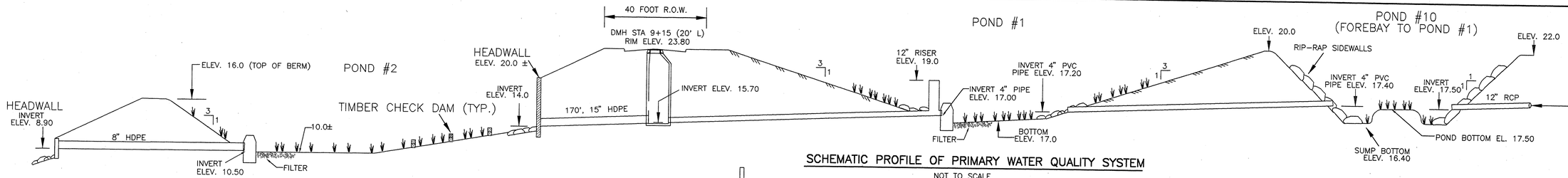
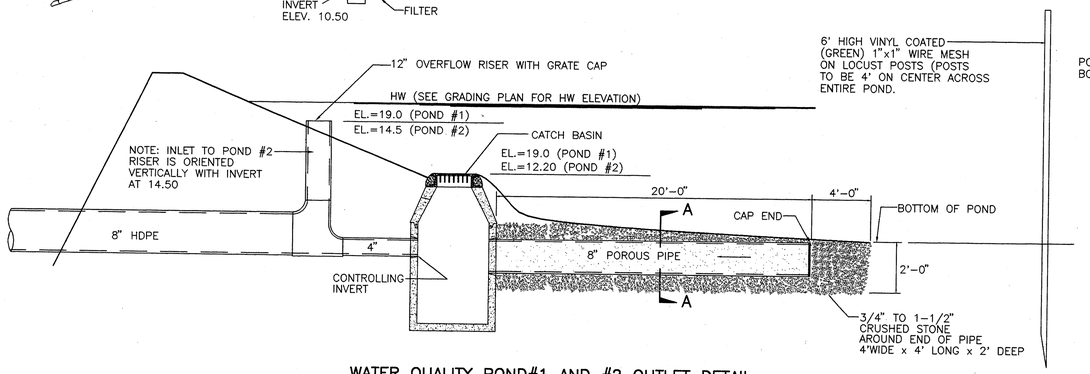
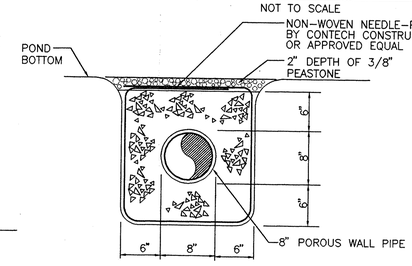


SCHEMATIC PROFILE OF PRIMARY WATER QUALITY SYSTEM



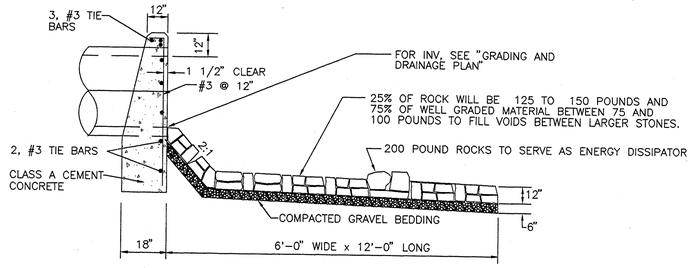
WATER QUALITY POND#1 AND #2 OUTLET DETAIL

NOT TO SCALE

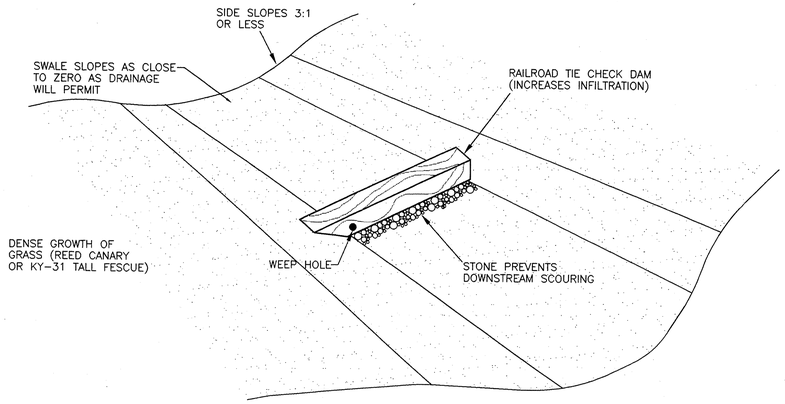


SECTION A-A

NOT TO SCALE



END ELEVATION

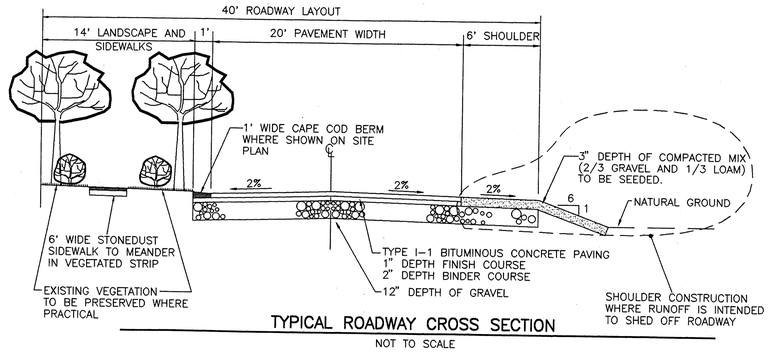


GRASS SWALE WITH TIMBER CHECK DAMS

NOT TO SCALE

CONCRETE ENDWALL AND RIPRAP APRON

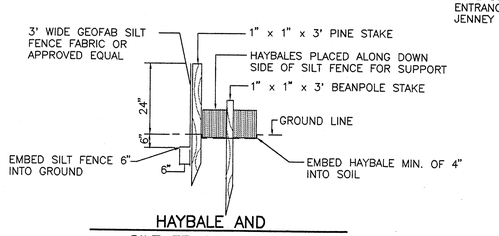
NOT TO SCALE



TYPICAL ROADWAY CROSS SECTION

NOT TO SCALE

CAPE COD BERM IS TO BE PROVIDED AS FOLLOWS:
ENTRANCE ROAD – ENTIRE LENGTH, BOTH SIDES
JENNEY LANE – STA 2+00 LEFT TO STA 3+50 LEFT
STA 3+50 BOTH SIDES TO STA 9+00 BOTH SIDES



HAYBALE AND SILT FENCE DETAIL

EROSION & SEDIMENT CONTROL NOTES

1. Erosion and sediment control measures will be installed prior to stump removal and construction. Gravel construction entrance will be installed before construction traffic into and out of project area begins. Stabilization of all regraded and soil stockpile areas will be initiated and maintained during all phases of construction.
2. All erosion and sediment control measures will be constructed in accordance with Town of Marion regulations. All erosion control measures are to be maintained and upgraded as required to achieve proper sediment control during construction. A staked haybale dam shall be installed down gradient of all drainage outfalls.
3. Additional control measures will be installed during the construction period, if deemed necessary by the Owner or Agents of the Owner.
4. Catch basins will be protected with haybale filters throughout the construction period until all disturbed areas are thoroughly stabilized. Filter fabric should be installed under grate opening until pavement is in place and ground surface is stabilized.
5. Seeding mixture for finished grassed areas will be as follows:

Kentucky Blue Grass	45%
Creeping Red Fescue	45%
Perennial Ryegrass	10%

Seed to be applied at a rate of 4 lbs./1000 sq. ft.
Fertilizer shall be applied at a rate of 2 lbs./1000 sq. ft..

Planting seasons shall be April 1 to June 1 and August 15 to September 15. After September 15, areas will be stabilized with haybale check, filter fabric, or woodchip mulch, as required, to control erosion, for areas to have specific landscape coverage other than seeding or sodding, see landscape development plan.

6. Areas to be left bare before finished grading and seeding is achieved, shall receive a temporary seeding of Perennial Ryegrass applied to a rate of 2 lbs./1,000 sq. ft. at a depth of 1/2 inch. Limestone (equivalent to be 50 percent calcium plus magnesium oxide) shall be applied as seedbed preparation at a rate of 90 lbs./1,000 sq. ft. Planting seasons shall be March 1 to June 15 and August 1 to October 1. Where grass predominates, fertilize according to a soil test at a minimum application rate of 1 lb. of nitrogen per 1,000 sq. ft.
Areas to be left bare before finish grading and seeding outside of planting seasons shall receive an air-dried wood chip mulch, free of course matter, treated with 12, lbs. nitrogen per ton, applied at a rate of 185-275 lbs./1,000 sq. ft.
7. The Contractor shall establish an erosion control line (haybale check or filter fabric) about ten (10') feet from toe to slope of proposed fill areas prior to beginning fill installation. Stabilization of slopes in fill areas (using mulch or grass) shall be initiated within thirty (30) days of commencement of fill installation.
8. Stabilization of slopes in cut areas (using mulch or grass) and the installation of control line (haybale check or filter fabric) at the toe of slope shall be initiated within thirst (30) days of commencement of cut.
9. Sediment removed from control structures will disposed of in a manner which is consistent with the intent of the plan. All haybales or silt fence retaining sediment over 1/2 their height shall have the sediment removed and all damaged erosion controls removed and replaced.
10. Contractor will be assigned the responsibility for implementing this Erosion and Sediment Control Plan. This responsibility includes the installation and maintenance of control measures, informing all parties engaged on the construction site of the requirements and objectives of the plan, and notifying the proper Town agency of any transfer of this responsibility. The owner shall be responsible for conveying a copy of the Erosion and Sediment control Plan if the title to the land is transferred.
11. The Contractor shall secure the services of Prime Engineering, Inc., who shall verify in the field that the controls required by this plan are properly installed, shall make inspection of such facilities not less frequently than weekly and within forty-eight (48) hours of any significant rainfall, and shall, by written report, inform the Owner or his agent not less frequently than weekly and the Marion Conservation Commission not less frequently than monthly of observations, maintenance, and corrective activities undertaken.
12. Stockpiles of soil shall be surrounded by a sediment barrier. Soil stockpiles to be left bare for more than fifteen (15) days shall be stabilized with temporary vegetation or mulch. If soil stockpiles are to remain for more than sixty (60) days, filter fabric shall be used in place of haybales. Side slopes shall not exceed 2:1.
13. The Contractor shall be responsible to control dust and wind erosion throughout the life of his Contract. Dust control shall include, but is not limited to sprinkling of water on exposed soils and haul roads. Contractor shall control dust to prevent a hazard to traffic on adjacent roadways.
14. If final grading is to be delayed for more than thirty (30) days after land disturbances cease, temporary vegetation or mulch shall be used to stabilize soils.
15. Haybales shall be used only as a temporary measure. Where control measures will be required for longer than sixty (60) days, filter fabric shall be used.
16. Where dewatering is necessary, there shall not be a discharge directly into wetlands or watercourses. Proper methods and devices shall be utilized to the extent permitted by law, such as pumping water into a temporary sedimentation bowl, providing surge protection at the inlet and the outlet of pumps, or floating the intake of the pump, or other methods to minimize and retain the suspended solids. If a pumping operation is causing turbidity problems, said operation shall cease until such time as feasible means of controlling turbidity area determined and implemented.

APPROVED, SUBJECT TO A COVENANT TO BE RECORDED HEREWITH.

DATE

TOWN OF MARION PLANNING BOARD

DATE OF APPROVAL

DATE OF ENDORSEMENT

PLAN APPROVED, SUBJECT TO THE CONDITION THAT NO LOT SHALL BE BUILT UPON WITHOUT PRIOR APPROVAL BY THE MARION BOARD OF HEALTH.

DATE

TOWN OF MARION BOARD OF HEALTH

REV.	DATE	DESCRIPTION	BY	APP.
4	11/11/96	REV. POND BOTTOM ELEV.		
3	10/8/96	REV. W.Q.P. #1 & #2 OUTLET DET.		
2	9/30/96	ISSUED FOR PERMITS		
1.	9/4/96	DWG. ADDED		

DRAWING TITLE: DETAILS – 3
PROJECT: THE COVE IN MARION
MARION, MASSACHUSETTS
CLIENT: DESIGN HOUSING, INC.
BOSTON, MASSACHUSETTS

PRIME ENGINEERING, INC.
CIVIL ENGINEERING • LAND SURVEYING • ENVIRONMENTAL ASSESSMENT
P.O. BOX 1088 350 BEDFORD STREET – LAKEVILLE, MASSACHUSETTS 02347
TEL: (508) 947-0050 FAX: (508) 947-2004

SCALE: NOT TO SCALE
DATE: 4 SEPT 1996
DRAWN BY: CAK / JRL
DESIGNED BY: CAK
CHECKED BY: RJR
APPROVED BY: RJR
DRAWING NO. 9
PROJECT NO. 1400101

COMMONWEALTH OF MASSACHUSETTS
RICHARD J. RHEAUME
No. 25373
CIVIL
REGISTERED PROFESSIONAL ENGINEER

C:\ACADR12\DWG\MARION\14001007.DWG