

Residential Development & Building Guide



Community Development Services

Community Development Building

305 SW A St., Bentonville, AR 72712

Building Inspection	(479) 271-3125
Current Planning	(479) 271-3126
Planning Services	(479) 271-6826

Revised: December 2008

Residential Building & Development Guide

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Contacts

City offices open at 8:00 a.m. and close at 4:30 p.m., Monday through Friday.

Community Development Department

Building Inspection

271-3125 271-3198 271-3107

305 SW 'A' Street

Issue building, electrical, plumbing, RPZ, mechanical and sign/temporary banner permits, fence permits, inspection scheduling, and code questions.

Lance Blasi, Chief Building Inspector

lblasi@bentonville.com

Annette Brightwell, Special Projects Planner

abrightwell@bentonville.com

Danny Underhill, Building Inspector

dunderhill@bentonville.com

Ronnie Swadley, Building Inspector

rswadley@bentonville.com

Gerald Webb, Building Inspector

gwebb@bentonville.com

Marvin Saunders, Code Enforcement Officer

msaunders@bentonville.com

Freda Wentz, Administrative Assistant

fwentz@bentonville.com

Current Planning Division

271-3126 271-3122 271-3157

305 SW 'A' Street

Rezoning, conditional use and variance requests; preliminary plats, final plats, incidental subdivision and large scale development reviews; Future Land Use Plan and Master Street Plan; and sign permit review.

Troy Galloway, AICP, Community Dev. Dir.

tgalloway@bentonville.com

Brian Bahr, Current Planning Manager

bbahr@bentonville.com

Beau Thompson, Planning Technician

bthompson@bentonville.com

Diane Shastid, Administrative Assistant

dshastid@bentonville.com

Planning Services Division

271-6826

305 SW 'A' Street

Guide decisions regarding future growth and development including the Master Street Plan, General Plan, and Future Land Use Plan. Administer the Community Development Block Grant (CDBG) program.

Shelli Rushing, AICP, Planning Services Manager

srushing@bentonville.com

Danielle Semsrott, Community Programs Coordinator

dsemsrott@bentonville.com

Suzanne Grider, Administrative Assistant

sgrider@bentonville.com

Mapping Division

271-6826

Troy Davis, Senior Mapper

tdavis@bentonville.com

Crissy Orr, Mapping Technician

corr@bentonville.com

Toni Forester, Mapping Technician

tfoerster@bentonville.com

Engineering

271-3166 271-3168 271-6719

305 SW 'A' Street

Review development plans, maintain design and construction specifications, conduct field inspections of construction and insure all work conforms to City codes.

Travis Matlock, City Engineer

tmatlock@bentonville.com

J.D. Lance, Engineering Technician

jlance@bentonville.com

Richard Burress, Construction Inspector

rburress@bentonville.com

Brian Turner, Construction Inspector

bturner@bentonville.com

Bryan Weickersheimer, Construction Inspector

bweickersheimer@bentonville.com

Jeff Roberts, Storm Water Control Inspector

jeroberts@bentonville.com

Cathy Cesena, Administrative Assistant

ccesena@bentonville.com

Transportation Department

271-6840

305 SW 'A' Street

Capital street and drainage projects.

Mike Churchwell, Transportation Engineer

mchurchwell@bentonville.com

Suzanne Grider, Administrative Assistant

sgrider@bentonville.com

Street Division

271-3130

501 SE 3rd Street, Suite A

Drainage questions/problems, street repairs, right-of-way clearing, street specs, grading permits.

Mike Button, Street Manager

mbutton@bentonville.com

Beverly Shepherd, Administrative Assistant

bshepherd@bentonville.com

Stormwater Enforcement Division

271-6849

305 SW 'A' Street

Ensures compliance with the City's Stormwater Pollution Prevention and Erosion Control Standards

Jeff Roberts, Stormwater Control Inspector

jeroberts@bentonville.com

Public Utilities

271-6720

305 SW 'A' Street

Mike Bender, Utilities Director

mbender@bentonville.com

Water and Sewer Departments

271-3140

501 SE 3rd Street, Suite B

Water and sewer line information/problems, upgrade sewer service, RPZ inspection/questions, and request water service for new construction.

Dean Button, Manager

dbutton@bentonville.com

Preston Newbill, Assistant Manager

pnewbill@bentonville.com

Susan Mitchell, Administrative Technician

smitchell@bentonville.com

Electric Department

271-3135

608 SE 3rd Street

Set appointments to connect temporary electric service, location of the electric line from the City's point of connection to the structure, street light repairs, and removal of tree limbs in power lines.

Mike Hughes, Electric Engineer

mhughes@bentonville.com

Paul Kellenbarger, Electric Utilities Manager

pkellenbarger@bentonville.com

Wayman Thurman, Electric Utilities Assistant Manager

wthurman@bentonville.com

Charlie Barnes, Engineering Technician

cbarnes@bentonville.com

April Hayes, Apprentice Engineering Technician

ahayes@bentonville.com

Linda Johnson, Administrative Assistant

ljohnson@bentonville.com

City Utility Billing & Collections Department

271-3100

City Hall, 117 W Central

Drive-Thru:

Monday - Friday

8:00am - 4:00pm

Setting up a new account and meter deposits for residential / commercial construction, payment of utility bills, and discontinue services.

After Regular Hours

271-3160

Call the Wastewater Treatment Plant for emergencies: water leaks, sewer problems, electrical outages, utility shut-off re-connections, etc.

Resources

Community Development Office

- Ch. 14, Zoning Code
- Ch. 15, Subdivision Code
- General Plan
- Future Land Use Plan
- Zoning Map
- Master Street Plan
- Street Tree Corridor Plan
- Downtown Master Plan
- Master Trail Plan
- Electric Service Boundary
- Drainage Ordinance
- County Flood Maps

Street Department

- City of Bentonville Street Specifications (maintained by Engineering)
- Stormwater Ordinance

City Web Site: www.bentonvillear.com

- Applications
- Zoning Code
- Subdivision Code
- Zoning Quick Reference Guide
- Building Activity Reports
- State Licensing Information
- Building Permit Fees
- Schedule of Impact Fees
- Design Specifications
 - Street Specifications
 - Stormwater Ordinance
- GIS Map Guide
 - Zoning Map
 - Future Land Use Map
 - Master Street Plan Map
 - Aerial Photos
 - Subdivisions
 - Parcels
 - Addresses
 - Streets
 - Traffic Counts
 - Buildings and Structures
- eGov
 - Utility Billing
 - Building Permits
 - Planning and Zoning

Building Inspection

Codes Enforced: (effective August 1, 2008)

2007 Arkansas Fire Prevention Code

which includes:

2006 International Building Code (IBC)
(Vol. 1 with Arkansas State amendments)

2006 International Residential Code (IRC)
(Vol. 2 with Arkansas State amendments)

2006 International Fire Code (IFC)
(Vol. 3 with Arkansas State Amendments)

900 Montclair Road
Birmingham, AL 35213-1206
(205) 661-1853
<http://www.iccsafe.org/>

2008 National Electric Code

10421 W. Markham
Little Rock, AR 72204
(501) 682-4549

2003 Arkansas Mechanical Code

4815 W. Markham St., Slot #24
Little Rock, AR 72205-3867
(501) 661-2642

2006 Arkansas Plumbing Code

5 West Markham Street
Little Rock, AR 72205-3067
(501) 661-2642

2006 Arkansas Fuel Gas Code

5 West Markham Street
Little Rock, AR 72205-3067
(501) 661-2642

2004 Arkansas Energy Code

One State Capitol Mall
Little Rock, AR 72201
(501) 682-7396

State Licensing Information:

General Contractors Licensing Board:

<http://www.state.ar.us/clb/>

Plumbing Professionals:

http://www.healthyarkansas.com/faq/faq_plumb.html

Electric Professionals:

<http://www.state.ar.us/directory/detail2.cgi?ID=1068>

HVAC Professionals:

http://www.healthyarkansas.com/faq/faq_hvac.html

Residential Planning & Zoning Review Process

Contact: Current Planning Office

1. Zoning Verification 1 day

a. Land Use. The very first step is to determine the current zoning classification of the property. The City maintains a large wall map with the zoning district boundaries as well as an up to date electronic GIS version at www.bentonvillear.com. Planning staff can assist in determining the current zoning district for the subject property. Once the zoning has been determined, the Table of Permitted Uses in the Zoning Code is used to determine if the proposed use is permitted in the zoning district. In the table, the zoning districts are located across the top and the land uses along the side. Where they meet there will be a box. In that box, there will be either a 'P', which means the use is permitted by right, or a 'C', which means the use is permitted subject to approval of a conditional use permit by the Planning Commission, or blank meaning the use is not permitted in that district.

b. Lot Configurations and Setbacks. If the current zoning district is appropriate for the land use proposed, the applicant then needs to review the requirements of the zoning district regarding lot size and building setbacks. The lot(s) need to meet the requirements of Art. 401 Zoning District Regulations of the Zoning Code.

2. Conditional Use 37 days

A conditional use is a use permitted in one or more districts as approved by the Planning Commission and set forth in Art. 401 Zoning District Regulations of the Zoning Code and required a special degree of control to ensure the use is consistent with and compatible with other existing or permissible uses in the same district or districts, and to assure that such uses shall not be inimical to the public interest. (See pg. 6)

3. Rezoning 37 days

If the proposed use of the property is not permitted in the zoning district, the applicant may request to rezone the property to a district where the proposed use is permitted. To take effect, the request must be approved by the Planning Commission then by the City Council. (See pg. 7)

4. Variance 10 days

If the lot configuration or setbacks do not meet the requirements of the zoning district in which the project is located, the applicant may apply for a

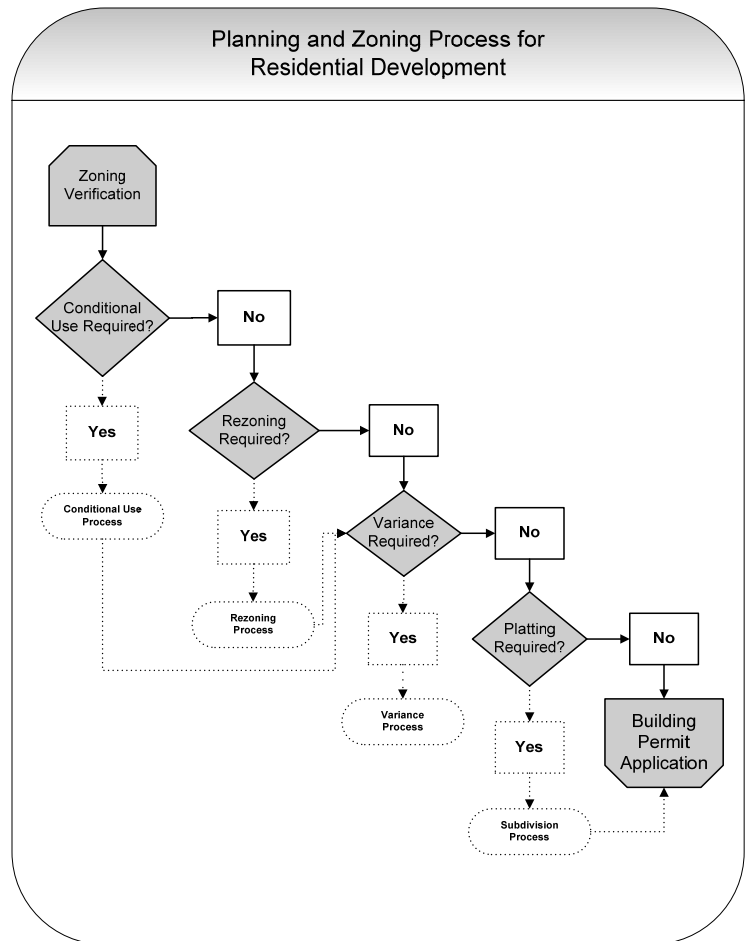
variance through the Board of Adjustment. (See pg. 8)

5. Subdivision Review 37 days

If the project is a large piece of land that needs to be subdivided, either through a subdivision, lot split, or property line adjustment, this will need to be completed by acquiring Planning Commission approval prior to requesting a building permit. (See pgs. 9-10)

6. Building Permit

Once the property is deemed consistent with the zoning classification, approval from Planning Commission has been granted, and assuming all other regulations have been met, then a building permit application may be submitted. (See pg. 17)



Conditional Use Process

Contact: Current Planning Office

A conditional use is a use that conforms to the intent of the General Plan for a specific area and is generally allowable. The use may represent potential problems, however, with respect to its impact on neighboring property or to the city as a whole. For this reason, it requires a careful review of its location, design, configuration, and spatial impact to determine the desirability of allowing it on a particular site.

1. Application

An application shall be filed by the property owner with the City Planning office in accordance with planning policies and procedures. Said application shall be filed no less than thirty-seven (37) days prior to the Planning Commission meeting. Such applications shall show the location and intended use of the site and include items listed on the application such as a general statement as to the intent of the use, hours and days of operation, planned parking changes, proposed structural changes, anticipated average number of customers per day, proposed number of employees, photographs of property, planned outdoor lighting changes, and indoor / outdoor areas to be utilized. Applications may be obtained from the Community Development office or online at www.bentonville.com.

2. Notification

The City of Bentonville will file a legal notice in regard to the proposed conditional use at least fifteen (15) days prior to the public hearing. Also, the Current Planning staff will post one or more public hearing signs on the premise of said property.

3. Staff Review

The Current Planning staff shall review the proposed conditional use and report to the Planning Commission on its relation to and probable effect on the surrounding area as well as its compliance with the requirements of the Code and will make recommendations to the Planning Commission.

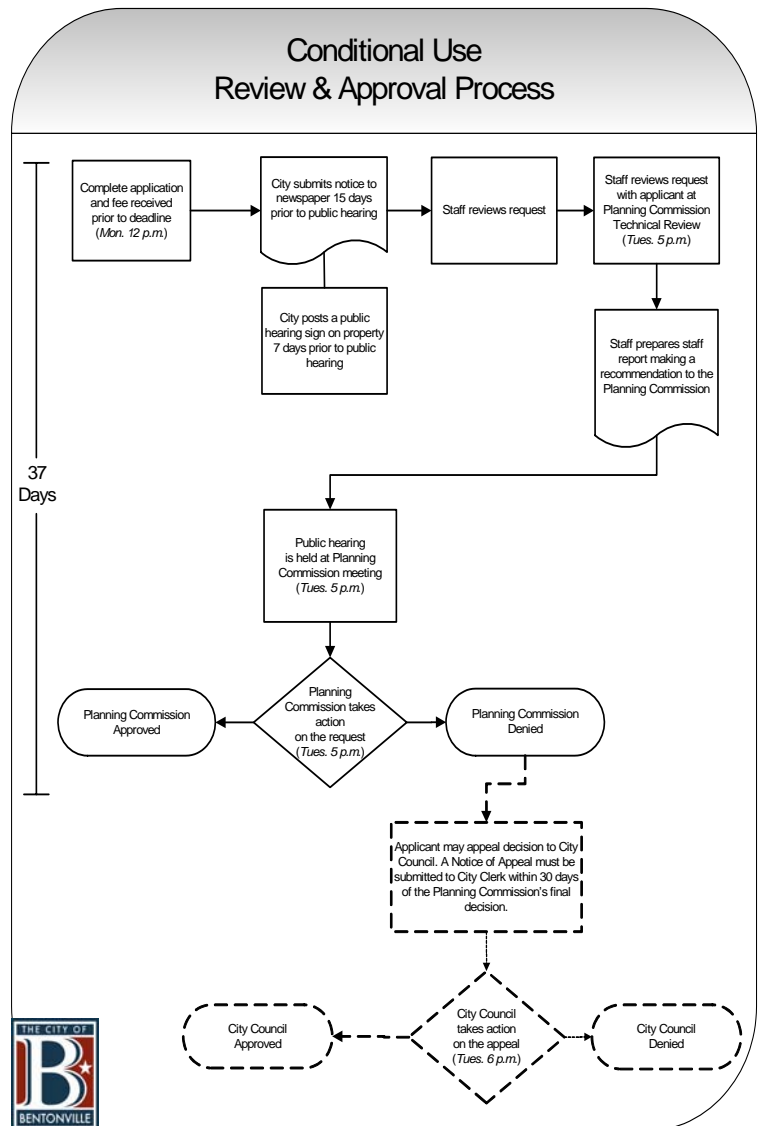
4. Planning Commission Action

The Planning Commission will hold a public hearing at a regularly scheduled Planning Commission meeting. They may approve, deny, defer, or modify the conditional use request. The Planning Commission may impose conditions and restrictions upon the premises benefited by a Conditional Use Permit as may be necessary to reduce or minimize any injurious effects of the conditional use. Such

conditions may include time limits for exercise of such authorization and commence within a reasonable time. The violation of any condition will constitute grounds for revocation of the conditional use permit.

Reference Documents:

- Conditional Use Application Form
- Ch. 14 Zoning Code, Art. 601 Supplemental Regulations
- Ch. 14 Zoning Code, Table of Permitted Uses
- www.bentonville.com – go to Departments, Planning



Rezoning Process

Contact: Current Planning Office

1. Application

An application giving the legal description of the property involved and the zoning classification requested for the property, shall be submitted to the Current Planning office by the owner of the property owner no less than thirty-seven (37) days prior to the public hearing. Applications may be obtained from the Community Development office or online at www.bentonville.com.

2. Notification

The property owner will be required to notify, by certified mail with return receipts requested and/or petition, all property owners within two hundred feet (200') of the property of his or her intention to apply for a zoning amendment no less than fifteen (15) days prior to the public hearing. The City will make notice of the public hearing in a newspaper fifteen (15) days prior to the Planning Commission meeting and will post a notice of public hearing sign on the property.

3. Planning Commission Action

(a) Approval. Following the public hearing, the proposed rezoning may be approved as presented or in modified form, by a majority vote of the Planning Commission and recommended for adoption by the City Council.

(b) Denial. If the Planning Commission disapproves a proposed amendment, the applicant may appeal to the City Council in accordance with Zoning Code Section 301.7, Appeals to City Council.

(c) Forward to City Council. Following approval by the Planning Commission, the petition will be sent to the City Council for action. An applicant may withdraw the request for an amendment prior to action by the City Council.

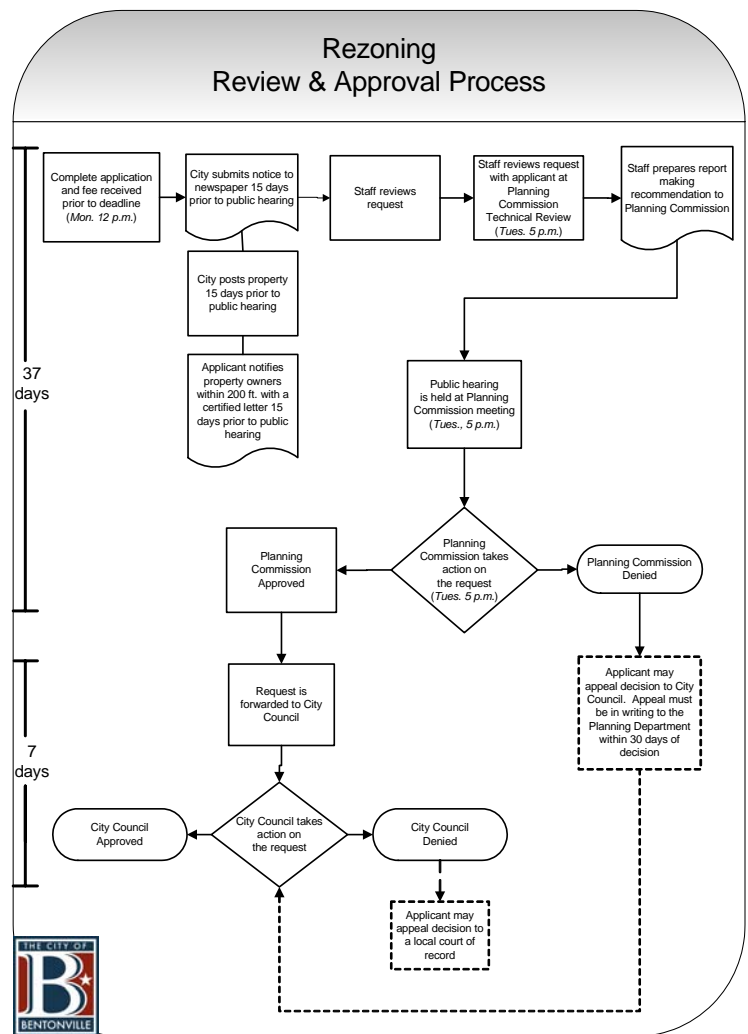
(d) Re-consideration. No application for a rezoning will be considered by the Planning Commission within six (6) months from date of final disapproval of a proposed amendment. The resubmission must meet all requirements for a rezoning request and must be a different zoning.

4. City Council Action

The City Council by majority vote may approve or deny the recommendation submitted by the Planning Commission or may return the proposed amendment to the Planning Commission for further study and recommendation. If the City Council does not concur with the recommendation of the Planning Commission, either as first submitted or as submitted after re-study, the City Council may, by majority vote, amend the map by granting the request for amendment in full or in modified form. Appeals denied by City Council must wait one (1) year before reapplying for and appeal on the same project.

Reference Documents:

- Rezoning Application Form
- Ch. 14 Zoning Code, Art. 301 Administration
- Future Land Use Plan
- www.bentonville.com – go to Departments, Planning



Variance Process

Contact: Current Planning Office

A variance is a tool that grants a variation from the literal provisions of the Zoning Code in instances where strict enforcement of the ordinance would cause undue hardship due to circumstances unique to the individual property under consideration.

1. Application

Each applicant must submit, at least ten (10) days prior to the public hearing, an application, a scaled drawing showing the requested variance along with all relevant information, including the exceptional condition or situation of the property which causes the exceptional practical difficulty or undue hardship for which relief is being sought. Applications may be obtained from the Community Development office or online at www.bentonville.com.

2. Notification

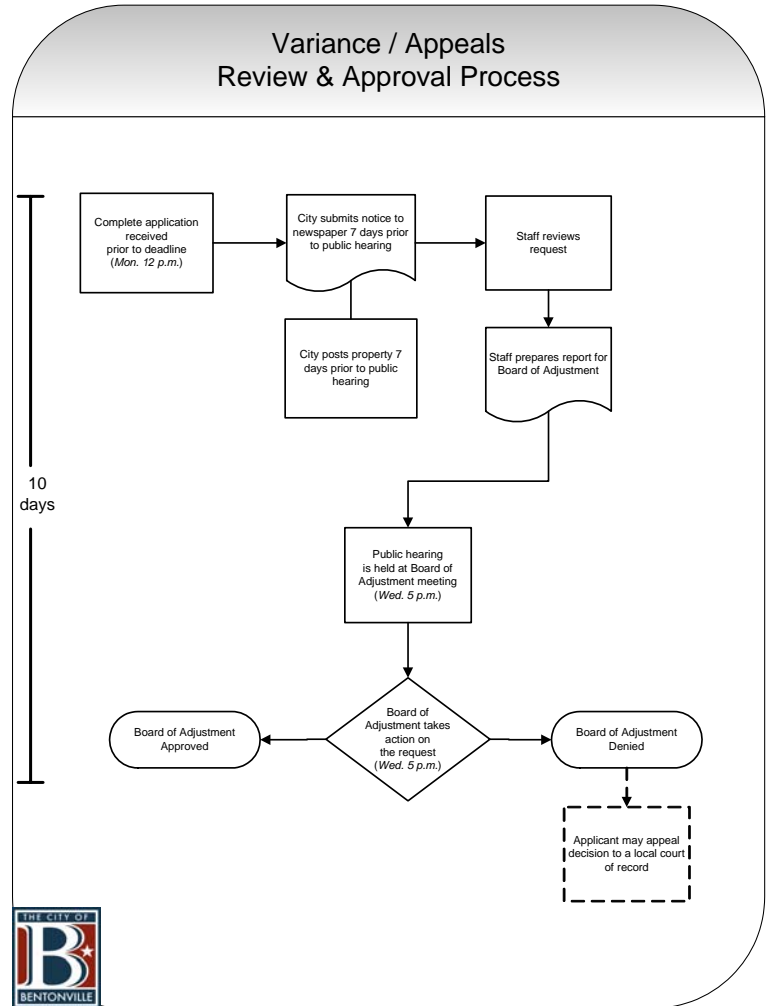
The City will publish a notice seven (7) days preceding the date of the Board of Adjustment meeting in a local newspaper. The City will also post a sign on the property for which the variance is being sought.

3. Board of Adjustment Action

The Board of Adjustment takes final action of approval of the variance. They may prescribe appropriate conditions and safeguards that it deems necessary.

Reference Documents:

- Variance Application Form
- Ch. 14 Zoning Code, Art. 301 Administration
- www.bentonville.com – go to Departments, Planning



Subdivision Review Process

Contact: Current Planning Office

1. Pre-Application Conference

(optional)

When the owner of a tract of land proposes its subdivision, the sub-divider is urged to discuss informally the intent of his subdivision with the planning staff. At the pre-application conference, the general character of the development will be discussed and items including zoning, utility service, street requirements, flooding and drainage, and other pertinent factors related to the proposed development will be reviewed.

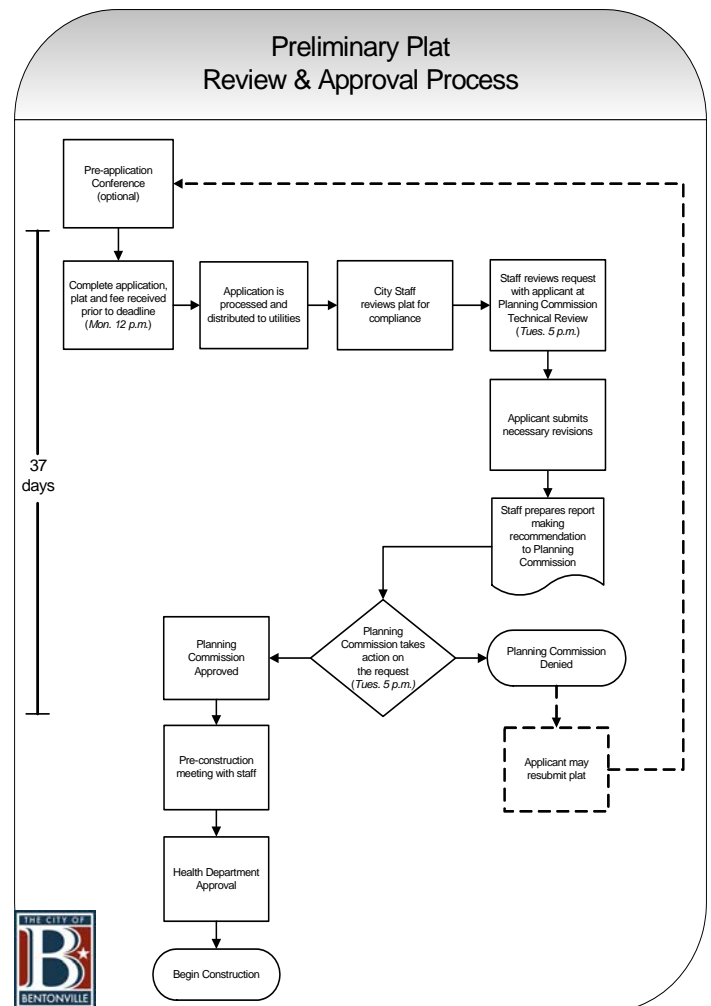
2. Preliminary Plat

(a) Application. The first required step in the review process is the submission of an Application for Preliminary Plat Approval. The application, fee, plat, drainage report, warranty deed and recorded plat shall be submitted to the Current Planning office no fewer than thirty-seven (37) days prior to the regular Planning Commission meeting at which it is to be considered. The plat must include all items as required by *Article 900 Plat Requirements* in the Subdivision Code. Applications may be obtained from the Community Development office or online at www.bentonville.com.

(b) Planning Department Action. The Current Planning staff and other appropriate city and public agency staff shall review the proposed subdivision for conformance with the Code and prepare a staff report for the Planning Commission.

(c) Planning Commission Action. After the Planning Commission has reviewed the Preliminary Plat and taken into account any staff recommendation, the applicant shall be advised of any required changes and/or additions. The Planning Commission may approve, approve conditionally, or disapprove the Preliminary Plat within sixty (60) days from the date of receipt thereof or the Preliminary Plat shall be deemed approved unless the sub-divider stipulates in writing to the Planning Commission that additional time is allowed. If disapproved, the Preliminary Plat will be returned to the sub-divider with a written statement as to the reasons for disapproval.

(c) Authorization to Proceed. Receipt of an approved or conditionally approved copy of the Preliminary Plat, together with an approved copy of the Improvements Plan shall constitute authorization of the Planning Commission for the sub-divider to proceed with the installation of improvements and the staking out of lots and blocks. The sub-divider must complete all improvements and schedule and attend a pre-construction meeting prior to filing a final plat application. The preliminary plat approval expires twelve (12) months from the original date of approval. Further development work will require another preliminary plat, unless the sub-divider submits a written request for extension, which requires Planning Commission approval. The extension must be submitted to the Current Planning office prior to the expiration date.



2. Final Plat

When the subdivision is complete or substantially complete, as determined by criteria set forth in Article 500 Final Plats, Sec. 500, Applicability, the applicant may file for final plat approval.

(a) Application. Upon completion of final inspection acceptance, the applicant must submit the application at least thirty-seven (37) days prior to the Planning Commission meeting at which it is to be considered. The application shall include the application form and fee, final plat, and donated assets.

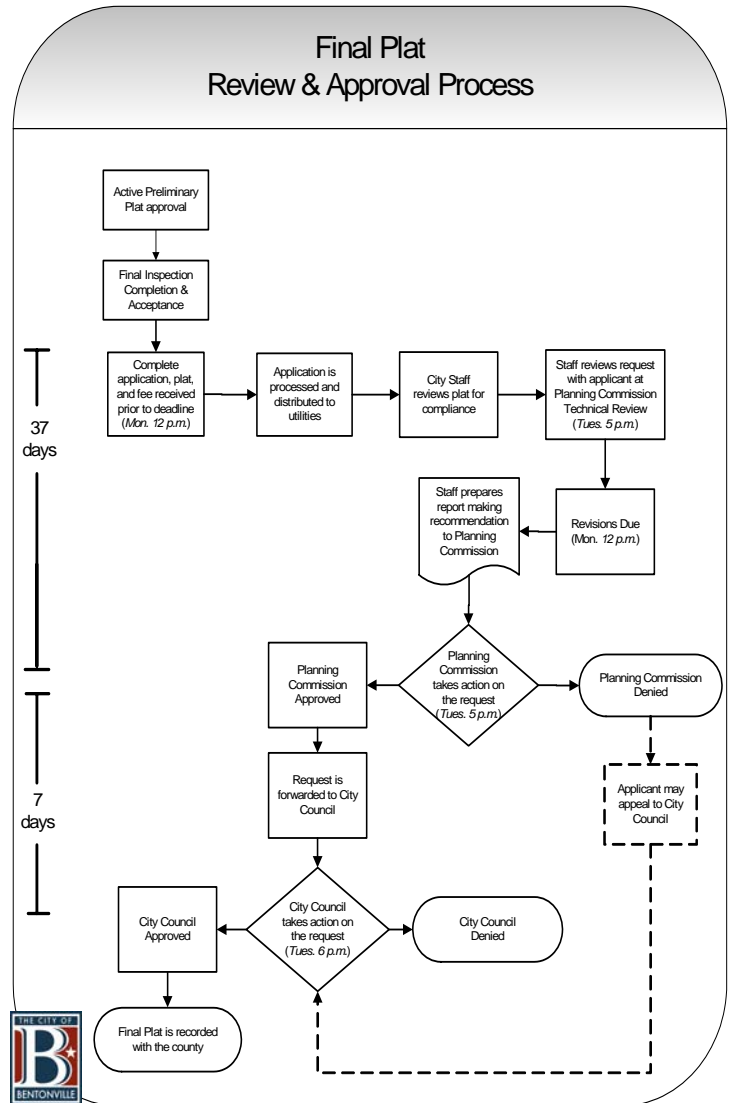
(b) Planning Commission Action. The Planning Commission shall approve or disapprove the Final Plat within sixty (60) days of receipt of the application.

(c) City Council Action. All public dedications shall be accepted by the City Council.

(d) Recording. The sub-divider shall submit, at a minimum, a Mylar plus ten (10) paper copies to the Current Planning office. Current Planning staff will record the final plat in the office of the County Recorder and notify the project representative when this has been completed. Upon recording the plat, the designated City official shall retain the Mylar and two (2) copies for the Planning Commission’s files and Building Inspections’ files.

Reference Documents:

- Final Plat Application
- Ch. 15 Sub. Code, Art. 500 Final Plats
- Ch. 15 Sub. Code, Art. 900 Plat Requirements
- www.bentonville.com – go to Departments, Planning



Incidental Subdivision Review Process

Contact: Current Planning Office

Incidental subdivisions include the following:

Lot Split. A lot split in which a lot, tract or parcel located within the planning area is divided into three (3) lots or less, and where right-of-ways and/or utility easements are being dedicated to the City. An original lot shall be split no more than three (3) times.

Informal Plat. An informal plat in which a lot, tract, or parcel is divided into five (5) lots or less and does not require dedications, vacations, reservations, changes in alignment of easements or rights-of-ways, or extensions of utilities.

Property Line Adjustment. A property line adjustment in which a property line(s) is moved or relocated but does not create an additional lot. A property line adjustment may or may not dedicate right-of-way and/or new utility easements.

Correction Plat. A correction plat in which a correction to an existing plat is necessary due to an incorrect legal description or scribner errors. The correction plat does not change the boundaries, does not change the subdivision name and does not create new lots. The correction plat may or may not dedicate right-of-way and / or new utility easements.

1. Application.

The application must be submitted to the Current Planning office not fewer than thirty-seven (37) days prior to the regular Planning Commission meeting at which it is to be considered and shall consist of a signed application form, filing fee, survey of the property, plat, and copy of land deed. The plat shall be drawn clearly to include the information as required in Article 900, Plat and Plan Requirements of the Subdivision Code. Applications may be obtained from the Community Development office or online at www.bentonville.com.

2. Review and Approval.

The Community Development Director may review and administratively approve an informal plat, property line adjustment, and correction plat if no dedications are being made. The Planning Commission shall approve or disapprove any incidental subdivision that is not being administratively approved as set forth in Sec.

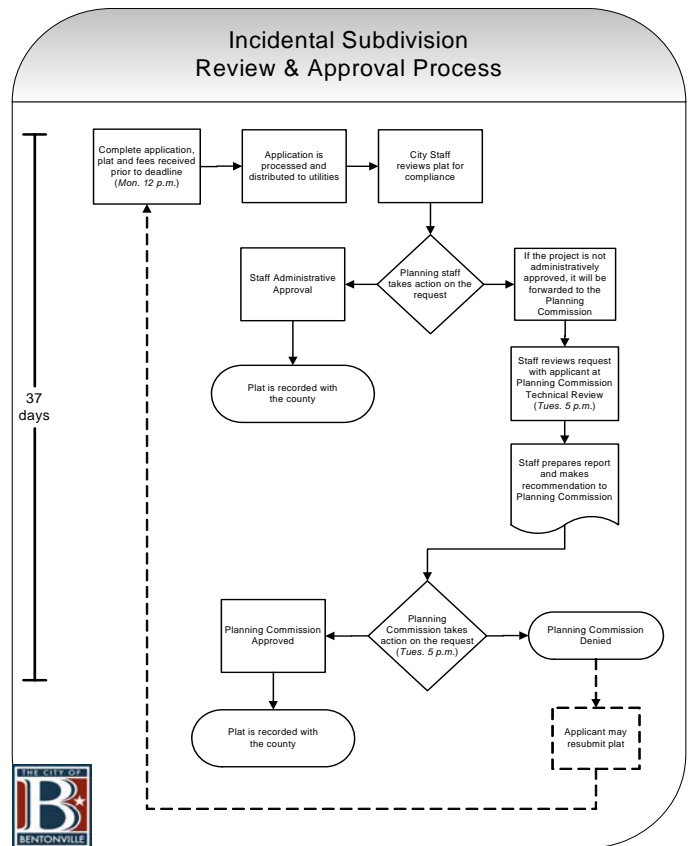
600.3(A) within sixty (60) days of receipt thereof.

3. Recording.

The sub-divider shall submit, at a minimum, a Mylar plus ten (10) paper copies to the Current Planning office. Current Planning staff will record the final plat in the office of the County Recorder and notify the project representative when this has been completed. Upon recording the plat, the designated City official shall retain the Mylar and two (2) copies for the Planning Commission's files and Building Inspections' files.

Reference Documents:

- Incidental Subdivision Application
- Ch. 15 Sub. Code, Art. 600 Incidental Subdivisions
- Ch. 15 Sub. Code, Art. 900 Plat Requirements
- www.bentonville.com – go to Departments, Planning



Planned Unit Development (PUD)/Planned Residential Development (PRD) Process

Contact: Current Planning Office

1. Pre-Application Conference

When a PUD or PRD is being proposed, the owner/developer/engineer must meet with Current Planning staff. At the pre-application conference, the general character of the development will be discussed and items including utility service, street requirements, flooding and drainage and other pertinent factors related to the proposed development will be reviewed.

2. Application

After receiving written comments from the pre-application conference, the applicant may proceed in preparing a formal application. The application must be submitted to the Current Planning office not fewer than thirty-seven (37) days prior to the regular Planning Commission meeting at which it is to be considered and shall consist of a signed application form, filing fee, copy of deed, master site plan, and a written description. Applications may be obtained from the Community Development Office or online at www.bentonville.com.

3. Notification

The property owner is required to notify, by certified mail with return receipts requested and/or petition all property owners within 200 feet of the property of his intention to apply for a PUD or PRD zoning designation no less than fifteen (15) days prior to the public hearing. The City will make notice of the public hearing in a newspaper fifteen (15) days prior to the Planning Commission meeting and will post a notice of public hearing sign on the property.

4. Rezoning and Master Site Plan

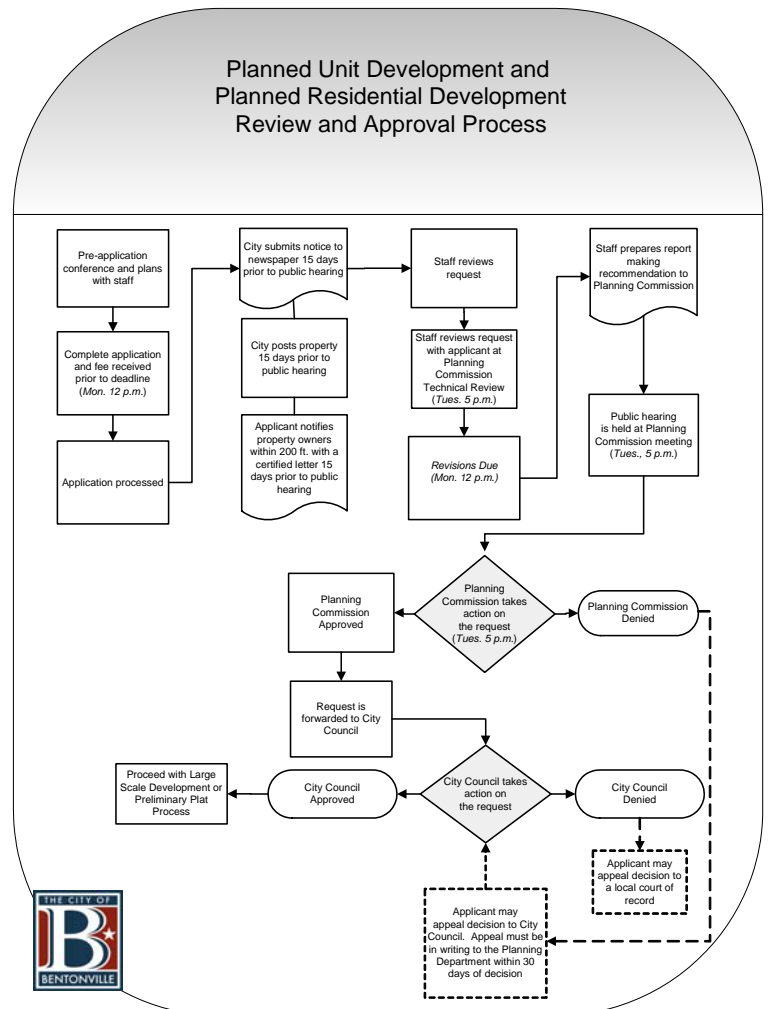
The PUD or PRD master site plan will be submitted and reviewed by the Planning Commission and City Council following the same procedures as a rezoning.

5. Preliminary Plat/ Large Scale Development

Once property is rezoned to a PUD or PRD, the applicant may proceed with a preliminary plat or a large scale development.

Reference Documents:

- Planned Unit Development Application Form
- Ch. 14 Zoning Code, Art. 401 Zoning District Regulations
- Ch. 15 Subdivision Code, Art. 800 Planned Unit Development
- Future Land Use Plan
- Master Trail Plan
- www.bentonville.com – go to Departments, Planning



PUD Development Criteria

Full regulations are provided in Sec. 401.10 Planned Unit Development of the Zoning Code

Minimum District Area

The minimum lot area required for property proposed for a Planned Unit Development District shall be ten (10) acres.

Modifications Permitted

The PUD district may allow the following -zoning and development standards to be modified:

- Density;
- Building setbacks;
- Height of building or structure;
- Lot size;
- Lot width;
- Lot depth;
- Landscaping;
- Required off-street parking spaces in instances of mixed residential/ commercial uses; and,
- Street widths.

Common Open Space Requirements

Common usable open space constitutes an essential ingredient in a PUD and is one of the most basic and important design elements.

Minimum area. A minimum of twenty percent (20%) of the total project area, exclusive of public right-of-way and parking lots, shall be devoted to common open space.

Common Open Space determination. The required common open space may include:

- Wetlands and water bodies, including the normal water surface area of unfenced retention ponds up to fifty percent (50%) of the required open space area;
- Active detention ponds that include recreational equipment/facilities.
- Vegetated / landscaped area, excluding required parking lot landscaping requirements;
- Pedestrian paths, trails, sidewalks (exclusive of those required by ordinance) and covered walkways;
- Public plazas and hard surfaced recreation areas; and,

- Public pools, tennis courts, basketball courts, baseball fields, soccer fields, or similar outdoor recreation facilities that are open to the residents and users of the PUD.

Structural Design Standards

- Residential buildings should have their main entrances oriented toward the adjoining street;
- All structures shall have a common architectural theme.
- Avoid unbroken building facades of more than one hundred feet (100’);
- Provide human scale features, especially at street level.
- Avoid unarticulated and monotonous building facades and window placement;
- Provide a variety of building heights and varied roofline articulation;
- Aluminum, vinyl or fiberglass siding or roofing materials on the facades or sides of the building shall not be visible from a public right-of-way; and,
- Rear- and side-loading residential garages are encouraged and shall be setback a minimum of twenty feet (20’). Front-loading garages shall be recessed a minimum of ten feet (10’) from the front elevation of the house and shall be setback a minimum of thirty feet (30’) from the front property line.

PRD Development Criteria

Full regulations are provided in Sec. 401.13 Planned Residential Development of the Zoning Code

Minimum District Area

The minimum lot area required for property proposed for a Planned Residential Development District shall be three (3) acres.

Modifications Permitted

The PRD district may allow the following -zoning and development standards to be modified:

- Density;
- Building setbacks;
- Height of building or structures;
- Lot size;
- Lot width;
- Lot depth;
- Required off-street parking spaces; and,
- Street widths.

Common Open Space Requirements

In addition to adhering to Article 1400 of the Subdivision Code, common usable open space constitutes an essential ingredient in a RFD and is one of the most basic and important design elements.

Minimum area. A minimum of 15% of the total project area, exclusive of public right-of-way and parking lots, shall be devoted to common open space.

Common Open Space determination. The required common open space may include:

- Wetlands and water bodies;
- Lawns – five percent (5%) maximum of total percentage required;
- Pedestrian paths, trails, sidewalks (exclusive of those required by ordinance), and covered walkways;
- Central gathering spaces such as plazas, parks, or courtyards;
- Vegetated/landscaped areas, excluding required parking lot landscaping requirements; and,
- Recreational areas/facilities such as public pools, tennis courts, basketball courts, baseball fields, soccer fields, or similar outdoor recreation facilities that is open to the residents and users of the PRD.

Structural Design Standards

- Buildings shall be sensitive to the natural environmental conditions and should be oriented around a public gathering space such as a plaza, park, or courtyard, or respond in design to a prominent feature, such as a corner location, or other manmade or natural feature;
- Buildings and site design shall provide inviting entry orientation;
- Main entrances shall be oriented toward the adjoining street;
- All structures shall have a common architectural theme;
- Human scale features shall be provided;
- Provide a variety of building height and varied roofline articulation;
- Aluminum, vinyl, or fiberglass siding materials on the facades or sides of the building shall not constitute over fifty percent (50%) of the structure; soffit and fascia shall not be included within this fifty percent (50%) calculation; and,
- Rear and side loading garages are encourage and shall be setback a minimum of thirty feet (30') for a rear loading garage and twenty feet (20') for a side loading garage. Front loading garages shall be recessed a minimum of ten feet (10') from the front elevation of the house and shall be setback a minimum of thirty feet (30') from the property line.

RESIDENTIAL ZONING REGULATIONS (Contact: Current Planning Office)																		
District	Zoning																	
	A1	RE	R1	R2	R3	R4	R-MH	RZL	RO	C1	C2	C3	C4	I1	I2	R-C2	R-C3	PRD
Accessory Dwelling	P	P	P	P	P	P	P	P	P	P	C	P	C	C	C	P	P	P
Attached Dwelling				P	P	P			P			P				P	P	P
Duplex				P	P	P										P	P	P
Single Family Dwelling	P	P	P	P	P	P	P	P	P			P				P	P	P
Two Family Dwelling				P	P	P			P			P				P	P	P
Manufactured Dwelling							P											P
Modular Dwelling	P	P	P	P	P	P	P	P	P			P						P
Multi-family Dwelling					P	P						P				P	P	P
Townhouse Dwelling				P	P	P			P			P				P	P	P
Zero Lot Line Dwelling					P	P		P										P

Residential Setback Requirements					
District	Structure Type	Front	Side		Rear
			Interior	Exterior	
All districts	Garages*	30'	-	-	-
A-1	All	30'	30'	30'	30'
R-E	All	30'	30'	30'	30'
R-1	All	20'	7'	20'	25'
R-2	All	20'	7'	20'	25'
R-3	All	20'	10'	20'	25'
R-4	All	20'	10'	20'	25'
R-MH	Manufactured home lots	20'	10'	20'	25'
	Manufactured home park	25'	15'	25'	25'
RZL	Zero Lot Line	20'	12/0'	20'	25'
R-O	Single-family	20'	7'	20'	25'
	Two-family	20'	10'	20'	25'
	Office with parking in front	50'	10'	50', with parking; 20' without parking	25'
	Office without parking in front	20'	10'	20'	25'
R-C2	Single-family	20'	5'	10'	15'
	All Others	20'	5'	10'	15'
R-C3	Single-family	0'	0'	5'	5'
	All Others	0'	5'	5'	5'

*Garages: Minimum setback for a front-loading garage from a public street shall be 30' from the property line.

Residential Bulk and Area Standards						
Street Frontage:		R1 & R2 should equal required lot width, others shall be 35'				
Width for Corner Lots:		75' at building line				
Depth:		100'				
Height:		40'				
District	Structure type	Lot area (sq. ft.)	Land area per dwelling unit (sq. ft.)	Lot width (ft.)	Max. coverage	
					Interior Lot	Exterior / Corner lot
A-1	All	217,800 (5 acres)	217,800 (5 acres)	100	30%	30%
R-E	All	87,120 (2 acres)	87,120 (2 acres)	100	10%	10%
R-1	All	6,000	6,000	60	40%	45%
R-2	Two-family	7,000	3,500	70	50%	55%
	Townhouses	10,000 (dev.) 2,000 (lot)	3,500	14' (interior) 21' (exterior)	50%	55%
	All others	7,000	7,000	60	40%	45%
R-3	Two-family	7,000	3,500	70	50%	55%
	All others	7,000	7,000	60	40%	45%
R-4	Two-family	7,000	3,500	65	50%	55%
	All others	10,000	--	65	50%	55%
R-MH	Manufactured home lots	4,500	4,500	50	30%	35%
	Manufactured home parks	11,000	3,500	60	30%	35%
	All others	7,000	7,000	65	40%	45%
R-ZL	Zero Lot Line	4,000	4,000	40	60%	65%
R-O	Single-family	6,000	6,000	60	40%	45%
	Two-family	7,000	3,500	70	50%	55%
	All others	6,000	6,000	60	60%	65%
R-C2	Single family	4,500	--	15'	60%	60%
	Two-family /Duplex	7,000	--	15'	60%	60%
	Townhomes (attached)	--	2,400	15' per unit	80%	80%
	Multi-family (4+ Units)	--	2,400	No min.	No max.	No max.
	All others	4,500	--	15'	60%	60%
R-C3	Single family	4,000	--	15'	70%	70%
	Two-family /Duplex	7,000	--	15'	70%	70%
	Townhomes (attached)	--	1,200	15' per unit	No max.	No max.
	Multi-family (4+ Units)	--	1,200	No min.	No max.	No max.
	All others	4,000	--	15'	70%	70%

Residential Building Permit Process

Contact: Building Inspection

1. Application Form

Complete the Residential Application. The application is available in the front office or online at www.bentonvillear.com.

2. Building Drawings

One complete set of building drawings showing size and dimensions of the structure, the size and dimensions of all rooms, windows, doors, etc., and what type of building materials are to be used. The plans must be submitted with the application.

3. Elevations

These drawings should be prepared by a design specialist or architect.

4. Site Plan

This drawing **must** be drawn to an **engineer** scale (1"= 10, 20, 30, 40, 50, 60) and show the following items: Setback requirements, lot dimensions, service connections to utilities (sewer, electric, water, gas), easements, and floodplain boundaries (if applicable). The structure must meet the required setbacks. See Residential Zoning Regulations on pages 13 & 14. See acceptable site plan on page 16.

5. Non-Occupancy Deposit

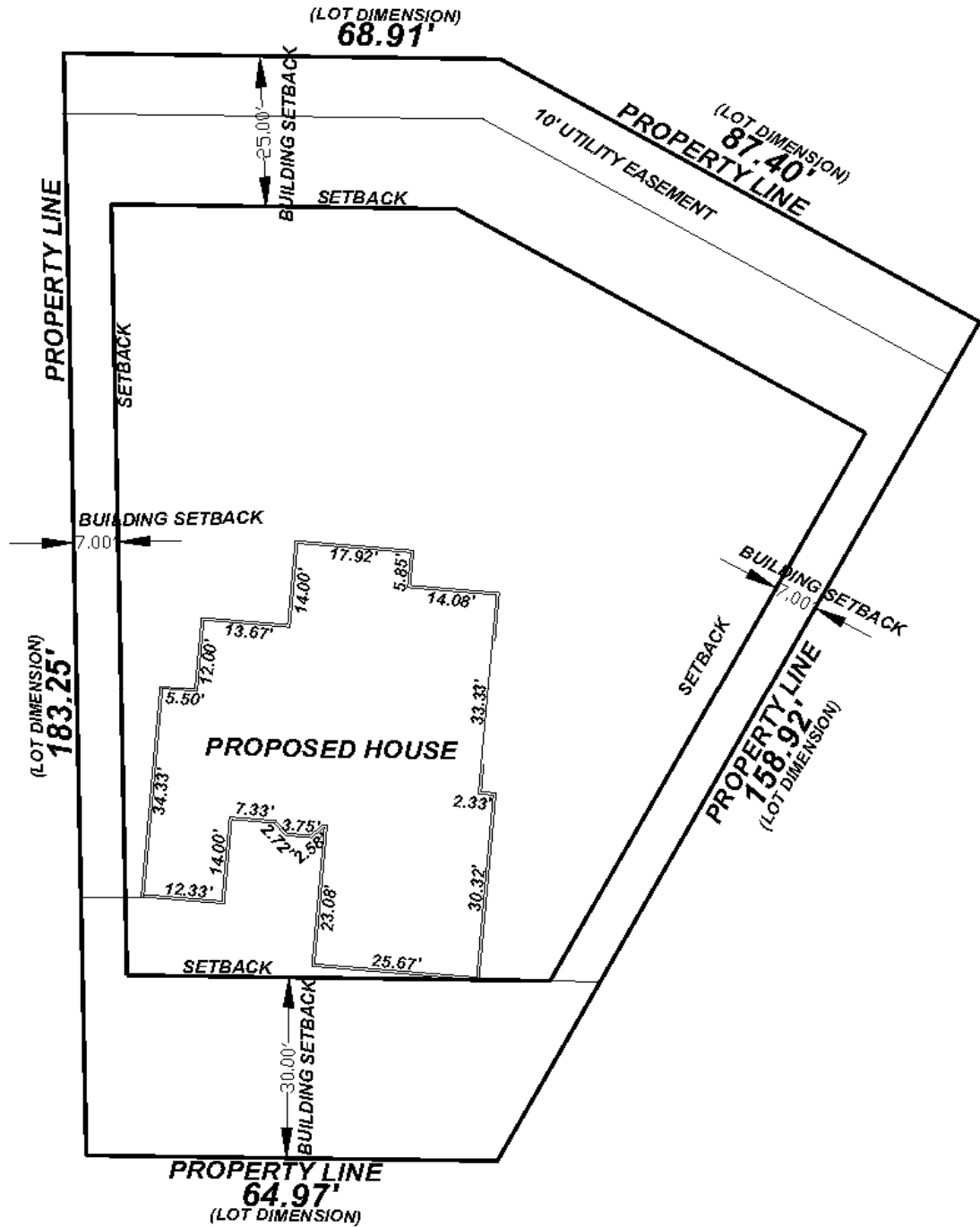
A "Non-Occupancy Deposit" of \$500 is required by anyone building in the City of Bentonville. The deposit will be held by the City until the structure is completed and has passed final inspection. Upon completion the deposit may be refunded in full or held on account. If the structure is occupied before the final inspection the \$500 will be forfeited and must be replaced before another permit is issued or further inspections are performed on existing projects under construction. (Ordinance No. 2004-96)

Reference Documents:

- Building Permit Application
- 2007 AR Fire Prevention Code-Vol. 1, 2, and 3 of the 2006 (IRC, IBC, IFC) w/Arkansas amendments.
- 2008 National Electric Code
- 2006 Arkansas Plumbing Code
- 2003 Arkansas Mechanical Code
- 2006 Arkansas Fuel Gas Code
- 2004 Arkansas Energy Code
- www.bentonvillear.com – go to Departments, Building Inspection

NOTE: All electrical, plumbing and mechanical work must be done by a state licensed electrician, plumber or mechanical installer. An owner is not allowed to do his own plumbing, electrical wiring, or mechanical installation unless properly licensed.

EXAMPLE



SCALE 1"=30'

ACCEPTABLE NEW HOUSE SITE PLAN

NOTE: THIS EXAMPLE IS NOT TO SCALE. ALL SITE PLANS SUBMITTED MUST BE AT AN EVEN SCALE.

123 SW Jones ST.
Current Zoning R-1



Residential Building Inspections

Contact: Building Inspection

All required inspections should be scheduled with the Building Inspection office **at least 24 hours in advance**. Usually inspections are done in a first come, first served basis but will depend on overall schedules. The permit number or physical address is required to schedule an inspection. Any inspection that is not ready or fails inspection will be charged a \$25 re-inspection fee. See also Inspection Requirements on page 19.

1. Footing Inspection

NOTE: Be sure the footing is inspected and approved BEFORE scheduling your concrete. Minimum footing requirements are found under Inspection Requirements on page 19. Be sure property pins or corners are located and marked to verify building setbacks are met.

2. Yard Lines

When trenches are excavated and underground utilities are in place (water, gas, sewer and electric), **do not cover** these lines until an inspection is conducted by Building Inspection.

3. Plumbing Under Slab Inspection

If your building is on a slab or concrete floor, your next inspection is a plumbing underslab inspection. This inspection is on all soil or waste and vent pipes as well as all water supply piping located under the slab. This test requires a five foot head or riser of water above the highest fixture or an air test with a 3" gauge with a maximum scale of 100 psi set to 5 psi for a period of 15 minutes. **Do not cover any plumbing until inspected and approved by Building Inspection.** NOTE: All plumbing shall be free of leaks and installed according to the Arkansas State Plumbing Code as amended by The City of Bentonville. See Local Amendments to adopted codes on page 21.

4. Slab or Concrete Floor Inspection

Slab requirements are found on page 19 of this booklet.

5. Temporary Electric Service Inspection

Temporary electric service inspections are usually done prior to the start of framing. This inspection may be done during any of the above scheduled inspections. After approved, you must

call the Electric Department to schedule an appointment to meet them for hook up. Tampering with the temporary service and bypassing the GFIC will result in disconnection of the service. A \$25 re-inspection fee will be charged and paid before service is reconnected. **The Electric Department has 72 hours to install the electric meter.**

6. Frame rough-in inspection

This inspection is done when all framing, electrical wiring, plumbing and heating and air is installed. A red (fail) or green (pass) inspection sticker will be placed in the "washer box" to indicate the outcome of the inspection. **Do not insulate until the frame rough-in is approved by Building Inspection.** After the insulation is installed, a wall inspection may be done if requested.

7. Permanent Electric Service Inspection

This inspection is to be done after the drywall is hung and the permanent electric meter base is installed. **The Electric Department has 72 hours to install the electric meter.**

8. Sidewalk Inspection.

This inspection may be done any time during construction. Reference adopted Street specifications for sidewalk requirements.

9. Final Inspection

This inspection will be conducted when the structure is complete and ready to occupy. All electrical, plumbing, and HVAC must be complete. All connections to city utilities must be complete and the building address must be installed on the outside of the building facing the street. Property must also have all required landscaping in place at the time of final inspection. See page 20 for landscaping requirements and tree recommendations.

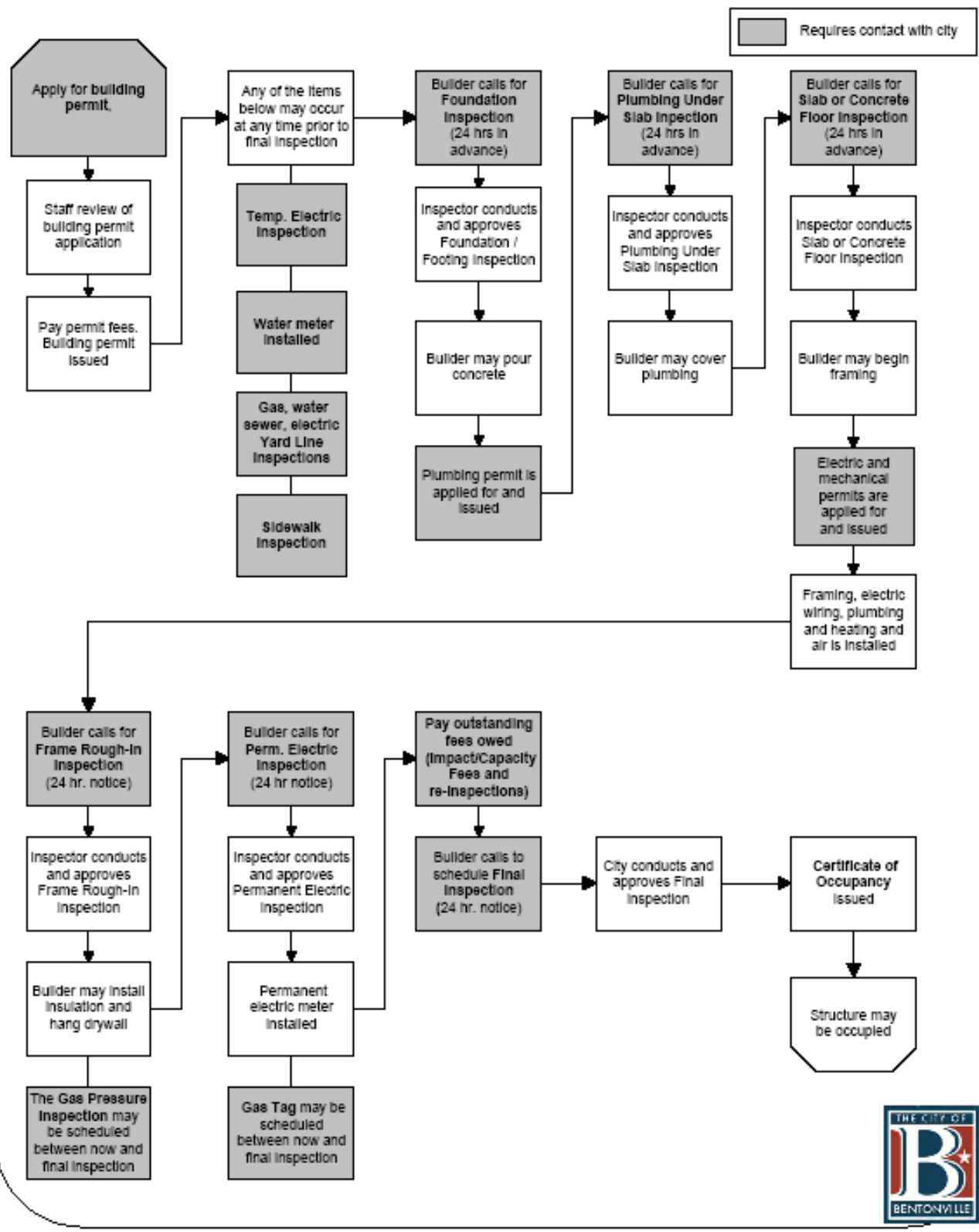
The building is NOT to be occupied before the Building Inspection Office approves the final inspection.

Residential Housing Construction: Landscaping Requirements

Prior to each residential structure being approved for a certificate of occupancy, one shade tree or two ornamental trees must be planted in the front yard. At time of planting, shade trees must be a minimum of 2.5” caliper and ornamental trees must be 1.5” caliper. Existing trees will be credited toward this requirement. (*Ordinance No. 2004-238, adopted on Dec. 14, 2004*)

Recommended Trees		
Common Name	Mature Height (in feet)	Growth Rate
SHADE		
Bald Cypress	50-70	Medium
Chinese Elm	30-40	Medium
Ginkgo	80-100	Slow
Green Ash	50-60	Fast
Hackberry	40-60	Medium/Fast
Japanese Zelcova	40-50	Medium/Fast
Pin Oak	60-75	Fast
Red Maple	40-60	Medium/Fast
Red Oak	60-75	Fast
Sugar Maple	60-75	Slow/Medium
Thornless Honey Locust	50-75	Medium
Tulip Poplar	60-150	Medium
White Ash	50-80	Medium
ORNAMENTAL		
Amur Maple	15-20	Medium
Chinese Pistache	25-35	Medium
Dogwood	20-25	Medium
Eastern Redbud	20-30	Medium
Golden Raintree	30-40	Medium/Fast
Japanese Red Maple	15-20	Slow/Medium
Purpleleaf Plum	15-30	Fast
River Birch	40-70	Medium/Fast
Saucer Magnolia	20-30	Medium
Serviceberry	15-20	Medium
Trident Maple	25-35	Medium
Washington Hawthorn	25-30	Medium
Yoshino Cherry	20-40	Fast

Process for Residential Building Inspections



Inspection Requirements

Contact: Building Inspection

Footings

A minimum of 18" deep, 18" wide ditch. 2½" rebar pinned every 6' to 8' approximately 4" to 6" from the bottom of the footing and a minimum of 2" from the side of the ditch. Rebar or metal chairs will be used to support the rebar. **NO WOOD STAKES.** Concrete for the footings shall be a minimum of 12" thick; 18" thick when over 2 stories.

Yard Lines

When trenches are excavated and underground utilities are in place (water, gas, sewer and electric), do not cover these lines until an inspection is conducted by Building Inspection. Ditch requirements are as follows:

- Water lines - 18" depth
- Sewer line – 12" minimum or as grade allows
- Gas lines - 12" depth
- Electric lines - 24" depth

Piers

The unsupported height of masonry piers shall not exceed ten times their least dimension. When structural hollow concrete masonry units are used for isolated piers to support beams and girders, the cellular spaces shall be filled solidly with concrete (grout), except that unfilled hollow piers may be used if their unsupported height is not more than four times their least dimension.

Pier Cap

Hollow piers shall be capped with 4 inches of solid masonry or concrete or shall be completely filled with concrete (grout).

Girder Beams

Girder beams shall be shimmed with yellow pine or metal. No soft woods allowed.

Slabs

All residential slabs shall extend above the surrounding grade a minimum of 2 blocks high. Final slab elevation shall be a minimum of 12" above final grade in every corner. Minimum slab thickness shall be 3½". Visqueen shall be 6 mil and shall be placed under all slabs under roof. Visqueen shall be lapped 6" at the joints and shall extend to the outer edge of the slab. Reinforcing wire is required. Wire shall be lapped 6" at the edges and tied. A termite pretreatment shall be required for all slabs. Slab inspection will be conducted when wire and Visqueen are in place.

Framing

All framing members shall be framed, anchored, tied and braced so as to develop strength and rigidity necessary for the purpose for which they are used. Exterior wall framing shall be as follows:

Stud Size	2 x 4	2 x 6
Roof/Ceiling	24" O.C.	24" O.C.
1 Floor Roof/Ceiling	16" O.C.	24" O.C.
2 Floors	N/A	16" O.C.

Purlins

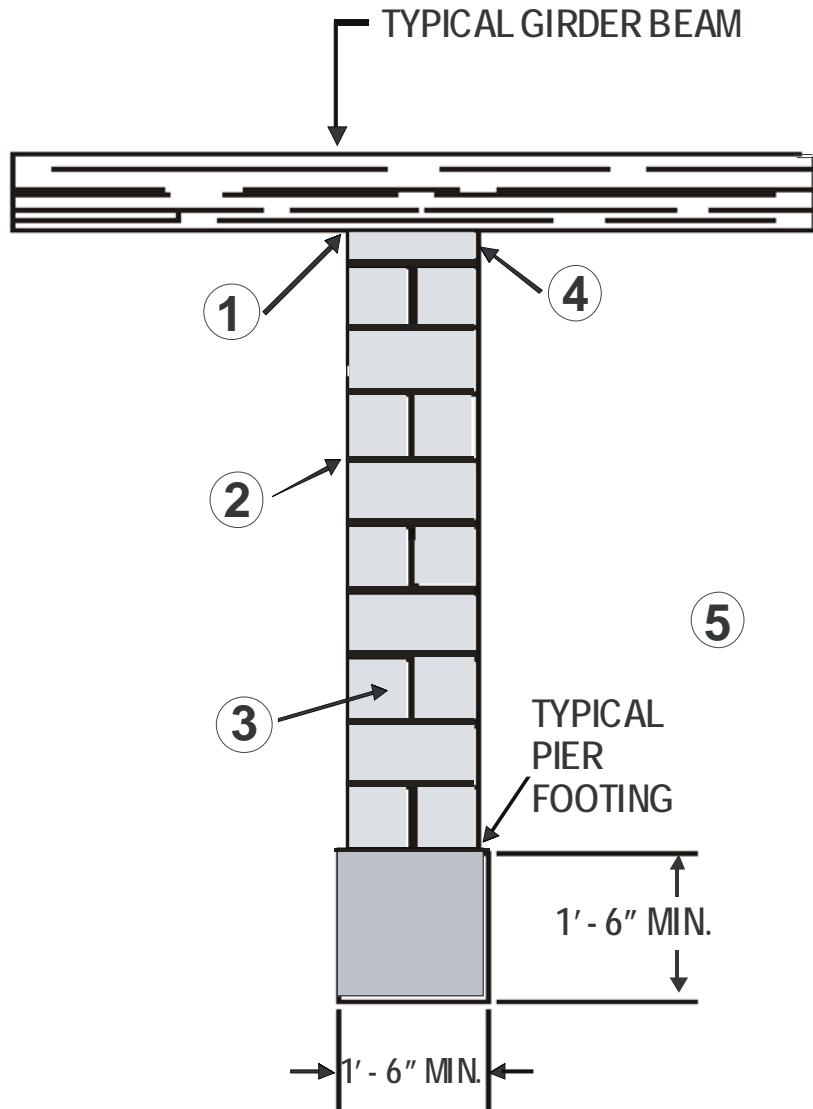
Purlins are permitted to be installed to reduce the span of rafters. Purlins shall be sized no less than the required size of rafters they support. Purlins shall be continuous and shall be supported by 2-inch by 4-inch braces installed to bearing walls at a slope not less than 45 degrees from horizontal. The braces shall be spaced not more than 4 feet on center and any brace longer than 8 feet shall be a T-Brace.

Headers

In door or window openings 6' and over, header material shall be #2 or better. For rough openings up to and including 6', the header shall rest on a single header stud. **For openings over 6", the header shall rest on two studs.** Headers for garage door openings up to 12' shall be two 2x12 #3 and shall rest on two header studs. Garage door openings exceeding 12' shall be three 2x12 #2 or better equivalent.

TYPICAL PIER DIAGRAM

1. SHIMS SHALL BE OF METAL OR SOLID NOMINAL (TREATED) LUMBER. NO WOOD SHIM LESS THAN 1 1/4" THICK WILL BE ALLOWED.
2. MASONRY JOINTS SHALL BE 3/8" THICK. ANY JOINT NOT 3/8" THICK SHALL NOT VARY MORE THAN 1/8" (1/4" MINIMUM, 1/2" MAXIMUM).
3. VERTICAL AND HORIZONTAL MASONRY JOINTS SHALL BE COMPLETELY FILLED.



4. ALL PIERS SHALL HAVE A 4" SOLID MASONRY CAP.
5. ANY PIER THAT EXCEEDS 5'-0" IN HEIGHT SHALL BE COMPLETELY GROUTED. (HOLLOW CORES FILLED WITH CONCRETE/GROUT.)

Local Amendments to Adopted Codes

2008 National Electric Code

1. If the circuit panel is more than 1 foot from the service meter, a fused disconnect or main breaker shall be installed at the meter.
2. The installing electrician shall provide a meter loop.
3. Any person doing electrical work in the City of Bentonville will be required to have an Arkansas State Masters Electrical License or be employed by a holder of such license.
4. All type NM-B Cable shall be properly supported and shall enter the outlet or lighting box no more than 2 cables per opening of such box and shall be secured by plastic or nylon staples, located 12 inches from the box and every 4 ½ feet thereafter. No metal staples allowed.
5. EMT shall be properly supported by approved straps at no more than 18 inches from the box and every 5 feet there after.
6. EMT or metal boxes shall not be substituted for a grounded conductor. A ground wire shall be required for each circuit.
7. All permanent outside receptacles shall be GFCI protected.
8. In kitchens, refrigerators shall be on a circuit by itself. This circuit shall have no other openings.
9. All persons desiring new temporary electric service shall contact the Bentonville Electric Department or the Building Inspection Department to determine the location of the electrical service **before** the installation.
10. No electrical work is to be covered without first being inspected and approved by the Building Inspection Department.
11. All underground secondary electric lines shall be a minimum of 24 inches deep from the City connection to the structure, which it serves. No direct burial cable is allowed.
12. All underground electric lines shall be in conduit and in a ditch by itself. **No other utility is permitted in the same ditch with the underground electric.**
13. #12 20 AMP circuits for wiring only.
14. Any single-phase account taken or served from a 120-208 3-phase bank will require a (5) five-socket meter base.
15. Electrical secondary conduit sizing: 200 amp, 3 inch. Anything over 200 amp, 4 inch. 2 inch conduit shall not be used.
16. Where possible, all risers shall extend through the roof. The Building Inspector or the City Electric Department shall determine this.
17. All interior metal piping shall be bonded.
18. All residential structures shall have at least one (1) carbon monoxide detector per level, hard-wired with battery backup. Also, every sleeping room containing a gas appliance shall have a carbon monoxide detector.
19. Electric services shall be grounded by two (2) ground rods driven a minimum of six (6) feet apart.
20. Electric service ground wire shall be protected by PVC conduit. PVC grounding conduit shall be run into meter base.
21. Sheetrock is to be installed before permanent electric service is connected.\
22. Permanent power requires at least two (2) dedicated circuits in main panel (refrigerator, washing machine, and/or furnace).
23. Pool grounding requires #8 solid bare copper ground wire.
24. No back-feeding house panels from temporary services.
25. Dedicated circuits in residential garages serving appliances shall have a single pole receptacle for each appliance. Duplex receptacles shall not be used in this application.

2006 Arkansas State Plumbing Code

All plumbing installations shall conform to the 2003 Arkansas State Plumbing Code.

1. Water service connections to the City water meter shall be made with a minimum of a $\frac{3}{4}$ inch brass 360 degree compression fitting. (Hose clamps will no longer be accepted.)
2. All persons doing plumbing work in the City shall be licensed by the state with an Arkansas State Masters License or be in the employ of an Arkansas State Master Plumber.

2003 Arkansas State Mechanical Code

All Plumbing installations shall conform to the 2003 Arkansas State Mechanical Code.

1. No Amendments

Sidewalk and Curb Cut Requirements

Sidewalks

Contact: Planning Office for specs

Contact: Building Inspection for inspection

1. Location: Sidewalk must be located in the street right-of-way, a minimum of 5' from the curb, unless otherwise specified. Obstacles such as utility poles, boxes, meters, etc. must be formed around. These utilities should not be in the sidewalk. Contact the City if you have questions.
2. Sidewalks must be constructed on a compacted subgrade which is free of dust, pockets, voids, ruts, and other defects.
3. Sidewalks in the street right-of-way must be inspected prior to pouring the sidewalk. Call the Planning Department at 271-3122 to schedule an appointment.
4. Sidewalks shall be installed in a manner that will conform to the existing grade and landscaping. Sidewalks which extend or link existing sidewalks shall adjoin the existing walks to form a continuous, even pathway.
5. Sidewalks shall be constructed of Portland cement concrete with a minimum 28 day compression strength of 3000 pounds per square inch or of 4" thick asphaltic concrete over 2" compacted base.
6. Sidewalks shall be the following: (unless otherwise noted on final plat)
 - a. Local and residential streets shall have a 5' wide walk and 5' separation from curb.
 - b. Collector streets shall have a 6' wide walk and 6' separation from curb.
 - c. Arterial streets shall have a 6' wide walk and 8.5' separation from curb.
7. The concrete shall be four (4) inches thick.
8. Expansion joints shall be 25 feet apart.
9. Transverse joints between expansion joints shall be scored at 5 foot intervals.

10. Sidewalks shall be finished with a wood float to a smooth, even surface unless otherwise approved.
11. All sidewalks shall meet Federal ADA Standards for Accessible Design.
12. Handicapped curb ramps shall be provided wherever a sidewalk intersects a curb, driveway, or street. Call the Planning Department, 271-3122, for specifications.
13. Sidewalks must be complete before the Certificate of Occupancy will be issued and permanent connection to utilities permitted.
14. Mail boxes are not allowed in the sidewalk. One of the purposes of the 5' separation is to accommodate mail boxes.

Drive Approach Curb Cut Requirements

Contact: Mike Button, City Street Manager at 271-3130.

The City of Bentonville Street Department policy for excavating within 2 feet of back of curb or edge of pavement requires SB-2 crushed limestone backfill.

The practice of excavating behind the curb and gutter then backfilling with the broken curb section is not acceptable.

The preferred practice is to saw the section for removal to a neat line and place concrete to this saw line.

Electric Information

Contact: Electric Department

Availability of Service

- A. Before construction is started, the customer shall contact The City of Bentonville Electric Department concerning availability of service for a desired location.
- B. The customer shall have the following information available:
 1. Anticipated load and service size.
 2. Voltage requirements.
 3. Type of service.
- C. The City of Bentonville Electric Department must designate the service entrance location before construction begins.

Type of Character of Service

- A. Before purchasing equipment or wiring, the customer shall contact The City of Bentonville Electric Department regarding type of service which can be furnished at a particular location.
- B. The voltage and/or number of phases which will be supplied will depend on the type, size, and location of the load, and existing city facilities.
- C. Voltages that are standard and normally available are:
 1. 120/240 Single Phase - three wire
 2. 120/208 Single Phase - three wire
 3. 120/208 Three Phase - four wire WYE
 4. 277/480 Three Phase - four wire WYE

A 120/240 four wire DELTA SERVICE may be considered by The City of Bentonville if warranted. The City of Bentonville will not provide a 120/240 four wire DELTA SERVICE if the area is served by an underground primary distribution system, or service is required by a pad mount transformer.

- D. Single-phase three wire services, or three-phase four wire services will be provided by the following guidelines:
 1. Customers in predominately residential areas and in underground subdivisions will normally be provided a single-phase 120/240 volt service. Three-phase service is not normally available.
 2. Commercial/industrial customers located in commercial/industrial areas will be provided

one of the standard three-phase voltages if it is currently available, or if the extension of such service is cost effective, or the load is such that it can be justified.

3. A three-phase 7200/12470 primary voltage service may be considered by the Bentonville Electric Department if it is advantageous to the City and/or the customer.
4. The customer shall be responsible for splitting evenly among the three-phases all single-phase load supplied by a three phase four wire WYE system.

Miscellaneous Requirements

- A. The City of Bentonville Electric Department requires addresses for all service order requests.
- B. No temporary electric service will be hooked up without first obtaining a Building Permit (Building Inspection) and scheduling an appointment for an on-site meeting with a representative of the Electric Department.
- C. A 24-hour advance notice will be required for service disconnects and reconnects.
- D. Service disconnects shall be made by Electric Department personnel **only**.
- E. Private electricians shall not cut meter seals or pull meters- **only** Electric Department personnel.

Construction Site Policies

Job Site Debris Policy

Contact Building Inspection

All new job sites in the City of Bentonville will be cleaned of debris daily. This includes paper products, insulation, wood products, and any other materials used in the construction of the new structure. Any heavy materials, such as wood, brick, etc., may be stacked in a pile until removed from the job site. Any light-weight materials, such as paper, insulation, etc., will be stored in a closed container until taken from the job site.

If debris is found on the job site by a building inspector, the scheduled inspection, no matter what it may be for, will fail. **There will be a \$25.00 re-inspection fee charged.**

Erosion Control

(Ord. # 2006-167)

Contact Stormwater Inspector

All construction sites shall adhere to the City's Stormwater Pollution Prevention & Erosion Control Standards. Copies available on City's web site under "Other Information".

Adequate Minimum Sanitary Facilities

Contact Building Inspection

Adequate sanitary facilities shall be provided as follows: A minimum of 1 (one) facility per builder, per subdivision.

Open Burning (Ord. #2004-158, 8-10-04)

Contact Fire Department.

1. Definitions:

Bonfire-An outdoor fire used for ceremonial purposes.

Open Burning- The burning of materials wherein products of combustion are emitted directly into the ambient air without passing through a stack or chimney from an enclosed chamber. Open burning does not include road flares, smudge pots and similar

devices associated with safety or occupational uses typically considered open flames or recreational fires. For the purpose of this definition, a chamber shall be regarded as enclosed when, during the time combustion occurs, only apertures, ducts, stacks, flues, or chimneys necessary to provide combustion air and permit the escape of exhaust gas are open.

Recreational fire- An outdoor fire burning materials other than household waste or rubbish where the fuel being burned is not contained in an incinerator, outdoor fireplace, barbeque grill or barbeque pit and has a total fuel area of 3 feet or less in diameter and 2 feet or less in height for pleasure, religious, ceremonial, cooking, warmth or similar purposes.

Yard Debris- Grass clippings, leaves, and shrubbery and tree trimmings collected from residential property. Does not include household waste or rubbish.

2: The open burning of yard debris is prohibited.

3: Recreational fires, other than bonfires, are allowed.

4: Controlled burning for the purpose of clearing land and bonfires are allowed at the discretion of the Fire Department officials with the issuance of a burn permit, subject to the following guidelines:

- a. Wind cannot exceed 10 mph
- b. Burn pile or bonfires shall not be located within 100 feet of any structure or highway
- c. Material must be extinguished completely by dark, or a representative of the landowner must be on-site all night to fire-watch.
- d. Fire must be controllable by the person on-site with water or heavy equipment.
- e. Surrounding properties must be considered. Permits will not be issued for properties in high hazard areas or high population areas, such as apartment complexes, hospitals, schools, etc.

5: Warming fires are allowed in accordance with Ark. Code Ann. § 8-4-305.

Associated Fees

Planning Fees

Contact: Current Planning Office

Request	Fee
Conditional Use	\$125
Rezoning	\$275
Variance	\$125
Vacation/Alley Easements	\$50
Incidental Sub.	\$125
Preliminary Plats	\$425 + \$1 per lot
Final Plat	\$200 & \$1 per lot
Large Scale Dev. – in house	\$200
Large Scale Dev.	\$275 + \$1 per lot

Street Fees

Contact: Street Department

Street cuts, sidewalk replacement and curb replacements to be measured by the City of Bentonville. If the street cut is for water or sewer related item please contact Water Utilities for measurement at 271-3140.

Street Cuts	\$100/sq. yd.
Sidewalk Replacements	\$28/sq. yd. w/\$100 minimum
Curb Replacements	\$15/linear ft. w/\$100 minimum
Road Bore Permits	\$15.00 per bore + \$750 bond posted per bore

Residential Utility Deposits

Contact: Utility Billing

The City of Bentonville requires a utility deposit for services furnished by the city (electric, water, trash). **Meter deposits must be made prior to service being connected.** A waiver of deposit is used for a contractor who has 2 (two) or more buildings under construction or an owner of rental property who has 2 (two) or more rentals.

Utility Deposit Schedule	
Electric, water/sewer & solid waste	\$100
Electric	\$50
Water, sewer	\$50
Solid Waste	\$10

Water & Sewer Service Fees

Contact: Water and Sewer Department

Sewer and water specifications can be obtained at the Water and Sewer Department located at 501 SE 3rd St. for \$30.

Backflow Preventer Permits	
Residential	\$30
Commercial	\$50

Materials supplied by City	
5/8" service	\$1000
1" service	\$1100
Double 5/8" service	\$1200
2" service	\$3000

Materials supplied by Contractor	
4" tap	\$175
6" tap	\$350
8" tap	\$500
12" tap	\$600
4" Sewer Tap	\$125

Building Permit Fees

Contact: Building Inspection

The City of Bentonville determines the valuation of a structure using the ICC Building Valuation Data Table. A copy of the table is available on the International Building Code's website at www.iccsafe.org. The valuation table is updated every six months to provide an up-to-date "average" construction cost per square foot. Once the valuation is determined, the following table is used to calculate permit fees.

Total Valuation	Fee
\$1000.00 and less	No fee, unless inspection required, in which case a \$15.00 fee for each inspection shall be charged.
\$1001.00 to \$50,000.00	\$15 for the first \$1,000.00 plus \$5.00 for each additional thousand or fraction thereof, to and including \$100,000.00.
\$50,001.00 to \$100,000.00	\$260.00 for the first \$50,000.00 plus \$4.00 for each additional thousand or fraction thereof, to and including \$100,000.00.
\$100,001.00 to \$500,000.00	\$460.00 for the first \$100,000 plus \$3.00 for each addition thousand or fraction thereof, to and including \$500,000.00.
\$500,001.00 and up	\$1660.00 for the first \$500,000.00 plus \$2.00 for each additional thousand or fraction thereof.

Residential Impact Fees

Contact: Building Inspection

Why Impact Fees?

Impact and Capacity Fees may be defined as new growth's fair share of *capital* facilities. Impact and Capacity Fees are a one-time payment of fees required of builders or developers before a final inspection is conducted. It is important to note that the impact fees do not apply to operating expenses, which is the vast majority of the City General Fund budget.

Partially because of unfunded mandates by the Federal and State governments, the City is under increasing pressure to find additional revenues. Growth is likely to eventually overcome the City's ability to provide the necessary infrastructure and services to sustain growth if the City cannot identify appropriate funding sources to provide for expanded services and infrastructure needed for growth. With impact and capacity fees, growth pays its equitable share of the needed capital facilities and helps to ensure the long-term growth potential of the City.

The position of the City of Bentonville is to embrace growth and the economic prosperity it brings to the City's citizens; however the same growth should not burden the City's ability to provide quality services at a fair price for the City as a whole. Impact and capacity fees can help ensure the long-term growth potential of the City and the accompanying economic prosperity of its citizens.

Fire/EMS Impact Fees Due prior to Final Inspection (1/1/04)	
SF Detached	\$762
All Other Residential	\$548

Ord. #2006-114. Adopted July 25, 2006. Effective Aug. 30, 2006.

Police Impact Fees	
SF Detached	\$66
All Other Residential	\$47

Ord. #2006-118. Adopted July 25, 2006. Effective Aug. 30, 2006.

Library Impact Fees	
SF Detached	\$428
All Other Residential	\$308

Ord. #2006-118. Adopted July 25, 2006. Effective Aug. 30, 2006.

Park Impact Fees	
SF Detached	\$898
All Other Residential	\$644

Ord. #2006-118. Adopted July 25, 2006. Effective Aug. 30, 2006.

Water Capacity Fees Due prior to Final Inspection	
SF w/ .625" meter	\$1,457
SF w/ 1.00" meter	\$2,004
All Other Residential:	
.625" meter	\$1,457
1.00" meter	\$2,004
2.000" meter	\$4,055
4.000" meter	\$19,231

Ord. #2006-115. Adopted July 25, 2006. Effective Aug. 30, 2006.

Sewer Capacity Fees Due prior to Final Inspection	
SF w/ .625" meter	\$1,139
SF w/ 1.00" meter	\$1,139
All Other Residential	\$860

Ord. #2006-82. Adopted June 23, 2006. Effective June. 24, 2006.

Table 31B

SPAN TABLE

FLOOR JOIST SPANS

L/240

1991 – NDS

40# Live Load (Living Areas)

10# Dead Load

Design Criteria: Strength – 10 lbs per sq. ft. dead load plus 40 lbs per sq. ft. live load; Deflection – Limited to span in inches divided by 360 for live load only

Species or Group	Grade*	Span (feet and inches)											
		<i>Italic Bold Print</i> indicates spans controlled by deflection											
		2 x 6			2 x 8			2 x 10			2 x 12		
		12"oc	16"oc	24"oc	12"oc	16"oc	24"oc	12"oc	16"oc	24"oc	12"oc	16"oc	24"oc
Douglas Fir-Larch	1	<i>10-11</i>	<i>9-11</i>	8-8	<i>14-5</i>	<i>13-1</i>	11-0	<i>18-5</i>	16-5	13-5	22-0	19-1	15-7
	2	<i>10-9</i>	<i>9-9</i>	8-1	<i>14-2</i>	<i>12-7</i>	10-3	17-9	15-5	12-7	20-7	17-10	14-7
	3	8-8	7-6	6-2	11-10	9-6	7-9	13-5	11-8	9-6	15-7	13-6	11-10
Douglas Fir-South	1	<i>10-0</i>	<i>9-1</i>	<i>7-11</i>	<i>13-2</i>	<i>12-0</i>	10-5	<i>16-10</i>	<i>15-3</i>	12-9	<i>20-6</i>	18-1	14-9
	2	9-9	8-10	<i>7-9</i>	<i>12-10</i>	<i>11-8</i>	10-0	<i>16-5</i>	<i>14-11</i>	12-2	<i>19-11</i>	17-4	14-2
	3	8-6	7-4	6-0	10-9	9-3	7-7	13-1	11-4	9-3	15-2	13-2	10-9
Hem-Fir	1	<i>10-6</i>	<i>9-6</i>	<i>8-4</i>	<i>13-10</i>	<i>12-7</i>	10-9	<i>17-8</i>	16-0	13-1	<i>21-6</i>	18-7	15-2
	2	<i>10-0</i>	<i>9-1</i>	<i>7-11</i>	<i>13-2</i>	<i>12-0</i>	10-2	<i>16-10</i>	15-2	12-5	20-4	17-7	14-4
	3	8-8	7-6	6-2	11-0	9-6	7-9	13-5	11-8	9-6	15-7	13-6	11-0
Southern Pine	1 Dense	<i>11-2</i>	<i>10-2</i>	<i>8-10</i>	<i>14-8</i>	<i>13-4</i>	<i>11-8</i>	<i>18-9</i>	<i>17-0</i>	<i>14-11</i>	<i>22-10</i>	<i>20-9</i>	18-1
	1	<i>10-11</i>	<i>9-11</i>	<i>8-8</i>	<i>14-5</i>	<i>13-1</i>	<i>11-5</i>	<i>18-5</i>	<i>16-9</i>	14-7	<i>22-5</i>	<i>20-4</i>	17-5
	1 Non-Dense	<i>10-9</i>	<i>9-9</i>	<i>8-6</i>	<i>14-2</i>	<i>12-10</i>	<i>11-3</i>	<i>18-0</i>	<i>16-5</i>	14-0	<i>21-11</i>	<i>19-11</i>	16-8
	2 Dense	<i>10-11</i>	<i>9-11</i>	<i>8-8</i>	<i>14-5</i>	<i>13-1</i>	<i>11-5</i>	<i>18-5</i>	<i>16-9</i>	14-0	<i>22-5</i>	<i>20-4</i>	16-8
	2	<i>10-9</i>	<i>9-9</i>	<i>8-6</i>	<i>14-2</i>	<i>12-10</i>	11-0	<i>18-0</i>	16-1	13-2	21-9	18-10	15-4
	2 Non-Dense	<i>10-3</i>	<i>9-4</i>	<i>8-2</i>	<i>13-6</i>	<i>12-3</i>	10-6	<i>17-3</i>	15-3	12-6	20-11	18-1	14-9
3	9-4	8-1	6-7	11-11	10-3	8-5	14-0	12-2	9-11	16-8	14-5	11-10	
Southern Pine (mixed)	1	<i>10-6</i>	<i>9-6</i>	<i>8-4</i>	<i>13-10</i>	<i>12-7</i>	<i>11-0</i>	<i>17-8</i>	<i>16-0</i>	13-1	<i>21-6</i>	18-10	15-5
	2	<i>10-3</i>	<i>9-4</i>	<i>8-2</i>	<i>13-6</i>	<i>12-3</i>	10-3	<i>17-3</i>	15-1	12-4	20-7	17-10	14-7
	3	8-10	7-8	6-3	11-3	9-9	7-11	13-1	11-4	9-3	15-7	13-6	11-0
Spruce-Pine-Fir	1	<i>10-3</i>	<i>9-4</i>	<i>8-1</i>	<i>13-6</i>	<i>12-3</i>	<i>10-3</i>	<i>17-3</i>	<i>15-5</i>	<i>12-7</i>	20-7	17-10	14-7
	2	<i>10-3</i>	<i>9-4</i>	<i>8-1</i>	<i>13-6</i>	<i>12-3</i>	<i>10-3</i>	<i>17-3</i>	<i>15-5</i>	<i>12-7</i>	20-7	17-10	14-7
	3	8-8	7-6	6-2	11-10	9-6	7-9	13-5	11-8	9-6	15-7	13-6	11-0
Spruce-Pine-Fire (south)	1	<i>9-9</i>	<i>8-10</i>	<i>7-9</i>	<i>12-10</i>	<i>11-8</i>	10-2	<i>16-5</i>	<i>14-11</i>	12-5	<i>19-11</i>	17-7	14-4
	2	<i>9-6</i>	<i>8-7</i>	<i>7-6</i>	<i>12-6</i>	<i>11-4</i>	9-6	<i>15-11</i>	14-3	11-8	19-1	16-6	13-6
	3	8-0	6-11	5-8	10-2	8-9	7-2	12-5	10-9	8-9	14-4	12-5	10-2
Western Woods	1	<i>9-6</i>	8-7	7-0	<i>12-6</i>	10-10	8-10	15-4	13-3	10-10	17-9	15-5	12-7
	2	<i>9-2</i>	<i>8-4</i>	7-0	<i>12-1</i>	10-10	8-10	15-4	13-3	10-10	17-9	15-5	12-7
	3	7-6	6-6	5-4	9-6	8-3	6-9	11-8	10-1	8-3	13-6	11-8	9-6

Table 31C

SPAN TABLE

CEILING JOIST SPANS

L/240

1991 – NDS

20# Live Load (Limited attic storage where development of future rooms is not possible)

10# Dead Load

Design Criteria: Strength – 10 lbs per sq. ft. dead load plus 10 lbs per sq. ft. limited attic storage; Deflection – Limited to span in inches divided by 240 for live load only

Species or Group	Grade*	Span (feet and inches)											
		<i>Italic Bold Print</i> indicates spans controlled by deflection											
		2 x 6			2 x 8			2 x 10			2 x 12		
		12”oc	16”oc	24”oc	12”oc	16”oc	24”oc	12”oc	16”oc	24”oc	12”oc	16”oc	24”oc
Douglas Fir-Larch	1	15-9	13-9	11-2	20-1	17-5	14-2	24-6	21-3	17-4	28-5	24-8	20-1
	2	14-10	12-10	10-6	18-9	16-3	13-3	22-11	19-10	16-3	26-7	23-0	18-10
	3	11-2	9-8	7-11	14-2	12-4	10-0	17-4	15-0	12-3	20-1	17-5	14-3
Douglas Fir-South	1	14-5	13-0	10-8	19-0	16-6	13-6	23-3	20-2	16-5	27-0	23-4	19-1
	2	14-1	12-6	10-2	18-3	15-9	12-11	22-3	19-3	15-9	25-10	22-4	18-3
	3	10-11	9-6	7-9	13-10	12-0	9-9	16-11	14-8	11-11	19-7	17-0	13-10
Hem-Fir	1	15-2	13-5	10-11	19-7	16-11	13-10	23-11	20-8	16-11	27-9	24-0	19-7
	2	14-5	12-8	10-4	18-6	16-0	13-1	22-7	19-7	16-0	26-3	22-8	18-6
	3	11-2	9-8	7-11	14-2	12-4	10-0	17-4	15-0	12-3	20-1	17-5	14-3
Southern Pine	1 Dense	16-1	14-7	12-9	21-2	19-3	16-8	27-1	24-5	19-11	32-11	28-7	23-4
	1	15-9	14-4	12-6	20-10	18-11	15-11	26-6	23-2	18-11	31-10	27-6	22-6
	1 Non-Dense	15-6	14-1	12-0	20-5	18-5	15-1	25-7	22-2	18-1	30-6	26-5	21-7
	2 Dense	15-9	14-4	11-10	20-10	18-9	15-4	25-7	22-2	18-1	30-6	26-5	21-7
	2	15-6	13-6	11-0	20-1	17-5	14-2	24-0	20-9	17-0	28-1	24-4	19-10
	2 Non-Dense	14-9	12-11	10-7	19-3	16-8	13-7	22-9	19-9	16-1	27-0	23-4	19-1
3	12-1	10-5	8-6	15-4	13-3	10-10	18-1	15-8	12-10	21-7	18-8	15-3	
Southern Pine (mixed)	1	15-2	13-9	11-2	19-11	17-5	14-2	23-11	20-9	16-11	28-1	24-4	19-10
	2	14-9	12-11	10-7	18-9	16-3	13-3	22-6	19-6	15-11	26-7	23-0	18-10
	3	11-5	9-11	8-1	14-6	12-7	10-3	16-11	14-8	12-0	20-1	17-5	14-3
Spruce-Pine-Fir	1	14-9	12-10	10-6	18-9	16-3	13-3	22-11	19-10	16-3	26-7	23-0	18-10
	2	14-9	12-10	10-6	18-9	16-3	13-3	22-11	19-10	16-3	26-7	23-0	18-10
	3	11-2	9-8	7-11	14-2	12-4	10-0	17-4	15-0	12-3	20-1	17-5	14-3
Spruce-Pine-Fire (south)	1	14-1	12-8	10-4	18-6	16-0	13-1	22-7	19-7	16-0	26-3	22-8	18-6
	2	13-8	11-11	9-8	17-5	15-1	12-4	21-3	18-5	15-0	24-8	21-4	17-5
	3	10-4	8-11	7-4	13-1	11-4	9-3	16-0	13-10	11-4	18-6	16-1	13-1
Western Woods	1	12-9	11-1	9-0	16-2	14-0	11-5	19-9	17-1	14-0	22-11	19-10	16-3
	2	12-9	11-1	9-0	16-2	14-0	11-5	19-9	17-1	14-0	22-11	19-10	16-3
	3	9-8	8-5	6-10	12-4	10-8	8-8	15-0	13-0	10-7	17-5	15-1	12-4

Table 31E

SPAN TABLE

LOW SLOPE RAFTER SPANS – PITCH 3 IN 12 OR LESS – NO FINISHED CEILING

L/240

1991 – NDS

20# Live Load (7 day duration)

10# Dead Load

Design Criteria: Strength – 20 lbs per sq. ft. plus 10 lbs per sq. ft. dead load with light roof covering, no ceiling and pitch 3 in 12 or less; Deflection – Limited to span in inches divided by 240 for live load only

Species or Group	Grade*	Span (feet and inches)											
		<i>Italic Bold Print</i> indicates spans controlled by deflection											
		2 x 6			2 x 8			2 x 10			2 x 12		
		12”oc	16”oc	24”oc	12”oc	16”oc	24”oc	12”oc	16”oc	24”oc	12”oc	16”oc	24”oc
Douglas Fir-Larch	1	<i>15-9</i>	<i>14-4</i>	<i>12-6</i>	<i>20-10</i>	<i>18-11</i>	15-10	<i>26-6</i>	23-9	19-5	31-10	27-6	22-6
	2	<i>15-6</i>	<i>14-1</i>	11-9	<i>20-5</i>	18-2	14-10	25-8	22-3	18-2	29-9	25-9	21-0
	3	12-6	10-10	8-10	15-10	13-9	11-3	19-5	16-9	13-8	22-6	19-6	15-11
Douglas Fir-South	1	<i>14-5</i>	<i>13-1</i>	<i>11-5</i>	<i>19-0</i>	<i>17-3</i>	15-1	<i>24-3</i>	<i>22-1</i>	18-5	<i>29-6</i>	26-1	21-4
	2	<i>14-1</i>	<i>12-9</i>	<i>11-2</i>	<i>18-6</i>	<i>16-10</i>	14-5	<i>23-8</i>	<i>21-6</i>	17-7	<i>28-9</i>	25-0	20-5
	3	12-3	10-7	8-8	15-6	13-5	10-11	18-11	16-4	13-4	21-11	19-0	15-6
Hem-Fir	1	<i>15-2</i>	<i>13-9</i>	<i>12-0</i>	<i>19-11</i>	<i>18-2</i>	15-6	<i>25-5</i>	<i>23-2</i>	18-11	<i>30-11</i>	26-10	21-11
	2	<i>14-5</i>	<i>13-1</i>	<i>11-5</i>	<i>19-0</i>	<i>17-3</i>	14-8	<i>24-3</i>	21-11	17-10	29-4	25-5	20-9
	3	12-6	10-10	8-10	15-10	13-9	11-3	19-5	16-9	13-8	22-6	19-6	15-11
Southern Pine	1 Dense	<i>16-1</i>	<i>14-7</i>	<i>12-9</i>	<i>21-2</i>	<i>19-3</i>	<i>16-10</i>	<i>27-1</i>	<i>24-7</i>	<i>21-6</i>	<i>32-11</i>	<i>29-11</i>	<i>26-1</i>
	1	<i>15-9</i>	<i>14-4</i>	<i>12-6</i>	<i>20-10</i>	<i>18-11</i>	<i>16-6</i>	<i>26-6</i>	<i>24-1</i>	<i>21-1</i>	<i>32-3</i>	<i>29-4</i>	25-2
	1 Non-Dense	<i>15-6</i>	<i>14-1</i>	<i>12-3</i>	<i>20-5</i>	<i>18-6</i>	<i>16-2</i>	<i>26-0</i>	<i>23-8</i>	20-3	<i>31-8</i>	<i>28-9</i>	24-1
	2 Dense	<i>15-9</i>	<i>14-4</i>	<i>12-6</i>	<i>20-10</i>	<i>18-11</i>	<i>16-6</i>	<i>26-6</i>	<i>24-1</i>	20-3	<i>32-3</i>	<i>29-4</i>	24-1
	2	<i>15-6</i>	<i>14-1</i>	<i>12-3</i>	<i>20-5</i>	<i>18-6</i>	15-10	<i>26-0</i>	<i>23-2</i>	18-11	31-5	27-2	22-2
	2 Non-Dense	14-9	<i>13-5</i>	<i>11-9</i>	<i>19-6</i>	<i>17-9</i>	15-2	<i>24-10</i>	22-1	18-0	30-2	26-1	21-4
3	13-6	11-8	9-6	17-2	14-10	12-1	20-3	17-6	14-4	24-1	20-11	17-1	
Southern Pine (mixed)	1	<i>15-2</i>	<i>13-9</i>	<i>12-0</i>	<i>19-11</i>	<i>18-2</i>	<i>15-10</i>	<i>25-5</i>	<i>23-2</i>	18-11	<i>30-11</i>	27-2	22-2
	2	<i>14-9</i>	<i>13-5</i>	<i>11-9</i>	<i>19-6</i>	<i>17-9</i>	14-10	<i>24-10</i>	21-9	17-9	29-9	25-9	21-0
	3	12-9	11-1	9-0	16-2	14-0	11-5	18-11	16-5	13-5	22-6	19-6	15-11
Spruce-Pine-Fir	1	<i>14-9</i>	<i>13-5</i>	<i>11-9</i>	<i>19-6</i>	<i>17-9</i>	<i>14-10</i>	<i>24-10</i>	22-3	<i>18-2</i>	29-9	25-9	21-0
	2	<i>14-9</i>	<i>13-5</i>	<i>11-9</i>	<i>19-6</i>	<i>17-9</i>	<i>14-10</i>	<i>24-10</i>	22-3	<i>18-2</i>	29-9	25-9	21-0
	3	12-6	10-10	8-10	15-10	13-9	11-3	19-5	16-9	13-8	22-6	19-6	15-11
Spruce-Pine-Fire (south)	1	<i>14-1</i>	<i>12-9</i>	<i>11-2</i>	<i>18-6</i>	<i>16-10</i>	14-8	<i>23-8</i>	<i>21-6</i>	17-10	<i>28-9</i>	25-5	20-9
	2	<i>13-8</i>	<i>12-5</i>	<i>10-10</i>	<i>18-0</i>	<i>16-4</i>	13-9	<i>22-11</i>	20-7	16-9	27-6	23-10	19-6
	3	11-7	10-0	8-2	14-8	12-8	10-4	17-10	15-6	12-8	20-9	17-11	14-8
Western Woods	1	<i>13-8</i>	12-4	10-1	<i>18-0</i>	15-8	12-10	22-1	19-2	15-8	25-8	22-2	18-1
	2	<i>13-3</i>	<i>12-0</i>	10-1	<i>17-5</i>	15-8	12-10	22-1	19-2	15-8	25-8	22-2	18-1
	3	10-10	9-5	7-8	13-9	11-11	9-9	16-9	14-6	11-10	19-6	16-10	13-9

Table 31G

SPAN TABLE

HIGH SLOPE RAFTER SPANS WITH HEAVY ROOF COVERING AND NO FINISHED CEILING **L/180**
 1991 – NDS
 20# Live Load (7 day duration)
 15# Dead Load
Design Criteria: Strength – 20 lbs per sq. ft. live load plus 15 lbs per sq. ft. dead load with heavy roof covering, no ceiling and pitch more than 3 in 12
 Deflection – Limited to span in inches divided by 180 for live load only

Species or Group	Grade*	Span (feet and inches)											
		<i>Italic Bold Print</i> indicates spans controlled by deflection											
		2 x 6			2 x 8			2 x 10			2 x 12		
		12"oc	16"oc	24"oc	12"oc	16"oc	24"oc	12"oc	16"oc	24"oc	12"oc	16"oc	24"oc
Douglas Fir-Larch	1	16-5	14-3	11-7	20-9	18-0	14-8	25-5	22-0	17-11	29-5	25-6	20-10
	2	15-4	13-3	10-10	19-5	16-10	13-9	23-9	20-7	16-9	27-6	23-10	19-6
	3	11-7	10-1	8-2	14-8	12-9	10-5	17-11	15-7	12-8	20-10	18-0	14-9
Douglas Fir-South	1	15-7	13-6	11-0	19-9	17-1	13-11	24-1	20-10	17-0	27-11	24-2	19-9
	2	14-11	12-11	10-6	18-10	16-4	13-4	23-1	20-0	16-4	26-9	23-2	18-11
	3	11-4	9-10	8-0	14-4	12-5	10-2	17-6	15-2	12-4	20-3	17-7	14-4
Hem-Fir	1	16-0	13-10	11-4	20-3	17-6	14-4	24-9	21-5	17-6	28-8	24-10	20-3
	2	15-2	13-1	10-8	19-2	16-7	13-7	23-5	20-3	16-7	27-2	23-6	19-2
	3	11-7	10-1	8-2	14-8	12-9	10-5	17-11	15-7	12-8	20-10	18-0	14-9
Southern Pine	1 Dense	17-8	16-1	13-6	23-4	21-1	17-3	29-2	25-3	20-7	34-2	29-7	24-2
	1	17-4	15-9	13-1	22-11	20-1	16-5	27-7	23-11	19-6	32-11	28-6	23-3
	1 Non-Dense	17-0	15-3	12-6	22-0	19-1	15-7	26-6	23-0	18-9	31-7	27-4	22-4
	2 Dense	17-4	15-0	12-3	22-5	19-5	15-10	26-6	23-0	18-9	31-7	27-4	22-4
	2	16-1	13-11	11-5	20-9	18-0	14-8	24-10	21-6	17-6	29-1	25-2	20-7
	2 Non-Dense	15-5	13-4	10-11	19-11	17-3	14-1	23-7	20-5	16-8	27-11	24-2	19-9
3	12-6	10-10	8-10	15-10	13-9	11-3	18-9	16-3	13-3	22-4	19-4	15-9	
Southern Pine (mixed)	1	16-5	14-3	11-7	20-9	18-0	14-8	24-10	21-6	17-6	29-1	25-2	20-7
	2	15-5	13-4	10-11	19-5	16-10	13-9	23-3	20-2	16-6	27-6	23-10	19-6
	3	11-10	10-3	8-4	15-0	13-0	10-7	17-6	15-2	12-5	20-10	18-0	14-9
Spruce-Pine-Fir	1	15-4	13-3	10-10	19-5	16-10	13-9	23-9	20-7	16-9	27-6	23-10	19-6
	2	15-4	13-3	10-10	19-5	16-10	13-9	23-9	20-7	16-9	27-6	23-10	19-6
	3	11-7	10-1	8-2	14-8	12-9	10-5	17-11	15-7	12-8	20-10	18-0	14-9
Spruce-Pine-Fire (south)	1	15-2	13-1	10-8	19-2	16-7	13-7	23-5	20-3	16-7	27-2	23-6	19-2
	2	14-3	12-4	10-1	18-0	15-7	12-9	22-0	19-0	15-7	25-6	22-1	18-0
	3	10-8	9-3	7-7	13-7	11-9	9-7	16-7	14-4	11-8	19-2	16-7	13-7
Western Woods	1	13-3	11-5	9-4	16-9	14-6	11-10	20-6	17-9	14-6	23-9	20-7	16-9
	2	13-3	11-5	9-4	16-9	14-6	11-10	20-6	17-9	14-6	23-9	20-7	16-9
	3	10-1	8-8	7-1	12-9	11-0	9-0	15-7	13-6	11-0	18-0	15-7	12-9

TABLE R-35							
ALLOWABLE SPANS FOR BUILT-UP WOOD CENTER GIRDERS AND FOOTING SIZES FOR GIRDER SUPPORT COLUMNS							
		ONE STORY		TWO STORY		THREE STORY	
Width of Structure (feet)	Girder Size (inches)	Maximum Span (feet-in.)	Footing Size (inches)	Maximum Span (feet-in.)	Footing Size (inches)	Maximum Span (feet-in.)	Footing Size (inches)
24	3-2x8	6-7	17x17*	4-11	20x20	4-1	22x22
	4-2x8	7-8	19x19*	5-8	21x21	4-9	24x24
	3-2x10	8-5	20x20*	6-3	23x23	5-3	25x25
	4-2x10	9-9	21x21	7-3	24x24	6-1	27x27
	3-2x12	10-3	22x22	7-8	25x25	6-4	27x27
	4-2x12	11-10	23x23	8-10	27x27	7-4	29x29
26	3-2x8	6-4	17x17*	4-9	20x20	3-11	22x22
	4-2x8	7-4	18x18*	5-6	22x22	4-7	24x24
	3-2x10	8-1	19x19	6-1	23x23	5-0	25x25
	4-2x10	9-4	21x21	7-0	24x24	5-10	27x27
	3-2x12	9-10	21x21	7-4	25x25	6-1	28x28
	4-2x12	11-5	23x23	8-6	27x27	7-1	30x30
28	3-2x8	6-2	17x17*	4-7	21x21	3-10	23x23
	4-2x8	7-1	18x18*	5-3	22x22	4-5	24x24
	3-2x10	7-10	19x19	5-10	23x23	4-10	26x26
	4-2x10	9-0	20x20	6-9	25x25	5-7	28x28
	3-2x12	9-6	21x21	7-1	26x26	5-11	28x28
	4-2x12	11-0	22x22	8-2	28x28	6-10	30x30
32	3-2x8	5-9	16x16*	4-3	21x21	3-7	24x24
	4-2x8	6-7	17x17	4-11	23x23	4-1	25x25
	3-2x10	7-4	18x18	5-5	24x24	4-6	27x27
	4-2x10	8-5	20x20	6-3	26x26	5-3	28x28
	3-2x12	8-11	20x20	6-8	27x27	5-6	29x29
	4-2x12	10-3	22x22	7-8	29x29	6-4	31x31

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1psf = 0.0479kN/m², 1 psi = 6.895 kPa.

Notes:

1. Values shown are for a clear span trussed roof, a load bearing center wall on the first floor in 2-story construction, and a loan bearing center wall on the first and second floors in a 3-story construction.
2. Spans based on allowable bending moment F_b=1000 pounds per square inch (psi) for repetitive members. See Table 502.3.1c.
3. Footing size based on 2000 psf soil-bearing capacity; footing thickness shall be one-half (min.) the width of the footing.
4. 4x4 posts may be used at these (*) locations, 6x6 posts, or 4x4 posts or 3-inch diameter steel columns with bearing plates or equivalent area, are acceptable in all locations.