

2022-23 FFA Landscape Design Career Development Project Brief

Clients, Property, Residence, and Design Intent:

The Woodhouse home is a newly renovated two-story farmhouse 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 the grounds of a Waldorf School to the east (the western-most edge of which is shown on the plan), and another single-family residence to the north (not shown). The house has a large open front porch facing Treehouse Lane, and a screened three-season porch that can be accessed either through the living room or the master bedroom. The Wilson's lot is relatively level, with the exception of a low area between the garage and house that remains wet for several days following significant rain events, primarily due to run-off from the combined roofs. There are two mature white ash trees (*Fraxinus americana*) on the property, and a multi-stem river birch (*Betula nigra*) to the east of the garage, which offers beautiful four-season interest.

Sam and Abigail Woodhouse have recently moved into the farmhouse with their six-year-old twin girls who will attend the Waldorf School next door. Sam is chair of the Ecology Department at the nearby college, and Abigail is a well-renowned sculptor. 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 and school lots. Sadly, due to damage from the emerald ash borer, the two white ash trees will have to be removed, and the clients wish to replace them with another shade tree (or trees), but also recognize that this affords the opportunity to plan for a small vegetable garden where they can teach the young twins about growing some of their own food!

In addition, the clients have spoken with the schoolboard, and would like to fund the installation of a rain garden and outdoor classroom on the school grounds (indicated on the base plan), as well as donate one of Abigail's large outdoor sculptures for installation somewhere in the west school yard (see supplemental materials for details of the sculpture). The classroom area should include seating and be able to accommodate up to 15 students at one time.

For both the Woodhouse property and the school grounds, consider plant material (trees, shrubs, herbaceous layers, groundcover), hardscape materials (pavers, outdoor furniture, etc.), connections/circulation, views, and sun/shade.

Budget for materials: \$30,000 (for materials only; labor and delivery costs not included)

Project Requirements:

Finished projects may be hand drafted or developed using a digital program.

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 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.

2022-23 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)

American Standard for Nursery Stock (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

Sculpture Details: See attached

PLANT LIST

Student Name:

ID	Qty	Common Name	Botanical Name	Scheduled Size	Mature Height	Mature Spread	Notes (recommended, but optional)
Trees							
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.	
Shrubs							
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.	
Perennials							
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.	
Grasses							
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.	
Ground Covers							
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
Plant/Softscape Material						
<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
Hardscape Material						
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
Furnishings						
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
TOTAL COST ESTIMATE:						



Perro del Sol (Sundog) – Example for sculpture installation by Abigail Woodhouse. This piece, in reality, was created by William Mayer in 1984. Please use this for reference regarding the type/style of outdoor sculpture that should be sited on the school property.