

SEED MIX

% WT.	lbs/A	NAME	PUR %	GERM %
35	8	BIRDS FOOT TREFOIL <i>LOTUS CONICULATUS</i> VAR. 'EMPIRE'	98	85
35	8	ALSIKE CLOVER <i>TRIFOLIUM HYBRIDUM</i>	96	90*
10	2	RED TOP <i>AGROSTIS ALBA</i>	92	85
5	1	CANADA BLUEJOINT <i>CALAMAGROSTIS CANADENSIS</i>	95	80**
5	1	FOX SEDGE <i>CAREX VULPINOIDES</i>	95	80**
5	1	NEW ENGLAND ASTER <i>ASTER NOVAE-ANGLIAE</i>	95	80**
5	1	DARK GREEN BULRUSH <i>SCIRPUS ATROVIRENS</i>	95	80**
100	22			

\* WITH 10% OR LESS GERMINATION OF HARD SEED.  
\*\* GERMINATION OVER TWO YEAR PERIOD FOR WETLAND SEEDS.

THE SEEDING MIXTURE SHALL HAVE A WEED CONTENT NOT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE FROM ALL NOXIOUS WEED SEED. HAY MULCH TO BE PLACED ON ALL EARTH SLOPES AT THE RATE OF 20 TONS PER ACRE, OR AS DIRECTED BY THE ENGINEER. COSTS FOR HAY MULCH TO BE INCLUDED IN PRICE OF ITEM 651.15.

LEGUME AID INNOCULANTS ARE TO BE USED IMMEDIATELY BEFORE SEEDING FOR CLOVER AND TREFOIL SEED AT TWO TIMES THE RECOMMENDED RATE OF THE MANUFACTURER. ALSIKE CLOVER SEED SHALL BE INNOCULATED WITH AN ALFALFA/CLOVER INNOCULANT. BIRDSFOOT TREFOIL SHALL BE INNOCULATED WITH A BIRDSFOOT TREFOIL INNOCULANT. MIXING THE INNOCULANT WITH A STICKY LIQUID BINDER SUCH AS SODA POP WILL HELP IT TO ADHERE TO THE SEEDS.

LANDSCAPE AND WETLAND SPECIES NOTES

- PLANTS LISTED IN THE QUANTITY SHEET AS GROUND COVER AND VINES SHALL BE REFERRED TO AS HERBACEOUS WETLAND SPECIES IN THE FOLLOWING NOTES.
- THE CONTRACTOR SHOULD PLACE ORDERS FOR HERBACEOUS WETLAND SPECIES AS EARLY AS POSSIBLE TO ENSURE SUPPLY. THE FOLLOWING IS A LIST OF POTENTIAL SUPPLIERS OF WETLAND PLANTS AND FOR WETLAND SEEDS.

PLANT SOURCE LIST

KESTER'S WILD GAME FOOD NURSERIES, INC. P.O. BOX 516 OMO, WI 54963 (414) 685-2929	ENVIRONMENTAL CONCERN, INC. P.O. BOX P ST. MICHAELS, MD 21663 (301) 745-9620
WILDLIFE NURSERIES P.O. BOX 2724 OSHKOSH, WI 54903 (414) 231-3780	ENVIRENS, INC. 1927 YORK RD. TIMONIUM, MD 21093 (301) 560-2280

SEED SOURCE LIST

COUNTRY WETLANDS NURSERY, LTD. BOX 156 SUNSET AVENUE MILTON, VERMONT 05468 (802) 893-1241 IN VT. 1-800-244-4268	L.D. OLIVER SEED CO., INC. BOX 126 MUSKOGEE, WI 53150 (414) 679-1268
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EARTHWORK SUMMARY		
QUANTITY	UNIT	ITEM
		FILL MATERIAL
485	CY	FILL MATERIAL LESS TOPSOIL DISPLACEMENT FACTOR (1.15)
560	CY	TOTAL FILL INCLUDING FACTOR
		MATERIAL AVAILABLE FOR FILL
11,700	CY	COMMON EXCAVATION
2,250	CY	TRENCH EXCAVATION OF EARTH
13,950	CY	TOTAL MATERIAL INCLUDING TOPSOIL
2,000	CY	LESS TOPSOIL DISPLACEMENT
11,950	CY	TOTAL MATERIAL AVAILABLE FOR FILL FACTOR (0.95)
11,355	CY	TOTAL MATERIAL AVAILABLE FOR FILL INCLUDING FACTOR
11,355	CY	TOTAL MATERIAL AVAILABLE FOR FILL
560	CY	TOTAL FILL MATERIAL
10,795	CY	TOTAL EXCESS MATERIAL

- THE TWO FOLLOWING HERBACEOUS WETLAND SPECIES SHALL BE PLANTED SEPARATELY, 1'-6" ON CENTER, IN AN ALTERNATING PATTERN SO BOTH TYPES OF PLANTS WILL BE EQUALLY DISTRIBUTED THROUGHOUT.

<i>SCIRPUS AMERICANUS</i>	COMMON THREE SQUARE
<i>SAGITTARIA LATIFOLIA</i>	DUCK POTATO

THE FOLLOWING HERBACEOUS WETLAND SPECIES SHALL BE PLANTED SEPARATELY, 1'-6" ON CENTER IN OFFSET ROWS:

<i>LEERSIA ORYZOIDES</i>	RICE CUT GRASS
<i>SPARGANIUM EURYCARPUM</i>	BURREED

- PLANTS IN PEAT POTS SHALL BE PLANTED IN OFFSET ROWS IN THEIR POTS, WITH THE TOPS OF THE POTS LEVEL WITH THE EXISTING GROUND SURFACE. ROOTS AND TUBERS ARE TO BE PUSHED GENTLY INTO THE SOIL SO THAT THE SOIL JUST COVERS THEM AND THEY WILL BE HELD IN PLACE AND NOT FLOAT. ALL WETLAND SPECIES SHALL BE HAND PLANTED TAKING CARE NOT TO DAMAGE TENDER GROWING TIPS OR ROOTS. DUCK POTATO TUBERS SHALL BE PLANTED AT A DEPTH OF 1"-3".
- ALL AREAS DISTURBED DURING INSTALLATION OF PLANTS SHALL BE REGRADED AND RESEEDED USING THE RECOMMENDED SEED MIX TO EXISTING CONDITIONS BY CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULL GERMINATION AND THRIVING GROWTH OF ALL PLANT SPECIES FOR A PERIOD OF ONE YEAR FOLLOWING COMPLETION OF PLANTING.
- ALL EXCAVATION FOR PLANTING, ALL MULCHING, TOPSOIL, WEED CONTROL FABRIC, PLANTING MIX AND RESEEDING SHALL BE INCLUDED IN THE PLANT COST.
- NO FERTILIZER SHALL BE USED THROUGHOUT THE SITE.
- HAY MULCH SHALL BE APPLIED FOLLOWING CONSTRUCTION AT A RATE OF 1/2 TON/ACRE. FOLLOWING DORMANT SEEDING, HAY MULCH SHALL BE APPLIED ON ALL SEEDED AND RESEEDED AREAS AT A RATE OF 2 TONS/ACRE.

FALL PLANTING (PHASE ONE)

- PLANTING OF ALL SHRUBS AND TREES SHALL BE COMPLETED BETWEEN AUGUST 15 AND OCTOBER 15.
- DORMANT SEEDING  
ALL SEEDING SHALL BE COMPLETED BETWEEN NOVEMBER 1 AND DECEMBER 15. (SEE NOTE 9 FOR HAY MULCH SCHEDULE)

SPRING PLANTING (PHASE TWO)

- PLANTING OF ALL HERBACEOUS WETLAND SPECIES DUCK POTATO (*SAGITTARIA LATIFOLIA*) COMMON THREE SQUARE (*SCIRPUS AMERICANUS*), RICE CUT GRASS (*LEERSIA ORYZOIDES*) AND BURREED (*SAGITTARIA LATIFOLIA*) SHALL BE COMPLETED FROM APRIL 15, TO JUNE 15.

CVRR MITIGATION SITE								
QUANTITY SHEET				STATE OF VERMONT AGENCY OF TRANSPORTATION				
APPROXIMATE SUMMARY OF QUANTITIES								
CONSTR. ENG.	EROSION CONTROL	UTILITIES	ROADWAY	GRAND TOTAL	UNIT	ITEM	ITEM NO.	
			1	1	LS	CLEARING & GRUBBING (5 ACRES)	201.10	
			11,700	11,700	CY	COMMON EXCAVATION	203.15	
			2,250	2,250	CY	TRENCH EXCAVATION OF EARTH	204.20	
			550	550	CY	STONE FILL, TYPE II	613.11	
	1,200			1,200	SY	GEOTEXTILE FABRIC FOR SILT FENCE	649.20	
			4,500	4,500	SY	GEOTEXTILE FABRIC FOR FILTERS	649.20	
			50	50	LBS	SEED MIX	651.15	
	50			50	EA	HAY BALES FOR EROSION CONTROL	651.26	
APPROXIMATE SUMMARY OF QUANTITIES								
ITEMS								
QUANTITY	UNIT	KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	CONTAINER	ITEM NO.
CONIFEROUS TREES								656.20
16	EACH	LL	LARIX LARICINA	EASTERN LARCH	1 1/2" - 2" CAL.	15' OC	B & B	
ITEMS								
DECIDUOUS TREES								656.30
15	EACH	AR	ACER RUBRUM	RED MAPLE	1 1/2" - 2" CAL.	25' OC	B & B	
12	EACH	AC	AMELANCHIER CANADENSIS	SHAD BUSH	1 1/2" CAL.	15' OC	B & B	
ITEMS								
DECIDUOUS SHRUBS								656.35
224	EACH	AA	ARONIA ARBUTIFOLIA	RED CHOKEBERRY	24"-30" HT.	3' OC	CONTAINER	
206	EACH	CS	CORNUS STOLINIFERA	RED OSIER DOGWOOD	24"-30" HT.	3' OC	CONTAINER	
166	EACH	IV	ILEX VERTICILLATA	WINTERBERRY	24"-30" HT.	3' OC	CONTAINER	
98	EACH	SC	SAMBUCUS CANADENSIS	ELDERBERRY	24"-30" HT.	3' OC	CONTAINER	
146	EACH	VD	VIBURNUM DENTATUM	ARROW WOOD	24"-30" HT.	3' OC	CONTAINER	
88	EACH	VC	VACCINIUM CORYMBOSUM	HIGH BUSH BLUEBERRY	24"-30" HT.	3' OC	CONTAINER	
26	EACH	CA	CORNUS AMOMUM	SILKY DOGWOOD	24"-30" HT.	3' OC	CONTAINER	
ITEMS								
GROUND COVER AND VINES								656.40
5000	EACH	LO	LEERSIA ORYZOIDES	RICE CUT GRASS	2" PEAT POTS	1'-6" OC	PEAT POTS	
8000	EACH	SE	SPARGANIUM EURYCARPUM	BURREED	LARGE ROOTS	1'-6" OC	BARE ROOT	
1250	EACH	SL	SAGITTARIA LATIFOLIA	DUCK POTATO	LARGE TUBERS	1'-6" OC	BARE ROOT	
1250	EACH	SA	SCIRPUS AMERICANUS	COMMON THREE SQUARE	LARGE TUBERS	1'-6" OC	BARE ROOT	

 engineering    planning    management    development	CHITTENDEN COUNTY CIRCUMFERENTIAL HIGHWAY	DRAWN BY: DJS/TJD CHECKED BY: [Signature] PROJ. ENG. [Signature] DATE: APRIL 1991
	VERMONT ROUTE 289 WILLISTON-COLCHESTER PB 033-1(2)	PROJ. NO. R11304PC DRAW. NO. 7564
	QUANTITY SHEET	SHEET 380 OF 400 WM 100