



EXTENDED LIMITS OF  
CONCRETE WALL TO  
ENCOMPASS ERODED AREA

DRAIN MANHOLE  
LOCATION

PROPOSED REPLACEMENT  
15" PIPE LOCATION

EXISTING 15" PIPE



VIEW SE EXISTING CONDITIONS @ DISCHARGE # 4 OFF IVERS ST

## DESCRIPTION OF REPAIR WORK:

1. Place a semicircular erosion protection line consisting of siltation fabric staked into ground to the outside of a straw waddle sized and located to encompass the entire work area.
2. Cut and remove vegetation along the wall in each direction away from the pipe as needed. Obtain detail images of existing stone wall and area to be refurbished.
3. Remove and stockpile existing stones for re-use on the away side from the pond.
4. Excavate a three foot wide trench as needed to create a level graded area along the entire length of the replacement wall down 12" to 18" below the invert of the existing 15" discharge pipe or as needed to sound compacted material. Stockpile excavated material for re-use to the away side from the pond. Use 3/4" screened gravel to replace any excess excavation of unsuitable soils.
5. Form and place a minimum 8" thick reinforced concrete footing 30" wide for the entire length of the replacement wall. Reinforcement is to consist of four (4) # 5 longitudinal rebar @ bottom matt only with #5 horizontal rebar @ 24" O/C in the short way for the length of the footing. In addition provide # 5 vertical dowels at 12" O/C at inside face as well as outside face (pond side).
6. Form and place a reinforced concrete battered wall to approximately 12" higher than the existing wall height with a minimum 18" thickness at bottom of wall and minimum 10" thickness at top of wall with the inside face held vertical. Reinforcement is to consist of #5 rebar @ 12" O/C each way for the inside as well as the outside vertical matts.
7. Provide a single appropriately sized through-wall sleeve to accommodate the replacement fifteen inch (15") pipe. The replacement pipe invert at headwall is to be set to 15" higher than existing or to the maximum height accommodating a minimum pipe slope of no less than 0.015 FT/FT.
8. Excavate and replace approximately 18 LF of 15 inch (15") pipe from the replacement headwall to the drain manhole located within the walkway and visible in the image directly beneath the trash barrel. Excavate around the tree roots as much as possible to preserve the existing pine tree if possible and place the replacement pipe through the sleeve so that it protrudes six (6)" beyond the headwall outside face and grout into place.
9. Upon achieving minimum seven days cure or concrete compressive strength of 3000 PSI, backfill behind the new concrete wall using suitable stockpiled materials or imported screen gravel materials as needed to bring the compacted backfill to 4" below the top of wall and grade ready to receive loam.
10. Place and spread loam to finish grade and seed with grass mix suitable for shade.

CITY OF NEW BEDFORD  
DEPARTMENT OF PUBLIC INFRASTRUCTURE

Headwall Repair and Stone Wall Refurbishment  
Sassaquin Pond Discharge # 4 Off Ivers Street

DESIGNED BY : DJF  
CHECKED BY :

SCALE: SEE SITE PLAN  
DATE : Sep 20\_2016  
SHEET 1 OF 1