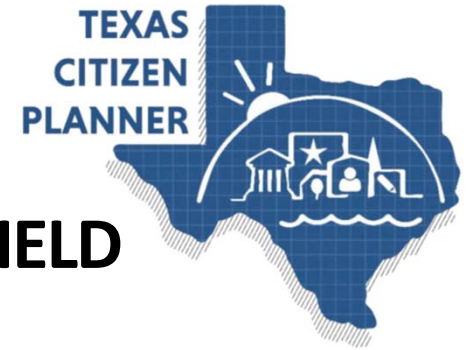


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AN INTRODUCTION TO STORMWATER ORDINANCE WRITING: EXAMPLES FROM THE FIELD



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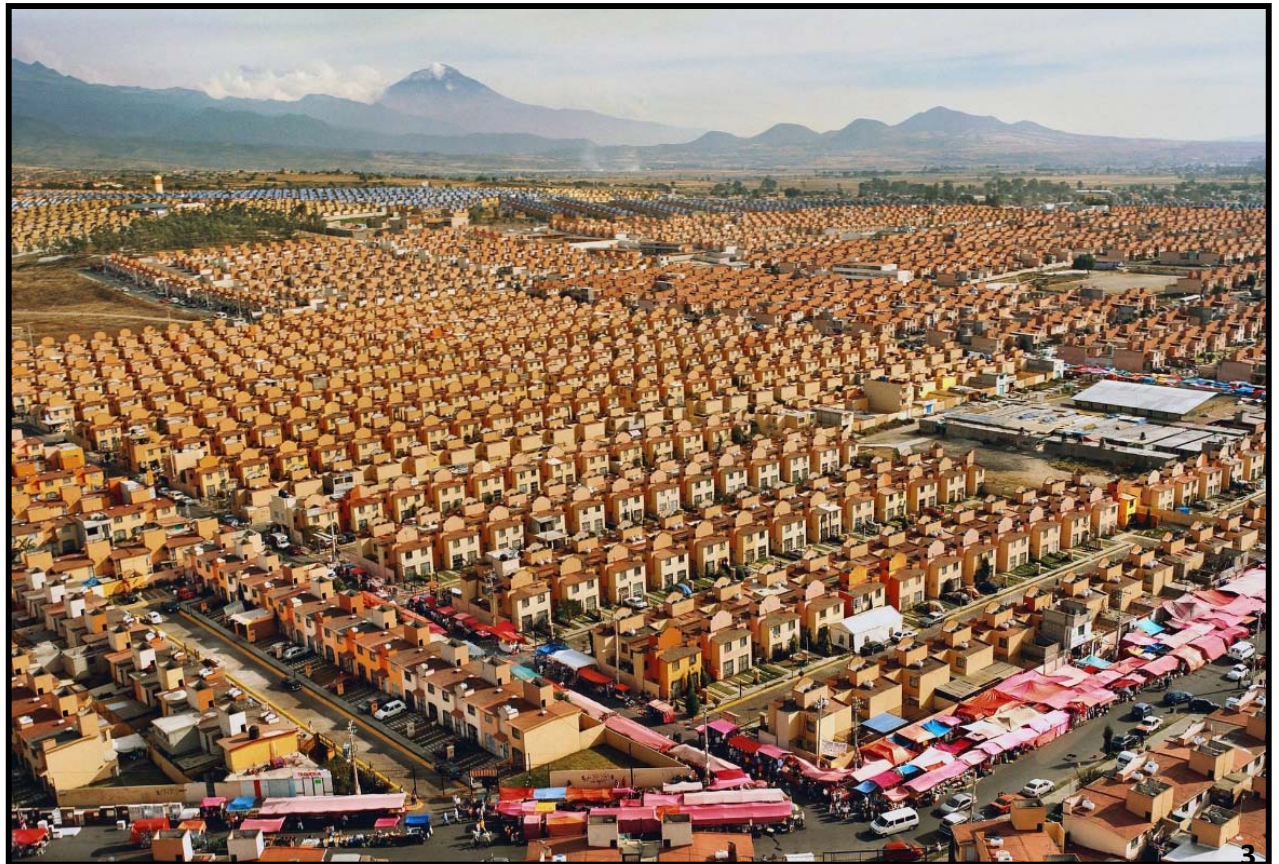
ORDINANCE WRITING PROCESS

- Identify problems and issues
- Formulate objectives
- Develop policies
- Write ordinance



IDENTIFY PROBLEMS AND ISSUES

- Flood damage reduction, floodplain management
- Drainage infrastructure capacity and growth
- Open space preservation, rapid development
- Erosion and sediment control
- Operations and maintenance
- Funding
- Clean Water Act compliance
- Water quality



FORMULATE OBJECTIVES

- Purpose:
 - State official position
 - Communicate
 - Provide basis for interpretation
 - Provide direction
 - Identify long term impacts
 - Identify necessary program changes
 - Evaluate implementation
- Format:
 - Program specific
 - Focused



Section 1.02 Purposes

The purposes of these regulations are:

- J. To minimize the pollution of streams and ponds; to provide for the adequacy of drainage facilities; to control storm water runoff; to minimize erosion and siltation problems; to safeguard the water table; to encourage the wise use and management of natural resources; and enhance the stability and beauty of the community and the value of the land.

DEVELOP POLICIES

- **Central to ordinance**
- **Describe how to achieve objectives**
- **May require technical analysis to derive**
- **Examples:**
 - **Should rules vary from one watershed to another?**
 - **Should provisions apply to small or large drainage areas?**
 - **Should private concerns operate stormwater facilities?**
 - **Who should pay for new infrastructure?**
 - **Should utility fees use gross lot size or imperviousness?**

Section 1.03 Policies

To carry out the purpose statements above, it is declared to be the policy of the City to guide and regulate the subdivision and development of land in such a manner as to promote orderly growth both within the City and, where applicable, within its extraterritorial jurisdiction.

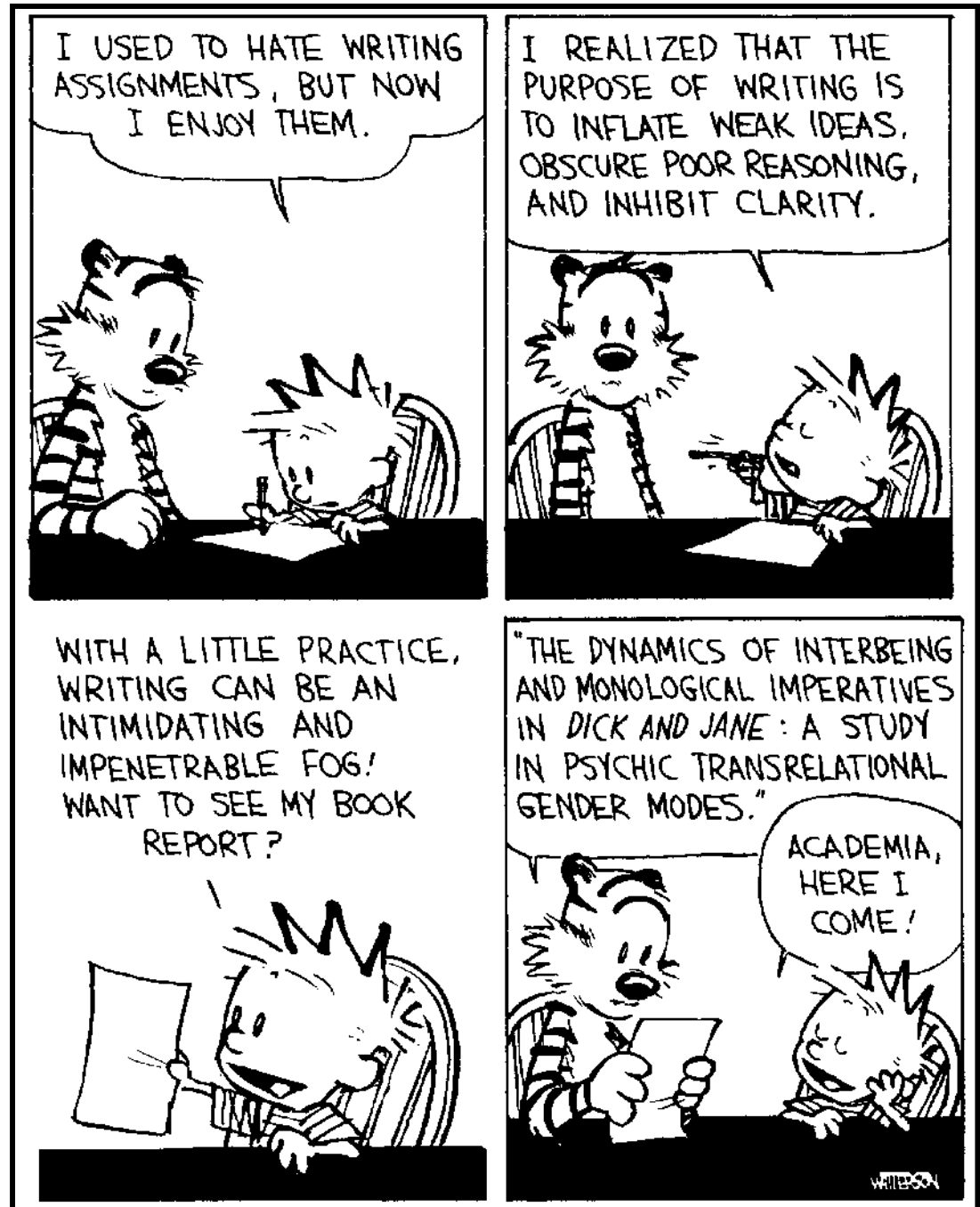
Proposed plats or subdivisions that do not conform to the purposes listed above and the following policies and regulations shall be denied, or, in lieu of being denied, be approved subject to conformance to these purposes and policies.

These regulations shall be administered in accordance with the following policies:

- D. **Adequate Public Facilities Standards.** Public facilities shall be considered adequate if they meet the minimum level of service (LOS) established in the appropriate sections of this ordinance and the following standards:
4. **Drainage.** Storm water runoff attributable to new development shall meet the intent of the minimum standards of this ordinance and the *Design Criteria Manual*. (Amend Ord 04-015, 1/27/04)
 5. **Storm Water Management.** Permanent features are required to maintain to the maximum extent practicable the predevelopment characteristics of the natural creek that ultimately receives storm water runoff from the development.

WRITE THE ORDINANCE

- Policy document NOT a design manual
- Address “What” and “Why”
- Include “How” in other documents



WRITE THE ORDINANCE

- **Participants:**
 - **Engineering, public works, planning, environmental management, legal, and other affected departments**
 - **Interest groups and stakeholders**
 - **Elected officials**
 - **Consultants**
- **Use “model” or borrowed ordinances with caution: Objectives and policies may differ!!**

ORDINANCE COMPONENTS

- **Legal authority**
- **Technical basis**
- **Administrative apparatus**
- **Enforcement provisions**

LEGAL AUTHORITY

- Ordinance must follow from political body's authority under state law
- Texas:
 - Type A, B, C, or Home Rule Municipality
 - County (Not Called an Ordinance)





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[CHAPTER 1. GENERAL PROVISIONS](#)

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WHEREAS, the City of Houston is a municipal corporation organized under the Constitution and the general and special laws of the State of Texas, and thereby exercises powers granted by the City's Charter and the provisions of Article XI, Section 5 of the Texas Constitution; and

WHEREAS, in the exercise of its lawful authority, the City may enact police power ordinances to promote and protect the health, safety and welfare of the public; and

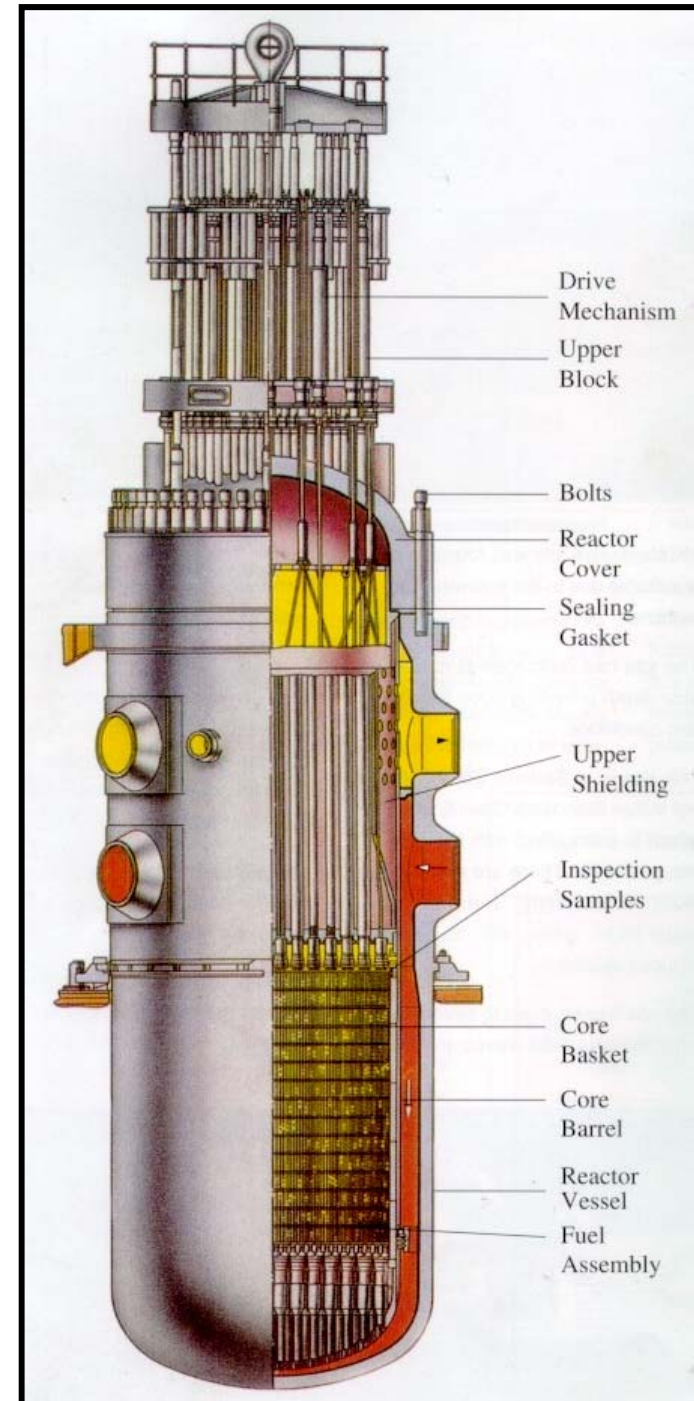
WHEREAS, the reduction of pollutants in storm water runoff promotes and protects the health, safety and welfare of the public; and

WHEREAS, the federal Environmental Protection Agency issued a National Pollutant Discharge Elimination System permit to the City for its storm sewer system effective October 1, 1998 (the "NPDES storm water permit"); and

WHEREAS, the NPDES storm water permit requires the City, among other things, to enact an ordinance and implement programs to reduce pollutants in storm water runoff from new development and significant redevelopment, construction sites, and industrial and high risk facilities, and to effectively prohibit non-storm water discharges to the City's storm sewer system by October 1, 2001; and

TECHNICAL BASIS

- Establish clear and measurable performance standards
- Avoid furnishing detailed design information
- Flexible vs. inflexible?



TECHNICAL BASIS EXAMPLE

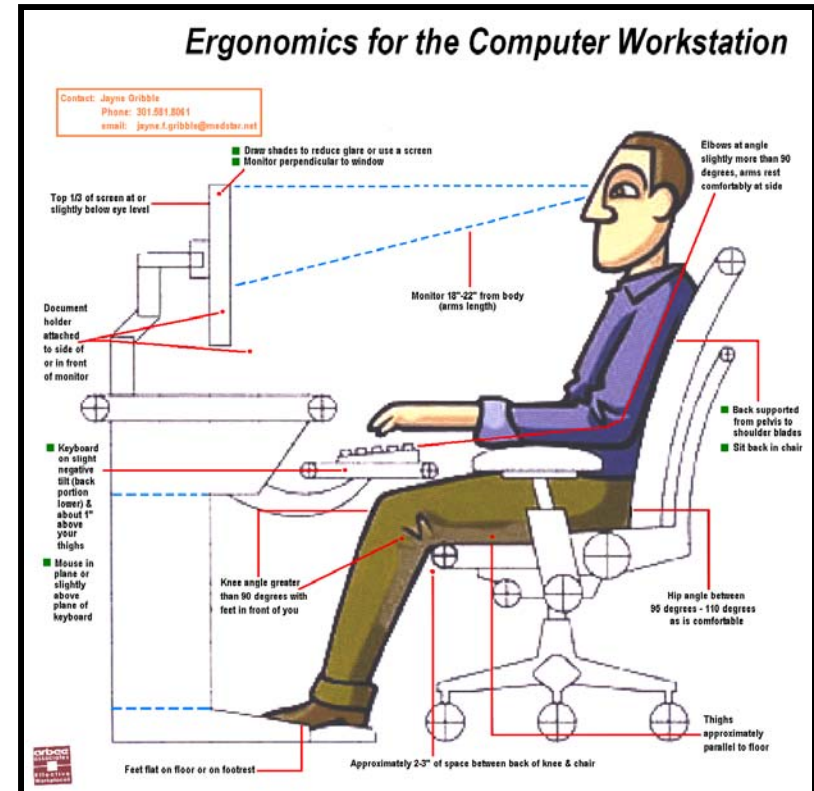
Sec. 11-51 Grading permit required for filling, grading, excavation, etc.

No person shall fill, grade, excavate or otherwise disturb the surface of real property within the city without first having secured a grading permit from the public services engineer. No owner of real property shall knowingly permit another person to fill, grade, excavate or otherwise disturb the surface of real property within the city without first having secured a permit from the public services engineer. In addition, if the property to be filled, graded, excavated or otherwise disturbed is within flood hazard area, a development permit must be secured from the city engineer as required in Chapter 11, Article II of this code.

(Ord. No. 2803, § 2(B), 4-6-92)

ADMINISTRATIVE APPARATUS

- Ordinance must clearly state who is responsible for carrying out municipal actions



ADMINISTRATOR EXAMPLE

Section 12.5-301. Administration.

The Director of the Department of Environmental Management and the Director's authorized representatives are authorized to administer, implement, and enforce the provisions of this Article.

ENFORCEMENT PROVISIONS

- Elements:
 - Approvals
 - Inspections
 - Penalties
- Phased enforcement



CHAPTER 54. ENFORCEMENT OF MUNICIPAL ORDINANCES

SECTION 54.001. GENERAL ENFORCEMENT AUTHORITY OF MUNICIPALITIES; PENALTY

SECTION 54.002. IMPOSITION OF FINE IN TYPE B GENERAL-LAW MUNICIPALITY

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SECTION 54.012. CIVIL ACTION

SECTION 54.013. JURISDICTION; VENUE

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SECTION 54.018. ACTION FOR REPAIR OR DEMOLITION OF STRUCTURE

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SECTION 54.031. SUBCHAPTER APPLICABLE TO CERTAIN MUNICIPALITIES

SECTION 54.032. ORDINANCES SUBJECT TO QUASI-JUDICIAL ENFORCEMENT

SECTION 54.033. BUILDING AND STANDARDS COMMISSION

SECTION 54.034. PROCEEDINGS OF COMMISSION PANELS

SECTION 54.035. NOTICE

SECTION 54.036. FUNCTIONS

SECTION 54.037. CIVIL PENALTY

SECTION 54.038. VOTE

SECTION 54.039. JUDICIAL REVIEW

SECTION 54.040. LIEN; ABSTRACT

SECTION 54.041. COMMISSION PANEL DECISION FINAL

SECTION 54.042. MUNICIPAL COURT PROCEEDING NOT AFFECTED

SECTION 54.043. ALTERNATIVE ADJUDICATION PROCESSES

SECTION 54.044. ALTERNATIVE PROCEDURE FOR ADMINISTRATIVE HEARING

ENFORCEMENT EXAMPLE

Sec. 47-602. Penal provisions applicable.

(a) Any person who violates any provision of this article shall be guilty of an offense and upon conviction thereof, shall be punished by a fine of not less than \$250.00 nor more than \$2000.00 for each violation. Each day in which any violation shall occur shall constitute a separate offense. Prosecution or conviction under this section shall not preclude any civil remedy or relief for a violation of this article.

(b) In addition to criminal prosecution, where applicable, the city shall have the right to seek the judicial remedies provided in section 47-603 of this Code for any violation of this article.

ENFORCEMENT EXAMPLE

Sec. 47-603. Judicial provisions applicable.

The city, acting through the city attorney or any other attorney representing the city, is hereby authorized to file an action in a court of competent jurisdiction to:

- (1) Enjoin any person from violating or threatening to violate the terms, conditions and restrictions of any permit issued under this article;
- (2) Enjoin the violation or threatened violation of the provisions of this article; or
- (3) Recover damages from the owner of a parcel in an amount adequate for the city to undertake any construction or other activity necessary to bring about compliance with this chapter.

This authority is in addition to all provisions of this Code relative to the definition of offenses and the provision of penalties for violations of such offenses.

ORDINANCE STYLE: FLEXIBLE VS. INFLEXIBLE

- **Flexible**
 - State general policies
 - Implement with judgment
 - Allows varied interpretations
 - Allows for creative solutions
 - Seeks “best” solutions for site issues
- **Inflexible**
 - Very specific technical requirements
 - Includes specific administrative requirements
 - Implement standard solutions
 - “One size fits all” approach



FLEXIBLE ORDINANCE EXAMPLE

New Development:

New developments that include an increase in imperviousness shall include permanent stormwater management features which reduce the discharge of pollutants to the maximum extent practical.

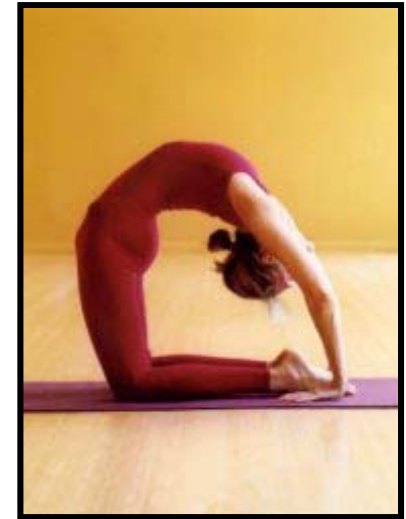
INFLEXIBLE ORDINANCE EXAMPLE

New Development:

New developments that include an increase in imperviousness of more than 1 acre shall include onsite stormwater management facilities which capture the first 0.5 inches of runoff and release that volume over a 24 hour period.

ORDINANCE STYLE: FLEXIBLE VS. INFLEXIBLE

- **Flexible**
 - Increases technical analysis requirements
 - Increases engineering costs
 - Increase staff qualifications and size
 - May be perceived as unfair
 - Little consistency
 - Increased O&M diversity
- **Inflexible**
 - Forces conformity and consistency
 - May yield inappropriate solutions
 - Reduced staff size and qualifications
 - Simpler “cook-book” engineering



HOW TO ADOPT?

CHAPTER 52. ADOPTION OF MUNICIPAL ORDINANCES

SECTION 52.001. SUBCHAPTER APPLICABLE TO TYPE A GENERAL-LAW MUNICIPALITY

SECTION 52.002. STYLE

SECTION 52.003. APPROVAL BY MAYOR AND RELATED CONDITIONS FOR ORDINANCE TO TAKE EFFECT

SECTION 52.004. OFFICIAL NEWSPAPER

SECTION 52.011. TYPE A GENERAL-LAW MUNICIPALITY

SECTION 52.012. TYPE B GENERAL-LAW MUNICIPALITY

SECTION 52.013. HOME-RULE MUNICIPALITIES

CHAPTER 53. CODE OF MUNICIPAL ORDINANCES

SECTION 53.001. ADOPTION OF CODE

SECTION 53.002. PUBLICATION OF ADOPTION ORDINANCE

SECTION 53.003. SUBDIVISION OF CODE

SECTION 53.004. CHANGE OR REPEAL OF ORDINANCE

SECTION 53.005. EFFECT OF CODIFICATION

SECTION 53.006. PRINTED CODE AS EVIDENCE

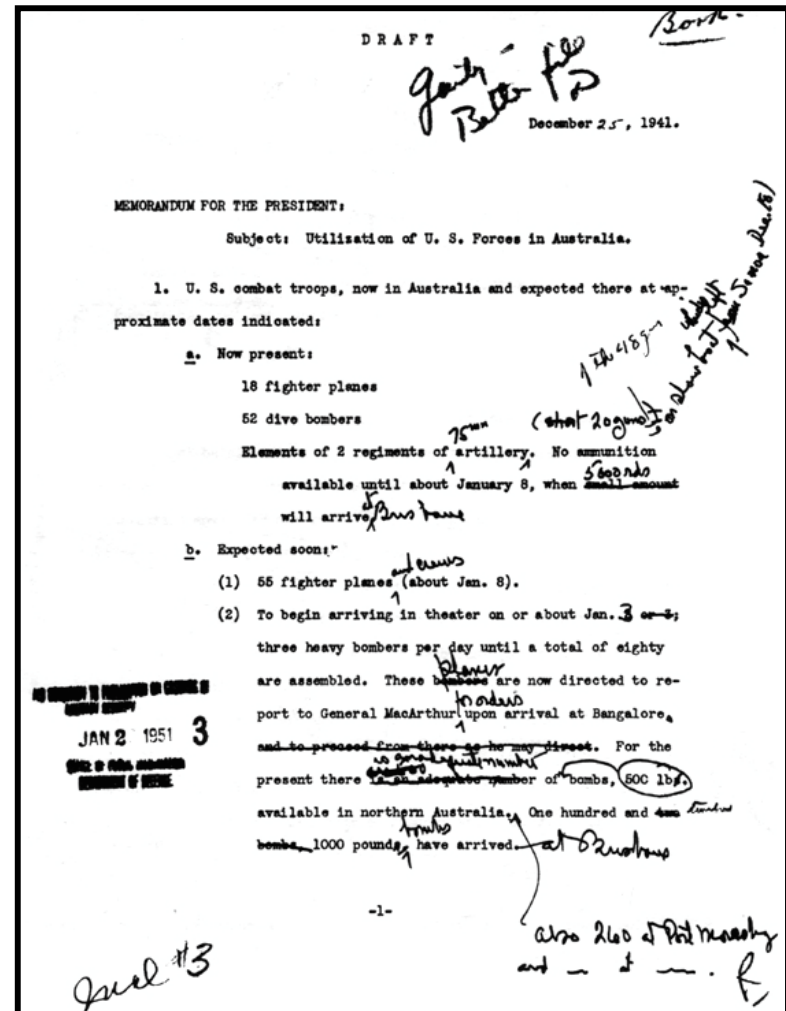
TRAPS AND PITFALLS

- Ordinance first, policies second
- I can write this myself!
- The developers and property owners won't mind
- Adopt quickly for compliance reasons
- This ordinance from Timbuktu will work!



REPERCUSSIONS OF POOR ORDINANCE WRITING

- Frequent revisions needed
- Eroded public confidence
- Eroded political support
- Unanticipated consequences



FLOODPLAIN MANAGEMENT ORDINANCE PROVISIONS

- Level of service
- Special flood hazard zones
- Risk level
- “Freeboard”
- Floodplain definition
- Floodway definition
- Levee requirements
- Permits for building in or near flood zone areas
- Buyouts
- Elevation
- Land use restrictions

QUESTIONS?

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