



ADAMS COUNTY

COLORADO
BOARD OF COUNTY COMMISSIONERS

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STUDY SESSION AGENDA
TUESDAY
September 12, 2017

ALL TIMES LISTED ON THIS AGENDA ARE SUBJECT TO CHANGE.

- | | | |
|-------------------|---------------------|--|
| 10:30 A.M. | ATTENDEE(S): | Kristin Sullivan / Jen Rutter / Chris LaMere |
| | ITEM: | Oil and Gas Monthly Update |
| 11:30 A.M. | ATTENDEE(S): | Raymond Gonzales |
| | ITEM: | Administrative Item Review / Commissioner |
| 12:00 P.M. | ATTENDEE(S): | Heidi Miller |
| | ITEM: | Executive Session Pursuant to C.R.S. 24-6-402(4)(b) and (e) for the Purpose of Receiving Legal Advice and Instructing Negotiators Regarding Commerce City URA |

(AND SUCH OTHER MATTERS OF PUBLIC BUSINESS WHICH MAY ARISE)

AGENDA IS SUBJECT TO CHANGE



STUDY SESSION AGENDA ITEM

DATE:	September 12, 2017
SUBJECT:	Oil and Gas Update
FROM:	Kristin Sullivan, Director Jen Rutter, Senior Environmental Analyst Chris LaMere, Oil & Gas Liaison
AGENCY/DEPARTMENT:	Community & Economic Development
ATTENDEES:	Kristin Sullivan, Jen Rutter, Chris LaMere
PURPOSE OF ITEM:	Update on oil and gas traffic impact fee development, regulation amendments, and general permitting activity in the County.
STAFF RECOMMENDATION:	Update

BACKGROUND:

During the spring of 2016, the Board of County Commissioners directed Staff to review the County's traffic impact fees, including conducting a study of oil and gas development. After a competitive bid solicitation process, Staff recommended awarding the contract to TischlerBise, with subconsultant Felsburg Holt & Ullevig, Inc (FHU). The Board of County Commissioners awarded the contract on March 16, 2017. After several months of data collection, Staff and FHU conducted three outreach meetings during the month of August, two for the general public and one for oil and gas operators, specifically.

During the May 30, 2017 Oil and Gas Update Study Session, the Board of County Commissioners directed Staff to develop draft regulations that address the following topics:

- Additional Standards for Flowlines and Gathering Pipelines
- Plugged and Abandoned Oil and Gas Wells and Former Oil and Gas Production Sites
- Residential Construction Setbacks
- Expiration of Approval

Stakeholder meetings had been held throughout the month of August to obtain feedback on the draft regulations. Staff met with groups such as Emergency Management and Fire Districts, School Districts, Oil & Gas Operators, Developers, Adjacent Local Governments, and neighborhood organizations. With the input from the stakeholders, Staff and the outside legal counsel for oil and gas will develop a final draft of the regulations to be brought before the Planning Commission and the Board of County Commissioners in a public hearing.

AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:

County Attorney
Jeff Robbins, Outside counsel for oil and gas issues

ATTACHED DOCUMENTS:

PowerPoint Presentation
Draft Regulations

FISCAL IMPACT:

Please check if there is no fiscal impact . If there is fiscal impact, please fully complete the section below.

Fund:

Cost Center:

	Object Account	Subledger	Amount
Current Budgeted Revenue:			
Additional Revenue not included in Current Budget:			
Total Revenues:			<hr/>


	Object Account	Subledger	Amount
Current Budgeted Operating Expenditure:			
Add'l Operating Expenditure not included in Current Budget:			
Current Budgeted Capital Expenditure:			
Add'l Capital Expenditure not included in Current Budget:			
Total Expenditures:			<hr/>

New FTEs requested: YES NO

Future Amendment Needed: YES NO

Additional Note:

APPROVAL SIGNATURES:

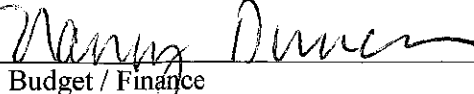


Raymond H. Gonzales, County Manager

Bryan Ostler, Interim Deputy County Manager

Patti Duncan, Interim Deputy County Manager

APPROVAL OF FISCAL IMPACT:



Nancy Duncan
Budget / Finance

Oil and Gas Update

Community & Economic Development Department

September 12, 2017

Summary

- Oil & Gas Regulation Amendments
 - Proposed and Revised Amendments
 - Public Input
 - Timeline for Approval
- Traffic Impact Fee
 - Methodology
 - Latest Update
- Permitting Activity & Processing
 - Permits Issued and In Process

Proposed Regulation Amendments

- Additional Standards for Flowlines and Gathering Pipelines
- Plugged and Abandoned Oil and Gas Wells and Former Oil and Gas Production Sites
- Residential Construction Setbacks
- Expiration of Approval

Additional Standards for Flowlines and Gathering Pipelines

- Definitions (i.e. flowlines, gathering lines, etc.)
- Requirement for reporting GPS coordinates, as-builts, engineering plans
- Setbacks for oil gathering pipelines from residences, schools, commercial buildings
 - *50 feet, 100 feet, 500 feet, etc.*

Plugged and Abandoned Oil and Gas Wells and Former Production Sites

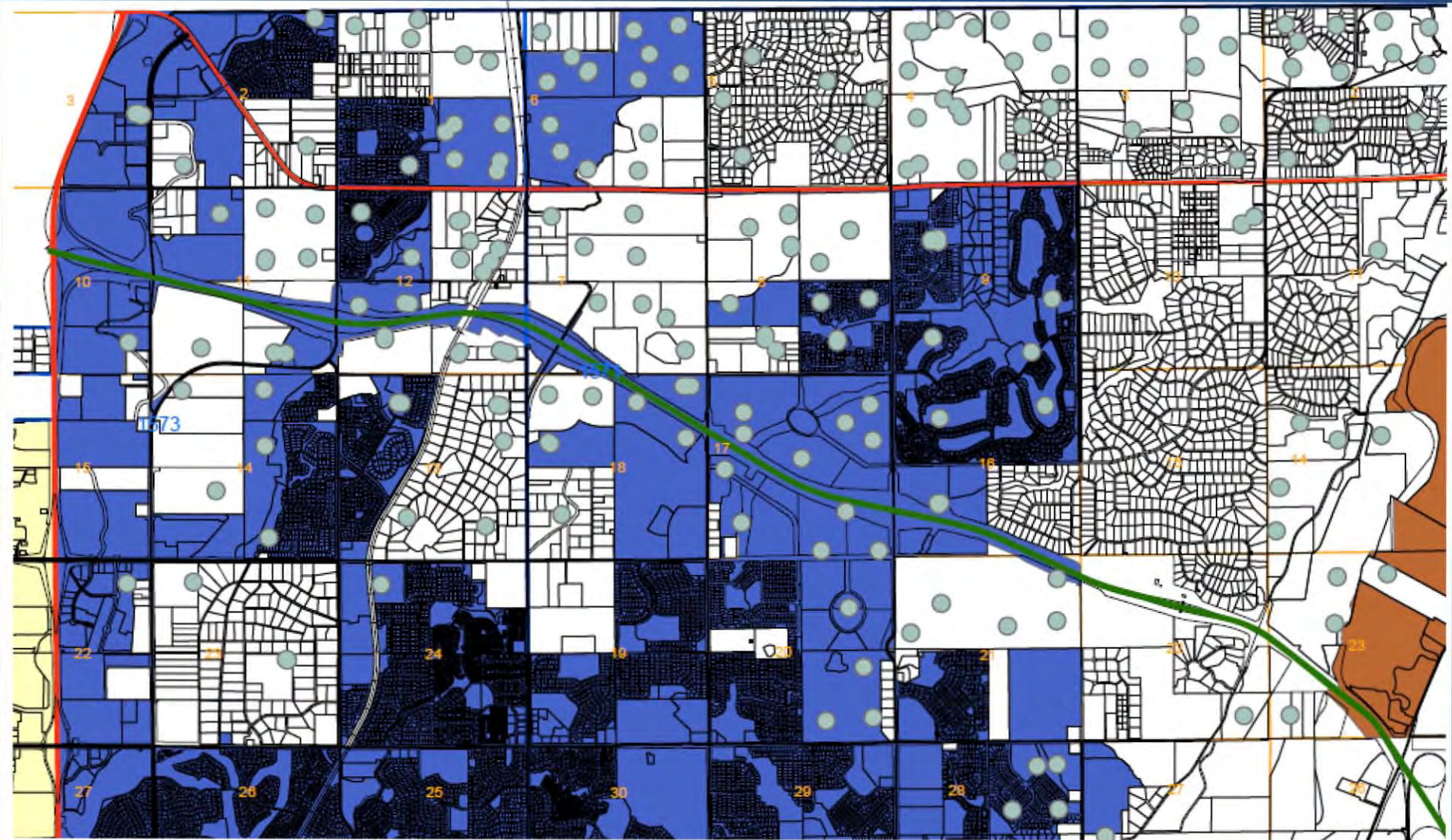
- Definitions (i.e. plugged and abandoned well, production site, etc.)
- Easement over a P&A'd well
 - *100-foot radius, 50'x100' easement*
 - No structures allowed
- Disclosure requirement for new plats, site plans for prospective purchasers
- Abandoned flowlines shall be removed prior to issuance of grading permit

Residential Construction Setbacks

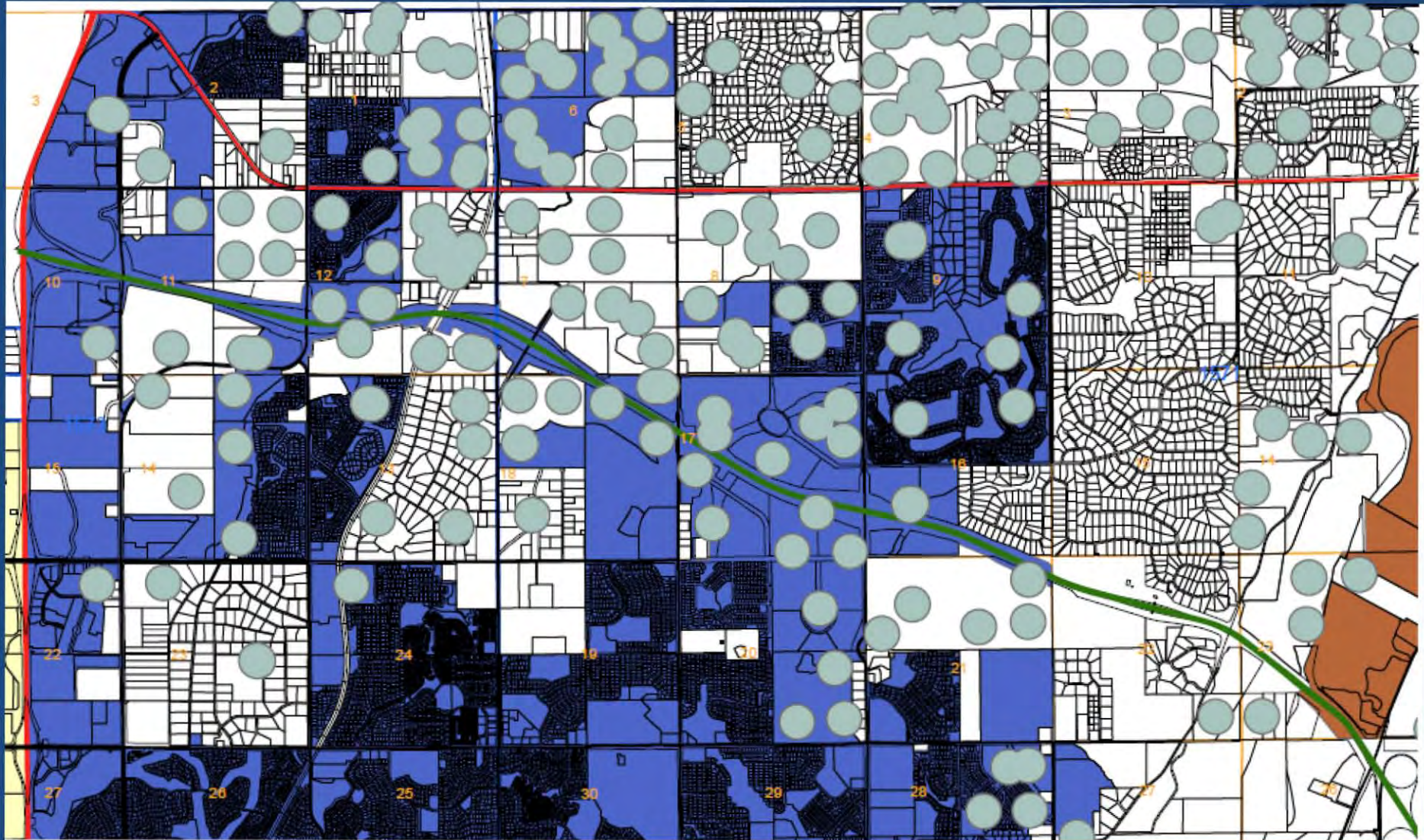
4-10-02-03-05 RESIDENTIAL CONSTRUCTION STANDARDS

- 1. Residential Construction Standards: The Director of Community and Economic Development shall impose the following standards as a condition of subdivision approval.
 - a. The subdivision plat shall contain a *X foot* buffer around each oil and gas well location in the form of a no-build easement on the Final Plat. No structures may be constructed within the buffer area. *(250, 500, 750 feet, etc.)*
 - b. Access to the oil and gas well location shall be provided by a public street or recorded easement for private access.
 - c. The Final Plat shall include notice to prospective buyers of the location of the oil and gas well(s) and associated easements.
 - d. All oil and gas well flowlines and/or easements shall be graphically depicted on the Final Plat.
 - e. All surface and subsurface agreements shall be noted on the Final Plat by the recorded book and page number.
 - f. Pursuant to Section 4-06-01-02-01-12, where a new home and/or other permanent structure with plumbing is constructed within *X feet* of an existing oil and gas well, the property owner shall submit a signed waiver acknowledging the existence of the facility. *(250, 500, 750 feet, etc.)*

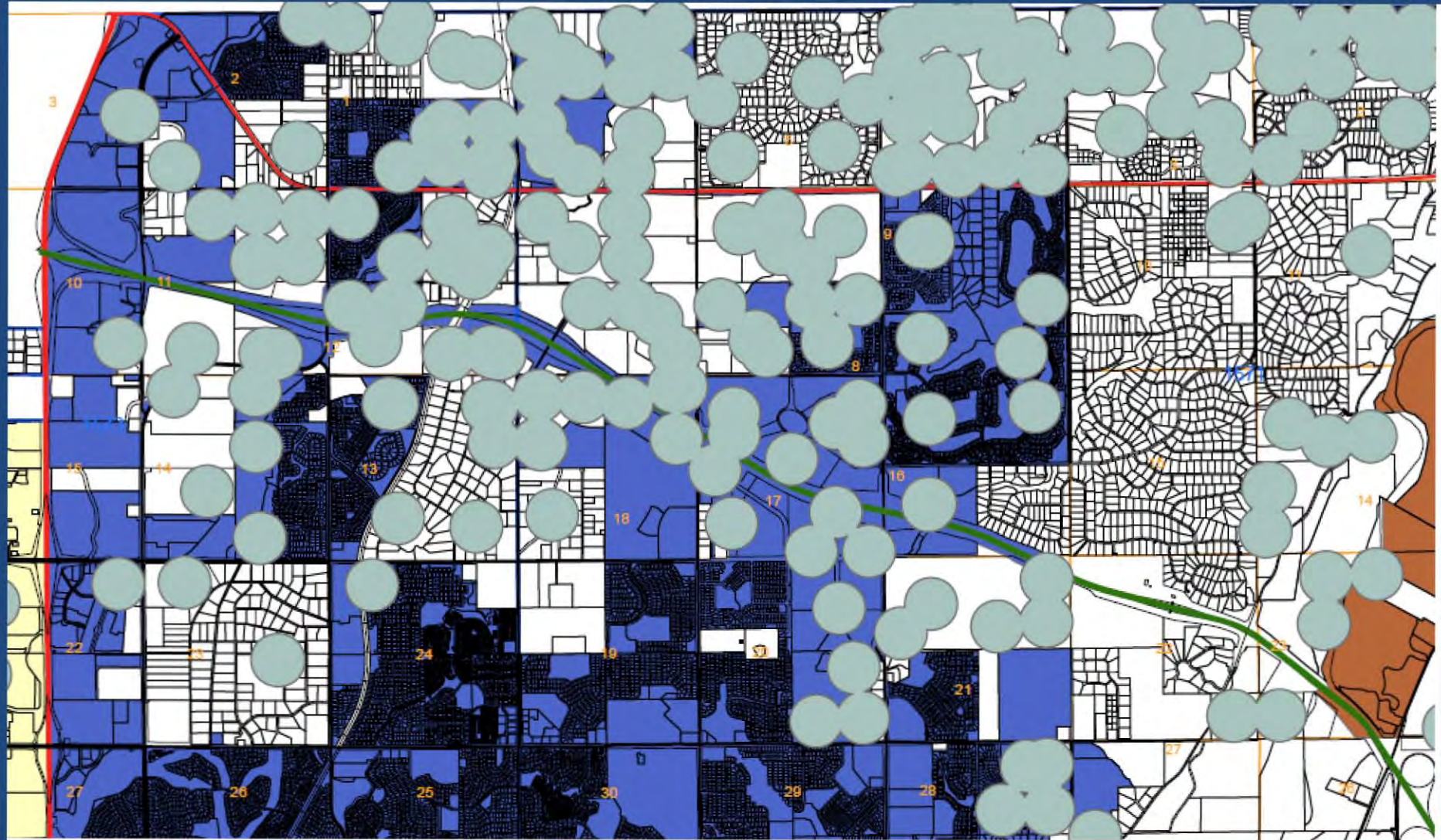
Active Wells with 250' Buffer (4.5 ac)



Active Wells with 500' Buffer (18.0 ac)



Active Wells with a 750' Buffer (40.6 ac)



Expiration of Approval

- Current:
 - If pad construction is commenced within 5 years, the location is vested.
- Proposed:
 - If pad construction is commenced within 3 years, the location is vested.
 - If all wells are not drilled within 3 years, the permit shall be renewed to drill the remaining wells.

Public & Stakeholder Outreach

Oil & Gas Regulation Amendments	
<i>Stakeholder Outreach</i>	
<i>Date</i>	<i>Stakeholder Group</i>
8/14/17	Fire Districts
	State Agencies
8/16/17	Proximate Local Govs.
	School Districts
8/17/17	Operators & Reps
	Developers
	Resident Groups
8/21/2017	General Public

Oil & Gas Traffic Impact Fees		
Public Outreach		
Date	Target Audience	Location
8/9/17	Public	Eagle View Adult Center
8/16/17	Oil & Gas Operators	Eagle View Adult Center
8/21/17	Public	Eagle View Adult Center

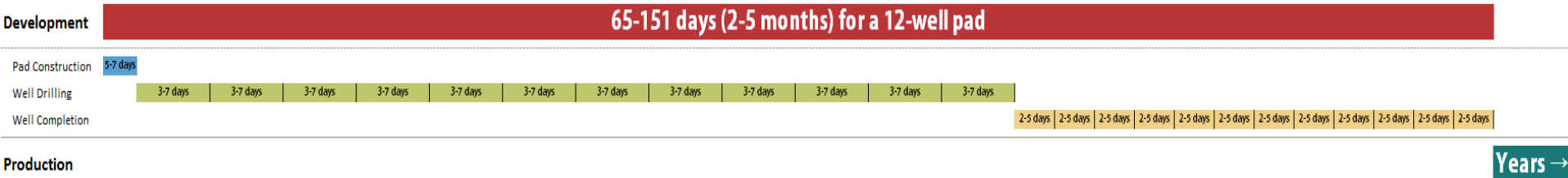
Recommended Adoption Timeline

- October 2017 – Begin public notice
- First Quarter of 2018 – Planning Commission and Board of County Commissioners Public Hearings

Traffic Impact Fee Study

- Identify potential impacts of oil and gas industry on Adams County's roads
- Estimate general magnitude of:
 - Oil and gas related truck traffic
 - Incremental road deterioration
 - Multimodal safety needs
- Calculate an impact fee to allow the County to offset increased road deterioration and multimodal safety costs

Oil & Gas Activity Overview



- **Development phase** (once lease and exploration complete):
 - Pad construction – 5-7 days total
 - Preparing the site, including building the access road and the well pad.
 - Drilling – 3-7 days/well
 - The process of drilling the well to the desired depth and completing the requisite number of horizontal bores.
 - Completion – 2-5 days/well
 - Converting the well system to a producing well, typically by fracturing the shale and completing the production well requirements. Removing flowback water from the well pad.
- **Production phase** (extracting, storing and distributing the resource)

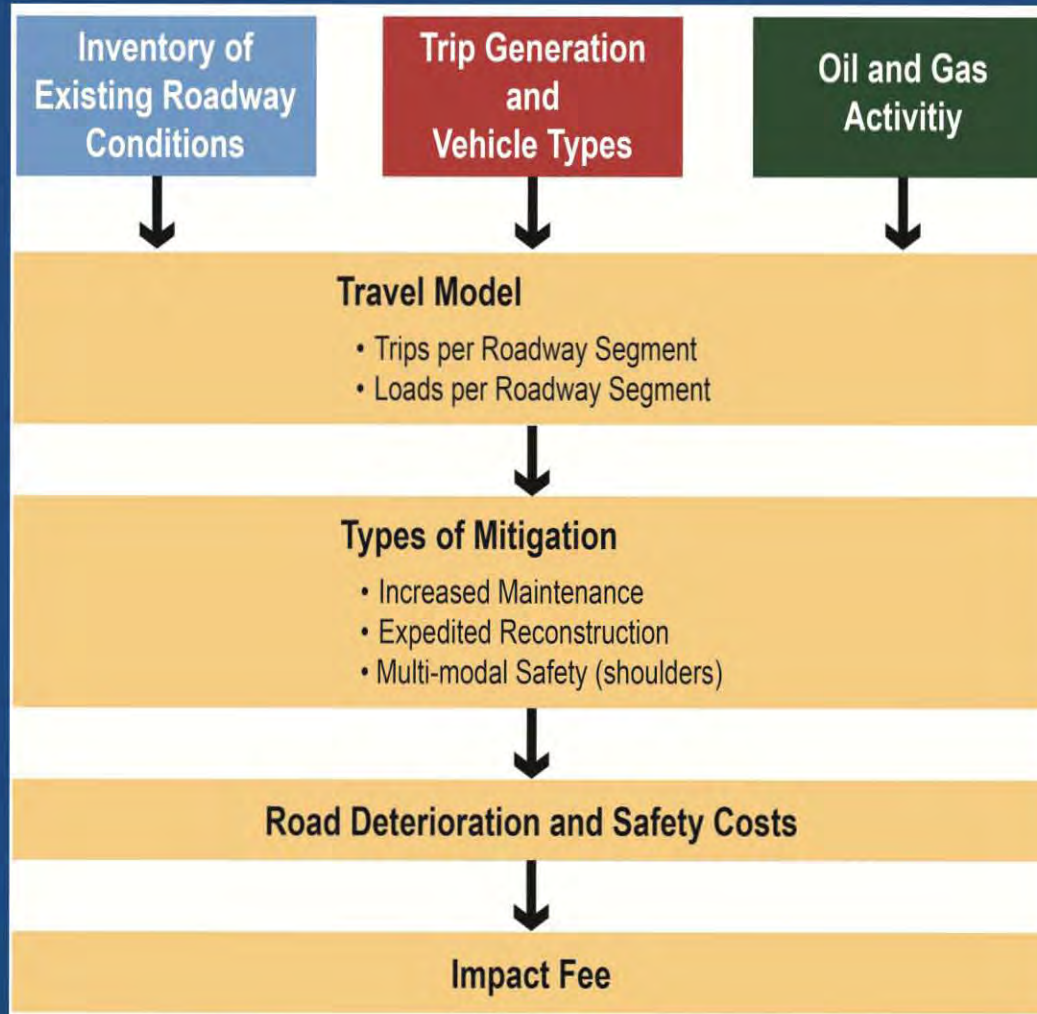
Elevated Impacts

Vehicle:	Passenger Car	Water Tanker	Specialized Trucks
Unit:	1	1	1
Weight:	1	20 x a car	40 x a car
Impact:	1	2,000-6,000 x a car	15,000-46,000 x a car

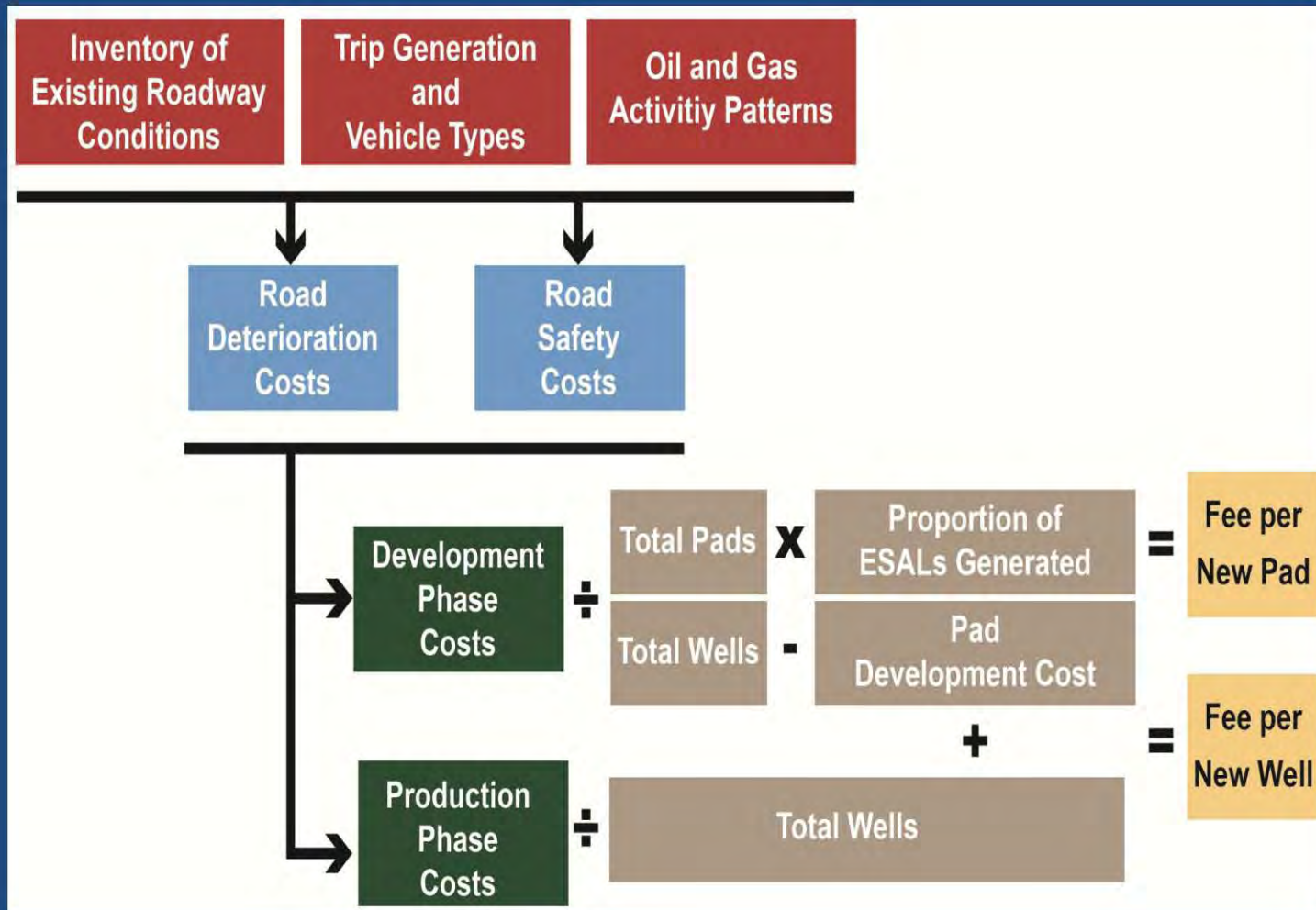


Credit: PACCAR Inc

Study Process



Fee Calculation Methodology



Traffic Impact Fee Next Steps

- Verify assumptions in model, coordinate fee methodology with general traffic impact fee project, test scenarios
- Finalize report
- Post report to website, notify stakeholders
- Staff recommends a 30-day comment period
- Public hearing before BoCC on the traffic impact fee

Permitting Activity

- Permits Approved via AUSR:

Operator	Pad Name	Number of Wells
PetroShare	Shook	14
Ward Petroleum	Schaefer	30
Anadarko	Lewton	1
Great Western	Ocho	32
Extraction	Alma	16
Anadarko	Buchholz	1

Permitting Activity

- Permits in the AUSR process:

Operator	Pad Name	Number of Wells
Ward Petroleum	Ivey	26
Extraction	Prairie Center (PC)	16
Great Western	B-Farm	36

Average Processing Time

	Processing	Referral	Compile & Send Comments	Receive Response from Operator	COA Negotiation & Report Writing	Director Decision	TOTAL TIME
Actual	5	22	5	29	55	6	123
Goal	7	21	0		7	7	42

Issues Encountered:

- Change in Assets
- Negotiating traffic impact fees, road maintenance agreements
- Site Plan Modifications

Questions?

ADDITIONAL STANDARDS FOR FLOWLINES AND GATHERING PIPELINES

The following standards apply specifically to flowlines and gathering pipelines, in addition to the applicable standards in Sec. *** thru Sec. ***.

4-10-99-01 UNDERGROUND LOCATION

All flowline and gathering pipelines, whether owned by the Operator or another company associated with the Oil and Gas Operation, shall be located underground.

4-10-99-02 FLOWLINES

Flowlines mean those segments of pipe from the wellhead downstream through the production facilities ending at, in the case of gas lines, the gas metering equipment; or, in the case of oil lines, the oil loading point; or in the case of waterlines, the water loading point, the point of discharge to a pit, or the injection wellhead.

4-10-99-03 GATHERING LINES

Gathering lines shall mean a pipeline and equipment described below that transports gas from a production facility (ordinarily commencing downstream of the final production separator at the inlet flange of the custody transfer meter) to a natural gas processing plant or transmission line or main. The term "gathering line" includes valves, metering equipment, communication equipment, cathodic protection facilities, and pig launchers and receivers, but does not include dehydrators, treaters, tanks, separators, or compressors located downstream of the final production facilities and upstream of the natural gas processing plants, transmission lines, or main lines.

4-10-99-04 ALIGNMENT

Gathering pipelines shall be aligned with established roads and share existing pipeline rights-of-way or consolidate new corridors for pipeline rights-of-way whenever possible.

4-10-99-05 WATER BODY CROSSING

Boring technology shall be used for gathering pipelines crossing streams, rivers or irrigation ditches.

4-10-99-06 COMPLIANCE WITH FLOODPLAIN REGULATIONS

Flowline or gathering pipelines located in or crossing an area of Special Flood Hazard shall comply with the requirements of the County's floodplain regulations in Section ***.

4-10-99-07 OPERATIONS AND MAINTENANCE

Operations and maintenance shall be conducted in accordance with the Procedural Manual for operations, maintenance, and emergencies prepared in conformance with 40 CFR § 192.605 for gas gathering pipelines or 40 CFR § 195.402 for oil gathering pipelines. This manual will be provided to the County before initial operations commence.

4-10-99-08 GPS INFORMATION AND AS-BUILT DRAWINGS

Within thirty (30) days of completing construction, the following information shall be provided to the Director:

1. Global positioning system (GPS) information sufficient to locate the flowline or gathering pipeline in a format compatible with the County's GIS system;
2. As-built drawings;
3. Engineering plans, drawings, and maps with summarized specifications showing the horizontal location, covering depths, and location of shutoff valves of the gathering pipeline. The drawings shall show the location of other pipelines and utilities that are crossed or paralleled within fifteen feet (15') of the flowline or gathering pipeline right-of-way;
4. Detailed cross-section drawings for all public rights-of-ways and easement crossings on County property;
5. A list of the names and mailing addresses of all residents, property owners, and tenants adjacent to the gathering pipeline construction.

4-10-99-09 RECORDATION OF AS-BUILT LOCATION AND ABANDONMENT

1. A legal description of the gathering pipeline location shall be recorded with the County and the County Clerk and Recorder within thirty (30) days after construction is completed;
2. The Director and the County Clerk and Recorder shall be notified of abandonment of any recorded gathering pipeline within thirty (30) days after abandonment.

4-10-99-10 RESTORATION OF SITE UPON COMPLETION OF CONSTRUCTION

Within thirty (30) days after construction of a flowline or gathering pipeline is completed, the affected property shall be graded, leveled, and restored to the same surface condition, as nearly as practicable, as existed before construction activities were first commenced.

4-10-99-11 VALVES

Flowline or gathering pipeline shall be equipped with automatic shut-off valves or remote control valves.

4-10-99-12 COMPUTERIZED MONITORING AND LEAK DETECTION

Flowline or gathering pipelines shall be equipped with computerized monitoring and leak detection that provides immediate notice of any leak to the County's emergency response providers.

4-10-99-13 NOTIFICATION OF GAS LEAKS

The Director of Community & Economic Development shall be notified immediately of gas leaks.

4-10-99-14 OIL GATHERING PIPELINES

These additional requirements apply to oil gathering pipelines.

1. Setback. Oil gathering pipelines shall be located a minimum distance of **X** feet from the exterior wall of a structure used for a residence, school, or commercial purposes.

Our intent is to explore setback distances of 250, 500, and 750 feet. Stakeholder feedback on this set of options is greatly appreciated.

2. Periodic Reports and Reporting of Accidents and Safety-Related Conditions for Oil Gathering Pipelines
 - a. Operator shall provide the Director with copies of the periodic reports at the time of reporting to the Pipeline Hazardous Material Safety Administration ("PHMSA")
 - b. Operator shall notify the Director of accidents and safety related conditions at the time of reporting to the PHMSA.

4-10-99-15 GAS GATHERING PIPELINES

In addition to 4 Colorado Code of Regulations (CCR) 723-4 that apply to gas gathering pipelines throughout the County, these standards apply to gas gathering pipelines located in areas with ten (10) or fewer buildings or outdoor areas of public assembly within 220 yards on either side of the centerline of any continuous one mile length of pipeline.

1. Hoop stress of 20% or more MAOP or more than 125 psig. Metallic gathering pipelines with a MAOP that produces a hoop stress of 20% or more of the SMYS or non-metallic gathering pipelines with a MAOP of more than 125 psig, shall comply with the transmission line requirements of 49 CFR § 192, except for Subpart D § 192.150, Passage of internal inspection devices.
2. Hoop stress of less than 20% MAOP or less than 125 psig. Metallic gathering pipelines with a MAOP that produces a hoop stress of 20 percent or less of the SMYS or non-metallic gathering pipelines with a MAOP of less than 125 psig shall comply with the following:
 - a. If a line is new, replaced, relocated, or otherwise changed, the design, installation, construction, initial inspection, and initial testing must comply with the following:
 - i. Design and Installation:
 - a. 49 CFR § 192 Subpart B
 - b. 49 CFR § 192 Subpart C
 - c. 49 CFR § 192 Subpart D, except for § 192.150, Passage of internal inspection devices
 - ii. Construction and Inspection: 49 CFR § 192 Subpart B
 - iii. Initial Testing: 49 CFR § 192 Subpart J.
 - b. Metallic gathering pipelines shall comply with corrosion control requirements of 49 CFR § 192, Subpart L.
 - c. Damage prevention program described in 49 CFR §192.614, subpart L.
 - d. Public education program required by 49 CFR § 192.616, subpart L.
 - e. Install and maintain line markers required by 49 CFR § 192.707, subpart M.
 - f. Leakage control program according to 49 CFR § 192.723(b), subpart M.
 - g. Procedural Manual addressing the maintenance and operational requirements of this Section.
 - h. Implementation of the Gas Pipeline Integrity Management Plan.

This chapter is known and may be cited as the "Adams County Regulations for Plugged and Abandoned Oil and Gas Wells and Former Oil and Gas Production Sites."

4-11-99-01 PURPOSE

This chapter is enacted to protect and promote the health, safety, morals, convenience, order, prosperity, or general welfare of the present and future residents of the County. These regulations are intended to be an exercise of the land use authority of the County.

4-11-99-02 DEFINITIONS

The following words and phrases used in this chapter have the following meanings:

- a. **Flowlines:** mean those segments of pipe from the wellhead downstream through the production facilities ending at, in the case of gas lines, the gas metering equipment; or, in the case of oil lines, the oil loading point; or in the case of waterlines, the water loading point, the point of discharge to a pit, or the injection wellhead.
- b. **Oil and Gas well:** means any hole drilled into the earth for the purpose of exploring for or extracting oil, gas, or other hydrocarbon substances.
- c. **Plugged and Abandoned well:** means the cementing of an oil and gas well, the removal of its associated production facilities, the removal or abandonment in-place of its flowline, and the remediation and reclamation of the well site.
- d. **Production site:** means the area surrounding or encompassing production facilities, including but not limited to production units, tanks and tank batteries, other production-related vessels, accessory equipment, pits, reserve pits, flowlines, sales lines, rights-of-way and easements associated with previous or current oil and gas operations, and tank batteries.
- e. **Production unit:** means a vessel for separating well stream fluids, possibly with heat, and putting fluids into merchantable condition.
- f. **Pit:** means any natural or man-made depression on the ground used for oil or gas exploration or production purposes. Reserve pit does not include steel, fiberglass, concrete, or other similar vessels which do not release their contents to surrounding soils.
- g. **Reserve pit:** means a pit used to store drilling fluids for use in drilling operations or to contain exploration and production waste generated during drilling operations and completion or re-completion procedures.
- h. **Sales lines:** are flowline sections connecting to sales meters.
- i. **Well:** means an oil and gas well or an injection well.

- j. **Wellhead:** means the equipment attaching the surface equipment to well bore equipment at the well.
- k. **Well site:** means that area surrounding a well or wells and accessory structures and equipment necessary for drilling, completion, recompletion, workover, development, and production activities.

4-12-99

PLUGGED AND ABANDONED WELL AND FORMER OIL AND GAS PRODUCTION SITE REGULATIONS

1. Prior to submittal of a final plat, minor subdivision plat, or site development plan, any plugged and abandoned well shall be located, excavated (if it was cut off and buried), and surveyed. The plugged and abandoned well shall be permanently marked by a brass plaque set in concrete similar to a permanent bench mark to monument its existence and location. Such plaque shall contain any information required on a dry hole marker by the Colorado Oil and Gas Conservation Commission and the County.
2. As a condition of review of any final plat, minor subdivision plat, or site development plan which contains a plugged and abandoned well or former oil and gas production site or is within 200 feet of such well or site, the owner shall submit a location diagram of the location of the wellhead, the production site, or the well site.
3. On every final plat and on every minor subdivision plat which contains a plugged and abandoned well, or for property within 100 feet of a plugged or abandoned well, there shall be dedicated to the County a well maintenance and workover easement, the dimensions of which shall be not less than fifty feet in width and 100 feet in length. No structures shall be located within this easement. The plugged and abandoned well shall be located in the center of the easement. There shall be public access for ingress and egress to the easement of a width of not less than twenty feet. Such public access shall be dedicated or granted to the County.
4. The well maintenance and workover easement shall be depicted on the site development plan.
5. Every final plat, minor subdivision plat, and site development plan which contains a plugged and abandoned well, or for property within 200 feet of a plugged or abandoned well, shall include the following notation: "The owner shall disclose to prospective purchasers of lots within a radius of 200 feet of the plugged and abandoned well of (1) the location of the plugged and abandoned well, (2) the location of the maintenance and workover easement, and (3) the purpose for the well maintenance and workover easement."
6. As a condition of approval of a final plat, minor subdivision plat, or site development plan, and prior to issuance of a grading, building, or public-private improvement permit for property on which there is a plugged and abandoned well or former oil and gas production site, the applicant shall submit to the County an acceptable verification that the well or former production site has been remediated of hydrocarbon contamination to background levels. In the alternative, the applicant shall submit to the County a certification by the County department of health and human services that there has been remediation of hydrocarbons at the

well site to a level satisfactory to the County department of health and human services.

7. Prior to issuance of a grading permit within a development containing a known reserve pit site, the reserve pit site shall be tested for expansive soils. Reserve pits containing expansive soils in locations proposed for buildings shall be subject to the provisions of the International Building Code regulating expansive soils and the standards and specifications as adopted in Section ***.
8. No utility lines shall be installed within ten feet of any plugged and abandoned well.
9. Prior to issuance of a grading permit within a development containing abandoned flowlines, any fluids within the abandoned flowlines shall be recovered and the flowlines shall be removed. Any fluid loss as a result of removing the flowlines shall be reported to the County public health department. Any such fluid loss shall be remediated to the satisfaction of the County public health department.

1. Residential Construction Standards: The Director of Community and Economic Development shall impose the following standards as a condition of subdivision approval.
 - a. The subdivision plat shall contain a **X foot** buffer around each oil and gas well location in the form of a no-build easement on the Final Plat. No structures may be constructed within the buffer area. *Our intent is to explore setback distances of 250, 500, and 750 feet. Stakeholder feedback on this set of options is greatly appreciated.*
 - b. Access to the oil and gas well location shall be provided by a public street or recorded easement for private access.
 - c. The Final Plat shall include notice to prospective buyers of the location of the oil and gas well(s) and associated easements.
 - d. All oil and gas well flowlines and/or easements shall be graphically depicted on the Final Plat.
 - e. All surface and subsurface agreements shall be noted on the Final Plat by the recorded book and page number.
 - f. Pursuant to Section 4-06-01-02-01-12, where a new home and/or other permanent structure with plumbing is constructed within **X feet** of an existing oil and gas well, the property owner shall submit a signed waiver acknowledging the existence of the facility. *Our intent is to explore setback distances of 250, 500, and 750 feet. Stakeholder feedback on this set of options is greatly appreciated.*

3. **Expiration of Approval:** Provided at least one well is drilled and completed during the initial three (3) year period following approval of a multi-well pad location, such approval permanently vests the permitted location for the number of wells as contained within the initial permit approval. However, only those wells that are drilled and completed during the initial three (3) year period following approval of a multi-well pad location shall be vested. If additional wells are to be drilled at the multi-well pad location following expiration of the initial three (3) year period, the permit for those wells shall be renewed pursuant to this provision. The permit renewal process is the process to ensure application of most recent Best Management Practices (associated with road impacts and mitigation of visual and noise aspects of oil and gas development near residential development) OR (associated with application of the permitting standards contained within this Code). The permit renewal process also allows the Operator to inform the County of any most recent Best Management Practices associated with well drilling and completion. To achieve these goals, the permit renewal process shall include all necessary and relevant provisions of this Code as determined by the Director of Community and Economic Development.