# DESIGNING YOUR LANDSCAPE

# SITE AND NEEDS ASSESSMENT

Examine all existing features of your site that could affect your landscape design and then identify the functions you want your landscape to serve.

**Site Assessment:** Considerations include soil conditions, drainage pattern and orientation to the sun (summer shade or winter protections). Look at views you want to protect or screen. Note existing features such as entrances, driveway, fence, patio, windows and existing plants. Locate all utility lines for both visual and safety concerns. **The Call-Before-You-Dig hotline number is 1-800-227-2600.** 

**Needs Assessment:** Focus on the different areas or "outdoor rooms" of your landscape and how you want to use them. Also focus on the overall "look" you want from your landscape. Think about public areas, leisure areas, flower and vegetable garden possibilities and transitional areas that tie together, separate or lead into other use areas.

# PLOT PLAN

Once you've completed your assessment of all existing features, it's time to prepare a Plot Plan. This is a bird's-eye view of your lot, using a scale to place all existing features. Accuracy is important in drawing the plot plan so that you have identified the space available for planting. To complete the Plot Plan, you will need:

# • Graph Paper

Scaling is critical in developing a landscape design. Draw your base plan on graph paper with eight or ten squares to the inch, letting the length of each square equal one foot.

## • Ruler

You may want to use an architect or engineer's scale ruler. This triangular-shaped ruler is marked with varying graduations to indicate feet per inch. Common scales for residential lots are 1:8 (1 inch equals 8 feet) or 1:10 (1 inch equals 10 feet). If using a regular ruler, then every 1/8''= 1 foot.

## • Tape Measure

To get your property boundaries and other lot dimensions, you may want to refer to the original house plans or check with the local city engineer's office. Or you can measure the property with a standard tape measure.

## • Tracing Paper

This comes in handy when you start sketching different designs. Just place the tracing paper over the plot plan.

## • Drafting Paper & Pencils

To draw a plot plan, you will need measurements. Draw a rough sketch of your lot showing property lines, the house, patios, walkways, and the driveway. Take the tape measure and accurately measure all sides of the house, all property lines, and accurately locate all features, existing plants, walkways, and planter beds. Then, draw as accurately as possible your house and lot "to scale" on graph paper.

The scale you use depends on how big your lot is and how big your sheet of paper is. At 1:8 scale (1'' = 8 feet), an 8.5" x 11" sheet of paper can fit a lot sized no larger than 68 feet by 88 feet. At 1:10 scale, and 8.5" x 11" sheet of paper can fit a lot sized no larger that 85 feet by 110 feet. You can make your lot fit on the paper by either changing the scale used or using a larger piece of paper.

The plot plan will be used to identify and accurately locate the different landscape areas available for the family's use. It's used to determine the best circulation routes around the house, and to identify the good views you want to highlight and those views that you'll want to screen. The plan should show the scale used, the direction (North arrow), any slopes or drainage patterns, existing plants, any underground utilities.

Once made, copies of the plot plan should be made to experiment with different design concepts.

# THE FUNCTIONAL DIAGRAM

When looking at the different landscape areas and their potential uses, many designers find it helpful to create *"function outlines" or "bubbles"*. A functional diagram roughly defines areas and uses by drawing "bubbles" on a copy of the Plot Plan. The "bubbles" approximate the size and shape of different features of the landscape. For example, bubbles can be drawn to represent the back patio, the grass area off the patio, and the planter beds. Arrows between bubbles are good for showing circulation pathways. Try different arrangements until you find the one that works best.



## PLANTING CONCEPTS

Once you know roughly what is going where and how much space you will need to allocate to the different elements of the landscape, you are ready to start converting your rough "bubbles" into specific shapes with defined edges. Although you are creating a flat plan, you must try to think of your landscape as a three-dimensional object. Consider the size and shape of the different elements to be included, the pathways, patios, planting beds, and of course, the shrubs and trees. Consider the "grade level" each element will be at. You may wish to break up a "flat" landscape by using paths and steps to move from one space to another. Or you could include some raised beds with retaining walls. The plants you use will also help define the different elevations in the design, from the low-growing ground covers to the trees.

Now it's time to consider the plant and hardscape materials you want to use. Again, if you look at the areas of your landscape as "outdoor rooms," you now have to think about what materials will make up the floors, walls, and ceilings of your rooms. Here is where your time and effort investigating different plants and materials will pay off. Find out the names of the plants you like. Do some research on the plants you pick out. How large do they grow? Do they get tall or spread? Will they stay evergreen throughout the year or do they drop their leaves?

Consider watering requirements, flower color, thorns, and solar orientation. Some plants work better than others in hot, sunny exposures, while some plants prefer the more protected east and north exposures.

In Southern Nevada, more and more homeowners are opting for xeriscape, which is the conservation of water through creative landscaping. And despite popular belief that xeriscape is simply a lone cactus in a bed of rocks, properly planned xeriscape is highly individual and can be as conventional and formal as you like.

#### **XERISCAPE DESIGN PRINCIPLES**

Xeriscape (pronounced zeer-ih-skape), and from the Greek word "x*eros*" meaning dry) is "creative use of water-efficient plants and landscape techniques that save water and energy naturally". Its seven principles are:

#### Sound Planning and Design

Planning your landscape design is important. You can make a mistake on paper and toss it away. When you make a mistake in the landscape, its effect is not so easily tossed. Successful xeriscapes begin with a good design that considers the function of the landscape and the mature size and water needs of the plant.

#### **Appropriate Turf Areas**

Locate grass only in areas where it provides functional benefits like the children's play area. Avoid using turf as just a "ground cover." Keep grass away from sidewalks, walls and fences for easier maintenance. Avoid planting grass in oddly shaped areas that can't be watered efficiently.

#### **Water Efficient Plants**

Many low water use plants are available. Some provide shade and screening, others are perfect for borders and accents. Many flowering plants provide seasonal bursts of color.

#### **Efficient Irrigation**

Water all trees, shrubs and groundcovers with an efficient, low-volume drip system. Irrigate grass areas

separately from other plantings. Change the irrigation schedule frequently with seasonal weather changes.

## **Organic Soil Improvements**

Use organic matter to improve the soil when planting. This helps the soil hold water, permits better water absorption and feeds nutrients to your plants.

# **Surface Mulches**

Use mulches to cover and cool the soil, decrease evaporation, reduce weed growth and slow erosion. Use organic mulches such as bark chips or wood shavings, or inorganic mulches like rock and gravel.

# **Appropriate Maintenance**

Xeriscapes require less maintenance than traditional landscapes, but to preserve the appearance and water efficiency, some regular maintenance is required. Proper pruning, weeding, fertilization and pest control will keep your xeriscape looking good. Irrigation system maintenance and adjustments help save water.

The concept of **hydrozones**, in which plants with similar watering requirements are grouped together, is used extensively in xeriscaping. Plants with the highest water needs are usually located closest to the house near the front entrance or around the back patio. This is often referred to as the **mini-oasis**, which concentrates the cooling effects of lush plantings closest to the home for the greatest benefit. Other hydrozones consisting of low-water use plants are usually located farther away from the home.

# FINAL CONCEPT PLAN

With the areas defined, circulation routes identified, and plants and hardscapes selected, you can proceed to the final **Concept Plan.** 

The Planting Plan should be drawn on drafting paper, and should be clear and legible.

- 1. The plan should contain a title block showing the name and address of the property, the scale used, a North arrow, and the date drawn.
- 2. The plan needs to include a complete plant list, showing the name, size, and number of plants used in the landscape. All plants and other features need to be clearly identified on the plan, including existing plants that will remain, mulching materials, boulders, etc. A sample of symbols is included.