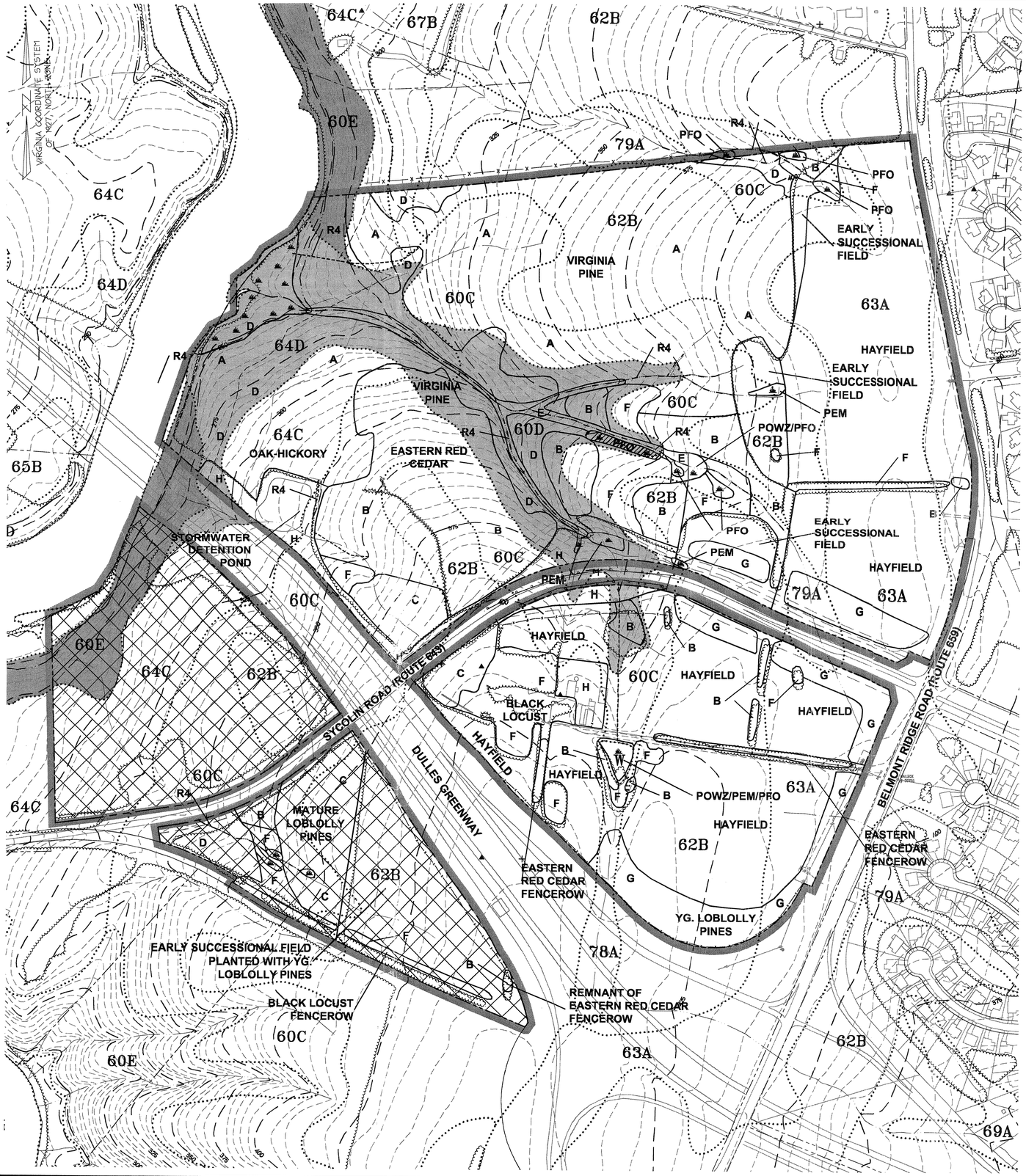

No	DESCRIPTION	DATE
1	COUNTY CHECKLIST COMMENTS	7/11/03
2	COUNTY 1ST SUB. COMMENTS	3/15/04
3	COUNTY 2ND SUB. COMMENTS	5/28/04
4	APPLICANT'S REV. SUBMISSION	8/16/04

ALL NOTES AND INFORMATION ON THIS SHEET PROVIDED BY WETLAND STUDIES AND SOLUTIONS, INC. ARE FOR THE ENTIRE PARCEL, A PORTION OF WHICH DELINIATED WITH HATCHED LINES IS NOT INCLUDED IN THIS REZONING APPLICATION.

NOTES:

Topo and boundary information obtained from Loudoun County Digital Data was used as the base for this Attachment.

WETLAND RECONNAISSANCE FINDINGS :

1. A wetland reconnaissance was performed by Wetland Studies and Solutions, Inc. (WSSI) based on an analysis of relevant background material and a pedestrian reconnaissance that was conducted on November 14, 15 and 18, 2002.

2. The purpose of the reconnaissance is to provide land planners with a general idea of the magnitude of constraints imposed by regulations protecting Jurisdictional Wetlands and other Waters of the U.S. (such as streams, ponds, etc.).

3. High and medium probability areas for Jurisdictional Wetlands and other Waters of the U.S. (i.e., streams and ponds) are depicted on this Attachment.

4. All other portions of the study area have a low potential for the occurrence of Jurisdictional Wetlands and/or other Waters of the U.S. However, Jurisdictional features may also occur in low potential areas, particularly in swales and depressions.

5. Please note that all Jurisdictional Waters of the U.S. are regulated under the Clean Water Act and require a permit from the U.S. Army Corps of Engineers (COE) and/or Virginia's Department of Environmental Quality (and sometimes local agencies as well) prior to impacting wetlands or other Waters of the U.S.

TREE STAND EVALUATION RESULTS SUMMARY : Six forest stand types (plus four other non-forested communities) were identified in this evaluation which included a pedestrian reconnaissance that was conducted by WSSI on November 14, 15, 18 and 19, 2002. The approximate boundaries of these communities are depicted on this Attachment (and identified by the letter for each forest stand type) with a brief description of each provided below.

Forest Stand Type A - Virginia Pine - A mature forest stand comprising ± 26.1 acres on the northern portion of the study area and the most extensive forest cover type. This even-aged successional forest developed after some form of disturbance. Virginia pine (*Pinus virginiana*) rapidly invades old fields, logged sites and other disturbed areas. Eastern red-cedar (*Juniperus virginiana*), another successional species is abundant in the sub-canopy. The abundant small saplings of oaks and hickories in the understory and herb layers indicate that this forest is undergoing regeneration (albeit at a relatively slow rate) to the White Oak-Black Oak-Northern Red Oak community found adjacent to the west and south of this Virginia Pine stand.

Forest Stand Type B - Eastern Red Cedar - Another successional forest cover type comprising ± 19.4 acres of the study area. The tree canopy in this mature, even-aged stand is dominated by eastern red cedar (*Juniperus virginiana*), one of the first woody species to invade abandoned croplands or pastures in dry uplands. A significant stocking of Virginia pine is also present in the canopy, including field-grown pines suggesting this forest was formerly pastureland.

Forest Stand Type C - Loblolly Pine - A pure stand of loblolly pine (*Pinus taeda*) has been planted on ± 6.3 acres of the western portion of the central and southern parcels and on the southwestern corner of the northern parcel. There were no significant numbers of other tree species in the canopy of this dense, even-aged forest. The understory included nine different tree and shrub species, mostly eastern red cedar, blackhaw viburnum and black locust, suggesting that this forest was, in all likelihood, an early successional field prior to over-planting with loblolly pine.

Forest Stand Type D - White Oak - Black Oak - Northern Red Oak - A mature climax forest covering ± 20.2 acres of ridgetops and gentle to moderately steep slopes of the western and central portions of the northern parcel. Dominated by white oak (*Quercus alba*) and northern red oak (*Quercus rubra*), pignut hickory (*Carya glabra*), mockernut hickory (*C. tomentosa*), chestnut oak (*Quercus prinus*) and black oak (*Quercus velutina*) are also present in the canopy as subdominants. The understory is relatively open, with scattered saplings of tree layer dominants, eastern redbud (*Cercis canadensis*), flowering dogwood (*Cornus florida*) and dense patches of witch-hazel (*Hamamelis virginiana*), spicebush (*Lindera benzoin*) and pawpaw (*Asimina triloba*).

Forest Stand Type E - Bottomland Hardwood- A mature, even-aged stand covering ± 6.1 acres at the bottoms of well-defined stream valleys on the central and western portions of the northern parcel and on the alluvial fan that has formed where the stream that drains the northern parcel flows into Goose Creek. This forest stand type is composed primarily of five tree species: box-elder (*Acer negundo*), American elm (*Ulmus americana*), American sycamore (*Platanus occidentalis*), green ash (*Fraxinus pennsylvanica*) and tulip poplar (*Liriodendron tulipifera*). Two understory shrubs: spicebush (*Lindera benzoin*) and pawpaw (*Asimina triloba*) are particularly abundant in the understory of this forest stand.

Forest Stand Type F - Black Locust - A pioneer species, black locust (*Robinia pseudoacacia*) occurs on ± 4.7 acres of the study area on the central parcel in and adjacent to abandoned pasture and paddocks near the farm buildings and on the other two parcels in small areas where disturbance (of an undetermined nature) previously occurred. White ash (*Fraxinus americana*), tree-of-heaven (*Ailanthus altissima*), red mulberry (*Morus rubra*), hackberry (*Celtis occidentalis*), box-elder (*Acer negundo*) and black cherry (*Prunus serotina*) are also present as sub-dominants in the canopy. This is an uneven-aged forest stand, with scattered mature trees and numerous small tree saplings. Dense thickets of multiflora rose (*Rosa multiflora*), serrate-leaf blackberry (*Rubus argutus*) and wineberry (*Rubus phoenicolasius*) are found in the understory.

Non-forested Communities

1. Hayfield occur on ± 47.4 acres on the eastern portions of the northern and central parcels. These hayfields are dominated by a mixture of grasses including meadow fescue (*Festuca pratensis*) and broom-sedge (*Andropogon virginicus*).

2. Early successional fields occur on ± 4.2 acres of the northern parcel at the boundary of the existing hayfields and the adjacent forested communities. In all likelihood, these areas were formerly hayfields that have been abandoned and natural succession is beginning to occur. The grasses, broom-sedge (*Andropogon virginicus*) and lesser amounts of meadow fescue (*Festuca pratensis*) occur with a diverse mixture of forbs, including various species of goldenrod (*Solidago*), Queen Anne's lace (*Daucus carota*) and black-eyed susan (*Rudbeckia serotina*) in the herb layer. Young eastern red cedar (*Juniperus virginiana*), persimmon (*Diospyros virginiana*), black locust (*Robinia pseudoacacia*) and Virginia pine (*Pinus virginiana*) are also present.

3. Young loblolly pine stands "G" - Approximately 7.0 acres of the hayfields and early successional fields have been over-planted with young loblolly pines, as depicted by the letter "G" on this Attachment. The loblolly pines are now generally 3-4" in dbh. Given sufficient time, these areas will mature to a loblolly pine forest like that present on the western portion of these parcels (identified by the letter "C" on this Attachment).

4. Disturbed areas "H" - Approximately 6.0 acres of this site were categorized as disturbed areas, indicated by the letter "H" on this Attachment. Disturbed areas are present where grading occurred for road construction (i.e., the Dulles Greenway and Sycolin Road) and for the construction of a stormwater detention pond adjacent to the Dulles Greenway and adjacent to the farm buildings on the central parcel. A mixture of native and non-native vegetation of widely variable ages occurs on these disturbed areas, including mature black locust (*Robinia pseudoacacia*) and red mulberry (*Morus rubra*). Small stands of young successional species (e.g., black locust, black cherry, tree-of-heaven and eastern red cedar) were also found scattered throughout the disturbed areas. The steepest slopes have been seeded with crown vetch (*Coronilla varia*).

ETS HABITAT EVALUATION RESULTS SUMMARY :

1. Suitable foraging and breeding habitat for the Henslow's sparrow, upland sandpiper and loggerhead shrike is present in the early successional fields and hayfields on the eastern portions of this study area. However, due to severe population declines for these species, they are now very rare breeders in Loudoun County, if they are present at all, and there is a low probability that they occur on this site.
2. Although the bald eagle may forage on Goose Creek (which borders the western side of the northern parcel) during migration or in the winter, it is not expected to occur frequently or to breed due to the absence of suitable nesting and sustained foraging habitat.
3. Potential habitat for the wood turtle is limited to the western side of the northern parcel adjacent to Goose Creek, a perennial stream. There is a low probability of occurrence due to the limited area of potentially suitable habitat and the study area's distance from known observations sites on the Potomac River.
4. Due to the absence of organically rich soil in the mature deciduous forests, American ginseng is unlikely to be present on this site.
5. For the reasons summarized above and detailed in the accompanying report, there is a low probability that any ETS occur on this site.

LEGEND

- MODERATELY STEEP SLOPE (15%-25%)
- STEEP SLOPE (≥ 25%)
- USGS TRIBUTARY STREAM (PER USGS)
- HIGH POTENTIAL FOR PERENNIAL STREAM (BASED ON WSSI'S FIELD OBSERVATIONS)
- HIGH POTENTIAL FOR INTERMITTENT STREAM & LESSER WATERS OF THE U.S.
- MEDIUM POTENTIAL FOR INTERMITTENT STREAM AND LESSER WATERS OF THE U.S.
- HIGH POTENTIAL FOR JURISDICTIONAL WETLANDS
- MEDIUM POTENTIAL FOR JURISDICTIONAL WETLANDS
- PARCEL AREA NOT REZONED WITHIN THIS APPLICATION

COWARDIN CLASSIFICATION

PFO	PALUSTRINE FORESTED WETLAND
PEM	PALUSTRINE EMERGENT WETLAND
R3	RIVERINE, UPPER PERENNIAL
R4	RIVERINE, INTERMITTENT

100 0 100 200
SCALE
1" = 200'

THIS SHEET IS NOT TO BE PROFFERED

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TREE INVENTORY MAP

GOOSE CREEK VILLAGE
REZONING APPLICATION
DULLES ELECTION DISTRICT LOUDOUN COUNTY, VIRGINIA

PROJECT NO: 303105
SCALE: 1"=200'
DATE: MAY 22, 2003
DESIGN: BPC
DRAWN: BGN/DMK
CHECKED:
SHEET No. 3 OF 11

LC-3080

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