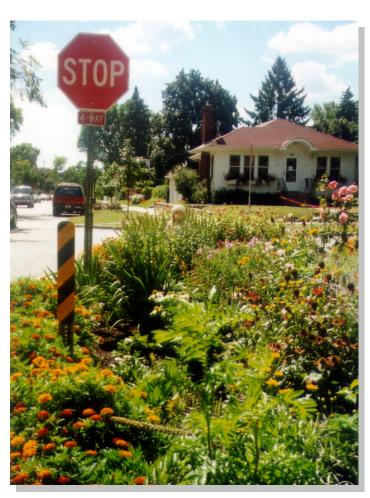
Nothing makes a walk down the street more pleasant than the color, texture, and fragrance of a beautiful garden. More and more Twin Cities residents are pulling their back yard gardens to the front. "Up front" gardening is becoming popular as people realize they can get great sun, more space, and the chance to share their gardens with the neighborhood.

Boulevards, the area between the curb and the street, are a perfect spot for a garden. A vibrant garden can slow traffic, provide a spot to sit and visit, and is an ideal way to meet neighbors. However, gardening on the boulevard is also more challenging. In particular, gardeners need to keep plants low enough so they don't block people's ability to see at intersections. And they need to design their gardens so that soil stays in the garden instead of washing into the street and ultimately into rivers or lakes.



Too-tall plantings at intersections may hide children so they can't be seen by drivers. Can you see the 5-year-old girl in this garden?

Who Owns the Boulevard?

In most communities, you own the space between the sidewalk and the street but the city has the legal right to enter this utility-filled territory, called an easement. Easements generally measure 14 feet from the curb into your yard. Boulevard gardeners need to be aware of two things. First, that the city may need to dig up the boulevard or sidewalk to repair and upgrade utilities. Resulting damage to the garden will not be repaired by the city. Second, gardeners are responsible to know and follow the ordinances that pertain to boulevard planting in their city. See References section for details. Follow your city's instructions and you will enjoy your garden for years to come.

Site Considerations

Trees

There may already be a beautiful plant on your boulevard: a tree. It is essential that you consider tree health while planning your boulevard garden. Boulevard trees face harsh growing conditions, such as low nutrients, compacted soil, and lack of regular watering.

Poor planning and improper boulevard garden maintenance can weaken or kill boulevard trees. However, with proper design and care, your attention can improve the health of your trees. Here are important rules when planting around boulevard trees.

 Do not dig or damage the roots of your boulevard or front yard trees. Follow this guideline to decide where digging is safe: Measure the diameter of your tree trunk at a point 4.5 feet above the ground. Multiply this number (in inches) by 1.5. The result is the distance (in feet) in which major roots extend in all directions from the tree trunk.

Do not dig in this area. The majority of tree roots grow within the top 6 inches of soil and can be severely damaged by normal garden cultivation. This may mean that you leave a border of grass around the tree. Or you may choose to strip just the top layer from your boulevard. Self-seeding or otherwise invasive perennials planted a few feet from the tree trunk will keep grass from growing back. Over time, perennials will fill the area. Many native plants and groundcovers work well in this situation.

Make sure you also measure the root system of any trees in your front yard. These trees may have vital roots extending underneath your sidewalk and into your boulevard.

- Avoid using herbicides on your boulevard garden. The herbicide Banvel (Dicamaba) can leach into soils and harm woody plants. Many cities forbid use of chemicals on boulevards.
- Do not pile soil or mulch directly against a tree trunk.
 Leave space between the tree and your mulch so that fungi and rodents do not attack the tree's bark. This recommendation applies to all trees in your yard.
- Water your tree deeply. In dry periods, your boulevard tree likes about 1.5–2 inches of water per week. Try to water your boulevard plantings and the tree on the same schedule. Avoid frequent, shallow waterings which may lead to weak, shallow tree roots.

Driveways and Sidewalks

Some boulevards are bordered by driveways or are crossed by walkways from sidewalk to curb. These concrete or gravel pathways create distinct sections for gardens. Decide if you wish to garden each section of your boulevard or if you will concentrate on those that receive the least traffic from pedestrians, cars, and pets. Always keep in mind that cars will park next to your boulevard and that passengers will use your boulevard.

Leave a 2-foot edge of turf or walkable groundcover on the street side and perhaps through the garden to direct people.

Many cities have regulations about planting near street intersections, driveways, or alleys (see next section).

Design Considerations

Sun or Shade

Consider the amount of sun your garden receives. Sketch the boulevard's outline and take visual notes on which parts receive sun at different times of day. If you are making this "sun sketch" during the spring or fall when no leaves are on the trees, be sure to take into account the full canopy of shade that future leaves will provide.

Height Restrictions

Most municipalities set guidelines on the height of boulevard plants. In Minneapolis and St. Paul, plants may be 36 inches tall, except within sightline zones. These zones are meant to maximize visibility for pedestrians, cyclists, and motorists. In St. Paul, for example, setbacks are the same as they are for parking (30 feet from an intersection, 5 feet from an alley or driveway). In those areas, plants may be 18 inches tall. In Minneapolis, the set back for 18-inch-tall plants is 40 feet from an intersection and 10 feet from an alley or driveway.

Try to keep tall plants toward the center of your boulevard to keep sightlines clear. Don't allow your plants to droop onto sidewalks, curbs, or alleys. Stake taller plants if they tend to droop.

Structures, Containers, Boulders, Rock Borders, and Pavers

Talk to your city before incorporating any of these elements into your boulevard garden. Many cities prohibit these features due to concerns about utility maintenance, snow plowing, or liability. Remember, people getting out of cars or pedestrians walking on your boulevard will encounter whatever you put on the boulevard. Think about the other people who use the boulevard before deciding to add obstructions.



Low plantings provide color but still allow children to be seen by drivers.

Boulevard Pollution DOs

- DO be careful when digging your boulevard to keep soil IN the boulevard and OFF your sidewalk, driveway, and the street. Take any excess soil to your compost pile. Sweep up and remove any soil or plant debris from hard surfaces.
- DO leave a 2-foot strip of grass or other tightly-knit groundcover between your boulevard garden and the curb. This barrier strip will catch soil runoff and keep it in the boulevard. The border also keeps rain and hose water in the garden rather than down the sewer. A groundcover strip makes a convenient place for car passengers to alight without hurting themselves or trampling your flowers. Try "Salt Survivor" grass seed for excellent turf results along streets.
- DO leave a 1-foot strip of grass or hardy groundcover next to the sidewalk or other paved areas. Again, this keeps the soil in place.
- DO prepare your boulevard bed to a level even with your sidewalk and curb.

Boulevard Pollution DON'Ts

- DON'T give in to the urge to create berms, mounds, or other raised bed gardens in your boulevard. Even though these methods look attractive, they cause runoff. Take a close look at a raised bed boulevard garden after a rain storm. It is easy to see the fine organic particles washing down the street.
- DON'T "clean up" your boulevard garden or your front yard by sweeping leaves and debris into the street before your neighborhood's scheduled street sweeping. Remember the surprise Halloween snowstorm in 1991? The snow prevented street cleaning that year and our lakes were visibly harmed the following summer. Bag your leaves for the compost facility, use a mulching lawn mower to finely grind them, or rake them into your backyard compost pile.
- DON'T mulch your boulevard garden heavily. Most mulches cannot prevent runoff of fine solids. Some leaf and wood mulches may even run off themselves. Most years we don't need to mulch since we receive enough snow cover to protect hardy perennials. For insurance in a dry winter, bag some leaves and keep them handy. Use these bagged leaves as mulch if snow cover is sparse.



Planting restrictions are the same as or similar to parking restrictions: 30–40 feet from intersections and 5–10 feet from alleys and driveways. This car is parked so close to the corner, the child is barely visible. Illegal parking puts pedestrians at risk. So do too-tall plants that prevent clear sightlines for walkers and drivers. Think of others before you park and before you plant.

Avoiding Pollution

Your boulevard should add to the beauty of the environment. Yet a poorly executed garden can be a major contributor to water pollution. Recent research into urban water quality shows that phosphorous runoff from yards and gardens creates significant environmental hazards in our watershed. Boulevard gardens are a particular problem, since the soil and organic materials from a poorly designed boulevard can easily wash out of the garden and into storm sewers.

When soil and plant debris wash down storm sewers, they flow directly into our lakes, creeks, and rivers. Soil particles and decaying plant materials contain phosphorous. When it gets in the water, it feeds algae, which blocks sunlight and prevents other aquatic plants from growing. As algae dies and decays, it uses up much of the oxygen in the water, which used to be available for fish.

Lawn clippings, leaves, and phosphorous fertilizers (phosphorus is the "P" in the "N-P-K" label) are also big contributors. Keep leaf and grass clippings in the garden or compost pile and out of the street. It is illegal to use high phosphorous fertilizers on lawns in the metro area.

Maintenance Goals

What kind of gardener are you? Hands-on, every night after work? Or a couple of hours a month? Be sure that your garden reflects the time you are willing to commit.

High-maintenance gardens include plantings of showy annuals. Every spring, annual gardeners need to select and plant a whole new garden. Deadheading wilted flowers and removing the entire plant at the end of the season create work. Annual gardens may require more water or fertilizer to thrive. On the plus side, they can be very showy and are fun to redesign each year.

Lower maintenance boulevards can include plantings of hardy perennials, low-growing shrubs, groundcovers, and bulbs. These can be planted once and in some cases can fill in large areas by self-seeding. The cost is initially much higher than that of an annual garden, but plants grow large and can be divided and shared.

Native plants are perhaps the easiest gardens to maintain over time. Natives require little or no extra water, little or no fertilization, and are typically very hardy in drought or harsh winters. An added plus is the remarkable show of butterflies and birds that may be attracted to your boulevard. We highly recommend native plantings. See resources section for more on native plants.

Planning to Dig

Gopher State One

Before you dig, call to see whether underground power lines, gas lines, or cables run under your boulevard. Dial Gopher State One at (651) 454-0002 and within 48 hours (excluding weekends and holidays) the locations of any buried utilities on your property will be clearly marked. Avoid hitting these utilities by staying at least 2 feet away in either direction. Damaging underground utilities is expensive and dangerous.

Soil Conditions and Lead Safety

Boulevard garden soil is often not the best quality. Most boulevards suffer from neglect, foot traffic, and winter sand and salt. The soil may even be construction fill rather than black dirt. These all contribute to some rather sorry soil conditions. It is a good idea to have a soil test. Call the University of Minnesota Extension Service listed by county in your phone book. We also recommend that you have your boulevard soil tested for lead, a common problem in street side gardens.

Contact the Sustainable Resources Center Urban Lands program for ways to deal with soil contamination and other soil problems (see "Resources" section.)

Soil Preparation

The work you put in at the outset of your boulevard project makes all the different in its future success. Take the time to do it right, and you will be rewarded.

- Drainage is key. Create soil conditions that allow water to percolate into the garden, rather than to run off over a compacted, hard surface.
- Strip sod. Using a sharp spade or a rented sod stripper, remove just the top layer of grass from the part of your boulevard that is to become a garden. Compost the old scraps or use them to fill in sparse areas in other parts of your lawn.
- Loosen soil. Using a digging fork, loosen the top layer of soil to about 8 inches deep. Motorized tillers are harder to control in the small space of a boulevard and are a problem for careful digging near trees.
- · Remove rocks and other debris.
- If necessary, amend the soil with compost or well-rotted manure, according to the results of your soil test.
- If you plan to bury a Osaka hose to provide irrigation, now is the time to do it. Place the hose at the manufacturers recommended depth, in a pattern that will serve plants through the boulevard. Position the hookup where you can easily attach a hose and monitor the watering. Purchase a hose guide that provides a smooth surface for tricycles, pedestrians, and wheelchair users who may use your sidewalk while you are watering.
- Do not allow soil to overflow the borders of your boulevard. The garden bed should be no higher than the top of the curb and sidewalk. Avoid the urge to mound soil in the boulevard. This leads to soil runoff.
- Do not remove so much soil that you create a deep basin in your boulevard. While this may help prevent runoff, the uneven drop-off from the sidewalk and curb edges creates a significant hazard to pedestrians.

Watch Those Car Doors!

Remember, people will open their car doors into your garden. Consider a barrier of at least 2 feet from the street planted with grass or a walkable groundcover to give car doors space to open. Also, consider a path through your garden so people can walk through, rather than on your plants.

Avoid large rocks or barriers that will interfere with car doors or pedestrians.

Rainwater Gardens

If the conditions of your boulevard are right, you can create a rain garden to catch and retain rainwater and snowmelt so they soak into the earth rather into than the storm sewer.

First, make sure you follow guidelines for digging near trees. Then, check to see you have enough room to leave a turf or groundcover border of 1–2 feet. If enough space remains, dig a very gradual, shallow dip (1–2 inches) in the center of the boulevard, leaving the boulevard edges level to any hard surfaces.

Plant your rain garden with hardy perennials suited for a wet site, such a Bee Balm (*Monarda* spp.) and Swamp Milkweed (*Asclepias incarnata*). Native plants work well in these conditions.

Too Much Salt?

If your plants get salt spray from winter plowing, consider planting these along the street (inside your grass or groundcover barrier).

High Salt Tolerance Perennials

Sea Thrift (Armeria maritima)

Reed Grass "Karl Foerster" (Calmagrostis acutifolia)

Dianthus (Pulminarius x allwoodii)

Blue Lyme Grass (Elymus arenarius)

Fountain Grass (Pennisetum alopecuroides)

Moderately Salt Tolerant Perennials

Artemisia "Silver Mound" (Artemisia schmidtiana)

Blue Fescue "Elijah Blue" (Festuca glauca)

Hosta (Hosta plantaginea)

Sea Lavender (Limomium latifolium)

Daylily "Stella D'Oro" (Hemerocallis)

Sedum "Autumn Joy" (Sedum spectabile)

Coral Bells (Heuchera micrantha)

Hardy wildflowers (Purple Coneflower, Yarrow, Daylilies)

Ornamental grasses are good choices on boulevards. Most require full sun. But DO NOT use Ribbon Grass (*Phalairis arundinacea*) or Amur Silver Grass/Hardy Pampas Grass (*Miscanthus sacchariflorus*). These are invasive and their seeds could wash off your boulevard into wetlands.

Alternatives to a Grass Border

If turf grass is not your preference, consider using any of these perennial plants as your garden border. They may not stand up to very heavy foot traffic, but they do trap soil and rainwater. Common Yarrow (Achillea millefolium). Bright or pastel flowers with delicate, fernlike foliage. Can be mowed to 2 inches. Accepts foot traffic. Aromatic when cut. If allowed to flower, can reach 12–30 inches tall. Self-seeds.

Pussy Toes (*Antennaria dioica*) spreads in a carpet of greygreen felty leaves. Grows to 6 inches. Pink or white flowers in late spring or early summer. Accepts some foot traffic.

Sedum, also known as Stonecrop, comes in many varieties. Look for the very low-growing, creeping types such as Sedum "Goldmoss" (*Sedum acre*), which grows 2–3 inches tall and spreads. Masses of yellow, starshaped flowers.

Thyme (*Thymus* spp.) Very aromatic creeping plants with tiny pink, lavender, or white flowers. 2–5 inches tall. Can be trimmed with a lawn mower. Somewhat tolerant of foot traffic.

Resources

For advice on native plantings, contact your local chapter of the Wild Ones. www.for-wild.org

Every city has its own guidelines regarding boulevard plantings. Contact your public works or planning department to inquire about local rules.

In Minneapolis, see the web page for blooming boulevards for a link to the city's ordinance: www.ci.minneapolis.mn.us/citywork/planning/sections/cue/blooming

In St. Paul, see:

www.ci.stpaul.mn.us/code/lc105.html#sec105.04

Gopher State One: (651) 454-0002

Credits

This publication was originally produced by the Sustainable Resources Center's Urban Lands Program, 1916 2nd Avenue South, Minneapolis, MN 55403. (612) 870-4255. www.src-mn.org

It was updated by Biking and Walking Solutions, which promotes front yard and boulevard gardens to slow traffic and to make our communities more friendly to cyclists and pedestrians. (651) 646-2864. www.saferoutes.org

Designed by Merriam Park Neighbors for Peace and their Plant Pink for Peace campaign, a project to encourage gardens that show community support for lasting peace. (651) 641-7592. www.mppeace.org

Additional plant suggestions provided by the St. Paul Green Coalition and Farm in the City, growing a healthy community through gardening and greening. (651) 641-8831. www.farminthecity.org