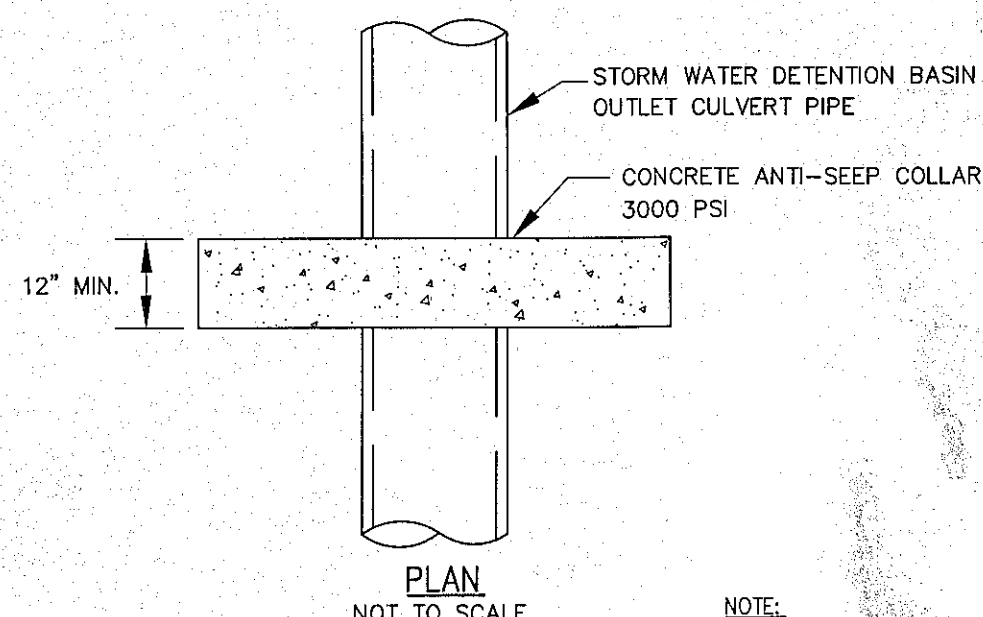
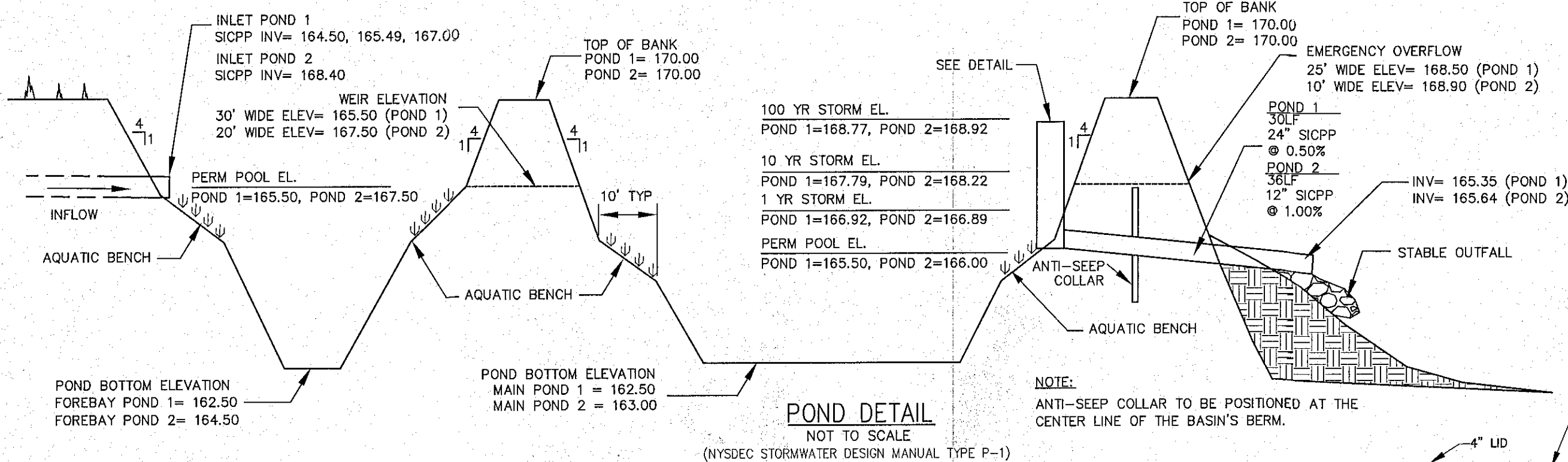
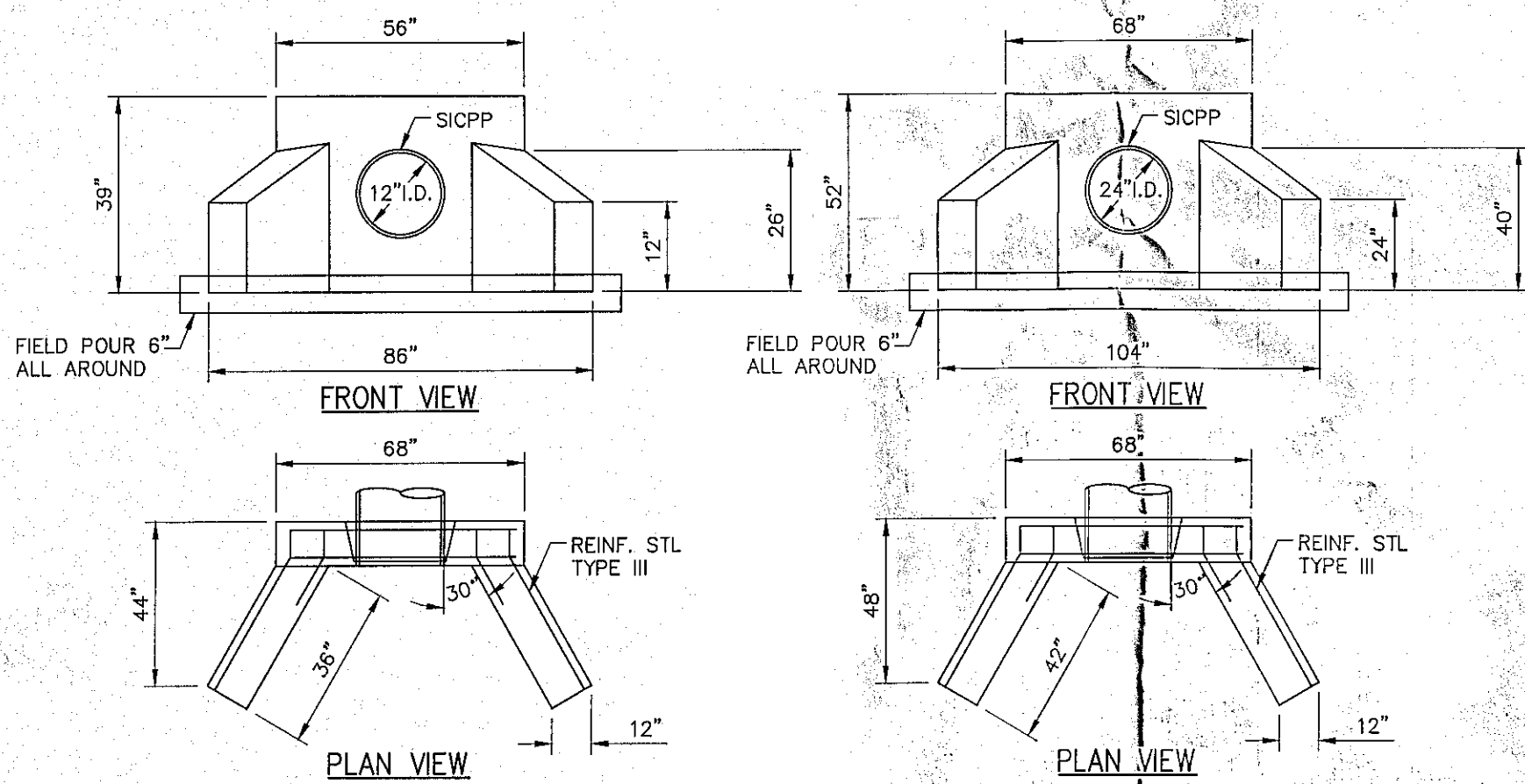




NOTE: ANTI-SEEP COLLAR SHALL BE POSITIONED AT THE CENTER LINE OF THE BASIN'S BERM.
NOTE: FOR ADDITIONAL CONSTRUCTION SPECIFICATIONS REFER TO THE TOWN OF BETHLEHEM SANITARY SEWER, WATER DISTRIBUTION, STORM SEWER, & HIGHWAY STANDARD DETAIL SHEETS

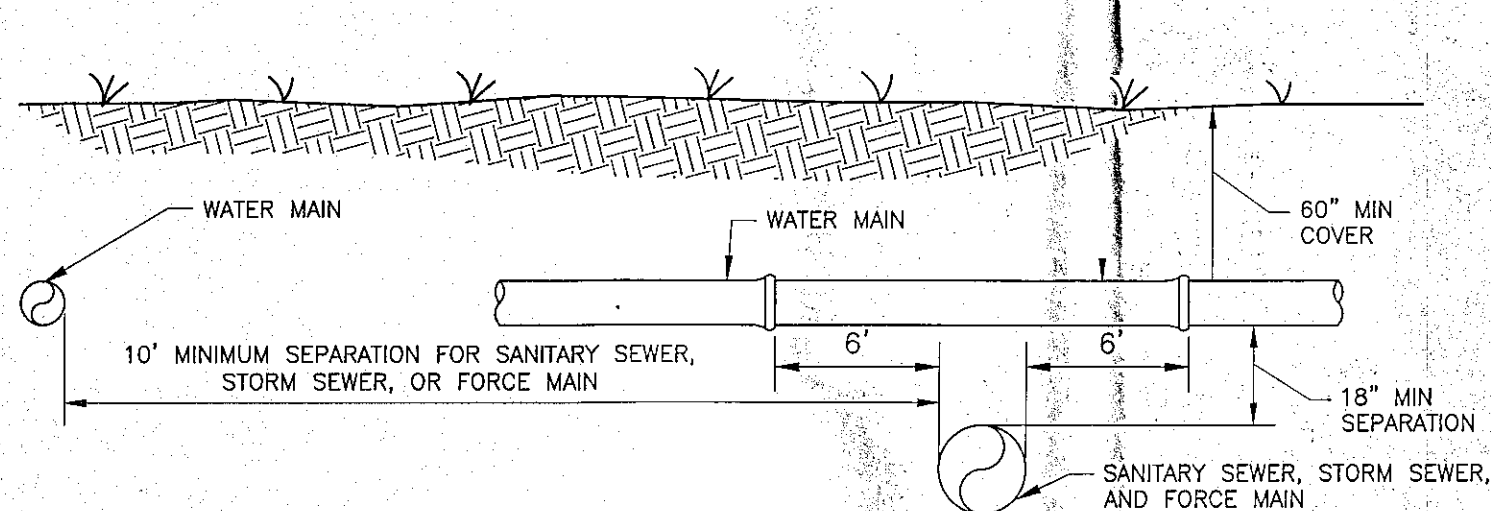
CONCRETE ANTI-SEEP COLLAR



POND 1 OUTFALL

- NOTES:
1. PRECAST OR CAST-IN-PLACE CONCRETE STRUCTURE TO BE WET CAST.
2. CONCRETE TO OBTAIN A STRENGTH OF 4,000 PSI (27 MPA) IN 28 DAYS.
3. REINFORCING STEEL TO HAVE A YIELD STRENGTH OF 60,000 PSI (414 MPA).

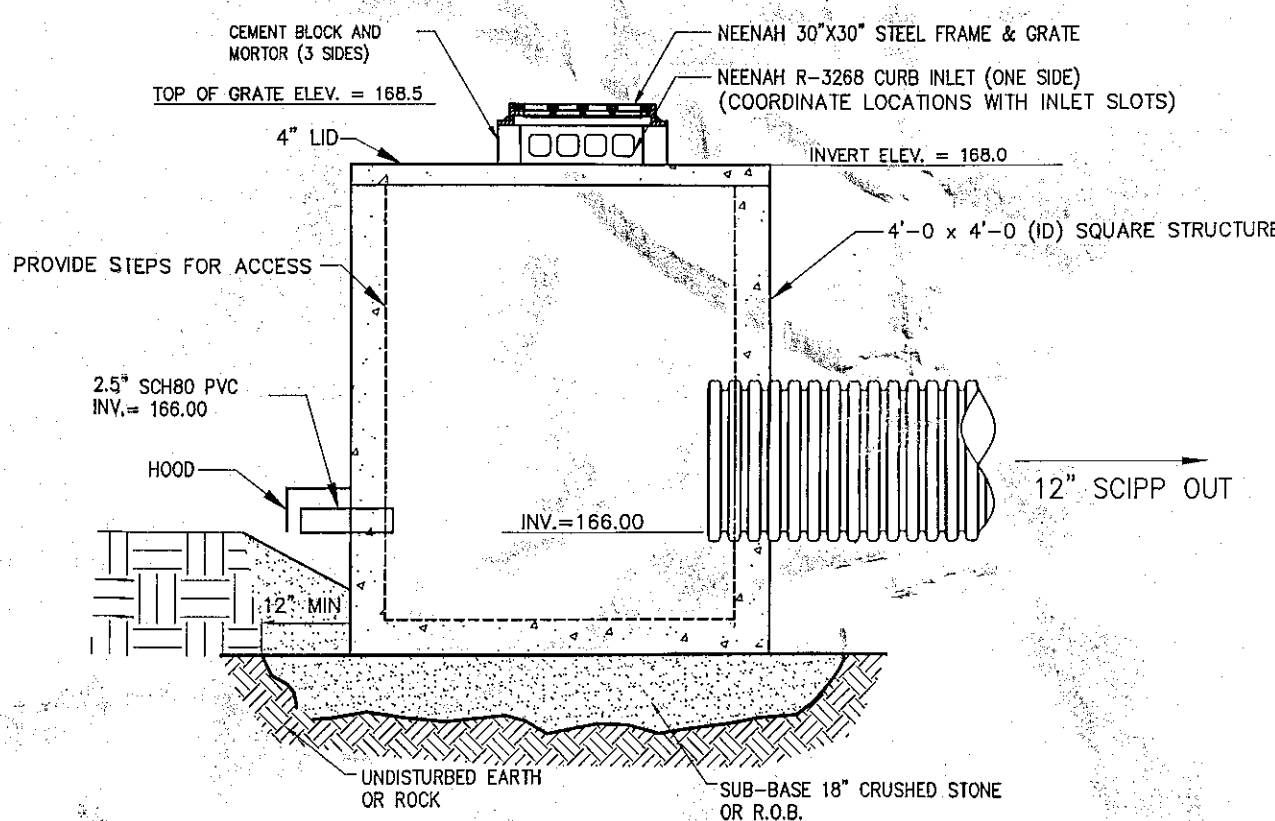
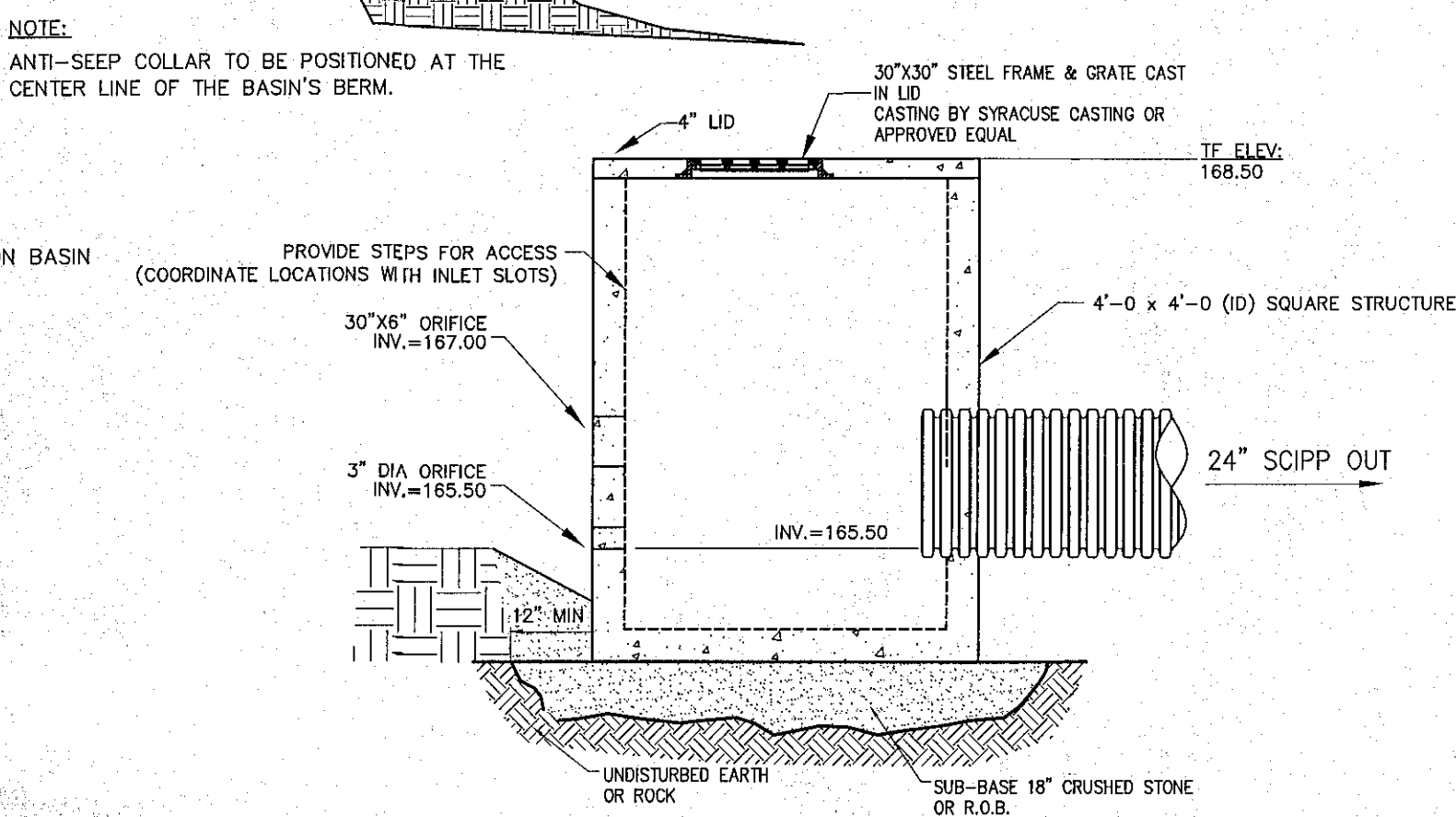
CONCRETE HEADWALL DETAIL



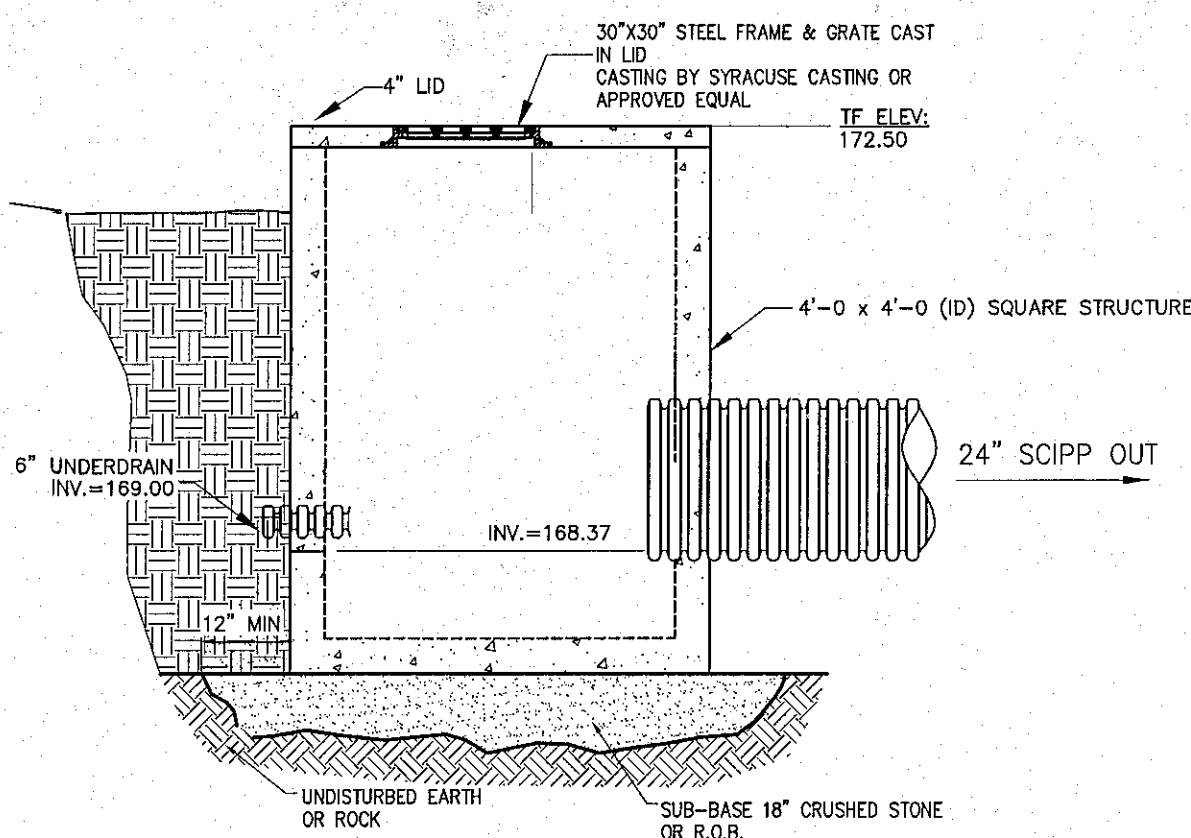
NOTES:
1. WATER MAINS SHALL BE SEPARATED FROM STORM SEWER, SANITARY SEWER, NON-POTABLE IRRIGATION MAINS, AND FORCE MAINS BY A MINIMUM CLEAR VERTICAL DISTANCE OF 18 INCHES MEASURED BETWEEN THE BOTTOM OF THE UPPER PIPE AND THE TOP OF THE LOWER PIPE. THE 18 INCHES MINIMUM VERTICAL SEPARATION DISTANCE DOES NOT APPLY TO SEPARATIONS OF SEWER LATERALS AND POTABLE WATER MAIN PIPELINE INSTALLATIONS. ALSO, WATER MAINS SHALL BE SEPARATED FROM STORM SEWER, SANITARY SEWER AND FORCE MAINS BY 10 FEET.
2. ALL CROSSINGS WITH VERTICAL CLEARANCE LESS THAN 18 INCHES SHALL BE MADE USING THICKNESS CLASS 200 ANW/C-300 DRI4, PVC CLASS 165 ANW/C-305, DR 25, PVC FOR PIPES GREATER THAN 12\"/>

TYPICAL PIPE SEPARATION DETAIL

NOTE: 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONTACT DIG SAFELY NEW YORK TO LOCATE ALL UNDERGROUND UTILITIES. 1-800-962-7962

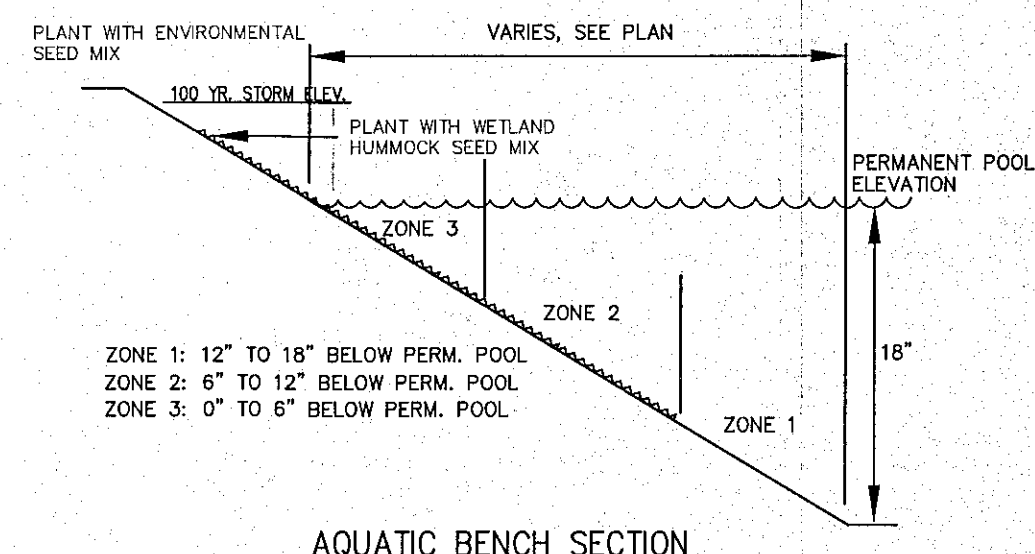


- NOTES:
1. PRECAST REINFORCED CONCRETE MANHOLE AS MANUFACTURED BY THE FORT MILLER CO. INC., FORT MILLER, NEW YORK OR EQUAL (ASTM C 478) STEEL REINFORCEMENT: 6\"/>



POND EMBANKMENT NOTES:

1. THE GROUND SURFACE LOCATED BELOW THE EMBANKMENT SHALL BE STRIPPED OF ALL VEGETATION, ORGANIC, AND OTHERWISE OBJECTIONABLE MATERIALS.
2. AFTER STRIPPING, THE IN-PLACE MATERIAL SHOULD BE MOISTENED, IF DRY, AND COMPACTED BEFORE PLACEMENT OF THE FIRST LAYER OF EMBANKMENT MATERIAL.
3. INCLUSION OF VEGETATION, ORGANIC MATERIALS, OR FROZEN SOIL IN THE EMBANKMENT IS PROHIBITED.
4. THE EMBANKMENT MATERIAL SHALL BE PLACED IN 1' MAXIMUM LIFTS.
5. EACH LIFT WILL BE COMPACTED TO 90% OF THE MAXIMUM DRY DENSITY AS ESTABLISHED BY A MODIFIED PROCTOR COMPACTION TEST.
6. THE MATERIAL BEING USED FOR THE EMBANKMENT SHALL BE FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS, OR OTHER OBJECTIONABLE MATERIALS.
7. RELATIVELY PERVIOUS MATERIALS SUCH AS GRAVEL (I.E. UNIFIED SOIL CLASSES GW, GP, SW, & SP) SHALL NOT BE PLACED IN THE EMBANKMENT.
8. BACKFILL AROUND CONDUITS WITHIN THE EMBANKMENT SHALL BE PLACED IN 4\"/>



NOTE:
CONTRACTOR TO MONITOR WATER LEVELS WITHIN THE NEWLY CREATED POND AT THE TIME OF SEEDING TO ENSURE PROPER PLACEMENT AND GROWING CONDITIONS ARE PROVIDED TO ENSURE VEGETATION IS ESTABLISHED. CONTRACTOR WILL BE RESPONSIBLE FOR THE WATERING AND MAINTENANCE OF ALL LANDSCAPED AREAS FOR (30) DAYS.

POND PLANTING DETAIL

NOT TO SCALE
(NYSDEC STORMWATER DESIGN MANUAL TYPE P-1)

ESM - ENVIRONMENTAL SEED MIX

(ENVIRONMENTAL SEED MIX IS NOT TO BE USED IN ANY WETLAND AREAS)

GRASS NAMES	PERCENT BY WEIGHT
KENTUCKY BLUE GRASS	15%
PERENNIAL RYE GRASS	20%
TIMOTHY	15%
ORCHARD GRASS	10%
BIRDSFOOT TREFOIL	15%
RED CLOVER	10%
TALL FESCUE	10%
REED CANARY GRASS	05%

SEED AT 20 LBS/ACRE ABOVE 100 YR. STORM EL.

WHM - WETLAND HUMMOCK SEED MIX

(SOUTHERN TIER CONSULTING, INC.)

CAREX VULPINOIDEA	FOX SEDGE	20%
LEERSIA ORYZOIDES	RICE CUT GRASS	15%
CAREX LURIDA/CRINITA	SEDGE	15%
JUNCUS EFFUSUS	SOFT RUSH	20%
SCIRPUS ATROVIRENS/CYPERINUS	BULRUSH	15%
CAREX COMOSA/INTUMESCENS	SEDGE	15%

SEED AT 4 LBS/ACRE ON SATURATED GROUND FROM ZONE 2 TO THE 100 YR. STORM EL.

AQUATIC BENCH PLANTINGS

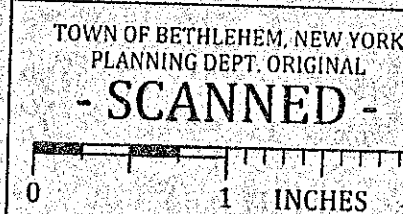
HERBACEOUS COMMUNITY (EW - EMERGENT WETLAND)

ZONE	BOT. NAME	COMMON NAME	SIZE	SPACING
1	POTAMOGETON NODOSUS	LONG-LEAVED POND WEED	BR	48"
1	ELODEA CANADENSIS	BROAD WATER WEED	BR	48"
1	LEMNA SP.	DUCKWEED	BR	48"
2	PONTEDERIA CORDATA	PICKERELWEED	BR	48"
2	SCIRPUS PUNGENS	COMMON THREE-SQUARE SEDGE	BR	48"
2	SCIRPUS VALIDUS	SOFT-STEM BULRUSH	BR	48"
3	PANICUM VIRGATUM	SWITCHGRASS	BR	48"
3	SCIRPUS CYPERINUS	WOOL GRASS	BR	48"
3	POLYGONUM SPP.	SMART WEED	BR	48"

PLANT BARE ROOT HERBACEOUS PLANTS IN RANDOM, STAGGERED PATTERN AT APPROPRIATE SPACING. UNDER SEED PLANTS IN ZONE 2 & 3 WITH WETLAND HUMMOCK SEED MIX.

STORMWATER POND LANDSCAPING DETAIL

(NOT TO SCALE)



PLANNING BOARD
TOWN OF BETHLEHEM
ALBANY COUNTY, NEW YORK
By direction of the Chairman,
These drawings are hereby approved.
See sheet(s) 25 of 26
for data and signature.

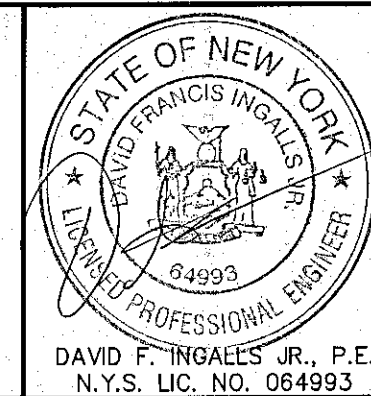
ALBANY COUNTY DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH SERVICE

By direction of the Commissioner of Health, these plans are hereby approved. See first sheet for data and signature.

NO.	DATE	REVISIONS	BY:
4	11/16/15	REVISED PER TOWN COMMENTS	PJY
3	10/6/15	REVISED PER TOWN COMMENTS	PJY
2	9/13/15	REVISED PER TOWN & TDE COMMENTS	PJY
1	8/19/15	REVISED PER TOWN & TDE COMMENTS	PJY

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STORM DETAILS
NEWELL PLACE
WEMPLE ROAD

TOWN OF BETHLEHEM
ALBANY COUNTY STATE OF NEW YORK

DATE: MAY 26, 2015
DRAWN BY: PJY
CADD FILE: 110380DF
CHECKED BY: DFI
JOB NO. 11-038
SCALE: AS SHOWN
SHEET 25 OF 27