

# CITY OF SANDPOINT APPROVED STREET TREE LIST INTRODUCTION

The following list of approved trees is based upon local experience and tree lists from surrounding communities [Missoula, Coeur d'Alene, Post Falls]. The City of Sandpoint is grateful to those communities for sharing their experience and knowledge.

This list refers only to planting of trees within the public right of way adjacent to private property. All businesses downtown can generally assume the public right of way [ROW] starts at their building's edge. Residential property owners, especially those on streets with no sidewalks, can get a rough idea of where the public ROW begins by noting the right of way distance on their particular street. Call Public Works at 263-3407 for your street's ROW Clearance. Then measure 1/2 of the ROW distance from the middle of the street to wards your property. It won't be exact (only a survey can determine exactly the Public/private line) but good enough. The ROW distances vary from 30 feet to 80 feet (or 15 to 40 feet from the middle of the road adjacent to the private property).

**DOWNTOWN BUSINESSES** [Bounded by First, Cedar, 5<sup>th</sup> Avenue, Pine Street] During the downtown revitalization work going on from 2003 through 2007, businesses are urged not to plant any new trees without consulting with Public Works, since all the sidewalks will be dug up during those years and new trees planted.

## TREE FORM

Consideration of a tree's shape at maturity is very important. For instance, while a flowering crab apple may be a small tree, if planted close to a sidewalk or street it can interfere with pedestrians or traffic because in habit it is typically low and horizontal branching. While pruning can shape all trees, radical pruning to achieve 7' clearance for pedestrians and 14' for traffic can make some trees look silly. Talk to an arborist or nursery owner about your particular situation and desired tree. Some trees forms are "irregular," while most can be grouped in about five form types:



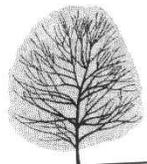
### Columnar

Frequently used because of not enough room on the site. This type of trees tends to be more susceptible to branch breaking because of its acute angle branches, but it is not always the case.



### Vase

Naturally V-shaped trees are liked near streets because they arch to form a canopy with less pruning.



### Round to Spreading

These shapes people like because of their "canopy effect." However, consideration must be given as to how well a particular species will adapt to "walking the branches up" to achieve clearances. Some trees, like the Honey Locust are desired because they can be limbed up very high and look beautiful and natural.



### Pyramid

Many trees are upright in shape when young later on become pyramidal because of drooping branches so pruning is usually required.



### Oval

Generally a good shape for a street tree.

## GROWTH RATE

Key: "L" = 6 to 12 inches per year. "M" = 12 to 18 inches per year. "F" = 18 to 24 inches per year. These rates are a distillation of many sources. Take them as approximations, as indications of roughly how fast a particular tree might grow under good conditions. Where two letters are given, that means sources differ.

## WHAT DO THEY LOOK LIKE?

There are so many pictures available for each of the trees listed below. Use an Internet search engine like "Google," and type in the botanical name and you will find several pictures under "Web" or "Images." You may have to look at several sites but with just a little bit of searching you will see enough pictures to know what a tree looks like both in the nursery and full grown. You can also tour several of the wholesale nurseries in Bonners Ferry or the larger retail nurseries in Sandpoint and Hayden Lake. There are also some books available in the local library.

## TREES UNDER POWER LINES

No tree that is likely to grow into power lines will be allowed in Sandpoint. We have too many plantings already that do and as such the power company has the right to radically trim those trees that represent a safety issue. The trees are permanently hurt by these trimmings and look ugly. Where noted by a '?', please consult with the City about using a tree. It may or may not be useable under power lines. Key in listings below assumes power lines at 30'. Some lines are lower, so adjust your tree choice accordingly. Trees can grow into telephone/ cable lines and co-exist, but some pruning may be necessary.

## HARDINESS

Sandpoint is listed by the USDA as being a zone 5 for hardiness (annual average minimum temperatures of -20 to -10 degrees F.). However, we do have years in which we are a zone 4 (-30 to -20 degrees F.). All trees listed here are zone 5 or lower. Zone 5 trees susceptible to die back in severe winters or late very cold spring frosts are noted when appropriate.

## SOIL CONDITIONS

Generally, but not exclusively, Sandpoint sits upon a clay base. Moreover, trees planted between sidewalks/ streets encounter 'compacted soils'-- soils that are clay, suffer from little oxygen and drain poorly. [By definition, soil under sidewalks and streets are 'compacted.'] Trees that adapt relatively well to compacted soils are noted. The soil's PH also tends to be slightly acidic.

## PLANTING SIZE

While the City does not prescribe a particular planting size, it is wise to plant a container or B&B tree no smaller than 1.5" caliper [measured 6 inches from tree root flare]. Smaller trees are susceptible in the public right of way to damage.

## WHICH TREE TO PICK?

Your choice is going to be decided by whom you talk to (everyone has their favorites), hopefully the tree's form, mature size and width, adaptability to your specific soil conditions and to availability. It might take some digging, no pun intended, to find what you want and you may have to go out of area to get what you want. For example, one of the most beautiful trees is the American Smoketree or *Continus obovatus*. At the time of this writing, summer 2003, it is nowhere to be found in northwest nurseries. But, there is a beautiful mature example on private property on the corner of Sixth and Larch, so they were available at one point and will be again.

## WHAT ABOUT PINE AND FIR TREES?

Selected approved pine and fir trees are listed separately after the broad-leaf trees. Three prohibitions: 1. No pine or fir trees in a parkway or tree lawn with less than 12 feet width and/or no pine or fir planted closer than six feet to a curb or sidewalk. 2. No pine or fir within 40 feet of a street corner [they will tend to block line of sight for cars and trucks. 3. No pine or fir near any business in a ROW sidewalk cutout. And, remember, while broad leaf trees tend only to "litter" during the fall with their leaves, pines and firs more or less "litter" year-round. Not a major concern, except when sidewalks are close-by.

## SPECIES AND CULTIVARS

In the following trees lists, there are sometimes listed just the species and other times specific "cultivars" or cultivations of a species. If the cultivar is listed, use only the cultivars listed and not any other cultivar or the species itself without approval from the City. Why? For example, the Acer Negundo or Box Elder is prohibited because as a species it is weak-wooded and attracts bugs. The cultivar "Sensation," however, has bred out those negatives. Similarly, the Ulmus or Elm species is famous for being almost wiped out in the East. But, new cultivars have relatively bred out the "Dutch Elm Disease."

## CITY OF SANDPOINT APPROVED STREET TREE LIST—1<sup>st</sup> Edition

### CLASS I: SMALL TREES--trees whose height, spread and trunk size allows their planting in tighter, smaller spaces.

Trees suitable for planting in tree lawns 3 feet wide or smaller and at least 1 foot from curb (or edge of street if there is no curb) and/or sidewalk. Always remember that the Public Works department will need 14-foot clearance from the edge of the street skyward for its snowplows and will prune the larger branches to get that clearance. So, while the trees listed below may not disturb sidewalks or streets, their form may need skilled pruning to give vehicular clearance.

<b>Botanical Name/Common Name/ "Cultivar"</b>	<b>Form</b>	<b>Mature Height/ Width in feet</b>	<b>Use under power lines? [30' high]</b>	<b>Growth Rate</b>	<b>Advantages</b>	<b>Use and Limitations</b>
<i>Acer Campestre/ Hedge Maple/ "Flame" or "Evelyn" aka "Queen Elizabeth" [the latter cultivar known for more upright branches and a vase-like shape than the species, but it is a little less hardy.]</i>	R	25-30/25-30	Yes	M	Known for its ability to be trained as a tree form or a hedge, it can withstand lots of pruning. Great fall color. Drought resistant once established.	As evidence by so many maples throughout Sandpoint, Maples can grow in our clay soils. But, with so many maples it is worth a pause to consider over-planting of one species and the dangers of a species-specific pest or disease wiping out the population as happened with the Elm back East or the White Pine here.
<i>Acer Ginnala/Amur Maple</i>	R	15-25/20-25	Yes	M	An extremely hardy maple, it is known for its very bright red fall color and for small spring flowers followed by its pinkish-red samaras during the summer season. Drought resistant once established. Very low maintenance.	Both the acer ginnala and its relative the acer tartarian are somewhat ragged looking in youth but with pruning make excellent street trees the older they get. Tree or shrub forms available.
<i>Acer Griseum/ Paperbark Maple</i>	R upright	20-30/25-35	Yes	L	One of the most beautiful maples mainly because of its wonderful bark. Nice red fall colors.	Close to being a zone 5b tree, unless it is planted in a somewhat protected site, it is susceptible to cold winter death or late spring frost dieback.
<i>Acer Plantanoides/ Crimson Sentry Maple</i>	C	25/15	Yes	M	Deep purple leaves, very compact, heavily branched	Somewhat not tolerant of compacted soils.
<i>Acer Tartaricum/ Tartarian Maple</i>	O to R	25/20	Yes	L-M	Again, a hardy tree known for its very bright red fall color and for its pinkish-red samaras during the summer season	Use in "tough sites."
<i>Acer Truncatum/ Purple Blow Maple</i>	R	25/25	Yes	L-M	Relatively pest free. Reddish purple to green leaves to yellow/red in fall.	Somewhat slow growing but a fine street tree.
<i>Acer Truncatum x Acer Plantanoides/ Maple "Pacific Sunset Maple"</i>	R	30/25	Yes	M	A JF Schmidt of Boring, Oregon cultivar noted for its fall colors and relatively small size for a maple.	Examples of this cultivar are in the town center encircling the fountain. Medium growth rate.

<i>Amelanchier x grandiflora</i> / <b>Serviceberry/</b> "Robin Hill" and Or <i>Amelanchier x laevis</i> / <b>Service berry/</b> "Cumulus," "Autumn Brilliance"	V to O, spread -ing	15-25/ 15-20	Yes	L-M	Graceful, beautiful. Flowers, good autumn colors, particularly "Autumn Brilliance." Good tasting fruit. Species is native.	Get only tree form from a nursery since the Serviceberry wants to be a shrub. Also, it really likes acidic, well- draining soil. There is some litter from fruits. Sensitive to air pollution, insects. They prefer being an "under story" tree.
<i>Carpinus caroliniana</i> /) American Hornbeam	O	25/ 15-20	Yes	L	Classic street tree. Outstanding yellow-orange fall colors. Fluted trunk.	
<i>Cornus kousa</i> or <i>mas</i> / <b>Dogwood</b> kousa or dogwood cornelian cherry	R, O, spread -ing	15-30/ 15-30	Yes	L	Beautiful flowers.	There are many species of dogwood and many cultivars. Choose only a hardy, tree form. Get advice from an experienced nursery, as choices are prolific.
<i>Crataegus</i> / <b>Hawthorne/</b> "Crimson Cloud," "Lavalle," "Washington," "Toba," "Winter King."	O to R	20-25/ 15-25	Yes	L-M	Beautiful spring flowers. They handle compacted and poor soils.	There are several species of Hawthorne available and many cultivars. Be sure to look for the species/ cultivar that is thornless and less susceptible to pests and diseases. Hawthorns do grow in Sandpoint and they are messy and are susceptible to pests and diseases but they generally right themselves and keep on going.
<i>Laburnum x watererii</i> / <b>Golden Chain Tree</b>	R	15-20/ 12-15	Yes	M	Yellow flowers in May	Can't abide standing water. Needs some shade.
<i>Maackia Amurensis</i> / <b>Amur Maackia</b>	V	25/20	Yes	L	Does well in poor soil. One of very few trees to flower mid- summer.	A bit slow growing, but is a tough tree. See example of one in at the corner of First and Cedar Streets.
<i>Malus</i> species/ <b>Flowering Crab Apple</b>	V to R spread -ing	10-25/ 10-25	Yes	L	The most beautiful shows of spring flowers of any species. Hardy and can flourish in compacted, poor soils.	Cultivars are prolific. For more upright branching cultivars see "Adirondack," "Centurion," "Sentinel." For cultivars less susceptible to pests and diseases seriously consider: "Sentinel," "Sugartyme," "Centurion," "Prairiefire," "Profusion." Crabs are messy, so for less mess, pick "Spring Snow," as it is the only crab without fruit. Crabs may be difficult to shape for clearances.
<i>Pyrus calleryana</i> / <b>Flowering Pear/</b> "Capital"	C	35/12	Possibly	M	Especially glossy green foliage, good spring flowers and fall color.	

<i>Prunus cerasifera./</i> <b>Purple Leaf Flowering Plum/</b> “Newport,” “Mt. St. Helens,” “Thundercloud,” “Krauter Vesuvius”	O to R	20/ 15-20	Yes	L-M	Great spring show of flowers. Rich purple leaves during the growing season.	“Newport” is the hardiest cultivar. However, “Thundercloud” has been planted a lot in Sandpoint. For deeper, richer purples, pick the “Krauter.” For hardiness and faster growth, pick the “Mt. St. Helens” from J.F. Schmidt nursery in Boring, Oregon.
<i>Prunus Pados/</i> <b>May Day Tree</b> “Merlot”	C	25/15	Yes	M-F	Extremely hardy plants. Leaves emerge green, then in summer heat turn purple. No suckers. Small fruit. This cultivar grows upright.	As of 2003 both Trees R US and Bonners Ferry Nursery in Boundary county were growing this cultivar.
<i>Prunus Pados/</i> <b>May Day Tree</b>	O to R	25-30/ 25	Possibly	M-F	Extremely hardy. Often picked because it one of the earliest trees to flower in spring. . Leaves emerge green, then in summer heat turn purple. Similar to prunus virginiana, but no suckers.	As of 2003 both Trees R US and Bonners Ferry Nursery in Boundary county were growing this cultivar.
<i>Prunus sargentii /</i> <b>Columnar Sargent Cherry</b>	C	35/15	No [with some reservations]	L-M	Beautiful flowers, very beautiful fall colors. Handsome mahogany colored bark.	Like most cherry trees, expect 25 years or so of healthy life. Cherry trees are susceptible to sun scald of the cherry tree’s somewhat thin bark. The sun scald can be a “door” to pests. They generally prefer acidic, well-draining soil, but they can be seen growing in urban situations.
<i>Prunus serrulata/</i> <b>Amanogawa</b>	C	25/20	Yes	L-M	Light pink flowers in spring. Very narrow. Bronze leaf in fall.	The sun scald can be a “door” to pests. They generally prefer acidic, well-draining soil, but they can be seen growing in urban situations.
<i>Prunus serrulata /</i> <b>Kwanzan Cherry</b>	V	30/20	Yes	L-M	The best cherry show in spring—double pink flowers. Good fall colors, too.	
<i>Prunus virginiana /</i> <b>Chokecherry/</b> “Canadian Red”	R upright	25/20	Yes	F	Extremely hardy plants. Leaves emerge green then in summer turn to purple. Small white flowers in spring. Tree does put out some suckers. Some small fruit.	
<i>Oxydendron arboretum /</i> <b>Sourwood</b>	P to R	20/ 15	Yes	L	Creamy white flowers in mid-summer. Bronze tinted green leaves turn brilliant orange-red in fall. Fairly soil tolerant.	Sensitive to air pollution. <u>May</u> be sensitive to our winters here. Ask locally.
<i>Syringa Reticulata /</i> <b>Japanese Tree Lilac/</b> “Ivory Silk” or “Summer Snow” [see also <i>Syringa Pekinensis</i> , a less formal-looking species]	O upright	20/15	Yes	L-M	June lilac blooms are prolific and long. Tough tree once established. Compact. Tidy looking. Somewhat disease and pest resistant.	Good examples of the “Ivory Silk” and the <i>Syringa Pekinensis</i> at U of I Experimental station on Boyer Avenue. Also planted in fall of 2003 on 2 <sup>nd</sup> Avenue between Cedar and Church Streets.
<i>Styrax japonicus /</i> <b>Japanese Snowbell</b>	R	25/25	Yes	L	Small tree covered in June by white flowers with yellow stamens	Can be considered a little less hardy in exposed sites. Ask locally.

**CLASS II: MEDIUM TREES--trees whose height, spread and trunk size allows their planting in somewhat larger spaces.**

Trees suitable for planting in tree lawns 5 to 6 feet wide or larger and at least 2 feet from curb (or edge of street if there is no curb) and/or sidewalk. Always remember that the Public Works department will need 14-foot clearance from the edge of the street skyward for its snowplows and will prune the larger branches to get that clearance. So, while the trees listed below may not disturb sidewalks or streets, their form may need skilled pruning to give vehicular clearance.

<b>Botanical Name/Common Name/ "Cultivar"</b>	<b>Form</b>	<b>Mature Height/ Width in feet</b>	<b>Use under power lines?</b>	<b>Growth Rate</b>	<b>Advantages</b>	<b>Use and Limitations</b>
<i>Acer Negundo</i> / <b>Box Elder</b> / "Sensation"	R	30/25	Yes	M-F	<u>Very tolerant</u> of all kinds of soil conditions. <u>Very red</u> leaf fall colors. Stays relatively small for a street maple. During growing season there is a slightly red tinge to the medium green leaves. Hardy—growing well in sites from Boise to Portland to Edmonton, Alberta and Whistler, BC	The box elder <u>species</u> is on the list of prohibited trees because the species does deserve its reputation of being too fast growing, weak-wooded and attractive to box elder bugs. However, this <u>cultivar</u> discovered in southern Idaho about 20 years and developed by J.F. Schmidt is slower growing, better formed, stronger branched and not at all attractive to bugs. See examples planted fall of 2003 on 2 <sup>nd</sup> Avenue between First and Main Streets.
<i>Acer Plantanoides</i> / <b>Norway Maple</b> / "Globosum."	R	15/18	Yes	M	Very formal looking. Dense and compact. Use where symmetry and formality are wanted.	According to <u>Street Tree Facts</u> , published by the University of Pennsylvania, about the Norway maple in general, "Dense shade and surface roots interfere with lawns. Roots may damage paving . . . Susceptible to leaf scorch, Verticillium wilt . . . and frost cracks. Sucking insects may sometimes excrete a sticky fluid that spatters autos."  Nonetheless, the Norway maple transplants easily, is tolerant of many kinds of soil, drought. That they do well in Sandpoint is evidenced by literally hundreds of them growing large and healthy here.
<i>Acer Plantanoides</i> / <b>Norway Maple</b> / "Columnare"	C	35/14	No	M	Perfect where buildings demand a narrow tree. Bold appearance in winter. Yellow fall colors.	
<i>Acer Plantanoides</i> / <b>Norway Maple</b> / "Ezestre" or "Easy Street"	P	40/20	No	M	A bud sport of Columnare, it is faster growing, slightly wider. Yellow fall colors. "Perfect street tree," says JF Schmidt.	
<i>Acer Plantanoides</i> / <b>Norway Maple</b> / "Fairview"	O upright	45/35	No	M	Upright in form. Reddish purple new growth, maturing to bronze green.	
<i>Acer Plantanoides</i> / <b>Norway Maple</b> / "Parkway" ("Columnarbroad")	O to P	40/25	No	M	Strong leader, branches, more tolerant of Verticillium wilt than the species.	

<i>Acer Rubrum</i> / <b>Red Leaf Maple</b> / "Karpick"	C to O	40/ 20	No	M-F	Narrow when young becoming oval with age. Rapid growth, red twigs	In this space size, it is important to pick only the cultivars listed to the right or like them. Species grows rapidly, shallow root system, transplants readily but needs acid soil. Thin bark can be damaged. Susceptible to Verticillium wilt. Colorful year round. Shade is less dense than other maples.
<i>Acer Rubrum</i> / <b>Red Leaf Maple</b> /"Armstrong"	C	45/ 15	No	M-F	Fast growing. Yellow-red fall colors.	
<i>Acer Rubrum</i> / <b>Red Leaf Maple</b> /"Bowhall"	C	40/15	No	M-F	Stays smaller than the Armstrong	
<i>Acer x freemanii</i> / <b>Hybrid Maple</b> / "Armstrong"	O	50/35	No	M-F	Great red fall color. [Try also new hardy "Sienna Glen" cultivar developed in Minnesota]. Good drought tolerance due to the cross between the Red and Silver maple species.	
<i>Acer truncatum x acer plantanoides</i> / <b>Norwegian Sunset Maple</b> / "Keithsform"	O	35/ 25	No	L-M	Upright oval shape with brilliant orange-red fall colors.	
<i>Carpinus betulus</i> / <b>European Hornbeam</b> / "Columnaris" or "Fastigiata"	C	35/ 25	No	L	Very symmetrical and formal in shape. Somewhat free of pests and diseases, drought resistant. Handles pruning.	Slow to medium growth rate.
<i>Cersis Canadensis</i> / <b>Eastern Redbud</b>	V to flat top	25/30	Possibly	M	Hardy tree with dark pink blooms.	Multi-stem or low branching. Need MN or WI strains for hardiness.
<i>Celtis occidentalis</i> / <b>Hackberry</b>	R /O	40/30	No	F	Urban tolerant tree with white flowers. Deep rooted tree doesn't hurt sidewalks. Rough and corky bark is attractive interest.	Doesn't always bloom. Recovers slowly from transplanting.
<i>Cercidiphyllum japonicum</i> / <b>Katsura Tree</b>	P to R	40/40	No	M	Rarely susceptible to pests and diseases. Handsome, variable form. Medium to fast growth rate. Heart shaped leaves—apricot orange fall colors.	Doesn't handle drought or compacted soils very well. Trunk can sunburn in sustained sun.
<i>Cladrastis kentukea</i> / <b>Yellowwood</b>	R	30/40	Possibly	M	Arching branches give an elm-like appearance. White pea-like blooms. Nice yellow fall color	Urban tolerant.
<i>Cotinus Obovatus</i> / <b>American Smoke Tree</b>	R	25/ 20	Yes	M	Cousin of the cotinus coggygria or common smokebush, this tree form is one of the most interesting trees for its pink, "smoke-like" fuzzy flowers through most of the summer and beautiful fluorescent red fall colors. Cold hardy.	The cotinus coggygria is more readily available as a shrub but it can be trained as a tree form, but is smaller. Prefers well-drained soils.  See beautiful example of Smoke Tree on private property on corner of 6 <sup>th</sup> and Larch Streets.
<i>Fagus sylvatica</i> / <b>European Beech</b> / "Fastigate" and "Dawyck"	C	40/12	No	L	The fastigiated cultivar is deep green leafed and a striking columnar tree. The Dawyck is a purple leaf version.	Beeches don't tolerate well poor drainage, drought or road salts.
<i>Fraxinus nigra</i> / <b>Green Ash</b> / "Fallgold"	C to O	40/ 12	No	L	Very hardy, seedless, more narrow than the species. Long golden yellow fall color.	Slower growing than most Ash cultivars which are normally fast.

<i>Fraxinus pennsylvanica</i> / <b>Green Ash</b>	P to O	35-50/ 25-35	No	F	All hardy, seedless, good yellow fall color, tolerant of compacted soils, long-lived.	There are a number of Green Ash cultivars that would be suitable to this size tree lawn: Look for Cimmzam, Leprechaun (Johnson), Patmore, Rugby, Summit
<i>Gleditsia tricanthos</i> / <b>Honey Locust</b> /"Morraine"	V wide	40/35	No	F	Spreading vase outline. Transplants easily, tolerant of compacted soils. Good thornless, fruitless cultivar	Some susceptibility to storm damage.
<i>Gleditsia tricanthos</i> / <b>Honey Locust</b> /"Skyline"	P broad	45/35	No	F	Transplants easily, tolerant of compacted soils. Well-behaved form, gives more compact feeling, easy to limb-up. Thornless and usually fruitless. Somewhat insect resistant.	
<i>Gleditsia tricanthos</i> / <b>Honey Locust</b> /"Imperial"	R spread-ing	35-40/ 35-45	No	F	Transplants easily, tolerant of compacted soils. Matures at lower height than other cultivars. Thornless and usually fruitless.	Susceptible to pests, but pulls through generally.
<i>Gleditsia tricanthos</i> / <b>Honey Locust</b> / "Shademaster"	V broad	45/35	No	F	Transplants easily, tolerant of compacted soils. Straight trunk, ascending branches. Prunes well for traffic clearance. Thornless/ fruitless.	Some ice damage reported. Susceptible to pests, but pulls through generally.
<i>Koelreuteria paniculata</i> / <b>Goldenrain Tree</b>	R	30/ 30	Possibly	M	Midsummer bright yellow flowers. Graceful form. Medium growth rate. No serious insects or diseases. Tolerant of various soils.	Works in Coeur d' Alene, but <i>may</i> be not hardy enough for Sandpoint in more exposed areas. Looks gaunt when young.
<i>Liriodendron tulipifera</i> / <b>Tuliptree</b> /"Fastigiatum"	C	50/ 15	No	F	Fast growing, keeps tight columnar shape. Yellow/orange flowers. Yellow fall colors.	Prefers well-drained acidic soil. Recovers slowly from transplant. Can get sunscald.
<i>Nyssa sylvatica</i> / <b>Black Gum or Tupelo</b>	P to irregular	35/ 20	No	L	Dark glossy green leaves going to coppery red in fall. No serious problems with insects or diseases. Distinctive. Fissured bark is interesting in winter.	Ask local nursery about tolerance of compacted soils (some sources are conflicting.)
<i>Ostrya virginiana</i> / <b>Ironwood or American Hop hornbeam</b>	O	40/ 25	NO	L	Pest resistant and urban tolerant. Hop-like fruits. Fall yellow color. Graceful tree. Tolerates shade. Attractive bark.	Sensitive to salt. Can't take high urban stresses.
<i>Parrotia persica</i> / <b>Persian Parrotia</b>	P to R	30/20	Possibly	M	Typically low-branched tree with unusual form and texture. Long-lived. Very interesting bark, red stamens in late winter early spring. One of best trees for extraordinary fall color. Highly prized tree. Medium growth rate.	Needs good drainage. Two are planted in the center of the Town Square (2003).
<i>Prunus Maackii</i> / <b>Amur Chokecherry</b>	O to R	25-30/ 25	Possibly	M	White spring flowers. Yellow fall color. Copper orange bark is attractive in winter. Very hardy.	Needs well-drained soil.
<i>Pyrus calleryana</i> / <b>Flowering Pear</b> /"Autumn Blaze"	R	30/25	Possibly	M	Flowers in spring, great fall colors. Best cold hardiness of c. pears. Handles compacted soils.	Some susceptibility to fireblight. Has some thorns.
<i>Pyrus calleryana</i> / <b>Flowering Pear</b> / "Chanticleer"	C to P	30-40/ 15-20	Possibly	M	Flowers in spring, great fall colors. Resistant to fireblight, wood breakage. Maintains shape. Handles compacted soils.	Many cities have over-planted the flowering pear, but not in Sandpoint.
<i>Pyrus calleryana</i> / <b>Flowering Pear</b> / "Redspire"	P	35/25	No	M	Flowers well in spring. Good formal appearance. Resistant to fireblight.	Less impressive fall colors than other pears.
<i>Quercus robur</i> / English <b>Columnar Oak</b> / "Fastigiata"	C	50-60/ 10-15	No	M	Resembles the Lombardy Poplar in outline. Tolerates drought and wide range of PH soils. Bronze fall color.	Does produce acorns about 1" long.

Sorbus americana or alnifolia or aucuparia or decora/ <b>Mountain Ash</b>	O to upright oval	25-40/ 18-30	No	L-M	Generally, all mountain ash are quite hardy, have flowers and fruit, do have a fall color.	There are many cultivars of this species. In quire locally. Mountain Ash tend to leaf out late in the spring, often not until late May. Only the Sorbus americana "Dwarfcrowm" (18/8) works for under power lines.
<i>Tilia americana</i> / <b>American Linden</b> / "Boulevard"	P	50/ 25	No	M	Native American basswood. Very hardy, tolerant of various soils. Yellow fall colors.	
<i>Tilia cordata</i> / <b>Littleleaf Linden</b> / "Chancellor"	P	35/ 20	No	M	Well adapted as a street tree. Symmetrical form. Fall color: yellowish.	Low tolerance of salts.
<i>Tilia x euchlora</i> / <b>Crimean Linden</b>	P to O	40/35	No	M	Nicest foliage of the Lindens. Dark green going to bright yellow. In winter, golden green twigs are interesting.	

### CLASS III: LARGE TREES--trees whose height, spread and trunk size demands their planting in larger spaces.

Trees suitable for planting in tree lawns 7 to 8 foot wide or wider and **at least** 3 feet from curb (or edge of street if there is no curb) and/or sidewalk. Always remember that the Public Works department will need 14-foot clearance from the edge of the street skyward for its snowplows and will prune the larger branches to get that clearance. So, while the trees listed below may not disturb sidewalks or streets, their form may need skilled pruning to give vehicular clearance. For large trees proper spacing is also an important consideration. Many of these trees have a spread of 40 to 70 feet. In time, one of these trees can simply overwhelm other trees nearby.

<b>Botanical Name/Common Name/ "Cultivar"</b>	<b>Form</b>	<b>Mature Height/ Width in feet</b>	<b>Use under power lines?</b>	<b>Growth Rate</b>	<b>Advantages</b>	<b>Use and Limitations</b>
<i>Acer Plantanoides/ Norway Maple/ "Summershade"</i>	R, broad	50/ 40	No	M	Fast growing. Heat resistant. Lighter green leaves than other cultivars. Fall yellow leaves. Somewhat tolerant of Verticillium wilt.	According to <u>Street Tree Facts</u> , published by the University of Pennsylvania, about the Norway maple in general, "Dense shade and surface roots interfere with lawns. Roots may damage paving. Susceptible to leaf scorch, Verticillium wilt . . . and frost cracks. Sucking insects may sometimes excrete a sticky fluid that spatters autos."  Nonetheless, the Norway maple transplants easily, is tolerant of many kinds of soil, drought. That they do well in Sandpoint is evidenced by literally hundreds of them growing large and healthy here.
<i>Acer Plantanoides/ Norway Maple/ "Schwedler"</i>	O, Broad	45-60/ 35-50	No	M	Purplish leaves turn bronze green as they grow, orange-yellow in fall. Somewhat tolerant of Verticillium wilt.	
<i>Acer Plantanoides/ Norway Maple/ "Emerald Queen"</i>	O	60/ 50	No	M	Most widely used Norway. Fine oval shape, good growth rate, excellent yellow fall color.	
<i>Acer Plantanoides/ Norway Maple/ "Deborah"</i>	O to R	55-60/ 45-50	No	M	Reddish purple leaves in spring turning to bronze green in summer/ fall.	
<i>Acer Plantanoides/ Norway Maple/ "Emerald Lustre"</i>	R, upright	55-65/ 50-60	No	M	Grows vigorously. Winter hardy. Great branching when young. Greenish-yellow fall colors.	
<i>Acer Plantanoides/ Norway Maple/ "Superform"</i>	O to R	45/40	No	M	Well-behaved form. Fall yellow leaves.	
<i>Acer Rubrum/ Red Maple/ "Autumn Flame"</i>	R	45-55/ 45-55	No	M-F	First red maple to color in the fall, one of the hardiest. Fruitless.	Species grows rapidly, shallow root system, transplants readily but needs acid soil. Thin bark can be damaged. Susceptible to Verticillium wilt. Colorful year round. Shade is less dense than other maples.
<i>Acer Rubrum/ Red Maple/ "Northwood"</i>	O to R	50-60/ 40-50	No	M-F	Hardy, straight trunk, moderate growth rate. Fall color not as reliable as others.	
<i>Acer Rubrum/ Red Maple/ "Red Sunset"</i>	O	50-60/ 40-50	No	M-F	Longer fall display of color. Strong branching structure.	
<i>Corylus colurna/ Turkish Filbert</i>	P to O	45-60/ 25-35	No	M	Stately, symmetrical tree.	Sometimes difficult to transplant and the fruit may pose a problem.
<i>Fagus grandifolia/ American Beech</i>	O	50/40	No	L	An imposing tree with silver-gray bark. Sturdy branches. Bronze yellow fall color.	
<i>Fraxinus pennsylvanica / Green Ash/</i>	O	50/40	No	F	All hardy, seedless, good yellow fall color, tolerant of compacted soils, salts, fast, long-lived. Easy to transplant.	For the larger Green Ash, look for "Marshall's Seedless," "Urbanite," "National 1999 (Champ tree)"

Fraxinus americana/ <b>White Ash/</b> "Autumn Applause"	O	40/25	No	M	Compact shape. Improved growth habit. Seedless. Reliable purple fall color.	Easy to transplant. Prefers moist, acidic soil, well drained, but can handle other soils. Tolerates partial shade. Sensitive to "Ash dieback," a complex disease in some places, but nothing reported in Sandpoint area. Sensitive to drought.
Fraxinus americana/ <b>White Ash/</b> "Autumn Purple"	R	45/ 40	No	M	The White Ash standard. Grows rapidly. Straight and sturdy. Various hues of lovely fall colors. Seedless.	
Fraxinus americana/ <b>White Ash/</b> "Rosehill"	O, upright	50/ 35	No	M	Rapid growing. Strong central leader. Relative narrow and open crown. Seedless.	
Fraxinus americana/ <b>White Ash/</b> "Skyline"	O	45/ 35	No	M	Growth rate is medium. Seedless. Stately, symmetrical.	
Ginkgo biloba/ <b>Ginkgo</b> or <b>Maidenhead Tree</b>	P, broad	50/ 40	No	L	The species is irregular in shape, large spreading branches, distinctive fan shaped leaves. Clear yellow in fall.	Flourished in Asia, Australia and North America 200 <i>million</i> years ago. Grows slow at first then moderately. Takes time to recover from transplanting. Very free of pests and diseases. Handles wide range of soils. Get only male clones as fruit can cause skin disease with some people.
Ginkgo biloba/ <b>Ginkgo/</b> or <b>Maidenhead Tree</b> /"Autumn Gold"	P	45/ 35	No	L	Narrow in youth, broadens in age as do we all. Excellent yellow fall color. Fruitless, tolerant of urban conditions.	
Ginkgo biloba/ <b>Ginkgo/</b> or <b>Maidenhead Tree</b> /"Princeton Sentry"	C to P	40/ 25	No	L	Seedless. Stiffly upright, but has all good characteristics of the Ginkgo. Bright yellow fall color.	
Liquidambar styraciflua/ <b>Sweetgum/</b> "Moraine"	P	40-50/ 25-35	No	F	Most winter hardy of the Sweetgums. Dark green leaves. Brilliant, variable shades of fall colors. Medium to fast growth rate. Can tolerate poor soils.	Need to get only the fruitless cultivar.
Liriodendron tulipifera/ <b>Tuliptree</b>	O	60-70/ 30-50	No	F	2" to 3" yellow-green and orange flowers. Grows very rapidly. Impressive tree.	Prefers well drained acidic soil. Recovers slowly from transplant. Can get sun scald.
Phellodendron amurense/ <b>Amur Cork Tree/</b> "Macho" or "Shademaster"	V to O	35-40/ 30	No	M	Bark is rugged and cork-like. Unusually pest free.	Need to pick either the "Macho" [fruitless, good branching habit] or "Shademaster" fruitless] cultivars. Root systems tend to be shallow and spreading, requiring adequate space for development.
Plantanus x acerifolia/ <b>London Planetree/</b> "Bloodgood"	P	60-70/ 50-60	No	F	The cultivar is resistant to anthracnose that seriously damages the species. The tree gets large but can be easily limbed up for beautiful filtered shade. Very nice dappled brown bark. Maple-like. Yellow fall color. Grows very fast. Fairly tolerant of compacted soils.	A beautiful tree that tends to be over-used, especially in malls and large parking lots.. Does litter. See examples of newly planted trees along Fifth Avenue and older trees on north side of City parking lot.
Quercus acutissima/ <b>Sawtooth Oak</b>	R	40-50/ 40-50	No	M	Relatively fast growing. Tolerates city conditions, relatively pest and disease free. Yellow fall color. Yellow-brown in fall.	Acorns can cause a litter problem in the tree's advanced years.
Quercus macrocarpa/ <b>Bur Oak</b>	R	80/80	No	M	Impressive, large tree. Thick trunk. Need lots of space. Likes alkaline soils. Hardy.	Heavy crops of acorns every three to five years. Grows slowly, intolerant of shade. <b>PLANT ONLY IN LARGE SPACE.</b>
Quercus bicolor/ <b>Swamp White Oak</b>	R	80/70	No	M	Native tree with broad, open crown. Tolerates compacted soils better than most oaks. Yellow-brown in fall.	Acorns can be a litter problem in some years.

Quercus palustris/ <b>Pin Oak</b>	P	60-70/25-35	No	M-F	Distinctive habit—strong central leader with long, slender, layered branches. Elegant. See one at corner of 2 <sup>nd</sup> Avenue and Main. Rusty orange-red fall color. Fast growing. Tolerates compacted soils.	Acorns can be a litter problem in some years. <b>PLANT ONLY WITH 10' OR MORE SPACE TO STREET. Severe pruning to meet clearances can distort natural habit. If possible use cultivars "Crownwright," and "Sovereign."</b>
Quercus alba/ <b>White Oak</b>	P to R	50-80/ 80-100	No	L-M	Classic "noble oak." Native of Eastern US. Red to purple fall color. Grows on wide range of soils.	Somewhat slow-growing. Acorns. Transplant only in the spring.
Quercus rubra/ <b>Northern Red Oak</b>	R	50-75/ 50-75	No	M	Stately, fast growing. Prefers moist, well-drained soils. Deep red fall color.	Needs lots of space. Will heave sidewalks if too near. Acorns. Slow growth at first, then faster.
Sophora japonica/ <b>Japanese Pagoda Tree/ "Regent"</b>	V to O	50-75/ 50-75	No	M-F	Creamy white flowers in clusters. Yellow fall color. This cultivar is fast growing. Resists insects. Straight trunk. Glossy green leaves.	At different times, leaves, flowers, fruit parts create some litter. Flowers stain sidewalks.
Tilia americana/ <b>American Linden /"Redmond"</b>	P to O	40-60/ 30-40		M	All Lindens are hardy trees. Strong branch structure, new twig growth is red. Upright growth pattern. Yellowish fall color. Transplants readily.	Susceptible to Verticillium wilt. But, generally, like all the Lindens, they can be considered "industrial."
Tilia cordata/ <b>Little Leaf Linden/ "Greenspire"</b>	P	40/30	No	M	Very uniform, symmetrical growth, strong central leader.	All Littleleaf Lindens have yellow fall color. Cordata typically most available in nurseries. Leaves of this species tend to remain green on the tree after other trees have shed theirs. Transplants readily.
Tilia cordata/ <b>Little Leaf Linden/ "Glenleven"</b>	P	45/30	No	M	Crown is less dense than other cultivars, but vigorous growth, straight trunk.	
Tilia cordata/ <b>Little Leaf Linden/ "Shamrock"</b>	P	40/30	No	M	Similar to Greenspire, but faster growing.	
Tilia Tomentosa/ <b>Silver Linden/ "Sterling" or "Green Mountain"</b>	P to O	50-70/ 30-50	No	M	Dark green leaves with silver undersides make for shimmering appearance	
Ulmus/ <b>Elm/ "Homestead"</b>	O, Narrow	55/35	No	M-F	Fast growing hybrid, form close to classic American Elm. Developed by USDA Nursery Lab.	Although the Elm has suffered severe die back, especially in the East, newer cultivars have created disease resistant trees. Use only these cultivars and possibly a few others if approved by an nursery and the City.  The Elm is still a magnificent tree. Adapts well generally to compacted soils, poor drainage, drought, wide range of PH.
Ulmus / japonica/ <b>Elm "Discovery"</b>	O to V	45/ 35	No	M-F	Very cold hardy, developed in Canada. Arching vase canopy.	
Ulmus/ <b>Elm/ "Frontier"</b>	O	40/ 30	No	M-F	Most all Elms have a yellow fall color; this cultivar has long-lasting burgundy fall color. U.S. National Arboretum cultivar.	
Ulmus/ <b>Elm/ "Morton Plainsman" aka "Vanguard"</b>	O to V	55/ 45	No	M-F	Very hardy and very dark, glossy green leaves, developed by Morton Arboretum.	
Ulmus wilsoniana/ <b>Elm/ "Prospector"</b>	V	40/ 30	No	M-F	Broad vase shape, hardy, gives classic Elm look. U.S. National Arboretum cultivar.	
Zelkova serrata/ <b>Japanese Zelkova/ "Green Vase" or "Village"</b>	V	50-60/ 30-40	No	F	Adapts well to compacted soils, dry soils, PH range. Has Elm-like appearance. Moderate growth rate. Few disease or pest problems. Bronze-red fall color.	"Village Green" gives easier clearance. "Green Vase" grows more quickly of the two in youth, but the Zelkova species grows fairly fast. Narrow branch angles can create spitting at crotch.

## **CONIFERS-**

It is possible to grow conifers in the public right of way on some residential streets. We do see them growing on our streets and doing well and not obstructing vision. At this time, until the Community Forest Committee has time to evaluate each species and appropriate cultivars, the City will review a property owner's desire to plant a conifer on a case-by-case basis.