



Mayor
Ben White

City Manager
Glenn Brown

Council Members
James Massey
Ron Gay
Lynn McIlhaney
Chris Scotti
David Ruesink

Agenda
College Station City Council
Workshop Meeting
Thursday, July 26, 2007, 3:00 p.m.
City Hall Council Chambers, 1101 Texas Avenue
College Station, Texas

1. Presentation, possible action, and discussion on items listed on the consent agenda.
2. Presentation, possible action and discussion on an update regarding the creation of neighborhood protection standards.
3. Presentation, possible action, and discussion regarding regional transportation planning items in Brazos County.
4. Presentation, possible action, and discussion regarding approval of the proposed Wide Area Communications System Plan.
5. Presentation, and discussion regarding an update briefing of the City's Technology Plan.
6. Council Calendars:
 - ❖ July 29, 2007 ~ Girls National Softball Tournament Opening Ceremony (TAMU Women's Softball Complex) 6:00 p.m. ~ 8:00 p.m.
7. Presentation, possible action, and discussion on future agenda items: A Council Member may inquire about a subject for which notice has not been given. A statement of specific factual information or the recitation of existing policy may be given. Any deliberation shall be limited to a proposal to place the subject on an agenda for a subsequent meeting.
8. Discussion, review and possible action regarding the following meetings: Audit Committee, Brazos County Health Dept., Brazos Valley Council of Governments, Cemetery Committee, City Center, CSISD/City Joint Meeting, Design Review Board, Fraternal Partnership, Historic Preservation Committee, Interfaith Dialogue Association, Intergovernmental Committee and School District, Joint Relief Funding Review Committee, Library Committee, Metropolitan Planning Organization, Outside Agency Funding Review, Parks and Recreation Board, Planning and Zoning Commission, Sister City Association, TAMU Student Senate, Research Valley Partnership, Regional Transportation Committee for Council of Governments, Transportation Committee, Wolf Pen Creek Oversight Committee, Wolf Pen Creek TIF Board, Zoning Board of Adjustments, YMCA Coordinating Board (see attached posted notices for subject matters).

9. Executive Session will immediately follow the workshop meeting in the Administrative Conference Room.

Consultation with Attorney {Gov't Code Section 551.071}; possible action. The City Council may seek advice from its attorney regarding a pending and contemplated litigation subject or settlement offer or attorney-client privileged information. Litigation is an ongoing process and questions may arise as to a litigation tactic or settlement offer, which needs to be discussed with the City Council. Upon occasion the City Council may need information from its attorney as to the status of a pending or contemplated litigation subject or settlement offer or attorney-client privileged information. After executive session discussion, any final action or vote taken will be in public. The following subject(s) may be discussed:

- a. Application with TCEQ in Westside/Highway 60 area, near Brushy Water Supply Corporation.
- b. Application for sewer package plant in Nantucket area.
- c. Civil Action No. H-04-4558, U.S. District Court, Southern District of Texas, Houston Division, *College Station v. U.S. Dept. of Agriculture, etc., and Wellborn Special Utility District.*
- d. Cause No. GN-502012, Travis County, *TMPA v. PUC* (College Station filed Intervention 7/6/05)
- e. Sewer CCN request.
- f. Legal aspects of Lease Agreement for No. 4 Water Well and possible purchase of or lease of another water site.
- g. Civil Action No. H-04-3876, U.S. District Court, Southern District of Texas, Houston Division, *JK Development v. College Station.*
- h. Cause No. 06-002318-CV-272, 272nd Judicial District Court, Brazos County, Texas, *Taylor Kingsley v. City of College Station, Texas and Does 1 through 10, inclusive.*
- i. Cause No. 485, CC, County Court at Law No. 1, Brazos County, Texas, *City of College Station v. David Allen Weber, et al.*
- j. Bed & Banks Water Rights Discharge Permits for College Station and Bryan.
- k. Cause No. 07-001241-CV-361, 361st Judicial District Court, Brazos County, Texas *Gregory A. & Agnes A. Ricks v. City of College Station*

Economic Incentive Negotiations {Gov't Code Section 551.087}; possible action

The City Council may deliberate on commercial or financial information that the City Council has received from a business prospect that the City Council seeks to have locate, stay or expand in or near the city with which the City Council in conducting economic development negotiations may deliberate on an offer of financial or other incentives for a business prospect. After executive session discussion, any final action or vote taken will be in public. The following subject(s) may be discussed:

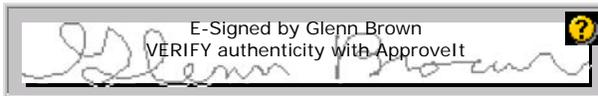
1. Game Day
2. Special Districts
3. Ramada Inn Mixed Use Development

Personnel {Gov't Code Section 551.074}; possible action

The City Council may deliberate the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer. After executive session discussion, any final action or vote taken will be in public. The following public officer(s) may be discussed:

1. City Council Self Evaluation
10. Final action on executive session, or any workshop agenda item not completed or discussed in today's workshop meeting will be discussed in tonight's Regular Meeting if necessary.
11. Adjourn.

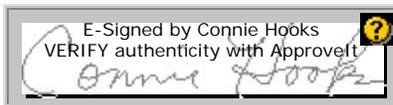
APPROVED:

An e-signature box for Glenn Brown. It contains a handwritten signature in blue ink, the text "E-Signed by Glenn Brown" and "VERIFY authenticity with ApproveIt", and a small yellow question mark icon in a black square.

City Manager

Notice is hereby given that a Workshop Meeting of the City Council of the City of College Station, Texas will be held on the 26th day of July, 2007, at 3:00 p.m. at the City Hall Council Chambers, 1101 Texas Avenue, College Station, Texas. The following subjects will be discussed, to wit: See Agenda

Posted this 23rd day of July at 2:30 p.m.

An e-signature box for Connie Hooks. It contains a handwritten signature in blue ink, the text "E-Signed by Connie Hooks" and "VERIFY authenticity with ApproveIt", and a small yellow question mark icon in a black square.

City Secretary

I, the undersigned, do hereby certify that the above Notice of Meeting of the Governing Body of the City of College Station, Texas, is a true and correct copy of said Notice and that I posted a true and correct copy of said notice on the bulletin board at City Hall, 1101 Texas Avenue, in

*Traditional Values, Progressive Thinking
In the Research Valley*

Council Meeting Thursday, July 26, 2007

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College Station, Texas, and the City's website, www.cstx.gov . The Agenda and Notice are readily accessible to the general public at all times. Said Notice and Agenda were posted on July 23, 2007, at 2:30 p.m. and remained so posted continuously for at least 72 hours proceeding the scheduled time of said meeting.

This public notice was removed from the official board at the College Station City Hall on the following date and time: _____ by _____.

Dated this ____ day of _____, 2007.

CITY OF COLLEGE STATION, TEXAS

By _____

Subscribed and sworn to before me on this the ____ day of _____,
_____ Notary Public – Brazos County, Texas

My commission expires: _____

This building is wheelchair accessible. Handicap parking spaces are available. Any request for sign interpretive service must be made 48 hours before the meeting. To make arrangements call (979) 764-3517 or (TDD) 1-800-735-2989. Agendas may be viewed on www.cstx.gov. Council meetings are broadcast live on Cable Access Channel 19.

July 26, 2007
Workshop Agenda
Neighborhood Protection Standards

To: Glenn Brown, City Manager
From: Bob Cowell, AICP, Director of Planning & Development Services

Agenda Caption: Presentation, possible action and discussion on an update regarding the creation of neighborhood protection standards.

Recommendation(s): After consideration and discussion of options regarding neighborhood protection standards, provide policy direction to City staff."

Summary: This item is a follow-up to the May 24th Council Workshop regarding Historic Preservation. At that meeting, Council received information regarding the current status of the Historic Preservation enabling ordinance, and Council directed Staff to bring forward an item on a Neighborhood Preservation Overlay. This overlay was originally brought forward by staff as an option during the original historic preservation discussion in 2006.

Neighborhood Protection standards have come into existence due in large part to combating the consequences of teardowns in older and established neighborhoods. Typically, when teardowns occur they are replaced by new structures that may or may not be compatible with the surrounding neighborhood. However, communities have broadened the use of neighborhood protection standards to deal with other neighborhood issues such as an influx of rental housing, parking, or the environment.

These standards may include everything from bulk standards like setback, floor area ratio to number of unrelated people in a household, on-street parking limitations or limits on impervious cover. These protection standards can be in the form of an overlay or of a separate zoning category, as is the case in Bryan.

Staff will be presenting additional information about issues of neighborhood compatibility, using neighborhood protection standards with historic preservation, examples used in other Texas communities, as well as challenges and opportunities for the City.

Budget & Financial Summary: N/A

Attachments:

1. City of Bryan, Residential-Neighborhood Conservation District
2. City of Austin, Residential Design and Compatibility Standards
3. City of Dallas, Neighborhood Stabilization Overlay
4. Out With the Old, In With the New: The Cost of Teardowns, Lane Kendig

Section 130-31 R-NC Residential-Neighborhood Conservation

(a) General Purpose and Description

The R-NC, Residential-Neighborhood Conservation District, is intended to be composed of detached dwelling units on lots of not less than five thousand (5,000) square feet. Dwellings are designed primarily for residential use and do not easily lend themselves to other types of nonresidential uses or rental property. Other uses may be permitted in this district which are compatible to residential uses and occupy structures designed for their intended use and do not infringe upon the residential uses.

(b) Permitted Uses:

- Accessory Structures
- Detached Dwelling Units w/ no more than 2 un-related people
- Essential Municipal Uses
- Group Home / Community Home
- Government (Federal or State) Owned structures, facilities, and uses
- Home Occupations
- Place of Worship
- Private Utilities (no storage yards)
- Real estate sales offices during the development of residential subdivisions, but not to exceed three (3) years
- Schools
- Temporary Structures for uses incidental to construction work on the premises, which said buildings shall be removed upon the completion or abandonment of construction work.

(c) Conditional Uses:

- Accessory Dwelling Unit
- Accessory Structure if greater than the standards set forth in Section 130-3(a)
- Bed and Breakfast
- Boarding (Lodging) House
- Child Care - Class B
- Community Center /Recreation Center
- Country Club or Golf Course
- Detached Dwelling Units w/ no more than 4 un-related people
- Duplex
- Funeral Home/Mortuary
- Municipal Services Support Facilities
- Neighborhood Services
- Nursing Home (Retirement Home)
- Patio Home (Zero Lot Line Dwelling)
- Police Station
- Professional Offices (In the Eastside Historic District, the Building must also be used as a primary dwelling by the owner, managing partner or majority shareholder of the business occupying the building.)

- Townhouses

(d) *Lot Area, Height, and Setback Requirements:*

Refer to Building Setbacks and Lot Standards, Article IV, Chapter 62, Bryan City Code.

(e) *Parking Regulations:*

Refer to Access and Off-Street Parking, Article VI of Chapter 62, Bryan City Code.

(f) *Other Regulations:*

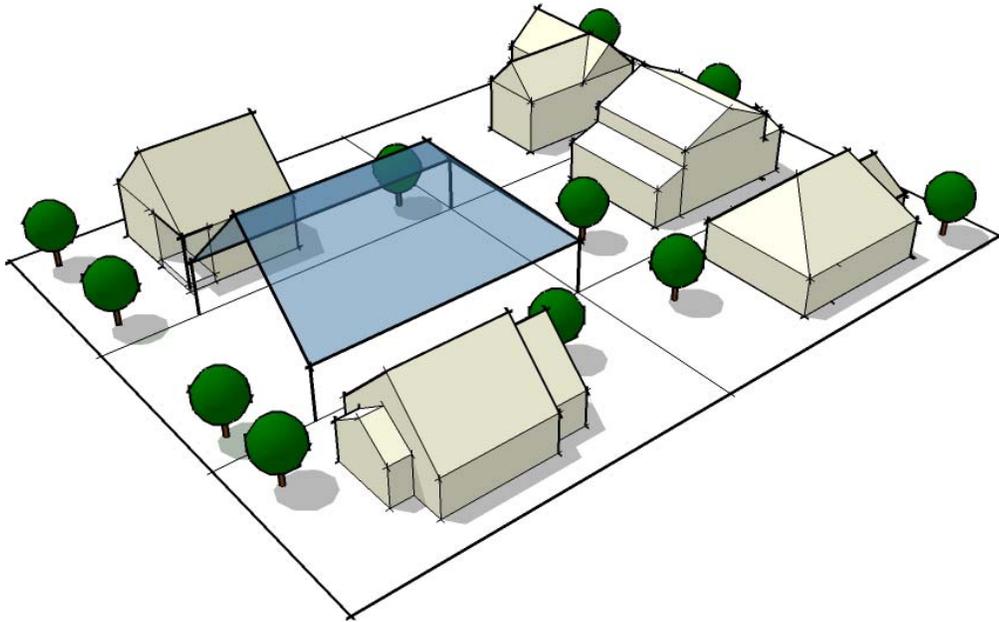
- (1) As established by all other applicable sections and/or ordinances.
- (2) Wireless telecommunication facilities shall be allowed only as provided for in Section 130-34.
- (3) Foster children residing in licensed foster care homes shall not be included in the calculation of the number of unrelated individuals living together in a single dwelling unit. Licensed foster care homes shall comply with any state mandated restrictions on the number of children permitted to reside in the dwelling unit.
- (4) Any dwelling unit permitted in this zoning district may have a second family comprised entirely of individuals related by blood, marriage or adoption, residing therein on a temporary basis for a period not exceeding six (6) months in any calendar year.

(g) *Special Requirements:*

- (1) No temporary structures, such as recreational vehicles, travel trailers, construction trailers, or mobile homes may be used for on-site dwelling purposes
- (2) Open storage is prohibited (except for materials for the resident's personal use or consumption, i.e. firewood, gardening materials, etc.)
- (3) Where activity has ceased for one (1) or more years on a property where the most recent land use is a permitted use in this district, a site plan shall be filed in accordance with the provisions of the Non-Residential & Multi-Family Development, Article III of Chapter 62, Bryan City Code, before activity on the property may resume. Detached dwellings, patio homes, townhouses, and duplexes are exempt from this provision.
- (4) Duplex, patio home, and townhouse dwellings permitted conditionally in this district shall conform to standards as specified in Section 130-33.
- (5) Professional offices, permitted conditionally in this district shall have one driveway. The minimum dimensions shall be 37 feet long by 18 feet wide so as to accommodate four vehicles on the site.
- (6) Professional offices, conditionally permitted in this district shall have a minimum of eight percent of the site landscaped.

SUBCHAPTER F: RESIDENTIAL DESIGN AND COMPATIBILITY STANDARDS

Austin, Texas



**APPROVED BY THE CITY COUNCIL
ON SEPTEMBER 28, 2006**

**BASED ON THE JUNE 22, 2006
CITY COUNCIL ORDINANCE AND
SUBSEQUENT AMENDMENTS**

SUBCHAPTER F: RESIDENTIAL DESIGN AND COMPATIBILITY STANDARDS

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ARTICLE 1: GENERAL PROVISIONS

1.1. INTENT

This Subchapter is intended to minimize the impact of new construction, remodeling, and additions to existing buildings on surrounding properties in residential neighborhoods by defining an acceptable buildable area for each lot within which new development may occur. The standards are designed to protect the character of Austin's older neighborhoods by ensuring that new construction and additions are compatible in scale and bulk with existing neighborhoods.

1.2. APPLICABILITY

Except as provided in Section 1.3, this Subchapter applies to property that is:

1.2.1. Within the area bounded by:

- A. Highway 183 from Loop 360 to Ben White Boulevard;
- B. Ben White Boulevard from Highway 183 to Loop 360;
- C. Loop 360 from Ben White Boulevard to Loop 1;
- D. Loop 1 from Loop 360 to the Colorado River;
- E. The Colorado River from Loop 1 to Loop 360; and
- F. Loop 360 from the Colorado River to Highway 183; and

1.2.2. Used for a:

- A. Bed and breakfast (group 1) residential use;
- B. Bed and breakfast (group 2) residential use;
- C. Cottage special use;
- D. Duplex residential use;
- E. Secondary apartment special use;
- F. Single-family attached residential use;
- G. Single-family residential use;
- H. Small lot single-family residential use;
- I. Two-family residential use; or
- J. Urban home special use.

1.3. EXCEPTIONS

- 1.3.1.** This Subchapter does not apply to a lot zoned as a single-family residence small lot (SF-4A) district unless the lot is adjacent to property zoned as a single-family residence standard lot (SF-2) district or family residence (SF-3) district.
- 1.3.2.** This Subchapter does not apply to the approximately 698.7 acres of land known as the Mueller Planned Unit Development, which was zoned as a planned unit development (PUD) district by Ordinance Number 040826-61.
- 1.3.3.** The side wall articulation requirement does not apply to new construction that is less than 2,000 square feet in gross floor area and that is less than 32 feet in height.

1.4. CONFLICTING PROVISIONS

- 1.4.1.** To the extent of conflict, this Subchapter supersedes:
 - A. Section 25-2-492 (Site Development Regulations);
 - B. Section 25-2-555 (Family Residence (SF-3) District Regulations);
 - C. Section 25-2-773 (Duplex Residential Use);
 - D. Section 25-2-774 (Two-Family Residential Use);
 - E. Section 25-2-778 (Front Yard Setback for Certain Residential Uses);

- F.** Section 25-2-779 (Small Lot Single-Family Residential Uses); and
- G.** Section 25-4-232 (Small Lot Subdivisions).

1.4.2. To the extent of conflict, the following provisions supersede this Subchapter:

- A.** Section 25-2-1424 (Urban Home Regulations);
- B.** Section 25-2-1444 (Cottage Regulations);
- C.** Section 25-2-1463 (Secondary Apartment Regulations); or
- D.** The provisions of an ordinance designating property as a:
 - 1.** Neighborhood plan (NP) combining district;
 - 2.** Neighborhood conservation (NC) combining district; or
 - 3.** Historic area (HD) combining district.

ARTICLE 2: DEVELOPMENT STANDARDS

2.1. MAXIMUM DEVELOPMENT PERMITTED

The maximum amount of development permitted on a property subject to this Subchapter is limited to the greater of 0.4 to 1.0 floor-to-area ratio or 2,300 square feet of gross floor area, as defined in Section 3.3. Floor-to-area ratio shall be measured using gross floor area as defined in Section 3.3.

2.2. BUILDING HEIGHT

Except where these regulations are superseded, the maximum building height for development subject to this Subchapter is 32 feet. Section 25-2-531 (*Height Limit Exceptions*) does not apply to development subject to this Subchapter, except for a chimney, vent, antenna, or energy conservation or production equipment or feature not designed for occupancy. Building height shall be measured under the requirements defined in Section 3.4.

2.3. FRONT YARD SETBACK

A. Minimum Setback Required

The minimum front yard setback required for development subject to this Subchapter is the lesser of:

1. The minimum front yard setback prescribed by the other provisions of this Code; or
2. The average front yard setback, if an average may be determined as provided in subsection B. below.

B. Average Front Yard Setback

1. An average front yard setback is determined based on the setbacks of each principal residential structure that is built within 50 feet of its front lot line.
2. Except as provided in paragraph 3., the four structures that are closest to the subject property on the same side of the block shall be used in the calculation of average front yard setback. If there are less than four structures on the same side of the block, the lesser number of structures is used in the calculation.
3. If there are no structures on the same side of the block, the four structures that are closest to the subject property and across the street are used in the calculation. If there are less than four structures across the street, the lesser number is used in the calculation. See Figure 1.

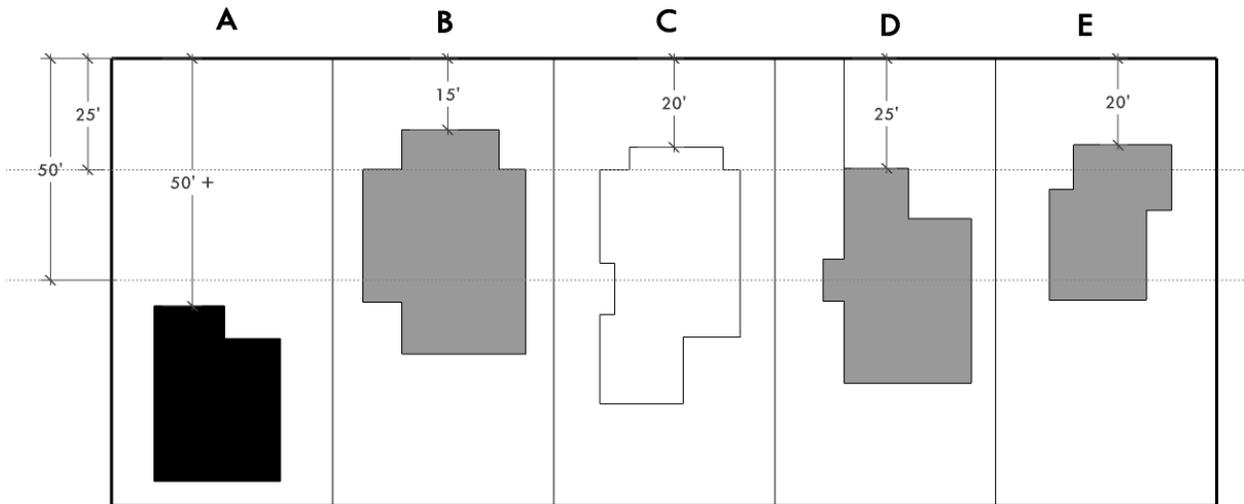


Figure 1: Average Front Yard Setback

In this example, the minimum required front setback in the underlying zoning district is 25 feet. However, because of the variety in existing setbacks of buildings on the same block face, new development on lot C may be located with a setback of only 20 feet, which is the average of the setbacks of lots B, D, and E. The building on lot A is not included in the average because it is located more than 50 feet from the property line.

2.4. REAR YARD SETBACK

The principal structure shall comply with the rear yard setback prescribed by other provisions of this Code. All other structures shall comply with the rear yard setback provisions of this Code, but the minimum rear yard setback may be reduced to five feet if the rear lot line is adjacent to an alley. See Figure 2.

2.5. SIDE YARD SETBACKS

All structures shall comply with the side yard setbacks prescribed by other provisions of this Code.

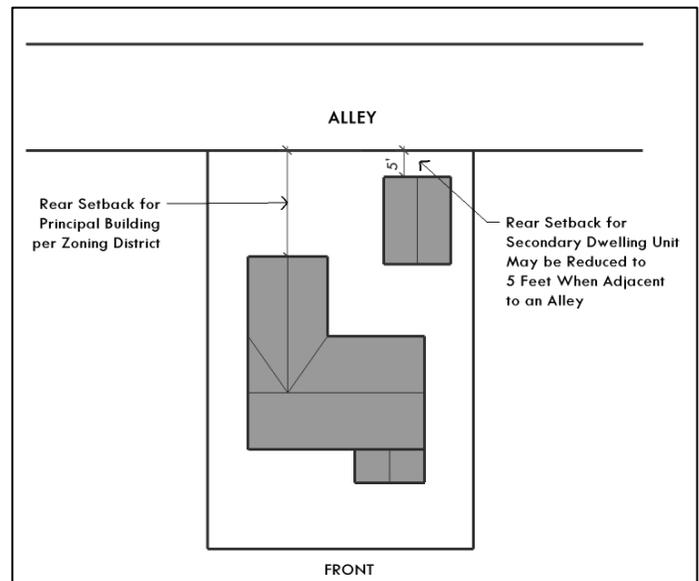


Figure 2: Rear Yard Setback

2.6. SETBACK PLANES

This subsection prescribes side and rear setback planes in order to minimize the impact of new development and rear development on adjacent properties. A structure may not extend beyond a setback plane except as authorized by subsection D. below. The height of a setback plane shall be measured under the requirements defined in Section 3.4.

A. Side Setback Plane

Except as provided in subsection B. below, an inwardly sloping 45-degree angle side setback plane begins at a horizontal line 15 feet directly above the side property line. The 15-foot height of the horizontal line is established for 40-foot deep portions of the lot beginning at the building line and extending to the rear of the lot, except that the last portion at the rear of the lot may be less than 40 feet deep. See Figures 3 through 5.

1. For the first portion, the 15-foot height of the horizontal line is measured at the highest of the elevations of the four intersections of the side lot lines, the building line, and a line 40 feet from and parallel to the building line.
2. For successive portions other than the last portion, the 15-foot height of the horizontal line is measured at the highest of the elevations of the four intersections of the side lot lines and the appropriate two lines that are 40 feet apart and parallel to the building line.
3. For the last portion, the 15-foot height of the horizontal line is measured at the highest of the elevations of the four intersections of the side lot lines, the appropriate line parallel to the building line, and the rear lot line.

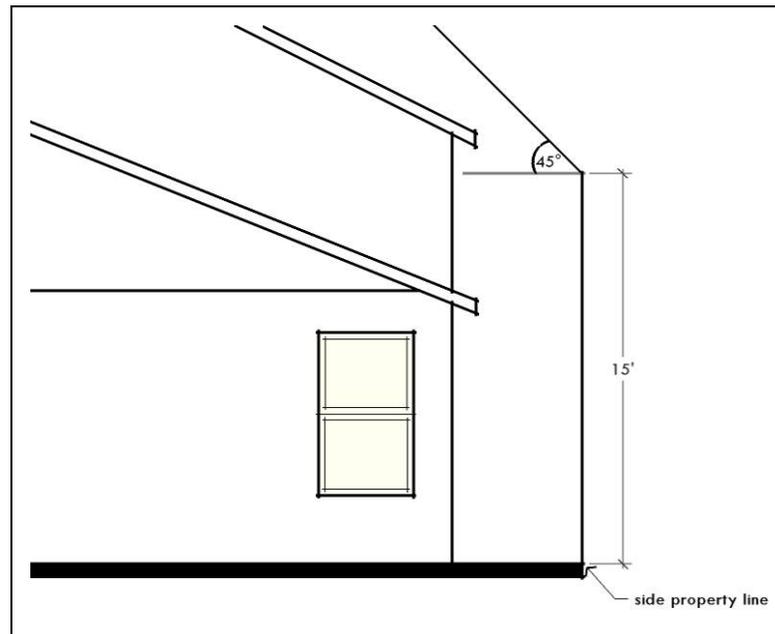


Figure 3: Side Setback Plane Measured From Side Property Line

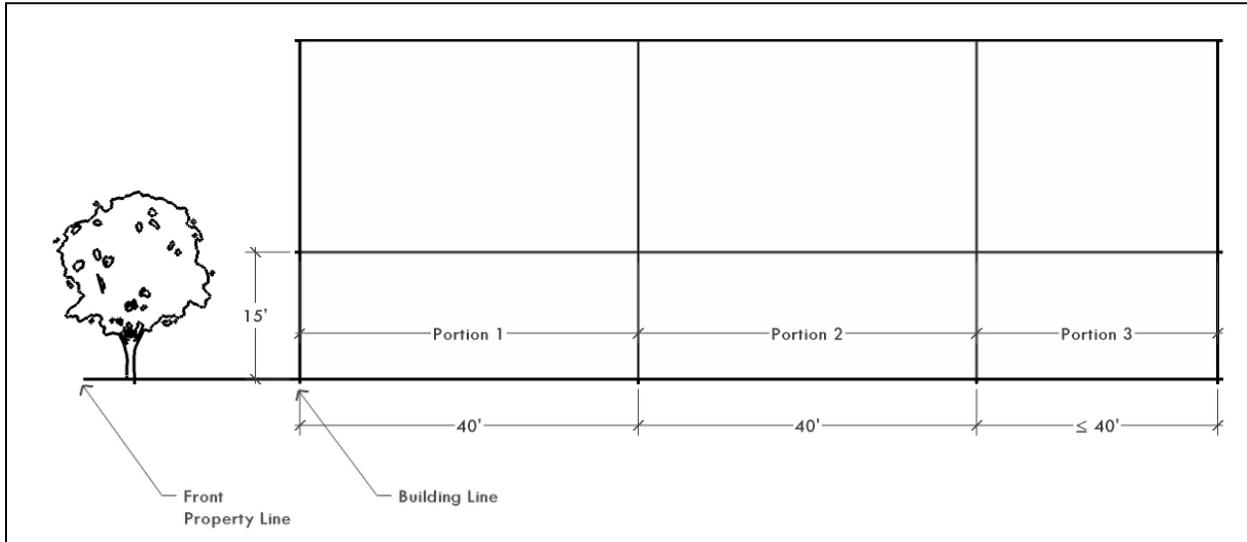


Figure 4: (Elevation View) Dividing Lot into 40-foot Portions to Create Side Setback Planes (Rear Setback Plane Not Shown)

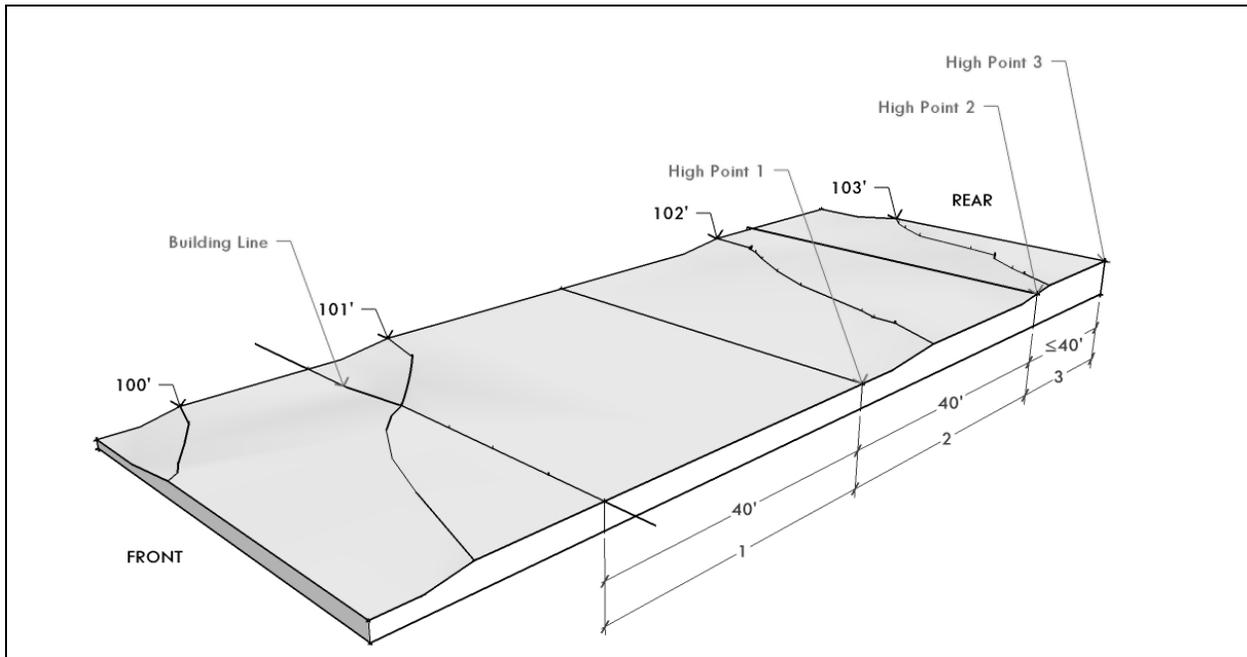


Figure 5: Determining High Points on a Sloping Lot

For each portion of the side setback plane, the 15-foot height of the horizontal line is measured starting from the highest point of the four intersections defining the portion. In this example, topography lines indicate that the lot is sloping downward from the rear to the front of the lot, and from the right to the left. The high points for Portions 1, 2, and 3 are indicated, along with the Building Line.

B. Rear Setback Plane

An inwardly sloping 45-degree angle rear setback plane begins at a horizontal line directly above the rear property line at the same elevation as the horizontal line for the last portion of the side setback plane established in paragraph A.3. See Figures 6 through 9.

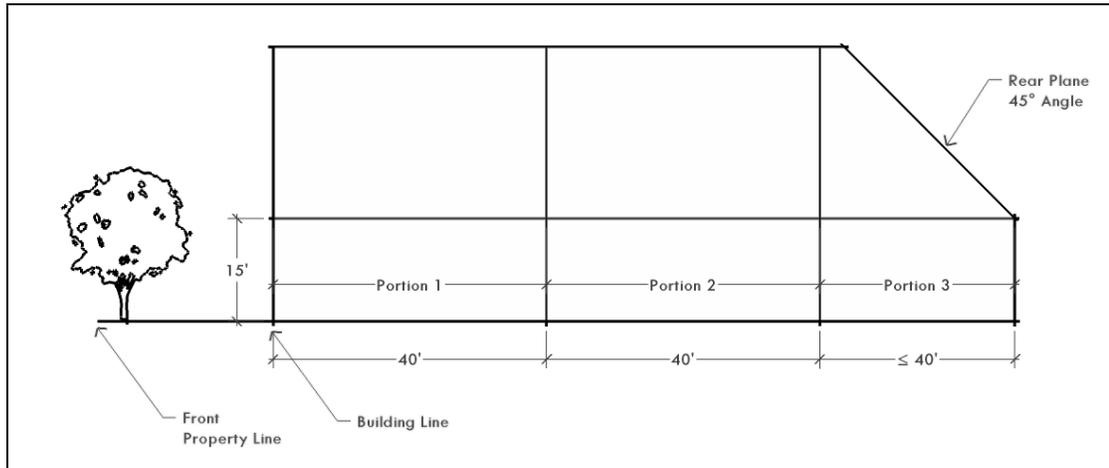


Figure 6: (Elevation View) Rear Setback Plane (Level Ground)

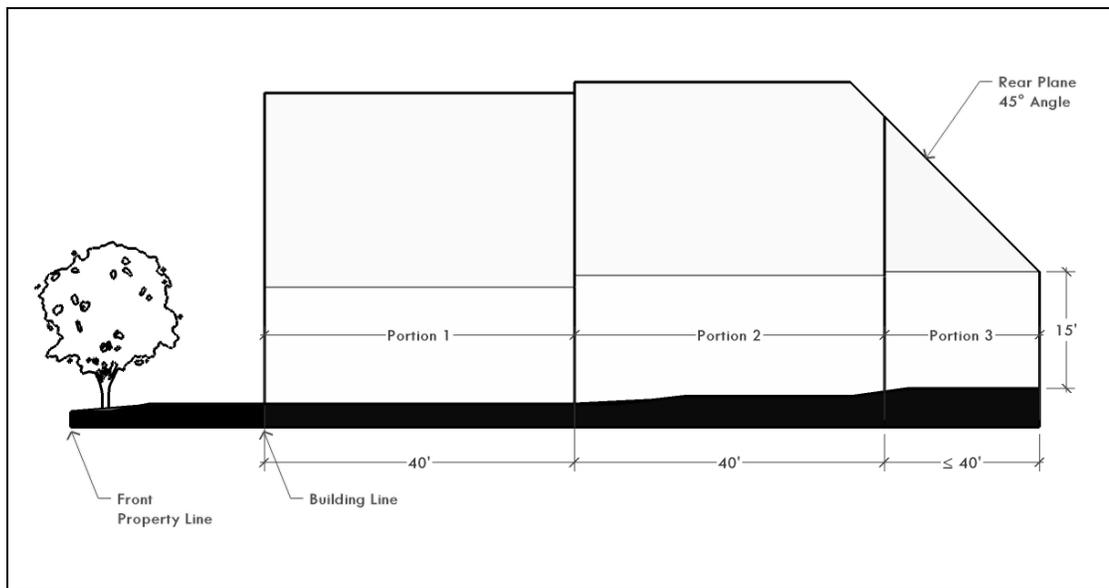


Figure 7: (Elevation View) Rear Setback Plane (Sloping Ground)

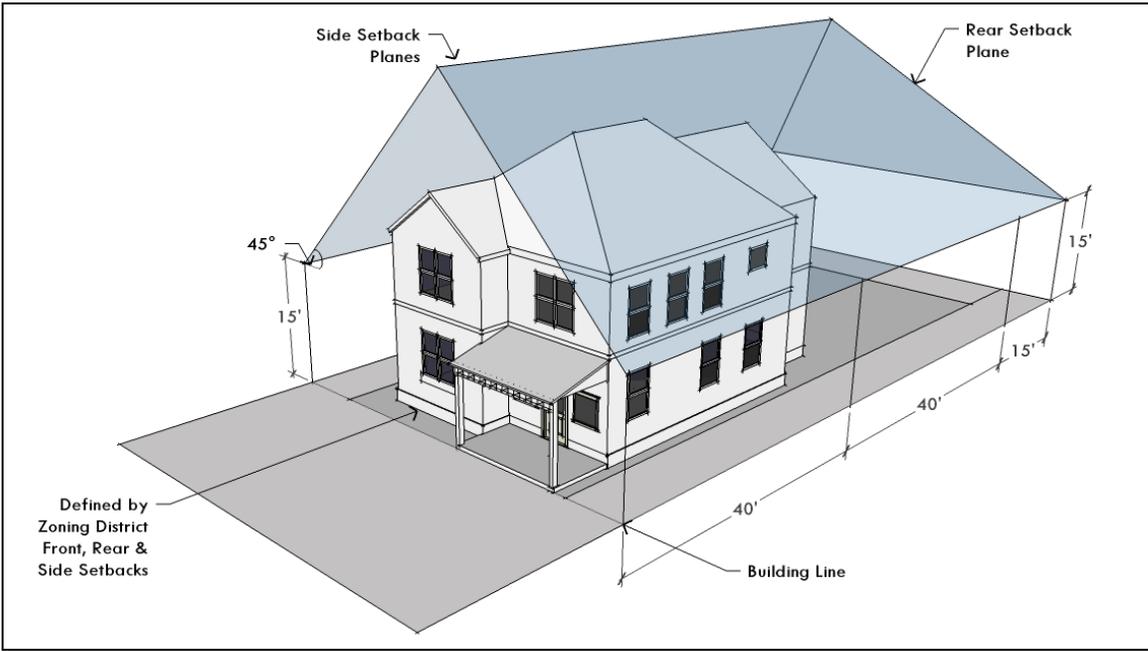


Figure 8: Side and Rear Setback Planes on Level Ground
The side and rear setback planes form a “tent” over the lot, rising from the property lines for 15 feet and then angling in at 45-degree angles from the side and rear. The required front, rear, and side yard setbacks are indicated by the darker shading on the ground.

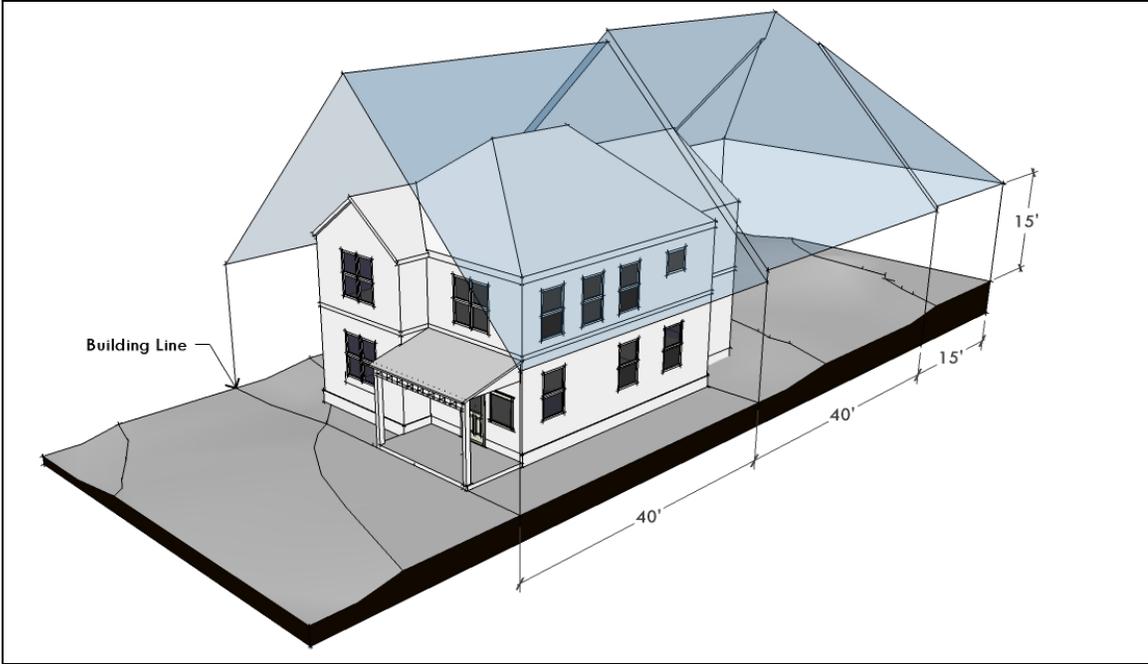


Figure 9: Side and Rear Setback Planes on Sloping Ground

C. Buildable Area

The buildable area, as defined in Section 3.3., consists of the smallest area within the front, side, and rear yard setbacks; maximum height limit; and the combined side and rear setback planes. See Figures 10 and 11.

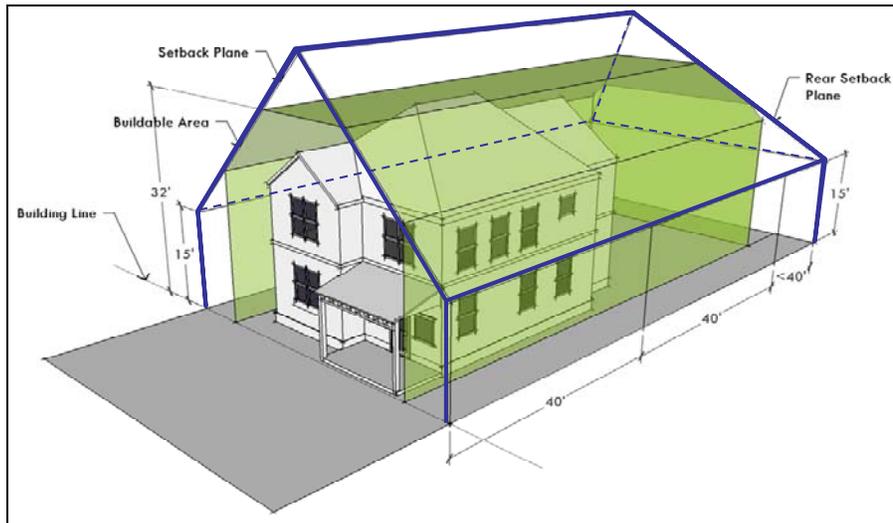


Figure 10: Buildable Area (Combination of Yard Setbacks, Maximum Height Limit, and Setback Planes)

The heavy blue line indicates the "tent" formed by the side and rear setback planes. The buildable area is the smallest area included within the front, side, and rear yard setbacks; maximum height limit; and the combined side and rear setback planes (shown here as the green area).

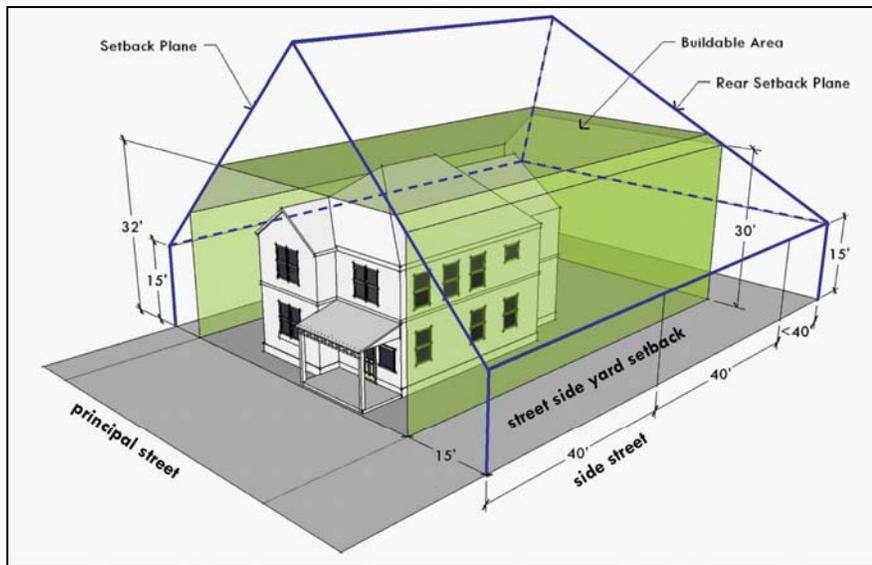


Figure 11: Buildable Area on Corner Lot

This figure shows the same concept illustrated in Figure 10 but for a corner lot that has a greater street side yard setback requirement. In this example, the minimum required street side yard setback in the underlying zoning district is 15 feet. Because the side setback plane is measured from the side property line, the height of the setback plane is 30 feet at the 15-foot street side yard setback line.

D. Side Setback Plane Exception for Existing One-Story Buildings

This subsection applies to a one-story building that was originally constructed or received a building permit for the original construction before October 1, 2006, and that is remodeled to add a second story.

1. For the portion of the construction that is within the footprint of the building that was originally constructed or received a building permit before October 1, 2006, the inwardly sloping 45-degree angle side setback plane begins at a horizontal line directly above the outermost side wall at a height that is equal to the height of the first floor wall plate that was originally constructed or received a building permit before October 1, 2006, plus ten feet. See Figure 12.
2. For the portion of the construction that is outside the footprint of the building that was originally constructed or received a building permit before October 1, 2006, the side setback plane prescribed by subsection A. above applies.

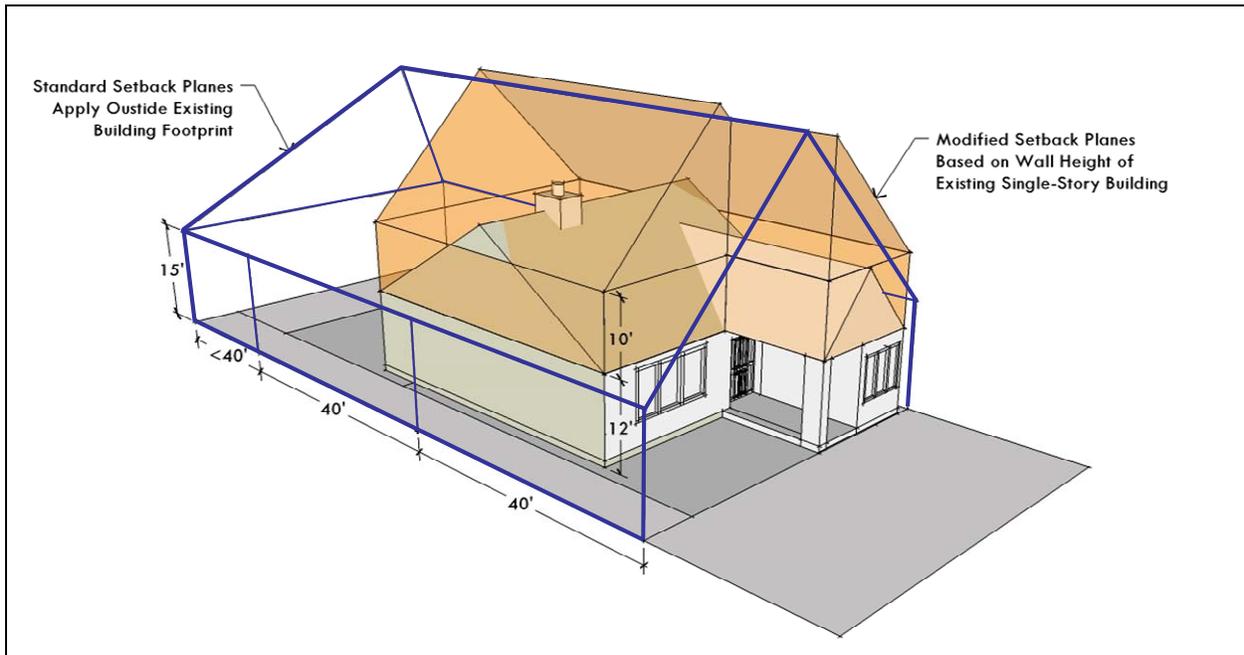


Figure 12: Side Setback Plane Exception for Existing Single-Story Buildings

The side setback planes for an existing single-story building are determined based on the height of the sidewall. In this example, the horizontal line that forms the base of the setback plane is placed ten feet above the sidewall height (12 feet). The revised plane rises above the standard setback plane within the area of the building footprint. The standard setback planes created in sections 2.6.A. and B. apply outside of the existing footprint.

E. Exceptions

A structure may not extend beyond a setback plane, except for:

1. A structure authorized by the Residential Design and Compatibility Commission in accordance with Section 2.8. below;
2. A roof overhang or eave, up to two feet beyond the setback plane;
3. A chimney, vent, antenna, or energy conservation or production equipment or feature not designed for occupancy; and
4. Either:

a. 30-Foot Side-Gabled Roof Exception

A side-gabled roof structure on each side of the building, with a total horizontal length of not more than 30 feet, measured from the building line along the intersection with the side setback plane (See Figure 13.); or

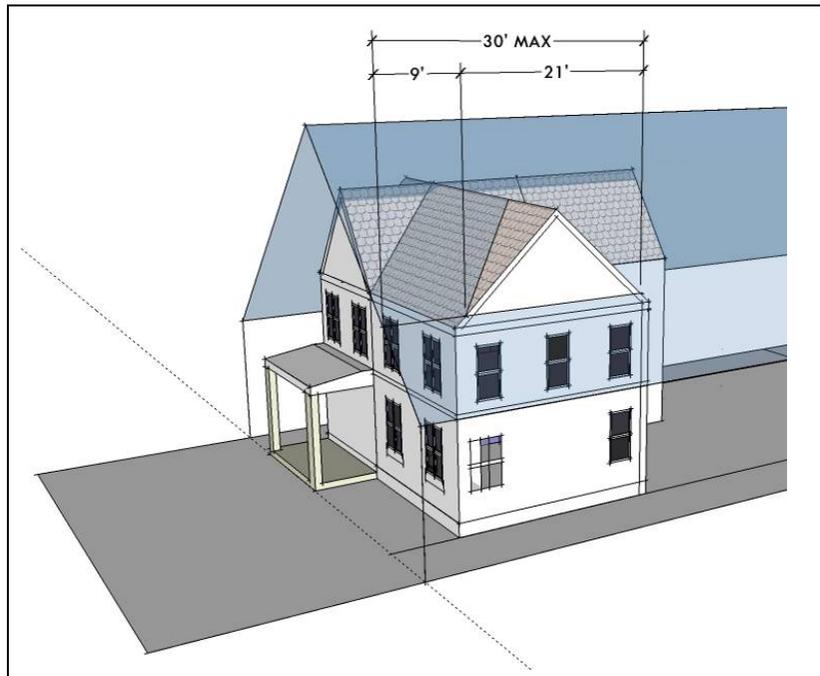


Figure 13: Side-Gabled Roof Exception

A side-gabled roof may project through the side setback plane for a horizontal distance of up to a maximum of 30 feet, measured from the building line. In this example, the gable intrudes into the setback plane beginning 9 feet behind the building line. Therefore, the maximum length of the gable intrusion would be 21 feet.

b. Gables Plus Dormers Exception

- (i) Gables or a shed roof, with a total horizontal length of not more than 18 feet on each side of the building, measured along the intersection with the setback plane (See Figures 14 and 17.); and
- (ii) Dormers, with a total horizontal length of not more than 15 feet on each side of the building, measured along the intersection with the setback plane. (See Figures 15 and 16.)

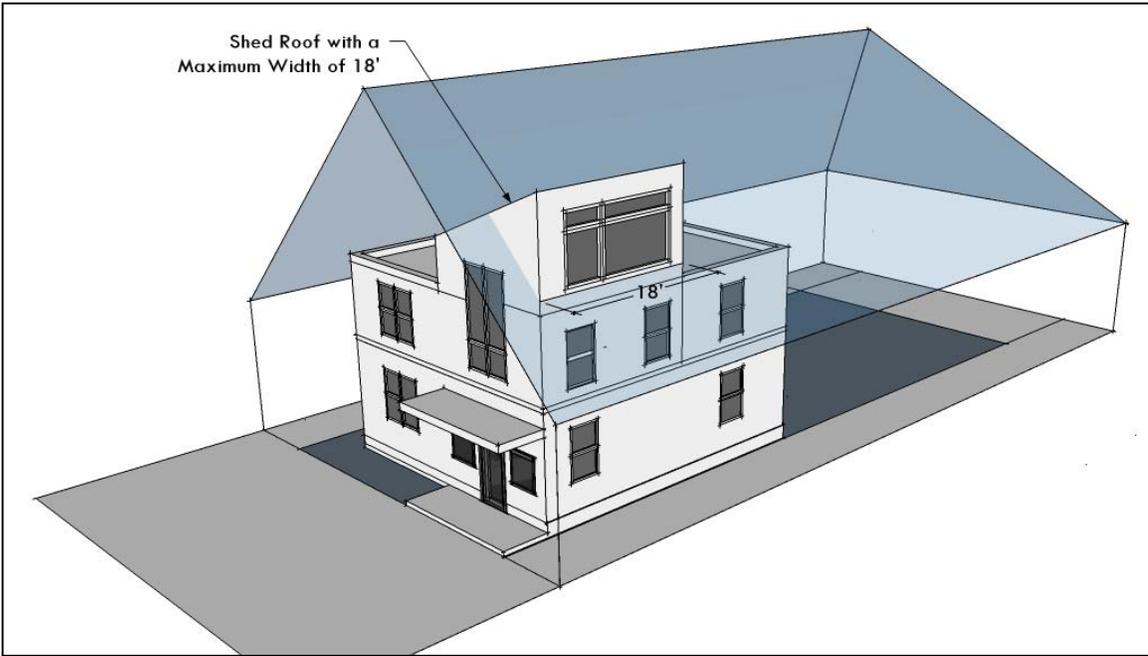


Figure 14: 18-foot Exception for Shed Roof

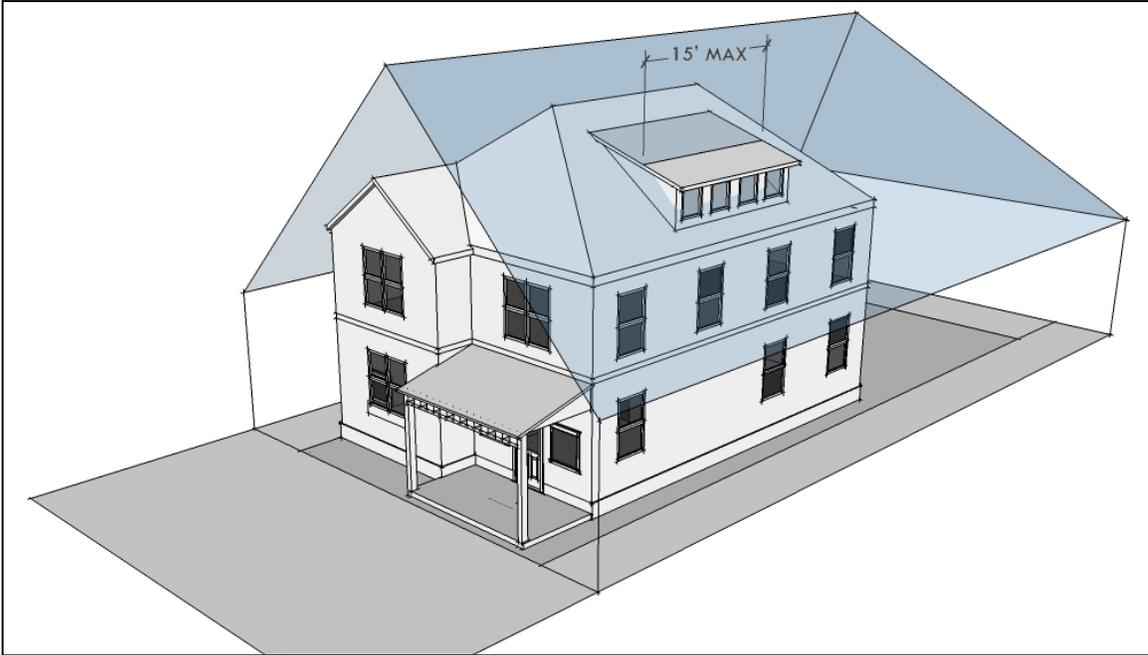
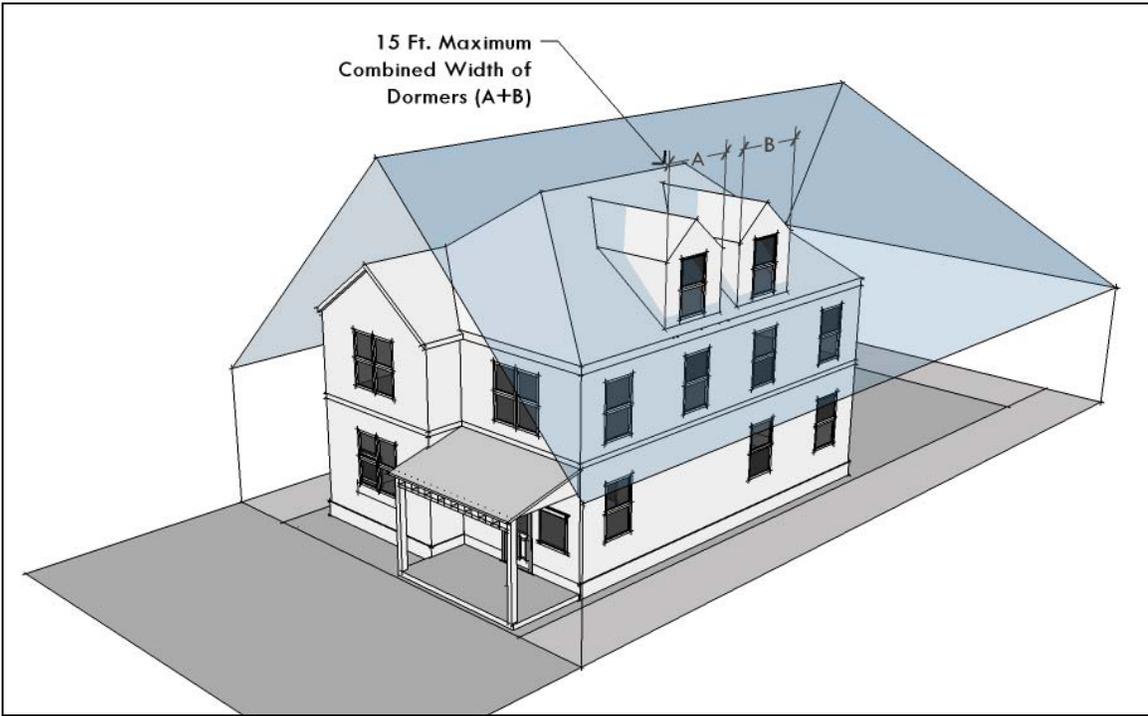


Figure 15 & 16: Dormer Exception (Gable or Shed)
One or more dormers with a combined width of 15 feet or less on each side of the roof may extend beyond the setback plane. The width of the dormer is measured at the point that it intersects the setback plane.

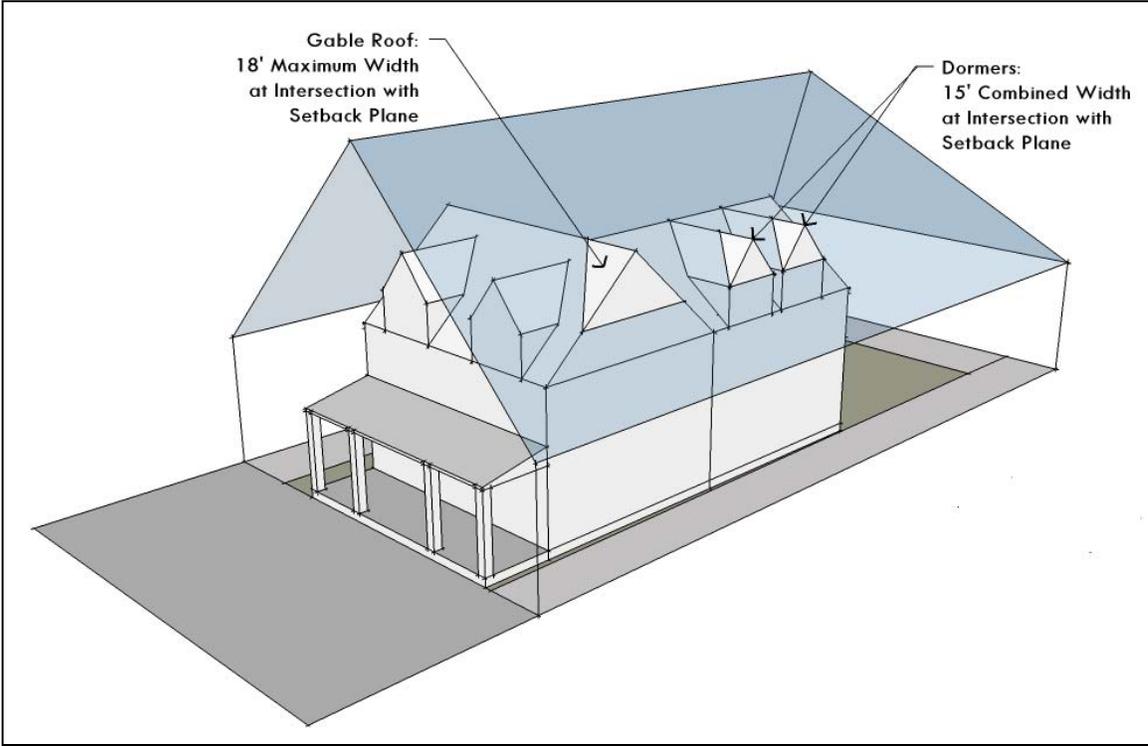


Figure 17: Combination of Roof and Dormer Exceptions

2.7. SIDE WALL ARTICULATION

A side wall of a building that is more than 15 feet high and is an average distance of 15 feet or less from an interior lot line may not extend in an unbroken plane for more than 32 feet along a side lot line. To break the plane, a perpendicular wall articulation of not less than four feet, for a distance along the side property line of not less than 10 feet, is required. See Figures 18 through 20.

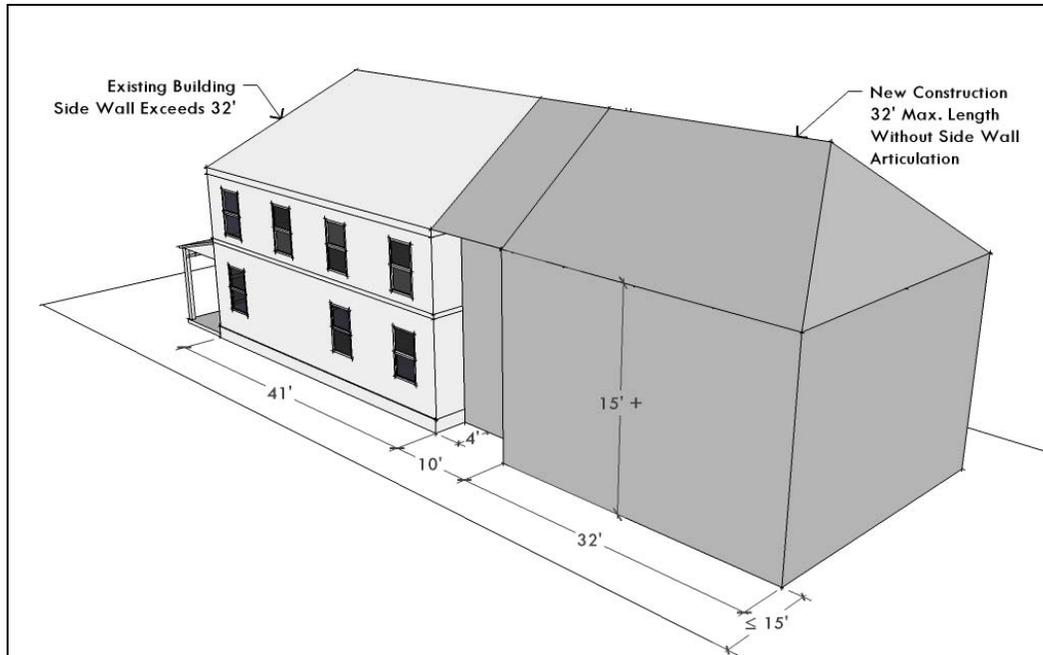


Figure 18: Side Wall Articulation (Existing Side Wall Exceeds 32 Feet)

Articulation is required for side walls on additions or new construction that are 15 feet or taller and located within 15 feet of the side lot line. No wall may extend for more than 32 feet without a projection or recession of at least 4 feet in depth and 10 feet in length.

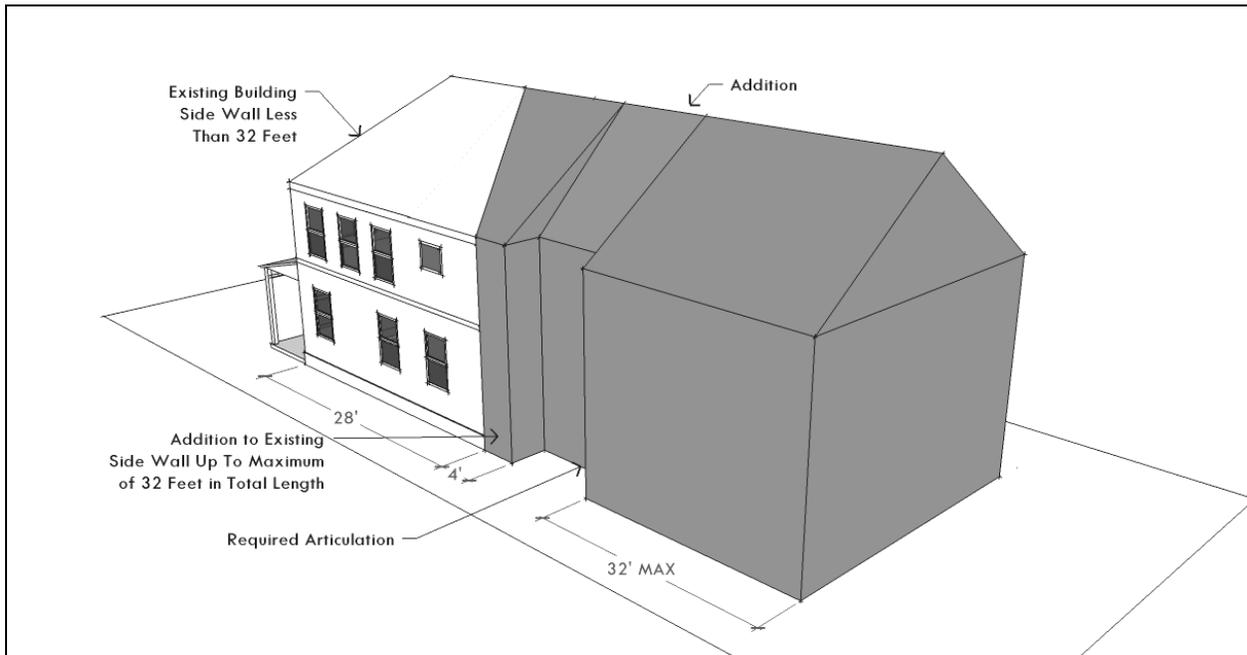


Figure 19: Side Wall Articulation (Existing Side Wall Less Than or Equal to 32 Feet)
An addition to an existing building may extend a side wall up to a maximum of 32' in total length without articulation.

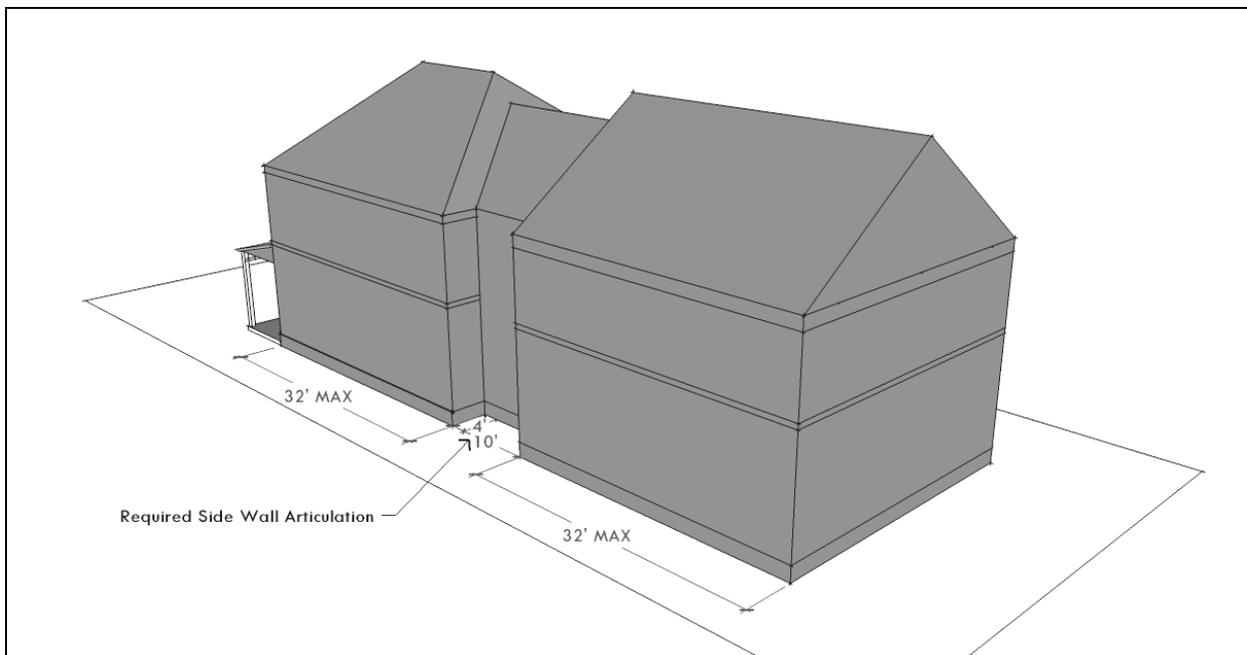


Figure 20: Side Wall Articulation (New Construction)
All new construction must meet the sidewall articulation standards.

2.8. MODIFICATIONS BY THE RESIDENTIAL DESIGN AND COMPATIBILITY COMMISSION

This section provides for modification by the Residential Design and Compatibility Commission of certain requirements of this Subchapter for a proposed development.

2.8.1. Modifications that May be Approved

The Residential Design and Compatibility Commission may approve:

- A.** An increase of up to 25 percent in the:
 - 1. Maximum floor-to-area ratio or maximum square footage of gross floor area;
 - 2. Maximum linear feet of gables or dormers protruding from the setback plane;
 - 3. Maximum side wall length before articulation is required; or
 - 4. Maximum height of the side or rear setback plane; or
- B.** A decrease of up to 25 percent in the minimum depth or length of a required wall articulation.

2.8.2. Modification Procedures

A. Application and Notice

- 1. A person may request a modification listed in subsection 2.8.1. above by filing an application with the Director on a form provided by the Director.
- 2. Not later than the 14th day after an application is filed, the Director shall:
 - a.** Mail notice of the application to:
 - (i) Each notice owner of property immediately adjacent to the subject property;
 - (ii) The appropriate neighborhood association, if any; and,
 - (iii) The neighborhood plan team, if any; and
 - b.** Post notice of the application in accordance with Section 25-1-135 (*Posting of Signs*).

B. Approval Criteria

The Residential Design and Compatibility Commission may, after a public hearing, approve a modification if it determines that the proposed development is compatible in scale and bulk with the structures in the vicinity of the development. In making this determination, the commission shall consider:

- 1. The recommendation of the neighborhood plan team, if any;
- 2. The development's:

- a. Compliance with neighborhood design guidelines, if any;
 - b. Consistency with the streetscape of the properties in the vicinity;
 - c. Consistency with the massing, scale, and proximity of structures located on either side of or behind the development;
 - d. Impact on privacy of adjacent rear yards; and
 - e. Topography and lot shape; and
3. For a development of an entire block, whether the development will have a negative impact on adjacent property.

C. Additional Criteria for Historic Properties

The Residential Design and Compatibility Commission may not approve a modification for:

1. A local, state, or national historic landmark, if the modification would adversely impact the landmark's historic status;
2. A "contributing structure," as defined in Section 25-2-351 (*Contributing Structure Defined*), or a contributing structure in a National Register historic district, if the modification would adversely impact its status as a contributing structure; or
3. A property listed as Priority 1 or Priority 2 on the City's most current survey of historic assets, if the modification would adversely impact the property's architectural integrity or change its priority rating.

D. Appeals

An interested party may appeal the Residential Design and Compatibility Commission's decision to the City Council.

E. Board of Adjustment May Grant Variances

This subsection does not prohibit the Board of Adjustment from granting a variance from a requirement of this Subchapter under 25-2-473 (*Variance Requirements*).

2.9. MODIFICATIONS WITHIN NEIGHBORHOOD PLAN (NP) COMBINING DISTRICTS

Under Section 25-2-1406 of the Code, an ordinance zoning or rezoning property as a neighborhood plan (NP) combining district may modify certain development standards of this subchapter.

ARTICLE 3: DEFINITIONS AND MEASUREMENT

3.1. BUILDABLE AREA

In this Subchapter, BUILDABLE AREA means the area in which development subject to this Subchapter may occur, and which is defined by the side and rear setback planes required by this Subchapter, together with the area defined by the front, side, and rear yard setbacks and the maximum height limit.

3.2. BUILDING LINE

In this Subchapter, BUILDING LINE means a line that is parallel to the front lot line and that intersects the principal residential structure at the point where the structure is closest to the front lot line, including any allowed projections into the front yard setback. See Figure 21.

3.3. GROSS FLOOR AREA

In this Subchapter, GROSS FLOOR AREA has the meaning assigned by Section 25-1-21 (*Definitions*), with the following modifications:

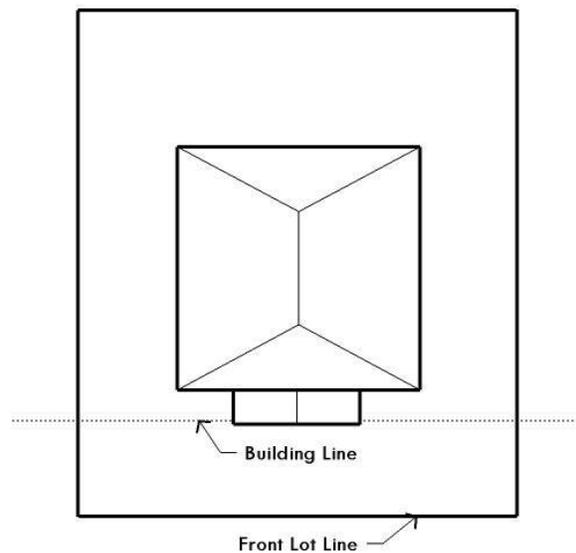


Figure 21: Building Line

3.3.1. The following shall be included in the calculation of gross floor area:

- A. The portion of a second or third story of a building that is covered by a roof, including a porch, portico, breezeway, passageway, or corridor;
- B. A mezzanine or loft; and
- C. The covered portion of a parking area, except for:
 1. Up to 450 square feet of:
 - a. A detached rear parking area that is separated from the principal structure by not less than 10 feet; or
 - b. A parking area that is open on two or more sides, if it does not have habitable space above it; and
 2. Up to 200 square feet of an attached parking area if it used to meet the minimum parking requirement.

3.3.2. The following shall be excluded from the calculation of gross floor area:

- A. A ground floor porch, including a screened porch;
- B. A habitable portion of a building that is below grade if:
 - 1. It does not extend beyond the first-story footprint; and
 - 2. The finished floor of the first story is not more than three feet above the average elevation at the intersections of the minimum front yard setback line and the side property lines; and
- C. A habitable portion of an attic, if:
 - 1. The roof above it is not a flat or mansard roof and has a slope of 3 to 12 or greater;
 - 2. It is fully contained within the roof structure;
 - 3. It has only one floor;
 - 4. It does not extend beyond the footprint of the floors below;
 - 5. It is the highest habitable portion of the building; and
 - 6. Fifty percent or more of the area has a ceiling height of seven feet or less.

3.3.3. An area with a ceiling height greater than 15 feet is counted twice.

3.4. HEIGHT

For purposes of this Subchapter, the HEIGHT of a building or setback plane shall be measured as follows:

- 3.4.1.** Height shall be measured vertically from the average of the highest and lowest grades adjacent to the building to:
 - A. For a flat roof, the highest point of the coping;
 - B. For a mansard roof, the deck line;
 - C. For a pitched or hip roof, the average height of the highest gable; or
 - D. For other roof styles, the highest point of the building.
- 3.4.2.** The grade used in the measurement of height for a building or setback plane shall be the lower of natural grade or finished grade, except height shall be measured from finished grade if:
 - A. The site's grade is modified to elevate it out of the 100-year floodplain; or
 - B. The site is located on the approximately 698.7 acres of land known as the Mueller Planned Unit Development, which was zoned as a planned unit development (PUD) district by Ordinance Number 040826-61.
- 3.4.3.** For a stepped or terraced building, the height of each segment is determined individually.

- 3.4.4.** The height of a structure other than a building is measured vertically from the ground level immediately under the structure to the top of the structure. The height of a fence on top of a retaining wall is measured from the bottom of the retaining wall.
- 3.4.5.** A maximum height is limited by both number of feet and number of stores if both measurements are prescribed, regardless of whether the measurements are conjoined with “or” or “and.”

3.5. NATURAL GRADE

3.5.1. In this Subchapter, NATURAL GRADE is:

- A.** The grade of a site before it is modified by moving earth, adding or removing fill, or installing a berm, retaining wall, or architectural or landscape feature; or
- B.** For a site with a grade that was legally modified before October 1, 2006, the grade that existed on October 1, 2006.

3.5.2. Natural grade is determined by reference to an on-ground survey, City-approved topographic map, or other information approved by the director. The director may require an applicant to provide a third-party report that shows the natural grade of a site.

SEC. 51A-4.507. NEIGHBORHOOD STABILIZATION OVERLAY.

(a) Findings and purpose.

(1) The city council finds that the construction of new single family structures that are

incompatible with existing single family structures within certain established neighborhoods is detrimental to the character, stability, and livability of that neighborhood and the city as a whole.

(2) The neighborhood stabilization overlay is intended to preserve single family neighborhoods by imposing neighborhood-specific yard, lot, and space regulations that reflect the existing character of the neighborhood. The neighborhood stabilization overlay does not prevent construction of new single family structures or the renovation, remodeling, repair or expansion of existing single family structures, but, rather, ensures that new single family structures are compatible with existing single family structures.

(3) The yard, lot, and space regulations of the neighborhood stabilization overlay are limited to facilitate creation and enforcement of the regulations.

(4) Neighborhood stabilization overlay districts are distinguished from historic overlay districts, which preserve historic residential or commercial places; and from conservation districts, which conserve a residential or commercial area's distinctive atmosphere or character by protecting or enhancing its significant architectural or cultural attributes.

(b) Definitions. In this section:

(1) BLOCKFACE means the linear distance of lots along one side of a street between the two nearest intersecting streets. If a street dead-ends, the terminus of the dead-end will be treated as an intersecting street.

(2) CORNER SIDE YARD is a side yard abutting a street.

(3) DISTRICT means a neighborhood stabilization overlay district.

(4) HEIGHT PLANE means a plane projecting upward and toward the subject lot from a point six feet above grade at the center line of the street adjacent to the front property line, and extending to the intersection of a vertical plane from the front building line with the maximum height established by the neighborhood stabilization overlay and continuing at the same angle to the maximum height of the underlying zoning. The height plane is illustrated below.

(5) INTERIOR SIDE YARD is a side yard not abutting a street.

(6) MEDIAN means the middle number in a set of numbers where one-half of the numbers are less than the median number and one-half of the numbers are greater than the median number. For example, 4 is the median number of 1, 3, 4, 8, and 9. If the

set of numbers has an even number of numbers, then the median is the average of the two middle numbers. For example, if the set of numbers is 1, 3, 4, 6, 8, and 9, then the median is the average of 4 and 6, or 5.

(7) NEIGHBORHOOD COMMITTEE means the owners of at least 10 properties within a proposed district.

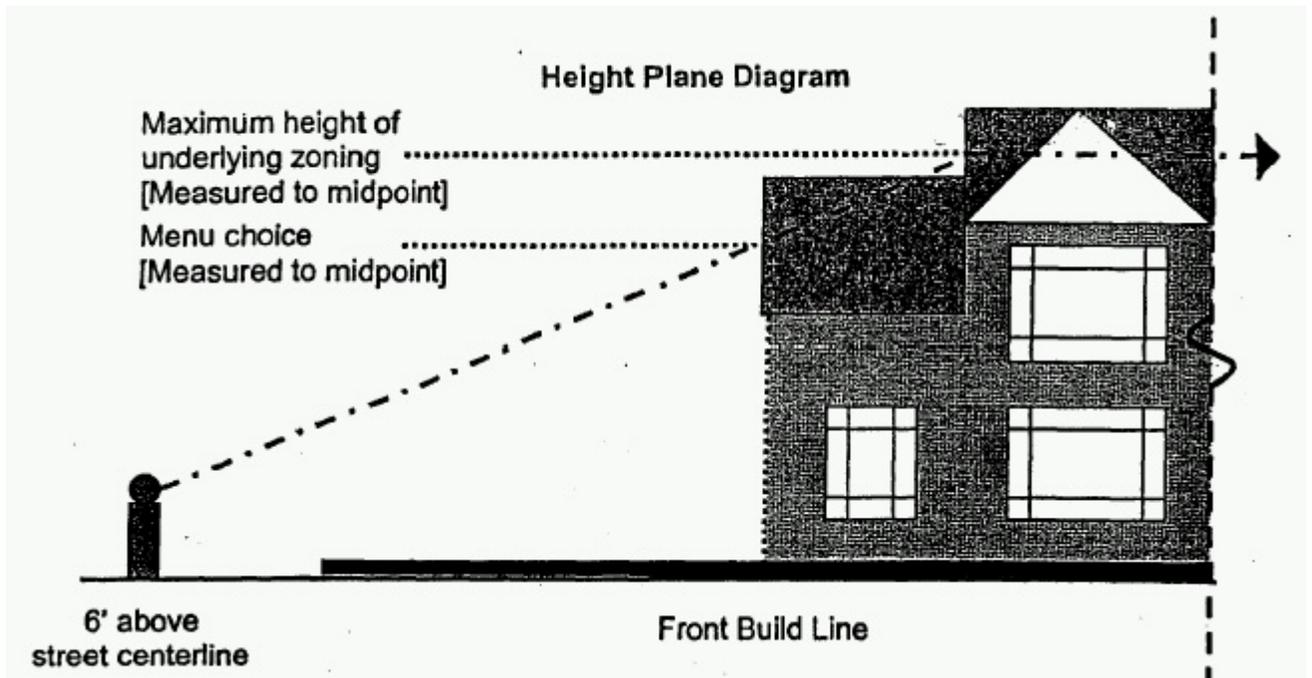
(8) SINGLE FAMILY STRUCTURE means a main structure designed for a single family use,

without regard to whether the structure is actually used for a single family use. For example, a house containing a child care facility is a single family structure, but an institutional building, such as a church or school, converted to a single family use is not.

(c) Petition, initiation, and process.

(1) Except as provided in this subsection, the procedures for zoning amendments contained in Section 51A- 4.701, "Zoning Amendments," apply.

(2) A neighborhood stabilization overlay may only be placed on an area that is zoned as a single family residential district and developed primarily with single family structures. A neighborhood stabilization overlay may not be placed on a conservation district or a neighborhood with a historic overlay. A neighborhood stabilization overlay may be placed on an established neighborhood even though it contains vacant lots. A neighborhood stabilization overlay may not be placed on a new subdivision being developed on a tract of land.



(3) A district must contain at least 50 single family structures in a compact, contiguous area, or be an original subdivision if the subdivision contains fewer than 50

single family structures. Boundary lines should be drawn to include blockfaces on both sides of a street, and to the logical edges of the area or subdivision, as indicated by a creek, street, subdivision line, utility easement, zoning boundary line, or other boundary. Boundary lines that split blockfaces in two should be avoided. The minimum area of a subdistrict within a district is one blockface.

(4) The neighborhood committee may request a petition form by submitting a request to the department on a form furnished by the department. The request must include the boundaries of the proposed district. The boundaries of the proposed district must comply with the requirements of this section.

(5) As soon as possible after the department provides the neighborhood committee with a petition form, the department shall conduct a neighborhood meeting. The department shall give notice of the neighborhood meeting to all property owners within the proposed district as evidenced by the last approved city tax roll at least 10 days prior to the neighborhood meeting.

(6) The petition must be on a form furnished by the department. The petition form must include a map of the boundaries of the proposed district, a list of the proposed regulations, the name and address of all property owners within the proposed district, and a statement that by signing the petition the signers are indicating their support of the district.

(7) The petition must be submitted with the following:

(A) The dated signatures of property owners within the proposed district in support of the proposed district.

(i) For a proposed district with 50 or fewer single family structures, the signatures on the petition must be dated within three months following the date of the neighborhood meeting.

(ii) For a proposed district with more than 50 single family structures, the signatures on the petition must be dated within six months following the date of the neighborhood meeting.

(B) The application fee, if applicable.

(i) If a petition is signed by more than 50 percent but less than 75 percent of the lots within the proposed district, the application fee must be paid.

(ii) If a petition is signed by 75 percent or more of the lots within the proposed district, the application fee is waived.

(iii) If the proposed district is authorized pursuant to Section 51A-4.701(a)(1), the application fee is waived.

(C) A map showing the boundaries of the proposed district.

(D) A list of any neighborhood associations that represent the interests of property owners within the proposed district.

(E) A list of the names and addresses of the neighborhood committee members.

(F) Any other information the director determines is necessary.

(8) A public hearing to create a district is initiated by submission of a complete petition or by authorization pursuant to Section 51A-4.701(a)(1).

(9) For purposes of Section 51A-4.701, "Zoning Amendments," once a complete petition has been submitted to the director, the neighborhood stabilization overlay shall be treated as a city plan commission authorized public hearing. If the district is initiated by petition, the notice of authorization contained in Section 51A-4.701(a)(1) is not required.

(10) Along with any other required notice, at least 10 days prior to consideration by the city plan commission, the director shall mail a draft of the proposed neighborhood stabilization overlay ordinance and a reply form to all owners of real property within the area of notification. The reply form must allow the recipient to indicate support or opposition to the proposed neighborhood stabilization overlay and give written comments. The director shall report to the city plan commission and the city council the percentage of replies in favor and in opposition, and summarize any comments.

(e) Neighborhood stabilization overlay.

(1) In general.

(A) A neighborhood stabilization overlay is not required to specify standards for each category of yard, lot, and space regulation in this subsection, but if it does, the regulations must be selected from the options described in this subsection.

(B) The yard, lot, and space regulations of the neighborhood stabilization overlay must reflect the existing conditions within the neighborhood.

(C) Except as provided in the neighborhood stabilization overlay, the yard, lot, and space regulations of the underlying zoning remain in effect.

(D) The provisions of Section 51A-4.704(c), regarding renovation, remodeling, repair, rebuilding, or enlargement of nonconforming structures, remain in effect.

(E) The yard, lot, and space regulations of the neighborhood stabilization overlay apply only to single family structures.

(F) The yard, lot, and space regulations of the neighborhood stabilization overlay must be read together with the yard, lot, and space regulations in Division 51A-

4.400. In the event of a conflict between the neighborhood stabilization overlay and Division 51A-4.400, the neighborhood stabilization overlay controls.

(2) Front yard setback. The minimum front yard setback must be within the range between the setback of the underlying zoning and the median front yard setback of single family structures within the district. This range may allow for a front yard setback that is greater or lesser than the front yard setback of the underlying zoning. For example, if the minimum front yard setback of the underlying zoning is 25 feet and the median front yard setback of single family structures within the district is 40 feet, the minimum front yard setback selected must be between 25 feet and 40 feet.

(3) Corner side yard setback. The minimum corner side yard setback must be within the range between the setback of the underlying zoning and the median corner side yard setback of single family structures within the district. This range may allow for a corner side yard setback that is greater or lesser than the corner side yard setback of the underlying zoning. For example, if the minimum corner side yard setback of the underlying zoning is five feet and the median corner side yard setback of single family structures within the district is 20 feet, the minimum corner side yard setback selected must be between five feet and 20 feet.

(4) Interior side yard setback. The minimum interior side yard setback must be within the range between the setback of the underlying zoning and the median interior side yard setback of single family structures within the district. This range may allow for an interior side yard setback that is greater or lesser than the interior side yard setback of the underlying zoning. For example, if the minimum interior side yard setback of the underlying zoning is five feet and the median interior side yard setback of single family structures within the district is 20 feet, the minimum interior side yard setback selected must be between five feet and 20 feet. The minimum side yard setback for each side yard may be separately established. For example, the minimum side yard on the west side may be five feet, and the minimum side yard on the east side may be 10 feet.

(5) Height.

(A) If the petition is signed by the owners of more than 50 percent but less than 60 percent of the lots within the district, height regulations may not be included in the overlay.

(B) If the petition is signed by the owners of 60 percent or more of the properties within the district, the maximum height selected must be selected from the following:

(i) If the median height of single family structures within the district is 20 feet or more, then the district height must be within the range between the median height of single family structures within the district and the maximum height of the underlying zoning.

(ii) If the median height of single family structures within the district is less than 20 feet, then the district height must be either the median height of single family structures within the district or within the range between 20 feet and the maximum height of the underlying zoning.

(C) If the district regulates height, single family structures may not be built to heights that exceed the height plane, except structures listed in Section 51A-4.408(a)(2). Height is measured from grade to the midpoint between the lowest eaves and the highest ridge of the structure. See Paragraph 51A-2.102(47), "Height."

(6) Garage access, connection, location. The garage access, connection, or location must be selected from one or more of the following options:

(A) garage access of:

- (i) front entry;
- (ii) side entry; or
- (iii) rear entry;

(B) garage connection of:

- (i) attached to the single family structure; or
- (ii) detached from the single family structure; and

(C) garage location:

- (i) in front of the single family structure;
- (ii) to the side of the single family structure; or
- (iii) to the rear of the single family structure. (Ord. 26161)

ZONING PRACTICE

June 2005

AMERICAN PLANNING ASSOCIATION



➔ ISSUE NUMBER SIX

PRACTICE CONTEXTUAL INFILL



Out With the Old, in With the New: The Cost of Teardowns

By Lane Kendig

Teardowns destroy an existing structure to build another.

Usually that replacement building is much larger and often of a different character than the original, affecting both adjacent landowners and the neighborhood—sometimes positively, but most often negatively.

From a regulatory perspective, it is important for planners to know that the economic conditions leading to a teardown result from social issues unrelated to design. Teardowns often occur in desirable neighborhoods where the housing stock is sound, but dated. A variation of the teardown can occur in neighborhoods where the housing stock is deteriorated. Many deteriorating neighborhoods would benefit from teardowns and replacement buildings, especially if the loss is not to buildings with significant historic value.

Obsolescence is a major reason for teardowns. Houses in an aging neighborhood may be a minimum of 30 to 50 years old. Bathrooms, kitchens, bedrooms, and storage areas are too small for modern tastes. Styles, colors, equipment, and materials are also dated. Age-related problems, including cracks, heating, air conditioning, plumbing, and general restoration often need attention. Less frequently, structural problems can lead to a teardown, especially in undesirable areas. The perfect setting for a teardown is where the home is out of sync with the perceived needs of the individuals interested in purchasing the property.



ⓘ The implications of teardowns are potentially far-reaching, altering both the physical character and economic status of long-established neighborhoods in both cities (top image) and suburbs (bottom image).



ECONOMICS AND TEARDOWNS

Economic conditions differentiate the teardown from a newly built too-big house. A lot with a potential teardown has a very high land value relative to the existing house. For new housing, the general rule is that lot value should be no more than 25 percent of the total value of the property, although this will not necessarily remain con-

stant over time. For teardowns, the lot is likely to be 50 percent or more of the value of the property, and in many cases, the land value will exceed the value of the house. If a purchaser can buy a vacant lot in a similar location, it makes little sense to spend substantially more for a teardown lot. The market must support the teardown as a rational investment because the total cost will include the lot, the initial house, demolition costs, and the cost of the new house.

The economic conditions that lead to teardowns also have an impact on neighboring property owners. As land values inflate and taxes rise (a condition accelerated by teardowns) current residents—many of whom are longtime neighborhood residents—may oppose teardowns if they feel they are being taxed out of their homes. Others may look at the increase as an opportunity to profit and move up to more modern homes. Such disparate views make consensus difficult.

Neighborhood character is reflected in lot size, house size and height, and vegetation. In new subdivisions filled with too-big houses, the community as a whole may react negatively to this characterization, but most residents of those subdivisions will see little threat from the house next door. On the other hand, teardowns alter the existing character of the neighborhood. For planners, this physical alteration, in combination with the resulting eco-

Editor's Note: Few issues define the modern planning dilemma like residential teardowns. The number of research inquiries on teardowns logged by APA's Planning Advisory Service reflects planners' concerns that teardowns are a clear and present threat to community character, housing affordability, and historic preservation. There is also no shortage of media coverage on this issue as it plagues older suburbs, gentrifying urban neighborhoods, and resort communities. In a sense, communities at risk for teardowns are victims of their own success. But are teardowns a symptom of a throwaway culture or a necessary byproduct of modernization? In this issue of *Zoning Practice*, planning consultant Lane Kendig examines the nature of this land-use phenomenon and provides helpful zoning tools for planners grappling with it. An in-depth analysis of teardowns and similar development patterns is available in *Too Big, Boring, or Ugly: Planning and Design Tools to Combat Monotony, the Too-Big House, and Teardowns*, (PAS Report No. 528).

conomic impact, makes the problem far more difficult to address.

Teardowns can also mean a mass gentrification of the neighborhood, threatening a community's supply of affordable housing. The most vulnerable neighborhoods are those where housing costs are lowest, because the market considers the neighborhood desirable but the dwellings are not in keeping with modern tastes. Teardowns and gentrification reduce the community's ability to ensure the availability of housing for municipal employees, service workers, and working-class residents.

PREDICTING TEARDOWNS

Predicting the potential for teardowns before they occur is an essential first step in combating them. Teardowns are market-driven. The vulnerable neighborhood is a highly desirable one, and market trends help identify a teardown problem in its early stages. In larger cities, neighborhoods must be studied for signs of changing economics (See "The Two Faces of Gentrification: Can Zoning Help?" *Zoning News*, June 2002), while in the suburbs, the whole community is likely to exhibit the change. Access to public transportation, waterfronts, recreational opportunities, and tourist amenities can also help create the shift (See "Short-Term Vacation Rentals: Residential or Commercial Use?" *Zoning News*, March 2002).

Teardowns are typically found in communities where the average size of a new house is well above the national average. Census data about the community and regional comparisons can also reveal a potential for teardowns. For example, a community whose average income is increasing at a faster rate than its neighbor's has a greater potential for teardowns.

Teardown locations are somewhat predictable. First, they occur in neighborhoods where the standard unit is among the smallest in the community. Depression-era homes and those from the late 1940s to 1950s are particularly vulnerable. The 900- to 1,400-square-foot house is at risk because it is about half the size of the average home in 2000. A second indicator of vulnerability is the number of stories. For example, ranch houses are vulnerable in an era when two-story homes are the standard.

Planners can identify at-risk neighborhoods by first driving around town and then looking for a gap between neighborhood house size and zoning district regulations, using a comparison of average house size and footprint with the building pad defined by the



⌚ A late-19th-century working-class "cottage" now abuts a 10,000-square-foot single-family home in this gentrifying Chicago neighborhood.

setbacks. On small lots, teardowns or major reconstruction (with the same net impact) are likely anywhere the house footprint is less than 60 percent of the building pad.

If community officials can identify at-risk neighborhoods before problems arise, it will be much easier to find solutions. Regulations are far easier to revise when they do not create a burden for buyers or residents who want to upgrade a home.

REGULATING TEARDOWNS

Zoning tools to regulate teardowns include setback, building coverage, floor area ratio, height, and building volume ratio. Once a neighborhood is identified as being at risk for teardowns,



⌚ Proper height and bulk regulations would have prevented the construction of this three-story condominium building in Chicago's Bungalow Belt.

the first objective for planners is to create a process that allows for "reasonable" home expansion but also preserves neighborhood character. The realities of modern living require planning efforts to acknowledge and permit the expansions. Without it, long-term residents and potential buyers may look elsewhere to live.

Ideally, regulations will allow normal neighborhood upgrades to retain vitality and prevent the infiltration of the too-big house, which turns the neighborhood over to another economic class. A complete study would look at typical floor plans of the neighborhood's dominant housing style, exploring various expansion strategies to provide guidance for homeowners. Such a study is best done by an architect who can understand and handle floor plan revisions. The planner and architect would then work together to evaluate the zoning standards. Making architectural, lot layout, and design concepts available to the public will educate both the community and its builders.

If the neighborhood has a tradition of context-sensitive home additions, planners can determine if they provide a reasonable basis on which to draft new regulations.

Setback. Setbacks that allow for a major expansion of building size should be reduced. The goal is modest expansion, not filling the building pad. This simple and effective tool works for existing neighborhoods where homes are built to the setback line and have similar ground coverage. In such cases, planners must address building height. For example, in neighborhoods with single-story houses, room additions happen on the ground floor, which may mean a less drastic cutback in the building pad and a height reduction to maintain the one-story character of the neighborhood.

Cape Cod-style conversions require a tight setback range. For example, current zoning might have setbacks permitting a 7,700-square-foot house on a 10,000-square-foot lot, though the neighborhood has homes averaging 1,100 to 1,500 square feet. Revising the setbacks to permit a 3,200-square-foot house is less damaging to the neighborhood's character.

Building Coverage. Building coverage follows the model of setbacks. Because it regulates ground coverage only, there are no essential differences between it and setback as a useful technique for teardown regulation. Building coverage also requires a height standard. The choice between setbacks and building coverage might be determined by the standard currently in use.

Floor Area Ratio (FAR). The model here is similar but requires more care because floor area is a more precise measure and directly involves the potential of multiple floors. The need to consider height is even more critical because FAR does not distinguish between ground- and upper-floor expansion. Using FAR may be a better tool for regulating teardowns in neighborhoods with a mix of housing styles, where the homes were built by different developers but are similar in size.

Height. Height is an important element in neighborhoods where the number of stories and roof pitches are defining features. Dramatic changes in height can be a problem. It is likely that in neighborhoods with ranch, Cape Cod, or split-level housing styles the maximum height established by zoning district regulations is substantially higher than the height of the existing building stock. The standards should be amended to respect existing character. Even in neighborhoods with two-story houses, the original homes may have low roof pitches—5/12, for example. With end gables, adding 15 feet to the rear of a 24-foot-wide house would raise the roof from five feet to a little more than eight feet. If the remodeling involved a change in roof pitch to 9/12, the roof height would nearly triple, from five feet to more than 14.6 feet. While the three-foot change would be merely noticeable, a 9.6-foot change is similar to adding a story.

Building Volume Ratio (BVR). BVR is the most flexible of the regulations because changes are tracked automatically, forcing the architect to make trade-offs. In general, BVR is not recommended as a primary regulatory tool for teardowns in existing neighborhoods because it requires detailed explanation and a change in the regulation format most familiar to residents.

The one exception is the community where historic development patterns create significant size gradients. For example, in many New England seaport towns, captain's houses transition quickly to small, historic Cape Cods—all within a few blocks. While it is possible to divide the neighborhood into smaller sections with overlays designating areas of varying BVRs, this may result in mapping battles with homeowners wanting to move the overlay boundaries for personal gain. Thus, building volume can be tied to a radius around the lot so overlay district lines need not be drawn.

ADDITIONAL MEASURES

In older neighborhoods with mature trees, house size is by no means the only determinant of community character. The saplings planted during the development of older subdivisions may now be as tall as 60 feet, adding to both the economic and aesthetic value of the neighborhood. Vegetation is equally important in determining character. A strict requirement to preserve front-yard vegetation will help preserve that character.

Communities with at-risk neighborhoods have two additional volume measures where the increase in floor area or BVR is offset by an increase in landscape volume ratio.



Landscape Volume Ratio (LVR). LVR measures soft vegetative volume. In mature residential communities this is as important as building volume because streets are likely to be lined with mature trees and the lots covered with mature landscaping. In many older neighborhoods landscape volume may be larger than building volume. A teardown is likely to result in a loss of mature vegetation. The LVR provides a means of measuring this element of neighborhood character.

Site Volume Ratio (SVR). SVR combines the two volume measures (BVR and LVR) and is calculated by subtracting the BVR from the LVR. Thus, a positive SVR indicates a landscape volume greater than the building volume. A negative value indicates building vol-

ume as the dominant value. The SVR is a means of calculating the existing community character by taking into account both the building and the landscaping.

The SVR offers some flexibility in that it rewards the landowner who preserves existing trees and plants new ones with more volume. Landowners who remove existing trees to make room for expansions are subject to reduced building volumes. Once teardowns begin, teardown proponents value regulatory flexibility. If a community's character can be retained, teardown opponents are less likely to be as adamant.

The precision and flexibility of the SVR makes it easier to demonstrate the impact of various options. For example, a family may want a house with 10-foot ceilings and a 9/12 roof pitch, but the house exceeds the SVR. The relative impact of different ceiling heights or roof pitches can be instantly calculated, making trade-offs between roof, ceilings, and floor areas easier to understand. Perhaps only one room needs the higher ceiling, and the roof pitch can be retained to meet the regulations. Also, adding four 12-foot-high evergreen trees might avoid resizing one room.

REGULATIONS TO PRESERVE COMMUNITY CHARACTER

Identifying at-risk neighborhoods by calculating the floor area permitted within the setbacks and comparing it with existing and proposed new homes in residential districts around the community also helps planners determine deck placement and the location of other outdoor elements when the building pad is full.

The first step is to do a maximum floor area calculation based on setbacks and then compare it to average buildings on the block. Using old building permits or plans will make the task much easier.

The second step is to compare maximum height regulations with what already exists in the neighborhood. The difference between possible and existing heights represents a potential character problem for the neighborhood if teardowns occur. If the difference is slight, and unless there are unique architectural or historical characteristics involved, the impact from teardowns will be minimal.

The third step is to consider the building possibilities within the setbacks. For example, is there room for decks or other outdoor accessory structures common to the neigh-

neighborhood? If build-out eliminates such elements, code changes are needed irrespective of the teardown issue. When developers in new neighborhoods pack the site, variance requests come pouring in within a year.

Because teardowns typically occur on smaller, older lots, simple and conventional regulations (see subsections below) are better than complex volume controls because they require adjustments rather than a new generation of regulation. If regulations change slightly—well before the first teardown—residents and homebuilders will likely not take issue with them. New regulations will invariably generate greater suspicion than the modification of old ones. Further, explaining new concepts to existing residents is challenging because new regulations always invoke fear. The exception is when new regulations are done as part of a comprehensive update of the code. When new standards are applied community-wide, and not exclusively to neighborhoods at risk for teardowns, residents feel less singled out and thus less resistant to change.

Setback and Height. Chances are, existing regulations address only setback and height. As a result, regulations need to be revised to conform to the neighborhood's existing houses—old homes are not necessarily built to those standards—to keep the new houses in character with the neighborhood.

The first step is to determine the building coverage of existing homes and then to compare it to the setbacks in the zoning ordinance. This is best done with high-quality aerial photos or GIS data placing the building footprint directly on the lot. Anyone familiar with building practice can gauge height, and a planner and building inspector can make close determinations with minimal measurements. Better yet are floor plans of typical neighborhood units that a jurisdiction may have on file.

The second step is to draft regulations that permit reasonable increases in house size so genuine community improvements remain possible. Home expansions must not destroy community character, and there is no model for appropriate expansion size. Providing a size range and using imaging tools (e.g., build-out scenarios juxtaposing photos of existing units with proposed units) can help residents measure the overall effect of a change.

Adjusting setbacks may create problems for garages or patios. Fortunately, this

is easily alleviated. Most ordinances have a section of permitted intrusions into setbacks, including chimneys, roofs, stairs, and other elements. When increasing setbacks to limit house size, the impact on outdoor spaces or secondary buildings is an important consideration.

It may be more difficult to adjust height standards because it is likely that existing homes are substantially below the maximum allowable height predicated by the ordinance. A common maximum height for many communities is 35 feet. Ranch houses built in the 1950s scarcely approach 20 feet. Cape Cods and split- and tri-levels also have heights substantially lower than 35 feet. A height reduction in such neighborhoods limits the possible detrimental impact of teardowns. Even in neighborhoods with two-story



The public process at work in a suburban community inundated with teardowns.

houses, roof heights may be well below 35 feet due to shallower roof pitches than those currently popular.

Building Coverage and Floor Area Ratio (FAR). If communities have standards for building coverage and FAR, limiting home size on teardown sites can be accomplished by adjusting the general ordinance standard. If a community is going to use building coverage and FAR with setback and height standards, a careful study of existing houses can determine allowable changes, including increases to the standards.

Overlay Districts. Overlay districts keep replacement houses in character with neighboring properties, permitting the protection of a wide variety of neighborhoods. Once neighborhood standards are identified, the critical

element is the purpose statement for the overlay district. The purpose of the overlay is to protect the character of the existing neighborhood, which was built to a standard substantially lower than the one permitted by the district standards. In effect, the neighborhood is over-zoned because out-of-scale buildings are permitted. Planners can explain to citizens that the neighborhood is different in character than areas built to the district standards, and that the overlay's reduced bulk standards are needed to preserve character. The overlay designation offers what other districts do not: preserving lot size and limiting homes to a compatible size. Creating a new zoning category simply clutters the ordinance. The uses in the district will not change. Bulk standards for the overlay add only a line to a table in the code for bulk and lot standards.

Neighborhood Conservation Districts.

Neighborhood conservation districts are variations of overlay districts. They apply additional setback, floor area, or height standards for neighborhoods built well below the maximum intensity of the zoning district. These are areas where the character would be damaged or destroyed by homes built to the maximum standards of the district. Such district designation is also useful where the zoning has changed over the years so that lots built under the old zoning became non-conforming under the new regulations.

Downzoning. Downzoning is necessary in many older cities and some older suburbs. Milwaukee and Chicago underwent comprehensive rezoning in recent years. Those cities found blocks or sections of neighborhoods given far more intensively than was necessary for the existing building stock. Suburban landowners often oppose downzoning, but in cities, protecting the character of an existing neighborhood of similar buildings is likely to garner support.

Waiting Period. This approach gets to the heart of the teardown phenomenon—the economic conditions that create it. In Lake Forest, Illinois, an old and affluent Chicago rail suburb, most new housing and much old housing is very large, but a portion of the town dating back to its earliest period contains small lots with modest homes. Though many are protected by a historic district designation, some were prime candidates for teardowns.

Lake Forest's code requires a two-year waiting period if a demolition permit is refused. The prospect of a two-year delay before tearing down a recently purchased

building, and then subsequent delay in getting approval, gives the city great negotiating strength to get architects to comply with its concerns about the future new building. The city has had regulations addressing the too-big house for many years.

CONCLUSION

A major challenge to new and old communities across the nation is to maintain the character of the community or neighborhood. Teardowns are largely linked to an overheated economic condition that can render a neighborhood obsolete. Communities with small houses and charming neighborhoods can anticipate this problem. Planning can provide a way to upgrade existing homes without teardowns that totally alter the neighborhood's character, but the time to act is before economic conditions create a demand for those teardowns. The tools described in this issue of *Zoning Practice* will help you achieve that end.

A packet of information on zoning options for teardowns is available to *Zoning Practice* subscribers by contacting Michael Davidson, editor, *Zoning Practice*, at the American Planning Association, 122 South Michigan Avenue, Suite 1600, Chicago, IL 60603, or by sending an e-mail to mdavidson@planning.org.
Lane Kendig is a consultant and a nationally recognized expert in the development of zoning and subdivision strategies.



NEWS BRIEFS

LINGLE

By Stuart Meck, FAICP

The United States Supreme Court has overturned a 25-year-old ruling on what constitutional test should be applied in determining a taking, narrowing the grounds for landowner challenges.

In the case, *Lingle v. Chevron*, decided in May, the Court, in a unanimous opinion written by Justice Sandra Day O'Connor, abandoned the long-standing two-prong takings test of its 1980 decision, *Agins v. City of Tiburon*. The *Agins* Court had held that application of a gen-

eral zoning law to a particular property results in a taking if the ordinance does not "substantially advance legitimate state interests . . . or denies an owner economically viable use of its property." A takings claim could be brought under either prong.

Reconsidering the *Agins* rule, the Court said that the "substantially advances" language is not an appropriate test for determining a taking because "it prescribes an inquiry in the nature of due process"—whether a regulation fails to serve any legitimate governmental objective because it was arbitrary or irrational. The *Agins* language, the Court said, was "regrettably imprecise" and resulted in an ambiguous overlap between takings and due process claims. An additional problem was the practical problem of requiring courts to "scrutinize the efficacy of a vast array of state and federal regulations—a task for which courts are not well suited."

The *Agins* language, the Court said, was "regrettably imprecise" and resulted in an ambiguous overlap between takings and due process claims.

Lingle was not a land-use case. Instead, it involved an attack on the constitutionality of a Hawaii statute that limited the rent that oil companies may charge dealers leasing company-owned stations. The statute's purpose was to prevent concentration of the retail gasoline market and the potential for high prices for consumers by maintaining the viability of independent lessee-dealers.

Chevron's complaint included a takings claim that the statute did not substantially advance the state's asserted interest in controlling retail gas prices. Trial evidence failed to demonstrate that, even if the rent cap did reduce lessee-dealer's costs, they would not pass on savings to consumers and it was likely that the rent cap would discourage oil companies from building new stations for lease. Applying the first prong of the *Agins* test, a federal district court had held the statute constituted an uncompensated taking, and the Ninth Circuit Court of Appeals affirmed.

Justice Anthony Kennedy filed a concurring opinion in which he emphasized that *Lingle* "does not foreclose the possibility that a regulation might be so arbitrary or irrational as to violate due process," and that the failure

of a regulation to substantially advance a government objective is relevant to that inquiry.

Land-use attorneys and law and planning professors contacted by *Zoning Practice* expressed mixed views about the ruling. Professor Daniel R. Mandelker, FAICP, of the Washington University School of Law declared that *Lingle* is "one more step toward the end of the property rights era in takings law." He predicted that "if takings based on partial economic loss will be few and far between, then takings law will have a diminished role in zoning litigation."

Nancy Stroud, AICP, a partner with the law firm of Weiss Serota Helfman Pastoriza Cole & Boniske in Fort Lauderdale, Florida, commented that land-use challenges under a substantive due process theory have "been very difficult for plaintiffs to win in the last several decades, especially in certain federal circuits that require that the government action 'shock the conscience' of the court or

that limit such claims to those involving legislative (versus administrative or quasi-judicial) actions." The analysis in *Lingle*, said Stroud, a member of APA's Amicus Curiae Committee, "confirms the folly of using the substantive due process clause to interfere with legislative decisions in the regulatory field. I would look instead to more litigation based on the equal protection clause, or even the First Amendment, with claims based on alleged discriminatory motive because of the plaintiff's exercise of political speech or based on other improper motives."

Edward Sullivan, a partner with the law firm of Garvey Schubert and Barer in Portland, Oregon, and a member of APA's Amicus Curiae Committee, called *Lingle* "a significant case which clarifies takings law considerably. No longer will landowners be able to threaten state or local governments with a costly battle of experts over whether a regulation is effective in meeting its stated purposes as a taking issue."

"In taking away *Agins*' 'substantially advances' prong as a stand-alone takings test that had inadvertently 'found its way in to our case law,'" says Brian W. Blaesser, a partner with Robinson & Cole in Boston. "The Supreme Court

has perhaps added a measure of strength to that 'diluted constitutional clause' known as substantive due process." But Blaesser added that substantive due process claims are not easy to bring because of another test that federal courts employ: "This test, derived from an *employment* law case, states that before a court may reach the alleged substantive due process violation, a landowner denied an approval must first prove a legitimate claim of 'entitlement' to that approval so as to establish a protected property interest. This test has created an almost insurmountable threshold for plaintiffs whenever land-use approvals are deemed discretionary. Until the Supreme Court clarifies or eliminates this test, substantive due process will never operate at full strength as a remedy for arbitrary or irrational regulation by government."

What remains to be seen, says Alan Weinstein, professor of law at Cleveland State University, "is whether *Lingle* will apply a brake to state courts, such as those in Ohio, which all too often second-guess the substantive correctness of local government's land-use policies in 'as applied' challenges. While there must still be some room for such challenges in states like Ohio, where legislative land-use decisions can be, and routinely are, overturned by popular referendum, hopefully, *Lingle* has sent a clear signal that courts should defer to the legislative policy judgments embodied in land-use regulations."

Jesse J. Richardson Jr., an associate professor in Urban Affairs and Planning at Virginia Tech in Blacksburg, believes that *Lingle's* implications "will be slim to none. The case may foretell of added validity of substantive due process claims, but substantive due process has been slowly gaining steam for years now."

Ben Ockner, an attorney with Berns, Ockner & Greenberger in Cleveland, Ohio, contends that *Lingle* "should not have a significant impact on takings claims arising from a city's unconstitutional application of zoning regulations to a particular property. Where a court determines that the prohibition of a property owner's proposed use of property fails to substantially advance a legitimate governmental interest (a 'substantive due process taking'), the court will be hard-pressed to determine that the property owner did not have a reasonable investment-backed expectation in pursuing that use of the property." Ockner questions whether the Court's comments in *Lingle* regarding the proper standard of review by trial courts in facial

constitutional challenges of municipal ordinances will cause confusion over the proper standard of review in applied constitutional challenges. "Nowhere in *Lingle* does the Court differentiate between the two standards of review, and it may not be clear that *Lingle* was a facial challenge, as was *Euclid v. Ambler Realty Company* [the 1926 U.S. Supreme Court decision that first upheld the constitutionality of zoning upon which the Court relied. It is clear from *Euclid* that zoning regulations which are constitutional on their face may be unconstitutional as applied to specific property under certain circumstances, and that a heightened level of scrutiny is required in an applied challenge."

Michael Berger, a partner with Manatt, Phelps & Phillips in Los Angeles, who has argued several major takings cases before the Supreme Court, is also concerned about the standard of review of government action on due process grounds in the post-*Lingle* environment. "If the standard is an 'anything goes,' or an affirmance if any rationale can be conjured by a court after the fact to support the regulation, then the government will benefit from a laissez-faire type of review." Like Nancy Stroud, he notes that some federal courts of appeal have adopted a "shocks the conscience" test for due process violations, drawing from extreme police misconduct cases that involve involuntary stomach pumping and high-speed chases through residential areas. "But is that what will, or should, happen in land regulation cases?" Berger asks. "Given that the land-use process typically involves lengthy studies and multiple public hearings and decisions, a more apt model would examine the decision and judge it against the Constitution on a less 'shocking' level."

Concerned about how the decision might impact the planning profession, as well as state and local governments, the APA Amicus Curiae Committee filed an amicus brief drafted by Professor Tom Roberts of Wake Forest University Law School and Edward Sullivan. APA urged the court to jettison the "substantially advances" test and argued that courts should not substitute their views of the wisdom or efficacy of state economic legislation under the guise of the Takings Clause. APA's brief pointed out, in part, that "[t]he question of the validity of governmental action is not a part of the takings inquiry, and it ought not become so based on the historical confusion between due process and takings. The adoption of legislation, partic-

ularly at the local government level, aided by the planning process, involves the participation of all segments of the community working to define the public interest. Allowing judges to second-guess legislation will undermine the public's role in the democratic process. Intermediate judicial scrutiny is neither needed nor justified to protect those who are well represented in legislative halls."

Stuart Meck, FAICP, is a senior research fellow in APA's research department.

Editor's Note: *Zoning Practice* will cover the entire recent series of four U.S. Supreme Court cases (*Kelo v. City of New London*, *San Remo Hotel v. City and County of San Francisco*, *Lingle v. Chevron*, and *City of Rancho Palos Verdes v. Abrams*) in the August issue, addressing various aspects of land-use planning in an article by Lora Lucero, a land-use attorney in New Mexico and the former and current interim editor of *Planning & Environmental Law*.

Cover photo by Michael Davidson. Photo shows the changes in density in a former working-class Chicago neighborhood.

VOL. 22, NO. 6

Zoning Practice is a monthly publication of the American Planning Association. Subscriptions are available for \$65 (U.S.) and \$90 (foreign). W. Paul Farmer, AICP, Executive Director; William R. Klein, AICP, Director of Research.

Zoning Practice (ISSN 1548-0135) is produced at APA. Jim Schwab, AICP, and Michael Davidson, Editors; Barry Bain, AICP, Fay Dolnick, Megan Lewis, AICP, Marya Morris, AICP, Rebecca Retzlaff, AICP, Lynn M. Ross, AICP, Sarah K. Wiebenson, Reporters; Julie Von Bergen, Assistant Editor; Lisa Barton, Design and Production.

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Printed on recycled paper, including 50-70% recycled fiber and 10% postconsumer waste.



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ARE TEARDOWNS A SYMPTOM OF A THROWAWAY SOCIETY?

6



July 26, 2007
Workshop Agenda
Regional Transportation Planning

To: Glenn Brown, City Manager

From: Bob Cowell, AICP, Director of Planning and Development Services

Agenda Caption: Presentation, possible action, and discussion regarding regional transportation planning items in Brazos County.

Recommendation(s): Staff will be presenting this item to the Planning and Zoning Commission on July 19th and will update Council on their comments at the meeting.

Summary: Staff has worked to identify regional transportation opportunities in Brazos County. These include a regional loop around College Station, as well as proposed interstate highways that could provide access to the area. Staff will update Council on these items.

Budget & Financial Summary: N/A

Attachments: N/A

July 26, 2007
Workshop Agenda
Wide Area Communications System Project

To: Glenn Brown, City Manager

From: Ben Roper, Director of Information Technology

Agenda Caption: Presentation, possible action, and discussion regarding approval of the proposed Wide Area Communications System Plan.

Recommendation(s): Staff recommends approval of the conceptual Wide Area Communications System Plan and submission of the Grant request

Summary: On January 25, 2007, Council approved an interlocal agreement with the City of Bryan, Brazos County and Texas A&M University to jointly procure consulting services for the purpose of applying for a federally funded Public Safety Interoperable Communications Grant for a single interoperable radio system. Subsequently, Washington County and the City of Brenham signed Joinder Agreements to participate in the project.

On March 8, 2007, Council approved a resolution granting a contract with RCC Consultants, Inc. for analysis, conceptual design and grant preparation services. Included in the contract is a briefing of the results and recommendations to the governing bodies of the six participating entities.

Over the past four months, RCC Consultants met with system operators and users to determine current system capabilities and shortfalls. Following analysis and a series of meetings, the Plan being briefed was developed.

Budget & Financial Summary: Grant preparation assistance by RCC Consultants is included in the original Consultant Contract. If the Grant application is approved, the anticipated cost share is 80/20 (Federal/Local). If the Grant is successful, budgeted funds for the City's Radio Replacement Project (Project CO0601, \$4.9M) will be used to meet the City's 20 per cent matching commitment.

Attachments:

None

**Five-Year Technology Plan
Fiscal Year 2006-2007 through Fiscal Year 2010-2011**

Note: Inclusion of any project in the Technology Plan does not constitute approval of the plan or authority to disburse funds. All projects must be submitted via City approved budget and project submission procedures.

Statement of Purpose

A five-year technology plan is developed and reviewed annually and used to provide a comprehensive approach to the implementation of technology for the City of College Station. The projects are reviewed annually to determine if each project is still needed or feasible. This plan is used in preparing Service Level Adjustments (SLA) and Capital Improvement Projects (CIP) during the budget process. City Council may approve or disapprove of any SLA or CIP submitted.

The goals of this plan are to:

- Maintain the technology infrastructure
- Push data entry to the point of data gathering
- Provide information at the point needed by citizens and employees
- Reduce redundancy by integrating systems

The citizens of College Station benefit by the maintenance and improvement of services, by having information available to them, and by the cost effectiveness of the delivery of services.

The following provides a brief summary of each element of the plan. The symbol (*f*) just to the right of the project name indicates that the project is funded.

1. Fiber optic loop (f)

Electric Fund - \$1,100,000

All Funds - \$400,000

Total Project Budget \$1,500,000

Requested by IS

began FY97

to be completed in FY06

This is a multi-year project that provides the City of College Station with a looped fiber network supporting telecommunications, phone, traffic and computer networks throughout the city. Some of the network's capacity is shared with Texas A&M University, College Station Independent School District, Texas Transportation Institute, and the Brazos Valley Community Network. Final project funds were expended in FY 07. Build out of fiber to reach specific traffic lights and remote city facilities, as currently planned, will complete in FY07.

The project included the first phase of short distance wireless which provides the City with various options to implement limited wireless capability for use by City field personnel. (See item # 18)

2. Automated customer service (f)

Electric Fund - \$187,000

FY02 - FY07

Ongoing costs estimated at \$38,000

Requested by IS, Court, Parks

This project enabled the first basic steps in providing citizens with online services. It provides for the purchase of software, hardware and the integration of existing databases to allow for payment of city services and citations via the Internet and the phone. The payment of utility bills via Internet and phone was successfully implemented in FY02. The payment of citation fees was completed in FY05. PARD Phase I to automate PARD activity scheduling was purchased, installed and placed in production in FY 04/FY 05. It includes class and team registration, facility reservations, field maintenance and much more. In FY 07, \$20,000 was transferred from this project to PARD Automation to complete Phase II, the activation of the Internet and Phone interactive portion of the PARD system, which will complete in FY 07. The next portion of this project will be to replace the hardware and upgrade the software on the UCS/Court Server, scheduled for FY 07

3. Police electronic booking and live scan fingerprint system (f)

General Fund - \$141,000

FY04

Ongoing cost estimated at \$15,000

Requested by Police

This project will provide electronic booking and fingerprinting software to support the operation of the holding jail. This will speed up the booking of detainees, allow immediate filing of electronic fingerprints and provide electronic mug shots. The Fingerprinting and Mugshot system was implemented in FY 05. An additional phase to complete the Electronic Booking of inmates is planned, but not scheduled.

4. PBX (phone system) replacement (f)

Equipment Replacement Fund - \$990,328

FY04

Ongoing cost estimated at \$35,000

Requested by IS

This project provides for the scheduled replacement of the city's PBX phone system, which is the system that handles phone service in all departments of the city. In FY04 this system was 10 years old and reached the end of its expected life. A consultant was retained and an RFP for a new phone system was released in FY04. A contract was awarded in Fall, FY 05. The project budget includes \$73,328 in funds transferred from other projects and added to the original budget of \$917,000. The project is 95% complete and will be closed following installation of the new phone system in PD, as planned during renovation.

5. Broadcasting and studio equipment (f)

General Fund (EG fees) - \$60,000 annually (estimated) FY04

Requested by Public Communications

This ongoing project provides funding for purchase of equipment and items related to broadcasting and production of events, which are aired on the City's cable channel. An educational and governmental fee (EG fee) is collected by the local cable company (15 cents monthly per subscriber) and paid to the City on a quarterly basis. Income from

these fees is limited to purchases related to the studio and production facilities for Channel 19.

6. Police Message Switch and Field Reporting System (f)
General Fund - \$280,229 **FY05**
Ongoing costs estimated at \$23,000

Requested by Police

This project will provide the software necessary for electronic entry of Police reports by officers in the field. This will reduce the amount of time officers spend in the office. This project is 98% complete, and will be closed following completion of the State TLETS IP conversion. Project budget reflects \$50,229 transferred from other projects.

7. Access Control and Security (f)*
Water and Wastewater Funds - \$15,776 **FY05**
General Fund - \$7,846

Requested by HR/Utilities

This project marked the initial phase of a multi-year project to implement a City wide ID system and provide improved Access Control and Security to designated City buildings and facilities. This phase purchased the ID printer and initial ID card stock, the server and management software. Funding to refit existing buildings and add access control to new buildings will be included in future Capital Improvement Project (CIP) submissions.

* The funds to purchase the initial equipment were identified and budgeted. Funds for future projects must be requested via the budget process.

8. ATM network replacement (f)
All Funds - \$453,172 **FY07**
Ongoing costs estimated to at \$75,000

Requested by IS

This project will provide the hardware needed to replace the fiber network switching equipment used for both voice and data transmission throughout the city. The present equipment will reach its life expectancy in FY06. This project was moved from FY 06 to FY 07 to allow completion of the phone system project before starting the network upgrade. In FY 06, \$46,828 of the original \$500,000 budget was transferred to the PBX (Phone System) replacement project (see item # 4) to provide switch upgrades that benefit both projects.

9. Automated citations (f)
General Fund - \$228,000 **FY06**
Municipal Court Technology Fund - \$100,000
Ongoing costs estimated at \$30,000

Total Project Budget \$328,000

Requested by Police and Municipal Court

This project will automate citation writing in the patrol divisions of the Police Department. It will provide for the entry of the citation information at the time that the citation is written, and will eliminate the need for the records division to re-enter the

information from a paper citation and the need for Municipal court staff to manually add additional information from the citation. This project is estimated to be completed in FY 07.

10. Radio system replacement (f)
Equipment Replacement Fund - \$3,400,000 **FY06**
All Funds - \$1,500,000
Ongoing costs estimated at \$150,000
Total Project Budget \$4,900,000
Requested by Fire/Police/IS

This project provides for the replacement and enhancement of the voice radio infrastructure. The radio system is more than ten years old and there is a need to review the technology in use to determine the type of new system required. Replacing the current system is necessary due to the age of the equipment and coverage limitations. The area of coverage should be increased to the areas of annexation expected over the next ten years. As the density of buildings and the height of buildings increase signal strength must increase to overcome these obstacles. Either a taller tower or multiple towers will be required in order to continue providing today's level of service. The implementation part of this project was delayed until the ongoing Federally mandated Radio Rebanding is completed. This project was amended to include \$100,000 for consulting services in FY 07 to gather the data necessary to determine the specific solution options that are available. An RFQ for consultant services was issued and a consultant selected.

The City also joined with other Brazos and Washington County entities to submit a Public Safety grant application that would establish a Wide Area Communication System. If this grant application is successful, the Radio Replacement project would be incorporated into this system.

11. Radio to Wireless Ethernet Upgrade (f)
Water Services Funds: \$50,000 **FY05-06 Through FY08-09**
Requested by Utilities – Water Services Plant Operations

The Wireless communications to the existing Water/Wastewater SCADA system uses a licensed frequency. The equipment age will soon reach 12 years of use. This upgrade will allow the implementation of devices that utilize the TCP/IP protocol including security devices, remote video and extended Input/Output.

12. Fiber Optic cable to Pump Stations (f)
Water Services Funds: \$500,000 **(FY06-07)**
Requested by Utilities – Water Services Plant Operations

This project consists of the installation of fiber optic cable to the Dowling Road Pump Station and Sandy Point Pump Station. This will increase communication capacity as the pump stations continue to expand. The Dowling Road facility will have fiber based communications as part of a construction project that was originally set to begin during the FY05-06 budget year. The project was delayed until FY07-08 to allow for the completion of the underground inner duct between the Dowling Road Pump Station and the Sandy Point Pump Station.

13. SCADA System Upgrade (f)

Water Services Funds: \$570,000

FY05-06 Through FY08-09

Requested by Utilities – Water Services Plant Operations

This project consists of replacing the Supervisory Control and Data Acquisition (SCADA) infrastructure. The existing equipment has exceeded its useful life expectancy. This equipment applies to the Plant Operations.

14. Plant Security (f)

Water Services Funds: \$570,000

FY05-06 Through FY08-09

Requested by Utilities – Water Services Plant Operations

This project consists of implementing a physical access security plan as directed by the EPA. This includes all Water and Wastewater facilities that were deemed as a high priority. The equipment consists of card readers and associated security badging, video cameras and digital video recorders. The program also includes the necessary software to grant or deny access and to produce reports of any activity. Any future upgrades to the security program will be combined with plant expansions or improvements.

15. PD bar-coding of evidence & property inventory (f)

General Funds - \$20,395

FY07

Ongoing costs estimated at \$2,500

Requested by Police

This project will allow the Evidence Technician at the Police Department to quickly track the in and out status of specific evidence pertaining to police cases. Each item of evidence must be carefully tracked through a chain of custody each time an investigator or prosecutor checks out or reviews the evidence. Major cases may have hundreds of items of evidence and some items must be checked in and out several times prior to trial. Funded by SLA in FY 06, PD working to ensure funds carried over into FY 07

16. EMS Reporting System (f)

General Fund \$100,000

FY 07

Ongoing costs estimated at \$20,000

Requested by Fire

The Fire Department needs to update the EMS reporting system. It takes staff 1.5 to 2 hours to complete a EMS report with the current system. In order to provide better reports in a quicker time frame the current system needs to be replaced with one of the newer more efficient EMS reporting systems. Research on available systems was conducted and an RFP was released in Feb 07. After evaluating the RFP responses, a lead vendor was selected and contract negotiations are underway.

17. Mobile Computing Field Operations

Water Services Funds: - \$21,000

FY08

Ongoing costs estimated at \$2,000

Requested by Utilities - Water Services

The Toughbook CF-30 is a field-deployable laptop designed for the rugged outdoors (complies with MIL-STD-810F for resistance to rain, humidity, salt fog, sand/dust,

vibration, shock, and temperature). Supplying the field crews with Toughbooks will give them the most up-to-date water/wastewater geographic and attribute information, including invaluable information not capable of being displayed on paper maps (e.g. pipe material). In addition, the field crews will have the latest City geographic and attribute information at their disposal, including information not previously displayed on paper maps (e.g. aerial photos). Having the Toughbook will eliminate the need to print water/wastewater map books and street map books, which in the long run will translate into savings in both time (in printing) and money (in materials and salary). Aside from the GIS capabilities, field crews will be able to use the Toughbook for word-processing and spreadsheets, thereby eliminating the need for recording data on paper in the field.

18. Wireless infrastructure (f)

All Funds - \$200,000

FY08

Ongoing costs estimated at \$20,000

Requested by IS

This project will support increased use of Wireless Fidelity (WiFi), by city employees in many areas of the city and possibly public access areas. An antenna of this type was placed on one of three major towers as a part of the Fiber Loop project (see #1 above). This project is being revised to provide increased Wireless access in City buildings and to create hotspots that will serve employees in the field.

19. Vehicle tracking - GPS batch devices

Water Services Funds/General Fund: - \$110,000

FY08

Ongoing costs estimated at \$33,000

Requested by Utilities (Water Services Mapping) and PW

This project allows the tracking of a vehicle's location and the speed of the vehicle (aka Automated Vehicle Locator – AVL). Supervisors then use reports to determine that city vehicles were in the proper locations and whether exceeding speed limits has occurred. This equipment improves customer service by quickly identifying the closest service vehicle to the trouble call. In other organizations this has resulted in fewer accidents and other vehicle related incidents.

20. Work Order Software with Mapping Integration.

Water Services Funds: - \$25,000

FY08

Ongoing costs estimated at \$3,000

Requested by Utilities - Water Services Mapping and Distribution / Collection

This project will provide the initial phase to implement a software system to manage the assets of the Water Department. The goal is to reduce duplication efforts and the number of information systems. There is the need to examine the current asset system, H.T.E, to determine if it can be modified or utilized as an asset management system and if not, upgrade our other work order system to implement a department wide asset system for the Water Department. This type of software will enhance the asset management of buried lines by planning for rehabilitation and trouble areas with a specified geographical area.

21. Work Order Software for Plant Equipment

Water Services Funds: - \$25,000

FY08

Ongoing costs estimated at \$3,000

Requested by Utilities - Water Services Plant Operations

This project will provide the initial phase to implement a software system to manage the assets of the Water Department. The goal is to reduce duplication efforts and the number of information systems. There is the need to examine the current asset system, H.T.E, to determine if it can be modified or utilized as an asset management system and if not, upgrade our other work order system to implement a department wide asset system for the Water Department. This type of software will enhance the management of assets to allow for scheduling of preventative maintenance, track cost, and better plan for replacement.

22. PD scheduling system (f)

General Funds - 71,300

FY08

Ongoing costs estimated at \$9,300

Requested by Police

This will provide the Police Department the same type of scheduling used in the Fire Department. This system will expedite the creation of work schedules, rosters, back-fill for absentees and entry of work hours in the payroll system.

23. Citizen request management

All Funds - \$50,000

FY08

Ongoing costs estimated at \$5,000

Requested by CMO

This system or service will allow citizens to enter requests either over the phone or the Internet. It will also allow for the tracking of all contacts with citizens as well as tracking all requests to the point of resolution.

24. Network Storage

All Funds - \$120,000

FY08

Ongoing costs estimated at \$10,000

Requested by IS

This project provides for equipment that will allow for consolidation of network storage into a central location. Storage and servers were distributed throughout the city prior to having a fiber loop providing redundancy of communications. There are efficiencies to be gained by centralizing the servers and the network storage now that the fiber loop is complete. This phase of the project adds management software, archive storage and an additional SAN device.

25. Server consolidation

All Funds - \$55,000

FY08

Requested by IS

The number of servers storing office files and email has grown over time. These servers were spread throughout the city when the network was new, less reliable and much slower than it is today. This project will allow moving the services to a cluster of servers in a limited number of locations using network based storage instead of server based storage. This will be more cost effective in the long run.

26. Long distance learning /video conferencing

All Funds - \$100,000

FY08

Ongoing costs estimated at \$15,000

Requested by Fire/HR

This project will provide the additional module and upgrade to the City's video streaming hardware and software to provide training city staff in several locations from another location. This is targeted specifically for Fire to remotely train personnel in the Fire Stations from a single location. This will keep Fire and EMS crews in the areas they are serving while providing required training.

27. Microsoft office upgrade

All Funds - \$202,150

FY08/09

Requested by IS

This project provides for the upgrade of the word processing, spreadsheet and presentation products used throughout the city. This is needed every three to five years for the city to remain compatible with products in common use.

City staff time is spent trying to make files in older versions of the most commonly used office software work with newer versions in use outside the city. The last upgrade was completed in 2004-2005 with the upgrade to Office 2000, although since Office 2000 support was discontinued by Microsoft in 2004, newer computers have Office 2003 installed. This phase would upgrade all City computers to MS Office 2007.

28. Code Enforcement Voice Recording System

General Fund \$12,000

FY 08

Ongoing costs estimated at \$1,500

Requested by Fire

This project would allow recording of selected calls to and from the Code Enforcement Officers for Quality Control purposes.

29. Unified Messaging

General Fund \$30,000

FY09

Ongoing costs estimated at \$5,000

Requested by IS

This project would provide integration between Novell GroupWise (City email system) and the telephone voice mail system. Voice messages are made accessible and manageable to the user, regardless of their method of message access, including telephone, PC softphone, email (online, remote and web access modes) as well as via appropriately equipped PDA's. The message status (new vs. read) is synchronized regardless of where it is accessed so messages are handled once. Voice messages can also be combined with other electronic attachments including faxes, and forwarded to others via email.

30. Fiber Optic Loop Expansion and Repair

All Funds - TBD

FY09

Ongoing estimated at TBD

This project will be an ongoing project to maintain, upgrade and expand the City's Fiber Optic Infrastructure to accommodate continued growth. The initial phase will extend the fiber loop to new buildings and City locations needing connectivity and provide alternate paths for data flow.

31. Automated Meter Reading (AMR)

Electric, Water and Wastewater Funds - TBD **FY09**

Requested by Fiscal - Utility Customer Service

AMR pilot project is envisioned, no further details included as this involves electric competitive matters.

32. Timekeeping

All Funds - \$250,000 **FY09**

Ongoing costs estimated at \$30,000

Requested by Finance

This project will allow city staff to enter the hours worked as appropriate for the job. This pushes data entry to the individual staff members. This should reduce workload on the administrative staff.

33. IBM I5e upgrade (f)*

All Funds \$250,000 **FY09**

Requested by IS

The I5e (formerly the AS400) is the computer system that runs several of the city's key operational databases and software. Some of these include, Utility Customer Service, Finance, Budget and Accounting, Fleet Management and Development Services. An upgrade to the hardware is anticipated every three to four years to insure that the system is performing at the level of efficiency required for its daily use. The project will provide the funding to make such changes, which will be determined for the particular year of implementation. This upgrade was last completed in FY 05.

* Project is included in the CIP Budget as "Projected", future year funding will not be approved until the budget for that year is approved.

34. Internet use monitoring system

All Funds - \$110,000 **FY09**

Ongoing costs estimated at \$10,000

Requested by IS

This project will allow better management of how and when city staff is using access to the Internet. Currently supervisors have no way to quickly see how much time employees spend on the Internet and the type of use being made of the Internet during work hours.

35. Computer Aided Dispatch (CAD) System Upgrade

General Fund - \$500,000 **FY09**

Ongoing costs estimated at \$100,000

Requested by Fire/Police

The current CAD system was installed in 2003. This project will examine the existing system and provide required upgrades or modifications to the system. This may include replacement or upgrade of hardware and software.

36. e-Signature city wide

All Funds - \$225,000

FY09

Ongoing costs estimated at \$33,750

Requested by IS

This project will provide electronic signature capability for all employees using desktop computers. Currently only those involved in the Council Agenda packet process have electronic signature capability. This should reduce the flow of paper documents requiring signatures citywide.

37. MDT radio infrastructure replacement

Equipment Replacement Fund - \$100,000

FY09

Requested by Fire/Police

The infrastructure to support the public safety mobile computing will be ten years old in FY2008 which is the expected life of this type of equipment. This project replaces the electronic equipment that provides the interface between radio frequency system (800 MHz radio system) and the Internet Protocol system (Computer Aided Dispatch). This equipment is located at the Radio Tower and is anticipated to be upgraded in conjunction with the Radio System Replacement (see item # 10). Current funding is estimated as sufficient to replace existing infrastructure, not enhance or upgrade. To a lesser extent, the data system is experiencing the same coverage limitations as the voice system addressed by project CO0601. If the data side requires expansion to a multi-site system to support current and projected City growth, costs will likely exceed \$100,000

38. SCADA System Man Machine Interface (MMI) Replacement

Water Services Funds: - \$95,000

FY09

Ongoing costs estimated at \$10,000

Requested by Utilities - Water Services Plant Operations

This project will allow for the evaluation and upgrade of the Plant Operations MMI to a more secure and maintainable terminal server configuration. The existing MMI has been in place for more than 12 years. We need to evaluate the software again to verify that the ongoing maintenance cost is acceptable for the service obtained and actual software still performs and they have not been lagging in technology.

39. Mobile computing in sanitation vehicles

Sanitation Fund - \$94,000

FY10

Ongoing costs estimated at \$12,000

Requested by PW-Sanitation

This project will provide for the equipment and software for Sanitation crews to view and complete work orders in the field. This will also allow the use of GIS in the vehicles. This project is dependent on completion of Wireless Infrastructure (project # 18).

40. Mobile data terminal replacements

Equipment Replacement Fund - \$227,000

FY10

Requested by Police/Fire

This project provides for the replacement of the equipment in Police and Fire vehicles. The current equipment was installed in 2005 and will be five years old in FY10.

41. Topographic/Aerial Mapping

All Funds - \$300,000

FY10

Requested by P&DS/Economic Development/IS

This project will update the layer of topology data in the Geographic Information System (GIS). This is important as the city's topology has been altered by development in the years since the last aerial data was gathered in 2005. It is also necessary in order to gather the topological data in the newly annexed areas and areas that may be annexed in the next five years. Citizens will benefit from better planning for drainage which decreases the risk of flood.