

## 2023-24 FFA Landscape Design Career Development Project Brief

### **Clients, Property, Residence, and Design Intent:**

The Gardiner home is a new construction – a two-story house situated on the corner lot of a quiet suburban street in Central New Jersey. The lot (property line indicated with red dashed line) is adjacent to two other single-family residences to the north and east (neighboring driveways and garages shown on the plan). The house has a large open front porch facing Catalpa Street, and a screened three-season porch to the rear that can be accessed either through the living room area, the first-floor bedroom, or from the backyard. The Gardiner's lot is relatively level, with the exception of a low area at the northwest corner of the property that remains wet for several days following significant rain events (indicated on the plan) due to runoff from the surrounding terrain and structures. There is a majestic white oak (*Quercus alba*) on the neighbor's property that extends over the northeastern corner of the Gardiner's lot, providing visual interest, seasonal charm, and a very shady portion of the yard.

Lily and Hank Gardiner have recently moved into the house with their two young children. Lily is chair of the Ecology Department at the nearby college, and Hank is an artist who works out of the studio attached to (and accessible via) the garage. Both are avid gardeners and amateur birders, and they would like to create a home landscape that features native plants and embraces both form and function – such as seasonal interest, bird and insect habitat, stormwater management, and some privacy/screening between their property and the adjacent residential lots. They also have ideas for a small herb and vegetable garden space (two raised beds) so they can learn to grow some of their own food with their children, and they would like to address the low area by installing a rain garden. Finally, they would like to create a pleasant walkway approach to the two entrances for the front porch (one that would come from the sidewalk along Catalpa Street, and one from the driveway/garage area), and connect the three-season porch entrance to that of the studio.

Your job as landscape designer is to meet the clients' wishes for their property. You are asked to consider plant material (trees, shrubs, herbaceous layers, groundcover), hardscape materials (pavers, outdoor furniture, etc.), connections/circulation, views, and sun/shade. The supplemental materials include resources for native plants and plants appropriate for rain gardens.

**Budget for materials:** \$10,000 (for materials only; labor and delivery costs not included)

### **Project Requirements:**

Finished projects may be hand drafted or developed using a digital program and must follow the format of the provided site plan (including north arrow, graphic scale, project title with designer's name, and plant key).

All drawings must be submitted on 18" x 24" paper at a scale of 1"= 10'-0". A plan view of the finished project is required; elevation drawings and/or other sketches will not be judged. A **copy** of the original should be submitted such that drawings can be marked up with comments from the coordinator prior to the spring presentation to judges. Students may, but are not required to, update their plans based on the coordinator's feedback.

Students are required to use standard, commonly recognized symbols for plants; these should be drawn to represent plants in scale at reasonable, mature sizes. Several references are included in the supplemental materials and can be used to determine mature height and spread of plant materials. Other symbols used should be representative of common professional drawing practices (e.g. hatching, paving patterns, etc.). Please see supplemental materials for graphic standard references.

A planting schedule should be included as a separate document. This should be organized by type of plant (i.e. deciduous tree, shrub, perennial, etc.) and in alphabetical order based on the key (which is determined by the botanic nomenclature). The cost estimate format should include material wholesale costs and should be completed as a separate chart from the drawing. Like the planting schedule, this chart should be organized by material (i.e. hardscape materials listed together, plant material listed together) and submitted as a separate document. Please see supplemental materials for examples of both charts.

## 2023-24 FFA Landscape Design Career Development Supplemental Materials

### **Landscape Architecture Graphic Standards References:**

Booth, Norman and Hiss, James. *Residential Landscape Architecture: Design Process for the Private Residence*. New York: Pearson Education, Inc., 2018.

Reid, Grant. *Landscape Graphics: Plan, Section, and Perspective Drawing of Landscape Spaces*. New York: Watson-Guptill, 2002.

Hopper, Leonard J. *Landscape Architectural Graphic Standards* (Student Edition). Hoboken: John Wiley & Sons, Inc., 2007.

### **Plant & Rain Garden Design References:**

Pinelands Nursery & Supply (<https://www.pinelandsnursery.com/>)

North Creek Nurseries (<https://www.northcreeknurseries.com/Native-Plants>)

Missouri Botanical Garden Plant Finder  
(<http://www.missouribotanicalgarden.org/plantfinder/plantfindersearch.aspx>)

Rain Garden Manual of New Jersey (available online through Rutgers Cooperative Extension Water Resources Program:  
[http://water.rutgers.edu/Rain\\_Gardens/RGWebsite/RainGardenManualofNJ.html](http://water.rutgers.edu/Rain_Gardens/RGWebsite/RainGardenManualofNJ.html))

American Standard for Nursery Stock ([https://www.in.gov/dnr/forestry/files/fo-ANSI\\_Z60\\_I\\_04.pdf](https://www.in.gov/dnr/forestry/files/fo-ANSI_Z60_I_04.pdf))

**Plant Schedule Example:** See attached

**Materials List & Cost Estimate Example:** See attached

**PLANT LIST**

Student Name:

ID	Qty	Common Name	Botanical Name	Scheduled Size	Mature Height	Mature Spread	Notes (recommended, but optional)
<b>Trees</b>							
BN	3	River birch	<i>Betula nigra</i>	1.5" caliper	40-70 ft.	40-60 ft.	This column may be used to record additional information, such as seasonal interest (e.g. fall foliage, bark appeal, bloom color/description), sun/shade or water requirements.
NS	1	Black gum	<i>Nyssa sylvatica</i>	2" caliper	30-50 ft.	20-30 ft.	
<b>Shrubs</b>							
CA	4	Sweet pepperbush	<i>Clethra alnifolia</i>	1 gallon	3-8 ft	4-6 ft.	
HV	5	Witch hazel	<i>Hamamelis virginiana</i>	2 gallon	15-20 ft.	15-20 ft.	
<b>Perennials</b>							
LC	8	Cardinal flower	<i>Lobelia cardinalis</i>	2 qt.	2-4 ft.	1-2 ft.	
RT	16	Brown-eyed Susan	<i>Rudbeckia triloba</i>	2 qt.	2-3 ft.	1-1.5 ft.	
<b>Grasses</b>							
JE	12	Common rush	<i>Juncus effusus</i>	1 qt.	2-4 ft.	2-4 ft.	
SS	8	Little bluestem	<i>Schizachyrium scoparium</i>	1 gallon	2-4 ft.	1.5-2 ft.	
<b>Ground Covers</b>							
AC	50	Wild ginger	<i>Asarum canadense</i>	LP50*	.5-1 ft.	1-1.5 ft.	*Landscape Plug 50-cell tray

**MATERIALS LIST + COST ESTIMATE**

Student Name:

Item	Description	Source	Qty.	Unit	Cost per Unit	Total Cost
<b>Plant/Softscape Material</b>						
<i>Asclepias tuberosa</i> (Butterfly weed)	Perennial, LP50	North Creek Nurseries	1	flat	\$ 88.55	\$ 88.55
<i>Echinacea purpurea</i> (Coneflower)	Perennial, LP50	North Creek Nurseries	1	flat	\$ 82.23	\$ 82.23
<i>Betula nigra</i> (River birch)	Tree, 1.5" caliper (B&B)	Pinelands Nursery	3	individual	\$ 140.00	\$ 420.00
Mulch	Double ground hardwood mulch	Belle Mead Coop	3	yard	\$ 21.99	\$ 65.97
<b>Hardscape Material</b>						
Bluestone flagstone	Irregular, full color	The Stone Center	120	sq. ft.	\$ 10.00	\$ 1,200.00
Delaware river rock	1-3" size	Belle Mead Coop	1	ton	\$ 95.99	\$ 95.99
<b>Furnishings</b>						
Hammock swing	The chair hammock (weathersafe)	Yellow Leaf Hammocks	2	individual	\$ 179.00	\$ 358.00
Boulder seating	Natural outdoor seating for garden/classroom	Stone's Throw Supply	5	individual	\$ 200.00	\$ 1,000.00
<b>TOTAL COST ESTIMATE:</b>						