



AMERICAN RESCUE PLAN ACT (ARPA) 2024 APPLICATION

Please submit a separate application for each project.

PART 1: CONTACT INFORMATION

Name(s)

Carol Larson

Committee or Organization (if applicable)

Forest Committee,

Cell Phone

215-806-5131

Other Phone

Email(s)

forest@arden.delaware.gov

Contact Address(es)

1900 Sherwood Road Wilmington, DE 19810, carol2339@verizon.net

PART 2: PROPOSAL DESCRIPTION

Please summarize your proposed project in 100 words or less.

Project Title: Vegetation Surveying and Mapping of the Open Space Parcels of the Three Communities of the Ardens.

Project Summary: The Forest Committee of Arden, in partnership with Ardentown and Ardencroft propose an inventory of current ecological conditions and plant communities in “public open spaces”. The last botanical inventories from 2002-4 are lists of plant species without associated geospatial data. A current inventory of plants and plant communities with a mapping interface that records geospatial data could be used to manage the forest and be updated to reflect future conditions. This study will provide a glimpse of how the flora may be changing in response to restoration work and environmental and ecological pressures such as changing climate and nonnative plants.

VILLAGE OF ARDEN AMERICAN RESCUE PLAN APPLICATION 2024

Full Project Description:

Describe your project in detail. Why is this project important to the community? Attach more descriptive information to the end of this proposal as needed.

ARPA PROPOSAL: Vegetation survey and mapping of open spaces of the Three Ardens

We are requesting authorization to spend \$5,824 in ARPA funds towards a comprehensive inventory of plants and plant communities of all community spaces (including, greens, wooded areas, and paths*) in the three Ardens. This is a combined effort to expand upon the plant surveys in the woods 20+ years ago, and to develop a detailed mapping interface to record geospatial data with current conditions and anticipate future conditions that may warrant intervention. Survey data with geospatial mapping will be entered into a cloud-based system, ArcGIS. Each village will be able to access the data (how information is viewed and disseminated to community members will be determined by the villages). In addition, representatives from each village will be able to edit the data, and add new datasets (e.g., providing locations of restoration work as well as other management activities).

The surveys (and mapping interface) will help us plan future work and responses to new conditions (e.g., loss of a prominent tree species, such as ashes and American beech). It will give us detailed data helpful for grant applications as well. This field mapping system can be used throughout the villages to store other information such as potholes, street trees and tree work, stormwater infrastructure, signage, street work including speed bumps and painting, and playground work.

The number quoted is a cost-share with Ardentown and Ardencroft, based on percentage of open space and population for each village. Planning will start in March and field work is scheduled from April-October. The proposal includes a public presentation in January to the Ardens, and a mapping tutorial for users designated by each village.

Items	Arden	Ardencroft	Ardentown	Total
<i>Open Space Acreage Percentages Averaged with 2020 Population Percentages</i>	45.90%	16.60%	37.60%	100.00%
Vegetation Inventory Costs (splitting \$18,400 by percentages above)	\$8,439	\$3,048	\$6,913	\$18,400
Annual Map Interface Licenses	\$385	\$770	\$385	\$1,540
Total	\$8,824	\$3,818	\$7,298	\$ 19,940

VILLAGE OF ARDEN AMERICAN RESCUE PLAN APPLICATION 2024

* To be defined with a reference map by the end of March

PART 3: PROJECT ADMINISTRATION

Project Administrator(s)

Name

Carol Larson

Ben Gruswitz

Title

Co-chair Forest Committee

Town chair Ardencroft

Email

forest@arden.delaware.gov

chair@ardencroft.delaware.gov

Phone

(215) 806-5131

(301) 655-3170

Estimated start date March 2024

Estimated end date January 2025

VILLAGE OF ARDEN AMERICAN RESCUE PLAN APPLICATION 2024

PART 4: PROJECT COSTS

Estimated expenses (use additional sheets if needed):

Materials:	\$
Labor:	\$ 8824.00 for Arden's portion of the inventory
Other:	\$
Expenses Total:	\$

Estimated Income: Other funding source(s) if any. Please name and list expected amounts for each source and if these are funds are confirmed.

Funding source 1: Forest Committee Budget	\$ 1500.00
Confirmed? no	
Funding source 2: Civic Committee Budget	\$ 1500.00
Confirmed? no	
Funding source 3: Schroeder bequest	\$???
Confirmed? no	
Total other funding:	\$3000.00

Expenses total (from above):	\$8824.00
Less other funding (from above):	\$3000.00

TOTAL ARPA REQUEST: \$ 5824.00

VILLAGE OF ARDEN AMERICAN RESCUE PLAN APPLICATION 2024

Please attach a minimum of two (2) bids from contractors to this application.

Bid #1

Name of Contractor

Dr. Will Ryan and Janet Ebert

Estimated Cost

\$8824.00

Pros & Cons of this Bid

Bid #2

Name of Contractor

Matt Sarver, Sarver Ecological

Estimated Cost

Not yet available

Pros & Cons of this Bid

Bid #3 (optional)

Name of Contractor

Estimated Cost

Pros & Cons of this Bid

What, if any, are the recurring maintenance costs to the Village of Arden for this project?

\$385 yearly licensing fee for geospatial mapping access.

PART 5: CONFLICT OF INTEREST

Please describe any potential conflict of interest here for the Project Administrators or the Contractors of this project. For more information use this link to Arden's Conflict of Interest Policy: https://arden.delaware.gov/wp-content/arden_docs/ConflictOfInterestPolicy.pdf

Will Ryan is a resident of Ardentown. We will compare his price to another company to ensure he is not asking more than the standard price.

PART 6: SUBMISSION

Attach further information as needed.

Proposal: Vegetation surveying and mapping of the open space parcels of the three communities of the Ardens (Arden, Ardentown, and Ardencroft).

Dr. Will Ryan (WR), ecologist/botanist and project manager Janet Ebert (JE), botanist

Summary:

The communities of Arden, Ardentown, and Ardencroft (collectively known as "the Ardens") wish to pursue an inventory of current ecological conditions relevant to plant communities within the parcels of land considered "public spaces" for the communities. The last botanical inventories, which took place over the past 20 years, provided a great starting point for ecology-based management. Due to technological limitations at that time, the results of these surveys were lists of plant species found within broad "sections", without associated geospatial data. This proposal addresses the need for a current inventory of plants and plant communities, in addition to the desire for a mapping interface that records geospatial data associated with current conditions and that can be updated to reflect future conditions (e.g., locations of introduced native plantings or nonnative plant removal). In addition, this study will clearly establish species presence trajectories by comparing what was found before versus during the 2024 field season, thus providing a glimpse of how the flora may be changing in response to the restoration work of various forest

committees, along with environmental and ecological pressures such as changing climate and nonnative plants.

Goals:

- 1) Record all plant species found throughout 2024 growing season (~April-October) within the public space parcels.
- 2) Record geospatial data associated with significant plant species, plant communities, and natural features (GIS shapefiles - points, lines, and polygons).
- 3) Establish mapping interface for the Ardens to reference current conditions, plan and record the locations of management activities, and provide a community-wide platform for visualization of natural resources.

Scope:

The survey and mapping will occur throughout the public space parcels (~145 acres), including terrestrial, palustrine, and riverine systems. Geospatial data will be recorded with a sub-foot accuracy GPS and integrated into a cloud-based data management app. Work will be conducted by Dr. Will Ryan and Janet Ebert, consulting botanists.

Methodology:

In March, WR will begin the establishment of the GIS mapping system and will plan field work for the year. From April-October, WR and JE will conduct field work pursuant to the "Goals", above. In November and December, data management and summarization will occur. In January, a public presentation (by WR) will take place to communicate the results of study. In February, deliverables will be submitted.

Deliverables and timeline:

- 1) Annotated list of all plant species found (MS Excel file)
- 2) GIS shapefiles (significant plant species, ecological communities, and natural features)
- 3) Mapping system established for the Ardens (including data collection app.)
- 4) 1–2-hr. tutorial of mapping system and support as needed
- 5) Short narrative describing work and recommended next steps.
- 6) Public presentation (~1.5 hrs.) for the Ardens to communicate results and field questions from the community.

Assumptions:

- 1) Representative from the Ardens will acquire and provide to WR all relevant GIS base files for use in project planning and map creation (e.g., NCC parcel polygons, hydro layers, roads, high-res. topography, etc.)
-

- 2) Representative from the Ardens has experience with mapping software and can assist with training others and troubleshooting mapping system issues.

Month [®] Activity [™]	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024	Nov 2024	Dec 2024	Jan 2025	Feb 2025
Project Planning												
Field Work												
Data Management												
Public Presentation												
Deliverables Submission												

Costs:

- 1) Labor – Will Ryan - \$9,200
- 2) Labor – Janet Ebert - \$9,200
- 3) GIS licenses for the Ardens not to exceed \$1,535*

*This is the annual cost associated with these licenses. If the Ardens can provide non-profit status, the cost would likely be considerably lower per year. WR will facilitate ordering licenses, but payment will be direct between the communities and ESRI (GIS company).

Grand Total: \$19,935 Three Ardens combined

Return no later than February 16, 2024, to the Arden Community Planning Committee at Planning@Arden.Delaware.gov. Or mail to: Arden Community Planning Committee, 2119 The Highway, Arden, DE 199810-4058.

Contact Jennifer Borders, Chair Community Planning Committee, for questions at Planning@Arden.Delaware.gov.
