

City of West Linn
PRE-APPLICATION CONFERENCE MEETING
March 4, 2010

SUBJECT: Zone change at 2014 Willamette Falls Drive from the Willamette Neighborhood Mixed Use Zone to General Commercial.

ATTENDEES: Applicants: Tim Tofte, Pat Hanlon, Jessica Iselin, Kevin VandenBrink
Staff: Peter Spir (Planning Department) Khoi Le (Engineering)
ODOT: Gail Curtis

The following is a summary of the meeting discussion provided to you from staff meeting notes. Additional information may be provided to address any “follow-up” items identified during the meeting. These comments are PRELIMINARY in nature. Please contact the Planning Department with any questions regarding approval criteria, submittal requirements, or any other planning-related items. Please note disclaimer statement below.

Project Details

The property occupies 40,909 square feet. The zoning is Willamette Neighborhood Mixed Use (MU). The applicant proposes to change the zoning to General Commercial(GC). Complicating matters is the fact that the property is also within the Willamette Falls Drive Commercial District Overlay Zone.

Background on the Willamette Neighborhood Mixed Use (MU)

In 2005, City Council created the MU zone designation to transition to, and protect the single family homes of the historic district from the more intensive commercial and office uses along Willamette Falls Drive Commercial District. The impetus for this new zone classification was a case on the south side of Willamette Falls Drive. A cedar decking business and an attorney’s office at 2051 Willamette Falls Drive had occupied two homes, ostensibly as home occupations, but it was clear that they were full time businesses. The fear of the neighbors and the neighborhood at large was that this could be lead to the eventual erosion of the residential district surrounding the commercial area. There were also concerns that this kind of development could erode the character of the commercial and residential historic districts. A consultant was hired and developed the standards with the Willamette Neighborhood Association with no input from City Planning staff.

On the face of things, the creation of a MU zone was quite reasonable. As CDC 59.010 states: *The purpose of the mixed use/transitional zone is to provide for a transitional*

area between commercial and residential zones with a desirable mix of residential land uses with limited commercial land uses. The limited commercial uses allowed in this district are selected for their compatibility with residential uses and their ability to meet the needs of the neighborhood. Uses in this district are intended to be compatible with the design and aesthetic qualities of the adjacent neighborhood.

In practice however, this chapter has presented some challenges in that it is based on the premise or assumption that all structures in the MU zone are existing Craftsman or similar historic homes. Thus the design standards of the chapter have no applicability to the majority of structures in the zone which are not Craftsmen etc. A particularly difficult section of the MU chapter is the dimensional standards of section 59.070:

59.070 DIMENSIONAL REQUIREMENTS, USES PERMITTED OUTRIGHT AND USES PERMITTED UNDER PRESCRIBED CONDITIONS

- A. *Except as may be otherwise provided by the provisions of this Code, the following are the requirements for uses within this zone:*
 - 1. *The minimum front lot line length or the minimum lot width at the front lot line shall be 35 feet.*
 - 2. *The average minimum lot width shall be 50 feet.*
 - 3. *The average minimum lot depth shall not be less than 90 feet.*
 - 4. *The minimum yard dimensions or minimum building setback area from the lot line shall be:*
 - a. *For a front yard, 12 feet minimum and 20 feet maximum to the structure, except that a porch, patio, or pedestrian amenity may be 6 feet from the front property line.*
 - b. *For an interior side yard, 7-1/2 feet.*
 - c. *For a side yard abutting a street, 12 feet.*
 - d. *For a rear yard, 20 feet. However, where the use abuts a residential district, the setback distance required in the residential district shall apply, and within the setback area a buffer of at least 10 feet of landscaping in addition to a fence is required.*
 - 5. *The maximum building height shall be two stories above grade, or 35 feet, whichever is less.*
 - 6. *Maximum building size for all floors shall not exceed 6,000 square feet above grade excluding porches.*
 - 7. *The building floor area ratio shall be .4, except that the ground floor of the building shall not exceed 5,000 square feet.*
 - 8. *The minimum lot size shall be 4,500 square feet and the maximum lot size shall be 10,000 square feet, unless defined as an existing lot of record.*

These standards are fine for craftsman remodels and infills that will house craft shops but they do not allow for traditional commercial or office development. A parcel of over 40,000 square feet in size, such as this, at the prime location in the district cannot reasonably be developed with only a 6,000 square foot building, height limitations and the other dimensional standards.

The MU zone also imposes the burden that almost every non-residential proposed use must obtain a Conditional Use Permit. Design Review is required under CDC Chapter 55 plus additional architectural standards of CDC section 59.070(B) which mandate that new commercial structures be constructed or remodeled to simulate single family homes with residential, not commercial setbacks.

As a result of these standards, it is staff's understanding that no business has been constructed under the provisions of this chapter.

Another issue is the boundaries of the zone. The MU zone may have some value where the prospective or existing commercial properties directly abut residential properties, but that is not the case with the majority of the zone. Most of the properties zoned MU do not abut non-MU zoned single family homes. Examples include properties on 8th Avenue and the subject property. Even properties on 13th Street north of I-205 and behind Albertson's were zoned MU. To date, three property owners have opted for zone and plan changes to the more appropriate General Commercial and R-2.1 zones. All of these zone and plan changes were approved.

Background on the Willamette Falls Drive Commercial District Overlay Zone

This zone was established circa 1992. It extends on both sides of Willamette Falls Drive and was intended to establish architectural standards for commercial and office development that reflected the 1890-1920 period. The zone includes the subject property. This overlay zone is highly popular among the development community and has encouraged the construction of dozens of commercial buildings.

Per CDC 58.030 the overlay zone's architectural standards supersede those of the MU zone:

58.030 APPLICABILITY

A. *The provisions of this chapter shall apply to all new commercial construction, restorations, and remodels on Willamette Falls Drive between 10th and 15th Streets. Restorations shall be defined as all exterior repairs, replacement of materials, alterations or changes, including reroofing, painting, window, and sign replacement, etc.*

While Chapter 58's applicability is regarded by staff as a positive fact, the language of CDC 58.030 is silent on the subject of dimensional standards. The City Attorney and

staff have concluded that since Chapter 58 does not expressly substitute alternative dimensional standards, then the limits of Chapter 59 still apply. The Willamette Falls Drive Historic Design Standards only apply to the architecture and design of the buildings. Thus, the 20 foot setback of the MU zone and the 6,000 square foot limitation in building size on a parcel over 40,000 square feet in size apply to this property.

Staff sees three options:

- (1) Stay zoned MU with an historic overlay and apply for the desired commercial use by Design Review (Chapters 55 and 58), CUP and a Class II Variance of the dimensional standards of Chapter 59.
- (2) Apply for the zone and plan change from MU to GC then develop the site under a Design Review permit with the historic overlay standards.
- (3) Stay zoned MU. Subdivide or partition the property then develop buildings on the property meeting the dimensional standards of CDC Chapter 59 and the design standards of CDC Chapter 58. A CUP would be required.

Option two is the predictable course of action. It leaves the applicant with zone designation that they can work with and a set of design standards that should satisfy the neighborhood and City with full deference to adjacent structures. It does trigger a different ODOT traffic analysis (see ODOT Senior Planner Gail Curtis' attached summary as well as ODOT traffic study scoping requirements). Options one and three seem more risky on first blush since a variance is usually the course of last resort but reviewing the approval criteria of section 75.060 against this site will show that a reasonable argument can be made to support the variance. Option three's partition would add significant cost and time to the project.

The approval criteria for zone and plan changes are as follows:

105.050 QUASI-JUDICIAL AMENDMENTS AND STANDARDS FOR MAKING THE DECISION

A decision to approve, approve with conditions, or to deny an application for a quasi-judicial amendment shall be based on all of the following standards:

- A. The standards set forth in Section 99.110(A); which provide that the decision shall be based on consideration of the following factors:

1. The applicable Comprehensive Plan policies as identified in sub-section "3" of this section and map designation.
 2. The applicable standards of any provision of this Code or other applicable implementing ordinance.
- B. The standards set forth in Section 99.110(B) which provides that in making the decision, consideration may also be given to the following:
1. Proof of change in the neighborhood or community or a mistake or inconsistency in the Comprehensive Plan or Zoning Map as it relates to the property which is the subject of the development application.
 2. Factual oral testimony or written statements from the parties, other persons and other governmental agencies relevant to the existing conditions, other applicable standards and criteria, possible negative or positive attributes of the proposal or factors in sub-section "A" or "B-1" above.
- C. The Comprehensive Plan, Plan and Ordinance Revision Process, and Specific Policy No. 4, which provides that the decision shall be based on consideration of the following criteria:
1. Conformance with the Comprehensive Plan policies and criteria.
 2. There is a public need for the change or that the change can be demonstrated to be in the interest of the present and future community.
 3. The changes will not adversely affect the health, safety and welfare of the community.
- D. Transportation Planning Rule Compliance

1. Review of Applications for Effect on Transportation Facilities. When a development application, whether initiated by the City or by a private interest, includes a proposed comprehensive plan amendment zone change or land use regulation change, the proposal shall be reviewed to determine whether it significantly affects a transportation facility, in accordance with Oregon Administrative Rule (OAR) 660-012-0060 (the Transportation Planning Rule – “TPR”). “Significant” means the proposal would:

a. Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);

b. Change standards implementing a functional classification system; or

c. As measured at the end of the planning period identified in the adopted transportation system plan:

(1). Allow land uses or levels of development that would result in types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

(2). Reduce the performance of an existing or planned transportation facility below the minimum acceptable performance standard identified in the TSP or comprehensive plan; or

(3). Worsen the performance of an existing or planned transportation facility that is otherwise projected to perform below the minimum acceptable performance standard identified in the TSP or comprehensive plan.

2. Amendments that affect Transportation Facilities.

Amendments to the comprehensive plan and land use regulations that significantly affect a transportation facility shall ensure that allowed land uses are consistent with the function, capacity, and level of service of the facility identified in the TSP. This shall be accomplished by one or a combination of the following:

- a. Adopting measures that demonstrate allowed land uses are consistent with the planned function, capacity, and performance standards of the transportation facility.
- b. Amending the TSP or comprehensive plan to provide transportation facilities, improvements or services adequate to support the proposed land uses consistent with the requirements of Section -0060 of the TPR.
- c. Altering land use designations, densities, or design requirements to reduce demand for automobile travel and meet travel needs through other modes of transportation.
- d. Amending the TSP to modify the planned function, capacity or performance standards of the transportation facility.

3. Traffic Impact Analysis. A Traffic Impact Analysis shall be submitted with a plan amendment or land use district change application.

The criterion that will be particularly applicable is (B) (1) above. It can be said that whereas the MU zone has applicability and may be appropriate on the south side of Willamette Falls Drive adjacent to single family homes it has no applicability at the intersection of two arterials near I-205. Its appropriateness at this location is further challenged by the fact that it is surrounded by intense commercial and office uses.

It can be stated that there was a mistake in the original zoning of MU in that the property is located at a prime commercial interchange with GC zoning to the west, east, and north. The site is also fully developed with the property having been occupied by a church and parking lot for decades. It serves no value as a transition to the Willamette

housing stock. Indeed, the nearest residential property is 220 feet across Willamette Falls Drive at 2057 Willamette Falls Drive.

Additional criteria was recently added to the CDC requiring an analysis of the proposed zone and plan change and whether it would allow uses that could adversely affect the functionality of nearby street facilities. The starting point of this analysis would be the Traffic Impact Analysis (TIA) of (D) (3) above. Discussions with the Engineering Department to correlate the TIA findings with the TSP, TPR and other plans and conditions would be necessary and the findings should become part of the submittal.

Conformance with comprehensive plan goals and policies must be addressed too. The Comprehensive Plan's Land Use element has the following goals:

Goals

1. ***Develop/redevelop commercial areas as mixed use/commercial districts that blend housing and commercial uses to: enhance the community's identity; encourage strong neighborhoods; increase housing choices; promote socioeconomic diversity; promote alternative modes of transportation; promote civic uses; and improve community interaction and involvement.***
2. *Consider the development of commercial and office facilities in West Linn that will increase employment opportunities, reduce dependence on services outside of the City, and promote energy-efficient travel and land use patterns, while recognizing that there will be limits imposed by West Linn's topography and limited available land.*
3. *Encourage retail commercial uses to be located in centers that facilitate one-stop shopping and discourage strip commercial development.*
4. ***Protect surrounding residential areas from adverse effects of commercial development in terms of loss of privacy, noise, lights, and glare.***
5. ***Require mixed use/commercial centers and uses to be aesthetically attractive and landscaped.***
6. *Provide for interconnections between mixed use/commercial centers via transit, pedestrian pathways, and other means.*
7. ***Require standards for mixed-use areas that create livable areas that fit in with***

existing neighborhood character.

8. *Provide enhanced opportunities for neighborhood involvement in neighborhood plan decisions to ensure they are livable, provide service improvements to area residents, and fit with the character of the neighborhood. Any significant changes of residential zones to commercial shall occur only after a neighborhood planning process is completed.*

Staff finds that zoning the site GC and requiring development of the site to go through design review (CDC Chapter 55 and 58) will ensure that the site is aesthetically developed and in sympathy with surrounding uses. The design should be able to mitigate any impacts using the standards of CDC Chapter 55 and 58. Also, at this prime location at the intersection of 10th Street and Willamette Falls Drive there is the opportunity to provide Willamette with a much needed visual anchor or landmark structure. (A structure confined by the design standards of the MU zone could not achieve that.) Staff sees nothing in the Willamette Neighborhood Vision Statement that would oppose this zone change and plan amendment.

The applicant should also make note of the Willamette Neighborhood's Vision Statement and Action Plan which includes the following applicable goal:

Goal #3: Vibrant business growth, consistent with our historical downtown area standards

- *We maintain strict standards and codes regarding the type of business and structure in our business areas.*
- *We aggressively pursue the businesses and restaurants that bring tasteful value to our neighborhood.*
- *We aggressively discourage growth of large chain wholesale or discount stores.*
- *We use roundabouts, planters, and landscaping to beautify our neighborhood streets.*

Engineering Comments

Even though the applicant is only trying to get information about changing the current zoning (mixed use) for their property to a different zoning (general commercial), there are important items that the applicant must be aware at this point so that they can incorporate in the future plan for this property.

TRAFFIC IMPROVEMENT

The property is currently located in the corridor where the City Transportation System Plan has identified traffic deficiency and recommended for improvement. There are

several projects listed in the TSP on page 8-29 on 10th Street between Blankenship Road and Willamette Falls Drive.

- 10th Street Widening
- Blankenship Road/10th Street - Eastbound right turn lane and exclusive left turn and share left turn lane on the west bound
- 10th Street/I-205 NB – Add Turn Lanes
- I205/10th Street Interchange – Construct Split Diamond Interchange
- 8th Court Extension
- 10th Street/Willamette Falls Drive – Traffic Signal or a Round About

At this time, the development, Willamette Market Place, located on the opposite site of the applicant property is conditioned widening 10th Street along its frontage as well as the applicant property frontage with the requirement installing a traffic signal at the intersection of 8th Avenue and 10th Street. The project will be constructed followed by the approval of both the City and ODOT.

There is also potential round about improvement by the City at the intersection of Willamette Falls Drive and 10th Street. This improvement can also affect the right of way along the applicant property on both Willamette Falls Drive and 10th frontage.

Most of these projects are listed as SDC eligible projects. Thus any proposed development projects within this corridor shall be subjected to fully or partially providing these improvements.

The magnitude of the financial involvement required from the developers shall depend upon how much impact will be created by the development to the current existing conditions in this corridor. The impact can be analyzed and determined through traffic report.

Engineering must scope the applicant's traffic report in addition to ODOT.

WATER IMPROVEMENT

This property is currently located in the Willamette Water Pressure Zone. The Willamette Water Pressure Zone is currently deficient under emergency conditions.

There is two projects listed in the City Water Master Plan in Table 8-5 on page 8-9 indicates what must to be improved in this Water Pressure Zone.

- 16th Street – 8th Avenue – 10th Street – Upsize existing 4" and 6" water main to 8" water main.
- Willamette Falls Drive from PRV to Pump Station – Upsize existing 10" water main to 20" water main.

Water improvement shall be required. The magnitude of improvement shall depend upon how much fire flow and demand the development is going to be needed. The impact can be analyzed and determined through hydraulic modeling report. The developer shall be responsible paying the City Water Consulting Engineering to run the analysis.

These projects are SDC project and are eligible for SDC.

STREET IMPROVEMENT

Street improvement shall be required. Improvement shall be further discussed at future application conference after zone change is approved and when applicant is ready to go forward with the development.

The current right of way along 10th Street at the applicant property is approximately 68'. The distance between the center line of the right of way to the applicant property line on 10th Street is approximately 38' wide. This seems to be enough to accommodate 2 travel lanes at 12' each, 6' wide island and 8' wide sidewalk.

However detail discussion must take place as well as survey must be done before the City can determine whether or not dedication along 10th Street shall be required to accommodate roadway widening.

Willamette Falls Drive shall be required if the City decides to go with the round about option.

STORM DRAINAGE IMPROVEMENT

Storm drainage improvement shall be required. Improvement shall be further discussed at future application conference after zone change is approved and when applicant is ready to go forward with the development.

SANITARY SEWER IMPROVEMENT

Sanitary sewer improvement shall be required. Improvement shall be further discussed at future application conference after zone change is approved and when applicant is ready to go forward with the development.

OTHER UTILIY IMPROVEMENTS

Dry utilities improvements shall be required. Improvements shall be further discussed at future application conference after zone change is approved and when applicant is ready to go forward with the development.

ODOT Senior Land Use Planner, Gail Curtis offered additional comments. She explained that the scope of the traffic analysis, in the case of a zone change, has to have a 20-year horizon. That means that the analysis would have to anticipate the traffic needs 20 years from now with the potential that the applicant would be responsible for a broader range of improvements. Conversely, if option one was selected with no zone change, then a traffic study through 2012 is required. Gail Curtis also stated that ODOT will scope the parameters and requirements of the traffic studies for the applicant. (The City of West Linn's Engineering Department will require that the City of West Linn also scope the traffic study requirements to ensure that not just ODOT's concerns are addressed but those of the City.) Gail Curtis explained that ODOT does not want to see the traffic light installed at 8th Avenue and 10th Street intersection. Discussion then included possible construction of a rotary or roundabout at the corner of 10th Street and Willamette Falls Drive and parking issues. Gail Curtis suggested that the city look into tax increment financing and other mechanisms that have allowed Bend, Tualatin, Corvallis, Lake Oswego and other cities to construct public parking facilities on side streets to solve parking problems and entice more visitors to their commercial centers.

Process

OPTION ONE: If option one is selected a CUP, Design Review and a Class II Variance will be required. No plan or zone change is needed. The submittal requirements and approval criterion of CDC Chapters 60, 55, 58, and 75 would apply. Deposit fees are listed on the Planning Department's website.

OPTION TWO: If option two is selected, this application will be (1) zone change from MU to GC; and, (2) a plan map amendment from Mixed Use to Commercial. The first step is full and complete response to the submittal requirements and approval criteria of CDC Chapter 105 (Amendments to the Code and Map "Zone Change") N/A is not an acceptable response to the approval criteria. The submittal requirements may be waived but the applicant must first identify the specific submittal requirement and request, in letter form, that it be waived by the Planning Director and must identify the specific grounds for that waiver. Prepare the application and submit to the Planning Department with deposit fees.

The zone change and plan amendment deposit fee is \$3,000. Staff bills hours against the deposit fee regardless of whether it is approved or denied. The applicant may request refund of unused fees. Subsequent to these zone and plan changes the applicant would have to apply for all necessary permits such as the Willamette Falls Drive Historic District Design Standards of CDC Chapter 58.

OPTION THREE: If option three is selected it would require a subdivision or partition. The 40,000 square foot lot lends itself to four lots with possible ROW dedication. This process will add about five to eight months and additional submittal and platting costs.

Once the lots are recorded then each lot could have a 6,000 square foot building and would have to meet the setbacks of chapter 59 unless waived by variance. CUP and design review would be required.

All options would trigger the neighborhood meeting provisions of CDC section 99.038. Follow the instructions of that chapter carefully as there have been some recent amendments. The Willamette neighborhood president is Beth Kieres at 722-1531.

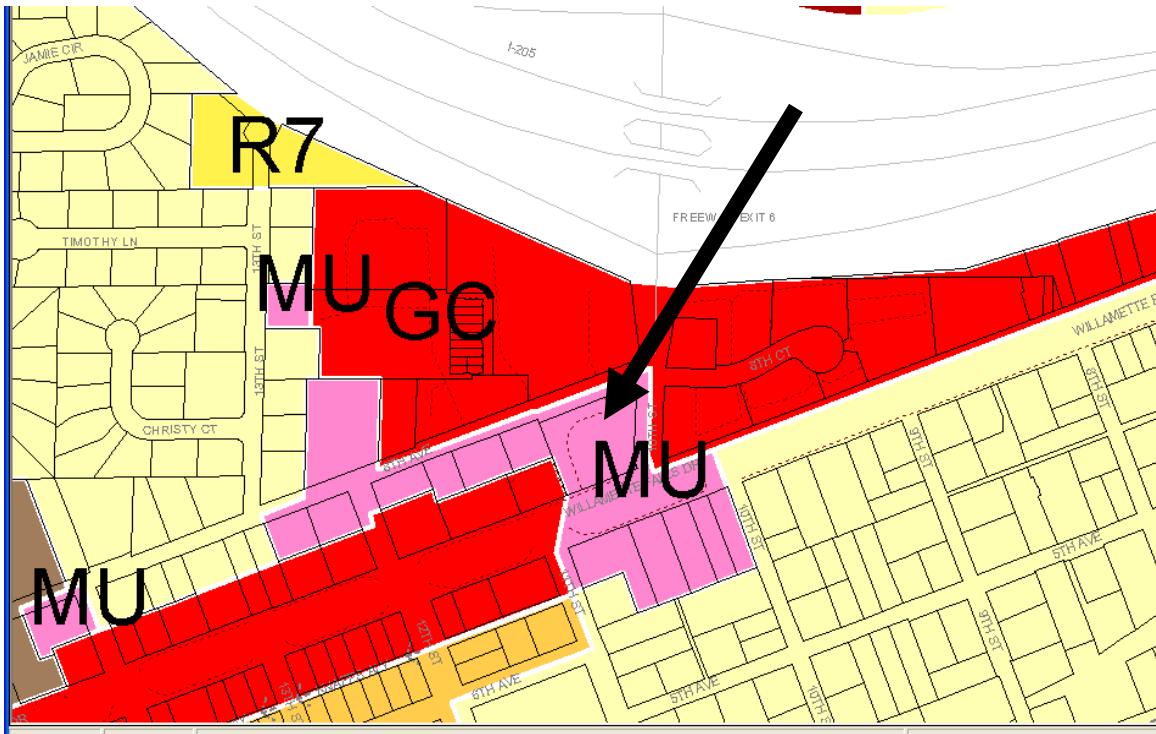
The City has 30 days to determine if the application is complete or not. Most applications are incomplete, usually due to inadequate responses to approval criteria or lack of sufficient engineering information on the drawings. The applicant has 180 days to make it complete, although usually it is complete within three months of the original submittal. Once complete, the City has 120 days to exhaust all local review and appeals. For option one the CUP and design review would be made by the Planning Commission. Appeals would go to the City Council and LUBA. Meanwhile, the Historic Review Board would decide the design review.

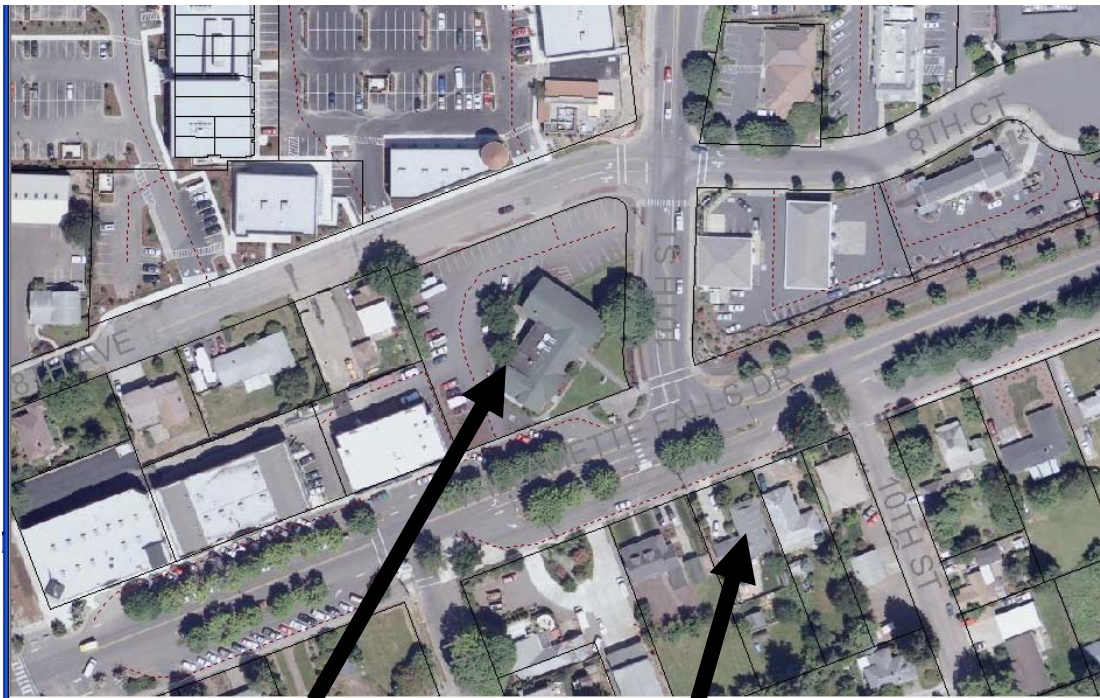
For option two, the Planning Commission will hold a hearing and make a recommendation to City Council who hold the final hearing to decide the zone and plan change application. The City Council decision may be appealed to LUBA.

Typical applications take four to five months from the date that the application is deemed complete.

DISCLAIMER: This summary discussion covers issues identified to date. It does not imply that these are the only issues. The burden of proof is on the applicant to demonstrate that all approval criteria have been met. These notes do not constitute an endorsement of the proposed application. Staff responses are based on limited material presented at this pre-application meeting. New issues, requirements, etc. could emerge as the application is developed. Also note that these notes are valid only for 18 months. After that date, a new pre-app would be required prior to any submittal.

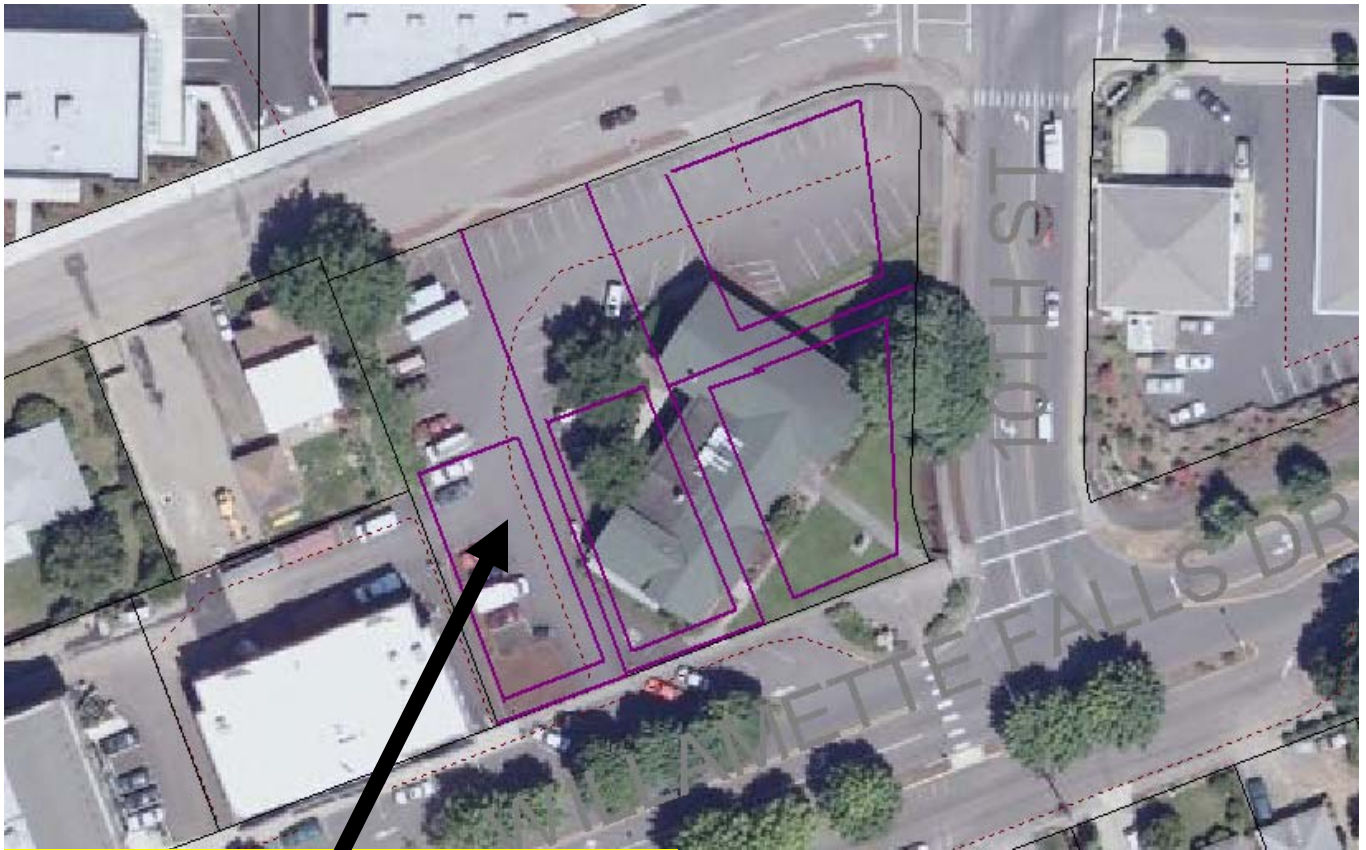
preappsummary- transitional mixed use to GC zone change at 2014 WF Dr. March 4, 2010





GC zoning is the appropriate zone at a major commercially dominated intersection. The location is arguably the main anchor or landmark property of this commercial corridor. Leaving the MU zone “as is” with the existing Historic District Overlay will allow the full range of commercial uses by CUP but only if a variance is approved to waive the strict dimensional standards of the MU zone.

MU zoning makes sense on the south side of the street as a bulwark or transition between commercial and residential.



Option three subdivision (illustrative purposes only)

ODOT TRAFFIC STUDY SCOPING:

Oregon

Department of Transportation

Region 1 Tech Center

123 NW Flanders
Portland, Oregon 97209-4012
Telephone (503) 731-8219
Fax (503) 731-8259

**March 8, 2010
3880**

File:

**Subject: Traffic Impact Analysis Scope of Work
 Proposed Zone Change on Willamette Falls Drive in West
 Linn, Oregon**

The purpose of this letter is to define the scope of work for a Traffic Impact Analysis (TIA) which evaluates the impact for the proposed zone change located at the northwest corner of the intersection of 10th Street and Willamette Falls Drive and 500 feet south of the interchange of Interstate 205 (I-205) and 10th Street. This section of I-205 is classified as an Interstate Highway with a maximum volume to capacity ratio (V/C) of 0.99 with ramp terminals that have a mobility standard of 0.85. ODOT has jurisdiction of 10th Street from the S Salamo Road/Blankenship Road intersection to the 8th Avenue/8th Court intersection and these two intersections have a maximum volume to capacity ratio (V/C) of 0.99. If the TIA reveals that the existing or future background conditions of study area intersections on ODOT facilities exceed this mobility standard, then the performance standard is to avoid further degradation according to the 1999 Oregon Highway Plan Policy 1F, Action 1.F.6. The subject parcel is a property of approximately one acre that was formerly a church. The parcel is currently zoned MU "Willamette Neighborhood Mixed Use Transitional Zone" and proposed to be zoned as GC "General Commercial".

Scope of Work:

I. General:

Executive Summary:

Provide a description of the zone change, site location and study area (including a site map). Briefly describe the purpose of the analysis, principal findings, recommendations and conclusions.

Analysis Study Area:

Provide a text description (including tax-lot descriptions) of the proposed zone change and a graphic showing the intersections and accesses to be evaluated as part of this analysis. The intersection analysis for this study shall include the intersections of 10th Street with the I-205 northbound and southbound ramp terminals, S Salamo Road/Blankenship Road, 8th Avenue/8th Court, and Willamette Falls Drive intersection as well as the intersection of Willamette Falls Drive with 12th Street.

Queuing analyses should be performed on all study area intersections. The future year reasonable worst case analysis study shall include a scenario in which the 8th Avenue and 8th Court approaches to 10th Street are restricted to right-in/right-out access. The scope of work for this TIA should be coordinated with the City of West Linn before the study is conducted since the City may require that additional analysis be made on area intersections.

II. Traffic Data:

Traffic Counts

Manual turning movement counts shall be made at all study area intersections and approaches. The counts must be at least 2-hours long with 15-minute breakdowns in the A.M. and P.M. peak hours.

Raw traffic volumes will not be accepted for use in traffic analysis. All traffic volumes shall be seasonally adjusted to represent 30th Highest Hour Volumes (30HV) for “background traffic” conditions. For guidance, please refer to the *Developing Design Hour Volumes* document.

<http://www.oregon.gov/ODOT/TD/TP/docs/TAPM/apm/ch4.pdf>

Site Trip Generation, Distribution and Assignment:

Site trip generation shall utilize the most recent edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual to estimate daily and peak hour trip volumes originating from and destined to the proposed zone change. All assumptions and adjustments shall be documented and discussed in the TIA, or in an appendix.

This analysis should use available transportation models in conjunction with the City of West Linn as well as current Transportation System and Comprehensive Plans to estimate traffic distribution patterns. Approved computer models, such as Traffix, or manual calculations may also be used for determining trip assignments for site-generated traffic volumes on roadways within the study area.

III. Analysis Procedures:

Capacity Analysis:

Capacity analysis of signalized intersections, unsignalized intersections, and roadway segments shall follow the established methodologies of the current Highway Capacity Manual (HCM2000). For signalized intersections, the overall intersection V/C shall be reported. The existing signal timing shall be used for all analysis scenarios. For unsignalized intersections, the highest approach V/C shall be reported, along with an indication of its corresponding movement.

Attached **Table 3.3.8** lists the ODOT default values for use in signalized intersection analysis. If multiple intersections are analyzed, the traffic volumes shall be balanced between intersection nodes. All intersection capacity analyses shall include heavy vehicles percentages by approach, as determined from manual counts.

Planning level mobility results (V/C) from the TIA will be compared against Highway Mobility Standards (Policy 1F) and the Maximum V/C Ratios provided in Table 6 of the 1999 Oregon Highway Plan (OHP).

Application of Computer software shall closely follow ODOT-approved analysis methodologies. HCS2000 and Synchro/SimTraffic are examples of accepted analysis software. For further guidance, contact TPAU.

Queue Length Analysis:

Intersection operation analysis shall include the effects of queuing and blocking. 95th Percentile queue lengths shall be reported for all study area intersections. The 95th Percentile queuing shall be used for design purposes, and will be reported to the next nearest 25 foot increment. Any methodology used to determine queue length shall be approved in advance by the Region.

IV. Analysis Requirements:

Intersection Sight Distance:

Adequate intersection sight distance shall be verified for all proposed intersections and highway approaches as required in ODOT's 2005 Highway Design Manual. For guidance, please contact the Region Access Management Engineer.

http://www.oregon.gov/ODOT/HWY/ENGSERVICES/hwy_manuals.shtml

Traffic Signal Installations & Modifications:

Analysis of signalized intersections shall be based on existing signal timing. Analysis and recommendations related to new and/or modified traffic signals shall follow ODOT's Traffic Signal Policy and Guidelines, and all subsequent revisions. These documents can be found on the web at:

http://www.oregon.gov/ODOT/HWY/TRAFFIC-ROADWAY/publications_traffic.shtml

New signal proposals for Day of Opening shall show, but are not limited to, the following:

- A clear indication of need for a traffic signal; only after other enhancements to nearby signals are shown to be insufficient to mitigate the new highway related impacts resulting from the proposed zone change.
- An assessment of the ability of existing, planned, and proposed public roads to accommodate zone change development traffic at another location.
- A detailed description of how the proposed zone change will affect existing and proposed study area intersections.
- Documentation of traffic volumes and signal warrant satisfaction; if a new signal is determined to be the correct solution.

Clearly show how one or more of the eight warrants identified in the 2003 edition of the Manual on Uniform Traffic Control Devices (MUTCD), Chapter 4C, Sections 1 through 9 are met, consistent with the requirements of OAR 734-020-0490. Traffic signal spacing requirements shall conform to the 1999 Oregon Highway Plan. Progression analysis shall meet the requirements of OAR 734-020-480.

If applicable; complete time-space diagrams for each of the analysis scenarios, including the existing coordinated system will be provided. They shall demonstrate that the proposed signal system is capable of maintaining adequate progression band widths for through traffic on the State Highway on the most critical roadway segments within the study area.

Any recommendations for traffic signals to be installed as part of future mitigation should meet preliminary signal warrants (MUTCD Warrant #1, Case A & B). All future proposed signals shall still need to meet the need and warrants as described. For guidance, please contact TPAU or the Region, or refer to the Preliminary Signal Warrant Guidelines.

<http://www.oregon.gov/ODOT/TD/TP/docs/TAPM/apm/pswForm.pdf>

NOTE: It is ultimately up to State Traffic Engineer to approve all signal installations, modifications and deviations. Just because an intersection may meet the MUTCD Warrants does not insure it will be approved by the State Traffic Engineer.

V. Analysis Output:

Existing Conditions:

Identify current year site conditions at the proposed zone change location. This includes, but is not limited to the following:

- A description of the site location, existing and proposed zoning, existing use(s), and proposed use(s) of subject property.
- A description of surrounding land uses.
- A graphic identifying existing lane configurations and traffic control devices at the study area intersections.
- A graphic showing existing 30HV traffic; reported as AM (7-9 a.m.) and PM (4-6 p.m.) Peak Hour Volumes (PHV), and also as average daily traffic (ADT). Also include in this graphic a list of heavy vehicle percentages by approach.
- An analysis of existing intersection operations, reported in terms of both Volume to Capacity (V/C) and Level of Service (LOS).
- An analysis of at least 3-years worth of crash data; including information on all SPIS sites within or adjacent to the study area.

Traffic Volumes & Operations – Future Year; with Worst Case Existing and Proposed Zoning Scenarios:

An analysis shall be made of all study area intersections for a 20-year horizon, for both “*reasonable worst case, existing zoning*” and “*reasonable worst case, proposed zoning*” scenarios. The proposed worst case development scenarios shall be approved by ODOT and the City prior to the analysis being performed. This analysis should provide the following:

- A graphic showing Year of Opening “*background traffic*” and “*total traffic*” volumes.
- A graphic or table showing V/C and LOS analysis results for both “*reasonable worst case, existing zoning*” and “*reasonable worst case, proposed zoning*” scenarios.
- A graphic or table itemizing storage length requirements for all approaches, rounded to the next nearest 25 foot increment.
- If applicable, a discussion of progression performance along the analysis corridor.

Planned transportation system improvements anticipated to be funded and constructed within the 20-year horizon shall be incorporated into the Future Year analysis. Do not incorporate improvements that are proposed as mitigation for the development. For guidance, please refer to the Transportation Planning Rule (TPR): OAR 660-012-0060.

<http://www.oregon.gov/ODOT/TD/TP/docs/TPR/adopt042005.pdf>

Analysis Variable Inputs:

A summary of traffic analysis variable inputs shall be provided in an appendix. In Synchro, the ***Int: Lanes, Volumes, Timings*** report is the output source for this information. TIA’s submitted without an input summary will not be accepted by the Department.

Conclusions and Recommendations:

Summarize existing and future conditions and discuss the proposed zone change's impacts. Identify any operational or safety deficiencies and recommend mitigation along with the effectiveness of the mitigation. Summarize how the proposed zone change complies with all operational and safety standards in the applicable approval criteria.

Note: Signal timing adjustments will not be considered as mitigation.

Sincerely,

Martin R. Jensvold, P.E.
Region Access Management Engineer

cc: Steve Schalk
Gail Curtis
Peter Spir, Associate Planner, City of West Linn
Khoi Lee, City of West Linn

Revised Development Review Guidelines Table 3.3.8

***Default
Signal
Parameters***

Table 3.3.8: ODOT Default Parameters for Use With Signalized Intersection Analysis Methodologies	
Total Lost Time	4 seconds per phase minimum for typical intersections, more for large or complex intersections.
Peak Hour Factor	For future year analysis: <ul style="list-style-type: none">• 0.85 for local and collector street approaches• 0.90 for minor arterial approaches,• 0.95 for major arterial approaches, unless better information is available, such as for a school or industrial use.

<p>Ideal Saturation Flow Rate</p>	<p>Field measurement should be consistent with methodology laid out in the HCM. Saturation flow rate worksheets must be included in the documentation.</p> <p>Where field measurements are not done,</p> <ul style="list-style-type: none"> • Outside of MPO urban areas, 1750 passenger cars per hour of green per lane (pcphgl) shall be used • Inside MPO urban growth boundaries, 1900 passenger cars per hour of green per lane (pcphgl) may be used, unless one or more of the following conditions are present, in which case 1750 pcphgl shall be used <ul style="list-style-type: none"> • On-street parking • Greater than 5% trucks • Other than ninety degree intersection skew angle • One or more approach(es), with a combined volume in excess of 5 vph, are present downstream of the intersection within the functional area, or upstream within the length of the standing queue • Poor signal spacing or observed queue spillbacks between signals during the peak hour, or • Less than 12 foot travel lanes
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