## Landscape DESIGN


#### Abstract

The goal of landscape design is to connect a house, fence, water feature, commercial building, or any permanent structure to the environment. Landscape plants and other materials should aesthetically enhance the environment, creating a setting that unites and balances the structure with its surroundings.


Planning is important. The landscape designer should carefully consider the beauty and science of plants to be used as well as the following site features.

Evaluate the direction the structure faces from all sides. Sun exposure is a critical plant requirement. Generally, the north side will be shady, the east will get morning sun, the west afternoon sun, and the south will be sunny most of the day. Sun exposure can vary depending on trees or other structures that may shade an otherwise sunny area. Structure orientation also predicts wind flow. Hot winds blow from the southwest and cold winter winds from the northwest.

How will the family or those working in and around the structure use the landscape? Does the family have young children? Will they entertain frequently using the outdoor areas? Do they plan to have a vegetable garden? Need a place for fireplace wood? Does the yard need privacy? Understanding the uses will determine what plants should be used. It is useful to divide the landscape into functional areas and landscape areas
according to use - public, private, utility, play, borders, foundations, etc. This enables working with smaller sections while following an overall plan.

Drainage is critical for plant growth. Few plants grow well in wet or soggy soil. Water should drain away from the structure. Downspouts should be extended and buried under landscape beds to prevent erosion around plants. Excess water must go somewhere, so excess free-moving water may need to be diverted away from structures, neighbors, or landscapes. Before excavating, identify and avoid underground utilities, water and sewer lines, and septic laterals by calling 1-800-DIGSAFE (1-800-344-7233).

The designer should sketch a plot drawing using accurate measurements. It should indicate parameters such as the foundation of the structure, windows, doors, driveways, sidewalks, utility boxes, marked utility line locations, patios, air conditioner, playground equipment, pools, and existing plant materials to be kept. Plant symbols should be drawn to scale. A common landscape scale is $1 / 8$ inch is equal

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to 1 foot. See the landscape plan on pages 14-15.

Think about how the design will function now and in the future. Will a pathway be needed for access from one area of the yard to another? Pathways should be wide enough for two people to walk together or pass each other. The pathway should to be at least 3 to 5 feet wide and sloped at 1 to 2 percent grade so water does not stand or puddle if using a solid surface. Avoid a path that feels closed in or restricted. The closer plants are to the walkway, especially larger plants, the wider the path requirement.

Will the elevation require steps in the landscape? A 6-inch rise (the height) is comfortable for most people. The run (depth of the step) plus twice the rise should equal 26 inches. If multiple steps are needed, include a landing every four or five steps, making a gradual stairway. The surface used for stairs and pathways should complement landscape materials and be structurally sound so nothing wobbles when used.

Include GFC outlets where electricity will be needed. Areas may require outdoor lighting, water pumps, holiday lights, or lighted accent pieces. Plan for future irrigation lines. PVC sleeves for irrigation and electrical lines are simple to install during the initial planting and should be part of the landscape plan, even if completed later. Leave access for hydrants and outlets.

If the landscape is not new construction, evaluate existing landscape plants to determine whether they are worth keeping or should be removed. Although established plants can add to the design, old, diseased, or overgrown plants can dominate a new landscape.

Plan for year-round color and interest. In the Great Plains, there are four complete seasons. Each area of the
landscape design should have a point of interest during each season. Look for plants with beautiful foliage, bark, berries, and flowers. There are plants for all seasons with appealing, unique qualities.

Plan for the full-grown size. The most common landscaping mistake is to plant too many plants too close together in too small an area. When designing the landscape, the first consideration is the sun requirement of the plant. Size is equally important. Give plants ample room to exhibit unique characteristics. Crowding plants may provide immediate gratification, but will overgrow in as few as three years. For a sustainable landscape, pick plants that are within the hardiness zone for your area and pick the perfect plant for the spot. Always consider ultimate size, sun, and soil requirements; geometric shape; bloom, berry, or foliage timing; and compatibility with other plants, while keeping in mind the overall site design.

The landscaped area should be contained in beds. Planting a single shrub in the middle of the lawn creates a mowing inconvenience, and the plant must compete with grass for survival. Because competition is strong and neither will thrive, it is best to plant where similar plants can be cared for together. For example, acid-loving plants that prefer shade can be grouped for similar requirements and maintenance.

Mulching landscape beds helps prevent weed growth, insulates soil from temperature fluctuation and conserves moisture. Organic mulches - cypress, cedar, or pine bark, for example - actually improve the soil. Underlaid fabric is not required with organic mulch, and weeds can be controlled by hand or by using a preemergence herbicide.

As mulch biodegrades, it becomes organic matter for soil conditioning. Inorganic mulches such as rock or rubber


Left: Natural edging for landscape beds.

See diagram below for installation of natural edging.
need underlayment to prevent the mulch from sinking into the soil. Mulch in a landscape bed should be approximately 2 to 4 inches deep.

Edging the landscape bed defines the planting area from the turf and decreases maintenance. A natural edging is used frequently because of ease of installation and flexibility. It can be enlarged or decreased depending on the bed and plant requirements.

Install a natural edging by digging a 6-inch-deep trench straight down on the turf side. Angle the trench at 45 degrees toward the landscape. The top of the trench should be 6 inches wide. Fill the bottom two-thirds with sand and the top one-third with mulch. See diagram, right. Edging will need to be cleaned out and re-dug every 2 to 3 years to keep a sharp, clean edge. Be sure drain tubing is buried below the edging.

Steel and rubber edging are frequently used and readily available. If using rubber edging, be sure to buy a heavy grade. If it
can be rolled into a circle, it will be too weak and have a short life. Secure the edging every 3 feet to prevent it from heaving as the ground freezes and thaws. Rubber will not withstand mower blades, so it must be installed below mowing height.

Other types of edging require more installation and will need to be part of the plan. Stone and concrete edging require a

solid surface, accomplished by excavating, leveling, and then forming a base with a compacted layer of crushed rock. There are many decorative edgings available to suit different styles and to match well with the structure.

## Elements of Design

Whether decorating a home, arranging flowers, or landscaping a yard, the elements of design hold true in creating an artistic design that is pleasing to the viewer. This series of design elements is written with the landscape in mind, but can have multiple design applications.

## Color

Color adds excitement to the landscape. While the many shades of green are beautiful, they can be redundant. Color, size, and contrast are used in creating focal points for the landscape and developing a theme.

Color can be added by using plants with colored foliage, flowers, or berries. Accent pieces will bring out color in other ways that compliment the use of plants. Variegated foliage can be used to break up colors and add variety to basic green. As a rule, use lighter flower colors toward the back of the landscape and the more vibrant colors toward the front, closer to the viewer. The lighter colors pull the view
back, increasing depth and dimension. An exception would be a pastel color theme. Softer colors such as pink, lavender, soft yellow, blue and white are used throughout to create a calming environment, ideal for a serene garden room. Warmer, brighter colors of red, orange, bright yellow, and hot pink cause more excitement for the viewer. All the colors of nature are compatible.

A simple trick to add color to the landscape is to extend the landscape bed by approximately 3 to 4 feet and border it with flowers. The border can be a solid bed or arranged as color spots - small areas of flowers spotted throughout the landscape that can be changed with the seasons.

Try to stay away from alternating mirror images. If using only two colors for example, red and yellow barberry grouping the plants three or more together tends to look better than alternating red, yellow, red, yellow. Something with color, even if it is a temporary seasonal plant, will add the pizzazz needed to brighten the landscape and make the most of its counterparts.

One last note on color: Do not try to put color in the landscape by leaving tags on plants. It is like wearing the price tag on your clothes. This is an overlooked detail seen much too often. Shrubs and trees for bloom color are listed on pages 5-9.

## Shrubs for Spring Color

| Plant Name | Height (feet) | Width (feet) | Color | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Flowering Almond | 4-5 | 3-4 | Pink |  |
| Azalea | 3 | 2-4 | Red, white, pink, lavender | Acid soils |
| Exbury Hybrid, Rhododendron | 3-4 | 3-4 | Yellow, orange, pink, white, red | Acid soils |
| Beautybush | 6-10 | 6-8 | Pink |  |
| Cherry, Nanking | 6-10 | 10-12 | White |  |
| Deutzia | 2-3 | 2-3 | White |  |
| Forsythia | 6-8 | 6-8 | Yellow |  |
| Fothergilla | 3-5 | 3-5 | White | Fragrant |
| Hydrangea, smooth Annebelle | 3-5 | 4-5 | White |  |
| Kerria | 4-5 | 4-5 | Yellow | Shade |
| Leptodermis | 2-3 | 2-3 | Purple |  |
| Lilac, common and hybrid | 10-12 | 10-12 | Purple, white, lavender, magenta |  |
| Lilac, dwarf | 4-6 | 4-6 | Purple |  |
| Mockorange | 4-6 | 4-6 | White | Fragrant |
| Plum, Cistina | 6-8 | 5-6 | Pink | Fragrant |
| Quince | 3-4 | 3-4 | White, salmon, red |  |
| Rhododendron | 3-5 | 3-5 | Red, lavender |  |
| Spirea, Bridalwreath, Snowmound, Thunberg, Tor, Vanhoutte | 4-6 | 6-8 | White |  |
| Viburnum | 5-6 | 5-6 | White | Many produce berries |

Note: Sizes and colors are an average for the plant. Sizes and plant characteristics differ by variety.

Shrubs for Summer Color

| Plant Name | Height <br> (feet) | Width <br> (feet) | Color | Notes |
| :--- | :--- | :--- | :--- | :--- | (R-5 |  | $3-5$ | White | Fragrant, attracts <br> butterflies |
| :--- | :--- | :--- | :--- |
| Abelia | $8-10$ | $5-6$ | Red, pink, purple, <br> white |
| Althea (Rose of <br> Sharon | $2-3$ | $3-4$ | Blue |

Shrubs for Fall Color and Multiple-Season Interest

| Plant Name | Height (feet) | Width (feet) | Color | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Barberry | 2-6 | 2-4 | Foliage color: red, green, yellow | Spring, summer, fall |
| Beautyberry | 3-5 | 3-5 | Lilac-purple fruits | Late summer-fall |
| Burning Bush, compact | 4-6 | 4-5 | Foliage color: red Winged cork bark | Fall, winter |
| Clethra, cinnamon | 4-6 | 3-5 | Golden yellow foliage | Fall |
| Coralberry | 2-3 | 4-5 | Coral-red fruit | Fall, winter |
| Cotoneaster | 1-4 | 2-3 | Pink blooms Red fruit; orange-mulit-colored foliage | Spring Fall, winter |
| Frothergilla, large | 6-8 | 5-6 | White flowers; red, orange, yellow foliage | Spring, fragrant fall |
| Hydrangea, oakleaf | 5-8 | 6-8 | Burgundy foliage | Fall |
| Mahonia; Oregon grape holly | 2-5 | 3-4 | Yellow flowers deep purple berries multi-colored foliage | Spring <br> Summer <br> Fall and winter |
| Nandina | 1-2 | 2-3 | Red foliage | Fall and winter Needs protection |
| Pyracantha | $\begin{aligned} & 3-4 \\ & 6-10 \end{aligned}$ | $\begin{aligned} & 5-6 \\ & 6-10 \end{aligned}$ | White flowers Orange berries, foliage evergreen | Spring <br> Fall and winter |
| Spicebush | 6-10 | 6-10 | Yellow flowers <br> Red fruit on female <br> Yellow foliage | Spring <br> Summer <br> Fall, prefers shade |
| Fragrant Sumac, Gro-low | 2-3 | 6-8 | Orange-Red foliage | Fall |
| Sweetspire | 3-5 | 4-6 | White flowers Reddish-purple foliage | Summer Fall |
| Viburnum, Doublefile, Fragrant, Linden, Witherod cultivars | 5-6 | 4-6 | White flowers berries Reddish-burgundy foliage | Spring Summer Fall |

Note: Sizes and colors are an average for the plant. Sizes and plant characteristics differ by variety.

| Trees for Bloom Color |  |  |  |
| :--- | :--- | :--- | :--- |
| Plant Name | Height (feet) | Color | Notes |
| Buckeye | $20-40$ | Greenish-yellow <br> panticles | Spring |
| Cherry, ornamental | $8-10$ | Pink or white | Spring |
| Crabapple, <br> numerous <br> varieties | $15-20$ | Pink or white <br> flowers; red or <br> orange fruit | Spring, some <br> varieties are <br> fruitless |
| Dogwood | $12-15$ | Pink or white <br> flowers; <br> Burgundy foliage in | Spring <br> fall |
| Fall |  |  |  |

Research and Extension

| Trees for Bloom Color |  |  |  |
| :--- | :--- | :--- | :--- |
| Plant Name | Height (feet) | Color | Notes |
| Sourwood | $20-30$ | Creamy-white <br> Red and purple <br> foliage | Summer <br> Fall |
| Viburnum, $10-15$ White <br> Blackhaw, <br> Siebold $15-20$ | Summer <br> Summer and fall |  |  |
| Witchhazel | Yellow, orange, <br> copper <br> Orange, red and <br> purple foliage | Early spring flowers <br> Fall foliage <br> Prefers shady, <br> moist conditions |  |
| Yellowwood | $30-40$ | White clusters | Summer |

Note: Sizes and colors are an average for the plant. Sizes and plant characteristics differ by variety.

## Themes and Focal Points

Development of a theme often begins by determining which plants to use as the focal point - the spot the viewer's eye sees first. Whatever is most colorful or contrasts the most in size, texture, or geometric form will command attention and become the focal point of a landscape.

Accent pieces, specimen plants, or plants with color catch the eye.
Proportion is critical for the focal point. It should attract attention without being overbearing. The focal point is usually found at the entrance to the structure or seen at first glance when viewing the overall landscape. Lighting in the area of the focal point will provide 24-hour enhancement.

The theme will provide consistency in each section of the landscape. Using a repetition of the same plants will draw the eye from the focal point to other points of interest. Repetition, while pulling the landscape theme together, can be achieved without using the plants in the same sequence or placement. A rearrangement or using additional plants or objects can also achieve overall harmony. The plantings in each landscape area do not need to be
the same but should work together and have something in common.

Part of the overall theme will include transitional areas that connect planting areas in the landscape. Creating an obstruction or boundary defines one area and connects it to the next space. Use of color spots, especially pastel or neutral colors, small hedges, walls, boulders, or pathways work well to end one section and move to the neighboring planting area. Care should be taken to scale the boundary with the surroundings and style of the structure so it does not become intrusive and dominant. The goal is to transition from area to area in a harmonious flow.

## Texture and Form

Texture is the visual "feel" of the plant. There are plants with bold heavy leaves and deep veins. In contrast, other plants are wistful, flowing, airy, and fine-textured. Plant texture is a valuable tool in designing for depth and balance. Every plant has its own geometric shape and associated texture. They can be pyramidal, horizontal, vertical, prostrate, columnar, globe, or vase-shaped. All shapes and sizes give a visual experience within the landscape. Texture can create drama - a bold or soft
statement. Bold plants command attention but can be counterbalanced with fine undergrowth, grasses, or weeping twigs.

Dominant structures can be softened and made intrinsically interesting by adding fine-textured plants that do not have as much visual weight. The larger and more stately the plant, the heavier it appears to the viewer. Balancing the landscape will offset large garages, corners, or parts of the structure with dominating features. A landscape balanced with textures and geometric shapes is more pleasing to the viewer and keeps the movement of the landscape flowing.

The "feel" of the design determines the reaction of the viewer. With many to choose from, the palette of textures and forms together provides a sense of balance. Together they create interest and stability. The difference in appearance between a fern and a large leaf viburnum can create a complementary appearance in the same bed. Another example is the furry texture found on the perennial rabbit's ear (Stayches). Who can resist the touch of the foliage? It is soft and visually gentle. Used as a groundcover with a stiff or erect plant, such as an ornamental tree, creates interest because they complement each other.

Consider the shape each plant contributes to the landscape. Using several geometric shapes will add rhythm and can be used to accent similar shapes in the structure. If the structure has a peaked roof, a vertical plant can accent it, or a spreading plant can play down the vertical line. Similarly, different geometric shapes can break up a linear wall and develop sections that can be duplicated in other areas.

## Line and Rhythm

The line and movement of the landscape allow the viewer to move their focus from one area of the landscape to another. The view starts at the focal
point and moves to other sections of the landscape. Repetition of color or plants, flowing curved beds, or the addition of bold shape or texture help to create a line and flowing movement.

Take a clue from nature. Think of the natural flow of a river and its bluffs. The line moves in and out, sometimes dramatically. Small crannies and large loops harmoniously flow at the perimeter allowing growing space for both large canopy plants and smaller undergrowth and groundcovers. Asymmetrical shapes work together as a consistent theme natural, soft, and informal.

Symmetrical design is used to develop a more formal look. Planting identical mirror images of two areas develop a balanced look that works well near structures that are also symmetrical. Formal gardens with clipped hedges can be used to create garden rooms and form pathways for the garden landscape.

Landscaping within structural boundaries is often limiting. It may become necessary to eliminate these barriers by jumping the landscaped bed beyond a sidewalk to connect with other areas or beds. Landscaped beds do not need to always connect from one area to another, but the visual flow from area to area will be part of the developing theme. Transition can be achieved by incorporating pathways, either with solid materials or turf.

As the landscape moves around the structure, use different plants to accommodate the change in sun and size requirements, but remain consistent with aesthetic goals. The flow of the landscaped bed is used to dramatically enhance the balance of the landscape structure. A sweeping, looped bed around the corner of a house will offset a massive driveway on the opposite corner.

Many landscape mistakes are made when determining the size of the bed. An

ornamental tree should not be planted within 10 feet of a house. The average foundation plant has a spread of 4 to 5 feet. Allow at least 18 inches between foundation plantings and the house at full-grown size. This means the center of the plant should not be closer than 4 feet from the house. Allow another 3-foot radius between the plant and house to allow it to spread. The 4to 5-foot foundation shrub requires a 7-foot diameter planting area. Curved lines develop a flow and rhythm, so allow enough space to adequately accommodate the plants. It is difficult to achieve the desired effect if plantings are close and linear.

## Dimension

Dimension in a landscape gives depth to the plantings. Plantings should be layered to see beyond one row of plants. Done properly, three-dimensional plantings can make a small area seem larger and deeper. Framing the landscape with borders will not only create parameters for development but is an area where dimension becomes interesting as a background for other landscaped areas.

Whether landscaping a foundation or backyard, start with large, bold plants in the background of the view and progress forward using medium plants next and smaller more colorful plants in the foreground. Incorporate color into the depths with lighter colors to the back and more vibrant colors closer to the viewer. Small border plants and groundcovers can enhance layering and serve as an edging that creates a soft, natural flow of plants. The foreground is a perfect place to add annuals and perennials for seasonal color. Visualize using layers of plants with different degrees of size and shape. Think about how the frame lends itself to combinations of texture and shapes without any of the plants hiding one another.

A backyard border can provide privacy using combinations of deciduous plants that lose leaves in the fall, and evergreens. Varied shapes, groupings, and layers of plants make a year-round perimeter of plants. Plants that produce flowers, berries, and provide protection will be a useful habitat for butterflies, wildlife, and birds.

Dimension in the landscape increases with lighting. Strong up-lighting in the

Ornamental grasses, sedums, and groundcovers provide interesting plant texture in the landscape.
background or down-lighting from trees is dramatic. Pathway lighting works well for borders and pathways. Lighting not only contributes to the dimensional statement, but also provides security.

## Accents

Accents are useful elements of design because they help create special points of interest. The placement of a unique specimen plant or an object of interest should be designed with the view in mind. Water gardens, disappearing fountains, a sundial, fencing, boulders, arbors or pergolas, and statuary are among a popular array of landscape accents. Accents can act as a reason for the plantings in an area or to fill a void. Accents can develop a separate theme or be used to enhance an existing one. Caution should be taken not to compete with existing features by placing accents too close together or creating an area that is too busy. This will only confuse the view and disrupt the flow of the landscape.

## Defining Areas

The artistic selections for the landscape are a matter of personal preference. A good landscape will include all types of plants. These include trees and shrubs, both deciduous and evergreen. Perennials, annuals, groundcovers, grasses, and bulbs give variety but need to be planted strategically. When selecting plants that will work together, first consider plant requirements. Similar requirements help make maintenance easier and the gardener successful.

Consider the view and angles of the landscape as seen from different vantage points. View the landscape from inside the house to evaluate the overall panorama. Because landscaping is an extension of the home or structure, there should be a connection.

Garden rooms can serve as outdoor living areas that provide privacy and shelter. The space is defined and is a destination for a quiet sanctuary. The garden room, big or small, can be designed for the unique taste and preference of the user.

Busier areas are designed for the public to enjoy. Public areas add curb appeal to the structure. Utility areas such as vegetable gardens, outdoor storage, or sites for air conditioners may need to be screened off and out of site. Borders frame the property and provide background and privacy.

Each distinct area will require plants with specific function. There should be a reason for each plant selected, and all areas should work together for a balanced, proportional, and interesting landscape that connects to the structure and environment.

Massing, or grouping many plants of the same type, makes a bold statement. Using several of the same plants and staggering their placement gives depth and weight to the area. Planting in odd numbers is generally more appealing provided there is enough space. Mass plantings are generally found inside the borders of landscape beds for larger trees and shrubs, frequently using plants with color to make an abundant grouping. Vertical plants can be staggered throughout a border to develop rhythm. Variegated plants work well with just about everything, breaking up the colors. Perennials can be planted strategically in groupings and timed for blooming to become a continuous change of color and texture. Ornamental grasses fit into most groupings as a transition of texture, intertwining with stems and foliage for naturalizing.

Plants with stately structure, with many sizes and shapes from which to choose, are the fundamentals of the landscape. They add stability to the bed
and should be considered first when designing plant combinations. Trees for shade or design effects should be placed initially. Other plants can be filled in to incorporate variety and fulfill the aesthetic design. If the landscape is being completed in stages, the following guidelines will be helpful in determining priorities.

- Site preparation - removal of unwanted plants and structures, excavation as needed for drainage, installation of irrigation lines and electrical outlets, addition of topsoil, trees, and other slow-growing plants
- Hardscape such as decks, patios, water features, or other more permanent structures
- Planting beds - start with front yard
- Borders and perimeter plantings
- Accent features and final touches

Foundation plantings, those plants around and close to the structure, are fundamental in most landscapes. The focal point is often incorporated into this area and responsible for much of the curb
appeal given to the structure. These plants should not block the view by being planted in front of windows or restricting access to the entrance. Combinations of evergreens, deciduous plants, and flowers can be used and layered for a three-dimensional appearance. Three of the same plant in a row is not considered landscaping. Foundation plants tie the structure to the immediate area and then the design flows from there.

Often, during construction, inadequate space is allowed for foundation plantings so it may become necessary to extend the planting bed beyond barriers such as sidewalks, driveways, steps, or retaining walls. The plants selected must be able to grow to full size in the space allowed, or replaced every few years as they become overgrown. Continual pruning is an option, but not a good one as it takes a toll on the health and beauty of the plant. Plant placement is critical so plants do not grow into the structure or create drainage or maintenance problems.

## Landscape Plan Graphics

## Deciduous Tree Symbols



Deciduous Shrub Symbols


Evergreen Shrub Symbols


## Landscape Plan

Black Hills Spruce (3)


Lawn

Annabelle Hydrangea (9)


Client :
The Smith Residence
Address :

1234 Oak Street

Scale: I/8" = I'0"

Plan No. :

Designer: gld
Editor :
Date :

## Resources

Some useful links to help in planting and maintaining the landscape can be found on the K-State Research and Extension website.

- Pruning ornamental plants bttp://www.ksre.ksu.edu/library/bort2/c550.pdf
- Planting trees and shrubs http://www.ksre.ksu.edu/library/hort2/mf402.pdf
- Watering a new trees and shrubs http://www.ksre.ksu.edu/library/hort2/MF2800.pdf
- Fertilizing trees http://www.ksre.ksu.edu/library/hort2/mf2707.pdf
- Establishing new lawns http://www.ksre.ksu.edu/library/hort2/mf1126.pdf
- Fertilizing lawns http://www.ksre.ksu.edu/library/hort2/mf2324.pdf
- Weed control in the lawn bttp://www.ksre.ksu.edu/library/bort2/mf2385.pdf
- Designing a perennial bed http://www.ksre.ksu.edu/library/hort2/mf2327.pdf
- Care for annuals http://www.ksre.ksu.edu/hfrrlextensn/Hort_Tips/AnnualĖPerrenial_Flower/ Annuals.pdf
- Water gardening http://www.ksre.ksu.edu/library/bort2/mf2910.pdf http://www.ksre.ksu.edu/library/bort2/mf2911.pdf http://www.ksre.ksu.edu/library/hort2/mf2912.pdf bttp://www.ksre.ksu.edu/library/bort2/mf2913.pdf
- Plants recommended for Kansas http://www.hfrr.ksu.edu/DesktopDefault.aspx?tabid=731

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Landscape plan drawings by Greg Davis, Associate Professor of Landscape Design
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