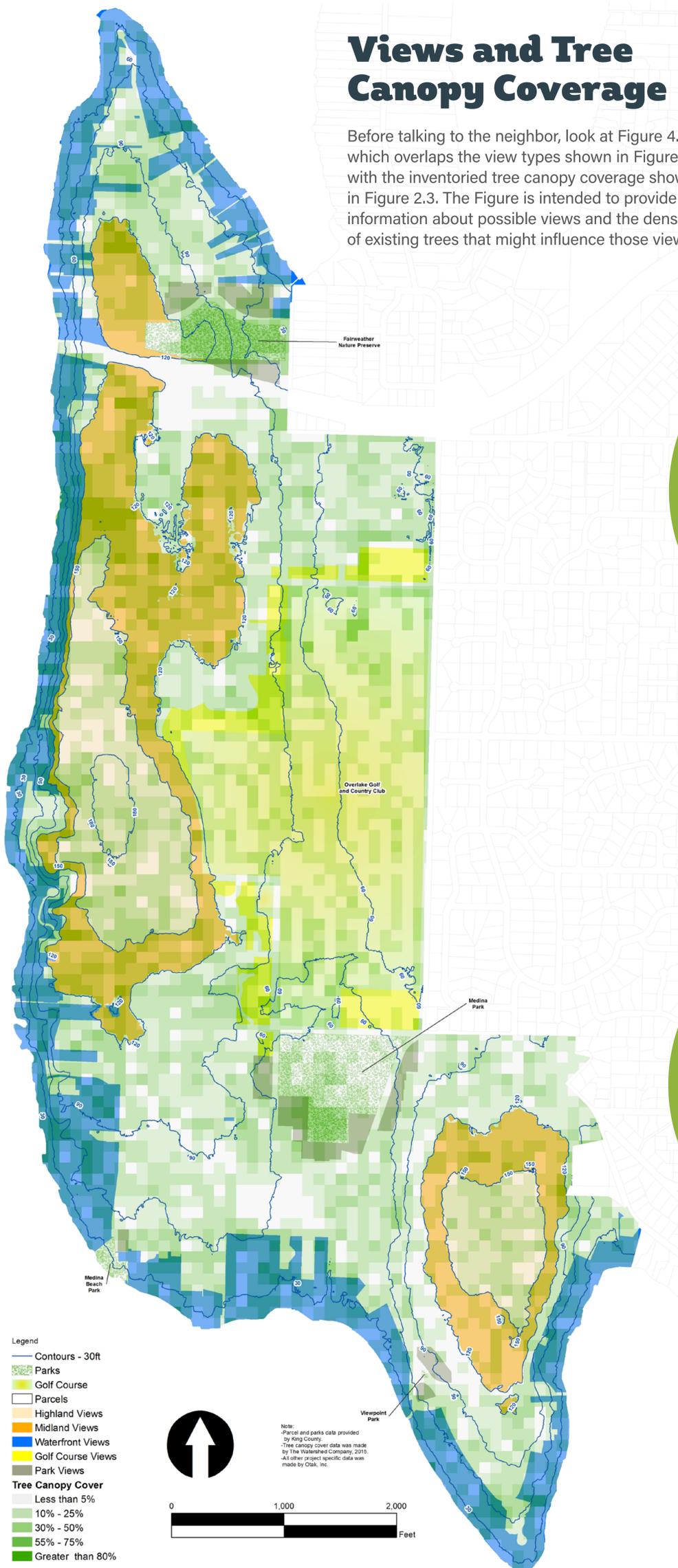


Views



Views and Tree Canopy Coverage

Before talking to the neighbor, look at Figure 4.2, which overlaps the view types shown in Figure 3.1 with the inventoried tree canopy coverage shown in Figure 2.3. The Figure is intended to provide information about possible views and the density of existing trees that might influence those views.

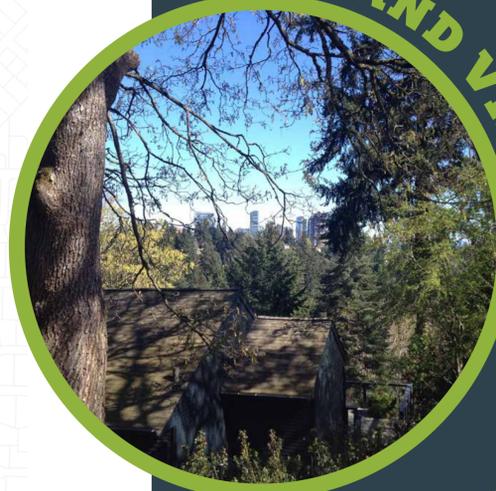


HIGHLAND VIEWS



These are land areas having higher than 150-foot elevation. They are the highest areas within the boundaries of the City.

MIDLAND VIEWS



These are land areas having a 120-foot to 150-foot elevation. This 30-ft elevation difference was based on zoning height standards and the potential for neighboring house structures to block views.

WATERFRONT VIEWS



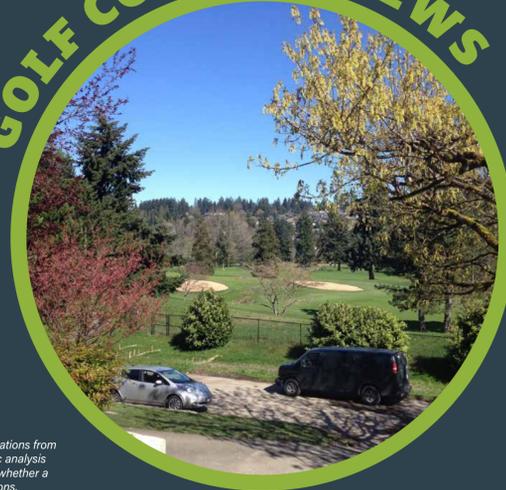
These areas are lots adjoining Lake Washington, but excluding highland and midland views.

PARK VIEWS



These areas are lots adjoining Fairweather Nature Preserve and Park, Medina Park, Medina Beach Park, and View Park, but exclude highland and midland views.

GOLF COURSE VIEWS



These areas are lots adjoining the golf course, but excluding highland and midland views.

NOTE:
 The mapping of possible views is to identify locations from where types of views might exist. A site-specific analysis of individual locations is required to determine whether a prominent feature is viewable from these locations.

STEP ONE

Picking the Right Place



The first step in planting new trees and landscaping is to determine the above ground form and space for the plant. Medina is a community with mature landscaping. Often, a mature landscape contains vegetation that requires the removal of unhealthy or declining trees, shrubs and other plants. In replacing existing vegetation, consideration should be given to more appropriate plant species that will thrive amongst mature plants and trees. Shadier and drier conditions often exist for these understory locations. Inventorying and understanding the conditions where a tree or plant might be placed is an important first step in picking the right tree or other plant. Answer these questions to help inform this decision before picking the plant; they include:

- How is the outdoor space going to be used? Is the space going to be used for active recreation like a lawn, or active cultivation to grow food and herbs or is the space going to be a more passive woodland garden?
- How will it connect to other outdoor or indoor spaces?
- Will a nearby lawn, fruit trees or a vegetable garden be heavily shaded by a particular tree location? Which direction are these elements in relation to the sun's path through the sky?
- Would it be advantageous to have the plant lose its leaves to gain sunlight and air-circulation in winter or would the plant perform more service as an evergreen?
- If there was a tree which died, why did it die? Was it the presence of a fungus which is still in the soil?
- What size would the new tree or plant need to be to not impact the neighbor's sunlight and views?
- Does the planting location has fast, average or poor infiltration? A simple infiltration test includes the following steps:

1. Dig a hole two feet wide and two feet deep where the plant is to be placed.
2. Wet the hole by filling with water to a depth of 12 inches for 15 minutes.
3. Allow the water to drain.
4. Re-fill the wetted hole with water to a depth of 12 inches or more and time how long it takes for the water to drain.
5. If the infiltration rate is more than 15 minutes per inch of water depth, then the drainage is very poor. If the water level is an inch lower in less than two minutes, the drainage is considered very fast. The average rate for good drainage is seven to eight minutes per inch of water.

Seattle Area Climate Data

	JAN	FEB	MAR	APR	MAY	JUN
Average high in °F	45	48	52	58	64	69
Average low in °F	36	37	39	43	47	52
Av. precipitation in inch	5.2	3.9	3.31	1.97	1.57	1.42
Days with precipitation	19	15	16	13	11	9
Hours of sunshine	74	99	154	201	247	234
	JUL	AUG	SEPT	OCT	NOV	DEC
Average high in °F	72	73	67	59	51	47
Average low in °F	54	55	52	47	41	38
Av. precipitation in inch	0.63	0.75	1.65	3.27	5	5.43
Days with precipitation	5	6	8	14	17	19
Hours of sunshine	304	248	197	122	77	62

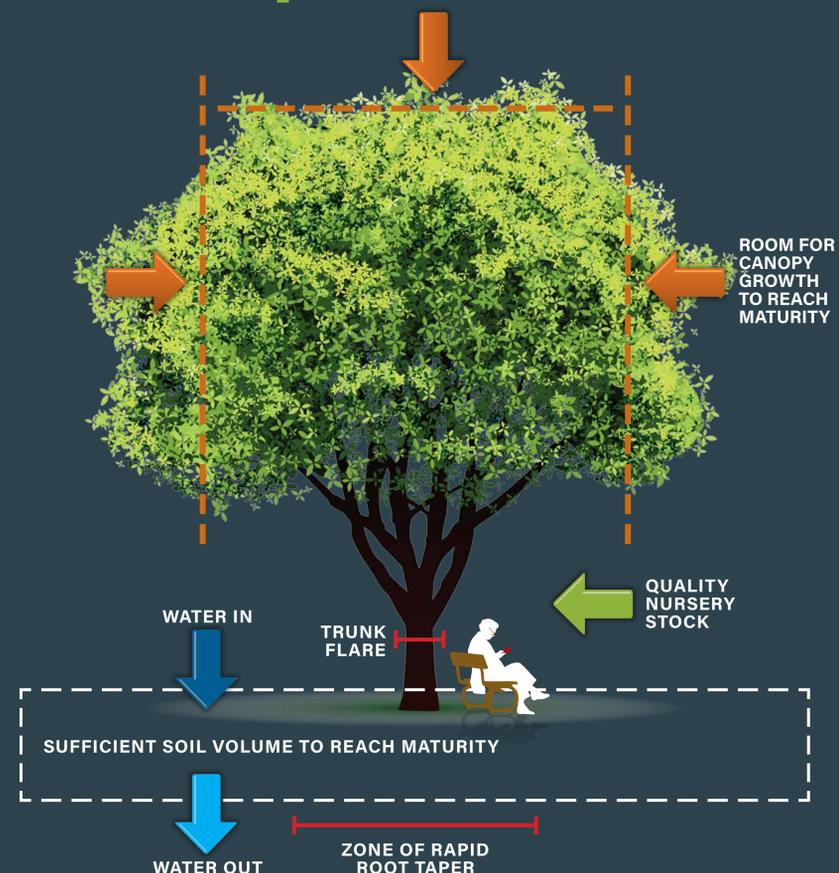
*Climate data for Seattle, WA - 30154 - 1901-1990 normal - weather

Month of year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Dominant wind direction	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖	↖
Wind probability >= 4 Beaufort (%)	20	23	27	20	13	12	6	6	9	16	22	24	16
Average Wind speed (mph)	8	8	9	9	8	8	7	7	8	8	9	9	8
Average air temp. (°F)	45	48	51	55	62	68	72	72	68	62	53	47	53

An example of successional planting with newly planted trees to eventually replace the four mature trees as a landscape backdrop and a way to frame the adjacent view



Tree Requirements



STEP TWO

Picking the Right Tree



After inventorying locations and selecting the right places, begin answering the following questions specific to the place where a tree or plant will be installed.

- How tall would the plantings need to grow at maturity to shape the space effectively?
- How should the space be shaped by the planting? Is the tree or plant going to provide canopy over a space, a focal point in the landscape, a privacy screen to an outdoor space or a frame for a view? Should the plant form be stiffly upright, vase shaped, broadly spreading or pyramidal?
- What is the distance to the nearest overhead power lines? Will the tree need to be pruned to maintain clearance for the overhead power line?
- Is there a driveway, sidewalk or pathway nearby? Will the tree or plant need to be pruned to maintain clearance for vehicles or pedestrians when it is mature?
- What size would the new tree or plant need to be to not impact the neighbor's sunlight and views? One of the easiest ways to determine if a tree at maturity will block views is to use a helium balloon and a measured length of string; a day without a breeze is helpful for field measurements with helium balloons.
- Does the tree or plant require nutrient rich soil or supplemental irrigation during a summertime drought? Most native plants have adapted to grow well in our native soil with our summertime drought's.
- Are the trees and plants best to look similar or different? Diverse plantings have an informal forested appearance, one of the goals of the Medina Comprehensive Plan, provide a more resilient landscape from plant pathogens and provide a more rich ecological benefit for habitat value.
- Is the tree or plant recommended for USDA zone 8b or Sunset zone 5? USDA zones are based on average annual extreme minimum temperature of 15 to 20 degrees Fahrenheit for the years 1976 through 2005. The Sunset zones are based on length of growing season, timing and amount of rainfall, winter low temperatures, summer high temperatures, wind and humidity.

Tree Tip!

Use simple tools, like helium balloons, to model mature heights of tree species.



Privacy and Screening

Hedges provide screening for privacy and protection. Problems arise as the trees and shrubs grow larger.

- Their roots can infiltrate cracks and seams of existing utilities and structures.
- Trees and shrubs can grow unevenly as differences in soil, drainage, and exposure can result in variable growth.
- Nearby vegetation can shade and compete for nutrients with plantings intended for first and/or second story screening.

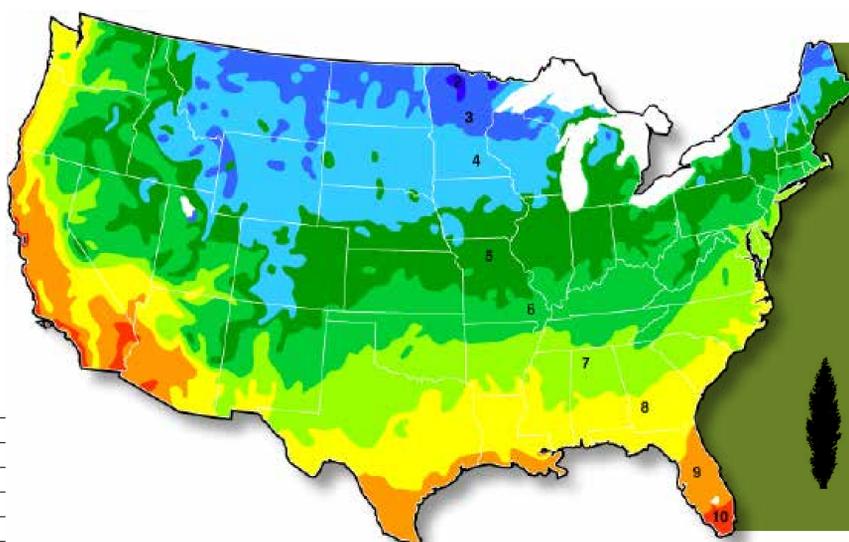
When any formal hedge is planted which requires regular maintenance to maintain its width and height, it is recommended that neighbors meet to discuss the acceptable height range (on a slope this might be a height at a certain elevation), acceptable width range, trimming interval and the potential sharing of maintenance costs.

When space is available, it is recommended to combine a variety of evergreen and deciduous plant materials into an informal screen rather than install a formal, clipped hedge. The maintenance will be less with the informal screen and the habitat value more rich.

Runoff Control

The hard surfaces of rooftops, driveways, decks, etc. are impervious to water infiltration, thereby increasing the volume and flow of water runoff from a storm. Rapidly moving water can erode soils and increase siltation leading to water pollution in Lake Washington. Trees and plants play an important role in stabilizing soils and preventing erosion. Some steps in reducing storm water runoff include:

- Promote tree canopy coverage so that leaves can intercept rainfall, reducing the initial load and slowing down the rates to allow time for more infiltration.
- Use more vegetation, such as groundcover, to slow water runoff and increase infiltration.
- Low impact development – the goal of low impact development is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source of rainfall. The incorporation of trees and other vegetation are important features of low impact development.



USDA PLANT HARDINESS ZONES	Temperature Range
Zone 2	-50° to -40° F
Zone 3	-40° to -30° F
Zone 4	-30° to -20° F
Zone 5	-20° to -10° F
Zone 6	-10° to 0° F
Zone 7	0° to 10° F
Zone 8	10° to 20° F
Zone 9	20° to 30° F
Zone 10	30° to 40° F



Stewardship Partnerships/ Right-of-Way Trees



The trees and vegetation within the rights-of-way are a defining characteristic of the community. Responsible planting and maintenance of these trees and vegetation are important to the well-being of the community. Private property owners play an important role in both planting and maintenance since their land and trees adjoin a majority of the street rights-of-way.

Opportunities for City/ Private Stewardship Partnerships

Stewardship of the City's urban forest is shared by residents, local businesses, government, and public agencies. In looking to establish partnerships, the following goals and policies provide guidance:

Guiding Principles

- Public Safety.
- *Science-Based Decision Making*—picking the right place and then picking the right tree.
- Industry-Recognized Best Management Practices (ANSI A 300 standards for tree care operations).
- Plant Diversity.
- Maintaining the community's tree canopy coverage for the long-term.



GUIDANCE 1

Shared responsibility in engaging in the planting and maintenance of trees within the right-of-way.

GUIDANCE 2

The partnership must implement the guiding principles in Section 7.2.

GUIDANCE 3

Use of the Medina Tree Fund shall be for enhancement and diversifying tree plantings within City rights-of-way and for public safety purposes.

GUIDANCE 4

The partnership must contribute to the health and well-being of Medina residents as a whole and not for the specific benefit of individual property owners.

GUIDANCE 5

The partnership must involve at least one of the tree removal criteria set forth in Section 7.7.1, except partnerships involving view obstruction must be consistent with Guidance 4.

GUIDANCE 6

Partnerships shall involve cost-sharing measures to be negotiated on a case-by-case basis.

GUIDANCE 7

Partnerships should consider the goals and policies of the Medina Comprehensive Plan.



Role of the City: PUBLIC SAFETY

Examples of vegetation management and safety includes, but is not limited to:

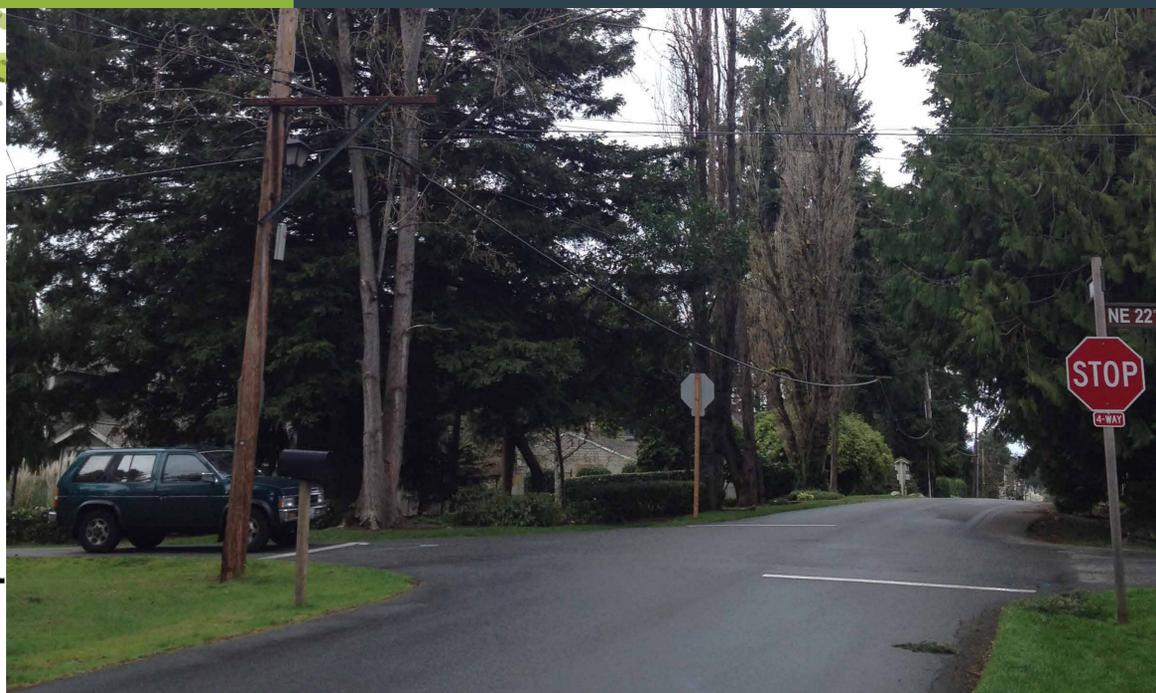
- Keeping signs visible to drivers.
- Keeping road users (vehicles, bicycles and pedestrians) visible to each other.
- Improving visibility of wildlife near the road.
- Keeping sidewalks and pedestrian paths clear and free from overhanging vegetation.
- Removing trees close to the roadway which could result in a severe crash if hit.
- Improving winter road maintenance when snow and ice hit.
- Helping public drainage systems function as designed.
- Preserving pavements through daylighting and root system control.
- Controlling noxious weeds.

Role of Private Property Owners: MAINTENANCE

Regardless of who planted the vegetation, all adjoining property owners have responsibility to ensure trees, shrubs and landscaping in the adjoining right-of-way does not interfere with the free passage of vehicles and pedestrians, or causes risk of danger to the public or property.

Pruning trees within City rights-of-way by property owners is allowed provided American National Standards Institute (ANSI) standards developed by the International Society of Arboriculture (ISA) are followed. A permit is required whenever the pruning exceeds the following on a tree which is six-inches diameter breast height or larger:

1. Pruning removes more than 25 percent of the natural canopy of the tree; or
2. Pruning removes any limb having a diameter greater than three inches; or
3. The pruning is determined to endanger the life of the tree.



Medina Tree Programs

TREE CODE, VIEW & SUNLIGHT ORDINANCE, AND TREE MANAGEMENT & STEWARDSHIP PLAN

Medina Trees

- Are governed by the City Tree Ordinance, Medina Municipal Code chapter 20.52
- Are voluntarily subject to the process described in Trees - View and Sunlight Obstruction, Medina Municipal Code chapter 18.16
- Are recommended to be located, selected, planted and maintained with the considerations described in the Tree Management and Stewardship Plan

City Tree Ordinance is applicable to the entire City



In the example diagram below all three of Medina's tree programs are used, here's how:

The Tree Code provides the guidance on permitting the removal of a tree on private property, in this case a geotechnical engineers memo would be required in addition to a complete and approved application due to the steep slope and concerns about slope stability.

The Trees - Views and Sunlight Ordinance provides a voluntary process for the neighbors to follow to resolve a dispute over trees and views.

The Tree Management and Stewardship provides recommendations to locate, select, plant and maintain trees to meet the intent of the comprehensive plan, establish an ecologically rich landscape and maintain a long-lived urban forest.



Neighbor A

Neighbor B

Neighbor C