OKLAHOMA COOPERATIVE EXTENSION SERVICE HLA-6440



# Homeowner Garden Design Series: Planning the Landscape

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A landscape comprises all the living and nonliving elements of an area of land including plants, landforms and man-made structures. Fences and lighting are as much a part of the landscape as trees and herbs. A well-designed landscape provides many benefits to homeowners; landscaping increases property and resale values, increases the beauty and utility of spaces surrounding buildings, and creates a unique sense of place for relaxation and enjoyment. Proper planning is necessary to achieve the greatest returns from your investment and to avoid common landscaping mistakes. In this fact sheet you will learn how to conduct a site evaluation, identify design objectives and create a rough landscape plan.

Landscape planning and design are fluid processes. There is often no correct sequence of steps. If you are designing or redesigning an entire landscape, you will start by creating a site map and conducting a survey. When creating a garden or bed for a specific purpose, we generally start by identifying our goals such as creating a wildlife garden or establishing plants to shade a patio. The same set of techniques are used whether planning an entire landscape or designing a single garden.

#### Planning a Landscape:

- Conduct a site evaluation identify positive and negative features, and environmental conditions of the planting site or landscape.
- Identify landscaping goals consider how you plan to use the area.
- Create a bubble diagram define areas for each planned use of the landscape.

# Site Evaluation

The purpose of the site evaluation is to record existing structures and features of the landscape, identify the positive and negative aspects of the existing landscape, and to record specific environmental and site characteristics (Figures 1 and 2). The landscape survey will be used in the initial planning stages, and later when designing plantings.

A site inventory documents all existing elements on the site in their existing location (Figure 1). First, draw your

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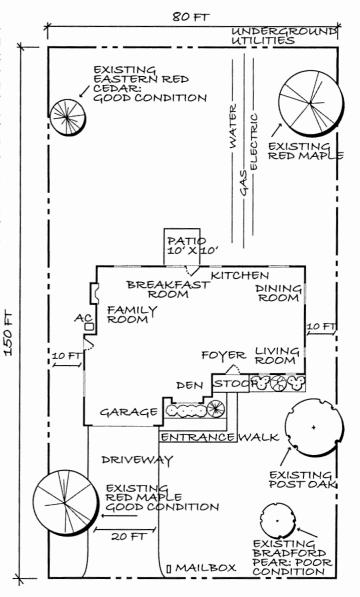


Figure 1. Site inventory documents existing plants, structures and utilities.

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landscape to scale as best you can. You do not need to be an artist; any drawing that makes sense to you will be adequate. Grid paper is useful for drawing to scale. Mark the location of the house and unattached buildings such as garages or sheds, as well as existing walkways, drives, utilities boxes, patios, fences and other structures. Reproduce the general floor plan of the house including the locations of windows and doors. Call OKIE (1-800-522-OKIE) to have your utility lines mapped and add these to the drawing.

Record the locations of existing plant material including trees, shrubs and flowerbeds. Mark the location of tree trunks and use circles to indicate the extent of the tree crown or canopy. You may wish to adopt your own system of symbols to represent objects and plant types such as evergreen and deciduous plants.

Once you have recorded the existing structures, walk through the landscape and take careful notes regarding site conditions. Environmental conditions such as amount of sunlight, protection from wind, and soil moisture will vary in different locations throughout the landscape. Likewise, soil type and slope are not uniform over a site. Each of these bears great impact on the types of plants and plantings that can be established on a site. Consider each in turn, taking clear notes and recording information on your site map. You may wish to take notes on a separate sheet of paper, and use a numbering or lettering system to coordinate notes to specific locations on the map.

## Sun

Indicate on your map areas that receive full sun (6 or more hours of direct sunlight each day), part sun (4 to 6 hours per day), or shade (less than 4 hours of direct sun daily).

#### Wind

Identify what areas are relatively exposed to strong winds, and what areas are sheltered by buildings, structures or plants.

## Topography

Low spots tend to remain wet and experience more frost than uphill areas. Steep slopes create challenges to gardening, such as erosion, and may need to be altered. On the other hand, slopes also provide opportunities in design. They provide variation in elevation and can be used in separating distinct areas of the garden.

#### Temperature

Identify hot spots in the landscape, such as along south facing walls or near air conditioning units and dryer vents. Areas that receive full sun or afternoon sun will also be hotter (and drier) than more shaded sites. Other areas may be more protected from sun and wind, providing ideal planting sites for heat sensitive plants. Skilled gardeners can identify microhabitats in the landscape where marginally hardy plants can successfully be grown.

## Water and Drainage

Identify areas in the landscape where water collects. Low spots and areas surrounding drain spouts tend to be wet. Other areas may be exceptionally dry. The soil beneath the roof overhang does not receive as much direct rainfall as areas not sheltered by the roof. The constant air flow near air conditioning units also has a drying effect on plantings. Consider and record any existing irrigation systems and structures.

#### Soil Type

Soil type will greatly affect the drainage of an area. Sandy soils drain very quickly, while clay soils are slow to drain. Some plants have specific soil requirements. Record the soil texture (sand, silt, clay) in different areas of the landscape. Sandy soils have a coarse texture and feel gritty when you rub them between your fingers. Clay soils have a fine texture and feel smooth when rubbed between your fingers. Silt soils are more powdery feeling. Many soils have a mixture of two or more particles along with organic matter.

Once you have recorded all the characteristics and features of the existing landscape or planned planting site, it is time to conduct an evaluation (Figure 2). The purpose of

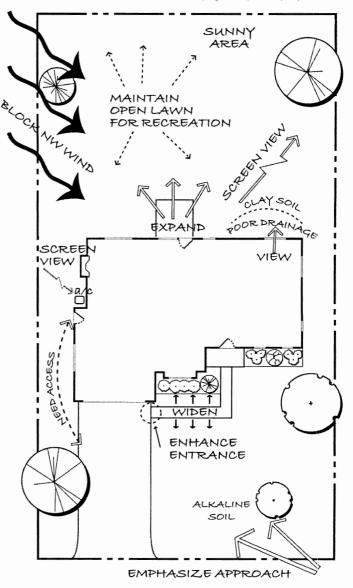


Figure 2. Site analysis identifies challenges and positive features of the landscape.

this step is to identify the positive and negative features of the landscape. Begin by examining the existing structures. Many structures are necessary and cannot be altered, the air conditioner or utility box, for example. You might find other structures that are inessential to the current use of the landscape, such as a swing set that has not been used for years, or a rusty old fence that serves no real purpose. Identify which structures you wish to keep and those that need removal or replacement.

Evaluate the existing landscape. Identify plants you wish to retain and work into the new landscape or planting. Look for plants that have overgrown their space; a shrub that overhangs the sidewalk or blocks a window, for example. Some trees and shrubs may just require a little pruning, while others may need to be removed or transplanted to a new location. (See fact sheets HLA-6414 *Planting Trees and Shrubs* and HLA-6409 *Pruning Ornamental Trees, Shrubs and Vines* for more information on these topics.)

In a visual evaluation, we are also concerned with views. Identify the locations from which you most often view the landscape. This may be inside your home, such as through a kitchen or sitting room window, or may be outdoors, such as from a patio or deck. Go to each location and look out over the landscape. Look in all directions and consider views both within and beyond your property line. Is the current view from those windows pleasing or would you like an additional planting to add more interest to that area? There may be a lake or pond nearby, or a picturesque view of a hilltop church. These may be views you wish to enhance or frame through landscape elements or plantings (Figure 3).

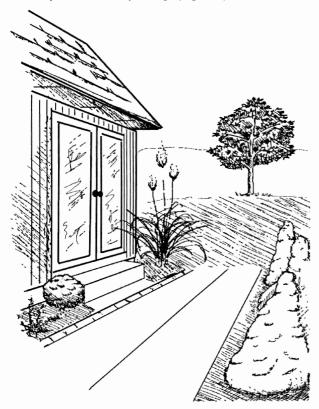


Figure 3. Plantings can create lines that direct the eye toward an interesting view or away from an undesirable view.

On the other hand, there may be a utility box or a larger public utility structure, or perhaps your neighbor has an unattractive chain link fence you'd like to hide from view. Landscape plantings can also be designed to hide such undesirable views. Likewise, plants, as well as various structures, can be used to add privacy in areas of the landscape.

Finally, identify problematic areas as you conduct the survey. Erosion and poor drainage or standing water are problems that can be corrected with proper planning. Likewise, you can alter certain conditions such as excessive shade and poor air movement to improve the physical plant environment. Assess the health of existing trees and shrubs. Dead or dying trees may pose hazards and require removal.

# Landscaping Goals

Before you begin to plan the landscape or planting, clearly identify your goals. How do you plan to use the yard or garden? Make a list of the activities you intend to carry out in the yard or garden. This may include reading, sunbathing, meditation or relaxation. Do you wish to have an outdoor dining area? Do you need to plan areas for pets, hobbies or for children to play? Be thorough and consider all members of the household. List the number of people that participate in each activity; this will help you to plan an appropriately sized area for each activity.

Identify any structures or hardscape that you may need to install to meet the desired landscape uses such as a patio or deck to accommodate a dining area. Will you include a play structure or fenced area? Make sure to consider long-term plans as well as immediate ones. Perhaps you someday plan to put in a swimming pool or hot tub. These should be included in your initial planning.

Determine what special features, if any, you might want to add to the landscape. Perhaps you want to include a fountain, sculpture or other unique feature in the garden. Are there specialty gardens you wish to install such as a rock or vegetable garden, or wildlife habitat? Identify structures that might help you enjoy the landscape to its fullest. These may include pergolas for shade, benches and sitting areas, paths or steps. Each should be considered as part of the planning process.

Make sure to get the entire family involved in the planning stage so that everyone's needs are addressed. You might find family members have very different ideas or needs, work to meet as many as possible. Get the ideas down on paper; you can decide later which ones will realistically fit into your landscape plan.

#### Create a Rough Plan

Once you have identified your wants and needs in the landscape, it is time to start putting ideas on paper. It is a good idea to make several photocopies of your landscape drawing to use for planning, and work in pencil. You will likely go through several drafts before coming up with a plan you like.

The landscape drawing already indicates the locations of existing structures, trees and other plantings. Remove from your drawing any plants or structures you plan on removing or replacing in the landscape. Now draw bubbles to represent the different use areas you intend to incorporate into the landscape and label each bubble clearly with its intended use. This is called a bubble drawing or bubble plan. Bubble drawings help

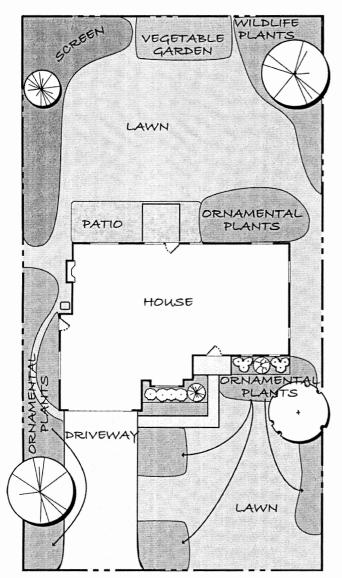


Figure 4. Bubble drawing with areas identified for vegetable gardening, lawn, wildlife habitat and mixed beds.

define use areas and allow you to visualize how different use areas fit together into the landscape. The bubbles roughly correspond to the shape and size of planned use areas, but will continue to be refined throughout the design process (Figure 4).

Remember to include service areas where garbage cans may be stored, a location for stacking firewood if you have a fireplace and an area for composting. Patios, walkways and sheds can be drawn to approximate the intended shape and size. Be sure to include all planned use areas and proposed structures.

Create several potential bubble drawings and select the best one. The final selection will be used to develop a more detailed concept plan. In a concept plan, the individual bubbles begin to take on specific shapes and characteristics. We also start to see where one bubble borders another, and how individual spaces will come together. The concept plan provides a starting point for designing the landscape, but is far from a completed design. Before we can move on in the designing process, we must appreciate how plants and structures function in the landscape, understand the guiding principles and elements of design, and learn to organize space to effectively transition from one use area to another. These concepts and more are presented in the Homeowner Garden Design Series of fact sheets.

One final consideration in the planning phase is irrigation. Consider how you intend to water the landscape plantings. Will you install an irrigation system to water lawns or garden beds? Are there adequate faucets to accommodate watering by hand or sprinkler? Planning ahead can save you time, labor and expense in the long term. You may need to work with a contractor to create an irrigation plan. Once you have developed an irrigation plan, add this to your concept plan as well.

It is important to also note, if you do not feel confident with design, you can hire a landscape architect or designer to complete all or part the design work. Take the time to find a designer you feel comfortable working with. Some businesses offer design work only, while others design, install and may even maintain landscapes. When selecting a firm, review photographs of past projects and ask for references. Visit some of the designer's completed projects to see the finished work. A good designer will listen to your ideas and use them to create a space that meets your needs.

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