

Volunteer

Professional

Volunteer + Professional

Front Parking Partner

Image Source: Immanuel Giel. "Rasenpflasterstein_1.jpg" 25 September 2007 via Wikimedia, Public Domain





The Front Parking Partner lot design provides parking for two vehicles that can be used by one resident or shared between two neighboring houses.

This is not a typical parking area. The parking surface is designed to allow water to infiltrate instead of running off into the street and into Detroit’s overtaxed sewerage system.

Colorful plantings are suggested in front of and behind the parking area to help screen vehicles from the road.

This lot design includes a curb cut which requires city permitting. You or your contractor will need to obtain a permit from the city before building this design.

For more information refer to [DFC-lots.com](https://dfc-lots.com)

What is the lot design likely to cost?

The estimated cost of the Front Parking Partner is over \$5,501 and based on volunteer and professional labor. The Field Guide recommends hiring a professional for the earthwork and installation of the parking pad. Planting can be completed by a professional or by volunteers. The cost assumes that residents or volunteers have access to basic safety gear and garden tools.

How much upkeep will this lot design require?

This lot design requires a medium level of maintenance to thrive. Maintenance will include watering plants and newly planted trees, particularly during times of drought and excess heat, pruning trees and shrubs, and general upkeep of the parking area.

Will the installation of this lot design require a professional?

The installation of this lot design will require professional assistance for the first few steps. The Field Guide identifies volunteer opportunities if you, with the help and support of friends, family or neighbors, would like to construct the planting portion of this lot design. Please refer to the Step-By-Step section for guidance on professional and volunteer recommended steps. If you do not feel able to tackle the volunteer aspect of this lot design, a professional can construct the entire project.

How long will it take to install this lot design?

This lot design requires a professional for the completion of several steps. The projected installation time listed below is for volunteer opportunities listed in step-by-step section only. While people tackle projects differently, the Field Guide estimates installation time of the lot design to be one to two full weekends with volunteer group organized by a knowledgeable lot leader. The Field Guide recommends the help of at least five healthy adults or youth to construct this lot design. The Field Guide assumes that the lot is ‘construction ready,’ and all equipment and materials required for lot design have been acquired and are ready to go.

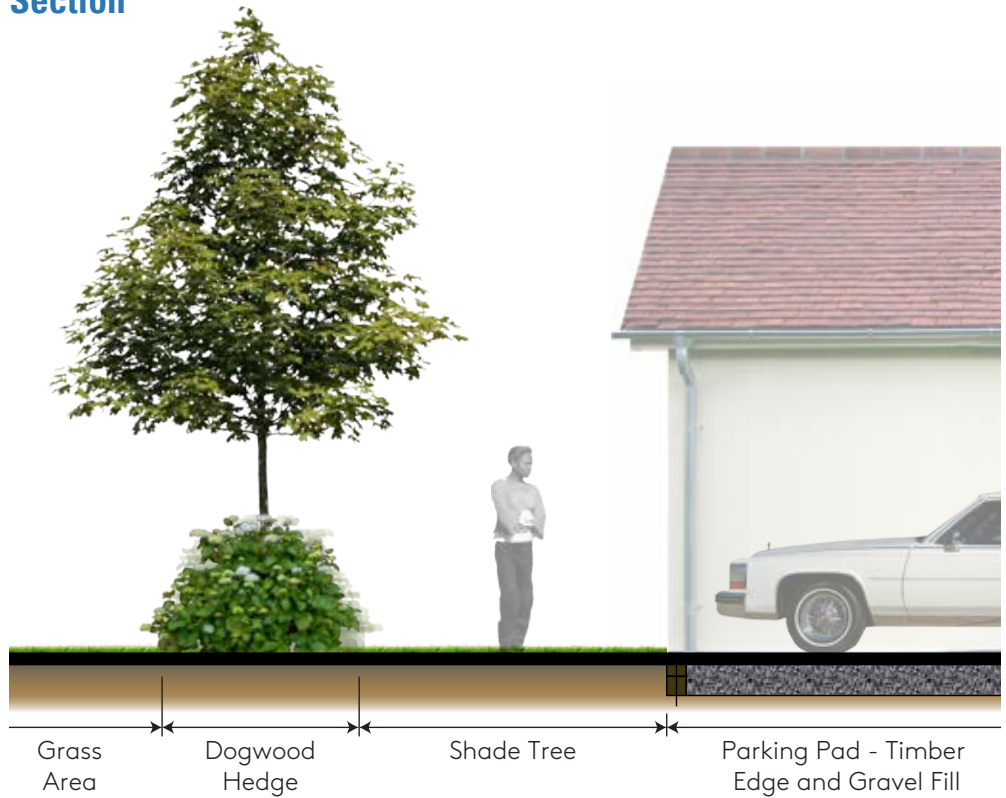
Cost	\$50 - 1,000	\$1,001 - 2,500	\$2,501 - 5,500	\$5,500 +
People	Volunteer	Professional	Volunteer + Professional	
Experience	Beginner	Intermediate	Advanced	
Upkeep	Low	Medium	High	
Stormwater	Good	Better	Best	
Location	Residential Lot in Sun or Shade (Between Two Residential Houses is Ideal)			

Front Parking Partner

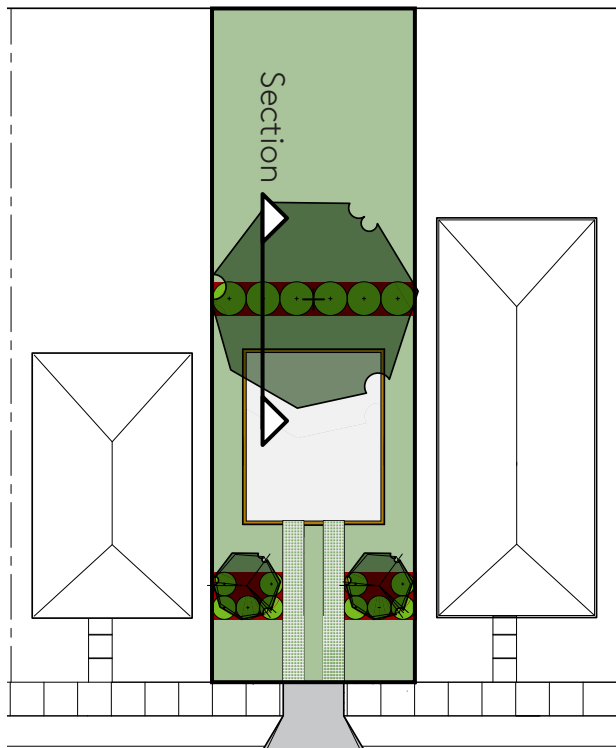
Examples of Driveways Materials



Section



Where Do I Grow?



The Front Parking Partner can be constructed on a single lot and can be utilized by one or two neighboring properties.

- Trees
- Shrubs
- Parking Pad
- Grass or Optional Groundcover

Before You Start

'Construction Ready'

This lot design assumes that you have prepared the lot to a 'construction ready' state.

'Construction Ready' refers to a lot that is clean and clear of trash, hazardous objects, unwanted trees, brush and vegetation, fences, and other unwanted structures.

It may be necessary to remove grass in preparation for your lot design. Refer to the Remove Your Grass box located on the right hand side of this page for more information.

Is there an available water source near your lot? Consider how and where you will access water during and after construction to ensure that your plants can establish.

If your lot is not ready for construction, refer to the [Clean + Green](#) lot design.

You can find the lot design at DFC-lots.com.

Call Before You Dig

Locate underground utilities before beginning your lot design. MISS DIG provides a free service to Michigan residents by locating and marking utilities on requested properties. Call (800) 482-7171 or 811 at least three days before you plan to start digging on your lot.

Test Your Soil

Harmful pollutants have made their way into many urban soils. To proceed with awareness, consider having your soil tested before construction. Two great options are available:

Soil testing is free to members of Keep Growing Detroit's Garden Resource Program. Call (313) 757-2635 for more information or visit detroitagriculture.net.

If you are not yet a member, you can work directly with Michigan State University's (MSU) Extension Program. They have a Home Lawn and Garden Soil Test Mailer for \$25. For more information call (888) 678-3464 or visit msusoiltest.com.

If you are concerned about the presence of lead or other contaminants in your soil, call the Michigan Department of Health and Human Services at (866) 691-5323 or (800) 424-LEAD.

Remove Your Grass

Need to remove grass in areas where you are constructing your lot design?

There are many ways to remove unwanted grass. The first is to remove the grass and its root system by digging up the grass. Another option is to cover your lot with cardboard or a plastic tarp to smother your grass in darkness. It will take several weeks, but after being covered, the dead grass will be easier to remove.

Till Safely

Before you till, inspect your lot for signs of buried concrete or rubble that was not removed during the cleanup stage. Large debris can ruin tiller blades.

When tilling, wear appropriate safety gear, such as covered boots with socks, long pants, safety glasses, dust mask, and ear protection. Make sure you understand the safe operating procedures of your tiller. Refer to the user's manual.

What You Need: Shopping List

Shopping List

The shopping list provides a breakdown of potential materials, tools, and resources required to construct this lot design.

This shopping list is designed for a single lot (30 by 100 feet).

Tools + Resources

Suggested Tools

- **Marking Paint & Tape Measure**
- **Safety Gear:** Gloves, heavy work boots, tall socks, pants, long sleeve shirts, dust masks, protective eye wear, ear plugs, and hard hats (if using heavy machinery)
- **Garden Tools:** Spades, shovels, rakes, trash bags, and wheelbarrows
- **Ball Cart**, for moving heavy trees
- **Drill, Power Saw, and Sledge Hammer**

Potential Water Sources

- Garden Hose with potential extension hose
- Sprinkler
- Rain Barrel in addition to other water source

Field Guide Resources

Resources are available on the Field Guide's web site.

- **Clean + Green**
- **Tree Planting Detail**
- **Perennials + Grasses Planting Detail**
- **Bulb Planting Detail**

Materials List

Materials

- **Geo-fabric**, 750 square feet, 4 ounce non-woven
- **Timber Edging**, 24 boards, 8 feet by 8 inches by 8 inches, pressure treated or cedar boards
- **Edging Stakes**, 48 stakes, ¾ inch by 18 inch round steel
- **Parking Pad Stone**, 8 cubic yards of MDOT 6A stone
- **Grass Paver Aggregate Base**, 7 cubic yards of MDOT 21AA crushed stone
- **Grass Paver Setting Bed**, 1 cubic yard of MDOT 2NS sand
- **Topsoil**, 1 cubic yard
- **Mulch or Wood Chips**, 3 cubic yards

Planting

- **Knockout Roses**, 12 pots or Balled & Burlapped
- **Amur Maple**, 2 pots or Balled & Burlapped
- **Scarlet Oak**, 1 pots or Balled & Burlapped
- **Red Twig Dogwood**, 6 pots or Balled & Burlapped

Remaining Lot (Optional)

Groundcover

- **Low-maintenance Fescue Mix**, 10 pounds of seeds
- **Germination Blanket**, 2 rolls (8 by 112.5 feet)

Front Parking Partner Step-By-Step

Let's Start

Want to create the Front Parking Partner? The Field Guide recommends hiring a professional for some tasks. Here are a few guiding principles to help you understand the tasks involved in the lot design, and the steps volunteers can construct themselves.

Check off tasks as you go along.

Lot Design Steps

Professional Recommended:

- Prepare Your Lot**
- Install Curb Cut**
- Create Parking Pad**
- Install Grass Pavers**

Volunteer Opportunities:

- Plant Trees**
- Plant Perennials**
- Maintain Your Lot Design**
- Sow Remaining Lot**

Prepare Your Lot

The Front Parking Partner is one of the more complex lot designs within the Field Guide. It is recommended that you hire a professional for the following steps: Prepare Your Lot, Install Curb Cut, Create Parking Pad, and Install Grass Pavers.

If you decide to construct this lot design without the recommended assistance of a professional, the guiding principles below are provided to assist you with the installation of the lot design.

- This lot design utilizes a little more than half of a single lot, a 30 by 60 foot area.
- The Front Parking Partner should be constructed as shown in the plan to ensure parking area and planting set back the proper distance (ten feet) from adjacent properties and sidewalks.
- The parking pad should be placed five feet from adjacent property lines and at least ten feet from the sidewalk.
- Before constructing the Front Parking Partner, ensure your lot and street are clean and clear of obstacles and is safe for you to drive to and from your proposed parking area.
- The lot design creates extra soil, that will need to be hauled off site and disposed of properly. An alternative is to incorporate the extra soil into the rear portion of your lot.
- Use marking paint and a tape measure to map out the size, shape, and dimensions of your parking area.

Front Parking Partner Step-By-Step

○ Install Curb Cut

The Field Guide recommends hiring a professional to obtain the Right-Of-Way permit and construct a concrete curb cut to City of Detroit Standards.

For more guidance on permits refer to [City of Detroit, Applying For Permits](#) section on their web site.

○ Create Parking Pad

Follow the following guiding principles for installing the parking pad:

- **Excavate a 26 by 21 foot area to a depth of one foot.** Remove all stones and roots to create a level area and compact soil.
- **Timber Edging:** You will need 24, 8 feet by 8 inches by 8 inches pressure-treated or cedar boards. Set the bottom row of timber edging, level, and cut boards to fit.
- Pre-drill holes for round steel stakes, using two holes per timber for bottom set of timber edging.
- Embed stakes into the predrilled holes using a sledge hammer. You will need 48, ¾ inch by 18 inch round steel stakes for edging.
- Set second layer of timber edging on top of the first row, staggering joints between top and bottom timbers.
- Cut boards to fit.
- Pre-drill holes through top timber edging, making sure to avoid the stakes already installed into bottom timbers.
- Embed stakes through both timber courses.
- **Parking Pad:** Place the four ounce non-woven geo-fabric across pad area and up sides, leaving six to nine inches lip (500 square feet).
- For the parking pad, fill parking area with 12 inches of MDOT 6A stone (eight cubic yards).

○ Install Grass Pavers

Follow the following guiding principles for installing the grass pavers:

- Driveway strips require the excavation of a ten foot and three inch wide area for the full length of the driveway, centered on the parking pad.
- Compact soil subgrade, and cover bottom with non-woven geotextile fabric (250 square feet).
- Fill excavation with nine inches of MDOT 21AA crushed stone base, installing in 3.5 inch lifts and compacting each lift (seven cubic yards).
- Place one inch of MDOT 2NS sand as a leveling course over the compacted aggregate (one cubic yard).
- The driveway median should be three feet wide with driveway strips two feet and six inches wide on either side.
- Install edge restraints along grass paver edges and embed stakes into the crushed aggregate base.
- Cover all exposed sand with three inches of topsoil, and spread grass seed (one cubic yard).

Stone Size Defined

MDOT 6A Stone refers to stone sizes generally ¾ of an inch to 1-½ inches in size.

MDOT 21AA refers to stone that is generally smaller than a ½ inch in size.

MDOT 2NS refers to sand that is generally ¾ inch in size.

Front Parking Partner Step-By-Step

○ Plant Trees

The Field Guide recommends planting 1.5 inch diameter trees; however, smaller or larger trees can be planted if preferred. Trees can be purchased in pots or balled and burlapped. Trees can be purchased in pots or balled and burlapped. If you decide to plant larger trees, speak with a professional or an educational group as older trees can be more difficult to establish.

Plant trees as soon as possible after purchasing. If you cannot plant them the same day, do not leave unplanted trees in direct sunlight. Keep them in shade and well watered until you can plant them. (Trees dry out fast!)

Identify the location where you wish to plant the trees. Dig a hole three times the width of the root ball and equal to the depth.

Pots should be removed before placing the tree in the planting hole. Balled and burlapped root balls should remain wrapped until placed in hole. Unwrap the top 1/3 of the root ball and peel back the burlap once planted. Remove any twine, nails, or stakes. The root flare should be level with the ground when you place the tree in the hole.

Water the root ball, then backfill the hole with the soil previously removed from planting. Add water to the tree every six inches as you backfill the hole. Compact the soil lightly after each watering until the hole is filled with soil and level with the adjacent ground.

The Field Guide recommends three foot diameter by three inch depth of compost or organic mulch around trees, keeping mulch a few inches away from tree trunks.

For more guidance on tree planting refer to the [Tree Planting Detail](#).

○ Plant Perennials

A sunny to partly sunny planting option is recommended for the Front Parking Partner as trees will not provide deep shade for approximately ten years. If your lot is currently located in shade, seek alternative planting options.

Place plants in desired location, then remove plastic pots, loosen roots, and plant.

The Field Guide recommends two front planting areas (seven by 10.5 feet) and one back planting area (five feet by 30 feet).

Place three inches of mulch or wood chips to the front and back of planting areas (three cubic yards for all beds). Front planting areas require one-half cubic yards of mulch or wood chips per bed. Adding mulch or wood chips will help suppress weeds.

For more guidance on planting perennials refer to the [Perennials + Grasses Planting Detail](#).

○ Maintain Your Lot Design

The parking area requires minimal maintenance; however, plants need care and maintenance to thrive and look their best. Water and weed plants regularly, especially during the first few years. Prune roses in late winter and maples in fall. You can prune the Dogwood any time.

Front Parking Partner Step-By-Step



Visit the Resources page on the Field Guide's web site (DFC-lots.com) to discover other vendors and places to purchase plants.

Average Height of Plants



Trees, Large and Small Shrubs

○ Sow Remaining Lot

If you are seeking a lower maintenance alternative to a traditional lawn, the Field Guide recommends a fescue seed mix. **If you follow the Front Parking Partner lot design you will need approximately 10 pounds of fescue seed mix for the remaining lot (1,500 square feet) and two 8 by 112.5 foot rolls of single net germination blankets.**

This family of floppy grasses is very drought-resistant and requires one cutting (in August or September) per year. Fescue can be established in full sun to shade and should be seeded in spring (mid-March to mid-May) or fall (August to September).

Soil should be prepared for seeding by scarifying, raking, or tilling the soil four to six inches deep to loosen any compaction, allowing for easier seed germination and better water infiltration. Apply seed mix to a damp lot.

Sow seed across the remaining lot by using a seed spreader or by hand. A seed rate of five pounds per 1,000 square feet is recommended. Gently water seedlings daily until they are four to six inches in height. Placing a thin layer of straw or a germination blanket over seeded areas will help ensure that your seed establishes by keeping seeds from blowing away and protecting them from birds. Germination blankets or straw can be purchased at most nurseries and garden stores.

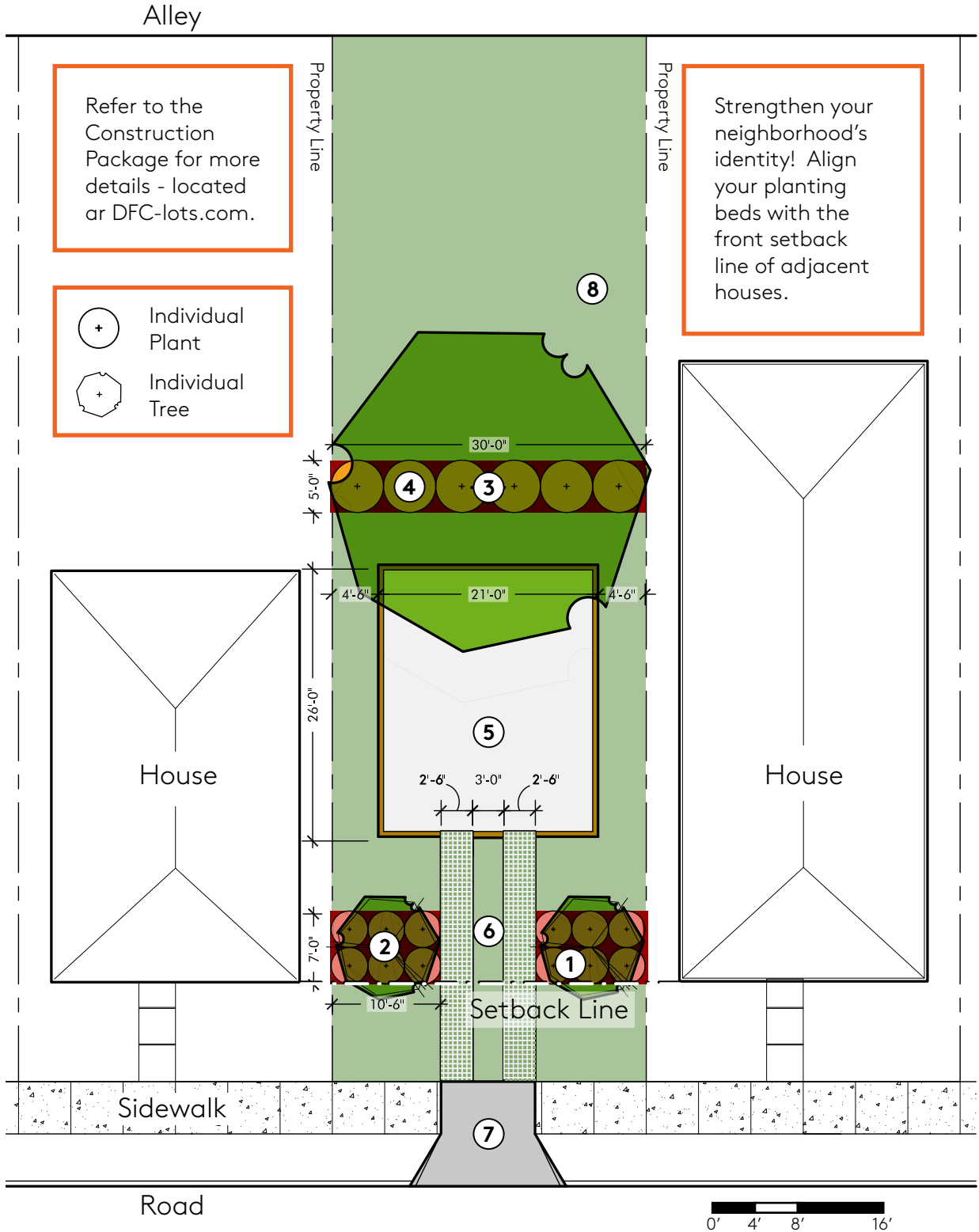
When established, grass will not require supplemental watering except during unusually dry periods. Eco-Turf Low Maintenance Fescue Mix is one recommended seed mix and can be purchased through the Michigan Wildflower Farm.

Other Field Guide lot designs can be used as groundcovers. Check out the web site for additional options and ideas.

Next Level: If you would like to bring additional color to your grass, you can plant bluebells, crocuses and/or daffodils to create a decorative show in spring. Bulbs should be planted in the fall.

For more guidance on bulb planting refer to the [Bulb Planting Detail](#).

Front Parking Partner Lot Design

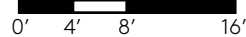


Refer to the Construction Package for more details - located at DFC-lots.com.

Strengthen your neighborhood's identity! Align your planting beds with the front setback line of adjacent houses.

- + Individual Plant
- + Individual Tree

- | | | | |
|---|--|---|---|
| <p>1 Flowering Shrub (Rose)</p> <p>2 Ornamental Tree (Amur Maple)</p> | <p>3 Shade Tree (Scarlet Oak)</p> <p>4 Hedge (Dogwood)</p> | <p>5 Parking Pad</p> <p>6 Grass Paver</p> | <p>7 Concrete Drive Approach</p> <p>8 Grass or Optional Groundcover</p> |
|---|--|---|---|



Planting: Full Sun to Part Sun



Knockout Rose¹
Rosa 'Radtko'
 3' Height x 3' Width.
Quantity: 12 pots or B & B



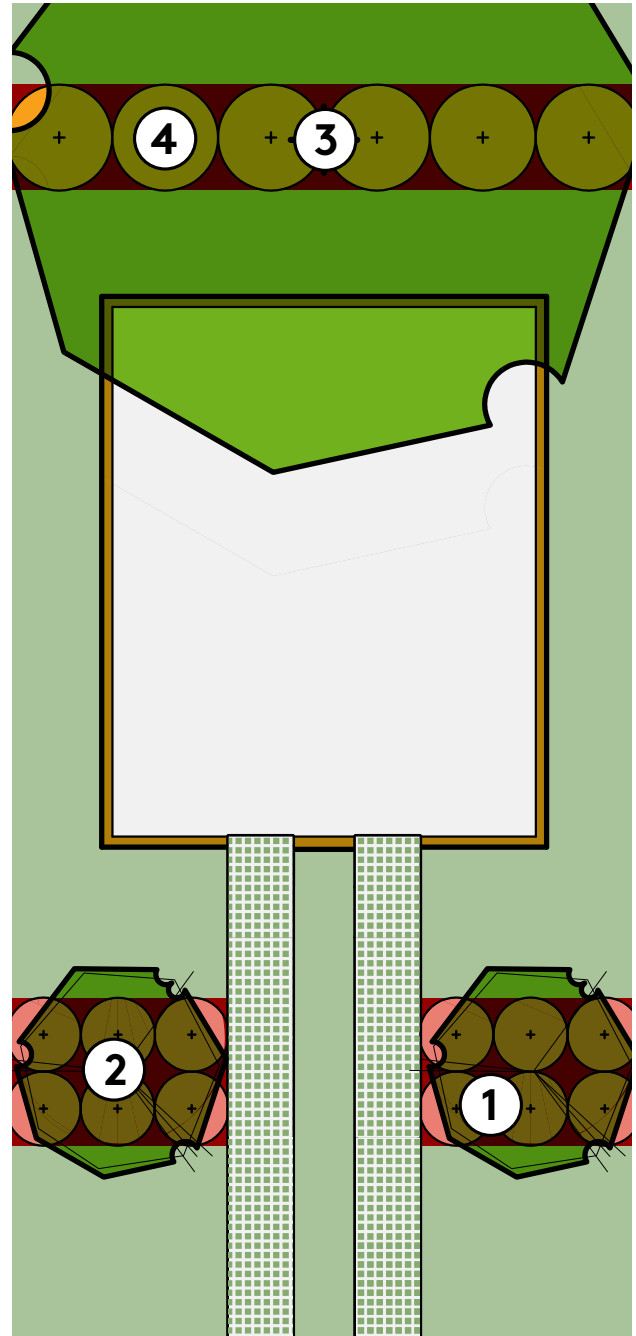
Amur Maple²
Acer ginnala
 20' Height x 20' Width.
Quantity: 2 pots or B & B



Scarlet Oak³
Quercus coccinea
 70' Height x 50' Width.
Quantity: 1 pot or B & B



Red Twig Dogwood⁴
Cornus alba 'Bailhalo'
 5' Height x 5' Width.
Quantity: 6 pots or B & B



Key

- 1

Knockout Rose

(Space approximately three and one half feet apart.)
- 2

Amur Maple

(Small trees shown in front perennial bed.)
- 3

Scarlet Oak

(Large tree shown in back perennial bed.)
- 4

Red Twig Dogwood

(Space approximately five feet apart.)

Plant Sizes

Pots: 1.5 inch diameter trees are available at commercial landscape supply stores in pots or balled and burlapped (B & B).

Image Source: 1) Jim the Photographer, "Red Knockout Roses." 19 May 2011 via Flickr, CC BY 2.0; 2) F.D. Richards, "Amur Maple." 24 October 2013 via Flickr, CC BY-SA 2.0; 3) Jean-Pol Grandmont, "Feuilles du Chêne écarlate - Quercus coccinea." 04 October 2008 via Wikimedia, CC BY-SA 3.0; 4) Nicokolas Titkov, "Cornus alba genus, Swida alba." 01 June 2013 via Flickr, CC BY-SA 2.0.

Did You Know?

Professionals Can Help!

The Field Guide to Working With Lots provides a Construction Package for each lot design. The Construction Package includes information and details required for a professional to construct this design. On the Field Guide web site, use the [Construction Package](#) link located near the top of this lot design page to download and print. Your selected professional will then be able to provide a cost estimate and schedule based on the condition of your lot and the design you select.

Want to Hire Locally?

DFC-lots.com has a growing list of Detroit-based professionals and suppliers of landscape materials and services.

Still unsure of where to start?

Call (313) 294-LOTS or email fieldguide@detroitfuturecity.com for assistance.

Helpful Facts

- Permits can be obtained through the City of Detroit's Public Works Department, Traffic Engineering section. Check out the City's web site for detailed information on cost and what you will need to bring with you to apply for your permit.
- General troubleshooting resources are available for permitting in the City of Detroit and Wayne County on the Field Guide's 'Resource' page.

Planting Tips

- Water after planting and as needed. Do not let soil dry out.
- Weed weekly or as needed.
- The best time to plant trees and shrubs is in the spring or fall.
- Do not plant in extreme heat. Early mornings or evenings are ideal.
- Mulch helps protect trees and plants from mowers and conserves water.
- Call ahead to make sure the nursery or garden store has the plants you need for your lot design.

Front Parking Partner Notes

A large grid area for taking notes, enclosed in a thick orange border. The grid consists of small squares, typical of graph paper, and is intended for handwritten notes related to the 'Front Parking Partner' section.



**DETROIT
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A FIELD GUIDE

**Visit [DFC-lots.com](https://dfc-lots.com)
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