021-02-23 CITY COMMENT
3	2021-04-13 CITY COMMENT
4	2021-05-26 CITY COMMENT
5	2021-06-15 FOR APPROVAL

PROJECT TITLE

BROOKSIDE ADDITION
O'FALLON, MISSOURI

THE STERLING CO.
ENGINEERS & SURVEYORS
5055 New Baumgartner Road
St. Louis, Missouri 63129
Ph 314-487-0440 Fax 314-487-8944
www.sterling-eng-sur.com
Corporate Certificate of Authority #001348

The Professional Engineer's seal and signature affixed to this sheet, applies only to the specifications and data on this sheet. All sketch, instructions or other documents not exhibiting this seal and signature shall not be considered prepared by this engineer, and the engineer expressly disclaims any and all responsibility for such plans, drawings or documents not exhibiting this seal and signature.

STATE OF MISSOURI
MICHAEL G. BOERDING
NUMBER
PE-2004018214
PROFESSIONAL ENGINEER

Date: 06-15-2021
Michael G.Boerding. PE
License No. MO E-28643
Professional Engineer

LOMBARDO HOMES OF ST. LOUIS, LLC
2299 TECHNOLOGY DRIVE, SUITE 150
O'FALLON, MISSOURI 63368
Ph. 636-265-2710
Fax 636-695-3195

DOWNSTREAM DEFENDER DETAILS

P+Z No.	20-001538
City No.	20-009251
Date:	JUNE 15, 2021
Job No.	19-10-344

Page No.
DTL-6
IMP

"PRELIMINARY PLAT" Approval Date: September 3, 2020

Drawing name: V:\19\0344 Feldewert Lombardo\Drawings\Engineering\Improvements\03441MP DETAILS.dwg Plotted on: Jun 15, 2021 - 7:57am Plotted by: jluetkenhaus