



Natural Gas Program Summary

April 8, 2010

Quicksilver
Lake Arlington Drill Site

Topics

Drill Site :

- 1) Process,
- 2) Conditions, &
- 3) Operations



Rice Loh Drill Site

Current Processes

Notifications

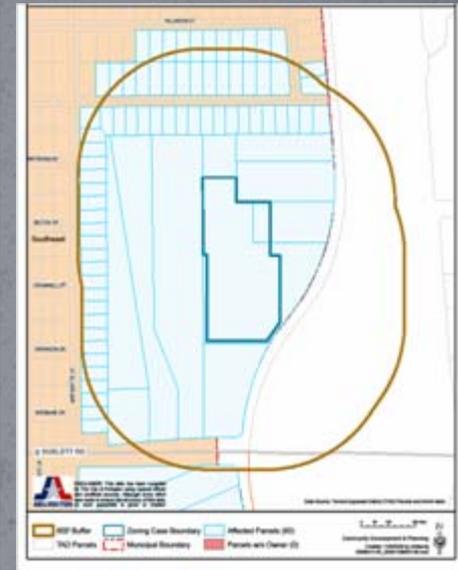
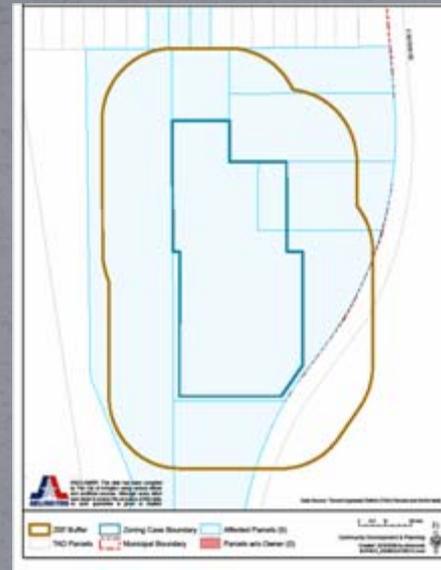
- 200 feet for zoning
- 600 feet for permit

Petitions

- SUP – 20% opposed
- GW – 60% support

SUP Time Periods

- Expire after 1 year – GW permit issued and drilled
- 1 year extension may be granted
- After 1st well drilled, no expiration



Process Change Proposals

Notifications

- 600 feet for zoning
- 600 feet for permit

Petitions

- Setback reduction requested during SUP stage
- Same conditions and measurements
 - 20% opposed and 60% support

SUP Time Periods

- Expire after set time period
- Operator updates site status before Council

Additional Process Concerns

Property Boundaries

Entire property included in SUP

- Enforce landscaping standards outside drill site
- Streetscaping installed per City Ordinance

Plat Requirement

- Adequate infrastructure for development
- Identifies access easements for future lots
- Promotes orderly development in Arlington

Site Conditions

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



Stoner Drill Site

Fracing

Frac Ponds

- Restoration and maintenance
 - Aesthetics, weeds, pond full
- Fencing
- Design as a feature

Frac Tanks

- Number of tanks
- Additional Roadway Impact

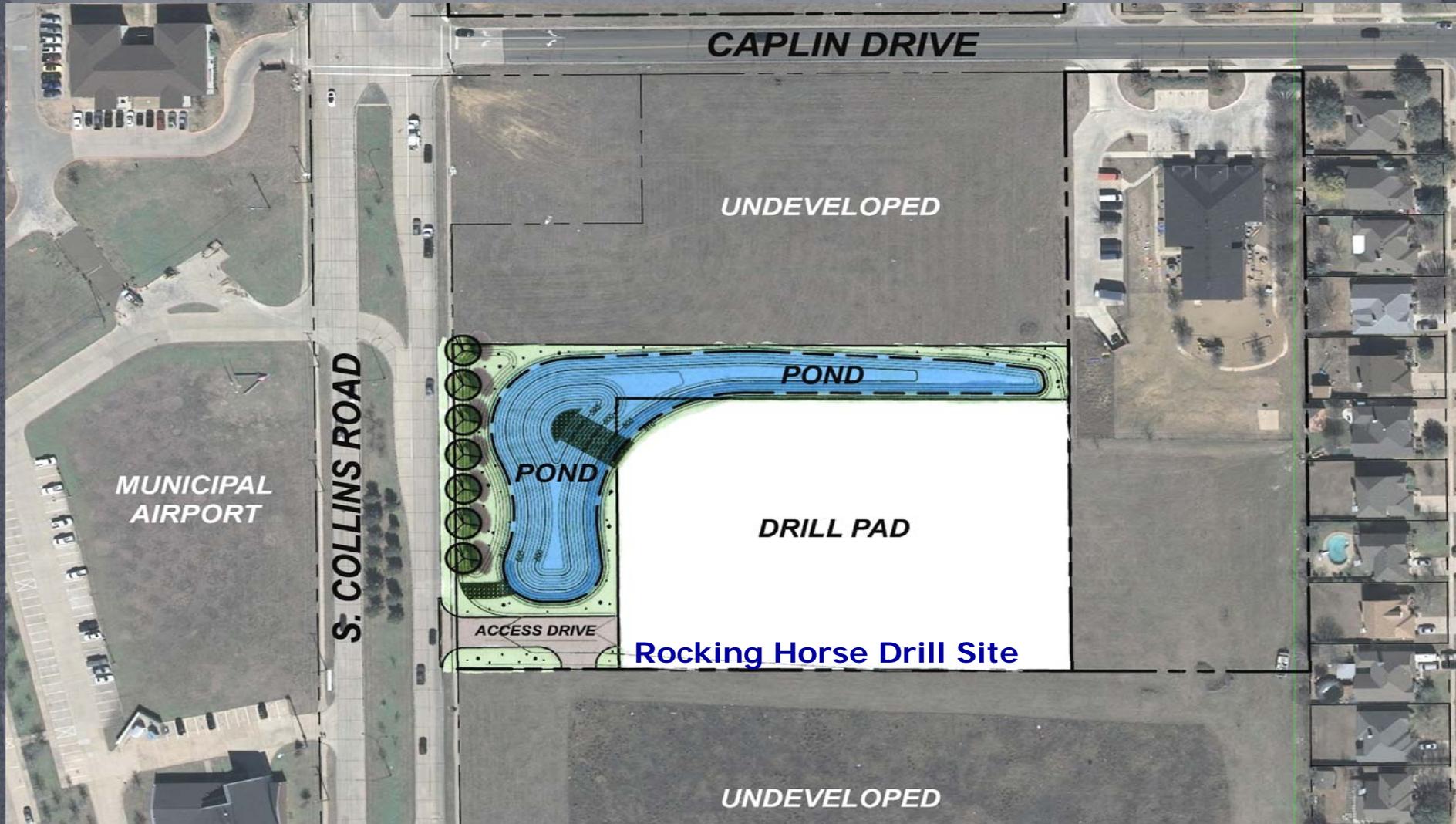
Temporary Water Lines

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



Fulson Drill Site Frac Pond

Frac Pond Design



Pond design based on surroundings

Image credit: MMA

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

Streetscape

- 10-foot landscape setback



MITX Drill Site. View from Debbie Lane.

Streetscape Landscaping



Streetscape

Randol Mill Road

No Streetscape

Collins Street

Fencing and Walls

Temporary Fencing

- Entire site or appurtenances
 - Required around wellhead
- Secured gate
 - Site or wellhead
- Required around frac ponds
 - Chain link per Ordinance

Permanent Wall

- Masonry currently required
- Set maximum opacity standards



MITX Drill Site. View from Collins Street.

Zoning Ordinance Opacity Rules

Adjacent to parkland or open space

- 50 percent openness
- Ornamental metal with columns
- Plant vines or shrubs along fence

Fences in front yard

- 75 percent openness

Level based on surroundings



Acceptable

Remediation

Current Requirement

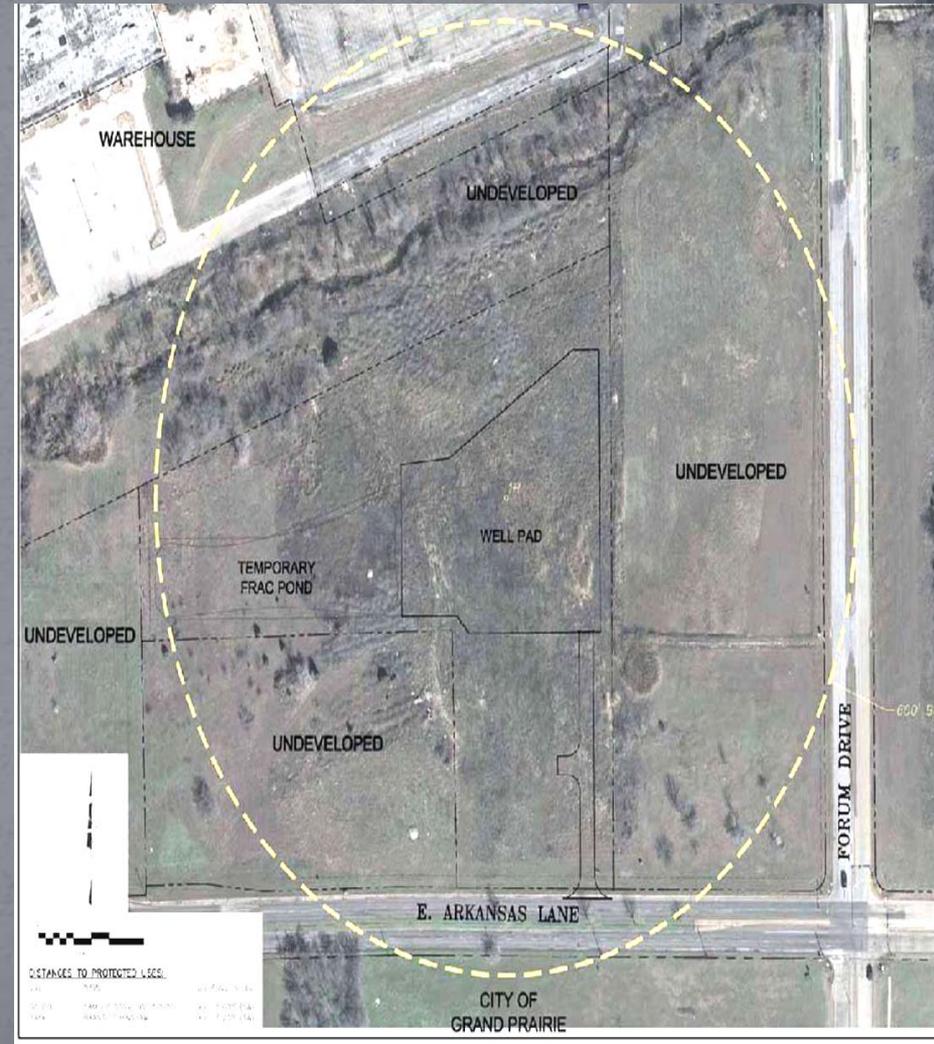
- Abandoned in accordance with Railroad Commission
- Well casings cut and removed at least 10 feet below surface
- No buildings built over abandoned well
- One Arlington site
 - Frac pond to pre-drilling condition
 - Pad reduced to production area



Example Site Restoration

Site Operations

- 1) Road Damage
- 2) Transportation
- 3) Bonding
- 4) Flowback



Arkansas Drill Site

Road Damage

Fee Based On:

- Lane miles
- Roadway type
- Number of wells

2007 Study

- Based on 2004 assumptions

Update Analysis

- Per-lane assessment
- Accurate traffic counts
- Site ingress and egress
- Current construction costs

Road Repair Agreement

- Tied to identified damage



Transportation

Route finalized at permit stage

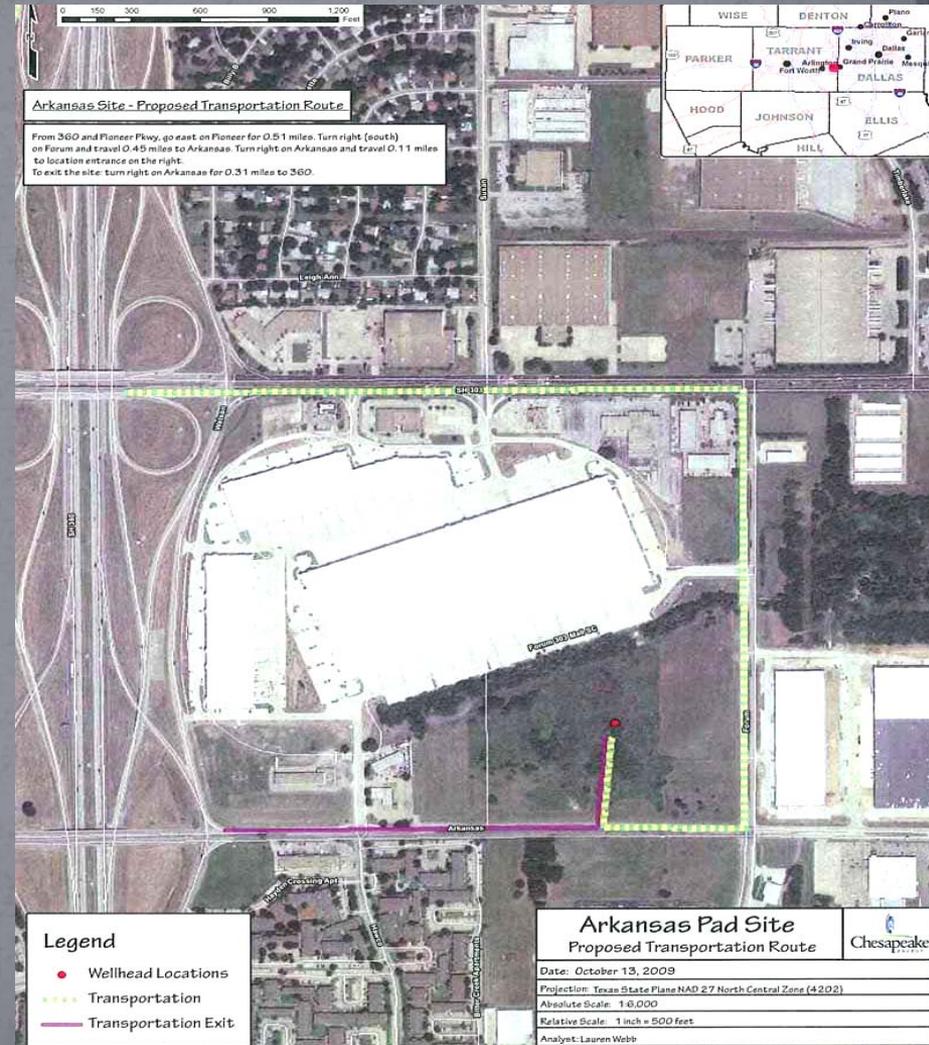
- Utilize identified truck routes
- Input from impacted ISD
- Avoid school zones
- Time restrictions

Flexibility for status changes

- Deteriorated roadway
- Road construction
- Detours

Follow approved route during each stage

- Meet with Operator before each activity



Bonding

Current Amounts

- \$50,000
 - During drilling and reworking
- \$10,000
 - Producing without reworking

Costs

- Approximate \$6 million bond
- Affects credit rating and ability to insure

Blanket Bond

- Identified amount per operator
- Total based on well numbers

