



Home of the Tualatin River National Wildlife Refuge

Planning Commission Meeting Packet

FOR

June 28, 2016

Planning Commission Meeting

**Sherwood City Hall
22560 SW Pine Street
Sherwood, Oregon**



Home of the Tualatin River National Wildlife Refuge

**City of Sherwood
PLANNING COMMISSION**

**Sherwood City Hall
22560 SW Pine Street
Sherwood, OR 97140**

June 28, 2016

7:00 PM Planning Commission Meeting

Agenda

1. Call to Order/ Roll Call

2. Consent Agenda

- a. February 9, 2016 Planning Commission Minutes approval
- b. May 24, 2016 Planning Commission Minutes approval
- c. June 14, 2016 Planning Commission Minutes approval

3. Council Liaison Announcements

4. Staff Announcements (Brad Kilby)

5. Community Comments

6. New business

a. Public Hearing – SP 16-04 Sherwood Plaza Apartments

The applicant proposes a six- building, 82-unit apartment complex located behind and east of the Sherwood Plaza commercial development and south of Langer Drive. The property is zoned Retail-Commercial (RC).

Residential uses are allowed in the RC zone so long as it is clearly secondary to the commercial use (Sherwood Plaza) on the site. The use is subject to the dimensional standards of the High Density Residential zone (HDR).

7. Planning Commissioner Announcements

8. Adjourn

City of Sherwood, Oregon
Planning Commission Meeting
February 9, 2016

Planning Commissioners Present:

Chair Jean Simson
Vice Chair Russell Griffin
Commissioner Chris Flores
Commissioner Alan Pearson
Commissioner Rob Rettig

Staff Present:

Tom Pessemier, Assistant City Manager
Julia Hajduk, Community Development Director
Brad Kilby, Planning Manager
Kirsten Allen, Planning Dept. Program Coordinator

Planning Commission Members Absent:

Commissioner Michael Meyer
Commissioner Lisa Walker

Council Members Present:

None

Work Session

Call to Order

Chair Jean Simson convened the meeting at 7:00 pm and asked for any announcements. Brad Kilby, Planning Manager, reported that discussion regarding recreational marijuana regulation would begin soon with an online survey and a public work session in March. He expected land use applications from Zenport Industrial, the Community Garden and the Springs Living soon.

1. Industrial Land Use Districts Development Code

Community Development Director Julia Hajduk said staff had received direction at the work session held on January 26, 2016. She said proposed changes to the language were based on feedback received at the meeting and noted that written comments had been received by Macadam Forbes Commercial Real Estate Services (see record, Exhibit 1). Staff was directed to begin the notice process to the Department of Land Conservation and Development (DLCD) and to hold public hearings.

Tentative dates for public hearing dates:

- Planning Commission, April 12, 2016
- City Council, May 3, 2016 and May 17, 2016

Chair Simson adjourned the meeting at 7:55 pm.

Submitted by:

Kirsten Allen, Planning Department Program Coordinator

Approval Date: _____

**City of Sherwood, Oregon
Planning Commission Meeting
May 24, 2016**

Planning Commissioners Present:

Chair Jean Simson
Commissioner Chris Flores
Commissioner Michael Meyer
Commissioner Alan Pearson
Commissioner Rob Rettig
Commissioner Lisa Walker

Staff Present:

Tom Pessemier, Assistant City Manager
Julia Hajduk, Community Development Director
Bob Galati, City Engineer
Brad Kilby, Planning Manager
Michelle Miller, Senior Planner
Kirsten Allen, Planning Dept. Program Coordinator

Planning Commission Members Absent:

Vice Chair Russell Griffin

Council Members Present:

Sally Robinson by phone

Work Session

1. Recreational Marijuana

Michelle Miller, Senior Planner gave a presentation and noted recreational marijuana license types determined by the Oregon Liquor Control commission (OLCC). She explained the proposed code regulations based on input from the Commission and public engagement. Discussion followed and a timeline was determined based on additional outreach opportunities over the summer including festivals and city sponsored events. Staff was directed to limit retail facilities to 3000 square feet.

Regular Meeting

1. Call to Order/Roll Call

Chair Jean Simson convened the meeting at 7:35 pm.

She moved to the consent agenda and asked for comments or a motion.

2. Consent Agenda

- a. March 29, 2016 Planning Commission Minutes approval
- b. April 12, 2016 Planning Commission Minutes approval
- c. April 26, 2016 Planning Commission Minutes approval

Motion: From Commissioner Alan Pearson to approve the Consent Agenda, Seconded by Commissioner Chris Flores. All present Planning Commissioners voted in favor.

3. Council Liaison Announcements

Councilor Robinson thanked the Commission for their efforts regarding marijuana facility regulation and public outreach. She said she would not be present for the next few meetings and there may not be an alternate present.

4. Staff Announcements

Brad Kilby, Planning Manager informed that TriMet would open a new bus line 97, from Tualatin to Sherwood, on June 6, 2016 (visit www.trimet.org/schedules/r097.htm) and the Community Garden opened May 23rd. He announced a Cedar Creek Trail Local Trail Advisory Committee meeting on May 25, 2016 with an open house on June 1st at 6:30 pm. Phase I will be constructed first between Tonquin Road and Hwy 99W.

Mr. Kilby informed that he sent an e-mail to the Sherwood West landowners about the possibility that Metro would revisit the Urban Growth Boundary maps in 2018 and that State Senate Bill 1573 regarding annexation requirements that may affect the ultimate timing of Sherwood West. He stated Federal Emergency Management Agency (FEMA) maps would be adopted shortly for Sherwood residents with flood insurance, but the National Marine and Fisheries Service (NMFS) had recently submitted a biological opinion regarding the new FEMA maps which may require two processes towards adoption. The maps cannot be changed by jurisdictions.

5. Community Comments

None were received.

6. Old Business

a. Public Hearing – PA 16-02 Public or Commercial Parking within the Old Town Overlay

Chair Simson began the public hearing and read the public hearing statement stating the Planning Commission would make a recommendation to the City Council. She said the hearing was legislative and ex parte contact did not apply. Chair Simson asked for the staff report.

Brad Kilby, Planning Manager gave a presentation and said the City receives complaints about a parking shortage in Old Town and the URA, owners of the Robin Hood Theater lot, wanted to relocate the parking in order to develop the lot. Two lots off of First Street had been identified for the new parking lot. The lots were split zoned with one zoned residentially. Residential properties are not allowed to have non-accessory parking. Mr. Kilby said as a result of testimony received at the public hearing on April 12, 2016 and a split decision by the Planning Commission the application was amended to limit the scope of the amendment to residential properties adjacent to collector or arterial roadways and vacant as of May 1, 2016. He explained that non-accessory (stand-alone) parking did not have an associated use and gave the parking lot behind City Hall as an example of accessory parking. Only one lot met the criteria.

Mr. Kilby explained that conditional uses in Old Town were subject to a public hearing before the Planning Commission with notice to surrounding properties. He described approval criteria for a text amendment was based upon a need, which has established by the Urban Renewal Agency and must be in accordance with the Transportation Planning Rule in which the functional classifications of roads cannot be affected by the amendment. ODOT and the City Engineer have confirmed that no roadway classification would be affected.

Mr. Kilby noted that a new notice was sent to surrounding property owners explaining the new proposed language and stated that no public comments were received by staff. He recommended the Planning Commission forward a recommendation of approval to the City Council, reminded the commission that this was not an approval for the parking lot and reiterated that only one lot met the proposed language.

Chair Simson asked for applicant testimony.

Tom Pessemier expressed that there was a need for parking in Old Town and that comments were heard from citizens relative to historic structures and the desire to preserve the character of Old Town. He noted that the proposal was amended to address concerns expressed and it was the URA's desire to construct parking in Old Town on 1st Street. No homes would be removed to build the parking lot.

Keith Jones, Harper Houf Peterson Righellis stated he had prepared the application and had ensured that the record complied with the Comprehensive Plan and the Sherwood Zoning and Community Development Code. He confirmed a need to provide parking and stated it was a good site for parking.

Mr. Pessemier disclosed the May 1, 2016 date was chosen because of eventual demolition of privately owned houses on Ash Street and he wanted to avoid confusion. He added that the proposed language would be added to the Conditional Uses code, Section 16.162.040 as item C, and suggested a review of 16.162.040.A prior to going to City Council.

Chair Simson thanked staff and the applicant, noting that in legislative matters, public testimony could affect a positive change.

Mr. Pessemier noted that the City Council was not involved in the application as inferred by staff, because the URA Board was made up of city council members and they were the final decision maker.

Chair Simson asked for public testimony. The one person who had turned in a form to testify declined, because his concerns were addressed by the applicant.

Chair Simson closed the public hearing and the following motion was received.

Motion: From Commissioner Alan Pearson that the Sherwood Planning Commission forward a recommendation of approval to the City Council for PA 16-02 Public or Commercial Parking within the Old Town Overlay based on applicant testimony, public testimony received and analysis, findings and conditions in the staff report. Seconded by Commissioner Michael Meyer. All present Planning Commissioners voted in favor.

7. Planning Commissioner Announcements

Commissioner Pearson announced he was cancer free.

8. Adjourn

Chair Simson adjourned the meeting at 8:06 pm.

Submitted by:

Kirsten Allen, Planning Department Program Coordinator

Approval Date: _____

**City of Sherwood, Oregon
Planning Commission Meeting
June 14, 2016**

Planning Commissioners Present:

Chair Jean Simson
Commissioner Michael Meyer
Commissioner Alan Pearson
Commissioner Lisa Walker

Staff Present:

Julia Hajduk, Community Development Director
Brad Kilby, Planning Manager
Kirsten Allen, Planning Dept. Program Coordinator

Planning Commission Members Absent:

Vice Chair Russell Griffin
Commissioner Chris Flores
Commissioner Rob Rettig

Council Members Present:

Sally Robinson

1. Call to Order/Roll Call

Chair Jean Simson convened the meeting at 7:00 pm.

2. Consent Agenda

None

3. Council Liaison Announcements

Councilor Robinson noted the job posting for a Senior Planner position for the Comprehensive Plan update. She reported that Meinecke Parkway west of Hwy 99W would be closed to the public between June 20 and July 15 for water main upgrades. Councilor Robinson will be on medical leave for the next couple months. She reminded the Commission that City Council will meet once a month over the summer.

4. Staff Announcements

Brad Kilby, Planning Manager informed that there would be a public meeting regarding the Tannery Site Assessment Update on Wednesday July 13, 2016 from 6:00-7:30 pm. The City received an EPA grant to assess the site for cleanup and the possibility of the City purchasing the two lots being assessed. If the city acquired the property, cleanup grants would be applied for.

5. Community Comments

None were received.

6. Old Business

a. Public Hearing – PA 15-06 Claus Property Plan Amendment and Zone Change

Mr. Kilby conveyed that staff had received a request on behalf of the applicant to amend the application and continue the hearing to a later date. He indicated that new public notices would be sent.

Motion: From Commissioner Alan Pearson to continue the hearing to a date not certain with a re-notice, Seconded by Commissioner Lisa Walker. All present Planning Commissioners voted in favor.

7. Planning Commissioner Announcements

There were no announcements

8. Adjourn

Chair Simson adjourned the meeting at 7:06 pm.

Submitted by:

Kirsten Allen, Planning Department Program Coordinator

Approval Date: _____

New Business Agenda

Item A

CITY OF SHERWOOD
Staff Report

June 28, 2016
File No: SP 12-04

Sherwood Plaza Apartments

TO: Planning Commission

Pre-App. Meeting: August 3, 2015
App. Submitted: March 2, 2016
App. Complete: May 9, 2016
Hearing Date: June 28, 2016
120 Day Deadline: September 6, 2016

From:



Michelle Miller, AICP
Senior Planner

Proposal: The applicant proposes a six- building, 82-unit apartment complex located behind and just east of the Sherwood Plaza commercial development and south of Langer Drive. The property is zoned Retail-Commercial (RC). The applicant's submittal materials are attached to this report as Exhibit A.

I. BACKGROUND

A. Owner/Applicant: Portland Fixture Limited Partnership
15350 SW Sequoia Pkwy
Portland OR

Contact: Brian Shahum 503-925-1850

Applicant's Representative: Emerio Design
8285 SW Nimbus Ave. Ste, 180
Beaverton OR 97008

Contact: AnneMarie Skinner, 503-746-8812

B. Location: SW Langer Drive. Washington County Tax Map 2S129CB tax lots 00400.

C. Parcel Size: The total site area of tax lot 400 is 13.26 acres of which 3.43 acres is proposed for the residential development.

Existing Development and Site Characteristics: The square shaped 13.26 acre site contains Sherwood Plaza, a single story multi-tenant retail facility. The site, known as "Sherwood Plaza" is a 27,000 square foot shopping plaza where multiple commercial businesses surround an existing parking area with several satellite buildings. The "Plaza" consists of one large parcel along SW Langer Drive that includes a large, long L-shaped shopping area with a post office, toy store, several restaurants, a coffee shop and a large

children's indoor activity center. There are several outlying buildings including a drive through restaurant, a dine-in restaurant and a real estate office. The parking area consists of 540 spaces primarily in the front of the large shopping area surrounding the buildings. The parking areas are separated with a few landscape islands and a sidewalk that connects to SW Langer Drive. This commercial plaza area has primary access onto SW Langer Drive at three locations as it curves around the site on the site's west and northern boundaries. There are several other stand-alone buildings on the site which contain two restaurants, a drive up coffee shop and a small office building.

There is an access road behind the Plaza and a large stand of lodgepole pines and overgrown vegetation separating the developed and undeveloped sections of the site. The remaining vacant portion, approximately 3.43 acres is relatively flat, with grass and minimal landscaping.

- D. Site History: The site received land use approval for development of the Plaza in 1977. (SR 77-04) Several other site plan approvals have been granted since that time and Includes the Taco Bell Site Plan approval in 2008 (SP 07-08) and Dutch Bros. in 2012 (SP 12-02).
- E. Zoning Classification and Comprehensive Plan Designation: The site is zoned Retail Commercial (RC). Per Chapter 16.22, the purpose of the RC zone is to provide areas of general retail and service uses that neither require larger parcels of land, nor produce excessive environmental impacts as per Division VIII. Multi-family housing is allowed so long as it is clearly secondary to the commercial use. The dimensional standards of the High Density Residential apply, with a density range between 16.8 and 24 units to the acre.
- G. Adjacent Zoning and Land Use: The subject property is adjacent to high density residentially zoned and developed properties to the south and east. The Sunfield Apartments are located to the south and the Arbor Terrace subdivision is located to the east. A private drive is located adjacent to the property's eastern boundary. Properties north and west of the site are also zoned Retail Commercial.
- H. Review Type: The applicant proposes site plan approval for six multi-family buildings adjacent to the Sherwood Plaza. Due to the size, the application is subject to a Type IV review which requires review and approval by the Planning Commission after conducting a public hearing. An appeal would be heard by the Sherwood City Council.
- I. Public Notice and Hearing: This application was processed consistent with the standards in effect at the time it was submitted. A neighborhood meeting was held on January 4, 2016 at the Sherwood Police Department. The neighborhood meeting was attended by four members of the general public. They raised concerns, the proposed parking, housing type, site amenities, play area location, garbage receptacles, and management of the development. The minutes are provided in the applicant's materials (See Exhibit A).

Notice of the application was mailed to property owners within at least 1,000 feet of the subject property, posted on the property and in five locations throughout the City on June 6 and 7, 2016 in accordance with Section 16.72.020 of the SZCDC. The notice was published in the Times (a paper of general circulation) on June 23 and in the Sherwood Gazette (a paper of local circulation) in the June 2016 edition in accordance with Section 16.72.020 of the SZCDC.

- J. Review Criteria: Sherwood Zoning and Community Development Code, 16.12 (Residential Land Use Districts), 16.22 (Commercial Land Use Districts), 16.58 (Clear Vision and Fence Standards), 16.72 (Procedures for Processing Development Permits), 16.90 (Site Planning), 16.92 (Landscaping), 16.94 (Off Street Parking and Loading), 16.96 (On-Site Circulation), 16.98 (On-Site Storage), Division V.I Public Infrastructure- 16.106 (Transportation Facilities), 16.110 (Sanitary Sewers), 16.112 (Water), 16.114 (Storm), 16.116 (Fire Protection), 16.118 (Public and Private Utilities), Division VIII. Environmental Resources, 16.142 (Parks, Trees, and Open Spaces), 16.154 (Heat and Glare)

II. PUBLIC COMMENTS

Public notice was mailed and posted on the property and in five locations throughout the City on June 6 and 7, 2016. Staff received no specific public comments to this application. However, comments are accepted prior to, or at the Planning Commission hearing.

III. AGENCY COMMENTS

Staff sent e-notice to affected agencies on May 18, 2016. The following is a summary of the comments received. Copies of full comments are included in the record unless otherwise noted.

Sherwood Engineering Department: Craig Christensen, PE, Project Engineer submitted comments on June 16, 2016. His comments are incorporated throughout the report, and where appropriate conditions have been imposed to ensure that the proposal meets the standards which the engineering department is responsible to enforce. These comments are discussed in greater detail throughout this report, incorporated into the recommended decision, and are attached as Exhibits B.

Clean Water Services: Jackie Sue Humphrey's submitted comments dated June 13, 2016. Within her comments, Ms. Humphrey's indicates that the applicant will be required to obtain a storm connection permit from Clean Water Services (CWS), and approval of final construction plans and drainage calculations. The CWS comments are attached to this report as Exhibit C.

Tualatin Valley Fire and Rescue: Tom Mooney, Deputy Fire Marshal II with Tualatin Valley Fire and Rescue (TVFR), submitted comments for this proposal on June 10, 2016. Mr. Mooney's comments have been incorporated into this report where applicable, and are attached to this report as Exhibit D.

Pride Disposal Co.: Kristin Leichner of Pride Disposal, provided staff with amended comments dated May 26, 2016 that initially had the applicant revise their layout to accommodate the disposal trucks. The revised layout is satisfactory to Pride Disposal. Ms. Leichner's comments are attached to this report as Exhibit E.

ODOT, PGE, Kinder Morgan Energy, NW Natural Gas, Washington County, Metro, and Tri-Met were also notified of this proposal and did not respond or provided no comments to the request for agency comments by the date of this report.

IV. SITE PLAN REVIEW REQUIRED FINDINGS (SECTION 16.90)

1. **The proposed development meets applicable zoning district standards and design standards in Division II, and all provisions of Divisions V, VI, VIII and IX.**

FINDING: This standard can be met as discussed and conditioned in this report.

- 2. The proposed development can be adequately served by services conforming to the Community Development Plan, including but not limited to water, sanitary facilities, storm water, solid waste, parks and open space, public safety, electric power, and communications.**

Staff Analysis: Water, sanitary and streets are all available. They were provided as a part of the Sherwood Plaza. Parks and open space are nearby at Langer Park and provided onsite by the applicant. Solid waste services, power, communication and public safety are all available to this development as it is located adjacent to SW Langer Drive, within the City's designated Town Center. There is a need to provide storm water treatment for the proposed development that has been discussed in the Engineering comments later in this report.

FINDING: Services are available to the site. Some of the services must be extended to the proposed apartment buildings. These extensions are discussed and conditioned further in this report.

- 3. Covenants, agreements, and other specific documents are adequate, in the City's determination, to assure an acceptable method of ownership, management, and maintenance of structures, landscaping, and other on-site features.**

FINDING: This site plan is subject to the conditions of the original Sherwood Plaza site plan approval. Any required covenants or restrictions will be required to be satisfied as a part of the development.

- 4. The proposed development preserves significant natural features to the maximum extent feasible, including but not limited to natural drainage ways, wetlands, trees, vegetation (including but not limited to environmentally sensitive lands), scenic views, and topographical features, and conforms to the applicable provisions of Division VIII of this Code and Chapter 5 of the Community Development Code.**

FINDING: The site where the apartments are proposed is flat and vacant. There are not any known significant natural resource areas on the property.

- 5. For developments that are likely to generate more than 400 average daily trips (ADTs), or at the discretion of the City Engineer, the applicant shall provide adequate information, such as a traffic impact analysis or traffic counts, to demonstrate the level of impact to the surrounding street system. The developer shall be required to mitigate for impacts attributable to the project.**

STAFF ANALYSIS: The applicant prepared a traffic analysis as requested by the City Engineer that was reviewed by DKS, the City's transportation consultants. The applicant evaluated the transportation impacts and pedestrian safety and connectivity surrounding the proposed development.

Specifically, the applicant was asked to evaluate the safety of the pedestrian crossing of SW Langer Drive in the vicinity of the site to determine if enhanced crossing is needed to provide safety pedestrian crossing access to/from the proposed site to the commercial development to the north. In the assessment, the applicant noted that there were no

pedestrian crashes during the last three years near the crossing, adequate sight distance is provided, and that the proposed development would not be expected to add substantially more pedestrian volumes.

However, the applicant also determined that the proposed development is a residential complex in the Town Center, opposite of food and shopping attractions on the other side of Langer Drive. This combination of mixed uses does have the potential to increase multimodal activity to/from the site, consistent with the vision of the Sherwood Town Center.

Further analysis found that the minimum pedestrian volume peak-hour evaluation is 20 pedestrians per hour using the existing crosswalk at the intersection of SW Langer Drive. The proposed development would generate 51 weekday PM peak hour trips.

To that end the City Engineer in consultation with DKS determines that an enhanced pedestrian crossing is warranted and recommends the following condition to ensure pedestrian safety and connectivity at this location. (See Exhibit G. Transportation information prepared by Kittelson and responses by DKS)

FINDING: Based on the above analysis, the applicant does not meet this criterion, but can do so with the following condition.

RECOMMENDED CONDITION: Prior to Engineering Plans approval, design the pedestrian crossing striping that conforms to standards defined in Section 3b.18 (Crosswalk Markings) of the Manual on Uniform Traffic Control Devices. The pedestrian crossing striping shall include longitudinal lines parallel to the pedestrian traffic flow, and diagonal lines placed at 45 degree angle to the longitudinal lines.

RECOMMENDED CONDITION: Prior to final occupancy, install a high visibility advanced pedestrian crossing warning signage and striping at the pedestrian crossing of Langer Drive between the Plaza Site driveway entrance and the Highway 99W right-in/right-out access road. Signage shall conform to standards defined in the Manual on Uniform Traffic Control Devices. Applicant's Engineer shall provide pedestrian crossing signage design drawings to the City for review and approval.

6. **The proposed office, retail multi-family institutional or mixed-use development is oriented to the pedestrian and bicycle, and to existing and planned transit facilities. Urban design standards shall include the following:**
 1. **Primary, front entrances shall be located and oriented to the street, and have significant articulation and treatment, via facades, porticos, arcades, porches, portal, forecourt, or stoop to identify the entrance for pedestrians. Additional entrance/exit points for buildings, such as a postern, are allowed from secondary streets or parking areas.**
 2. **Buildings shall be located adjacent to and flush to the street, subject to landscape corridor and setback standards of the underlying zone.**
 3. **The architecture of buildings shall be oriented to the pedestrian and designed for the long term and be adaptable to other uses. Aluminum, vinyl, and T-111 siding shall be prohibited. Street facing elevations shall have windows,**

transparent fenestration, and divisions to break up the mass of any window. Roll up and sliding doors are acceptable. Awnings that provide a minimum 3 feet of shelter from rain shall be installed unless other architectural elements are provided for similar protection, such as an arcade.

Staff Analysis: The vacant portion of the site is long and rectangular with limited options for orientation to the actual street frontage of the northern section of SW Langer Drive. The applicant contends that the overall site is a corner lot and both the western and northern property border SW Langer Drive and thus the three buildings on the eastern edge are facing a street albeit the westernmost portion of SW Langer Drive. Because of the narrowness and existing lot configuration, some buildings cannot be oriented to SW Langer Drive at the north.

In looking at the setbacks for the site, the applicant uses northern SW Langer Drive as the front of the site (See applicant's materials page 4 of the narrative) and the east and west boundaries as the side property lines. For clarity, staff has assigned each of the six buildings a number. (See Exhibit F. Numbered Building Site Plan). Using the north boundary as the front, Building 1 should be oriented to SW Langer Drive rather than internal to the parking area. The applicant's narrative agrees with this assessment, but it is unclear from the site layout (applicant's site plan sheet A1.01) whether Building 1 is indeed orientated to the street. From this plan view, there is no sidewalk to the front entrance and it would appear that the front elevation is facing the internal parking area rather than SW Langer Drive.

The other building using the front yard setback of SW Langer Drive to the north, "Building A" has a side elevation that directly faces northern SW Langer Drive, with a 28 foot setback. Building 1 and 2 are flush with SW Langer Drive on the north and need to be oriented to the street. The applicant shows a side elevation at this location rather than a front elevation for Building 2, with limited articulation and orientation to the pedestrian. The applicant will need to revise this elevation in order to meet the intention of this standard.

FINDING: Based on the above analysis, the applicant does not meet this criterion. The applicant should be able to meet this provision with the following condition.

RECOMMENDED CONDITION: Prior to final site plan approval, provide revised elevations for the northern sides of Buildings 1 and 2 which front SW Langer Drive. The elevations shall clearly demonstrate how the buildings are located and oriented to the street, and have significant articulation and treatment, via facades, sidewalk connection, porticos, arcades, porches, portal, forecourt, or stoop to identify the entrance for pedestrians.

V. APPLICABLE CODE PROVISIONS

The applicable zoning district standards are identified in Chapter 16.22 below.

A. Division II– Land Use and Development

The applicable provisions of Division II include:

Chapter 16.22 - COMMERCIAL LAND USE DISTRICTS

16.22.010 – Purpose

C. Retail Commercial (RC) - The RC zoning district provides areas for general retail and service uses that neither require larger parcels of land, nor produce excessive environmental impacts as per Division VIII.

Staff Analysis: The site is zoned Retail Commercial, (RC) and provides “areas of general retail and service uses that neither require larger parcels of land, nor produce excessive environmental impacts as per Division VIII.” The site, approximately 13.26 acres in total on one tax lot, holds the Sherwood Plaza, a multi-tenant single story retail outlet as well as a stand-alone fast food restaurant, a sit down restaurant, a single story office building and a small drive up coffee stand and associated parking. The applicant proposes to add multi-family housing on the remaining 3.43 acres of the site, which would be permitted within this zone, so long as it is clearly secondary to the primary retail commercial use of the property.

FINDING: Based on the above analysis, the applicant meets this criterion.

16.22.020 - Uses

Multi-family housing, subject to the dimensional requirements of the High Density Residential (HDR) zone in 16.12.030 when located on the upper floors, in the rear of, or otherwise clearly secondary to commercial buildings

Staff Analysis: According to the table, multi-family residential uses are permitted outright within the zone so long as they are “otherwise clearly secondary to the commercial building.” Since the commercial buildings are single story and pre-existing, the applicant does not propose to add residential apartments atop the existing buildings but utilize a vacant portion of the site behind or in the rear of the commercial property.

The applicant submitted a traffic study with this land use application identifying 1,517 pm peak hour trips generated from the commercial uses on the site. (See applicant’s traffic study, Exhibit A, prepared by Kittelson and Associates. In this same study, they estimated that the 82 unit multi-family development would generate an additional 545 net new weekday daily trips, a much smaller proportion than the commercial activity and the vehicular trip activity.

The commercial portion of the site takes up approximately 75 % of the overall site area in compared to the residential area of the multifamily. Additionally, the multifamily development is clearly secondary as to the amount of frontage visible on SW Langer Drive.

FINDING: Based on the above discussion, the applicant meets this criterion.

16.12.030. - Residential Land Use Development Standards

C. Development Standard per Residential Zone (table)

HDR Dimensional Standard	In Feet
Two or Multi-Family: for the first 2 units	8,000 sq. ft.
Multi-family, each add. Unit after first 2	1,500 sq. ft.
Minimum lot width at front property line	25
Minimum lot width at building line-	60
Lot Depth	80
Max Height	40 or 3 stories

Setbacks- Multi-family	
Front Yard	14
Interior side yard	
• Over 24 ft. in height	See § 16.68- Infill
Rear Yard	20

1. Lot Dimensions

Staff Analysis: The proposed development is located within the RC zone and subject to the High Density Residential (HDR) dimensional standards for multi-family development. The HDR designation allows for a density of 16.8 to 24 units. The residential area is 3.47 acres and the housing density will be between 57 and 82 units. The applicant has proposed the maximum density for this site.

The building and all other structures must meet the dimensional standards outlined in the Sherwood Zoning and Development Code (SZDC).The minimum lot width at the front property line is required to be 25 feet and the minimum lot width at the building line is required to be 60 feet. The minimum lot depth is 80 feet. The subject property is 565 feet wide at the northern frontage and at least 718 feet deep, thus clearly exceeding the minimum required dimensions.

The first two multifamily units are required to have 8,000 square feet with each additional unit requiring 1,500 square feet of area. The applicant proposes 82 units, using the first two units at 8,000 square feet and then the remaining 80 units require an additional 120,000 for a total of 128,000 square feet or a minimum of 2.94 acres. The vacant area designated for the housing units are 3.43 acres.

FINDING: Based on the above discussion, the lot dimension standards are met.

2. Setbacks

Staff Analysis: As discussed earlier, the northern setback is the front of the site, which requires a 14 foot setback, the southern property line is the rear setback and requires 20 feet and the side yard setbacks are required to meet Chapter 16.68-Infill because the buildings are all over 24 feet in height which will be further discussed below. The applicant’s plans show the front yard setback to be 14 feet and rear yard setback to be 20 feet. (Exhibit A, applicant’s site plan Sheet A1.01 and Sheet A1.02)

FINDING: The front and rear setback requirements are met. The side yard setbacks will be discussed below.

16.68.030 - Building Design on Infill Lots

B. Interior Side Setback and Side Yard Plane. When a structure exceed twenty four (24) feet in height:

1.The minimum interior side setback is five (5) feet, provided that elevations or portions of elevations exceeding twenty four (24) feet in height shall be setback from interior property line(s) an additional one-half (½) foot for every one (1) foot in height over twenty four (24) feet (see example below); and

Staff Analysis: Three buildings are adjacent to the eastern side property line and subject to the side yard setback requirements. No other buildings are near any of the other side property lines. For this section, please refer to Exhibit F which assigns numbers to the buildings.

Building 2, (sheet A2.01), the tallest building is 36 feet tall, 12 feet above the 24 foot high threshold which requires six feet (12 feet/.5 foot) of additional setback beyond the 5 feet minimum. Thus, the side yard setback is eleven feet and the plans show an 11 foot setback.

Buildings 4 and 5, (sheet A2.03 and A2.05) are both 30 feet tall, 6 feet above the threshold which requires three feet of additional setback or 8 feet. The applicant shows these buildings 11 feet from the side property line. (Sheet A1.01).

2. All interior side elevations exceeding twenty four (24) feet in height shall be divided into smaller areas or planes to minimize the appearance of bulk to properties abutting the side elevation: When the side elevation of such a structure is more than 750 square feet in area, the elevation shall be divided into distinct planes of 750 square feet or less. For the purposes of this standard, a distinct plane is an elevation or a portion of an elevation that is separated from other wall planes, resulting in a recessed or projecting section of the structure that projects or recedes at least two (2) feet from the adjacent plane, for a length of at least six (6) feet. The maximum side yard plane may be increased by ten percent (10%) for every additional five (5) feet of side yard setback provided beyond the five (5) foot minimum.

Staff Analysis: The applicant shows the interior side elevations divided into smaller areas with distinct planes resulting in recessed or projecting sections at least six feet long at different intervals on all of the buildings that face the residential development to the east. The recesses are at least 2 feet from the adjacent plane. (Sheet A1.02)

FINDING: Based on the above discussion the applicant meets this criterion.

C. Height

The maximum height of structures in the HDR zone is 40 feet or three stories, whichever is less.

FINDING: All of the proposed buildings are under 40 feet. The tallest building is 36 feet tall. Buildings 2-6 are three stories. Building 1 is two stories. Therefore, the applicant meets this criterion.

16.58 Clear Vision and Fence Standards

16.58.010 Clear Vision Areas

The following requirements shall govern clear vision areas:

2. In a commercial zone, the minimum distance shall be fifteen (15) feet, or at intersections including an alley, ten (10) feet.

Staff Analysis: There is one driveway where the clear vision areas could potentially be affected. The applicant has identified a 20 foot clear vision triangle on Sheet A1.01, showing that there will be no obstructions within the triangle, thus meeting this requirement.

FINDING: The proposed development does not include any new structures or proposed landscaping that would obstruct the clear vision areas that have been prescribed in Section 16.58. This criterion is satisfied by the proposed development.

B. Division V- Community Design

The applicable provisions of Chapter 5 include: 16.90 (Site Planning – addressed previously in this report), 16.92 (Landscaping), 16.94 (Off-street parking and Loading), and 16.96 (On-site Circulation). 16.98 (On-Site Storage)

16.92 Landscaping

16.92.010 - Landscaping Plan Required

All proposed developments for which a site plan is required pursuant to Section 16.90.020 shall submit a landscaping plan that meets the standards of this Chapter. All areas not occupied by structures, paved roadways, walkways, or patios shall be landscaped or maintained according to an approved site plan.

Staff Analysis: The applicant's materials contain a landscaping plan, identified as Sheets L1.1-L.4. Compliance with this section will be discussed below.

16.92.020 - Landscaping Materials

A. Type of Landscaping

Required landscaped areas shall include an appropriate combination of native evergreen or deciduous trees and shrubs, evergreen ground cover, and perennial plantings. Trees to be planted in or adjacent to public rights-of-way shall meet the requirements of this Chapter. Plants may be selected from the City's "Suggested Plant Lists for Required Landscaping Manual" or suitable for the Pacific Northwest climate and verified by a landscape architect or certified landscape professional.

1. Ground Cover Plants

a. All of the landscape that is not planted with trees and shrubs must be planted in ground cover plants, which may include grasses. Mulch is not a substitute for ground cover, but is allowed in addition to the ground cover plants.

b. Ground cover plants other than grasses must be at least the four-inch pot size and spaced at distances appropriate for the plant species. Ground cover plants must be planted at a density that will cover the entire area within three (3) years from the time of planting.

2. Shrubs

a. All shrubs must be of sufficient size and number to be at full growth within three (3) years of planting.

b. Shrubs must be at least the one-gallon container size at the time of planting.

3. Trees

a. Trees at the time of planting must be fully branched and must be a minimum of two (2) caliper inches and at least six (6) feet in height.

b. Existing trees may be used to meet the standards of this chapter, as described in Section 16.92.020.C.2.

Staff Analysis: The landscape plan includes a combination of trees, shrubs and groundcover. The groundcover and shrub plantings are at least one gallon in size. The trees are at least 2" caliper. Proper installation and size of materials will be reviewed at the time of final inspection prior to occupancy of the buildings.

FINDING: Based on the above discussion, the applicant meets the criterion with respect to variety of plant materials, but full compliance cannot be realized until the final inspection by planning staff. The following condition is recommended to fully meet this standard.

RECOMMENDED CONDITION: Prior to final occupancy, ensure that all landscaping is installed per the approved landscape plan specifications.

B. Plant Material Selection and Preparation

1. Required landscaping materials shall be established and maintained in a healthy condition and of a size sufficient to meet the intent of the approved landscaping plan. Specifications shall be submitted showing that adequate preparation of the topsoil and subsoil will be undertaken.

2. Landscape materials should be selected and sited to produce a hardy and drought-resistant landscape area. Selection of the plants should include consideration of soil type, and depth, the amount of maintenance required, spacing, exposure to sun and wind, the slope and contours of the site, and compatibility with existing native vegetation preserved on the site.

Staff Analysis: Laura Antonson, a registered landscape architect prepared the landscape plan set for this project. She identified the variety of plants and indicated that they would meet the requirements of this Chapter and would be at full growth within 3 years of planting. The applicant provided a description of how the trees and plants should be planted along with the type of soil and amendment that would be suitable for these plants.

FINDING: Based on the above discussion, the applicant meets this criterion.

C. Existing Vegetation

1. All developments subject to site plan review per Section 16.90.020 and required to submit landscaping plans per this section shall preserve existing trees, woodlands and vegetation on the site to the maximum extent possible, as determined by the Review Authority, in addition to complying with the provisions of Section 16.142. (Parks, Trees and Open Space) and Chapter 16.144 (Wetland, Habitat, and Natural Resources).

Staff Analysis: There are existing lodgepole pines separating the residential and commercial use on site. The narrative indicates that they are proposing to remove eight of the 24 pines onsite. The applicant does not explain why they need to be removed for development.

In contrast, the landscape plan, L1.1, shows that 31 trees need to be removed for development. The applicant has not conducted a proper inventory as described in Chapter 16.142, which will be discussed further within this report.

FINDING: Based on the above discussion, the applicant has not provided a clear description on the landscape plans and in the narrative which trees are to be retained or removed for

development and a tree inventory conducted by an arborist describing the condition of the trees.

RECOMMENDED CONDITION: Prior to final site plan approval, submit plans that indicate the correct number of trees to be removed or retained, the condition of the trees and if necessary, the reason for their removal.

2. Existing vegetation, except those plants on the Nuisance Plants list as identified in the "Suggested Plant Lists for Required Landscaping Manual" may be used to meet the landscape standards, if protected and maintained during the construction phase of the development.

a. If existing trees are used, each tree six (6) inches or less in diameter counts as one (1) medium tree.

b. Each tree that is more than six (6) inches and up to nine (9) inches in diameter counts as two (2) medium trees.

c. Each additional three (3) inch diameter increment above nine (9) inches counts as an additional medium tree.

Staff Analysis: As discussed above, staff is unable to discern the appropriate number of trees to be retained and removed and as a result unable to calculate these provisions.

FINDING: Based on the above criterion, the applicant does not meet the standard, but may be able to do so by meeting the previous condition stated above.

D. Non-Vegetative Features

1. Landscaped areas as required by this Chapter may include architectural features interspersed with planted areas, such as sculptures, benches, masonry or stone walls, fences, rock groupings, bark dust, semi-pervious decorative paving, and graveled areas.

2. Impervious paving shall not be counted toward the minimum landscaping requirements unless adjacent to at least one (1) landscape strip and serves as a pedestrian pathway.

3. Artificial plants are prohibited in any required landscaped area.

Staff Analysis: The applicant describes the southernmost play area as containing play equipment within the landscaped open space area, which is permitted. The applicant has not counted any impervious area within the required open space areas with the exception of the sideway within southern play area which serves as a pedestrian pathway from the parking lot. No artificial plants are proposed.

FINDING: Based on above discussion, the applicant meets this criterion.

16.92.030 - Site Area Landscaping and Perimeter Screening Standards

A. Perimeter Screening and Buffering

1. Perimeter Screening Separating Residential Zones:

A minimum six-foot high sight-obscuring wooden fence, decorative masonry wall, or evergreen screen, shall be required along property lines separating single and two-family uses from multi-family uses, and along property lines separating residential zones from commercial, institutional/public or industrial zones subject to the provisions of Chapter 16.48.020 (Fences, Walls and Hedges).

- a. For new uses adjacent to inventoried environmentally sensitive areas, screening requirements shall be limited to vegetation only to preserve wildlife mobility.
- b. The required screening shall have breaks, where necessary, to allow pedestrian access to the site. The design of the wall or screening shall also provide breaks or openings for visual surveillance of the site and security.
- c. Evergreen hedges used to comply with this standard shall be a minimum of thirty-six (36) inches in height at maturity, and shall be of such species, number and spacing to provide the required screening within one (1) year after planting.

Staff Analysis: The applicant proposes a six foot cedar fence along the eastern boundary and most of the southern boundary, both of which are adjacent to existing residential developments. At the southwest corner of the site, there are existing mature Photinia shrubs that provide screening between developments.

The applicant does not propose a break in the fence between developments to allow pedestrian access to the site. Since the eastern property line is 720 feet long, a pedestrian pathway between the residential developments is warranted for better access to Sherwood Plaza and better pedestrian connectivity for the surrounding neighborhood.

FINDING: Based on the above discussion, the applicant meets criterion with respect to the fencing, but does not include an adequate break in the screening where necessary to allow pedestrian access to the site.

RECOMMENDED CONDITION: Prior to final site plan approval, provide at least one break in the fencing with a five foot wide public pedestrian pathway and a corresponding public non-vehicular access easement centrally located at the eastern boundary to allow adjoining pedestrian access through the site.

2. Perimeter Landscaping Buffer

- a. A minimum ten (10) foot wide landscaped strip comprised of trees, shrubs and ground cover shall be provided between off-street parking, loading, or vehicular use areas on separate, abutting, or adjacent properties.
- b. The access drives to a rear lots in the residential zone (i.e. flag lot) shall be separated from abutting property(ies) by a minimum of forty-two-inch sight-obscuring fence or a forty-two-inch to an eight (8) feet high landscape hedge within a four-foot wide landscape buffer. Alternatively, where existing mature trees and vegetation are suitable, Review Authority may waive the fence/buffer in order to preserve the mature vegetation.

3. Perimeter Landscape Buffer Reduction

If the separate, abutting property to the proposed development contains an existing perimeter landscape buffer of at least five (5) feet in width, the applicant may reduce the proposed site's required perimeter landscaping up to five (5) feet maximum, if the development is not adjacent to a residential zone. For example, if the separate abutting perimeter landscaping is five (5) feet, then applicant may reduce the perimeter landscaping to five (5) feet in width on their site so there is at least five (5) feet of landscaping on each lot.

Staff Analysis: The applicant has indicated within their narrative that they would be providing a fence along the eastern and southern property line. The applicant also provides

for at least ten feet of landscaping around the perimeter of the site. It is still unclear whether the majority of the lodgepole pines will remain, but regardless, the landscape plan shows adequate perimeter landscaping on the western boundary as well. The applicant proposes to landscape the entire 11 foot wide area between the fence and the buildings to the east. The applicant does not propose a reduction.

FINDING: Based on the above discussion, the applicant meets this criterion.

B. Parking Area Landscaping

1. Purpose

The standard is a landscape treatment that uses a combination of trees, shrubs, and ground cover to provide shade, storm water management, aesthetic benefits, and screening to soften the impacts of large expanses of pavement and vehicle movement. It is applied to landscaped areas within and around the parking lot and loading areas.

2. Definitions

a. **Parking Area Landscaping:** Any landscaped area on the site that is not required as perimeter landscaping § 16.92.030 (Site Landscaping and Screening).

b. Canopy Factor

(1) Landscape trees are assigned a canopy factor to determine the specific number of required trees to be planted. The canopy factor is calculated based on the following formula:

Canopy Factor = Mature Height (in feet) × Canopy Spread (in feet) × Growth Rate Factor × .01

(2) **Growth Rate Factor:** The growth rate factor is three (3) for fast-growing trees, two (2) for medium growing trees, and one (1) for slow growing trees. The growth rate of a tree is identified in the "Suggested Plant Lists for Required Landscaping Manual."

3. Required Landscaping

There shall be at least forty-five (45) square feet parking area landscaping for each parking space located on the site. The amount of required plant materials are based on the number of spaces as identified below.

Staff Analysis: The applicant proposes 139 spaces which requires 6,255 square feet of parking area landscaping. The applicant proposes 14 landscaped planters totaling 6354 square feet of parking area landscaping interior to the parking area that comply with the spacing requirements.

4. Amount and Type of Required Parking Area Landscaping

a. Number of Trees required based on Canopy Factor

Small trees have a canopy factor of less than forty (40), medium trees have a canopy factor from forty (40) to ninety (90), and large trees have a canopy factor greater than ninety (90);

(1) Any combination of the following is required:

(i) One (1) large tree is required per four (4) parking spaces;

- (ii) One (1) medium tree is required per three (3) parking spaces; or
- (iii) One (1) small tree is required per two (2) parking spaces.
- (iv) At least five (5) percent of the required trees must be evergreen.

(2) Street trees may be included in the calculation for the number of required trees in the parking area.

Staff Analysis: The applicant proposes 38 trees onsite to meet the parking area landscaping requirements. The applicant has provided 25 large trees to account for 100 parking spaces and 14 medium trees to account for 42 parking spaces. The applicant has included enough trees per parking space and provided details as to which trees are designated medium or large on the plan set. The applicant proposes two evergreen trees, or 5 % of the required total.

FINDING: Based on the above discussion the applicant meets this standard.

b. Shrubs:

(1) Two (2) shrubs are required per each space.

(2) For spaces where the front two (2) feet of parking spaces have been landscaped instead of paved, the standard requires one (1) shrub per space. Shrubs may be evergreen or deciduous.

Staff Analysis: The applicant proposes 300 shrubs for 97 parking spaces, nearly three per space and 160 shrubs for the 42 spaces that require an additional shrub per space. The applicant proposes 460 shrubs in total.

FINDING: Based on the above discussion the applicant meets this standard.

c. Ground cover plants:

(1) Any remainder in the parking area must be planted with ground cover plants.

(2) The plants selected must be spaced to cover the area within three (3) years. Mulch does not count as ground cover.

Staff Analysis: The applicant proposes to cover the remaining unpaved area with ground cover and has noted that the selected plants will be able to cover the area within three years.

FINDING: Based on the above discussion, the applicant meets this criterion.

a. Individual landscaped areas (islands) shall be at least ninety (90) square feet in area and a minimum width of five (5) feet and shall be curbed to protect the landscaping.

b. Each landscape island shall be planted with at least one (1) tree.

c. Landscape islands shall be evenly spaced throughout the parking area.

d. Landscape islands shall be distributed according to the following:

(2) Multi or mixed-uses, institutional and commercial uses: one (1) island for every ten (10) contiguous parking spaces.

e. Storm water bio-swales may be used in lieu of the parking landscape areas and may be included in the calculation of the required landscaping amount.

Staff Analysis: The applicant has provided landscape islands that are spaced to provide for at least one island for every ten contiguous parking spaces. The fourteen planter islands each contain a tree within each landscape island that is at least 90 square feet and 5 feet wide with curbs to protect the landscaping. The applicant has spaced the landscaping appropriately throughout the site.

FINDING: Based on the above discussion, this criterion is met.

C. Screening of Mechanical Equipment, Outdoor Storage, Service and Delivery Areas

All mechanical equipment, outdoor storage and manufacturing, and service and delivery areas, shall be screened from view from all public streets and any adjacent residential zones. If unfeasible to fully screen due to policies and standards, the applicant shall make efforts to minimize the visual impact of the mechanical equipment.

Staff Analysis: According to the applicant, they do not propose any outdoor storage or mechanical equipment.

FINDING: Based on the above discussion, this criterion is not applicable.

D. Visual Corridors

Except as allowed by subsection 6. above, new developments shall be required to establish landscaped visual corridors along Highway 99W and other arterial and collector streets, consistent with the Natural Resources and Recreation Plan Map, Appendix C of the Community Development Plan, Part II, and the provisions of Chapter 16.142(Parks, Trees, and Open Space). Properties within the Old Town Overlay are exempt from this standard.

Staff Analysis: The northern property is adjacent to SW Langer, a collector and thus a visual corridor is required along the frontage. This will be discussed and conditioned further within this report under Chapter 16.142.

16.92.040 Installation and Maintenance Standards

A. Installation

All required landscaping must be in-ground, except when in raised planters that are used to meet minimum Clean Water Services storm water management requirements. Plant materials must be installed to current nursery industry standards. Plant materials must be properly supported to ensure survival. Support devices such as guy wires or stakes must not interfere with vehicular or pedestrian movement.

B. Maintenance and Mitigation of Landscaped Areas

1. Maintenance of existing non-invasive native vegetation is encouraged within a development and required for portions of the property not being developed.

2. All landscaping shall be maintained in a manner consistent with the intent of the approved landscaping plan.

3. Any required landscaping trees removed must be replanted consistent with the approved landscaping plan and comply with § 16.142, (Parks, Trees and Open Space).

C. Irrigation

The intent of this standard is to ensure that plants will survive the critical establishment period when they are most vulnerable due to lack of watering. All landscaped areas must provide an irrigation system, as stated in Option 1, 2, or 3.

1. Option 1: A permanent built-in irrigation system with an automatic controller installed.

2. Option 2: An irrigation system designed and certified by a licensed landscape architect or other qualified professional as part of the landscape plan, which provides sufficient water to ensure that the plants become established. The system does not have to be permanent if the plants chosen can survive independently once established.

3. Option 3: Irrigation by hand. If the applicant chooses this option, an inspection will be required one (1) year after final inspection to ensure that the landscaping has become established.

Staff Analysis: The applicant's landscaping plans show the installation and maintenance standards for the proposed landscaping. An irrigation system will be used to ensure that the plants remain healthy. The applicant proposes a landscaping company to maintain the grounds and existing trees to be retained will remain protected during construction by fencing and erosion control inspections by city staff.

FINDING: Based on the above discussion, the applicant has met this criterion.

16.94 Off Street Parking and Loading

16.94.010 - General Requirements

E. Location

1. Residential off-street parking spaces:

a. Shall be located on the same lot or development as the residential use.

b. Shall not include garages or enclosed buildings with the exception of a parking structure in multifamily developments where three (3) or more spaces are not individually enclosed. (Example: Underground or multi-level parking structures).

Staff Analysis: The applicant proposes to add surface parking around the buildings and in the central area on the same residential lot. The applicant also proposes three separate garage structures but do not include the structured parking to satisfy the minimum parking requirements for the site. The applicant does not propose any on street parking.

F. Marking

All parking, loading or maneuvering areas shall be clearly marked and painted. All interior drives and access aisles shall be clearly marked and signed to show the direction of flow and maintain vehicular and pedestrian safety.

Staff Analysis: All of the parking will be marked with striping. The applicant shows a two lane drive aisle that is shown marked on the plans.

FINDING: Based on the above discussion the applicant meets this criterion.

G. Surface and Drainage

1. All parking and loading areas shall be improved with a permanent hard surface such as asphalt, concrete or a durable pervious surface. Use of pervious paving material is encouraged and preferred where appropriate considering soils, location, anticipated vehicle usage and other pertinent factors.

FINDING: The applicant proposes to use asphalt for the parking area. This criterion is met.

H. Repairs

Parking and loading areas shall be kept clean and in good repair. Breaks in paved surfaces shall be repaired. Broken or splintered wheel stops shall be replaced. Painted parking space boundaries and directional symbols shall be maintained in a readable condition.

FINDING: The site will be inspected before the Certificate of Occupancy is granted and will need to be in good condition and repair. After that, any necessary repairs would become a Code Compliance issue. Based on the discussion, the applicant has not met this criterion, but can do so by satisfying the following condition.

RECOMMENDED CONDITION: Prior to final occupancy, ensure that the parking and loading areas are in good repair, wheel stops are in good condition and the painted parking space boundaries and directional symbols are readable.

I. Parking and Loading Plan

An off-street parking and loading plan, drawn to scale, shall accompany requests for building permits or site plan approvals, except for single and two-family dwellings, and manufactured homes on residential lots. The plan shall show but not be limited to:

- 1. Delineation of individual parking and loading spaces and dimensions.**
- 2. Circulation areas necessary to serve parking and loading spaces.**
- 3. Location of accesses to streets, alleys and properties to be served, and any curb cuts.**
- 4. Landscaping as required by Chapter 16.92.**
- 5. Grading and drainage facilities.**
- 6. Signing and bumper guard specifications.**
- 7. Bicycle parking facilities as specified in Section 16.94.020.C.**
- 8. Parking lots more than one (1) acre in size shall provide street-like features including curbs, sidewalks, and street trees or planting strips.**

FINDING: The applicant prepared a parking plan that included the striping plan and dimensions. The specific criteria will be discussed within the applicable Code sections.

16.94.020 - Off-Street Parking Standards

A. Generally

Where square feet are specified, the area measured shall be the gross building floor area primary to the functioning of the proposed use. Where employees are specified, persons counted shall be those working on the premises, including proprietors, during the largest shift at peak season. Fractional space requirements shall be counted as a whole space. The Review Authority may determine alternate off - street parking and loading requirements for a use not specifically listed in this Section based upon the requirements of comparable uses

Table 1: Minimum and Maximum Parking Standards

Sherwood Plaza Apartments Unit Type	Number of Units Proposed	Minimum Parking Spaces Required
Studio (1 per unit)	6	6
One Bed (1.25 per unit)	41	51
Two Bed (1.5 per unit)	29	44
Three Bedroom (1.75 per unit)	6	11
Visitor Parking (15 % additional)	112 parking spaces x 15%	17

Staff Analysis: Parking standards for multi-family developments depend on the number of bedrooms in each apartment. The table above shows that 112 parking spaces are required for the apartments with an additional 15 % for visitor parking. In this case, 17 additional spaces are required for visitors.

The applicant has provided for 139 surface parking spaces onsite, exceeding the minimum required by 10 additional spaces. The applicant proposes three garage buildings over 1,100 square feet in side for additional parking for tenants, and not included in this calculation.

FINDING: Based on the above discussion, the applicant meets this criterion.

B. Dimensional and General Configuration Standards

1. Dimensions For the purpose of this Chapter, a "parking space" means a stall nine (9) feet in width and twenty (20) feet in length. Up to twenty five (25) percent of required parking spaces may have a minimum dimension of eight (8) feet in width and eighteen (18) feet in length so long as they are signed as compact car stalls.

Staff Analysis: The applicant's plans show 139 standard parking spaces. The applicant shows that there will be eighteen (18) compact parking spaces and 121 standard parking spaces. Up to 25 % of the minimum number of spaces may be compact so up to 32 spaces are allowed. Since the applicant proposes only 18 spaces as compact, this standard is met.

FINDING: Based on the above discussion, the applicant meets this criterion.

2. Layout

Parking space configuration, stall and access aisle size shall be of sufficient width for all vehicle turning and maneuvering. Groups of more than four (4) parking spaces shall be served by a driveway so as to minimize backing movements or other maneuvering within a street, other than an alley. All parking areas shall meet the minimum standards shown in the following table and diagram.

Staff Analysis: All of the parking spaces are at 90 degree angles to the drive aisles and according to Table 3, the minimum standard is 26 feet for the two way drive aisle. The applicant proposes a 26 foot wide two way drive aisle for the parking area.

FINDING: Based on the above discussion, the applicant meets this standard.

3. Wheel Stops

a. Parking spaces along the boundaries of a parking lot or adjacent to interior landscaped areas or sidewalks shall be provided with a wheel stop at least four (4) inches high, located three (3) feet back from the front of the parking stall as shown in the above diagram.

b. Wheel stops adjacent to landscaping, bio-swales or water quality facilities shall be designed to allow storm water runoff.

FINDING: The applicant shows wheel stops where they abut a sidewalk. Therefore, the applicant meets this criterion with respect to the site plan, but cannot fully comply with this requirement without the following condition.

RECOMMENDED CONDITION: Prior to receiving the Certificate of Final Occupancy, install wheel stops where they abut sidewalks or interior landscaping.

C. Bicycle Parking Facilities

1. General Provisions

a. **Applicability.** Bicycle parking spaces shall be provided for new development, changes of use, and major renovations, defined as construction valued at twenty-five (25) percent or more of the assessed value of the existing structure.

b. **Types of Spaces.** Bicycle parking facilities shall be provided in terms of short-term bicycle parking and long-term bicycle parking. Short-term bicycle parking is intended to encourage customers and other visitors to use bicycles by providing a convenient and readily accessible place to park bicycles. Long-term bicycle parking provides employees, students, residents, commuters, and others who generally stay at a site for at least several hours a weather-protected place to park bicycles.

c. **Minimum Number of Spaces.** The required total minimum number of bicycle parking spaces for each use category is shown in Table 4, Minimum Required Bicycle Parking Spaces.

d. **Minimum Number of Long-term Spaces.** If a development is required to provide eight (8) or more required bicycle parking spaces in Table 4, at least twenty-five (25) percent shall be provided as long-term bicycle with a minimum of one (1) long-term bicycle parking space.

e. **Multiple Uses.** When there are two or more primary uses on a site, the required bicycle parking for the site is the sum of the required bicycle parking for the individual primary uses.

Staff Analysis: The applicant's site plan indicates that that the site will have both short and long term bike parking. The Code requires two bike spaces per ten auto spaces; and since

over bike 8 spaces are required the applicant is required to provide additional long term bike spaces at a rate of 25 % of the total required.

In this case, the project has 139 vehicular parking spaces so the applicant is required to have at least 14 spaces with at least 25% or 4 spaces long term.

The applicant has included a covered area for six long term spaces near the southeast corner of the site and 12 short term spaces. Sheet A.1.04 shows the typical bike rack to be used on the site and the long term bike shelter located at the same location.

FINDING: Based on the above discussion, this criterion is met.

2. Location and Design.

a. General Provisions

(1) Each space must be at least two (2) feet by six (6) feet in area, be accessible without moving another bicycle, and provide enough space between the rack and any obstructions to use the space properly.

(2) There must be an aisle at least five (5) feet wide behind all required bicycle parking to allow room for bicycle maneuvering. Where the bicycle parking is adjacent to a sidewalk, the maneuvering area may extend into the right-of-way.

(3) Lighting. Bicycle parking shall be at least as well-lit as vehicle parking for security.

(4) Reserved Areas. Areas set aside for bicycle parking shall be clearly marked and reserved for bicycle parking only.

(5) Bicycle parking in the Old Town Overlay District can be located on the sidewalk within the right-of-way. A standard inverted "U shaped" or staple design is appropriate.

Alternative, creative designs are strongly encouraged.

(6) Hazards. Bicycle parking shall not impede or create a hazard to pedestrians. Parking areas shall be located so as to not conflict with vision clearance standards.

b. Short-term Bicycle Parking

(1) Provide lockers or racks that meet the standards of this section.

(2) Locate inside or outside the building within thirty (30) feet of the main entrance to the building or at least as close as the nearest vehicle parking space, whichever is closer.

c. Long-term Bicycle Parking

(1) Provide racks, storage rooms, or lockers in areas that are secure or monitored (e.g., visible to employees or customers or monitored by security guards).

(2) Locate the outside bicycle parking spaces within one hundred (100) feet of the entrance that will be accessed by the intended users.

(3) All of the spaces shall be covered.

d. Covered Parking (Weather Protection)

(1) When required, covered bicycle parking shall be provided in one (1) of the following ways: inside buildings, under roof overhangs or awnings, in bicycle lockers, or within or under other structures.

(2) Where required covered bicycle parking is not within a building or locker, the cover must be permanent and designed to protect the bicycle from rainfall and provide seven-foot minimum overhead clearance.

(3) Where required bicycle parking is provided in lockers, the lockers shall be securely anchored.

Table 4: Minimum Required Bicycle Parking Spaces

Residential Categories

- Multi-dwelling — 2 or 1 per 10 auto spaces.

FINDING: As discussed above, the applicant has satisfied the required short and long term parking requirement. The site is located near a sidewalk and there is adequate maneuverability for the bikes at this location. This criterion is met.

16.96 Onsite Circulation

16.96.010 - On-Site Pedestrian and Bicycle Circulation

A. Purpose

On-site facilities shall be provided that accommodate safe and convenient pedestrian access within new subdivisions, multi-family developments, planned unit developments, shopping centers and commercial districts, and connecting to adjacent residential areas and neighborhood activity centers within one-half mile of the development. Neighborhood activity centers include but are not limited to existing or planned schools, parks, shopping areas, transit stops or employment centers. All new development, (except single-family detached housing), shall provide a continuous system of private pathways/sidewalks.

Staff Analysis: The applicant propose private sidewalks for pedestrian circulation throughout the development and connecting with the other onsite commercial amenities at Sherwood Plaza and on SW Langer Drive. There are two access points within the development for vehicular connectivity.

FINDING: Based on the above analysis, the applicant meets this criterion.

16.96.020 Minimum - Residential standards

Minimum standards for private, on-site circulation improvements in residential developments:

A. Driveways

- 1. Single-Family: One (1) driveway improved with hard surface pavement with a minimum width of ten (10) feet, not to exceed a grade of 14%. Permeable surfaces and planting strips between driveway ramps are encouraged in order to reduce stormwater runoff.**
- 2. Two-Family: One (1) shared driveway improved with hard surface pavement with a minimum width of twenty (20) feet; or two (2) driveways improved with hard surface pavement with a minimum width of ten (10) feet each. Permeable surfaces and planting strips between driveway ramps are encouraged in order to reduce stormwater runoff.**
- 3. Multi-Family: Improved hard surface driveways are required as follows:**

Number of Units	Number required	Two Way Drive
3—49	1	24 feet
50 or more	2	24 feet

Staff Analysis: The applicant proposes a total of 139 parking spaces that will be centrally located on site. Existing overhead utilities shall be relocated underground along the frontage of the development and beneath the existing easternmost driveway to the existing complex. The Applicant proposes to use an existing driveway that is 26 feet wide.

FINDING: Based on the above discussion, the applicant meets this criterion.

B. Sidewalks and Curbs

1. A private pathway/sidewalk system extending throughout the development site shall be required to connect to existing development, to public rights-of-way with or without improvements, to parking and storage areas, and to connect all building entrances to one another. The system shall also connect to transit facilities within five hundred (500) feet of the site, future phases of development, and whenever possible to parks and open spaces.

Staff Analysis: The applicant proposes a private sidewalk system extending throughout the development to the public rights of way and to the parking areas and open space. Although not proposed, the applicant has been conditioned earlier in this report to provide a paved pathway to the adjoining residential multifamily development to the east.

FINDING: Based on the above discussion, the applicant meets this criterion.

16.98.020 - Solid Waste Storage

All uses shall provide solid waste storage receptacles which are adequately sized to accommodate all solid waste generated on site. All solid waste storage areas and receptacles shall be located out of public view. Solid waste receptacles for multi-family, commercial and industrial uses shall be screened by six (6) foot high sight-obscuring fence or masonry wall and shall be easily accessible to collection vehicles.

Staff Analysis: The applicant provides for two trash enclosures, one at the southwestern corner of the site and one near the central eastern boundary between Buildings 3 and 5. Pride Disposal has reviewed and approved a revision to the applicant's proposal as evidenced by the letter and comments that they have provided and attached as Exhibit E.

FINDING: Based on the above discussion, this criterion is satisfied.

C. Division VI - Public Improvements

16.108– Streets

16.108.030.01 – Required Improvements

Except as otherwise provided, all developments containing or abutting an existing or proposed street, that is either unimproved or substandard in right-of-way width or improvement, shall dedicate the necessary right-of-way prior to the issuance of building permits and/or complete acceptable improvements prior to issuance of occupancy permits.

Staff Analysis: The subject property is bordered by SW Langer Drive to the north. The existing street has a 21-foot wide half-street paved street section with 5-foot wide curb tight sidewalk within a 33-foot wide half street right-of-way section. Standard for a 3 lane collector street is 24 feet of paved width for a half street section with a 5-foot wide landscape strip and 8-foot wide sidewalk within a 39-foot wide half street right-of-way section. The 21 feet of half street paved width with curb-tight sidewalk is consistent throughout this area.

The applicant does not propose additional streets or street improvements. However, the proposed development (82 new apartments) is anticipated to increase the pedestrian traffic and vehicular along the subject property frontage of SW Langer Drive and at the SW Langer Drive pedestrian crossing in front of the subject property west of the proposed development. The sidewalk ramps at the main driveway for the existing complex across from the Langer Access do not meet ADA standards.

The preliminary plans indicate that the new development will obtain access to SW Langer Drive via the easternmost driveway of the existing development. The existing driveway and sidewalk ramps located at the proposed access for the new development does not meet current Sherwood Engineering Department standards.

Ultimately, the Sherwood Transportation System Plan (TSP) indicates removal of the traffic signal at SW Sherwood Boulevard/SW Langer Drive intersection and modify the intersection so that only right-in, right-out, and left-in movements would be allowed. This modification would be supplemented with the installation of a traffic signal at the SW Sherwood Boulevard/SW Century Drive intersection, which would include eastbound and westbound left turn lanes. Based on the proposed improvements estimated at \$900,000 in the TSP (project D24 as shown in page 169 of the Sherwood TSP Volume 2) and the 0.82 percent impact by the proposed development as determined by comparing the total entering volume during the weekday PM peak hour of background (1,576 vehicles) and total traffic (1,589 vehicles) conditions, the development's proportional share contribution of \$7,423 is required.

FINDING: Based on the above analysis, the applicant does not meet this criterion but can do so with the following conditions.

RECOMMENDED CONDITION: Prior to engineering approval, widen sidewalk to 8 feet of width and dedicate right-of-way to a 39-foot half street width along the frontage of SW Langer Drive from the eastern property line of the subject property through the driveway across from the SW Langer Drive/Langer Access intersection. The right-of-way dedication shall be recorded with Washington County prior to final city engineering approval of the public improvements. Street lighting will need to be relocated as necessary.

RECOMMENDED CONDITION: Prior to building permit approval, reconstruct the existing easternmost driveway to the complex to meet Sherwood Engineering Department standards.

RECOMMENDED CONDITION: Prior to building permit approval, reconstruct existing sidewalk ramp on east side of the existing driveway to the complex (across from the Langer Access road) to bring it in compliance with ADA standards.

RECOMMENDED CONDITION: Prior to engineering department plan approval, contribute the development's proportional share contribution of \$7,423 for the SW Langer/SW Sherwood Blvd intersection change.

16.108.040.03 - Underground Utilities

All public and private underground utilities, including sanitary sewers and storm water drains, shall be constructed prior to the surfacing of streets. Stubs for service connections shall be long enough to avoid disturbing the street improvements when service connections are made.

Staff Analysis: The City Engineer has indicated that there are overhead utilities to the site that require undergrounding.

FINDING: Based on the above discussion, the applicant has not met this criterion, but can do so with the following condition.

RECOMMENDED CONDITION: Prior to the issuance of building permits, the existing overhead utilities shall be relocated underground along the frontage of the development and beneath the existing easternmost driveway to the existing complex.

16.108.050.11-Transit Facilities

Developments along existing or proposed transit routes, as illustrated in Figure 7-2 in the TSP, shall be required to provide areas and facilities for bus turnouts, shelters, and other transit-related facilities to Tri-Met specifications. Transit facilities shall also meet the following requirements:

- 1. Locate buildings within 20 feet of or provide a pedestrian plaza at major transit stops.**
- 2. Provide reasonably direct pedestrian connections between the transit stop and building entrances on the site.**
- 3. Provide a transit passenger landing pad accessible to disabled persons (if not already existing to transit agency standards).**
- 4. Provide an easement or dedication for a passenger shelter and underground utility connection from the new development to the transit amenity if requested by the public transit provider.**
- 5. Provide lighting at a transit stop (if not already existing to transit agency standards).**

Staff Analysis: There is an existing transit facility on SW Langer north and west near Sherwood Plaza. Tri-Met did not provide comments on the proposed development to indicate additional stops are needed.

FINDING: There is no evidence to suggest that any transit facilities are needed for the proposed development; therefore, this criterion is not applicable to the proposed development.

16.110 - Sanitary Sewers

Sanitary sewers shall be installed to serve all new developments and shall connect to existing sanitary sewer mains. Sanitary Sewers shall be constructed, located, sized and installed at standards consistent 16.110.

Staff Analysis: Currently, a public sanitary sewer main exists northeast of the subject property crossing SW Langer Drive from the east. There is also a private sanitary sewer within the subject property west of the portion to be developed. All surrounding properties are developed with public sanitary sewer service, therefore no public sanitary sewer main extension is required.

The preliminary plans indicate that the new development will connect to the existing public sanitary sewer within the neighboring property east of the subject property. No record of a public sanitary easement for this sewer can be found.

FINDING: Based on the above discussion, the applicant does not meet this criterion, but can do so with the following condition.

RECOMMENDED CONDITION: Prior to engineering plan approval, the proposed development shall supply sanitary service to the development as needed meeting Sherwood Engineering standards.

RECOMMENDED CONDITION: Prior to engineering plan approval, if the developer desires to connect to the existing sanitary sewer within the neighboring property to the east, then the developer shall provide proof of or obtain and record a public sanitary sewer easement over the public sanitary sewer within the property east of the subject property.

RECOMMENDED CONDITION: Prior to final occupancy, private sanitary sewer shall be installed in compliance with the current Oregon Plumbing Specialty Code.

RECOMMENDED CONDITION Prior to engineering plan approval, all public sanitary sewer infrastructure shall be designed to meet the City of Sherwood standards and be reviewed and approved by the Sherwood Engineering Department.

16.112– Water Supply

Water lines and fire hydrants conforming to City and Fire District standards shall be installed to serve all building sites in a proposed development in compliance with 16.112.

Staff Analysis: Currently there is a public water main existing within SW Langer Drive along the subject property frontage. No public water main extension is required, however some improvements may need to occur for placement of fire and domestic service for the development.

The preliminary plans indicate that the new development will connect to the existing public water line north of the development within SW Langer Drive.

FINDING: Although the water lines are already available to the site, the Fire Marshal has indicated that there is not enough information within the record to demonstrate that fire flows are met. Therefore, the following conditions are warranted for this development.

RECOMMENDED CONDITION: Prior to the issuance of building permits, the proposed development shall supply domestic, irrigation and fire water to the development as needed meeting Sherwood Engineering standards.

RECOMMENDED CONDITION: Prior to the issuance of any building permits, water flows calculations (domestic, irrigation and fire) shall be provided by the developer.

16.114 - Storm Water

Storm water facilities, including appropriate source control and conveyance facilities, shall be installed in new developments and shall connect to the existing downstream drainage system consistent with the Comprehensive Plan, the requirements of the Clean Water Services water quality regulations and section 16.114.

Staff Analysis: According to the City Engineer, a public storm sewer exists within SW Langer Drive along most of the subject property frontage. All surrounding properties are developed with public storm sewer service, therefore no public storm sewer main extension is required. Currently only a small portion of the existing impervious area within the subject property has water quality treatment.

The preliminary plans indicate that the new development will connect to the existing storm sewer north of the development within SW Langer Drive.

RECOMMENDED CONDITION: The proposed development shall provide storm sewer service to the development as required to meet Clean Water Services, and the Sherwood Engineering standards.

RECOMMENDED CONDITION: Prior to engineering approval, the developer shall perform an analysis of the downstream storm sewer system in accordance with Clean Water Services standards.

RECOMMENDED CONDITION: The developer shall either remove and replace any downstream deficiencies in the existing storm sewer system or provide detention in a manner that the downstream system will have adequate capacity for this new development.

RECOMMENDED CONDITION The developer shall provide water quality treatment for all new impervious area constructed and any existing impervious area redeveloped unless otherwise approved by the City Engineer and Clean Water Services. Also some or all of the existing impervious area to remain undisturbed within the subject property shall have water quality treatment as required by Clean Water Services in accordance with their standards.

RECOMMENDED CONDITION: The developer shall replace the catch basin on the west side of the easternmost driveway and connect it to the existing public storm sewer system within SW Langer Drive or eliminate it if deemed unnecessary by City of Sherwood Engineering Department.

RECOMMENDED CONDITION: Private storm water runoff within the subject property shall be collected and conveyed in accordance with the current Oregon Plumbing Specialty Code.

16.116.010 - Fire Protection

When land is developed so that any commercial or industrial structure is further than 250 feet or any residential structure is further than 500 feet from an adequate water supply for fire protection, as determined by the Fire District, the developer shall provide fire protection facilities necessary to provide adequate water supply and fire safety. In addition capacity, fire flow, access to facilities and number of hydrants shall be consistent with 16.116.020 and fire district standards.

Staff Analysis: There is an existing fire hydrant within the subject property on the west side of the development. This fire hydrant appears to supply fire flow for the development. This fire hydrant is currently lacking a backflow assembly between the fire hydrant and the public water main.

Thomas Mooney, the TVFR Deputy Fire Marshal has provided comments within Exhibit C of this report that indicates that the development has not fully satisfied the fire protection requirements. This is not uncommon in that the District will typically issue comments that are intended to guide the applicant towards compliance as the construction drawings are finalized; however, given that the comments are not specific to the proposal the following conditions are warranted.

FINDING: Based on the above discussion, the applicant does not meet this standard but is able to do so by satisfying the following conditions.

RECOMMENDED CONDITION: Prior to the issuance of building permits, the applicant shall provide evidence in writing from the Fire Marshal that the requirements within his comments have been satisfied by the proposed development.

RECOMMENDED CONDITION: If on-site fire protection is required, install backflow protection meeting Sherwood Engineering Department standards.

RECOMMENDED CONDITION: The existing fire hydrant shall have backflow protection meeting Sherwood Engineering Department standards or be removed from service.

RECOMMENDED CONDITION: Prior to final occupancy, private water lines shall be installed in compliance with the current Oregon Plumbing Specialty Code.

RECOMMENDED CONDITION: Prior to issuance of a final engineering plan approval, all public water infrastructure shall meet City of Sherwood standards and be reviewed and approved by the Sherwood Engineering Department.

16.118.020 – Public and Private Utilities Standard

A. Installation of utilities shall be provided in public utility easements and shall be sized, constructed, located and installed consistent with this Code, Chapter 7 of the Community Development Code, and applicable utility company and City standards.

- B. Public utility easements shall be a minimum of eight feet in width unless a reduced width is specifically exempted by the City Engineer.
- C. Where necessary, in the judgment of the City Manager or his designee, to provide for orderly development of adjacent properties, public and franchise utilities shall be extended through the site to the edge of adjacent property (ies).
- D. Franchise utility conduits shall be installed per the utility design and specification standards of the utility agency.
- E. Public Telecommunication conduits and appurtenances shall be installed per the City of Sherwood telecommunication design standards.
- F. Exceptions: Installation shall not be required if the development does not require any other street improvements. In those instances, the developer shall pay a fee in lieu that will finance installation when street or utility improvements in that location occur.

Staff Analysis: In this specific instance, the developer is proposing to connect to services at the property line.

FINDING: The proposed development includes the extension of some public utilities onto the site. It is in the public's interest to have access to the utilities for the purpose of maintenance. Therefore, the following condition is warranted with this proposal.

RECOMMENDED CONDITION: Prior to granting occupancy, the applicant shall provide an 8 foot public utility easement for the water meter and the FDC vault and assembly in conformance with City standards.

RECOMMENDED CONDITION: Prior to Building Permit approval, install Sherwood Broadband utilities shall be installed along the subject property's frontage per requirements set forth in City Ordinance 2005-017 and City Resolution 2005-074.

D. Division VIII. Environmental Resources

Chapter 16.142 - PARKS, TREES AND OPEN SPACES

16.142.020 - Multi-Family Developments

A. Standards

Except as otherwise provided, recreation and open space areas shall be provided in new multi-family residential developments to the following standards (townhome development requirements for open space dedication can be found in Chapter 16.44.B.8- Townhome Standards):

1. Open Space

A minimum of twenty percent (20%) of the site area shall be retained in common open space. Required yard parking or maneuvering areas may not be substituted for open space.

2. Recreation Facilities

A minimum of fifty percent (50%) of the required common open space shall be suitable for active recreational use. Recreational spaces shall be planted in grass or otherwise suitably improved. A minimum area of eight-hundred (800) square feet and a minimum width of fifteen (15) feet shall be provided.

3. Minimum Standards

Common open space and recreation areas and facilities shall be clearly shown on site development plans and shall be physically situated so as to be readily accessible to and usable by all residents of the development.

Staff Analysis: The applicant is required to have at least 20% of the site area for open space. The total site area is approximately 149,410 square feet and therefore 29,882 square feet is required for the multifamily development. The applicant provides approximately 33,317 square feet for open space. (See applicant’s materials, sheet A1.02)

The applicant is also required to provide at least 50% of the required open space (29,882 square feet) for active recreational use. The applicant provides for an area in the southeastern corner of the site to be equipped with a play structure and park benches and several other areas that will be landscaped with grass and plantings that are just under 8,000 square feet. The open space areas area dispersed throughout the development and in close proximity to the different apartment buildings. However, the applicant does not provide the size of the individual open space areas to determine if the applicant has fully complied with this criterion.

FINDING: Based on the above discussion, the applicant has not met this criterion. Based on the amount of open space illustrated on the plans, it is feasible for the applicant to meet this criterion with the following condition.

RECOMMENDED CONDITION: Prior to final site plan approval, provide the calculations for the individual open space areas demonstrating compliance with Section 16.142.020.

16.142.040 - Visual Corridors

A. Corridors Required

New developments located outside of the Old Town Overlay with frontage on Highway 99W, or arterial or collector streets designated on Figure 8-1 of the Transportation System Plan shall be required to establish a landscaped visual corridor according to the following standards:

	Street	Minimum Corridor
3.	Collector	10 feet

B. Landscape Materials

The required visual corridor areas shall be planted as specified by the review authority to provide a continuous visual and/or acoustical buffer between major streets and developed uses. Except as provided for above, fences and walls shall not be substituted for landscaping within the visual corridor. Uniformly planted, drought resistant street trees and ground cover, as specified in Section 16.142.060, shall be planted in the corridor by the developer. The improvements shall be included in the

compliance agreement. In no case shall trees be removed from the required visual corridor.

3. Establishment and Maintenance

Designated visual corridors shall be established as a portion of landscaping requirements pursuant to Chapter 16.92. To assure continuous maintenance of the visual corridors, the review authority may require that the development rights to the corridor areas be dedicated to the City or that restrictive covenants be recorded prior to the issuance of a building permit.

4. Required Yard

Visual corridors may be established in required yards, except that where the required visual corridor width exceeds the required yard width, the visual corridor requirement shall take precedence. In no case shall buildings be sited within the required visual corridor, with the exception of front porches on townhomes, as permitted in Section 16.44.010(E) (4) (c).

Staff Analysis: SW Langer is a designated collector. The applicant is required to provide a minimum visual corridor that is 10-feet wide along the site's frontage with SW Langer. The applicant has not shown the visual corridor on the plans, but has provided a landscape plan that shows landscaping that is varying in width between 14 and 28 feet. The proposed landscaping includes a combination of trees shrubs and ground cover along SW Langer Drive. The landscape plans call for a landscape maintenance company to maintain the landscaping. The plan also calls for an internal irrigation system.

FINDING: Based on the above discussion, the applicant meets the visual corridor criterion.

16.142.050 Trees Along Public Streets or on Other Public Property

16.142.050. Street Trees

A. Trees are required to be planted to the following specifications along public streets abutting or within any new development or redevelopment. Planting of such trees shall be a condition of development approval. The City shall be subject to the same standards for any developments involving City-owned property, or when constructing or reconstructing City streets. After installing street trees, the property owner shall be responsible for maintaining the street trees on the owner's property or within the right-of-way adjacent to the owner's property.

Staff Analysis: The applicant proposes six street trees to be located along the frontage of SW Langer Drive. Two of the trees are a Harlequin Glorybower and the other trees are Aristocrat Callery Pear. Neither of these trees are on the City's recommended street tree list. The applicant has not provided the tree canopy cover for these trees to know how far apart they should be planted either.

FINDING: Based on the above discussion, the applicant has not met this criterion but can do so by satisfying the following conditions.

RECOMMENDED CONDITION: Prior to final site plan approval, provide verification from a licensed landscape professional that the proposed trees are suitable for this location and are at appropriate distance apart based on the conditions of the site.

RECOMMENDED CONDITION: Prior to final site plan approval, provide plans that show street trees adequately placed along the frontage of the site.

B. Applicability

All applications including a Type II - IV land use review, shall be required to preserve trees or woodlands, as defined by this Section to the maximum extent feasible within the context of the proposed land use plan and relative to other codes, policies, and standards of the City Comprehensive Plan.

C. Inventory

1. To assist the City in making its determinations on the retention of trees and woodlands, land use applications including Type II - IV development shall include a tree and woodland inventory and report. The report shall be prepared by a qualified professional and must contain the following information:

Staff Analysis: The applicant has provided a limited tree inventory and has identified the majority of the trees to be removed onsite. However, the inventory does not show the reason for removal of the majority of the trees on site or the condition. The inventory contrasts with the narrative description of the trees to be removed

FINDING Based on the above discussion, the applicant has not met this standard but could do so by satisfying the following condition.

RECOMMENDED CONDITION: Prior to final site plan approval, provide a tree inventory with the condition of the trees, and the reason the applicant requests the tree's removal in order to assist the City in making its determinations on the retention of the trees.

3. Required Tree Canopy - Non-Residential and Multi-family Developments

Each net development site shall provide a variety of trees to achieve a minimum total tree canopy of 30 percent. The canopy percentage is based on the expected mature canopy of each tree by using the equation πr^2 to calculate the expected square footage of each tree. The expected mature canopy is counted for each tree even if there is an overlap of multiple tree canopies.

The canopy requirement can be achieved by retaining existing trees or planting new trees. Required landscaping trees can be used toward the total on site canopy required to meet this standard. The expected mature canopy spread of the new trees will be counted toward the required canopy cover. A certified arborist or other qualified professional shall provide an estimated tree canopy for all proposed trees to the planning department for review as a part of the land use review process.

	Commercial, Industrial, Institutional Public and Multi-family
Canopy Requirement	30%
Counted Toward the Canopy Requirement	
Street trees included in canopy requirement	No
Landscaping requirements included in canopy requirement	Yes
Existing trees onsite	Yes x2
Planting new trees onsite	Yes

FINDING: The applicant has not discussed compliance with this criterion, but the landscape plans indicate that there are many trees proposed for the site. The applicant could meet this criterion with the following condition.

RECOMMENDED CONDITION: Prior to final site plan approval, provide the tree canopy calculation that shows a minimum 30% tree canopy cover for the site.

16.146.020 - Noise Sensitive Uses

When proposed commercial and industrial uses do not adjoin land exclusively in commercial or industrial zones, or when said uses adjoin special care, institutional, or parks and recreational facilities, or other uses that are, in the City's determination, sensitive to noise impacts, then:

- A. The applicant shall submit to the City a noise level study prepared by a professional acoustical engineer. Said study shall define noise levels at the boundaries of the site in all directions.
- B. The applicant shall show that the use will not exceed the noise standards contained in OAR 340-35-035, based on accepted noise modeling procedures and worst case assumptions when all noise sources on the site are operating simultaneously.
- C. If the use exceeds applicable noise standards as per subsection B of this Section, then the applicant shall submit a noise mitigation program prepared by a professional acoustical engineer that shows how and when the use will come into compliance with said standards.

Staff Analysis: It is not anticipated that there will be high levels of noise beyond what is expected in an urban area generated by the proposed multi-family use.

FINDING: As proposed, there will be no adverse impacts therefore this standard is met

16.148.010 - Vibrations

All otherwise permitted commercial, industrial, and institutional uses shall not cause discernible vibrations that exceed a peak of 0.002 gravity at the property line of the

originating use, except for vibrations that last five (5) minutes or less per day, based on a certification by a professional engineer.

Staff Analysis: It is not anticipated that there will be high levels of vibration beyond what is expected in an urban area.

FINDING: There are not any expected adverse impacts therefore this standard is met.

16.150.010 – Air Quality

All otherwise permitted commercial, industrial, and institutional uses shall comply with applicable State air quality rules and statutes:

- A. All such uses shall comply with standards for dust emissions as per OAR 340-21-060.**
- B. Incinerators, if otherwise permitted by Section 16.140.020, shall comply with the standards set forth in OAR 340-25-850 through 340-25-905.**
- C. Uses for which a State Air Contaminant Discharge Permit is required as per OAR 340-20-140 through 340-20-160 shall comply with the standards of OAR 340-220 through 340-20-276.**

Staff Analysis: It is not anticipated that there will be high levels of air pollution beyond what is expected in an urban area.

FINDING: There are not any expected adverse impacts therefore this standard is met.

16.152.010 - Odors

All otherwise permitted commercial, industrial, and institutional uses shall incorporate the best practicable design and operating measures so that odors produced by the use are not discernible at any point beyond the boundaries of the development site.

Staff Analysis: It is not anticipated that there will be high levels of odor or unusual beyond what is expected in an urban area.

FINDING: There are not any expected adverse impacts therefore this standard is met.

16.154.010 – Heat and Glare

Except for exterior lighting, all otherwise permitted commercial, industrial, and institutional uses shall conduct any operations producing excessive heat or glare entirely within enclosed buildings. Exterior lighting shall be directed away from adjoining properties, and the use shall not cause such glare or lights to shine off site in excess of one-half (0.5) foot candle when adjoining properties are zoned for residential uses.

Staff Analysis: The lighting plan provides a photometric lighting plan that demonstrates that the light at the property line is expected to be 0.5 foot candle or less.

FINDING: As demonstrated on the submitted plans, the proposed lighting will not shine off site in excess of 0.5 foot candle. This criterion is satisfied.

RECOMMENDATION

Based upon review of the applicant's submittal information, review of the code, agency comments and consideration of the applicant's submittal, staff finds that the requested approvals do not fully comply with the standards but can be conditioned to comply. Therefore, staff recommends **approval of File Nos: SP 16-04 with the recommended conditions below.**

VI. CONDITIONS OF APPROVAL

A. General Conditions

1. Compliance with the Conditions of Approval is the responsibility of the developer or its successor in interest.
2. This land use approval shall substantially comply with the submitted preliminary site plans dated March, 2016 prepared by Emerio Engineering except as indicated in the following conditions of the Notice of Decision. Additional development or change of use may require a new development application and approval.
3. The developer/owner/applicant is responsible for all costs associated with private/public facility improvements.
4. **This approval is valid for a period of two (2) years from the date of the decision notice.** Extensions may be granted by the City as afforded by the Sherwood Zoning and Community Development Code.
5. An on-going condition of the approval is that the site be maintained in accordance with the approved site plan. In the event that landscaping is not maintained, in spite of the assurances provided, this would become a code compliance issue.
6. The continual operation of the property shall comply with the applicable requirements of the Sherwood Zoning and Community Development Code and Municipal Code.
7. A temporary use permit must be obtained from the Planning Department prior to placing a construction trailer on-site.
8. This approval does not negate the need to obtain permits, as appropriate from other local, state or federal agencies even if not specifically required by this decision.

B. Prior to issuance of grading or erosion control permits from the Building Department:

1. Obtain City of Sherwood Building Department approval of grading plans.
2. Provide an Erosion and Sediment Control Plan that is consistent with the applicable requirements of CWS and or the DEQ for the duration of construction.

C. Prior to Final Site Plan Approval:

1. Submit the required final site plan review fee along with a brief narrative and supporting documents demonstrating how each of the final site plan conditions are met.
2. Provide revised elevations for the northern sides of Buildings 1 and 2 which front SW Langer Drive. The elevations shall clearly demonstrate how the buildings are located and oriented to the street, and have significant articulation and treatment, via facades, sidewalk connection, porticos, arcades, porches, portal, forecourt, or stoop to identify the entrance for pedestrians.
3. Submit plans that indicate the correct number of trees to be removed or retained, the condition of the trees and if necessary, the reason for their removal.
4. Provide plans that show at least one break in the fencing with a five foot wide public pedestrian pathway and a corresponding public non-vehicular access easement centrally located at the eastern boundary to allow adjoining pedestrian access through the site.
5. Provide the calculations for the individual open space areas demonstrating compliance with Section 16.142.020.
6. Provide verification from a licensed landscape professional that the proposed trees are suitable for this location and are at appropriate distance apart based on the conditions of the site.
7. Provide plans that show street trees adequately placed along the frontage of the site.
8. Provide a tree inventory with the condition of the trees, and the reason the applicant requests the tree's removal in order to assist the City in making its determinations on the retention of the trees.
9. Provide the tree canopy calculation that shows a minimum 30% tree canopy cover for the site.

D. Prior to Engineering Plan approval,

1. The developer shall perform an analysis of the downstream storm sewer system in accordance with Clean Water Services standards.
2. The developer shall either remove and replace any downstream deficiencies in the existing storm sewer system or provide detention in a manner that the downstream system will have adequate capacity for this new development.
3. The developer shall provide water quality treatment for all new impervious area constructed and any existing impervious area redeveloped unless otherwise approved by the City Engineer and Clean Water Services. Also some or all of the existing impervious area to remain undisturbed within the subject property shall

have water quality treatment as required by Clean Water Services in accordance with their standards.

4. All public water infrastructure shall meet City of Sherwood standards and be reviewed and approved by the Sherwood Engineering Department.
5. Contribute the development's proportional share contribution of \$7,423 for the SW Langer/SW Sherwood Blvd intersection change.
6. Design the pedestrian crossing striping that conforms to standards defined in Section 3b.18 (Crosswalk Markings) of the Manual on Uniform Traffic Control Devices. The pedestrian crossing striping shall include longitudinal lines parallel to the pedestrian traffic flow, and diagonal lines placed at 45 degree angle to the longitudinal lines.

E. Prior to Issuance of a Building Permit:

1. Receive Sherwood Engineering Department approval of engineering plans for all public improvements and/or connections to public utilities (water, sewer, storm water, and streets).
2. Obtain approval from the Engineering Department for storm water treatment.
3. Obtain a Storm Water Connection Permit from Clean Water Services.
4. Obtain final site plan approval from the Planning Department.
5. Provide evidence in writing from the fire marshal that the applicant has submitted evidence demonstrating that the existing water lines will provide at least 20 psi of dedicated water service.
6. The applicant shall provide evidence in writing from the fire marshal that the requirements within his comments have been satisfied by the proposed development.
7. Relocate the existing overhead utilities underground along the frontage of the development and beneath the existing easternmost driveway to the existing complex.
8. All public sanitary sewer infrastructure shall be designed to meet the City of Sherwood standards and be reviewed and approved by the Sherwood Engineering Department.
9. The proposed development shall supply domestic, irrigation and fire water to the development as needed meeting Sherwood Engineering standards.
10. Water flows calculations (domestic, irrigation and fire) shall be provided by the developer.
11. The developer shall replace the catch basin on the west side of the easternmost driveway and connect it to the existing public storm sewer system

within SW Langer Drive or eliminate it if deemed unnecessary by City of Sherwood Engineering Department.

12. Private storm water runoff within the subject property shall be collected and conveyed in accordance with the current Oregon Plumbing Specialty Code.
13. Reconstruct the existing easternmost driveway to the complex to meet Sherwood Engineering Department standards.
14. Reconstruct existing sidewalk ramp on east side of the existing driveway to the complex (across from the Langer Access road) to bring it in compliance with ADA standards
15. Install Sherwood Broadband utilities shall be installed along the subject property's frontage per requirements set forth in City Ordinance 2005-017 and City Resolution 2005-074.

F. Prior to Final Inspection of the Building Official & Certificate of Occupancy:

1. Provide public utility easements for the water meter and the FDC vault and assembly in conformance with City standards.
2. All public improvements shall be competed, inspected and approved, as applicable, by the City, CWS, TVF & R, TVWD and other applicable agencies.
3. All agreements required as conditions of this approval must be signed and recorded.
4. All site improvements including but not limited to landscaping, parking and site lighting shall be installed per the approved final site plan and inspected and approved by the Planning Department.
7. All other appropriate department and agency conditions have been met.
8. Ensure that the parking and loading areas are in good repair, wheel stops are in good condition and the painted parking space boundaries and directional symbols are readable.
9. Install wheel stops where they abut sidewalks or interior landscaping.
10. Install the private sanitary sewer in compliance with the current Oregon Plumbing Specialty Code.
11. All public sanitary sewer infrastructure shall be designed to meet the City of Sherwood standards and be reviewed and approved by the Sherwood Engineering Department.
12. The developer shall either remove and replace any downstream deficiencies in the existing storm sewer system or provide detention in a manner that the downstream system will have adequate capacity for this new development.

13. Private sanitary sewer shall be installed in compliance with the current Oregon Plumbing Specialty Code.
14. The proposed development shall provide storm sewer service to the development as required to meet Clean Water Services, and the Sherwood Engineering standards.
15. The existing fire hydrant shall have backflow protection meeting Sherwood Engineering Department standards or be removed from service.
16. Private water lines shall be installed in compliance with the current Oregon Plumbing Specialty Code.
17. All public water infrastructure shall meet City of Sherwood standards and be reviewed and approved by the Sherwood Engineering Department.
18. Provide an 8 foot public utility easement for the water meter and the FDC vault and assembly in conformance with City standards.

G On-going Conditions:

1. An on-going condition of the approval is that the site be maintained in accordance with the approved site plan. In the event that landscaping is not maintained, in spite of the assurances provided, this would become a code compliance issue.

VII. EXHIBITS

- A. Applicant's submitted land use application materials received on March 2, 2016
- B. Engineering comments dated June 21, 2016
- C. Clean Water Services comments dated June 13, 2016
- D. Tualatin Valley Fire & Rescue comments dated June 10, 2016
- E. Pride Disposal Company comments dated May 26, 2016
- F. Site Plan with Numbered Buildings 1-6
- G. Transportation information prepared by Kittelson and responses by DKS dated May and June 2016

Exhibit A

***Exhibit A can be reviewed electronically at the following web address:

<http://www.sherwoodoregon.gov/planning/project/sherwood-plaza-apartments>



Engineering Land Use Application Comments

To: Michelle Miller, Senior Planner

From: Craig Christensen, P.E., Engineering Department

Project: Sherwood Plaza Apartments (SP 16-04)

Date: June 21, 2016

Engineering staff has reviewed the information provided for the above cited project. Final construction plans will need to meet the standards established by the City of Sherwood Engineering Department and Public Works Department, Clean Water Services (CWS) and Tualatin Valley Fire & Rescue in addition to requirements established by other jurisdictional agencies providing land use comments. City of Sherwood Engineering Department comments are as follows:

Sanitary Sewer

Currently a public sanitary sewer main exists northeast of the subject property crossing SW Langer Drive from the property east of the subject property. There is also a private sanitary sewer within the subject property west of the portion to be developed. All surrounding properties are developed with public sanitary sewer service, therefore no public sanitary sewer main extension is required.

The preliminary plans indicate that the new development will connect to the existing public sanitary sewer within the neighboring property east of the subject property. No record of a public sanitary easement for this sewer can be found.

CONDITION: The proposed development shall supply sanitary service to the development as needed meeting Sherwood Engineering standards.

CONDITION: If the developer desires to connect to the existing sanitary sewer within the neighboring property to the east, then the developer shall provide proof of or obtain and record a public sanitary sewer easement over the public sanitary sewer within the property east of the subject property prior to final engineering plan approval.

CONDITION: Private sanitary sewer shall be installed in compliance with the current Oregon Plumbing Specialty Code.

CONDITION: All public sanitary sewer infrastructure shall meet City of Sherwood standards and be reviewed and approved by the Sherwood Engineering Department prior to issuance of a final engineering plan approval.

Project: Sherwood Park Apartments (SP 16-04)
Date: June 21, 2016
Page: 2 of 5

Water

Currently there is a public water main existing within SW Langer Drive along the subject property frontage. No public water main extension is required, however some improvements may need to occur for placement of fire and domestic service for the development.

The preliminary plans indicate that the new development will connect to the existing public water line north of the development within SW Langer Drive.

CONDITION: The proposed development shall supply domestic, irrigation and fire water to the development as needed meeting Sherwood Engineering standards.

CONDITION: Water flows calculations (domestic, irrigation and fire) shall be provided by the developer.

Fire protection shall meet the conditions imposed by Tualatin Valley Fire & Rescue.

CONDITION: If on-site fire protection is required, install backflow protection meeting Sherwood Engineering Department standards.

There is an existing fire hydrant within the subject property on the west side of the development. This fire hydrant appears to supply fire flow for the development. This fire hydrant is currently lacking a backflow assembly between the fire hydrant and the public water main.

CONDITION: The existing fire hydrant shall have backflow protection meeting Sherwood Engineering Department standards or be removed from service.

CONDITION: Private water lines shall be installed in compliance with the current Oregon Plumbing Specialty Code.

CONDITION: All public water infrastructure shall meet City of Sherwood standards and be reviewed and approved by the Sherwood Engineering Department prior to issuance of a final engineering plan approval.

Storm Sewer

Currently a public storm sewer exists within SW Langer Drive along most of the subject property frontage. All surrounding properties are developed with public storm sewer service, therefore no public storm sewer main extension is required.

The preliminary plans indicate that the new development will connect to the existing storm sewer north of the development within SW Langer Drive.

CONDITION: The proposed development shall provide storm sewer service to the development as needed meeting Sherwood Engineering standards.

Project: Sherwood Park Apartments (SP 16-04)
Date: June 21, 2016
Page: 3 of 5

CONDITION: The developer shall perform an analysis of the downstream storm sewer system in accordance with Clean Water Services standards.

CONDITION: The developer shall either remove and replace any downstream deficiencies in the existing storm sewer system or provide detention in a manner that the downstream system will have adequate capacity for this new development.

Currently only a small portion of the existing impervious area within the subject property has water quality treatment.

CONDITION: The developer shall provide water quality treatment for all new impervious area constructed and any existing impervious area redeveloped unless otherwise approved by the City Engineer and Clean Water Services. Also some or all of the existing impervious area to remain undisturbed within the subject property shall have water quality treatment as required by Clean Water Services in accordance with their standards.

CONDITION: The developer shall replace the catch basin on the west side of the easternmost driveway and connect it to the existing public storm sewer system within SW Langer Drive or eliminate if deemed unnecessary by City of Sherwood Engineering Department.

CONDITION: Private storm water runoff within the subject property shall be collected and conveyed in accordance with the current Oregon Plumbing Specialty Code.

Transportation

The subject property is bordered by SW Langer Drive to the north. The existing street has a 21-foot wide half-street paved street section with 5-foot wide curb tight sidewalk within a 33-foot wide half street right-of-way section. Standard for a 3 lane collector street is 24 feet of paved width for a half street section with a 5-foot wide landscape strip and 8-foot wide sidewalk within a 39-foot wide half street right-of-way section. The 21 feet of half street paved width with curb-tight sidewalk is consistent throughout this area.

CONDITION: Widen sidewalk to 8 feet of width and dedicate right-of-way to a 39-foot half street width along the frontage of SW Langer Drive from the eastern property line of the subject property through the driveway across from the SW Langer Drive/Langer Access intersection. The right-of-way dedication shall be recorded with Washington County prior to final city engineering approval of the public improvements. Street lighting will need to be relocated as necessary.

The preliminary plans indicate that the new development will obtain access to SW Langer Drive via the easternmost driveway of the existing development. The existing driveway and sidewalk ramps located at the proposed access for the new development does not meet current Sherwood Engineering Department standards.

Project: Sherwood Park Apartments (SP 16-04)
Date: June 21, 2016
Page: 4 of 5

CONDITION: The existing easternmost driveway to the complex shall be reconstructed to meet Sherwood Engineering Department standards.

The proposed development (82 new apartments) is anticipated to increase the pedestrian traffic along the subject property frontage of SW Langer Drive and at the SW Langer Drive pedestrian crossing in front of the subject property west of the proposed development. The sidewalk ramps at the main driveway for the existing complex across from the Langer Access do not meet ADA standards.

CONDITION: Reconstruct existing sidewalk ramp on east side of the existing driveway to the complex (across from the Langer Access road) to bring it in compliance with ADA standards.

The analysis of the pedestrian crossing referencing NCHRP 562 for guidance, results in the following conditions:

CONDITION: High visibility advanced pedestrian crossing warning signage shall be installed at the pedestrian crossing of Langer Drive between the Plaza Site driveway entrance and the Highway 99W right-in/right-out access road. Signage shall conform to standards defined in the Manual on Uniform Traffic Control Devices. Applicant's Engineer shall provide pedestrian crossing signage design drawings to the City for review and approval.

CONDITION: The pedestrian crossing striping shall conform to standards defined in Section 3b.18 (Crosswalk Markings) of the Manual on Uniform Traffic Control Devices. The pedestrian crossing striping shall include longitudinal lines parallel to the pedestrian traffic flow, and diagonal lines placed at 45 degree angle to the longitudinal lines.

Grading and Erosion Control:

City policy requires that prior to grading, a permit is obtained from the Building Department for all grading on the private portion of the site.

The Engineering Department requires a grading permit for all areas graded as part of the public improvements. The Engineering permit for grading of the public improvements is reviewed, approved and released as part of the public improvement plans.

An erosion control plan and permit is required from the City of Sherwood Engineering Department for all public and private improvements. The erosion control permit is reviewed, approved and released as part of the public improvement plans.

They proposed development will disturb approximately 3.5 acres.

CONDITION: Developer shall obtain a DEQ NPDES 1200CN permit prior to Sherwood Engineering Department approval of the public improvement plans.

Project: Sherwood Park Apartments (SP 16-04)
Date: June 21, 2016
Page: 5 of 5

Other Engineering Issues:

A Clean Water Services Service Provider Letter has been obtained by the developer.

CONDITION: The developer shall adhere to the conditions of the Clean Water Services Service Provider Letter.

CONDITION: A Storm Water Connection Permit Authorization shall be obtained prior to Sherwood Engineering Department approval of the public improvement plans.

CONDITION: Developer shall execute an Engineering Compliance Agreement or a right-of-way permit prior to issuing of a building permit.

CONDITION: Dedicate an 8-foot wide PUE along the frontage of SW Langer Drive from the eastern property line of the subject property through the driveway across from the SW Langer Drive/Langer Access intersection. The PUE dedication shall be recorded with Washington County prior to final city engineering approval of the public improvements.

CONDITION: Existing overhead utilities shall be relocated underground along the frontage of the development and beneath the existing easternmost driveway to the existing complex.

CONDITION: Sherwood Broadband utilities shall be installed along the subject property's frontage per requirements set forth in City Ordinance 2005-017 and City Resolution 2005-074.

END OF COMMENTS.

M E M O R A N D U M

Date: June 13, 2016
To: Michelle Miller, Senior Planner, City of Sherwood
From: Jackie Sue Humphreys, Clean Water Services (the District)
Subject: Sherwood Plaza Apartments, SP-16-04, 2S129CB00400

Please include the following comments when writing your conditions of approval:

PRIOR TO ANY WORK ON THE SITE

A Clean Water Services (the District) Storm Water Connection Permit Authorization must be obtained. Application for the District's Permit Authorization must be in accordance with the requirements of the Design and Construction Standards, Resolution and Order No. 07-20, (or current R&O in effect at time of Engineering plan submittal), and is to include:

- a. Detailed plans prepared in accordance with Chapter 2, Section 2.04.
- b. Detailed grading and erosion control plan. An Erosion Control Permit will be required. Area of Disturbance must be clearly identified on submitted construction plans. If site area and any offsite improvements required for this development exceed one-acre of disturbance, project will require a 1200-CN Erosion Control Permit.
- c. Detailed plans showing the development having direct access by gravity to public storm and sanitary sewer.
- d. Provisions for water quality in accordance with the requirements of the above named design standards. Water Quality is required for all new development and redevelopment areas per R&O 07-20, Section 4.05.5, Table 4-1. Access shall be provided for maintenance of facility per R&O 07-20, Section 4.02.4.
- e. If use of an existing offsite or regional Water Quality Facility is proposed, it must be clearly identified on plans, showing its location, condition, capacity to treat this site and, any additional improvements and/or upgrades that may be needed to utilize that facility.

- f. If private lot LIDA systems proposed, must comply with the current CWS Design and Construction Standards. A private maintenance agreement, for the proposed private lot LIDA systems, needs to be provided to the City for review and acceptance.
- g. Show all existing and proposed easements on plans. Any required storm sewer, sanitary sewer, and water quality related easements must be granted to the City.
- h. Any proposed offsite construction activities will require an update or amendment to the current Service Provider Letter for this project.

CONCLUSION

This Land Use Review does not constitute the District's approval of storm or sanitary sewer compliance to the NPDES permit held by the District. The District, prior to issuance of any connection permits, must approve final construction plans and drainage calculations.



June 10, 2016

Michelle Miller, Senior Planner
City of Sherwood
Community Development Division
22560 SW Pine St
Sherwood, OR 97140

Re: Sherwood Plaza Apartments, SP 16-04
Plans dated: April 26, 2016

Dear Michelle,

Thank you for the opportunity to review the proposed site plan surrounding the above named development project. Tualatin Valley Fire & Rescue endorses this proposal predicated on the following criteria and conditions of approval:

FIRE APPARATUS ACCESS:

1. **FIRE APPARATUS ACCESS ROAD DISTANCE FROM BUILDINGS AND FACILITIES:** Access roads shall be within 150 feet of all portions of the exterior wall of the first story of the building as measured by an approved route around the exterior of the building or facility. An approved turnaround is required if the remaining distance to an approved intersecting roadway, as measured along the fire apparatus access road, is greater than 150 feet. (OFC 503.1.1))

Overall site plan indicates this is met.

2. **ADDITIONAL ACCESS ROADS – COMMERCIAL/INDUSTRIAL HEIGHT:** Buildings exceeding 30 feet in height or three stories in height shall have at least two separate means of fire apparatus access. (D104.1)

Overall site plan indicates this is met.

3. **AERIAL FIRE APPARATUS ROADS:** Buildings with a vertical distance between the grade plane and the highest roof surface that exceeds 30 feet in height shall be provided with a fire apparatus access road constructed for use by aerial apparatus with an unobstructed driving surface width of not less than 26 feet. For the purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of the parapet walls, whichever is greater. Any portion of the building may be used for this measurement, provided that it is accessible to firefighters and is capable of supporting ground ladder placement. (OFC D105.1, D105.2)

Overall site plan indicates this is met.

4. **AERIAL APPARATUS OPERATIONS:** At least one of the required aerial access routes shall be located within a minimum of 15 feet and a maximum of 30 feet from the building, and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial access road is positioned shall be approved by the fire code

official. Overhead utility and power lines shall not be located over the aerial access road or between the aerial access road and the building. (D105.3, D105.4)

Overall site plan indicates this is met.

5. **FIRE APPARATUS ACCESS ROAD WIDTH AND VERTICAL CLEARANCE:** Fire apparatus access roads shall have an unobstructed driving surface width of not less than 20 feet (26 feet adjacent to fire hydrants (OFC D103.1)) and an unobstructed vertical clearance of not less than 13 feet 6 inches. The fire district will approve access roads of 12 feet for up to three dwelling units and accessory buildings. (OFC 503.2.1 & D103.1)

Overall site plan indicates this is met.

6. **NO PARKING:** Parking on emergency access roads shall be as follows (OFC D103.6.1-2):
1. 20-26 feet road width – no parking on either side of roadway
 2. 26-32 feet road width – parking is allowed on one side
 3. Greater than 32 feet road width – parking is not restricted

Overall site plan indicates this is met.

7. **PAINTED CURBS:** Where required, fire apparatus access roadway curbs shall be painted red (or as approved) and marked "NO PARKING FIRE LANE" at 25 foot intervals. Lettering shall have a stroke of not less than one inch wide by six inches high. Lettering shall be white on red background (or as approved). (OFC 503.3)

See Overall Site Plan sheet 4 of 5 for locations of fire lane markings.

8. **SURFACE AND LOAD CAPACITIES:** Fire apparatus access roads shall be of an all-weather surface that is easily distinguishable from the surrounding area and is capable of supporting not less than 12,500 pounds point load (wheel load) and 75,000 pounds live load (gross vehicle weight). Documentation from a registered engineer that the final construction is in accordance with approved plans or the requirements of the Fire Code may be requested. (OFC 503.2.3)

Surface and load capabilities not indicated on site plan.

9. **TURNING RADIUS:** The inside turning radius and outside turning radius shall not be less than 28 feet and 48 feet respectively, measured from the same center point. (OFC 503.2.4 & D103.3)

Overall site plan indicates this is met.

10. **ACCESS ROAD GRADE:** Fire apparatus access roadway grades shall not exceed 12%. When fire sprinklers* are installed, a maximum grade of 15% will be allowed.

0-12%	Allowed
13-15%	Special consideration with submission of written Alternate Methods and Materials request. Ex: Automatic fire sprinkler (13-D) system* in lieu of grade.
≥16%	Special consideration on a case by case basis with submission of written Alternate Methods and Materials request Ex: Automatic fire sprinkler (13-D) system* plus additional engineering controls in lieu of grade.**

*The approval of fire sprinklers as an alternate shall be accomplished in accordance with the provisions of ORS 455.610(5) and OAR 918-480-0100 and installed per section 903.3.1.1, 903.3.1.2, or 903.3.1.3 of the Oregon Fire Code (OFC 503.2.7 & D103.2)

** See Forest Dwelling Access section for exceptions.

Overall site plan indicates this is met.

11. **AERIAL APPARATUS OPERATING GRADES:** Portions of aerial apparatus roads that will be used for aerial operations shall be as flat as possible. Front to rear and side to side maximum slope shall not exceed 10%.

Overall site plan indicates this is met.

12. **ACCESS DURING CONSTRUCTION:** Approved fire apparatus access roadways shall be installed and operational prior to any combustible construction or storage of combustible materials on the site. Temporary address signage shall also be provided during construction. (OFC 3309 and 3310.1)

FIREFIGHTING WATER SUPPLIES:

13. **MUNICIPAL FIREFIGHTING WATER SUPPLY EXCEPTIONS:** The requirements for firefighting water supplies may be modified as approved by the fire code official where any of the following apply: (OFC 507.5.1 Exceptions)
1. Buildings are equipped throughout with an approved automatic fire sprinkler system (the approval of this alternate method of construction shall be accomplished in accordance with the provisions of ORS 455.610(5)).
 2. There are not more than three Group R-3 or Group U occupancies.

14. **COMMERCIAL BUILDINGS – REQUIRED FIRE FLOW:** The minimum fire flow and flow duration for buildings other than one- and two-family dwellings shall be determined in accordance with residual pressure (OFC Table B105.2). The required fire flow for a building shall not exceed the available GPM in the water delivery system at 20 psi.

Note: OFC B106, Limiting Fire-Flow is also enforced, except for the following:

- In areas where the water system is already developed, the maximum needed fire flow shall be either 3,000 GPM or the available flow in the system at 20 psi, whichever is greater.
- In new developed areas, the maximum needed fire flow shall be 3,000 GPM at 20 psi.
- Tualatin Valley Fire & Rescue does not adopt Occupancy Hazards Modifiers in section B105.4-B105.4.1

15. **FIRE FLOW WATER AVAILABILITY:** Applicants shall provide documentation of a fire hydrant flow test or flow test modeling of water availability from the local water purveyor if the project includes a new structure or increase in the floor area of an existing structure. Tests shall be conducted from a fire hydrant within 400 feet for commercial projects, or 600 feet for residential development. Flow tests will be accepted if they were performed within 5 years as long as no adverse modifications have been made to the supply system. Water availability information may not be required to be submitted for every project. (OFC Appendix B)

Provide documentation of fire hydrant flow testing to indicate available fire flow.

16. **WATER SUPPLY DURING CONSTRUCTION:** Approved firefighting water supplies shall be installed and operational prior to any combustible construction or storage of combustible materials on the site. (OFC 3312.1)

FIRE HYDRANTS:

17. **FIRE HYDRANTS – COMMERCIAL BUILDINGS:** Where a portion of the building is more than 400 feet from a hydrant on a fire apparatus access road, as measured in an approved route around the exterior of the building, on-site fire hydrants and mains shall be provided. (OFC 507.5.1)
- This distance may be increased to 600 feet for buildings equipped throughout with an approved automatic sprinkler system.
 - The number and distribution of fire hydrants required for commercial structure(s) is based on Table C105.1, following any fire-flow reductions allowed by section B105.3.1. Additional fire hydrants may be required due to spacing and/or section 507.5 of the Oregon Fire Code.

Additional fire hydrants maybe required based upon required fire flow.

18. **FIRE HYDRANT NUMBER AND DISTRIBUTION:** The minimum number and distribution of fire hydrants available to a building shall not be less than that listed in Table C 105.1. (OFC Appendix C)

The number of required hydrants will be determined based upon required fire flow.

19. **FIRE HYDRANT(S) PLACEMENT:** (OFC C104)

- Existing hydrants in the area may be used to meet the required number of hydrants as approved. Hydrants that are up to 600 feet away from the nearest point of a subject building that is protected with fire sprinklers may contribute to the required number of hydrants. (OFC 507.5.1)
- Hydrants that are separated from the subject building by railroad tracks shall not contribute to the required number of hydrants unless approved by the fire code official.
- Hydrants that are separated from the subject building by divided highways or freeways shall not contribute to the required number of hydrants. Heavily traveled collector streets may be considered when approved by the fire code official.
- Hydrants that are accessible only by a bridge shall be acceptable to contribute to the required number of hydrants only if approved by the fire code official.

Overall site plan indicates this is met.

20. **FIRE HYDRANT DISTANCE FROM AN ACCESS ROAD:** Fire hydrants shall be located not more than 15 feet from an approved fire apparatus access roadway unless approved by the fire code official. (OFC C102.1)

Overall site plan indicates this is met.

21. **REFLECTIVE HYDRANT MARKERS:** Fire hydrant locations shall be identified by the installation of blue reflective markers. They shall be located adjacent and to the side of the center line of the access roadway that the fire hydrant is located on. In the case that there is no center line, then assume a center line and place the reflectors accordingly. (OFC 507)

Contact City of Sherwood Water Department for markers.

22. **CLEAR SPACE AROUND FIRE HYDRANTS:** A 3 foot clear space shall be provided around the circumference of fire hydrants. (OFC 507.5.5)

23. **FIRE DEPARTMENT CONNECTION (FDC) LOCATIONS:** FDCs shall be located within 100 feet of a fire hydrant (or as approved). Hydrants and FDC's shall be located on the same side of the fire apparatus access roadway or drive aisle, fully visible, and recognizable from the street or nearest point of the fire department vehicle access or as otherwise approved. (OFC 912.2.1 & NFPA 13)

- Fire department connections (FDCs) shall normally be located remotely and outside of the fall-line of the building when required. FDCs may be mounted on the building they serve, when approved.
- FDCs shall be plumbed on the system side of the check valve when sprinklers are served by underground lines also serving private fire hydrants.

***Overall site plan does not indicate locations of fire department connections for buildings.
Please indicate locations on site plan.***

BUILDING ACCESS AND FIRE SERVICE FEATURES

24. **KNOX BOX:** A Knox Box for building access may be required for structures and gates. See Appendix C for further information and detail on required installations. Order via www.tvfr.com or contact TVF&R for assistance and instructions regarding installation and placement. (OFC 506.1)

25. **UTILITY IDENTIFICATION:** Rooms containing controls to fire suppression and detection equipment shall be identified as "Fire Control Room." Signage shall have letters with a minimum of 4 inches high with a minimum stroke width of 1/2 inch, and be plainly legible, and contrast with its background. (OFC 509.1)
26. **PREMISES IDENTIFICATION:** New and existing buildings shall have approved address numbers; building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property, including monument signs. These numbers shall contrast with their background. Numbers shall be a minimum of 4 inches high with a minimum stroke width of 1/2 inch. (OFC 505.1)

If you have questions or need further clarification, please feel free to contact me at (503) 259-1419.

Sincerely,

Tom Mooney

Tom Mooney
Deputy Fire Marshal II

Email: Thomas.mooney@tvfr.com

Cc: File



May 26, 2016

Michelle Miller
Senior Planner
City of Sherwood
503-625-4242

Re: Sherwood Plaza Apartments

We have reviewed the site plans Jim Toporek sent for the above mentioned project (attached). There are 2 enclosures on site that both measure at least 20' wide and 10' deep (inside wall measurements). We will have straight on access to both enclosures with appropriate clearance across from the opening. Each enclosure has 1 set of gates measuring at least 20' wide.

The site plan indicates there is to be a roof on each enclosure. If a roof is put on each enclosure, we will need at least 25' of overhead clearance in order to service the enclosures.

The following requirements also need to be met on each enclosure:

- There should be no center post at the access point where the gates close.
- The gates need to be hinged in front of the enclosure walls to allow for the full 20' width. This will also allow for the 120 degree opening angle that is required.
 - Enclosure on site plan A1.03 will only have 90 degree opening angle on the southern gate, this is acceptable as long as the northern gate meets the 120' degree opening angle.
- The gates need cane bolts and holes put in place for the gates to be locked in the open and closed position. The holes for the gates to be held open need to be at the full opening angle.
- Full swing gates required.
- There must be 25' of overhead clearance.

If you have any questions, feel free to contact me.

Sincerely,

Kristin Leichner
Pride Disposal Co.
(503) 625-6177

SITE PLAN SUMMARY:

APPROXIMATE TOTAL SITE AREA: 100,000 SQ. FT.
 TOTAL LOT AREA: 100,000 SQ. FT.
 TOTAL BUILDING AREA: 112,138 SQ. FT.
 TOTAL PARKING SPACES: 112
 TOTAL GARAGE SPACES: 112
 TOTAL DECK AREA: 112 SQ. FT.
 TOTAL BALCONY AREA: 112 SQ. FT.
 TOTAL TERRACE AREA: 112 SQ. FT.
 TOTAL STAIR AREA: 112 SQ. FT.
 TOTAL ELEVATOR SHAFT AREA: 112 SQ. FT.
 TOTAL MECHANICAL ROOM AREA: 112 SQ. FT.
 TOTAL ELECTRICAL ROOM AREA: 112 SQ. FT.
 TOTAL WATER TREATMENT AREA: 112 SQ. FT.
 TOTAL LANDSCAPING AREA: 112 SQ. FT.
 TOTAL CONCRETE PAVEMENT AREA: 112 SQ. FT.
 TOTAL SITE AREA: 100,000 SQ. FT.

LOT COVERAGE:

ITEM	AREA	%
BUILDING AREA	112,138 SF	112.14%
LANDSCAPING	112 SF	0.11%
CONCRETE PAVEMENT	112 SF	0.11%
TOTAL	112,362 SF	112.35%

SITE PLAN LEGEND:

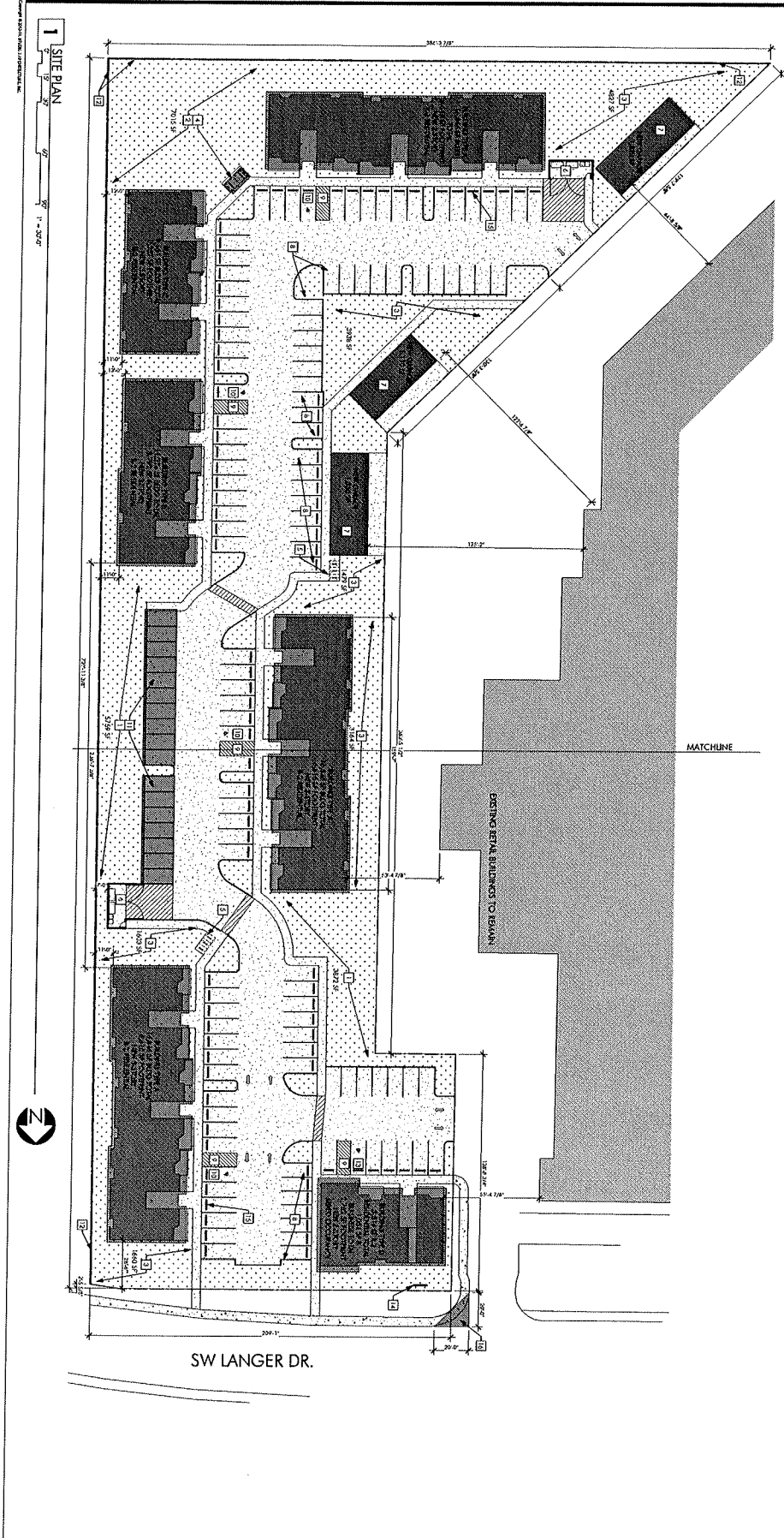
- 1. BUILDING AREA
- 2. BUILDING ORGANIC ADORN
- 3. LANDSCAPING
- 4. CONCRETE PAVEMENT/WALKWAY

SITE PLAN NOTES:

1. UNOCCUPIED OR UNIMPROVED AREAS SHALL BE MAINTAINED IN A MANNER CONSISTENT WITH THE CITY OF SHERWOOD LAND USE ORDINANCES.
2. UNOCCUPIED OR UNIMPROVED AREAS SHALL BE MAINTAINED IN A MANNER CONSISTENT WITH THE CITY OF SHERWOOD LAND USE ORDINANCES.
3. UNOCCUPIED OR UNIMPROVED AREAS SHALL BE MAINTAINED IN A MANNER CONSISTENT WITH THE CITY OF SHERWOOD LAND USE ORDINANCES.
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7. UNOCCUPIED OR UNIMPROVED AREAS SHALL BE MAINTAINED IN A MANNER CONSISTENT WITH THE CITY OF SHERWOOD LAND USE ORDINANCES.

SITE PLAN GENERAL NOTES:

1. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF SHERWOOD AND THE SHERWOOD PLANNING COMMISSION.
2. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF SHERWOOD AND THE SHERWOOD PLANNING COMMISSION.
3. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF SHERWOOD AND THE SHERWOOD PLANNING COMMISSION.
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11 SITE PLAN
 SHEET: **A1.01**

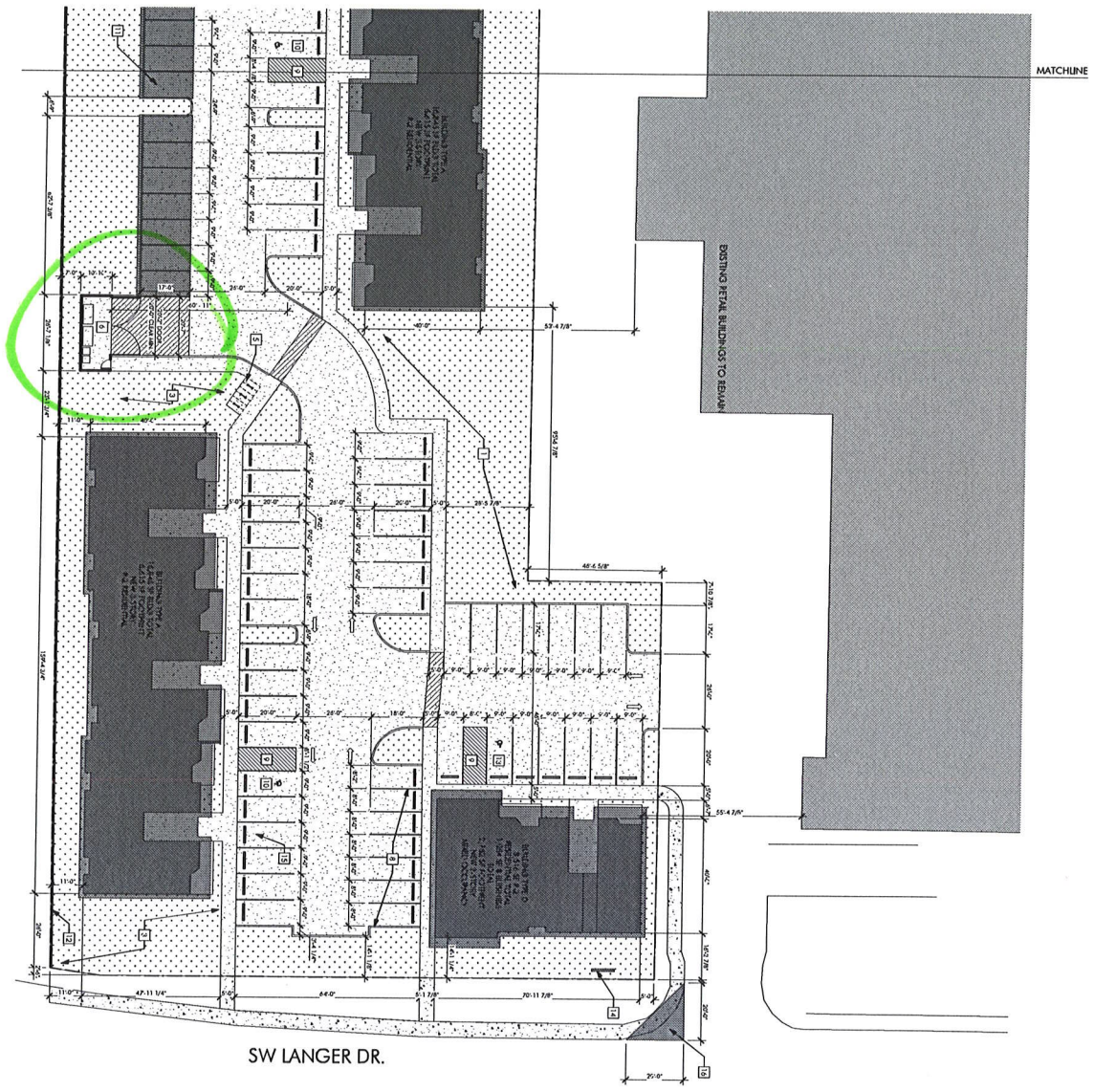
**NEW MULTI-FAMILY HOUSING
 SHERWOOD APARTMENTS**
 16390 SW LANGER DR. SHERWOOD, OREGON 97140

PROJECT # 2015-45
 DATE 02/07/2016
 REVISIONS

STUDIO 3 ARCHITECTURE
 INCORPORATED
 221 S. 24th Street, Suite 100
 Portland, Oregon 97204
 P: 503.398.6300
 F: 503.398.6300
 WWW.STUDIO3ARCHITECTURE.COM

1 SITE PLAN NORTH

Scale: 1" = 20'-0"



SW LANGER DR.

MATCHLINE

EXISTING METAL BUILDING TO REMAIN

SITE PLAN SUMMARY:

MANUFACTURED HOME UNITS

1. TOTAL UNITS	17
2. 1-BEDROOM	4
3. 2-BEDROOM	13

AUTOCOURT PARKING REQUIREMENTS

1. TOTAL UNITS	17	1.2 SPACES	20.4
2. 1-BEDROOM	4	1.2 SPACES	4.8
3. 2-BEDROOM	13	1.2 SPACES	15.6
4. TOTAL	17	1.2 SPACES	20.4

TOTAL PARKING REQUIREMENT: 20.4 SPACES

TOTAL PARKING PROVIDED: 20.4 SPACES

TOTAL PARKING SURPLUS: 0 SPACES

CONCRETE SHALL BE REINFORCED WITH #4 BARS AT 18" ON CENTER.

CONCRETE SHALL BE REINFORCED WITH #4 BARS AT 18" ON CENTER.

CONCRETE SHALL BE REINFORCED WITH #4 BARS AT 18" ON CENTER.

SITE PLAN LEGEND:

- BUILDING AREA
- BUILDING OVERHANG ABOVE
- UNPAVED
- CONCRETE FLOOR/DRIVEWAY/PAVING

LOT COVERAGE:

SITE AREA DESCRIPTION	AREA	%
BUILDINGS	30,198 SF	20.8%
PARKING, DRIVEWAYS	64,900 SF	45.4%
LANDSCAPE	52,212 SF	35.8%
TOTAL SITE AREA	147,310 SF	100%

SITE PLAN KEYNOTES:

1. UNPAVED OPEN SPACE SHALL BE MAINTAINED AS SUCH.
2. UNPAVED OPEN SPACE SHALL BE MAINTAINED AS SUCH.
3. UNPAVED OPEN SPACE SHALL BE MAINTAINED AS SUCH.
4. UNPAVED OPEN SPACE SHALL BE MAINTAINED AS SUCH.
5. UNPAVED OPEN SPACE SHALL BE MAINTAINED AS SUCH.
6. UNPAVED OPEN SPACE SHALL BE MAINTAINED AS SUCH.
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19. UNPAVED OPEN SPACE SHALL BE MAINTAINED AS SUCH.
20. UNPAVED OPEN SPACE SHALL BE MAINTAINED AS SUCH.

SITE PLAN GENERAL NOTES:

1. THE LOCATIONS OF BUILDING UNITS, DRIVEWAYS, AND PARKING SPACES SHALL BE AS SHOWN ON THIS PLAN AND SHALL NOT BE SUBJECT TO CHANGE WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL AGENCIES WHICH MAY BE CONCERNED BY THIS PROJECT.
2. BEFORE CONSTRUCTION BEGINS, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM ALL AGENCIES WHICH MAY BE CONCERNED BY THIS PROJECT.
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A1.03

SHEET:

NEW MULTI-FAMILY HOUSING
SHERWOOD APARTMENTS
16390 SW LANGER DR. SHERWOOD, OREGON 97140

PROJECT # 2015.45
DATE: 02/07/2016
REVISIONS

3722 COMMERCIAL ST. SE
SALMON, OR 97101-3416
503.330.6300
WWW.STUDIO3ARCHITECTURE.COM



SW Langer Drive
Landscape Parking Delineation

Legend:

LANDSCAPE PARKING AREAS
TOTAL = 6255 SF

Notes:

1. PLANTING PLAN SEE SHEETS L1.2 AND L1.3.
2. PLANT LEGEND SEE SHEET L1.2. PLANTING DETAILS SEE THIS SHEET.
3. LANDSCAPE PARKING CALCULATIONS SEE THIS SHEET.
4. SEE ARCHITECTURAL PLANS FOR SITE PLAN AND SITE SQUARE FOOTAGES.

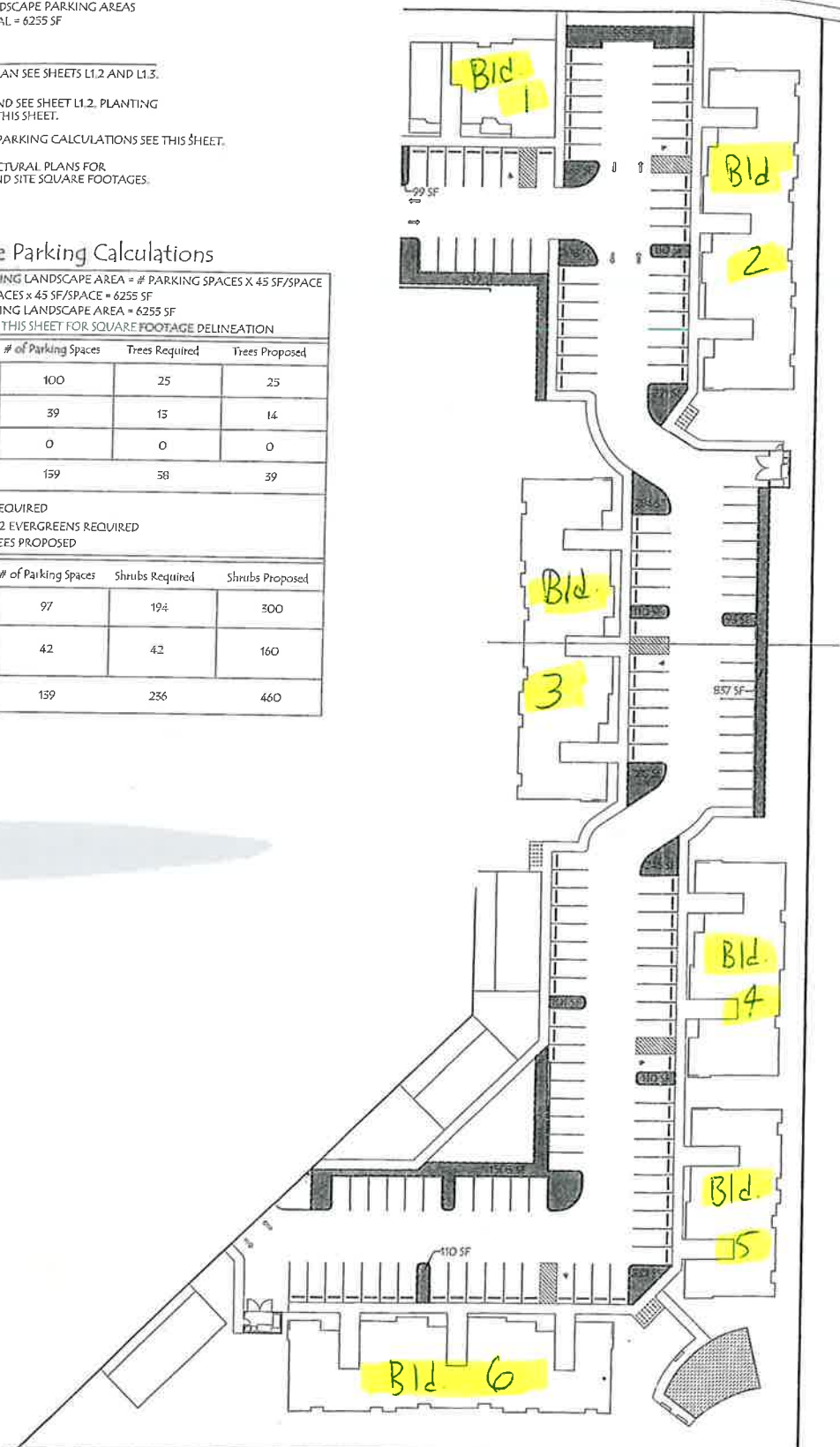
Landscape Parking Calculations

REQUIRED PARKING LANDSCAPE AREA = # PARKING SPACES X 45 SF/SPACE
 159 PARKING SPACES X 45 SF/SPACE = 6255 SF
 REQUIRED PARKING LANDSCAPE AREA = 6255 SF
 *SEE PLAN INSET THIS SHEET FOR SQUARE FOOTAGE DELINEATION

Trees	# of Parking Spaces	Trees Required	Trees Proposed
1 Large Tree / 4 Spaces	100	25	25
1 Med. Tree / 3 Spaces	39	15	14
1 Small Tree / 2 Spaces	0	0	0
TOTALS	159	50	39

5% EVERGREEN REQUIRED
 39 TOTAL X .05 = 2 EVERGREENS REQUIRED
 2 EVERGREEN TREES PROPOSED

Shrubs	# of Parking Spaces	Shrubs Required	Shrubs Proposed
2 Shrubs / Space	97	194	300
1 Shrub / Space No Paving in Front of Stall	42	42	160
TOTALS	139	236	460





KITTELSON & ASSOCIATES, INC.

TRANSPORTATION ENGINEERING / PLANNING

610 SW Alder Street, Suite 700, Portland, OR 97205 ☎ 503.228.5230 ✉ 503.273.8169

June 20, 2016

Project #: 19514

Bob J. Galati, PE
City of Sherwood
22560 SW Pine St.
Sherwood, OR 97140

RE: Sherwood Plaza 82-Unit Apartment Complex (SP 16-04)

Dear Bob,

Thank you for your review and comments on the December 4, 2015 Transportation Impact Analysis (TIA) report prepared for the proposed Sherwood Plaza Apartment Complex. We have reviewed your reply dated May 13, 2016 to our response to comments letter dated April 27, 2016 and have provided our responses below in standard text following your comments shown in *italics*. Furthermore, we have received an additional data request as part of Item 5A in a letter dated June 14, 2016. Our reply to that request is noted in our response in Item 5A below. Please consider this letter as a supplement to the TIA report, which remains unchanged.

Item 1: (Speed bumps and drive aisles)

- *Recommendation: No additional action required. Response addresses prior request.*

Response: As noted above, this comment has been addressed.

Item 2: (Crashes at Langer Drive / Hwy 99W)

- *The additional information provided (including the crash diagram in Exhibit C) indicates that there is a pattern of crashes between northbound and westbound vehicles, which accounted for four of the five total crashes at this location. No potential corrective safety measures were provided, and it was noted that the residential development would add negligible traffic to this location.*
- *Recommendation: No additional action required to address this item.*

Response: As noted above, this comment has been addressed.

Item 3: (Town Center V/C ratios)

- *Recommendation: No additional action required. Response addresses prior request*

Response: As noted above, this comment has been addressed.

Item 4: (Proportionate share analysis for Sherwood Boulevard / Langer Drive)

- *The response proposes retiming the traffic signal to alleviate vehicle queues exceeding available storage, which is not consistent with the identified improvement at the intersection. Further, the modification cannot be phased into the planned improvements and may have limited benefits due to the arrival patterns of vehicles from Sherwood/Edy/99W. SimTraffic worksheets were not included in the results.*
- *Recommendation: The materials requested previously should be provided - "A discussion and analysis of the proportionate share of the proposed development's impact towards the intersection redevelopment costs will need to be performed. Included will be the need to discuss how funding the proportionate share is to be accomplished." Further, 95th percentile queueing analysis worksheets for SimTraffic that support the analysis findings should be provided.*

Response: The SimTraffic worksheets for the SW Sherwood Boulevard/SW Langer Drive intersection (Intersection #1 in the analysis) have been provided and are attached at the end of this letter. Note that the results are for intersection #1 only.

The Sherwood Transportation System Plan (TSP) proposes to remove the traffic signal at SW Sherwood Boulevard/SW Langer Drive intersection and modify the intersection so that only right-in, right-out, and left-in movements would be allowed. This modification would be supplemented with the installation of a traffic signal at the SW Sherwood Boulevard/SW Century Drive intersection, which would include eastbound and westbound left turn lanes. Based on the proposed improvements estimated at \$900,000 in the TSP (project D24 as shown in page 169 of the Sherwood TSP Volume 2) and the 0.82 percent impact by the proposed development as determined by comparing the total entering volume during the weekday PM peak hour of background (1,576 vehicles) and total traffic (1,589 vehicles) conditions, it is suggested that the development contribute a proportional share contribution of \$7,423. There is a concern that conversion of the Sherwood Boulevard/SW Langer Drive intersection to unsignalized traffic control would have a negative impact on drivers' ability to easily locate and access the Sherwood Plaza shopping center.

Item 5: (Pedestrian safety and connectivity)

- *Item 5A – "Evaluate the safety of the pedestrian crossing of Langer Drive in the vicinity of the site and determine if enhanced crossing is needed to provide safe pedestrian crossing access to/from the proposed site to the land uses north of Langer Drive."*
 - *The response notes that there were no pedestrian crashes during the last three years at Langer Drive / OR 99W, adequate sight distance is provided, and that the proposed development would not be expected to add substantially more pedestrian volumes. However, the proposed development is a residential complex in the Town Center, opposite of food and shopping attractions on the other side of Langer Drive. This combination of mixed uses does have the potential to increase multimodal activity to/from the site, consistent with the vision of the Sherwood Town Center.*

- *Recommendation: Consider the need for an enhanced crossing location and treatment along Langer Drive, using likely pedestrian crossing locations and analysis based on NCHRP 562 methodology.*
- *Item 5A (Additional data request from June 14, 2016 letter)*
 - *The applicant provided reference to existing crossing activity and NCHRP 562 guidance. However, there was no consideration provided for the increased multimodal activity for the proposed residential use (which would result in 51 PM peak hour trips) adjacent to the retail, food, and other uses. The potential increase in pedestrian activity to/from the proposed residential use may trigger the need for enhanced pedestrian crossings.*
 - *Recommendation: Consider the need for an enhanced crossing location and treatment along Langer Drive, using likely pedestrian crossing locations and analysis based on NCHRP 562 methodology, with consideration for the additional pedestrian activity resulting from the site. An estimate of total pedestrian crossings Langer Drive to/from the site during the peak hours should be provided, as well as an indication if this increase (or activity during other time periods) would support an enhanced pedestrian crossing.*
- *Item 5B – “Also evaluate the pedestrian connectivity through Sherwood Plaza to Langer Drive along the southern edge.”*
 - *Recommendation: No additional action required. Response addresses prior request.*

Response: Guidelines contained in the NCHRP 562 report suggests that the minimum pedestrian volume for peak-hour evaluation is 20 pedestrians per hour in both directions. The data collection shows that at most there were six pedestrians per hour (during the weekday PM peak hour; the weekday AM peak hour had fewer pedestrians) using the crosswalk at the intersection of SW Langer Drive and the 99W right-in/right-out access road.

A review of two other intersections (SW Langer Drive/SW Baler Way and SW Langer Drive/SW Sherwood Boulevard) that are part of the project study area shows that the pedestrian volumes at these locations (which represent pedestrians crossing to/from adjacent residential area to commercial/retail developments) are seven and 11 pedestrians during the weekday PM peak hour, respectively (the weekday AM peak hour pedestrians volumes at both locations are lower).

The proposed development would generate 51 weekday PM peak hour trips. Data from *NCHRP Report 770, Estimating Bicycling and Walking for Planning and Project Development: A Guidebook*, estimates that walking trips comprise approximately 11.8 percent¹ of all daily person trips (including walking trips to/from transit). This corresponds to an increase of approximately six walking trips during the weekday PM peak hour. If all six trips would use the crosswalk on SW Langer Drive west of the proposed development (which is unlikely given that the shortest path to the Sherwood Plaza and Sherwood Market Center shopping centers would not use the crosswalk closest to the proposed development),

¹ NCHRP Report 770, Estimating Bicycling and Walking for Planning and Project Development: A Guidebook. Transportation Research Board, Washington, D.C., 2014. Page 13.

the weekday PM peak hour pedestrian volumes crossing SW Langer Drive would be at most 12 pedestrians, which is below the threshold for a peak-hour evaluation.

The NCHRP 562 methodology states that when fewer pedestrians are present, consideration for median refuge islands, curb extensions, or other traffic calming treatments can be alternatives to be considered. The location already has a marked crosswalk (which is one of the five categories of potential treatments) than spans approximately 48 feet of curb-to-curb distance. Opportunities to increase driver visibility and awareness of the existing crosswalk include:

- Improve the crosswalk at the SW Langer Drive and the 99W right-in/right-out access road to match other crosswalks on SW Langer Drive east of the proposed development. This would have the benefit of creating a more consistent pedestrian crossing environment. Specifically, the following improvements would constitute conditions of approval and include:
 - Enhance the crosswalk surfaced by painting the area between the striping to match the crosswalks at the intersection of SW Langer Drive/SW Holland Street.
 - Addition of high-visibility advance crosswalk signage similar to those present near the intersection of SW Langer Drive/SW Holland Street.

Item 6: (HCM analysis version)

- *Recommendation: No additional action required. Response addresses prior request.*

Response: As noted above, this comment has been addressed.

Item 7: (SimTraffic queuing analysis for Sherwood Boulevard / Langer Drive)

- *SimTraffic results were referenced but analysis worksheets were not provided.*
- *Recommendation: Provide the SimTraffic queuing analysis worksheets as requested in Item 4.*

Response: The SimTraffic analysis worksheets are attached to the end of this letter.

We trust this letter and supplement to our December 4, 2015 Transportation Impact Analysis for the propose Sherwood Plaza Apartment Complex adequately address the questions raised in the City's review. Please feel free to contact us if you have any further questions.

Sincerely,
KITTELSON & ASSOCIATES, INC.



Marc Butorac, P.E., P.T.O.E.
Principal Engineer



Zachary Horowitz
Senior Project Manager



720 SW Washington St.
Suite 500
Portland, OR 97205
503.243.3500
www.dksassociates.com

MEMORANDUM

DATE: June 14, 2016
TO: Bob Galati, City of Sherwood
FROM: Garth Appanaitis, PE
SUBJECT: Sherwood Multi-Family Development TIA Review
Sherwood On Call - Task 24

P11117-024

Per your request of June 7, 2016, we have reviewed the additional responses¹ provided to address prior review comments of the traffic impact analysis (TIA)² provided for the proposed 82 unit apartment development east of Sherwood Plaza. This review focused on determining if the responses provided for a complete application, which are summarized in the following sections. Based on our review of submitted materials, additional analysis components should be considered and clarification should be provided for the recommended improvements.

The following items refer to the review comments in the prior letter³ to the applicant. The description of the items requested have been abbreviated for brevity.

- Item 1 (Speed bumps and drive aisles)
 - *Recommendation: No additional action required. Previously addressed.*
- Item 2 (Crashes at Langer Drive / Hwy 99W)
 - *Recommendation: No additional action required. Previously addressed.*
- Item 3 (Town Center V/C ratios)
 - *Recommendation: No additional action required. Previously addressed.*
- Item 4 (Proportionate share analysis for Sherwood Boulevard / Langer Drive)
 - Additional information including traffic queueing worksheets and a proposed calculation of proportionate share was provided.
 - *Recommendation: No additional action required. Response addressed prior request.*
- Item 5 (Pedestrian safety and connectivity)
 - Item 5A - "Evaluate the safety of the pedestrian crossing of Langer Drive in the vicinity of the site and determine if enhanced crossing is needed to provide safe pedestrian crossing access to/from the proposed site to the land uses north of Langer Drive."
 - The applicant provided reference to existing crossing activity and NCHRP 562 guidance. However, there was no consideration provided for the increased multimodal activity for the proposed residential use (which would result in 51 PM peak hour trips) adjacent to the retail, food, and other uses. The potential increase in pedestrian activity to/from the proposed residential use may trigger the need for enhanced pedestrian crossings.

¹ RE: Sherwood Plaza 82-Unit Apartment Complex (SP 16-04), prepared by Kittelson & Associates, Inc., June 7, 2016.

² Memorandum: Sherwood Multi-Family Development Traffic Impact Analysis, prepared by Kittelson & Associates, Inc., December 4, 2015.

³ RE: Sherwood Plaza 82-Unit Apartment Complex (SP 16-04), City of Sherwood, April 4, 2016.

Bob Galati
Sherwood Multi-Family TIA Review
Page 2 of 2



- *Recommendation: Consider the need for an enhanced crossing location and treatment along Langer Drive, using likely pedestrian crossing locations and analysis based on NCHRP 562 methodology, with consideration for the additional pedestrian activity resulting from the site. An estimate of total pedestrian crossings Langer Drive to/from the site during the peak hours should be provided, as well as an indication if this increase (or activity during other time periods) would support an enhanced pedestrian crossing.*
- Item 5B - “Also evaluate the pedestrian connectivity through Sherwood Plaza to Langer Drive along the southern edge.”
 - *Recommendation: No additional action required. Previously addressed.*
- Item 6 (HCM analysis version)
 - *Recommendation: No additional action required. Previously addressed.*
- Item 7 (SimTraffic queueing analysis for Sherwood Boulevard / Langer Drive)
 - *Recommendation: No additional action required. Response addressed prior request.*

If you have any questions, please call.



KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING
610 SW Alder Street, Suite 700, Portland, OR 97205 ☎ 503.228.5230 ☎ 503.273.8169

June 7, 2016

Project #: 19514

Bob J. Galati, PE
City of Sherwood
22560 SW Pine St.
Sherwood, OR 97140

RE: Sherwood Plaza 82-Unit Apartment Complex (SP 16-04)

Dear Bob,

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Response: As noted above, this comment has been addressed.

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Response: As noted above, this comment has been addressed.

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modification cannot be phased into the planned improvements and may have limited benefits due to the arrival patterns of vehicles from Sherwood/Edy/99W. SimTraffic worksheets were not included in the results.

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Response: The SimTraffic worksheets for the SW Sherwood Boulevard/SW Langer Drive intersection (Intersection #1 in the analysis) have been provided and are attached at the end of this letter. Note that the results are for intersection #1 only.

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Item 5: (Pedestrian safety and connectivity)

- *Item 5A – "Evaluate the safety of the pedestrian crossing of Langer Drive in the vicinity of the site and determine if enhanced crossing is needed to provide safe pedestrian crossing access to/from the proposed site to the land uses north of Langer Drive."*
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- *Recommendation: Provide the SimTraffic queuing analysis worksheets as requested in Item 4.*

Response: The SimTraffic analysis worksheets are attached to the end of this letter.

We trust this letter and supplement to our December 4, 2015 Transportation Impact Analysis for the propose Sherwood Plaza Apartment Complex adequately address the questions raised in the City's review. Please feel free to contact us if you have any further questions.

Sincerely,
KITTELSON & ASSOCIATES, INC.



Marc Butorac, P.E., P.T.O.E.
Principal Engineer



Zachary Horowitz
Senior Project Manager

Queuing and Blocking Report
Weekday AM Peak Hour

4/11/2016

Intersection: 1: SW Langer Dr & SW Sherwood Blvd

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	119	221	69	192	328	105	120	115	85
Average Queue (ft)	55	72	26	41	152	50	42	48	39
95th Queue (ft)	104	154	62	152	259	89	87	90	72
Link Distance (ft)		486			338		265		258
Upstream Blk Time (%)					0				
Queuing Penalty (veh)					0				
Storage Bay Dist (ft)	100		175	175		100		200	
Storage Blk Time (%)	2	3		0	4	1	1		
Queuing Penalty (veh)	5	3		0	10	1	1		

Intersection: 2: SW Langer Dr & Dwy North Of Dutch Bros

Movement	WB	WB	SB
Directions Served	L	R	L
Maximum Queue (ft)	71	36	31
Average Queue (ft)	35	18	4
95th Queue (ft)	61	44	20
Link Distance (ft)		374	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	75		100
Storage Blk Time (%)	0		
Queuing Penalty (veh)	0		

Intersection: 3: 99W RIRO Access & SW Langer Dr

Movement	EB	WB	WB	NB	NB	SB
Directions Served	L	L	TR	LT	R	LTR
Maximum Queue (ft)	30	24	12	47	35	50
Average Queue (ft)	2	3	0	16	18	24
95th Queue (ft)	15	15	7	43	43	51
Link Distance (ft)			114	170		249
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	50	50			50	
Storage Blk Time (%)			0	0	0	
Queuing Penalty (veh)			0	0	0	

Queuing and Blocking Report
Weekday PM Peak Hour

6/1/2016

Intersection: 1: SW Langer Dr & SW Sherwood Blvd

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	124	186	78	200	346	112	111	178	225
Average Queue (ft)	62	92	26	88	197	53	43	75	95
95th Queue (ft)	109	159	62	225	322	91	83	141	175
Link Distance (ft)		486			338		265		258
Upstream Blk Time (%)					1				0
Queuing Penalty (veh)					0				0
Storage Bay Dist (ft)	100		175	175		100		200	
Storage Blk Time (%)	1	6	0	11	1	0	0	0	1
Queuing Penalty (veh)	3	7	1	25	1	0	1	1	

Intersection: 2: SW Langer Dr & Dwy North Of Dutch Bros

Movement	WB	WB	NB	SB	SB
Directions Served	L	R	TR	L	T
Maximum Queue (ft)	88	55	10	30	16
Average Queue (ft)	47	15	0	4	1
95th Queue (ft)	76	48	6	19	12
Link Distance (ft)		374	258		343
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	75			50	
Storage Blk Time (%)	1	0	0	0	0
Queuing Penalty (veh)	0	0	0	0	0

Intersection: 3: 99W RIRO Access & SW Langer Dr

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	TR	L	TR	LT	R	LTR
Maximum Queue (ft)	34	16	39	8	78	65	90
Average Queue (ft)	4	1	12	0	35	31	42
95th Queue (ft)	20	9	36	4	66	58	72
Link Distance (ft)		396		114	170		249
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	50		50			50	
Storage Blk Time (%)	0	0	0		4	1	
Queuing Penalty (veh)	0	0	0		2	1	

Queuing and Blocking Report
Weekday AM Peak Hour

4/27/2016

Intersection: 1: SW Langer Dr & SW Sherwood Blvd

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	122	181	68	193	270	105	85	125	97
Average Queue (ft)	54	71	25	51	151	47	39	55	42
95th Queue (ft)	100	135	56	173	241	81	72	105	77
Link Distance (ft)		486			338		265		258
Upstream Blk Time (%)					0				
Queuing Penalty (veh)					0				
Storage Bay Dist (ft)	100		175	175		100		200	
Storage Blk Time (%)	1	2		0	4	0	0	0	0
Queuing Penalty (veh)	2	3		0	8	0	0	0	0

Intersection: 2: SW Langer Dr & Dwy North Of Dutch Bros

Movement	WB	WB	SB
Directions Served	L	R	L
Maximum Queue (ft)	70	45	35
Average Queue (ft)	37	19	3
95th Queue (ft)	62	45	19
Link Distance (ft)		374	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	75		50
Storage Blk Time (%)	0		0
Queuing Penalty (veh)	0		0

Intersection: 3: 99W RIRO Access & SW Langer Dr

Movement	EB	EB	WB	NB	NB	SB
Directions Served	L	TR	L	LT	R	LTR
Maximum Queue (ft)	34	6	24	70	31	55
Average Queue (ft)	4	0	2	15	19	26
95th Queue (ft)	21	4	14	45	43	51
Link Distance (ft)		396		170		249
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	50		50		50	
Storage Blk Time (%)	0			0	0	
Queuing Penalty (veh)	0			0	0	

Queuing and Blocking Report
Weekday PM Peak Hour

4/27/2016

Intersection: 1: SW Langer Dr & SW Sherwood Blvd

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	123	210	68	199	344	98	90	167	200
Average Queue (ft)	57	100	27	109	216	48	41	72	90
95th Queue (ft)	103	180	60	244	333	82	77	129	161
Link Distance (ft)		486			338		265		258
Upstream Blk Time (%)					1				0
Queuing Penalty (veh)					0				0
Storage Bay Dist (ft)	100		175	175		100		200	
Storage Blk Time (%)	1	7		0	16	0	0		0
Queuing Penalty (veh)	4	8		1	36	0	0		0

Intersection: 2: SW Langer Dr & Dwy North Of Dutch Bros

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	L
Maximum Queue (ft)	90	32	28	34
Average Queue (ft)	47	13	1	2
95th Queue (ft)	78	38	11	17
Link Distance (ft)		374	258	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	75			50
Storage Blk Time (%)	2			0
Queuing Penalty (veh)	0			0

Intersection: 3: 99W RIRO Access & SW Langer Dr

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	TR	L	TR	LT	R	LTR
Maximum Queue (ft)	39	20	40	20	86	70	84
Average Queue (ft)	5	1	14	1	39	31	40
95th Queue (ft)	23	10	37	13	68	57	72
Link Distance (ft)		396		114	170		249
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	50		50			50	
Storage Blk Time (%)	0	0	0	0	4	0	
Queuing Penalty (veh)	0	0	0	0	3	0	



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MEMORANDUM

DATE: May 13, 2016
TO: Bob Galati, City of Sherwood
FROM: Garth Appanaitis, PE
SUBJECT: Sherwood Multi-Family Development TIA Review
Sherwood On Call - Task 24

P11117-024

Per your request of May 3, 2016, we have reviewed the responses¹ provided to address prior review comments of the traffic impact analysis (TIA)² provided for the proposed 82 unit apartment development east of Sherwood Plaza. This review focused on the technical components of the responses, which are summarized in the following sections. Based on our review of submitted materials, additional analysis components should be considered and clarification should be provided for the recommended improvements.

The following items refer to the review comments in the prior letter³ to the applicant. The description of the items requested have been abbreviated for brevity.

- Item 1 (Speed bumps and drive aisles)
 - *Recommendation: No additional action required. Response addresses prior request.*
- Item 2 (Crashes at Langer Drive / Hwy 99W)
 - The additional information provided (including the crash diagram in Exhibit C) indicates that there is a pattern of crashes between northbound and westbound vehicles, which accounted for four of the five total crashes at this location. No potential corrective safety measures were provided, and it was noted that the residential development would add negligible traffic to this location.
 - *Recommendation: No additional action required to address this item.*
- Item 3 (Town Center V/C ratios)
 - *Recommendation: No additional action required. Response addresses prior request*
- Item 4 (Proportionate share analysis for Sherwood Boulevard / Langer Drive)
 - The response proposes retiming the traffic signal to alleviate vehicle queues exceeding available storage, which is not consistent with the identified improvement at the intersection. Further, the modification cannot be phased into the planned improvements and may have limited benefits due to the arrival patterns of vehicles from Sherwood/Edy/99W. SimTraffic worksheets were not included in the results.
 - *Recommendation: The materials requested previously should be provided - "A discussion and analysis of the proportionate share of the proposed development's impact towards the intersection redevelopment costs will need to be performed. Included will be the need to discuss how funding the proportionate share is to be accomplished." Further, 95th percentile*

¹ RE: Sherwood Plaza 82-Unit Apartment Complex (SP 16-04), prepared by Kittelson & Associates, Inc., April 27, 2016.

² Memorandum: Sherwood Multi-Family Development Traffic Impact Analysis, prepared by Kittelson & Associates, Inc., December 4, 2015.

³ RE: Sherwood Plaza 82-Unit Apartment Complex (SP 16-04), City of Sherwood, April 4, 2016.



queueing analysis worksheets for SimTraffic that support the analysis findings should be provided.

- Item 5 (Pedestrian safety and connectivity)
 - Item 5A - “Evaluate the safety of the pedestrian crossing of Langer Drive in the vicinity of the site and determine if enhanced crossing is needed to provide safe pedestrian crossing access to/from the proposed site to the land uses north of Langer Drive.”
 - The response notes that there were no pedestrian crashes during the last three years at Langer Drive / OR 99W, adequate sight distance is provided, and that the proposed development would not be expected to add substantially more pedestrian volumes. However, the proposed development is a residential complex in the Town Center, opposite of food and shopping attractions on the other side of Langer Drive. This combination of mixed uses does have the potential to increase multimodal activity to/from the site, consistent with the vision of the Sherwood Town Center.
 - *Recommendation: Consider the need for an enhanced crossing location and treatment along Langer Drive, using likely pedestrian crossing locations and analysis based on NCHRP 562 methodology.*
 - Item 5B - “Also evaluate the pedestrian connectivity through Sherwood Plaza to Langer Drive along the southern edge.”
 - *Recommendation: No additional action required. Response addresses prior request.*
- Item 6 (HCM analysis version)
 - *Recommendation: No additional action required. Response addresses prior request.*
- Item 7 (SimTraffic queueing analysis for Sherwood Boulevard / Langer Drive)
 - SimTraffic results were referenced but analysis worksheets were not provided.
 - *Recommendation: Provide the queueing analysis worksheets for SimTraffic as requested in Item 4.*

If you have any questions, please call.



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION ENGINEERING / PLANNING

610 SW Alder Street, Suite 700, Portland, OR 97205 = 503.228.5230 = 503.273.8169

April 27, 2016

Project #: 19514

Bob J. Galati, PE
City of Sherwood
22560 SW Pine St.
Sherwood, OR 97140

RE: Sherwood Plaza 82-Unit Apartment Complex (SP 16-04)

Dear Bob,

Thank you for your review and comments on the December 4, 2015 Transportation Impact Analysis (TIA) report prepared for the proposed Sherwood Plaza Apartment Complex. We have reviewed your comments and provided our responses below in standard text following your comments shown in *italics*. Please consider this letter as a supplement to the TIA report, which remains unchanged.

Item 1: On page 2, there is a recommendation for installation of speed bumps along the south and east side of Sherwood Plaza in order to control vehicular speeds.

- *The term speed bump denotes an AC pavement bump typically 12 to 18 inches wide by 3 inches in height. Generally, for private internal site uses, I would not generally comment upon this type of item. However, I would request more specific information on the type of speed control device being recommended. A speed cushion may be more appropriate for emergency responders trying get to a residential complex.*
- *Also, there is no discussion on how the drive access aisles will work with truck access and turning movements. Truck staging areas are not identified and conflicts with residential site access from staged trucks may occur if not accounted for in the design.*

Response: The attached Exhibit "A" shows the location of the existing speed bumps (in yellow) in the drive aisles behind the Sherwood Plaza and adjacent to SW Langer Drive at the north and west access points. According to the applicant, approximately once per week a small number of trucks enter the rear of Sherwood Plaza from SW Langer Drive at the northern driveway, drive south to the unloading zone shown in Exhibit "A", then travel clockwise around the rear of the property and exit onto SW Langer Drive via the driveway south of Dutch Bros. Coffee. When trucks are parked as shown in Exhibit "A", they would potentially block vehicles. However, the trips to and from the residential site are not expected to travel along the east side of Sherwood Plaza. The northern residential site driveway provides access at a point further north than the truck unloading area. Trucks and vehicles would mix between the residential development's north access point and SW Langer Drive and the residential development's south access point and SW Langer Drive. However, the loading area is located between the site driveways where minimum traffic is anticipated from the development.

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To control traffic speeds and interactions with infrequently unloading vehicles, it is suggested that a single speed cushion (as shown in Exhibit "B") be installed along the south side of Sherwood Plaza as illustrated in Exhibit "A".

Item 2: On page 2, the report regarding the intersection of Langer Drive/Hwy 99W does not have any specific information regarding crash patterns, other than in Table 3 showing some information on angled crashes.

- *An assessment of crash patterns and potential corrective safety measures will need to be provided.*

Response: Further information about the five reported crashes at this location may be found in the first paragraph on Page 14. All five reported crashes were angle crashes that involved northbound (leaving Sherwood Plaza) and southbound (from the 99W right-in right-out access road) vehicles that failed to yield to east-west traffic on Langer Drive as shown in Exhibit "C". There is adequate sight distance on all approaches at this location. As described in the report, the proposed residential development would add negligible traffic volumes to this location.

Item 3: Page 10 has several references to the V/C ratio (including Table 2) of a standard V/C ratio of 0.99.

- *The intersections within the report limits are located within the Sherwood Town Center boundary which impacts specific development code requirements and traffic mobility standards. An example of this is the Sherwood Town Center standard V/C ratio of 1.1 for traffic mobility during peak hour conditions. The report should be modified to reflect the Town Center Plan requirements.*

Response: This has been noted. The updated applicable standards for each intersection are shown in the table at the top of the following page. Each intersection, for both the weekday AM and PM peak hours, for existing, background, and total traffic conditions continues to meet the applicable Sherwood Town Center v/c and LOS standards.

#	Intersection	Jurisdiction ¹	Standard
1	SW Langer Drive/ SW Sherwood Boulevard	City of Sherwood	LOS "D"
2	SW Langer Drive/Driveway on the north side of Dutch Bros.	City of Sherwood	LOS "D"
3	SW Langer Drive/99W right-in right-out access road	City of Sherwood	LOS "D"
4	SW Langer Drive/Driveway west edge of site	City of Sherwood	LOS "D"
5	SW Tualatin-Sherwood Road/Theater access	Washington County	LOS "E"
6	SW Tualatin-Sherwood Road/SW Baler Way	Washington County	V/C of 1.10
7	SW Langer Drive/SW Baler Way	City of Sherwood	LOS "D"
8	West Site Driveway/Site Driveway	City of Sherwood	LOS "D"

¹ Sherwood Town Center standards apply as described in pages 9-10 of Appendix F: Traffic Analysis of the *Sherwood Town Center Plan*, 2013

Item 4: Page 33 of the report provided a queueing analysis that indicates that the eastbound left turn 95th percentile queue at Sherwood Boulevard/Langer Drive intersection would not be adequately accommodated with the existing storage requirements. The City's TSP also identifies the intersection as having existing mobility and safety concerns (TSP project D24).

- *The addition of the proposed development will place increased pressure on this intersections sub-standard functioning. A discussion and analysis of the proportionate share of the proposed development's impact towards the intersections redevelopment costs will need to be performed. Included will be the need to discuss how funding the proportionate share is to be accomplished.*

Response: The background scenario (without the proposed development) results indicate that the eastbound left turn would exceed the available storage at this intersection. The proposed development would add no more than three (3) vehicles during either the AM or PM peak hour, and the results from both Synchro and SimTraffic show this would not lengthen the 95th percentile queue length. Further analysis was undertaken to see if modifications to the existing signal timing parameters would improve the 95th percentile queue length for the eastbound left-turn movement. The analysis results show (see Exhibit F) that when signal timing modifications such as increasing the amount of green time for the eastbound left-turn are implemented, the 95th percentile queue lengths (shown by the SimTraffic results) would be able to be accommodated by the available storage. It is suggested that the development contribute a portion of the funds required to complete an engineering study to re-time the signal at the SW Sherwood Boulevard/SW Langer Drive intersection.

Item 5: Page 34 of the report provided review of the multi-modal connectivity of the site and adjacent off-site areas. The report identified the pedestrian crossing of Langer Drive near the Hwy 99W access, but no assessment of the safety of the pedestrian crossing was provided.

- *Evaluate the safety of the pedestrian crossing of Langer Drive in the vicinity of the site and determine if enhanced crossing is needed to provide safe pedestrian crossing access to/from the proposed site to the land uses north of Langer Drive.*
- *Also evaluate the pedestrian connectivity through Sherwood Plaza to Langer Drive along the southern edge.*

Response: The three-year safety analysis did not identify any reported crashes involving pedestrians at the marked crosswalk on the east leg of the SW Langer Drive/99W right-in right-out access road intersection. There is adequate sight distance on all approaches at this location. The data collection indicated that during the weekday AM and PM peak hours, there were two and six pedestrians using the crosswalk, respectively. The proposed residential development would not be expected to add substantially more pedestrian volume to this location. Based on the low pedestrian volumes and past safety performance, no enhanced crossing treatments are recommended at this location. There is adequate width along the southern edge of Sherwood Plaza to provide a pedestrian walkway that would allow connectivity from the development's southern access point to SW Langer Drive. The applicant proposes to demarcate a 6-foot pedestrian pathway along the southern curb from the

development's access point to SW Langer Drive (see Exhibit "D"). Any parking, dumpsters, or other obstacles would be relocated off the area used for pedestrian pathway.

Item 6: Typically, the latest versions of standards and manuals are used in analysis and report generation. The report is utilizing the Highway Capacity Manual (HCM) version 2000.

- *Provide the rationale behind not using HCM 2010. The updated version may or may not have impacts on the signalized intersection analysis, however, the latest updated version should be used if no reasonable explanation can be given.*

Response: The HCM 2000 methodology was utilized as the HCM 2010 is still not fully reliable either Synchro versions 8 or 9, and the software remains incapable of analyzing certain lane configurations such as intersections with U-turns. Furthermore, comparison of HCM 2010 results using Synchro (version 8 or 9) continues to differ from the results determined by using the computational engine developed as part of the HCM 2010 methodology. To provide a relative comparison, we have reviewed the results using Synchro 9 and the HCM 2010 methodology. A comparison between those results and the HCM 2000 show some minor differences. All study area intersections would meet the applicable jurisdictional standards. Exhibit "E" provides the HCM 2010 results for the study intersections.

Item 7: Page 33 of the report indicates that Synchro was utilized in the deterministic queueing analysis in place of SimTraffic. The intention is to use Synchro and SimTraffic as companion models with Synchro being used to determine the macro level of LOS and delays, followed by using SimTraffic to simulate real world conditions. Synchro underestimates the queueing lengths as it does not take into account the spill back from insufficiently long turning lanes. The intersection of Langer Drive and Sherwood Boulevard is the identified major concern regarding impacts from the development's traffic.

- *Provide an analysis of the Langer Drive/Sherwood Boulevard intersection using SimTraffic to determine the queueing impacts.*

Response: The analysis of the Langer Drive/Sherwood Boulevard intersection using SimTraffic indicates that 95th percentile queue lengths would be similar to (or better than) the results indicated by the Synchro results as shown in Exhibit "F".

We trust this letter and supplement to our December 4, 2015 Transportation Impact Analysis for the propose Sherwood Plaza Apartment Complex adequately address the questions raised in the City's review. Please feel free to contact us if you have any further questions.

Sincerely,
KITTELSON & ASSOCIATES, INC.



Marc Butorac, P.E., P.T.O.E.
Principal Engineer



Zachary Horowitz
Senior Project Manager

Exhibit A: Location of existing speed bumps and truck loading area

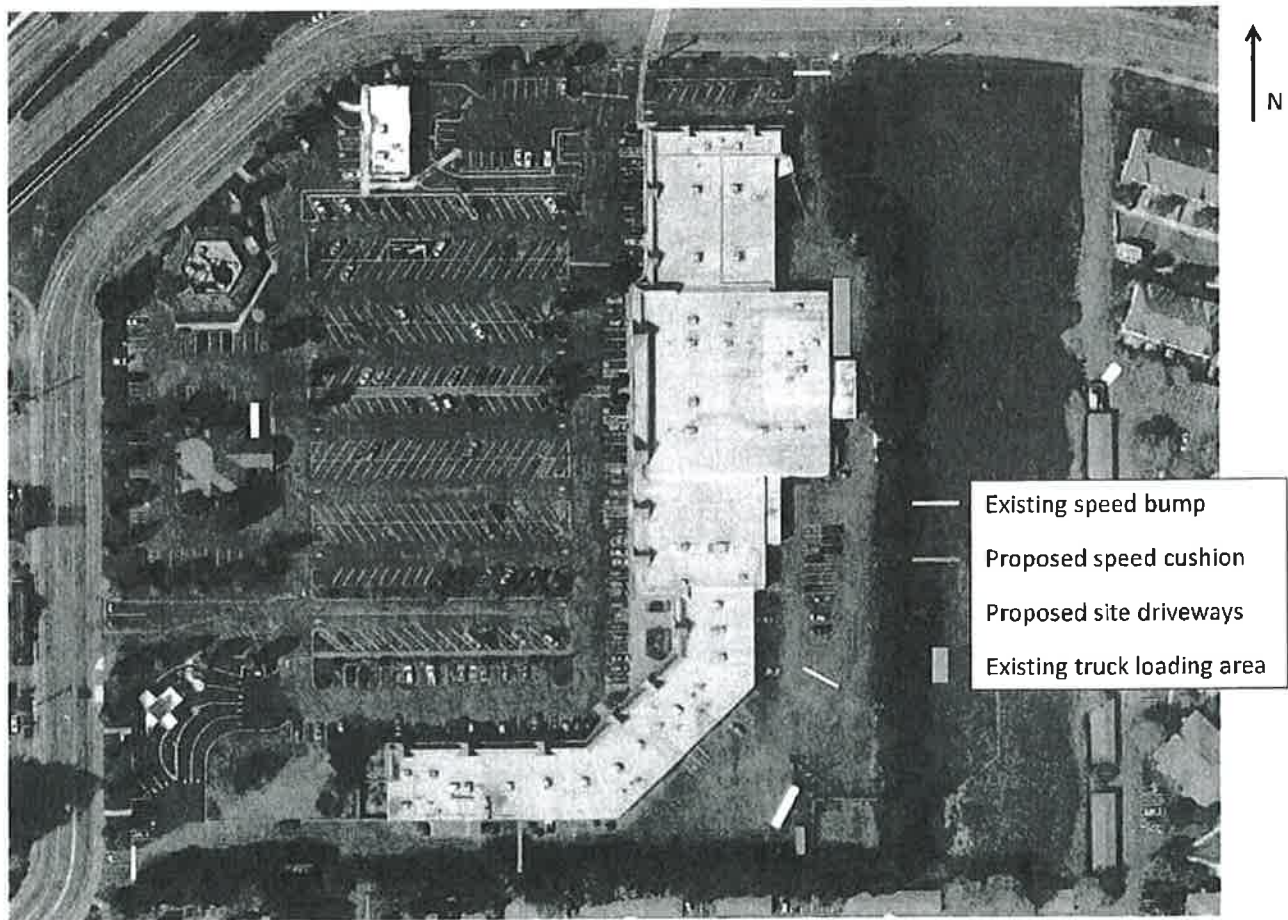
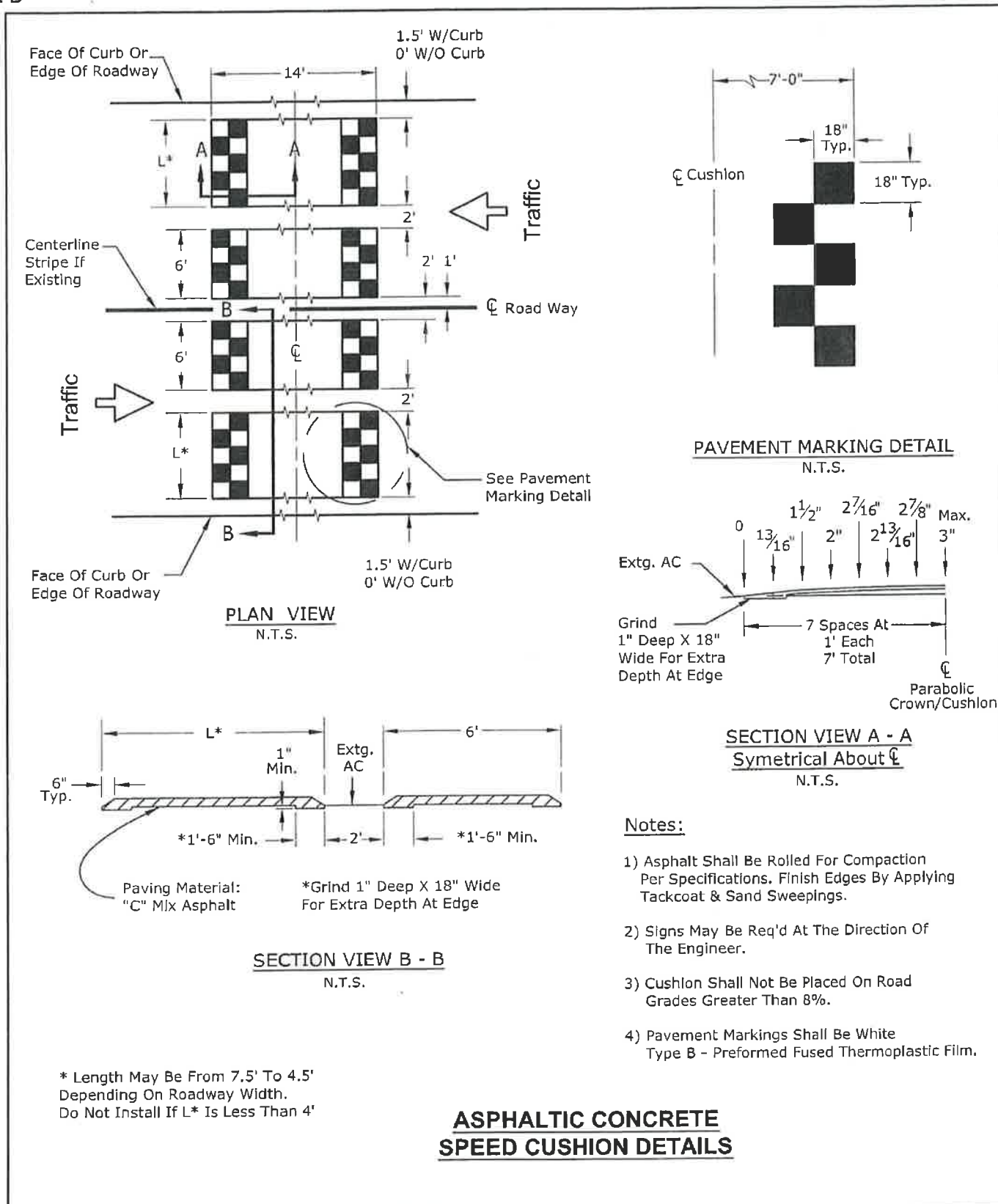


Exhibit B




 <p>WASHINGTON COUNTY DEPARTMENT OF LAND USE & TRANSPORTATION ENGINEERING SECTION</p>	<p>SPEED CUSHION ROAD WIDTH GREATER THAN 26' SPEED 25 M.P.H. OR LESS</p>	
	<p>PLOT STAMP: 02/24/11 5:41P KELLYE CAD: 6063.DWG</p>	<p>EFFECTIVE DATE: 3/18/2011</p>

Exhibit C: Location of crashes at SW Langer Drive/99W right-in right-out access road

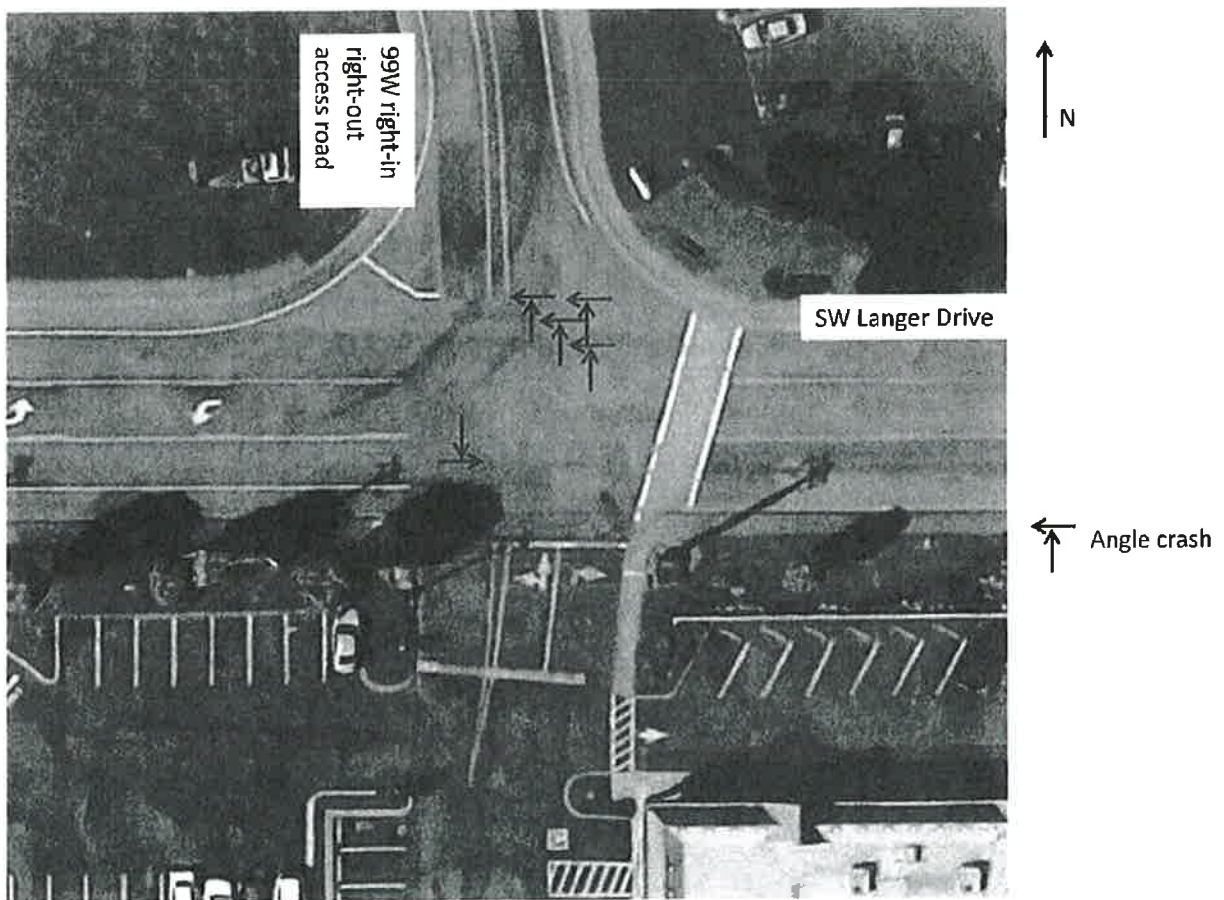
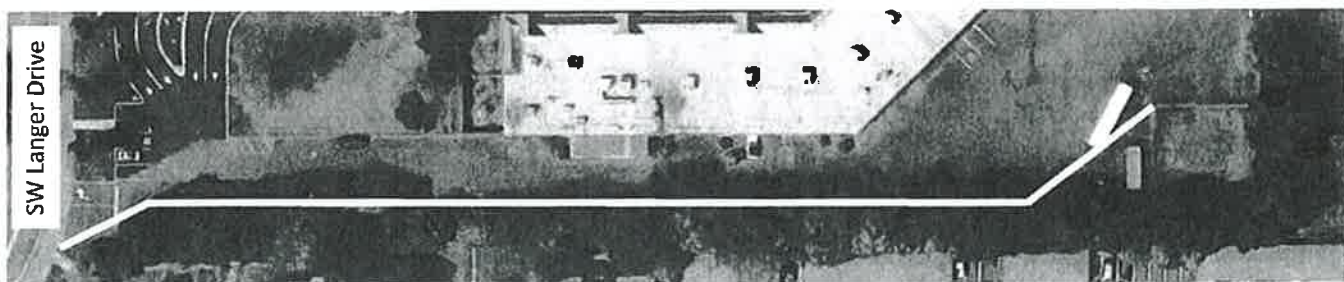


Exhibit D: Proposed location of pedestrian pathway



Proposed 6-foot pathway



Exhibit E: HCM 2010 Analysis Results

Existing Conditions HCM 2010 Operational Analysis Results

#	Intersection	LOS		V/C		Jurisdiction ¹	Standard	Met?
		AM	PM	AM	PM			
1	SW Langer Drive/ SW Sherwood Boulevard	C (22.2)	C (29.6)	0.53	0.63	City of Sherwood	LOS "D"	Yes
2	SW Langer Drive/Driveway on the north side of Dutch Bros.	B (10.6)	B (13.6)	0.13 (WB)	0.26 (WB)	City of Sherwood	LOS "D"	Yes
3	SW Langer Drive/99W right-in right-out access road	B (11.8)	C (24.8)	0.09 (SB)	0.38 (SB)	City of Sherwood	LOS "D"	Yes
4	SW Langer Drive/Driveway west edge of site	B (10.2)	B (12.1)	0.01 (NB)	0.08 (SB)	City of Sherwood	LOS "D"	Yes
5	SW Tualatin-Sherwood Road/Theater access	A (9.6)	B (17.9)	0.52	0.53	Washington County	LOS "E"	Yes
6	SW Tualatin-Sherwood Road/SW Baler Way	A (7.7)	B (10.1)	0.57	0.74	Washington County	V/C of 1.10	Yes
7	SW Langer Drive/SW Baler Way	B (10.4)	C (19.0)	0.11 (EB)	0.42 (EB)	City of Sherwood	LOS "D"	Yes

Year 2016 Background Conditions HCM 2010 Operational Analysis Results

#	Intersection	LOS		V/C		Jurisdiction ¹	Standard	Met?
		AM	PM	AM	PM			
1	SW Langer Drive/ SW Sherwood Boulevard	C (22.3)	C (30.4)	0.54	0.64	City of Sherwood	LOS "D"	Yes
2	SW Langer Drive/Driveway on the north side of Dutch Bros.	B (10.7)	B (14.0)	0.14 (WB)	0.29 (WB)	City of Sherwood	LOS "D"	Yes
3	SW Langer Drive/99W right-in right-out access road	B (12.0)	C (26.2)	0.09 (SB)	0.40 (SB)	City of Sherwood	LOS "D"	Yes
4	SW Langer Drive/Driveway west edge of site	B (10.4)	B (12.5)	0.01 (NB)	0.08 (SB)	City of Sherwood	LOS "D"	Yes
5	SW Tualatin-Sherwood Road/Theater access	B (13.3)	C (15.5)	0.08 (NB)	0.23 (SB)	Washington County	LOS "E"	Yes
6	SW Tualatin-Sherwood Road/SW Baler Way	C (24.7)	C (25.5)	0.43	0.48	Washington County	V/C of 1.10	Yes
7	SW Langer Drive/SW Baler Way	B (10.9)	C (24.7)	0.18 (EB)	0.45 (EB)	City of Sherwood	LOS "D"	Yes

Year 2016 Total Traffic Conditions HCM 2010 Operational Analysis Results

#	Intersection	LOS		V/C		Jurisdiction ¹	Standard	Met?
		AM	PM	AM	PM			
1	SW Langer Drive/ SW Sherwood Boulevard	C (22.5)	C (30.8)	0.56	0.64	City of Sherwood	LOS "D"	Yes
2	SW Langer Drive/Driveway on the north side of Dutch Bros.	B (10.8)	B (13.3)	0.15 (WB)	0.28 (WB)	City of Sherwood	LOS "D"	Yes
3	SW Langer Drive/99W right-in right-out access road	B (12.1)	D (26.7)	0.10 (SB)	0.26 (SB)	City of Sherwood	LOS "D"	Yes
4	SW Langer Drive/Driveway west edge of site	B (10.3)	B (12.9)	0.06 (NB)	0.09 (SB)	City of Sherwood	LOS "D"	Yes
5	SW Tualatin-Sherwood Road/Theater access	B (13.3)	C (15.5)	0.08 (NB)	0.23 (SB)	Washington County	LOS "E"	Yes
6	SW Tualatin-Sherwood Road/SW Baler Way	C (25.0)	C (25.9)	0.44	0.49	Washington County	V/C of 1.10	Yes
7	SW Langer Drive/SW Baler Way	B (11.2)	D (27.9)	0.21 (EB)	0.54 (EB)	City of Sherwood	LOS "D"	Yes
8	West Site Driveway/Site Driveway	A (8.4)	A (8.5)	0.03 (WB)	0.01 (WB)	City of Sherwood	LOS "D"	Yes

¹ Sherwood Town Center standards apply. See pages 9-10 of Appendix F: Traffic Analysis of the Sherwood Town Center Plan, 2013

Exhibit F: 95th Percentile Queuing Results

Synchro

Intersection	Movement	95th Percentile Queue Length (feet)						Available Storage (feet)
		Weekday AM Peak Hour (Background)	Weekday PM Peak Hour (Background)	Weekday AM Peak Hour (Total Traffic)	Weekday PM Peak Hour (Total Traffic)	Weekday AM Peak (Difference)	Weekday PM Peak (Difference)	
SW Langer Drive/ SW Sherwood Boulevard	EBL	#150	125	110	105	-40	-20	100
	WBL	50	50	50	50	0	0	175
	NBL	100	100	95	95	-5	-5	100
	SBL	100	#175	#135	#105	35	10	200

SimTraffic

Intersection	Movement	95th Percentile Queue Length (feet)						Available Storage (feet)
		Weekday AM Peak Hour (Background)	Weekday PM Peak Hour (Background)	Weekday AM Peak Hour (Total Traffic)	Weekday PM Peak Hour (Total Traffic)	Weekday AM Peak (Difference)	Weekday PM Peak (Difference)	
SW Langer Drive/ SW Sherwood Boulevard	EBL	105	110	100	100	-5	-10	100
	WBL	60	60	55	60	-5	0	175
	NBL	90	90	80	80	-10	-10	100
	SBL	90	140	105	130	15	-10	200



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Jennifer Harris

Councilors
Renee Brouse
Linda Henderson
Dan King
Jennifer Kuiper
Sally Robinson

City Manager
Joseph Gall, ICMA-CM

Assistant City Manager
Tom Pessemier

April 4, 2016

Marc Butorac, PE
Kittelson & Associates, Inc
610 SW Alder Street, Suite 700
Portland, OR 97205

Re: Sherwood Plaza 82-Unit Apartment Complex (SP 16-04)

Dear Marc,

DKS Associates and I have reviewed the TIA submitted for the above referenced project and have questions and comments related to the report. These items will need to be discussed and resolved prior to the project being deemed complete by the Engineering Department.

Item 1: On page 2, there is a recommendation for installation of speed bumps along the south and east side of Sherwood Plaza in order to control vehicular speeds.

- The term speed bump denotes an AC pavement bump typically 12 to 18 inches wide by 3 inches in height. Generally, for private internal site uses, I would not generally comment upon this type of item. However, I would request more specific information on the type of speed control device being recommended. A speed cushion may be more appropriate for emergency responders trying get to a residential complex.
- Also, there is no discussion on how the drive access aisles will work with truck access and turning movements. Truck staging areas are not identified and conflicts with residential site access from staged trucks may occur if not accounted for in the design.

Item 2: On page 2, the report regarding the intersection of Langer Drive/Hwy 99W does not have any specific information regarding crash patterns, other than in Table 3 showing some information on angled crashes.

- An assessment of crash patterns and potential corrective safety measures will need to be provided.

Item 3: Page 10 has several references to the V/C ratio (including Table 2) of a standard V/C ratio of 0.99.

- The intersections within the report limits are located within the Sherwood Town Center boundary which impacts specific development code requirements and traffic mobility standards. An example of this is the Sherwood Town Center standard V/C ratio of 1.1 for traffic mobility during peak hour conditions. The report should be modified to reflect the Town Center Plan requirements.

Item 4: Page 33 of the report provided a queueing analysis that indicates that the eastbound left turn 95th percentile queue at Sherwood Boulevard/Langer Drive

intersection would not be adequately accommodated with the existing storage requirements. The City's TSP also identifies the intersection as having existing mobility and safety concerns (TSP project D24).

- The addition of the proposed development will place increased pressure on this intersections sub-standard functioning. A discussion and analysis of the proportionate share of the proposed development's impact towards the intersections redevelopment costs will need to be performed. Included will be the need to discuss how funding the proportionate share is to be accomplished.

Item 5: Page 34 of the report provided review of the multi-modal connectivity of the site and adjacent off-site areas. The report identified the pedestrian crossing of Langer Drive near the Hwy 99W access, but no assessment of the safety of the pedestrian crossing was provided.

- Evaluate the safety of the pedestrian crossing of Langer Drive in the vicinity of the site and determine if enhanced crossing is needed to provide safe pedestrian crossing access to/from the proposed site to the land uses north of Langer Drive.
- Also evaluate the pedestrian connectivity through Sherwood Plaza to Langer Drive along the southern edge.

Item 6: Typically, the latest versions of standards and manuals are used in analysis and report generation. The report is utilizing the Highway Capacity Manual (HCM) version 2000.

- Provide the rationale behind not using HCM 2010. The updated version may or may not have impacts on the signalized intersection analysis, however, the latest updated version should be used if no reasonable explanation can be given.

Item 7: Page 33 of the report indicates that Synchro was utilized in the deterministic queuing analysis in place of SimTraffic. The intension is to use Synchro and SimTraffic as companion models with Synchro being used to determine the macro level of LOS and delays, followed by using SimTraffic to simulate real world conditions. Synchro underestimates the queuing lengths as it does not take into account the spillback from insufficiently long turning lanes. The intersection of Langer Drive and Sherwood Boulevard is the identified major concern regarding impacts from the development's traffic.

- Provide an analysis of the Langer Drive/Sherwood Boulevard intersection using SimTraffic to determine the queuing impacts.

Please let me know if have any questions regarding these comments.

Sincerely,



Bob J. Galati, PE

City Engineer

Ph: 503-925-2303

Email: galatib@sherwoodoregon.gov

CC: Project Files



720 SW Washington St.
Suite 500
Portland, OR 97205
503.243.3500
www.dksassociates.com

MEMORANDUM (DRAFT)

DATE: March 25, 2016
TO: Bob Galati, City of Sherwood
FROM: Garth Appanaitis, PE
SUBJECT: Sherwood Multi-Family Development TIA Review
Sherwood On Call - Task 24

P11117-024

Per your request of March 4, 2016, we have reviewed the traffic impact analysis (TIA)¹ provided for the proposed 82 unit apartment development east of Sherwood Plaza. This review focused on the technical components of the analysis, which are summarized in the following sections. Based on our review of submitted materials, additional analysis components should be considered and clarification should be provided for the recommended improvements.

TECHNICAL REVIEW SUMMARY

This section provide a summary of our technical review, which is organized into significant items that should be addressed and additional review notes for consideration.

Review note: Comments are referenced according to physical page/figure number referenced in the report, which in some cases differ from the electronic (PDF) document.

Significant Items

The following items have significant potential to alter the finding of transportation impacts and related recommendations and should be addressed:

- Page 2 - There is a recommended consideration for speed bump installations along south and east side of Sherwood Plaza. However, such improvements may conflict with loading vehicles and truck maneuvers. Further, there is no description about the width of the drive aisle and if emergency response mobility will be maintained (20 foot minimum width).
 - Recommendation: Clarify the width of the drive aisle that will be maintained.
- Page 2 - The report recommends that the intersections of Langer Drive / 99W and Baler Way / TS Road should be monitored by the City for potential traffic control modifications if the historical safety problems persist.
 - Recommendation: The intersection of Baler Way / TS Rd will be revised with the construction of Washington County's MSTIP improvements, which will change traffic circulation in the area. This intersection should continue to be monitored for continued safety needs, as recommended in the report.
 - Recommendation: The intersection of Langer Drive / 99 W does not have any identified improvements and will have traffic added by the proposed development. No additional detail is provided indicating crash patterns, other than the portion of angle crashes noted in Table 3. An assessment of crash patterns and potential corrective safety measures should be provided.

¹ Memorandum: Sherwood Multi-Family Development Traffic Impact Analysis, prepared by Kittelson & Associates, Inc., December 4, 2015.

Bob Galati
Sherwood Multi-Family TIA Review (DRAFT)



Page 2 of 3

- Page 2 - The recommendations do not mention site frontage improvements along Langer Drive. The City of Sherwood TSP project D18 includes upgrades along the corridor. All improvements to the site frontage should be consistent with the ultimate improvements or, alternatively, the City may consider collecting fee in lieu of improvements.
 - Recommendation: Coordinate with City staff to determine proper frontage improvements or fee in lieu.
- Page 7 - While not noted, the site is located within the adopted Sherwood Town Center boundary, which impacts specific development code requirements and traffic mobility standards.
 - Recommendation: The development should be consistent with any specific requirements related to the Sherwood Town Center, including a volume-to-capacity (V/C) threshold of 1.1 for traffic mobility during the peak hour.
- Page 33 - The queuing analysis indicates that the eastbound left turn 95th percentile queue at Sherwood Boulevard / Langer Drive would not be adequately accommodated with existing storage. The proposed development would add additional vehicles to this existing safety deficiency. The TSP identified project D24, which would modify this intersection and the intersection of Sherwood Blvd / Century Drive.
 - Recommendation: Coordinate with City staff to determine funding mechanism for this improvements and necessary developer contribution (if any).
- Page 34 - A review of multi-modal connectivity was provided, including mention of an existing crosswalk on Langer Drive. Sherwood Code 16.106.080 F 5 requires:

“Proposed public improvements and mitigation measures will provide safe connections across adjacent right-of-way (e.g., protected crossings) when pedestrian or bicycle facilities are present or planned on the far side of the right-of-way.”

While acknowledgement of the existing crosswalk was made, no assessment of safety was provided.

- Recommendation: Evaluate the safety of pedestrians crossing Langer Drive in the vicinity of the site and determine if an enhanced crossing is needed to provide safe pedestrian access to/from the proposed site to land uses north of Langer Drive.
- Page 34 - The multi-modal connectivity does not describe pedestrian access to/from the southern edge of the site. Figure 2 (Page 6) shows the proposed site plan, which does not indicate sidewalks or designated pedestrian facilities through the site. It appears that pedestrians would have to walk through the drive aisle south of Sherwood Plaza to reach the retail located west of the site.
 - Recommendation: Clarify pedestrian access from to/from the southern edge of the site with the surrounding street system.
 - Recommended for consideration: The developer may consider internal pedestrian facilities that will provide accessible pedestrian connectivity between the south end of the proposed site and retail uses north of Langer Drive.

Other Review Notes

The following items were noted during the technical review and are not likely to significantly affect the analysis findings.

- Page 4 - The proposed development is assumed to be fully built during 2016. If this timeline is not feasible, additional background traffic growth may be needed, however background traffic growth was assumed to be relatively low (1.5 percent per year) and this is not likely to significantly change findings.
- Page 10 - The analysis methodology notes that 2000 Highway Capacity Manual procedures were used for the intersection capacity analysis. Where there are some limitations with the 2010 HCM procedures for

Bob Galati
Sherwood Multi-Family TIA Review (DRAFT)



Page 3 of 3

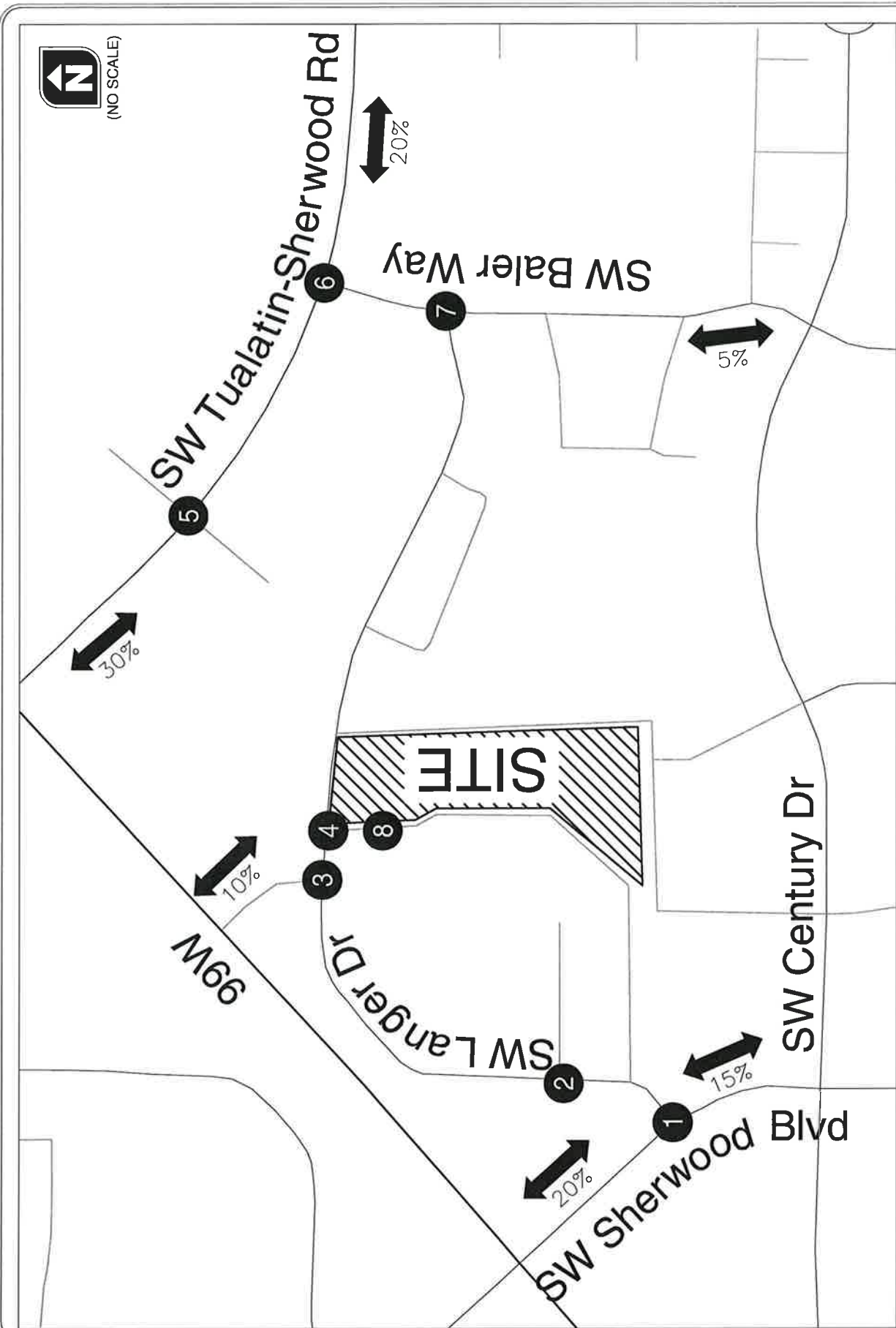
signalized intersections, it is unclear why the 2010 HCM analysis was not applied for the unsignalized study intersections.

- Page 10 - In the discussion of the operating standards, there is no mention of the Sherwood Town Center, which dictates the operating standards for the study intersections, all of which are located within the Town Center have a v/c threshold of 1.1 during the peak hour. All intersections are operating within this threshold.
- Page 13 - While not noted in the text, the high number of crashes at the theater access are due to rear-end crashes, which are common at signalized intersections and are likely to be corrected with the proposed removal of the traffic signal through Washington County's MSTIP project.
- Figure 9 /10 - The figures provide reasonable assumptions about changes to traffic circulation with the planned improvements on Tualatin-Sherwood Road.
- Page 33 - It appears that a deterministic queueing methodology (Synchro) was used in place of SimTraffic. While this is not preferred, it was not directly identified during scoping discussions.

If you have any questions, please call.

October 2015

Sherwood Multi-Family Development



ESTIMATED TRIP DISTRIBUTION PATTERN
SHERWOOD, OREGON
FIGURE 8

I HAVE READ AND UNDERSTOOD THE RULES FOR MEETINGS IN THE CITY OF SHERWOOD.

1. PLEASE INDICATE THE ITEM YOU WOULD LIKE TO SPEAK ABOUT

Date: 6/28/16 Agenda Item: Sherwood Plaza Apt. (From Agenda)

NOTE: If you want to speak to the Commission about more than one subject, please submit a separate form for each item.

2. PLEASE MARK YOUR POSITION/INTEREST ON THE AGENDA ITEM

Applicant: X Proponent: _____ Opponent: _____ Other: _____

3. PLEASE PROVIDE YOUR NAME AND ADDRESS IN A LEGIBLE FORMAT TO RECEIVE A COPY OF THE NOTICE OF DECISION ON THIS MATTER.

Name: DAVE ZIMMEL

Address: 15350 SW SEQUOIA PKWY

City/State/Zip: PORTLAND, OR 97229

Email Address: DZIMMEL@MERCURYDEV.COM

I represent: **Myself** X **Other** _____

4. PLEASE GIVE THIS FORM TO THE RECORDING SECRETARY PRIOR TO YOU ADDRESSING THE PLANNING COMMISSION. Thank you.

I HAVE READ AND UNDERSTOOD THE RULES FOR MEETINGS IN THE CITY OF SHERWOOD.

1. PLEASE INDICATE THE ITEM YOU WOULD LIKE TO SPEAK ABOUT

Date: 06/28/2016 Agenda Item: 139 only
not parking (From Agenda)

NOTE: If you want to speak to the Commission about more than one subject, please submit a separate form for each item.

2. PLEASE MARK YOUR POSITION/INTEREST ON THE AGENDA ITEM

Applicant: _____ Proponent: _____ Opponent: X Other: X

3. PLEASE PROVIDE YOUR NAME AND ADDRESS IN A LEGIBLE FORMAT TO RECEIVE A COPY OF THE NOTICE OF DECISION ON THIS MATTER.

Name: Valery Koyeman
Address: 16129 SW Holland Ln
City/State/Zip: Sherwood OR 97140
Email Address: Valko48@yahoo.com

I represent: **Myself** X **Other** _____

4. PLEASE GIVE THIS FORM TO THE RECORDING SECRETARY PRIOR TO YOU ADDRESSING THE PLANNING COMMISSION. Thank you.

I HAVE READ AND UNDERSTOOD THE RULES FOR MEETINGS IN THE CITY OF SHERWOOD.

1. PLEASE INDICATE THE ITEM YOU WOULD LIKE TO SPEAK ABOUT

Date: 6/28/16 Agenda Item: SP-16-04 Sherwood Plaza Apts (From Agenda)

NOTE: If you want to speak to the Commission about more than one subject, please submit a separate form for each item.

2. PLEASE MARK YOUR POSITION/INTEREST ON THE AGENDA ITEM

Applicant: Proponent: Opponent: Other:

3. PLEASE PROVIDE YOUR NAME AND ADDRESS IN A LEGIBLE FORMAT TO RECEIVE A COPY OF THE NOTICE OF DECISION ON THIS MATTER.

Name: BRIAN SHAHUM
Address: 15350 SW SEQUOIA PKWY PORTLAND, OR 97224
City/State/Zip: _____

Email Address: BSSHAHUM@MERCURYDEV.COM

I represent: **Myself** **Other**

4. PLEASE GIVE THIS FORM TO THE RECORDING SECRETARY PRIOR TO YOU ADDRESSING THE PLANNING COMMISSION. Thank you.

I HAVE READ AND UNDERSTOOD THE RULES FOR MEETINGS IN THE CITY OF SHERWOOD.

1. PLEASE INDICATE THE ITEM YOU WOULD LIKE TO SPEAK ABOUT

Date: 6-28 Agenda Item: _____ (From Agenda)

NOTE: If you want to speak to the Commission about more than one subject, please submit a separate form for each item.

2. PLEASE MARK YOUR POSITION/INTEREST ON THE AGENDA ITEM

Applicant: _____ Proponent: _____ Opponent: _____ Other: X

3. PLEASE PROVIDE YOUR NAME AND ADDRESS IN A LEGIBLE FORMAT TO RECEIVE A COPY OF THE NOTICE OF DECISION ON THIS MATTER.

Name: Tony Bevel
Address: 17036 SW Lynamby Way
City/State/Zip: Sherwood OR
Email Address: kybybevel@AOL.com

I represent: **Myself** X **Other** _____

4. PLEASE GIVE THIS FORM TO THE RECORDING SECRETARY PRIOR TO YOU ADDRESSING THE PLANNING COMMISSION. Thank you.

~~_____~~ Traffic problems.

I HAVE READ AND UNDERSTOOD THE RULES FOR MEETINGS IN THE CITY OF SHERWOOD.

1. PLEASE INDICATE THE ITEM YOU WOULD LIKE TO SPEAK ABOUT

Date: 6-28-16 Agenda Item: SHERWOOD PLAZA APARTMENTS (From Agenda)

NOTE: If you want to speak to the Commission about more than one subject, please submit a separate form for each item.

2. PLEASE MARK YOUR POSITION/INTEREST ON THE AGENDA ITEM

Applicant: X Proponent: X Opponent: _____ Other: _____

3. PLEASE PROVIDE YOUR NAME AND ADDRESS IN A LEGIBLE FORMAT TO RECEIVE A COPY OF THE NOTICE OF DECISION ON THIS MATTER.

Name: JIM TOPOREK

Address: 7332 SW 13TH DR UNIT C

City/State/Zip: PORTLAND, OR 97219

Email Address: JIM@STUDIO3ARCHITECTURE.COM

I represent: **Myself** X **Other** _____

4. PLEASE GIVE THIS FORM TO THE RECORDING SECRETARY PRIOR TO YOU ADDRESSING THE PLANNING COMMISSION. Thank you.

I HAVE READ AND UNDERSTOOD THE RULES FOR MEETINGS IN THE CITY OF SHERWOOD.

1. PLEASE INDICATE THE ITEM YOU WOULD LIKE TO SPEAK ABOUT

Date: 6-28-16 Agenda Item: Sherwood Plaza Apt 23 (From Agenda)

NOTE: If you want to speak to the Commission about more than one subject, please submit a separate form for each item.

2. PLEASE MARK YOUR POSITION/INTEREST ON THE AGENDA ITEM

Applicant: Proponent: Opponent: Other:

3. PLEASE PROVIDE YOUR NAME AND ADDRESS IN A LEGIBLE FORMAT TO RECEIVE A COPY OF THE NOTICE OF DECISION ON THIS MATTER.

Name: ERIC EVANS / EMERALD DESIGN

Address: 8285 SW CUMBUS AVE #180

City/State/Zip: BUTTE OR 97008

Email Address: BA eric@emerald-design.com

I represent: **Myself** **Other**

4. PLEASE GIVE THIS FORM TO THE RECORDING SECRETARY PRIOR TO YOU ADDRESSING THE PLANNING COMMISSION. Thank you.

I HAVE READ AND UNDERSTOOD THE RULES FOR MEETINGS IN THE CITY OF SHERWOOD.

1. PLEASE INDICATE THE ITEM YOU WOULD LIKE TO SPEAK ABOUT

Date: 10-25-16 Agenda Item: Sherwood Apt (From Agenda)

NOTE: If you want to speak to the Commission about more than one subject, please submit a separate form for each item.

2. PLEASE MARK YOUR POSITION/INTEREST ON THE AGENDA ITEM

Applicant: Proponent: Opponent: Other:

3. PLEASE PROVIDE YOUR NAME AND ADDRESS IN A LEGIBLE FORMAT TO RECEIVE A COPY OF THE NOTICE OF DECISION ON THIS MATTER.

Name: Annamarie Skimer

Address: 4205 SW Nimbus #180

City/State/Zip: Beaverton, OR 97005

Email Address: annemarie@emeriodesign.com

I represent: **Myself** **Other**

4. PLEASE GIVE THIS FORM TO THE RECORDING SECRETARY PRIOR TO YOU ADDRESSING THE PLANNING COMMISSION. Thank you.

SHERWOOD PLAZA APARTMENTS SP 16-05

Planning Commission

Public Hearing

June 28, 2016

6-28-16
Date

PC
Gov. Body

6a
Agenda Item

1
Exhibit #



Sherwood Plaza Apartments Proposal



99W

Proposed Sherwood Plaza Apartments Site

Sherwood Plaza

Sunfield Lakes Apartments

Vicinity Map

Sherwood Plaza on SW Langer Drive



Sherwood Plaza Site

© Google Maps

Arbor Terrace

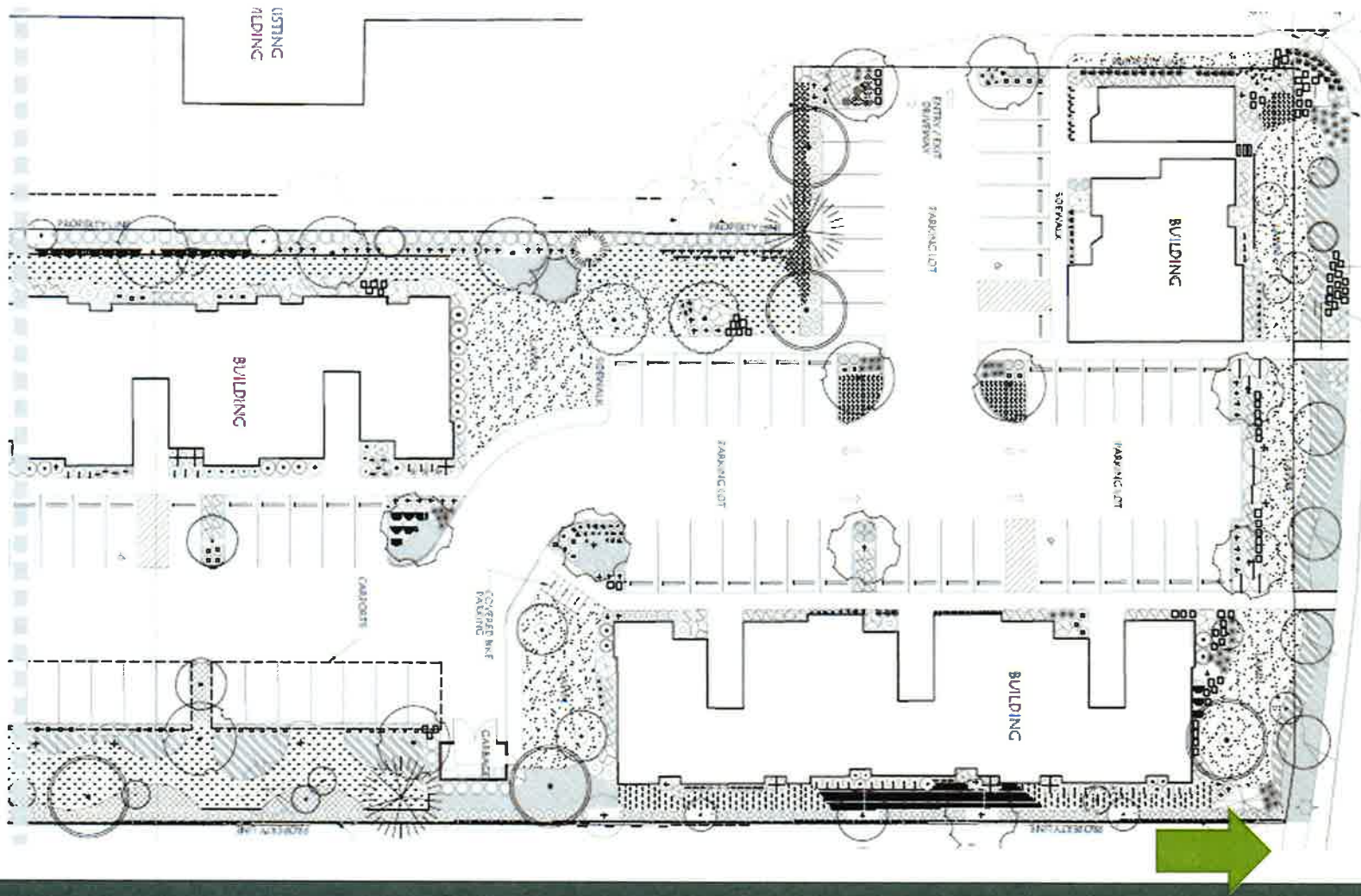
Sunfield Apartments



Sherwood Plaza Site

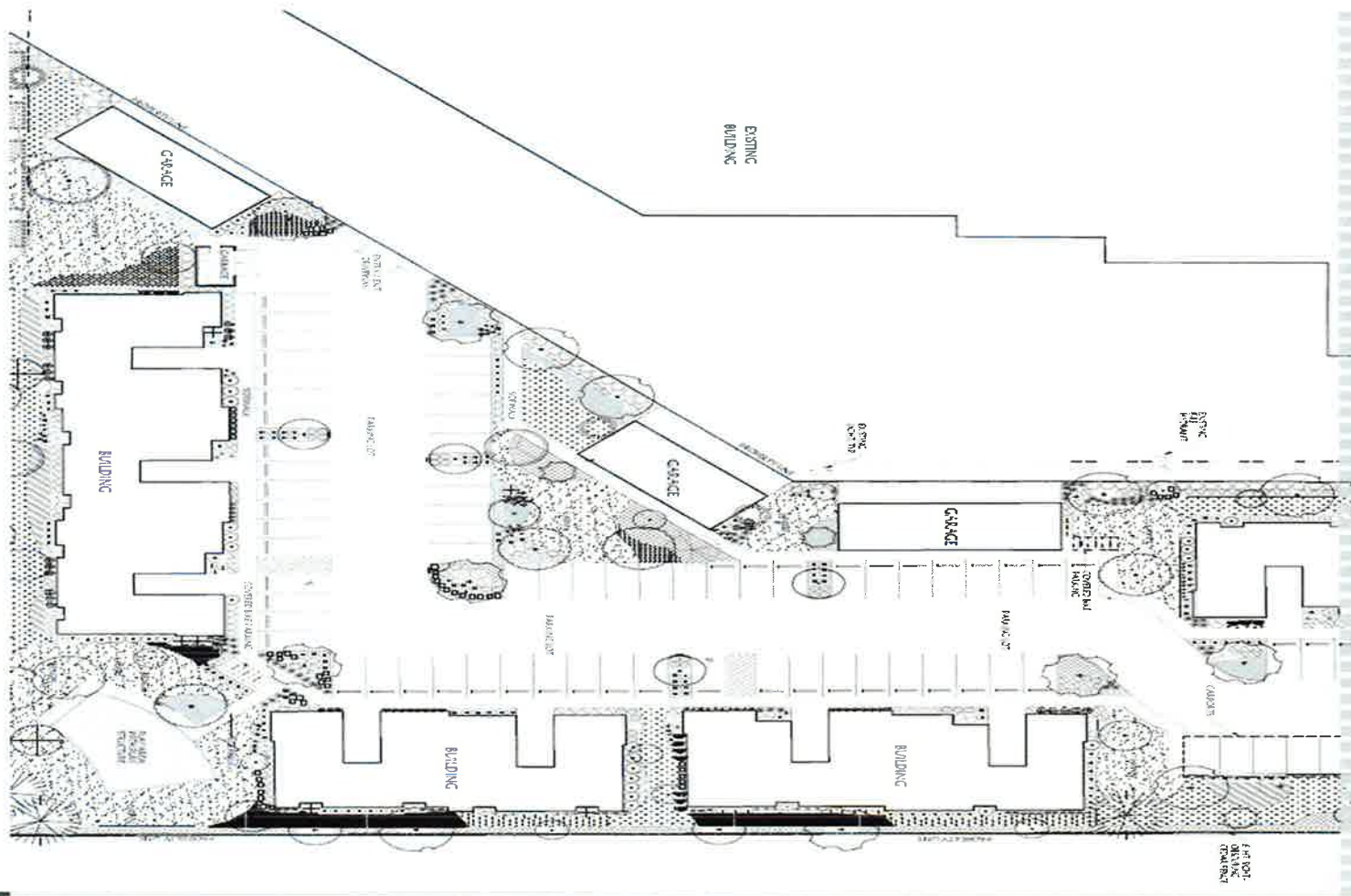
Sherwood Plaza Apt. Site Plan Proposal

- Construct an 82-unit apartment complex behind the Sherwood Plaza site
- 139 parking spaces
- 39,000 sq. feet of required Open Space Areas
- Access on SW Langer Drive at the easternmost entrance



Open Space Areas and Landscaping

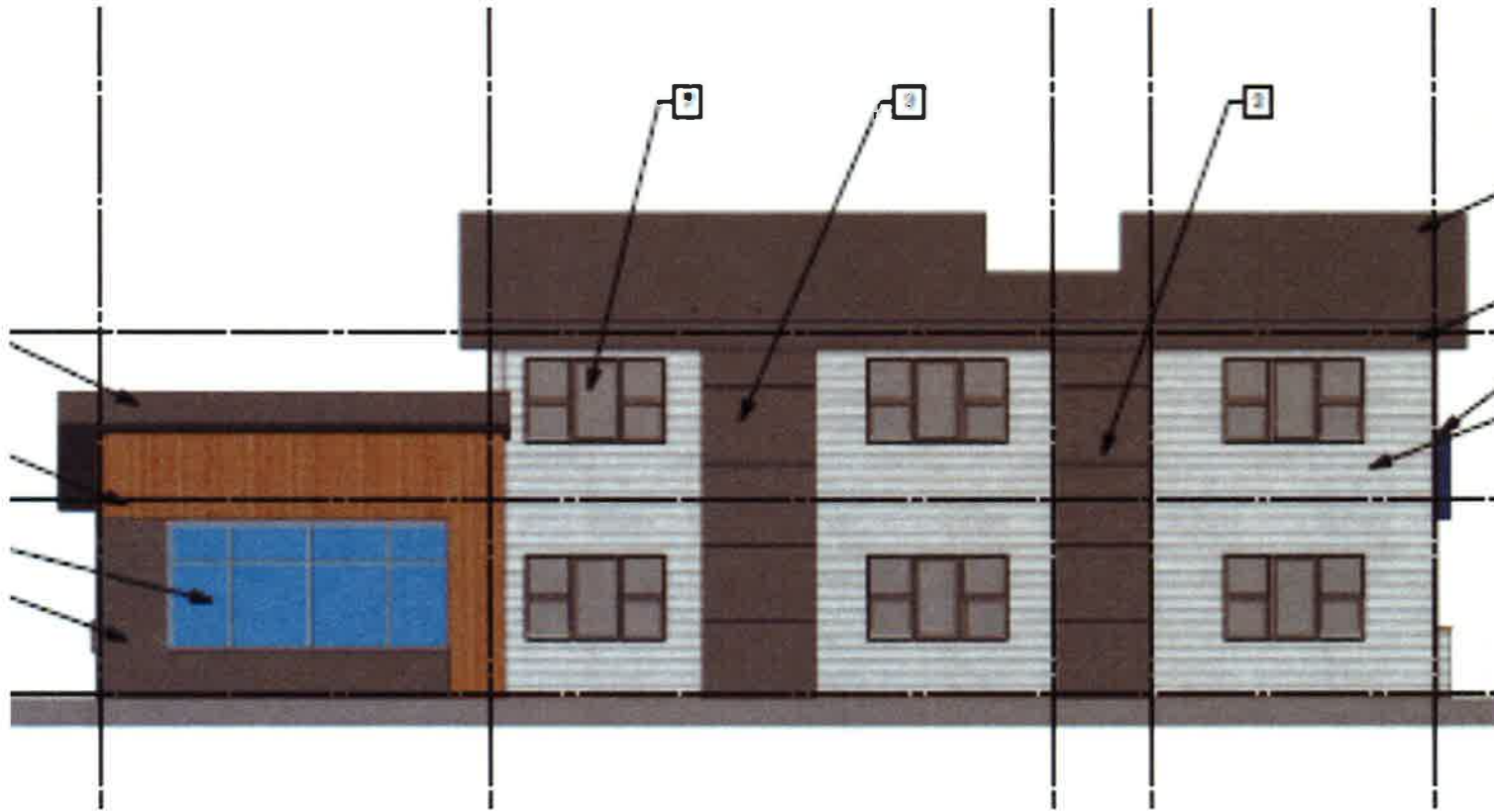
North area



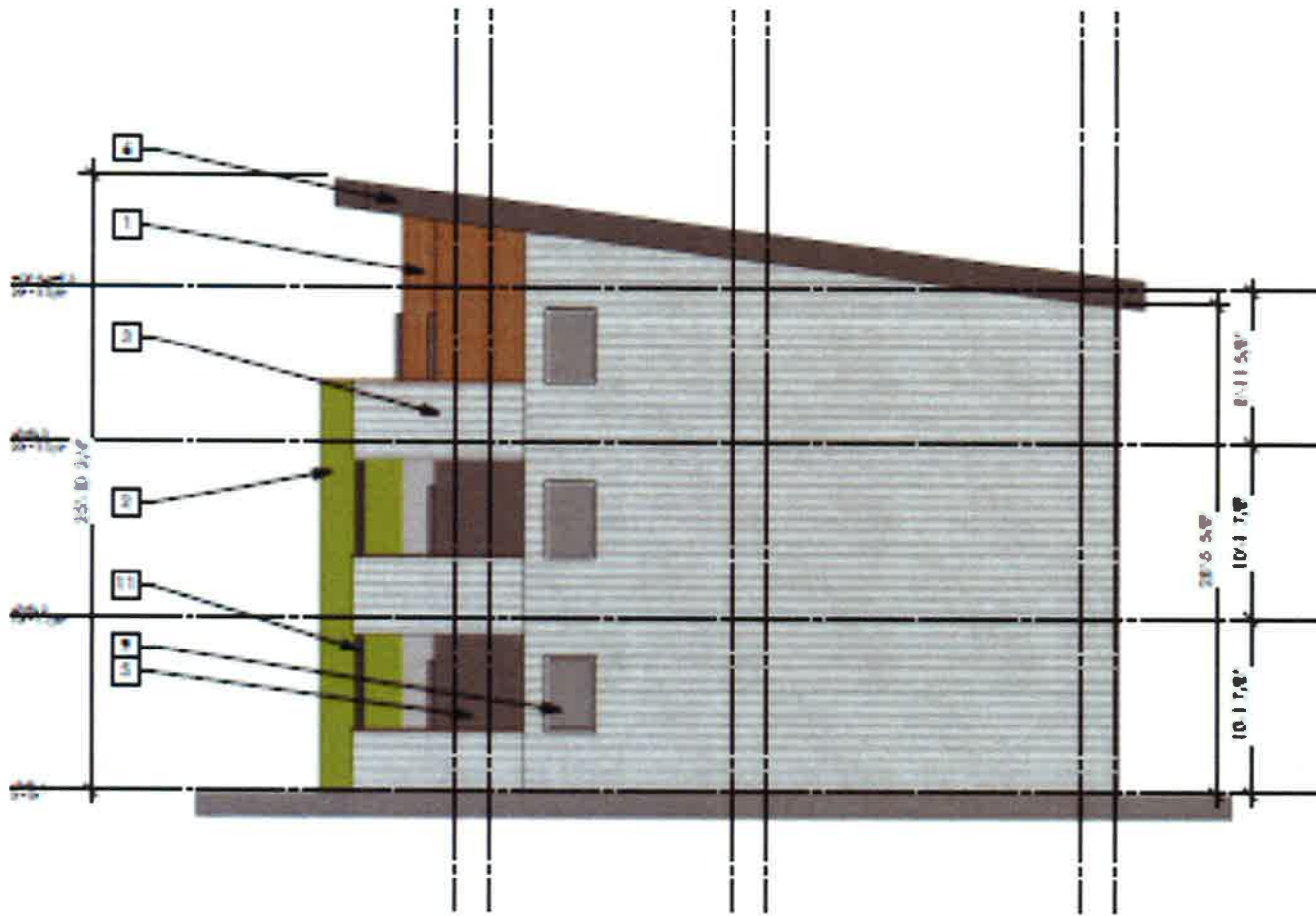
Open Space Areas and Landscaping



Multi-family Design Standards



Street Facing Elevation of Building 1



Street Facing Elevation of Building 2

Recommended Condition

1. Provide revised elevations for the northern sides of Buildings 1 and 2 which front SW Langer Drive clearly demonstrating how the buildings are located and oriented to the street.





Site Improvements



Apartment Site

Enhanced Pedestrian Crossing



Apartment Site

Enhanced Pedestrian Crossing



Pedestrian connection through neighborhoods



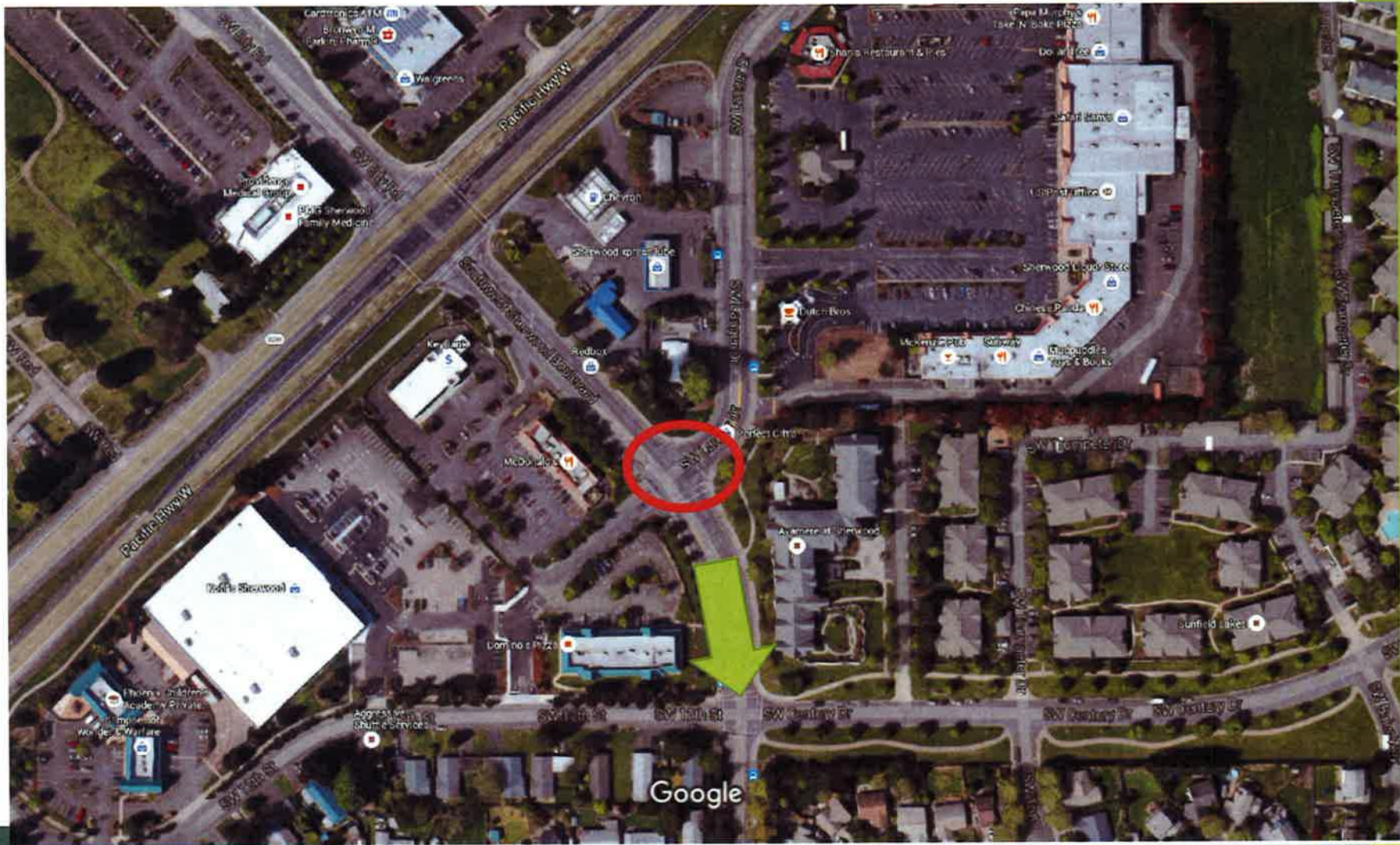


Pedestrian connection through neighborhoods



Other Staff Recommended Public Improvements

- Widen sidewalks to 8 feet
- Dedicate right of way to 39 foot half street
- Reconstruct the sidewalk ramp on east side of existing driveway to ADA standards
- Contribute \$7,423 for the SW Langer/ SW Sherwood intersection change



Intersection Change at SW Sherwood and SW Langer

Staff Report Recommendations

- **Recommend approval with the conditions discussed in the staff report**
- **Hold a public hearing**
- **Answer questions**

APPROVED MINUTES

City of Sherwood, Oregon
Planning Commission Meeting
June 28, 2016

Planning Commissioners Present:

Chair Jean Simson
Commissioner Michael Meyer
Commissioner Alan Pearson
Commissioner Rob Rettig

Staff Present:

Julia Hajduk, Community Development Director
Bob Galati, City Engineer
Brad Kilby, Planning Manager
Michelle Miller, Senior Planner
Kirsten Allen, Planning Dept. Program Coordinator

Planning Commission Members Absent:

Vice Chair Russell Griffin
Commissioner Chris Flores
Commissioner Lisa Walker

Council Members Present:

Jennifer Harris

1. Call to Order/Roll Call

Chair Jean Simson convened the meeting at 7:00 pm.

2. Consent Agenda

- a. February 9, 2016 Planning Commission Minutes approval
- b. May 24, 2016 Planning Commission Minutes approval
- c. June 14, 2016 Planning Commission Minutes approval

Motion: From Commissioner Alan Pearson to approve the minutes, Seconded by Commissioner Michael Meyer. All present commissioners voted in favor.

3. Council Liaison Announcements

None were received

4. Staff Announcements

Brad Kilby, Planning Manager said the 2016-17 Budget had been approved by City Council which included a position for a Senior Planner (for a limited duration) to complete the Comprehensive Plan update. He informed that there would be a public meeting regarding the Tannery Site Assessment Update on Wednesday July 13, 2016 at 6:30 pm and added that staff had presented proposed regulations for marijuana facilities to the Police Advisory Board. The Planning Commission will hold that hearing regarding marijuana facilities in Sherwood on July 26, 2016. No public comments have been received.

5. Community Comments

None were received.

6. New Business

a. Public Hearing – SP 16-04 Sherwood Plaza Apartments

Chair Simson read the public hearing statement and asked for any ex parte, bias or conflict of interest. None were received.

Michelle Miller, Senior Planner gave a presentation of the staff report (see record, Exhibit 1). She showed the location of the proposed action and stated it was zoned Retail Commercial (RC) and located within the Sherwood Town Center area. The proposed apartments would go on the vacant area of approximately 3.43 acres, behind the Sherwood Plaza shopping center. Ms. Miller said the property was surrounded by multifamily apartments and townhomes. Multifamily housing is generally allowed in Retail Commercial provided it is secondary to the primary use of commercial. Multifamily housing has fewer daily trips for traffic than the commercial plaza.

Ms. Miller said there were six different buildings proposed on the site, consisting of 82 apartment units, ranging from studio to three bedroom. She stated that the applicant proposed to gain access using the existing east driveway of the plaza with 139 parking spaces in the center of the site and garages that were not included in the calculation. There would be approximately 39,000 square feet of open space area. Ms. Miller reported that the applicant met the standards of the High Density Residential zone and other site plan requirements and no written comments had been received. She showed the proposed landscaping on the site consisting of street trees, a ten foot visual corridor along Langer Drive, and an active play area in the back corner of the site.

Ms. Miller noted that multifamily design standards required the primary entrance be face the street (Langer Drive) with articulation and interest for people passing by. She said Building 1 faced the parking area and Building 2 had a side elevation facing Langer Drive that fell short of the standard. Ms. Miller acknowledged that the site was constrained by being long and narrow. Staff recommended a condition for revised elevations for the northern sides of Buildings 1 and 2 and to orient the buildings to the street.

Ms. Miller stated one of the recommendations from the traffic study was to improve the crosswalk with a high visibility crossing and markings to help make people aware of the pedestrians crossing. She said the code required interconnected neighborhoods, but the applicant had proposed a 720 foot long fence along Trumpeter Drive. She said it cut off access from the adjacent neighborhood and requested a break in the fence between Buildings 2 and 4. Chair Simson asked if there was access between the play area and Century Drive. There was not one proposed.

Ms. Miller specified other recommended public improvements included widening the sidewalk along Langer Drive in front of the site, dedicating the right-of-way at that location to a 39 foot half street, reconstructing the sidewalk ramp on east side of existing driveway to ADA standards, and to contribute \$7423 (a proportionate share) for the SW Langer and SW Sherwood intersection change project. She explained that the current stoplight at Langer Drive and Sherwood Blvd was slated to move to the intersection of Century Drive and Sherwood Blvd. The fund would go toward moving the signal. Staff recommended approval with the conditions in the staff report.

Ms. Miller asked for the Commission to approve the following changes of the staff report. Page numbers are from the packet.

- Re-letter the sections on page 10
- Add condition from page 13 regarding the installation of a high visibility advanced pedestrian crossing warning signage and striping as F.5 to page 46.

- Add conditions from page 34 under Prior to Engineering plan approval as D.7, D.8 to page 45.
- Delete conditions 10 and 11 on page 46 and renumber section F.
- Add condition F.16 “If onsite fire protection is required, install backflow protection meeting Sherwood engineering standards” to page 47.

Motion: From Commissioner Alan Pearson to approve the suggested changes. Seconded by Commissioner Michael Meyer. All present planning commissioners voted in favor.

Chair Simson asked for questions from the Commission for staff.

Commissioner Pearson commented that there was only one access to the site. He was informed by staff that there was an exit at the front and the rear of the site.

Chair Simson commented on a lack of access to the south towards [Langer] Park near the play area. Ms. Miller confirmed that residents would have to go through the conditioned access and south to the park through the private drive at Sunfield Lakes Apartments.

Commissioner Rettig asked about the title report and said he was looking for the ownership and the required easements. He said the survey noted the title report was not used to prepare the map and there might be existing easements, conditions, or restrictions that could affect the title. He said the online title had numerous easements and was concerned that there may be easements running through the development. Ms. Miller responded that the required easements would be noted and verified during the Engineering plan approval. Bob Galati, City Engineer explained that plans submitted to the Engineering Department would contain easement and right-of-way locations and any private utilities easements; private utilities would be relocated as part of the project in cooperation with the private utility companies.

Commissioner Rettig commented that Washington County did not show the property with a lease boundary. He asked if setbacks would be off of the lease line or if it was considered one large parcel. Ms. Miller confirmed that it was one tax lot and that was how staff had reviewed it.

Chair Simson expressed concern for prospective residents if the owner chose not to renew the lease. She suggested a condition that residents be notified of the land lease. Ms. Miller responded that the City did not get involved in that level of detail for leases, but staff had verified the overall lease and that property improvements were being done through an agreement between the landholder and the long term lease holder. Mr. Kilby added that leases were private agreements and local government typically stayed away from getting involved in private agreements.

Chair Simson noted that her concerns were based on manufacture home parks that closed without warning to residents. Mr. Kilby informed the Commission that manufactured home parks were now protected. Julia Hajduk added that the buildings and amenities on the site would remain even if the lease was not renewed and it would be comparable to a new ownership situation.

To explain the crosswalk improvements, Garth Appanaitis, on call traffic engineer for the City from DKS Associates, came forward and explained that staff had requested the applicant provide the safe crossing of Langer Drive. The existing marked crosswalk west of the development had about six pedestrians using the crosswalk during the pm peak hour. Mr. Appanaitis said the applicant suggested about six additional pedestrians during the evening peak hours would be added from the development to total about twelve crossings during the pm peak hour. He said the applicant proposed and staff concurred some improvements for safety which included adding advanced signage and high visibility striping at the crossing. Mr. Appanaitis referred to Exhibit H (see planning record) and said the exhibit

showed examples of the crossing with white lines and no signage, the proposed additional advanced crossing signage, and pedestrian crossing sign at the crosswalk location. Mr. Appanaitis explained that the development was not reaching the threshold that would typically require additional improvements and additional enhancements would not be needed until about seventy crossings during the hour given the speed and traffic volumes on this roadway.

Commissioner Michael Meyer asked when the traffic study was completed and was told late October 2015. He commented that when the grocery store across the street reopened the number of pedestrians crossing the street might increase. Mr. Appanaitis replied that the traffic study included other similar crossings on Langer Drive which did not exceed ten crossing per hour.

Chair Simson commented there were five crossings east of the site and only one west of the site. She said she observed several people cross over a twenty minute period and commented on the bus stop on the other side of the road. She pointed out that this was in the City's Town Center which was intended to be pedestrian friendly; 82 additional units, with 82 people crossing seemed to warrant an additional crosswalk.

Mr. Appanaitis specified that approximately eighty units resulted in the ballpark of fifty trips during the pm peak hour. He said trip types included entering and leaving the site by car, by transit, and by walking, and biking. Only if everyone walked and went north, would it be approaching the threshold. Mr. Galati added that he had received numerous complaints about the existing crosswalk requesting improvements.

Chair Simson acknowledged the logic, but disagreed from a user standpoint. She said if even half of the people from the development used the crosswalk to the grocery store once in a while, they would want to walk straight across.

Mr. Galati stated that he would rather direct traffic in a location that was safe and could be controlled. He said the lamb chop coming off the highway was stop controlled and coming out of Sherwood Plaza was stop controlled. He said that meant there were two directions that could be controlled, and if signed properly the crosswalk would be visual enough. He thought the existing crosswalk was where it needed to be.

Commissioner Pearson said he had driven over the crosswalk many times and it was hard to see. He commented on the proposed improvements and said he hated to suggest more expensive improvements. Commissioner Pearson suggested more lighting to increase visibility. Mr. Galati said staff could ask the applicant to look at if the existing street lighting provided enough illumination to make the crossing safe. Commissioner Pearson commented that the crosswalk should be illuminated and brightly painted to make it clear and obvious that it was a crosswalk; it is human nature to jaywalk, but making an inviting crosswalk may entice more people to use it and would be safer for drivers.

Mr. Galati said the striping plan of parallel and diagonal lines was all that the City could ask for from this development. He said it would highly illuminate the crosswalk zone and the advanced signage warning would help. If people sped along Langer Drive, it was an enforcement issue; staff will always try to educate people to make sure they follow the traffic laws for safety reasons.

Chair Simson asked for applicant testimony.

Anne Marie Skinner, Planner for Emerio Design representing the applicant came forward and thanked staff for their assistance. She explained the application was for an 82 unit multifamily residential complex and said it was taking the best use of the undeveloped property and making it usable; beautifying the area for the city. She said the entire parcel was one parcel and the residential

portion was slightly over three acres. The rest of the property has been developed as commercial. Ms. Skinner said the applicant was grateful the Sherwood Code allowed the secondary residential use and felt it was a good transition between the townhouses, single family residential, and multifamily to the commercial use to the west. She said more commercial would be hard to see and would increase traffic more than the proposed residential.

Ms. Skinner said code requirements were either met or would be met as part of the development and through the construction, that there were many conditions specifically related to engineering requirements that could not be shown without the conditions of approval and the applicant was waiting for preliminary approval. She said they would be met through engineering plans that would be submitted for final approval.

Ms. Skinner submitted a packet of information and said the landscaping plans had been revised in the first four pages by the applicant to meet the conditions of approval C.3, C.5 - C. 9 (see planning record, Exhibit I). She reported that the street trees were from the approved street tree list and their landscape architect had added the reason for the removal of the trees as well as an arborist who was retained to assess the health of the trees to be submitted for the final approval. The landscape architect gave her opinion that some of the trees slated for removal are not in the best of health and should be removed regardless of development to preserve the health of the surrounding viable trees, but most of the trees slated for removal were for buildings or required improvements.

Ms. Skinner submitted six drawings in the packet of the active recreational open space in the southwest corner of the project at approximately 7000 square feet in area. She said the renderings visualized the types of activities in the park for the residents of the development. The remaining open space areas were interspersed throughout the development. Ms. Skinner stated the landscaping plan showed the plantings for both the active and passive open space areas and said the proposed fence along the east boundary would be nicely landscaped and made of Cedar. She remarked that the eight people in attendance at the neighborhood meeting were all opposed to any break in the fence and the applicant understood that technically nobody should be walking on the private drive that is not part of the same development. She stated the pedestrian connection was available along Langer Drive to the north, about 300 feet from where staff was proposing the break in the fence. She suggested that rather than walk through the development the residents adjacent could walk on the sidewalk, provided as part of the development, to access the commercial development.

Ms. Skinner communicated that the applicant felt the condition to orient the building to Langer Drive was met with the inclusion of the pedestrian plaza (see planning record, Exhibit I). The pedestrian plaza would front Langer Drive next to the two closest buildings and provide a front forecourt articulation that would tie them to Langer Drive. With the addition of the pedestrian plaza the applicant thought the condition had met the intent of the code and asked not to be required to re-orient Building 1 and offered to move the side entrance to the north end. The applicant offered to add windows to the north end of Building 2. Ms. Skinner repeated the request to remove the condition requiring the break in the fence.

Brian Shahum, from Mercury Development came forward and said the Zimel family had leased the property since 1973. He said a few people who attended the neighborhood meeting were present and mentioned the Kauffmans who voiced concerns for parking, security, and noise. He said parking was a very big issue as neighbors see a lot of cars not from their development parking there. He suggested a break in the fence would give access to people to park in the neighborhood taking away the limited parking they have. Mr. Shahum commented that it was important to listen to what neighbors were

asking and stated the fence would be done in a tasteful manner with something that would keep people out of their property and ensure the children's safety.

Mr. Shahum asked if the applicant could get a copy of the new conditions of approval. He was informed that the conditions of approval are noted throughout the report and relisted at the end. The conditions noted during the staff presentation were listed in the report, but not relisted at the end of the document. Staff would provide a new copy once the Commission made a decision which will include all of the conditions numbered correctly.

Mr. Shahum stated the SDC charges for the project would come in at \$1.5 million and said the \$7,423 to move the lighted intersection from SW Langer would adversely affect the shopping center with its right in/right out access. He said the Zimel family was not aware of the change and there had been opportunities for the information to be provided when the Dutch Bros. and the Taco Bell were developed. He said they would have voiced their opinion against it and did not feel it was something they should have to contribute to given how the intersection would negatively impact the center.

Dave Zimel, Portland Fixture, came forward with Eric Evans. Mr. Zimel said there was a challenge with the condition to dedicate right of way as the applicant was leasing the land and did not own the land. He did not have the authority to dedicate the ground, only the right to develop the property. He did not know if the landowner would agree to dedicate the land. Mr. Zimel stated that all of the options had been exercised for the ground lease which would end March 31, 2054.

Eric Evans, Emerio Design offered to amend the recommended condition at the bottom of page 32 of the packet to include "or adequate fee in lieu payment for the value of the land and improvements rather than a dedication or physical improvements acceptable to the city engineer, or a combination thereof".

The applicant had 11 minutes remaining and chose to save it for rebuttal.

Chair Simson called for public testimony.

Valery Koyfman, resident of Sherwood in the adjacent Arbor Terrace neighborhood, came forward and expressed concern for parking. He said for 82 units only 139 parking spaces were proposed. Mr. Koyfman noted that this was less than two parking spaces for each apartment and said parking overflow would end up in his neighborhood which is already overloaded. He said residents were worried about parking and increased traffic which meant increased noise and air pollution.

Tony Bevel, Sherwood resident reminded the commission of a fatality involving an individual crossing between the Walmart and Target sites. He said the new shopping center was well planned where it was determined there were enough crosswalks. Mr. Bevel agreed with Chair Simson in the need to push for an additional crosswalk between the shopping center to the north and the new apartments for pedestrian safety. He noted that it will cost the City a lot more money for the new crosswalk between Walmart and Target and had already cost a number of people a lot of heartache. He suggested doing it right and demanding something better than what was proposed.

No other testimony was received.

The applicant returned for rebuttal. Mr. Shahum commented that the concerns for parking enhanced the argument not to have a break in the fence on the eastern border, because the neighbors were asking that there not be one. He responded that the parking space requirement for the complex was 129 spaces which had been increased to 139 spaces and the parking numbers did not take into consideration the 17 garage spaces that would be available.

Ms. Skinner added that the applicant did not have any objections for the two requirements for the crosswalk. She said a commercial development would add more noise and air pollution than the proposed residential. Mr. Shahum noted that there were bicycle racks above the required at the site as well.

Chair Simson asked for questions for the applicant from the Commission.

Commissioner Meyer commented that from a citizen's point of view it did not feel great having the fence up. One of the nice things about Sherwood was being able to walk between neighborhoods. He said the proposal was effectively a neighborhood within the community and he saw the fence as a barrier. He was not unfeeling toward the residents of the adjacent neighborhood, but noted they were not fenced in either.

Mr. Shahum responded the applicant wanted to put a quality product out there and he had met with a number of property management companies who indicated that security was a major issue. He said last year there were people illegally dumping their Christmas trees on the site because they had access and they wanted to put in something that was secure for the people who would live there and for the neighbors. Mr. Shahum added that he heard comments at the neighborhood meeting about people selling drugs out of nearby apartments and the subsequent police presence. He said they wanted a high end apartment complex without that element that Sherwood could be proud of. He stated that direct access into the complex would have people parking on nearby streets and loitering.

Chair Simson noted there were open spaces created for the new community, but that there was no connection to the rest of the community. Mr. Shahum replied that the requirement for open space was 29,800 square feet, but 33,317 square feet was included; over 10% more than required. He signified that it was a great way to beautify the empty field and give something to the neighborhood and town.

Mr. Zimel commented that he did not see the benefit of connecting the apartment complex because the back of the shopping center was not a place where someone would want to cross over to. He preferred seeing the residents go to Langer Drive to access the shopping center, because there is no way to pass through the buildings and the only thing an opening in the fence would affect was the small kids. Mr. Zimel pointed out that the private drive was dark at night and an open access was an easy place for someone to come in and do something they should not, putting kids at risk. He did not think it was actually connecting to something.

Chair Simson noted that a southern opening that she asked about near the play area would connect to the Langer Park. Ms. Miller added that Sunfield Lakes Apartments were quasi-public because it was multifamily housing and it would be difficult to challenge pedestrians walking through. Ms. Miller said Chair Simson's sentiment was supported in the code in a number of places; onsite circulation, perimeter buffering, block length requirements.

Chair Simson pointed to the pedestrian plaza design provided by the applicant. She said the plaza was intended to tie the development to the community, but the code says the buildings needed to be oriented to the community. She commented that there was a similar style building on 185th Avenue north of Baseline Road. The applicant offered to add windows to that side of the building and said what was created with the pedestrian plaza was similar to other new development in Sherwood; near Walmart there are not main entrances to Chipotle or Mod Pizza, but plaza areas on the side. Chair Simson noted that even though the main entrance was not at the street, it looked like you could walk in one of the doors and there was articulation and interest that did not make you feel like you are looking at the back of the building. She said Building 2 looked like the side of a blank wall.

Jim Toporek, Studio 3 Architecture came forward and noted that there was undulation on the back of the Building 1, but appeared blank on the 2D drawing. Building 2 had balconies jutting out and could be amended to add color or movement in the wall. Mr. Toporek stated he did not understand the requirement; he saw this stipulation in big cities like Portland, but SW Langer was not an active pedestrian thoroughfare with retail to the west and a large parking buffer between the sidewalk and the retail. There was a retail building to the north, and a fifteen foot landscape buffer with a fence at the townhomes. Mr. Toporek said with the parking to the interior of the site, residents of Building 1 would have to park and walk around to the front with their groceries. In other situations where the developer was force into that situation the units received less rent.

Mr. Toporek pointed out that a main entry faced toward the street was to have eyes on the street, but in this case they wanted eyes on the parking and the children playing in the open watching over the community. He stipulated that the proposed pedestrian opened to the sidewalk for bicycle and transit facilities; it allowed people in and acted as a place for pause along the sidewalk. He concluded that it was difficult to flip the building around for the reasons stated.

Chair Simson asked about the articulation on Building 1. Mr. Toporek explained that the articulation happened with the change of materials and in two foot movements.

Commissioner Pearson asked staff why there was a requirement for the break in the fence. Ms. Miller responded that it was recommended in the code and the purpose was to encourage circulation throughout neighborhood; provided an opportunity to walk the neighborhood, get more eyes on the street, and was safer than an isolated community.

Commissioner Pearson replied that he understood and agreed with it, but that the Commission had also heard from the neighbors that the break was not wanted with valid concerns. He said he understood security and when he heard from the neighbors and the applicant concerns for security, he agreed. A fence with a great hole voided the security. He understood the desire for communal interaction, but was more security conscious.

Motion: From Commissioner Alan Pearson to rescind that portion of the requirement, Seconded by Commissioner Rob Rettig. Commissioners Pearson and Rettig voted in favor. Chair Simson and Commissioner Meyer voted against. Motion failed.

Chair Simson returned to the concern about the articulation for Buildings 1 and 2. She said with the articulation as described on Building 1, in combination with the plaza, the applicant was coming closer, but that Building 2 did not have any articulation in 75% of the elevation.

The applicant asked if they could suggest changes to the design. Chair Simson agreed, implying it was difficult to gain staff agreement on the fly and suggested the hearing could be continued. Mr. Shahum asked if Building 1 was acceptable to the Commission and they could concentrate on Building 2. Chair Simson received a consensus from the Commission. Commissioner Meyer commented that the Commission was looking for an interesting architectural look and was not sure the entrance needed to be moved to face the street.

Mr. Kilby proposed a recess before the closing the public hearing. He suggested a motion to change condition C.2 to memorialize the Commission's consent.

Motion: From Commissioner Alan Pearson to change condition C.2 to Building 2 only, Seconded by Commissioner Michael Meyer. All present commissioners voted in favor.

Julia Hajduk clarified that if the hearing was continued there may be different planning commissioners present at the next hearing who may have additional concerns.

Chair Simson addressed a concern from the neighborhood meeting regarding the trash enclosure by verifying that Pride Disposal needed the enclosure in the proposed location to allow garbage truck access. She commented that noise from play areas was inherent to development and reasonable noise from people living in the community was acceptable.

Chair Simson called for a recess at 8:50 pm and reconvened at 8:57 pm. The applicant asked for a two week continuance.

Motion: From Commissioner Michael Meyer to accept the continuance request, Seconded by Commissioner Rob Rettig. All present commissioners voted in favor.

The hearing was continued to July 12, 2016. Chair Simson said the items of concern may change given the makeup of the Planning Commission on that date.

Mr. Shahum commented on the crosswalk and pointed out that DKS Associates and Kittelson & Associates studied the trips and everything was below any requirements for further pedestrian sidewalks. The applicant wanted to follow their expert opinions. He said there was a lot of discussion between Engineering Department staff and information was provided to meet the requirements.

Chair Simson asked if other commissioners felt strongly about an additional crosswalk.

Commissioner Pearson commented that he did not see how adding another crosswalk would appreciatively improve the situation, but would cost more instead. He would rather see the money spent lighting the area. Mr. Shahum offered to review the existing lighting and follow the guidelines of the Engineering Department.

Commissioner Pearson commented on a lighted stop sign and warning sign on Sunset Blvd. He said he had concerns with small signs high and to the right of the roadway. He said the lighted stop sign added an element of safety.

Chair Simson commented that when staff mentioned a high visibility pedestrian crossing she envisioned flashing yellow LEDs that enabled people to cross. She said that would give people a place to safely cross.

Commissioner Meyer said there was flashing yellow lights at the corner of Pine Street and Railroad Street. He said he agreed with the City's traffic engineer to enhance an area that was more easily controlled instead of add another crossing. From a human perspective people would cross the road wherever they wanted to. He was in favor of directing them to something more visible.

Chair Simson said the Commission would like more information for the crosswalk, Building 2, and easement information, if available. She commented that conditions regarding engineering specifications about sewer, water and sanitary were in every application the Commission reviewed and did not detract the Commission from being able to approve the application.

7. Planning Commissioner Announcements

Commissioner Pearson asked about information he had received from the Smart Growth Conference. Mr. Kilby informed the commission that staff had scanned the information given to him by Commissioner Pearson and he would forward the information via email.

Mr. Kilby asked Mr. Galati to give details on the Capital Improvement Plan. Each commissioner had received a copy. Mr. Galati explained that a Capital Improvement Plan was required by the state and stated the plan contained all the projects identified in each of the city's master plans; water, sewer, parks, and transportation.

8. Adjourn

Chair Simson adjourned the meeting at 9:17 pm.

Submitted by:

Kirsten Allen

Kirsten Allen, Planning Department Program Coordinator

Approval Date: September 13, 2016