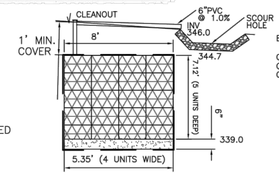
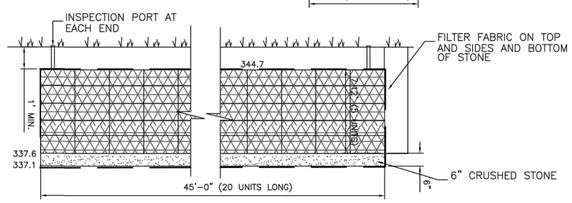
H20 LOAD RATED	
Surface area	+ 95% void
Material	100% recycled Polypropylene
Biological & Chemical Resistance	Unaffected by moulds and algae, soil-bourne chemicals, bacteria and bitumen.
Service Temperature	-30°bOC to 120°bOC (-22°bOF to 248°bOF)

ECORAIN TANK

H20 LOAD RATED
16.06"Wx26.97"Lx17.72"HIGH
STORAGE VOLUME/TANK = 4.22 CF
BY ECORAIN SYSTEMS INC.

NOTE: ENTIRE TANK SYSTEM TO BE WRAPPED IN FILTER FABRIC TOP, BOTTOM AND ALL SIDES





DRAINAGE CALCULATIONS
DA = 0.23 AC (AREA OF DISTURBANCE)

EXISTING RUNOFF
DA = 0.23 AC
Tc = 6 MIN
CN = 52

$Q_{2\ YR}$ = 0.02
$Q_{10\ YR}$ = 0.17
Q_{100YR} = 0.66

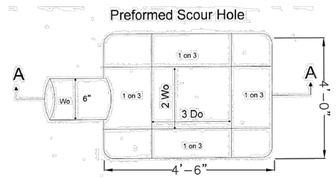
DEVELOPED RUNOFF DIRECT
DA = 0.09 AC
Tc = 6 MIN
CN = 61

$Q_{2\ YR}$ = 0.04
$Q_{10\ YR}$ = 0.14
Q_{100YR} = 0.37

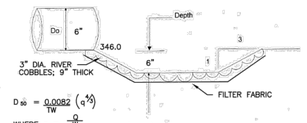
DEVELOPED RUNOFF AREA TO DETENTION BASINS
DA = 0.14 AC
Tc = 6 MIN
CN = 82

DETENTION OUTFLOW
$Q_{2\ YR}$ = 0.0
$Q_{10\ YR}$ = 0.0
Q_{100YR} = 0.65

	EXISTING	VS	TOTAL DEVELOPED
$Q_{2\ YR}$	= 0.02 CFS		= 0.0 CFS
$Q_{10\ YR}$	= 0.17 CFS		= 0.0 CFS
Q_{100YR}	= 0.66 CFS		= 0.65 CFS



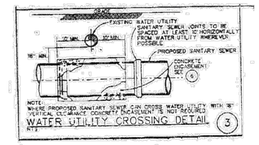
PLAN



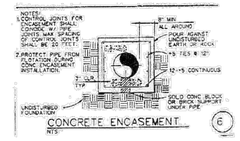
$D_{50} = \frac{0.0082}{TW}(q^{3/2})$

WHERE $q = \frac{Q}{W}$
TW = 0.1
Q = 0.43
W = 0.5
D_{50} = 0.1 FT.
∴ USE 3" DIA. RIVER COBBLES; 9" THICK

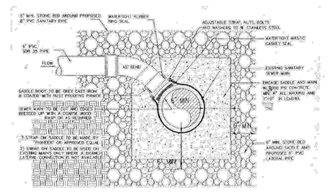
Section A - A



WATER UTILITY CROSSING DETAIL 3

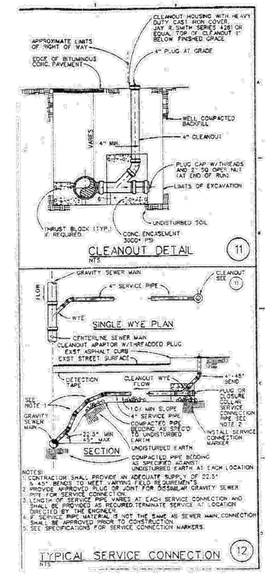


CONCRETE ENCASEMENT 6

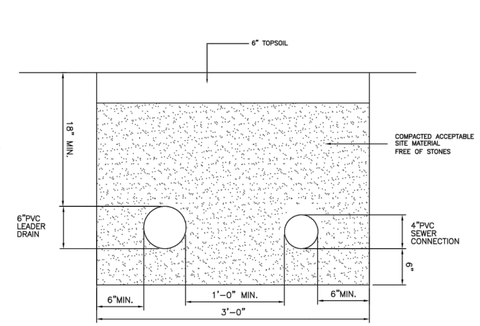


90° STRAP-ON SADDLE ASSEMBLY

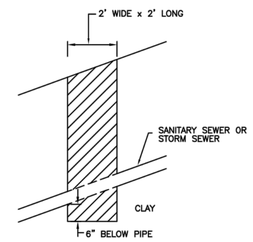
CONTRACTOR IS TO CONTACT THE TOWNSHIP ENGINEER 72 HOURS PRIOR TO INSTALLATION OF THE SEWER SADDLE FOR INSPECTION



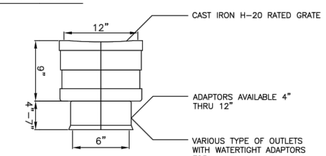
TYPICAL SERVICE CONNECTION 12



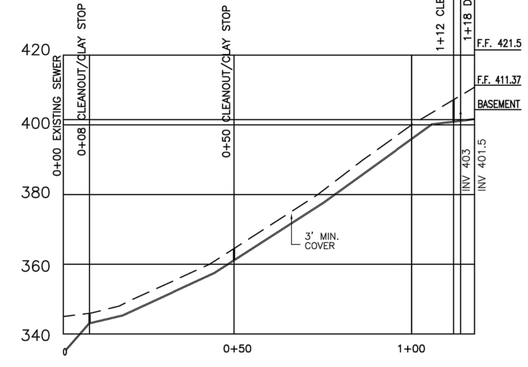
PIPE TRENCH DRAIN



CLAY STOP DETAIL



12" INLINE DRAIN

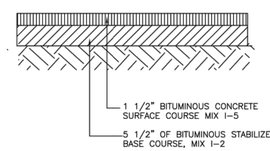


SANITARY SEWER CONNECTION

SCALE: 1"=20' HORZ.
1"=20' VERT.

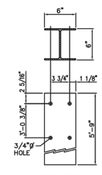
ASPHALT APRON DETAIL

NOT TO SCALE

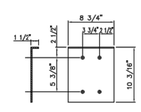


PAVEMENT PATCH DETAIL

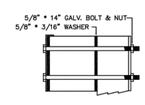
NOT TO SCALE



STEEL POST

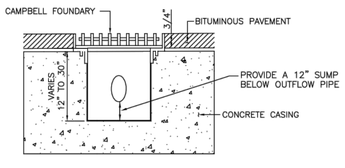


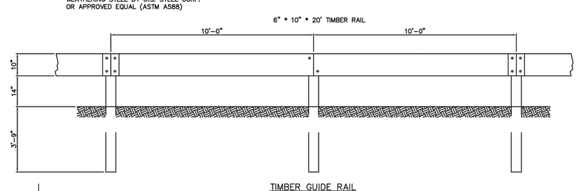
SPLICE PLATE



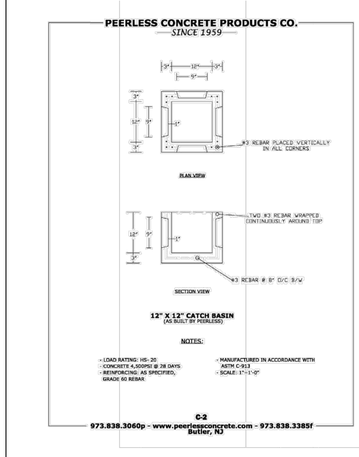
SECTION THRU GUIDE RAIL SPLICE

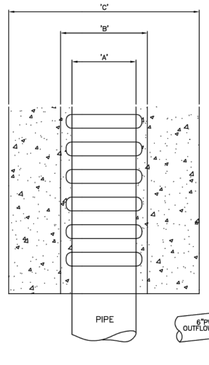
NOTE: STEEL SHALL BE COR-TEN TYPE WEATHERING STEEL BY U.S. STEEL CORP. OR APPROVED EQUAL (ASTM A588)





TIMBER GUIDE RAIL
N.T.S.





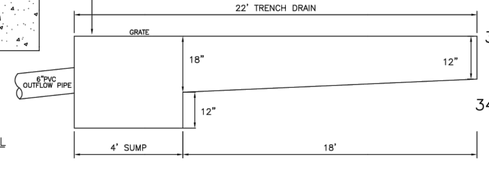
TRENCH DRAIN DETAIL

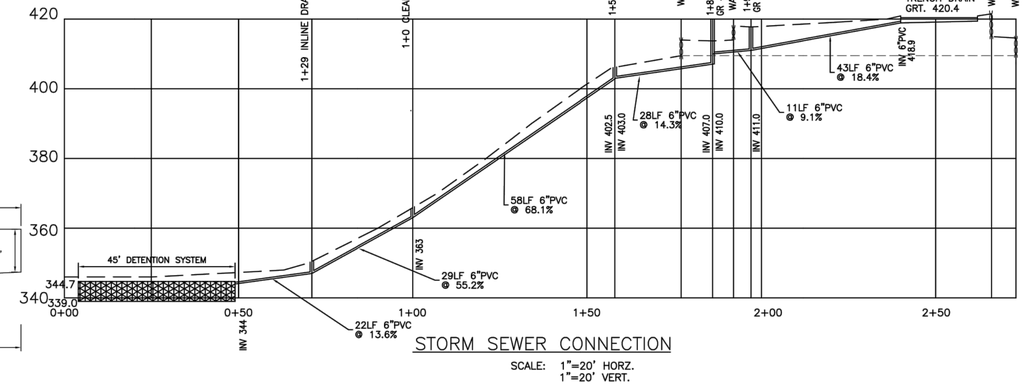
N.T.S.

'A'	6"	8"	12"
'B'	7 3/4"	9 3/4"	14"
'C'	22"	24"	30"
CAMPBELL FOUNDARY	#4525	#4525A	#4526A

NOTE: HEAVY DUTY TRENCH COVER DESIGNED FOR A.A.S.H.T.O. HS20-44 HIGHWAY LOADING

THE PORTION OF THE TRENCH DRAIN GRATE ABOVE THE SUMPED AREA SHALL BE REMOVABLE/HINGED FOR REMOVAL OF DEBRIS





STORM SEWER CONNECTION

SCALE: 1"=20' HORZ.
1"=20' VERT.

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NO.	DATE	COMMENT

APPROVAL STAMPS AND SIGNATURES

DRAWING TITLE
PROPOSED 1-FAMILY DWELLING

BSCAN STICKER

PROJECT NAME AND ADDRESS
35 SUSAN DRIVE, CHATHAM
MORRIS COUNTY, NJ

PROJECT DESCRIPTION
SECTION DETAILS

OWNER'S NAME AND ADDRESS
MR. & MRS. HAPPINESS DIRU

SEAL

DRAWN BY	SCALE AS SHOWN
CHECKED BY RA	DATE 08.17.2018
FILE	BUILDING PLAN ID NUMBER
PAGE NO. 02 OF 18	A- 100