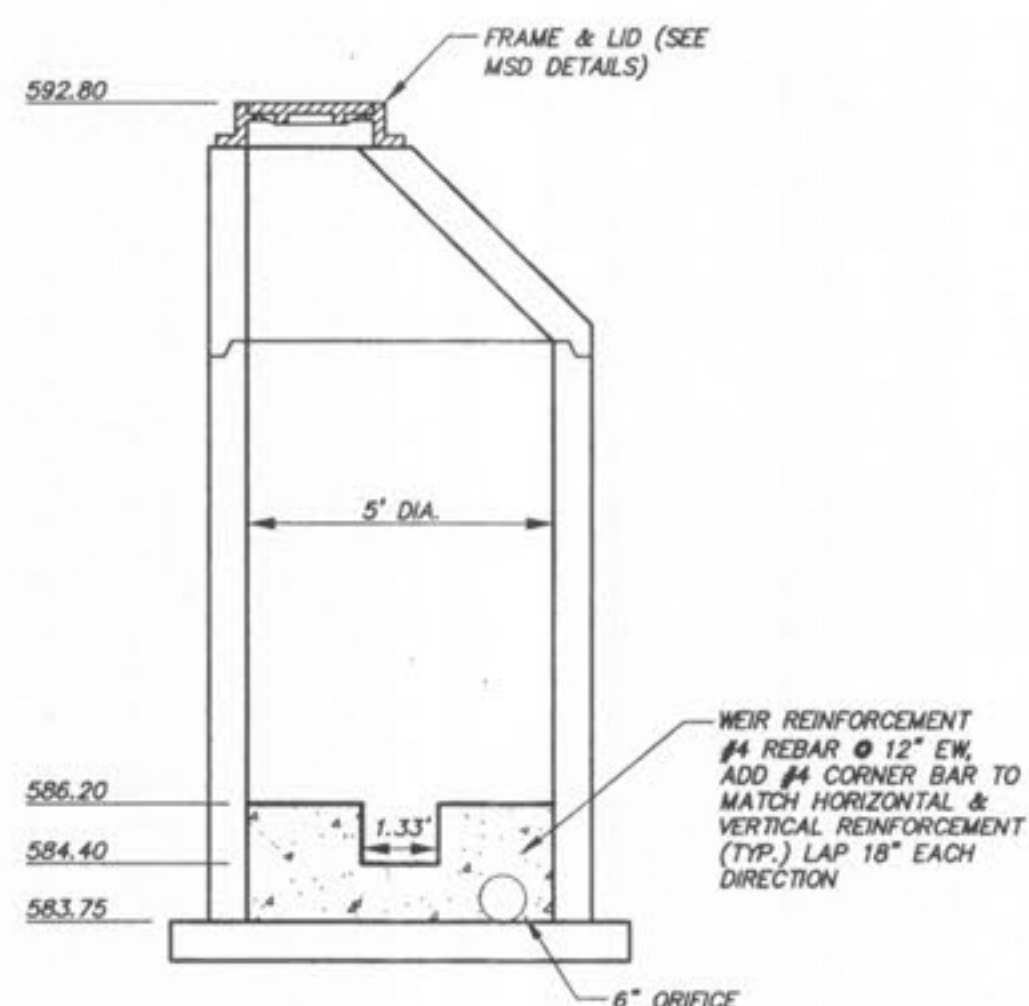


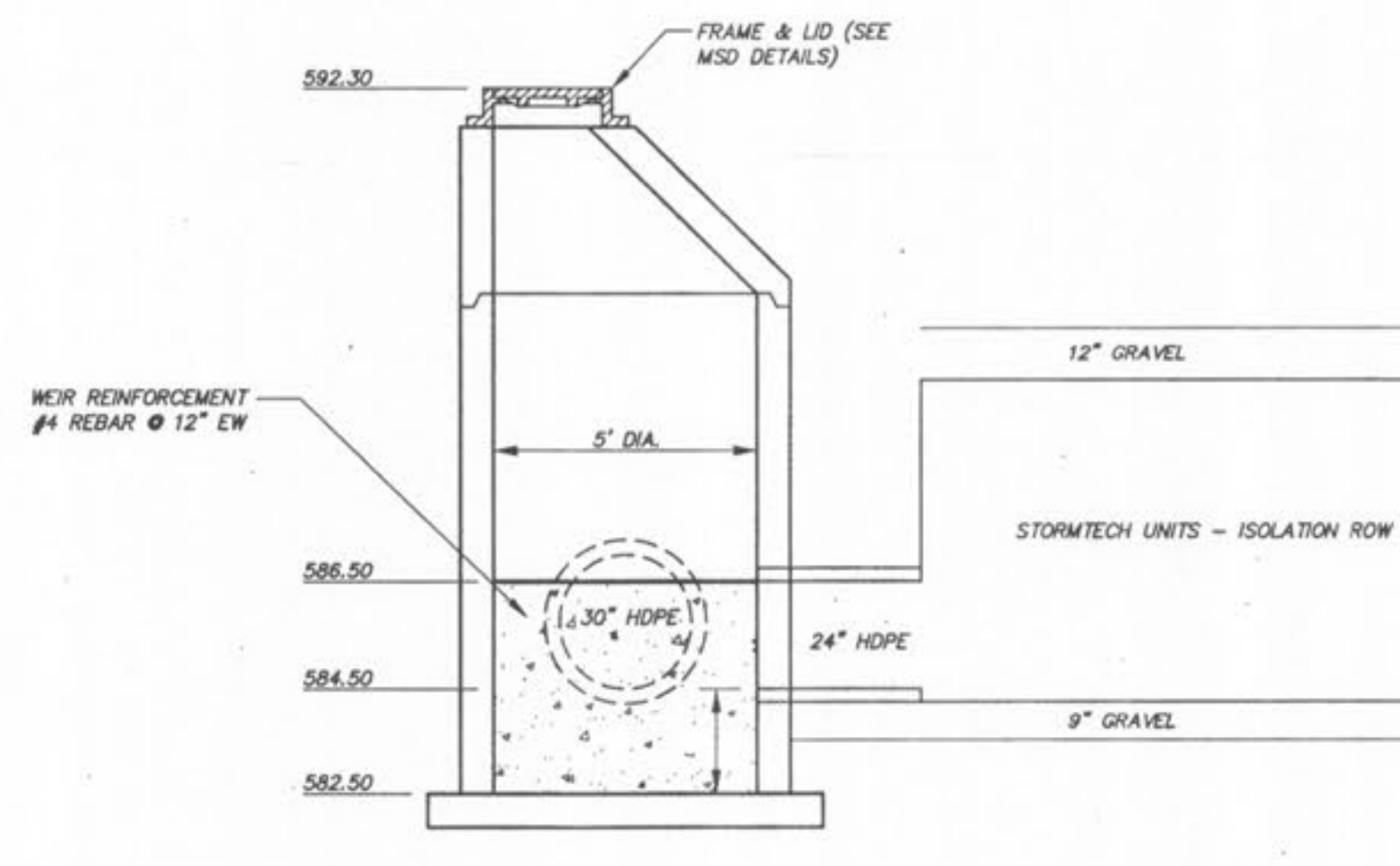
FOUNDATION GEOTEXTILE FABRIC

1. GEOTEXTILE FABRIC AT BASE OF FOUNDATION ROCK FOR THE STORMTECH UNITS SHALL BE MIRAFI 600X OR EQUAL.
2. GEOTEXTILE FABRIC SHALL BE PLACED DIRECTLY ON PREPARED SUBGRADE. THE FABRIC SHOULD BE ROLLED OUT FLAT AND TIGHT WITH NO FOLDS.
3. GEOTEXTILE FABRIC SHALL BE ORIENTED IN THE DIRECTION OF THE STORMTECH UNITS.
4. ADJACENT GEOTEXTILE ROLLS SHALL BE OVERLAPPED A MINIMUM OF 18\".
5. PRIOR TO BASE ROCK PLACEMENT, THE GEOTEXTILE SHALL BE HELD IN PLACE USING PINS OR SOIL NAILS AND EACH END OF THE ROLL SHALL BE HELD IN PLACE WITH PILES OF BASE ROCK PRIOR TO ADDITIONAL BASE ROCK PLACEMENT.
6. FILL OVER GEOTEXTILE FABRIC SHALL BE PLACED IN 8\" TO 12\" LOOSE LIFTS.
7. TRACKED CONSTRUCTION EQUIPMENT SHOULD NOT BE OPERATED DIRECTLY UPON THE GEOTEXTILE. A MINIMUM OF 6\" OF COMPACTED FILL IS REQUIRED FOR TRACKED VEHICLE OPERATION.
8. NO MORE THAN ONE SPLICE PER RUN SHALL BE ALLOWED. SPLICES IN A RUN SHALL BE OVERLAPPED AT LEAST 5\". SPLICES IN ADJACENT RUNS SHALL BE STAGGERED A MINIMUM OF 15\".

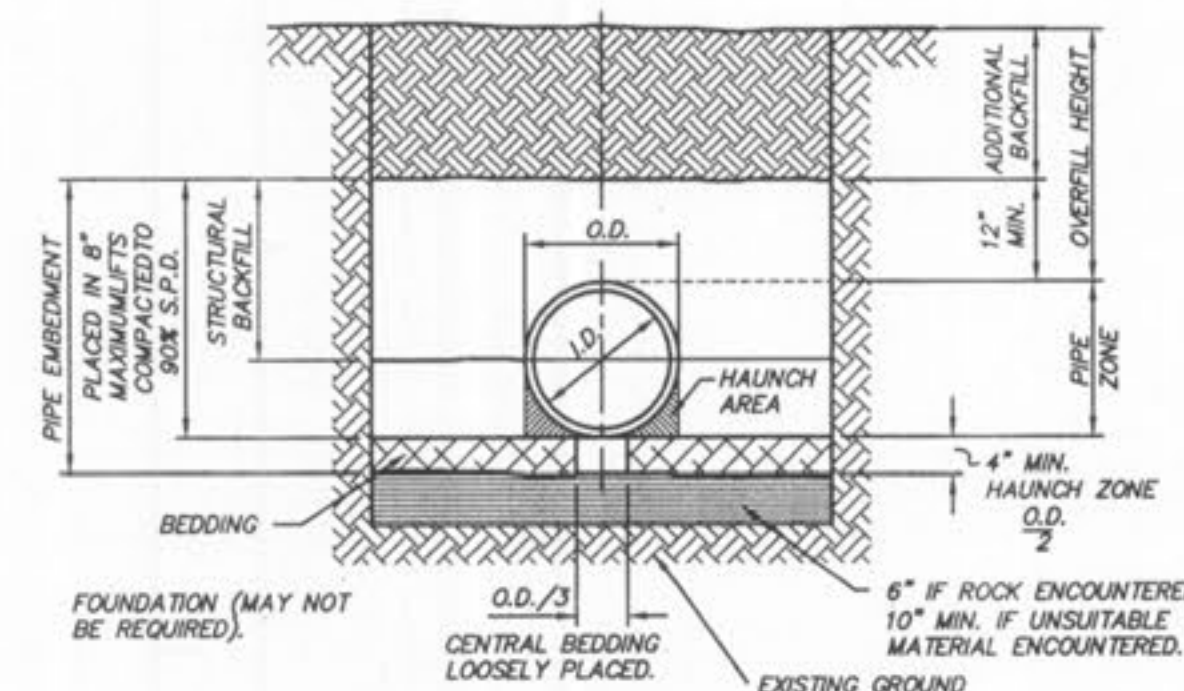
STORMTECH UNITS DETAIL
NOT TO SCALE



OUTLET CONTROL STRUCTURE 1
NOT TO SCALE



INFLOW CONTROL STRUCTURE 2
NOT TO SCALE



TYPICAL TRENCH DETAIL

TABLE III
PARALLEL PIPE INSTALLATION

PIPE SIZE	S (IN.)	X (IN.)
12	9	9
15	9	9
18	9	9
24	10	10
30	16	16
36	18	18
42	18	18
48	18	18

S = MINIMUM PIPE SEPARATION (IN) BETWEEN OUTSIDE WALLS OF PIPES.
X = MINIMUM SEPARATION BETWEEN TRENCH WALL AND OUTSIDE WALL OF PIPE.

CONSTRUCTION SEQUENCE

1. PLACE BEDDING MATERIAL TO GRADE.
2. COMPACT BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
3. INSTALL PIPE TO GRADE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE SPRINGLINE.
5. COMPLETE BACKFILL ACCORDING TO SPECIFICATIONS.

BACKFILL NOTES

1. BEDDING, HAUNCH, AND STRUCTURAL BACKFILL SHALL BE IN CONFORMANCE W/ AASHTO M145 GROUP A-1, A-2, OR A-3 COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DEFINED BY ASTM D698.
2. ADDITIONAL BACKFILL SHALL BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DEFINED BY ASTM D698.

LEGEND

- I.D. = NORMAL INSIDE DIAMETER OF PIPE.
- O.D. = OUTSIDE DIAMETER OF PIPE
- H = FILL COVER HEIGHT OVER PIPE (FEET)
- MIN. = MINIMUM
- MAX. = MAXIMUM
- UNDISTURBED SOIL

TABLE I
CORRUGATED HDPE AND POLYVINYL CHLORIDE CIRCULAR PIPE

SPECIFIED DIA OF PIPE (IN.)	MIN OVERFILL HEIGHT (FT)	HDPE		POLYVINYL CHLORIDE		TRENCH WIDTH (IN.)
		MAX OVERFILL HEIGHT* (FT)	SDR 35#	MAX OVERFILL HEIGHT* (FT)	SDR 26#	
12	1	38	15	30	34	34
15	1	39	15	30	39	39
18	1	40	15	30	44	44
24	1	40	15	30	55	55
30	1	40	N/A	N/A	67	67
36	1	38	N/A	N/A	78	78
42	2	10	N/A	N/A	84	84
48	2	9	N/A	N/A	95	95
54	2	8	N/A	N/A	104	104
60	2	8	N/A	N/A	113	113

* MAXIMUM OVERFILL MEASURED FROM THE TOP OF PIPE TO SURFACE
PER ASTM D-3034 FOR PIPE UP TO 15\" AND ASTM F879 OVER 15\"

TABLE II
MINIMUM COVER FOR CONSTRUCTION LOADS

PIPE DIA. (IN.)	MINIMUM COVER (FT) FOR INDICATED AXLE LOADS (THOUSANDS OF POUNDS)			
	18-50	50-75	75-110	110-150
12-36	2.0	2.5	3.0	3.0
42-48	3.0	3.0	3.5	4.0

THE CONTRACTOR SHALL PROVIDE MINIMUM COVER PLUS ANY ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. IN UNPAVED SITUATIONS, THE SURFACE MUST BE MAINTAINED TO A LEVEL AND NON-RUTTED CONDITION.

EMBEDMENT OF PLASTIC STORM SEWER PIPE

NOT TO SCALE

REVISION NOTES:
1. REVISED STORMTECH SYSTEM.

PLANNING & DEVELOPMENT #1804.08 APPROVED AUGUST 6, 2009
STORM SEWER DETAILS

WOODBURY PLACE
ST. CHARLES COUNTY, OTTAWA, MISSOURI

Surveyed:
Drawn: CH
Checked: TOC/AMK

Scale: AS SHOWN
Date: DECEMBER 7, 2009
Job: 11354
Sheet: C123

Revised: 19 JAN 2010

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