

# Natural Gas Program Summary

Planning and Zoning Commission Work Session

March 31, 2010

Rice Loh  
Drill Site



# Site Condition Topics

- 1) Fracing
- 2) Landscaping
- 3) Fencing
- 4) Remediation



Stoner Drill Site

# Fracing

## ➤ **Frac Ponds**

- Time limits for restoration
- Annual maintenance
  - Aesthetics, weeds, pond full
- Fencing requirements
- Water disposal upon frac completion
- Design as a feature

## ➤ **Frac Tanks**

- Number of tanks
- Additional Roadway Impact

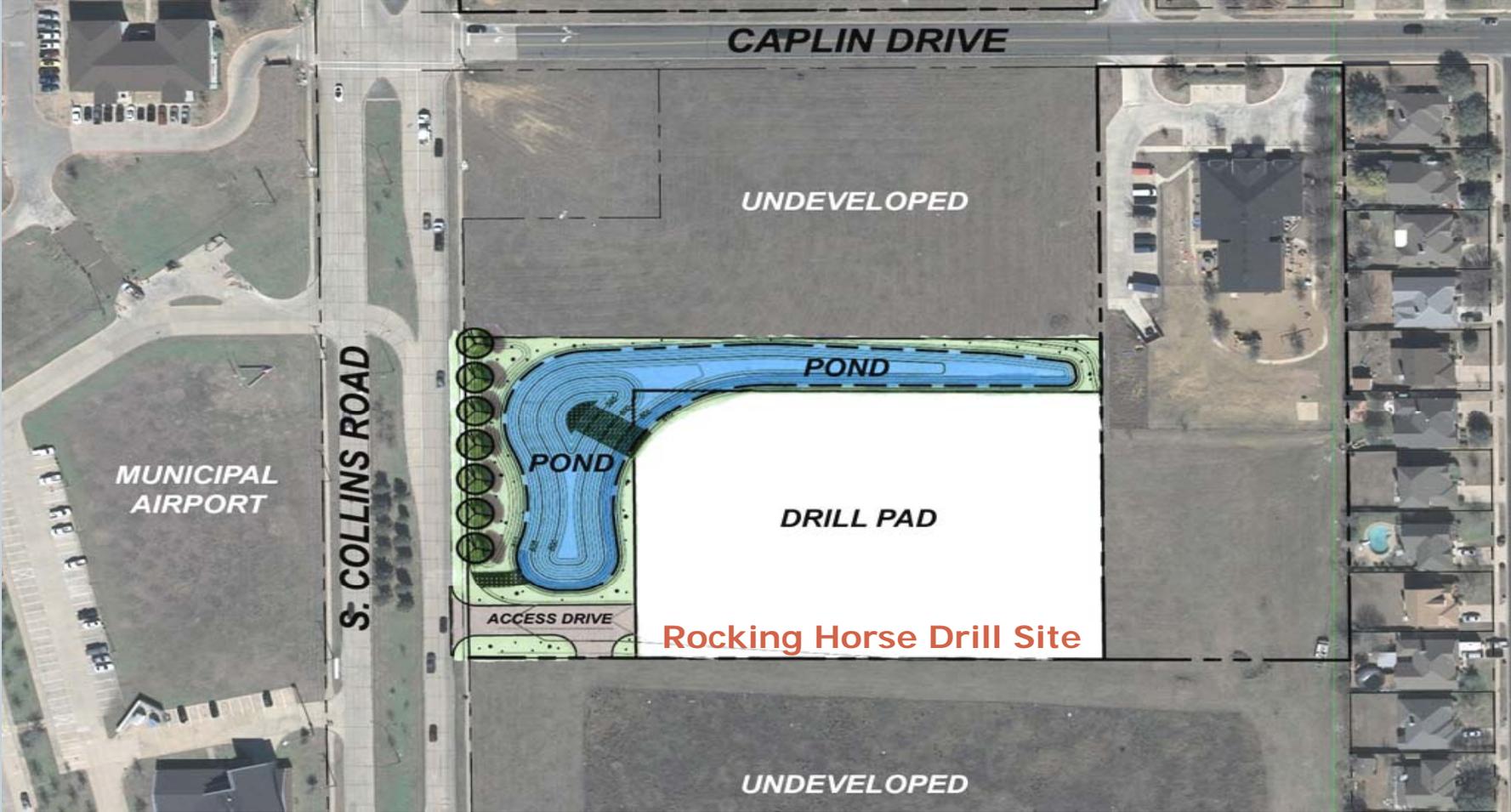
## ➤ **Temporary Water Lines**

- Connect to off-site pond
- Reduce number of ponds



Fulson Drill Site Frac Pond

# Frac Pond Design

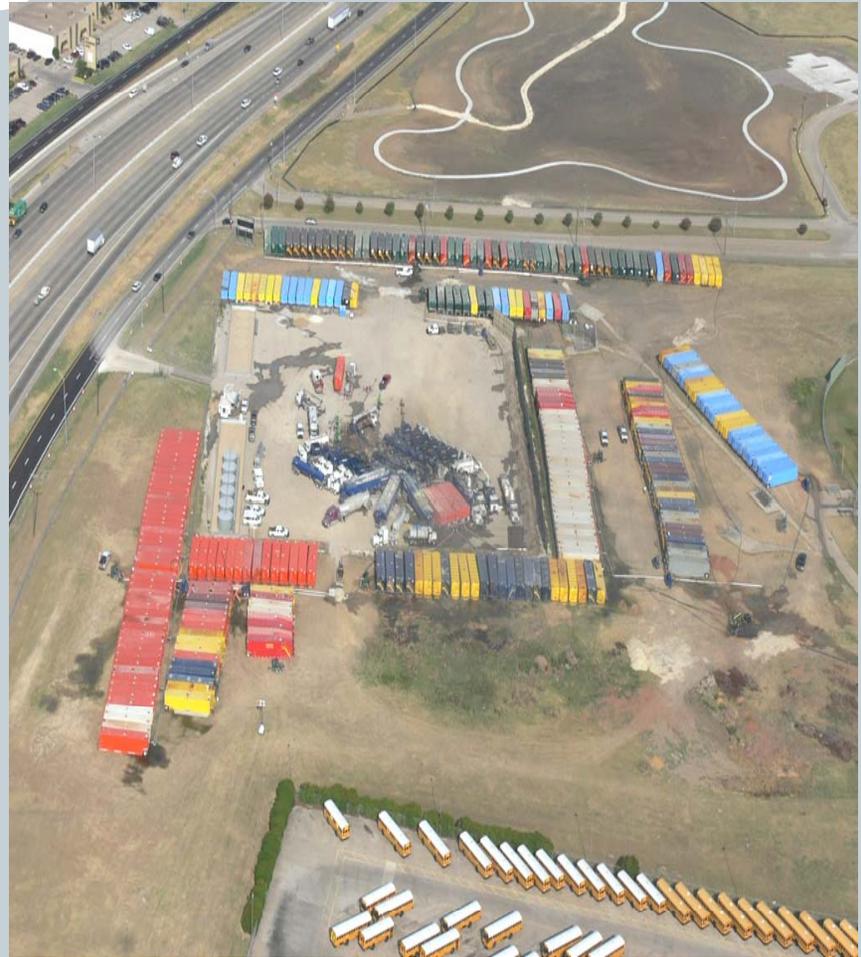


Pond design based on surroundings

# Pond Alternatives



Temporary Water Lines



Frac Tanks

# Landscaping

## ➤ Site Perimeter

- Maintain setbacks
  - Follow current zoning conditions
  - 20 feet controlled access freeway
  - 10 feet other public streets
  - 40, 30, or 20 feet at property line
- Install at property boundary, not around interior pad site

## ➤ Streetscape

- 10-foot landscape setback required



MITX Drill Site. View from Debbie Lane.

# Streetscape Landscaping



Streetscape Installed

Randol Mill Road



No Streetscape

Collins Street

# Fencing and Walls

## ➤ Temporary Fencing

- Entire site or appurtenances
  - Currently required only around wellhead
- Secured gate
  - Site or wellhead
- Required around frac ponds
  - Chain link specified in Ordinance



## ➤ Permanent Wall

- Currently masonry required
- Set maximum opacity standards...



# Zoning Ordinance Opacity Rules

- **Adjacent to parkland or open space**
  - 50 percent openess
  - Ornamental metal with columns
  - May plant vines and/or shrubs along fence
  
- **Fences in front yard**
  - 75 percent openess
  
- **Level based on surroundings**



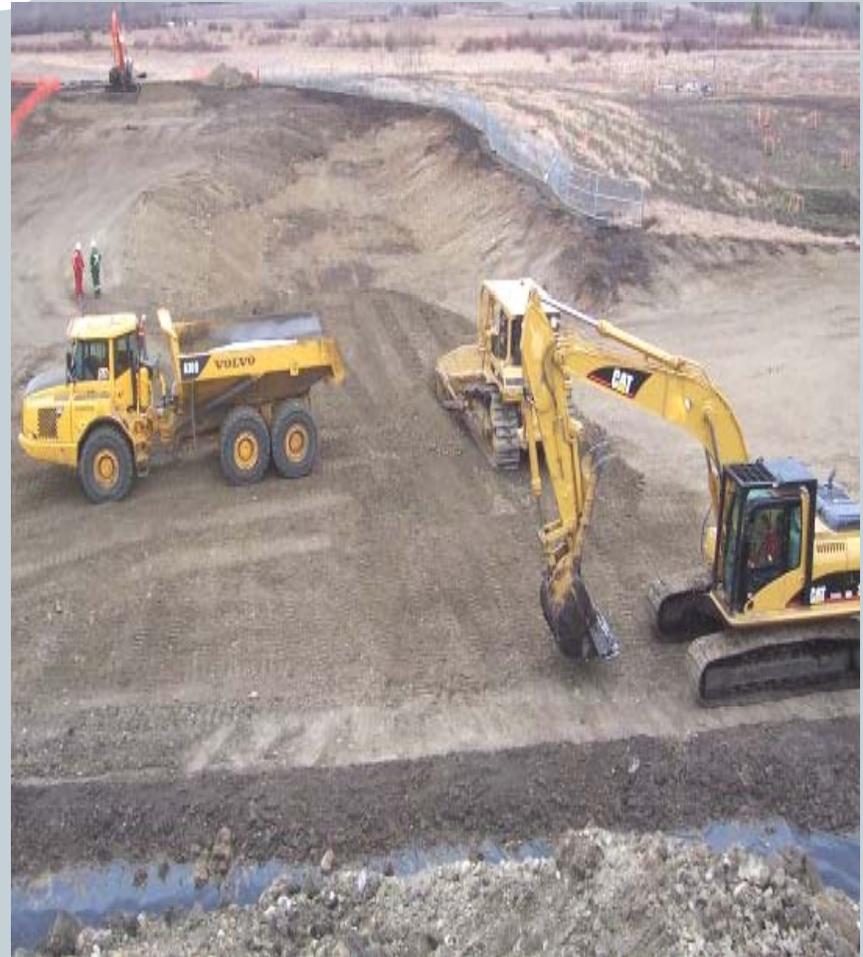
Acceptable

# Fencing Options



# Remediation

- **Already Required**
  - All wells shall be abandoned in accordance with the rules of the Railroad Commission
  - All well casings shall be cut and removed to a depth of at least 10 feet below the surface
  - No buildings shall be built over an abandoned well.
  - One Arlington site
    - Restored frac pond area to pre-drilling condition
    - Reduced pad site to final production area



Example Site Restoration

# Recommendations

**1) Broaden use of alternate water sources**

**2) Highlight temporary water line usage**

- Promote use of existing water sources (natural and frac ponds)
- Enable ROW crossings

**3) Encourage non-masonry site fencing**

- Maximum opacity

**4) Streetscape all sites**

- Operator owned and operator leased
- Recognize standards if privately owned

**5) No temporary fencing**

- Final site product at start of drilling
- Exempt frac pond fencing

**6) Tiered site classification**

- 6) Pond, wall, landscape