

**GENERAL MANAGEMENT PLAN FOR
A PORTION OF THE DIFFICULT RUN STREAM VALLEY
(The Gabrielson Tract)**

I. INTRODUCTION

A. Park Description

The Gabrielson Tract is a 12 acre portion of the Difficult Run Stream Valley. It is located on Leeds Road in the Sully supervisory district. This site was once maintained as a showplace for ornamental/horticultural resources. The steep slopes behind the house down to the floodplain have been terraced with stone and landscaped with a variety of vegetation (see Appendix). There are two man-made ponds behind the house which have been landscaped as well with a variety of ornamental grasses, perennials, and bamboo.

B. Purpose and Description of the Plan

The purpose of this General Management Plan (GMP) is to serve as a guide for all future planning and programming. This document should be referred to before future planning and design projects are started.

This GMP describes the existing natural and cultural resources of the park, as well as other existing conditions. Management zones have been established, with accompanying lists of potential uses for each zone. The uses are described in general terms, so that as visitor needs change, the uses provided can change also.

General Management Plans are meant to be flexible, to change with the changing needs of park visitors. Every GMP should be updated periodically, to reflect changes that have occurred both on and off-site.

II. PARK PURPOSE AND SIGNIFICANCE

A. Park Purpose: What is the purpose of the park?

Park Purpose statements are intended to provide an umbrella for planning and decision making. If a proposed use conflicts with any one of the purposes listed, it will be considered an incompatible use. By establishing park purposes, future plans can remain flexible, as legislative requirements and visitor preferences change.

The purpose of the Gabrielson portion of Difficult Run Stream Valley Park is to:

- ▶ preserve, protect, restore, and interpret natural resources
- ▶ preserve, protect, restore, and interpret horticultural resources
- ▶ provide a variety of passive recreation for all county citizens

B. Significance Statement: Why is this park important?

The Gabrielson portion of Difficult Run Stream Valley Park is important to the Fairfax County park system because in 1976 all the streams in the Difficult Run Watershed were identified as suitable for municipal water supply, primary contact recreation, propagation of fish and other aquatic life, and other beneficial uses. In Virginia's 1988 Nonpoint Pollution Assessment Report the waters of the Difficult Run Watershed are identified as exhibiting the effects of urban nonpoint source pollution (NPS). In 1990 it was identified by the NVSWCD as a "critical environmental area undergoing rapid changes," and was adopted by the BOS through the Health Department's Adopt-A-Stream program. The watershed received a "high" ranking in the 1991 Overall Nonpoint Source Priorities of the Commonwealth of Virginia. This shows a continual degradation of the watershed.

Difficult Run is the largest watershed in Fairfax County and the last known to have supported native Brook Trout. Planned land use is for low density residential development, which makes this area a good target for protecting water quality. The floodplain portion of the property is a Chesapeake Bay Resource Protection Area, and the county EQC policy, Park Authority Stream Valley policy, and county Floodplain Ordinance recommend, among other things, passive recreation and habitat protection/preservation as priority uses in stream valleys.

The county EQC policy also recommends "additions to stream valleys...to augment the habitats and buffers provided by the stream valleys." The need to buffer stream valleys, by protecting adjacent uplands such as on the Gabrielson Tract, has long been recognized by the Park Authority, and is referenced in the agency's 1988 Preliminary Needs Assessment; the Conservation Division's 1990 Natural Resource Protection Plan; and the current version of the agency's 1995 draft Park Comprehensive Plan (PCP) scheduled for adoption later in spring 1995. In the PCP, this portion of the Difficult Run stream valley is designated a Class II Greenway, which consists of "larger stream valleys and contiguous natural areas, {preserved} for riparian habitat, water quality protection, and aesthetic values." The PCP also identifies the Gabrielson Tract as one to be managed so as "to emphasize the horticultural value of the site."

Recognition of the property as one of horticultural value also reflects the provisions in the April 1966 contract to be included with the transfer of land. This contract states, in part, "it is mutually understood that it is the desire of the parties hereto that the property herein described shall be maintained as a natural area with emphasis on the continued development of an arboretum and botanical type park."

C. Visitor Experiences: What will the visitor experience at this park?

- ▶ Visitors will be able to enjoy the natural beauty and be provided the opportunity for solitude and relaxation
- ▶ Visitors will be able to learn about plants in their natural habitats and in specially planted areas and understand their relationship to each other and the wildlife of the area

III. *EXISTING CONDITIONS*

A. Slopes

Approximately one third of the site, the section immediately adjacent to the flood plain, is more than 15% slope. In fact, most of the slope is considerably more than 15%, nearing 50% in places. This slope has been terraced with stone walls in places. The flood plain is less than 5% slope, and the extreme eastern section of the park is between 5 and 15% slope.

B. Soils

The flood plain soil is Chewacla Silt Loam, a somewhat poorly to moderately well-drained soil subject to flooding. The hillside is mostly Rocky Land, with rock outcroppings and cobble. Hard rock may be encountered while excavating this soil. The top of the hill is divided into two soil types. Elioak Silt Loam is located on the top of the ridge. This soil is a good soil for development with a good water holding capacity. Glenelg Silt Loam on the remainder of the site is moderately deep and well-drained with moderate water holding capacity.

C. Cultural Resources

This site has a low probability for significant cultural resources. Part of this is due to the severe topographic nature for the land. The possibility for subterranean cultural resources does exist. The flood plain has a slight probability for a buried prehistoric Native American site, however, there is no above ground evidence of a site.

D. Natural Resources

The site is in the Difficult Run stream valley, with a large part of the property in the floodplain. It appears to have been farmland not too long ago as indicated by the early successional stage of the floodplain forest and earlier aerial photographs. However, there are several large trees, Tulip Poplar and Red Maple 100 years old or more, along the stream bank itself. There is significant erosion along the stream due to increased water flow and volume from increasing development. Further revegetation of the floodplain, through succession, will continue to aid in stormwater management. Other than the large trees mentioned above, no significant native plant species or outstanding specimens were located. There are signs of current beaver activity, and a small lodge on one of the ponds that may be active.

The ornamental vegetation is in surprisingly good condition. The native vegetation has begun to take over, but with some effort the planned landscape can be restored. The azaleas are said to include some rare varieties from Asia, and should be identified by an expert, as should the other ornamental vegetation (the azaleas can be correctly identified only during their flowering season). There are two man-made ponds behind the house which have been landscaped with a variety of ornamental grasses, perennials, and bamboo.

E. Access

Existing vehicular access is the driveway from Leeds Road. A second drive exists further along Leeds Road. Both entrances are chained and padlocked.

F. Utilities

Utilities to the house include electricity and water. There is no county sewer or natural gas to the house.

G. Surrounding Land Use

The park and the area surrounding it is zoned R-E. Girl Scout Camp Crowell is southwest of the site on the western side of Difficult Run; the Whole Word Fellowship church is located west of the camp on Vale Road; the remaining nearby property is all large lot residential.

H. Countywide Trail

The County Comprehensive Plan requires a countywide trail along Vale Road and along Hunters Valley Road and the outlet road. The stream valley trail is planned along both sides of Difficult Run.

I. Existing Facilities

Existing on the site is a concrete block house with detached garage, paved driveway, and small parking area. Stone walls terrace the hillside and a primitive trail runs along the top of the hill.

IV. MANAGEMENT FRAMEWORK

The management framework integrates research, site analysis, and basic data presented in this document. Management zones have been defined to provide a framework for decision making. Existing uses, existing conditions, and recommendations from Park Authority staff were considered in the development of the management zones. The framework provides broad flexibility within a range of potential uses for each management zone.

The "Potential Uses" stated for the zone describe what uses are acceptable for each zone. If a use is not listed for a zone, by its omission it is considered an incompatible use for that zone. The potential uses are intentionally general to allow flexibility when making decisions.

A. Natural Resource Protection Zone

The entire study site with the exception of the Entrance Zone will be included as areas of valuable natural resources and be protected by a Natural Resource Protection Zone (NRPZ). Human impact in this zone will be kept to a minimum. Some of the NRPZ may include cultural resources as well. Management of the natural resources will be allowed, but degradation of this zone shall be prohibited.

Horticultural Resource Management Zone

Within the NRPZ is a secondary zone; this area of horticultural interest contains plantings to be evaluated, renovated, and studied. This zone is the Horticultural Resource Management Zone (HRMZ). These plantings are a primary park attraction and will provide the basic resources for horticultural interpretation and education. To provide the basis for this study, an inventory of existing plantings must be taken. This inventory should be conducted over the course of an entire growing period, or at least a year. From this inventory, a horticultural management plan will be developed to guide the renovation and management of the collection.

POTENTIAL USES:

- Trails
- Wildlife and Habitat Management
- Research, Interpretation, and Education
- Passive Recreation

B. **Entrance Zone**

The existing entrance to the park, the driveway entrance on Leeds Road, will be evaluated with the second entrance further up Leeds Road to determine the entrance. The Entrance Zone (EZ) draws visitors into the site and allows them to view the park as they enter.

POTENTIAL USES:

- Park Buildings (not to include maintenance buildings)
- Parking
- Trails
- Roads and Road Improvements
- Utilities

V. **MANAGEMENT RECOMMENDATIONS**

Until the development of a Conceptual Development Plan or Project Implementation Plan, the following recommendations will be used to guide the park management.

Passive use would be the best management approach to the Gabrielson Tract. Providing citizens with a botanical arboretum, trails to and along the stream valley, picnic areas to relax, and interpretive programs for horticulture and natural resources would be the preferred management practices. Passive recreation would be in keeping with the location of the property and the PA policies established for management of these sensitive areas. Also, leaving the site undeveloped allow the floodplain forest to continue to provide stormwater management functions, and would aid in habitat preservation/protection by maintaining the larger continuous habitat along Difficult Run stream valley.

A. **Horticultural Management Plan**

The existing plantings should be inventoried and evaluated based on a study over a period of a year or more. The attached appendix is a rough beginning of a list of plants on the site. A Horticultural Management Plan (HMP) should be developed to provide recommendations for immediate and long term care and interpretation of this horticultural site.

B. Existing House

The house should be renovated and rented to a Park Authority tenant in order to provide security for the buildings and site until the HMP is created. The lease should include wording prohibiting the tenant from modifying the site or vegetation in any way other than strictly maintenance or safety modifications until the HMP is put into effect.

C. Existing Stone Retaining Walls

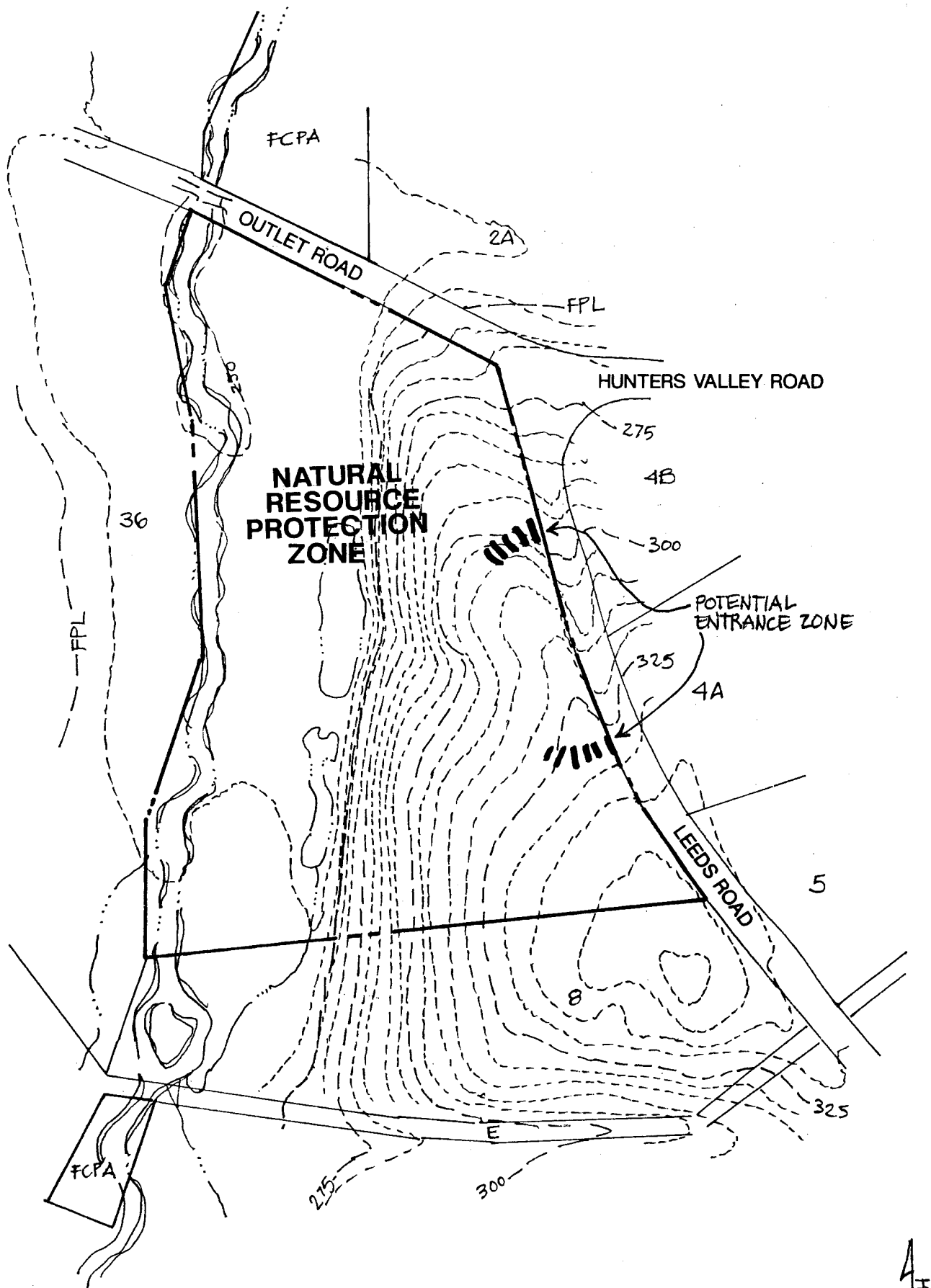
These existing stone walls, terracing the steep slopes behind the house have been neglected through the years and are in serious need of repair.

D. Existing Bamboo

The bamboo is spreading beyond its intended use, and is attempting to cross the stream. As it is an invasive exotic plant, it should be removed before it gains an even larger foothold in the stream valley.

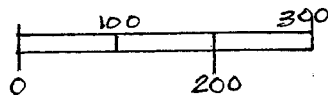
E. Cultural Resources

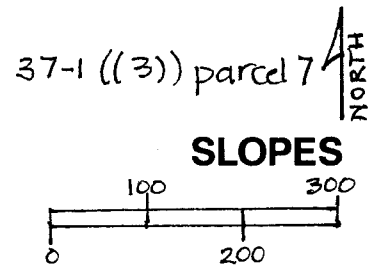
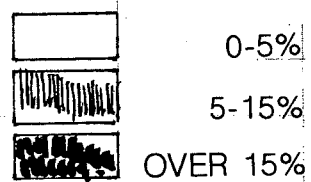
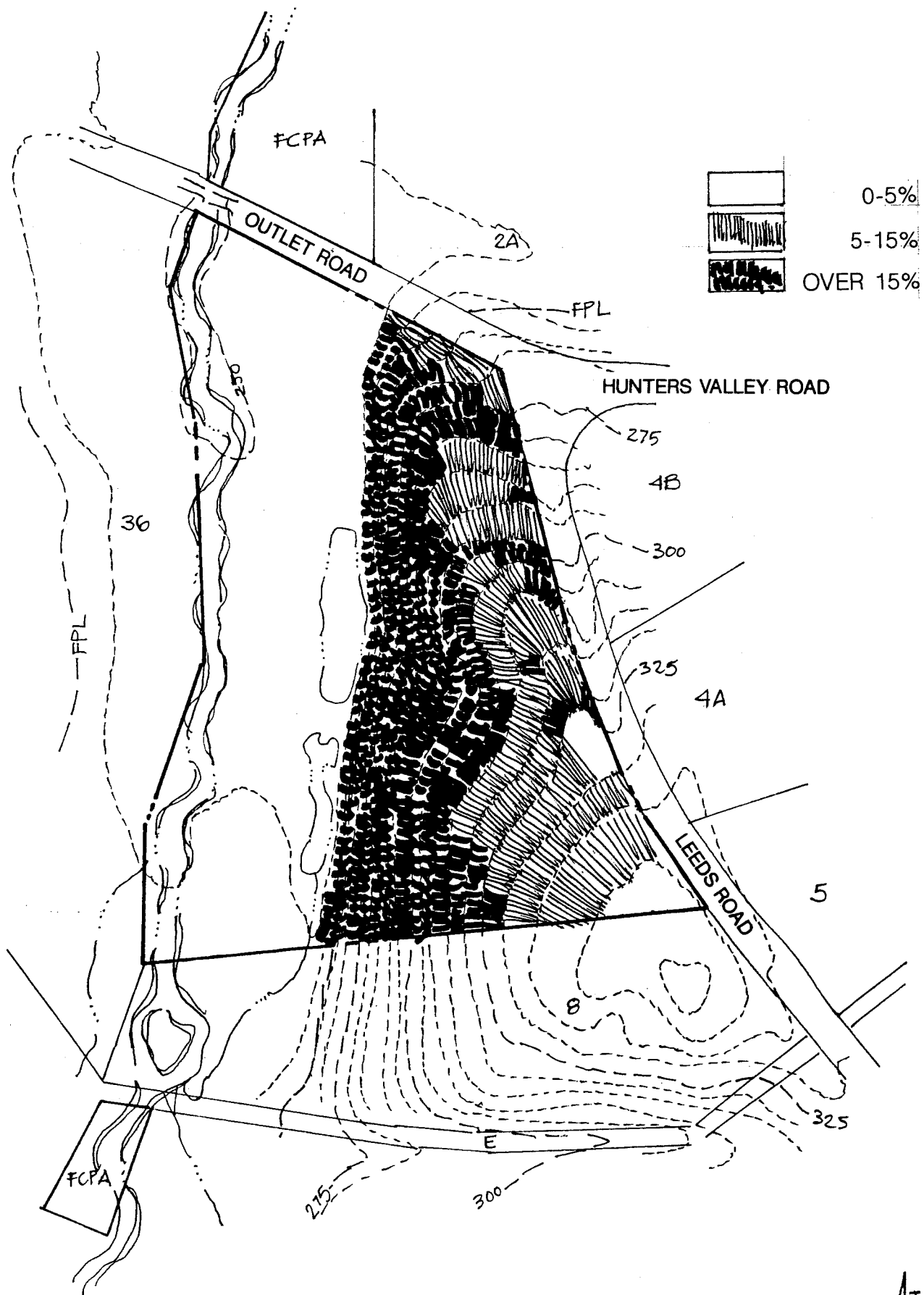
There will be no adverse effect on significant cultural resources if the site is developed. Avoidance of the flood plain is recommended due to the possibility of a buried prehistoric occupation. If the flood plain is to be disturbed a Phase I survey should be undertaken to satisfy compliance.

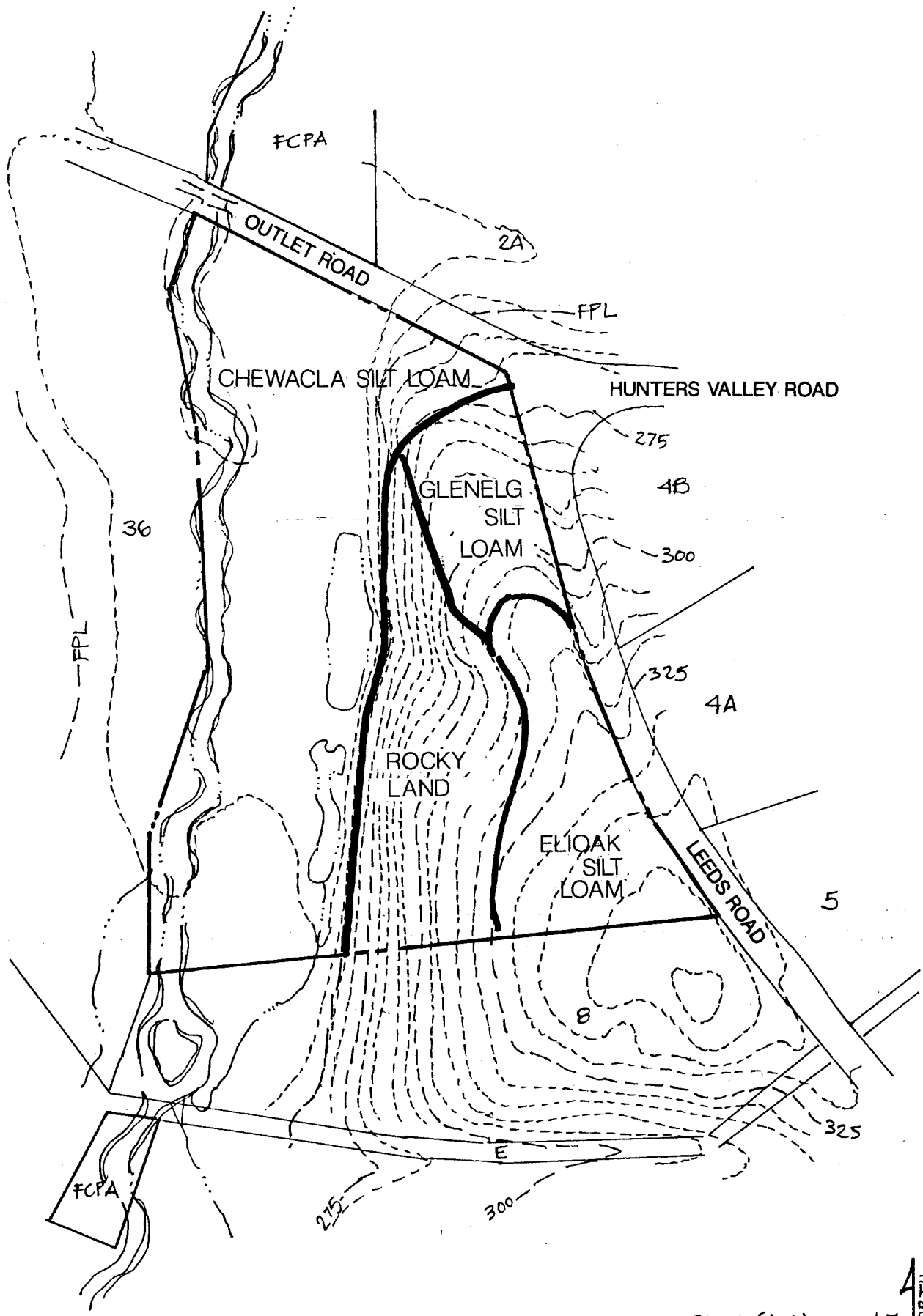


37-1 ((3)) parcel 7

GENERAL MANAGEMENT FRAMEWORK







37-1 ((3)) parcel 7

SOILS

0 100 200 300

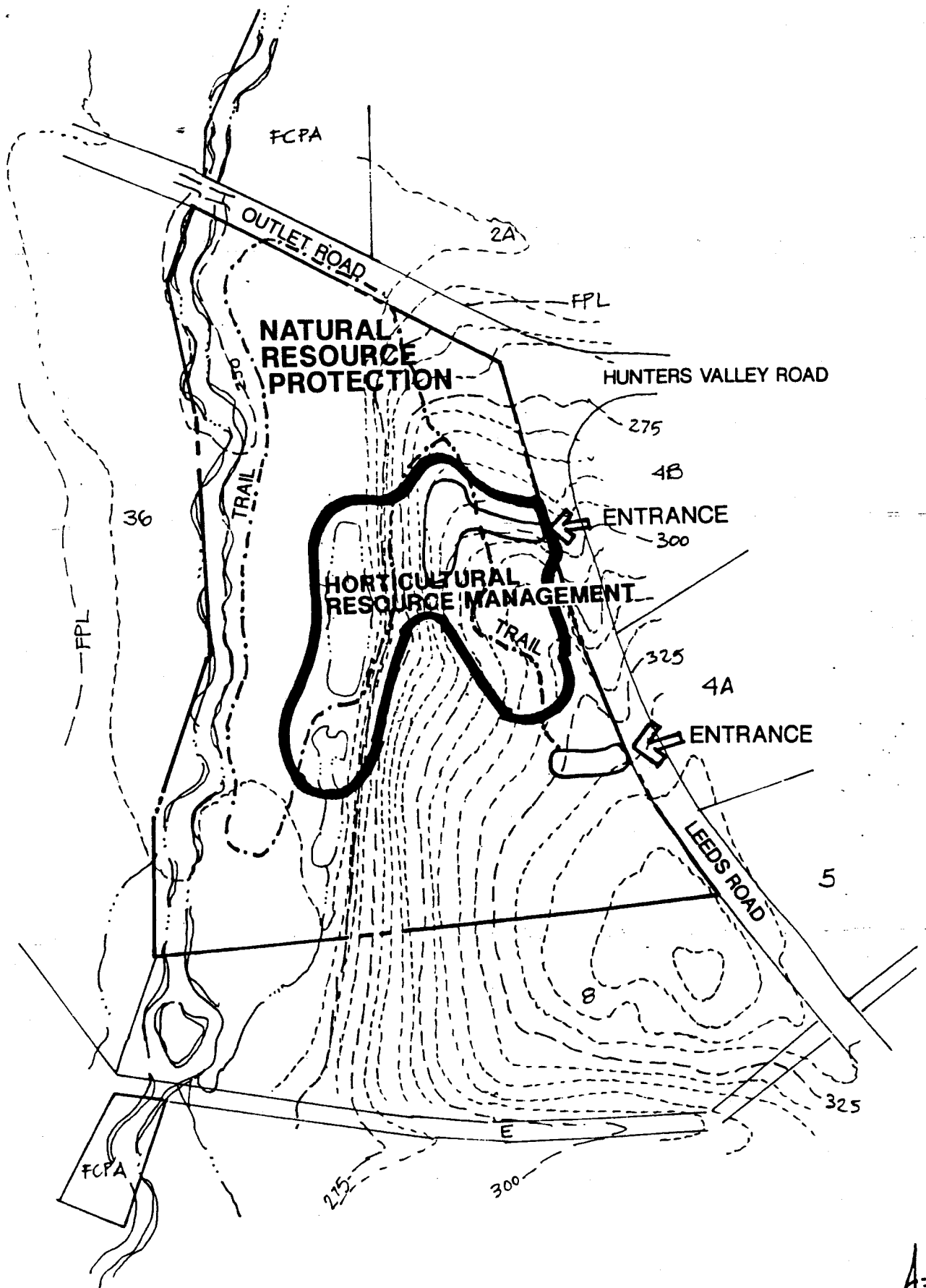
PLANT LIST FOR THE GABRIELSON TRACT

ORNAMENTAL

Mountain Laurel	Kalmia latifolia
Azaleas	Rhododendron sp
Japanese Holly	Ilex crenata
American Holly	Ilex opaca
White Pine	Pinus strobus
Bush Honeysuckle	Lonicera sp
Vinca	Periwinkle
Rhododendrons	Rhododendron sp
Leucothoe	Leucothoe sp
Bamboo	
Viburnum	Viburnum opulus and trilobum
Spirea	Spirea x vanhouttei
Barberry	Barberry thunbergii
Exbury Azalea	Rhododendron sp
Fire Pink	Silene virginica
Climbing Rose	Rosa sp
grasses	
Hemlock	Tsuga canadensis
Iris	Iris sp
Pond Lilies	Nymphaea sp
Mahonia	Mahonia bealei
Yew	Taxus sp
English Ivy	Hedera helix
Privet	Ligustrum sp
Douglas Fir	Pseudotsuga menziesi
Scotch Broom	Cytisus scoparius
Pfitzer Juniper	Juniperus communis
Burning Bush	Euonymus alata
Nierembergia	Nierembergia sp
Crown Vetch	Coronilla varia
Bald Cypress	Taxodium distichum

NATIVE

Cardinal Flower	Lobelia cardinalis
Arrowwood	Viburnum dentatum
Meadow Beauty	Rhexia virginica
Ironweed	Vernonia noveboracensis
Joe Pye Weed	Eupatorium dubium
Magnolia	Magnolia virginiana
Partridgeberry	Mitchella repens
Tulip Poplar	Liriodendron tulipifera
Red Maple	Acer rubrum
Black Cherry	Prunus serotina



**GABRIELSON GARDENS
CONCEPTUAL DEVELOPMENT PLAN**

