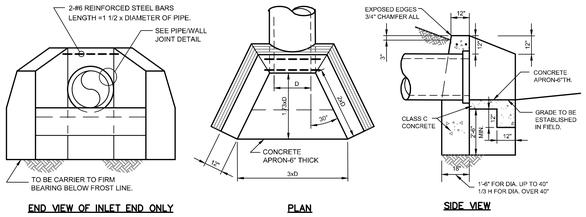


END VIEW OF INLET END ONLY

PLAN

SIDE VIEW

HEADWALLS IN CUBIC YARDS

PIPE SIZE	CORR. STEEL PIPE IN C.Y.	REIN. CONC. PIPE IN C.Y.	APRONS IN C.Y.
12"	1.4	1.4	0.2
15"	1.7	1.7	0.2
18"	2.1	2.1	0.3
21"	2.5	2.5	0.4
24"	2.9	2.9	0.5
27"	3.3	3.4	0.6
30"	3.7	3.8	0.7
36"	4.7	4.8	0.9
42"	5.8	6.3	1.2
48"	7.6	8.4	1.5
54"	9.7	10.7	1.8
60"	12.2	13.4	2.1
66"	15.0	16.4	2.5
72"	18.1	19.9	3.0

GENERAL NOTES:

1. ALL EDGES TO BE CHAMFERED 1".

2. THE RUBBING OF HEADWALLS TO REMOVE FORM MARKS AS REQUIRED IN SUBSECTIONS 501.14 FOR CONCRETE STRUCTURES, WILL NOT BE REQUIRED FOR HEADWALLS AT THE BOTTOM OF EMBANKMENTS IN RURAL AREAS.

3. FOR SLOPE DRAIN HEADWALLS, DIMENSIONS AND APRON GRADES SHALL BE SET BY ENGINEER.

4. FOR MORE THAN ONE PIPE, SET THE PIPES A MINIMUM OF ONE FOOT APART (OUTSIDE BARREL TO OUTSIDE BARREL); THERE SHALL BE 12" ABOVE THE TOP OF A PIPE IN A WINGWALL: THE TERMINUS OF THE WINGWALL SHALL BE 2D FROM THE CENTERLINE OF THE PIPE IN A WINGWALL.

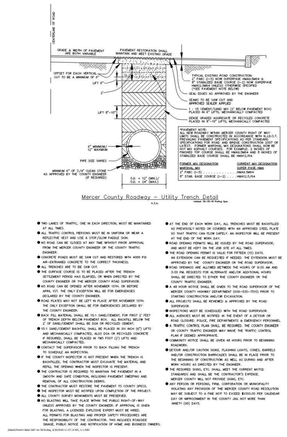
5. THE TERMINUS FOR OUTLET AND INLET APRONS SHALL BE SET BY EXTENDING THE PIPE GRADE AHEAD AND BACK, RESPECTIVELY.

6. FOR ARCH PIPE, THE SPAN SHALL BE SUBSTITUTED FOR D.

7. IF PRECAST HEADWALLS ARE TO BE USED, SHOP DRAWINGS OF THE UNITS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW AND APPROVAL.

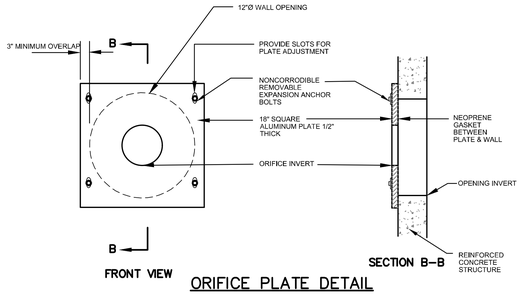
PRECAST CONCRETE HEADWALL WITH WINGWALLS

NOT TO SCALE



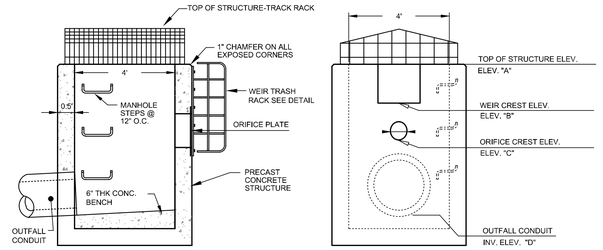
MERCER COUNTY STANDARD UTILITY TRENCH DETAIL

NOT TO SCALE



ORIFICE PLATE DETAIL

NOT TO SCALE



SECTION

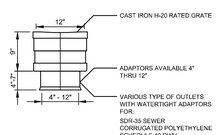
FRONT ELEVATION

TRASH RACKS NOT SHOWN FOR CLARITY
SEE PLAN FOR GRADING

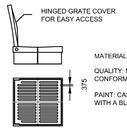
LOCATION	ELEV. "A"	WEIR LENGTH	ELEV. "B"	ORIFICE SIZE	ELEV. "C"	OUTLET PIPE SIZE	ELEV. "D"
BASIN A OS	208.75	1.7'	207.00	2.5"	205.50	18"	205.50
BASIN B OS	206.25	3.0'	203.40	12" W X 6" H	201.89	24"	201.40
BASIN C OS	206.00	1.0'	203.75	2.5"	202.20	18"	201.50
BASIN D OS	209.73	6.0'	210.00	2.5"	207.43	15"	207.43
BASIN E OS	201.25	3.0'	200.25	2.5"	199.40	15"	196.19
BASIN E1 OS	207.25	N/A	N/A	6.0" / 2.5"	206.00 / 204.50	24"	202.14

OUTLET CONTROL STRUCTURE DETAIL

NOT TO SCALE



12" INLINE DRAIN



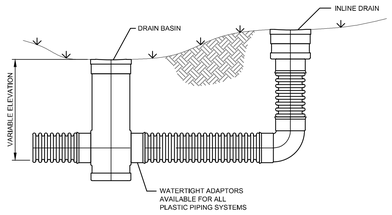
MATERIAL: CAST IRON

QUALITY: MATERIAL SHALL CONFORM TO ASTM A48 - CLASS 30B

PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT

PEDESTRIAN (H-10) RATED
DRAINAREA = 51.0 SQ. INCH

12" CAST IRON GRATE

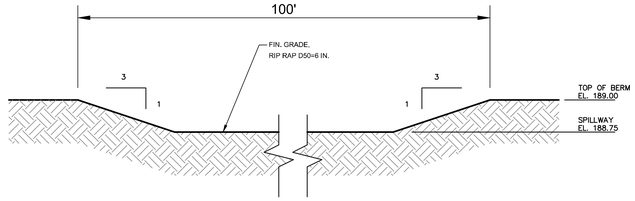


TYPICAL INSTALLATIONS

NYLOPLAST DRAIN BASIN AND INLINE DRAIN
OR APPROVED EQUAL (TO BE INSTALLED AS NEEDED)

GRASS SWALE YARD INLET DETAIL

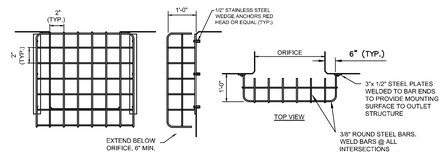
NOT TO SCALE



TYPICAL SECTION THRU SPILLWAY

EMERGENCY SPILLWAY DETAIL

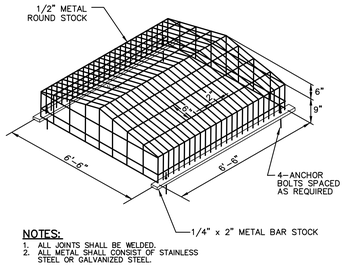
NOT TO SCALE



NOTES:
1. ALL JOINTS SHALL BE WELDED.
2. ALL METAL SHALL CONSIST OF STAINLESS STEEL OR GALVANIZED STEEL.

ORIFICE TRASH RACK DETAIL

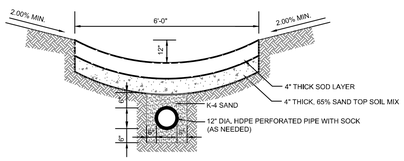
NOT TO SCALE



NOTES:
1. ALL JOINTS SHALL BE WELDED.
2. ALL METAL SHALL CONSIST OF STAINLESS STEEL OR GALVANIZED STEEL.

TOP OF STRUCTURE TRASH RACK

NOT TO SCALE



SECTION

NOTES:
1. 12" HDPE PERFORATED PIPE WITH SOCK UNDERDRAINS AND YARD INLETS TO BE INSTALLED AT THE OWNER'S DISCRETION ON AN AS NEEDED BASIS WITHIN DRAINAGE EASEMENTS IN BACKYARDS OF LOTS.
2. UNDERDRAINS SHALL TIE INTO DOWNSTREAM INLETS AS LOCATED ON UTILITY PLANS.

GRASS SWALE AND UNDERDRAIN DETAIL

NOT TO SCALE

THESE PLANS ARE NOT TO BE USED FOR BID OR CONSTRUCTION

PLANS ARE FINAL FOR SANITARY SEWER AND WATER MAIN DESIGN

12			
11			
10			
9			
8			
7	REVISION		DATE CHKD
6			
5			
4	REV. PER NJDEP FHA	6/2/21	KK
3	REV. PER NJDEP FHA	5/12/21	KK
2	REV. FOR TOWN SUBMISSION	4/13/21	KK
1	REGULATORY AGENCY SUBMISSION	1/29/21	SAD
	REVISION	DATE	CHKD

PROJ.: 080861-F1-001
DATE: 11-20-2020
DWG.: 16B-DT

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PRELIMINARY & FINAL MAJOR SUBDIVISION AND PRELIMINARY & FINAL SITE PLAN

THE COLLECTION at HOPEWELL

CONSTRUCTION DETAILS-UTILITY

BLOCK 85, LOT 3; BLOCK 86, LOTS 32-34 & 130; AND PART OF BLOCK 85, LOT 9
TOWNSHIP OF HOPEWELL, MERCER COUNTY, NEW JERSEY

SHEET No. 16 OF B

V:\080861 - Zeltz Parcel Residential-Hopewell Twp\080861-01-002 (ENG) - Lennar-Zeltz Parcel Res-Hopewell Twp\Engineering\Engineering Plans\SHT-DET-UTILITY.dwg 06/04/21 09:28:17AM, kkirkwood, LAYOUT:16B-DT-UTILITY
XREFS: TM-LENNAR-ZATZ.dwg