

**WHATCOM COUNTY  
PLANNING & DEVELOPMENT SERVICES  
STAFF REPORT**

**I. SUMMARY OF PROPOSAL AND RECOMMENDATION**

**File #** ZON2007-00014

**File Name:** Pipeline Safety & Development Changes

**Applicant:** Whatcom County Council (Carl Weimer, sponsor)

**Request:** This proposed amendment would add a new section to the zoning code (Title 20), the subdivision code (Title 21), and perhaps the environmental code (Title 16), which would provide for better protection of people and pipelines by ensuring communication between developers and pipeline companies, clear knowledge of the existence of pipelines, clear discussion of possible impacts to pipelines as part of the SEPA checklist, and minimum setbacks for new construction, land disturbance and high consequence land uses.

**Reason for Request:** The purpose of this section is to help prevent and minimize unnecessary risk to the public health, safety, and welfare due to hazardous liquid and gas transmission pipelines. Recognizing it is impossible to eliminate risk entirely, this section is intended to:

- (1) Minimize the likelihood of accidental damage to hazardous liquid and gas transmission pipelines due to external forces, such as construction equipment.
- (2) Avoid exposing land uses with high on-site populations that are difficult to evacuate and land uses that serve emergency functions to risk of injury or damage in the event of a pipeline failure.
- (3) Help reduce adverse impacts in the event of a pipeline failure.
- (4) Supplement existing federal and state regulations related to hazardous liquid and gas transmission pipeline corridor management.

The provisions of this section are intended to protect the health, safety and welfare of the general public and are not intended to protect any particular individual, class of individuals, or organization.

**Recommendation:** Staff recommends that the Planning Commission, after holding a public hearing and considering all testimony, vote to approve the proposed amendments with or without modifications, and to forward their recommendation to the Whatcom County Council.

## **II. BACKGROUND INFORMATION**

**Location:** Throughout all of unincorporated Whatcom County next to where transmission pipelines occur.

This proposed amendment to the zoning code was first docketed by the Whatcom County Council in 2007. Due to other priorities, review of this amendment and public hearing has not taken place until now.

As new development occurs near transmission pipelines, (many times in areas that were previously rural in character), there is a need to ensure the safety of people in those developments, as well as to ensure that those people do not cause damage to pipelines that could potentially harm other people and the environment.

The intent of the proposed amendments is to set forth a process where consultation between a developer and a neighboring pipeline company takes place. The proposed consultation zone is intended as a requirement of the developer but there would be no time limitation if there is no response from the neighboring pipeline company. The proposal is also intended to apply to all new development, prohibiting critical facilities, but does not change the zoning along pipelines. The proposal contemplates changes to the SEPA Checklist and the environmental code in Title 16 as well. Finally, additions to the land division code in Title 21 may also be necessary.

Mr. Paul Fincher, Sumas District Operations Manager of Williams Northwest Pipeline sent a letter to Mr. David Stalheim, Director of Whatcom County Planning and Development Services, dated March 4, 2010, fully supporting the intent of the proposal and applauding the County's willingness to allow flexibility in the requirements. Mr. Fincher encouraged an expansion of the proposal scope to include all logging activities within 660 feet of transmission pipelines, heavy equipment crossing pipelines including log skidding, falling timber, and clear cutting. Proposed logging activity should receive equal consultation with pipeline operators prior to permit issuance.

## **III. ANALYSIS OF THE PROPOSED AMENDMENT**

**A.** Pursuant to Whatcom County Code (WCC) 20.10.080, at the conclusion of the public comment period, the Planning Commission shall evaluate the merits of the amendment in relationship to the goals, policies and objectives of the Comprehensive Plan for compliance with any other special provisions as provided by WCC 20.90.060 and shall make recommendation as to whether the amendment should be approved, approved with modifications or denied. The Planning Commission shall then cause written findings and a recommendation to the County Council to be prepared for the amendment.

### **Whatcom County Comprehensive Plan**

The proposed amendment is meant to carry out the intent of Goal 5M of the Comprehensive Plan by providing greater information and regulatory measures to protect the citizens and environment of Whatcom County.

#### **GOAL 5M: Protect the citizens and the environment of Whatcom County through informational, educational, and regulatory measures.**

Policy 5M-3: Develop information/education and notification programs to alert the public of pipeline location and safety considerations when making land purchase or development decisions adjacent to transmission pipelines.

The proposed amendment supports Goal 5N of the Comprehensive Plan, and builds upon Policy 5n-7 by defining "high consequence land use" and setting minimum setbacks for such new developments, and mitigation measures for expansion to existing high consequence land uses.

#### **GOAL 5N: Develop locational siting criteria specific to special conditions regarding transmission and large distribution pipelines.**

Policy 5N-7: For natural gas transmission pipelines, encourage siting of critical facilities and high occupancy facilities pursuant to the regulations of WAC 480-93-020, and 480-93-030 (not closer than 500' from a 500 psi pressure or greater pipeline, not closer than 100' from a pipeline with a pressure between 250 and 499 psi) and as hereafter amended.

Policy 5N-3: Transmission pipeline are discouraged in urban growth areas, small towns, crossroads commercial, and other areas of intense rural development which would render such pipeline siting inappropriate.

Policy 5N-3 shows the correct concern for discouraging new pipelines from certain more intense levels of development, and this proposed amendment builds upon that concern by providing direction to protect citizens and the environment when new development moves closer to pipelines.

Most of the transmission pipelines in the county were built in rural areas. Many of those rural areas are now being faced with increased development, and some pipelines are now within UGAs and five year review areas. As new homes and businesses are increasingly placed in close proximity to pipelines it is important for the county to do what it can to ensure the safety of its citizens and the environment.

Both the Washington Utilities and Transportation Commission and the federal Pipeline and Hazardous Materials Safety Administration have recognized the growing problem of development encroaching on existing pipelines, and are encouraging local government to act proactively in their planning near pipelines. Two recent reports that highlight the need for such planning are:

Transmission Pipelines and Land Use by the Transportation Research Board of the National Academies, available at: <http://onlinepubs.trb.org/onlinepubs/sr/sr281.pdf>.

Land Use Planning in Proximity to Natural Gas and Hazardous Liquid Transmission Pipelines in Washington State by the Washington Utilities and Transportation Commission, available at: <http://www.mrsc.org/artdocmisc/landusegas.pdf>.

#### **IV. PROPOSED FINDINGS OF FACT AND REASONS FOR ACTION**

1. Most of the transmission pipelines in the county were built in rural areas. Many of those rural areas are now being faced with increased development, and some pipelines are now within UGAs and five year review areas. As new homes and businesses are increasingly placed in close proximity to pipelines it is important for the county to do what it can to ensure the safety of its citizens and the environment.
2. Both the Washington Utilities and Transportation Commission and the federal Pipeline and Hazardous Materials Safety Administration have recognized the growing problem of development encroaching on existing pipelines, and are encouraging local government to act proactively in their planning near pipelines.
3. By Resolution Number 2007-034, the Whatcom County Council initiated a formal review of this proposal as included within Attachment A of that resolution.
4. Pursuant to RCW 36.70A.106, a Notification for 60-Day Review of Development Regulation Amendment was submitted to the State of Washington, Department of Commerce on February 2, 2010.
5. A determination of non-significance (DNS) was issued under the State Environmental Policy Act (SEPA) on February 8, 2010, case number SEP2010-00012.
6. The SEPA DNS Legal Notice was published one time in the Bellingham Herald on February 8, 2010.
7. The SEPA DNS was distributed on February 8, 2010 to: WA Department of Ecology SEPA Unit (Olympia), WA Department of Ecology (Bellingham), WA Department of Fish and Wildlife, WA Department of Archaeology and Historic Preservation, WA Department of Natural Resources, Lummi Nation (Natural and Cultural Resources Departments), Nooksack Indian Tribe (Natural and Cultural Resources Departments), Applicant Carl Weimer, Williams Pipeline, Trans Mountain Pipeline, Olympic Pipeline, Kinder-Morgan Pipeline, City of Blaine, City of Ferndale, City of Sumas, City of Everson, City of Nooksack, Whatcom County Emergency Management, Whatcom County Fire Districts (1, 4, 5, 7, 8, 11, 14, 16, 17, 18, 19, and 21), South Whatcom Fire Authority, Building Industry Association of Whatcom County, Federal Energy Regulation Commission, State Utility and Transportation Commission.

8. All public notification generated one letter from Williams Northwest Pipeline dated March 4, 2010, supporting the proposal.
9. The Whatcom County Comprehensive Plan Goal 5M and Policy 5M-3 support developing information/education and notification programs to alert the public of pipeline locations and safety when making land development decisions adjacent to transmission pipelines.
10. The Whatcom County Comprehensive Plan Goal 5N and Policy 5N-7 discourages new pipelines from certain more intense levels of development. This proposed amendment provides a process for consultation with pipeline companies when new development is proposed that moves closer to pipelines.
11. Notice of the Planning Commission hearing was published in the Bellingham Herald on March 14, 2010.
12. The Planning Commission held a public hearing relating to the subject amendment on March 25, 2010.

**V. PROPOSED CONCLUSION**

The subject amendment is consistent with the criteria of WCC 20.90.050.

**VI. RECOMMENDATION**

Staff recommends approval of the proposed zoning amendment subject to the following recommendations:

**Proposed Regulatory Language:**

**Development Application Submittal Requirements.**

- (1) Applicants shall show hazardous liquid and gas transmission pipeline corridors and applicable setbacks on site plans and subdivision plats when proposed development is located within 660 feet of the pipeline corridor. Minor modifications to existing structures that do not involve significant land disturbance on-site or changes to off-site improvements are exempt from this requirement.
- (2) Consultation Zone along hazardous liquid and gas transmission pipeline corridors  
(A) Consultation Zone Distance. The consultation requirement applies to development permits involving any parcel that is within 660 feet of the centerline of a hazardous liquid and gas transmission pipeline corridor. The 660 foot consultation zone distance may be lessened for certain development activities if the distance changes are first reviewed with the pipeline operator(s) and found to be consistent

with prudent pipeline operation given the local conditions, such as terrain, soil types, etc. There must be written documentation from the pipeline operator(s) showing their agreement to any lessening of the consultation zone distance for certain types of development permits. The intent of this section is to provide flexibility and to avoid unnecessary paperwork and delays in the permitting process while also making sure that all activities that may impact the integrity of a hazardous liquid or gas transmission pipeline are thoroughly reviewed.

(B) Consultation Zone Notification. Whenever any individual applies for a development permit within the consultation zone established for hazardous liquid and gas transmission pipelines, the staff at the permit counter shall notify the individual that they are within the consultation zone, explain the relevant application procedures, and provide contact information for the applicable pipeline operator(s). This same procedure shall be followed whenever an individual inquires about development regulations or zoning restrictions for property within the consultation zone.

(C) Complete Application for Development Permit within Consultation Zone. A complete application for any development permit within the designated consultation zone must include written verification from the applicant that:

(i) The applicant has contacted the pipeline operator(s) and has provided the pipeline operator(s) with documentation detailing the proposed development activity and where the activity is to take place; and

(ii) The pipeline operator(s) has reviewed the documents for compatibility with continued safe operation of the hazardous liquid or gas transmission pipeline (s).

(iii) The written verification required by this section can be in any form acceptable to the county, including electronic communications, so long as it is clear that the pipeline operator(s) has received and reviewed documentation showing the proposed activity and its location.

(3) A SEPA checklist submitted by an applicant for a development permit involving any parcel that is within 660 feet of the centerline of a hazardous liquid or gas transmission pipeline easement must reference the transmission pipeline(s) and provide information concerning any impact the activity will have upon the integrity of the hazardous liquid or gas transmission pipeline(s).

(4) All other applicable development application submittal requirements apply.

### **Pipeline Corridor Protection Requirements.**

(1) Hazardous Liquid and Gas Transmission Pipeline Corridor. No significant land disturbance or construction or expansion of structures is allowed within hazardous liquid

or gas transmission pipeline corridors without the express written consent of the pipeline operator.

(2) Pipeline Corridors shall be identified and protected during construction by placement of a temporary barricade and on-site notices. Barricades and on-site notices are subject to review by the Code Administrator.

(3) Reasonable Use Provision.

(A) The required pipeline corridor protection requirements from hazardous liquid and gas transmission pipeline corridors shall not deny all reasonable economic use of property. If an applicant demonstrates to the satisfaction of the Hearing Examiner that strict application of these requirements are greater than any legal easement requirements, and would deny all reasonable economic use of the property, the requirements may be lessened subject to appropriate conditions.

(B) An applicant for relief from strict application of the requirements shall demonstrate the following:

(i) No reasonable economic use of the applicant's property can be made if the requirements are strictly applied; and

(ii) The proposed use on the corridor is the minimum necessary to provide the applicant with a reasonable economic use of the property; and

(iii) All reasonable mitigation measures have or will be implemented or assured; and

(iv) The inability to derive any reasonable economic use is not the result of the applicant's actions or those of the applicant's predecessors in title; and

(v) The pipeline corridor protection requirements are greater than any legal easement or right-of-way requirements for the corridor; and

(vi) The pipeline location has been definitively determined.

(C) As a condition of any relief granted under this section, the applicant shall be required to record an instrument against the title of the property notifying all subsequent purchasers of the fact that a lesser requirement on the pipeline corridor has been approved and of any and all conditions placed on the grant of relief.

### **Requirements for Land Use Compatibility.**

(1) High Consequence Land Uses.

(A) New high consequence land uses proposed for location within 500 feet of a hazardous liquid or gas transmission pipeline corridor are prohibited.

(B) Proposed expansions to existing high consequence land uses located within 500 feet of a hazardous liquid or gas transmission pipeline corridor shall at a minimum be designed to avoid increasing the level of risk in the event of a pipeline failure, and where feasible, reduce the risk compared to the existing development. Potential techniques to minimize or reduce risk include but are not limited to:

(i) Site design features, such as maintaining or increasing the distance between occupied structures, or structures that provide critical lifeline functions, and the hazardous liquid or gas transmission pipeline and anticipated blast zones or flow paths for leaking hazardous materials.

(ii) Building features, such as design to avoid a significant increase in on-site population or to expedite evacuation.

(iii) Technological features, such as accelerated notice of a pipeline failure to the high consequence land use to facilitate evacuation or features that help to avoid damage in the event of a pipeline failure.

(iv) Operational features, such as emergency plans and education programs for occupants and employees concerning pipeline safety, developed in accordance with the procedures in (2)(B)(ii).

Modifications to existing buildings that do not increase the onsite population hinder evacuation, or change evacuation routes are exempt from this requirement.

(2) Other Development.

(A) Applicants for the following types of new or expanded development shall use appropriate mitigation measures to help reduce adverse impacts in the event of a pipeline failure:

(i) Commercial or industrial.

(ii) Multi-family.

(iii) Religious facilities.

(iv) Other developments as required by the Code Administrator that, because of proximity to a hazardous liquid or gas transmission pipeline corridor, pose a safety concern due to characteristics of the occupants, development, or site.

(B) Mitigation measures intended to reduce risk and minimize impact in the event of a pipeline failure include but are not limited to:

(i) Site and building design techniques such as maximizing the distance between new or expanded development and anticipated blast zones or flow paths for leaking hazardous materials and controlling ignition sources.

(ii) Emergency procedures such as emergency plans and guides, employee training and drills, and education programs for occupants and employees concerning pipeline safety, such as what to be aware of and how to respond in the event of a problem.

(a) Applicants shall consult with the Fire Marshal regarding the level of emergency planning and procedures appropriate for the proposed development. Based on the nature, occupancy, or location of a proposed development, the Fire Marshal may require emergency plans and procedures for any occupancy classifications.

(b) Emergency plans and procedures shall be consistent with the Fire Code and shall be approved by the Fire Marshal.

Modifications to existing buildings that do not increase the onsite population, hinder evacuation, or change evacuation routes are exempt from this requirement.

**Definitions:**

**Gas Transmission Pipeline** means a “transmission line” as defined in 49 CFR § 192.3

**Hazardous Liquid Pipeline** means a “pipeline” as defined in 49 CFR § 195.2

**High Consequence Land Use** means a land use that if located in the vicinity of a hazardous liquid or gas transmission pipeline represents an unusually high risk in the event of a pipeline failure due to characteristics of the inhabitants or functions of the use.

High consequence land uses include:

(1) Land uses that involve a high-density on-site population that is more difficult to evacuate. These uses include schools (through grade 12), hospitals, clinics, multi-family housing or other facilities exclusively for elderly or handicapped, stadiums or arenas, and day care centers, and does not extend to family day care or adult family homes.

(2) Land uses that serve critical “lifeline” or emergency functions, such as fire and police facilities, utilities providing regional service, or water supplies if exposed to a significant risk that will curtail its lifeline function for a critical period of time.

(3) Uses with similar characteristics as determined by the Code Administrator.

**Pipeline Corridor** means the pipeline pathway defined by rights-of-way and easements in which the pipelines and facilities of a hazardous liquid or gas transmission pipeline operator are located, including rights-of-way and easements over and through public or private property.

**ATTACHMENTS:**

- Exhibit A – Map of Whatcom County Utility Corridors.
- Exhibit B – Letter from Mr. Paul Fincher, Sumas District Operations Manager, Williams Northwest Pipeline, dated March 4, 2010.