

# Exhibit C

## The Improvements

### ***Raised Wooden Garden Beds***

The larger percentage of improvements within the licensed area for this year will consist of 20 to 30 raised garden beds with wooden sides. Each bed will be constructed of wood that has not been pressure-treated or chemically “protected.” The width of these beds will all consistently be four feet. The height of the boards may vary from 6 to 12 inches. The length of the beds will vary from four feet to 12 feet. Most of these beds will be planted according to the “Square Foot Garden” design as created by Mel Bartholomew in the early 1980’s. Some of these beds will have a trellis attached to the wood frame to facilitate vertical space saving for vines such as those of cucumber and squash plants. Each bed will have a small sign on it indicating the steward for the plot, what is planted there, and then later information regarding crop yields from that plot. Because of the intense planting configurations associated with square foot gardening, these raised beds have crop yields up to 50% more than the traditional row planting methods. We will use string to delineate foot squares. (See Attachment A for our proposed first installation on Saturday April 12, 2014)

Water conservation methods such as Ollas will be used. In addition amendments to the soil such as vermiculite and moss will further enhance water retention. To slow down evaporation, all beds will be mulched. One of the members of Loving Garland Green, Gene Rodgers, is a retired engineer. He has designed a portable gutter system that we are hoping at some later date (and of course with a formal proposal to city officials) to install against the existing shed on the property to harvest rainwater from the roof into a small reservoir. The approximate size of that shed is 1,200 square feet. Given the annual rainfall of Garland, we could expect to harvest 26,000 gallons of water from that roof annually.



### ***One or Two Keyhole Gardens***

These gardens were first made popular in Africa and are catching on in hot climates like Texas. Keyhole gardens hold moisture and nutrients due to an active compost pile in the center of a round bed.



The two photos above are provided to illustrate the concept more clearly. The lovely photo on the left is from Deb Tolman's garden in Central Texas. She uses keyhole gardens as the main source for her food. The photo on the right comes from Send a Cow. ([www.sendacow.org.uk](http://www.sendacow.org.uk))

The photo below shows the process of a build. We plan to give notice well in advance of the day of the build so that citizens can come to the site to participate and learn.



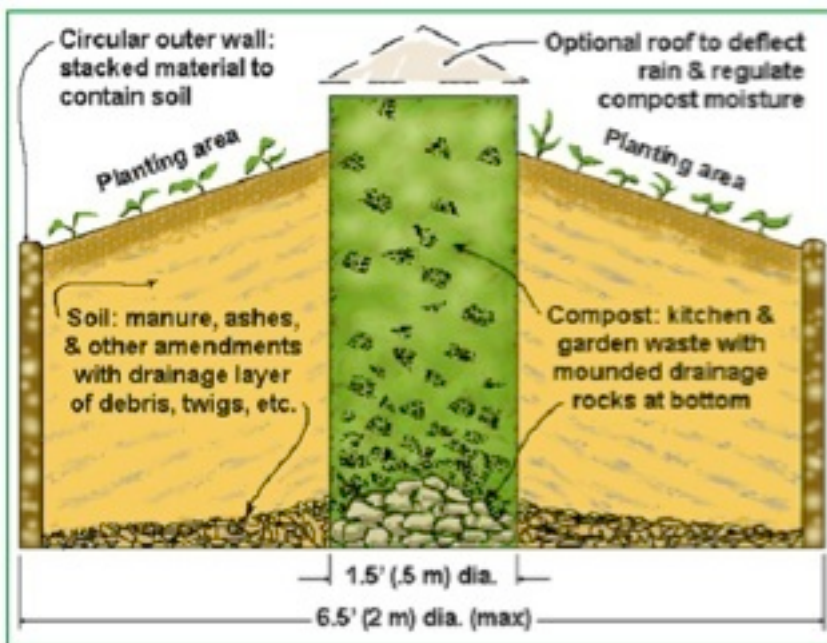


Most likely the keyhole garden beds we install will be made from corrugated metal and will follow the design similar to the one shown below due to the ease of dismantling them. These gardens are approximately three feet high and six feet in diameter.





Keyhole garden scheme. Layering is proven to enhance soil health. Layering suggestions: wood on very bottom, next cardboard, next a bit of compost, next petroleum-free newspaper, manure, worms, wood ash, straw, topsoil. Repeat, compost, straw, topsoil or some such combination until you reach desired height. [texascooppower.com](http://texascooppower.com)



When it rains or you water your compost, nutrients will seep into the surround bed. I don't think we will need the optional roof, as we don't have rainy seasons here in Garland.

### ***Container Gardens***

Scattered throughout the garden, we will have edibles planted in containers. Many folks don't realize they can grow almost any plant to maturity in a container. For example, last year I grew four of the best-tasting cantaloupes I've ever eaten—all out of one container about two feet high and 18 inches in diameter. I also grew six great eggplants in a container about the same size. Below are examples from a few of the containers from my 2014 urban garden. The one in the foreground contains sweet peas. The one in the background is growing Kale.



### ***Compost Bins***

We will have approximately 10 to 12 wire compost bins in the licensed area. We may build some of the bins from recycled pallets, but once we decide we will pass our design along to Felisa Conner and her staff for input and final approval.





### ***Ollas***

An Olla is a ceramic jar that is often unglazed. They are designed with a short wide neck and a wider body, resembling a bean pot. Because water seeps through the walls of an unglazed olla, these pots can be used to irrigate plants. It is buried in the ground next to the roots of the plant to be irrigated. The neck of the olla extends above the soil. The olla is kept filled with water, which gradually seeps into the soil to water the roots of the plant. No water is lost to evaporation or run off. Our Loving Green Garland Ollas are made from two unglazed clay flowerpots that we glue together with Gorilla glue. We plug the hole in the bottom pot and sometimes we attach a PVC pipe to the hole in the top, which is where we put the water in. Of course a cap is placed over the hole to prevent mosquito breeding.



### ***Shed***

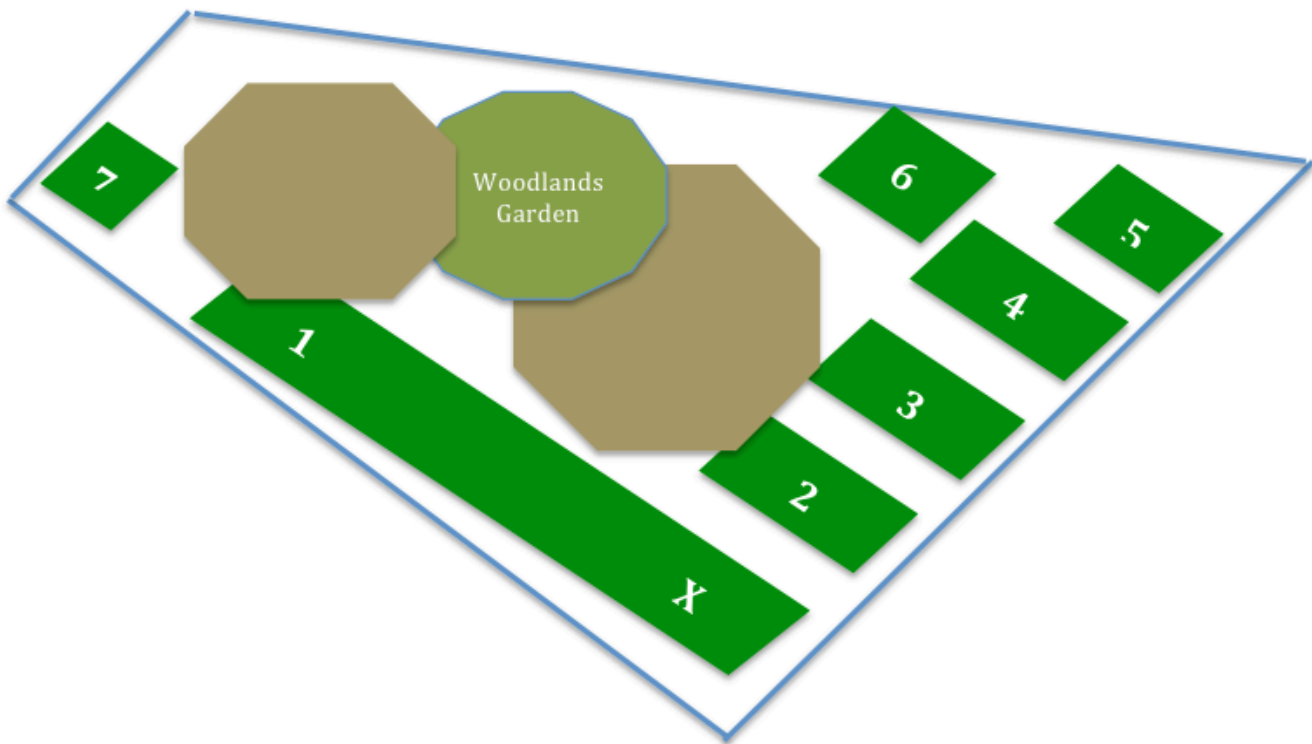
We may ask to put a small shed on the property (a footprint no larger than 5 x 8 that could be easily removed if needed). Its purpose would be for storage of buckets, hoses and garden tools. TBD. Again, as with the compost bins, we will submit our design along to Felisa and her staff for input and final approval.

Theft and vandalism may be a problem as they sometimes are with community gardens. However, I believe, that with proper presentation of our purpose to work for all residents of Garland, combined with the inclusive and democratic spirit of our group, that we will overcome these challenges.

Overall, the site will be managed organically to ensure that all beds are managed without application of any herbicides or pesticides and following gardening methods that promote water conservation. We hope to be able to cover the entire area with cardboard and then mulch over that and then beds with amended soil on top of the mulch. Finer mulch such as pine needles or straw will be applied to the top of the garden soil once the plants area established.



The diagram below very roughly represents the licensed area. We have two talented mechanical design engineers who are members of Loving Garland Green. I'm sure that over the next month or two they can render a more exact map for us. The areas in green indicate the prime areas for sun and thus the prime growing areas. The brown indicates where the heaviest part of the shade canopies will fall from the existing trees. In that area, it is unlikely for any plants other than shade tolerant plants to grow. We will need to plant our area carefully and perform some sunlight pattern studies of the licensed area. For now (and likely up to mid to late August when we get ready to put in a winter garden) we will establish beds beginning in area 1. I estimate that we can put in 20 to 30 beds (4x8 feet) in area 1. This area is definitely the best area for sun. X marks the approximate location of our very first 4x8 foot raised bed (32 square feet) we hope to install Saturday April 12, 2014. More detail on this bed is provided in *Attachment A*. Detail for the woodlands garden is presented on *Attachment B*.





# Loving Garland Green

## ATTACHMENT A GARDEN PLOT #1: 4' x 8' - 32 square feet Garden Stewards responsible for this plot: All members of Loving Garland Green

### A Square Foot Garden

This garden plot follows a design for gardening called “square foot” gardening. Mel Bartholomew popularized the phrase “square foot gardening”. He wrote a book on the topic in the early 1980’s and then published an updated version “All New Square Foot Gardening” in 2006. The garden space is divided into one-foot squares. Different seeds are usually planted in each square. Common spacing is one plant per square for larger plants (broccoli, basil tomato, etc.), four plants per square for medium large plants like lettuce, nine plants per square for medium-small plants like spinach, and sixteen per square for small plants such as onions and carrots. Plants that normally take up yards of space as runners, such as squash or cucumbers, are grown vertically on sturdy frames that are hung with netting or string to support the developing crops. Four Ollas are planted for water conservation.

<b>Tarragon</b> Transplant late April	<b>Kale</b> Week 1 Feb (seed)	<b>Butterfly flowers</b> Transplant late April	<b>Cucumber</b> After danger of last frost transplant
<b>Orach</b> (also known as Mountain spinach) Feb 1 seed	1.5 gallon olla	<b>Mustard</b> Week 1 Feb (seed)	<b>Mustard</b> Week 1 Feb (seed)
<b>Swiss Chard</b> Week 1 Feb (seed)	<b>Tomato</b> After danger of last frost transplant	<b>Basil</b> After danger of last frost transplant	<b>Kale</b> Week 1 Feb (seed)
<b>Swiss Chard</b> Week 1 Feb (seed)	<b>Orach</b> (also known as Mountain spinach) Feb 1 seed	1.5 gallon olla	<b>Tomato</b> After danger of last frost transplant
<b>Kale</b> Week 1 Feb (seed)	<b>Okra</b> After danger of last frost transplant	<b>Okra</b> After danger of last frost transplant	<b>Cantaloupe*</b> After danger of last frost
<b>Orach</b> (also known as Mountain spinach) Feb 1 seed	1.5 gallon olla	<b>Okra</b> After danger of last frost transplant	<b>Marigolds</b> Transplant April
<b>Okra</b> After danger of last frost transplant	<b>Tomato</b> After danger of last frost transplant	1.5 gallon olla	<b>Swiss Chard</b> Week 1 Feb (seed)
<b>Marigolds</b> Transplant April	<b>Marigolds</b> Transplant April	<b>Tarragon</b> Transplant April	<b>Butterfly flowers</b> Transplant late April



## ATTACHMENT B WOODLANDS GARDEN

For those new to the urban gardening scene, a woodlands garden (sometimes called 'forest gardening') is the oldest form of land use and one of the most resilient agro-ecosystems. Forest gardening is a low maintenance, sustainable, plant-based food production system based on woodland ecosystems that incorporates food and nut trees, shrubs, herbs, vines and perennial vegetables. Using companion planting, these plants can be intermixed to build a woodland habitat. The book providing the source of inspiration for me is titled "Paradise Lot". It is the story of how two friends living in a home on 1/10th of an acre in Holyoke, Mass. transformed their back yard into a woodlands garden. Now they teach classes on how to do it. [Paradise Lot.](http://paradiselotblog.wordpress.com/)  
<http://paradiselotblog.wordpress.com/>

Today, the Internet abounds in information regarding woodlands gardens. The parks departments of many cities all over the USA are establishing woodland gardens. We at Loving Garland Green hope to establish one in the space we have been provided at 4022 Naaman School Road here in Garland.

