



NOTES:

1. BASE COIR LOG SHALL BE MINIMUM 16-INCH DIAMETER AND SUBSEQUENT LOGS SHALL BE MINIMUM 12-INCH DIAMETER. NUMBER OF COIR LOGS MAY VARY BASED ON HEIGHT OF BANK.
2. PROVIDE MINIMUM SEVENTEEN (17) 2"x2"x40" OAK STAKES PER LOG WITH APPROXIMATELY TWICE AS MANY STAKES ON STREAM SIDE OF LOG. BACKFILL BEHIND LOG WITH ORGANIC TOP SOILS (>12% ORGANIC CONTENT AND 100% PASSING 1" SIEVE) TO MERGE INTO THE WETLAND AREAS. PROVIDE MINIMUM THREE (3) CINCHES PER LOG TO PREVENT MOVEMENT.
3. LOG SHOULD BE PLACED SO THAT ABOUT HALF OF BASE LOG IS SUBMERGED. IF LOGS ARE NOT AT LEAST HALF SUBMERGED, CONTRACTOR SHALL PROVIDE IRRIGATION TO ENABLE PLANTINGS TO ESTABLISH.
4. PLANTINGS SHALL BE INSTALLED IN A "ZIG-ZAG" PATTERN INTO THE TOP OF THE LOG A MINIMUM OF ONE INCH DEEPER INTO THE LOG THAN THE DEPTH OF THE PLANT PLUG. PROVIDE HERBACEOUS PLUG PLANTS ALONG THE BASE COIR LOG AND TUBELINGS ALONG THE UPPER LOGS. CONTRACTOR SHALL PROVIDE PLANTINGS AS DETAILED BELOW OR AS REQUIRED IN THE APPROVED ORDER OF CONDITIONS.

PLUG PLANTS (1 PLUG PLANT PER LINEAR FOOT)

SOFT RUSH (JUNCUS EFFUSUS)
TUSsock SEDGE (CAREX STRICTA)

TUBELINGS (1 TUBELING PLANT PER EVERY 3 LINEAR FEET)

SILKY DOGWOOD (CORNUS AMOMUM)
SWAMP AZALEA (RHODODEDRON VISCOSUM)
BUTTONBUSH (CEPHALANTHUS OCCIDENTALIS)

5. HAND RAKING AND SEEDING ALL DISTURBED AREAS ON AND NEAR THE COIR LOG WITH WETLAND SEED MIX FROM NEW ENGLAND WETLAND PLANCE, INC., ERNST CONSERVATION SEEDS OR APPROVED EQUAL AT THE RATE SPECIFIED BY THE MANUFACTURER.
6. PROVIDE LIVE SANDBANK WILLOW STAKES OR OTHER SPECIES AS APPROVED BY CONSERVATION COMMISSION. LIVE STAKES SHALL BE 0.5" TO 2" IN DIAMETER AND 2 TO 3 FEET LONG. DO NOT STORE LIVE STAKES OUTSIDE. PLANT LIVE STAKES IMMEDIATELY. STAGGER STAKES IN EACH ROW OF COIR LOG AT 10' O.C. SPACING.



**DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
TOWN OF BILLERICA,
MASSACHUSETTS**

**STREAM BANK
RESTORATION**

CREATED BY: DCW/KCS

SCALE: NTS

FILE:

CHECKED BY: GA/JT

DATE: 06/29/2015