



AGENDA

MOLALLA PLANNING COMMISSION MEETING

January 16, 2019

6:30 PM

Molalla Adult Center

315 Kennel Ave., Molalla, OR 97038

Chairman Rae Lynn Botsford

*Commissioner Steve Deller
Commissioner Debbie Lumb
Commissioner Doug Eaglebear*

*Commissioner Jennifer Satter
Commissioner Open
Commissioner Open*

CALL TO ORDER

Convene Meeting and Roll Call
Pledge of Allegiance

PUBLIC COMMENT/COMMUNICATIONS AND PRESENTATIONS

(Citizens are allowed up to 3 minutes to present information relevant to the City but not listed as an item on the agenda. Prior to speaking, citizens shall complete a comment form and deliver it to the City Recorder. The City Council does not generically engage in dialog with those making comments but may refer the issue to the City Manager. Complaints shall first be addressed at the department level prior to addressing the City Council.)

CONSENT AGENDA

1. November 7, 2018 Minutes

PUBLIC HEARING

2. Code Update Transportation System Plan

NEW BUSINESS

OLD BUSINESS

REPORTS AND ANNOUNCEMENTS

ADJOURN

Agenda posted at City Hall, Senior Center, Library and the City Website at <http://www.cityofmolalla.com/meetings>
This meeting location is wheelchair accessible. Disabled individuals requiring other assistance must make their request known 48 hours preceding the meeting by contacting the City Recorder's Office at 503-829-6855

Minutes of the Molalla Planning Commission Regular Meeting
Molalla Adult Center
315 Kennel Ave, Molalla, OR 97038
November 7, 2018

- 1) **CALL TO ORDER OF THE MOLALLA PLANNING COMMISSION MEETING;** the regular meeting of November 7, 2018 was called to order by Chair Rae Lynn Botsford.

ATTENDANCE:

Chair Rae Lynn Botsford - Present
Co-Chair Omar Reynaga - Absent
Commissioner Debbie Lumb – Present
Commissioner Jennifer Satter – Absent
Commissioner Doug Eaglebear – Present
Commissioner Hardeep Singh Brar- Absent
Commissioner Steve Deller - Present

STAFF IN ATTENDANCE:

Dan Huff, City Manager - Absent
Gerald Fisher, Public Works Director – Absent
Aldo Rodriguez, Community Planner – Present
Spencer Parsons, City Attorney – Absent

2) **MINUTES:**

- Chair Botsford confirms with PC if they have received and review the minutes. PC confirms. Chair Botsford calls for a motion to confirm the 10.3.18 minutes. PC Eaglebear motions to approve 10.3.18 minutes. PC Lumb seconds. Motion approved. All ayes.

3) **COMMUNICATIONS, PRESENTATIONS, and PUBLIC COMMENT**

- No public comment

4) **PUBLIC HEARINGS**

- None

5) **DISCUSSION ITEM**

- None

6) **REPORTS AND ANNOUNCEMENTS:**

- Gordon Howard from DLCD – Planning Commission Training Session Presentation
 - Reviews Planning Commission history, Oregon State Wide Planning Goals, Quasi-Judicial Hearings, and Legislative Hearings.

7) **ADJOURN**

Motion to adjourn made by PC Eaglebear. PC Lumb seconded. Motion carried, all ayes.

**Minutes of the Molalla Planning Commission Regular Meeting
Molalla Adult Center
315 Kennel Ave, Molalla, OR 97038
November 7, 2018**

Chair, Rae Lynn Botsford

Date

ATTEST:

Aldo Rodriguez
Community Planner

City of Molalla

Planning Commission Meeting



Agenda Category: Public Hearing

Subject:	Public Hearing for Code Language Update for Transportation System Plan
Recommendation:	Recommend City Council Adopt the Ordinance to amend Chapter 17 of the Municipal Code
Date of Meeting to be Presented:	January 16, 2019
Fiscal Impact:	
Submitted By:	Public Works Director, Gerald Fisher
Approved By:	Dan Huff

Background:
<p>The City Council held a Public Hearing on September 26, 2018 for the 2018 Transportation Master Plan. The master plan and Ordinance were adopted at that meeting.</p> <p>Planning Commission to hold a public hearing and receive public comment on the proposed language changes. Staff recommends that the Planning Commission approved the amendments to Chapter 17 of the Municipal Code and recommended adoption by City Council at its January 23, 2019 meeting. Attached is Tech Memo 7, the Regulatory Solutions Summary, and the redline version of the code update for Planning Commission's review.</p>



MEMORANDUM

Technical Memorandum #7: Regulatory Solutions Molalla Transportation System Update

DATE 3/21/2018
TO Molalla TSP Project Management Team
FROM Matt Hastie and Andrew Parish, Angelo Planning Group
CC Matt Bell and Nick Gross, Kittelson & Associates, Inc.

INTRODUCTION

This memorandum provides regulatory solutions to address recommendations from Technical Memorandum #1: Plans and Policy Review. Identified deficiencies from Memorandum #1 are included in the table below.

The Molalla Municipal Code was updated in 2017. Article 17 contains zoning regulations, design standards, application requirements, and review procedures. The development code contains several sets of requirements that address the relationship between land use development and transportation system development, and are important in implementing the Transportation System Plan. Transportation-related requirements can be found in the following code sections:

- Article 17-2.2 – Establishes zoning districts and use regulations therein (including transportation facilities)
- 17-3.5 Parking and Loading
- 17-3.6 Public Facilities
- 17-4 Application Review

REGULATORY SOLUTIONS

The table below lists recommendations from Technical Memorandum #1: Plans and Policy Review, along with the relevant development code reference. Draft recommended code revisions shown in underline/strike-through adoption-ready format is provided after the table for each recommendation.

	Recommendation	Development Code Reference	Reference
1	<p>Recommendation: Section 17-3.6.020(A)(4) states that its purpose is to explain, among other items, “the required contents of a Traffic Impact Analysis” and additional TIA requirements are found in sections 17-3.3.030 (C), 17-3.6.020 (A)(4), 17-4.2.040 (A), 17-4.2.040 (B)(8), 17-4.3.060 (A)(2), and 17-5.1 of the draft code. Further requirements for preparation of a TIA will be considered as part of this process and applicable code amendments may be identified as part of the TSP update process.</p>	<p>17-3.6-020.(A)(4) Traffic Impact Analysis</p>	<p>See reference 1 for draft language to update TIA requirements.</p>
2	<p>Recommendation: If the TSP identifies the need for transit transfer stations and/or park-and-ride lots, consider adding those uses to Table 17-3.5.040.A specifically.</p>	<p>17-3.5.040 Bicycle Parking</p>	<p>See reference 2 for draft amendments to Table 17-3.5.040A.</p>
3	<p>Recommendation: Update the code to include block-length regulations for new developments in 17.3.6.020.D. Minimum and maximum block length standards in the model code are 200 feet and 400-600 feet, respectively, varying by land use. Maximum block perimeter standards in the model code are 1,200 to 1,400 feet.</p> <p>Consider updating this section to include the TPR language under (E) as reasons for infeasibility of an accessway.</p>	<p>17-3.6-020 Transportation Standards</p>	<p>See reference 3 for draft language.</p> <p>Block length standards are addressed via reference to the Public Works Design Standards and the TSP in existing code language.</p>
4	<p>Recommendation: Identify design requirements of transit routes and transit facilities through the TSP update process; update development code requirements as necessary to require developments to include or accommodate needed transit facilities in the future. Dimensional or design standards for required facilities may be include in the TSP or updated public works standards.</p>	<p>17-3.6.020 (B) Street Location, Alignment, Extension, and Grades ; 17-3.6.020 (C) Rights-of-Way and Street Section Widths</p>	<p>There have been no major transit facilities identified in the TSP update, and new standards for transit facilities are not required.</p>
5	<p>Recommendation: Consider updating the list of required connections in Section 17-3.3.040 to include transit stops.</p> <p>If the TSP identifies “major transit stops” within Molalla, the City could update section 17.3 to include the requirements for building orientation, pedestrian access, and transit amenities.</p> <p>Consider making the transit-oriented provisions in (17-3.5.030.B(3)) mandatory, rather than optional. Design standards for transit facilities may be included in the City’s public works standards.</p>	<p>17-3.3.040 Pedestrian Access and Circulation</p> <p>-</p>	<p>See reference 5 for draft amendments.</p> <p>No major transit stops identified in TSP update.</p> <p>Mandatory provisions for reduced parking near transit stops may not be appropriate at this time – allowing them through a Type II procedure can incentivize transit opportunities.</p>

	Recommendation	Development Code Reference	Reference
6	Recommendation: If “major transit stops” or routes are identified in the TSP update, consider adopting a pedestrian district along major transit routes that complies with 4(a)(C) as a means to implement 4(b)(A) –(B).	-	No major transit stops identified in the TSP update.
7	Recommendation: The City should update the code to require that new developments with planned designated employee parking areas provide preferential parking for employee carpools and vanpools, in addition to or separate from the current parking reduction allowance in Section (17-3.5.030.B(3)). A typical local code requirement is to require employers with more than a specific number of employees to dedicate a percentage of the required parking spaces for car/vanpools. For example, some local jurisdictions impose this requirement for businesses with 50 or more employees and typically include the carpool/vanpool spaces within the total number of spaces already required by the code.	17-3.5.030 Automobile Parking	See Reference 7 for draft parking language. This language can supplement existing code language that provides voluntary parking reductions for including carpool/vanpool parking in a development.
8	Recommendation: Broaden this section to include other items mentioned in (e) – pullouts, park-and-ride areas, and other facilities. Add a provision in the Parking and Loading section (17-3.5.030) that provides for some flexibility in required parking spaces when repurposing the space for a transit-oriented use.	17-3.5.030 Automobile Parking	See Reference 8 for draft language.
9	Recommendation: The Vehicle Access and Circulation section of the code should be amended to require that new development provide pedestrian access to existing and planned future transit routes.	17-3.3.030 Pedestrian Access and Circulation	Pedestrian access to existing and planned future transit routes is adequately addressed by Recommendation 5 and draft language in Reference 5.
10	Recommendation: When updating the transit element of the TSP, review existing land uses and consider future land use changes that would support the viability of transit on existing or planned routes.	-	No land use changes identified in TSP update.
11	Recommendation: Through the TSP update process, the City will evaluate functional classifications and cross sections of these streets and will incorporate designs that minimize pavement widths and associated impacts.		No draft language included in this memorandum – updated cross-sections will be provided as needed.

	Recommendation	Development Code Reference	Reference
12	Recommendation: Update the transportation goals and policies (Goal 12) section of the Comprehensive Plan to include the updated TSP goals and policies.	Comprehensive Plan Goal 12	Transportation goals and policies are found in Technical Memorandum 2B. As an alternative to including these policies in the comprehensive plan, the TSP can simply be referenced (requiring no changes to the current Comprehensive Plan).

Reference 1

Traffic Impact Analysis is addressed in the Molalla Development Code (17-3.6.020(A)(4)) as well as in the Public Works standards (2.1.4 Traffic Analysis). These standards seem to be different from one another. For comparison, the table below also includes the traffic impact analysis requirements from Oregon City and St. Helens.

	Threshold Requirements	Analysis Preparation/Contents
Molalla Development Code	<ul style="list-style-type: none"> • Zone or plan amendment • Known concerns • 300 Avg. Daily Trips (ADT) • 20% increase in peak hour volume for a particular movement • Increase in use of adjacent streets by freight • Existing or proposed connections that have spacing/sight distance issues • A change in traffic patterns that may cause safety concerns • Required by ODOT 	<ul style="list-style-type: none"> • Must be prepared by a professional engineer. No other requirements listed.
Molalla Public Works	<ul style="list-style-type: none"> • 1,000 Vehicle Trips per weekday or more • When development "could affect safety, access management, street capacity, or know traffic problems..." • Residential development of 4+ units 	Detailed requirements listed. <ul style="list-style-type: none"> • Purpose of report and study objectives • Executive summary • Description of site and study area roadways • On-site Traffic Evaluation • Recommendations for Public Improvements • Access Management • Review of alternative access points

	Threshold Requirements	Analysis Preparation/Contents
Oregon City, OR development code	<p>Two levels of analysis:</p> <p>Transportation Analysis Letter (TAL) required for smaller developments. Required when (At the discretion of the City Engineer):</p> <ul style="list-style-type: none"> • Development generates fewer than 24 peak hour trips and fewer than 250 daily trips. • Development not expected to impact failing intersections. • Development not expected to impact adjacent roadways that are high accident areas, identified safety concerns, or have high concentrations of pedestrians and bicyclists. <p>Transportation Impact Study (TIS) required for larger developments that do not meet all of the TAL requirements.</p>	<p>TAL:</p> <ul style="list-style-type: none"> • Expected trip generation information • Site plan showing access and neighboring properties • Documentation regarding driveway width, intersection spacing, AASHTO sight distance guidelines, compliance with TSP. <p>TIS:</p> <ul style="list-style-type: none"> • Existing Conditions • Detailed growth assumptions, traffic volumes, and operational analysis for: <ul style="list-style-type: none"> • Background conditions (without proposed development) • Full buildout conditions (with proposed development) • Conclusions and recommendations
St. Helens, OR development code	<p>TIA required when:</p> <ul style="list-style-type: none"> • Change in zoning or comp plan • Access on Highway 30 • 250 ADT or 25 additional peak hour trips • Affects known problematic intersections • An increase in use of adjacent streets by vehicles exceeding the 20,000 pound gross vehicle weights by 10 vehicles or more per day; • Driveway does not meet minimum sight distance, spacing requirements or is otherwise hazardous <p>Cites latest edition of the ITE trip generation manual.</p>	<p>Detailed list of contents, including:</p> <ul style="list-style-type: none"> • Pre-app conference • Study area, can be modified by City engineer • Existing Conditions, Background Conditions, Full Buildout, Phased Years of Completion, and 20-year or TSP horizon year • Peak hour analysis • Listed approval criteria

Overall recommendation for TIA process:

- The requirements within the Public Works Standards and the Development Code should match.

- 1,000 trips per day (listed in the public works standards) is a high threshold compared to other jurisdictions. We recommend a two-tier approach similar to Oregon City, using the additional trigger related to heavy vehicle traffic from St. Helens:
 - **Tier 1:** Transportation Analysis Letter, would be required of all developments that generate less than 25 trips during the peak hour. The TAL could include a site access review (sight distance, access spacing, access width, safety); trip generation; frontage improvements; and other desired analysis.
 - **Tier 2:** Transportation Impact Analysis, would be required of all development that generate 25 or more trips during the peak hour or will increase the heavy vehicle percentage along a given roadway by 10% or more; heavy vehicles are defined as 20,000 lbs. gross weight. A TIA also would be required of any project that involves a zone change, and the TIA must meet the requirements of the Transportation Planning Rule.
- Study intersections should be defined by site frontage (anything within 600 feet of the site frontage) OR the intersection of two streets classified as a collector or higher where 20 additional trips will be added during the peak hour as a result of the development.
- The code should reference the Latest Edition of ITE Trip Generation and Highway Capacity Manuals.
- The analysis and its components will be at the discretion of the City Engineer.
- Applicant shall also coordinate the elements of the TIA with ODOT where the development fronts or impacts a state facility based on the Tier 1 or Tier 2 threshold conditions.

Draft language that would replace 17-3.6.020(A)(4) is provided below.

--

(4) The purpose of this subsection is coordinate the review of land use applications with roadway authorities and to implement Section 660-012-0045(2)(e) of the State Transportation Planning Rule, which requires the City to adopt a process to apply conditions to development proposals in order to minimize impacts and protect transportation facilities. The following provisions also establish when a proposal must be reviewed for potential traffic impacts; when a Transportation Analysis Letter (TAL) or Transportation Impact Analysis (TIA) must be submitted with a development application in order to determine whether conditions are needed to minimize impacts to and protect transportation facilities; the required contents of a TAL/TIA Traffic Impact Analysis; and who is qualified to prepare the analysis.

- ~~a. **When a Traffic Impact Analysis is Required.** The City or other road authority with jurisdiction may require a Traffic Impact Analysis (TIA) as part of an application for development, a change in use, or a change in access. A TIA shall be required where a change of use or a development would involve one or more of the following:~~
- ~~(1) A change in zoning or a plan amendment designation;~~
 - ~~(2) Operational or safety concerns documented in writing by a road authority;~~
 - ~~(3) An increase in site traffic volume generation by 300 Average Daily Trips (ADT) or more;~~
 - ~~(4) An increase in peak hour volume of a particular movement to and from a street or highway by 20 percent or more;~~
 - ~~(5) An increase in the use of adjacent streets by vehicles exceeding the 20,000 pound gross vehicle weights by 10 vehicles or more per day;~~

~~(6) Existing or proposed approaches or access connections that do not meet minimum spacing or sight distance requirements or are located where vehicles entering or leaving the property are restricted, or such vehicles are likely to queue or hesitate at an approach or access connection, creating a safety hazard;~~

~~(7) A change in internal traffic patterns that may cause safety concerns; or~~

~~(8) A TIA required by ODOT pursuant to OAR 734-051.~~

a. **Determining the required level of Transportation Analysis and Documentation.** A

Transportation Impact Analysis (TIA) is required for developments that are expected to have an impact on the transportation system. The analysis shall be based upon the latest edition of the ITE Trip Generation Manual or an agreed-upon alternative methodology where credible data is available to support the alternative methodology. When specific criteria generally associated with small developments are met, a Transportation Analysis Letter (TAL) may be substituted for the required TIA. At the discretion of the City Engineer, a TAL may satisfy the City's transportation analysis requirements, in lieu of a TIA, when a development meets all of the following criteria:

1. The development generates fewer than 25 peak hour trips during either the AM or PM peak hour. (Two examples of common developments generating fewer trips than these threshold levels are: a subdivision containing 25 or fewer single-family residences or a general office building less than 15,000 square feet.)
2. The development is not expected to impact intersections that currently fail to meet the City's level of service standards or intersections that are operating near the limits of the acceptable level of service thresholds during a peak operating hour.
3. The development is not expected to significantly impact adjacent roadways and intersections that are high accident locations, areas that contain an identified safety concern, or high concentration of pedestrians or bicyclists such as school zones
4. The development generates an increase in use of adjacent streets by vehicles exceeding the 20,000 pound gross vehicle weights by less than 10 vehicles per day;

b. **Transportation Analysis Letter Contents.** If the City determines based on information provided by the applicant and in accordance with the criteria specified in Section 3.1 that a TAL is the appropriate document to submit, the following requirements shall apply.

1. The TAL shall be prepared by or prepared under the direct supervision of a Registered Professional Engineer who shall sign and stamp the TAL.
2. The TAL shall include the following:
 - i. The expected trip generation of the proposed development including the AM peak hour, the PM peak hour, daily traffic, and other germane periods as may be appropriate, together with appropriate documentation and references.
 - ii. Site plan showing the location of all access driveways or private streets where they intersect with public streets plus driveways of abutting properties and driveways on the opposite side of the street from the proposed development.
 - iii. Documentation that all site access driveways meet City of Molalla Private Access Driveway Width Standards.
 - iv. Documentation that all site access driveways meet City of Molalla's Minimum City Street Intersection Spacing Standards.
 - v. Documentation that all new site accesses and/or public street intersections meet AASHTO intersection sight distance guidelines.

- vi. Documentation that there are no inherent safety issues associated with the design and location of the site access driveways.
 - vii. Documentation that the applicant has reviewed the City's TSP and that proposed streets and frontage improvements do or will comply with any applicable standards regarding the functional classification, typical sections, access management, traffic calming and other attributes as appropriate.
- c. **Transportation Impact Analysis Contents.** The following information shall be included in each TIA submitted to the City. Additional information specified by the City in the scoping summary or through the pre-application meeting or other project meetings shall also be included.
- 1. Completed TIA checklist signed by the Professional Engineer responsible for the preparation of the TIA.
 - 2. Table of Contents – Listings of all sections, figures, and tables included in the report.
 - 3. Executive Summary – A summary of key points, findings, conclusions, and recommendation including a mitigation plan.
 - 4. Introduction, including:
 - i. Proposed land use action including site location, zoning, building size, and project scope
 - ii. Map showing the proposed site, building footprint, access driveways, and parking facilities.
 - iii. Map of the study area that shows site location and surrounding roadway facilities.
 - 5. Existing Conditions:
 - i. Existing site conditions and adjacent land uses.
 - ii. Roadway characteristics of important transportation facilities and modal opportunities located within the study area, including roadway functional classifications, street cross-section, posted speeds, bicycle and pedestrian facilities, on-street parking, and transit facilities.
 - iii. Existing lane configurations and traffic control devices at the study area intersections.
 - iv. Existing traffic volumes and operational analysis of the study area roadways and intersections.
 - v. Roadway and intersection crash history analysis.
 - vi. Intersection and stopping sight distance related to new and impacted driveways and intersections.
 - 6. Background Conditions (without the proposed land use action):
 - i. Approved in-process developments and funded transportation improvements in the study area.
 - ii. Traffic growth assumptions.
 - iii. Addition of traffic from other planned developments.
 - iv. Background traffic volumes and operational analysis.
 - 7. Full Buildout Traffic Conditions (with the proposed land use action):
 - i. Description of the proposed development plans.
 - ii. Trip generation characteristics of proposed project (including trip reduction documentation).
 - iii. Trip distribution assumptions.

- iv. Full buildout traffic volumes and intersection operational analysis.
- v. Site circulation and parking.
- vi. Intersection and site-access driveway queuing analysis.
- vii. Recommended roadway and intersection mitigation measures (if necessary).
- 8. Conclusions and recommendations
- 9. Appendix- With dividers or tabs
 - i. Traffic count summary sheets.
 - ii. Crash analysis summary sheets.
 - iii. Existing, Background, and Full Buildout traffic operational analysis worksheets with detail to review capacity calculations.
 - iv. Signal, left-turn, and right-turn lane warrant evaluation calculations.
 - v. Signal timing sheets depicting the timing and phasing used in analysis.
 - vi. Other analysis summary sheets such as queuing.
- 10. To present the information required to analyze the transportation impacts of development, the following figures shall be included in the TIS:
 - i. Vicinity Map
 - ii. Existing Lane Configurations and Traffic Control Devices
 - iii. Existing Traffic Volumes and Levels of Service for each required time period
 - iv. Future Year Background Traffic Volumes and Levels of Service for each required time period
 - v. Proposed Site Plan, including access points for abutting parcels and for those across the street from the proposed development
 - vi. Future Year Assumed Lane Configurations and Traffic Control Devices
 - vii. Estimated Trip Distribution/Assignment Pattern
 - viii. Trip reductions (pass-by trips at site access (es))
 - ix. Site-Generated Traffic Volumes for each required time period
 - x. Full Buildout Traffic Volumes and Levels of Service for each required time period

Reference 2

Table 17-3.5.040.A Minimum Required Bicycle Parking Spaces

Use	Minimum Number of Spaces
Multifamily Residential (not required for parcels with fewer than 4 dwelling units)	2 bike spaces per 4 dwelling units
Commercial	2 bike spaces per primary use or 1 per 5 vehicle spaces, whichever is greater
Industrial	2 bike spaces per primary use or 1 per 10 vehicle spaces, whichever is greater
Community Service	2 bike spaces

Use	Minimum Number of Spaces
Parks (active recreation areas only)	4 bike spaces
Schools (all types)	2 bike spaces per classroom
Institutional Uses and Places of Worship	2 bike spaces per primary use or 1 per 10 vehicle spaces, whichever is greater
Transit Transfer Stations and Park and Ride lots	<u>5 bike spaces per acre</u>
Other Uses	2 bike spaces per primary use or 1 per 10 vehicle spaces, whichever is greater

Reference 3

4. Street Connectivity and Formation of Blocks.

Where a street connection cannot be made due to physical site constraints, approach spacing requirements, access management requirements, or similar restrictions; where practicable, a pedestrian access way connection shall be provided pursuant to Chapter 17-3.3. Streets and accessways need not be required where one or more of the following conditions exist:

(i) Physical or topographic conditions make a street or accessway connection impracticable. Such conditions include but are not limited to freeways, railroads, steep slopes, wetlands or other bodies of water where a connection could not reasonably be provided;

(ii) Buildings or other existing development on adjacent lands physically preclude a connection now or in the future considering the potential for redevelopment; or

(iii) Where streets or accessways would violate provisions of leases, easements, covenants, restrictions or other agreements existing as of May 1, 1995, which preclude a required street or accessway connection.

Reference 5

17-3.3.040 Pedestrian Access and Circulation

...

2. **Safe, Direct, and Convenient.** Walkways within developments shall provide safe, reasonably direct, and convenient connections between primary building entrances and all adjacent parking areas, recreational areas, playgrounds, ~~and~~ public rights-of-way, and existing and planned future transit facilities, conforming to the following standards:

...

17-3.5.030 Automobile Parking

...

B. Exceptions and Reductions to Off-Street Parking.

3. The Planning Official, through a Type II procedure, may reduce the off-street parking standards of Table 17-3.5.030.A for sites with one or more of the following features:

- a. ~~Site has a bus stop with frequent transit service located adjacent to it, and the site's frontage is improved with a bus stop waiting shelter, consistent with the standards of the applicable transit service provider: Allow up to a 20 percent reduction to the standard number of automobile parking spaces~~ Sites containing or adjacent to a bus stop with frequent transit service, whose frontage is improved with a bus stop waiting shelter consistent with the standards of the applicable transit provider, are allowed a 20 percent reduction to the standard number of automobile parking spaces.

...

Reference 7

17-3.5.030 Automobile Parking

B. Carpool and Vanpool Parking Requirements.

1. Carpool and vanpool parking spaces shall be identified for the following uses:
 - a. New commercial and industrial developments with fifty (50) or more parking spaces,
 - b. New institutional or public assembly uses, and
 - c. Transit park-and-ride facilities with fifty (50) or more parking spaces.
2. Of the total spaces available for employee, student, and commuter parking, at least five percent, but not fewer than two, shall be designated for exclusive carpool and vanpool parking.
3. Carpool and vanpool parking spaces shall be located closer to the main employee, student or commuter entrance than all other parking spaces with the exception of ADA parking spaces.
4. Required carpool/vanpool spaces shall be clearly marked "Reserved - Carpool/Vanpool Only."

Reference 8

3. The Planning Official, through a Type II procedure, may reduce the off-street parking standards of Table 17-3.5.030.A for sites with one or more of the following features:

- a. Site has a bus stop with frequent transit service located adjacent to it, and the site's frontage is improved with a bus stop waiting shelter, consistent with the standards of the applicable transit service provider: Allow up to a 20 percent reduction to the standard number of automobile parking spaces.
- b. Space is being dedicated for a transit facility such as a park and ride, bus pull-out, or other transit facility: Allow up to a 10 percent reduction in the number of automobile parking spaces.

...

6. The Planning Official, through a Type I procedure, may allow property owners of existing nonresidential development to replace up to 10% of existing parking spaces with bus shelters and other pedestrian and transit amenities located adjacent to streets with existing or planned transit routes.

Reference 9

See Reference 5 for language regarding safe, reasonably direct, and convenient pedestrian access to transit facilities.



MEMORANDUM

Plan and Code Amendments Summary Molalla Transportation System Update

DATE 5/14/2018
TO Molalla TSP Project Management Team
FROM Matt Hastie and Andrew Parish, Angelo Planning Group
CC Matt Bell and Nick Gross, Kittelson & Associates, Inc.

Following is a brief summary of recommendations from Technical Memorandum #7: Regulatory Solutions, including proposed amendments to the City's Development Code and other documents recommended to help implement the updated Molalla Transportation System Plan.

- **Traffic Impact Analysis Requirements and Procedures.** Update requirements within the Public Works Standards and the Development Code to ensure consistency between these two documents and to refine the approach to preparation and submittal of TIAs. The new procedures would allow for a tiered approach, ensure that freight trips are factored into thresholds for preparing a TIA, and define the contents of the analysis in more detail.
- **Bicycle Parking Requirements.** Update Development Code section 17-3.5.040.A to add minimum requirements for bicycle parking associated with transit transfer stations and park and ride lots, which are not currently addressed in the requirements.
- **Street Connectivity and Formation of Blocks.** Update the Development Code to clarify conditions where it is acceptable to vary from city standards governing the length and perimeter of newly created blocks (i.e., where topography, other natural features, cost or other factors preclude the ability to do so).
- **Pedestrian Access and Circulation.** Update Development Code section 17-3.3.040 to require safe, direct and convenient pedestrian connections within developments to transit facilities. (*Note: similar connections to other community destinations such as parks, playgrounds and streets are already required.*)
- **Automobile Parking Requirements.** Update Development Code section 17-3.5.030 to allow a reduction in required parking spaces for development sites containing or adjacent to a transit stop with a shelter. Up to a 20% reduction would be allowed, with 10% devoted to a new bus shelter or other transit-related improvement.
- **Vanpool and carpool parking.** Require provision of vanpool and carpool parking spaces for new institutional or public assembly uses; and for new commercial and industrial developments and transit park-and-ride facilities with fifty (50) or more parking spaces.

Exhibit “A”

17-3.5.030 Automobile Parking

A. Minimum Number of Off-Street Automobile Parking Spaces. Except as provided by subsection 17-3.5.030.A, or as required for Americans with Disabilities Act compliance under subsection 17-3.5.030.G, off-street parking shall be provided pursuant to one of the following three standards:

1. The standards in Table 17-3.5.030.A;
2. A standard from Table 17-3.5.030.A for a use that the Planning Official determines is similar to the proposed use; or
3. Subsection 17-3.5.030.B Exceptions, which includes a Parking Demand Analysis option.

Table 17-3.5.030.A – Automobile Parking Spaces by Use	
Use Categories <small>(Chapter 17-5 contains examples of uses and definitions.)</small>	Minimum Parking per Land Use <small>(Fractions are rounded down to the closest whole number.)</small>
Residential Categories	
Household Living	
Single-Family Dwelling, including manufactured homes on lots	one space per dwelling
Duplex	three spaces per duplex
Accessory Dwelling (second dwelling on a single-family lot)	one space total for primary dwelling and accessory dwelling
Multifamily	1.5 spaces for a one bedroom unit 2 spaces for a two bedroom unit 2.5 spaces for three bedrooms or more
Group Living, such as nursing or convalescent homes, rest homes, assisted living, congregate care, and similar special needs housing	0.5 space per four bedrooms

Table 17-3.5.030.A – Automobile Parking Spaces by Use	
Use Categories (Chapter 17-5 contains examples of uses and definitions.)	Minimum Parking per Land Use (Fractions are rounded down to the closest whole number.)
Commercial Categories	
Commercial Outdoor Recreation	per Conditional Use Permit review (Chapter 17-4.4)
Bed and Breakfast Inn	one space per use, plus one space for each bedroom offered as lodging
Educational Services, not a school (e.g., tutoring or similar services)	one space per 300 sq. ft. floor area
Entertainment, Major Event	per Conditional Use Permit review (Chapter 17-4.4)
Hotels, Motels, and similar uses	0.75 space per guest room. See also, parking requirements for associated uses, such as restaurants, entertainment uses, drinking establishments, assembly facilities.
Mortuary or Funeral Home	one space per 300 sq. ft. floor area
Offices	General Office: one space per 500 sq. ft. floor area
	Medical or Dental Office: one space per 500 sq. ft. floor area
Outdoor Recreation, Commercial	per Conditional Use Permit review (Chapter 17-4.4)
Surface Parking Lot, when not accessory to a permitted use	per Conditional Use Permit review (Chapter 17-4.4)
Quick Vehicle Servicing or Vehicle Repair	two spaces, excluding vehicle service or queuing area, or per Conditional Use Permit review (Chapter 17-4.4)
Retail Sales and Commercial Service	<u>Bank</u> : one space per 300 sq. ft. floor area
	<u>Retail</u> : one space per 400 sq. ft. floor area, except one space per 1,000 sq. ft. for bulk retail (e.g., auto sales, nurseries, lumber and construction materials, furniture, appliances, and similar sales)
	<u>Restaurants and Bars</u> : one space per 200 sq. ft. floor area
	<u>Health Clubs, Gyms, Continuous Entertainment (e.g., bowling alleys)</u> : one space per 500 sq. ft.
	<u>Theaters and Cinemas</u> : one space per 6 seats
Self-Service Storage	two spaces, plus adequate space for loading and unloading
Industrial Categories	
Industrial Service	one space per 1,000 sq. ft. of floor area
Manufacturing and Production	one space per 1,000 sq. ft. of floor area; or as required by Conditional Use Permit review (Chapter 17-4.4)
Warehouse and Freight Movement	0.5 space per 1,000 sq. ft. of floor area; or as required by Conditional Use Permit review (Chapter 17-4.4)
Waste-Related	per Conditional Use Permit review (Chapter 17-4.4)
Wholesale Sales, e.g., Building Materials, Heavy Equipment, Agricultural Supplies, etc.	one space per 1,000 sq. ft.

Table 17-3.5.030.A – Automobile Parking Spaces by Use	
Use Categories (Chapter 17-5 contains examples of uses and definitions.)	Minimum Parking per Land Use (Fractions are rounded down to the closest whole number.)
Institutional Categories	
Basic Utilities	Parking based on applicant's projected parking demand, subject to City approval
Community Service, including Government Offices and Services	Parking based on applicant's projected parking demand, subject to City approval, except as specifically required elsewhere in this table for individual uses (See public assembly, office, retail, housing, etc.)
Daycare	Family Daycare: one space, plus required parking for dwelling Daycare Center: one space per 400 sq. ft. of floor area
Medical Center or Hospital	one space per 500 sq. ft. floor area
Parks and Open Space	Parking based on projected parking demand for planned uses
Public Assembly	one space per 75 sq. ft. of public assembly area; or as required by Conditional Use Permit (Chapter 17-4.4)
Religious Institutions and Houses of Worship	one space per 75 sq. ft. of main assembly area; or as required by Conditional Use Permit (Chapter 17-4.4)
Schools	Pre-School through Middle-School: one space per classroom
	High Schools: Parking based on applicant's projected parking demand, subject to City approval. A Transportation Demand Management Plan is also required.
	Colleges: one space per 400 sq. ft. of floor area exclusive of dormitories, plus one space per two dorm rooms. A Transportation Demand Management Plan is also required.
Other Categories	
Accessory Uses	Parking standards for accessory shall be based on applicant's projected parking demand, subject to City approval.
Agriculture	None, except as required for accessory uses
Radio Frequency Transmission Facilities	None, except as required by Conditional Use Permit (Chapter 17-4.4)
Temporary Uses	Parking standards for temporary uses are the same as for primary uses, except that the Planning Official may reduce or waive certain development and design standards for temporary uses.
Transportation Facilities (operation, maintenance, preservation, and construction)	None, except for park-and-ride facilities; and where temporary parking is required for construction staging areas

B. Carpool and Vanpool Parking Requirements.

- 1. Carpool and vanpool parking spaces shall be identified for the following uses:
 - a. New commercial and industrial developments with fifty (50) or more parking spaces.
 - b. New institutional or public assembly uses, and
 - c. Transit park-and-ride facilities with fifty (50) or more parking spaces.
- 2. Of the total spaces available for employee, student, and commuter parking, at least five percent, but not fewer than two, shall be designated for exclusive carpool and vanpool parking.
- 3. Carpool and vanpool parking spaces shall be located closer to the main employee, student or commuter entrance than all other parking spaces with the exception of ADA parking spaces.
- 4. Required carpool/vanpool spaces shall be clearly marked "Reserved - Carpool/Vanpool Only."

- Formatted: Font: Not Bold
- Formatted: Indent: Left: 0.31", Hanging: 0.25"
- Formatted: Font: Not Bold
- Formatted: Indent: Left: 0.5", Hanging: 0.25"
- Formatted: Font: Not Bold
- Formatted: Font: Not Bold
- Formatted: Indent: Left: 0.31", Hanging: 0.25"
- Formatted: Font: Not Bold
- Formatted: Font: Not Bold
- Formatted: Font: Not Bold

BC. Exceptions and Reductions to Off-Street Parking.

- 1. There is no minimum number of required automobile parking spaces for uses within the Central Commercial C-1 zone;
- 2. The applicant may propose a parking standard that is different than the standard under subsections 17-3.5.030.A(1) and (2), above, for review and action by the Planning Official through a Type I or II procedure. The applicant's proposal shall consist of a written request and a parking analysis prepared by a qualified professional. The parking analysis, at a minimum, shall assess the average parking demand and available supply for existing and proposed uses on the subject site; opportunities for shared parking with other uses in the vicinity; existing public parking in the vicinity; transportation options existing or planned near the site, such as frequent bus service, carpools, or private shuttles; and other relevant factors. This parking analysis applies to a request in the reduction or an increase in parking ratios.
- 3. The Planning Official, through a Type II procedure, may reduce the off-street parking standards of Table 17-3.5.030.A for sites with one or more of the following features:
 - a. Sites containing or adjacent to a bus stop with frequent transit service, whose frontage is improved with a bus stop waiting shelter consistent with the standards of the applicable transit provider, are allowed a 20 percent reduction to the standard number of automobile parking spaces.~~Site has a bus stop with frequent transit service located adjacent to it, and the site's frontage is improved with a bus stop waiting shelter, consistent with the standards of the applicable transit service provider: Allow up to a 20 percent reduction to the standard number of automobile parking spaces.~~
 - b. Space is being dedicated for a transit facility such as a park and ride, bus pull-out, or other transit facility: Allow up to a 10 percent reduction in the number of automobile parking spaces.
 - c. Site has dedicated parking spaces for carpool or vanpool vehicles: Allow up to a 10 percent reduction to the standard number of automobile parking spaces.
 - d. Site has dedicated parking spaces for motorcycles, scooters, or electric carts: Allow reductions to the standard dimensions for parking spaces.
 - e. Site has more than the minimum number of required bicycle parking spaces: Allow up to a 10 percent reduction to the number of automobile parking spaces.

- e. Site has off-street parking or other public parking in the vicinity of the site.
- 4. The number of required off-street parking spaces may be reduced through the provision of shared parking, pursuant to Section 17-3.5.030.D.
- 5. The Planning Official through a Type I procedure may reduce the off-street parking standards of Table 3.5.030.A by one parking space for every two on-street parking spaces located adjacent to the subject site, provided the parking spaces meet the dimensional standards of Section 17-3.5.030.E.
- 6. The Planning Official, through a Type I procedure, may allow property owners of existing nonresidential development to replace up to 10% of existing parking spaces with bus shelters and other pedestrian and transit amenities located adjacent to streets with existing or planned transit routes.

CD. Maximum Number of Off-Street Automobile Parking Spaces. The maximum number of off-street automobile parking spaces allowed per site equals the minimum number of required spaces for the use pursuant to Table 17-3.5.030, times a factor of:

- 1. 1.2 spaces for uses fronting a street with adjacent on-street parking spaces; or
- 2. 1.5 spaces, for uses fronting no street with adjacent on-street parking; or
- 3. A factor based on applicant's projected parking demand, subject to City approval.

DE. Shared parking. Required parking facilities for two or more uses, structures, or parcels of land may be satisfied by the same parking facilities used jointly, to the extent that the owners or operators show that the need for parking facilities does not materially overlap (e.g., uses primarily of a daytime versus nighttime nature; weekday uses versus weekend uses), and provided that the right of joint use is evidenced by a recorded deed, lease, contract, or similar written instrument establishing the joint use. Shared parking requests shall be subject to review and approval through a Type I Review.

EE. Parking Stall Design and Minimum Dimensions. Where a new off-street parking area is proposed, or an existing off-street parking area is proposed for expansion, the entire parking area shall be improved in conformance with this Code. At a minimum the parking spaces and drive aisles shall be paved with asphalt, concrete, or other City-approved materials, provided the Americans with Disabilities Act requirements are met, and shall conform to the minimum dimensions in Table 17-3.5.030.E and the figures below. All off-street parking areas shall contain wheel stops, perimeter curbing, bollards, or other edging as required to prevent vehicles from damaging buildings or encroaching into walkways, sidewalks, landscapes, or the public right-of-way. Parking areas shall also provide for surface water management, pursuant to Section 17-3.6.050.

Table 17-3.5.030.E - Parking Area Minimum Dimensions*

PARKING ANGLE < °	CURB LENGTH	STALL DEPTH		AISLE WIDTH		BAY WIDTH		STRIPE LENGTH
		SINGLE D1	DOUBLE D2	ONE WAY A1	TWO WAY A2	ONE WAY B1	TWO WAY B2	
90°	8'-6"	18'	36'	23'	23'	59'	59'	18'
60°	10'	20'	40'	17'	18'	57'	58'	23'

45°	12'	18'-6"	37'	13'	18'	50'	55'	26'-6"
30°	17'	16'-6"	33'	12'	18'	45'	51'	32'-8"
0°	22'	8'-6"	17'	12'	18'	29'	35'	8'-6"

*See Figure 17-3.5-18. See also, Chapter 17-3.2 Building Orientation and Design for parking location requirements for some types of development; Chapter 17-3.3 Access and Circulation for driveway standards; and Chapter 17-3.4 for requirements related to Landscaping, Screening, Fences, Walls, and Outdoor Lighting.

FG. Adjustments to Parking Area Dimensions. The dimensions in subsection 17-3.5.030.E are minimum standards. The Planning Official, through a Type II procedure, may adjust the dimensions based on evidence that a particular use will require more or less maneuvering area. For example, the Planning Official may approve an adjustment where an attendant will be present to move vehicles, as with valet parking. In such cases, a form of guarantee must be filed with the City ensuring that an attendant will always be present when the lot is in operation.

GH. Americans with Disabilities Act (ADA). Parking shall be provided consistent with ADA requirements, including, but not limited to, the minimum number of spaces for automobiles, van-accessible spaces, location of spaces relative to building entrances, accessible routes between parking areas and building entrances, identification signs, lighting, and other design and construction requirements.

HJ. Electric Charging Stations. Charging stations for electric vehicles are allowed as an accessory use to parking areas developed in conformance with this Code, provided the charging station complies with applicable building codes and any applicable state or federal requirements.

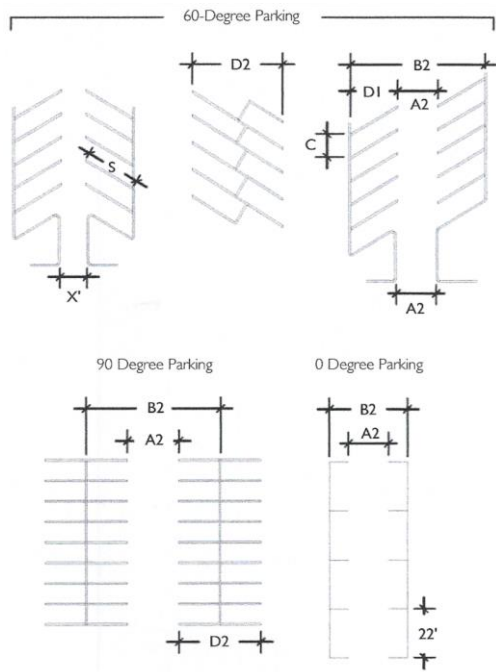


Figure 17-3.5-1

17-3.5.040 Bicycle Parking

A. Standards. Bicycle parking spaces shall be provided with new development and, where a change of use occurs, at a minimum, shall follow the standards in Table 17-3.5.040.A. Where an application is subject to Conditional Use Permit approval or the applicant has requested a reduction to an automobile-parking standard, pursuant to subsection 17-3.5.030.B, the Planning Official may require bicycle parking spaces in addition to those in Table 17-3.5.040.A.

Table 17-3.5.040.A Minimum Required Bicycle Parking Spaces	
Use	Minimum Number of Spaces
Multifamily Residential (not required for parcels with fewer than 4 dwelling units)	two bike spaces per four dwelling units
Commercial	two bike spaces per primary use or one per five vehicle spaces, whichever is greater
Industrial	two bike spaces per primary use or one per 10 vehicle spaces, whichever is greater
Community Service	two bike spaces
Parks (active recreation areas only)	four bike spaces
Schools (all types)	two bike spaces per classroom
Institutional Uses and Places of Worship	two bike spaces per primary use or one per 10 vehicle spaces, whichever is greater
Transit Transfer Stations and Park and Ride lots Transit Transfer Stations/Park and Ride Facilities/Other Uses	two bike spaces per primary use or one per 10 vehicle spaces, whichever is greater Five bike spaces per acre
<u>Other Uses</u>	<u>Two bike spaces per primary use or one per 10 vehicle spaces, whichever is greater</u>

Formatted: Font: Gill Sans MT

Formatted: Font: Gill Sans MT

B. Design. Bicycle parking shall consist of staple-design steel racks or other City-approved racks, lockers, or storage lids providing a safe and secure means of storing a bicycle, consistent with the Public Works Design Standards.

C. Exemptions. This section does not apply to single-family and duplex housing, home occupations, and agricultural uses.

D. Hazards. Bicycle parking shall not impede or create a hazard to pedestrians or vehicles, and shall be located so as to not conflict with the vision clearance standards of Section 17-3.3.030.G.

17-3.5 – Parking and Loading | Bicycle Parking



Figure 17-3.5-19

17-3.6.020 Transportation Standards

A. General Requirements.

1. Except as provided by subsection 5, below, existing substandard streets and planned streets within or abutting a proposed development shall be improved in accordance with the standards of Chapter 17-3.6 as a condition of development approval.
2. All street improvements, including the extension or widening of existing streets and public access ways, shall conform to Section 17-3.6.020, and shall be constructed consistent with the City of Molalla Public Works Design Standards.
3. All new streets shall be contained within a public right-of-way. Public access ways (e.g., pedestrian ways) may be contained within a right-of-way or a public access easement, subject to review and approval of the City Engineer.
4. The purpose of this subsection is coordinate the review of land use applications with roadway authorities and to implement Section 660-012-0045(2)(e) of the state Transportation Planning Rule, which requires the City to adopt a process to apply conditions to development proposals in order to minimize impacts and protect transportation facilities. The following provisions also establish when a proposal must be reviewed for potential traffic impacts; when a Transportation Analysis Letter (TAL) or Traffic Impact Analysis (TIA) must be submitted with a development application in order to determine whether conditions are needed to minimize impacts to and protect transportation facilities; the required contents of a ~~Traffic Impact Analysis~~TAL/TIA; and who is qualified to prepare the analysis.

a. Determining the required level of Transportation Analysis and Documentation.

A Transportation Impact Analysis (TIA) is required for developments that are expected to have an impact on the transportation system. The analysis shall be based upon the latest edition of the ITE Trip Generation Manual or an agreed-upon alternative methodology where credible data is available to support the alternative methodology. When specific criteria generally associated with small developments are met, a Transportation Analysis Letter (TAL) may be substituted for the required TIA. At the discretion of the City Engineer, a TAL may satisfy the City's transportation analysis requirements, in lieu of a TIA, when a development meets all the following criteria:

1. The development generates fewer than 25 peak hour trips during either the AM or PM peak hour. (Two examples of common developments generating fewer trips than these threshold levels are: a subdivision containing 25 or fewer single-family residences or a general office building less than 15,000 square feet.)
2. The development is not expected to impact intersections that currently fail to meet the City's level of service standards or intersections that are operating near the limits of the acceptable level of service thresholds during a peak operating hour.
3. The development is not expected to significantly impact adjacent roadways and intersections that are high accident locations, areas that contain an identified safety concern, or high concentration of pedestrians or bicyclists such as school zones.
4. The development generates an increase in use of adjacent streets by vehicles exceeding the 20,000-pound gross vehicle weights by less than 10 vehicles per day.

Formatted: Indent: Left: 0.5"

Formatted: Indent: Left: 0.75"

b. Transportation Analysis Letter Contents. If the City determines based on information provided by the applicant and in accordance with the criteria specified in Section 3.1 that a TAL is the appropriate document to submit, the following requirements shall apply.

Formatted: Indent: Left: 0.5"

1. The TAL shall be prepared by or prepared under the direct supervision of a Registered Professional Engineer who shall sign and stamp the TAL.

Formatted: Indent: Left: 0.75"

2. The TAL shall include the following:

i. The expected trip generation of the proposed development including the AM peak hour, the PM peak hour, daily traffic, and other germane periods as may be appropriate, together with appropriate documentation and references.

Formatted: Indent: Left: 1"

ii. Site plan showing the location of all access driveways or private streets where they intersect with public streets plus driveways of abutting properties and driveways on the opposite side of the street from the proposed development.

iii. Documentation that all site access driveways meet City of Molalla Private Access Driveway Width Standards.

iv. Documentation that all site access driveways meet City of Molalla's Minimum City Street Intersection Spacing Standards.

v. Documentation that all new site accesses and/or public street intersections meet AASHTO intersection sight distance guidelines.

vi. Documentation that there are no inherent safety issues associated with the design and location of the site access driveways.

vii. Documentation that the applicant has reviewed the City's TSP and that proposed streets and frontage improvements do or will comply with any applicable standards regarding the functional classification, typical sections, access management, traffic calming and other attributes as appropriate.

c. Transportation Impact Analysis Contents. The following information shall be included in each TIA submitted to the City. Additional information specified by the City in the scoping summary or through the pre-application meeting or other project meetings shall also be included.

Formatted: Indent: Left: 0.5"

1. Completed TIA checklist signed by the Professional Engineer responsible for the preparation of the TIA.

Formatted: Indent: Left: 0.75"

2. Table of Contents – Listings of all sections, figures, and tables included in the report.

3. Executive Summary – A summary of key points, findings, conclusions, and recommendation including a mitigation plan.

4. Introduction, including:

i. Proposed land use action including site location, zoning, building size, and project scope

Formatted: Indent: Left: 1"

ii. Map showing the proposed site, building footprint, access driveways, and parking facilities.

iii. Map of the study area that shows site location and surrounding roadway facilities.

5. Existing Conditions:

i. Existing site conditions and adjacent land uses.

ii. Roadway characteristics of important transportation facilities and modal opportunities located within the study area, including roadway functional classifications, street cross-section, posted speeds, bicycle and pedestrian facilities, on-street parking, and transit facilities.

iii. Existing lane configurations and traffic control devices at the study area intersections.

iv. Existing traffic volumes and operational analysis of the study area roadways and intersections.

v. Roadway and intersection crash history analysis.

vi. Intersection and stopping sight distance related to new and impacted driveways and intersections.

6. Background Conditions (without the proposed land use action):

i. Approved in-process developments and funded transportation improvements in the study area.

ii. Traffic growth assumptions.

iii. Addition of traffic from other planned developments.

iv. Background traffic volumes and operational analysis.

7. Full Buildout Traffic Conditions (with the proposed land use action):

i. Description of the proposed development plans.

ii. Trip generation characteristics of proposed project (including trip reduction documentation).

iii. Trip distribution assumptions.

iv. Full buildout traffic volumes and intersection operational analysis.

v. Site circulation and parking. vi. Intersection and site-access driveway queuing analysis.

vii. Recommended roadway and intersection mitigation measures (if necessary).

8. Conclusions and recommendations

9. Appendix- With dividers or tabs

i. Traffic count summary sheets.

Formatted: Indent: Left: 0.75"

Formatted: Indent: Left: 1"

Formatted: Indent: Left: 0.75"

Formatted: Indent: Left: 1"

Formatted: Indent: Left: 0.75"

Formatted: Indent: Left: 1"

Formatted: Indent: Left: 0.75"

Formatted: Indent: Left: 1"

ii. Crash analysis summary sheets.

iii. Existing, Background, and Full Buildout traffic operational analysis worksheets with detail to review capacity calculations.

iv. Signal, left-turn, and right-turn lane warrant evaluation calculations.

v. Signal timing sheets depicting the timing and phasing used in analysis.

vi. Other analysis summary sheets such as queuing.

10. To present the information required to analyze the transportation impacts of development, the following figures shall be included in the TIS:

i. Vicinity Map

ii. Existing Lane Configurations and Traffic Control Devices

iii. Existing Traffic Volumes and Levels of Service for each required time period

iv. Future Year Background Traffic Volumes and Levels of Service for each required time period

v. Proposed Site Plan, including access points for abutting parcels and for those across the street from the proposed development

vi. Future Year Assumed Lane Configurations and Traffic Control Devices

vii. Estimated Trip Distribution/Assignment Pattern

viii. Trip reductions (pass-by trips at site access (es))

ix. Site-Generated Traffic Volumes for each required time period

x. Full Buildout Traffic Volumes and Levels of Service for each required time period. When a Traffic Impact Analysis is Required. The City or other road authority with jurisdiction may require a Traffic Impact Analysis (TIA) as part of an application for development, a change in use, or a change in access. A TIA shall be required where a change of use or a development would involve one or more of the following:

(1) A change in zoning or a plan amendment designation;

(2) Operational or safety concerns documented in writing by a road authority;

(3) An increase in site traffic volume generation by 300 Average Daily Trips (ADT) or more;

(4) An increase in peak hour volume of a particular movement to and from a street or highway by 20 percent or more;

(5) An increase in the use of adjacent streets by vehicles exceeding the 20,000-pound gross vehicle weights by 10 vehicles or more per day;

(6) Existing or proposed approaches or access connections that do not meet minimum spacing or sight distance requirements or are located where vehicles entering or leaving the property are restricted, or such vehicles are likely to queue or hesitate at an approach or access connection, creating a safety hazard;

Formatted: Indent: Left: 0.75"

Formatted: Indent: Left: 1"

~~(7) A change in internal traffic patterns that may cause safety concerns; or~~

~~(8) A TIA required by ODOT pursuant to OAR 734.051.~~

~~b. Traffic Impact Analysis Preparation. A professional engineer registered by the State of Oregon, in accordance with the requirements of the road authority, shall prepare the Traffic Impact Analysis.~~

Formatted: Indent: Left: 1"

5. The City Engineer may waive or allow deferral of standard street improvements, including sidewalk, roadway, bicycle lane, undergrounding of utilities, and landscaping, as applicable, where one or more of the following conditions in (a) through (d) is met. Where the City Engineer agrees to defer a street improvement, it shall do so only where the property owner agrees not to remonstrate against the formation of a local improvement district in the future.
 - a. The standard improvement conflicts with an adopted capital improvement plan.
 - b. The standard improvement would create a safety hazard.
 - c. It is unlikely due to the developed condition of adjacent property that the subject improvement would be extended in the foreseeable future, and the improvement under consideration does not by itself significantly improve transportation operations or safety.
 - d. The improvement under consideration is part of an approved partition and the proposed partition does not create any new street.

B. Street Location, Alignment, Extension, and Grades.

1. All new streets, to the extent practicable, shall connect to the existing street network and allow for the continuation of an interconnected street network, consistent with adopted public facility plans and pursuant to subsection 17-3.6.020.D Transportation Connectivity and Future Street Plans.
2. Specific street locations and alignments shall be determined in relation to existing and planned streets, topographic conditions, public convenience and safety, and in appropriate relation to the proposed use of the land to be served by such streets.
3. Grades of streets shall conform as closely as practicable to the original (pre-development) topography to minimize grading.
4. New streets and street extensions exceeding a grade of 10 percent over a distance more than 200 feet, to the extent practicable, shall be avoided. Where such grades are unavoidable, the City Engineer may approve an exception to the 200-foot standard and require mitigation, such as a secondary access for the subdivision, installation of fire protection sprinkler systems in dwellings, or other mitigation to protect public health and safety.
5. Where the locations of planned streets are shown on a local street network plan, the development shall implement the street(s) shown on the plan.
6. Where required local street connections are not shown on an adopted City street plan, or the adopted street plan does not designate future streets with sufficient specificity, the development shall provide for the reasonable continuation and connection of existing streets to adjacent developable properties, conforming to the standards of this Code.

-
7. Existing street-ends that abut a proposed development site shall be extended with the development, unless prevented by environmental or topographical constraints, existing development patterns, or compliance with other standards in this Code. In such situations, the applicant must provide evidence that the environmental or topographic constraint precludes reasonable street connection.
 8. Proposed streets and any street extensions required pursuant to this section shall be located, designed, and constructed to allow continuity in street alignments and to facilitate future development of vacant or redevelopable lands.

C. Rights-of-Way and Street Section Widths.

1. Street rights-of-way and section widths shall comply with the current version of the Public Works Design Standards and Transportation System Plan. The standards are intended: to provide for streets of suitable location, width, and design to accommodate expected vehicle, pedestrian, and bicycle traffic; to afford satisfactory access to law enforcement, fire protection, sanitation, and road maintenance equipment; and to provide a convenient and accessible network of streets, avoiding undue hardships to adjoining properties.
2. All streets shall be improved in accordance with the construction standards and specifications of the applicable roadway authority, including requirements for pavement, curbs, drainage, striping, and traffic control devices. Where a planter strip is provided it shall consist of a minimum ~~five-five-foot-widefoot~~ wide strip between the sidewalk and the curb or roadway. Where a swale is provided, it shall either be placed between the roadway and sidewalk or behind the sidewalk on private property, subject to City Engineer approval and recording of required public drainage way and drainage way maintenance easements. Streets with parking on one side only should be avoided. When used, they must be posted NO PARKING.
3. Where a range of street width or improvement options is indicated, the City Engineer shall determine requirements based on the advice of a qualified professional and all of the following factors:
 - a. Street classification and requirements of the roadway authority, if different than the City's street classifications and requirements;
 - b. Existing and projected street operations relative to applicable standards;
 - c. Safety of motorists, pedestrians, bicyclists, and South Clackamas Transit District (SCTD) users, including consideration of accident history;
 - d. Convenience and comfort for pedestrians, bicyclists, and SCTD users;
 - e. Provision of on-street parking;
 - f. Placement of utilities;
 - g. Street lighting;
 - h. Slope stability, erosion control, and minimizing cuts and fills;
 - i. Surface water management and storm drainage requirements;

- j. Emergency vehicles or apparatus and emergency access, including evacuation needs;
- k. Transitions between varying street widths (i.e., existing streets and new streets); and
- l. Other factors related to public health, safety, and welfare.

D. Transportation Connectivity and Future Street Plans. The following standards apply to the creation of new streets:

1. **Intersections.** Streets shall be located and designed to intersect as nearly as possible to a right angle. Street intersections shall meet the current requirements of the Public Works Design Standards and Transportation System Plan.
2. **Access Ways.** The Planning Commission, in approving a land use application with conditions shall require a developer to provide an access way where the creation of a cul-de-sac or dead-end street is unavoidable and the access way connects or may in the future connect, the end of the street to another street, a park, or a public access way, except where the City Engineer and City Planner determine the access way is not feasible. Where an access way is required, it shall be not less than 10 feet wide and shall contain a minimum ~~eight-eight-foot~~-wide concrete surface or other all-weather surface approved by the City Engineer. Access ways shall be contained within a public right-of-way or public access easement, as required by the City.
3. **Connectivity to Abutting Lands.** The street system of a proposed subdivision shall be designed to connect to existing, proposed, and planned streets adjacent to the subdivision. Wherever a proposed development abuts unplatted land or a future development phase of an existing development, street stubs shall be provided to allow access to future abutting subdivisions and to logically extend the street system into the surrounding area. Street ends shall be designed to facilitate future extension in terms of grading, width, and temporary barricades.
4. **Street Connectivity and Formation of Blocks.** In order to promote efficient vehicular and pedestrian circulation throughout the city, subdivisions and site developments shall be served by an interconnected street network, pursuant to the current version of the Public Works Design Standards and Transportation System Plan. Where a street connection cannot be made due to physical site constraints, approach spacing requirements, access management requirements, or similar restrictions; ~~where practicable~~, a pedestrian access way connection shall be provided pursuant to Chapter 17-3.3. Streets and accessways need not be required where one or more of the following conditions exist:
 - (i) Physical or topographic conditions make a street or accessway connection impracticable. Such conditions include but are not limited to freeways, railroads, steep slopes, wetlands or other bodies of water where a connection could not reasonably be provided;
 - (ii) Buildings or other existing development on adjacent lands physically preclude a connection now or in the future considering the potential for redevelopment; or
 - (iii) Where streets or accessways would violate provisions of leases, easements, covenants, restrictions or other agreements existing as of May 1, 1995, which preclude a required street or accessway connection.
5. **Cul-de-sac Streets.** A cul-de-sac street shall only be used where the City Engineer determines that

Formatted: Indent: Left: 0.5"

environmental or topographical constraints, existing development patterns, or compliance with other applicable City requirements preclude a street extension. Where the City determines that a cul-de-sac is allowed, cul-de-sac length, turn-around type, and pedestrian access to adjoining properties shall meet the requirements of the current version of the Public Works Design Standards and Transportation System Plan and Section 17-3.6.020D.2, above.

6. Future Street Plan. Where a subdivision is proposed adjacent to other developable land, a future street plan shall be filed by the applicant in conjunction with an application for a subdivision in order to facilitate orderly development of the street system. The plan shall show the pattern of existing and proposed future streets from the boundaries of the proposed land division and shall include other divisible parcels within 600 feet surrounding and adjacent to the proposed subdivision. The street plan is binding when part of a multi-phased master planned development. The plan must demonstrate, pursuant to City standards, that the proposed development does not preclude future street connections to adjacent development land.

7. Private Streets and Gated Drives. Private streets and gated drives serving more than two dwellings (i.e., where a gate limits access to a development from a public street), are prohibited.

E. Engineering Design Standards. Street design shall conform to the standards of the applicable roadway authority; for City streets that is the current version of the Public Works Design Standards and Transportation System Plan. Where a conflict occurs between this Code and the Public Works Design Standards, the provisions of the Design Standards shall govern.

F. Fire Code Standards. Where Fire Code standards conflict with City standards, the City shall consult with the Fire Marshal in determining appropriate requirements. The City shall have the final determination regarding applicable standards.

G. Substandard Existing Right-of-Way. Where an existing right-of-way adjacent to a proposed development is less than the standard width, the City Engineer may require the dedication of additional rights-of-way at the time of Subdivision, Partition, or Site Plan Review, pursuant to the standards in the Public Works Design Standards and Transportation System Plan.

H. Traffic Calming. The City may require the installation of traffic calming features such as traffic circles, curb extensions, reduced street width (parking on one side), medians with pedestrian crossing refuges, speed tables, speed humps, or special paving to slow traffic in neighborhoods or commercial areas with high pedestrian traffic.

I. Sidewalks, Planter Strips, and Bicycle Lanes. Except where the City Engineer grants a deferral of public improvements, pursuant to Chapter 17-4.2 or Chapter 17-4.3, sidewalks, planter strips, and bicycle lanes shall be installed concurrent with development or widening of new streets, pursuant to the requirements of this chapter. Maintenance of sidewalks and planter strips in the right-of-way is the continuing obligation of the adjacent property owner.

J. Streets Adjacent to Railroad Right-of-Way. When a transportation improvement is proposed within 300 feet of a railroad crossing, or a modification is proposed to an existing railroad crossing, the Oregon Department of Transportation and the rail service provider shall be notified and given an opportunity to

comment, in conformance with the provisions of Article 17-4. Private crossing improvements are subject to review and licensing by the rail service provider.

- K. Street Names.** No new street name shall be used which will duplicate or be confused with the names of existing streets in the City of Molalla or vicinity. Street names shall be submitted to the City for review and approval in consultation with Clackamas County and emergency services.
- L. Survey Monuments.** Upon completion of a street improvement and prior to acceptance by the City, it shall be the responsibility of the developer's registered professional land surveyor to provide certification to the City that all boundary and interior monuments have been reestablished and protected.
- M. Street Signs.** The city, county, or state with jurisdiction shall install all signs for traffic control and street names. The cost of signs required for new development shall be the responsibility of the developer. Street name signs shall be installed at all street intersections. Stop signs and other signs may be required.
- N. Streetlight Standards.** Streetlights shall be relocated or new lights installed, as applicable, with street improvement projects. Streetlights shall conform to City standards, be directed downward, and full cutoff and full shielding to preserve views of the night sky and to minimize excessive light spillover onto adjacent properties.
- O. Mail Boxes.** Mailboxes shall conform to the requirements of the United States Postal Service and the State of Oregon Structural Specialty Code.
- P. Street Cross-Sections.** The final lift of pavement shall be placed on all new constructed public roadways prior to final City acceptance of the roadway.