



Grading Ordinance Update



March 29, 2011



Timeline

- Fall 2009-June 2010- Development of technical draft
 - Volunteer group of local engineers
- July 14, 2010-Planning & Development LRC policy direction
- July-December 2010- Ordinance refinement, stakeholder review of proposed draft
 - Land Use Council
 - El Paso Association of Builders
 - Council of Engineering Companies
 - Land Development Consultants
 - OSAB & OSAB Subcommittee (October 27, 2010 unanimous recommended approval with suggested changes)



Timeline

- February 24, 2011- City Plan Commission unanimous approval of title 19 & 20 precision changes with recommended amendment (exemption for irrigation structures)
- March 1, 2011-Distributed final ordinance for stakeholder review
- March 29, 2011- City Council consideration of proposed Ordinance and precision changes



Intent

- Comprehensive rewrite of grading Ordinance
- Address ongoing City Council/resident requests
 - Public safety
 - Provide better erosion control
 - Control particulate matter
 - Encourage better planning for development/projects
 - Minimize neighborhood nuisance
 - Stability of sites during and after construction activities







Intent

- Maintain ecology and topography of area
 - Minimize area to be disturbed
 - Natural treatment of disturbed areas
 - Minimize adverse ecological, physical and visual impacts
- Address technical issues
 - Clarify technical requirements
 - Streamline permit process
 - Clarify purpose, definitions and chapter provisions







Major Changes: Permit Process

- One grading permit required for subdivisions
 - Issued after preliminary approval on subdivision/plat from City Plan Commission
 - Borrow & waste permit still incorporated
 - Clearing and access permit removed
- No increase proposed for permit fees
 - Fee structure to reflect new process for permit issuance

PURPOSE: Streamlines the process and prevents clearing and grubbing before the site is planned out for use.



Major Changes: Permit Process

- Exceptions
 - Legally platted or unplatted residential lots less than 1 acre
 - Access road (20') for Geotech and Survey work
 - Maintenance activities to restore site to approved plan
 - Demolition of existing buildings & structures

Governmental agency projects are not exempt



Major Changes: Application Requirements

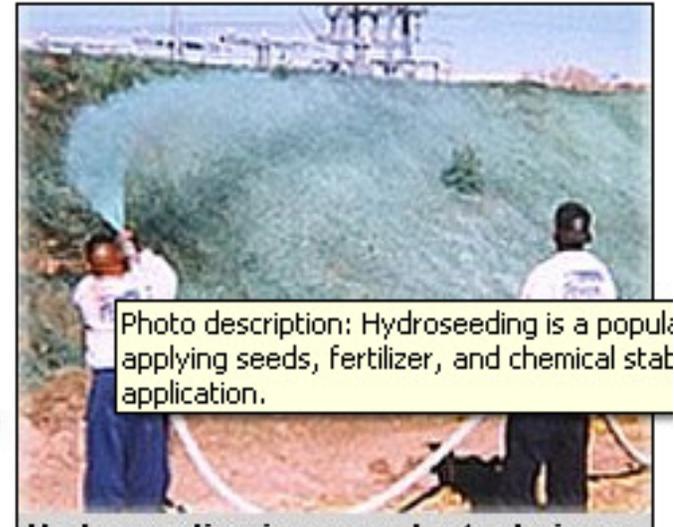
- Adds Grading Stabilization Plan (GSP)
 - Identifies all areas to be exposed to erosion more than 180 days
 - Identifies Stabilization Measures to be implemented to stabilize site
 - Outlines maintenance measures and scheduling
 - Above and beyond Chapter 15 – Storm Water Pollution Prevention Plan

PURPOSE: Address erosion after the grading operation is complete or if the site is abandoned.



Local example of stabilized ponding area

Stabilization Measures detailed on EPA website



Hydroseeding



Rock Rip Rap



Major Changes: Insurance & Bond

- Insurance requirements:
 - Value of \$ 250,000 minimum
- New permit bond requirement:
 - Value of \$ 50,000
 - Issued for duration of permit and warranty period
 - two years after completion of work permitted or until issuance of building permit

PURPOSE: Consistent with other building permit bond requirements, covers expenses incurred by City to address destabilized sites.



Major Changes: Engineering Controls

- Grading Design
 - Sets guidelines for material movement
 - Design required to address safety including falling hazards and damage to adjacent properties, including right of way
 - Slopes design standards:
 - Max 3:1
 - Factors of Safety set
 - Drainage facilities added to protect face of slope
 - Slope Setback set

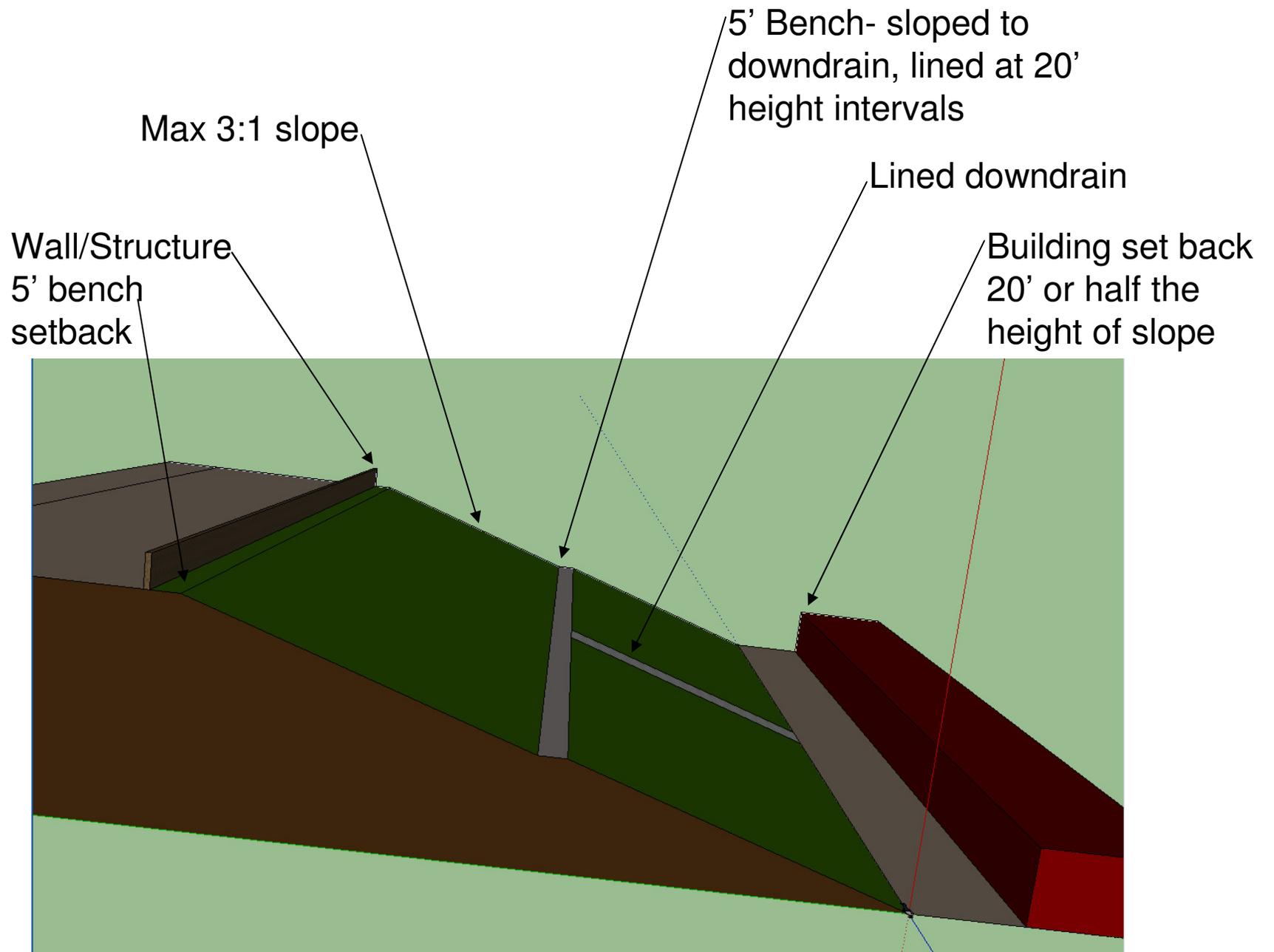
PURPOSE: Clarifies design guidelines and addresses public safety.



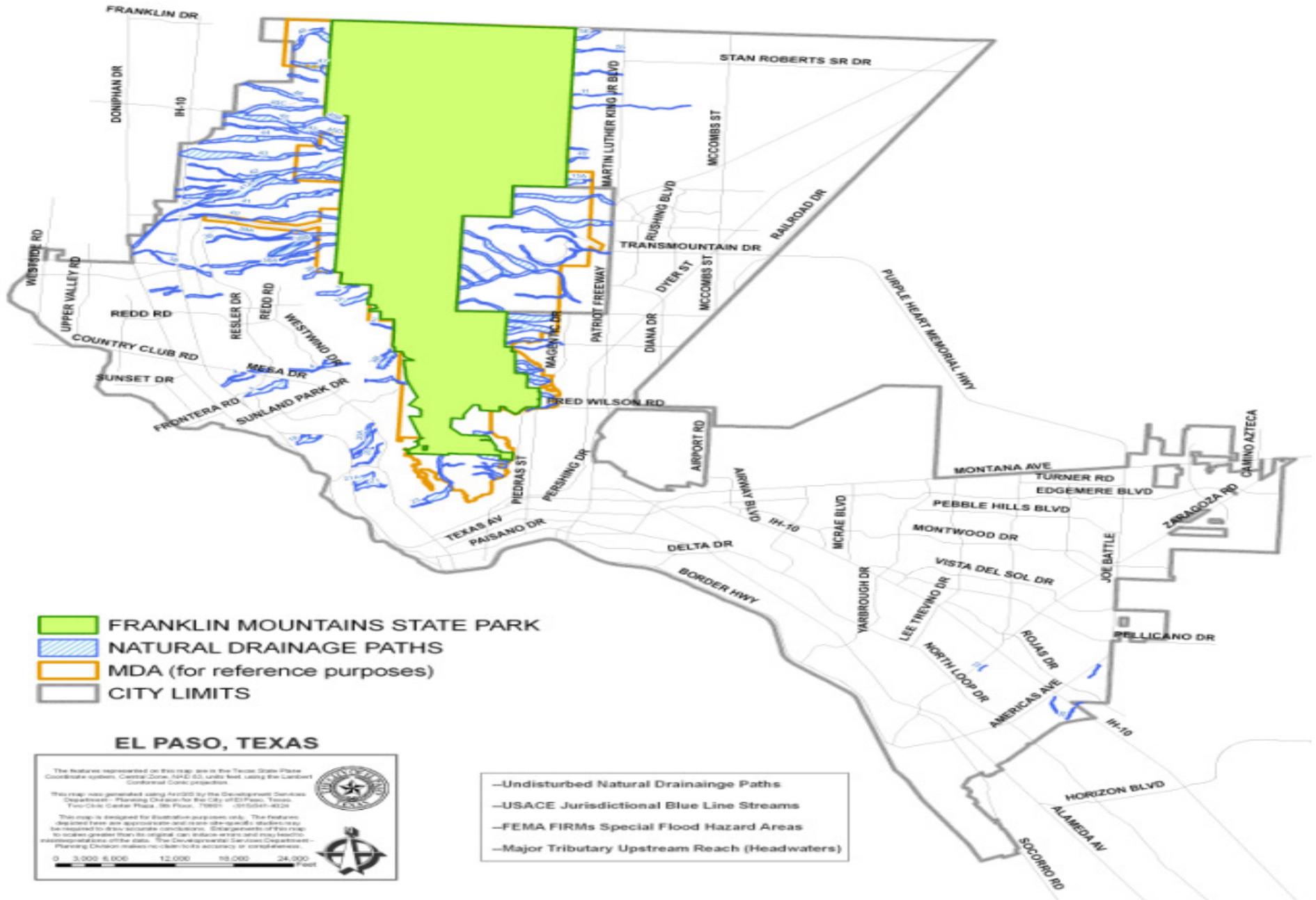
Major Changes: Engineering Controls

- Slopes design standards:
 - Fill slopes can't be built by pushing soil over the side of slope
- Retaining walls shall be faced with stone or other earth colored material
- Ponding areas shall meet the slope design requirements and be stabilized per the Grading Stabilization Plan

PURPOSE: Clarifies design guidelines and addresses public safety.



NATURAL DRAINAGE PATHS





Major Changes: Engineering Controls

- Adds section to address the preservation of existing natural drainage paths, terrain and vegetation
 - Grade to match the terrain
 - Special design requirements necessary for grading proposed within “Natural Drainage Paths” map
 - Maximum design velocity shall not exceed scouring velocity of natural soil/covering
 - Landscape Architect will assist in the design to achieve a **Natural Appearance**
 - Harvest and reuse existing vegetation within the site

PURPOSE: Leave existing conditions undisturbed to the maximum extent possible – does not prohibit grading within this area

Facility has natural appearance:
Native colored materials, varied width, incorporates boulders and vegetation

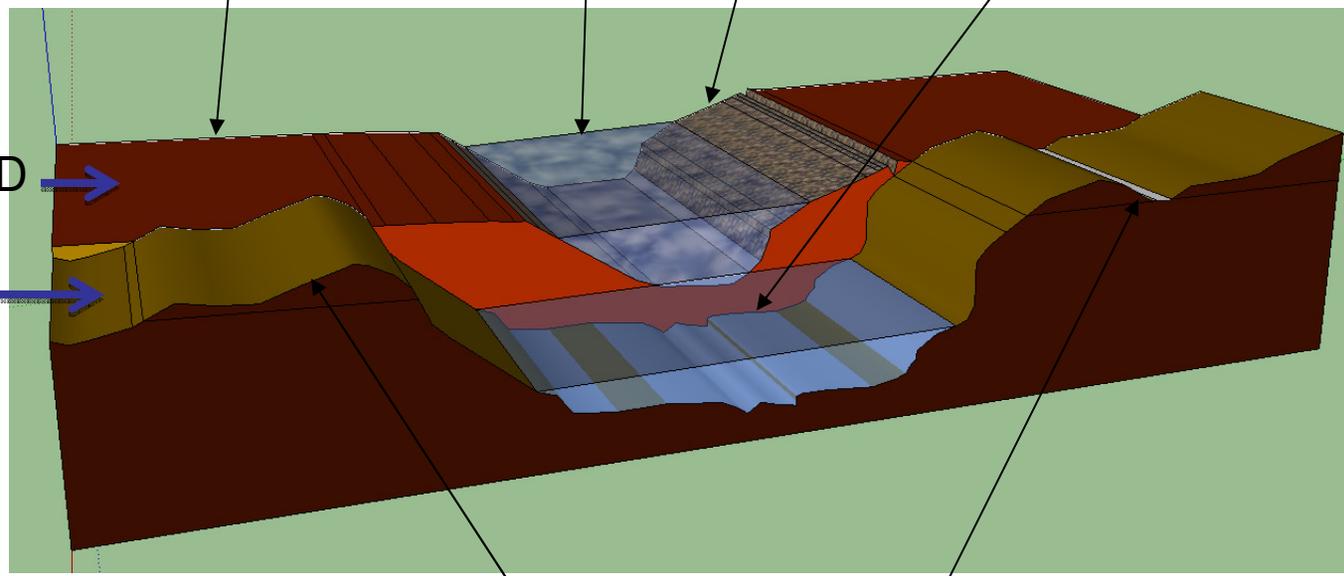
Modified floodplain

Graded building site

Exist floodplain

PROPOSED →

EXISTING →



Rim to Rim + 20'



Graded Unstable Slope



Incorporated development
to existing terrain



Major Changes: Permit Closeout Procedure

- Establishes beginning of 2 year warranty period and date GSP must be implemented
- Permittee formalizes substantial completion of grading operation
- City issues letter stating general conformance

PURPOSE: Formalizes closure of the permit.



Precision Changes

- Title 9 – Prohibits grading as a mode of controlling weeds on a property.
- Title 19 – Aligns the new permit process to issue a single grading permit and grading definition to match new grading ordinance
- Title 20 – References fencing requirements for Natural Drainage Paths in grading ordinance
 - 2' height if adjacent to public right of way
 - 4' height if adjacent to private property
 - Prohibits chain link
 - Exempts irrigation structures
- 18.44.200. a.l.vi. Floor amendment to clarify that “Fill slopes shall not be constructed by pushing soil over the top of slope”.

Section	Item	Staff	OSAB	Other
18.44.060 Exceptions	Access Road Exemption	20' feet wide	12' feet wide	
18.44.050 Permits Required	Grading Permit Issuance	Preliminary plat approval	Final plat approval	
18.44.070 Permit Application	Days for GSP implementation	180	120	90
18.44.100 Permit Application, Staff Review	Ecological Expertise		Professional expertise provided by arid biologist or ecologist	



Questions/Comments