ORDINANCE NO. 1354-13

AN ORDINANCE RELATING TO THE TRANSPORTATION SYSTEM PLAN; ADOPTING THE 2012 TUALATIN TRANSPORTATION SYSTEM PLAN UPDATES; AND AMENDING TUALATIN DEVELOPMENT CODE CHAPTERS 1, 3, 11, 31, 34, 38, 71, 73, 74, AND 75 (PTA-12-02)

WHEREAS upon the application of the City of Tualatin, a public hearing was held before the City Council of the City of Tualatin on February 11, 2013, and continued on February 25, 2013, related to a Plan Text Amendment (PTA) of the Tualatin Development Code (TDC); and amending TDC Chapters 1, 3, 11, 31, 34, 38, 71, 73, 74, and 75 (PTA-12-02); and

WHEREAS the City provided notice of PTA-12-02 to the Oregon Department of Land Conservation and Development as provided under ORS 197.610; and

WHEREAS notice of public hearing was given as required by Tualatin Development Code 1.031; and

WHEREAS the Council conducted a public hearing on February 11, 2013, and was continued on February 25, 2013, and heard and considered the testimony and evidence presented by the City staff and those appearing at the public hearing; and

WHEREAS based upon the evidence and testimony heard and considered by the Council, especially the City staff report dated February 11, 2013, makes and adopts as its Findings of Fact the findings and analysis in the staff report dated February 11, 2013, which are incorporated by this reference; and

WHEREAS the City Council finds that granting the amendment is in the public Interest, the public interest is best protected by granting the amendment at this time, the amendment conforms with the Tualatin Community Plan, and the amendment complies with the applicable provisions of TDC 1.032.

THE CITY OF TUALATIN ORDAINS AS FOLLOWS:

Section 1. TDC 1.032 is amended to read as follows:

Before granting an amendment to the Plan Text or Plan Map of the Tualatin Development Code (TDC), including the Tualatin Community Plan, the Council shall find that:

(1) Granting the amendment is in the public interest.

(2) The public interest is best protected by granting the amendment at this time.

(3) The proposed amendment is in conformity with the applicable objectives of the Tualatin Community Plan.

(4) The following factors were consciously considered: the various characteristics of the areas in the City; the suitability of the areas for particular land uses and improvements in the areas; trends in land improvement and development; property values; the needs of economic enterprises and the future development of the area; needed right-of-way and access for and to particular sites in the area; natural resources of the City and the protection and conservation of said resources; prospective requirements for the development of natural resources in the City; and the public need for healthful, safe, aesthetic surroundings and conditions. Proof of change in a neighborhood or area, or a mistake in the Plan Text or Plan Map for the property under consideration are additional relevant factors to consider.

(5) The criteria in the Tigard-Tualatin School District Facility Plan for school facility capacity have been considered when evaluating applications for a comprehensive plan amendment or for a residential land use regulation amendment. The Tigard-Tualatin School District's School Facility Plan criteria (formula) for new school capacity are:

(TCR - SMR) * CSR = NC
(NC * CFF) / CSP = MNP
(MNP or MPS) * CSP = AC

Where:

CR		Total number of classrooms.
MR		Special mandated classrooms.
SR		Average class size policy for regular rooms.
C		Normal capacity.
FF		Core facility factor (kitchen, cafeteria, restrooms, offices, gym, music, mechanical: 0.12 for K-8 schools and 0.15 for 9-12 schools.
SP		Average class size policy for portables.
NP		Maximum number of portables, rounded up to the nearest whole number, or
PS		Maximum number of portables allowed on site, as determined by existing school capacity, above, or allowed by the City of Tualatin through land use decisions such as, but not limited to, conditional use

		permits.
C		Additional capacity.

(6) Granting the amendment is consistent with the applicable State of Oregon Planning Goals and applicable Oregon Administrative Rules, including compliance with the Transportation Planning Rule TPR (OAR 660-012-0060).

(7) Granting the amendment is consistent with the Metropolitan Service District's Urban Growth Management Functional Plan.

(8) Granting the amendment is consistent with Level of Service F for the p.m. peak hour and E for the one-half hour before and after the p.m. peak hour for the Town Center 2040 Design Type (TDC Map 9-4), and E/E for the rest of the 2040 Design Types in the City's planning area.

(9) Granting the amendment is consistent with the objectives and policies regarding potable water, sanitary sewer, and surface water management pursuant to TDC 12.020, water management issues are adequately addressed during development or redevelopment anticipated to follow the granting of a plan amendment.

(10) The applicant has entered into a development agreement.

(a) This criterion shall apply only to an amendment specific to property within the Urban Planning Area (UPA), also known as the Planning Area Boundary (PAB), as defined in both the Urban Growth Management Agreement (UGMA) with Clackamas County and the Urban Planning Area Agreement (UPAA) with Washington County. TDC Map 9-1 illustrates this area.

(b) This criterion is applicable to any issues about meeting the criterion within 1.032(9).

Section 2. TDC 3.010 is amended to read as follows:

(1) The development of the Plan for Tualatin was based as much as possible on objective data that measured conditions within the planning area. To obtain this data, the planning process was divided into 2 phases, with the first phase being data collection and the second phase being the preparation of a plan based on the collected data. The data was collected in a document entitled Phase I - Technical Memoranda. The Technical Memoranda described data concerning numerous topics. Those topics are described as follows:

(a) Citizen Involvement
Citizen Participation

(b) Land use

Natural Resource Inventory
Geological Resources
Flood Plains, Drainage and Wetlands
Fishery Resources
Wildlife Resources
Wetland Protection Regulations
Ecologically Significant Natural Areas
Vegetation
Soils Inventory, Urban/Rural Conflicts
Air Quality, Pollution Potentials
Noise Quality, Pollution Potentials
Groundwater Resources, High Groundwater and Weak Soils
Historical and Cultural Resource Inventory
Land Use Summary
Existing Land Use
Buildable Land Summary
Residential, Commercial and Industrial Demand
Population Forecast
Housing
Commercial/Industrial
Urbanization
Housing Inventory
Energy Conservation

(c) Public Facilities
Transportation
Public Services
Water Supply
Sewerage
Storm Drainage
Flooding and Natural Hazards
Recreation and Open Space
Schools
Electrical, Gas and Utilities

(2) To portray material lending itself to graphic description, a series of clear mylar overlays were produced. This series of overlays was useful in describing to the advisory committees and the public much of the information necessary to reach planning decisions. The graphic overlays cover the following topics and are available for review at the Tualatin City Hall.

(a) Slope Analysis (indicates areas that may be natural hazard areas).

(b) Soils Classifications (indicates areas that may be natural hazard areas).

(c) Water Areas and Wetlands (indicates areas that may be natural hazard areas).

(d) Vegetation and Wildlife.

(e) Recreation and Open Space Inventory.

(f) Street Classifications and Capacities.

(g) Major Street Inventory.

(h) Existing Land Use.

(i) Water Service Areas.

(j) Sewer Service Areas.

(3) To briefly acquaint the reader with some of the data that has been used in the Plan, the following summary has been written. The summary briefly describes the data and initial findings produced in the first planning phase. For a detailed review of data used in this Plan, please refer directly to Phase I - Technical Memoranda, City of Tualatin Historic Resource Technical Study and Inventory 1992/1993, City of Tualatin Natural Resource Inventory and Local Wetlands Inventory 1995, 2001 Transportation System Plan (TSP) and 2012 TSP Update (TSP Technical Memorandum, December 2012), and NW Tualatin Concept Plan 2005.

Section 3. TDC 3.080 is amended to read as follows:

(1) Transportation.

The following is a summary of the current condition of the transportation modes serving Tualatin from the 2012 Tualatin Transportation System Plan Update (TSP Technical Memorandum, December 2012):

(a) **Pedestrian:** Pedestrian facility needs include: fill sidewalk gaps on several arterials and collector streets; narrow or obstructed sidewalks; wide or angled crosswalks at intersections; and difficult crossing on major roadways (SW Boones Ferry Road, SW Tualatin-Sherwood Road, and roadways in the downtown core). Most of the pedestrian crashes reported in the 5-year crash study time frame occurred on SW Boones Ferry Road, generally when a vehicle failed to yield for pedestrians. Most crashes occurred when a vehicle was turning. ~~Central Tualatin, areas around schools (with the notable exception of Tualatin Elementary), and newer residential and industrial development generally have good pedestrian facilities. Older roadways in the industrial area, and roadways around the fringes of the city tend to have little or no pedestrian facilities. Sections of~~

~~Boones Ferry Road, Nyberg Street east of I-5, and I-5 overpasses lack sidewalks on one or both sides. Multiple-use pathways are provided within a number of City parks and greenways.~~

(b) **Bicycle**: Existing bicycle facilities in Tualatin have a few gaps and challenging connections such as: difficult left-turn maneuvers; constrained environment; difficult areas with low bike visibility; bike lanes outside of turn lanes; obstacles within the bike lanes; and gaps in the network. In addition to these needs, there are a number of high-crash locations. Most crashes result in an injury to the bicyclist, and most occur on a dry roadway surface in daylight conditions. High-crash locations include SW Boones Ferry Road and SW Tualatin-Sherwood Road, as well as the SW Nyberg Road interchange ramps at I-5.~~Bicycle attractors, such as schools, parks, retail centers, and public facilities, are generally not well served from the City's residential areas due to a lack of continuous bicycle facilities, and high traffic volumes on many of the City's collector streets. Central Tualatin, for example, lacks bicycle lanes on most internal streets, and on many approach routes. Although residential neighborhoods have a well-connected system of bicycle routes and the industrial area of western Tualatin are generally well-served internally by bicycle facilities, bicycle facilities from these areas to other bicycle attractors have not yet been established~~.

(c) **Multi-use Paths**: Additional bicycle and pedestrian connections over the Tualatin River are needed to connect with existing regional paths, as well as to provide alternate routes to the one existing Ki-a-Kuts bridge that is exclusively for bicycles and pedestrians (from Tualatin Community Park to Durham City Park in Durham). Additionally, many of the existing multi-use paths are fragmented and do not connect; signs and other wayfinding guides are needed to inform bicyclists or pedestrians how to move among the various pathways, and from the pathways to on-street facilities. The planned multi-use path network is only half constructed; once the system is complete, the multi-use path network will be more comprehensive.

~~(c)~~(d) **Transit:** TriMet does not provide transit service within all areas of Tualatin or on all major corridors. No transit service is provided on SW Tualatin-Sherwood Road or SW Tualatin Road, and many residents in the western portion of the City live more than a mile from the nearest transit line. Many residents who do live near a bus line are not served by transit at regular intervals during the day. Because of the limitations of service during off-peak hours, noncommuting trips may be more difficult to complete using transit in Tualatin. Community feedback indicated the following specific needs for transit: service connecting the west side of Tualatin to the downtown core; Park-and-rides in the west and south areas of Tualatin; extended service hours, including weekend service; and more direct connections to places other than downtown Portland.

(h)(e) **Roadways**: Some of the existing roadways do not meet City, County, or State design standards. Further, a number of major roadways intersect with other roadways at a skew. This creates sight distance limitations and, thus, safety concerns.

The two most highly-traveled roadways are SW Tualatin-Sherwood Road and SW Nyberg Road with over 20,000 vehicles per day. SW Tualatin Road and SW Boones Ferry Road corridors have 10,000 vehicles daily at multiple locations. Additionally, SW Tualatin-Sherwood Road carries a large amount of heavy vehicles, around 11.5 percent, with SW Boones Ferry Road carrying 8.4 percent heavy vehicles (compared with the average road in the Portland Metro area, which typically carries 2-4 percent heavy vehicles). Appendix B of the TSP Technical Memorandum (December 2012) provides a full description of existing (2011) roadway conditions, while Appendix C provides a description of future (2035) forecasted roadway conditions.

In the existing conditions analysis only two intersections - SW Martinazzi Avenue and SW Sagert Street, as well as SW Teton Avenue and SW Tualatin Road, were found to have greater congestion than mobility standards allow. In the future (2035) the number of intersections not meeting operations standards grew to twelve.

Key needs identified for the street system include: improved roadway connectivity; improved travel time along congested corridors; intersection improvements; and upgrading roadway geometries. Additionally, safety is a concern for the community, and safety issues were identified at the following intersections: SW Tualatin-Sherwood Road and SW Boones Ferry Road, and SW Nyberg Street and I-5 southbound off ramps.~~Intersections at I-5 interchanges, on Highway 99W, and in Central Tualatin operate at or close to capacity. Four unsignalized intersections currently meet traffic signal warrants (Teton/Avery; Sagert/65th; Nyberg/65th; Sagert/Martinazzi). The I-5 and I-205 freeways, Tualatin-Sherwood Road, Boones Ferry Road, Tualatin Road, Martinazzi Avenue, and Avery Street all have sections operating at or near capacity. Crash patterns requiring further investigation were identified at three intersections: Tualatin-Sherwood Road/Martinazzi; Nyberg/I-5 southbound ramp; Lower Boones Ferry/I-5 southbound ramp.~~

(i)(f) **Freight Routes**: The needs of the freight system are consistent with those identified in the Street System Plan. Projects that address needs related to truck routes, either directly or by providing alternate routes that improve traffic operations along truck routes, serve the needs of the freight system.~~Traffic congestion on Tualatin-Sherwood Road slows freight movements to and through Tualatin. Sharp corners and residential~~

~~neighborhoods along parallel routes constrain the use of those routes as alternates to Tualatin-Sherwood Road.~~

~~(e)~~(g) **Rail**: Portland and Western Railroad (PNWR) owns and operates two freight rail lines within the City. One track (running north-south) accommodates both freight and the WES commuter rail, and an east-west line runs along the south side of SW Herman Road. As of November 2012 the east-west line carries one train daily in each direction, and the north south has two freight trains daily in addition to the WES trains. PNWR has no current plans to increase freight service through Tualatin. Although the east-west track runs adjacent to manufacturing areas, no rail sidings or other access to businesses are planned.~~The Portland & Western Railroad and Willamette & Pacific operate two lines through the City of Tualatin for the movement of freight. Track conditions meet state guidelines. Industrial-zoned land abuts the rail lines, providing opportunities for potential customers to locate next to rail service. Planning is underway to develop a Wilsonville-Beaverton commuter rail line that would have a station in Tualatin. The closest AMTRAK passenger rail stations are located in Portland and Salem.~~

~~(d)~~(h) **Pipelines and Transmission Systems**: A natural gas transmission pipeline and a gasoline pipeline cross through the City. There is no anticipated need to increase pipeline capacity or construct new pipelines through the City, and therefore no such improvements are proposed in the TSP.~~Electric transmission lines, and natural gas distribution lines serve the City. No issues have been identified with these facilities.~~

~~(f)~~(i) **Air**: There are no airports within the City of Tualatin, although several airports are located within 30 miles of the City: the Aurora State Airport, Hillsboro Municipal Airport, and Portland International Airport. These airports meet the commercial, freight, and business aviation needs of Tualatin residents. No plans are proposed to construct airport facilities within the City of Tualatin; existing airports are anticipated to continue serving the citizens of Tualatin adequately.~~There are several public general aviation airports that serve Tualatin. The closest airport is 12 miles south of Tualatin, in Aurora. The closest airport with scheduled passenger service is the Portland International Airport, 25 miles northeast of Tualatin.~~

~~(g)~~(j) **Water**~~Marine~~: The Tualatin River is the only large waterway within the City of Tualatin. ~~The river is not navigable from the Willamette River due to impassable areas and a diversion dam downstream.~~ The river is used primarily for recreation and is open for canoeing and kayaking. Therefore, the TSP does not include any specific policies, programs or projects for the Tualatin River as part of the transportation network. However, several projects are proposed in other sections of the TSP

Technical Memorandum (December 2012) to increase access to the river for recreation purposes.~~No navigable waterways are located in the vicinity of Tualatin. The closest marine facilities are located 12 miles to the north in Portland, Oregon.~~

(2) Sewer service areas. To assist in determining areas most suited to urban development, a sewer service area overlay was prepared to illustrate the feasibility of providing sewer service throughout the Tualatin Planning Area. The Study Area was divided into 4 categories of sewer service availability in order of increasing complexity and expense of service. In addition, properties that can be served by existing pumping stations are considered to have gravity-flow service available.

(3) Water service areas. As in the case of sewer service, the Tualatin Study Area was divided into 4 categories of water service availability. The 4 categories agreed closely with the 4 categories of sewer service. In addition to showing the degree of water service complexity and expense, the water service overlay depicts main transmission lines, reservoirs, water supply sources, and the approximate dividing line between the City's upper and lower water service levels.

(4) Storm drainage. The Tualatin Drainage Plan defines and describes areas of inadequate drainage throughout the Tualatin Study Area. The Plan, which was originally prepared in 1972, will need to be updated as part of the City's planning revision work, but the overall drainage patterns have not changed. The City's core area and the area along Boones Ferry Road, south of the core area, are the most critical from the standpoint of drainage. The former will be dealt with in conjunction with Urban Renewal Area improvements.

(5) Electrical service. The Study Area is well served with major Portland General Electric Co. (PGE) transmission lines. Line extensions to newly developing areas do not appear to be a problem.

(6) Gas service. The Tualatin area is well served by several large-capacity natural gas lines. The Northwest Natural Gas Co. has main trunk lines in the Bonneville Power Administration (BPA) right-of-way west of the Study Area. The City presently has a high percentage of natural gas use, which should be reviewed in light of probable future supply and cost.

(7) Telephone service. The Tigard-Tualatin area telephone system is presently overloading, causing delays in calling and some dissatisfaction among residents and businesses. The area is served by the General Telephone Co. A new central office is in operation in the Wilsonville area, reducing the overloading of the 638-exchanges. Because of recent and expected future growth in Tualatin, General Telephone Co. is proposing the development of a new central office in Tualatin, or the expansion of their Stafford office to handle the load.

(8) Schools. At this time, the existing Tualatin Elementary School is overcrowded. A new school in south Tualatin is planned to be completed for fall of 1979. This,

according to the School District, will relieve the overcrowding. There are no sites now for a third school, although the existing Comprehensive Plan indicates several potential locations. There are 3 general areas developing for residential use in the City. The southern part of the City will be served by the new school opening in 1979, as well as the existing school, which also serves the central area of the City. The 2 other areas are east of the freeway and west of the Tualatin Country Club. These should be the areas for future sites, depending upon projected population from future residential development. High school students in Tualatin are currently served by Tigard High School. According to the School District, a major high school in Tualatin is still many years away, but preliminary thinking for a site has begun. One small portion of the Study Area in the far southwest corner of the City is served by the Sherwood School District. A revision of boundaries may be necessary in this portion of the Study Area to conform the Tigard School District boundaries to those of the City.

(9) Parks.

(a) Developed. The only developed City park within the corporate City limits is the 23-acre Tualatin Community Park and a new 6.48-acre nature park. The Community Park provides for a broad range of activities for all ages and includes the Tualatin Community Center. Both parks are in the process of being improved.

(b) Undeveloped. There are 8 existing City park sites which are currently being developed.

(c) Future. Conceived as recreational possibilities for neighborhood and broader community use, 14 sites were inventoried. These sites are scattered throughout the urbanized areas of the City. Each site is unique in its own fashion, i.e., setting, topography, views, vegetation, access, or natural wildlife resources.

(10) Conservation management areas. These areas comprise some of the City's richest natural and scenic assets and should be maintained in their present rural character. Briefly, these areas are:

(a) The wetland marsh, bog and ponds.

(b) All the flood plain area generally below the 100-year flood line.

(c) All creek and drainageways.

(d) The Tualatin riverbank areas.

(11) Bikepaths and footpaths.

(a) An existing bike and footpath system has been implemented in some

sections of the City.

(b) Future extensions of the existing bike and footpath systems were proposed to provide the City with a complete network of trails. This system was mapped in overlay fashion as part of the Technical Memoranda.

(12) School recreational facilities.

(a) These are areas suitable for play areas for small children and some field activities for older children and adults. These sites would have to be developed via a joint use agreement between the City and the Tigard School District.

(b) Existing. Tualatin Elementary School.

(c) Future. New elementary school in south Tualatin and any additional elementary school sites.

(13) Other recreational facilities.

(a) Private. The Tualatin Country Club golf course provides a major private recreational facility in the City.

(b) Public. The City of Tigard maintains Cook Park across the Tualatin River, which is available to residents of Tualatin but has no direct access from Tualatin. The Tigard School District maintains a swim center at Tigard High School that is available for use by Tualatin residents.

(14) Views.

(a) Unlike the more distinctly contoured geographic sections of other parts of the urban area, Tualatin does not have spectacular views. Views of scenic areas in Tualatin are very subtle.

(b) Features. The most important views are of the drainages, bogs and wetlands; the Tualatin River; and outstanding groups of trees.

(c) Location. The most important view areas are the marsh and wetlands running in an east-westerly direction. In the southern portion of the City, there are occasional views through the vegetation to Mt. Hood, Mt. Scott, Kerr Mountain, Bull Mountain and Cooper Mountain. Particularly important views of Mt. Hood occur when looking easterly along Nyberg, Sagert and Avery Streets.

Section 4. The following definitions are amended alphabetically in TDC 31.060 to read as follows:

Barriers. Physical or topographic conditions that 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; where buildings or other existing development on adjacent lands physically preclude a connection now or in the future considering the potential for redevelopment; and 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, or the requirements of Titles 3 and 13 of the Metro Urban Growth Management Functional Plan (UGMFP).

Bike (Bicycle) Parking, Long-term. Facilities for parking bicycles for stays of more~~less~~ than four (4) hours and all-day/monthly.

Bike (Bicycle) Parking, Short-term. Facilities for parking bicycles for stays of less~~more~~ than four (4) hours ~~and all-day/monthly~~.

Major Driveway. Access is considered a major driveway when controlled by~~if a traffic impact analysis determines that~~ a traffic signal ~~is required~~.

Major Transit Stop. Existing and planned light rail stations, commuter rail stations and transit transfer stations, except for temporary facilities; other planned stops designated as major transit stops in TDC Chapter 11 (Figure 11-65); and existing stops which have or are planned for frequently scheduled fixed-route service.

Section 5. TDC 34.330 is amended to read as follows:

The following standards are minimum requirements for fences in a RL (Low Density Residential) or a RML (Medium Low Density Residential) Planning District, where an access-restricted lot line or property line abuts a public street classified as a major arterial, minor arterial, major collector, minor collector, or expressway by the Tualatin Functional Classification Plan, or abuts a state-owned interstate highway (I-5 or I-205).

(1) Subdivision or Partition of Property in a RL or RML Planning District.

Where property is the subject of a subdivision or partition application, and has an access-restricted property line(s) or lot line(s) that abuts a major arterial, minor arterial, major collector, minor collector, or expressway right-of-way or an interstate highway property line for a distance greater than 60 feet, a masonry fence shall be installed along the arterial/ collector/expressway/interstate highway frontage, in conformance with design standards set forth in TDC 34.340 and the fence standards set forth below:

(a) Required fencing shall be installed along the entire length of the access-restricted property line(s) or lot line(s) abutting the arterial/collector/expressway right-of-way or interstate highway property

line, except as provided in TDC 34.330(3), prior to issuance of any building permit on any parcel or lot created by the partition or subdivision.

(b) Except as provided in TDC 34.330(3), required fencing shall be located entirely outside of the public right-of-way or state-owned interstate highway property, and as close as physically possible to, approximately parallel with, either the property line or lot line abutting the arterial/collector/expressway right-of-way or interstate highway property line, or in the case of an arterial/collector/expressway street the ultimate right-of-way line, whichever is located furthest from the centerline of the street right-of-way.

(i) For public streets classified as an arterial/collector/expressway, as approved by the ~~City Engineer~~Community Development Director or their designee, the location of the ultimate right-of-way line shall be one-half of the right-of-way width specified in TDC Chapters 11 and ~~Chapter~~ 754 ~~of the Tualatin Development Code~~ for the appropriate classification of street, measured at right angles from the centerline of the actual street improvement, or measured at right angles from the centerline of the right-of-way, whichever method is determined most appropriate by the ~~City Engineer~~Community Development Director or their designee.

(ii) For public streets classified as an arterial/collector/expressway, if an owner is granted a variance from TDC 34.330(1)(b) standards, which results in a fence being located within the ultimate right-of-way area, the property owner shall execute a removal agreement, subject to City Council approval. The removal agreement shall provide that, after notice by the City, the property owner shall remove any structure, or portion thereof, that extends into the ultimate right-of-way, at no expense to the City. In case of default in that obligation, the City may cause such removal at the expense of the owner with all costs incurred to become a lien against such land or premises. The agreement shall also provide that the owner of the affected premises shall not be entitled to any damages or compensation in consequence of the City's exercise of its rights under the agreement. This provision shall not be construed as denying the owner of such property the right to just compensation for the unimproved value of any land taken for the widening of any street.

(c) Required fencing shall be installed such that stormwater drainage patterns and flow rates are not altered in a manner detrimental to property or persons.

(2) Replacement of Existing Fence, or Construction of New Fence in a RL or RML Planning District.

Where property is not the subject of a subdivision or partition application, and is developed with a single-family dwelling, and has an access-restricted property line or lot line that abuts a major arterial, minor arterial, major collector, minor collector, or expressway right-of-way, or interstate highway property line, the following fence standards apply:

(a) Replacement of an Existing Fence That Does Not Meet the Masonry Fence Standard.

Where an existing fence that does not meet the masonry fence standard set forth in TDC 34.340 is located approximately parallel with, and within ten feet of, an access-restricted property line or lot line that abuts an arterial/collector/ expressway right-of-way or interstate highway property line, AND more than 50 percent of fences that are constructed approximately parallel with, and within ten feet of, access-restricted property lines or lot lines that abut the same arterial/collector/expressway right-of-way line or interstate highway property line, in the interval between the nearest intersecting streets, or hypothetical extensions thereof in the case of interstate highways, located on both sides of the subject property (See Figure 34-1 for illustration), meet the masonry fence standard, then at the time that 60 percent or more of the length of the fence is removed, the entire length of the fence located along the arterial/collector/expressway/interstate highway frontage shall be removed and replaced with a fence that meets the masonry fence design standards set forth in TDC 34.340.

(i) Installation of required replacement fencing shall be complete within six months from the date that 60 percent or more of the length of the fence is removed;

(ii) Required fencing shall be located entirely outside of the public right-of-way or state-owned interstate highway property, and as close as physically possible to, approximately parallel with, the property line or lot line abutting the arterial/collector/expressway right-of-way or interstate highway property line, except as provided in TDC 34.330(3);

(iii) Required fencing shall be installed such that stormwater drainage patterns and flow rates are not altered in a manner detrimental to property or persons.

(b) Replacement or Repair of an Existing Fence that meets the Masonry Fence Standard.

Where an existing fence that meets the masonry fence standard set forth in TDC 34.340 is located approximately parallel with, and within ten feet of, an arterial/collector/expressway right-of-way or interstate highway property line, then at the time that any portion of the access-restricted property line or lot line that abuts a fence is removed, the fence shall be repaired or replaced in conformance with the masonry design standards set forth in TDC 34.340.

(i) Repair or replacement shall be complete within six months from the date that any portion of the fence is removed;

(ii) Required fencing shall be located entirely outside of the public right-of-way or state-owned interstate highway property, and as close as physically possible to, approximately parallel with, the property line or lot line abutting the arterial/collector/expressway right-of-way or interstate highway property line, except as provided in TDC 34.330(3);

(iii) Required fencing shall be installed such that stormwater drainage patterns and flow rates are not altered in a manner detrimental to property or persons.

(c) Construction of New Fence.

Where no existing fence is located approximately parallel with, and within ten feet of, an access-restricted property line or lot line that abuts an arterial/collector/expressway right-of-way or interstate highway property line, AND more than 50 percent of fences that are constructed approximately parallel with, and within ten feet of, access-restricted property lines or lot lines that abut the same arterial/collector/expressway right-of-way line or interstate highway property line, in the interval between the nearest intersecting streets, or hypothetical extensions thereof in the case of interstate highways, located on both sides of the subject property (See Figure 34-1 for illustration), meet the masonry fence standard, then any new fence that is constructed approximately parallel with, and within ten feet of, the access-restricted property line or lot line abutting the arterial/collector/expressway right-of-way or interstate highway property line, shall be in conformance with the required design standards set forth in TDC 34.340.

(i) Required fencing shall be located entirely outside of the public right-of-way or state-owned interstate highway property, and as close as physically possible to, approximately parallel with, the property line abutting the arterial/collector/expressway right-of-way

or interstate highway property line, except as provided in TDC 34.330(3);

(ii) Required fencing shall be installed such that stormwater drainage patterns and flow rates are not altered in a manner detrimental to property or persons.

(3) Exceptions to Fence Location or Configuration:

(a) For public streets classified as an arterial/collector/expressway, where the City Engineer determines that vehicular access is to be provided from the arterial/collector/expressway to a parcel or lot abutting the arterial/collector/expressway, the fence shall not be required along the arterial/collector/expressway frontage of that particular parcel or lot.

(b) For public streets classified as an arterial/collector/expressway, where the City Engineer determines that an opening or passage through the fence must be provided, the fence shall include such required opening. The same shall be provided in fences along state-owned interstate highways when required by the state or Tualatin Valley Fire & Rescue or the City Engineer.

(c) All vision clearance requirements set forth in TDC 73.400(16) shall be met.

(d) The City Engineer, in the case of public streets classified as an arterial/collector/expressway, or the state in the case of state-owned interstate highways, may require an alternate location or configuration of the fence alignment to accommodate stormwater facilities, easements, or other requirements, such as, but not limited to, bicycle paths, multi-use paths, or for maintenance purposes.

(e) For state-owned interstate highways, where an area of vegetation at least 200 linear feet in width runs parallel to the interstate highway and forms a visual, aesthetic or acoustic barrier, or land in a Natural Resource Protection Overlay (NRPO) district or other protected area as defined in TDC Chapter 72 runs parallel to the interstate highway, AND such land is located between the interstate highway property line and the developable area of a property being developed in the RL or RML Planning District, no fence shall be required. Where the area of vegetation is less than 200 linear feet in width, the required fence shall be located entirely outside the vegetated, NRPO or other protected area and as close as physically possible to, approximately parallel with, the edge of said vegetated, NRPO or other protected area on the developable portion of the property being developed.

Section 6. TDC 38.140 is amended to read as follows:

(1) No sign shall be permitted in the RL Planning District for permitted uses and conditional uses that allow single family dwellings except the following:

(a) Subdivision, home occupation and public transit shelter signs in accordance with TDC 38.110(15), (11) and (14).

(2) No sign shall be permitted in the RL Planning District for conditional uses other than single family dwellings except the following:

(a) Subdivision, home occupation and public transit shelter signs in accordance with TDC 38.110(15), (11) and (14).

(b) Monument signs are permitted. If used, the following standards apply.

(i) Number: One per frontage on a public street right-of-way, and no more than one on each frontage.

(ii) Number of Sides: No more than two.

(iii) Height Above Grade: No higher than five feet.

(iv) Area: No more than 18 square feet.

(v) Illumination: Indirect.

(vi) Location: No greater than 30 feet from the frontage property line along the public street right-of-way.

(vii) For churches the sign may be an internally illuminated mechanical readerboard provided it is on the frontage of an arterial or collector street designated in ~~the~~ TDC Chapter 11, ~~Table~~ Figure 11-~~2~~1, and the readerboard portion is no more than 75 percent of the allowed sign face area.

(c) Wall signs are permitted. If used, the following standards apply:

(i) Number: In addition to the monument signs permitted in TDC 38.140(2)(b) above, each building on the site is permitted one wall sign, provided that the building has no less than 2000 square feet of gross floor area.

(ii) Number of Sides: No more than one.

(iii) Height Above Grade: No higher than the height of the sign band.

(iv) Area: One wall sign on one of the buildings shall be no more than 16 square feet. Wall signs on all other buildings shall be no more than eight square feet.

(v) Illumination: Indirect.

(d) In place of one of the monument signs allowed in TDC 38.140(2)(b) above, public K-12 schools are permitted pole signs subject to the following standards:

(i) Number: One per school site. Not allowed on a public high school site where an electronic message display monument sign subject to TDC 38.140(2)(e) is present.

(ii) Number of Sides: No more than two.

(iii) Height Above Grade: No higher than 15 feet.

(iv) Height of Sign Face: No higher than five feet.

(v) Area: No more than 35 square feet.

(vi) Illumination: Internal or indirect.

(vii) Mechanical Readerboard: The sign may be a mechanical readerboard.

(viii) Location: Elementary school readerboards shall be on an arterial public street right-of-way frontage or a collector frontage if no arterial frontage exists.

(e) In addition to a monument sign allowed in TDC 38.140(2)(b) above, a public high school (Grades 9-12) on a property of 40 acres or larger in area is permitted one freestanding monument sign with an electronic message display subject to the following standards:

(i) Number: One per school site.

(ii) Number of Sides: No more than two.

(iii) Height Above Grade: No higher than 8 feet.

(iv) Height of Sign Face: No higher than 6 feet

(v) Area of Sign Face: No more than 32 square feet with the electric display occupying no more than 75% of the sign face area.

(vi) Illumination of non-electronic sign face: Internal including halo effect illumination.

(vii) Electronic Message display shall have a maximum transition time between messages of 2 seconds, have a minimum display time where the image remains static for a period of 20 seconds or more; have a maximum luminance of 500 candelas per square meter after sunset and before sunrise; and shall be equipped with an automatic dimming feature that adjusts for ambient light levels.

(viii) Time of Operation: Electronic message display is restricted from the hours of 10:00 pm. to 7:00 am.

(ix) Location: An electronic message display shall be located within 30 ft. of an arterial public street right-of-way frontage and no closer than 100 ft. to a residential property.

(f) In place of the wall signs allowed in TDC 38.140(2)(c) above, public schools are permitted wall signs subject to the following standards:

(i) Number: Each building on the school site is permitted wall signage on each elevation. One sign per elevation is allowed.

(ii) Number of Sides: No more than one.

(iii) Height Above Grade: No higher than the height of the sign band.

(iv) Height of Sign Face: No higher than five feet, except that one wall sign on the east elevation of the primary building at a public high school may be up to 10 feet in height.

(v) Area: No more than 75 square feet, except one wall sign on the east elevation of the primary building at a public high school shall not exceed 300 square feet.

(vi) Illumination: Internal or indirect.

(3) See TDC 38.110(5-15) for additional signage and if used, the standards of TDC 38.110(5-15) apply.

Section 7. TDC 38.240 is amended to read as follows:

(1) No sign shall be permitted in the ML, MG or MP Planning Districts for permitted and conditional uses except the following:

(a) Monument signs are permitted. If used, the following standards apply:

(i) Location on Site: No greater than 100 feet from the frontage property line along the public street right-of-way.

(ii) Number: One per frontage on a public street right-of-way with a maximum of two and no more than one on each frontage.

(iii) Number of Sides: No more than two.

(iv) Height Above Grade: No higher than 10 feet.

(v) Area: No more than 40 square feet.

(vi) Illumination: Indirect or internal.

(vii) For schools for kindergarten through 12 in a ML Planning District, one sign may be an internally illuminated mechanical readerboard provided it is on the frontage of an arterial or collector street designated in TDC Chapter 11, Figure 11-1~~Table 11-2~~ and the readerboard portion is no more than 75 percent of the allowed sign face area.

(b) Wall signs are permitted. If used, the following standards apply:

(i) Number: One on each owned or leased wall not to exceed two walls for each owned or leased space and not to exceed four elevations of each building.

(ii) Number of Sides: No more than one.

(iii) Height Above Grade: No higher than the height of the sign band.

(iv) Height of Each Letter, Number, Symbol or Logo: No higher than four feet.

(v)Area: No more than five percent of the wall's elevation provided that an area of at least 32 square feet is permitted and the maximum is 150 square feet.

(vi) Illumination: Indirect or internal.

(vii) In the MP District in place of one wall sign, one monument sign, in addition to the monument signs allowed in (a) above, is allowed, provided it is in the yard setback area abutting the wall where the wall sign would have been located, is within 100 feet of a primary public customer doorway in the wall where the wall sign would have been located and is at least 100 feet from any other monument sign.

(2) See TDC 38.110(5-17) for additional signage and if used, the standards of TDC 38.110(5-17) apply.

Section 8. TDC 38.250 is amended to read as follows:

(1) No sign shall be permitted in the IN Planning District for permitted and conditional uses except the following:

(a) Monument signs, as set forth in TDC 38.110(1), are permitted, subject to the following standards:

(i) Number: One per motor vehicle access to a public street right-of-way and no more than one at each motor vehicle access.

(ii) Location: Monument signs shall be located no further than 75 feet from motor vehicle access.

(iii) Number of Sides: No more than two.

(iv) Height Above Grade: No higher than eight feet.

(v) Area: Each permitted monument sign shall be no more than 32 square feet.

(vi) Illumination: Indirect or internal.

(vii) Electronic Message or Mechanical Readerboard is permitted in place of or as part of a permitted monument sign on the frontage of an arterial or collector street designated in ~~the~~ TDC Chapter 11, ~~Table 11-2~~ Figure 11-1, provided that the readerboard portion is no more than 75 percent of the allowed sign face area.

(b) Wall signs within a sign band, where the sign band is no higher than 17 feet from the grade used to measure height of structure, are permitted, as set forth in TDC 38.110(3), subject to the following standards:

(i) Number: Each building on site is permitted one wall sign per habitable floor elevation, provided that the building has no less than 2,000 square feet of gross floor area.

(ii) Number of Sides: No more than one.

(iii) Height Above Grade: No higher than the height of the sign band.

(iv) Area: Each wall sign shall be no more than 75 square feet.

(v) Height of Sign Face: No higher than five feet.

(vi) Illumination: Internal or indirect.

(c) Wall signs within a sign band, where the sign band is higher than 17 feet from the grade used to measure height of structure, are permitted, as set forth in TDC 38.110(3), subject to the following standards:

(i) Number: Each building on site is permitted one wall sign per habitable floor elevation, provided that the building has no less than 2,000 square feet of gross floor area.

(ii) Number of Sides: No more than one.

(iii) Height Above Grade: No higher than the height of the sign band.

(iv) Area: Each wall sign shall be no more than eight square feet.

(v) Height of Sign Face: No higher than three feet.

(vi) Illumination: Internal or indirect.

(d) See TDC 38.110(5-15) for additional signage and if used, the standards of TDC 38.110(5-15) apply.

Section 9. TDC 71.065 is amended to read as follows:

Except as otherwise provided for, or permitted, by the provisions of this chapter, and subject to the provisions of the Resource Management Plan, no permanent use of the Wetlands Protected Area (WPA) will be allowed other than passive nature study, wildlife protection and enhancement, the north-south collector road (90th Avenue) and pedestrian bridge through the Zidell property (2S1 23 100), and other activities compatible with the intent, purposes and objectives of this chapter above set forth. ~~The north-south collector shall be located according to Figure 11-2 of the Tualatin~~

~~Development Code.~~ The pedestrian bridge shall be located within 300 foot wide corridor west of the Pratt-Broome property (2S1 23 100).

Except as otherwise provided for, or permitted by the provisions of this chapter (and subject to the Resource Management Plan), no permanent use of the Sweek Pond Management Area (SPMA) will be allowed other than the following uses:

- Public uses;
- Habitat protection;
- Water supply protection;
- Enhancement;
- Restoration;
- Wetland resource protection;
- Historic houses such as the ("Hedges House") relocation;
- Environmental educational facility;
- Gardens;
- Landscaping;
- Trails;
- Parking lot;
- Lighting;
- Signing;
- Picnic facilities;
- Boardwalk with viewing platform into Sweek Pond;
- Access road east of Pond area; and
- Other uses deemed to be consistent with the Resource Management Plan.

All uses in the WPA and SPMA will be subject to the following provisions:

(1) Such permitted uses shall be in all cases and at all times remain subject to the provisions of TDC 71.090(2) and (3) of this chapter and to such other or further restrictions or conditions as may be, or become, reasonably necessary to afford to the owner(s) or to others entitled to possession or control of the area reasonable assurance that they will suffer or incur no loss, damage, expense or liability of any kind by reason of such uses or any activities undertaken in connection therewith.

(2) No discharge of firearms, trapping, poisoning, or intentional destruction of wildlife shall be permitted in the Wetlands Protection District (WPD).

(3) Annual monitoring of the number of plant and animal species and the number within each species occurring within the Wetlands Protection Area (WPA) and 40-foot setback within the Wetlands Fringe Area (WFA) may be undertaken by conservation groups under the supervision, or with the approval, of the Oregon Department of Fish and Wildlife.

(4) Uses occurring within the Wetlands Fringe Area (WFA) shall be restricted to those uses allowed by the primary planning district classifications and standards.

(5) Structures and other permanent improvements to land lying adjacent to the boundary of the Wetlands Protected Area (WPA) and Sweek Pond Management Area (SPMA) shall be located as far removed from such boundary as is consistent with the development objectives and plans of the owners or developers of such adjacent property, subject in all cases to the provisions of TDC 71.061 of this chapter.

(6) Where upland development occurs and immediately adjacent to the Wetlands Protected Area (WPA) and the 40-foot setback provided for by TDC 71.061, such development and usages associated therewith shall be effected in such a manner as to minimize to the greatest extent practicable, consistent with full development and usage of the Wetlands Fringe Area (WFA), disturbance of recognized valuable wildlife forms within the Wetlands Protected Area (WPA) by automobile, truck and pedestrian traffic, shipping and receiving activities, trash and refuse pickup or disposal activities, and outdoor production or manufacturing operations.

Section 10. TDC 71.067 is amended to read as follows:

All crossings of the Wetland Protection District have been completed and no additional crossings are contemplated.

~~(1) A new north-south collector street as more specifically described in Chapter 11 shall be permitted.~~

~~(2) Vehicle Access to the pond area of the Sweek Pond Management Area shall be provided by an access road located adjacent to the east side of such pond area. The right-of-way shall be 45 feet and the centerline shall be located within a 45 foot wide corridor, that being 22.5 feet on either side of the centerline described in Exhibit F. The access road shall be located so as to limit the impact on the Wetlands Protected Area (WPA) and the Sweek Pond Management Area (SPMA) as much as practicable. This access road shall be used to connect the RH/HR District on the east with the RH District on the west.~~

~~(3) A public pedestrian bridge over the Wetlands Protected Area is permitted, provided the bridge shall not impact an area of more than approximately 2,614 square feet within the WPA, shall be located within a corridor, described in Exhibit G. the pedestrian bridge shall be located so as to limit the impact on the Wetlands Protected Area (WPA) as much as practicable.~~

Section 11. TDC 73.160 is amended to read as follows:

The following standards are minimum requirements for commercial, industrial, public and semi-public development, and it is expected that development proposals shall meet or exceed these minimum requirements.

(1) Pedestrian and Bicycle Circulation.

(a) For commercial, public and semi-public uses:

(i) a walkway shall be provided between the main entrance to the building and any abutting public right-of-way of an arterial or collector street where a transit stop is designated or provided. The walkway shall be a minimum of 6 feet wide and shall be constructed of concrete, asphalt, or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable;

(ii) walkways shall be provided between the main building entrances and other on-site buildings and accessways. The walkways shall be a minimum of 6 feet wide and shall be constructed of concrete, asphalt, or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable;

(iii) walkways through parking areas, drive aisles, and loading areas shall be visibly raised and of a different appearance than the adjacent paved vehicular areas;

(iv) accessways shall be provided as a connection from the development's internal bikeways and walkways to all of the following locations that apply: abutting arterial or collector streets upon which transit stops or bike lanes are provided or designated; abutting undeveloped residential or commercial areas; adjacent undeveloped sites where an agreement to provide an accessway connection exists; and to abutting publicly-owned land intended for general public use, including schools;

(v) fences or gates which prevent pedestrian and bike access shall not be allowed at the entrance to or exit from any accessway.

(vi) bikeways shall be provided which link building entrances and bike facilities on the site with the adjoining public right-of-way and accessways.

(vii) Outdoor Recreation Access Routes shall be provided between the development's walkway and bikeway circulation system and parks, bikeways and greenways where a bike or pedestrian path is designated.

(b) For Industrial Uses:

(i) a walkway shall be provided from the main building entrance to sidewalks in the public right-of-way and other on-site buildings and accessways. The walkway shall be a minimum of 5 feet wide and constructed of concrete, asphalt, or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable.

(ii) Walkways through parking areas, drive aisles and loading areas shall have a different appearance than the adjacent paved vehicular areas.

(iii) Accessways shall be provided as a connection between the development's walkway and bikeway circulation system and an adjacent bike lane;

(iv) Accessways may be gated for security purposes;

(v) Outdoor Recreation Access Routes shall be provided between the development's walkway and bikeway circulation system and parks, bikeways and greenways where a bike or pedestrian path is designated.

(c) Curb ramps shall be provided wherever a walkway or accessway crosses a curb.

(d) Accessways shall be a minimum of 8 feet wide and constructed in accordance with the Public Works Construction Code if they are public accessways, and if they are private accessways they shall be constructed of asphalt, concrete or a pervious surface such as pervious asphalt or concrete, pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable.

(e) Accessways to undeveloped parcels or undeveloped transit facilities need not be constructed at the time the subject property is developed. In such cases the applicant for development of a parcel adjacent to an undeveloped parcel shall enter into a written agreement with the City guaranteeing future performance by the applicant and any successors in interest of the property being developed to construct an accessway when the adjacent undeveloped parcel is developed. The agreement shall be subject to the City's review and approval.

(f) Where a bridge or culvert would be necessary to span a designated greenway or wetland to provide a connection to a bike or pedestrian path, the City may limit the number and location of accessways to reduce the impact on the greenway or wetland.

(g) Accessways shall be constructed, owned and maintained by the property owner.

(2) Drive-up Uses.

(a) Drive-up uses shall provide a minimum stacking area clear of the public right-of-way and parking lot aisles from the window serving the vehicles as follows:

(i) Banks--each lane shall provide a minimum capacity for five automobiles.

(ii) Restaurants--each lane shall provide a minimum capacity for eight automobiles.

(iii) Other Drive-Up Uses--each lane shall provide a minimum capacity for two to eight automobiles, as determined through the architectural review process.

(iv) For purposes of this Section, an automobile shall be considered no less than twenty feet in length. The width and turning radius of drive-up aisles shall be approved through the architectural review process.

(b) Parking maneuvers shall not occur in the stacking area. The stacking area shall not interfere with safe and efficient access to other parking areas on the property.

(c) Locate drive-up aisles and windows a minimum of 50 feet from residential planning districts to avoid adverse impacts. A wall or other visual or acoustic may be required through the architectural review process.

(3) Safety and Security.

(a) Locate windows and provide lighting in a manner which enables tenants, employees and police to watch over pedestrian, parking and loading areas.

(b) In commercial, public and semi-public development and where possible in industrial development, locate windows and provide lighting in a manner which enables surveillance of interior activity from the public right-of-way.

(c) Locate, orient and select on-site lighting to facilitate surveillance of on-site activities from the public right-of-way without shining into public rights-of-way or fish and wildlife habitat areas.

(d) Provide an identification system which clearly locates buildings and their entries for patrons and emergency services.

(e) Shrubs in parking areas must not exceed 30 inches in height. Tree canopies must not extend below 8 feet measured from grade.

(f) Above ground sewer or water pumping stations, pressure reading stations, water reservoirs, electrical substations, and above ground natural gas pumping stations shall provide a minimum 6' tall security fence or wall.

(4) Service, Delivery and Screening.

(a) On and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners shall be screened with sight obscuring fences, walls or landscaping.

(b) Outdoor storage, excluding mixed solid waste and source separated recyclables storage areas listed under TDC 73.227, shall be screened with a sight obscuring fence, wall, berm or dense evergreen landscaping.

(c) Above ground pumping stations, pressure reading stations, water reservoirs; electrical substations, and above ground natural gas pumping stations shall be screened with sight-obscuring fences or walls and landscaping.

(5) The Federal Americans with Disabilities Act (ADA) applies to development in the City of Tualatin. Although TDC, Chapter 73 does not include the Oregon Structural Specialty Code' s (OSSC) accessibility standards as requirements to be reviewed during the Architectural Review process, compliance with the OSSC is a requirement at the Building Permit step. It is strongly recommended all materials submitted for Architectural Review show compliance with the OSSC.

(6) (a) All industrial, institutional, retail and office development on a transit street designated in TDC Chapter 11 (Figure ~~11-6~~11-5) shall provide either a transit stop pad on-site, or an on-site or public sidewalk connection to a transit stop along the subject property's frontage on the transit street.

(b) In addition to (a) above, new retail, office and institutional uses abutting major transit stops as designated in TDC Chapter 11 (Figure ~~11-6~~11-5) shall:

(i) locate any portion of a building within 20 feet of the major transit stop or provide a pedestrian plaza at the transit stop;

(ii) provide a reasonably direct pedestrian connection between the major transit stop and a building entrance on the site;

(iii) provide a transit passenger landing pad accessible to disabled persons;

(iv) provide an easement or dedication for a passenger shelter as determined by the City; and

(v) provide lighting at the major transit stop.

Section 12. TDC 73.370 is amended to read as follows:

(1) General Provisions.

(a) At the time of establishment of a new structure or use, or change in use, or change in use of an existing structure, within any planning district of the City, off-street parking spaces, off-street vanpool and carpool parking spaces for commercial, institutional and industrial uses, off-street bicycle parking, and off-street loading berths shall be as provided in this and following sections, unless greater requirements are otherwise established by the conditional use permit or the Architectural Review process, based upon clear findings that a greater number of spaces are necessary at that location for protection of public health, safety and welfare or that a lesser number of vehicle parking spaces will be sufficient to carry out the objectives of this section. In the Central Design District, the Design Guidelines of TDC 73.610 shall be considered. In case of conflicts between guidelines or objectives in TDC Chapter 73, the proposal shall provide a balance.

(b) At the time of enlargement of an existing multi-family residential, commercial, institutional or industrial structure or use, TDC 73.370 shall apply to the existing and enlarged structure or use.

(c) Except where otherwise specified, the floor area measured shall be the gross floor area of the building primary to the function of the particular use of the property other than space devoted to off-street parking or loading.

(d) Where employees are specified, the term shall apply to all persons, including proprietors, working on the premises during the peak shift.

(e) Calculations to determine the number of required parking spaces and loading berths shall be rounded to the nearest whole number.

(f) If the use of a property changes, thereby increasing off-street parking or loading requirements, the increased parking/loading area shall be provided prior to commencement of the new use.

(g) Parking and loading requirements for structures not specifically listed herein shall be determined by the Community Development Director, based upon requirements of comparable uses listed.

(h) When several uses occupy a single structure, the total requirements for off-street parking may be the sum of the requirements of the several uses computed separately or be computed in accordance with TDC 73.370(1)(m), Joint Use Parking.

(i) Off-street parking spaces for dwellings shall be located on the same lot with the dwelling. Other required parking spaces may be located on a separate parcel, provided the parcel is not greater than five hundred (500) feet from the entrance to the building to be served, measured along the shortest pedestrian route to the building. The applicant must prove that the parking located on another parcel is functionally located and that there is safe vehicular and pedestrian access to and from the site. The parcel upon which parking facilities are located shall be in the same ownership as the structure.

(j) Required parking spaces shall be available for the parking of operable passenger automobiles of residents, customers, patrons and employees and shall not be used for storage of vehicles or materials or for the parking of trucks used in conducting the business.

(k) Institution of on-street parking, where none is previously provided, shall not be done solely for the purpose of relieving crowded parking lots in commercial or industrial planning districts.

(l) Parking facilities may be shared by users on adjacent parcels if the following standards are met:

(i) One of the parcels has excess parking spaces, considering the present use of the property; the other parcel lacks sufficient area for required parking spaces.

(ii) The total number of parking spaces meets the standards for the sum of the number of spaces which would be separately required for each use.

(iii) Legal documentation, to the satisfaction of the City Attorney, shall be submitted verifying permanent use of the excess parking area on one lot by patrons of the uses deficient in required parking area.

(iv) Physical access between adjoining lots shall be such that functional and reasonable access is actually provided to uses on the parcel deficient in parking spaces.

(v) Adequate directional signs shall be installed specifying the joint parking arrangement.

(vi) Areas in the Natural Resource Protection Overlay District, Other Natural Areas identified in Figure 3-4 of the Parks and Recreation Master Plan, or a Clean Water Services Vegetated Corridor would be better protected.

(m) Joint Use Parking. Joint use of parking spaces may occur where two or more separate developments or multiple uses in a development are able to jointly use some or all of the same required parking spaces because their parking demands occur at different times. Joint use of parking spaces may be allowed if the following standards are met:

(i) There shall be no substantial conflict in the principal operating hours of the buildings or uses for which the joint use parking is proposed. Future change of use, such as expansion of a building or establishment of hours of operation which conflict with or affect a joint use parking agreement are prohibited, unless approval is obtained through the Architectural Review process;

(ii) The joint use parking spaces shall be located no more than 500 feet from a building or use to be served by the joint use parking;

(iii) The number and location of parking spaces, hours of use and changes in operating hours of uses subject to joint use shall be approved through the Architectural Review process;

(iv) Legal documentation, to the satisfaction of the City Attorney, shall be submitted verifying the joint use parking between the separate developments. Joint use parking agreements may include provisions covering maintenance, liability, hours of use and cross easements; and

(v) The City Attorney approved legal documentation shall be recorded by the applicant at the Washington or Clackamas County Recorder's Office and a copy of the recorded document submitted to the Planning Department prior to issuance of a building permit.

(vi) Areas in the Natural Resource Protection Overlay District, Other Natural Areas identified in Figure 3-4 of the Parks and Recreation Master Plan, or a Clean Water Services Vegetated Corridor would be better protected.

(n) Bicycle parking facilities shall ~~either be~~ include long-term parking that consists of covered, secure stationary racks, lockable enclosures, or rooms

(indoor or outdoor) in which the bicycle is stored, ~~or~~ and short-term parking provided by secure stationary racks (covered or not covered), which accommodate a bicyclist's lock securing the frame and both wheels. The Community Development Director, their designee, or the Architectural Review Board may approve a form of bicycle parking not specified in these provisions but that meets the needs of long-term and/or short-term parking pursuant to Section 73.370.

(o) Each bicycle parking space shall be at least 6 feet long and 2 feet wide, and overhead clearance in covered areas shall be at least 7 feet, unless a lower height is approved through the Architectural Review process.

(p) A 5-foot-wide bicycle maneuvering area shall be provided beside or between each row of bicycle parking. It shall be constructed of concrete, asphalt or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be maintained.

(q) Access to bicycle parking shall be provided by an area at least 3 feet in width. It shall be constructed of concrete, asphalt or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be maintained.

(r) Required bicycle parking shall be located in convenient, secure, and well-lighted locations approved through the Architectural Review process. Lighting, which may be provided, shall be deflected to not shine or create glare into street rights-of-way or fish and wildlife habitat areas.

(s) Long-term b~~B~~icycle parking facilities may be provided inside a building in suitable secure and accessible locations.

(t) Bicycle parking may be provided within the public right-of-way in the Core Area Parking District subject to approval of the City Engineer and provided it meets the other requirements for bicycle parking.

(u) Bicycle parking areas and facilities shall be identified with appropriate signing as specified in the Manual on Uniform Traffic Control Devices (MUTCD) (latest edition). At a minimum, bicycle parking signs shall be located at the main entrance and at the location of the bicycle parking facilities.

(v) Required bicycle parking spaces shall be provided at no cost to the bicyclist, or with only a nominal charge for key deposits, etc. This shall not preclude the operation of private for-profit bicycle parking businesses.

(w) Parking on existing residential, commercial and industrial development may be redeveloped as a transit facility as a way to encourage the development of transit supportive facilities such as bus stops and pullouts, bus shelters and park and ride stations. Parking spaces converted to such uses in conjunction with the transit agency and approved through the Architectural Review process will not be required to be replaced.

(x) Required vanpool and carpool parking shall meet the 9-foot parking stall standards in Figure 73-1 and be identified with appropriate signage.

(2) Off-Street Parking Provisions.

(a) The following are the minimum and maximum requirements for off-street motor vehicle parking in the City, except for minimum parking requirements for the uses in TDC 73.370(2)(a) (Residential Uses: iii, iv, v, vi, vii; Places of Public Assembly: I, ii, iv; Commercial Amusements: I, ii; and Commercial: I, ii, xi, xii, xiv) within the Core Area Parking District (CAPD). Minimum standards for off-street motor vehicle parking for the uses in 73.370(2) (a) Residential Uses: iii, iv, v, vi, vii; Places of Public Assembly: I, ii, iv; Commercial Amusements: I, ii; and Commercial: I, ii, xi, xii, xiv in the CAPD are in TDC 73.370(2)(b). The maximum requirements are divided into Zone A and Zone B, as shown on the Tualatin Parking Zone Map, Figure 73-3. The following are exempt from calculation of maximum parking requirements: parking structures; fleet parking; parking for vehicles for sale, lease or rent; car/vanpool parking; dedicated valet parking; and user-paid parking.

Section 13. TDC 73.370 is amended to read as follows:

(1) General Provisions.

(a) At the time of establishment of a new structure or use, or change in use, or change in use of an existing structure, within any planning district of the City, off-street parking spaces, off-street vanpool and carpool parking spaces for commercial, institutional and industrial uses, off-street bicycle parking, and off-street loading berths shall be as provided in this and following sections, unless greater requirements are otherwise established by the conditional use permit or the Architectural Review process, based upon clear findings that a greater number of spaces are necessary at that location for protection of public health, safety and welfare or that a lesser number of vehicle parking spaces will be sufficient to carry out the objectives of this section. In the Central Design District, the Design Guidelines of TDC 73.610 shall be considered. In case of conflicts between guidelines or objectives in TDC Chapter 73, the proposal shall provide a balance.

(b) At the time of enlargement of an existing multi-family residential, commercial, institutional or industrial structure or use, TDC 73.370 shall apply to the existing and enlarged structure or use.

(c) Except where otherwise specified, the floor area measured shall be the gross floor area of the building primary to the function of the particular use of the property other than space devoted to off-street parking or loading.

(d) Where employees are specified, the term shall apply to all persons, including proprietors, working on the premises during the peak shift.

(e) Calculations to determine the number of required parking spaces and loading berths shall be rounded to the nearest whole number.

(f) If the use of a property changes, thereby increasing off-street parking or loading requirements, the increased parking/loading area shall be provided prior to commencement of the new use.

(g) Parking and loading requirements for structures not specifically listed herein shall be determined by the Community Development Director, based upon requirements of comparable uses listed.

(h) When several uses occupy a single structure, the total requirements for off-street parking may be the sum of the requirements of the several uses computed separately or be computed in accordance with TDC 73.370(1)(m), Joint Use Parking.

(i) Off-street parking spaces for dwellings shall be located on the same lot with the dwelling. Other required parking spaces may be located on a separate parcel, provided the parcel is not greater than five hundred (500) feet from the entrance to the building to be served, measured along the shortest pedestrian route to the building. The applicant must prove that the parking located on another parcel is functionally located and that there is safe vehicular and pedestrian access to and from the site. The parcel upon which parking facilities are located shall be in the same ownership as the structure.

(j) Required parking spaces shall be available for the parking of operable passenger automobiles of residents, customers, patrons and employees and shall not be used for storage of vehicles or materials or for the parking of trucks used in conducting the business.

(k) Institution of on-street parking, where none is previously provided, shall not be done solely for the purpose of relieving crowded parking lots in commercial or industrial planning districts.

(l) Parking facilities may be shared by users on adjacent parcels if the following standards are met:

(i) One of the parcels has excess parking spaces, considering the present use of the property; the other parcel lacks sufficient area for required parking spaces.

(ii) The total number of parking spaces meets the standards for the sum of the number of spaces which would be separately required for each use.

(iii) Legal documentation, to the satisfaction of the City Attorney, shall be submitted verifying permanent use of the excess parking area on one lot by patrons of the uses deficient in required parking area.

(iv) Physical access between adjoining lots shall be such that functional and reasonable access is actually provided to uses on the parcel deficient in parking spaces.

(v) Adequate directional signs shall be installed specifying the joint parking arrangement.

(vi) Areas in the Natural Resource Protection Overlay District, Other Natural Areas identified in Figure 3-4 of the Parks and Recreation Master Plan, or a Clean Water Services Vegetated Corridor would be better protected.

(m) Joint Use Parking. Joint use of parking spaces may occur where two or more separate developments or multiple uses in a development are able to jointly use some or all of the same required parking spaces because their parking demands occur at different times. Joint use of parking spaces may be allowed if the following standards are met:

(i) There shall be no substantial conflict in the principal operating hours of the buildings or uses for which the joint use parking is proposed. Future change of use, such as expansion of a building or establishment of hours of operation which conflict with or affect a joint use parking agreement are prohibited, unless approval is obtained through the Architectural Review process;

(ii) The joint use parking spaces shall be located no more than 500 feet from a building or use to be served by the joint use parking;

(iii) The number and location of parking spaces, hours of use and changes in operating hours of uses subject to joint use shall be approved through the Architectural Review process;

(iv) Legal documentation, to the satisfaction of the City Attorney, shall be submitted verifying the joint use parking between the separate developments. Joint use parking agreements may include provisions covering maintenance, liability, hours of use and cross easements; and

(v) The City Attorney approved legal documentation shall be recorded by the applicant at the Washington or Clackamas County Recorder's Office and a copy of the recorded document submitted to the Planning Department prior to issuance of a building permit.

(vi) Areas in the Natural Resource Protection Overlay District, Other Natural Areas identified in Figure 3-4 of the Parks and Recreation Master Plan, or a Clean Water Services Vegetated Corridor would be better protected.

(n) Bicycle parking facilities shall either be lockable enclosures in which the bicycle is stored, or secure stationary racks which accommodate a bicyclist's lock securing the frame and both wheels.

(o) Each bicycle parking space shall be at least 6 feet long and 2 feet wide, and overhead clearance in covered areas shall be at least 7 feet, unless a lower height is approved through the Architectural Review process.

(p) A 5-foot-wide bicycle maneuvering area shall be provided beside or between each row of bicycle parking. It shall be constructed of concrete, asphalt or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be maintained.

(q) Access to bicycle parking shall be provided by an area at least 3 feet in width. It shall be constructed of concrete, asphalt or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be maintained.

(r) Required bicycle parking shall be located in convenient, secure, and well-lighted locations approved through the Architectural Review process. Lighting, which may be provided, shall be deflected to not shine or create glare into street rights-of-way or fish and wildlife habitat areas.

(s) Bicycle parking facilities may be provided inside a building in suitable secure and accessible locations.

(t) Bicycle parking may be provided within the public right-of-way in the Core Area Parking District subject to approval of the City Engineer and provided it meets the other requirements for bicycle parking.

(u) Bicycle parking areas and facilities shall be identified with appropriate signing as specified in the *Manual on Uniform Traffic Control Devices* (MUTCD) (latest edition). At a minimum, bicycle parking signs shall be located at the main entrance and at the location of the bicycle parking facilities.

(v) Required bicycle parking spaces shall be provided at no cost to the bicyclist, or with only a nominal charge for key deposits, etc. This shall not preclude the operation of private for-profit bicycle parking businesses.

(w) Parking on existing residential, commercial and industrial development may be redeveloped as a transit facility as a way to encourage the development of transit supportive facilities such as bus stops and pullouts, bus shelters and park and ride stations. Parking spaces converted to such uses in conjunction with the transit agency and approved through the Architectural Review process will not be required to be replaced.

(x) Required vanpool and carpool parking shall meet the 9-foot parking stall standards in Figure 73-1 and be identified with appropriate signage.

(2) Off-Street Parking Provisions.

(a) The following are the minimum and maximum requirements for off-street motor vehicle parking in the City, except for minimum parking requirements for the uses in TDC 73.370(2)(a) (Residential Uses: iii, iv, v, vi, vii; Places of Public Assembly: I, ii, iv; Commercial Amusements: I, ii; and Commercial: I, ii, xi, xii, xiv) within the Core Area Parking District (CAPD). Minimum standards for off-street motor vehicle parking for the uses in 73.370(2) (a) Residential Uses: iii, iv, v, vi, vii; Places of Public Assembly: I, ii, iv; Commercial Amusements: I, ii; and Commercial: I, ii, xi, xii, xiv in the CAPD are in TDC 73.370(2)(b). The maximum requirements are divided into Zone A and Zone B, as shown on the Tualatin Parking Zone Map, Figure 73-3. The following are exempt from calculation of maximum parking requirements: parking structures; fleet parking; parking for vehicles for sale, lease or rent; car/vanpool parking; dedicated valet parking; and user-paid parking.

(b) The following are the minimum requirements for off-street motor vehicle parking in the Core Area Parking District (CAPD) for the uses in TDC 73.370(2)(a)(Residential Uses: iii, iv, v, vi, vii; Places of Public Assembly: i, ii, iv; Commercial Amusements: i, ii; and Commercial: i, ii, xi, xii, xiv).

(i) Core Area Parking District (CAPD) off-street motor vehicle parking standards are required at 75% of the applicable off-street motor

vehicle parking requirements identified in TDC 73.370(1)(h), 73.370(1)(m) and 73.370(2)(a).

(ii) Off-street motor vehicle parking requirements: (Refer to Core Area Parking District Ordinance TMC Chapter 11-3 for fee schedules and regulations regarding the Core Area Parking District.)

(A) Commercial, semi-public, and public uses except as outlined under TDC 73.370(2)(b)(ii)(B). A minimum of 75% of required CAPD off-street motor vehicle parking shall be provided for the first two floors of gross leasable area for commercial, semi-public, and public uses above grade, except as outlined under TDC 73.370(2)(b)(ii)(B).

(B) Development of a publicly-owned community center on Tract 8 of the Tualatin Commons shall be exempt from providing off-street motor vehicle parking and the impact fee within the CAPD.

(C) Residential Uses:

(1) Common-wall Dwellings including townhouses and condominiums. A minimum of 75% of required CAPD off-street motor vehicle parking shall be provided.

(2) Multi-Family Dwellings. A minimum of 75% of required CAPD off-street motor vehicle parking shall be provided for the first two floors of living units, above grade.

(3) Retirement Housing, Residential Homes and Residential Facilities. A minimum of 75% of required CAPD off-street motor vehicle parking shall be provided for the first two floors of dwelling units, above grade.

(iii) CAPD off-street motor vehicle parking required under TDC 73.370(2)(b)(i) shall be provided for residential uses and gross leasable area of commercial, semi-public, and public uses below grade and above the second floor, except as outlined under TDC 73.370(2)(b)(ii)(B).

(iv) At the time of enlargement of an existing structure or use there shall be no net loss of existing off-street motor vehicle parking in addition to providing new off-street motor vehicle parking required under TDC 73.370(2)(b).

(v) Outdoor dining facilities are exempt from providing off-street motor vehicle parking within the CAPD.

(3) Off-Street Vanpool and Carpool Parking Provisions.

The minimum number of off-street Vanpool and Carpool parking for commercial, institutional and industrial uses is as follows:

Number of Required Parking Spaces	Number of Vanpool or Carpool Spaces
0 to 10	1
10 to 25	2
26 and greater	1 for each 25 spaces.

USE	MINIMUM MOTOR VEHICLE PARKING REQUIREMENT	MAXIMUM MOTOR VEHICLE PARKING REQUIREMENT	BICYCLE PARKING REQUIREMENT	PERCENTAGE OF BICYCLE PARKING TO BE COVERED
Residential Uses:				
(i) Detached single-family dwelling, Residential home, Residential facilities (located in low density (RL) planning districts Townhouse	2.00 vehicle parking spaces per dwelling unit, Residential Home or Residential Facility (stalls or spaces within a residential garage not included, except as approved in Architectural Review).	None	None required	N/a
(ii) Multi-family dwellings in subdivisions	1.50 spaces per unit, in addition to garage	None	Developments with four or more units; none required if a garage is provided as an integral element of a unit; otherwise 1.00 space per unit	100
(iii) Multi-family dwellings in complexes with private internal driveways	1.0 space/studio, 1.25 space/1 bedr., 1.50 space/2 bedr., 1.75 space/3+bedr. in addition to garage	None	Developments with four or more units; none required if a garage is provided as an integral element of a unit; otherwise, 1.00 space per unit	100
(iv) Retirement housing facility	1.00 space per dwelling unit	None	0.50 space per unit	50

USE	MINIMUM MOTOR VEHICLE PARKING REQUIREMENT	MAXIMUM MOTOR VEHICLE PARKING REQUIREMENT	BICYCLE PARKING REQUIREMENT	PERCENTAGE OF BICYCLE PARKING TO BE COVERED
(v) Boarding house, lodging house	1.00 space per guest house accommodation	None	0.25 space per guest house accommodation	50
(vi) Congregate care, assisted living and residential care facilities	0.50 space per dwelling unit	None	2, or 0.20 spaces per dwelling unit, whichever is greater	50
(vii) Residential facilities (located in other than low density residential planning districts)	1.00 space per 3 beds, plus 1.00 space per employee	None	2, or 1.00 space for every 6 beds, whichever is greater	50
(viii) Dwelling units within the Central Design District except as specified in (d), (e), and (f) above	1.50 space per dwelling unit, including garage	None	Developments with four or more units; none required if a garage is provided as an integral element of a unit; otherwise 1.00 space per unit	100
Institutions:				
(i) Convalescent home, nursing home or sanitarium	1.00 space per 2 beds for patients or residents	None	2, or 1.00 space for every 6 beds, whichever is greater	50
(ii) Hospital	1.00 space per 500 sq. ft. of gross floor area	None	1 space per 1000 gross sq. ft.	First 10 spaces or 40%, whichever is greater

USE	MINIMUM MOTOR VEHICLE PARKING REQUIREMENT	MAXIMUM MOTOR VEHICLE PARKING REQUIREMENT	BICYCLE PARKING REQUIREMENT	PERCENTAGE OF BICYCLE PARKING TO BE COVERED
Places of Public Assembly:				
(i) Library, reading room	1.00 space per 400 sq. ft. of public area	None	2, or 1.5 spaces per 1000 gross sq. ft., whichever is greater	10
(ii) Nursery, primary, elementary or middle school, child day care center	2.00 spaces per employee	None	4, or 1.00 space per 5 students based on the design capacity of the facility, whichever is greater	75
(iii) Senior high school	0.2 spaces per student ~~plus 1.00 space per~~ and staff	Zone A and Zone B: 0.3 spaces per student plus 1.00 space per staff	4, or 1.00 space per 5 students based on the design capacity of the facility, whichever is greater	25
(iv) Other places of public assembly, including churches	1.00 space per 4 seats or 8 feet of bench length	Zone A: 0.6 spaces per seat Zone B: 0.8 spaces per seat	1 space per 40 seats or 80 feet of bench length	25
Commercial Amusements:				
(i) Theater	1.00 space per 4 seats	Zone A: 0.4 spaces per seat Zone B: 0.5 spaces per seat	1 space per 30 seats	10

USE	MINIMUM MOTOR VEHICLE PARKING REQUIREMENT	MAXIMUM MOTOR VEHICLE PARKING REQUIREMENT	BICYCLE PARKING REQUIREMENT	PERCENTAGE OF BICYCLE PARKING TO BE COVERED
(ii) Bowling alley	5.00 spaces per lane	None	4, or 0.50 spaces per lane, whichever is greater	40
(iii) Dance hall, skating rink	4.3 spaces per 1000 sq. ft. gross floor area	Zone A: 5.4 spaces per 1000 sq. ft. gross floor area Zone B: 6.5 spaces per 1000 sq. ft. gross floor area	2 spaces per 1000 sq. ft. of floor area	50
(iv) Racquet courts, health club	1.00 space per 1000 sq. ft. gross floor area	Zone A: 1.3 spaces per 1000 sq. ft. gross floor area Zone B: 1.5 spaces per 1000 sq. ft. gross floor area	2 spaces per 1000 sq. ft. of exercise area	50
Commercial:				
(i) Retail shops (under 100,000 sq. ft. gross floor area)	4.00 spaces per 1000 sq. ft. of gross floor area	Zone A: 5.1 spaces per 1000 sq. ft. gross floor area Zone B: 6.2 spaces per 1000 sq. ft. gross floor area	0.50 space per 1000 sq. ft. of gross floor area	50

USE	MINIMUM MOTOR VEHICLE PARKING REQUIREMENT	MAXIMUM MOTOR VEHICLE PARKING REQUIREMENT	BICYCLE PARKING REQUIREMENT	PERCENTAGE OF BICYCLE PARKING TO BE COVERED
(ii) Retail store handling exclusively bulky merchandise such as furniture or automobiles and service or repair shops4	1.00 space per 400 sq. ft. of sales floor area	Zone A: 5.1 spaces per 1000 sq. ft. gross floor area Zone B: 6.2 spaces per 1000 sq. ft. gross floor area	2, or 0.20 space per 1000 sq. ft. of sales floor area, whichever is greater	50
(iii) Shopping center (over 100,000 sq. ft. of gross floor area)	4.1 spaces per 1000 sq. ft. of gross floor area	Zone A: 5.1 spaces per 1000 sq. ft. gross floor area Zone B: 6.2 spaces per 1000 sq. ft. gross floor area	0.50 space per 1000 sq. ft. of gross floor area	50
(iv) Banks/savings and loans	4.30 spaces per 1000 sq. ft. of gross floor area	Zone A: 5.4 spaces per 1000 sq. ft. gross floor area Zone B: 6.5 spaces per 1000 sq. ft. gross floor area	2, or 0.33 spaces per 1000 sq. ft., whichever is greater	10
(v) Medical & dental offices	3.90 spaces per 1000 sq. ft. of gross floor area	Zone A: 4.9 spaces per 1000 sq. ft. gross floor area Zone B: 5.9 spaces per 1000 sq. ft. gross floor area	2, or 0.33 spaces per 1000 gross sq. ft., whichever is greater	First 10 spaces or 40%, whichever is greater

USE	MINIMUM MOTOR VEHICLE PARKING REQUIREMENT	MAXIMUM MOTOR VEHICLE PARKING REQUIREMENT	BICYCLE PARKING REQUIREMENT	PERCENTAGE OF BICYCLE PARKING TO BE COVERED
(vi) General office	2.70 spaces per 1000 sq. ft. of gross floor area	Zone A: 3.4 spaces per 1000 sq. ft. gross floor area Zone B: 4.1 spaces per 1000 sq. ft. gross floor area	2, or 0.50 space per 1000 gross sq. ft., whichever is greater	First 10 spaces or 40%, whichever is greater
(vii) Government office	2.70 spaces per 1000 sq. ft. of gross floor area	Zone A: 3.4 spaces per 1000 sq. ft. gross floor area Zone B: 4.1 spaces per 1000 sq. ft. gross floor area	2, or 0.50 spaces per 1000 gross sq. ft., whichever is greater	First 10 spaces or 40%, whichever is greater
(viii) Restaurant	10.00 spaces per 1000 sq. ft. of gross floor area	Zone A: 19.1 spaces per 1000 sq. ft. gross floor area Zone B: 23.0 spaces per 1000 sq. ft. gross floor area	1.00 space per 1000 gross sq. ft.	25
(ix) Drive-up restaurant	9.90 spaces per 1000 sq. ft. of gross floor area	Zone A: 12.4 spaces per 1000 sq. ft. gross floor area Zone B: 14.9 spaces per 1000 sq. ft. gross floor area	2.00 spaces per 1000 gross sq. ft.	25
(x) Motel	1.00 space per room	None	0.20 space per room	10

USE	MINIMUM MOTOR VEHICLE PARKING REQUIREMENT	MAXIMUM MOTOR VEHICLE PARKING REQUIREMENT	BICYCLE PARKING REQUIREMENT	PERCENTAGE OF BICYCLE PARKING TO BE COVERED
(xi) Mortuary	1.00 space per 4 seats or 8 feet of bench length in chapels	None	1 space per 40 seats or 80 feet of bench length	10
(xii) Office furniture and office furniture sales	1.00 space per 550 gross sq. ft.	None	2, or 0.20 space per 1000 sq. ft. of sales floor area, whichever is greater	10
(xiii) Park and Ride lots	None	None	5% of auto spaces	100
(xiv) Major transit stops (not Park and Ride lots)	None	None	4	100
(xiv) Wireless communication facility	1 space	None	n/a	n/a
Industrial:				
(i) Manufacturing	1.60 spaces per 1000 sq. ft. of gross floor area	None	2, or 0.10 spaces per 1000 gross sq. ft., whichever is greater	First 5 spaces or 30%, whichever is greater
(ii) Warehousing	0.30 spaces per 1000 sq. ft. of gross floor area	Zone A: 0.4 spaces per 1000 sq. ft. gross floor area Zone B: 0.5 spaces per 1000 sq. ft. gross floor area	2, or 0.10 spaces per 1000 gross sq. ft., whichever is greater	First 5 spaces or 30%, whichever is greater
(iii) Wholesale establishment	3.00 spaces per 1000 sq. ft. of gross floor area	None	2, or 0.50 spaces per 1000 gross sq. ft., whichever is greater	First 5 spaces or 30%, whichever is greater

Section 14. TDC 73.380 is amended to read as follows:

A parking lot, whether an accessory or principal use, intended for the parking of automobiles or trucks, shall comply with the following:

(1) Off-street parking lot design shall comply with the dimensional standards set forth in Figure 73-1 of this section, except for parking structures and underground parking where stall length and width requirements for a standard size stall shall be reduced by .5 feet and vehicular access at the entrance if gated shall be a minimum of 18 feet in width.

(2) Parking stalls for sub-compact vehicles shall not exceed 35 percent of the total parking stalls required by TDC 73.370(2). Stalls in excess of the number required by TDC 73.370(2) can be sub-compact stalls.

(3) Off-street parking stalls shall not exceed eight continuous spaces in a row without a landscape separation, except for parking structures and underground parking. For parking lots within the Central Design District that are designed to frame views of the central water feature or identified architectural focal elements as provided in TDC 73.350(3), this requirement shall not apply and the location of parking lot landscape islands shall be determined through the Architectural Review process.

(4) Parking lot drive aisles shall be constructed of asphalt or concrete, including pervious concrete. Parking stalls shall be constructed of asphalt or concrete, or a pervious surface such as pavers or grasscrete, but not gravel or woody material. Drive aisles and parking stalls shall be maintained adequately for all-weather use and drained to avoid water flow across sidewalks. Pervious surfaces such as pervious concrete, pavers and grasscrete, but not gravel or woody material, are encouraged for parking stalls in or abutting the Natural Resource Protection Overlay District, Other Natural Areas identified in Figure 3-4 of the Parks and Recreation Master Plan, or in a Clean Water Services Vegetated Corridor. Parking lot landscaping shall be provided pursuant to the requirements of TDC 73.350 and TDC 73.360. Walkways in parking lots shall be provided pursuant to TDC 73.160.

(5) Except for parking to serve residential uses, parking areas adjacent to or within residential planning districts or adjacent to residential uses shall be designed to minimize disturbance of residents.

(6) Artificial lighting, which may be provided, shall be deflected to not shine or create glare in a residential planning district, an adjacent dwelling, street right-of-way in such a manner as to impair the use of such way or a Natural Resource Protection Overlay District, Other Natural Areas identified in Figure 3-4 of the Parks and Recreation Master Plan, or a Clean Water Services Vegetated Corridor.

(7) Groups of more than 4 parking spaces shall be so located and served by driveways that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley.

(8) Service drives to off-street parking areas shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress, and maximum safety of pedestrians and vehicular traffic on the site.

(9) Parking bumpers or wheel stops or curbing shall be provided to prevent cars from encroaching on the street right-of-way, adjacent landscaped areas, or adjacent pedestrian walkways.

(10) Disability parking spaces and accessibility shall be provided in accordance with applicable federal and state requirements.

(11) On-site drive aisles without parking spaces, which provide access to parking areas with regular spaces or with a mix of regular and sub-compact spaces, shall have a minimum width of 22 feet for two-way traffic and 12 feet for one-way traffic. On-site drive aisles without parking spaces, which provide access to parking areas with only sub-compact spaces, shall have a minimum width of 20 feet for two-way traffic and 12 feet for one-way traffic.

Section 15. TDC 73.390 is amended to read as follows:

(1) The minimum number of off-street loading berths for commercial, industrial, public and semi-public uses is as follows:

Square Feet of Floor Area	Number of Berths
Less than 5,000	0
5,000 - 25,000	1
25,000 - 60,000	2
60,000 and over	3

(2) Loading berths shall conform to the following minimum size specifications.

(a) Commercial, public and semi-public uses of 5,000 to 25,000 square feet shall be 12' x 25' and uses greater than 25,000 shall be 12' x 35'

(b) Industrial uses - 12' x 60'

(c) Berths shall have an unobstructed height of 14'

(d) Loading berths shall not use the public right-of-way as part of the required off-street loading area.

(3) Required loading areas shall be screened from public view from public streets and adjacent properties by means of sight-obscuring landscaping, walls or other means, as approved through the Architectural Review process.

(4) Required loading facilities shall be installed prior to final building inspection and shall be permanently maintained as a condition of use.

(5) A driveway designed for continuous forward flow of passenger vehicles for the purpose of loading and unloading children shall be located on the site of a school or child day care center having a capacity greater than 25 students.

(6) The off-street loading facilities shall in all cases be on the same lot or parcel as the structure they are intended to serve. In no case shall the required off-street loading spaces be part of the area used to satisfy the off-street parking requirements.

(7) Subject to Architectural Review approval, the Community Development Director may allow the standards in this Section to be relaxed within the Central Design District, where a dense mix of uses is desirable in close proximity, pedestrian circulation is strongly emphasized, and the orientation of structures around a central water feature virtually eliminates the possibility of reserving any side of a building solely for truck access. Adjustments may include, but are not limited to, reduction in the number of loading berths required, adjustment of loading berth size specifications and right-of-way restrictions, shared loading berths and maneuvering areas for use by more than one building, alteration or elimination of screening requirements, and requirements for maintenance of berths in a clean and visually appealing condition. The Community Development Director, their designee, or the Architectural Review Board may allow a loading area adjacent to or within a street right-of-way in the Central Design District where the loading and unloading operations meet all of the following criteria:

(a) short in duration (i.e., less than one hour);

(b) infrequent (fewer than three operations daily);

(c) does not obstruct traffic during peak traffic hours;

(d) does not interfere with emergency response services;

(e) is acceptable to the applicable roadway authority; and

(f) the design standards for the abutting road allow on-street parking.

Section 16. TDC 73.400 is amended to read as follows:

(1) The provision and maintenance of vehicular and pedestrian ingress and egress from private property to the public streets as stipulated in this Code are continuing requirements for the use of any structure or parcel of real property in the City of Tualatin.

Access management and spacing standards are provided in this section of the TDC and TDC Chapter 75. No building or other permit shall be issued until scale plans are presented that show how the ingress and egress requirement is to be fulfilled. If the owner or occupant of a lot or building changes the use to which the lot or building is put, thereby increasing ingress and egress requirements, it shall be unlawful and a violation of this code to begin or maintain such altered use until the required increase in ingress and egress is provided.

(2) Owners of two or more uses, structures, or parcels of land may agree to utilize jointly the same ingress and egress when the combined ingress and egress of both uses, structures, or parcels of land satisfies their combined requirements as designated in this code; provided that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases or contracts to establish joint use. Copies of said deeds, easements, leases or contracts shall be placed on permanent file with the City Recorder.

(3) Joint and Cross Access

(a) Adjacent commercial uses may be required to provide cross access drive and pedestrian access to allow circulation between sites.

(b) A system of joint use driveways and cross access easements may be required and may incorporate the following:

(i) a continuous service drive or cross access corridor extending the entire length of each block served to provide for driveway separation consistent with the access management classification system and standards.

(ii) a design speed of 10 mph and a maximum width of 24 feet to accommodate two-way travel aisles designated to accommodate automobiles, service vehicles, and loading vehicles;

(iii) stub-outs and other design features to make it visually obvious that the abutting properties may be tied in to provide cross access via a service drive;

(iv) a unified access and circulation system plan for coordinated or shared parking areas.

(c) Pursuant to this section, property owners may be required to:

(i) Record an easement with the deed allowing cross access to and from other properties served by the joint use driveways and cross access or service drive;

(ii) Record an agreement with the deed that remaining access rights along the roadway will be dedicated to the city and pre-existing driveways will be closed and eliminated after construction of the joint-use driveway;

(iii) Record a joint maintenance agreement with the deed defining maintenance responsibilities of property owners;

(iv) If (i-iii) above involve access to the state highway system or county road system, ODOT or the county shall be contacted and shall approve changes to (i-iii) above prior to any changes.

(4) Requirements for Development on Less than the Entire Site

(a) To promote unified access and circulation systems, lots and parcels under the same ownership or consolidated for the purposes of development and comprised of more than one building site shall be reviewed as one unit in relation to the access standards. The number of access points permitted shall be the minimum number necessary to provide reasonable access to these properties, not the maximum available for that frontage. All necessary easements, agreements, and stipulations shall be met. This shall also apply to phased development plans. The owner and all lessees within the affected area shall comply with the access requirements.

(b) All access must be internalized using the shared circulation system of the principal commercial development or retail center. Driveways should be designed to avoid queuing across surrounding parking and driving aisles.

(5) Lots that front on more than one street may be required to locate motor vehicle accesses on the street with the lower functional classification as determined by the City Engineer.

(6) Except as provided in TDC 53.100, all ingress and egress shall connect directly with public streets.

(7) Vehicular access for residential uses shall be brought to within 50 feet of the ground floor entrances or the ground floor landing of a stairway, ramp or elevator leading to dwelling units.

(8) To afford safe pedestrian access and egress for properties within the City, a sidewalk shall be constructed along all street frontage, prior to use or occupancy of the building or structure proposed for said property. The sidewalks required by this section shall be constructed to City standards, except in the case of streets with inadequate right-of-way width or where the final street design and grade have not been established,

in which case the sidewalks shall be constructed to a design and in a manner approved by the City Engineer. Sidewalks approved by the City Engineer may include temporary sidewalks and sidewalks constructed on private property; provided, however, that such sidewalks shall provide continuity with sidewalks of adjoining commercial developments existing or proposed. When a sidewalk is to adjoin a future street improvement, the sidewalk construction shall include construction of the curb and gutter section to grades and alignment established by the City Engineer.

(9) The standards set forth in this Code are minimum standards for access and egress, and may be increased through the Architectural Review process in any particular instance where the standards provided herein are deemed insufficient to protect the public health, safety, and general welfare.

(10) Minimum access requirements for residential uses:

(a) Ingress and egress for single-family residential uses, including townhouses, shall be paved to a minimum width of 10 feet. Maximum driveway widths shall not exceed 26 feet for one and two car garages, and 37 feet for three or more car garages. For the purposes of this section, driveway widths shall be measured at the property line.

(b) Ingress and egress for multi-family residential uses shall not be less than the following:

DWELLING UNITS	MINIMUM NUMBER REQUIRED	MINIMUM WIDTH	WALKWAYS, ETC.
2	1	16 feet	No walkways or curbs required.
3-19	1	24 feet	No walkways or curbs required.
20-49	1 Or	24 feet	6-foot walkway, 1 side only; curbs required.
	2	16 feet (one way)	
50-499	1 Or	32 feet	6-foot walkway, 1 side only; curbs required.
	2	24 feet	
Over 500	As required by City Engineer	As required by City Engineer	As required by City Engineer

(11) Minimum Access Requirements for Commercial, Public and Semi-Public Uses.

In the Central Design District, when driveway access is on local streets, not collectors or arterials and the building(s) on the property is(are) less than 5,000 square feet in gross floor area, or parking is the only use on the property, ingress and egress shall

not be less than 24 feet. In all other cases, ingress and egress for commercial uses shall not be less than the following:

REQUIRED PARKING SPACES	MINIMUM NUMBER REQUIRED	MINIMUM PAVEMENT WIDTH	MINIMUM PAVEMENT WALKWAYS, ETC.
1-99	1	32 feet for first 50 feet from ROW, 24' thereafter.	Curbs required; walkway 1 side only
100-249	2	32 feet for first 50 feet from ROW, 24' thereafter.	Curbs required; walkway 1 side only.
Over 250	As required by City Engineer	As required by City Engineer	As required by City Engineer

(12) Minimum Access Requirements for Industrial Uses.

Ingress and egress for industrial uses shall not be less than the following:

REQUIRED PARKING SPACES	MINIMUM NUMBER REQUIRED	MINIMUM PAVEMENT WIDTH	MINIMUM PAVEMENT WALKWAYS, ETC.
1-250	1	36 feet for first 50' from ROW, 24' thereafter	No curbs or walkway required.
Over 250	As required by City Engineer	As required by City Engineer	As required by City Engineer

(13) One-way Ingress or Egress.

When approved through the Architectural Review process, one-way ingress or egress may be used to satisfy the requirements of Subsections (7), (8), and (9). However, the hard surfaced pavement of one-way drives shall not be less than 16 feet for multi-family residential, commercial, or industrial uses.

(14) Maximum Driveway Widths and Other Requirements.

(a) Unless otherwise provided in this chapter, maximum driveway widths shall not exceed 40 feet.

(b) Except for townhouse lots, no driveways shall be constructed within 5 feet of an adjacent property line, except when two adjacent property owners elect to provide joint access to their respective properties, as provided by Subsection (2).

(c) There shall be a minimum distance of 40 feet between any two adjacent driveways on a single property unless a lesser distance is approved by the City Engineer.

(15) Distance between Driveways and Intersections.

Except for single-family dwellings, the minimum distance between driveways and intersections shall be as provided below. Distances listed shall be measured from the stop bar at the intersection.

(a) At the intersection of collector or arterial streets, driveways shall be located a minimum of 150 feet from the intersection.

(b) At the intersection of two local streets, driveways shall be located a minimum of 30 feet from the intersection.

(c) If the subject property is not of sufficient width to allow for the separation between driveway and intersection as provided, the driveway shall be constructed as far from the intersection as possible, while still maintaining the 5-foot setback between the driveway and property line as required by TDC 73.400(14)(b).

(d) When considering a public facilities plan that has been submitted as part of an Architectural Review plan in accordance with TDC 31.071(6), the City Engineer may approve the location of a driveway closer than 150 feet from the intersection of collector or arterial streets, based on written findings of fact in support of the decision. The written approval shall be incorporated into the decision of the City Engineer for the utility facilities portion of the Architectural Review plan under the process set forth in TDC 31.071 through 31.077.

(16) Vision Clearance Area.

(a) Local Streets - A vision clearance area for all local street intersections, local street and driveway intersections, and local street or driveway and railroad intersections shall be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are 10 feet from the intersection point of the right-of-way lines, as measured along such lines (see Figure 73-2 for illustration).

(b) Collector Streets - A vision clearance area for all collector/arterial street intersections, collector/arterial street and local street intersections, and collector/arterial street and railroad intersections shall be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are 25 feet from the intersection point of the right-of-way lines, as measured along such lines. Where a driveway

intersects with a collector/arterial street, the distance measured along the driveway line for the triangular area shall be 10 feet (see Figure 73-2 for illustration).

(c) Vertical Height Restriction - Except for items associated with utilities or publicly owned structures such as poles and signs and existing street trees, no vehicular parking, hedge, planting, fence, wall structure, or temporary or permanent physical obstruction shall be permitted between 30 inches and 8 feet above the established height of the curb in the clear vision area (see Figure 73-2 for illustration).

(17) Major driveways, as defined in 31.060, in new residential and mixed-use areas are required to connect with existing or planned streets except where prevented by topography, rail lines, freeways, pre-existing development or leases, easements or covenants, or other barriers.

Section 17. TDC 74.210 is amended to read as follows:

The width of streets in feet shall not be less than the width required to accommodate a street improvement needed to mitigate the impact of a proposed development. In cases where a street is required to be improved according to the standards of the TDC, the width of the right-of-way shall not be less than ~~the minimums~~ indicated in TDC Chapter ~~11~~74, ~~Transportation Plan~~ Public Improvement Requirements, Figures 74-2A through 74-2G.

(1) For subdivision and partition applications, wherever existing or future streets adjacent to property proposed for development are of inadequate right-of-way width the additional right-of-way necessary to comply with ~~the Transportation Element of the Tualatin Community Plan~~ TDC Chapter 74, Public Improvement Requirements, Figures 74-2A through 74-2G shall be shown on the final subdivision or partition plat prior to approval of the plat by the City. This right-of-way dedication shall be for the full width of the property abutting the roadway and, if required by the City Engineer, additional dedications shall be provided for slope and utility easements if deemed necessary.

(2) For development applications other than subdivisions and partitions, wherever existing or future streets adjacent to property proposed for development are of inadequate right-of-way width, the additional right-of-way necessary to comply with ~~the Transportation Element of the Tualatin Community Plan~~ TDC Chapter 74, Public Improvement Requirements, Figures 74-2A through 74-2G shall be dedicated to the City for use by the public prior to issuance of any building permit for the proposed development. This right-of-way dedication shall be for the full width of the property abutting the roadway and, if required by the City Engineer, additional dedications shall be provided for slope and utility easements if deemed necessary.

(3) For development applications that will impact existing streets not adjacent to the applicant's property, and to construct necessary street improvements to mitigate

those impacts would require additional right-of-way, the applicant shall be responsible for obtaining the necessary right-of-way from the property owner. A right-of-way dedication deed form shall be obtained from the City Engineer and upon completion returned to the City Engineer for acceptance by the City. On subdivision and partition plats the right-of-way dedication shall be accepted by the City prior to acceptance of the final plat by the City. On other development applications the right-of-way dedication shall be accepted by the City prior to issuance of building permits. The City may elect to exercise eminent domain and condemn necessary off-site right-of-way at the applicant's request and expense. The City Council shall determine when condemnation proceedings are to be used.

(4) If the City Engineer deems that it is impractical to acquire the additional right-of-way as required in subsections (1)-(3) of this section from both sides of the centerline in equal amounts, the City Engineer may require that the right-of-way be dedicated in a manner that would result in unequal dedication from each side of the road. This requirement will also apply to slope and utility easements as discussed in TDC 74.320 and 74.330. The City Engineer's recommendation shall be presented to the City Council in the preliminary plat approval for subdivisions and partitions, and in the recommended decision on all other development applications, prior to finalization of the right-of-way dedication requirements.

(5) Whenever a proposed development is bisected by an existing or future road or street that is of inadequate right-of-way width according to TDC Chapter ~~11~~74, Public Improvement Requirements, Figures 74-2A through 74-2G, additional right-of-way shall be dedicated from both sides or from one side only as determined by the City Engineer to bring the road right-of-way in compliance with this section.

(6) When a proposed development is adjacent to or bisected by a street proposed in TDC Chapter 11, Transportation Plan (Figure 11-3) and no street right-of-way exists at the time the development is proposed, the entire right-of-way as shown in TDC Chapter ~~11~~74, TDC Public Improvement Requirements, Figures 74-2A through 74-2G, shall be dedicated by the applicant. The dedication of right-of-way required in this subsection shall be along the route of the road as determined by the City.

Section 18. TDC 74.410 is amended to read as follows:

(1) Streets shall be extended to the proposed development site boundary where necessary to:

(a) give access to, or permit future development of adjoining land;

(b) provide additional access for emergency vehicles;

(c) provide for additional direct and convenient pedestrian, bicycle and vehicle circulation;

(d) eliminate the use of cul-de-sacs except where topography, barriers such as railroads or freeways, existing development, or environmental constraints such as major streams and rivers prevent street extension.

(e) eliminate circuitous routes. The resulting dead end streets may be approved without a turnaround. A reserve strip may be required to preserve the objectives of future street extensions.

(2) Proposed streets shall comply with the general location, orientation and spacing identified in the Functional Classification Plan (Figure 11-1), Local Streets Plan, (TDC 11.630 and ~~Figure 11-1 and~~ Figure 11-3) and the Street Design Standards (Figures 74-2A through 74-2G).

(a) Streets and major driveways, as defined in TDC 31.060, proposed as part of new residential or mixed residential/commercial developments shall comply with the following standards:

(i) full street connections with spacing of no more than 530 feet between connections, except where prevented by ~~constraints or~~ barriers;

(ii) bicycle and pedestrian accessway easements where full street connections are not possible, with spacing of no more than 330 feet, except where prevented by barriers;

(iii) limiting cul-de-sacs and other closed-end street systems to situations where barriers prevent full street extensions; and

(iv) allowing cul-de-sacs and closed-end streets to be no longer than 200 feet or with more than 25 dwelling units, except for streets stubbed to future developable areas.

(b) Streets proposed as part of new industrial or commercial development shall comply with TDC 11.630, Figure 11-1, and Figures 74-2A through 74-2G.

(3) During the development application process, the location, width, and grade of streets shall be considered in relation to existing and planned streets, to topographical conditions, to public convenience and safety, and to the proposed use of the land to be served by the streets. The arrangement of streets in a subdivision shall either:

(a) provide for the continuation or appropriate projection of existing streets into surrounding areas; or

(b) conform to a street plan approved or adopted by the City to meet a particular situation where topographical or other conditions make continuance of or conformance to existing streets impractical.

(4) The City Engineer may require the applicant to submit a street plan showing all existing, proposed, and future streets in the area of the proposed development.

(5) The City Engineer may require the applicant to participate in the funding of future off-site street extensions when the traffic impacts of the applicant's development warrant such a condition.

Section 19. TDC 74.420 is amended to read as follows:

When an applicant proposes to develop land adjacent to an existing or proposed street, including land which has been excluded under TDC 74.220, the applicant should be responsible for the improvements to the adjacent existing or proposed street that will bring the improvement of the street into conformance with the Transportation Plan (TDC Chapter 11), TDC 74.425 (Street Design Standards), and the City's Public Works Construction Code, subject to the following provisions:

(1) For any development proposed within the City, roadway facilities within the right-of-way described in TDC 74.210 shall be improved to standards as set out in the Public Works Construction Code.

(2) The required improvements may include the rebuilding or the reconstruction of any existing facilities located within the right-of-way adjacent to the proposed development to bring the facilities into compliance with the Public Works Construction Code.

(3) The required improvements may include the construction or rebuilding of off-site improvements which are identified to mitigate the impact of the development.

(4) Where development abuts an existing street, the improvement required shall apply only to that portion of the street right-of-way located between the property line of the parcel proposed for development and the centerline of the right-of-way, plus any additional pavement beyond the centerline deemed necessary by the City Engineer to ensure a smooth transition between a new improvement and the existing roadway (half-street improvement). Additional right-of-way and street improvements and off-site right-of-way and street improvements may be required by the City to mitigate the impact of the development. The new pavement shall connect to the existing pavement at the ends of the section being improved by tapering in accordance with the Public Works Construction Code.

(5) If additional improvements are required as part of the Access Management Plan of the City, TDC Chapter 75, the improvements shall be required in the same manner as the half-street improvement requirements.

(6) All required street improvements shall include curbs, sidewalks with appropriate buffering, storm drainage, street lights, street signs, street trees, and, where designated, bikeways and transit facilities.

(7) For subdivision and partition applications, the street improvements required by TDC Chapter 74 shall be completed and accepted by the City prior to signing the final subdivision or partition plat, or prior to releasing the security provided by the applicant to assure completion of such improvements or as otherwise specified in the development application approval.

(8) For development applications other than subdivisions and partitions, all street improvements required by this section shall be completed and accepted by the City prior to the issuance of a Certificate of Occupancy.

(9) In addition to land adjacent to an existing or proposed street, the requirements of this section shall apply to land separated from such a street only by a railroad right-of-way.

(10) Streets within, or partially within, a proposed development site shall be graded for the entire right-of-way width and constructed and surfaced in accordance with the Public Works Construction Code.

(11) Existing streets which abut the proposed development site shall be graded, constructed, reconstructed, surfaced or repaired as necessary in accordance with the Public Works Construction Code and TDC Chapter 11, Transportation Plan, and TDC 74.425 (Street Design Standards).

(12) Sidewalks with appropriate buffering shall be constructed along both sides of each internal street and at a minimum along the development side of each external street in accordance with the Public Works Construction Code.

(13) The applicant shall comply with the requirements of the Oregon Department of Transportation (ODOT), Tri-Met, Washington County and Clackamas County when a proposed development site is adjacent to a roadway under any of their jurisdictions, in addition to the requirements of this chapter.

(14) The applicant shall construct any required street improvements adjacent to parcels excluded from development, as set forth in TDC 74.220 of this chapter.

(15) Except as provided in TDC 74.430, whenever an applicant proposes to develop land with frontage on certain arterial streets and, due to the access management provisions of Chapter 75, is not allowed direct access onto the arterial, but instead must take access from another existing or future public street thereby providing an alternate to direct arterial access, the applicant shall be required to construct and place at a minimum street signage, a sidewalk, street trees and street lights along that portion of the arterial street adjacent to the applicant's property. The three certain arterial streets are S.W.

Tualatin-Sherwood Road, S.W. Pacific Highway (99W) and S.W. 124th Avenue. In addition, the applicant may be required to construct and place on the arterial at the intersection of the arterial and an existing or future public non-arterial street warranted traffic control devices (in accordance with the Manual on Uniform Traffic Control Devices, latest edition), pavement markings, street tapers and turning lanes, in accordance with the Public Works Construction Code.

(16) The City Engineer may determine that, although concurrent construction and placement of the improvements in (14) and (15) of this section, either individually or collectively, are impractical at the time of development, the improvements will be necessary at some future date. In such a case, the applicant shall sign a written agreement guaranteeing future performance by the applicant and any successors in interest of the property being developed. The agreement shall be subject to the City's approval.

(17) Intersections should be improved to operate at a level of service of at least D and E for signalized and unsignalized intersections, respectively.

(18) Pursuant to requirements for off-site improvements as conditions of development approval in TDC 73.055(2)(e) and TDC 36.160(8), proposed multi-family residential, commercial, or institutional uses that are adjacent to a major transit stop will be required to comply with the City's Mid-Block Crossing Policy.

Section 20. TDC 74.430 amended to read as follows:

(1) When, in the opinion of the City Engineer, the construction of street improvements in accordance with TDC 74.420 would result in the creation of a hazard, or would be impractical, or would be detrimental to the City, the City Engineer may modify the scope of the required improvement to eliminate such hazardous, impractical, or detrimental results. Examples of conditions requiring modifications to improvement requirements include but are not limited to horizontal alignment, vertical alignment, significant stands of trees, fish and wildlife habitat areas, the amount of traffic generated by the proposed development, timing of the development or other conditions creating hazards for pedestrian, bicycle or motor vehicle traffic. The City Engineer may determine that, although an improvement may be impractical at the time of development, it will be necessary at some future date. In such cases, a written agreement guaranteeing future performance by the applicant in installing the required improvements must be signed by the applicant and approved by the City.

(2) When the City Engineer determines that modification of the street improvement requirements in TDC 74.420 is warranted pursuant to subsection (1) of this section, the City Engineer shall prepare written findings of modification. The City Engineer shall forward a copy of said findings and description of modification to the applicant, or his authorized agent, as part of the Utility Facilities Review for the proposed development, as provided by TDC 31.072. The decision of the City Engineer may be appealed to the City Council in accordance with TDC 31.076 and 31.077.

(3) To accommodate bicyclists on streets prior to those streets being upgraded to the full standards, an interim standard may be implemented by the City. These interim standards include reduction in motor vehicle lane width to 10 feet [the minimum specified in AASHTO's A Policy on Geometric Design of Highways and Streets (1990)], a reduction of bike lane width to 4-feet (as measured from the longitudinal gutter joint to the centerline of the bike lane stripe), and a paint-striped separation 2 to 4 feet wide in lieu of a center turn lane. Where available roadway width does not provide for these minimums, the roadway can be signed for shared use by bicycle and motor vehicle travel. When width constraints occur at an intersection, bike lanes should terminate 50 feet from the intersection with appropriate signing.

~~(4) The Local Commercial-Industrial Street Section, B-CI, may have an interim reduced cross-section as determined by the City Engineer. The interim reduced standard would include 24-28 feet of pavement, 3-foot gravel shoulders, 2:1 side slopes to a drainage ditch and a 5-foot asphalt sidewalk on one side. Development to the full B-CI Standard will be determined subject to required traffic study analysis. See Figure 75-2F for the Interim B-CI Street Standard.~~

Section 21. TDC 74.450 is amended to read as follows:

(1) Where proposed development abuts or contains an existing or proposed bikeway, ~~or~~ pedestrian path, or multi-use path, as set forth in TDC Chapter 11, Transportation ~~Plan~~, Figure 11-4, the City may require that a bikeway, ~~or~~ pedestrian path, or multi-use path be constructed, and an easement or dedication provided to the City.

(2) Where required, bikeways and pedestrian paths shall be provided as follows:

(a) Bike and pedestrian paths shall be constructed and surfaced in accordance with the Public Works Construction Code.

(b) The applicant shall install the striping and signing of the bike lanes and shared roadway facilities, where designated.

Section 22. TDC 75.030 is amended to read as follows:

This section shall apply to all City, County and State public streets, roads and highways within the City and to all properties that abut these streets, roads and highways.

(1) Access shall be in conformance with TDC Chapter 73 unless otherwise noted below.

(2) Freeways~~, Expressways~~ and Arterials Designated.

For the purposes of this chapter the following are freeways~~, expressways~~ and arterials:

(a) Interstate 5 Freeway;

(b) Interstate 205 Freeway;

~~(c) I-5/99W Connector;~~

~~(d)~~(c) Pacific Highway 99W;

~~(e)~~(d) Tualatin-Sherwood Road at all points located within the City of Tualatin Planning Area;

~~(f)~~(e) Nyberg Street, from its intersection with Tualatin-Sherwood Road east to 65th Avenue, including the I-5 Interchange;

~~(g)~~(f) 124th Avenue from Pacific Highway 99W south to Tonquin ~~Road and/or the future I5/99W Connector~~;

~~(h)~~(g) Lower Boones Ferry Road, from Boones Ferry Road to the Bridgeport/72nd intersection and from the Bridgeport/72nd intersection to the east City limits;

~~(i)~~(h) Boones Ferry Road at all points located within the City of Tualatin Planning Area;

~~(j)~~(i) ~~SW~~ 65th Avenue from its intersection with Nyberg Street south to City limits ~~Sagert Street~~;

~~(k)~~(j) Borland Road from ~~SW~~ 65th Avenue east to Saum Creek;

~~(l)~~(k) Bridgeport Road from Lower Boones Ferry Road to the west City limits;

~~(m)~~(l) Martinazzi Avenue from Boones Ferry Road south to Sagert Street;

~~(n) Tualatin Road from Boones Ferry Road to Herman Road;~~

~~(o)~~(m) Sagert Street from Martinazzi Avenue to 65th Avenue;

~~(p) Hall Boulevard extension from Tualatin Road to the north City limits;~~

(q~~o~~n) Leveton Drive from 1~~4~~08th Avenue to 124~~0~~8th Avenue;

~~(r)~~(o) 108th Avenue from Leveton Drive to Herman Road;

~~(s)~~(p) Herman Road from ~~108th Avenue to~~ Teton Avenue to 124th Avenue;

~~(r)~~(q) 90th Avenue;

~~(s)~~(r) Avery Street;

~~(t)~~(s) Teton Avenue;

~~(r)~~(t) ~~Lower Boones Ferry Road extension west to Tualatin Road.~~

If the Council finds that any other road or street is in need of access control for any reason, it may direct that the street or road be added to this section through a Plan Text Amendment.

(3) Applicability

(a) This chapter applies to all developments, permit approvals, land use approvals, partitions, subdivisions, or any other actions taken by the City Council or any administrative officer of the City pertaining to property abutting any road or street listed in TDC 75.030. In addition, any parcel not abutted by a road or street listed in TDC 75.030, but having access to an arterial by any easement or prescriptive right, shall be treated as if it did abut the arterial and this chapter applies. This chapter shall take precedence over any other TDC chapter and over any other ordinance of the City when considering any development, land use approval or other proposal for property abutting an arterial or any property having an access right to an arterial.

(b) With the approval of the City Council, the City may act on its own initiative to protect the public safety and control access on arterials or any street to be included by TDC 75.030, consistent with its authority as the City~~'s~~ Road Authority.

Section 23. TDC 75.070 is amended to read as follows:

Except as shown ~~on~~ in TDC Chapter 11, Transportation, (Figures 11-1 and 11-3)~~Map 75-1~~, all new intersections with arterials shall have a minimum spacing of ½ mile between intersections.

Section 24. TDC 75.080 is amended to read as follows:

Except as provided in 75.090 all properties which abut two roadways shall have access on the lowest classification roadway, preferable on a local street~~an arterial and another road or street shall not have access on the arterial~~.

Section 25. TDC 75.090 is amended to read as follows:

When a property abuts a freeway~~, expressway~~ or arterial and a future street shown in TDC Chapter 11, Transportation, (Figures 11-1 and 11-3)~~on Map 75-1~~, or abuts or bisects the property, the City Engineer may approve an interim access on the arterial subject to the following conditions:

(1) The City Engineer finds that at the current time the construction of the new street shown in TDC Chapter 11, Transportation, (Figures 11-1 and 11-3)~~on Map 75-1~~ is impractical due to costs of right-of-way acquisition.

(2) The property owner receiving interim access dedicates the right-of-way for the new street as shown in TDC Chapter 11, Transportation, (Figures 11-1 and 11-3)~~on Map 75-1~~ if it would be on the property.

(3) At such time as the City Engineer finds that it is practical to construct a new street as shown in TDC Chapter 11, Transportation, (Figures 11-1 and 11-3)~~on Map 75-1~~, the property owner agrees to pay for or construct its fair share of the new street when it is practical.

(4) At such time as the new street as shown in TDC Chapter 11, Transportation, (Figures 11-1 and 11-3)~~on Map 75-1~~ is constructed, the interim access shall be closed and no longer used. The cost of this closure shall be borne by the property owner.

(5) In granting the interim access the property owner may be required to share said interim access with adjacent properties.

(6) The interim access shall be constructed in a manner to make it as efficient as possible. Improvements required as part of the interim access may include:

(a) A left turn lane.

(b) A right turn lane.

(c) Driveways constructed at street intersections to provide for truck turning movement.

(d) Dedication of additional right-of-way on the arterial.

(e) Installation of traffic control signals.

(f) Limitation of new driveways to right turn in, right turn out movements by construction of raised median barriers or other means.

(7) Any interim access approved in accordance with this chapter shall be set forth in the form of a written agreement, approved by the City Attorney. The agreement shall

be verified by the owner in the manner provided for deeds and restrictions on real property. The agreement shall bind the parties thereto as well as their heirs, successors in interest and assigns and shall not be modified without the express written approval of the City.

Section 26. TDC 75.100 is amended to read as follows:

If the City Engineer finds that it is physically impossible for a property to receive access from any other street or road than an arterial as defined in TDC 75.030 and that the property cannot physically be served by any new street as shown on in TDC Chapter 11, Transportation, (Figures 11-1 and 11-3)~~Map 75-1~~ or any logical extension of or addition thereto, the City Engineer may grant a permanent access directly to an arterial. In doing so the City Engineer may impose conditions on the construction of said access including, but not limited to:

(1) Dedication of additional right-of-way on the arterial.

(2) Creation of a joint access.

(3) Construction of left turn lanes.

(4) Construction of right turn lanes.

(5) Installation of traffic signals.

(6) Limitation of access to right turn in, right turn out by construction of raised median barriers or other means.

Section 27. TDC 75.110 is amended to read as follows:

(1) New streets designed to serve as alternatives to direct, parcel by parcel, access onto arterials are shown in TDC Chapter 11, Transportation, (Figures 11-1 and 11-3)~~on Map 75-1~~. These streets are shown as corridors with the exact location determined through the partition, subdivision, public works permit or Architectural Review process. Unless modified by the City Council by the procedure set out below, these streets will be the only new intersections with arterials in the City. ~~*See map for changes*~~

(2) Specific alignment of a new street may be altered by the City Engineer upon finding that the street, in the proposed alignment, will carry out the objectives of this chapter to the same, or a greater degree as the described alignment, that access to adjacent and nearby properties is as adequately maintained and that the revised alignment will result in a segment of the Tualatin road system which is reasonable and logical.

(3) The City Council may include additional streets on Figures 11-1 and 11-3~~on Map 75-1~~ through the plan amendment procedure. In addition to other required findings, the City Council must find that the addition is necessary to implement the objectives of this chapter.

Section 28. TDC 75.120 is amended to read as follows:

The following list describes in detail the freeways~~, expressways~~ and arterials as defined in TDC 75.030 with respect to access. Recommendations are made for future changes in accesses and location of future accesses. These recommendations are examples of possible solutions and shall not be construed as limiting ~~the~~ City~~'s~~ authority to change or impose different conditions if additional studies result in different recommendations from those listed below.

(1) INTERSTATE 5 (I-5)
I-5 is a State facility and access is controlled by the State.

(2) INTERSTATE 205 (I -205)
I-205 is a State facility and access is controlled by the State.

~~I-5/99W CONNECTOR~~
~~If a Goal exception is granted for the Regional Transportation Plan, the I-5/99W Connector may run from a new interchange near Norwood Road westerly and then northwesterly to Tualatin-Sherwood Road or it may run westerly to Highway 99W south of Sherwood. This roadway is a controlled access highway with possible intersections proposed at the following locations:~~

~~(1) The intersection of Boones Ferry Road and I-5/99W Connector.~~

~~(2) The intersection of Grahams Ferry Road and I-5/99W Connector.~~

~~(3) The intersection of the southern extension of SW 124th Avenue and I-5/99W Connector.~~

~~(4) The intersection of Tualatin-Sherwood Road and I-5/99W Connector.~~

~~If the I-5/99W Connector is constructed in phases, some interim accesses may be provided in accordance with TDC Chapter 75 when the road is a two-lane road. When the road is completed to its design width, it may be necessary to construct sections of a frontage road to provide access to properties along the I-5/99W Connector. This would be mainly in the area between Graham Ferry Road and the Portland and Western (old Burlington Northern) railroad track.~~

(3) PACIFIC HIGHWAY 99W

On the southeasterly side of Pacific Highway 99W access will be provided by Cipole Road, ~~a future street~~ 130th Avenue, 124th Avenue and Hazelbrook Road. ~~Prior to construction of 130th Avenue, interim access in accordance with TDC Chapter 75 may be approved by the City Engineer.~~ In addition to 130th Avenue, shared driveway accesses will be allowed between Tax Lots 2S1 21A1800 (Grimm's Fuel, 18850 ~~99W~~Cipole Road) and 1801 (Construction Equipment Company, ~~18550~~ 18650 99W), and Lots 2000 (~~SW Readymix, 18610 99W~~no street address) and 2101 (Anderson Forge ~~and~~ & Machine, 18500 99W)~~, Tax Map 2S121A~~. A shared driveway ac~~-~~cess will also be allowed between 130th Avenue and 124th Avenue. ~~130th Avenue should match up with a re-aligned Pacific Drive on the northwesterly side of 99W.~~ West of Cipole Road and south of Pacific Highway 99W access will be provided by a new street or private drive extending west of Cipole Road across from the proposed Cummins Drive/Cipole Road intersection.

East of 124th Avenue on the southeasterly side of Pacific Highway 99W, property will access onto Tualatin Road or onto Hazelbrook Road. In this area a central access from Pacific Highway 99W consisting of one right-in and one right-out driveway may be allowed. The access point shall be located within the middle one-third of the frontage between 124th Avenue and Hazelbrook Road. The City Engineer shall determine ~~The~~ the final location ~~shall be determined by the City~~ Engineer at the time any portion of either site is developed.

On the northwesterly side of Pacific Highway 99W access will be provided by Cipole Road and Pacific Drive. West of Cipole Road and north of Pacific Highway 99W, access will be provided by ~~SW~~ Pacific Drive. Pacific Drive will be extended as a frontage road toward the 124th Avenue intersection as far as is practicable as determined by the City Engineer. Past that point shared driveways shall be used as determined by the City Engineer. Pacific Drive will be reconfigured to align with 130th Avenue to form a new intersection. From the reconfigured intersection with Pacific Drive and Pacific Highway 99W to 124th Avenue, interim accesses may be approved in accordance with TDC Chapter 75. Between 124th Avenue and the Tualatin River on the northwesterly side of Pacific Highway 99W existing accesses will remain except as noted below for development or redevelopment due to the median of Pacific Highway 99W these will be limited to right-turn in, right-turn out. Any redevelopment in this area will require that the driveway accesses be consolidated to a minimum number as determined by the City Engineer

(4) TUALATIN-SHERWOOD ROAD

(a) Nyberg Street to Boones Ferry Road:
Access to this section was purchased at the time of right-of-way acquisition. Access will be provided by Martinazzi Avenue and Boones Ferry Road. Notwithstanding other provisions of this Code, a single access onto Tualatin-Sherwood Road shall be allowed along the north side of this section in the block between Martinazzi Avenue and Boones Ferry Road; its exact location and configuration shall be determined by the City Engineer.

(b) Boones Ferry Road to ~~S.W.~~ 89th Avenue:
All access to this property was purchased as part of the right-of-way acquisition. Access shall be limited to right-in, right-out access on the south side at Mohave Court and on the north side ~~opposite~~ kitty-corner or opposite to Mohave Court. Full access shall be prohibited at these locations by means of a median barrier. ~~A new~~An existing four-way intersection serving ~~SW~~ 89th~~,~~ Avenue,~~and~~ Old Tualatin-Sherwood Road, and a driveway of the Hedges Greene retail development~~strip mall~~ (Tax Lot 2S123D 2600) ~~shall be~~is located approximately 800 feet west of Boones Ferry Road. ~~This intersection shall be designed in cooperation with Washington County.~~

(c) 89th Avenue to Teton Avenue:
Tualatin-Sherwood Road access shall be limited as follows: On the north side of the road the Emery Zidell Commons Subdivision (Tax Map 2S1-~~23A~~23D) shall have two street accesses located at 90th Avenue across from 90th Court and at 95th Place at the west property line. The intersection of 90th Avenue with Tualatin-Sherwood Road shall ~~be~~ remain a four-way intersection. The four-way intersection at the west line of the Emery Zidell Subdivision shall ~~be~~ remain located across from 95th Place on the south side of Tualatin-Sherwood Road.

Between 95th Place and 97th Avenue on the north side of Tualatin-Sherwood Road, the two existing driveways may remain, but limited to right-in, right-out. A cross access will be developed to serve tax lots 2S1 23CA 200, 90000~~500, 501, 600~~, 700, 800, 801, and 900~~, Tax Map 2S123CA~~ for access to 95th Place.

~~At a point 850 feet east of Teton a~~The cul-de-sac street system (of 97th Avenue) ~~will~~ extends north with Potano Street as a stub to the west to ~~pick up~~serve ~~the property behind Premier Indus- trial Park~~Tax Lot 2S1 23CB 100. On the south side ~~Evergreen Business Park~~Tualatin Gardens Subdivision (Tax Lot 2S1 23DA, 1400) shall access onto Old Tualatin-Sherwood Road. Tax Lots 2S1 23DB 00600 and 2S1 23DC 00401~~600, Tax Map 2S1 23DB (9360 Tualatin-Sherwood Road)~~ shall access onto 95th Place. Between 97th Avenue and Teton Road, Tax Lots 2S1 23CC 200 and 300 ~~of Tax Map 2S123CC~~ shall have a joint driveway access, and Tax Lot 400 ~~of Tax Map 2S123CC~~ shall have a cross access to either the joint driveway on Tax Lots 200 and 300 or a cross access over Tax Lot 500 to Teton Avenue.

A driveway~~, which may become or a cul-de-sac street, will~~ extends south of Tualatin--Sherwood Road at 97th Avenue. The driveway ~~or cul-de-sac will~~ provides access for ~~the two~~ Tax Lot 2S1 23CD 300 and the six Tualatin Business West ~~(old Pardue) properties~~ Tax Lots 2S123CD 700, 800, 900,

1000, 1100, and 1200 ~~(2S1 23 CD/200, 300)~~ located between 95th Place and the properties to the west fronting ~~SW~~ Teton (2S1 23CC/1100, 1200, 1300). The properties fronting on Teton Avenue ~~will~~ take access from Teton Avenue. The Washington County water quality facility (Tax Lot 2S1 23CC 1000~~2S123CC/1000~~) is permitted the one existing service driveway adjacent to its east property line.

(d) Teton Avenue to Avery Street/112th Avenue:
On the north side of Tualatin-Sherwood Road no new ~~streets or~~ driveways will be constructed and existing driveways will be removed at the time of development or redevelopment. All of the properties will be served by either Manhasset Drive or 112th Avenue. 112th Avenue will connect to Myslony Street. Tax Lot 2S1 22DD 600 (Western Industrial Ceramics ~~(2S1 22D/200~~) shall take access to Manhasset Street. An eastern extension off of the 112th Avenue/Myslony Street connection will terminate at and provide access to ~~the~~ Tax Lot 2S1 22D 600 (Pascuzzi Investment LLC ~~(2S1 22D/600~~) and may provide additional access for Tax Lot 2S1 22DD 100 (UPS ~~(2S122D/301~~), which has access from the west end of Manhasset Drive ~~properties. The actual align-ments of the 112th Avenue/Myslony Street connection and the eastern extension to the Pascuzzi and UPS properties will be determined at the time the surrounding properties are developed.112th Avenue may be constructed over some period of time and will require interim access agreements per TDC 75.090~~.

On the south side of Tualatin-Sherwood Road there will be no new driveways or streets. Development of property east of Tax Lot 2S1 27AA 90000 (Arlington Commons at Tualatin Condominiums)~~Oregon Culvert (2S1 27A/101, 102)~~ on Tualatin-Sherwood Road may be accomplished only with a joint access agreement with ~~Air Liquid~~Lakeside Lumber through ~~the Air Liquid~~ its driveways on Tax Lot 2S1 27AA 2000. ~~The Oregon Culvert property (2S1 27AA/100 and 200)~~Tax Lot 90000 shall have one access onto Tualatin-Sherwood Road. Properties between ~~Oregon Culvert~~Arlington Commons at Tualatin and Avery Street on the south side ~~shall be~~are served from ~~SW~~ Avery Street and Avery Court and no driveway ~~or street~~ access will be constructed with Tualatin-Sherwood Road.

(e) Avery Street/112th to Cipole Road:
On the north side of Tualatin-Sherwood Road between 112th Avenue and Cipole Road the area will be served by the following streets or driveways:

(~~1~~i) ~~An intersection with~~ 115th Avenue ~~approximately 1,100 feet west of the intersection of Tualatin-Sherwood Road and 112th Avenue~~ which will extend north to Amu Street~~and east to an~~

~~intersection at 112th Avenue a minimum of 150 feet north of Tualatin-Sherwood Road~~.

(~~2~~ii) ~~An intersection approximately 1,300 feet east of the intersection of Tualatin-Sherwood Road and~~ 1240th Avenue which will extend north and west to an intersection at 124th Avenue approximately 800 feet north of Tualatin-Sherwood Road.

(~~3~~iii) 124th Avenue.

(~~4~~(iv) Cipole Road.
The exact location and configuration of the streets or driveways shall be determined by the City Engineer.

On the south side of Tualatin-Sherwood Road between Avery Street and 120th Avenue the area will be served by the following street system:

(~~1~~v) ~~An~~The ~~intersection with~~ 115th Avenue ~~approximately 1100 feet west of Avery Street~~.

(~~2~~vi) ~~A~~The ~~street intersection at~~ 120th Avenue, which may be restricted to right-in, right-out movements in the future.

The exact location and configuration of the streets shall be determined by the City Engineer. No driveways will be constructed in this area and existing driveways will be removed. Tax Lot 2S127B 800 (Select Sales (~~2S1 27B/800~~) shall have a cross access to 115th Avenue.

(5) ~~S.W.~~NYBERG STREET

Tualatin-Sherwood Road to 65th Avenue:

(a) West of I-5:
On the south side between Fred Meyer and I-5 ~~Freeway~~ any development shall be served by the Fred Meyer driveway (Tax Lot 2S1 24CA 200 or Urban Renewal Area Block 6) aligned with the ~~K-Mart~~ Urban Renewal Area Block 2 driveway on the north side and shall not be granted any access to Nyberg Street. No additional driveways will be allowed.

(b) East of I-5:
On ~~the east side of I-5 Freeway on~~ the north side ~~of the road between the Sweetbrier Inn and the Trailer Park of Portland, any additional development or redevelopment shall remove existing~~ ~~driveways and,~~ the Nyberg Woods ~~development~~shopping center (Tax Lot 2S1 24A 2503) shall be limited to ~~two~~ one signalized ~~street~~ accesses and one right-in/right-out access.~~, and t~~The driveway for Forest Rim Apartments (Tax Lot 2S1 24A

2800) may remain. ~~and a driveway on the west side of 7035 SW Nyberg Street (2S124A/2505).~~

On the south side, ~~east of I-5 Freeway of Nyberg Street, west~~ accesses ~~to~~ Tax Lot 2S1 24DB 200 (Shell) ~~Texaco may~~shall be limited to right-in, right-out. ~~and~~ Tax Lot 2S1 24DB 100 (La-Z-Boy) ~~zyboy~~ access shall be aligned with the Nyberg Woods signalized access ~~Forest Rim Apartments will be relocated to align with the access on the north side of Nyberg Street~~. The existing westside Nyberg Retail access ~~may~~shall be limited to right-in, right-out. Tax Lot 2S1 24DA 100 (~~he~~ Meridian Park Veterinary Hospital and 7-~~11~~ Eleven) shall share a driveways that aligns with ~~may remain, or be closed or combined if redevelopment occurs, or be changed as needed when the~~ the 65th/Nyberg Street intersection ~~is reconfigured~~. There will be no new additional driveways created in this section of roadway.

(6) 124TH AVENUE

(a) Pacific Highway to Tualatin Road:
~~Tualatin Road shall intersect with 124th Avenue as a T intersection approximately 450 feet south of Pacific Highway. No street or driveway accesses on the west side of this intersection will be permitted.~~ No driveway accesses shall be allowed between Pacific Highway 99W and Tualatin Road.

(b) Tualatin Road to Herman Road:
Between Tualatin Road and Herman Road, access to 124th Avenue shall be limited to a street intersection at Leveton Drive. The area west of the 124th Avenue/Tualatin Road intersection and south of Pacific Highway 99W will be served by a cul-de-sac connecting to the westward extension of Leveton Drive. ~~Access to 124th in this section may require the execution of interim agreements per TDC 75.090 to serve properties on the west side of 124th Avenue until the new street system can be constructed to adequately serve all the properties.~~

(c) Herman Road to Tualatin-Sherwood Road:
On the east side of 124th Avenue between Herman Road and Tualatin-Sherwood Road the area will be served by the following streets or driveways:

~~1~~(i) A street intersection at Myslony Street.

~~2~~(ii) A street or driveway intersection approximately 800 feet south of the Myslony Street/124th Avenue intersection extending east with an alternative to extend north to connect with Myslony Street a minimum

of 150 feet east of 124th Avenue. Access may be limited to right in/right out as determined by the City Engineer.

~~3~~(iii) ~~A street or driveway intersection approximately 800 feet north of the intersection of Tualatin-Sherwood Road and 124th Avenue~~ Cimino Street extending east and south to an intersection at Tualatin-Sherwood Road across from 120th Avenue. The exact location and configuration of the streets and driveways shall be determined by the City Engineer.

On the west side of 124th Avenue between Herman Road and Tualatin-Sherwood Road the area will be served by the following streets or driveways:

~~1~~(iv) A driveway across from Myslony Street.

~~2~~(v) A street or driveway intersection approximately 800 feet north of the intersection of Tualatin-Sherwood Road and 124th Avenue. The exact location and configuration of the streets or driveways shall be determined by the City Engineer.

(d) Tualatin-Sherwood Road to Tonquin Road ~~and/or a future I5/99W Connector~~:

Between Tualatin-Sherwood Road and Tonquin Road ~~and/or a future I5/99W Connector~~, access to 124th Avenue shall be limited to street intersections at Blake Street and the unnamed east-west collector street. Depending on when this segment of 124th Avenue is constructed, ~~and where and when the I-5 to 99W Connector is constructed,~~ a (possibly interim) connection to Tonquin Road may also be provided.

(7) LOWER BOONES FERRY ROAD

(a) Boones Ferry Road to Childs Road:
On the south side of the road, Tax Lot 2S1 24AB 800 ~~the~~ (Club Sport Oregon ~~property (old Costco site)) (2S124AB, 800) (18120 SW Boones Ferry Road)~~ shall have its access located at its east property line. This access shall be combined with the access of the Mt. Hood Chemical Building ~~(the old Chadwick building)~~ (Tax Lot 2S1 24A~~B~~ 700) at its west property line into one joint access.

On the north side of the road is a small lot (Leageld Development; Tax Lot) ~~(~~2S1 13DC 2000) ~~whose~~ the driveway of which shall line up with the intersection of Childs Road and Lower Boones Ferry Road.

(b) Childs Road to I-5 Freeway:

On the south side of the road the existing driveways may be allowed to remain. No new driveways will be permitted. ~~If the properties change to another Planning District, the number and location of the accesses may need to be changed. The property at the northeast corner of Lower Boones Ferry Road and Childs Road, (Foursquare Church) shall take its access off of Childs~~ Road. ~~The Billygan's Roadhouse (2S113DC/700 & 800) shall share an access with 2S113DC/1100.~~

On the north side of the road, the existing driveways may be allowed to remain. No new driveways will be permitted. ~~The Robertson/Bioremediation lots (2S113DC/ 1800 & 1900) shall share a driveway. The Robinson Property (old Directors Furniture site) east of the Schneider Truck Terminal (the old Ryder Truck rental facility) (2S1 13DC/1000) shall align its driveway with the driveway immediately across Lower Boones Ferry Road on the south side. The Barbara Johnson property (2S1 13DC/501) shall share an access and may be limited to right in, right out. The CarQuest site (2S113DC/501) shall take access off of Hazel Fern Road.~~

(c) I-5 Freeway northerly to Bridgeport Road:
On the west side, Hazel Fern Road shall intersect with Lower Boones Ferry Road, as Traveller's Lane. ~~The Village Inn's (2S113DB/1200 & 1300) access may remain. If the site is re- developed, access shall be determined by the City Engineer. .Shilo Inn (2S1 13DB 1400) shall access off of Hazel Fern Road.~~

On the east side, the Tri-Met park and ride shall be permitted two driveway accesses as determined by the City Engineer.

(d) 72nd Avenue to the east City limits:
On the north side access shall be permitted only by 65th Avenue and 63rd Avenue and a right-in, right-out driveway between 65th and 63rd Avenues. Between 63rd Avenue and the east City limits the properties fronting Lower Boones Ferry Road shall take access from 63rd Avenue.

On the south side access shall be permitted at 65th Avenue. Between 65th Avenue and the east City limits no new accesses shall be permitted. A median may be constructed to limit access to right-in, right-out.

(8) BOONES FERRY ROAD

(a) North City Limits to the Tualatin River:
All existing driveways will remain. No new driveways will be permitted.

(b)Tualatin River to Tualatin Road:
Between the River and Martinazzi Avenue on the south side, the access for the apartments (Tax Lot 2S1 24B/ 1500) will be closed and converted

over to the Loop Road. The Loop Road ~~may~~ will have a right-in, right-out connection to Boones Ferry Road between the river and Martinazzi Avenue. On the south side of Boones Ferry Road between Martinazzi Avenue and the driveway for the White Lot (~~old~~ formerly Lot C), any development or redevelopment shall take access over the White Lot or from Martinazzi Avenue. Between the White lot and 84th Avenue, all properties shall have combined accesses resulting in only one access on Boones Ferry Road. Between 84th Avenue and Tualatin Road on the south side, any redevelopment shall result in no driveways onto Boones Ferry Road and access shall be taken from 84th Avenue or Seneca Street.

On the north side ~~the Baranzano~~ (Tax Lots 2S1 24BC/ 1301 and~~,~~ 1400 ~~(known for the defunct River House project through applicant Baranzano and owned by CSB LLC)~~ and ~~Bray~~ Tax Lot ~~(~~2S1 24B/ 1300 (Apartments by Hedges Creek; Kaplan) ~~properties~~ shall combine their driveways at a location to be determined by the design of the Martinazzi Avenue-Boones Ferry Road inter-section. ~~T~~Further the ~~Baranzano River House and Kaplan Apartments by Hedges Creek~~ (formerly ~~Greulich) (2S1 24BC/1300)~~ properties shall combine their access into one on Lot 1300 across from the White lot's driveway. Between the Green (~~old~~ former Lot G ~~lot~~) and Blue (~~old~~ former Lot ~~H lot~~) ~~lots~~Lots, any redevelopment of these properties shall remove the existing driveways and take access from the public parking lots from a cross access between the two public lots. Between the Blue ~~lot~~ Lot and Tualatin Road any development or redevelopment shall have access off of Tualatin Road at the north edge of the property or over the Blue ~~lot~~Lot.

(c) Tualatin Road to Tualatin-Sherwood Road:
On the west side of this road is the Portland ~~and~~ & Western ~~(old Burlington Northern) railroad~~ Railroad (PNWR) tracks. There will be no access to Boones Ferry Road across the ~~Portland and Western~~PNWR tracks except an access for a public street to the west side of the railroad tracks, centered on the centerline of Nyberg Street. The existing two driveways to ~~the Pratt Broome~~ (Tax Lot 2S1 23D /~~2~~3400 (Sweek House also known as Willowbrook) ~~property~~ shall be allowed a gated emergency access onto Boones Ferry Road, the other access shall be closed and access taken over Tax Lot 2S1 23D 2600 (~~the~~ Hedges Greene ~~R~~retail development~~strip mall~~) to Nyberg Street.

On the east side of this road, all redevelopment shall lead to elimination of all driveways onto Boones Ferry Road. Vehicular access to Boones Ferry Road in this section shall be limited to the Seneca Street intersection and Nyberg Street intersection. This will require interim access agreements per TDC 75.090.

(d) Tualatin-Sherwood Road to Sagert Street:

On the west side, all existing driveways will be allowed to remain. On the frontage of the property of the demolished historic ~~former Old~~ Tualatin ~~Elementary~~Elementary ~~Grade~~ School ~~property~~ (Tax Lots 2S1 23DD 500 and 501), ~~frontage (2S123DD 500),~~ a new local street intersection is allowed on ~~SW~~ Boones Ferry Road that connects to a future public street on the Old Tualatin Elementary School property that extends north from ~~SW~~ Sagert Street in the approximate alignment of ~~SW~~ 90th Avenue. The new local street intersection may be located approximately 500 ft. north of the intersection with ~~SW~~ Sagert Street. Tax Lot 2S1 23DA 100 (~~The Tualatin Center~~unnamed ~~strip mall~~ retail development at the intersection with Warm Springs Street~~property (the old Galloway site) (2S1 23DA/100) (19401 19417 Boones Ferry Road~~) will have one access aligned with Warm Springs.

On the east side, the ~~old McDonald's~~ driveway of McDonalds (Tax Lots 2S1 24CB 1201, 1301, and 1400) was closed and shall remain closed ~~(2S1 24CB/1201)~~. Any additional development on the Brock property (2S1 24CB 2100) shall result in closure of this driveway to Boones Ferry Road. Any additional development on ~~the Ziedman property~~ (Tax Lot 2S1 24CB/ 2200 (Tualatin West Center retail development) shall result in closure of this driveway to Boones Ferry Road. Between Warm Springs Street and Tualatin-Sherwood Road, as an option to closing the driveways at Brocks, and Tualatin West Center~~Ziedmans~~, it may be permissible to construct a raised median barrier or other improvements in Boones Ferry Road in this section to physically eliminate left turning movements, thus limiting all these driveways to right turn in, right turn out. Any redevelopment of the residential property between Mohawk and Sagert on the east side of Boones Ferry Road shall be accomplished in such a manner that the ultimate access to this area is from a street off of Sagert Street at its intersection with 86th Avenue. This may require interim agreements in accordance with TDC 75.090. All existing driveways in this area will be allowed to remain so long as the use of the property does not change.

(e) ~~Boones Ferry Road south of~~ Sagert Street to Avery Street:
The existing driveways will be allowed to remain. Any redevelopment of any residential property between Sagert and Avery shall result in no additional driveways being constructed in this area

(f) Avery Street to Ibach Street:
South of Avery Street, the Sundae Meadows Subdivision and Tualatin Presbyterian Church (Tax Lot 2S1 26AC~~,~~ 301) ~~(9230 Siletz Drive)~~ shall access Boones Ferry Road via Siletz Drive. One additional street or private drive (Cherry Lane) will be allowed~~provided~~ for the ~~Boones Ferry Condos (2S1 26AC Supplemental~~Boones Ferry Commons Condominiums (Tax Lot 2S1 26CA 90000).

(g) Ibach Street to Norwood Road:
Development of these residential properties shall result in no more than two driveway accesses for Tualatin High School, one emergency access with no curb cut for Graham's Landing Townhomes Condos (~~SW Corner of Boones Ferry and Ibach~~Tax Lot 2S1 35BA 90000) and only street intersections for other properties. All street intersections on Boones Ferry Road between Ibach and Norwood shall be spaced a minimum of 500 feet apart.

(9) 65TH AVENUE

(a) Nyberg to Borland:
There will be no new additional driveways.

(b) Borland Road to ~~Sagert Street~~south city limits:
~~There will be no new driveways.~~ A street connection will be constructed across from Sagert Street to serve property to the east of 65th Avenue.

(10) BORLAND ROAD

(a) Between 65th and the Entrance to Bridgeport School:
In this section of roadway, as the residential properties develop, all accesses to Borland shall be limited to street intersections. These street intersections shall be spaced a minimum of 500 feet apart. All development in this area shall be interconnected so there are no dead-end entrances from Borland Road.

(b) Bridgeport School Entrance to Saum Creek:
As the residential properties develop, all accesses to Borland shall be limited to street intersections. These street intersections shall be spaced a minimum of 500 feet apart. All development in this area shall be interconnected so there are no dead-end entrances from Borland Road. Access to Prosperity Park Road is allowed.

(11) BRIDGEPORT ROAD

(a) 72nd Avenue to the West City Limits:
On the north side, the existing driveways will be allowed to remain. No new driveways will be permitted. ~~the Durham Quarry (2S113DB/100) access will be limited to three driveways. Two driveways shall align across from Hazel Fern Road and the REI driveway and the final driveway location at the southwest corner of the site shall be determined by the City Engineer. As part of the Durham Quarry development Finday Street in the City of Durham at the northwest corner of the site may be an access to the site.~~

On the south side the existing driveways will be allowed to remain. No new driveways will be permitted. ~~between Lower Boones Ferry Road and Hazel Fern Road no driveway access shall be permitted. From Hazel Fern to the City limits, A-1 Coupling (2S113DB/701) shall take access from Hazel Fern Road. The undeveloped property (2S113DB/600) shall have a joint access with REI (2S113DB/500). Bridgeport Office (Tax Lot 2S1 13DB/ 400) and the driveway easement for Tax Lot 2S1 13DB/ 401 shall combine driveways.~~

(12) 72ND AVENUE

(a) Bridgeport Road to North City Limits:
The existing driveways will be allowed to remain. No new driveways will be permitted. ~~On the east side no street or driveway access shall be permitted. Access to the Tri-Met Park and Ride shall be provided from a new driveway access serving the Borders Book development in the City of Tigard. On the west side no street or driveway access shall be permitted. Access to 72nd from the Durham Quarry development will be in the City of Tigard~~

(13) MARTINAZZI AVENUE

(a) Boones Ferry Road to Seneca Street:
On the west side, any redevelopment on the ~~Doyle (old Silvey)~~ Haberman and Sopft Touch Dentistry property (2S1 24BC/ 1500~~,~~ and 1503) or the ~~Halstin (old post office~~ unnamed retail development property with corner tenant Umpqua Bank ~~)~~ (2S1 24BC/ 1502) shall result in combining these two driveways into one driveway on Martinazzi Avenue, or the ~~H~~alstin retail development property shall take access from the White ~~public parking~~ !Lot (~~old~~ former Lot C) to Boones Ferry Road.

On the east side the existing driveway shall be removed and access shall be taken off of the Loop Road.

(b) Seneca Street to Nyberg Street:
No driveways shall be permitted. The raised center median prohibiting left turns in this area shall remain until driveways are removed. On the west side on Tax Lot 2S1 24BC 2702 ~~the~~ (Wells Fargo Bank), the driveway shall be removed and access taken from Seneca Street or Nyberg Street. On the east side the driveway for Tax Lot 2S1 14B/ 2000 (Tualatin Center retail development Building 1) shall be removed and access taken from the Loop Road or Nyberg Street.

(c) Nyberg Street to Tualatin-Sherwood Road:
There shall be no access to Martinazzi Avenue.

(d) Tualatin-Sherwood Road to Warm Springs Street:
The only access shall be the existing Fred Meyer/Martinazzi Square driveway intersection.

(e) Warm Springs Street to Sagert Street:
There shall be no additional access granted. The only street intersection will be Mohawk Street.

~~(14) TUALATIN ROAD~~

~~(a) Boones Ferry Road to Hall Boulevard Extension~~Chinook Street:
~~On the west side is the Portland and~~ & Western railroad ~~Railroad (PNWR) tracks (the old Burlington Northern tracks). There will be no access to Tualatin Road across the tracks.~~

~~On the east side a driveway access may be permitted for~~ undeveloped ~~Tax Lot~~ 2S1 24BC/ 300. ~~The existing driveways for~~ Tax Lots ~~2S1 24BC/ 100 &~~ and 200 ~~(Tualatin Community Park) may remain.~~

~~Hall Boulevard Extension to Chinook Street:~~

~~On the north and east side no new driveway access shall be permitted. Redevelopment shall require access to be taken from 84th Avenue or Cherokee Street.~~

~~On the south and west side, no new driveway accesses shall be permitted. Access related to redevelopment of 2S123/ 100 shall be determined by the City Engineer.~~

~~(b) Chinook Street to Herman Road:~~
~~No new driveway accesses shall be permitted. On the north side any development or redevelopment of the Tualatin Country Club (2S1 14D/ 500) shall require a street or driveway connection aligning with 90th Avenue. Redevelopment of~~ Tax Lots ~~2S1 23BA/ 2403 or 2S123BA/4800 shall require access to Cheyenne Way connecting to Tualatin Road.~~

~~On the south side of this road is the Portland and~~ & Western railroad ~~Railroad (PNWR) tracks(old SP tracks). There will be no access to Tualatin Road across the tracks except for 90th Avenue and the Durametal (~~Tax Lot ~~2S1 23BD/ 800 (multi-tenant industrial building) driveway.~~

(14) SAGERT STREET

(a) Martinazzi Avenue to 65th Avenue

No new driveways or streets shall be allowed, except the City Engineer may allow one driveway from the SE corner lot of Sagert and Martinazzi. This driveway may be restricted to right-in, right-out.

~~HALL BOULEVARD~~
~~Tualatin Road to North City Limits:~~

~~No driveway access shall be allowed to the Hall Boulevard extension. A street connection shall be made for the Lower Boones Ferry Road/Tualatin Road extension.~~

(15) LEVETON DRIVE

(a) 1~~1~~08th Avenue to 1~~0~~18th Avenue:
On the north side of Leveton Drive, JAE (2S122B/ 200) shall align a driveway across from 118th Avenue and be permitted a second driveway approximately 50 feet from their east property line. Novellus (2S122AA/ 500 and 2S122AB/ 100) shall be permitted three driveways located approximately 25 feet and 950 feet from the west property line for Tax Lot 100 and 600 feet west of 108th Avenue for Tax Lot 500.

On the south side, Phight Inc. (2S122/ 300) shall be allowed a driveway aligned with the west Novellus (2S122AB/ 100) driveway and a driveway adjacent to their east property line. Fujimi (2S122/ 400) shall be allowed a driveway adjacent to their west property line and east property line. Tofle (2S122AD/ 400) shall be allowed a driveway aligning across from the Novellus (2S122AA/ 500) driveway and a second driveway approximately 260 feet west of 108th Avenue.

(b) 118th Avenue to 124th Avenue:
The existing driveways will be allowed to remain. No new driveways will be permitted.

(16) 108TH AVENUE

(a) Leveton Drive to Herman Road:
On the west side, Tofle (2S122AD/ 400) shall take access from Leveton Drive. The undeveloped property (2S122AD/ ~~500~~1300, 1400 and 1500) shall be allowed one driveway onto 108th Avenue. The old Shulzts Clearwater site (2S122AD/ 800) and then Northwest Pipe and Metal Fab (2S122AD/ 600 &and 700) shall provide a joint driveway access. The Wahco Inc. property (2S122AD/ 900) shall take access from Herman Road.

On the east side, the DOT Inc.~~,~~ site shall have a driveway that aligns with Leveton Drive. The City Operations Center (2S122AD/ 200 &and 300) will be permitted two driveways at locations to be determined by the City Engineer.

(17) HERMAN ROAD

(a) ~~108th~~Teton Avenue to ~~Teton~~108th Avenue:
On the north side~~,~~ the existing driveways will be allowed to remain. No new driveways will be permitted. ~~the City Operations Center (2S122AD/200 & 2300) will be permitted one driveway ap- proximately midpoint along their Herman Road frontage.~~ Airifco (2S123B/ 600) will be permitted one driveway adjacent to their west property line.
On the south side is the Portland ~~and~~ & Western ~~railroad~~ Railroad (PNWR) tracks ~~(the old SP tracks)~~. There will be no access to Herman Road across the tracks except for a shared driveway between the Kem Equipment (2S122AD/ 800) and Marshall Property (2S122AD/ 1000) located on the common property line. The Marshall Property (2S123BC/ 1000) shall take access from Teton Avenue.

(b) ~~Teton~~108th Avenue to 12418th Avenue:
On the north side the existing driveways will be allowed to remain. No new driveways will be permitted.

On the south side is the Portland & Western Railroad (PNWR) tracks. There will be no access to Herman Road across the tracks.

(c) 118th Avenue to 124th Avenue:
On the north side the existing driveways will be allowed to remain. No new driveways will be permitted.

On the south side is the Portland & Western Railroad (PNWR) tracks. There will be no access to Herman Road across the tracks.

(18) 90TH AVENUE

(a) Tualatin Road to Tualatin-Sherwood Road:
The existing driveways will be allowed to remain. No new driveways will be permitted.

(19) AVERY STREET

(a) Teton Road to Tualatin-Sherwood Road:
The existing driveways will be allowed to remain. No new driveways will be permitted.

(20) TETON AVENUE

(a) Tualatin Road to Herman Road:

The existing driveways will be allowed to remain. No new driveways will be permitted

(b) Herman Road to Tualatin-Sherwood Road:
The existing driveways will be allowed to remain. No new driveways will be permitted.

(c) Tualatin-Sherwood Road to Avery Street:
The existing driveways will be allowed to remain. No new driveways will be permitted.

~~LOWER BOONES FERRY ROAD EXTENSION WEST TO TUALATIN ROAD~~

~~Boones Ferry Road to Tualatin Road:~~

~~Driveway or street locations during redevelopment of the properties west of Boones Ferry Road and east of the river shall be determined by the City Engineer. A street connection shall be at the Hall Boulevard extension. Driveway or street access for properties along Chinook Street will be determined by the City Engineer at the time of development or redevelopment.~~

Section 29. TDC 75.140 is amended to read as follows:

(a) Major Collectors. Direct access from newly constructed single family homes, duplexes or triplexes shall not be permitted. As major collectors in residential areas are fully improved, or adjacent land redevelops, direct access should be relocated to the nearest local street where feasible.

(b) Minor Collectors. Residential, commercial and industrial driveways where the frontage is greater or equal to 70 feet are permitted. Minimum spacing at 100 feet. Uses with less than 50 feet of frontage shall use a common (joint) access where available. ~~Except for collectors designated Cs&p and Cs&2p, direct access from newly constructed single family homes, duplexes or triplexes shall not be permitted. Except for collectors designated Cs&p and Cs&2p, as minor collectors in residential areas are fully improved, or adjacent land redevelops, direct access should be relocated to the nearest local street where feasible.~~

(c) If access is not able to be relocated to the nearest local street, the City Engineer may allow interim access in accordance with 75.090 of this chapter to provide for the eventual implementation of the overall access plan.

Section 30. TDC 75.200 is deleted in its entirety:

Section 31. Section 74.425 is added to the TDC to read as follows:

(1) Street design standards are based on the functional and operational characteristics of streets such as travel volume, capacity, operating speed, and safety. They are necessary to ensure that the system of streets, as it develops, will be capable of safely and efficiently serving the traveling public while also accommodating the orderly development of adjacent lands.

(2) The proposed street design standards are shown in Figures 72A through 72G. The typical roadway cross sections comprise the following elements: right-of-way, number of travel lanes, bicycle and pedestrian facilities, and other amenities such as landscape strips. These figures are intended for planning purposes for new road construction, as well as for those locations where it is physically and economically feasible to improve existing streets.

(3) In accordance with the Tualatin Basin Program for fish and wildlife habitat it is the intent of Figures 74-2A through 74-2G to allow for modifications to the standards when deemed appropriate by the City Engineer to address fish and wildlife habitat.

(4) All streets shall be designed and constructed according to the preferred standard. The City Engineer may reduce the requirements of the preferred standard based on specific site conditions, but in no event will the requirement be less than the minimum standard. The City Engineer shall take into consideration the following factors when deciding whether the site conditions warrant a reduction of the preferred standard:

(a) Arterials:

(i) Whether adequate right-of-way exists

(ii) Impacts to properties adjacent to right-of-way

(iii) Current and future vehicle traffic at the location

(iv) Amount of heavy vehicles (buses and trucks).

(b) Collectors:

(i) Whether adequate right-of-way exists

(ii) Impacts to properties adjacent to right-of-way

(iii) Amount of heavy vehicles (buses and trucks)

(iv) Proximity to property zoned manufacturing or industrial.

(c) Local Streets:

(i) Local streets proposed within areas which have environmental constraints and/or sensitive areas and will not have direct residential access may utilize the minimum design standard. When the minimum design standard is allowed, the City Engineer may determine that no parking signs are required on one or both sides of the street.

Section 36. TDC Chapter 11 is deleted in its entirety and a new Chapter 11 is added to the TDC to read as follows:

Section 11.600.

(1) The Tualatin Transportation System Plan (TSP) establishes a long-range vision for the combination of projects, programs, and policies that will achieve Tualatin's transportation goals. To do this, the TSP looks at the needs of its residents, businesses, employees, and visitors – now (Year 2012), and what is expected for the future (Year 2035). TSPs are required by the state of Oregon for all cities with populations greater than 2,500 people. The current TSP (December 2012) is a major update of the TSP that was adopted in 2001, with analyses completed in 2000. The TSP considers the diverse needs of all users of the City's transportation network, and sets out recommendations that will serve the needs of transit riders, bicyclists, pedestrians, freight traffic, and drivers.

The TSP has been prepared in compliance with state, regional, and local plans and policies, including the Oregon Highway Plan (OHP), the state Transportation Planning Rule (TPR), Metro's Regional Transportation Plan (RTP), Metro's Regional Transportation Functional Plan (RTFP), Washington and Clackamas Counties Transportation System Plans, and Tualatin's Comprehensive Plan. The TSP presents a vision specific to the City's transportation future, while remaining consistent with these state, regional, and local plans. Plan elements will be implemented by the City, private developers, and regional, or state agencies.

(2) Regulatory Requirements. The TPR (OAR 660-012), developed by the state Department of Land Conservation and Development (DLCD) in accordance with state law, and Oregon Revised Statute (ORS) 197.712 guide preparation of the TSP and require that jurisdictions develop the following:

(a) A road plan for a network of arterial and collector roads

(b) A public transit plan

(c)A bicycle and pedestrian plan

(d) An air, rail, water, and pipeline plan

(e) A transportation financing plan

(f) Policies and ordinances for implementing the TSP

The TPR requires that alternate travel modes including cycling, walking, and transit, be given equal consideration with automobile travel and states that reasonable effort must be applied in the development and enhancement of alternate modes in Tualatin's future transportation system. Local jurisdictions must also coordinate their plans with relevant state, regional, and county plans and amend their own ordinances to implement the TSP.

Metro also requires that TSPs meet certain requirements that have been adopted in the RTP and RTFP. Local TSPs must:

(a) Establish an arterial street network, considering Metro's street design concepts and include a conceptual map of new streets

(b) Implement access management standards

(c) Include policies, standards, and projects that connect to transit stops

(d) Develop a transit plan consistent with the regional transit functional plan

(e) Develop pedestrian, bicycle, freight, parking, and transportation system management plans

(f) Ensure that regional transportation needs are incorporated into the TSP

(g) Include regional transportation goals for mode share and vehicles miles traveled

(3) The TSP Technical Memorandum, December 2012, is adopted by reference as a supporting technical document to the Tualatin Development Code (TDC). The TSP Technical Memorandum (December 2012) was prepared in compliance with the requirements of the TPR and includes the following chapters and appendices:

Chapter 1:	Introduction
Chapter 2:	Modal Plans
Chapter 3:	Implementation Policy and Code Language
Appendix A:	Plan and Policy Review
Appendix B:	Existing Conditions and Deficiencies
Appendix C:	Future Transportation Conditions
Appendix D:	Alternatives Analysis
Appendix E:	Transportation Funding and Improvement Costs

Appendix F: Implementing Ordinances
Appendix G: Public Involvement Process
Appendix H: Bicycle and Pedestrian

The Modal Plans element (Chapter 2) of the TSP Technical Memorandum (December 2012) addresses those components necessary for development of the future transportation network. Chapter 2 of the TSP Technical Memorandum (December 2012) was adopted as the transportation element of the Tualatin Community Plan in the Spring of 2013. This chapter is intended to provide policy guidance for transportation improvements, which are then implemented by the TDC.

(4) Plan Process. Tualatin began the process to update the TSP in 2011. Staff organized their work into four basic steps.

Step 1. The team (of staff and consultants) identified existing and future needs, opportunities, project goals, and objectives. City staff and the consultant project team assembled existing and collected new data, analyzed the data to identify deficiencies and opportunities, and attended a number of community events to ask about issues with the transportation system to form an understanding of transportation problems to be addressed in the TSP. Additionally, the project website included an issues map where visitors to the website could identify transportation problems within the City.

Step 2. Next the team created a long list of potential solutions and screened and evaluated potential solutions to see how ideas met project goals and objectives. An open house, several Transportation Task Force (TTF; refer to TDC 11.600) meetings, and Working Group meetings helped create and/or evaluate potential solutions. Throughout each of these steps, the project team engaged the community to ensure that each element was appropriate for Tualatin.

Step 3. The team prepared the draft recommendations for projects to be included into the TSP, refining a number of recommendations for the more complex transportation needs, and prioritizing the project recommendations to help both the City and the community define which projects and programs should be implemented first.

Step 4. Finally the team developed the draft and final TSPs for City adoption. This process focused on compiling all recommendations into the TSP document, and coordinating with relevant stakeholders in reviewing the TSP for completeness and consistency. These stakeholders included the community, City Council, Tualatin Planning Commission (TPC), Tualatin Parks Advisory Committee (TPARK), Washington County, Metro, Oregon Department of Transportation (ODOT), Clackamas County, adjacent cities, and the state's DLCD.

(5) Study Area. In December 2002, Metro expanded the Portland Urban Growth Boundary (UGB). This expansion included lands bordering Tualatin's Planning Area boundary that are intended to develop in the future for industrial uses. Following studies of impacts of these expansions, the city's TSP (2001) was amended to incorporate these new lands.

(a) The City of Tualatin, in conjunction with ODOT, initiated a study of a 23 acre area south of Highway 99W and west of SW Cipole Road in 2004. The Northwest Tualatin Concept plan addressed the impacts of developing this area for industrial uses. A technical analysis was prepared for the Concept Plan, following requirements of the TPR, that specifically addressed the transportation needs associated with developing the concept plan area at urban densities. Development of the Concept Plan was guided by input from an 11-member Technical Advisory Committee (TAC) that met four times during the planning process. The TAC included representatives from the City of Tualatin, ODOT, Washington County, Bonneville Power Administration (BPA), Metro, U.S. Fish and Wildlife Service (representing the Tualatin River National Wildlife Refuge), Portland General Electric (PGE), Clean Water Services (CWS), and TriMet. Mailing to stakeholders and a public open house were used to obtain community feedback on the draft plan. The TSP (2001) amendments relating to the Northwest Tualatin Concept Plan area were accepted by the City Council on June 13, 2005.

(b) The City of Tualatin, in conjunction with ODOT, initiated a study of a 431-acre area south of SW Tualatin-Sherwood Road and west of the Portland & Western railroad tracks in 2004. In 2010, the City analyzed this area plus an additional 183-acres south of the Concept Plan area. The Southwest Tualatin Concept Plan addressed the impacts of developing this area for industrial uses, particularly the portion of the area designated as a "regionally significant industrial area." A technical analysis was prepared for the Concept Plan, following the requirements of the TPR that specifically addressed the transportation needs associated with developing the Concept Plan area at urban densities. Development of the Concept Plan was guided by input from a 31-member TAC that met 12 times during the planning process. The TAC included representatives from the Cities of Tualatin, Sherwood, and Wilsonville; Metro; ODOT; DLCD; Washington County; PGE; BPA; CWS; Oregon Department of Geology and Mineral Industries; Coffee Creek Correctional Facility; Tualatin Valley Fire & Rescue (TVF&R); TriMet; Genessee and Wyoming Railroad; and property owners from the Tonquin Industrial Group, the Itel properties area and from Tigard Sand & Gravel. Mailings to stakeholders and four public open houses were used to obtain community feedback on the draft plan. The TSP (2001) amendments relating to the Southwest Tualatin Concept Plan area were accepted by the City Council on October 11, 2010.

(c) The study area for the current Tualatin TSP (2012) is comprised of the Tualatin Planning Area boundary, with one addition - the Basalt Creek planning area between Tualatin and Wilsonville. This area outside of the Planning Area Boundary, but within the study area, was included because of the transportation impact that it could have on the City's transportation network associated with the potential development of residential and employment areas. The study area is shown on several of the TSP's figures, including Figure 11-1 Functional Classification Plan.

(6) Public Involvement. The TSP planning process actively engaged the citizens of Tualatin in the production of its TSP. Residents, business owners, employees, and agency partners were encouraged to participate and were provided with multiple ways to share their thoughts - from initial goal development and issue identification to evaluation and screening. The public involvement plan outlined a thorough outreach process, making it easy and fun for the public to share ideas. The process provided meaningful ways to influence outcomes and took advantage of existing communication networks to reach more people.

(a) Transportation Task Force. The public involvement plan established a clear decision-making framework for the TSP. The Transportation Task Force (TTF), with input from Working Groups, advised the Tualatin Planning Commission (TPC). The TPC then made a recommendation to the City Council, which then adopted the final TSP Technical Memorandum (December 2012) and any changes to the City's Code. In addition, the TPARK made recommendations on the bicycle and pedestrian elements to the City Council. Each of these organizations received regular project updates from City staff throughout the process and each had representative members on the TTF. These groups were given the opportunity to provide their recommendation before the TTF decisions were forwarded to TPC and the City Council.

The TTF was formed in November 2011 for the purpose of advising the TPC and City Council about the needs and concerns of the community with regard to transportation. The City Council Citizen Involvement Committee selected TTF members carefully to be representative of neighborhoods, the business community, and the interests of Tualatin's advisory committees. Members and alternates were selected from a pool of applications. Neighboring communities, counties, TVF&R, ODOT, Metro, and TriMet also had representatives on the TTF.

Additional information about the TTF, Working Groups, and other aspects of the public involvement process for the TSP are included in Appendix G of the TSP Technical Memorandum (December 2012).

Section 11.610

(1) Over a span of three meetings the TTF prepared a vision for the TSP, conveyed as a set of goals and objectives. In early 2012 they adopted seven principal goals organized into the following goal categories:

Goal 1: Access and Mobility
Goal 2: Safety
Goal 3: Vibrant Community
Goal 4: Equity
Goal 5: Economy
Goal 6: Health and the Environment
Goal 7: Ability to be Implemented

These goals and their associated objectives were also discussed by the community at the first open house in February 2012 and by TPC, TPARK, and City Council. The full description of goals and objectives served as the basis for the TSP's evaluation framework. This means that all TSP recommendations were tied back to the underlying vision as established by these groups.

(2) Goal 1: Access and Mobility. Maintain and enhance the transportation system to reduce travel times, provide travel-time reliability, provide a functional and smooth transportation system, and promote access for all users.

Objectives:

(a) Improve travel time reliability/provide travel information for all modes including freight and transit.

(b) Provide efficient and quick travel between points A and B.

(c) Provide connectivity within the City between popular destinations and residential areas.

(d) Accommodate future traffic, bicycle, pedestrian, and transit demand.

(e) Reduce trip length and potential travel times for motor vehicles, freight, transit, bicycles, and pedestrians.

(f) Improve comfort and convenience of travel for all modes including bicycles, pedestrians, and transit users.

(g) Increase access to key destinations for all modes.

(3) Goal 2: Safety. Improve safety for all users, all modes, all ages, and all abilities within the City of Tualatin.

Objectives:

(a) Address known safety locations, including high-crash locations for motor vehicles, bicycles, and pedestrians.

(b) Address geometric deficiencies that could affect safety including intersection design, location and existence of facilities, and street design.

(c)Ensure that emergency vehicles are able to provide services throughout the City to support a safe community.

(d) Provide a secure transportation system for all modes.

(4) Goal 3: Vibrant Community. Allow for a variety of alternative transportation choices for citizens of and visitors to Tualatin to support a high quality of life and community livability.

Objectives:

(a) Produce a plan that respects and preserves neighborhood values and identity.

(b) Create a variety of safe options for transportation needs including bicycles, pedestrians, transit, freight, and motor vehicles.

(c) Provide complete streets that include universal access through pedestrian facilities, bicycle facilities, and transit on some streets.

(d) Support a livable community with family-friendly neighborhoods.

(e) Maintain a small-town feel.

(5) Goal 4: Equity. Consider the distribution of benefits and impacts from potential transportation options, and work towards fair access to transportation facilities for all users, all ages, and all abilities.

Objectives:

(a) Promote a fair distribution of benefits to and burdens on different populations within the City (that is, low-income, transit-dependent, minority, age groups) and different neighborhoods and employment areas within the City.

(b) Consider access to transit for all users.

(6) Goal 5: Economy. Support local employment, local businesses, and a prosperous community while recognizing Tualatin's role in the regional economy.

Objectives:

(a) Support a vibrant city center and community, accessible to all modes of transportation.

(b) Support employment centers by providing transportation options to major employers.

(c) Increase access to employment and commercial centers on foot, bike, or transit.

(d) Consider positive and negative effects of alternatives on adjacent residential and business areas.

(e) Accommodate freight movement.

(f) Facilitate efficient access for goods, employees, and customers to and from commercial and industrial lands, including access to the regional transportation network.

(7) Goal 6: Health/Environment. Provide active transportation options to improve the health of citizens in Tualatin. Ensure that transportation does not adversely affect public health or the environment.

Objectives:

(a) Provide active transportation options to area schools to reduce childhood obesity.

(b) Promote active transportation modes to support a healthy public and children of all ages.

(c) Provide interconnected networks for bicyclists and pedestrians throughout the City for all age groups.

(d) Consider air quality effects of potential transportation solutions. Protect park land and create an environmentally sustainable community.

(e) Consider positive and negative effects of potential solutions on the natural environment (including wetlands and habitat areas).

(8) Goal 7: Ability to Be Implemented. Promote potential options that are able to be implemented because they have community and political support and are likely to be funded.

Objectives:

(a) Promote fiscal responsibility and ensure that potential transportation system options are able to be funded given existing and anticipated future funding sources.

(b) Evaluate potential options for consistency with existing community, regional, and state goals and policies.

(c) Strive for broad community and political support.

(d) Optimize benefits over the life cycle of the potential option.

(e) Consider transportation options that make the best use of the existing network.

(f) Conduct the planning process with adequate input and feedback from citizens in each affected neighborhood.

Section 11.620

(1) A city's functional classification plan defines the intended operations and character of roadways within the overall transportation system including standards for roadway and right-of-way width, access spacing, and pedestrian and bicycle facilities. The City of Tualatin's functional classification system applies to roadways owned by the City, the County, and the State, and includes principal arterials, major arterials, minor arterials, major collectors, minor collectors, connector, and local roads. Figure 11-1 presents the updated functional classification plan for the City of Tualatin.

The arterial roadways carry a high number of vehicles including transit and freight vehicles, and provide mobility with few opportunities for local access. Collectors assemble traffic from a neighborhood or district and deliver it to the closest arterial street. Collectors serve shorter trip lengths than arterials and have more local access opportunities. Both arterials and collectors within Tualatin are owned by a variety of agencies including the City, ODOT, and Clackamas and Washington Counties. The roadway owners are responsible for maintenance and upkeep on the roadways and they make decisions on upgrades to their facilities. TSP Technical Memorandum (December 2012) describes the functional classifications and the purpose they are intended to serve in more detail; Appendix A, Plan and Policy Review, of the TSP Technical Memorandum provides a detailed description of the various policies associated with roadway ownership.

There are a number of existing freight and truck routes through the City designated by the City, the State, and the Federal government. These routes have specific design criteria and mobility standards to ensure that these roadways serve freight traffic.

(2) Functional Classification Policies. Functional classification policies support the City's transportation goals and objectives included in TDC 11.610. Policies help provide direction for roadways and roadway classifications.

(a) Functional Classification Policy 1: Major and minor arterials will comprise the main backbone of the freight system, ensuring that freight trucks are able to easily move within, in, and out of the City.

(b) Functional Classification Policy 2: Continue to construct existing and future roadways to standard when possible for the applicable functional classification to serve transportation needs within the City.

(3) Street Design Standards. Street design standards by functional classification are included in TDC Section 74.425.

(4) The RTP's Regional Street Design System describes typical features of its street design designations. For comparison purposes, Metro's Regional Street Design System map has been recreated in Figure 11-2. The Tualatin TSP's street design standards for roadways shown on the RTP Regional Street Design System map are generally in conformance with the RTP's concepts, particularly in the areas of pedestrian and bicycle lanes, landscape strips, and medians or center turn lanes.

Section 11.630

(1) The street system modal plan consists of several sections: a listing of street urban upgrades and new streets, other intersection-specific or non-capacity streets projects, access management policies, and traffic operation standards. This modal plan is included in its entirety in the TSP Technical Memorandum (December 2012) and pertinent sections are included in this section of TDC Chapter 11.

(2) Summary of Limitations and Needs of Street System. Key needs identified for the street system include:

(a) Improved Roadway connectivity. New roadway connections should be explored to improve east-west connectivity south of SW Tualatin-Sherwood Road and north-south regional connectivity. Metro RTP policies related to a complete street system identify one-mile spacing between major arterial streets with collector streets or minor arterials spaced a half-mile apart.

(b) Improved travel time along congested corridors. Focus on reducing vehicle delay on key corridors.

(c) Intersection improvements. Address intersection delay and intersection issues in congested areas.

(d) Upgrading roadway geometries. City design standards for roadway width, sidewalks, and bicycle facilities should be followed where specific deficiencies have been identified.

(e) Additionally, safety is a concern for the community. Safety issues were identified at the following intersections:

(i) SW Tualatin-Sherwood Road and SW Boones Ferry Road

(ii) SW Nyberg Street and I-5 southbound off ramps.

(3) Roadway Policies. The following establish the City's policies on roadways.

(a) Roadway Policy 1: Implement design standards that provide clarity to developers while maintaining flexibility for environmental constraints.

(b) Roadway Policy 2: Ensure that street designs accommodate all anticipated users including transit, freight, bicyclists and pedestrians, and those with limited mobility.

(c) Roadway Policy 3: Work with Metro and adjacent jurisdictions when extending roads or multi-use paths from Tualatin to a neighboring City.

(4) Local Streets Plan. The RTP calls for cities to identify all contiguous areas of vacant and re-developable parcels of five or more acres planned or zoned for residential or mixed-use development and to prepare a conceptual new streets plan map. Figure 11-3 presents the City of Tualatin's Local Streets Plan. The intent of this map is to identify the locations of future street connections and desired connections within future development that promote a connected street system. The endpoints of the connections should be considered fixed, unless the Community Development Director or their designee determines that an alternate connection point is preferable due to safety, operations, improved connectivity concerns, or environmental impacts. The routes connecting endpoints may vary, as long as a reasonably direct route between the two points is provided.

(5) Access Management. Access management is important to maintain traffic flow and ensure safety on the City's arterial street network, including SW Tualatin-Sherwood Road, Oregon Highway 99W (OR 99W), and other high-traffic routes. Limiting the number of points where traffic can enter and exit reduces potential conflict points, improves roadway performance, and reduces the need for capacity expansion. The City manages access through Chapter 75 of the TDC; that chapter details where access is permitted on arterial and collector roads within the City. Tualatin must coordinate with Washington and Clackamas Counties and ODOT to manage access on roads the City does not own, including SW Tualatin-Sherwood Road, SW Cipole Road, SW 65th Avenue, SW Borland Road, and sections of SW Boones Ferry Road. Chapter

75 of the TDC, most recently updated in 2012, has specific access standards for each arterial road within Tualatin. It provides recommendations for future changes on specific roads, as well as potential solutions for access issues.

(a) Access Management Policies. Access management policies are:

(i) Access Management Policy 1: No new driveways or streets on arterial roadways within the City, except where noted in the TDC, Chapter 75, usually when no alternative access is available.
(ii) Access Management Policy 2: Where a property abuts an arterial and another roadway, the access for the property shall be located on the other roadway, not the arterial.

(iii) Access Management Policy 3: Adhere to intersection spacing included in Chapter 75 of the TDC.

(iv) Access Management Policy 4: Limit driveways to right-in, right-out (where appropriate) through raised medians or other barriers to restrict left turns.

(v) Access Management Policy 5: Look for opportunities to create joint accesses for multiple properties, where possible, to reduce the number of driveways on arterials.

(vi) Access Management Policy 6: No new single-family home, duplex or triplex driveways on major collector roadways within the City, unless no alternative access is available.

(vii) Access Management Policy 7: On collector roadways, residential, commercial and industrial driveways where the frontage is greater or equal to 70 feet are permitted. Minimum spacing at 100 feet. Uses with less than 50 feet of frontage shall use a common (joint) access where available.

(6) Traffic Operations Standards. This section includes a discussion of standards included in the OHP, ODOT's Highway Design Manual (HDM), and the TPR and City documents for local roadways. Based on the preferred system for operational analysis, there are four intersections that do not meet jurisdictional standards after mitigation strategies are included. These intersections that experience operational constraints are in the SW Lower Boones Ferry Road/I-5 interchange area, and are due to the additional motor vehicle trips associated with the widening of SW Boones Ferry Road from SW Martinazzi Avenue to SW Lower Boones Ferry Road.

The first mitigation strategies developed explored transportation system management techniques (maximizing operations at intersections through signal timing adjustments and/or phasing adjustments). If system management techniques did not

achieve acceptable jurisdictional operations, localized capacity improvements were explored (for example, a new turn pocket). Generally these improvements allowed for adequate signal operations under a mitigated scenario.

There were some intersections located in the downtown core area that were not able to meet jurisdictional standards without the implementation of significant capacity and/or roadway widening improvements. These types of major infrastructure improvements were deemed to be too impactful to the downtown core and were not included in the final preferred system improvements. The downtown Tualatin area is designated a Town Center by Metro, and using that designation, Town Centers are allowed to not meet jurisdictional standards. Alternate standards for Town Centers in the RTP are based on a two-hour peak hour. The standard volume to capacity ratio (v/c) for the first peak hour is 1.1, and for the second peak hour is 0.99. These intersections meet the RTP standards, and there is no need for additional alternate mobility standards.

Section 11.640.

(1) Public transit in Tualatin is envisioned to be multi-faceted by including local and express bus service, commuter rail, potential high capacity transit, and local transit shuttle services. In addition, the community's vision for public transit includes improvements in the quality of transit service, as well as land uses that better complement and encourage use of transit in downtown Tualatin. Figure 11-5 presents the updated transit system for the City of Tualatin.

(2) Summary of Limitations and Needs for Transit. TriMet does not provide transit service within all areas of Tualatin or on all major corridors. No transit service is provided on SW Tualatin-Sherwood Road or SW Tualatin Road, and many residents in the western portion of the City live more than a mile from the nearest transit line. Many residents who do live near a bus line are not served by transit at regular intervals during the day. According to the Conceptual Linking Tualatin Plan (Draft 2012), over 11,000 workers and over 5,000 households (over half of the people living and working in the city) lack regular transit service within a quarter mile of where they live or work. Because of the limitations of service during off-peak hours, noncommuting trips may be more difficult to complete using transit in Tualatin. Community feedback indicated the following specific needs for transit:

(a) Service connecting the west side of Tualatin to the downtown core

(b) Park-and-rides in the west and south areas of Tualatin

(c) Extended service hours, including weekend service

(d) More direct connections to places other than downtown Portland.

Additional needs for transit stops include direct and safe access to transit stops and bicyclist and pedestrian amenities at stops, especially where transit riders are able to transfer lines or modes.

(3) Transit Policies. The City of Tualatin's policies on public transit are as follows:

(a) Transit Policy 1: Partner with TriMet to jointly develop and implement a strategy to improve existing transit service in Tualatin.

(b) Transit Policy 2: Partner with the Tualatin Chamber of Commerce to support grant requests that would expand the Tualatin Shuttle services.

(c)Transit Policy 3: Partner with TriMet, Metro, and neighboring communities to plan the development of high-capacity transit in the Southwest Corridor, as adopted in the Metro High Capacity Transit System Plan.

(d) Transit Policy 4: Partner with TriMet, Metro, and neighboring communities to plan development of high-capacity transit connecting Tualatin and Oregon City, as adopted in the Metro High Capacity Transit System Plan.

(e) Transit Policy 5: Coordinate with ODOT and neighboring communities on conversations related to Oregon Passenger Rail between Portland and Eugene.

(f) Transit Policy 6: Develop and improve pedestrian and bicycle connections and access to transit stops.

(g) Transit Policy 7: Encourage higher-density development near high-capacity transit service.

(h) Transit Policy 8: Metro in the RTP calls for increased WES service frequency. The City will coordinate with TriMet, Metro, and ODOT to explore service frequency improvements and the possible inclusion of a second WES station in south Tualatin.

(i) In addition to the transit policies included here, Bicycle and Pedestrian Policies 7 and 8, included in TDC 11.650, are applicable to transit.

Section 11.650.

(1) This modal plan describes pedestrian and bicycle improvements to comfortably and safely accommodate bicyclists and pedestrians within the City. These include multi-use paths, specific bicycle and pedestrian improvements, and street

upgrades. Figure 11-4 presents the updated bicycle and pedestrian system for the City of Tualatin.

(2) Summary of Limitations and Needs for Bicycle and Pedestrian Facilities. This section summarizes limitations and needs for bicycle and pedestrian facilities, and multi-use paths. A full description of existing conditions and deficiencies for the bicycle, pedestrian, and pathway system can be found in Appendix B of the TSP Technical Memorandum (December 2012).

(a) Bicycle Facility Needs. Existing bicycle facilities in Tualatin have a few gaps and challenging connections:

(i) Difficult left-turn maneuvers

(ii) Difficult areas with low bike visibility

(iii) Bike lanes outside of turn lanes

(iv) Obstacles within the bike lanes

(v) Gaps in the network

(vi) In addition to these needs, there are a number of high-crash locations. Most crashes result in an injury to the bicyclist, and most occur on a dry roadway surface in daylight conditions. High-crash locations include SW Boones Ferry Road and SW Tualatin-Sherwood Road, as well as the SW Nyberg Road interchange ramps at I-5.

(b) Pedestrian Facility Needs. Pedestrian facility needs include:

(i) Fill sidewalk gaps on arterials and collector streets

(A) Sections of SW Herman Road
(B) Sections of SW Grahams Ferry Road
(C) Sections of SW Boones Ferry Road
(D) SW Blake Street between SW 105th and SW 108th Avenues
(E) SW Sagert Street overpass over I-5
(F) SW 105th Avenue between SW Paulina Drive and SW Blake Street

(ii) Narrow or obstructed sidewalks

(iii) Wide or angled crosswalks at intersections

(iv) Difficult crossing on major roadways (SW Boones Ferry Road, SW Tualatin-Sherwood Road, and roadways in the downtown core)

(v) Most of the pedestrian crashes reported in the 5-year crash study timeframe occurred on SW Boones Ferry Road, generally when a vehicle failed to yield for pedestrians. Most crashes occurred when a vehicle was turning.

(c) Multi-use Path Needs. Additional bicycle and pedestrian connections over the Tualatin River are needed to connect with existing regional paths, as well as to provide alternate routes to the one existing Ki-a-Kuts bridge that is exclusively for bicycles and pedestrians (from Tualatin Community Park to Durham City Park in Durham). Additionally, many of the existing multi-use paths are fragmented and do not connect; signs and other wayfinding guides are needed to inform bicyclists or pedestrians how to move among the various pathways, and from the pathways to on-street facilities. The planned multi-use path network is only half constructed, once the system is complete, the multi-use path network will be more comprehensive.

(3) Bicycle and Pedestrian Policies. The City of Tualatin's policies on bicycle and pedestrian facilities are as follows:

(a) Bicycle and Pedestrian Policy 1: Support Safe Routes to Schools (SRTS) for all Tualatin schools

(b) Bicycle and Pedestrian Policy 2: Work with partner agencies to support and build the Ice Age Tonquin Trail

(c) Bicycle and Pedestrian Policy 3: Allow wider sidewalks downtown for strolling and outdoor cafes

(d) Bicycle and Pedestrian Policy 4: Add benches along multi-use paths for pedestrians throughout the City (especially in the downtown core)

(e) Bicycle and Pedestrian Policy 5: Develop and implement a toolbox, consistent with Washington County, for mid-block pedestrian crossings

(f) Bicycle and Pedestrian Policy 6: Implement bicycle and pedestrian projects to help the City achieve the regional non-single-occupancy vehicle modal targets in Table 11-1.

(g) Bicycle and Pedestrian Policy 7: Implement bicycle and pedestrian projects to provide pedestrian and bicycle access to transit and essential destinations for all mobility levels, including direct, comfortable, and safe pedestrian and bicycle routes

(h) Bicycle and Pedestrian Policy 8: Ensure that there are bicycle and pedestrian facilities at transit stations

(i) Bicycle and Pedestrian Policy 9: Create on- and off-street bicycle and pedestrian facilities connecting residential, commercial, industrial, and public facilities such as parks, the library, and schools

(j) Bicycle and Pedestrian Policy 10: Create obvious and easy to use connections between on- and off-street bicycle and pedestrian facilities, and integrate off-street paths with on-street facilities.

(4) Bicycle Boulevards. Currently, there are no existing bicycle boulevards in Tualatin, though Washington County has bicycle boulevard policies and design standards.

Bicycle boulevards are roadways that use a variety of design treatments to reduce vehicle speeds so that motorists and bicyclists generally travel at the same speed, to create a safer and more-comfortable environment for all users. Bicycle boulevards may include a variety of applications ranging from minor street signing enhancements (such as shared lane markings) to larger scale projects (for example, bike-only access at intersections, traffic diverters). Boulevards also incorporate treatments to facilitate safe and convenient crossings where bicyclists must traverse major streets. Traffic controls along a boulevard may assign priority to through cyclists while encouraging through vehicle traffic to use alternate parallel routes.

Bicycle boulevards work best in well-connected street grids, where riders can follow intuitive and reasonably direct routes. Boulevards also work best when higher-order parallel streets exist to serve through vehicle traffic. Bicycle boulevards are generally located on streets with lower traffic volumes and vehicle speeds, such as minor collectors or local streets passing through residential neighborhoods. Typically a bicycle boulevard would be located on a street where vehicles travel less than 30 miles per hour and average daily traffic volume is less than 3,000 vehicles (in both directions).

Proposed bicycle boulevards in Tualatin are shown on Figure 11-4. These are all low volume, low speed streets that connect neighborhoods with roadways and trails where bicycle infrastructure investments have been made. As a short-term action, the City should consider signing these roadways as bicycle routes, and monitor usage on an annual basis. As bicycle usage increases, and bicyclists and drivers become more used to sharing travel lanes, further investments could be considered to enhance safety for bicyclists.

Section 11.660.

(1) Efficient truck movement plays a critical role in the economic wellbeing and development of Tualatin. Trucks must be able to access commercial, industrial,

manufacturing, distribution, and other employment areas both in Tualatin and connecting to the regional system. Future commercial/industrial uses are expected to be located consistent with the land uses identified in the Comprehensive Plan, which matches the current planning district designations, as codified in the TDC.

(2) The freight network illustrated in Figure 11-6 is largely consistent with the functional classification plan (Figure 11-1), which strives to connect industrial and manufacturing uses to the regional and state transportation network via a series of major and minor arterial roadways. The movement of raw materials and finished products via designated truck routes provides for efficient movement of goods while maintaining neighborhood livability, public safety, and minimizing maintenance costs of the roadway system. Federally and state designated truck routes, part of the National Highway System (NHS), have been identified on I-5 and OR 99W. Metro identifies "road connectors" in the RTP freight network on SW 124th Avenue, SW Tualatin-Sherwood Road, SW Lower Boones Ferry Road, and SW Boones Ferry Road. The City of Tualatin designates additional truck routes on roadway facilities that connect commercial/industrial districts within the City to major arterials and, ultimately, to OR 99W, I-5, and I-205.

(3) The needs of the freight system are consistent with those identified in the Street System Plan (TDC 11.630). Projects that address needs related to truck routes, either directly or by providing alternate routes that improve traffic operations along truck routes, serve the needs of the freight system. All new roadways should be built to current City design standards to meet the operational needs of trucks on designated truck routes.

Section 11.670.

(1) Portland and Western Railroad (PNWR) owns and operates two freight rail lines within the City. One track (running north-south) accommodates both freight and the WES commuter rail, and an east-west line runs along the south side of SW Herman Road. As of November 2012 the east-west line carries one train daily in each direction, and the north south has two freight trains daily in addition to the WES trains described in the Transit section.

There are 13 gated public railroad crossings in Tualatin and a number of additional driveways or private roads that cross the railroad. The private crossings are stop controlled, but not signalized. Freight trains have the right of way at all intersections. The low number of trains does not present a large safety concern in the City, and recent Quiet Zone work done in conjunction with the north-south WES rail line opening added gates at all public crossings.

(2) PNWR has no current plans to increase freight service through Tualatin. Although the east-west track runs adjacent to manufacturing areas, no rail sidings or other access to businesses are planned.

(3) Freight Rail Policies. Following are policies for freight rail:

(a) Freight Rail Policy 1: Continue to coordinate with PNWR and TriMet to ensure that railroad crossings are safe and have few noise impacts on adjacent neighborhoods

(b) Freight Rail Policy 2: Look for opportunities to shift goods shipments to rail to help reduce the demand for freight on Tualatin's roads.

(c)Freight Rail Policy 3: Look for opportunities to create multi-modal hubs to take advantage of the freight rail lines

(4) Passenger Rail Policies. The City of Tualatin's policies on public transit are described in TDC 11.640 as part of the Transit Modal Plan. Those policies that may relate to the existing heavy rail lines in Tualatin include Transit Policies 3, 4, 5, and 8:

Section 11.680.

This section includes the Water, Pipeline and Air Plans.

(1) Water Plan. The Tualatin River is the only large waterway within the City of Tualatin. The river is used primarily for recreation and is open for canoeing and kayaking. Therefore, the TSP does not include any specific policies, programs or projects for the Tualatin River as part of the transportation network. However, several projects are proposed in other sections of the TSP Technical Memorandum (December 2012) to increase access to the river for recreation purposes.

(2) Pipeline Plan. A natural gas transmission pipeline and a gasoline pipeline cross through the City. There is no anticipated need to increase pipeline capacity or construct new pipelines through the City, and therefore no such improvements are proposed in the TSP.

(3) Air Plan. There are no airports within the City of Tualatin, although several airports are located within 30 miles of the City: the Aurora State Airport, Hillsboro Municipal Airport, and Portland International Airport. These airports meet the commercial, freight, and business aviation needs of Tualatin residents. No plans are proposed to construct airport facilities within the City of Tualatin; existing airports are anticipated to continue serving the citizens of Tualatin adequately.

Section 11.690.

(1) The TPR requires all cities with populations greater than 25,000 people to develop a Transportation Demand Management (TDM) Plan. The RTP also requires that TDM strategies be used to encourage alternative transportation modes and achieve higher vehicle occupancy targets. TDM measures are designed to change travel behavior in order to reduce the need for more road capacity and improve performance

of the road system. Typical TDM projects include encouraging use of travel modes other than the auto, ride sharing, and measures to reduce the need for travel—such as telecommuting policies.

TDM policies and projects can be cost-effective ways to reduce congestion by encouraging the use of other modes, reducing the need for travel or reducing the number of vehicle-miles driven. The City of Tualatin can implement a range of TDM measures to manage travel demand, in conjunction with partner organizations in many cases. Providing bicycle, pedestrian, and transit infrastructure can be effective means to encourage drivers to switch to other modes. Many of the pedestrian, bicycle, and transit improvements proposed in other sections of the TSP can be considered TDM measures as they encourage use of travel modes other than the auto. In addition to these infrastructure projects, a number of strategies are applicable to Tualatin, as discussed in detail in the TSP Technical Memorandum (December 2012).

(2) Transportation Demand Management Policies. The following policies support other modal plans in the TSP and help Tualatin meet its mode-share targets, as required by the RTP and presented in Table 11-1:

(a) TDM Policy 1: Support demand reduction strategies, such as ride sharing, preferential parking, and flextime programs.

(b) TDM Policy 2: Partner with the Tualatin Chamber of Commerce, the Westside Transportation Alliance, major employers, and business groups to implement TDM programs

(c) TDM Policy 3: Explore the use of new TDM strategies to realize more efficient use of the City's transportation system

(d) TDM Policy 4: Support Washington County's regional TDM programs and policies to reduce the number of single-occupancy vehicle (SOV) trips

(e) TDM Policy 5: Promote the use and expansion of the Tualatin Shuttle program.

(3) Metro Modal Targets. Metro in its 2035 RTP established modal targets for how residents in the region will make trips in 2040. These are separated out by regional designations. Tualatin has a number of designations within the City limits, as described in the following sections and shown in Figures 9-4 (Design Type Boundaries) and 11-2 (Metro Regional Street Design System).

(a) Town Center. This designation is consistent with the Town Center Plan study area, centered on the Lake of the Commons and includes land south of the Tualatin River and west of I-5, including the Tualatin Community Park. The western Boundary is SW 95th Avenue south to SW Tualatin-Sherwood Road, and then southern boundary is SW Tualatin-

Sherwood Road to approximately SW Boones Ferry Road then continues east near SW Warm Springs Street.

(b) Corridors. There are a number of corridors in Tualatin: SW Tualatin-Sherwood Road is a regional street, along with 99W, SW 124th Avenue, and SW Tualatin Road. SW Boones Ferry Road is a community street, and SW Tualatin-Sherwood Road/SW Nyberg Street in downtown are community boulevards. Regional arterials include 99W, SW 124th Avenue, SW Boones Ferry Road, SW Tualatin-Sherwood Road, SW Herman Road, SW Nyberg Street, SW Sagert Street, SW Borland Road, and SW 65th Avenue.

(c) Employment Land. Most of western Tualatin is employment land south of SW Tualatin Road and west of the railroad tracks.

(d) Parks and Natural Areas. Hedges Creek is designated a park and natural area, along with many of the other greenway areas including Nyberg Creek Greenway, Saum Creek, and other City parks.

(e) Neighborhoods. Neighborhood areas include southern Tualatin near SW Boones Ferry Road, northern Tualatin north of SW Tualatin Road, and eastern Tualatin excluding the hospital area and the greenways and parks.

(f) These designations have modal targets associated with them, as seen in Table 11-1. The non-drive-alone modal target for Tualatin is 45-55 percent in the Town Center and Station Community, and 40-45 percent for the employment land, parks and natural areas, and neighborhoods.

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TABLE 11-1
Metro Modal Targets

2040 Regional Designation	Non-drive-alone Modal Target	2040 Regional Designation	Non-drive-alone Modal Target
Regional Centers Town Centers Main Streets Station Communities Corridors Passenger Intermodal Facilities	45–55%	Regional Centers Town Centers Main Streets Station Communities Corridors Passenger Intermodal Facilities	45–55%
Industrial Areas Freight Intermodal Facilities Employment Areas Inner Neighborhoods Outer Neighborhoods	40–45%	Industrial Areas Freight Intermodal Facilities Employment Areas Inner Neighborhoods Outer Neighborhoods	40–45%

Source: Metro's 2035 RTP

Section 11.700.

(1) Transportation System Management (TSM) measures are designed to increase the efficiency, safety, capacity, and level of service of the transportation system without physically increasing roadway capacity. Typical TSM projects include traffic light synchronization, traffic calming, travel information systems, access management, and parking management strategies. Many of the projects listed in the modal plans—including the Transit, Pedestrian and Bicycle, and Access Management plans—qualify as TSM measures.

Many TSM tools can be implemented inexpensively to help make the existing system work more efficiently. A wide range of TSM strategies are applicable to Tualatin. These are discussed in detail in the TSP Technical Memorandum (December 2012).

Section 11.710.

(1) The City owns several public parking lots in downtown Tualatin to support denser development in the City's core area. A separate taxing district has been created to support ongoing maintenance and operations of these parking lots. The City completed a study in 2011 which identified that the existing parking supply is sufficient to meet the parking demand in downtown Tualatin.

(2) The RTFP requires parking policies and a parking plan in a TSP or other planning document. The current TDC includes parking minimums and is compliant with this requirement.

Section 11.720.

(1) The project table for each modal plan in the Tualatin TSP Technical Memorandum (December 2012) includes recommendations for applicable funding sources. Additionally, the relative importance of TSP projects are identified in the project tables, based on community goals, the magnitude of the deficiency or issue that the project addresses, and the ability to secure funding, conduct engineering, and build a project. Appendix E of the TSP Technical Memorandum (December 2012) provides a detailed description of transportation funding and improvement costs for all of the TSP's recommendations.

(2) A variety of established federal, state, regional, and local funding sources are available to fund future transportation projects in the Tualatin TSP Technical Memorandum (December 2012), depending on the eligibility requirements. Implementation of TSP projects will depend on funding and community priorities.

(3) Prioritization. Prioritization of projects within the TSP Technical Memorandum (December 2012) is separated into three categories: short-term, medium-term, and long-term. Short term projects are expected to be built within 0-5 years, while medium-term are 5-10 years, and long-term projects are expected to be built in the 10-20 year time frame. Prioritization is determined based on a combination of the most important projects to implement first, the ease of implementation, and the potential cost – some projects will take a number of years to identify and secure funding. Some projects will also need regional coordination and support, which may take time to secure an agreement. Prioritization is an estimate: long-term projects may be implemented sooner than 10-20 years due to funding becoming available, a high degree of community support or other factors. The suggested priority for projects in the TSP Technical Memorandum (December 2012) is a general guide and not a required timeframe.

The City will need to periodically update the TSP, and will review the need and timing for longer-term improvements at those times. Prioritizing specific near-term projects will occur annually when the City updates its five-year financial plan and prepares its capital improvement plan (CIP) for the following year. Future road improvements or related transportation projects listed or not listed in the TSP Technical Memorandum (December 2012) are not required to be reviewed and approved through a land use process.

The construction of roads, storm drainage, water, sewer, and electrical facilities in conjunction with local development activity should be coordinated if the City of Tualatin is to continue to develop in an orderly and efficient way. Consequently, the plans proposed in the TSP Technical Memorandum (December 2012) should be

considered in light of developing infrastructure sequencing plans, and may need to be modified accordingly.

Section 31. Figures, Maps and Tables, are amended as follows:

Figures 74-2A through 74-2~~F~~G, Street Design Standards are deleted and replaced by **Exhibits A - G**.

Figure 11-1 Functional Classification and Traffic Signal Plan, is deleted and replaced with **Exhibit H**.

Figure 11-2, Metro Regional Street Design System is deleted and replaced by **Exhibit I.**

Figure 11-3, Local Street Plan is deleted and replaced by **Exhibit J.**

Figure 11-4, ~~Tualatin~~ Bicycle and Pedestrian System ~~Plan~~ is deleted and replaced by **Exhibit K.**

Figure 11-5, ~~Tualatin Bicycle~~ Transit Plan~~System~~ is deleted and replaced by **Exhibit L.**

Figure 11-6, ~~Tualatin Transit Plan~~Freight Routes is deleted and replaced by **Exhibit M.**

~~Figures 11-8a through 11-8d, Financially Constrained TSP Projects.~~

~~Figures 75-2A through 75-2G, Recommended Street Design Standards~~

~~Map 75-1, Access Management.~~

Table 11-1, Metro Modal Targets~~Tualatin Functional Classification Descriptions.~~

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~~Table 11-2, Street Functional Classification Summary.~~

~~Table 11-3, Transportation Improvement Program Summary.~~

~~Table 11-4, Projects Unfunded or Requiring New Funding Sources.~~

~~Table 75-1, Functional Classification Design Standards Summary~~

INTRODUCED AND ADOPTED this 25th Day of February, 2013.

CITY OF TUALATIN, OREGON

BY_____
Mayor

ATTEST:

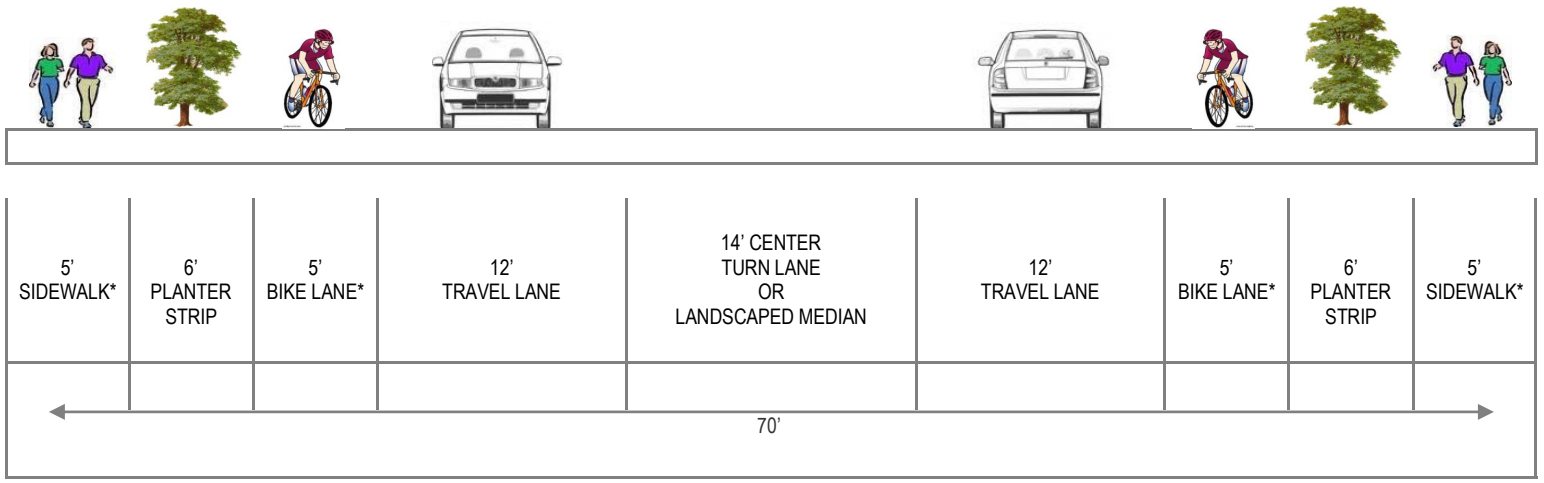
BY_____
City Recorder

APPROVED AS TO LEGAL FORM

BY_____
City Attorney

MAJOR ARTERIAL

Minimum



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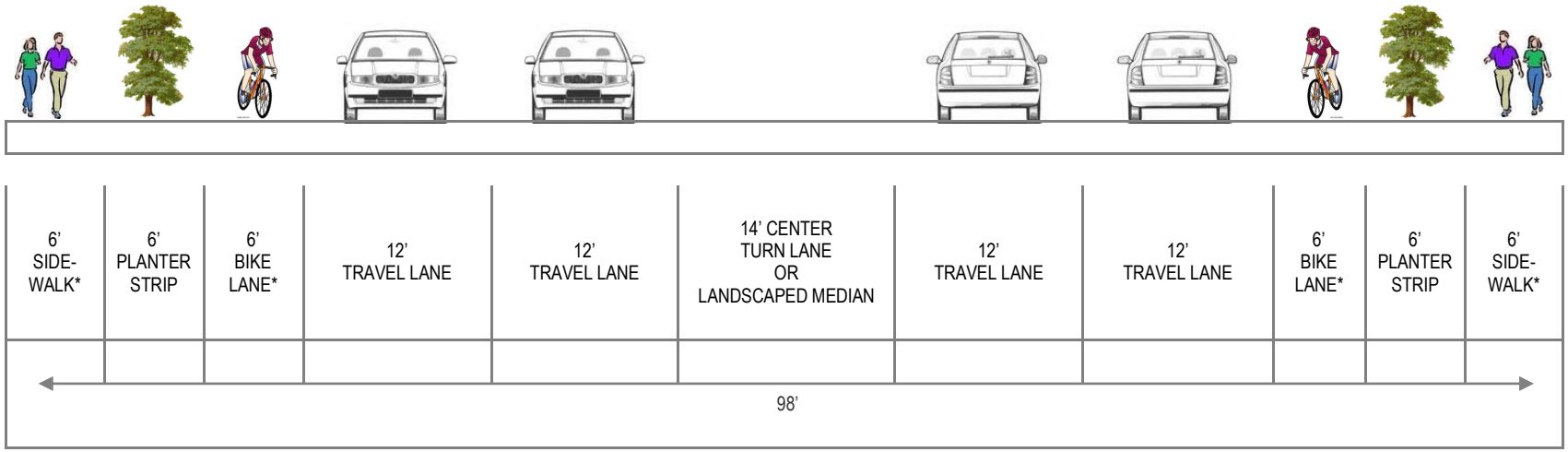
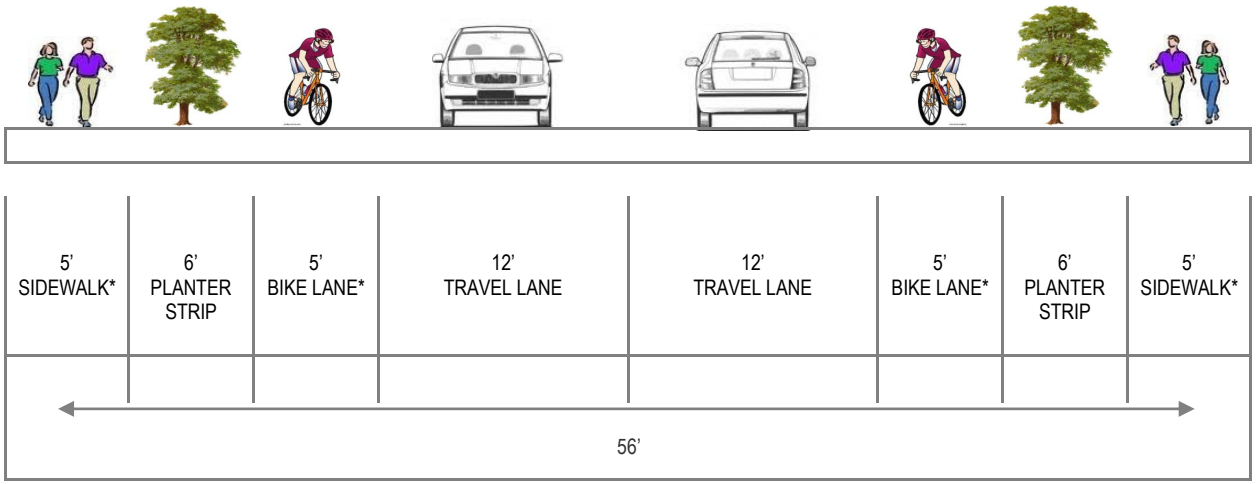


*The City of Tualatin may allow a 12' multi-use path to be substituted for the sidewalk and bicycle lane on either or both sides. If allowed, the planter strip must be installed between the travel lane and the multi-use path.

MINOR ARTERIAL

Minimum



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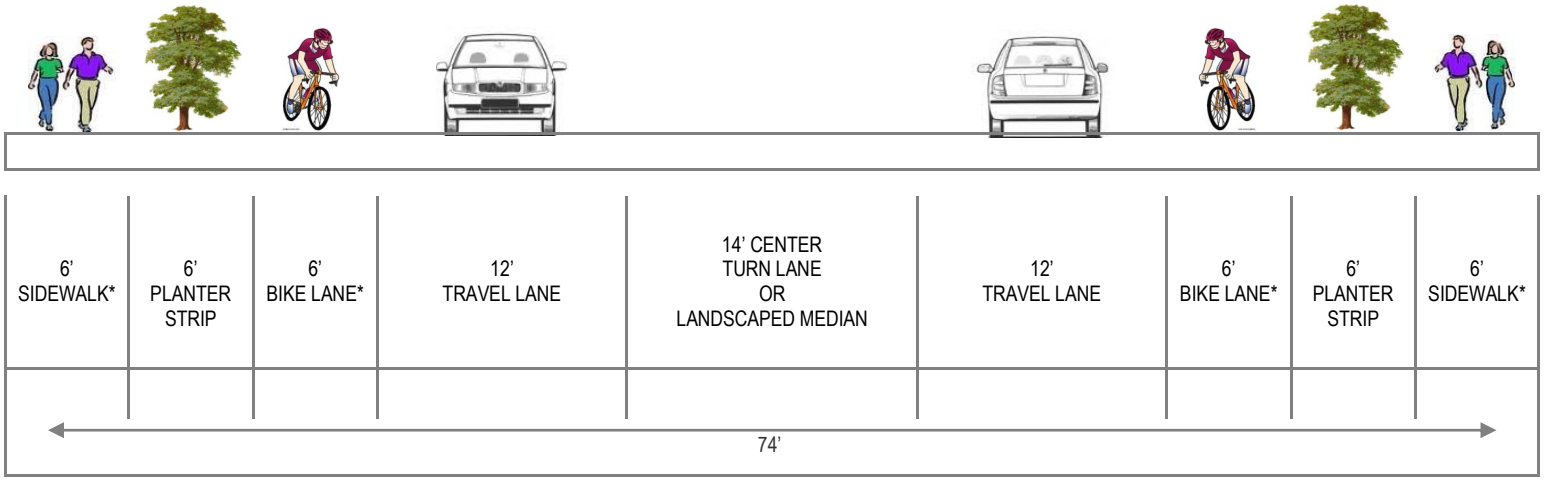
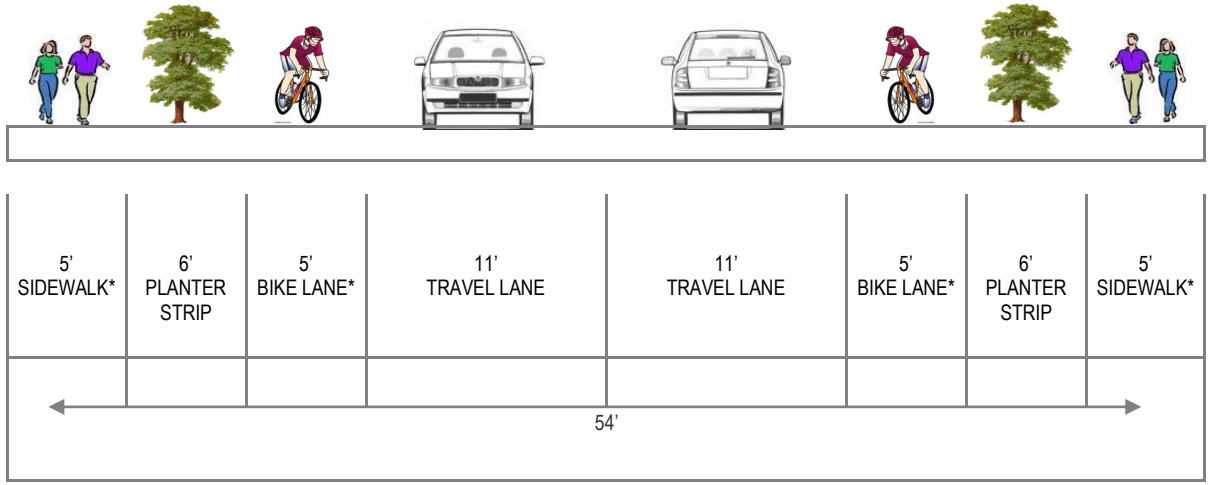


*The City of Tualatin may allow a 12' multi-use path to be substituted for the sidewalk and bicycle lane on either or both sides. If allowed, the planter strip must be installed between the travel lane and the multi-use path.

MAJOR COLLECTOR

Minimum



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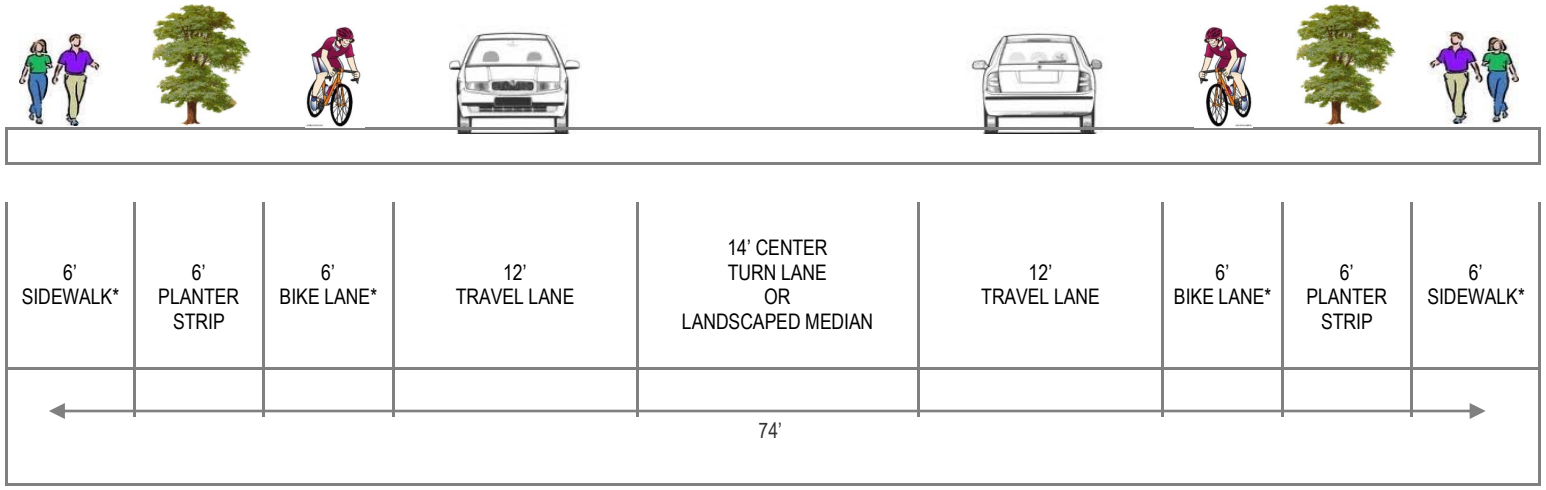

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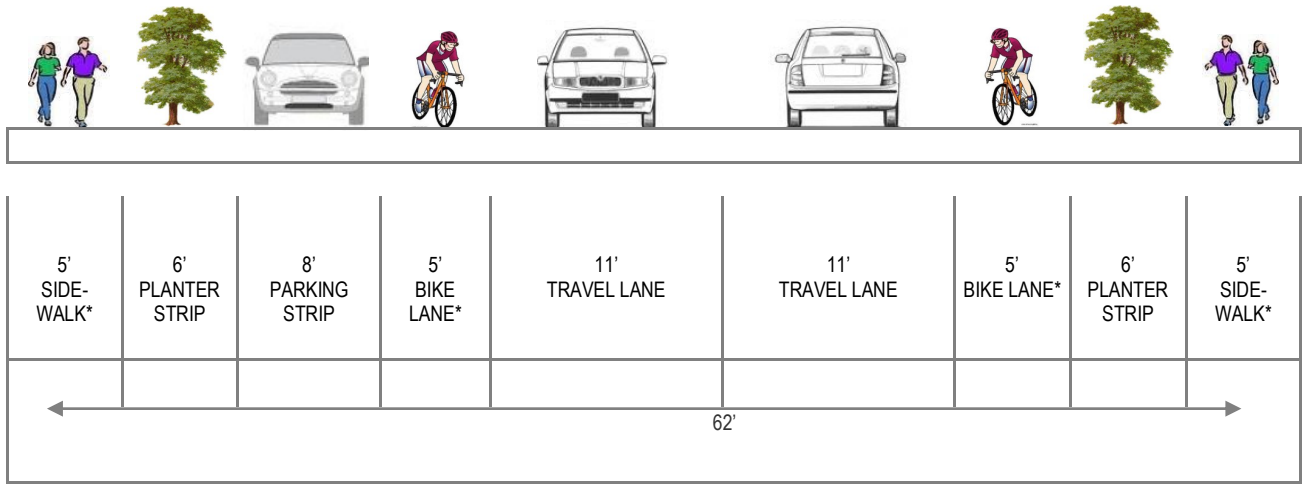
MINOR COLLECTOR

Minimum



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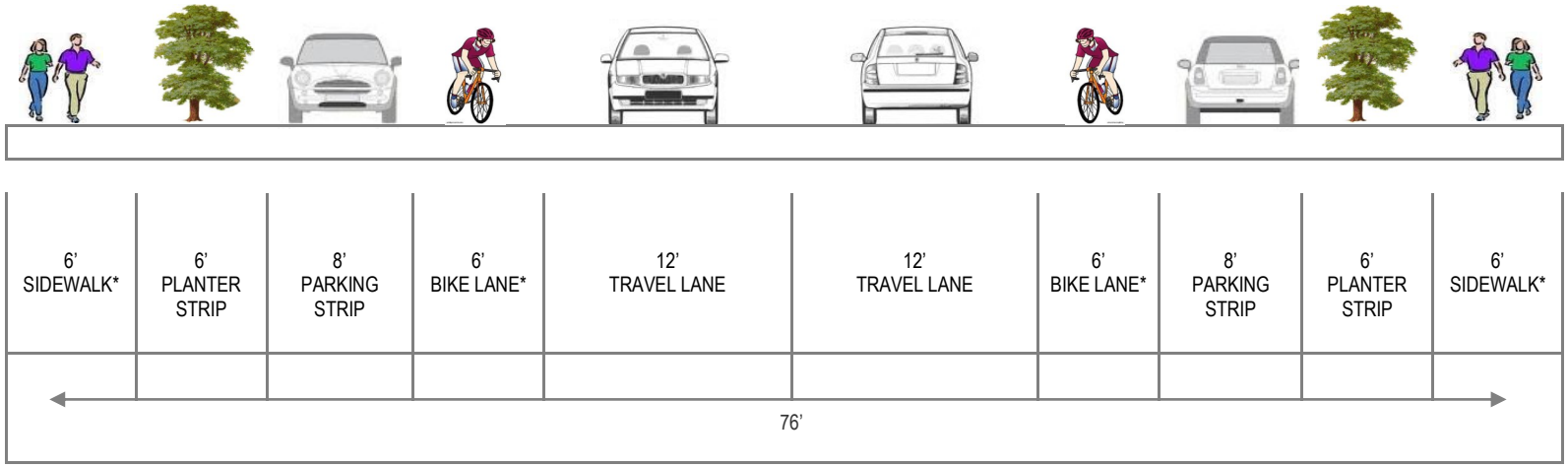
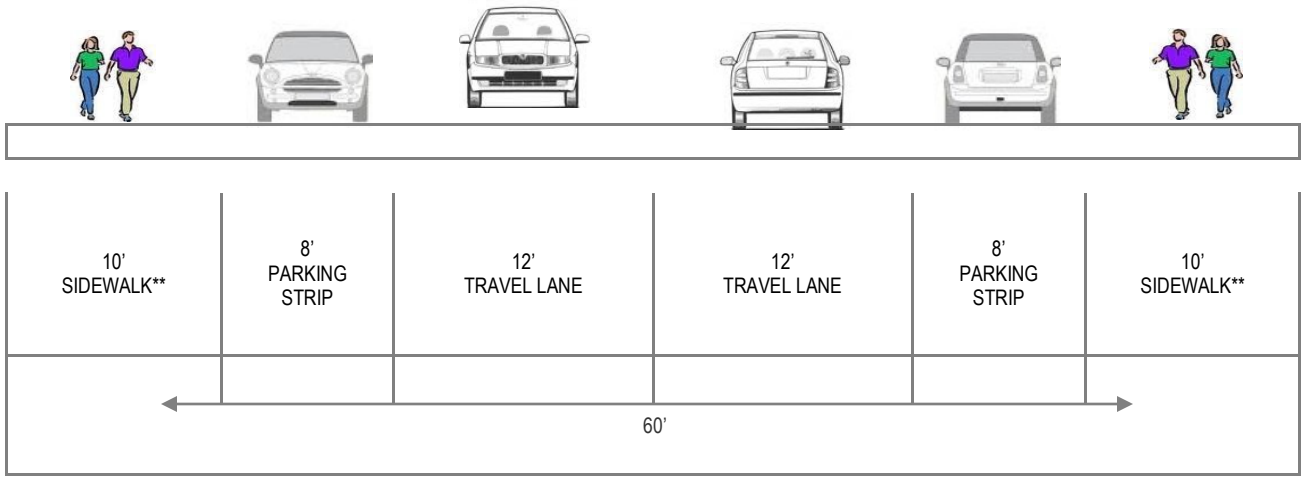


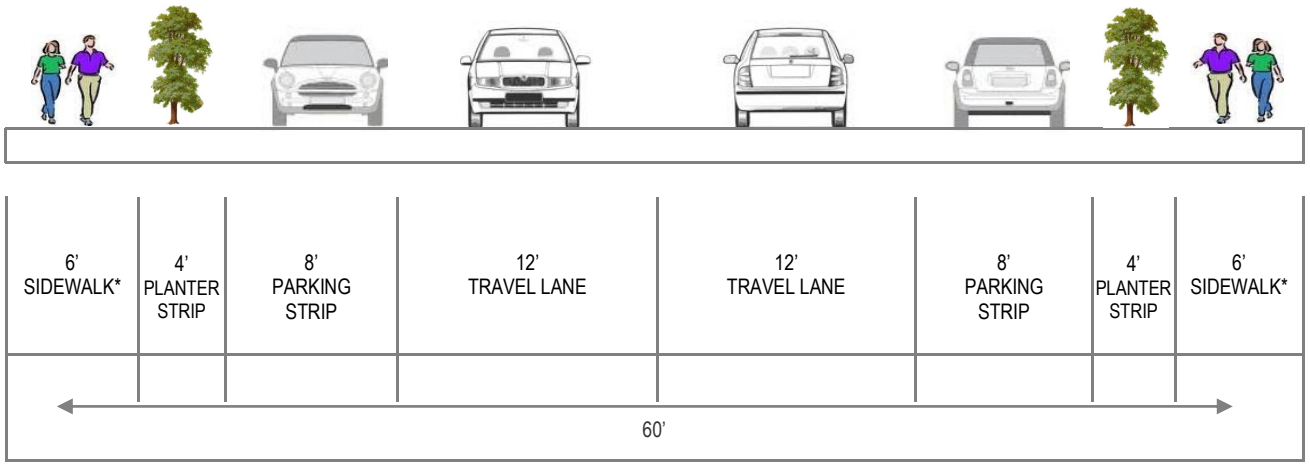
*The City of Tualatin may allow a 12' multi-use path to be substituted for the sidewalk and bicycle lane on either or both sides. If allowed, the planter strip must be installed between the travel lane and the multi-use path.

CONNECTOR

Downtown Core



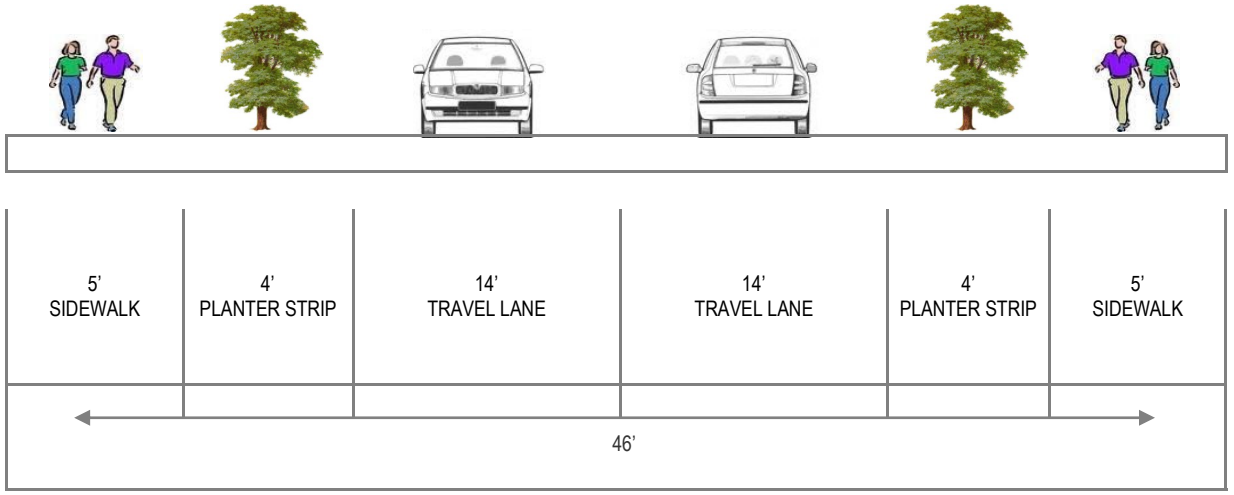
Commercial/Industrial



*The City of Tualatin may allow a 12' multi-use path to be substituted for the sidewalk and bicycle lane on either or both sides. If allowed, the planter strip must be installed between the travel lane and the multi-use path.
**Sidewalks on the downtown connector roads have 5 x 5' tree grates instead of planter strips.

LOCAL

Minimum



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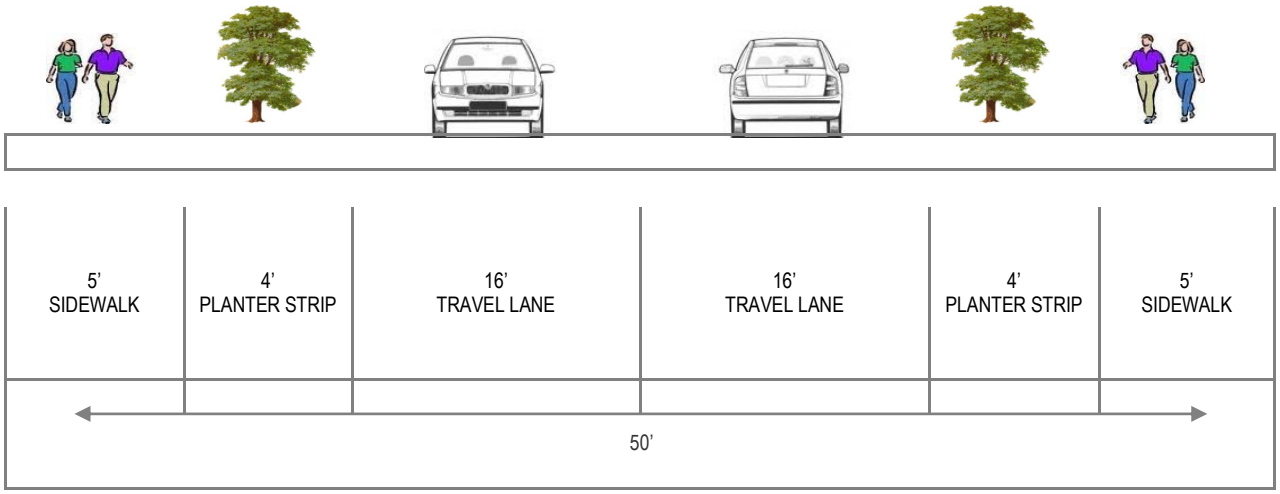
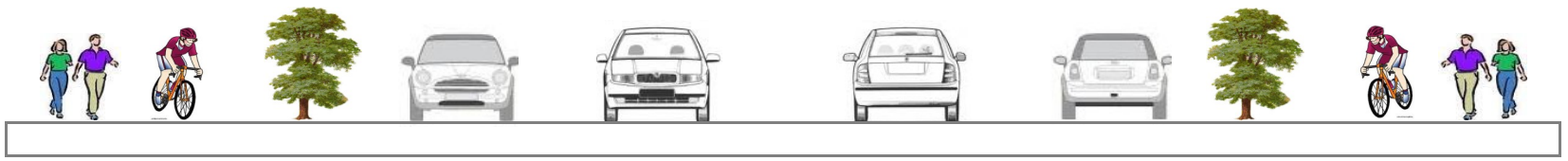


WITH MULTI-USE PATH

Preferred Collector



12' MULTI-USE PATH*	6'' PLANTER STRIP	8' PARKING STRIP	12' TRAVEL LANE	12' TRAVEL LANE	8' PARKING STRIP	6' PLANTER STRIP	12' MULTI-USE PATH*

76'

Preferred Arterial

12' MULTI-USE PATH*	6' PLANTER STRIP*	12' TRAVEL LANE	14' CENTER TURN LANE OR LANDSCAPED MEDIAN	12' TRAVEL LANE	6' PLANTER STRIP	12' MULTI-USE PATH*

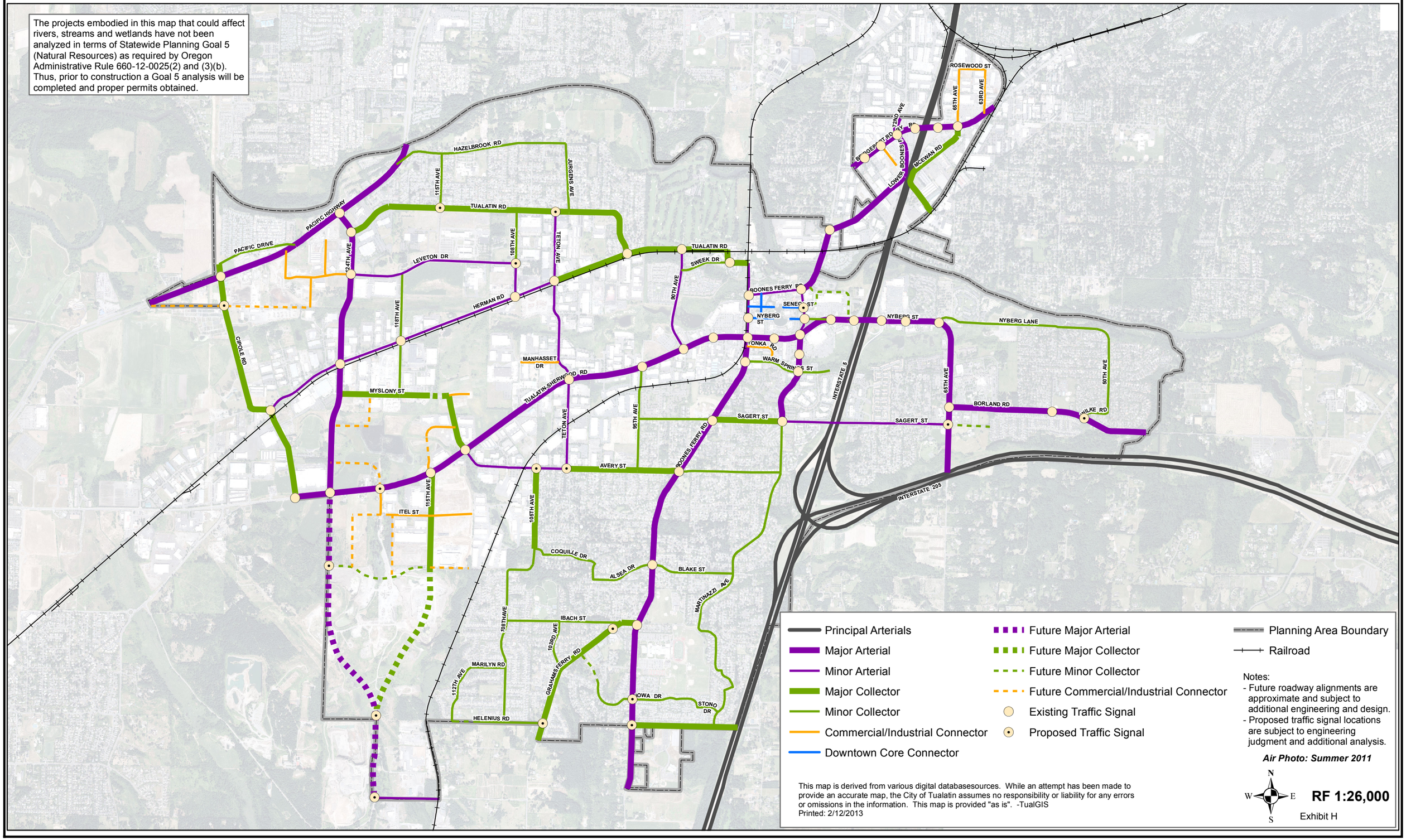
74'

*The City of Tualatin may allow a 12' multi-use path to be substituted for the sidewalk and bicycle lane on either or both sides. If allowed, the planter strip must be installed between the travel lane and the multi-use path.

Figure 11-1: Functional Classification and Traffic Signal Plan

TUALGIS

The projects embodied in this map that could affect rivers, streams and wetlands have not been analyzed in terms of Statewide Planning Goal 5 (Natural Resources) as required by Oregon Administrative Rule 660-12-0025(2) and (3)(b). Thus, prior to construction a Goal 5 analysis will be completed and proper permits obtained.



Principal Arterials
Major Arterial
Minor Arterial
Major Collector
Minor Collector
Commercial/Industrial Connector
Downtown Core Connector

Future Major Arterial
Future Major Collector
Future Minor Collector
Future Commercial/Industrial Connector
Existing Traffic Signal
Proposed Traffic Signal

Planning Area Boundary
Railroad

Notes:
- Future roadway alignments are approximate and subject to additional engineering and design.
- Proposed traffic signal locations are subject to engineering judgment and additional analysis.

Air Photo: Summer 2011

N W E S

RF 1:26,000

Exhibit H

Figure 11-2: Metro Regional Street Design System

TUALGIS

HAZELBROOK RD
115TH AVE
JURGENS AVE
PACIFIC HIGHWAY
TUALATIN RD
PACIFIC DRIVE
124TH AVE
LEVETON DR
108TH AVE
TETON AVE
SWEEK DR
90TH AVE
BOONES FERRY RD
HERMAN RD
118TH AVE
SENECA ST
NYBERG ST
NYBERG LANE
CIPOLE RD
MANHASSET DR
TONKA RD
WARM SPRINGS ST
TUALATIN-SHERWOOD RD
MYSLONY ST
INTERSTATE 5
65TH AVE
50TH AVE
BORLAND RD
WILKE RD
SAGERT ST
ROSEWOOD ST
63RD AVE
72ND AVE
BRIDGEPORT RD
LOWER BOONES FERRY RD
MCEWAN RD
95TH AVE
AVERY ST
ITEL ST
115TH AVE
105TH AVE
INTERSTATE 205
COQUILLE DR
ALSEA DR
BLAKE ST
MARTINAZZI AVE
IBACH ST
108TH AVE
103RD AVE
GRAHAMS FERRY RD
MARILYN RD
112TH AVE
IOWA DR
STONO DR
HELENIUS RD

Regional Boulevard
Regional Street
Community Street
Urban Road
Freeways
Planning Area Boundary

N
W E
S

RF 1:26,000

This map is derived from various digital databasesources. While an attempt has been made to provide an accurate map, the City of Tualatin assumes no responsibility or liability for any errors or omissions in the information. This map is provided "as is". -TualGIS
Printed: 2/12/2013

Air Photo: Summer 2011

Exhbit I

Figure 11-3: Local Street Plan

Minor Collector

Local Street Connection

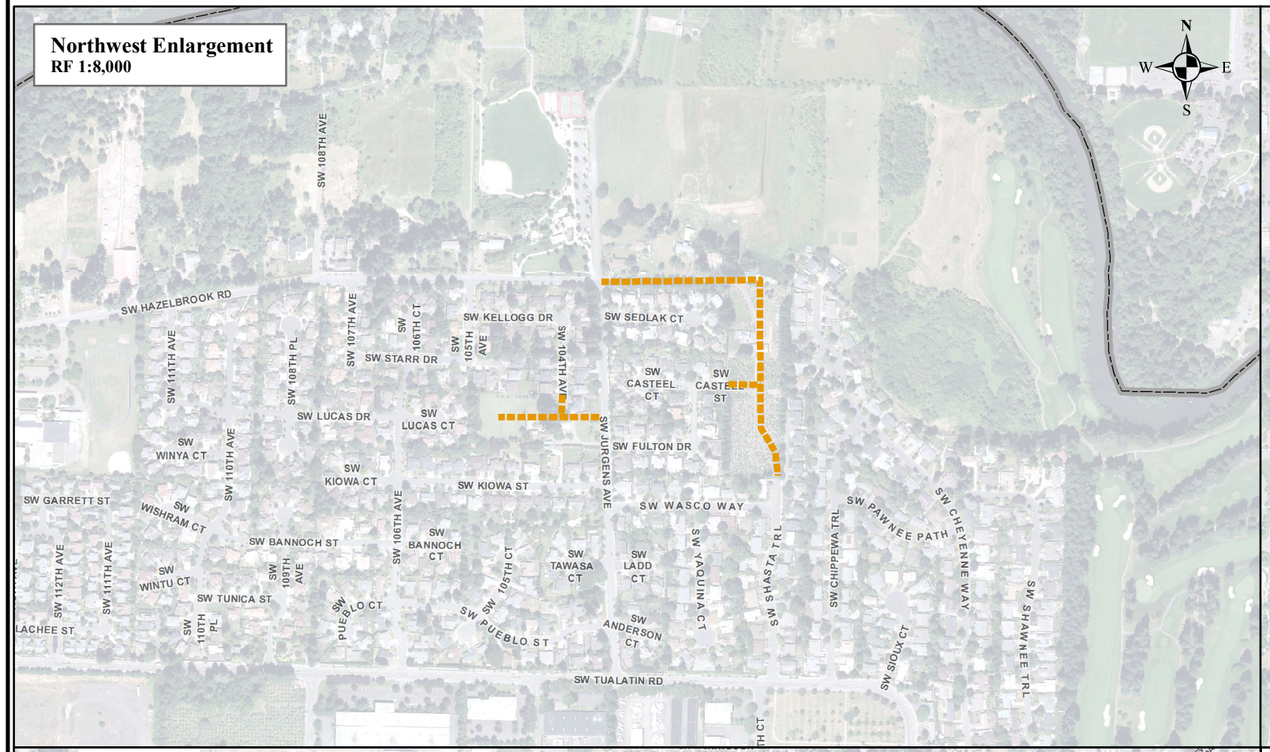
Planning Area Boundary

Air Photo: Summer 2011

Note:
Future roadway alignments are approximate and subject to additional engineering and design.

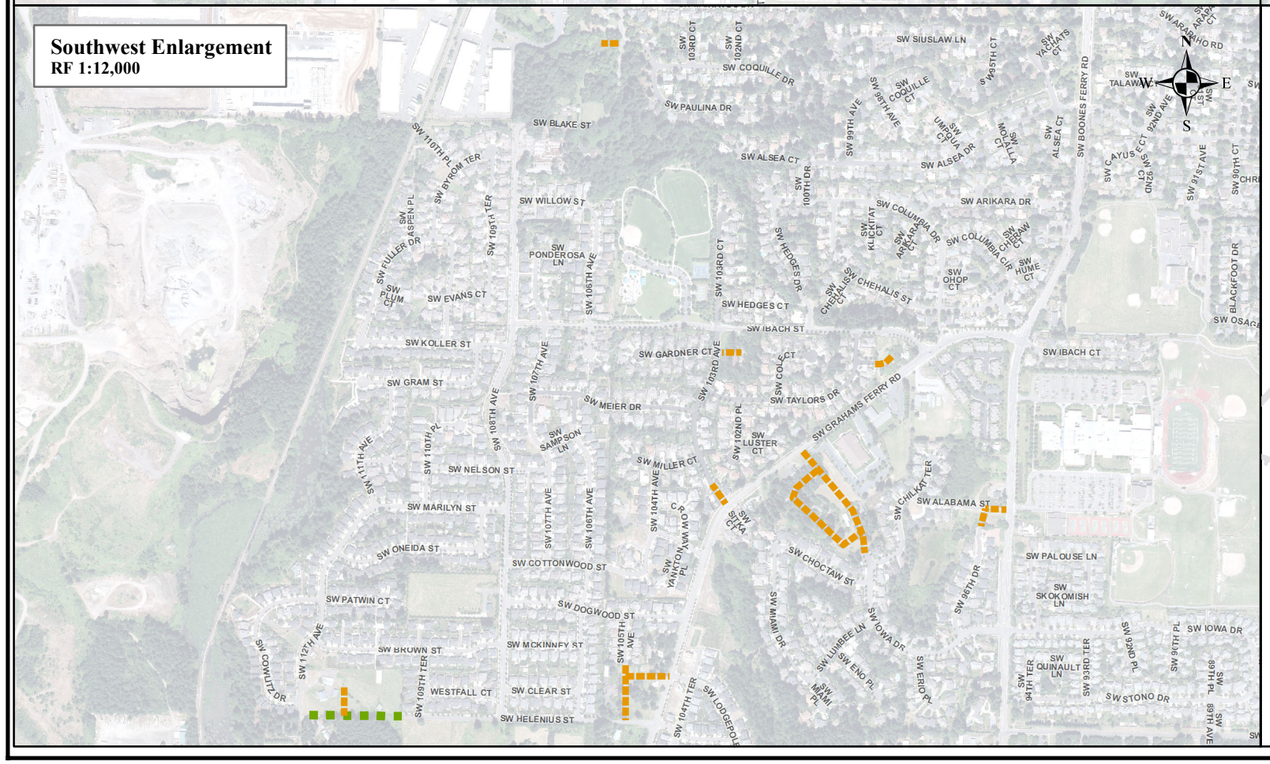
TUALGIS

Northwest Enlargement
RF 1:8,000



East Enlargement
RF 1:9,000

Southwest Enlargement
RF 1:12,000



City Overview
RF 1:50,000

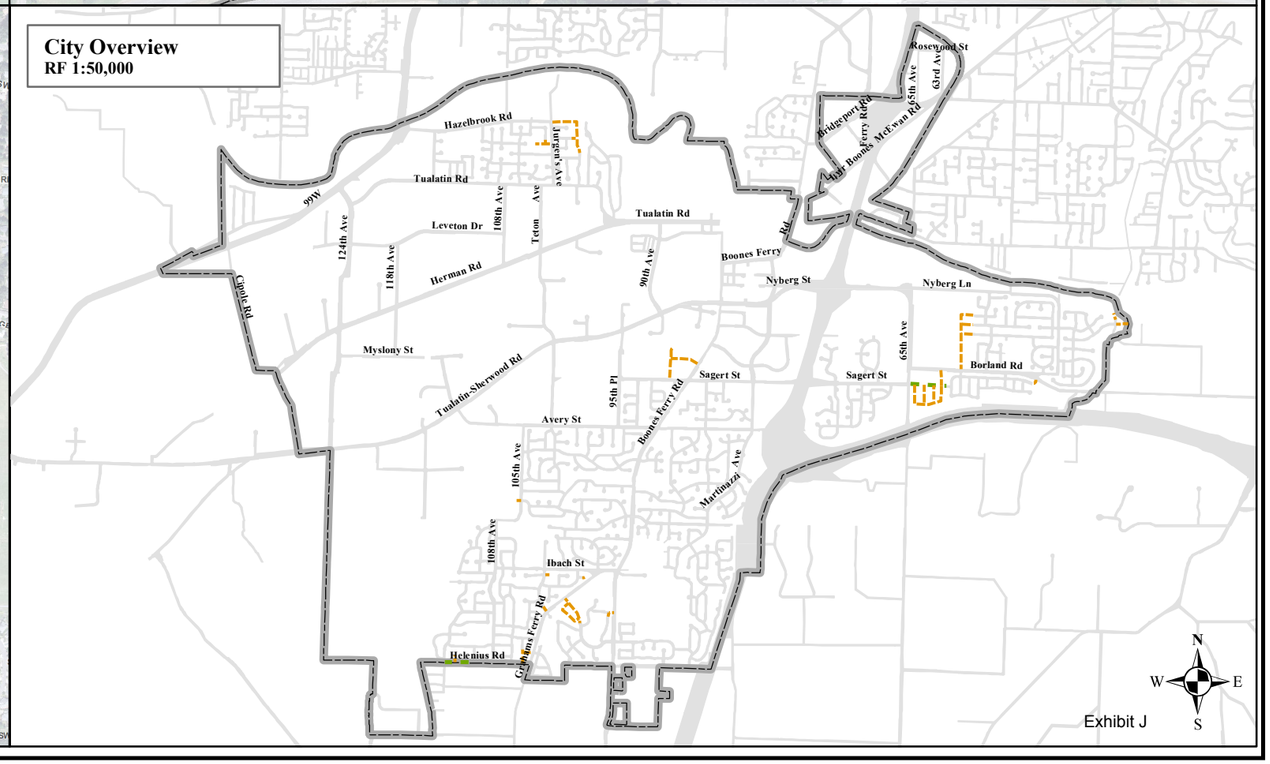
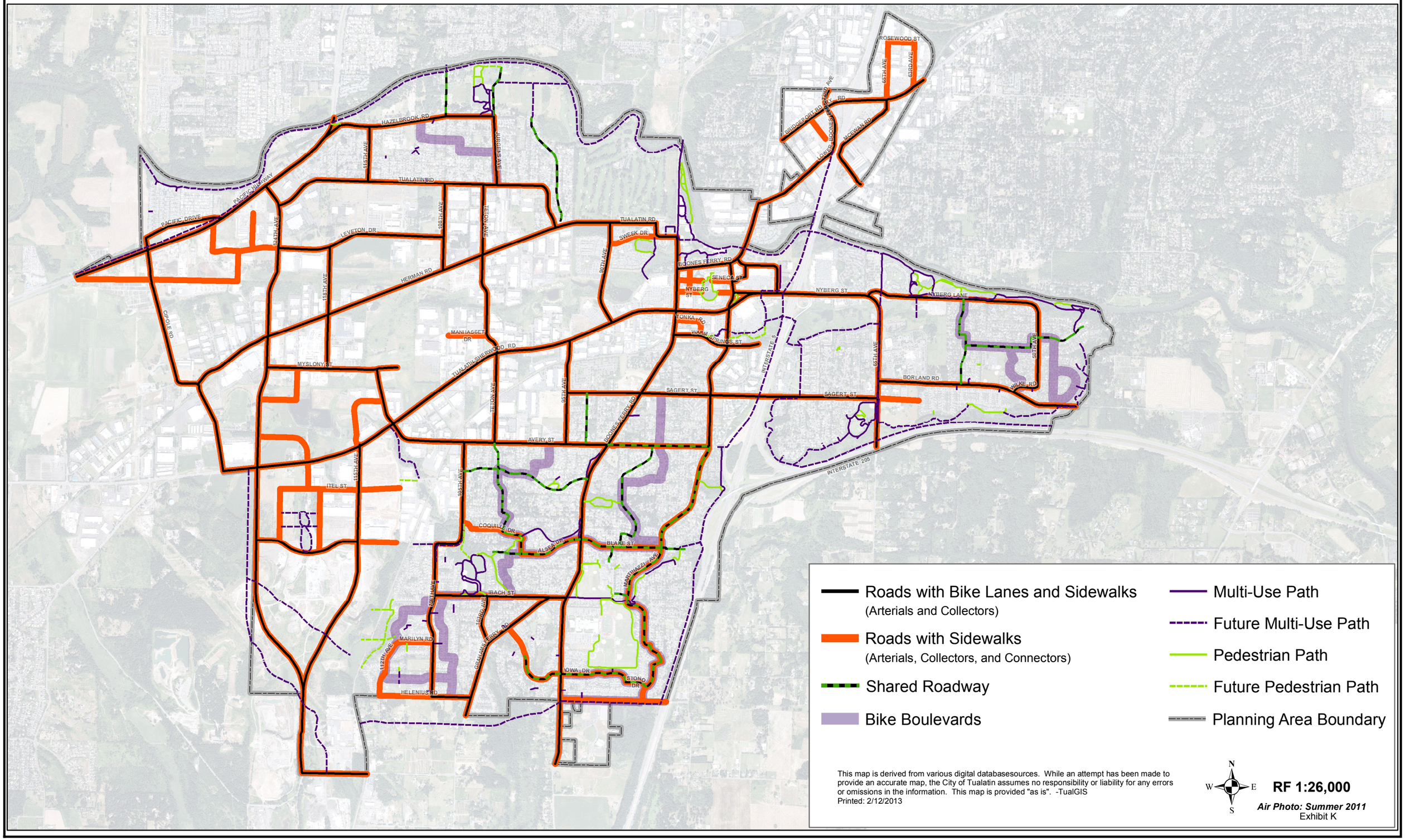


Exhibit J

Figure 11-4: Bicycle and Pedestrian Plan

TUALGIS



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Printed: 2/12/2013

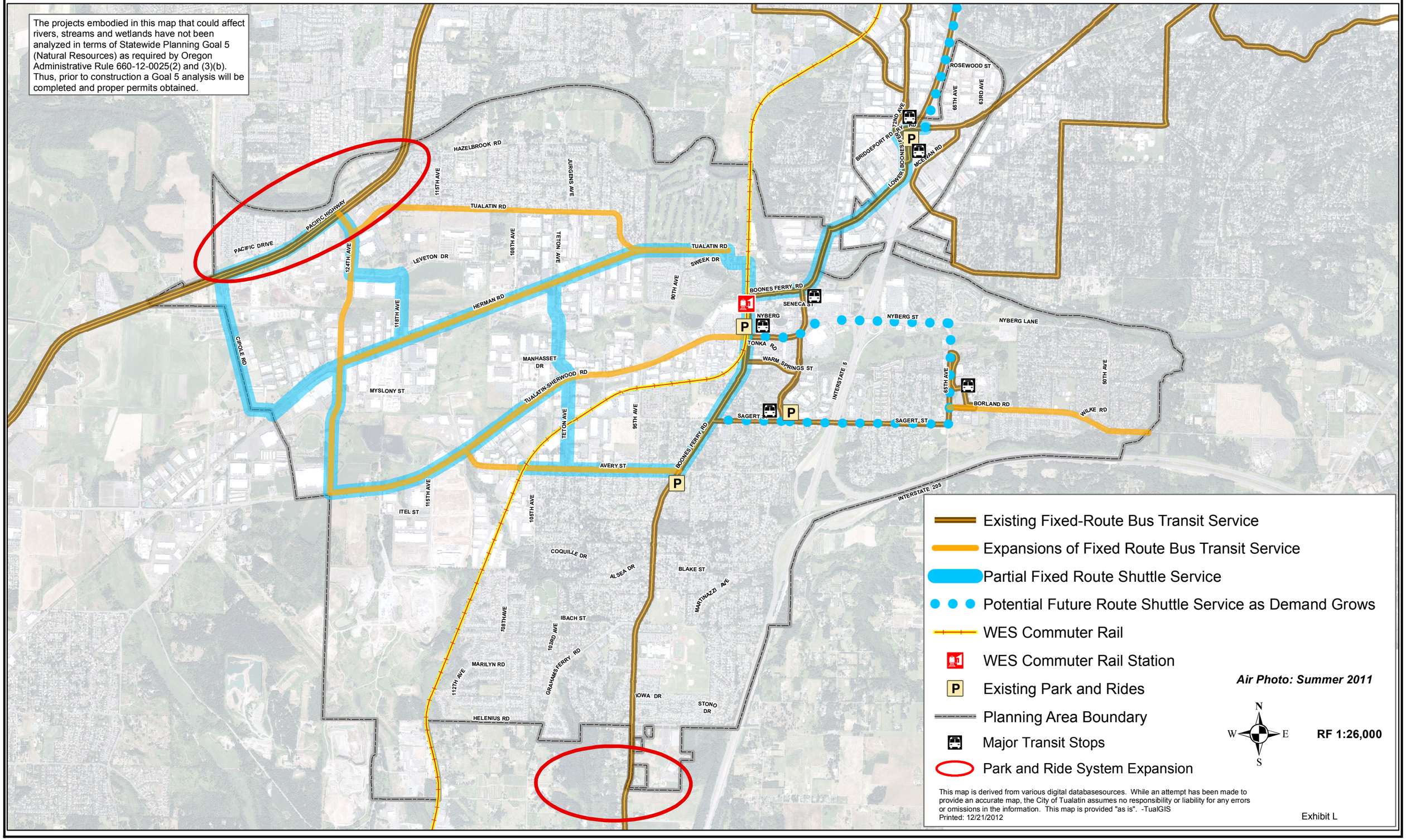
RF 1:26,000

Air Photo: Summer 2011
Exhibit K

Figure 11-5: Tualatin Transit Plan

TUALGIS

The projects embodied in this map that could affect rivers, streams and wetlands have not been analyzed in terms of Statewide Planning Goal 5 (Natural Resources) as required by Oregon Administrative Rule 660-12-0025(2) and (3)(b). Thus, prior to construction a Goal 5 analysis will be completed and proper permits obtained.



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Printed: 12/21/2012

Exhibit L

Figure 11-6: Freight Routes

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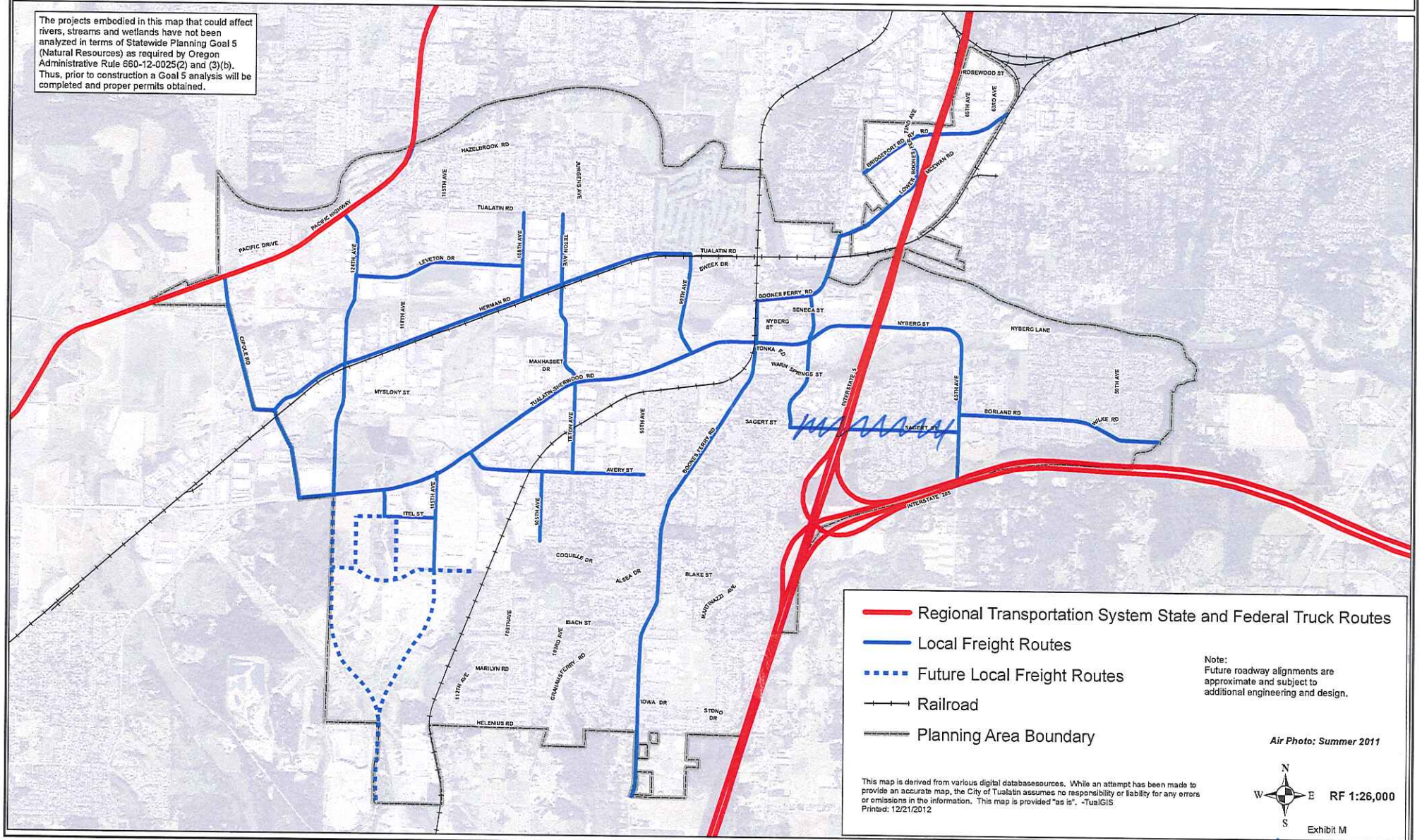

sagert removed

Attachment A- Revised Transportation System Plan located at:

http://www.tualatinoregon.gov/sites/default/files/fileattachments/citycouncil/calevents/14245/itemh.1._att2_transportation_system_plan.pdf