

DATE: November 29, 2011

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Pre-taped staff presentation: available at fcgov.com/clerk/agendas.php

WORK SESSION ITEM

FORT COLLINS CITY COUNCIL

SUBJECT FOR DISCUSSION

Xcel Energy West Main Replacement Project.

EXECUTIVE SUMMARY

Xcel Energy is developing plans for an 80 mile long high pressure natural gas pipeline replacement project that begins at the Wyoming border and ends in Broomfield. The existing pipeline, an 8- inch diameter pipe installed in 1929, will be replaced with a 16-inch diameter pipeline that will be rated to a pressure of 1020 pounds per square inch gage (psig.) Xcel's goal is to install the pipeline within public roadways wherever possible for safety reasons. Xcel is working with City staff to continue refining the pipeline routing. This project will impact City streets and natural areas.

GENERAL DIRECTION SOUGHT AND SPECIFIC QUESTIONS TO BE ANSWERED

The purpose of this work session is to inform Council of Xcel Energy's plans to replace the existing gas pipeline through the City with a new larger gas line, and to identify the impacts to the street system and the natural areas. Staff is seeking Council input on the pipe line alignment early in the design process.

BACKGROUND / DISCUSSION

Project Description

The West Main Pipeline was installed in 1929 as a high pressure natural gas pipeline that served the communities on the western Front Range. The pipeline begins near the Wyoming border and ends near Broomfield. Beginning in 2009, Xcel Energy started assessing the integrity of the pipeline as mandated by several federal codes and from the Public Utilities Commission (PUC). These assessments are done by filling the pipeline with water and increasing the pressure inside the pipeline by a multiplier of the maximum pressure allowed on the pipeline, and also by inserting In Line Inspection (ILI) tools into the pipeline. ILI tools look for corrosion, cracks, dents, and loss of the wall thickness of the pipeline.

Currently, Xcel Energy is still assessing the integrity of the pipeline to ensure it is safe to operate until replacement, but the results from the testing have shown that the existing pipeline needs to be

replaced. Xcel Energy evaluated the size required for not only for current demand, but also for at least 30 years into the future. It was determined that the new pipeline should be a 16-inch diameter pipeline, and the pressure that the pipeline will be rated to is 1020 psig.

The existing 8-inch pipeline currently lies within Timberline Road, Horsetooth Road, and Shields Street. Xcel Energy is proposing to relocate the new high pressure gas line outside of the roadways wherever possible for safety reasons. The pipeline will have a much higher potential of being damaged if it is in the roadway. Some portions of the pipeline in the roadway will have to be replaced due the existing distribution system for Fort Collins customers. Xcel Energy is working with City staff to determine the best locations for the City and Xcel Energy. The pipeline routing has already been modified based on input from the City staff.

The replacement of this gas line will have impacts to the City's street system as well as the Natural Areas.

Street System Impact

Three major streets will be potentially impacted by the replacement of the gas line: Timberline Road, Horsetooth Road, and Shields Street. Horsetooth Road, and Shields Street were paved in 2011 as part of the Streets Department Maintenance Program (SMP).

Prior to any SMP work being performed, a utility notification is sent to other City departments and private utility companies. Xcel responded and stated they did not have any concerns or projects impacting the 2011 SMP. Xcel did not know, at the time, that it would be replacing the gas line. The City moved ahead with scheduled maintenance treatments. Xcel will be required to repave all of the impacted streets to bring them back to equal or better conditions.

City Engineering will inspect all work performed by Xcel within the City public right-of-way. An excavation permit will be issued to Xcel, and it will be required to pay applicable "street cut" fees. The fees are tripled for streets overlaid within the last five years.

The good news is that this project potentially will provide an opportunity for the Street Maintenance Program to coordinate with Xcel on any remaining street maintenance needs within the project limits.

Natural Areas Impacts

Xcel has stated that it is willing to work with staff to avoid, minimize and mitigate impacts to natural areas. Xcel is willing to time the construction to minimize impacts to wildlife and vegetation; bore the pipe line under wetlands and sensitive vegetation and habitat; and to time restoration to maximize success. As with all construction there will be short term impacts to vegetation and wildlife that cannot be avoided or mitigated. The trenching operation would impact vegetation for a width of approximately 75'. Xcel is required to place above ground markers within eye sight of one another which will have an impact to the view shed. There will also be impacts in the future due to routine maintenance, repairs and ultimate replacement of the gas line. The site specific impacts identified at this time are as follows:

- **Coyote Ridge Natural Area**

Xcel wants to place the gas line along the west side of Shields Street just outside of the future right of way to avoid future conflicts. The installation of the pipe line would have temporary impacts to a 1.25--mile stretch of what is currently wheat field and significant impacts to a 0.25-mile stretch of primarily native prairie vegetation. The wheat field will be restored to native grasses in the future. The installation would have minimal long term impacts on wildlife.

- **Hazaleus Natural Area**

Xcel wants to place the gas line along the east side of Shields Street outside of the future right-of-way to avoid future conflicts. The installation of the pipe line would impact mostly non-native grasses and have minimal long term impact on wildlife. Xcel proposes to bore under the wetlands to avoid impacts to the wetlands. The area impacted by the proposed gas line installation will be impacted in the future to construct a regional recreation trail.

- **Cathy Fromme Prairie Natural Area**

Xcel wants to place the gas line along the west side of Shields Street just outside of the future right-of-way to avoid future conflicts. Xcel is proposing to bore under much of site to avoid impacts. In the areas where Xcel will not be able to bore there would be minimal long term impacts to wildlife, and potentially significant impacts to native prairie vegetation, the trailhead parking lot, and the Fossil Creek trail.

- **Kingfisher Point Natural Area**

Xcel's 8" gas line crosses Kingfisher in an existing easement. Xcel is planning to use the existing easement to install the new gas line across Kingfisher and the Poudre River. Xcel is proposing to bore under the river, the Poudre River trail, and much of Kingfisher to avoid impacts. In the areas where Xcel will not be able to bore there will be long term impacts to recently restored native grasses and minimal long term impacts to wildlife.

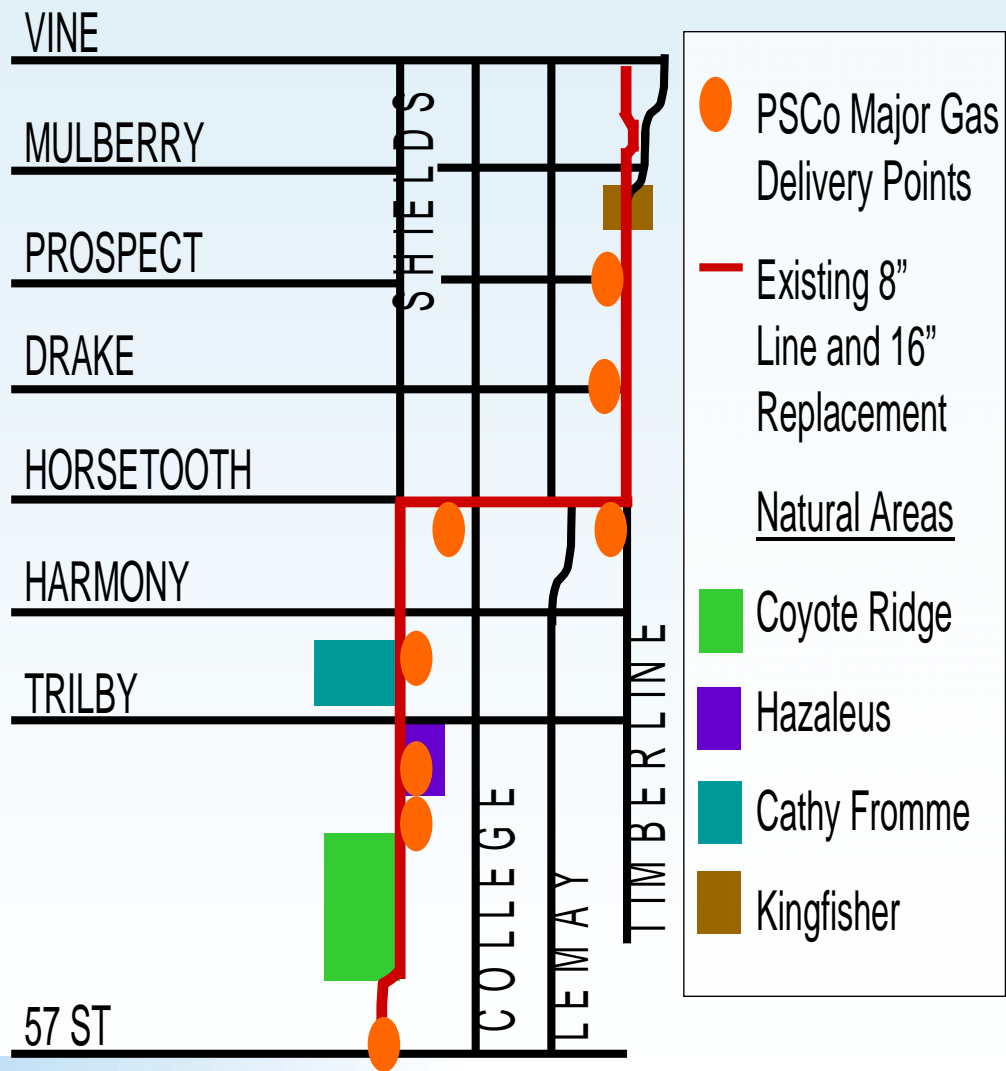
Summary

City staff will continue to work with Xcel Energy through the project design to determine a detailed location of the pipeline to limit the project impacts. Easements from the City through its Natural Areas may be required by Xcel to accommodate its preferred alignment. Any impacts to City streets will be fully mitigated, and the roadways will be restored to their current condition.

ATTACHMENTS

1. Map
2. Powerpoint presentation

Xcel Loveland/Fort Collins Replacement Line

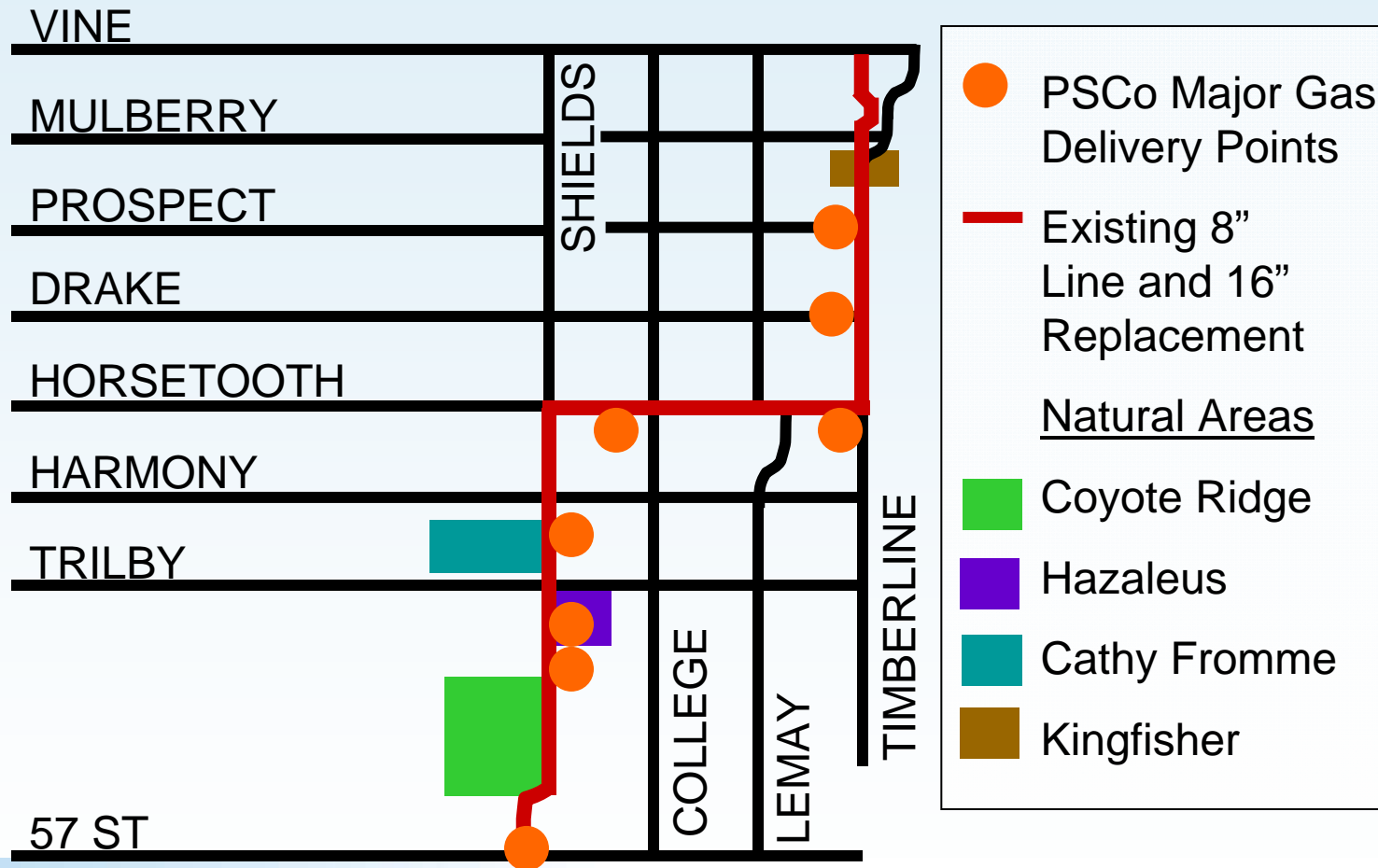




West Main Replacement Project

November 2011

Loveland/Fort Collins Replacement Line



West Main Background

- High pressure natural gas pipeline installed 1925-1931
- Extends from Wyoming border south into Broomfield (approximately 80 miles of pipeline)
- Backbone of the natural gas system in the Front Range **and is critical to maintaining reliable natural gas service** serving several communities including:
 - Fort Collins, LaPorte, Loveland, Greeley Longmont, Lafayette, Louisville, Boulder, Broomfield, Westminster, Denver, etc.

Why Replacement?

- Results from Federal DOT code inspections
 - Anomalies found during integrity assessments prompting immediate repairs
 - Pipeline corrosion more prevalent than expected (loss of pipe thickness)
- Pipeline exit strategy initiated December 2010
 - Will continue integrity assessments, repairs and safe operation of pipeline until retired
- Began talking with Fort Collins late spring 2011

Pipeline Routing

Preferred route resulted from talks with the City staff and included:

- Proximity to existing facilities. **These points of service are critical for continued safe and reliable natural gas to the citizens and businesses within the City of Fort Collins.**
- Safety of the new pipeline
 - Installation outside congested roadways whenever possible
- Sensitivity to the environment and natural areas
- Reduce impact to customers/residents as much as possible

Fort Collins Impacts

- Pipeline route includes replacing the line in the pavement and in some natural areas
 - Pavement impacts: Timberline Rd, Horsetooth Rd, and Shields St
 - Natural Areas: Cathy Fromme Prairie, Hazaleus, Coyote Ridge, and Kingfisher Point
- City assisting with route refinement to lessen the impact to residents
 - Identify project coordinating opportunities with City projects (i.e., water replacements, sewer work, etc.)

Natural Areas Impacts

- Xcel will work with City Staff to avoid, minimize and mitigate impacts
 - Construct pipeline in winter to minimize impacts to wildlife and vegetation
 - Bore pipeline under wetlands and sensitive vegetation and habitat
 - Restoration prior to spring to maximize success

Natural Areas Impacts

- Coyote Ridge
 - Temporary impacts to wheat field
 - Minimal impacts to wildlife and view shed
 - Above ground markers
- Hazaleus
 - Impacts to mostly non-native grasses which will be restored to native grasses
 - Minimal impacts to wildlife and viewshed
 - Impacted area will be a regional trail in future
 - Above ground markers

Natural Areas Impacts

- Cathy Fromme
 - Potential significant impacts to native prairie vegetation
 - Minimal impacts to wildlife
 - Above ground markers
- Kingfisher
 - Potential significant impacts to recently restored native grass
 - Minimal impacts to wildlife
 - Above ground markers

Pavement Impacts

- **Street Maintenance Program (SMP) Utility Notifications**
 - Sent prior to any SMP work being performed to other City departments and private utility companies
 - Minimize the impact of utility cuts on the pavement and to coordinate work with others
 - Two coordination notices sent to Xcel prior to performing our 2011 Street Maintenance Program.

Pavement Impacts

- Xcel responded and stated that they did not have any concerns or projects impacting the 2011 streets.
- Three streets that were overlaid in 2011 will be impacted.
 - 1) Shields St. – from Horsetooth Rd. to Harmony Rd.
 - 2) Horsetooth Rd. – from College Ave. to Timberline Rd.

Pavement Impacts

- Additionally, two more streets will be impacted that have received recent overlays:
 - 1) Shields St. – from Harmony Rd. to Bon Homme Richard Dr. (2009)
 - 2) Timberline Rd. – from Vermont Dr. to Horsetooth Rd. (2008)

Project Summary

- Replacement of the 8" West Main Pipeline with a new 16" pipeline
 - 2013 – 2014 replacement in Fort Collins, Loveland, and Larimer County
- \$136 million project estimate
- 3 - 4 year replacement schedule remaining

NEXT STEPS

- Action by Council Regarding Easements Within the Natural Areas
- Excavation Permitting Through the Engineering Department

