



# Tree Planting Fact Sheet

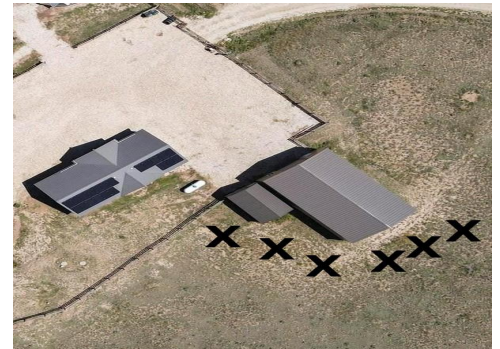
## Energy Efficient Planting

### What is energy efficient planting?

Energy efficient planting is done by manipulating the physical characteristics of trees to directly contribute to reduced energy consumption within a household. Primarily, this is done in ways that reduce the cost of air conditioning in the summer and reduce the cost of heating in the winter

### Reducing air conditioning with shade trees

Well-placed shade trees can be planted to help reduce the effect of air conditioning in the summer by blocking the path of sunlight onto the house. In the winter, falling leaves negate most of the cooling effect of these trees creating a net benefit for the homeowner. Shade trees are at their most effective when planted on the southern and western sides of a building. Planting them within 40 feet of the house works best. Plant them far enough away from the house to avoid conflict between the roots of the tree and the house's foundation



Sample planting diagram where the x's represent possible shade tree plantings

### Reducing Heating Costs with Evergreen Trees

During the winter, evergreen trees can function as windbreaks. Generally, windbreak lines are best planted north of the building to slow down southward travelling winds. Evergreen trees should be taller than the building and planted in layers if possible. For most conifers, a good rule of thumb is to plant the trees roughly 8 feet apart and to plan for 10-15 feet between rows of trees to form an effective windbreak.

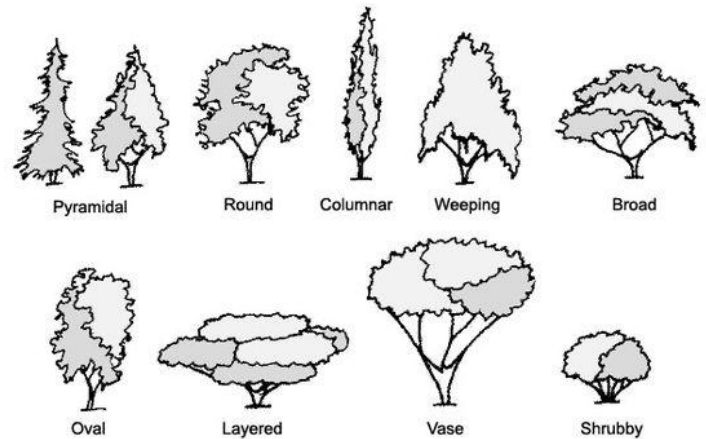


## Selecting the right tree

Not all trees are created equal. When selecting a shade tree, several factors should be addressed such as width of the building, height, and the soil types underneath.

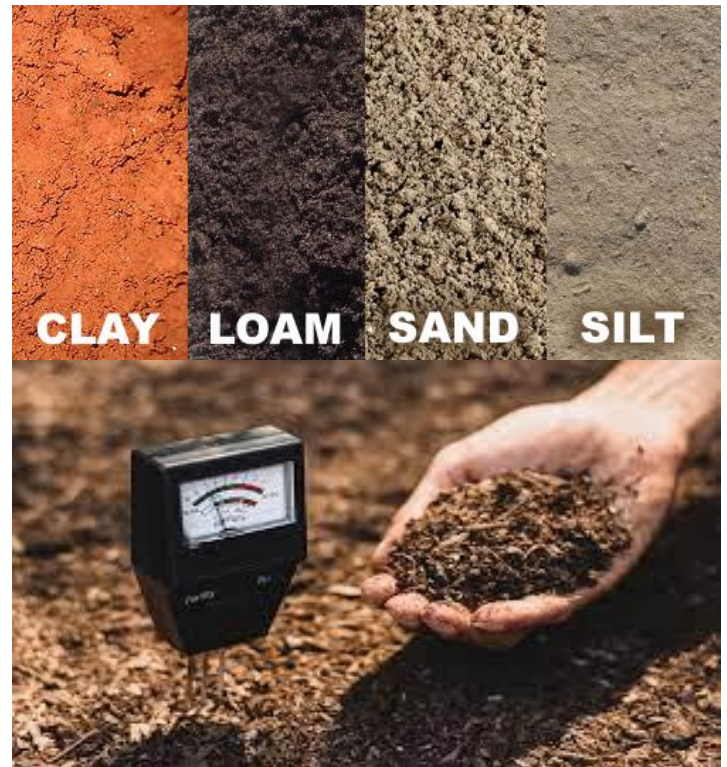
### Tree Shapes:

Shade trees should be selected with the width and height of the surface in mind (aim for a mature height of 25 feet+). Round shaped trees like a white oak can provide a good spread across a tall wide surface while broad-spreading trees like red oaks may work to cover a wider but shorter surface.



### Soil Types:

The chemical and structural makeup of your properties soil should be surveyed prior to tree plantings. Species will usually be described as liking more “well-drained” soils that are sandy or silty while other plants will be described as liking more clayey or damp soils. In addition, pH levels should be checked. Certain species such as willows tend to prefer acidic soil while others such as bur oak tend to prefer more “alkaline” soils



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