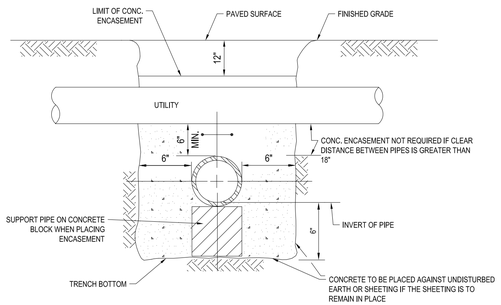
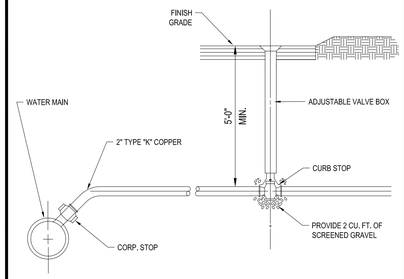


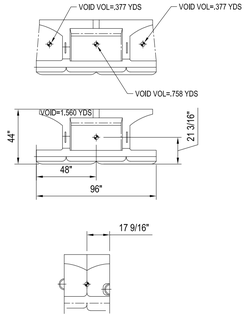
NOTES:
- PIPE MUST BE BRACED VERTICALLY & HORIZONTALLY TO PREVENT FLOATATION DURING PLACEMENT OF CONCRETE
- ALL CONCRETE ENCASEMENT SHALL BE KEPT 12" BELOW THE BOTTOM OF ASPHALT PAVEMENT

CONCRETE ENCASEMENT @ UTILITY CROSSING N.T.S.



NOTE: CONTRACTOR TO VERIFY O.D. AND TYPE OF EXISTING MIAN PRIOR TO MAKING CONNECTION.

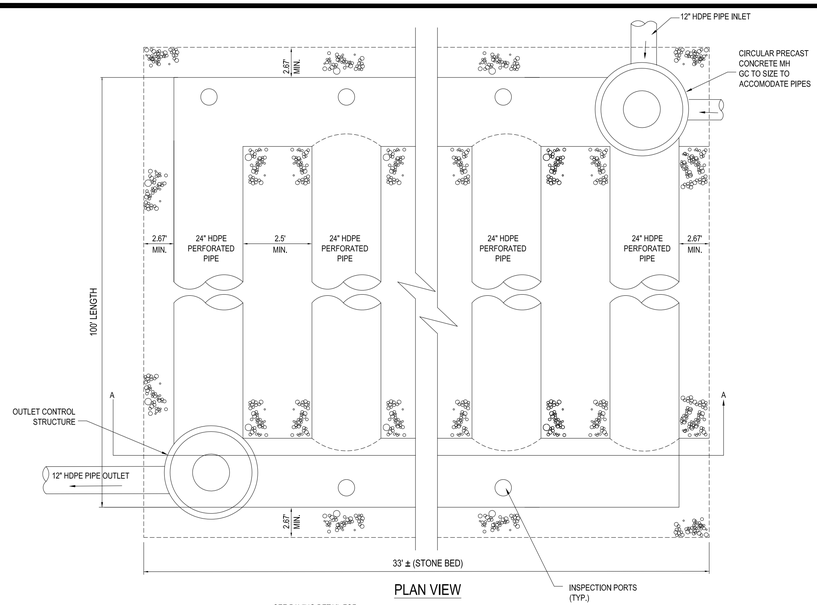
SERVICE CONNECTION DETAIL N.T.S.



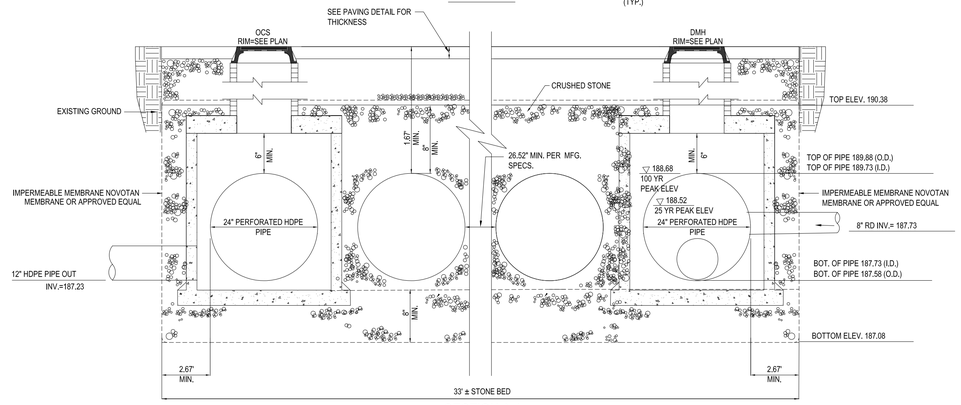
24SF BLOCK
BLOCK WT. = 6,000 LBS
FORM WT. = 4,600 LBS
CONCRETE VOLUME = 1.56 CU YDS

ROCK IN-FILL FOR INSTALLATION ~ 1.7 CU YDS, EQUIVALENT TO 2.3 TONS

BLOCK DIMENSIONS N.T.S.



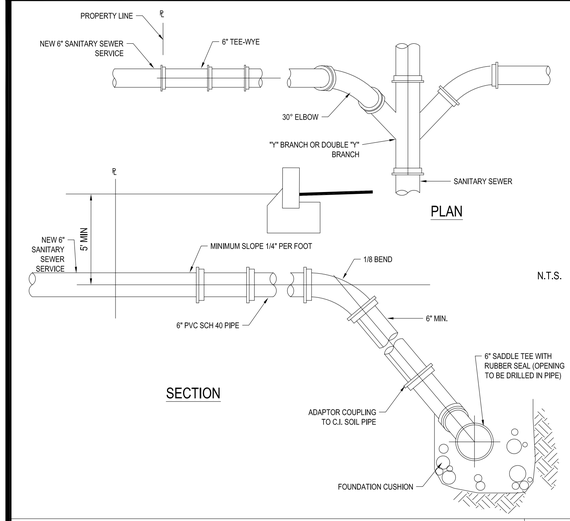
PLAN VIEW



SECTION A-A

NOTE
ALL PIPE SHALL BE MANUFACTURED BY ADS OR APPROVED EQUAL. INSTALLATION METHODS & MATERIALS SHALL COMPLY WITH MANUFACTURER'S SPECIFICATIONS.

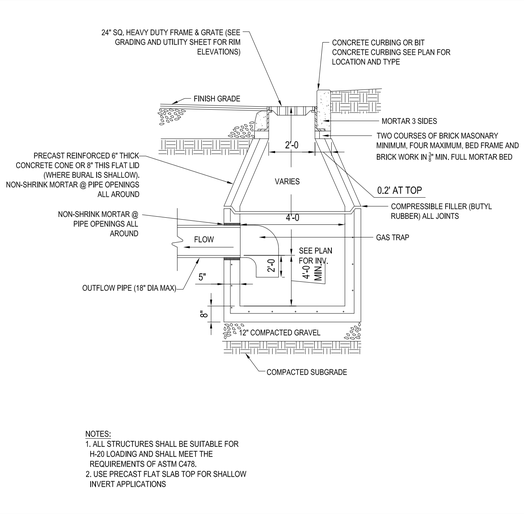
UNDERGROUND STORAGE SYSTEM



N.T.S.

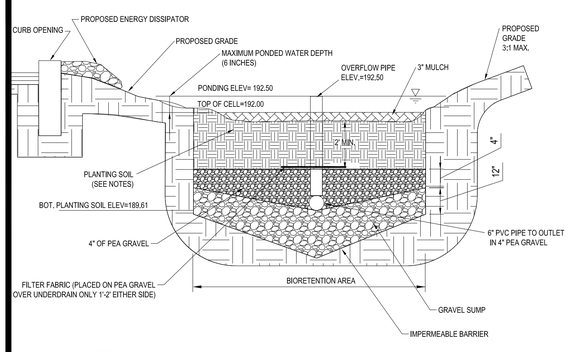
SECTION

STANDARD (SEWER) CONNECTION DETAIL N.T.S.



NOTES:
1. ALL STRUCTURES SHALL BE SUITABLE FOR H-20 LOADING AND SHALL MEET THE REQUIREMENTS OF ASTM C478.
2. USE PRECAST FLAT SLAB TOP FOR SHALLOW INVERT APPLICATIONS

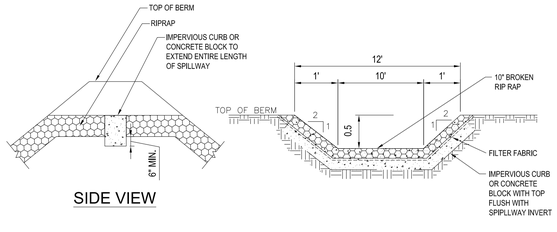
PRECAST CONCRETE DEEP SUMP CATCH BASIN N.T.S.



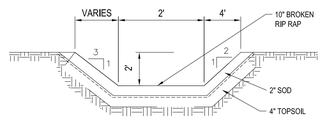
NOTES:

1. PLANTING SOIL MIX SHALL CONSIST OF A MIXTURE OF SAND, SILT, CLAY, ORGANIC MATTER & TOPSOIL
   SAND: 85-88%
   SILT: 8-12%
   CLAY: 0-2%
   LEAF COMPOST: 3-5%
2. PLANTING SOIL MIX SHALL BE UNIFORM AND FREE FROM STONES, ROOTS, STUMPS OR ANY FOREIGN OBJECTS LARGER THAN 2" MAX. SIZE.
3. CLAY CONTENT SHALL NOT EXCEED 2%.
4. SOILS SHALL CONSIST OF 3-5% ORGANIC CONTENT.
5. SAND SHALL BE GRAVELLY SAND THAT MEETS ASTM C-33.
6. PROVIDE AN ADDITIONAL 20% (BY VOLUME) OF WELL AERATED (6-12 MONTHS) LEAF COMPOST TO THE PLANTING SOIL MIXTURE.

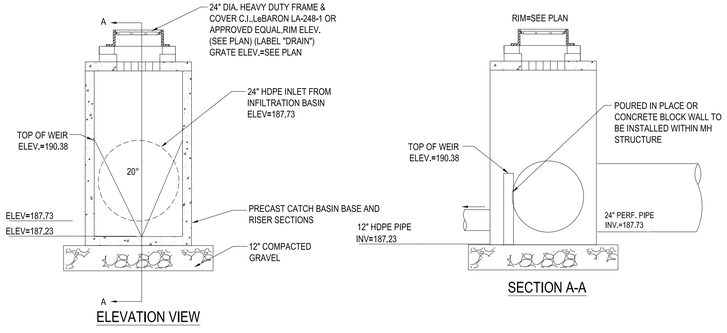
BIORETENTION CELL N.T.S.



EMERGENCY SPILLWAY N.T.S.



SOD SWALE N.T.S.



OUTLET CONTROL STRUCTURE

UNDERGROUND STORAGE SYSTEM W/ OUTLET CONTROL STRUCTURE N.T.S.

BOHLER ENGINEERING
CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS
CORPORATE OFFICE:
◆ WARREN, NJ
OFFICES:
◆ CHALFONT, PA
◆ PITTSBURGH, PA
◆ STERLING, VA
◆ ROCHESTER, NY
◆ FORT LAUDERDALE, FL
◆ SOUTHBOROUGH, MA
◆ PRINCETON, NJ
◆ TOWSON, MD
◆ LANCASTER, PA
◆ ROHNOMOMA, NY
◆ CENTER VALLEY, PA

THESE PLANS AND DESIGNS INCORPORATED HEREON AS INSTRUMENTS OF SERVICE ARE AND SHALL REMAIN THE PROPERTY OF BOHLER ENGINEERING (NJ), LLC WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THE REPRODUCTION OR UNAUTHORIZED USE OF THESE PLANS WITHOUT THE WRITTEN CONSENT OF BOHLER ENGINEERING (NJ), LLC IS PROHIBITED. ONLY DRAWINGS SIGNED AND SEALED BY BOHLER ENGINEERING (NJ), LLC SHALL BE CONSIDERED AUTHORIZED PLANS SHALL BE USED FOR CONSTRUCTION PURPOSES. © 2008 BOHLER ENGINEERING

REVISIONS

REV	DATE	COMMENT	BY
1	06/21/10	REVS PER TOWN COMMENT	EGD
2			
3			
4			
5			
6			
7			
8			
9			

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE.
(MA, ME, NH, RI, VT 1-888-344-7233)
(CT 1-800-922-4455)
(NY 1-800-962-7962)

PERMIT SET

PROJECT No.:	W081068
DRAWN BY:	KBS
CHECKED BY:	JGS/MM
DATE:	5/04/10
SCALE:	AS NOTED
CAD I.D.:	w081068ss1

PROJECT:

SITE PLAN DOCUMENTS

FOR

TD Bank

408 MASSACHUSETTS AVENUE
MIDDLESEX COUNTY
ACTON, MASSACHUSETTS

BOHLER ENGINEERING
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
Fax: (508) 480-9080
www.BohlerEngineering.com

W.D. GOEBEL
PROFESSIONAL ENGINEER
MASSACHUSETTS LICENSE No. 42644
RHODE ISLAND LICENSE No. 7268
CONNECTICUT LICENSE No. 21854
NEW HAMPSHIRE LICENSE No. 10280
MAINE LICENSE No. 9490

SHEET TITLE:

CONSTRUCTION DETAILS

SHEET NUMBER:

14
OF 1

REV. 1 - 06-21-10

P:\08 TD Banknorth\W081068\DWG\w081068ss1.dwg, 14-Details, 7/16/2010 3:03:46 PM, dlabonte, Adobe PDF, ARCH D, 1:1