

NOTE:

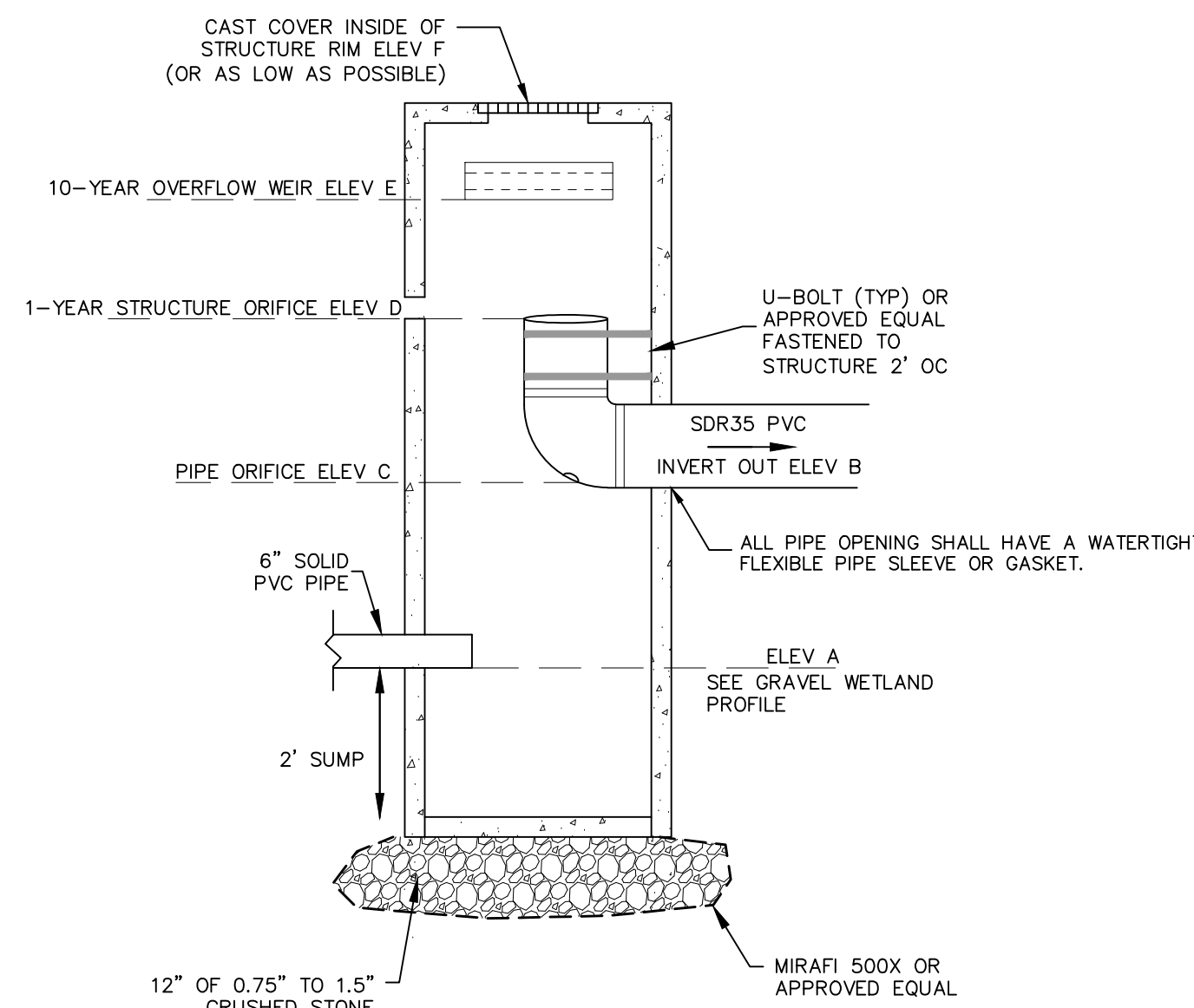
THE AGGREGATE LAYER BETWEEN THE WETLAND SOIL AND THE GRAVEL CELL SHOULD BE PEA GRAVEL OR A COMBINATION OF SAND AND PEA GRAVEL. THE WETLAND SOIL LAYER SHALL BE OF LOW HYDRAULIC CONDUCTIVITY (0.1-0.01 FT/DAY) WITH A PH NOT LESS THAN 6.0 AND NOT GREATER THAN 7.0. INGREDIENTS USED IN THE SOIL LAYER CAN INCLUDE FINE SOILS, SAND, AND COMPOST, BUT EXCLUDE MANURE. WHEN MIXED THE WETLAND SOIL SHALL BE A LOW-PHOSPHOROUS SOIL MIX.

THE GRAVEL WETLAND SOIL SHALL BE TESTED IN ACCORDANCE WITH THE P-TESTING PROCEDURE AS DESCRIBED IN "BIORETENTION AND GRAVEL WETLAND SOIL MEDIA TESTING GUIDANCE" PREPARED BY THE UNIVERSITY OF VERMONT AND OTHERS, 2023.

CONTRACTOR TO FACILITATE TESTING OF SOIL MEDIA.

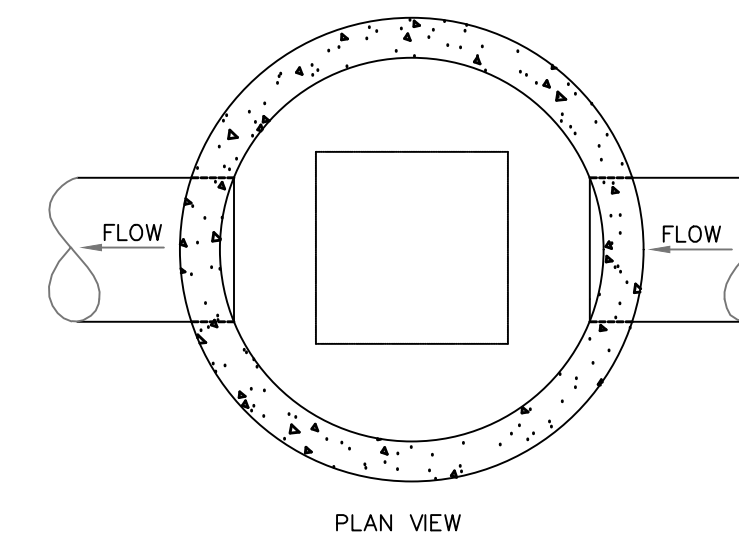
ITEM	GRAVEL WETLAND #1	
	ELEV	SIZE
ELEV A	330.98'	6.0"
ELEV B	335.67'	15.0"
ELEV C	335.67'	1.0"
ELEV D	338.33'	1.5"
ELEV E	339.46'	12"x6"
ELEV F	340.96'	24"x24"

OUTLET STRUCTURE SCHEDULE



OUTLET STRUCTURE PROFILE

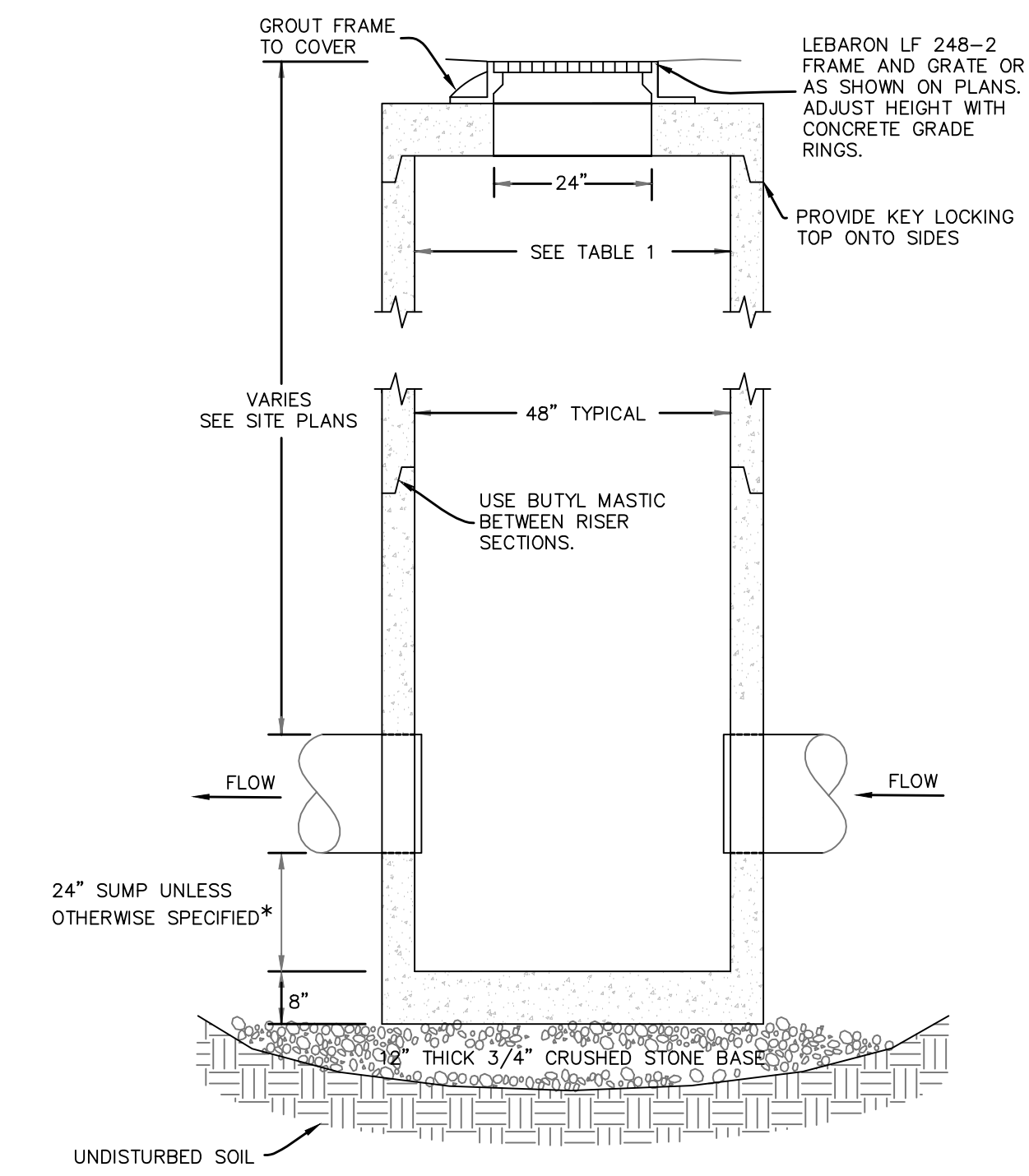
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PLAN VIEW

TABLE 1

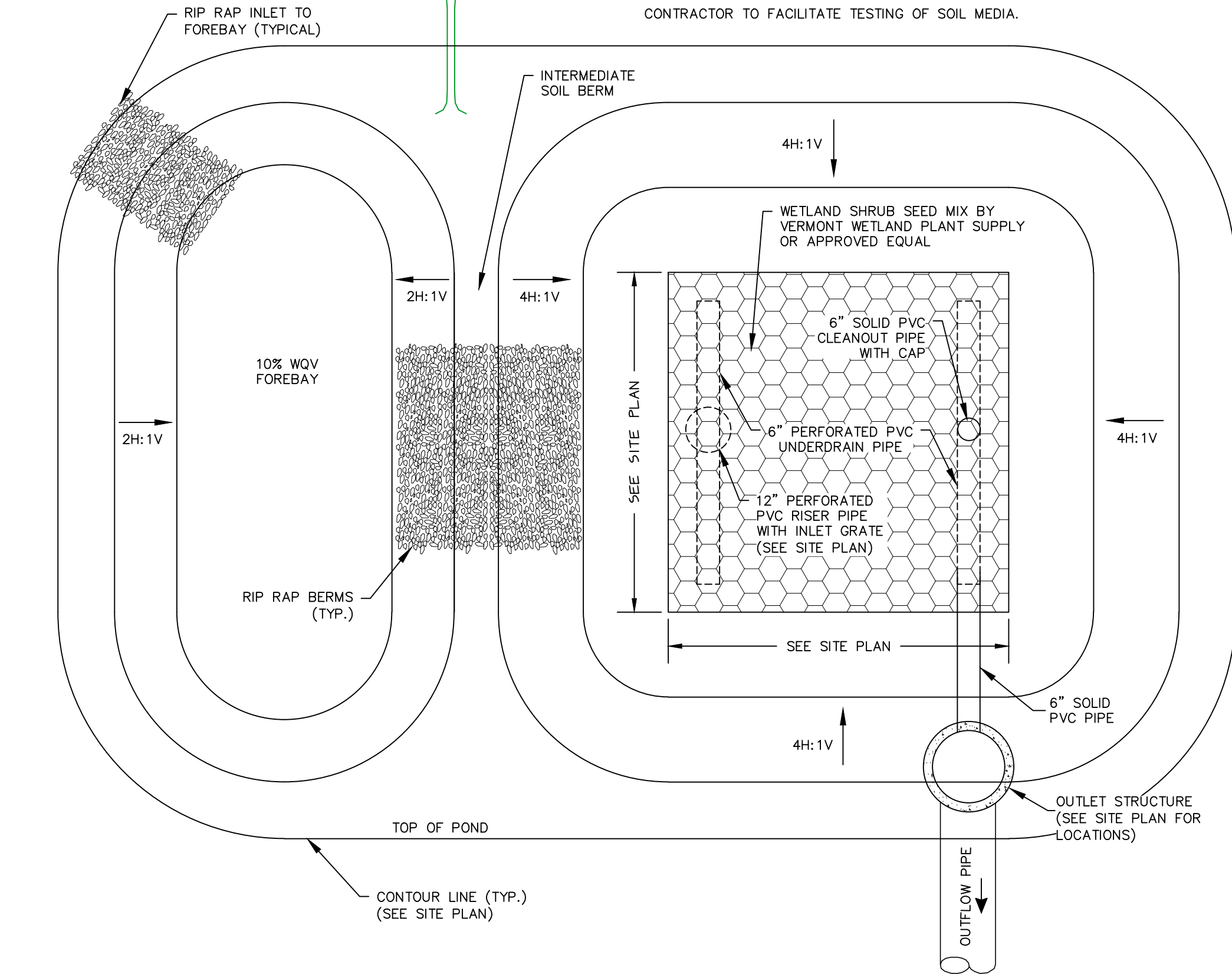
STORM CATCH BASIN DIAMETER	MINIMUM WALL THICKNESS	LARGEST PIPE DIA. ALLOWED	MINIMUM CONCRETE COVER THICKNESS
48"	5"	30"	10"
60"	6.75"	36"	12"
72"	7"	48"	18"



RAISE FRAME TO FINISHED GRADE ONLY AFTER BASE COURSE OF PAVEMENT IS IN PLACE - RAISE FRAME TO BASE COURSE GRADE IF WEAR COURSE IS TO BE PLACED DURING THE FOLLOWING CONSTRUCTION SEASON.
4000 PSI CONCRETE BY SD IRELAND, CAMP PRECAST OR APPROVED EQUAL.
FLEXIBLE MANHOLE SLEEVES SHALL BE PROVIDED FOR ALL PIPE PENETRATIONS.
BACKFILL STRUCTURE WITH GRANULAR BACKFILL VAOT 703.04.
STRUCTURE SHALL BE H20 RATED WITHIN ROADWAYS.

CATCH BASIN DETAIL

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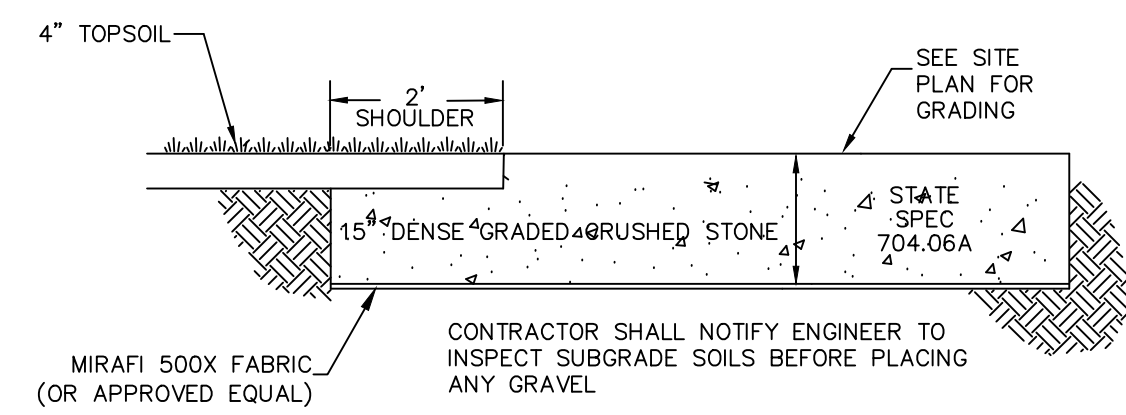
GRAVEL WETLAND TYPICAL PLAN VIEW

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GRAVEL WETLAND VOLUMETRIC CALCULATIONS:

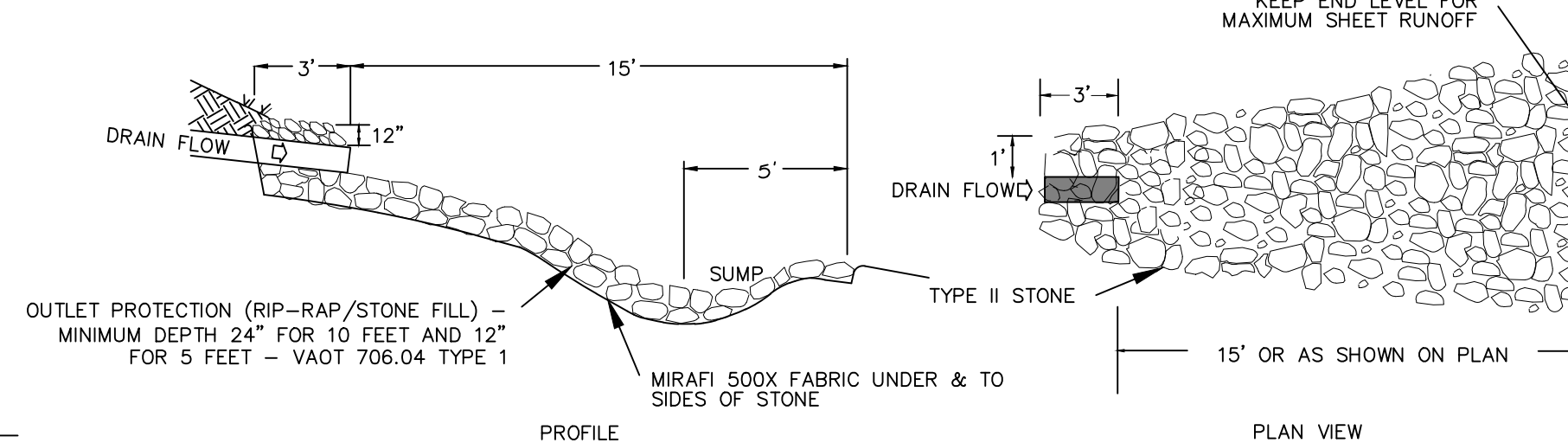
WATER QUALITY TREATMENT VOLUME REQUIRED (PER VT STANDARD COMPLIANCE WORKBOOK) = 0.1120 AC-FT * 43,560 SF / AC = 4,878.7 CF

4,878.7 CF / 1,079 SF (BOT. POND AREA) = 4.52 FT OF STONE



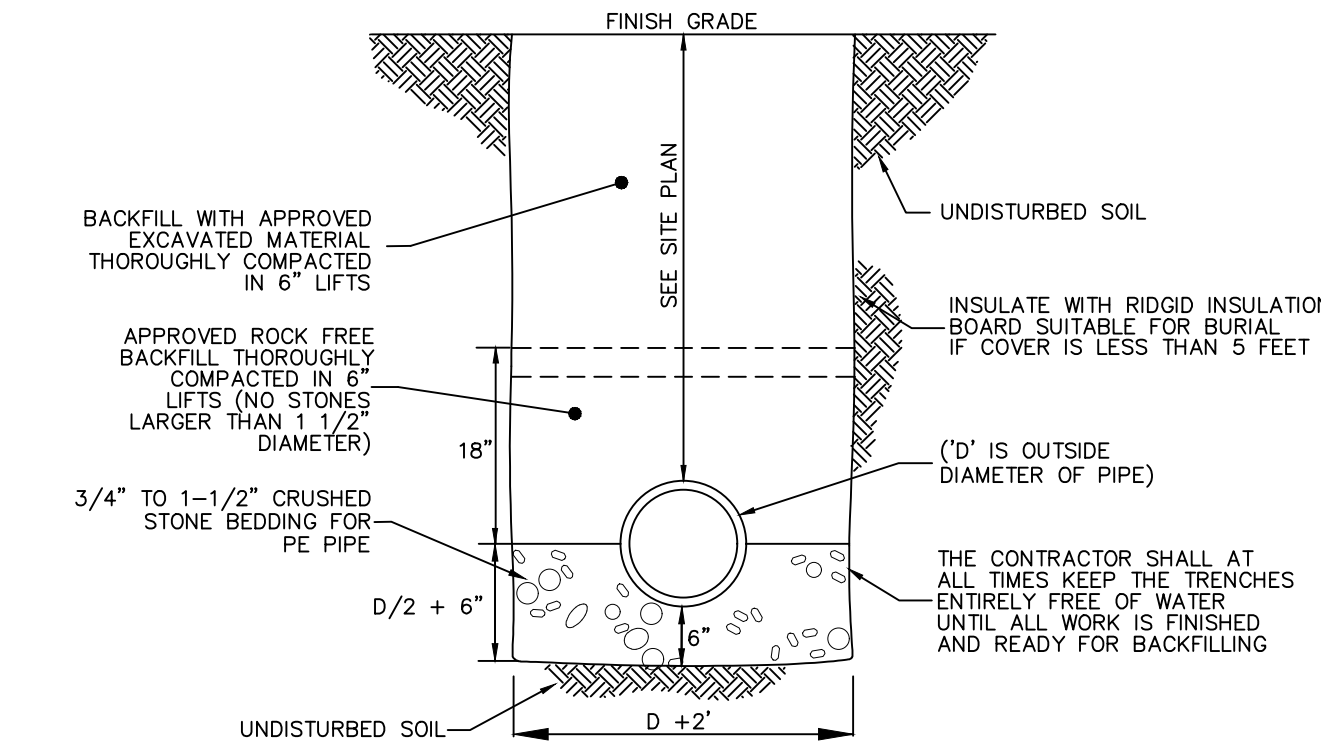
DRIVEWAY AND DRIVE AISLE AREA DETAIL

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STORM OUTFALL DETAIL

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GRAVITY STORM TRENCH DETAIL

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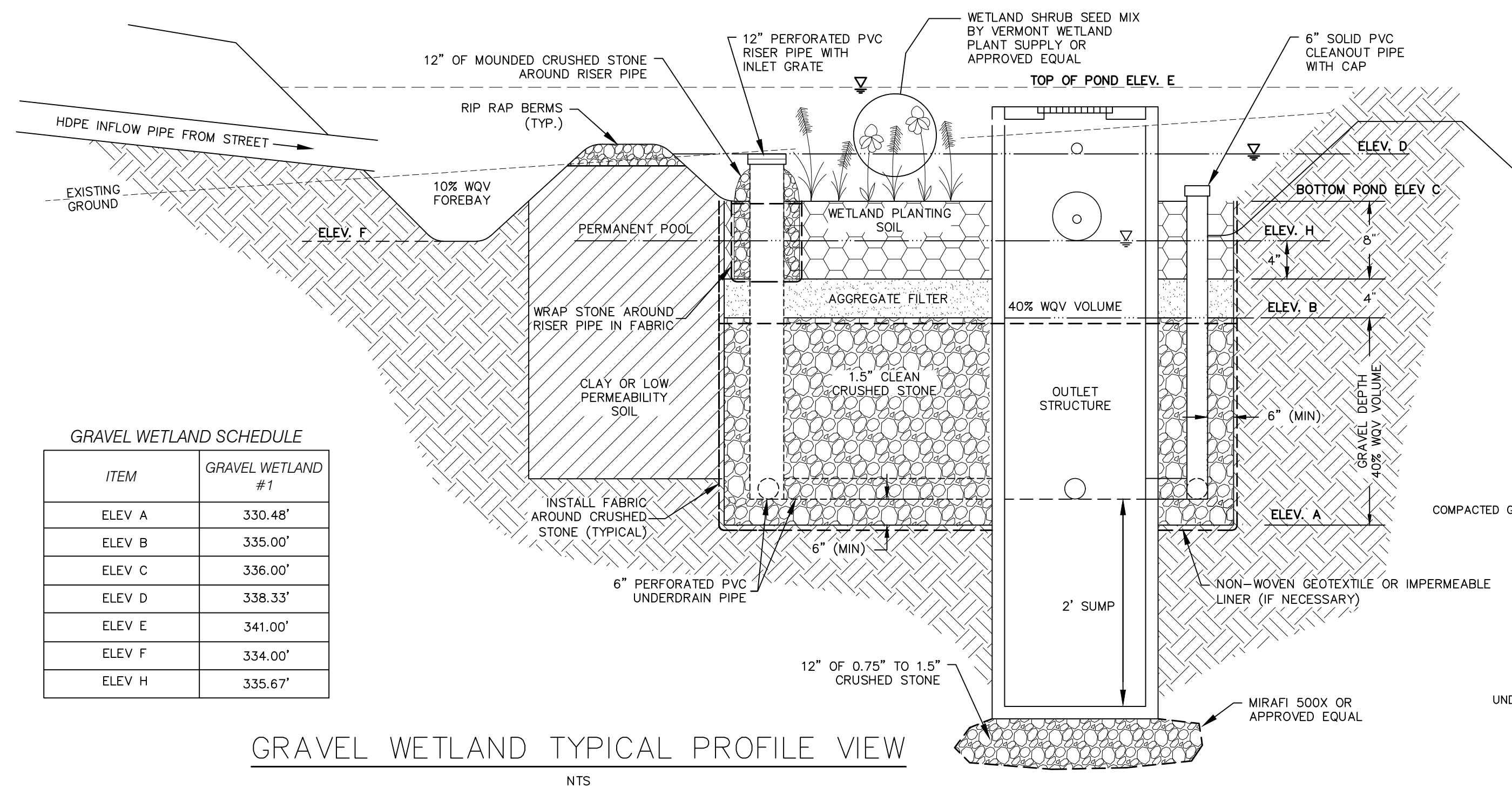
STORM SYSTEM MAINTENANCE

SYSTEM MAINTENANCE IS IMPORTANT FOR TREATMENT AND CONTROL OF STORM RUNOFF FROM THE IMPERVIOUS SURFACES (BUILDINGS, ROAD, DRIVEWAYS, AND SIDEWALKS). THE FOLLOWING ELEMENTS FORM THE MINIMUM REQUIREMENTS:

- THE OWNER (OR REPRESENTATIVE) SHALL PERFORM INSPECTIONS ANNUALLY AND FOLLOWING SIGNIFICANT (LARGE) STORM EVENTS. THE FOLLOWING ITEMS SHALL BE REVIEWED: CONDITION OF THE VEGETATION, CONDITION OF THE DITCH SURFACES, DEPTH OF ACCUMULATED SEDIMENT (IF ANY), THE PRESENCE OF EROSION (IF ANY), CONDITION OF THE STORM PIPES, AND THE CONDITION OF THE PIPE INLETS AND OUTLETS. ANY OBSERVABLE DEGRADATION OF THE STORM SYSTEM SHALL BE NOTED.
- THE OWNER (OR REPRESENTATIVE) SHALL COMPLETE REPAIR OF ANY ITEMS, AS REQUIRED TO MAINTAIN OPTIMAL SYSTEM OPERATION. AT A MINIMUM, THE FOLLOWING ITEMS SHALL BE INCLUDED:
 - FOLLOWING ANY MAJOR STORMS ANY EROSION GULLIES 6 INCHES OR DEEPER SHALL BE FILLED AND VEGETATION ESTABLISHED IN THE DISTURBED AREA.
 - SEDIMENT ACCUMULATED TO A DEPTH OF MORE THAN 6 INCHES IN ANY CONVEYANCE SWALES OR THE SEDIMENT FOREBAY SHALL BE REMOVED AND DISPOSED OF IN AN UPLAND AREA THAT IS NOT WITHIN 100 FEET OF WATERS OF THE STATE. VEGETATION SHALL BE ESTABLISHED IN ALL DISTURBED AREAS.
 - VEGETATION SHALL BE ESTABLISHED AS NEEDED, IN AREAS OF BARE SOIL. THIS IS PARTICULARLY IMPORTANT IN FLOW AREAS WHERE VEGETATION PROVIDES SEDIMENT REMOVAL. THE CATCH BASIN SUMPS SHALL BE CLEANED WHEN THE ACCUMULATED SEDIMENT EXCEEDS 12" IN DEPTH (THE SUMPS ARE 24" IN DEPTH).
 - SILT FENCES SHALL BE USED IF NEEDED TO PREVENT EROSION AND AID IN THE ESTABLISHMENT OF VEGETATION. THESE TEMPORARY MEASURES SHALL BE REMOVED AFTER THE SITE IS STABILIZED AND THE RISK OF EROSION IS REDUCED.
- THE OWNER SHALL MECHANICALLY SWEEP AND REMOVE SEDIMENTS IN THE ROADWAY AREAS AND CATCH BASIN SUMPS AS NECESSARY PRIOR TO MAY 15TH.

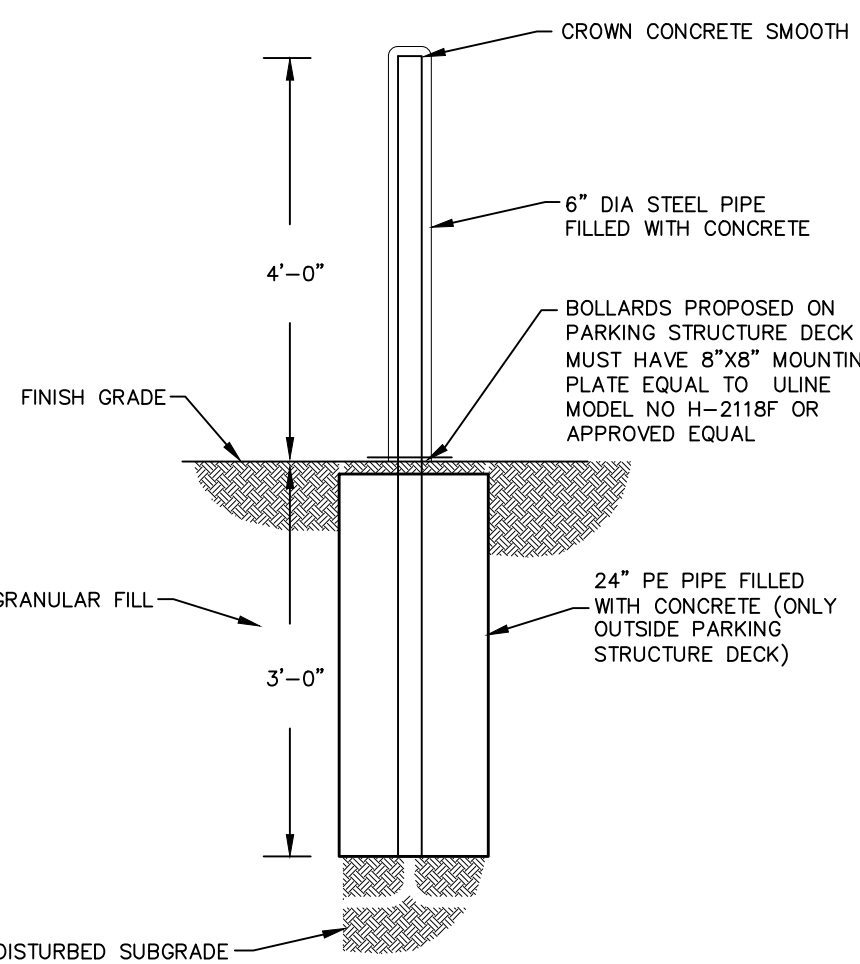
GRAVEL WETLAND SCHEDULE

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ELEV H	335.67'



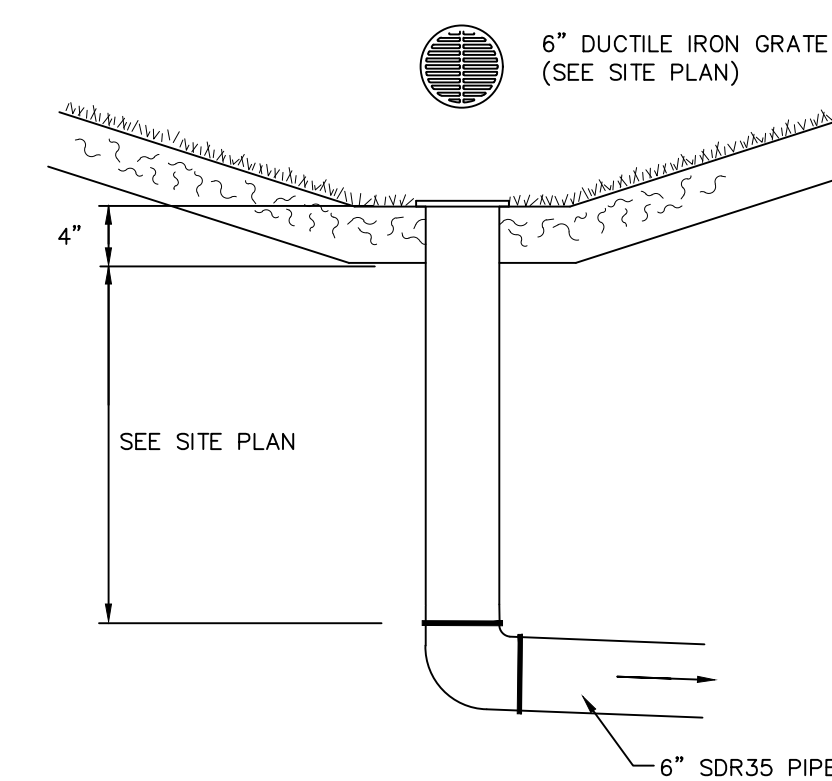
GRAVEL WETLAND TYPICAL PROFILE VIEW

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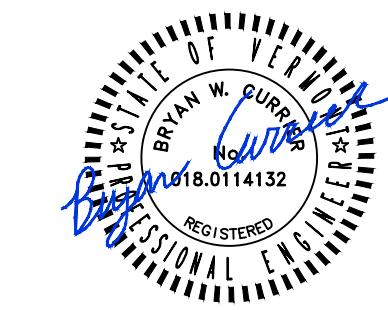
BOLLARD

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6" YARD DRAIN

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DATE	REVISION	BY	DATE
SURVEY	OB/CA	OB/CA	11-20-2023
DESIGN	OB/CA	OB/CA	JOB#
DRAWN	JFV	JFV	2014-14
CHECKED	BWC	BWC	FILE
SCALE	1"=20'	1"=20'	2014-14-519

O'LEARY-BURKE CIVIL ASSOCIATES, PLC

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E-MAIL: obc@olearyburke.com

WILLIS FARM ROAD - LOT 4

RICHMOND, VT

CONSTRUCTION DETAILS

PLAN SHEET #

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