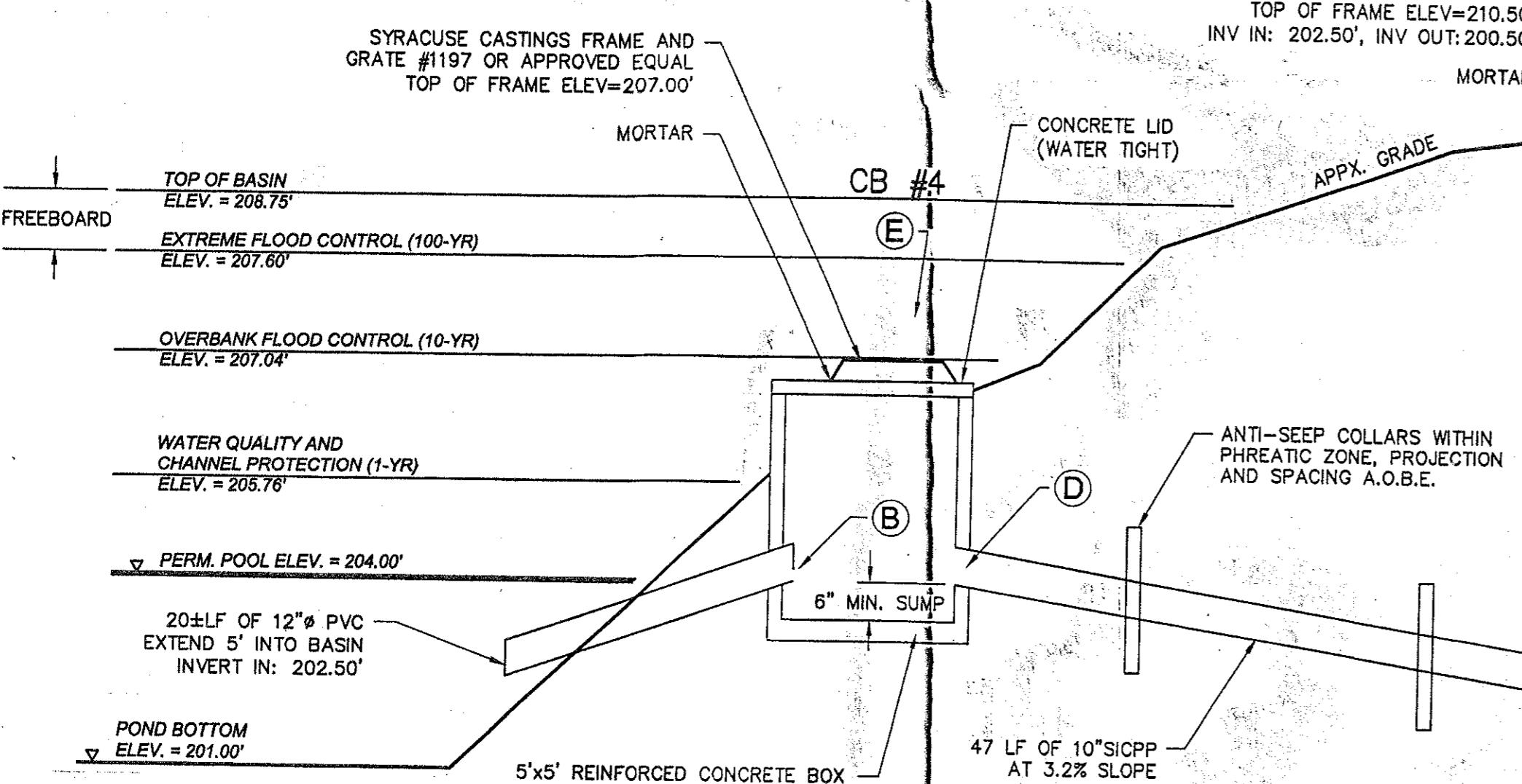


PLANT LIST BASIN F

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY.
TLA	TYPA SP.	CACTAIL	TUBES	SPACED EVENLY	112
SAC	SCIRPUS ALCUTUS	HARDSTEM BURRUSH	TUBES	SPACED EVENLY	0
IVE	IRIS VERSICOLOR	BLUE FLAG IRIS	TUBES	SPACED EVENLY	163
ARE	ALNUS REGOSA	SPECKLED ALDER	7 GAL	AS SHOWN	0
ARU	ACER RUBRUM	RED MAPLE	15 GAL	AS SHOWN	0
BIN	BETULA NIGRA	RIVER BIRCH	N/A	N/A	0
CSE	CORNUS SERICEA 'CARDINAL'	RED OSIER DOGWOOD	N/A	N/A	0
COC	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	N/A	N/A	0
IVER	ILEX VERTICILLATA	WINTERBERRY	N/A	N/A	0
GRI	GINGKO BILOBA	GINGKO	2 1/2" - 3" CAL	AS SHOWN	7
SAF	SALIX FLAME'	WILLOW	3' - 4'	AS SHOWN	7

AB-XX=AQUATIC BENCH-XX WIDE



ORIFICE ID	INVERT ELEV.	DESCRIPTION	OPERATIONAL SETTING
(A)			N/A
(B)	202.50	4" ORIFICE IN 12" REVERSE PIPE	N/A
(C)			N/A
(D)	204.00	12" SICPP	N/A
(E)	207.00	24" GRATE	N/A

OUTLET STRUCTURE #4 - BASIN F

N.T.S.

ALBANY COUNTY DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH SERVICES

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

11-03

DETENTION POND PLANTING SPECIFICATIONS

1. SHALLOW WATER EMERGENT COMMUNITIES.
2. PRIOR TO PLANTING, PUMP POND DOWN TO A LEVEL THAT WILL FACILITATE INSTALLATION OF EROSION CONTROL MEASURES.
3. PLUGS SHALL BE A MINIMUM SIZE OF 2 INCHES IN DIAMETER AND 4 INCHES IN LENGTH. EACH PLUG SHALL BE THOROUGHLY ROOTED.
4. WATER EMERGENT PLUGS SHALL BE PLANTED AT THE PERMANENT WATER LINE TO 6 INCHES BELOW THE PERMANENT WATER LINE.
5. PLANTS SHALL BE EVENLY DISTRIBUTED AROUND THE POND, PLANTING IN GROUPS OF 5 - 7 PLANTS FOR EACH SPECIES AND SPACED 18 INCHES ON CENTER.
6. NO INSTALLATION SHALL OCCUR UNTIL TEMPORARY STABILIZATION OF THE LOT HAS OCCURRED AND THE WATER LEVEL OF THE PERMANENT POOL HAS BEEN REACHED AND SUSTAINED.

ESTABLISHING AND MAINTAINING TREES, SHRUBS, AND VINES

GENERAL:

- 1.) PLANTS SHALL CONFORM TO THE SPECIES, VARIETY, SIZE, NUMBER, AND CONDITIONS AS STATED ON LANDSCAPE DRAWINGS. "AMERICAN STANDARD FOR NURSERY STOCK," QUALITY
- 2.) DURABLE, LEGIBLE LABELS WITH THE SCIENTIFIC AND COMMON NAME AND CULTIVAR SHALL BE SECURELY ATTACHED TO PLANTS, BUNDLES OF SEEDLINGS, CONTAINERS, AND/OR FLATS.
- 3.) PRIOR TO DELIVERY, THE TRUNK, BRANCHES, AND FOLIAGE OF THE PLANTS SHALL BE SPRAYED WITH NON-TOXIC ANTIDESICCANT, APPLIED ACCORDING TO THE MANUFACTURERS

RECOMMENDATIONS:

- 1.) DECIDUOUS TREES AND SHRUBS: APRIL 1 TO JUNE 1 AND OCTOBER 15 TO DECEMBER 15.
- 2.) EVERGREEN TREES AND SHRUBS: APRIL 1 TO JUNE 1 AND SEPTEMBER 1 TO NOVEMBER 15.

SPACING:

- 1.) ALL TREES AND SHRUBS SHALL BE PLANTED AS SPECIFIED ON LANDSCAPE DRAWINGS OR AS SPECIFIED IN THE FIELD BY THE DESIGN ENGINEERS OR LANDSCAPE ARCHITECT.
- 2.) FOR CLUMPS, PLANT SPACING SO MATURE SHRUBS WILL BE TOUCHING OR OVERLAPPING BY ONLY 1 OR 2 FEET.

SITE PREPARATION:

- 1.) INDIVIDUAL SITES FOR PLANTING SEEDLINGS SHALL BE PREPARED BY SCALPING THE SOD AWAY FROM A FOUR FOOT SQUARE AREA WHERE THE TREE OR SHRUB IS TO BE PLANTED.
- 2.) ALL PLANTING BEDS SHALL BE CULTIVATED TO A DEPTH OF 8 INCHES, OR CHEMICALLY TREATED FOR WEED CONTROL.

PLANTING:

- 1.) PLANTS SHALL BE LOCATED AS SHOWN ON PLANS AND/OR DRAWINGS AND, WHERE NECESSARY, LOCATED ON THE SITE BY STAKES, FLAGS OR OTHER MEANS.
- 2.) PRIOR TO PLANTING, REMOVE GALVANIZED WIRE BASKET SECURING ROOT BALL, UNIE AND ROLL DOWN BURLAP OR REMOVE AS MUCH TREATED BURLAP AS POSSIBLE.
- 3.) THE PLANTS SHALL BE SET UPRIGHT IN HOLE.
- 4.) THE PLANTING HOLE SHALL BE THREE TIMES DEEPER THAN THE DIAMETER OF THE PLANT, AT A DEPTH THAT ALLOWS THE ROOT FLAIR TO BE ABOVE FINISHED GRADE AND SHALL BE BACKFILLED WITH NATIVE TOP SOIL WHERE POSSIBLE.
- 5.) ALL PLANTS SHALL BE THOROUGHLY WATERED ON THE SAME DAY OF PLANTING. PLANTS THAT HAVE SETTLED SHALL BE RESET TO GRADE.

WRAPPING:

- 1.) IMMEDIATELY AFTER PLANTING, WRAP DECIDUOUS TREE TRUNKS FROM THE BOTTOM TO THE FIRST LIMB WITH A 4 INCH WIDE BITUMINOUS IMPREGNATED, INSECT RESISTANT TAPE OR PAPER MANUFACTURED FOR THAT PURPOSE. TIE WITH JUTE (BAG STRINGS) AT TOP AND BOTTOM. THE WRAP SHOULD BE REMOVED PER NURSERY RECOMMENDATIONS.

MULCHING:

- 1.) MULCH THE DISTURBED AREA AROUND INDIVIDUAL TREES AND SHRUBS WITH A 2-3" LAYER OF WOOD CHIPS. PULL WOOD CHIPS 1 INCH AWAY FROM THE BASE OF SHRUBS TO AVOID FUNGUS DEVELOPMENT.

CLEAN-UP AND MAINTENANCE:

- 1.) AFTER ALL WORK IS COMPLETE, ALL EXCESS SOIL, DEBRIS, ETC., SHALL BE REMOVED FROM THE SITE.
- 2.) WATER PLANTS TWO WEEKS AFTER PLANTING. FOR TWO YEARS, WATER PLANTS EVERY TWO WEEKS DURING DRY PERIODS, WHICH EXCEED THREE WEEKS WITHOUT A GOOD SOAKING. REMOVE TRUNK WRAP ONE YEAR AFTER PLANTING OR AS RECOMMENDED BY NURSERY.

PRUNING:

- 1.) REMOVE TREES, LIMBS, AND LIMB STUBS TO THE FOLLOWING WIDTHS AND HEIGHTS SPECIFIED FOR THE INTENDED USE.
- 2.) REMOVE DEAD, DISEASED, OR DYING LIMBS.
- 3.) DO NOT REMOVE MORE THAN ONE-THIRD OF THE LIVE CROWN OF A TREE IN A YEAR.
- 4.) USE BRANCH BARK RIDGE AS A REFERENCE FOR THE STARTING POINT AND ANGLE OF CUT.
- 5.) USE THE 3 OR 4 CUT PRUNING METHOD ON ALL BRANCHES OVER 2 INCHES IN DIAMETER: FIRST CUT ABOUT ONE-THIRD THE WAY THROUGH THE UNDERSIDE OF THE LIMB (ABOUT REMOVED, THERE IS NO SPLINTERING OF THE MAIN TREE TRUNK). REMOVE THE STUB. IF THE BRANCH IS LARGER THAN 5-6 INCHES IN DIAMETER, USE THE FOUR CUT SYSTEM. CUTS 1 AND 2 REMAIN THE SAME AND CUT 3 SHOULD BE FROM THE UNDERSIDE OF THE LIMB, ON THE OUTSIDE OF THE BRANCH COLLAR. CUT 4 SHOULD BE FROM THE TOP AND IN ALIGNMENT WITH THE 3RD CUT. CUT 3 SHOULD BE 1/4 TO 1/3 THE WAY THROUGH THE LIMB. THIS WILL PREVENT THE BARK FROM PEELING DOWN THE TRUNK. DO NOT PAINT THE CUT SURFACE.

PROTECTING TREES IN HEAVY USE AREA:

- 1.) THE COMPACTION OF SOIL OVER THE ROOTS OF TREES AND SHRUBS BY THE TRAMPLING OF CONSTRUCTION EQUIPMENT SHOULD BE AVOIDED. A ZONE OF PROTECTION SHALL BE ESTABLISHED AROUND PLANTED TREES AND SHRUBS AND EXISTING TREES AND SHRUBS THAT ARE TO REMAIN. APPLY AND MAINTAIN A 3 TO 4 INCH LAYER OF UNDECAYED WOOD CHIPS OR 2 INCHES OF NO. 2 WASHED, CRUSHED GRAVEL.

TEMPORARY CRITICAL AREA PLANTING SPECIFICATIONS

- 1.) WATER MANAGEMENT PRACTICES MUST BE INSTALLED AS APPROPRIATE FOR SITE CONDITIONS. THE AREA MUST BE ROUGH GRADED AND SLOPES PHYSICALLY STABLE. LARGE DEBRIS AND ROCKS ARE USUALLY REMOVED. SEEDBED MUST BE SEEDED WITHIN 24 HOURS OF DISTURBANCE OR SCARIFICATION OF THE SOIL SURFACE WILL BE NECESSARY PRIOR TO SEEDING.
- 2.) FERTILIZER AND LIME ARE NOT TYPICALLY USED FOR TEMPORARY SEEDINGS.
- 3.) PLANTING IN SPRING OR SUMMER OR EARLY FALL, THEN SEED THE AREA WITH RYEGRASS (ANNUAL OR PERENNIAL) AT 30 LBS. PER ACRE (APPROXIMATELY 0.7 LB. /1000 SQ. FT. OR USE 1 LB. /1000 SQ. FT.).
- 4.) PLANTING IN LATE FALL OR EARLY WINTER, THEN SEED CERTIFIED 'AROSTOOK' WINTER RYE (CEREAL RYE) AT 100 LBS. PER ACRE (2.5 LBS. /1000 SQ. FT.).
- 5.) A NEW SEEDING METHOD MAY BE USED THAT WILL PROVIDE UNIFORM APPLICATION OF SEED TO THE AREA AND RESULT IN RELATIVELY GOOD SOIL TO SEED CONTACT.
- 6.) MULCH THE AREA WITH HAY OR STRAW AT 2 TONS/ACRE (APPROX. 90 LBS. /1000 SQ. FT. OR 2 BALES). QUALITY OF HAY OR STRAW MULCH ALLOWABLE WILL BE DETERMINED BASED ON LONG TERM USE AND VISUAL CONCERN. MULCH ANCHORING WILL BE REQUIRED WHERE WIND OR AREAS OF CONCENTRATED WATER ARE OF CONCERN. WOOD FIBER HYDROMULCH OR OTHER SPRAYABLE PRODUCTS APPROVED FOR EROSION CONTROL (NYLON WEB OR MESH) MAY BE USED IF APPLIED ACCORDING TO MANUFACTURERS' SPECIFICATION. CAUTION IS ADVISED WHEN USING NYLON OR OTHER SYNTHETIC PRODUCTS. THEY MAY BE DIFFICULT TO REMOVE PRIOR TO FINAL SEEDING.

WORK WITHIN R.O.W.

- 1.) REFER TO PLAN SHEET 9 "TYPICAL ROADWAY SECTIONS AND SITE DETAILS" FOR ADDITIONAL DETAILS AND SPECIFICATIONS REGARDING DEMOLITION AND RECONSTRUCTION WITHIN R.O.W.
- 2.) ALL TRAFFIC CONTROL MEASURES TO CONFORM TO THE SPECIFICATIONS OF THE NATIONAL (FHWA) MUTCD, NY'S SUPPLEMENT TO THE NATIONAL MUTCD, AND LOCAL HIGHWAY DEPARTMENT SPECIFICATIONS, LATEST EDITIONS. A PLAN SHALL BE PREPARED OUTLINING THE TRAFFIC CONTROL MEASURES TO BE PROVIDED IN ACCORDANCE WITH THE REFERENCED SPECIFICATIONS PRIOR TO COMMENCEMENT OF ANY WORK WITHIN THE R.O.W.
- 3.) ALL WORK SHALL BE PERFORMED TO ENSURE THAT POST-CONSTRUCTION CONDITIONS MEET OR EXCEED THE CONDITIONS PRIOR TO THE START OF WORK.
- 4.) NO DRAINSAGE CONVEYANCES WITHIN THE R.O.W. (PIPING, DITCHES, GENERAL DRAINAGE PATTERNS, ETC.) SHALL BE ALTERED IN POST-CONSTRUCTION CONDITIONS EXCEPT AS SPECIFIED.
- 5.) ALL WORK WITHIN THE R.O.W. SHALL BE IMMEDIATELY STABILIZED UPON COMPLETION OF WORK VIA SUBBASE AND ASPHALT PLACEMENT, SEEDING, OR OTHER SUITABLE MEASURES AS ORDERED BY THE ENGINEER OR REGULATORY OFFICIALS.
- 6.) NO WORK SHALL COMMENCE WITHIN THE R.O.W. UNTIL ALL MATERIALS AND EQUIPMENT ARE ON SITE THAT ARE REQUIRED FOR THE WORK TO BE PERFORMED.
- 7.) THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING AND FINANCING ANY PERMITS AND BONDING REQUIRED FOR WORK WITHIN THE R.O.W.

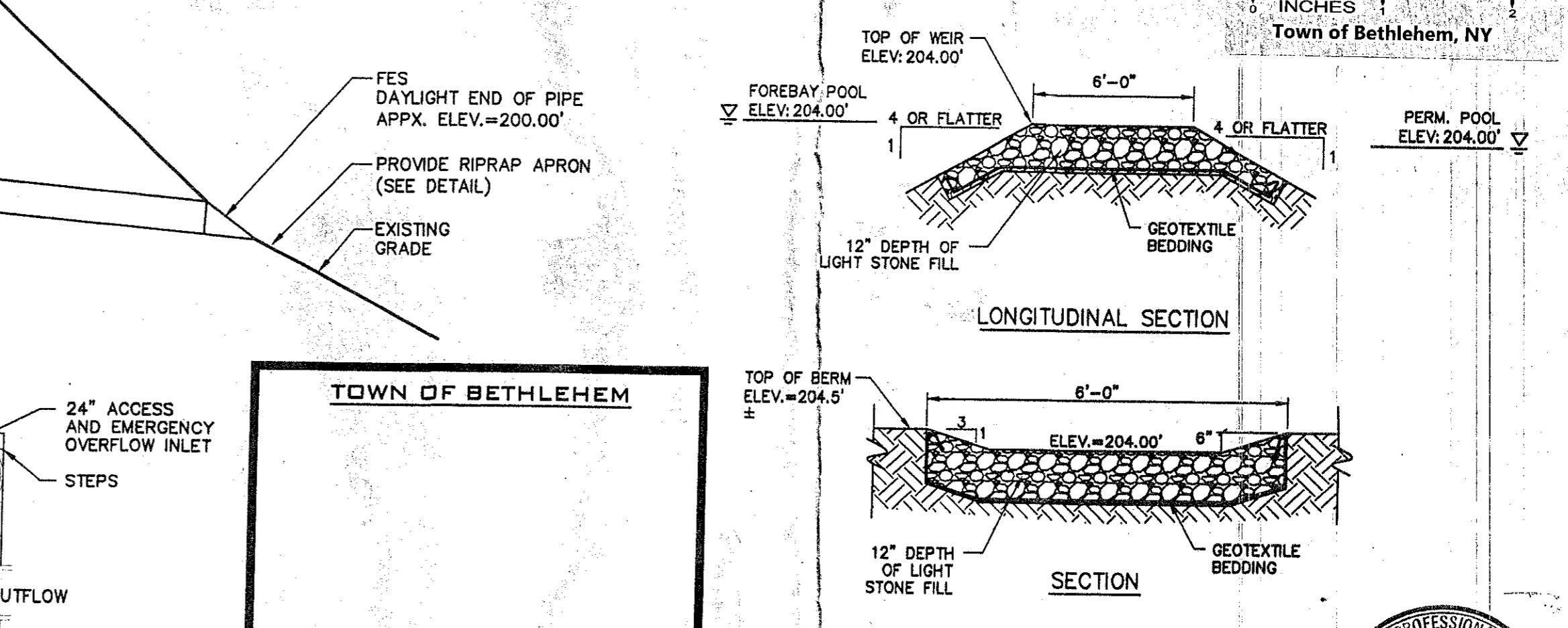
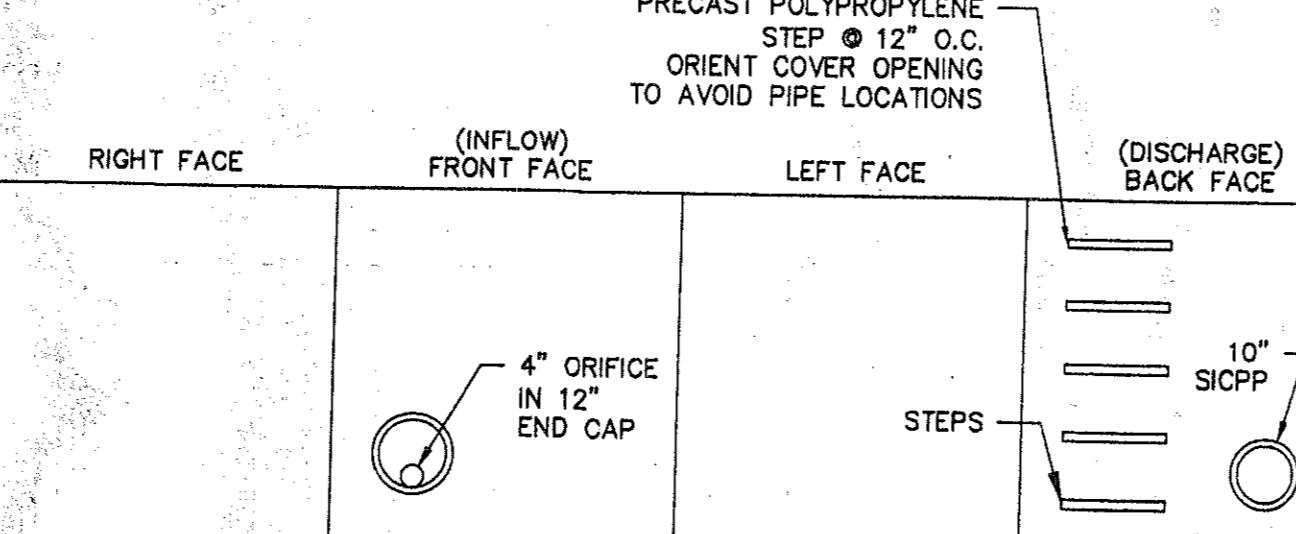
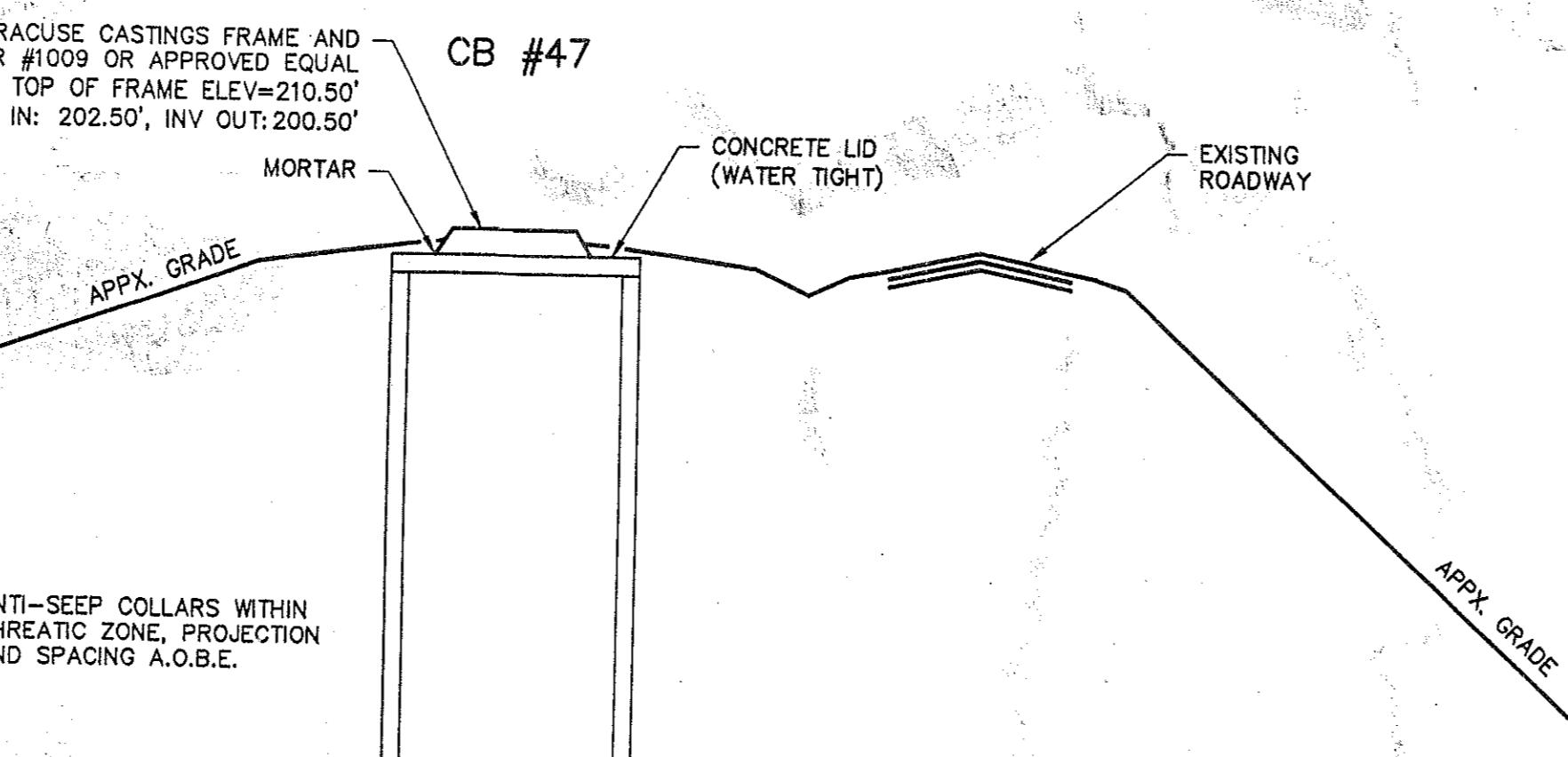
ANTI-SEEP COLLAR DESIGN

DESIGN IN ACCORDANCE WITH NYSDCC STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

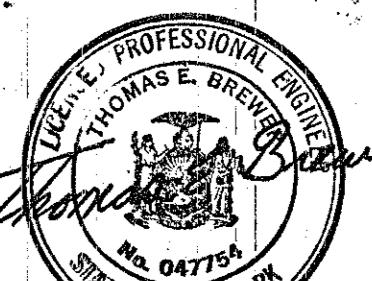
BASIN	DIM. "Y"	EMB. SLOPE	PIPE SLOPE	PIPE DIA.	SATURATION LENGTH L_s	COLLAR SIZE	QUANTITY
F	4.75	4:1	3.2%	0.83"	44'	3" X 3"	(3)

COLLARS TO BE "AGRI-GRAN ANTI-SEEP COLLARS" OR APPROVED EQUAL.

COLLAR INSTALLATION SPACING TO BE DIVIDED EQUALLY ACROSS SATURATION LENGTH "L_s" AS SHOWN IN THIS TABLE. SATURATION LENGTH BEGINS AT BASIN OUTLET STRUCTURE.



FOREBAY TO WET POND WEIR



PLANNING BOARD
TOWN OF BETHLEHEM
ALBANY COUNTY, NEW YORK
By direction of the Chairman.
These drawings are hereby approved.
See sheet 11
and signature.

BREWER ENGINEERING ASSOCIATES, P.C.
CONSULTING ENGINEERS • PLANNERS
743 COLUMBIA TURNPIKE, EAST GREENBUSH, NEW YORK 12061
PHONE: 518-477-5223

MISCELLANEOUS SITE DETAILS AND BASIN 'F'
DRAWN BY: RTT DATE: 02/15/14 CHECKED BY: TDS SCALE: AS NOTED
REVISION: DATE: DRAWING NUMBER: TITLE: MISCELLANEOUS SITE DETAILS AND BASIN 'F'

VAN DYKE SPINNEY PHASE 2
TOWN OF BETHLEHEM COUNTY OF ALBANY STATE OF NEW YORK
DRAWING NUMBER: 11 23
UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW
JOB NO. 11-03