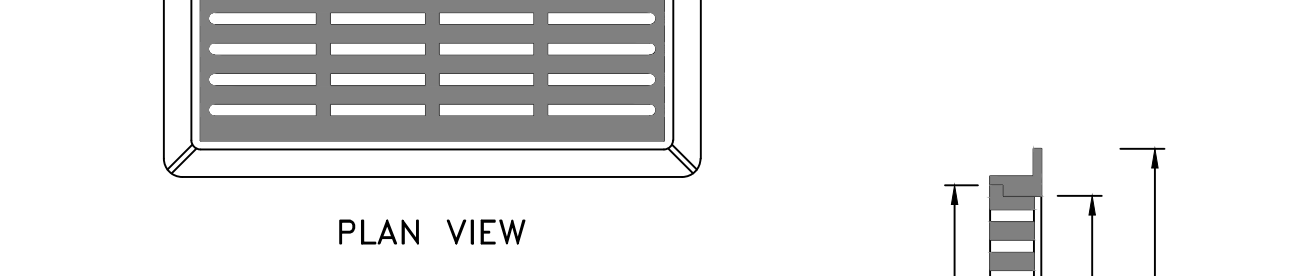
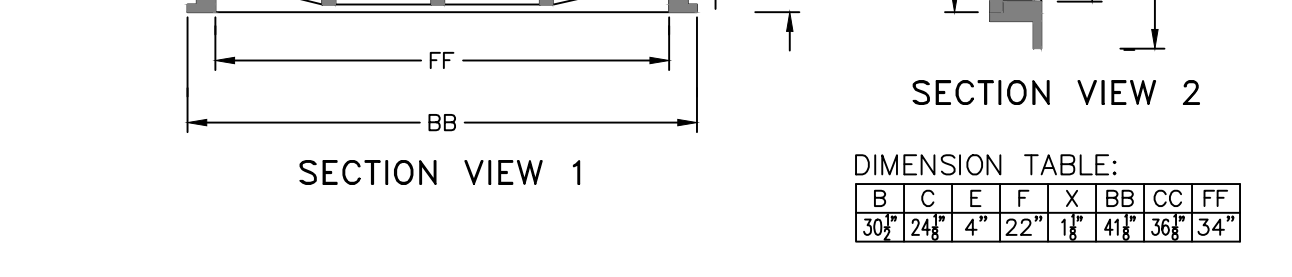


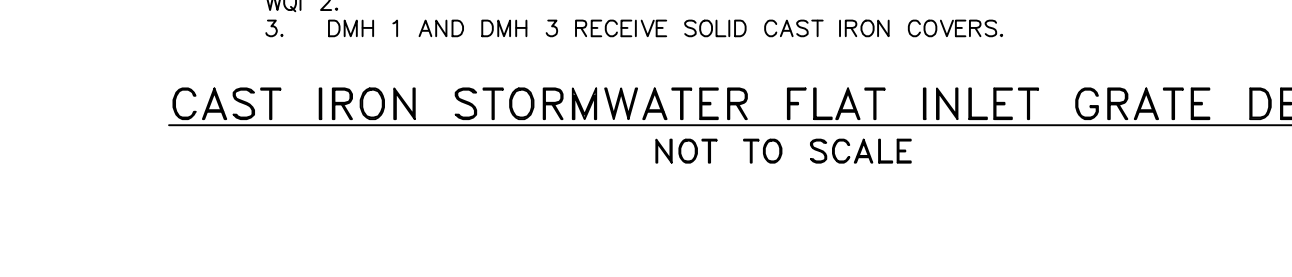
NOTES:
 1. PRECAST CONCRETE CATCH BASIN WITH CONCRETE STRENGTH OF 4000 PSI @ 28 DAYS.
 2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE CATCH BASIN AND PARGE AROUND.
 3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE WITHIN 10 FEET OF A WATER MAIN (OR SERVICE LINE) OR A SEWER MAIN (OR SERVICE LATERAL) SHALL BE MADE WATER-TIGHT.
 4. PROVIDE A MINIMUM 0.1\"/>



NOTES:
 1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 2541, OR APPROVED EQUAL.
 2. CATCH BASINS TO RECEIVE CURB INLETS ARE: CB 1-3, CB 5-7, AND CB 10 & 11.



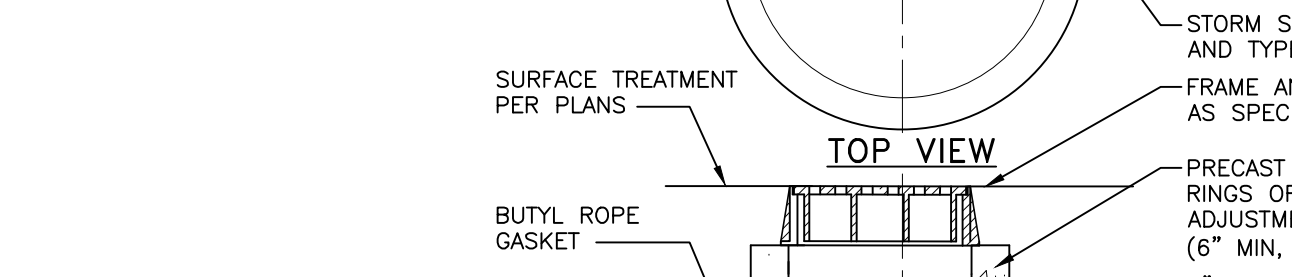
NOTES:
 1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.



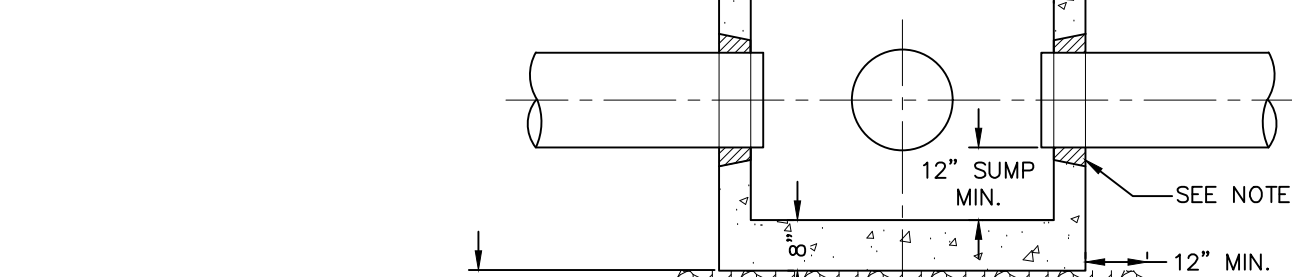
NOTES:
 1. YARD INLET BASINS SHALL BE PRE-CAST REINFORCED CONCRETE. SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI AND SHALL BE IN CONFORMANCE WITH ASTM 478-68. WALLS AND BASE SHALL BE ONE PIECE CONSTRUCTION. YARD INLET BASIN SHOWN BY EXPANDED SUPPLY PRODUCTS (ESP), 3330 ROUTE 9, COLD SPRING, NY (845) 265-3771.
 2. BACKFILL USING SELECT MATERIAL, COMPACTED IN 6\"/>



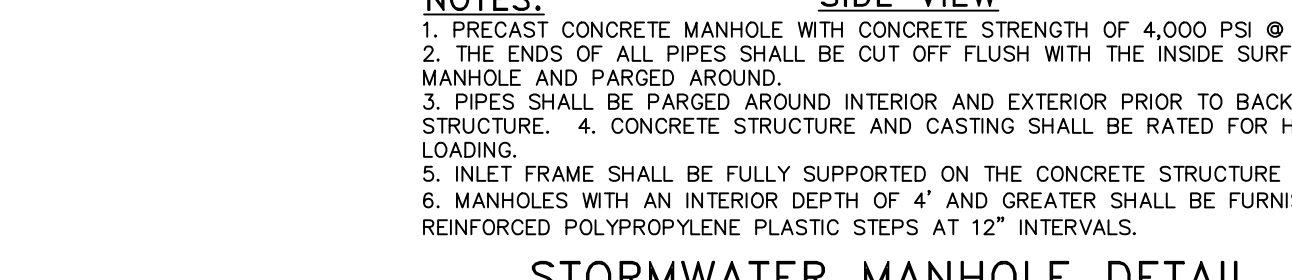
NOTES:
 1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 3433, OR APPROVED EQUAL.
 2. CATCH BASINS TO RECEIVE FLAT INLETS ARE: CB 4, CB 8 & 9, DMH 2, WQ1 1 AND WQ2 2.
 3. DMH 1 AND DMH 3 RECEIVE SOLID CAST IRON COVERS.



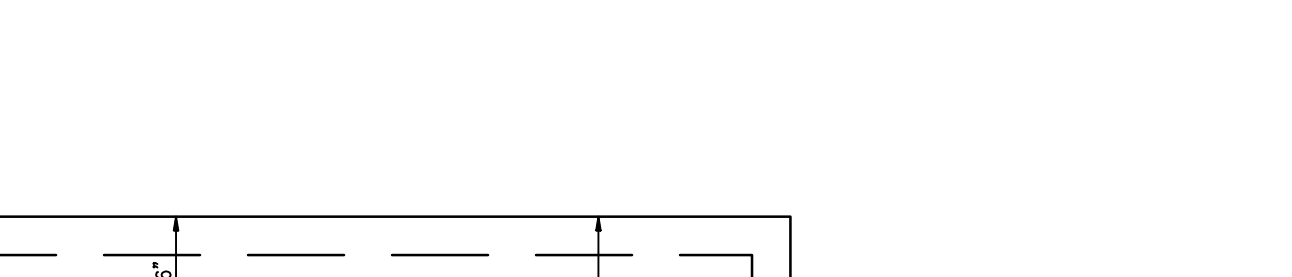
NOTES:
 1. PRECAST CONCRETE MANHOLE WITH CONCRETE STRENGTH OF 4000 PSI @ 28 DAYS.
 2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE MANHOLE AND PARGE AROUND.
 3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE WITHIN 10 FEET OF A WATER MAIN (OR SERVICE LINE) OR A SEWER MAIN (OR SERVICE LATERAL) SHALL BE MADE WATER-TIGHT.
 4. PROVIDE A MINIMUM 0.1\"/>



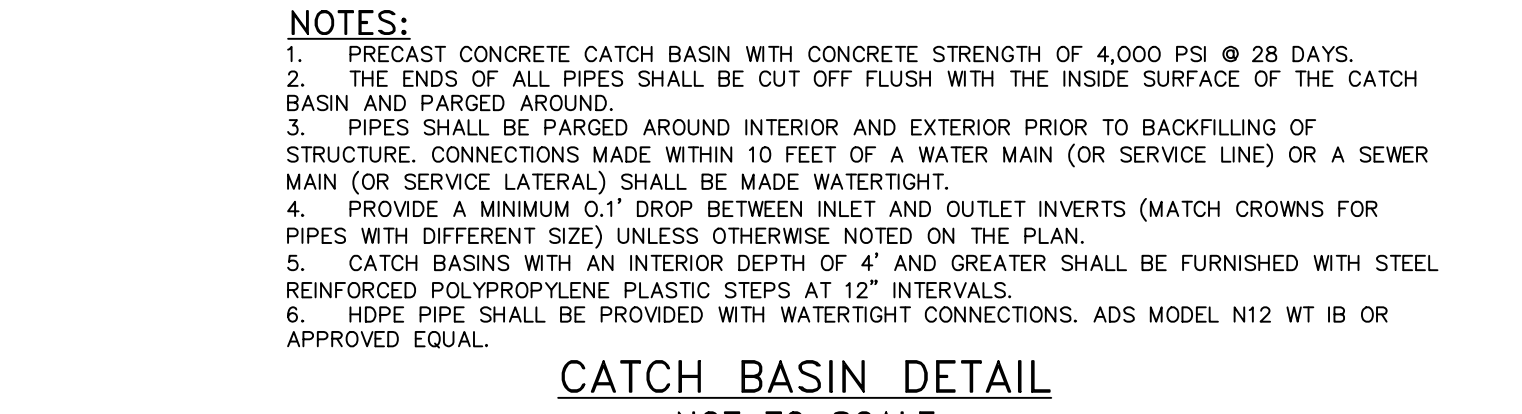
NOTES:
 1. MINIMUM 1\"/>



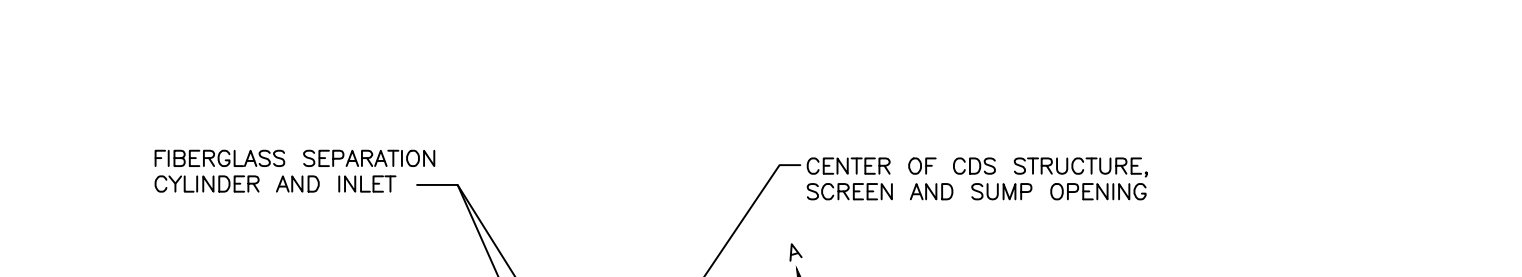
NOTES:
 1. THE INFILTRATION BASIN SHALL NOT SERVE AS A SEDIMENT TRAP DURING CONSTRUCTION AND SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITY.
 2. RELATIVELY LIGHT TRACKED EQUIPMENT IS RECOMMENDED FOR CONSTRUCTION PURPOSES TO AVOID COMPACTION OF THE BASIN FLOOR.
 3. A HEAVY FLOOR SURFACE TEXTURE SHALL BE RETAINED ALONG THE BASIN FLOOR, ESPECIALLY WITHIN THE AREA IDENTIFIED AS BEING USED FOR INFILTRATION.
 4. ESTABLISH SLOPE, SIZING AND FLOOR TO PREVENT EROSION AND SLOUGHING AND TO PROVIDE A NATURAL MEANS OF MAINTAINING RELATIVELY HIGH INFILTRATION RATES. GRASSES OF THE PEGACEAE FAMILY (ALTA FESCUE, WESTERN PEGACE OR RED FESCUE) ARE SPECIFIED ON THE PLAN, PRIMARILY DUE TO THEIR ADAPTABILITY TO DRY SANDY SOILS, DROUGHT RESISTANCE, HARDNESS, AND ABILITY TO WITHSTAND BREEZING WINDS. FESCUE WILL ALSO ALLOW FOR LONG INTERVALS BETWEEN MOWINGS, WHICH SHALL OCCUR TWICE PER YEAR MINIMUM, TYPICALLY IN JUNE AND SEPTEMBER IS SATISFACTORY.
 5. THE BERMS SHALL BE SUFFICIENTLY COMPACTED AND OF SUCH MATERIAL TO PREVENT SEEPAGE.



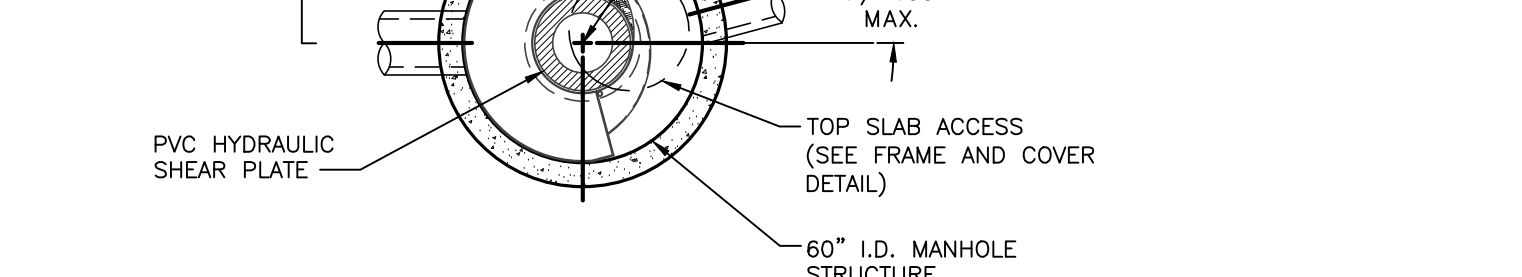
NOTES:
 1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.



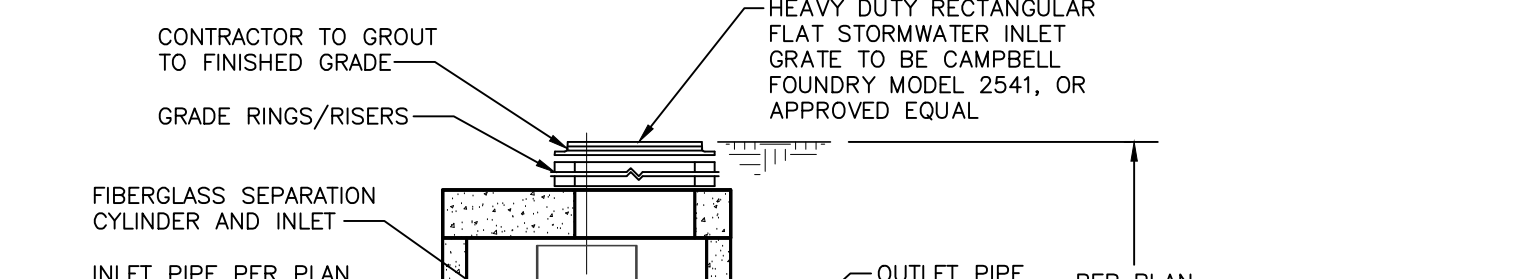
NOTES:
 1. STORMWATER TREATMENT SYSTEM (SMTS) SHALL BE DESIGNED TO MEET PERFORMANCE GOALS BASED ON FULL SCALE LABORATORY PERFORMANCE DATA.
 2. SMTS SHALL BE DESIGNED TO RETAIN FLATABLES AND TRAPPED SEDIMENT AT FLOW RATES UP TO AND INCLUDING PEAK TREATMENT CAPACITY.
 3. SMTS INVERTS IN AND OUT SHALL BE AT THE SAME ELEVATION.
 4. SMTS SHALL NOT BE COMPROMISED BY EFFECTS OF DOWNSTREAM TALKWATER.
 5. SMTS SHALL HAVE NO INTERNAL COMPONENTS THAT OBSTRUCT MAINTENANCE ACCESS.
 6. PIPE ORIENTATION MAY VARY; SEE SITE PLAN FOR SIZE AND LOCATION.
 7. PURCHASER SHALL NOT BE RESPONSIBLE FOR ASSEMBLY OF INTERNAL COMPONENTS.
 8. ONE MANHOLE FRAME AND COVER SUPPLIED WITH SYSTEM, NOT INSTALLED.
 9. PURCHASER TO PREPARE EXCAVATION AND PROVIDE LIFTING EQUIPMENT.
 10. STRUCTURE SHALL MEET AASHTO H2020 AND CASTINGS SHALL MEET AASHTO M306 LOAD RATING, ASSUMING GROUNDWATER AT, OR BELOW THE OUTLET PIPE INVERT ELEVATION.
 11. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHEET AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE, CLEANING.
 12. SEE GRADING & UTILITY PLAN FOR PIPE ORIENTATION, INVERTS AND SIZES.



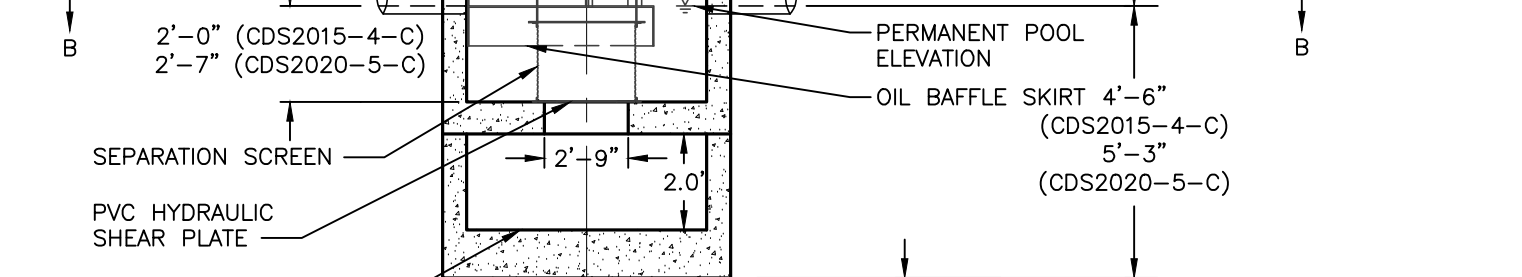
NOTES:
 1. PRECAST CONCRETE MANHOLE WITH CONCRETE STRENGTH OF 4000 PSI @ 28 DAYS.
 2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE MANHOLE AND PARGE AROUND.
 3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE WITHIN 10 FEET OF A WATER MAIN (OR SERVICE LINE) OR A SEWER MAIN (OR SERVICE LATERAL) SHALL BE MADE WATER-TIGHT.
 4. PROVIDE A MINIMUM 0.1\"/>



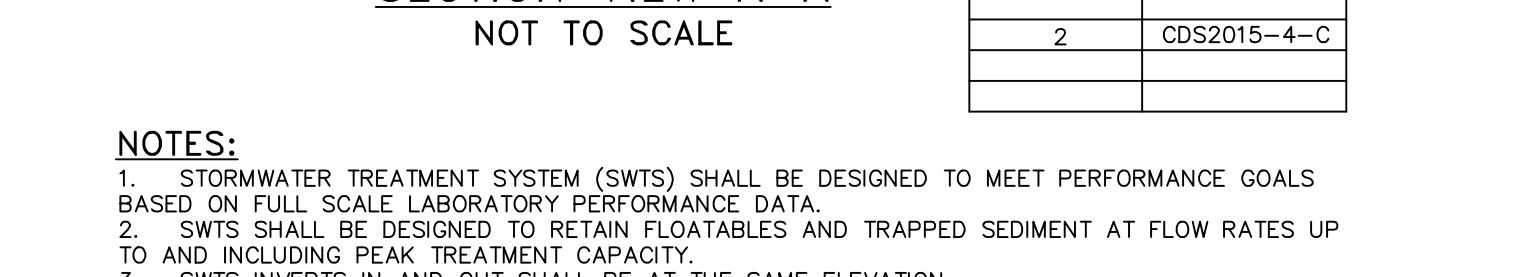
NOTES:
 1. MINIMUM 1\"/>



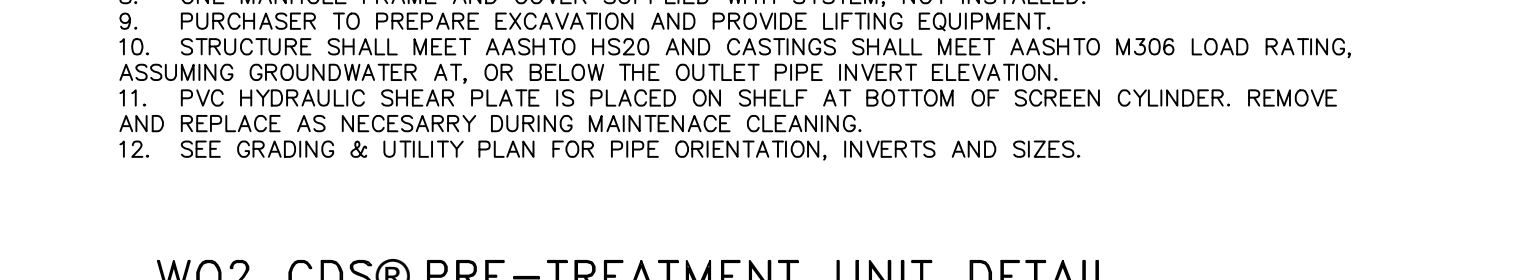
NOTES:
 1. THE INFILTRATION BASIN SHALL NOT SERVE AS A SEDIMENT TRAP DURING CONSTRUCTION AND SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITY.
 2. RELATIVELY LIGHT TRACKED EQUIPMENT IS RECOMMENDED FOR CONSTRUCTION PURPOSES TO AVOID COMPACTION OF THE BASIN FLOOR.
 3. A HEAVY FLOOR SURFACE TEXTURE SHALL BE RETAINED ALONG THE BASIN FLOOR, ESPECIALLY WITHIN THE AREA IDENTIFIED AS BEING USED FOR INFILTRATION.
 4. ESTABLISH SLOPE, SIZING AND FLOOR TO PREVENT EROSION AND SLOUGHING AND TO PROVIDE A NATURAL MEANS OF MAINTAINING RELATIVELY HIGH INFILTRATION RATES. GRASSES OF THE PEGACEAE FAMILY (ALTA FESCUE, WESTERN PEGACE OR RED FESCUE) ARE SPECIFIED ON THE PLAN, PRIMARILY DUE TO THEIR ADAPTABILITY TO DRY SANDY SOILS, DROUGHT RESISTANCE, HARDNESS, AND ABILITY TO WITHSTAND BREEZING WINDS. FESCUE WILL ALSO ALLOW FOR LONG INTERVALS BETWEEN MOWINGS, WHICH SHALL OCCUR TWICE PER YEAR MINIMUM, TYPICALLY IN JUNE AND SEPTEMBER IS SATISFACTORY.
 5. THE BERMS SHALL BE SUFFICIENTLY COMPACTED AND OF SUCH MATERIAL TO PREVENT SEEPAGE.



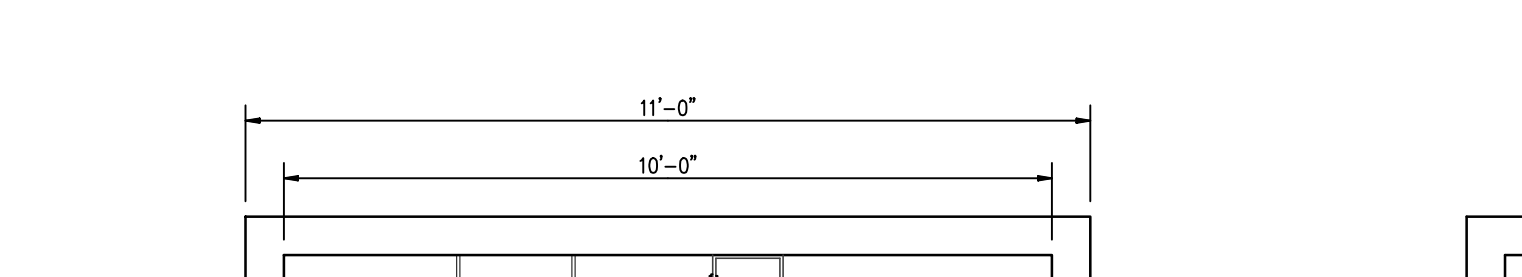
NOTES:
 1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.



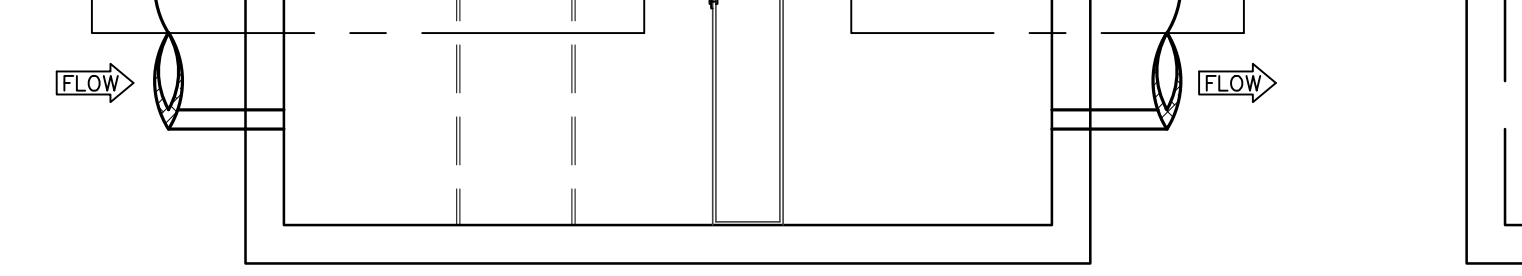
NOTES:
 1. WATER QUALITY INLET SHOWN IS \"CRYSTAL CLEAN\" MODEL # 1056 BY CRYSTAL STREAM TECHNOLOGIES, INC. OF LAWRENCEVILLE, GA.
 2. ALL PIPES SHALL BE CONSTRUCTED TO BE FLUSH WITH THE INSIDE WALLS.
 3. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL PIPES AND STRUCTURES BETWEEN AND AROUND THE WATER QUALITY VAULTS.
 4. ALL VAULT LIFTING CONNECTIONS SHALL BE LOCATED ON THE OUTSIDE OF THE VAULT WALLS.
 5. CONCRETE VAULT PRE-CASTER IS RESPONSIBLE FOR THE STRUCTURAL INTEGRITY OF THE CONCRETE VAULTS. WALL AND SLAB THICKNESSES SHALL BE ALTERED ACCORDINGLY.



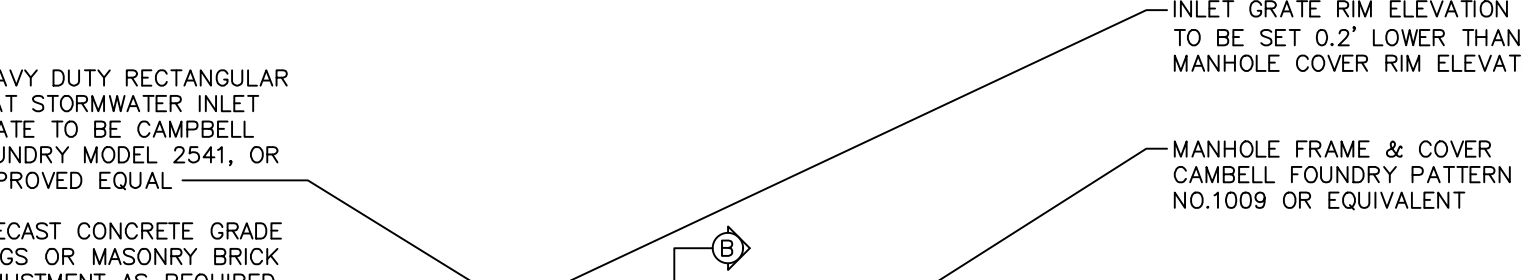
NOTES:
 1. CULTEC RECHARGER 900HD CHAMBERS BY CULTEC, INC. OF BROOKFIELD, CT. ALL CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH CULTEC INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
 2. THE BED OF THE SYSTEM FOOTPRINT SHALL BE Laid NEARLY LEVEL.
 3. EACH ROW OF CHAMBERS SHALL BE FED VIA A 12\"/>



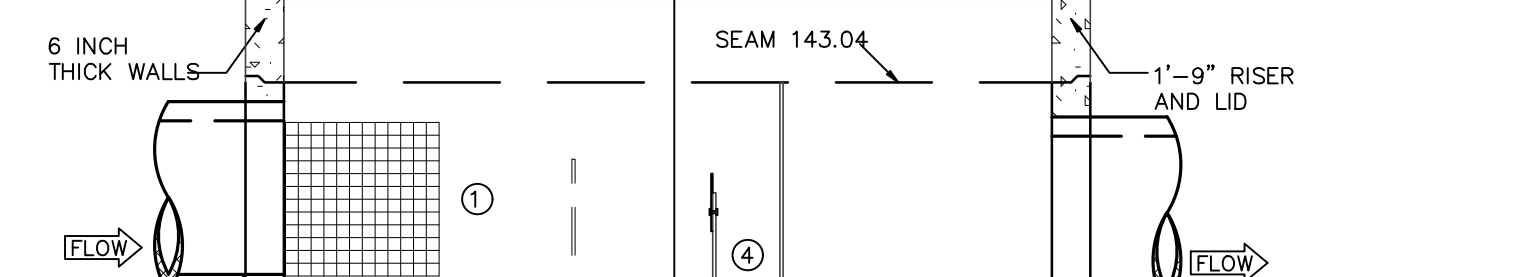
NOTES:
 1. CULTEC NO. 20L POLYETHYLENE LINER TO BE PLACED BENEATH FIRST ROW OF CHAMBERS.
 2. CULTEC RECHARGER 900HD CHAMBERS BY CULTEC, INC. OF BROOKFIELD, CT. ALL CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH CULTEC INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
 3. EACH ROW OF CHAMBERS SHALL BE FED VIA A 12\"/>



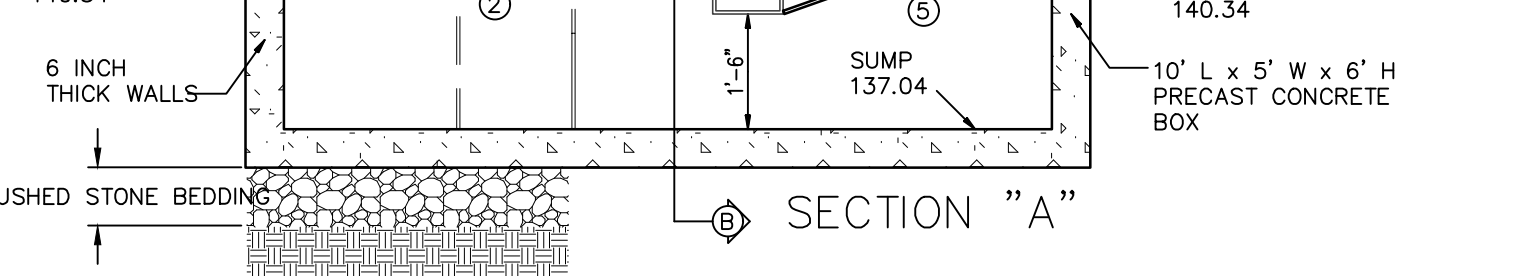
NOTES:
 1. CULTEC NO. 20L POLYETHYLENE LINER TO BE PLACED BENEATH FIRST ROW OF CHAMBERS.
 2. CULTEC RECHARGER 900HD CHAMBERS BY CULTEC, INC. OF BROOKFIELD, CT. ALL CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH CULTEC INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
 3. EACH ROW OF CHAMBERS SHALL BE FED VIA A 12\"/>



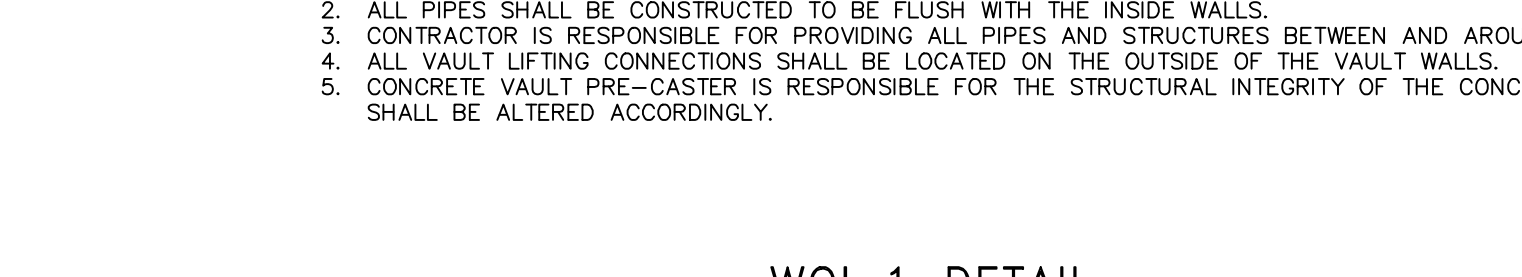
NOTES:
 1. CULTEC NO. 20L POLYETHYLENE LINER TO BE PLACED BENEATH FIRST ROW OF CHAMBERS.
 2. CULTEC RECHARGER 900HD CHAMBERS BY CULTEC, INC. OF BROOKFIELD, CT. ALL CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH CULTEC INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
 3. EACH ROW OF CHAMBERS SHALL BE FED VIA A 12\"/>



NOTES:
 1. CULTEC NO. 20L POLYETHYLENE LINER TO BE PLACED BENEATH FIRST ROW OF CHAMBERS.
 2. CULTEC RECHARGER 900HD CHAMBERS BY CULTEC, INC. OF BROOKFIELD, CT. ALL CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH CULTEC INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
 3. EACH ROW OF CHAMBERS SHALL BE FED VIA A 12\"/>



NOTES:
 1. CULTEC NO. 20L POLYETHYLENE LINER TO BE PLACED BENEATH FIRST ROW OF CHAMBERS.
 2. CULTEC RECHARGER 900HD CHAMBERS BY CULTEC, INC. OF BROOKFIELD, CT. ALL CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH CULTEC INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
 3. EACH ROW OF CHAMBERS SHALL BE FED VIA A 12\"/>



NOTES:
 1. CULTEC NO. 20L POLYETHYLENE LINER TO BE PLACED BENEATH FIRST ROW OF CHAMBERS.
 2. CULTEC RECHARGER 900HD CHAMBERS BY CULTEC, INC. OF BROOKFIELD, CT. ALL CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH CULTEC INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
 3. EACH ROW OF CHAMBERS SHALL BE FED VIA A 12\"/>



NOTES:
 1. CULTEC NO. 20L POLYETHYLENE LINER TO BE PLACED BENEATH FIRST ROW OF CHAMBERS.
 2. CULTEC RECHARGER 900HD CHAMBERS BY CULTEC, INC. OF BROOKFIELD, CT. ALL CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH CULTEC INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
 3. EACH ROW OF CHAMBERS SHALL BE FED VIA A 12\"/>

OWNER:
 Beacon HIP Lofts, LLC
 39 Front Street
 Beacon, NY 12508

ARCHITECT:
 Aryeh Siegel, Architect
 514 Main Street
 Beacon, New York 12508

SITE/CIVIL ENGINEER:
 HUDSON LAND DESIGN
 174 Main Street
 Beacon, New York 12508

LANDSCAPE DESIGN:
 LQ Design
 P.O. Box 244
 Beacon, NY 12508

SURVEYOR:
 TEC Land Surveying
 Main Street
 Beacon, New York 12508

REVISIONS:

NO.	DATE	DESCRIPTION	BY
1	8/29/17	PER PLANNING BOARD COMMENTS	CMB
2	9/26/17	NO CHANGE	CMB

SEAL:
 JON D. BOBENDORF, P.E.
 NYS LICENSE NO. 076245
 DANIEL G. KOEHLER, P.E.
 NYS LICENSE NO. 082716

APPROVED FOR APPROVAL:
 MAYOR OF THE CITY OF BEACON _____ DATE _____
 APPROVED BY RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BEACON
 ON THE _____ DAY OF _____ 20____

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____ 20____, BY _____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

Amendment to Special Use Permit Stormwater Details

Sheet 9 of 10

Beacon HIP Lofts
 Beacon, New York
 Scale: As Noted
 July 25, 2017