

[returning to the roots for growth: greater rosemont + mondawmin regeneration]

Northwest GRAMA Area



Concept

Regeneration in the biological sense is the process of **renewal, restoration, and growth** which enables cells, organisms, and ecosystems to be resilient to natural changes which cause disturbance in the system. All species are capable of **regeneration** in some form.

Ecosystems are also regenerative. After a disturbance, new species will colonize and start to grow in the altered space. In ecology, this new growth of pioneering species, as part of the successional process, is known as regeneration.

Components for Regeneration of Greater Rosemont and Mondawmin:

- Renewal** - re-purposing available materials for new, beneficial functions
- Restoration** - highlighting the agricultural history of the neighborhood to educate people
- Growth** - creating new programs to help improve community and environmental health

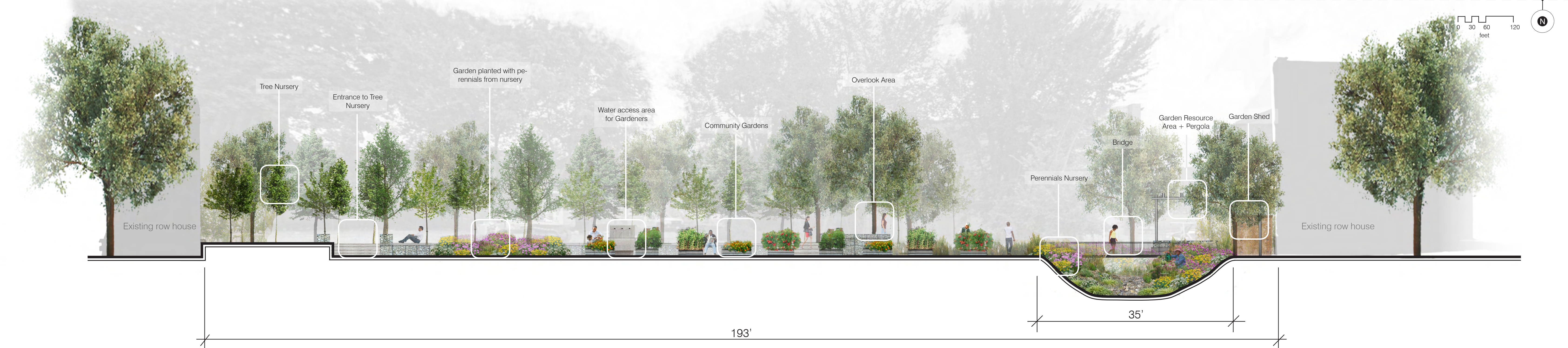
Site Selection

The site chosen for design is located on Westwood Ave in the Northwest GRAMA area, and was selected for the following reasons:

- the relatively flat topography of the site requires minimal grading
- the southern orientation of the site, as well as the lack of existing trees, is ideal for growing many types of produce, perennials, and tree species
- its proximity to North Ave and Bloomingdale Rd allows for easy access for those commuting to the gardens via bus
- its adjacency to the Gateway Housing Complex, which is currently under construction, will provide a valuable resource for new residents as well as increase pedestrian traffic around the site, a crucial component for promoting "eyes on the street"

Other sites in this neighborhood may be suitable for 1 or more of the programs found on this site depending on site topography, sunlight, and visibility.

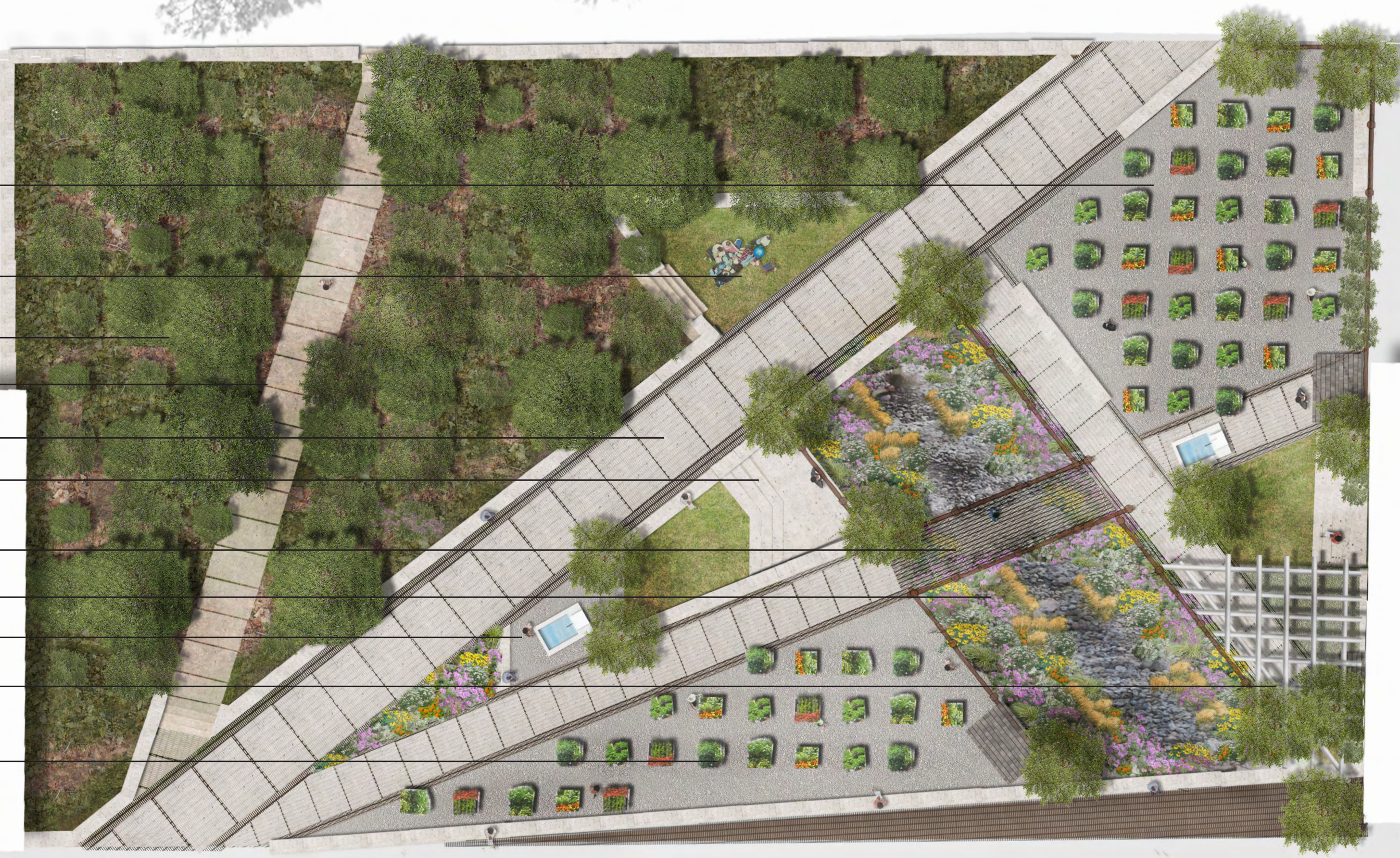
Bus stops	Convenience stores	.32 Site acreage	Area of design focus	Other sites within a 3 block radius of focus site which could potentially be used for regeneration of NW GRAMA
Barber shop	Liquor store			



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Site Plan for Westwood Ave Vacant Lots

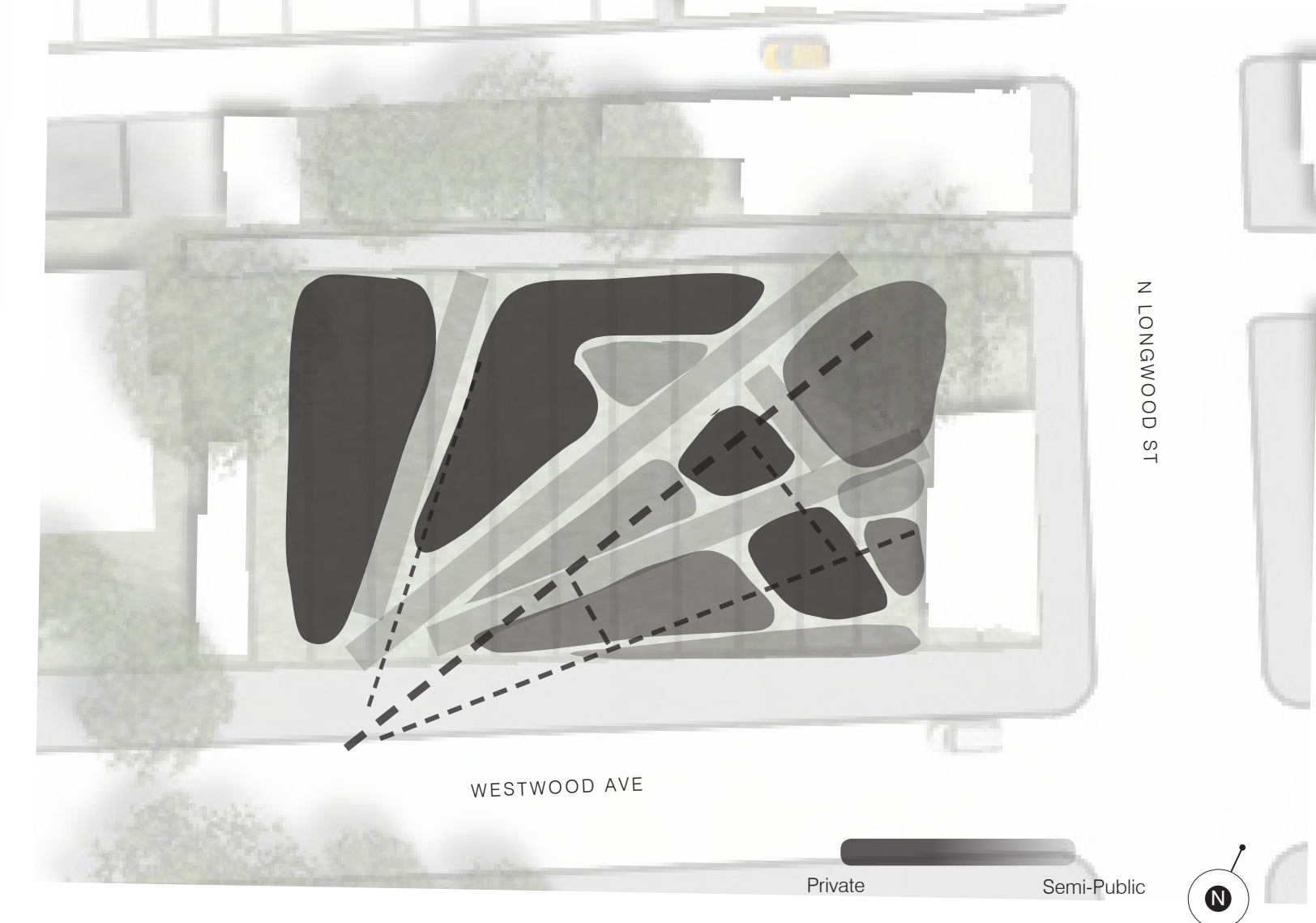
- Community Garden Plots
- Shaded lawn
- Tree Nursery
- Tree Nursery Path
- Main Path
- Perennial Garden Overlook/Event Space
- Bridge
- Perennial Nursery
- Water Access Area
- Garden Resource Area
- Community Garden Plots



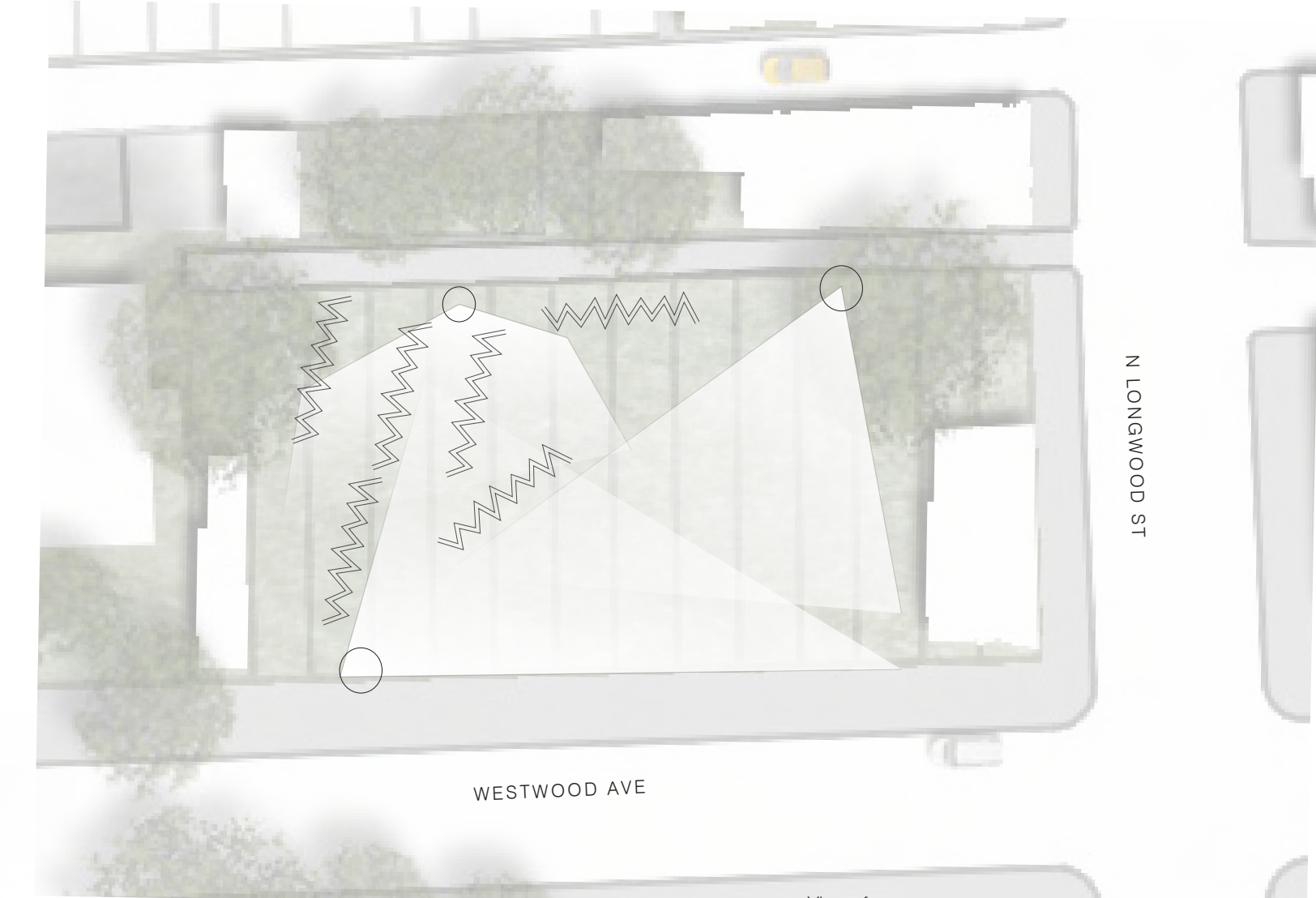
Program Functional Relationships Influence on Site Design

Program relationships heavily influenced the design of the site. In particular, pedestrian circulation; views from the sidewalk as well as within the site; and the need for a mix of public, semi-public, and semi-private spaces were all considered during design. Pedestrian circulation was influenced by an existing desire line extending from the mid-block area of Westwood Ave to the alley behind the site. Maintaining clear site lines was essential for safety, therefore all barriers within the site are semi-transparent. Seating walls, pavement change, and elevation change visually differentiate spaces between the most public areas - the central path and gathering area, and the more private areas - the tree nursery and perennial nursery.

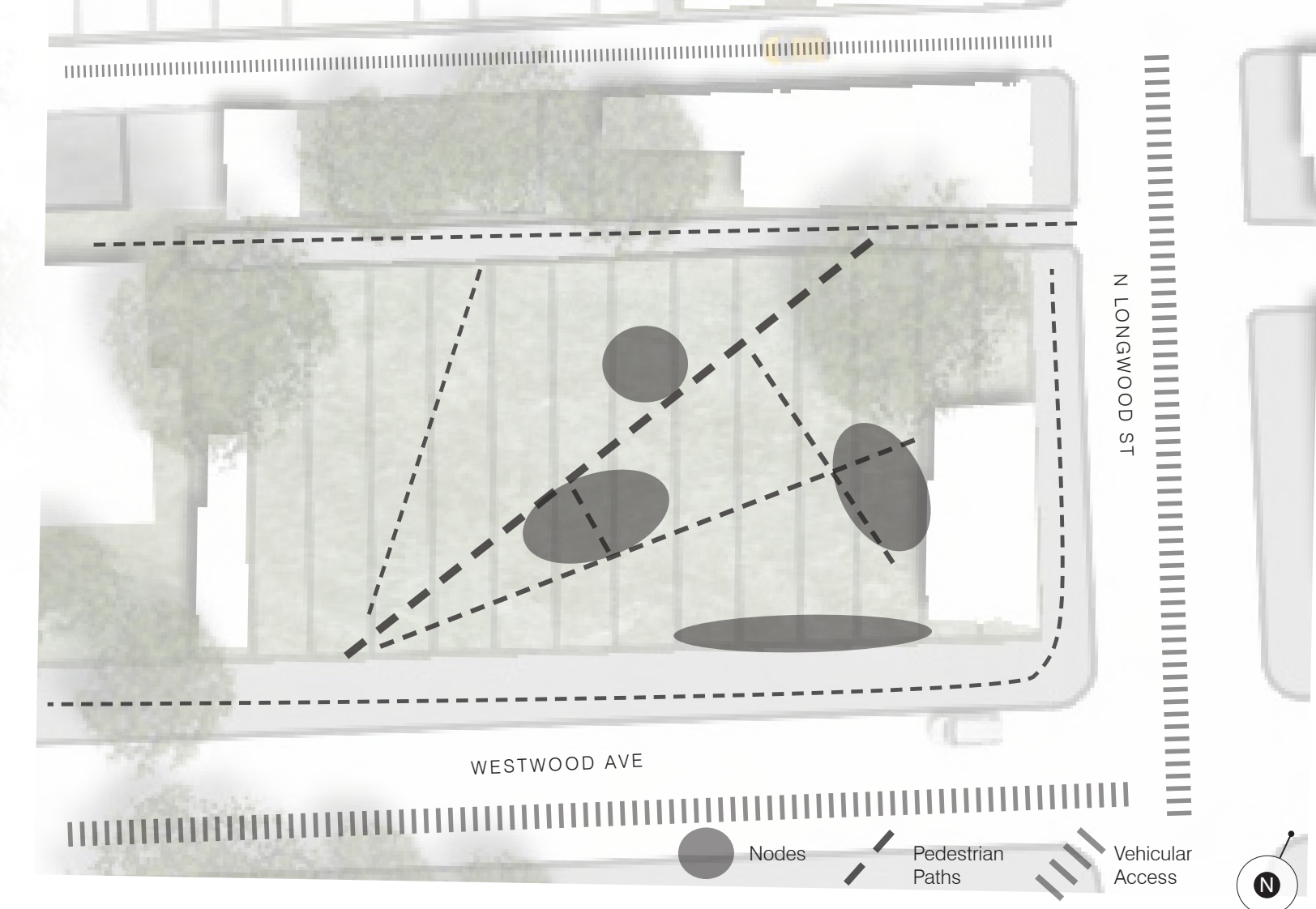
Program Function



Views From Site Entrances



Circulation



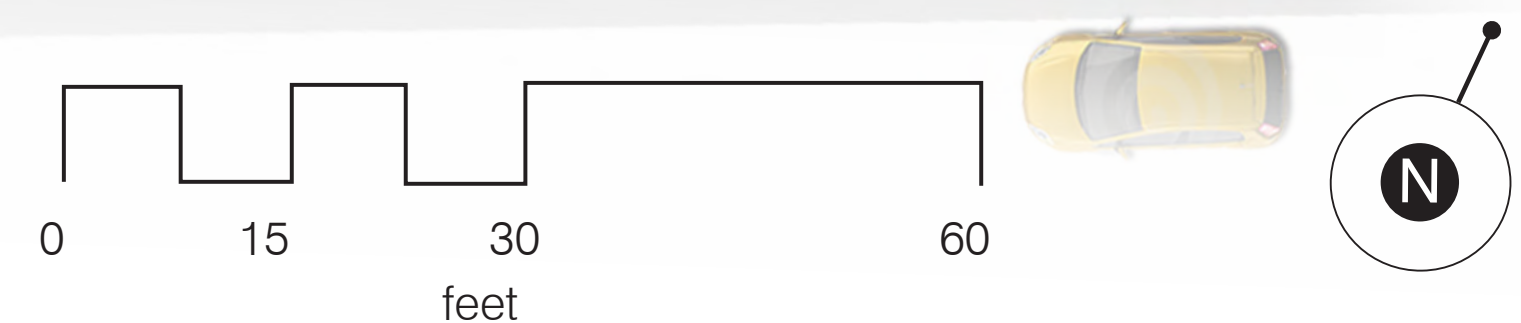
Productive Space: Tree Nursery, Perennial Nursery, Garden Plots

The three productive areas in the site: the tree nursery, the perennial nursery, and the community gardens reflect the idea of regeneration. The tree nursery will be on a minimum 3 year rotation, meaning that trees will be allowed to grow in the nursery for a minimum of three years. Perennials will be changed every two years and produce grown in the garden plots will be replanted annually. Once the trees and perennials reach their allotted time in the nursery they will be transplanted to tree grates and newly constructed bioswales in the GRAMA area. Garden plots may be renewed annually by residents of NW GRAMA and be used to grow food, flowers, or whatever residents desire.

Recreational Space: Spaces for Community Gathering and Relaxation

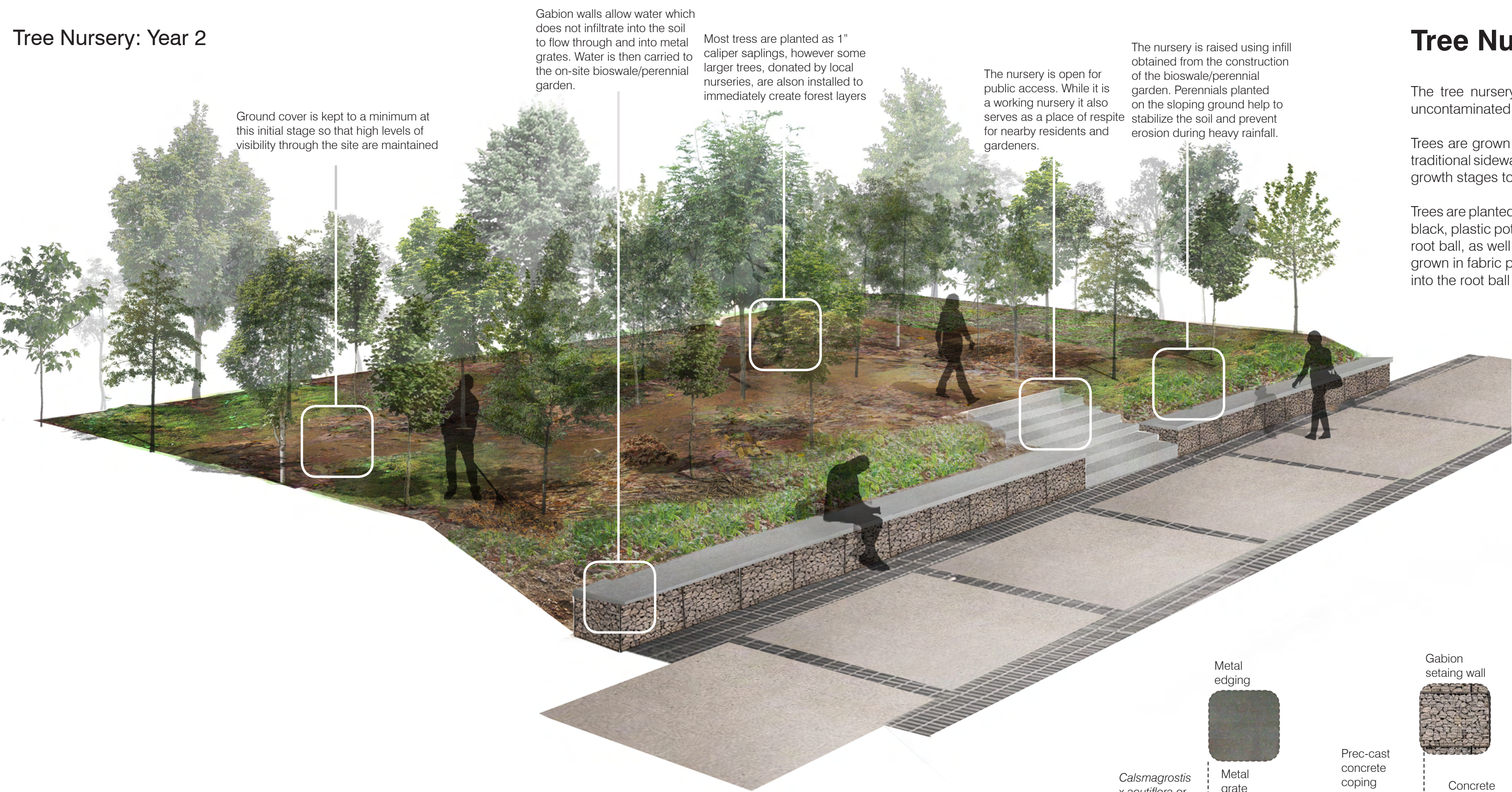
Three small grassy lawns, stepped seating, and an area sheltered by a pergola make up the gathering and relaxation spaces within the site. A gabion seating walls filled with material from deconstructed row houses in the neighborhood form seating walls and separate the site into distinct spaces. The Garden Resource area is a space for gardeners to share tips on gardening through the use of chalk boards and a lending library of gardening books. Two tool sheds, one in each plot area, are shared storage space. Two trough-like fountains act as "watering holes", as gardeners gather at this there to fill their watering cans, encouraging interaction between members.

WESTWOOD AVE



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Tree Nursery: Year 2



Tree Nursery

The tree nursery is elevated two feet above the rest of the site to allow for root growth in uncontaminated soil and easy transplanting of trees.

Trees are grown in the privately managed nursery for 3 to 6 years. Trees will be transplanted to traditional sidewalk trees grates or bioswales within NW GRAMA. Trees are transplanted at different growth stages to stagger size of trees within nursery and maintain a park-like environment.

Trees are planted in 18"x15" fabric bags such as Root Pouch® or Smart Pot® instead of traditional black, plastic pots. Plastic pots can inhibit root growth by causing roots to wrap around outside of root ball, as well as alter temperatures of soil within the pot, causing premature blooming. Trees grown in fabric pots will air prune, meaning once roots reach the side of the bag they grow back into the root ball and continue to branch laterally and enhance the root structure.

Tree Nursery: Year 6

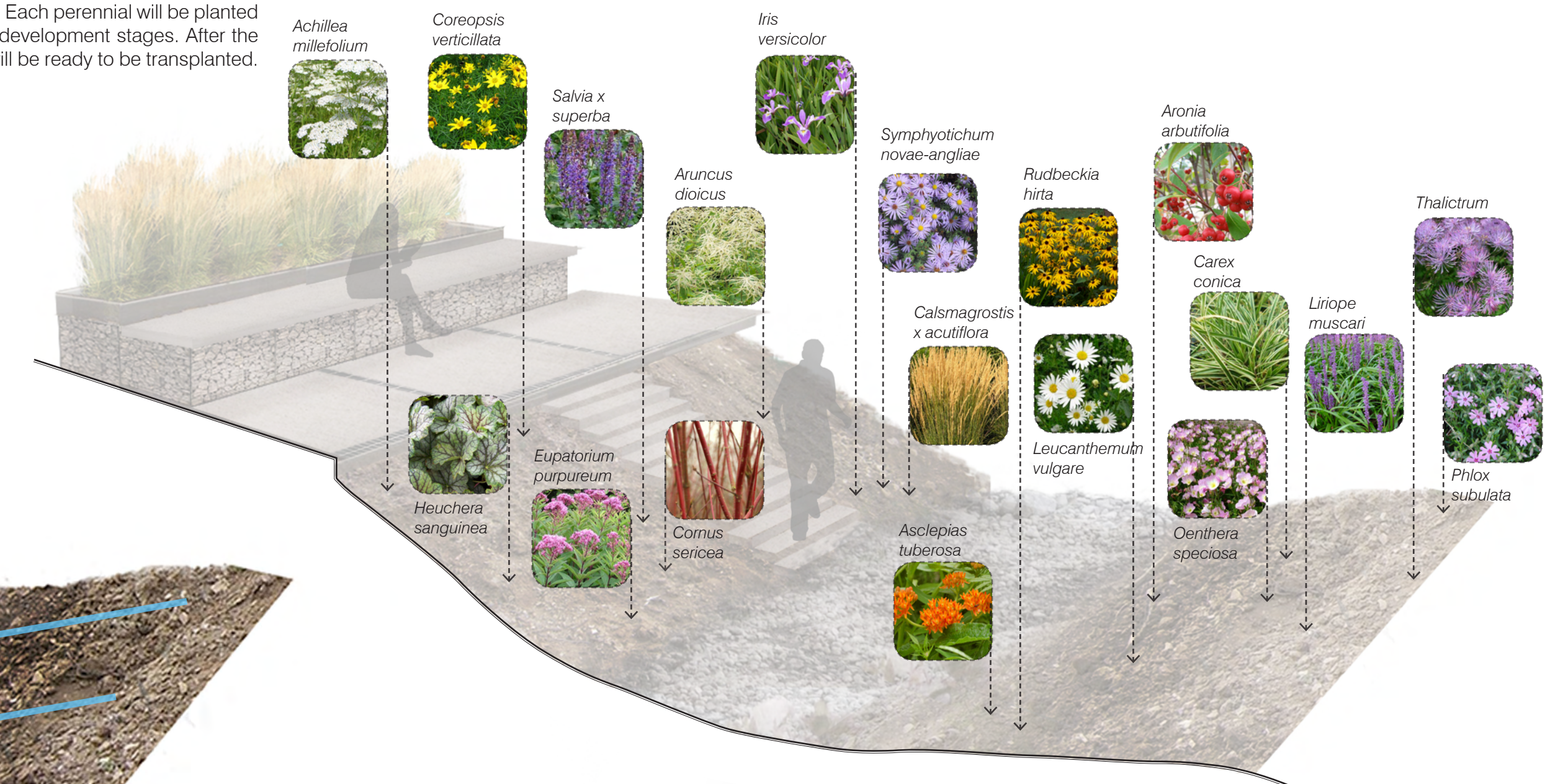


Perennial Nursery

The perennial nursery is arranged along the site bioswale, evoking the form of a stream bank. It also acts as a barrier, separating the community garden plots from the main pathway and the central gathering space.

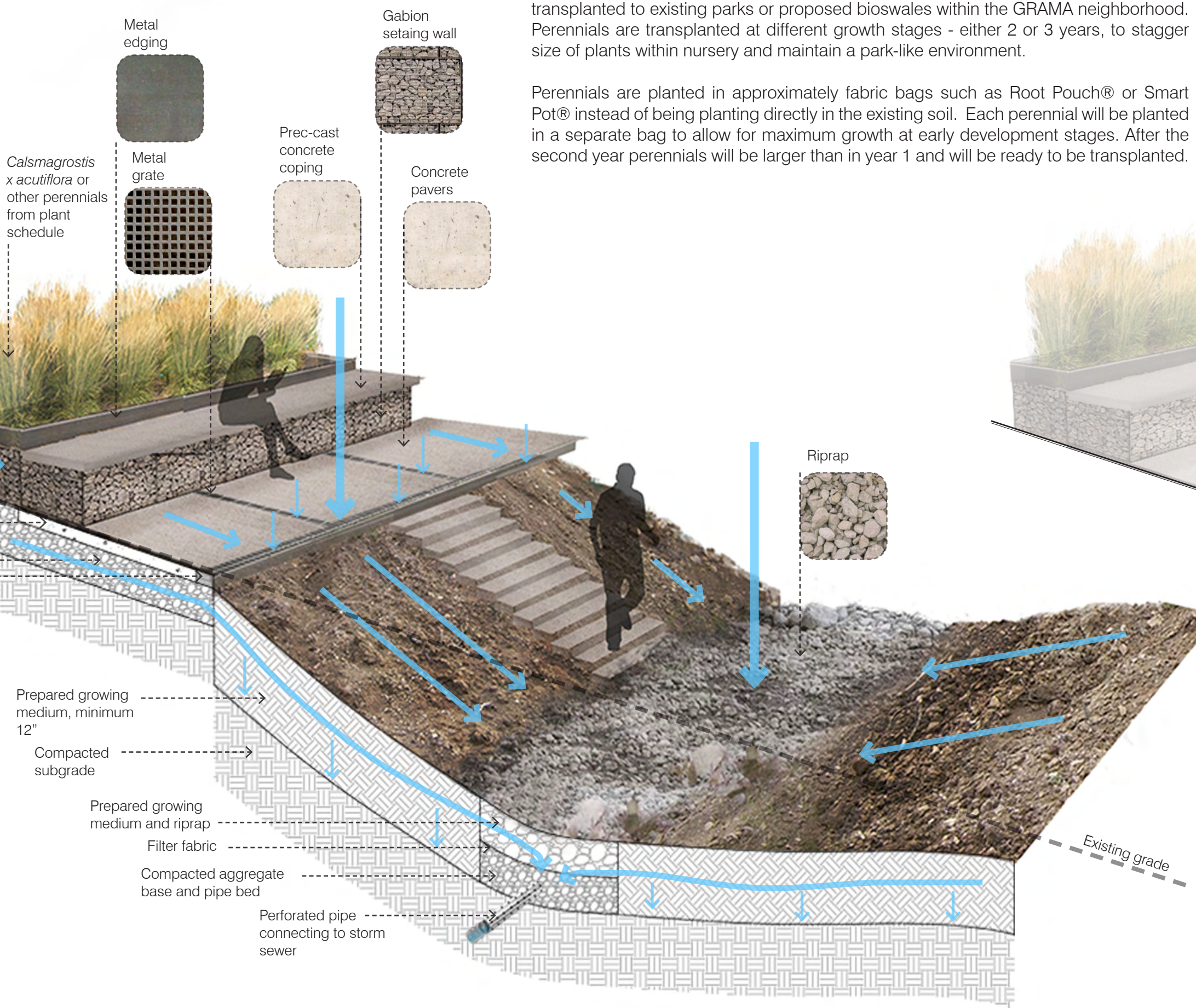
Perennials are grown in the privately managed nursery for 2 to 3 years. Perennials will be transplanted to existing parks or proposed bioswales within the GRAMA neighborhood. Perennials are transplanted at different growth stages - either 2 or 3 years, to stagger size of plants within nursery and maintain a park-like environment.

Perennials are planted in approximately fabric bags such as Root Pouch® or Smart Pot® instead of being planting directly in the existing soil. Each perennial will be planted in a separate bag to allow for maximum growth at early development stages. After the second year perennials will be larger than in year 1 and will be ready to be transplanted.



Community Garden Plots

Unlike the tree and perennial nurseries, the community garden plots are available for rent by any interested person, family, or organization. The plots on site are 3'x3' raised beds which are an ideal size for beginner gardeners, those who only wish to maintain a smaller space, or those who wish to have a smaller yield. It also allows space for more plots on site, therefore allowing more community members to participate. Intensive planting of these plots will be encouraged. The square foot gardening technique, which maximizes production on small plots, will be used as a model for interested gardeners. Water will be hooked up on site through Baltimore's Community Managed Open Space (CMOS) Water Access program.



Cover Type	Area (square ft)	Area (acres)	Coefficient (C)	Intensity (in/hr)	Velocity (cfs)
Concrete	4,542	0.104	0.90	4.5	0.421
Gravel	3,290	0.076	0.85	4.5	0.291
Lawn	933.9	0.021	0.17	4.5	0.016
Soil (tree nursery, 2-5% slope)	7,155	0.164	0.15	4.5	0.112
Soil (perennial nursery, < 10% slope)	1,887	0.043	0.60	4.5	0.016
Gardens	642.3	0.015	0.25	4.5	0.017
Bioswale	487.5	0.011	0.20	4.5	0.010
Metal grate (drains to bioswale, same coefficient)	1,764	0.040	0.20	4.5	0.036
Total	20,702	0.475			1.019

Scientific Name	Common name	Height	Moisture	Sunlight	Seasonal interest
<i>Achillea millefolium</i>	Yarrow	2-3 ft	dry-medium	full sun	White flowers, June-Sept
<i>Aronia arbutifolia</i>	Chokeberry	6-10 ft	medium	full sun/part shade	Pink/white flowers, April*
<i>Aruncus dioicus</i>	Goat's beard	4-6 ft	medium-wet	full sun/part shade	white flowers, Apr-May
<i>Asclepias tuberosa</i>	Butterfly weed	1-2 ft	dry-moist	sun/part shade	Orange flowers, May-Sept
<i>Calamagrostis x acutiflora</i>	Feather reed grass	3-5 ft	medium-wet	full sun	purple flowers, May-Feb
<i>Carex conica marginata</i>	Japanese sedge	6 in	wet	sun	
<i>Coreopsis verticillata</i>	Threadleaf coreopsis	1-2 ft	dry	sun/part shade	Yellow flowers, June-July
<i>Cornus sericea</i>	Red twig dogwood	6-9 ft	medium-wet	full sun/part shade	White flowers, May-June*
<i>Eutrochium purpureum</i>	Joe pye weed	5-7 ft	medium	full sun/part shade	Purple/pink flowers
<i>Heuchera sanguinea</i>	Coral bells	1-1.5 ft	medium	full sun/part shade	Red flowers, May-June*
<i>Iris versicolor</i>	Blue flag iris	1-3 ft	medium-wet	sun/part shade	Blue/purple flowers, May-Aug
<i>Leucanthemum vulgare</i>	Oxeye daisy	1-3 ft	medium	sun	White flowers
<i>Liriope muscari</i>	Lily turf	1-1.5 ft	medium	full sun/part shade	Lavender, Aug-Sept*
<i>Oenothera speciosa</i>	Evening primrose	1-3 ft	dry-moist	sun	White/pink flowers, Feb-July
<i>Phlox subulata</i>	Creeping phlox	4 in	medium	full sun	
<i>Rudbeckia hirta</i>	Black-eyed Susan	1-3 ft	dry-moist	sun/part shade	Yellow flowers, June-Oct
<i>Salvia x superba</i>	Hybrid sedge	1-2 ft	moist	full sun	Purple flowers
<i>Symphyotrichum novae-angliae</i>	New England aster	3-6 ft	medium	full sun	Purple/pink flowers, May-Aug
<i>Thalictrum rochebrune</i>	Meadow rue	4-6 ft	medium	full sun/part shade	Purple flowers