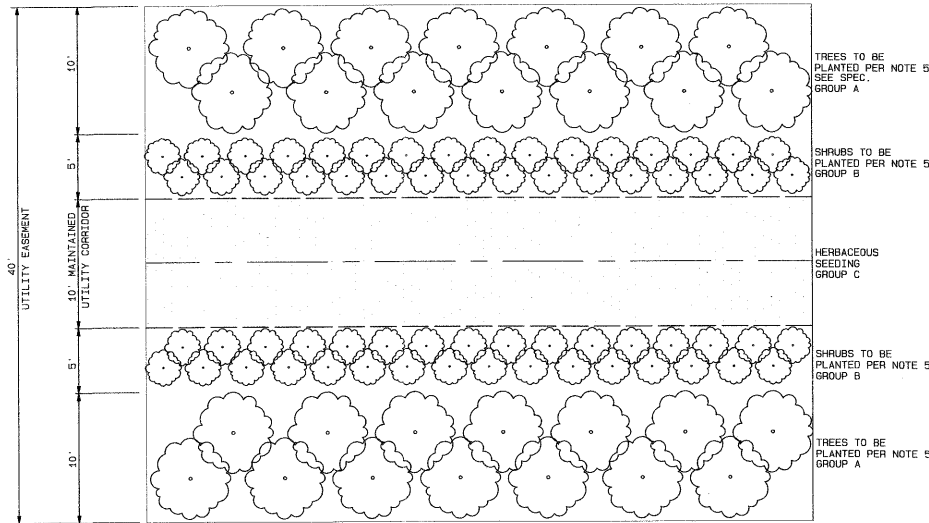


Note: This construction corridor restoration details apply only to sanitary sewer easements within United States of America owned land.



1 40' UTILITY EASEMENT  
C9.2 1" = 5'

### TOWN OF CARY VEGETATION CONSTRUCTION CORRIDOR RESTORATION

Within the United States of America owned property, the proposed utility corridor and its service area pass through four different community types: mesic hardwood-pine forest, piedmont alluvial forest, early successional pine forest, and cutover/abandoned agricultural/Right-of-Way. Each type of community varies in maturity and composition. The forested community types are based on those described in Classification of the Natural Communities of North Carolina: Third Approximation (Schafale and Weakley, 1990). Previous use of this land for agriculture and silviculture has left little of it in its natural community classification type.

Although much of this area is no longer representative of its described community type, the Town of Cary intends to not only impact as little of it as possible, but to also restore as much of the area as possible. As stated in the approved EAMitigation Plan,

*"the Town intends to undertake the following measures to reduce the period necessary for habitat recovery and to minimize, in general, the impacts of fragmentation. The Town will follow the shortest possible route; limit the utility corridor during construction to a maximum width of 40 feet; restore the construction corridor with native woody vegetation; and minimize maintenance mowing. Additionally, to the extent possible, the Town will leave large trees at the edges of the construction corridor in order to minimize creation of openings in the forest canopy. Contracts will include instructions and measures required to minimize damage to trees both at the edges of and outside the construction corridor."*

Restoration of the construction corridor within the United States of America owned property with native woody vegetation is a prime concern of this project. Each community type will be planted with dominant, marquis species that are available from the North Carolina Division of Forestry Resources. This is the best source for high quality, high volume, and low cost seedlings. Other dominant species are expected to establish themselves on their own (volunteer species). See Table 1 for a list of tree and shrub species that will be planted, or that should volunteer in each community type. The herbaceous layer within the forested areas should also establish itself on its own; however, within the right away, an herbaceous layer will be established by hydro-seeding with native seeds. The Cutover/Abandoned Agricultural/Right-of-Way areas are expected to establish themselves as early successional pine forest.

The construction corridor within the United States of America owned property is to be a maximum of 40 feet wide. After construction, it will be replanted with native species, leaving only a 10 feet herbaceous corridor in the center. On either side of this corridor, two rows of shrubs will be planted at 3 feet intervals, and offset by row. On the far side of the shrub layer, two rows of offset trees will be planted with 6 feet between each tree.

- GENERAL NOTES:**
- NATIVE PLANTING FROM THREE GROUPS ARE PROPOSED. HERBACEOUS PLANT MATERIAL WILL BE GENERATED FROM SEEDING APPROPRIATE FOR BROAD COVER. SHRUBS AND TREES WILL BE ACQUIRED FROM NC FOREST SERVICE OR OTHER LOCAL SOURCE.
  - TREES AND SHRUBS SHOULD BE PLANTED WITH A DOUBLE BAR AND TO BE FERTILIZED WITH GONCOAT. HERBACEOUS PLANTS TO BE HYDRO-SEEDED WHERE APPROPRIATE.
  - MULCHING IS NOT PROPOSED
  - TREES AND SHRUBS TO BE PLANTED DURING SPRING OR FALL.
  - THE NATIVE PLANTING SPACING SHALL BE CONSISTENT WITH THE EXISTING VEGETATION THROUGHOUT THE CORRIDORS. EXISTING VEGETATION DENSITIES SHALL BE DETERMINED BY FIELD SURVEY CONDUCTED PRIOR TO CONSTRUCTION.

### PLANTING LIST

#### GROUP A - TREES

COMMUNITY TYPE	PLANTING SPECIES	VOLUNTEER SPECIES
MESIC HARDWOOD PINE FOREST	WHITE OAK (QUERCUS ALBA) RED OAK (QUERCUS RUBRA) PIBALT HICKORY (CARYA GLABRA)	RED MAPLE (ACER RUBRUM) SWEETGUM (LIQUIDAMBAR STYRACIFLUA) TULIP POPLAR (LIRIODENDRON TULIPIFERA) IRONWOOD (CARPINUS CAROLINIANA) SHORT-LEAF PINE (PINUS ECHINATA)
PIEDMONT ALLUVIAL FOREST	RIVER BIRCH (BETULA NIGRA) SYCAMORE (PLATANUS OCCIDENTALIS) PIBALT HICKORY (CARYA GLABRA)	RED MAPLE (ACER RUBRUM) WHITE ASH (FRAXINUS AMERICANA) AMERICAN OLM (ULMUS AMERICANA) IRONWOOD (CARPINUS CAROLINIANA) AMERICAN BEECH (FAGUS GRANDIFOLIA)
EARLY SUCCESSIONAL PINE FOREST	LOBLOLLY PINE (PINUS TAEDA)	SWEETGUM (LIQUIDAMBAR STYRACIFLUA) SHORT-LEAF PINE (PINUS ECHINATA)

#### GROUP B - SHRUBS

COMMUNITY TYPE	PLANTING SPECIES	VOLUNTEER SPECIES
MESIC HARDWOOD PINE FOREST	BLUBERRY (VACCINIUM SP.) VIBURNUM (VIBURNUM ACERIFOLIUM)	AMERICAN HOLLY (ILEX OPACA) FLOWERING DOGWOOD (CORNUS FLORIDA) STRAWBERRY BUSH (DOGWOODS AMERICANA)
PIEDMONT ALLUVIAL FOREST	BLUBERRY (VACCINIUM SP.) VIBURNUM (VIBURNUM ACERIFOLIUM)	PAN-PAN (ASIMINA TRILOBA) FLOWERING DOGWOOD (CORNUS FLORIDA) SPICEBUSH (LINDERA BENZON)
EARLY SUCCESSIONAL PINE FOREST	NOT NEEDED	BLACKBERRY (RUBUS BETULIFOLIUS) GREENBRIER (SMILAX ROTUNDIFOLIA)

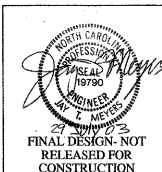
#### GROUP C - HERBACEOUS

SEASON	PLANTING SPECIES	PLANTING RATE
WINTER	EASTERN BANGRASS (TRIPSACUM DACTYLOIDES) BOTTLEBRUSH GRASS (ELYMUS HYSTRIX)	20 LBS PLS / ACRE 5 LBS/ACRE
SPRING	SWEETGUM (LIQUIDAMBAR STYRACIFLUA) BOTTLEBRUSH GRASS (ELYMUS HYSTRIX)	20 LBS PLS / ACRE 5 LBS/ACRE
FALL	EASTERN BANGRASS (TRIPSACUM DACTYLOIDES) VIRGINIA WILD RYE (ELYMUS VIRGINICUS) BOTTLEBRUSH GRASS (ELYMUS HYSTRIX)	10 LBS PLS / ACRE 5 LBS PLS/ACRE 5 LBS/ACRE

02-SP-169  
APPROVED  
TOWN OF CARY

Approved by DRG Date 9-10-03  
Planning DRG Date 10-14-03  
Engineering JS Date 10-15-03

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**Amberly Sanitary Sewer Interceptors**  
Cary, NC  
Sherrill Carolina  
11520 North Carolina Highway 100  
CHARLOTTE, NC 28277

REVISIONS  
06/12/03 WNR COMMENTS

PROJECT #: 2437 DATE: 04/17/03  
DRAWN BY: ACL CHECKED BY: JM  
TITLE:

USACOE CORRIDOR RESTORATION  
SHEET  
**C9.1.4**

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