

**Scale Based Zoning Study**  
**City of West University Place, Texas**  
**Prepared by Councilman Bill May**

April 2001

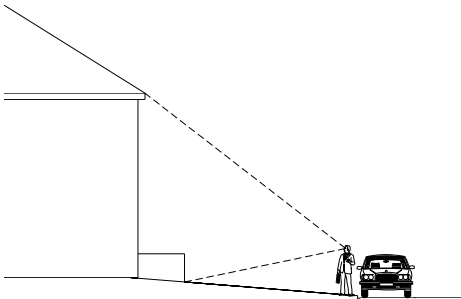
**BILL MAY**  
Architect

## Scale Based Zoning Study

April 2001 - Bill May Architect

**Introduction:** Our Comprehensive Plan makes reference to scale. Ordinances place restrictions on property owners, often without addressing the issues of scale. We can restrict a property owner with respect to square footage, but this does little to insure that the scale of what he builds is compatible with his neighbors.

**Scale Based Zoning:** Our interests might be well served to rethink our entire zoning approach. As the basis of a new approach, We should investigate a visual rather than a legal model.

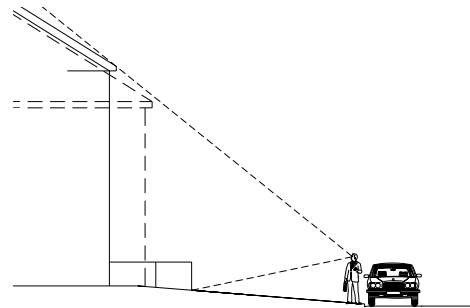


The concept of scale is largely perceptual and can be expressed quite well graphically. From our pedestrian perspective, the height of the roof is most critical in establishing the vertical scale of a house. Adjacent corners of neighboring homes provide the most obvious view of their comparative

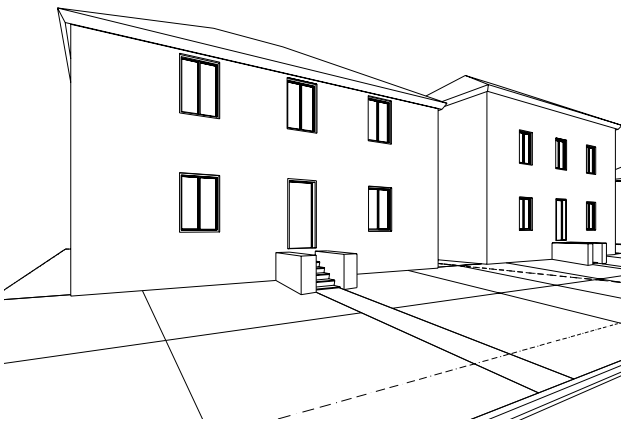
### Line of sight for perspective view

Objects appear smaller if they are farther from the viewer, therefore, taller homes will look more in scale with existing, smaller homes if moved from the building line, farther from the viewer.

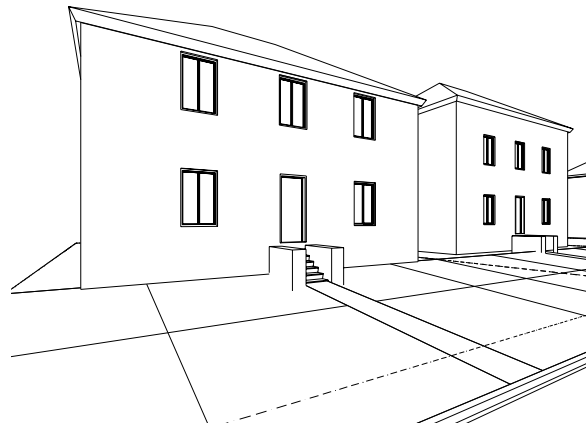
The visual mass of elements which extend above the eaves at the building line should be limited.



Effect of greater set-back

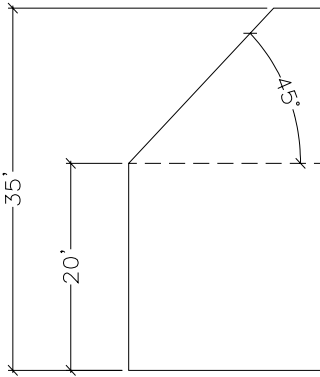


Contrasting height at building line



Greater set-back of taller house

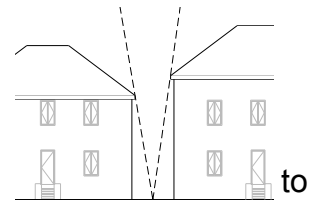
**Allowable Heights:** A maximum eave height at the building line should be established based on eave height of existing two story building stock or approximately twenty feet. A maximum building height of thirty five feet could be maintained. Higher eaves should be allowed if setback from the building line. This could apply to both front and side yards.



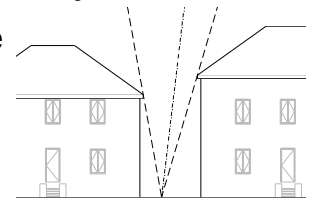
**Maximum allowable heights**

**Side Setbacks and Eave heights:** Set-backs and eave height at side yards are also critical scale factors to be considered. We should be considerate of light, air circulation and access. Fire department would prefer a 5' set back for access property in case of an emergency. A typical five foot set-back with protruding eaves limits light and creates a fire hazard. Set-backs should be five feet to eaves, exclusive of removable gutters and fascia.

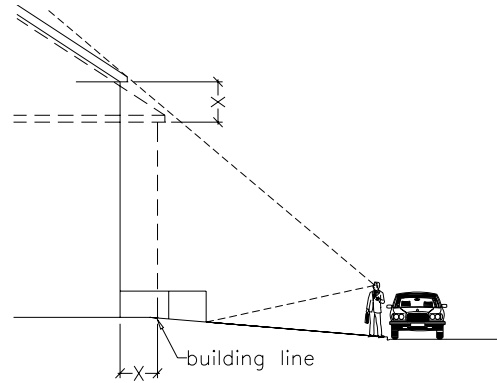
Taller buildings create a greater canyon effect. Higher buildings should be set back further to open side yards to light and air, thus limiting the canyon effect.



**Canyon effect**

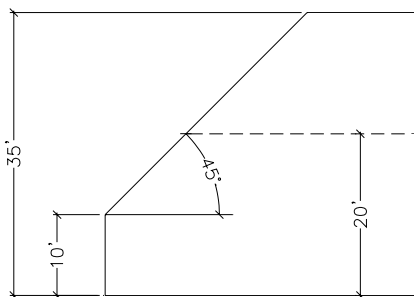


**With greater set-back**



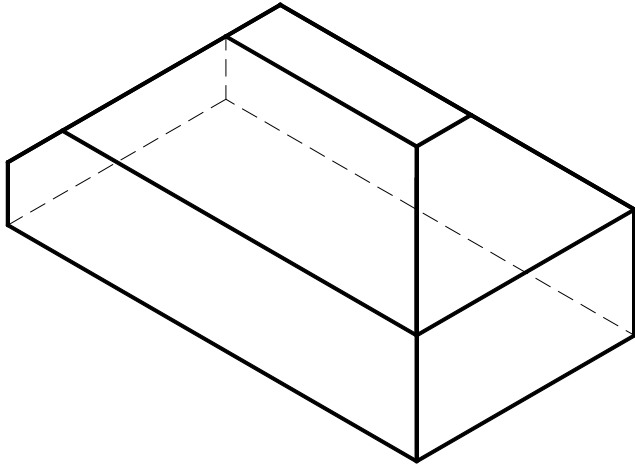
**Eave height increase with set-back**

**Eave Height Increases:** An allowable height increase of one foot for each foot of set-back from building line would create an allowable building envelope relative to a 12 on 12 roof slope with a maximum height of thirty five feet.



**Rear yard height limits**

**Rear Yard Height:** In order to create more open space at rear yards, a we should investigate a one story restriction at the rear building line. This might preclude the canyon effect which often occurs between two story garages with "accessory quarters". We should also investigate a limited width at the rear building line.



**Allowable Building Envelope:**

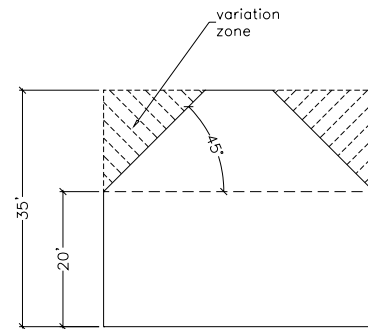
The sum of front, side, rear and height restrictions creates a three dimensional envelope of allowable building. Building within this envelope would allow for large structures with limited impact on adjacent properties. Existing area limitations could be retained with control of insured by adherence to scale based criteria.

**Allowable Building Envelope**

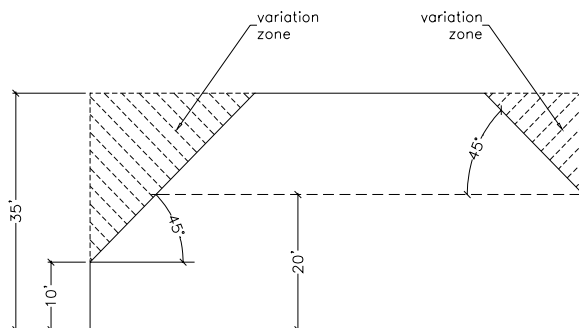
**Eave Height Variations:** In order to accommodate architectural features such as dormers while limiting the impact on adjacent properties, a variation zone with strict rules for application should be established from the allowable building envelope to the building line and maximum allowable height.

Elements in front or rear variation zones should not be allowed to penetrate the side variation zones and vice-versa in order to limit visual mass at the corners. This will have the maximum effect at maintaining a scale consistent with the scale of the existing building stock.

Size and number of dormers originating at the eave line is controlled. Elements originating above the eave are more stringently controlled as illustrated on the following page.

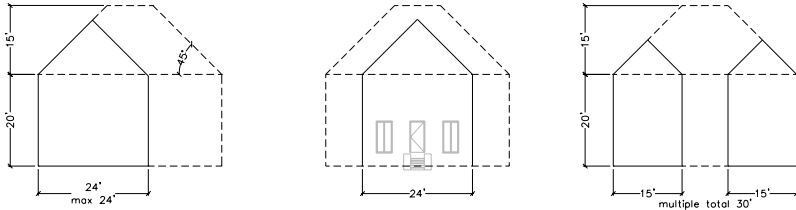


**Side variation zones (front view)**

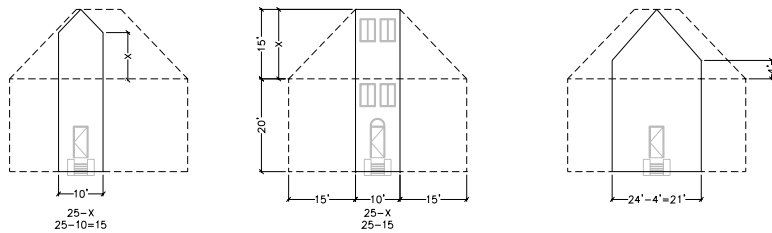


**Front and rear variation zones (side view)**

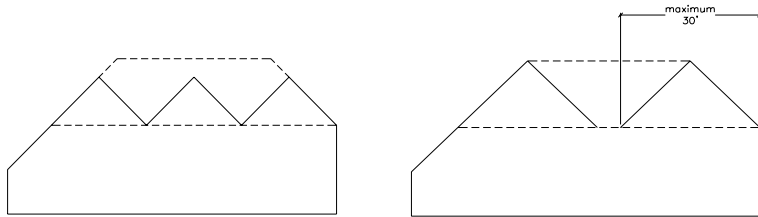
Single elements originating at the allowable eave line, should not to exceed 24 feet wide. The total width of multiple elements should be limited to 30 feet.



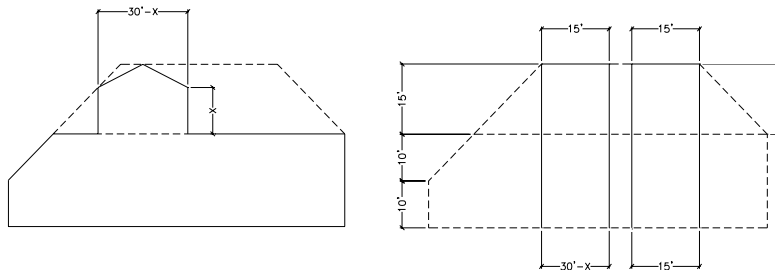
The width of elements with eaves or parapets above the allowable eave line can be up to 30 feet less the distance the eave or parapet is above the allowable eave line.



Elements on the side, originating at the allowable eave line, should not to exceed 30 feet wide each. The width of multiple elements will be limited by the number and pitch.



Side elements originating above eave line are limited to 30 feet less the distance their eave or parapet exceeds the allowable eave line.



Multiple elements above eave line should be separated by amount equal to highest eave.

