



***Land Use Applications for Conditional Use &  
Community Service Use***

Submitted to City of Milwaukie Planning Department

**February 2016**

## Northwest Housing Alternatives Project Team

**Applicant:** Northwest Housing Alternatives  
Stephen McMurtrey, Housing Development Director  
2316 SE Willard Street  
Milwaukie, Oregon 97222  
503.654.1007 ex. 122  
mcmurtrey@nwhousing.org

**Architecture:** MWA Architects  
Bill Lanning, AIA, Architect/Director of Housing  
70 NW Couch Street, Suite 401  
Portland, Oregon 97209  
503.973.5151  
blanning@mwaarchitects.com

**Civil Engineering:** KPFF  
Joshua Lighthipe, PE, LEED, Associate  
111 SW 5<sup>th</sup> Avenue, Suite 2500  
Portland, OR 97204  
503.542.3860  
Josh.lighthipe@kpff.com

**Landscape:** 2.ink Studio  
Christopher Olin, Associate  
107 SE Washington Street #228  
Portland, OR 97214  
503.546.4645  
colin@2inkstudio.com

**Traffic Analysis:** Kittelson & Associates, Inc.  
Matt Hughart, Associate Planner  
610 SW Alder St  
Portland, Oregon 97205  
503.535.7425  
mhughart@kittelson.com

## **Application Summary Information for Northwest Housing Alternatives**

<b>Subject Tax Lots:</b>	11E36BC0 6000 (under purchase contract)
<b>(All owned or under purchase contract by NHA)</b>	11E36BC0 6100
	11E36BC0 6200
	11E36BC0 6300
	11E36BC0 6400
	11E36BC0 6500
	11E36BC0 6600
	11E36BC0 6700
	11E36BC0 6800
	11E36BC0 6900
<b>Total NHA Site Size:</b>	1.70 acres
<b>Current Comprehensive Plan Designation:</b>	Mixed Use/High Density Residential
<b>Current Zoning:</b>	R-2
<b>Application Submitted for:</b>	Conditional Use approval Community Service Use approval

**TABLE OF CONTENTS**  
**Land Use Applications for Northwest Housing Alternatives**

**Section 1: Project Description & Requested Approvals..... 1**  
**Section 2: Project Background ..... 2**  
**Section 3: Conditional Use - Office ..... 6**  
**Section 4: Community Service Use - Shelter ..... 11**  
**Section 5: Base Zone Standards - R2 ..... 15**  
**Section 6: Public Facilities ..... 15**  
**Section 7: Off-Street Parking ..... 20**  
**Section 8: Summary ..... 26**

**List of Exhibits**

Exhibit A: Plan Set

- Sheet 1.1 Existing Site Conditions A
- Sheet 1.2 Existing Site Conditions B
- Sheet 1.3 Landscape Concept Plan
- Sheet 1.4 Site Plan
- Sheet 1.5 Site Lighting Plan
- Sheet 1.6 Lighting Cut Sheets
- Sheet 2.0 Floor Plan, Office
- Sheet 2.1 Floor Plan, Office
- Sheet 2.2 Floor Plan, Shelter
- Sheet 3.0 Office Elevations
- Sheet 3.1 Shelter Elevations
- Conceptual Designs

Exhibit B: Pre-Application Summary Notes

Exhibit C: Traffic Impact Analysis

Exhibit D: Bicycle Parking Product Sheets

## Section 1: Project Description & Requested Approvals

Northwest Housing Alternatives (NHA), Oregon's largest non-profit developer of affordable housing, has had its corporate offices in Milwaukie for nearly 30 years. In that time, the company has grown both in Milwaukie and statewide. Locally, the NHA campus currently consists of two offices buildings, the Annie Ross Homeless Shelter for families, and nine units of affordable rental housing. Statewide, NHA now has a portfolio of over 1,800 affordable apartments for Oregonians with low incomes and special needs.

As a growing company, NHA intends to redevelop its Milwaukie campus. Redevelopment is slated to begin in 2017 and would involve demolition of all existing structures and construction of new buildings to accommodate NHA's integrated needs for office space, a new shelter and affordable housing within a cohesive campus. The primary elements of NHA's plan for redevelopment include the following (see Exhibit A: Site Plan).

- *An office building that meets NHA's staff needs and serves as a community asset.* The new office space will accommodate staff growth that has occurred over the last decade and is projected to serve NHA's administrative needs for at least the next 20 years.
- *A new building for the Annie Ross House Shelter that provides families experiencing homelessness with enhanced individual living quarters.* This arrangement will afford shelter residents more privacy than the current building, which only has small bedrooms and shared bathrooms.
- *Affordable rental housing options for families.* These apartments will be designed to be compatible with the existing neighborhood and consistent with the City of Milwaukie's multi-family design standards. The nearby MAX light rail station will provide NHA residents with convenient transit access to employment and educational opportunities throughout the Metro region.

This redevelopment project will allow NHA to simultaneously improve its office space, upgrade the Annie Ross House Shelter, increase Milwaukie's affordable housing options and support transit-oriented development close to the Lake Road light rail stop, which is near the intersection of Lake Road and Main Street.

The NHA site has a Mixed-Use/High Density Residential Comprehensive Plan designation and is zoned R-2. In order to implement the campus redevelopment, NHA will need the following land use approvals from the City:

- Conditional Use (CU). An office use is allowed in the R-2 zone with Type III conditional use (CU) approval.
- Community Service Use (CSU). The Annie Ross House Shelter is considered a "temporary or transitional facility" and is allowed with Type III Community Service Use (CSU) approval.

The new multifamily affordable housing units are permitted outright in the R-2 zone and will ultimately require Development Review approval. NHA intends to meet the clear and objective design standards for multifamily development, as established in Section 19.505.3(C), and will therefore be subject to a Type I Development Review process.

This application package combines the Type III CU and CSU applications for the office and shelter uses. It's important to note that this application **does not** include the Type I Development Review request

for the multifamily units. Because NHA plans to meet the clear and objective standards for multifamily development, the Type I Development Review application will be submitted at a later date, separate from the CU and CSU Type III applications. Information about the multifamily development is included in this application package to the extent that it is part of the overall NHA campus redevelopment and provides context for the CU and CSU uses in terms of parking, access, transportation and utility impacts, open space and other site layout elements.

## **Section 2: Project Background**

**Office Space.** No previous land use history for the NHA office building was able to be located; the city does not have any record of past approvals. The existing office building was originally owned by the North Clackamas School District and used by the district as an administrative office. NHA purchased the building and associated parking area from the district in 1987 and has been using it as its primary office space since that time. There are currently 35 employees (includes full and part time employees) that work on the NHA campus; employees are not typically all on site at the same time because work is intermittent and includes night shifts. Hours of operation for the main office are Monday through Friday, 8:30 AM to 5:00 PM.

The proposed new office has been designed to accommodate approximately 50 employees; this will serve existing employees and future anticipated growth in employees over the next 20 years.

**Annie Ross House Shelter.** The Annie Ross House Shelter was originally approved as a Community Service Use by the city in July 1985. Conditions of approval for the original use included required fencing, installation of an alarm system, and widening the access from Willard Street to meet city standards. In addition, conditions of approval required that NHA staff be present at all times on the site and that all potential clients for the shelter be screened at an off-site location.

The shelter in its current capacity can house up to five families; use is intermittent and is based on need and referrals through Clackamas County. Potential shelter residents are screened by Clackamas County at an off-site location before they are admitted to the shelter. Residents typically stay at the shelter for about 35 days before moving to a more permanent housing situation. The shelter also has space for a food pantry that serves residents on the campus. Surplus food is shared with other providers in Clackamas County and made available to residents in other NHA housing units. In addition, the shelter has a separate area for staff on duty. Staff is on duty at the shelter daily from 8:00 AM until 10:00 PM (or 11:00 PM on weekends), at which point the shelter is locked for the night (shelter residents must be back in the shelter by curfew). During nighttime, there is a staff security monitor on site who regularly patrols the campus, including the shelter. The night monitor lives on campus. Any school-age children living at the shelter are required to go to school during regular school hours.

The proposed new shelter will function in the same manner as the existing shelter, as described above, but will be large enough to accommodate eight families in separate living quarters (each with their own bathroom and limited food preparation capacity).

Per the Milwaukie Zoning Code, Section 19.201 Definitions, the shelter is considered a “transitional facility”, which is defined as follows:

*“Temporary or transitional facility” means a facility which may provide temporary or transitional services to families or individuals, including lodging where the average stay is 60 days or less. Such facilities shall be classified as community service uses and may include shelters, community counseling centers, rehabilitation centers, and detention and detoxification facilities.”*

Per City staff, the shelter living quarters are not considered dwelling units because they are defined as a type of Community Service Use and they do not have full kitchens. Therefore, the shelter does not count towards density standards applicable to the site.

**Previous Zone Change Request.** In 2013, NHA requested a zone change from the City of Milwaukie in order to rezone their properties to R-1-B. Both zones implement the same Comprehensive Plan designation (Mixed-Use/High Density Residential); however, the R-1-B zone would allow more intense levels of development than the existing R-2 zone. The zone change was approved by the Planning Commission but appealed by citizens who were concerned about the potential for development that might be perceived as incompatible with the surrounding neighborhood. City Council ultimately upheld the appeal and denied the zone change request. In an effort to recognize those previous community concerns, NHA is now proposing development at levels consistent with the existing R-2 zone. This includes fewer affordable housing units and a smaller office building than were originally considered. Proposing this project under the current R-2 zoning also allows the city to review the office building as a Conditional Use (under the R-1-B zoning, the office would be permitted outright).

**Neighborhood Outreach.** Starting in 2012, NHA began quarterly open house meetings to re-introduce NHA to the surrounding community. Open house meetings are designed to discuss neighborhood safety and to create effective lines of communication between NHA and immediate neighbors. During these meetings, informal discussions of NHA's plans to renovate its campus occurred. Additionally, NHA has attended meetings with the Lake Road Neighborhood Association and the Historic Milwaukie Neighborhood District Association (Historic Milwaukie NDA) to discuss campus redevelopment plans. In 2015, as NHA began to solidify its approach for a revised application under the existing zoning, NHA met with the Historic Milwaukie NDA twice and met informally with their board president once. At these meetings, NHA discussed plans for moving forward with the campus redevelopment. NHA has discussed the site plan and provided concept materials with architectural features of the proposed campus layout, including massing studies and 3-dimensional renderings. As NHA has continued to refine drawings, scope and timelines for application submittal, they have reached out to the Historic Milwaukie NDA and requested addition to their agenda for their next available neighborhood meetings. Most recently, NHA met with the Historic Milwaukie NDA on November 9, 2015.

Figure 1: Site and Surrounding Zoning

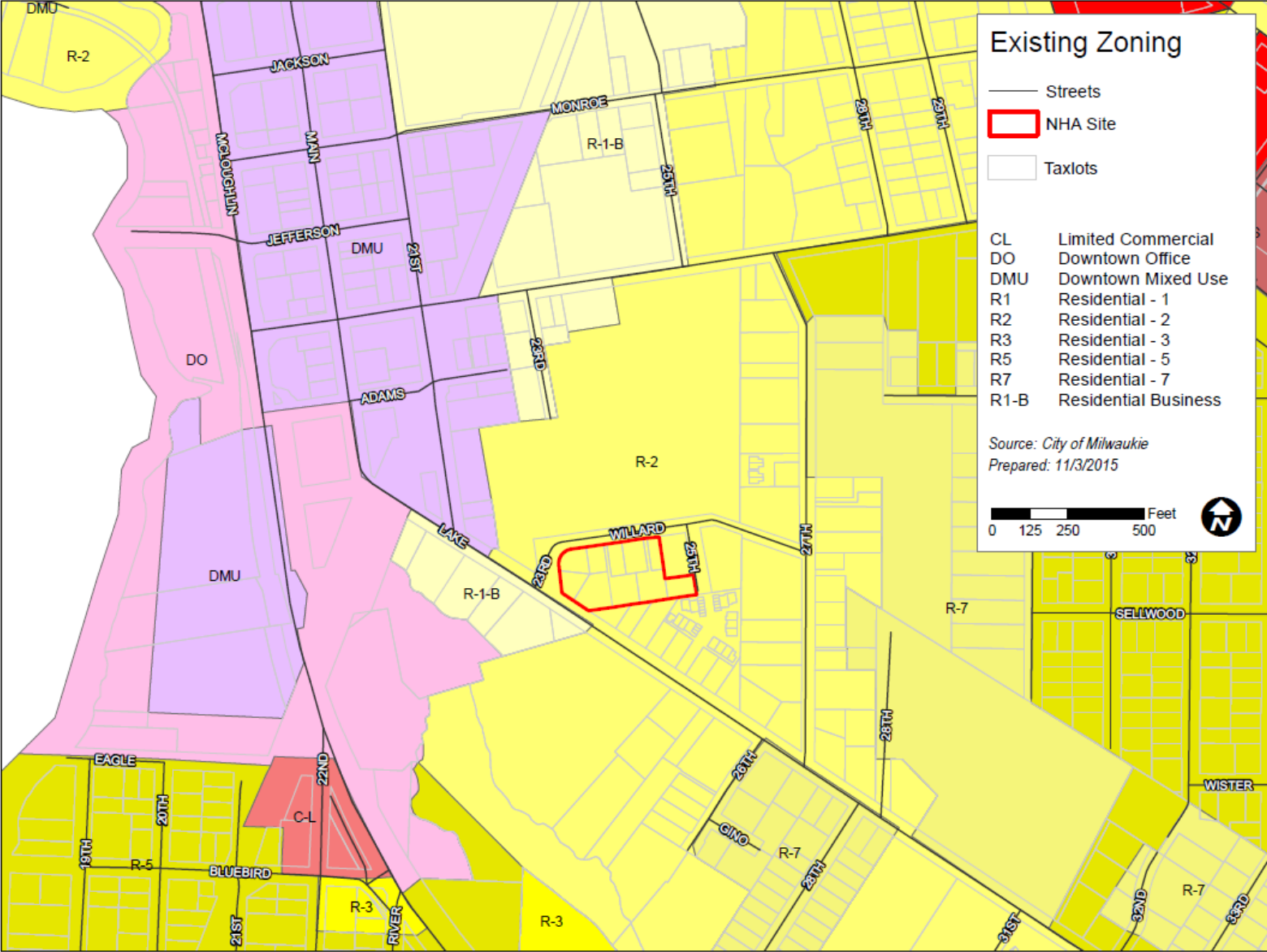
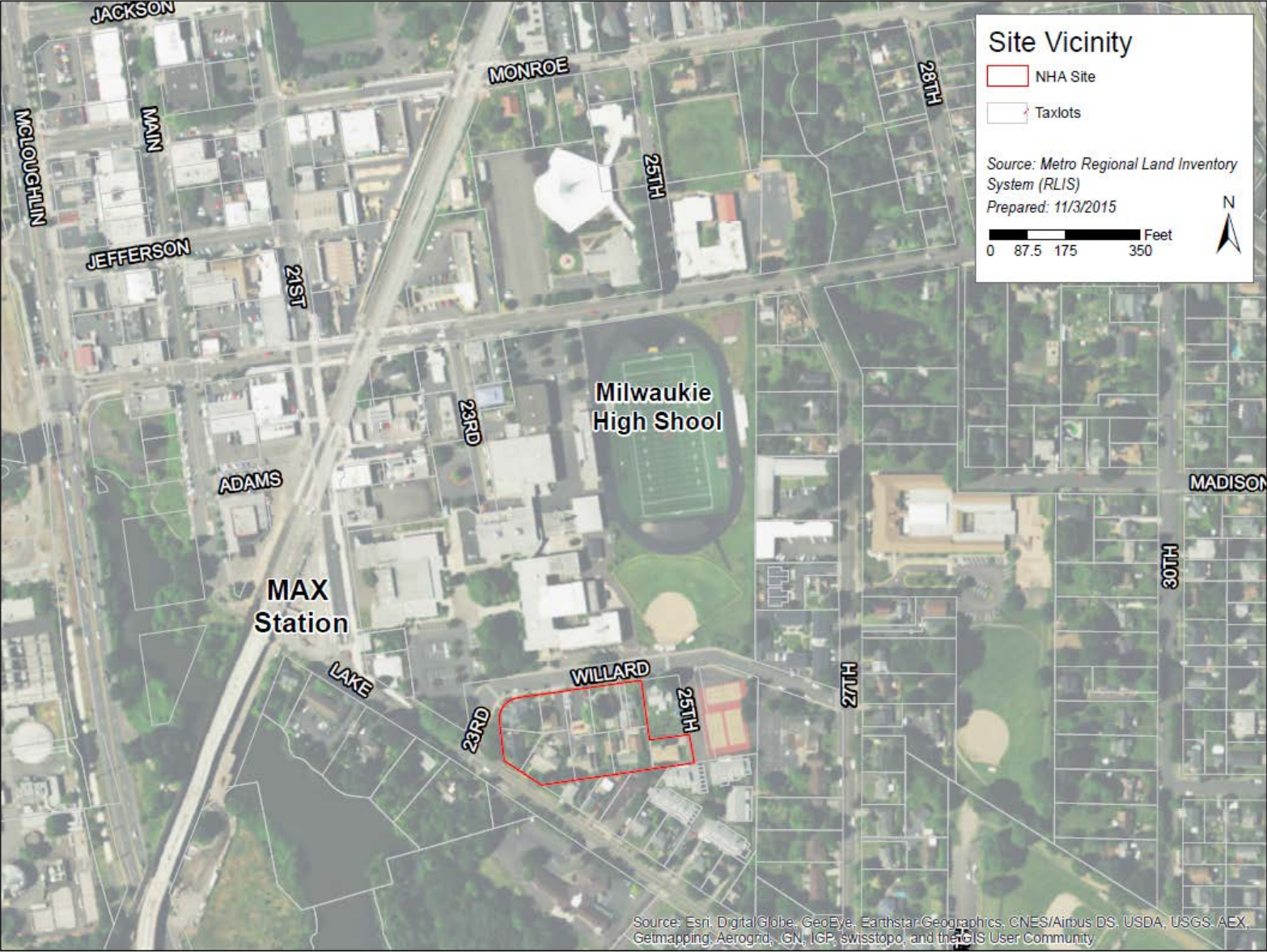




Figure 2: Aerial Image of Site and Vicinity



### Section 3: Conditional Use Approval Criteria - Office Use

This section provides findings to demonstrate compliance with the approval criteria for a new conditional use approval per Section 19.905 of the Milwaukie Zoning Code. Each criterion is cited in full (in italics) and followed by a response section that details how the proposed new office use complies.

#### **19.905 CONDITIONAL USES**

##### **19.905.4 Approval Criteria**

A. *Establishment of a new conditional use, or major modification of an existing conditional use, shall be approved if the following criteria are met:*

1. *The characteristics of the lot are suitable for the proposed use considering size, shape, location, topography, existing improvements, and natural features.*

**Response:** The NHA site is approximately 1.70 acres in size and relatively flat (with the exception of the somewhat steep edge along the Lake Road frontage and western boundary of the property). Existing improvements include an office building, the Annie Ross House Shelter, some duplex and single-family housing units and associated parking and open space. All development currently on the site will be removed in order to accommodate the proposed new development and allow reconfiguration of the site to better suit the applicant's needs. As shown on the Site Plan in Exhibit A, the site is large enough to allow for a larger office building and shelter, additional multifamily housing units, and adequate parking, open spaces and landscaping and comply with all development standards of the R-2 zone.

In terms of the proposed office building (the subject of the conditional use review), the site provides ample space for the new office, which will have a footprint of approximately 4,770 square feet (for comparison, the existing office footprint is approximately 4,000 square feet). It will be located in the same area of the NHA site as the existing office building and will have a total of 12,500 square feet of floor area on three levels. Due to the topography of the site, the office design will take advantage of the site grades to allow for the building to engage at the street level more than the current facilities. The building is designed in a split level fashion where the lowest floor is along Willard Street. Within the building, at this level, will be conference room and employee breakroom space along with a small outdoor plaza area at the NW corner of the building (identified on Sheet 1.3). The building will appear as three levels in height at Willard Street but as viewed from the interior courtyard and Lake Street it will appear as two levels in height.

The site will be configured so that access to the office building will be available from the sidewalk along SE Willard Street, the sidewalk at the corner of SE Willard Street and SE 23<sup>rd</sup> Street, and from the on-site walkways provided between the parking lot and the office building. The location of the NHA site is suitable for this project because it is located in a zone that allows the mix of uses being proposed. The surrounding area is developed at moderate densities that are comparable to the development proposed for the NHA site. The site is also located along Lake Road, which has frequent bus service, and is near (less than two blocks) the new MAX light rail station. This convenient access to transit will serve both NHA employees and clients/residents.

2. *The operating and physical characteristics of the proposed use will be reasonably compatible with, and have minimal impact on, nearby uses.*

**Response:** The character of the area surrounding the NHA site is transitioning to a mixed use area, consistent with the vision established in the Milwaukie Comprehensive Plan. Downtown Milwaukie is located to the west of the site and is developed with mixed-use commercial uses; properties to the southwest of the site are developed with a combination of office, single-family residential, and institutional uses; properties to the southeast of the site are developed with single-family, multifamily, office, and institutional uses; and properties to the east are developed with multifamily, institutional, and single-family uses. Within the context of the Historic Milwaukie Neighborhood, the predominant use by area is commercial (49 percent), followed by single-family residential (24 percent), multifamily residential (13 percent), institutional (8 percent), and vacant properties (6 percent). The proposed project would permit the development of the site with uses similar to those found in the vicinity. The proposed NHA office has been designed to be compatible with these surrounding uses, both in terms of operations and physical characteristics. Furthermore, NHA has been operating an office use on this site for 30 years. Prior to that, the North Clackamas School District operated an office use on the site.

The new office will have typical weekday hours of operation, generally between 8:30 AM and 5:00 PM. Employees will enter and exit the site throughout the day using the primary vehicle access along SE Willard Street. It is also expected that some employees will bicycle to work and/or use transit, and will therefore access the site from the surrounding sidewalk network. Parking for office employees will be provided on site and is also available on-street along SE Willard and SE 23<sup>rd</sup> Ave. The office will not hold large events that would generate high levels of traffic or noise. The office building is also configured on the site so that it is located away from the existing lower-density residential uses that are south and east of the NHA property.

In terms of physical characteristics, the proposed office building will be setback from the sidewalk 15 feet, as required by the Milwaukie Zoning Code. The setback area will be landscaped with a mix of trees and ground cover, providing a green buffer between the building and the sidewalk/street. The office building has been designed with large windows along the street-facing façade to provide a sense of openness and transparency into the building.

The NHA site is surrounded by a variety of building functions, architectural styles and building materials. Because of this, the surrounding neighborhood does not provide a defined context; therefore the design of the office uses similar visual and massing elements in order to respect the eclectic neighborhood mix but does not attempt to replicate any one style. As an office building, it is important that it be identified differently from the housing around it. Through the use of brick, cement plank cladding, and wood siding, the office building reflects the variety of material and textural elements without appearing institutional. The mass of the building is broken down into smaller components in order to reflect the residential development around the property and not compete in massing with the high school to the north. The roof is residential in character with the use of a gable form. It is offset which is slightly different in the neighborhood but intentional, to allow for sustainability goals for the project which include the use of photovoltaic panels to reduce utility costs. The intent is that the residents, neighbors and community identify the building as an office yet understand the relationship to the larger development through the massing and material uses. The

shelter shares a similar form and material palette while the future multi-family housing will have some similar roof forms but a smaller percentage of similar cladding materials.

Traffic generated by the proposed office is projected to increase minimally with this project (7 additional trips during the weekday AM peak hour and 6 trips during the PM peak hour). Those increases are based on projected increase in the number of employees from 35 to 50. Traffic generated by this project will not result in impacts to intersections; all intersections near the site will continue to operate at acceptable levels. The proposed access drives into the site will meet the city's access spacing and sight distance requirements. The Traffic Impact Analysis included in Exhibit C provides additional detail about traffic impacts.

*3. All identified impacts will be mitigated to the extent practicable.*

**Response:** As noted in the response above, impacts to the surrounding neighborhood are not anticipated to occur as a result of conditional use approval of the proposed office. An office use has operated at this location for more than 30 years.

*4. The proposed use will not have unmitigated nuisance impacts, such as from noise, odor, and/or vibrations, greater than usually generated by uses allowed outright at the proposed location.*

**Response:** The proposed office use will not generate nuisance impacts such as noise, odor or vibrations. The office will function in a manner typical to most office uses, with weekday hours between 8:30 AM and 5:00 PM. Office functions will take place inside the building and primarily involve administrative activities. The office does not engage in any activity that would generate odor or vibrations. There will be no activities at the office that will result in unusual noise levels (outdoor events or large truck deliveries, for example). As noted above, traffic generated by the proposed office use will be minimal and will not result in measurable impacts to the surrounding streets or intersections.

*5. The proposed use will comply with all applicable development standards and requirements of the base zone, any overlay zones or special areas, and the standards in Section 19.905.*

**Response:** The subject properties are zoned R-2. There are no overlay zones or special areas that apply to this project. Section 5 of this narrative demonstrates how the proposed use meets the requirements and development standards for the R-2 zone. No other standards in 19.905 apply to this use.

*6. The proposed use is consistent with applicable Comprehensive Plan policies related to the proposed use.*

**Response:** Policies relevant to the proposed NHA project are addressed below. While this section of the narrative addresses the Conditional Use criteria for the office building, some of the responses below consider the entire site. Because the NHA site is being redeveloped as a cohesive campus with multiple uses, context is necessary to make a thorough statement of consistency with city policies. This

is especially true when evaluating transportation and public utility impacts; those elements were considered in the context of the overall site redevelopment.

#### *Chapter 4 Land Use*

##### **OBJECTIVE #2 — RESIDENTIAL LAND USE: DENSITY AND LOCATION**

*To locate higher density residential uses so that the concentration of people will help to support public transportation services and major commercial centers and foster implementation of the Town Center Master Plan.*

6. *High Density in Mixed Use Areas will be based on the following policies:*
  - a. *Within the Mixed Use Area designated on Map 7, a range of different uses including residential, commercial and office are allowed and encouraged. It is expected that redevelopment will be required to implement these policies, and that single structures containing different uses will be the predominant building type.*
  - b. *Commercial uses will be allowed at the ground floor level, and will be located relative to the downtown area so that pedestrian access between areas is convenient and continuous.*
  - c. *Office uses will be allowed at the ground and first floor levels.*
  - d. *High Density residential uses will be allowed on all levels. At least fifty (50) percent of the floor area within a project must be used for residential purposes.*
  - e. *Within the Mixed Use Area, a residential density bonus of fifteen (15) percent over the allowable density may be granted in exchange for exceptional design quality or special project amenities.*
  - f. *All parking must be contained within a project.*

**Response:** The proposed redevelopment on the NHA site supports the above land use policies by providing a mix of office and moderate-density residential uses on the site, in a location that is in close proximity to transit (bus and light rail) and to businesses in downtown Milwaukie. In addition, NHA provides its employees with reimbursement for expenses associated with commuting to work via transit and using transit for work-related meetings. As further incentive, NHA employees are eligible for monthly prize drawings if they submit their transit logs each month.

Required parking will be contained on site.

This project will result in more efficient use of the site, providing a greater concentration of office employees and housing in this area, consistent with city objectives and the existing R-2 zoning.

##### **OBJECTIVE #2 — EMPLOYMENT OPPORTUNITY**

*To continue to support a wide range of employment opportunities for Milwaukie citizens.*

2. *The City will encourage new professional and service-oriented employment opportunities to meet the diverse needs of City residents.*

**Response:** Redevelopment of the NHA site will allow NHA to better accommodate existing employees in the office space and allow for anticipated growth over the next 20 years. This anticipated growth will provide professional employment opportunities for Milwaukie residents. In addition, expanding employment in proximity to transit and the downtown area will support plans to revitalize downtown Milwaukie.

**OBJECTIVE #12 — TOWN CENTER**

*To emphasize downtown Milwaukie and the expanded city center as a Town Center with the major concentration of mixed use and high density housing, office, and service uses in the City.*

**Response:** As noted above, the proposed redevelopment of the NHA campus supports the above objective by providing a mix of office and residential uses within the Town Center in close proximity to retail and service businesses in downtown Milwaukie.

*7. Adequate public transportation facilities and public utilities will be available to serve the proposed use prior to occupancy pursuant to Chapter 19.700.*

**Response:** The Pre-Application Report (Exhibit B) notes that existing City of Milwaukie public utilities are available to serve the NHA site for water and sanitary sewer. For stormwater, NHA will be required to submit a stormwater management plan prior to development that meets the city's standards and requirements. As shown on the Landscape Plan in Exhibit A, stormwater treatment facilities are planned for various locations on the site to mitigate impervious surfaces created as part of the development. All water quality facilities on site will be designed according to city design standards.

As demonstrated in the Traffic Impact Analysis provided in Exhibit C, adequate public transportation facilities are available to serve the proposed redevelopment of the NHA site. No improvements to public transportation facilities are identified in the analysis. The applicant will be required to dedicate additional right-of-way along the site's frontage with Lake Road in order to comply with applicable street width standards for an arterial roadway.

## Section 4: Community Service Use Approval Criteria - Shelter Use

This section provides findings to demonstrate compliance with the approval criteria for a new community service use approval per Section 19.904 of the Milwaukie Zoning Code. Each criterion is cited in full (in italics) and followed by a response section that details how the proposed new shelter use complies.

### **19.904 COMMUNITY SERVICE USES**

#### **19.904.4 Approval Criteria**

*An application for a community service use may be allowed if the following criteria are met:*

*A. The building setback, height limitation, and off-street parking and similar requirements governing the size and location of development in the underlying zone are met. Where a specific standard is not proposed in the CSU, the standards of the underlying zone are met;*

**Response:** Compliance with the development standards of the underlying R-2 zone is demonstrated in Section 5 of this narrative.

*B. Specific standards for the proposed uses as found in Subsections 19.904.7-11 are met;*

**Response:** The standards found in 19.904.9 are intended for “Public, Private, Religious, and Other Facilities not Covered by Other Standards”, which applies to the shelter use. Those standards are addressed after this section of approval criteria.

*C. The hours and levels of operation of the proposed use are reasonably compatible with surrounding uses;*

**Response:** The area surrounding the subject site has an urban residential character with a mix of institutional uses and commercial/office uses, and a moderately dense blend of single-family homes, townhomes and apartment buildings. Milwaukie High School is directly across the street (Willard Street) from the site and generates a large amount of activity during peak school times.

The proposed new shelter will be designed to house a maximum of eight families and will function like a small apartment building in terms of hours and level of use. Shelter residents will live there, go to work and attend school in the same manner as residents in the surrounding neighborhood. The shelter is closed each night at 10:00 PM (11:00 PM on weekends); shelter residents are required to be back in the shelter by the designated curfew in order to spend the night. During the daytime, many shelter residents are off-site at work or school.

The Milwaukie High School has typical hours of operation for a high school, with arrival activities beginning around 7:30 AM (school classes begin at 8:35 AM). Classes end at 3:10 PM and extracurricular activities (sports and band practice, etc.) typically end by 7:00 PM. During spring and fall seasons, outside events such track meets or football games occur in the evening. Football games, which typically generate the highest level of use, start at 7:00 PM and are over by 10:00 PM.

Milwaukie Presbyterian Church, located across Lake Road from the NHA site, operates seven days a week, typically between the hours of 8:00 AM to 9:00 PM. The highest levels of operation occur during Sunday service at 10:00 AM. Several annual events (Christmas Eve service, for example) extend past the typical hours, but those types of events occur only three to four times per year.

Based on the above information, the hours and levels of operation of the shelter will be reasonably compatible with adjacent uses.

Furthermore, the shelter is oriented internally on the NHA site, providing a substantial buffer between the shelter and outside adjacent uses. Approximately half of shelter residents do not own a car and will use other forms of transportation (transit, walking and biking) to get to and from the shelter. To ensure the safety and comfort of shelter residents and neighbors, there will be NHA staff on site at all times, day and night. The shelter has been operating on this site for 30 years and has been granted two expansions by the City of Milwaukie. The shelter does not generate unusual or incompatible levels of noise, traffic or light and has historically blended well with the surrounding residential, commercial and institutional uses.

*D. The public benefits of the proposed use are greater than the negative impacts, if any, on the neighborhood;*

**Response:** The proposed Annie Ross House redevelopment will continue to provide a much-needed public benefit by giving temporary shelter to families experiencing homelessness in Clackamas County. From the most recent available homeless counts in Clackamas County (performed in 2015), over 2,000 people identified as being homeless and of those 2,000 over half were from families with children.<sup>1</sup> Clackamas County has virtually the same landmass as the state of Delaware and the Annie Ross House is the only shelter in Clackamas County that provides emergency housing for families with children. There is a severe shortage of shelter housing for families in Clackamas County which is why NHA proposes to expand the Annie Ross House to serve eight families at a time instead of five. Families who stay at the shelter also have access to critical services (healthcare, job training, food boxes, etc.) and receive assistance in securing permanent housing. An on-site staff member, with the oversight of the Shelter Operations Manager, is always available to help with smooth transitions for new families and ensure the shelter functions well. As noted above, the shelter will operate similar to a small apartment building and will not have negative impacts on the neighborhood.

*E. The location is appropriate for the type of use proposed.*

**Response:** The Annie Ross House Shelter has operated at this site for 30 years. There are a number of reasons why the site has been, and will continue to be, an appropriate location for the shelter:

- The main NHA office is also on this site. This provides shelter residents convenient access to many of the support services that NHA provides. It also allows NHA staff to regularly monitor and access the shelter as needed to help transition families in and out of the shelter.
- The site is located in close proximity (two blocks) to the Lake Road light rail station as well as nearby downtown commercial businesses and services. This will allow shelter residents to access downtown and transit by foot or bike, thus reducing the need for vehicle use.

---

<sup>1</sup> Clackamas County point-in-time count, as referenced on 11/16/15; from-  
[http://www.lotsm.org/docs/2015\\_Clackamas\\_Homeless\\_PIT\\_Report\\_Final.pdf](http://www.lotsm.org/docs/2015_Clackamas_Homeless_PIT_Report_Final.pdf)



- The site is located along Lake Road, which is a major arterial street with bus service and allows shelter residents to access the NHA site with minimal use of smaller, local streets.
- This site and surrounding area have a Mixed-Use/High Density Residential plan designation, which means the city has determined that this area is appropriate for a mix of commercial, institutional and higher-density residential uses. The shelter use, and the other NHA uses proposed on the site, are consistent with this designation and with the types of residential and institutional development that have already occurred in the area.

**19.904.9 Specific Standards for Institutions—Public, Private, Religious, and Other Facilities not Covered by Other Standards**

*A. Utilities, streets, or other improvements necessary for the public facility or institutional use shall be provided by the agency constructing the use.*

**Response:** NHA (the applicant and agency constructing the use) will provide any needed utility work on the site, and any other improvements associated with the proposed project. Per the Traffic Impact Analysis (see Exhibit C), no street improvements are required for this proposed project.

*B. When located in or adjacent to a residential zone, access should be located on a collector street if practicable. If access is to a local residential street, consideration of a request shall include an analysis of the projected average daily trips to be generated by the proposed use and their distribution pattern, and the impact of the traffic on the capacity of the street system which would serve the use. Uses which are estimated to generate fewer than 20 trips per day are exempted from this subsection.*

**Response:** There are no collector streets adjacent to the NHA site from which access may be taken. Access to the site will be taken from SE Willard Street, which is a local street. The Traffic Impact Analysis included with this submittal in Exhibit C provides projected trip data and evaluates the potential impact of the overall site development (including the new shelter) on the local street system. The analysis concludes that the proposed NHA project will not have measurable impacts and no mitigation is required.

*C. When located in a residential zone, lot area shall be sufficient to allow required setbacks that are equal to a minimum of  $\frac{2}{3}$  the height of the principal structure. As the size of the structure increases, the depth of the setback must also increase to provide adequate buffering.*

**Response:** As shown on the Site Plan, the proposed shelter is located internally on the NHA site and has adequate setbacks to meet the above standard. The shelter is proposed to be 33'-6" in height, which would require 22-foot setbacks per the above standard. The shelter is setback from property lines well beyond 22 feet.

*D. The height limitation of a zone may be exceeded to a maximum height of 50 ft provided Subsection 19.904.9.C of this subsection is met.*

**Response:** Subsection D is not applicable because the height limit of the R-2 zone will not be exceeded. The shelter will be 33'-6" in height, which is below the 45-foot maximum allowed.

*E. Noise-generating equipment shall be sound-buffered when adjacent to residential areas.*

**Response:** The shelter will not have any noise-generating equipment. Therefore, this standard is not applicable.

*F. Lighting shall be designed to avoid glare on adjacent residential uses and public streets.*

**Response:** Outdoor lighting on NHA site will be provided in the parking lot (as required) and along the on-site pedestrian walkways. The Site Lighting Plan and Cut Sheets provided in Exhibit A demonstrate that lighting fixtures will have cut-off features that will minimize lighting at the property line and comply with City of Milwaukie lighting standards. Extra perimeter landscaping will also be provided around the parking lot where it abuts residential uses to screen vehicle lights from adjacent homes.

*G. Where possible, hours and levels of operation shall be adjusted to make the use compatible with adjacent uses.*

**Response:** As noted previously, the Annie Ross House Shelter will function similarly to a small apartment building. At full capacity, it will hold eight families who will use the shelter as their temporary home. Consistent with current practice, the shelter doors will close at 10:00 PM (or 11:00 PM on weekends); shelter residents are required to be home by curfew. The hours and levels of operation of the proposed shelter will be very similar to those of the surrounding residential uses.

## Section 5: Base Zone Standards for the R-2 Zone

This section demonstrates how the proposed office and shelter uses comply with the applicable development standards of the R-2 zone.

“Lot” as defined by the MZC includes: “a legally defined unit of land other than a tract that is a result of a subdivision or partition. For general purposes of this title, lot also means legal lots or lots of record under the lawful control, and in the lawful possession, of 1 distinct ownership. When 1 owner controls an area defined by multiple adjacent legal lots or lots of record, the owner may define a lot boundary coterminous with 1 or more legal lots or lots of record within the distinct ownership.”

NHA owns and controls the subject tax lots and therefore, defines the lot area as a single site or “lot” for purposes of complying with the development standards. City staff concurred with this approach in the Pre-Application Report dated July 16, 2015 (see Exhibit B). Therefore, the table below addresses the site as a whole.

### 19.302.4 Development Standards

R-2 Development Standard	Proposed Project Consistency
Minimum lot size: Rowhouse - 3,000 sq. ft. Duplex - 7,000 sq. ft. All other lots - 5,000 sq. ft.	The NHA site is 1.70 acres, which exceeds the minimum lot size requirement for “all other lots”.
Minimum lot width: 50 ft.	As demonstrated on the Site Plan in Exhibit A, the proposed project meets the applicable standards for lot width, lot depth, street frontage and required yards.
Minimum lot depth: 80 ft.	
Minimum street frontage: 35 ft.	
Minimum front yard: 15 ft.	
Minimum side yard: 5 ft.	
Minimum street side yard: 15 ft.	
Minimum rear yard: 15 ft.	
Maximum bldg. height: 3 stories or 45 ft.	Office building: 38’-7” (3 stories) Shelter: 27’-10.5” (2 stories)
Side yard height plane	Not applicable.
Maximum lot coverage: 45%	Total site coverage: 31%
Minimum vegetation: 15%	Total site vegetation: Approximately 33% (24,352 square feet of vegetation)
Density requirements: Min 11.6 units per acre Max 17.4 units per acre	Not applicable to the office (CU) and shelter (CSU) uses. The multifamily units will be permitted under a separate land use process and density will be addressed in that review.

## 19.302.5 Additional Development Standards

### C. Minimum Vegetation

*At least half of the minimum required vegetation area must be suitable for outdoor recreation by residents, and not have extreme topography or dense vegetation that precludes access.*

**Response:** Required vegetation for the NHA site is 15% of the total site area, which is approximately 11,136 square feet. Half of that required area (5,568 sf) must be suitable for outdoor recreation. As shown on the Landscape Plan in Exhibit A, there are several areas designated as usable outdoor space, including the main courtyard in the center of the site, a play area, picnic area, and patio area. Together, those areas are 7,560 square feet, which exceeds the 50% requirement.

### D. Front Yard Minimum Vegetation

*At least 40% of the front yard shall be vegetated. The front yard vegetation area required by this subsection counts toward the minimum required vegetation for the lot. A property may provide less than the 40% of the front yard vegetation requirement if it is necessary to provide a turnaround area so that vehicles can enter a collector or arterial street in a forward motion.*

**Response:** As shown on the Landscape Plan in Exhibit A, the majority of the front yard along Willard Street (and 23<sup>rd</sup> Street) is landscaped with a combination of trees, shrubs and groundcover. The only exception is the location of walkways that connect the sidewalk to the office and housing buildings.

### J. Off-Street Parking and Loading

*Off-street parking and loading is required as specified in Chapter 19.600.*

**Response:** Off-street parking and loading is addressed in Section 6 of this narrative.

### K. Public Facility Improvements

*Transportation requirements and public facility improvements are required as specified in Chapter 19.700.*

**Response:** Responses to demonstrate compliance with the requirements of Chapter 19.700 are provided in Section 6 of this narrative.

### L. Additional Standards

*Depending upon the type of use and development proposed, the following sections of Chapter 19.500 Supplementary Development Regulations may apply. These sections are referenced for convenience, and do not limit or determine the applicability of other sections within the Milwaukie Municipal Code.*

1. *Subsection 19.504.4 Buildings on the Same Lot*
3. *Subsection 19.504.9 On-Site Walkways and Circulation*
4. *Subsection 19.504.10 Setbacks Adjacent to Transit*
6. *Subsection 19.505.2 Garage and Carport Standards*
9. *Subsection 19.505.6 Building Orientation to Transit*

**Response:** The subsections of Chapter 19.500 applicable to this proposal are 19.504.9 and 19.505.6. The other subsections listed above are not relevant to the proposed NHA project.

*19.504.9 On-Site Walkways and Circulation*

*A. Requirement*

*All development subject to Chapter 19.700 (excluding single-family and multifamily residential development) shall provide a system of walkways that encourages safe and convenient pedestrian movement within and through the development site. Redevelopment projects that involve remodeling or changes in use shall be brought closer into conformance with this requirement to the greatest extent practicable. On-site walkways shall link the site with the public street sidewalk system. Walkways are required between parts of a site where the public is invited to walk. Walkways are not required between buildings or portions of a site that are not intended or likely to be used by pedestrians, such as truck loading docks and warehouses.*

*B. Location*

*A walkway into the site shall be provided for every 300 ft of street frontage.*

*C. Connections*

*Walkways shall connect building entrances to one another and building entrances to adjacent public streets and existing or planned transit stops. On-site walkways shall connect with walkways, sidewalks, bicycle facilities, alleys, and other bicycle or pedestrian connections on adjacent properties used or planned for commercial, multifamily, institutional, or park use. The City may require connections to be constructed and extended to the property line at the time of development.*

*D. Routing*

*Walkways shall be reasonably direct. Driveway crossings shall be minimized. Internal parking lot circulation and design shall provide reasonably direct access for pedestrians from streets and transit stops to primary buildings on the site.*

*E. Design Standards*

*Walkways shall be constructed with a hard surface material, shall be permeable for stormwater, and shall be no less than 5 ft in width. If adjacent to a parking area where vehicles will overhang the walkway, a 7-ft-wide walkway shall be provided. The walkways shall be separated from parking areas and internal driveways using curbing, landscaping, or distinctive paving materials. On-site walkways shall be lighted to an average 5/10-footcandle level. Stairs or ramps shall be provided where necessary to provide a direct route.*

**Response:** As illustrated on the Landscape Plan, a pedestrian walkway system will be provided throughout the NHA site that connects the office, shelter and multifamily buildings to each other, to the parking lot, and to the surrounding public sidewalk system. Pedestrian connections to the public sidewalk along SE Willard Street will be available in five locations: one near the northeast corner of the office building, three leading to housing in Building A, and one at the northwest corner of the parking lot. The distance between those access points does not exceed 300 feet. There is also a pedestrian access (via stairs) connecting the western portion of the site to the public sidewalk area at the corner of SE 23<sup>rd</sup> Street and Lake Road. That access also provides a connection to the bus stop located at that corner (TriMet line #32). The on-site pedestrian walkway system does not cross through driveways or the parking lot. All walkways will be at least five feet in width and will be constructed in accordance

with the requirements above. Walkways will be lit at night in accordance with the above requirement. Proposed lighting is shown on the Lighting Plan in Exhibit A.

*19.505.6 Building Orientation to Transit*

*The following requirement applies to all new commercial, office, and institutional development within 500 ft of an existing or planned transit route measured along the public sidewalk that provides direct access to the transit route:*

*New buildings shall have their primary orientation toward a transit street or, if not adjacent to a transit street, a public right-of-way which leads to a transit street. The primary building entrance shall be visible from the street and shall be directly accessible from a sidewalk connected to the public right-of-way. A building may have more than 1 entrance. If the development has frontage on more than 1 transit street, the primary building entrance may be oriented to either street or to the corner.*

**Response:** The NHA site has frontage along Lake Road, which is served by an existing bus route. There is a bus stop located at the corner of Lake Road and SE 23<sup>rd</sup> Avenue, adjacent to the NHA development. The proposed office building is not adjacent to Lake Road; however, as shown on the Site Plan in Exhibit A, there is a direct public access from that corner to the primary entrance of the office building via stairs leading from the sidewalk/public plaza area.

## Section 6: Public Facilities

This section provides responses to demonstrate compliance with the public facility requirements of Chapter 19.700.

### *19.702 Applicability*

*Chapter 19.700 applies to the following types of development in all zones:*

...

*E. Modification or expansion of an existing structure or a change or intensification in use that results in any one of the following. See Subsections 19.702.2-3 for specific applicability provisions for single-family residential development and development in downtown zones.*

- 1. A new dwelling unit.*
- 2. Any increase in gross floor area.*
- 3. Any projected increase in vehicle trips, as determined by the Engineering Director.*

**Response:** The proposed NHA project involves an expansion and intensification of the existing use that will result in an increase in floor area and vehicle trips. Therefore, Chapter 19.700 is applicable.

### *19.703.1 Pre-application Conference*

*For all proposed development that requires a land use application and is subject to Chapter 19.700 per Section 19.702, the applicant shall schedule a pre-application conference with the City prior to submittal of the land use application. The Engineering Director may waive this requirement for proposals that are not complex.*

**Response:** NHA attended a pre-application meeting with the city on July 2, 2015. Summary notes from the meeting are provided in Exhibit B. A second meeting was held with the city on December 17, 2015, prior to submittal, to discuss the Transportation Impact Analysis.

### *19.703.2 Application Submittal*

*For all proposed development that is subject to Chapter 19.700 per Section 19.702, one of the following types of applications is required.*

...

#### *B. Transportation Facilities Review (TFR) Land Use Application*

*If the proposed development triggers a transportation impact study (TIS) per Section 19.704, a TFR land use application shall be required. ...*

**Response:** The proposed development triggers a TIS. Therefore, a Transportation Facilities Review application is required. That application is part of this submittal package.

### *19.703.3 Approval Criteria*

*For all proposed development that is subject to Chapter 19.700 per Section 19.702, the required development permit and/or land use application shall demonstrate compliance with the following approval criteria at the time of submittal.*

#### *A. Procedures, Requirements, and Standards*

*Development and related public facility improvements shall comply with procedures, requirements, and standards of Chapter 19.700 and the Public Works Standards.*

**Response:** The proposed development and associated public facility improvements will comply with all applicable procedures, requirements and standards of Chapter 19.700 and the city's Public Works Standards. Responses to all applicable sections of Chapter 19.700 are provided in this section.

*B. Transportation Facility Improvements*

*Development shall provide transportation improvements and mitigation at the time of development in rough proportion to the potential impacts of the development per Section 19.705 Rough Proportionality, except as allowed by Section 19.706 Fee in Lieu of Construction.*

...

**Response:** As noted in the Traffic Impact Analysis provided in Exhibit C, the proposed project is not anticipated to have measurable impacts on surrounding transportation facilities. As such, no off-site improvements or mitigation is required. Standard frontage improvements required by the city are discussed under (C) below.

*C. Safety and Functionality Standards*

*The City will not issue any development permits unless the proposed development complies with the City's basic safety and functionality standards, the purpose of which is to ensure that development does not occur in areas where the surrounding public facilities are inadequate. Upon submittal of a development permit application, an applicant shall demonstrate that the development property has or will have all of the following:*

- 1. Adequate street drainage, as determined by the Engineering Director.*

**Response:** This submittal includes a stormwater management plan that demonstrates how NHA will address drainage for the proposed redevelopment. The NHA project engineers have been working with city engineering staff to develop a drainage program that is adequate and efficient. NHA proposes to construct a green street planter/swale in the 5-foot wide landscape strip on Lake Road that will be large enough to handle the basin area that drains to it. The stormwater plan provides additional detail.

- 2. Safe access and clear vision at intersections, as determined by the Engineering Director.*

**Response:** As noted in the TIS in Exhibit C, the proposed site driveways on SE Willard Street and 25<sup>th</sup> Avenue meet the city's accessway spacing standards. There is also sufficient sight distance in both directions at the SE Willard Street driveway. Clear vision areas at both proposed driveways will be established and maintained, as recommended in the TIS and as required by MMC 12.24.

- 3. Adequate public utilities, as determined by the Engineering Director.*

**Response:** The NHA site is well served by public utilities. A Preliminary Utility Plan is included in the Plan Set in Exhibit A.

- 4. Access onto a public street with the minimum paved widths as stated in Subsection 19.703.3.C.5 below.*

**Response:** The NHA site will have access onto two public streets, SE Willard Street and SE 25<sup>th</sup> Avenue, both of which meet the minimum paved width requirements for a local street. See the response to subsection (5) below for detail.

- 5. Adequate frontage improvements as follows:*



- a. *For local streets, a minimum paved width of 16 ft along the site's frontage.*
- b. *For nonlocal streets, a minimum paved width of 20 ft along the site's frontage.*
- c. *For all streets, a minimum horizontal right-of-way clearance of 20 ft along the site's frontage.*

**Response:** The NHA site has frontages along SE Lake Road (arterial), SE Willard Street (local) and SE 23<sup>rd</sup> Avenue (local). Per the pre-application summary notes (Exhibit B), SE Lake Road has a paved width of 30 feet along the NHA frontage. SE Willard Street has a paved width of 36 feet, and SE 23<sup>rd</sup> Avenue has a paved width of 46 feet. All frontages have at least 20 feet of horizontal right-of-way clearance. Therefore, the NHA site frontages meet or exceed the above standard.

6. *Compliance with Level of Service D for all intersections impacted by the development, except those on Oregon Highway 99E that shall be subject to the following:*

...

**Response:** Table 7 in the TIS (Exhibit C) provides level of service forecasts for all impacted intersections. All intersections will operate at level C or above after the NHA project is complete. Therefore, this standard is met.

#### *19.704 Transportation Impact Evaluation*

##### *19.704.2 TIS General Provisions*

- A. *All transportation impact studies, including neighborhood through-trip and access studies, shall be prepared and certified by a registered Traffic or Civil Engineer in the State of Oregon.*

**Response:** The TIS provided in Exhibit C was prepared by Kittelson & Associates, Inc., by a traffic engineer registered in the State of Oregon (see stamp on page 22 of the TIA).

- B. *Prior to TIS scope preparation and review, the applicant shall pay to the City the fees and deposits associated with TIS scope preparation and review in accordance with the adopted fee schedule. The City's costs associated with TIS scope preparation and review will be charged against the respective deposits. Additional funds may be required if actual costs exceed deposit amounts. Any unused deposit funds will be refunded to the applicant upon final billing.*

**Response:** Fees and deposits associated with the TIS scope preparation and review were provided to the city as required.

- C. *The TIS shall be submitted with a transportation facilities review (TFR) land use application pursuant to Subsection 19.703.2.B and associated application materials pursuant to Subsection 19.703.3. The City will not accept a TFR application for processing if it does not include the required TIS. The City will not accept other associated land use applications for processing if they are not accompanied by the required TFR application.*

**Response:** The TIS is submitted as Exhibit C with this TFR, CU and CSU application package.

- D. *The Engineering Director may require a TIS review conference with the applicant to discuss the information provided in the TIS. This conference would be in addition to the required pre-application conference pursuant to Subsection 19.703.1. If such a conference is required, the City will not accept the TFR application for processing until the conference has taken place. The applicant shall pay the TIS review conference fee at the time of conference scheduling, in accordance with the adopted fee schedule.*

**Response:** The required TIS review conference was held with the city on December 17, 2015.

*E. The City may attach conditions of approval to land use decisions as needed to satisfy the transportation facility requirements of Section 19.708 and to mitigate transportation impacts identified in the TIS.*

**Response:** The applicant understands that the city may attach conditions of approval to the land use decision to satisfy transportation facility requirements.

### *19.704.3 TIS Requirements*

...

#### *B. TIS Content*

*A project-specific TIS checklist will be provided by the City once the Engineering Director has determined the TIS scope. A TIS shall include all of the following elements, unless waived by the Engineering Director.*

##### *1. Introduction and Summary*

*This section should include existing and projected trip generation including vehicular trips and mitigation of approved development not built to date; existing level and proposed level of service standard for City and County streets and volume to capacity for State roads; project build year and average growth in traffic between traffic count year and build year; summary of transportation operations; proposed mitigation(s); and traffic queuing and delays at study area intersections.*

##### *2. Existing Conditions*

*This section should include a study area description, including existing study intersection level of service.*

##### *3. Impacts*

*This section should include the proposed site plan, evaluation of the proposed site plan, and a project-related trip analysis. A figure showing the assumed future year roadway network (number and type of lanes at each intersection) should also be provided.*

##### *4. Mitigation*

*This section should include proposed site and areawide specific mitigation measures. Mitigation measures shall be roughly proportional to potential impacts pursuant to Section 19.705.*

##### *5. Appendix*

*This section should include traffic counts, capacity calculations, warrant analysis, and any information necessary to convey a complete understanding of the technical adequacy of the TIS.*

**Response:** The TIS provided in Exhibit C contains all required content as described above. Specifically:

- Introduction, page 1
- Existing Conditions, page 4
- Impacts, page 9
- Mitigation, page 21
- Appendix, included at the end of the report

#### *D. Neighborhood Through-Trip Study*

*Any nonresidential development projected to add more than 25 through-vehicles per day to an adjacent residential local street or neighborhood route will require assessment and mitigation of residential street impacts. ...*

**Response:** Per the Transportation Impact Study Checklist provided to the NHA traffic engineer, a neighborhood through-trip study is not required for this project.

*19.704.4 Mitigation*

*A. Transportation impacts shall be mitigated at the time of development when the TIS identifies an increase in demand for vehicular, pedestrian, bicycle, or transit transportation facilities within the study area.*

**Response:** As noted in the TIS in Exhibit C, the proposed NHA campus redevelopment will not have significant impacts to surrounding transportation facilities. All study area intersections are forecast to continue to operate acceptably in post-development conditions. The TIS does not recommend any mitigation other than ensuring that vision clearance is maintained along the two proposed site driveways. The TIS also notes that NHA employs some transportation demand management measures currently, and will continue to do so after the redevelopment is complete. Those measures include an employee transit incentive plan, transit cost reimbursement, and secure, sheltered bicycle parking for employees who bike to work.

*19.706 Fee in Lieu of Construction*

*If transportation facility improvements are required and determined to be proportional, the City will require construction of the improvements at the time of development. However, the applicant may request to pay a fee in lieu of constructing the required transportation facility improvements.*

**Response:** The applicant is not requesting to pay a fee in lieu of constructing required transportation improvements.

*19.708 Transportation Facility Requirements*

*19.708.1 General Street Requirements and Standards*

*A. Access Management*

*All development subject to Chapter 19.700 shall comply with access management standards contained in Chapter 12.16.*

**Response:** Chapter 12.16 states that, “Driveway approaches shall be constructed as set forth in the Milwaukie Public Works Standards.” The applicant is proposing to close the three existing site driveways and construct two new driveway approaches as part of the campus redevelopment. As noted in the TIS in Exhibit C, the two proposed site driveways (on SE Willard Street and SE 25th Avenue) meet City of Milwaukie’s accessway location spacing standards as outlined in Section 5.0082 of Milwaukie’s Public Works Standards.

*B. Clear Vision*

*All development subject to Chapter 19.700 shall comply with clear vision standards contained in Chapter 12.24.*

**Response:** Clear vision areas will be established and maintained at the two proposed site driveways. The TIS provided in Exhibit C recommends the following with regard to clear vision:

“Any new landscaping, signage or above-ground utilities along the SE Willard Street and SE 25th Avenue site frontage should be installed and maintained to ensure they do not interfere with the vision clearance triangles at the two proposed site driveways.”

...

*D. Development in Non-Downtown Zones*

*Development in a non-downtown zone that has frontage on a street section shown in the PAR is subject to the requirements of the Milwaukie Public Works Standards, which implements the street design standards and right-of-way dedication requirements contained in the PAR for that street frontage. The following general provisions apply only to street frontages that are not shown in the PAR and for development that is not in any of the downtown zones listed in Subsection 19.708.1.C above:*

- 1. Streets shall be designed and improved in accordance with the standards of this chapter and the Public Works Standards. ODOT facilities shall be designed consistent with State and federal standards. County facilities shall be designed consistent with County standards.*
- 2. Streets shall be designed according to their functional classification per Figure 8-3b of the TSP.*

**Response:** As part of the NHA redevelopment, the applicant will be providing street improvements to the site’s frontage along SE Lake Road intended to bring the road up current standard. SE Lake Road is a designated arterial. Based on conversations between the project engineer (KPFF) and city engineering staff, the required frontage improvements along SE Lake Road will include the following:

- 6.5-foot right-of-way dedication
- From the new property line, the cross section will include: 6-inch buffer, 6-foot sidewalk, 5-foot landscape strip, 6-inch curb
- Paving as needed to fill in the gap to reach center line

These improvements will result in approximately 8.5-feet of widening on Lake Road. The city plans to ultimately add a center turn lane on Lake Road and stripe a bike lane in this location; those future planned facilities will be accommodated by these frontage improvements.

- 3. Street right-of-way shall be dedicated to the public for street purposes in accordance with Subsection 19.708.2. Right-of-way shall be dedicated at the corners of street intersections to accommodate the required turning radii and transportation facilities in accordance with Section 19.708 and the Public Works Standards. Additional dedication may be required at intersections for improvements identified by the TSP or a required transportation impact study.*

**Response:** Per the pre-application meeting notes (see Exhibit B), existing rights-of-way along SE 23<sup>rd</sup> Avenue and SE Willard Street are adequate and no right-of-way dedication is required. Existing right-of-way along SE Lake Road is not adequate and the city is requiring 6.5 feet of dedication along the NHA site frontage with SE Lake Road. Plans provided in Exhibit A show the required right-of-way dedication.

- 4. The City shall not approve any development permits for a proposed development unless it has frontage or approved access to a public street.*

**Response:** The NHA site has frontage along SE Lake Road, SE 23<sup>rd</sup> Avenue, SE 25<sup>th</sup> Avenue and SE Willard Street. Proposed access to the site will be taken from SE Willard Street and a secondary access on SE 25<sup>th</sup> Avenue.

5. *Off-site street improvements shall only be required to ensure adequate access to the proposed development and to mitigate for off-site impacts of the proposed development.*

**Response:** No off-site street improvements are being required for the proposed NHA project.

6. *The following provisions apply to all new public streets and extensions to existing public streets.*

...

**Response:** No new public streets or extensions to existing public streets are required or proposed as part of the NHA redevelopment project.

7. *Traffic calming may be required for existing or new streets. Traffic calming devices shall be designed in accordance with the Public Works Standards or with the approval of the Engineering Director.*

**Response:** Traffic calming is not required by the city as part of this project.

8. *Railroad Crossings*

*Where anticipated development impacts trigger a need to install or improve a railroad crossing, the cost for such improvements may be a condition of development approval.*

**Response:** This standard is not applicable because there are no railroad crossings impacted by this proposal.

9. *Street Signs*

*The City shall install all street signs, relative to traffic control and street names, as specified by the Engineering Director. The applicant shall reimburse the City for the cost of all such signs installed by the City.*

**Response:** The Engineering Director has not informed the applicant of any street signs that may be required. As such, NHA assumes no street sign reimbursement will be required.

10. *Streetlights*

*The location of streetlights shall be noted on approved development plans. Streetlights shall be installed in accordance with the Public Works Standards or with the approval of the Engineering Director.*

**Response:** No streetlights have been required as part of this project.

E. *Street Layout and Connectivity*

...

**Response:** The proposed NHA project does not include any new streets or changes to the existing street layout and connectivity patterns of the surrounding street network. Therefore, subsection (E) does not apply.

19.708.2 *Street Design Standards*

...

**Response:** As noted previously, the city has required frontage improvements along SE Lake Road that include the following:

- 6.5-foot right-of-way dedication
- From the new property line, the cross section will include: 6-inch buffer, 6-foot sidewalk, 5-foot landscape strip, 6-inch curb
- Paving as needed to fill in the gap to reach center line
- There is no on-street parking on Lake Road in this location

These improvements will result in approximately 8.5-feet of widening on Lake Road. The city plans to ultimately add a center turn lane on Lake Road and stripe a bike lane in this location; those future planned facilities will be accommodated by these frontage improvements.

As shown on the Landscape Plan in Exhibit A, street trees will be provided along the site’s frontage with Lake Road, as required.

A stormwater treatment facility (swale) will be included in the 5-foot wide landscape strip along Lake Road to treat impervious surfaces from the project (plus additional impervious area beyond what is required).

*19.708.3 Sidewalk Requirements and Standards*

...

*B. Sidewalk Requirements*

*1. Requirements*

*Sidewalks shall be provided on the public street frontage of all development per the requirements of this chapter. Sidewalks shall generally be constructed within the dedicated public right-of-way, but may be located outside of the right-of-way within a public easement with the approval of the Engineering Director.*

*2. Design Standards*

*Sidewalks shall be designed and improved in accordance with the requirements of this chapter and the Public Works Standards.*

*3. Maintenance*

*Abutting property owners shall be responsible for maintaining sidewalks and landscape strips in accordance with Chapter 12.04.*

**Response:** As part of the proposed redevelopment, NHA will provide sidewalks along the site’s frontages as follows:

- A 6-foot setback sidewalk along the Lake Road frontage
- 5-foot sidewalks along the SE Willard Street and SE 23<sup>rd</sup> Avenue frontages where necessary to replace sidewalk impacted during construction.

All sidewalks will be constructed to city standard and maintained by NHA.

*19.708.4 Bicycle Facility Requirements and Standards*

*A. General Provisions*

*1. Bicycle facilities include bicycle parking and on-street and off-street bike lanes, shared lanes, bike boulevards, and bike paths.*

...

### *B. Bicycle Facility Requirements*

**Response:** As part of the NHA campus redevelopment, on-site bicycle parking will be provided consistent with the bicycle parking requirements in Chapter 19.609. Details regarding amount, location and design of bicycle parking are provided in the response to 19.609 in Section 7 of this narrative.

In addition, the city's cross section for SE Lake Road requires a 6-foot wide bike lane along the NHA frontage. Currently, no bike lane exists in this location. As part of the NHA redevelopment project, additional (6.5 feet) right-of-way will be dedicated along SE Lake Road and the paved width of Lake Road will be widened such that a future bike lane can be accommodated. However, the bike lane will not be striped as part of this project due to the absence of an adjacent connecting bike lane, as noted in subsection (2) regarding timing of construction.

#### *19.708.5 Pedestrian/Bicycle Path Requirements and Standards*

**Response:** No pedestrian/bicycle path is required as part of the proposed NHA project. Therefore, Section 19.708.5 is not applicable.

#### *19.708.6 Transit Requirements and Standards*

**Response:** The NHA site is located along a designated transit route listed in the city's TSP (SE Lake Road). Transit facilities currently exist along the route and no additional transit facilities are being required as part of this project. Therefore, Section 19.708.6 does not apply.

### *19.709 Public Utility Requirements*

#### *19.709.2 Public Utility Improvements*

*Public utility improvements shall be required for proposed development that would have a detrimental effect on existing public utilities, cause capacity problems for existing public utilities, or fail to meet standards in the Public Works Standards. Development shall be required to complete or otherwise provide for the completion of the required improvements.*

**Response:** Per the pre-application summary notes, the following applies to public utilities serving the NHA site:

- Water - Existing city water mains on SE Lake Rd, SE 23<sup>rd</sup> Ave, and SE Willard St are available to serve the proposed NHA development.
- Sewer - Existing city sewer mains on SE Lake Rd and SE Willard St are available to serve the proposed development.
- Stormwater - A stormwater management plan is required with this land use submittal to demonstrate how the proposed development will comply with all applicable standards.

This submittal includes a Preliminary Stormwater Drainage Report and a Utility Plan (Sheet C2 in Exhibit A). These items demonstrate that the proposed NHA project will comply with all applicable public utility requirements.

## Section 7: Off-Street Vehicle & Bicycle Parking

Off-street parking will be provided on the NHA site to serve all users, including employees, visitors and residents of the shelter and housing units. Parking on the site will remain continually available to these primary users of the site and will not be rented, sold or used for any purpose other than accommodating NHA related uses.

**Required Parking Spaces.** The table below summarizes the vehicle parking requirements for the entire NHA site.

- The shelter use is not a use that is specifically listed in Table 19.605.1 (Off-Street Parking Requirements). However, for the purpose of parking, the shelter units can be considered similar to a small multifamily unit (less than 800 square feet in size). Therefore, the table below assumes one parking space per shelter unit.
- Parking requirements for the office use are based on 12,500 square feet of office floor area
- Parking requirements for the multifamily housing are based on 4 units with less than 800 square feet of floor area and 24 units with more than 800 square feet of floor area.

NHA Use	Minimum Required	Maximum Allowed
Office	2 spaces per 1,000 sf of floor area = 24 spaces	3.4 spaces per 1,000 sf of floor area = 43
Shelter	1 space per unit = 8 spaces	1.25 spaces per unit = 10
Multifamily Housing	1 space per unit > 800 sf = 4 spaces 1.25 space per unit < 800 sf = 30	2 spaces per unit = 56
<b>Totals</b>	<b>66</b>	<b>109</b>

Per Section 19.605.3(B), certain reductions to the minimum parking requirements are allowed outright up to a 25% reduction in total parking. The following language applies to the NHA site:

*c. Parking for all uses except single-family attached and detached dwellings may be reduced by 25% if the development is within 1,000-ft walking distance, as defined in Subsection 19.605.3.B.2.d, of a light rail transit stop.*

*d. In determining walking distance, the applicant shall measure the shortest route along sidewalks, improved pedestrian ways, or streets if sidewalks or improved pedestrian ways are not present. Walking distance shall be measured along the shortest course from the point on the development site that is nearest to the transit stop.*

The NHA site is located approximately 550 feet in walking distance from the new MAX Orange Line light rail station on Lake Road. Therefore, a 25% reduction in parking minimums is allowed, bringing the minimum required parking to 50 spaces. As shown on the Site Plan, a total of 50 parking spaces is provided on the NHA site, including two ADA accessible spaces.

**Parking Dimensions.** Parking space and aisle dimensional requirements are established in Section 19.606.1. Parking spaces requirements applicable to the NHA site are summarized in the table below.



Standard	90 Degree Parking	Parallel Parking
Stall width	9 feet	8.5 feet
Curb length	9 feet	22 feet
2-way aisle width	22 feet	19 feet
Stall depth	18 feet	8.5 feet

As shown on the Site Plan, all parking spaces provided on the NHA site will meet these dimensional standards.

**Parking Location.** Section 19.604.2 establishes locational standards for parking as follows:

*19.604.2 Parking Area Location*

*Accessory parking shall be located in one or more of the following areas:*

- A. On the same site as the primary use for which the parking is accessory.*
- B. On a site owned by the same entity as the site containing the primary use that meets the standards of Subsection 19.605.4.B.2. Accessory parking that is located in this manner shall not be considered a parking facility for purposes of the base zones in Chapter 19.300.*

All of the parking necessary to serve the proposed office and shelter uses will be consolidated within a single area. The Milwaukie Code does not define the term “site” but treating the property as a single “lot” for purposes of the development standards suggests that the accessory parking is located on the same “site” as the office and shelter uses.

**Parking Lot Landscaping.** Per Section 19.606.2(C), perimeter landscaping is required around the parking lot at a width of 8 feet where abutting a public right-of-way and 6 feet where abutting another property. Planting requirements for the perimeter are as follows:

*2. Planting Requirements*

*Landscaping requirements for perimeter buffer areas shall include 1 tree planted per 40 lineal ft of landscaped buffer area. Where the calculation of the number of trees does not result in a whole number, the result shall be rounded up to the next whole number. Trees shall be planted at evenly spaced intervals along the perimeter buffer to the greatest extent practicable. The remainder of the buffer area shall be grass, ground cover, mulch, shrubs, trees, or other landscape treatment other than concrete and pavement.*

*3. Additional Planting Requirements Adjacent to Residential Uses*

*In addition to the planting requirements of Subsection 19.606.2.D.2, all parking areas adjacent to a residential use shall have a continuous visual screen in the landscape perimeter area that abuts the residential use. The area of required screening is illustrated in Figure 19.606.2.C.3. The screen must be opaque throughout the year from 1 to 4 ft above ground to adequately screen vehicle lights. These standards must be met at the time of planting. Examples of acceptable visual screens are a fence or wall, an earth berm with plantings, and other plantings of trees and shrubs*

As shown on the Site Plan and Landscape Plan in Exhibit A, perimeter landscaping that meets the width and planting requirements will be provided around the parking lot on the NHA site. For the perimeter of the parking lot that is adjacent to the residential property, additional plantings will be provided that will effectively screen vehicle lights as required.

**Interior Landscaping.** Interior parking lot landscaping is required for parking areas with over 10 spaces and therefore must be provided on the NHA site.

2. *Required Amount of Interior Landscaped Area*

*At least 25 sq ft of interior landscaped area must be provided for each parking space. Planting areas must be at least 120 sq ft in area and dispersed throughout the parking area.*

3. *Location and Dimensions of Interior Landscaped Areas*

a. *Interior landscaped area shall be either a divider median between opposing rows of parking, or a landscape island in the middle or at the end of a parking row.*

b. *Interior landscaped areas must be a minimum of 6 ft in width. Where a curb provides the border for an interior landscape area, the dimension shall be measured from the inside of the curb(s).*

**Response:** There are 50 parking spaces proposed for the NHA site, which requires a total of 1,250 square feet of interior parking lot landscaping. As shown on the Landscape Plan in Exhibit A, there are nine landscaped islands in the parking lot with a total of 1,332 square feet, which exceeds the minimum requirement. All landscaped islands are greater than six feet in width and at least 120 square feet in area.

4. *Planting Requirements for Interior Landscaped Areas*

b. *For landscape islands, at least 1 tree shall be planted per island. If 2 interior islands are located contiguously, they may be combined and counted as 2 islands with 2 trees planted.*

c. *The remainder of any divider median or landscape island shall be grass, ground cover, mulch, shrubs, trees, or other landscape treatment other than concrete and pavement.*

**Response:** As shown on the Landscape Plan in Exhibit A, the landscape islands provided on the NHA site will be planted with one tree per island. The remainder of the islands will be planted with ground cover.

19.606.3 *Additional Design Standards*

A. *Paving and Striping*

*Paving and striping are required for all required maneuvering and standing areas. Off-street parking areas shall have a durable and dust-free hard surface, shall be maintained for all-weather use, and shall be striped to show delineation of parking spaces and directional markings for driveways and accessways. Permeable paving surfaces may be used to reduce surface water runoff and protect water quality.*

**Response:** The proposed parking lot on the NHA site will be paved and striped, and will be constructed in accordance with the above standard. Permeable paving surfaces are not being proposed as part of this project.

### *B. Wheel Stops*

*Parking bumpers or wheel stops, of a minimum 4-in height, shall be provided at parking spaces to prevent vehicles from encroaching on the street right-of-way, adjacent landscaped areas, or pedestrian walkways. Curbing may substitute for wheel stops if vehicles will not encroach into the minimum required width for landscape or pedestrian areas.*

**Response:** Wheel stops will be provided for all parking spaces, consistent with the above requirement. Wheel stops are shown on the Site Plan in Exhibit A.

### *C. Site Access and Drive Aisles*

- 1. Accessways to parking areas shall be the minimum number necessary to provide access while not inhibiting the safe circulation and carrying capacity of the street. Driveway approaches shall comply with the access spacing standards of Chapter 12.16.*
- 2. Drive aisles shall meet the dimensional requirements in Subsection 19.606.1.*
- 3. Parking drive aisles shall align with the approved driveway access and shall not be wider than the approved driveway access within 10 ft of the right-of-way boundary.*
- 4. Along collector and arterial streets, no parking space shall be located such that its maneuvering area is in an ingress or egress aisle within 20 ft of the back of the sidewalk, or from the right-of-way boundary where no sidewalk exists.*
- 5. Driveways and on-site circulation shall be designed so that vehicles enter the right-of-way in a forward motion.*

**Response:** As shown on the Site Plan, the proposed parking lot will meet the above standards regarding drive aisles and site access.

### *D. Pedestrian Access and Circulation*

- 1. Pedestrian access shall be provided for off-street parking areas so that no parking space is further than 100 ft away, measured along vehicle drive aisles, from a building entrance, or a walkway that meets the standards of Subsection 19.606.3.D.2.*
- 2. Walkways through off-street parking areas must be continuous, must lead to a building entrance, and meet the design standards of Subsection 19.504.9.E.*

**Response:** As shown on the Landscape Plan, no parking space on the NHA site will be located further than 100 feet from a building entrance or a walkway. There are no walkways through the off-street parking area.

### *F. Lighting*

*Lighting is required for parking areas with more than 10 spaces. The Planning Director may require lighting for parking areas of less than 10 spaces if the parking area would not be safe due to the lack of lighting. Lighting shall be designed to enhance safe access for vehicles and pedestrians on the site, and shall meet the following standards:*

- 1. Lighting luminaires shall have a cutoff angle of 90 degrees or greater to ensure that lighting is directed toward the parking surface.*

2. *Parking area lighting shall not cause a light trespass of more than 0.5 footcandles measured vertically at the boundaries of the site.*
3. *Pedestrian walkways and bicycle parking areas in off-street parking areas shall have a minimum illumination level of 0.5 footcandles, measured horizontally at the ground level.*
4. *Where practicable, lights shall be placed so they do not shine directly into any WQR and/or HCA location. The type, size, and intensity of lighting shall be selected so that impacts to habitat functions are minimized.*

**Response:** The proposed parking area on the NHA site will be lighted in accordance with the standards in this section. The Lighting Cut Sheets and the Lighting Plan in Exhibit A provide additional detail and demonstrate compliance. There are no WQR or HCA locations on or adjacent to the site that will be impacted by on-site lighting.

### **19.609 BICYCLE PARKING**

#### **19.609.2 Quantity of Spaces**

A. *The quantity of required bicycle parking spaces shall be as described in this subsection. In no case shall less than 2 spaces be provided.*

1. *Unless otherwise specified, the number of bicycle parking spaces shall be at least 10% of the minimum required vehicle parking for the use.*
2. *The number of bicycle parking spaces at transit centers shall be provided at the ratio of at least 1 space per 100 daily boardings.*
3. *Multifamily residential development with 4 or more units shall provide 1 space per unit.*

**Response:** Required bicycle parking for the office and shelter uses were calculated as shown below.

- Office use. Required vehicle parking for the office use is a minimum of 25 spaces. At ten percent of required vehicle parking, the number of required bicycle parking spaces is three. However, based on past demand for bicycle parking at the NHA office, the applicant will provide six bicycle parking spaces for the office use.
- Shelter. A shelter is not a use specified by the Milwaukie code and therefore does not have an associated bicycle parking requirement. Based on past use of the Annie Ross House Shelter, the applicant proposes to provide four bicycle parking spaces for the shelter.

Bicycle parking will also be provided for the multifamily housing units as required by Section 19.609. However, the multifamily development is not part of this review. Specific bicycle parking provisions for the multifamily buildings will be addressed when the applicant submits the land use application associated with those buildings.

B. *Covered or enclosed bicycle parking. A minimum of 50% of the bicycle spaces shall be covered and/or enclosed (in lockers or a secure room) in any of the following situations:*

1. *When 10% or more of vehicle parking is covered.*
2. *If more than 10 bicycle parking spaces are required.*
3. *Multifamily residential development with 4 or more units.*

**Response:** The proposed office and shelter developments do not meet the thresholds identified above for covered or enclosed bicycle parking. Therefore, the standard is not applicable. However, the bicycle parking spaces provided for the office and shelter will be located in a covered location. Bicycle parking for the office will be located under a building overhang; bicycle parking for the shelter will be located under a building overhang.

### **19.609.3 Space Standards and Racks**

A. *The dimension of each bicycle parking space shall be a minimum of 2 x 6 ft. A 5-ft-wide access aisle must be provided. If spaces are covered, 7 ft of overhead clearance must be provided. Bicycle racks must be securely anchored and designed to allow the frame and 1 wheel to be locked to a rack using a high security, U-shaped, shackle lock.*

B. *Lighting shall conform to the standards of Subsection 19.606.3.F.*

**Response:** The bicycle parking on the NHA site will be designed to meet the above standards. The Bike Parking Product Sheets in Exhibit D provide additional detail and the Lighting Plan in Exhibit A demonstrates that lighting will be consistent with the standards of 19.606.3.F.

### **19.609.4 Location**

A. *Bicycle parking facilities shall meet the following requirements:*

1. *Located within 50 ft of the main building entrance.*
2. *Closer to the entrance than the nearest non-ADA designated vehicle parking space.*
3. *Designed to provide direct access to a public right-of-way.*
4. *Dispersed for multiple entrances.*
5. *In a location that is visible to building occupants or from the main parking lot.*
6. *Designed not to impede pedestrians along sidewalks or public rights-of-way.*
7. *Separated from vehicle parking areas by curbing or other similar physical barriers.*

**Response:** As shown on the Site Plan in Exhibit A, the location of bicycle parking for the office and shelter uses will meet the above standards. For the office, bicycle parking is located within the main entry plaza and will be visible to building occupants. This location provides direct access to the main building entrance and to the on-site pedestrian walkways that connect to the adjacent public sidewalk. Because there will be just six bicycle parking spaces and the main entry plaza is the most secure and visible location for office bicycle parking, dispersion of the spaces to other building entries is not appropriate. For the shelter, bicycle parking will be located next to the primary shelter entrance and will be visible from both the parking lot and the shelter. This location provides direct access to the shelter entrance and to the on-site pedestrian walkways that connect to the adjacent public sidewalk.

## **Section 8: Summary**

The above narrative demonstrates how the proposed redevelopment of the office building and Annie Ross House Shelter on the NHA campus will comply with the criteria for Conditional Use and Community Service Use approvals. Allowing these uses will enable NHA to continue their mission of providing affordable housing and essential services to Oregonians in need.

## **Exhibit A: Plan Set**

(Provided separately)

## **Exhibit B: Pre-Application Summary**





July 16, 2015

Bill Lanning  
MWA Architects  
70 NW Couch St., Suite 401  
Portland, OR 97209

**Re: Preapplication Report**

Dear Bill:

Enclosed is the Preapplication Report Summary from your meeting with the City on July 2, 2015, concerning your proposal for action on property located at 2316 SE Willard Street.

A preapplication conference is required prior to submittal of certain types of land use applications in the City of Milwaukie. Where a preapplication conference is required, please be advised of the following:

- Preapplication conferences are valid for a period of 2 years from the date of the conference. If a land use application or development permit has not been submitted within 2 years of the conference date, the Planning Director may require a new preapplication conference.
- If a development proposal is significantly modified after a preapplication conference occurs, the Planning Director may require a new preapplication conference.

If you have any questions concerning the content of this report, please contact the appropriate City staff.

Sincerely,

Blanca Marston  
Administrative Specialist II

Enclosure

cc: Stephen McMurtrey - NW Housing Alternatives  
Martha McLennan - NW Housing Alternatives  
Mary Dorman - APG  
Josh Lighthipe - KPFF  
Carrie Richter - Garvey Schubert Barer

**PRE-APPLICATION CONFERENCE REPORT**

---

**This report is provided as a follow-up to a meeting that was held on 7/2/2015 at 10:00am**

**Applicant Name:** Bill Lanning

**Company:** MWA Architects

**Applicant 'Role':** Architect

**Address Line 1:** 70 NW Couch St, Ste. 401

**Address Line 2:**

**City, State Zip:** Portland OR 97209

**Project Name:** NHA Campus Redevelopment

**Description:** Redevelop existing properties to provide for an office building, a shelter, and affordable housing apartments.

**ProjectAddress:** 2316 SE Willard St

**Zone:** R-2

**Occupancy Group:**

**ConstructionType:**

**Use:** Current and proposed: residential and office

**Occupant Load:**

**AppsPresent:** Bill Lanning, Stephen McMurtruy, Josh Lighthipe, Carrie Richter, Mary Dorman, Martha McLennan

**Staff Attendance:** Vera Kalias, Brad Albert, Chrissy Dawson

**BUILDING ISSUES**

**ADA:**

**Structural:**

**Mechanical:**

**Plumbing:**

**Plumb Site Utilities:**

**Electrical:**

**Notes:** No comments at this time.

**Please note all drawings must be individually rolled. If the drawings are small enough to fold they must be individually folded.**

### **FIRE MARSHAL ISSUES**

- Fire Sprinklers:** The congregate residence may be required to have a fully compliant NFPA sprinkler system.
- Fire Alarms:**
- Fire Hydrants:**
- Turn Arouds:**
- Addressing:**
- Fire Protection:**
- Fire Access:**
- Hazardous Mat.:**
- Fire Marshal Notes:** See attached.

### **PUBLIC WORKS ISSUES**

- Water:** City of Milwaukie 8-inch diameter water mains on SE Lake Road, SE 23rd Avenue and SE Willard Street are available to serve future development. The water System Development Charge (SDC) is based on the size of water meter(s) serving the property. The corresponding water SDC will be assessed with installation of each water meter. Water SDC credit will be provided based on the size of any existing water meter serving the property removed from service. The water SDC will be assessed and collected at the time the building permits are issued
- Sewer:** A City of Milwaukie 12-inch diameter sewer main on SE Lake Road and a City of Milwaukie 8-inch sewer main on SE Willard Street are available to serve future development.  
  
Currently, the wastewater System Development Charge (SDC) is comprised of two components. The first component is the City’s SDC charge of \$893.00 and the second component is the County’s connection fee for treatment of \$5,970 that the City collects and forwards to the County. Both charges are per connection unit. The wastewater SDC and connection fee is assessed using a plumbing fixture count from Table 7-3 of the Uniform Plumbing Code. The wastewater SDC connection units are calculated by dividing the fixture count of new plumbing fixtures by sixteen. The wastewater SDC will be assessed and collected at the time the building permits are issued.
- Storm:** Submission of a storm water management plan by a qualified professional engineer is required as part of future development. The plan shall conform to Section 2 - Stormwater Design Standards of the City of Milwaukie Pubic Works Standards.  
The storm water management plan shall demonstrate that the post-development runoff does not exceed the pre-development, including any existing storm water management facilities serving the development property. Also, the plan shall demonstrate compliance with water quality standards. The City of Milwaukie has adopted the most current City of Portland Stormwater Management Manual for design of water quality facilities.

All new impervious surfaces, including replacement of impervious surface with new impervious surfaces, are subject to the water quality standards. See City of Milwaukie Public Works Standards for design and construction standards and detailed drawings.

The storm SDC is based on the amount of new impervious surface constructed at the site. One storm SDC unit is the equivalent of 2,706 square feet of impervious surface. The storm SDC is currently \$844 per unit. The storm SDC will be assessed and collected at the time the building permits are issued.

**Street:**

The proposed development fronts the northeast side of SE Lake Road, an arterial road with a 65-foot right-of-way width, a paved width of 30 feet, 6.5 foot planter strips and 5 foot set-back sidewalks on both sides.

The proposed development fronts the east side of SE 23rd Avenue, a local street with a varying width of right-of-way, a 46-foot paved width and 5-foot curb-tight sidewalks on both sides.

The proposed development fronts the south side of SE Willard Street, a local street with a right-of-way width of 50 feet, a 36-foot paved width, a 5-foot curb-tight sidewalk on the north side, and a 3-foot planter strip with a 5-foot set-back sidewalk on the south side.

**Frontage:**

Chapter 19.700 of the Milwaukie Municipal Code, hereafter referred to as “Code”, applies to partitions, subdivisions, and new construction.

Transportation Facility Requirements, Code Section 19.708, states that all rights-of-way, streets, sidewalks, necessary public improvements, and other public transportation facilities located in the public right-of-way and abutting the partition site shall be adequate at the time of final plat or shall be made adequate in a timely manner.

According to Code Table 19.708.2 and the Transportation Design Manual, the arterial road cross section includes the following:

- 11-foot travel lanes
- 6-foot bike lane
- 5-foot landscape strips
- 6-foot setback sidewalks

The Lake Road improvements include, from the fronting property line, a 6 foot setback sidewalk, 5 foot planter strip, curb and gutter, and 17 feet of paved width to the center line of the road.

According to Code Table 19.708.2 and the Transportation Design Manual, the local street cross section includes the following:

- 10-foot travel lanes
- 6-foot parking strips with curb
- 3-foot landscape strips
- 5-foot setback sidewalks

The Willard Street improvements include, from the fronting property line, a 5-foot set-back sidewalk, 3-foot planter strip, curb and gutter.

Improvements to 23rd Avenue and the intersection of Lake Road and 23rd Avenue will depend on the results of a Traffic Impact Study. Final engineered plans for street improvements will be reviewed by

City of Milwaukie Engineering Staff at the time of final plat and shall be approved before construction begins.

**Right of Way:**

The existing right-of-way width on SE Lake Road fronting the proposed development is 65 feet. According to Code Table 19.708.2, the required right-of-way width for an arterial road is 63 feet. The applicant is responsible for right-of-way dedication 6.5 feet in width on SE Lake Road fronting the proposed development.

Existing right-of-way widths on SE 23rd Avenue and SE Willard Street are adequate and do not require dedication.

**Driveways:**

Code Section 12.16.040.A states that access to private property shall be permitted with the use of driveway curb cuts and driveways shall meet all applicable guidelines of the Americans with Disabilities Act (ADA). Driveway approaches shall be improved to meet the requirements of Milwaukie's Public Works Standards.

**Erosion Control:**

Per Code Section 16.28.020(C), an erosion control permit is required prior to placement of fill, site clearing, or land disturbances, including but not limited to grubbing, clearing or removal of ground vegetation, grading, excavation, or other activities, any of which results in the disturbance or exposure of soils exceeding five hundred square feet.

Code Section 16.28.020(E) states that an erosion control permit is required prior to issuance of building permits or approval of construction plans. Also, Section 16.28.020(B) states that an erosion control plan that meets the requirements of Section 16.28.030 is required prior to any approval of an erosion control permit.

**Traffic Impact Study:**

Code Section 19.704.1(A) states that the City will determine whether a transportation impact study (TIS) is required. In the event the proposed development will increase the intensity of use, a transportation impact study is required. The transportation impact study triggers a Transportation Facilities Review (TFR) Land Use Application to be filed concurrent with the land use application. Once the scope of the proposed development is determined and a deposit of \$1000.00 is paid, the City of Milwaukie will provide a detailed transportation impact study scope for the traffic study.

When the traffic impact study is completed in accordance with the TIS scope, the applicant shall schedule a second pre-application meeting with Milwaukie Engineering Staff. The second pre-application meeting will allow Engineering staff to review and comment on the applicant's traffic impact study prior to submission of any land use applications. The fee for the second pre-application meeting is \$100.00 and a deposit of \$2500.00. Upon completion of the second pre-application meeting, the applicant may submit their land use applications.

**PW Notes:**

**TRANSPORTATION SDC**

The Transportation SDC will be based on the increase in trips generated by the new use per the Trip Generation Handbook from the Institute of Transportation Engineers. The SDC for transportation is \$1,873 per trip generated. Credits will be given for any demolished structures, which shall be based upon the existing use of the structures. Credits for improvements to Lake Road and the intersection of Lake Road and 23rd Avenue will be calculated based on proportionality of the cost of the improvements. The transportation SDC will be assessed and collected at the time building permits are issued for development.

**PARKS & RECREATION SDC**

The parks & recreation System Development Charge (SDC) is triggered when application for a building permit on a new dwelling is received. Currently, the parks and recreation SDC for each Single-Family Residence is \$3,985.00. Credit is applied to any demolished structures and is based upon the existing use of the structures. The parks and recreation

SDC will be assessed and collected at the time building permits are issued for development.

#### REQUIREMENTS AT FINAL PLAT

- Engineered plans for public improvements (street, sidewalk, and utility) are to be submitted and approved prior to start of construction. Full-engineered design is required along the frontage of the proposed partition.
- The applicant shall pay an inspection fee of 5.5% of the cost of public improvements prior to start of construction.
- The applicant shall provide a payment and performance bond for 100% of the cost of the public improvements prior to the start of construction.
- The applicant shall provide a final approved set of Mylar "As Constructed" drawings to the City of Milwaukie prior to the final inspection.
- The applicant shall provide a maintenance bond for 100% of the cost of the public improvements prior to the final inspection.

### PLANNING ISSUES

#### Setbacks:

R-2 zone: front 15 ft; rear 15 ft, street side yard 15 ft; side yard 5 ft (with some exceptions related to town homes). Minimum setback from Lake Rd is 30 ft from the centerline.

#### Landscape:

R-2 zone: at least 15% of the site must be vegetated, and at least 40% of the front yard shall be vegetated. The front yard vegetation area counts toward the minimum required vegetation for the lot. A property may provide less than the 40% of the front yard vegetation requirement if it is necessary to provide a turnaround area so that vehicles can enter a collector or arterial street in a forward motion.

Per MMC 19.504.7, no more than 20% of the required vegetation area shall be covered in mulch or bark dust. Mulch or bark dust under the canopy of trees or shrubs is excluded from this limit. Plans for development shall include landscaping plans which shall be reviewed for conformance to this standard.

#### Parking:

MMC Chapter 19.600 Off-Street Parking and Loading establishes minimum off-street parking ratios for various uses. For multifamily dwelling units of less than 800 sq ft, a minimum of 1 parking space per unit is required and a maximum of 2 parking spaces per dwelling unit is permitted. For multifamily dwelling units of more than 800 sq ft, a minimum of 1.25 parking space per unit is required and a maximum of 2 parking spaces per dwelling unit is permitted.

For general office use, a minimum of 2 spaces per 1,000 sq ft of area is required and a maximum of 3.4 spaces per 1,000 sq ft is permitted.

There are some by-right reductions available for developments within 500 ft of a frequent transit stop and within 1,000 ft of a light rail station. These reductions are detailed in MMC 19.605.3. Parking space and drive aisle dimensions and parking lot landscaping and design requirements are located in MMC 19.606.

Please refer to MMC 19.605.4 for Shared Parking information.

For the purposes of parking requirements, as long as the property is under one ownership, the project is

considered to be one development site.

Parking lot design subject to MMC 19.606, including dimensional requirements and landscaping.

Proposal is also subject to bicycle parking requirements, per MMC 19.609.

**Transportation Review:** The City's transportation requirements are located in MMC 19.700. The Engineering Department has determined that this chapter may be triggered by the proposed zone change. See 'Public Works' notes for details.

**Application Procedures:** Application procedures are described below:

Conditional Use (CU): CU approval is required to permit the office use in the R-2 zone. The application is reviewed through a Type III review per MMC 19.1006, and the application fee is \$2,000. The approval criteria for CU applications are in MMC 19.905.4.

Community Service Use (CSU): CSU approval is required to permit the shelter use in the R-2 zone. The application is reviewed through a Type III review per MMC 19.1006, and the application fee is \$2,000. The approval criteria for CSU applications are in MMC 19.904.4.

Transportation Facilities Review (TFR): If a TIS is required, TFR approval will be required to evaluate the impacts of the Conditional Use and Community Service Use. The application is reviewed through a Type II review per MMC 19.1005, and the application fee is \$1,000. The approval criteria for TFR applications are in MMC 19.703.3.

Multi-family Residential Development Review (MFR): Development review for the proposed multi-family housing is subject to design review under two review processes: Objective (Type I) and Discretionary (Type II). The objective process is reviewed through a Type I review per MMC 19.1004, and the application fee is \$200. The design guidelines and standards are in MMC 19.505.3.D.

For the City's initial review, the applicant should submit 5 complete copies of the application, including all required forms and checklists. A determination of the application's completeness will be issued within 30 days. If deemed incomplete, additional information will be requested. If deemed complete, additional copies of the application will be required for referral to other departments, the Neighborhood District Association (NDA), and other relevant parties and agencies. City staff will inform the applicant of the total number of copies needed.

Type III applications are quasi-judicial in nature and are decided by the Planning Commission at a public hearing. The Planning Commission hears land use applications on the second and fourth Tuesdays of every month, and completed applications need to be submitted to the Planning Department no later than 45 days prior to the target Planning Commission hearing. In general, staff recommends that applications be submitted one to two weeks before the 45-day deadline in order to ensure that there is time to make the applications complete if they are initially deemed incomplete. Once the Planning Commission renders a decision, there is a fifteen calendar-day appeal period. Building permits will be accepted for review only after the appeal period for all land use decisions has expired.

Type II applications are administrative in nature and are decided by the Planning Director after a public notice period. The timeline for review and approval is generally 30 – 45 days.

Type I applications are administrative in nature and are decided by the Planning Director. The timeline for review and approval is generally 14 days.

Applications may be submitted concurrently. There is a 25% discount for the least expensive application(s).

Land use application submission materials are listed below for your convenience. Please refer to the handouts distributed at the pre-application conference for more detailed information.

1. All applicable land use applications forms with signatures of property owners.
2. All applicable land use application fees.
3. Completed and signed "Submittal Requirements" form.
4. Completed and signed "Site Plan Checklist and Procedures" form.
4. 5 copies of an existing conditions and a proposed conditions site plan, both to scale. These two site plans can be combined onto one site plan. Once the application is deemed complete, additional copies will be requested for distribution to City departments, applicable governmental agencies, and the neighborhood district association for review.
5. Detailed narrative describing compliance with all applicable code sections.

**Natural Resource Review:** Not required.

**Lot Geography:** The site consists of 9 tax lots and is generally rectilinear in shape, with an uneven eastern boundary.

**Planning Notes:** 1) A question was asked regarding the calculation of required parking for the shelter use, which is not listed in Table 19.605.1. The applicant may, within the application narrative, make an argument as to which of the listed uses is the most comparable. Alternatively, the applicant may submit a Type II parking determination application (MMC 1.605.2).

2) The City will consider all of the tax lots as a single site for the purposes of setbacks, lot coverage, minimum vegetation, etc.

3) Public notice signs will need to be posted on site prior to any hearing or decision on the Type III land use application. Notice of the application will be sent to property owners within 300 ft of the subject property. The applicant may wish to communicate with these property owners prior to submittal of the application in order to identify any potential concerns.

4) The preapplication conference is valid for purposes of submitting future land use applications as described in 19.1002.4. In general, a preapplication conference is valid for 2 years.

5) The Milwaukie Municipal Code is available online at <http://www.qcode.us/codes/milwaukie/>

### **ADDITIONAL NOTES AND ISSUES**

**County Health Notes:**

**Other Notes:**



**This is only preliminary preapplication conference information based on the applicant's proposal and does not cover all possible development scenarios. Other requirements may be added after an applicant submits land use applications or building permits. City policies and code requirements are subject to change. If you have any questions, please contact the City staff that attended the conference (listed on Page 1). Contact numbers for these staff are City staff listed at the end of the report.**

**Sincerely,**

**City of Milwaukie Development Review Team**

---

**BUILDING DEPARTMENT**

**Samantha Vandagriff - Building Official - 503-786-7611**

**Bonnie Lanz - Permit Technician - 503-786-7613**

**ENGINEERING DEPARTMENT**

**Vacant - Engineering Director - 503-786-7605**

**Brad Albert - Civil Engineer - 503-786-7609**

**Stacy Stubblefield - Civil Engineer - 503-786-7602**

**Chrissy Dawson - Engineering Technician II - 503-786-7610**

**Alex Roller - Engineering Technician I - 503-786-7695**

**COMMUNITY DEVELOPMENT DEPARTMENT**

**Alma Flores - Community Develop. Dir. - 503-786-7652**

**Marcia Hamley - Admin Specialist II - 503-786-7656**

**Alicia Martin -Admin Specialist II - 503-786-7600**

**Blanca Marston -Admin Specialist II - 503-786-7600**

**PLANNING DEPARTMENT**

**Dennis Egner - Planning Director - 503-786-7654**

**Li Alligood - Senior Planner - 503-786-7627**

**Brett Kelder - Associate Planner - 503-786-7657**

**Vera Kolas - Associate Planner - 503-786-7653**

**CLACKAMAS FIRE DISTRICT**

**Mike Boumann - Lieutenant Deputy Fire Marshal - 503-742-2673**

# Clackamas County Fire District #1

## Fire Prevention Office



### E-mail Memorandum

To: City of Milwaukie Planning Department  
From: Matthew Amos, Fire Inspector, Clackamas Fire District #1  
Date: **6/30/2015**  
Re: **2316 SE Willard St. 15-013PA**

---

This review is based upon the current version of the Oregon Fire Code (OFC), as adopted by the Oregon State Fire Marshal's Office. The scope of review is typically limited to fire apparatus access and water supply, although the applicant must comply with all applicable OFC requirements. When buildings are completely protected with an approved automatic fire sprinkler system, the requirements for fire apparatus access and water supply may be modified as approved by the fire code official. The following items should be addressed by the applicant:

#### COMMENTS:

**A Fire Access and Water Supply plan is required for subdivisions and commercial buildings over 1000 square feet in size or when required by Clackamas Fire District #1. The plan shall show fire apparatus access, fire lanes, fire hydrants, fire lines, available fire flow, FDC location (if applicable), building square footage, and type of construction. The applicant shall provide fire flow tests per NFPA 291, and shall be no older than 12 months. Work to be completed by experienced and responsible persons and coordinated with the local water authority.**

#### Fire Department Access:

1. Provide address numbering that is clearly visible from the street.
2. No part of a building may be more than 150 feet from an approved fire department access road.
3. Buildings exceeding 30 feet in height shall require extra width and proximity provisions for aerial apparatus.

## **Water Supply:**

1. 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. Note: This distance may be increased to 600 feet for buildings equipped throughout with an approved automatic sprinkler system.
2. All new buildings shall have a firefighting water supply that meets the fire flow requirements of the Fire Code. Maximum spacing between hydrants on street frontage shall not exceed 500 feet. Additional private on-site fire hydrants may be required for larger buildings. Fire sprinklers may reduce the water supply requirements.
3. The fire department connection (FDC) for any fire sprinkler system shall be placed as near as possible to the street, and within 100 feet of a fire hydrant.
4. Please see our design guide at:  
<http://www.clackamasfire.com/documents/fireprevention/firecodeapplicationguide.pdf>
5. Comments may not be all inclusive based on information provided.

If you have questions please contact Clackamas Fire District @503-742-2660

# **Exhibit C: Traffic Impact Analysis**



# KITTELSON & ASSOCIATES, INC.

TRANSPORTATION ENGINEERING / PLANNING

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

October 27, 2015

Project #: 13922

Stephen McMurtrey  
Northwest Housing Alternatives  
2316 SE Willard Street  
Milwaukie, OR 97222

## ***RE: Northwest Housing Alternatives Campus Redevelopment Plan - Transportation Impact Analysis***

Dear Stephen,

Northwest Housing Alternatives (NHA) is proposing to redevelop its existing Milwaukie campus to include new NHA office space, a new emergency family shelter, and new affordable rental housing. This report addresses the redevelopment's traffic and parking impacts on the surrounding transportation system and complies with the City of Milwaukie's traffic impact study criteria. Additional details of the methodology, findings and recommendations are provided herein.

## INTRODUCTION

NHA is proposing redevelopment of its existing campus, which is located just south of Milwaukie High School. The redevelopment will involve demolition of all existing campus structures and the construction of new building for its office, a new Annie Ross House, and 28 new affordable rental housing units. Figure 1 illustrates the site vicinity and Figure 2 illustrates the conceptual site layout. For the purposes of this study, full build-out and occupancy of the redeveloped campus is anticipated by the year 2019.

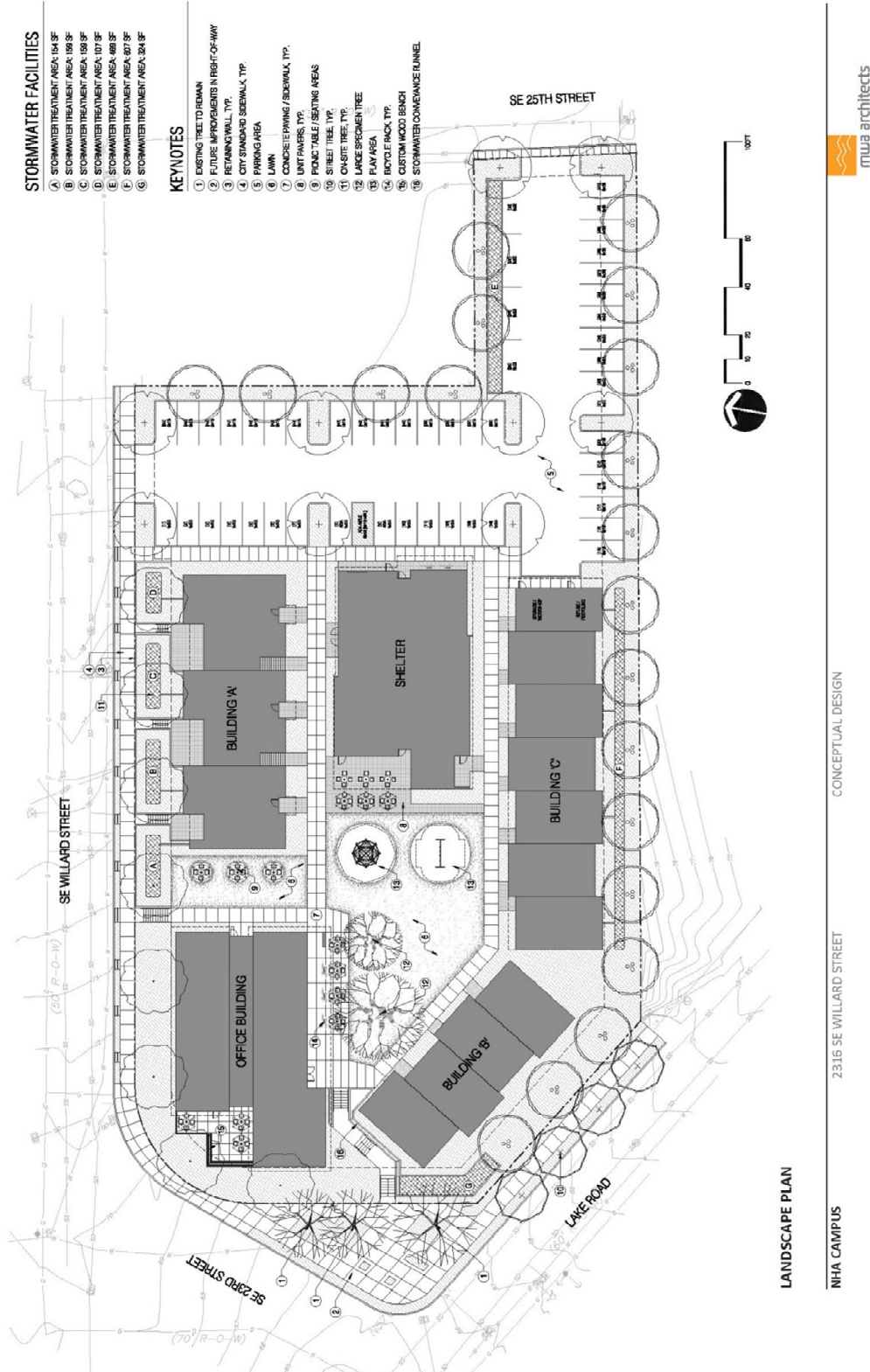
## SCOPE OF THE REPORT

This report identifies the transportation and parking-related impacts associated with the proposed redevelopment, and was prepared in accordance with the scope of work outline provided by the City of Milwaukie. Accordingly, operational analyses were performed at the following study intersections during the weekday AM and PM peak periods as they are expected to experience a ten percent increase in peak hour traffic volumes as a result of the proposed redevelopment:

- SE Lake Road/SE 23<sup>rd</sup> Avenue
- SE Willard Street/SE 25<sup>th</sup> Avenue
- SE Willard Street/SE 27<sup>th</sup> Avenue



Figure 2 – Conceptual Site Layout (Prepared by MWA Architects)



This report evaluates the following transportation issues:

- Existing land use and transportation system conditions within the site vicinity during the weekday AM and PM peak periods;
- Forecast year 2019 background traffic conditions during the weekday AM and PM peak periods;
- Trip generation and distribution estimates for the campus redevelopment;
- Forecast year 2019 total traffic conditions during both peak hours of the site assuming full buildout of the site;
- A comparison of on-street parking demand and supply to determine the potential for any parking impacts on the adjacent local streets surrounding the project site; and
- A summary of compliance of the redevelopment with the applicable transportation-related code requirements.

## Analysis Methodology

All level-of-service analyses described in this report were performed in accordance with the procedures stated in the 2010 Highway Capacity Manual (HCM). A description of level of service and the criteria by which they are determined is presented in Appendix "A". Appendix "A" also indicates how level of service is measured and what is generally considered the acceptable range of level of service. To ensure that this analysis was based on a reasonable worst-case scenario, the peak 15 minute flow rate during the peak hour periods was used in the evaluation of all intersections. For this reason, the analysis reflects conditions that are only likely to occur for 15 minutes out of each average peak hour. Traffic conditions during other weekday hours will likely be better than those described in this report.

## EXISTING CONDITIONS

This section summarizes the existing characteristics of the transportation system and adjacent land uses in the vicinity of the campus redevelopment site, including an inventory of the existing multi-modal transportation facilities and options, an evaluation of existing intersection operations for motor vehicles at the study intersections, and a summary of recent crash history.

### Site Conditions and Adjacent Land Uses

The existing NHA campus is located just to the south of Milwaukie High School and is roughly bordered by SE Willard Street to the north, SE 23<sup>rd</sup> Avenue to the west, SE Lake Road to the south, and SE 25<sup>th</sup> Avenue to the east. Single-family homes and condominiums border the campus to the south and east. Vehicular access to the campus is provided by three driveways located off of SE Willard Street.



## Transportation Facilities

Table 1 identifies the characteristics of key roadways located within the campus vicinity, including the existing street classifications reflected in the City’s Transportation System Plan (TSP). Figure 3 identifies the lane configurations and traffic control devices at the study intersections.

**Table 1 – Existing Transportation Facilities**

Roadway	TSP Classification	Motor Vehicle Travel Lanes	Posted Speed (mph)	Sidewalks	Striped Bicycle Lanes	On-Street Parking
SE Lake Road	Arterial	2	30	Yes	No	No
SE 27 <sup>th</sup> Avenue	Neighborhood Route	2	20 <sup>1</sup>	Yes	No	Yes
SE 23 <sup>rd</sup> Avenue	Local Street	2	20 <sup>1</sup>	Yes	No	Yes
SE Willard Street	Local Street	2	20 <sup>1</sup>	Yes <sup>2</sup>	No	Yes

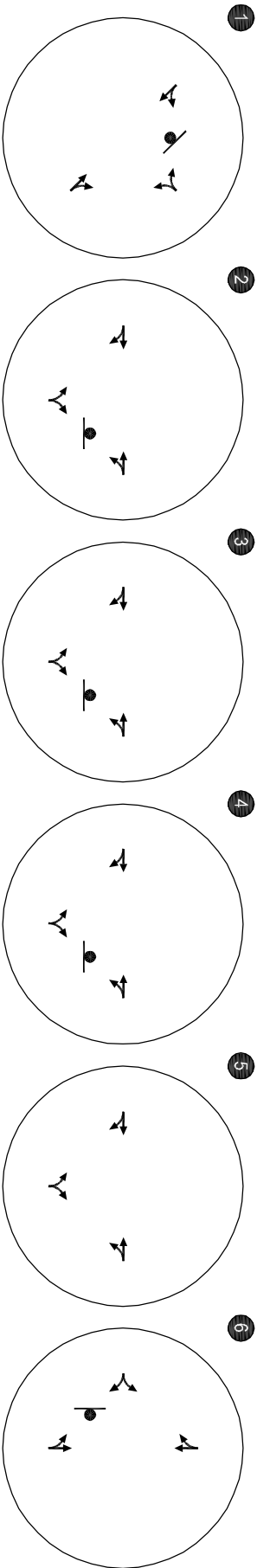
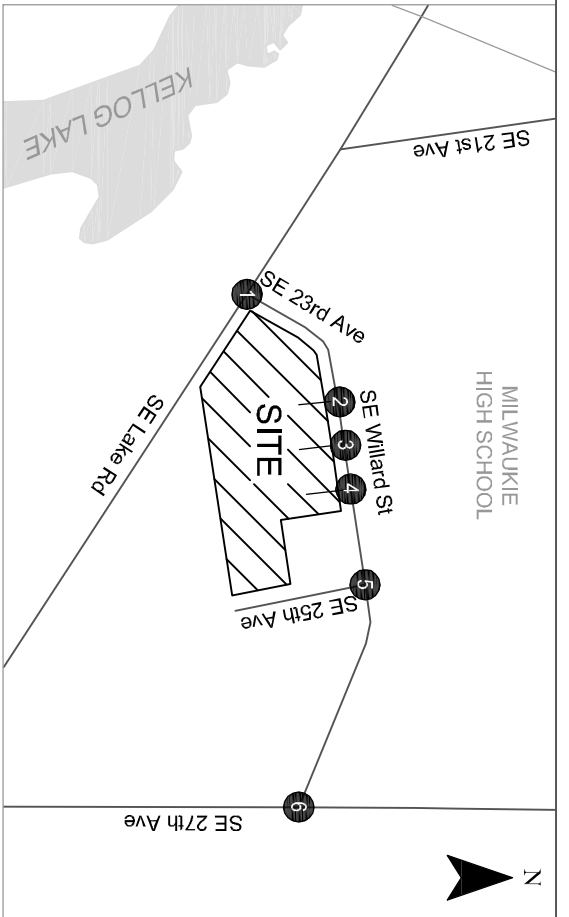
<sup>1</sup> School zone speed signs of 20 mph are posted on each of these roadways within the vicinity of the NHA campus. School speed zones are in effect from 7:00 AM to 5:00 PM on school days.

<sup>2</sup> There is a short gap in the sidewalk along the north side of SE Willard Street between SE 25<sup>th</sup> Avenue and SE 27<sup>th</sup> Avenue.

## Transit Service

Regional transit service is provided adjacent to the existing NHA campus via TriMet bus route 32 (Oatfield). Route 32 provides weekday and Saturday bus service (at approximately 15-30 minute intervals) along SE Lake Road with stops located near SE 23<sup>rd</sup> Street. A complete sidewalk network is provided on the roadways (SE Willard Street, SE 23<sup>rd</sup> Avenue, and SE Lake Road) between the NHA campus and these stops on SE Lake Road. Signed and striped crosswalks are also provided along SE Lake Road near the SE 23<sup>rd</sup> Avenue and SE 27<sup>th</sup> Avenue intersections.

In addition to Route 32, three other TriMet bus routes (29, 33, and 34) all provide service within close proximity of the NHA campus and are accessible via the local street sidewalk network. Lastly, the new Max Orange Line stops at the Milwaukie/Mail Street Max Station located just west of the site in Downtown Milwaukie. All combined, the NHA campus is well served by local and regional transit and a relatively complete sidewalk network exists on the adjacent street network to access the transit system.



-  - STOP SIGN
-  - TRAFFIC SIGNAL

**Existing Lane Configurations  
& Traffic Control Devices  
Milwaukie, Oregon**

Figure  
**3**

## Active Transportation

### *Pedestrian Facilities*

As documented in Table 1, sidewalks are provided on all streets that provide direct access to the NHA campus. Beyond the immediate site vicinity, the sidewalk network is fairly comprehensive providing a significant level of local and regional accessibility to the surrounding residential neighborhoods and nearby Downtown Milwaukie.

The NHA campus is located within the Milwaukie Elementary School (approximately 0.15 miles to the east along NE 27<sup>th</sup> Avenue), Rowe Middle School (approximately 0.6 miles to the southeast along SE Lake Road), and Milwaukie High School (directly across SE Willard Street) school boundaries. The North Clackamas School District has completed “Safe Walk Path Maps” for the transportation network located within each school boundary. A review of the maps indicates that there is a sidewalk and intersection crosswalk network between the NHA campus and all three school sites. Furthermore, the maps and a subsequent field inventory indicated that there are no physical walking barriers between the NHA campus and each school site.

### *Bicycle Facilities*

There is no physical or formally designated bicycle infrastructure on the immediately adjacent SE Lake Road, SE 23<sup>rd</sup> Avenue, SE 27<sup>th</sup> Avenue, and SE Willard Street networks. Rather, the vehicular volumes are low enough to enable cyclists to “share the road” with motorists.

## Existing Vehicular Operations

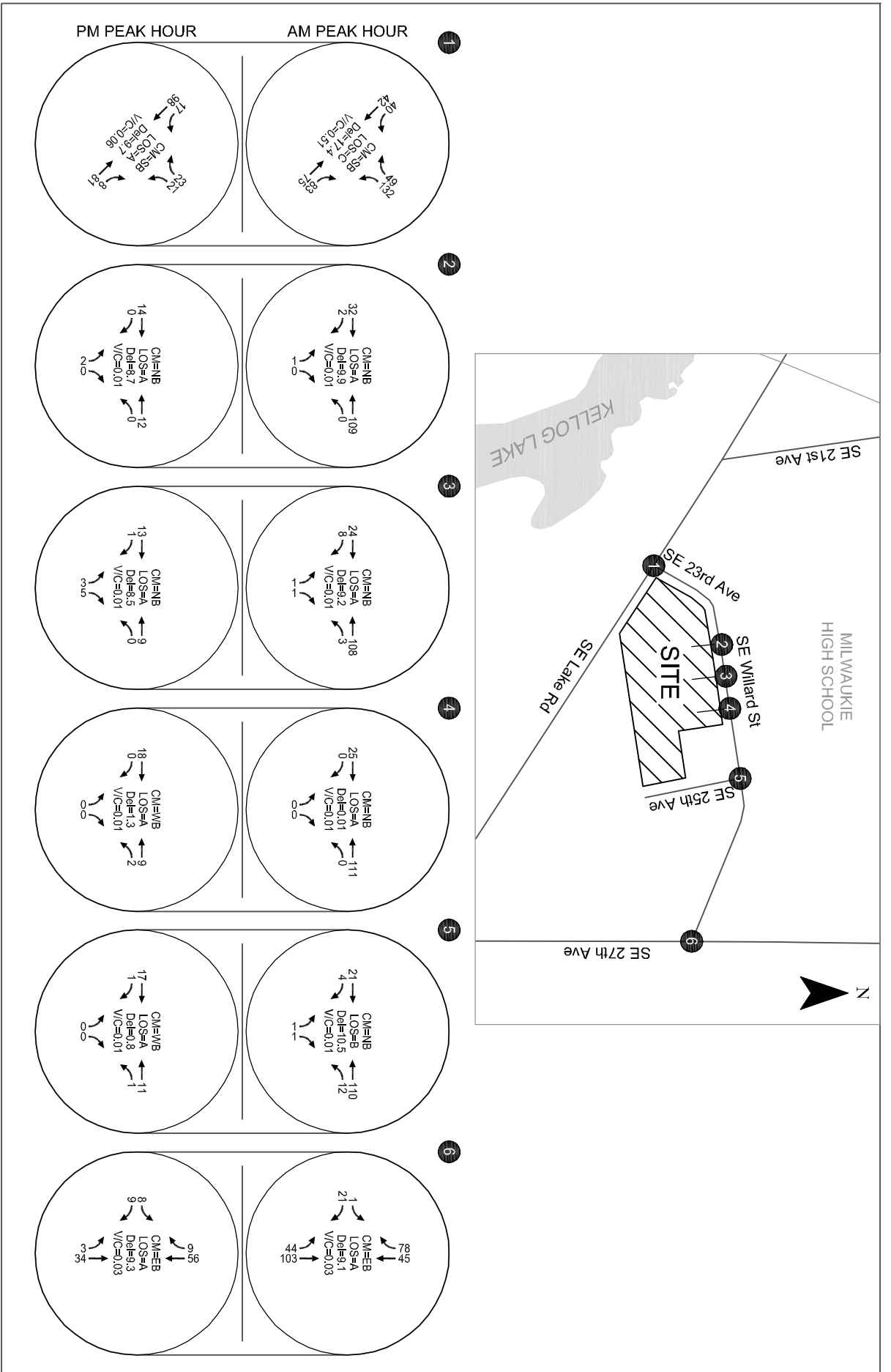
Manual turning movement counts were collected at the study intersections in September 2015 when local schools were in session. Traffic counts were collected during the morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak time periods. Appendix “B” contains the traffic count worksheets. Figure 4 and Table 2 summarizes the operational analysis for the study intersections during the weekday AM and PM peak hours. As shown in Table 2, all intersections operate acceptably per the City’s standards. Appendix “C” contains the 2015 existing conditions operational worksheets.

**Table 2 – 2015 Existing Traffic Conditions**

Intersection	Minimum Acceptable Measure of Effectiveness <sup>1</sup>	Weekday AM Peak Hour		Weekday PM Peak Hour	
		LOS	V/C	LOS	V/C
<b>Unsignalized Intersections<sup>2</sup></b>					
SE Lake Road/SE 23 <sup>rd</sup> Avenue	LOS D	C	0.51	A	0.06
SE Willard Street/SE 25 <sup>th</sup> Avenue	LOS D	B	0.01	A	0.01
SE Willard Street/SE 27 <sup>th</sup> Avenue	LOS D	A	0.03	A	0.03

<sup>1</sup>Milwaukie Municipal Code, Section 19.1407.4(A).

<sup>2</sup> LOS and V/C for unsignalized intersections reported for the highest delay or critical movement.



**Existing AM & PM Peak Hour Traffic Operations**  
**Milwaukie, Oregon**  
 Figure 4

## Crash History Analysis

Intersection crash histories were reviewed in an effort to identify potential intersection safety issues. Crash data for the study intersections were obtained from the Oregon Department of Transportation (ODOT) for the five-year period from January 1, 2009 through December 31, 2013. Table 3 illustrates the crashes reported at the study intersections. *Appendix “D” contains the ODOT crash data.*

**Table 3 - Intersection Crash History (January 1, 2009 through December 31, 2013)**

Intersection	Collision Type						Total Crashes
	Angle	Turning	Rear End	Side-swipe	Ped/Bike	Other	
SE Lake Road/SE 23 <sup>rd</sup> Avenue	0	0	0	0	0	0	0
SE Willard Street/SE 25 <sup>th</sup> Avenue	0	0	0	0	0	0	0
SE Willard Street/SE 27 <sup>th</sup> Avenue	0	0	0	0	1	0	1

As summarized in Table 3, the only reported crash occurred at the SE Willard Street/SE 27<sup>th</sup> Avenue intersection. A review of this crash indicates that it involved a vehicle-pedestrian collision where the vehicle was cited for making an illegal left-turn and failing to yield the right-of-way to a pedestrian. No other safety-related issues were identified through a review of this crash data. Based on review of the crash history, no safety-related mitigation measures are needed as a part of site redevelopment.

## TRAFFIC IMPACT ANALYSIS

The traffic impact analysis identifies how the study area’s transportation system will operate upon redevelopment of the campus. The impact of site-generated weekday AM and PM peak hour trips was examined as follows:

- Planned developments and transportation improvements in the site vicinity were identified and reviewed;
- Year 2019 background traffic conditions (build-out year of the proposed development without site-generated traffic) were analyzed at the study intersections;
- Future peak hour site-generated trips were estimated for build-out of the site;
- A trip distribution pattern was prepared and the site-generated trips were distributed to the study area intersections;
- Existing traffic patterns were adjusted to account for new roadway infrastructure;
- Forecast year 2019 total traffic conditions were analyzed during the weekday AM and PM, peak hours with build-out of the site;
- On-site circulation and site-access operations were evaluated; and
- On-street parking adequacy was reviewed.

## 2019 BACKGROUND CONDITIONS

The year 2019 background traffic analysis identifies how the study area’s transportation system will operate without the proposed development but within the anticipated buildout period. This analysis accounts for traffic attributed to planned developments within the study area and includes general growth in the region, but does not include traffic from the proposed redevelopment.

### Planned Developments and Transportation Improvements

Per discussions with City staff, there are no approved in-process developments in the immediate site vicinity that would impact the study intersections. There are also no transportation improvements identified for any of the study intersections or roadways within the specific time-frame of this study that would have a measurable impact on the future operations analysis.

### 2019 Background Operations

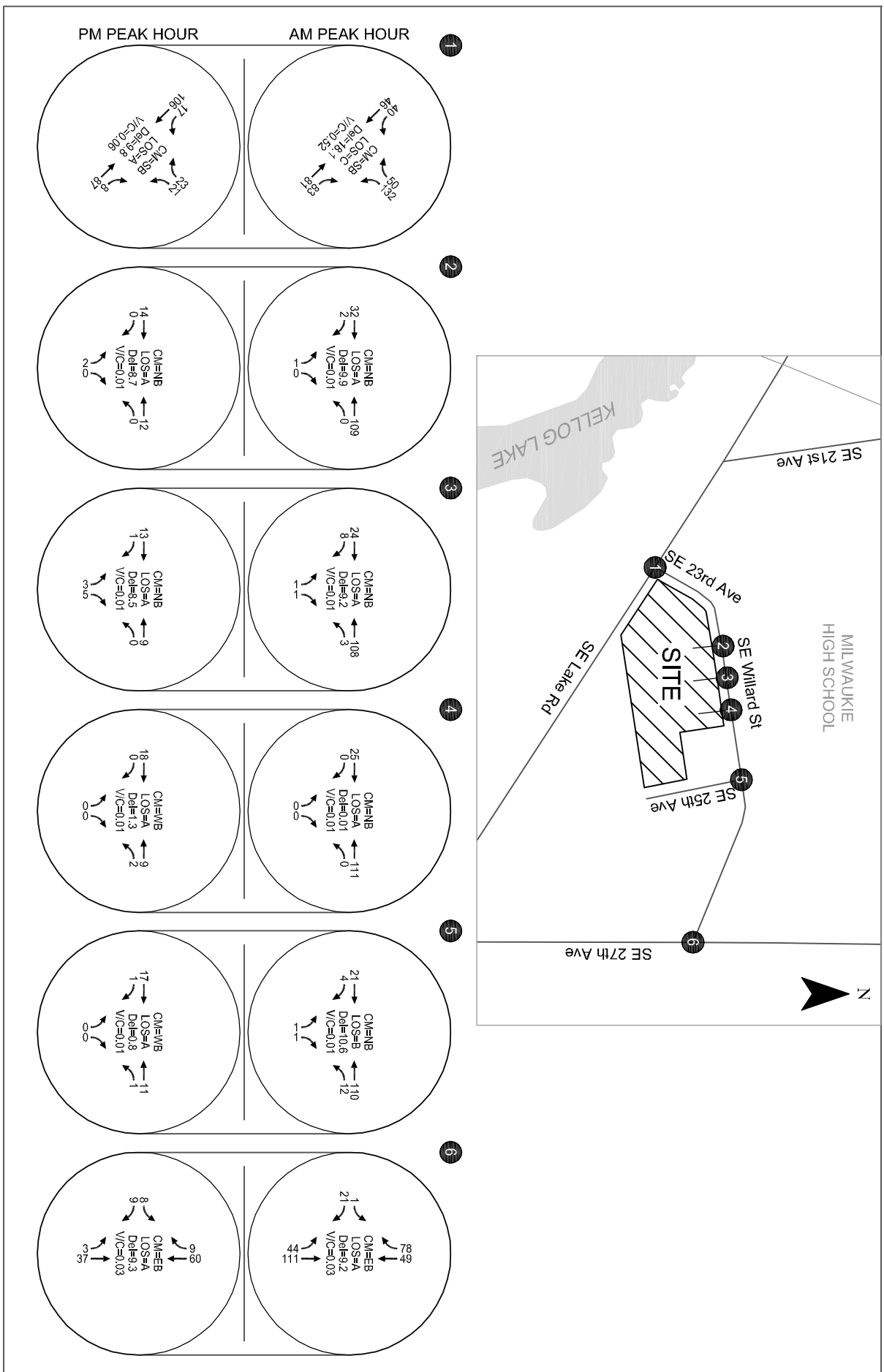
To account for future through traffic growth in the region, a 2 percent annual growth rate was used to forecast the future background traffic volumes. This growth rate is generally consistent with the rates used in the City’s Transportation System Plan. Figure 5 and Table 4 summarize the resulting forecast 2019 background traffic conditions for the study intersections during the weekday AM and PM peak hours. As shown, all intersections are forecast to continue to operate acceptably. *Appendix “E” contains the 2019 background operations worksheets.*

**Table 4 – 2019 Background Traffic Conditions**

Intersection	Minimum Acceptable Measure of Effectiveness <sup>1</sup>	Weekday AM Peak Hour		Weekday PM Peak Hour	
		LOS	V/C	LOS	V/C
<b>Unsignalized Intersections<sup>2</sup></b>					
SE Lake Road/SE 23 <sup>rd</sup> Avenue	LOS D	C	0.52	A	0.06
SE Willard Street/SE 25 <sup>th</sup> Avenue	LOS D	B	0.01	A	0.01
SE Willard Street/SE 27 <sup>th</sup> Avenue	LOS D	A	0.03	A	0.03

<sup>1</sup>Milwaukie Municipal Code, Section 19.1407.4(A).

<sup>2</sup> LOS and V/C for unsignalized intersections reported for the highest delay or critical movement.



CM = CRITICAL MOVEMENT (TWSC)  
 LOS = INTERSECTION LEVEL OF SERVICE (AWSC) / CRITICAL MOVEMENT LEVEL OF SERVICE (TWSC)  
 Del = INTERSECTION AVERAGE CONTROL DELAY (AWSC) / CRITICAL MOVEMENT CONTROL DELAY (TWSC)  
 V/C = CRITICAL VOLUME-TO-CAPACITY RATIO  
 TWSC = TWO-WAY STOP CONTROL  
 AWSC = ALL-WAY STOP CONTROL

# 2019 Background Weekday AM & PM Peak Hour Traffic Conditions Milwaukie, Oregon

Figure 5

## PROPOSED REDEVELOPMENT PLAN

As previously described and illustrated in Figure 2, NHA is proposing campus redevelopment that will include:

- Construction of a new 12,500 square foot office building to replace NHA's existing 5,365 square foot office. This building will be designed to more efficiently accommodate NHA's 35 existing office staff while providing room for future employee growth.
- Construction of a new Annie Ross House that will provide up to 8 shelter rooms for families needing emergency shelter or who are experiencing temporary homelessness.
- Construction of 28 affordable housing apartments.

From a circulation perspective, the redevelopment will consist of the following:

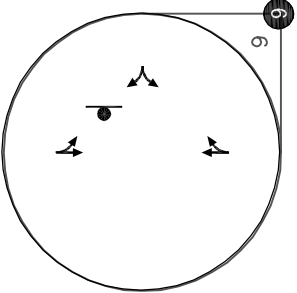
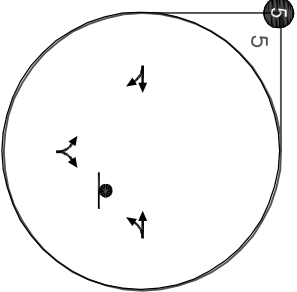
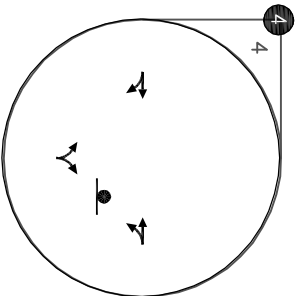
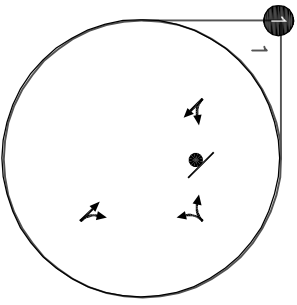
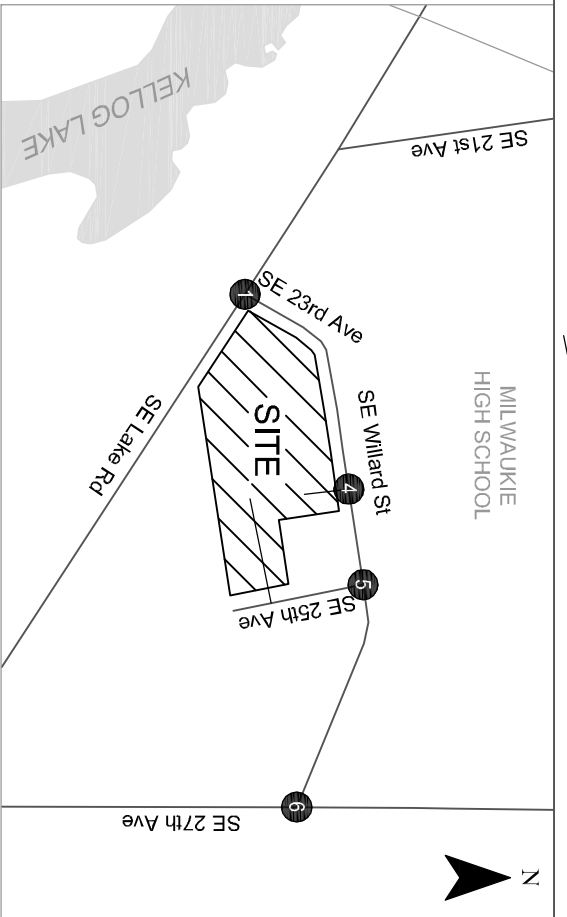
- All three existing site access driveways on SE Willard Street will be closed.
- A new site access driveway will be constructed at the eastern edge of the SE Willard Street frontage (approximately the same location as the existing easternmost driveway). This driveway will provide access to a 50-stall off-street parking lot that will be shared by NHA office staff, residents of the affordable housing units, and those individuals/families staying at the Annie Ross House.
- A second site access driveway will be constructed on SE 25<sup>th</sup> Street which will provide secondary access to the 50-stall parking lot.
- Pedestrian walkways will connect the campus to SE Willard Street and SE 23<sup>rd</sup> Avenue.
- Dedicated bicycle parking areas located throughout the campus will accommodate a total of 36 bikes.

Figure 6 illustrates the proposed/assumed lane configurations and traffic control devices at all of the study intersections and new site driveways.

### Re-Routing of Existing Site Access Trips

Assuming the proposed site driveway reconfiguration, the existing AM and PM site driveway trips associated with the existing NHA campus operations were rerouted to the proposed SE Willard Street driveway. The rerouting is documented in Figure 7.

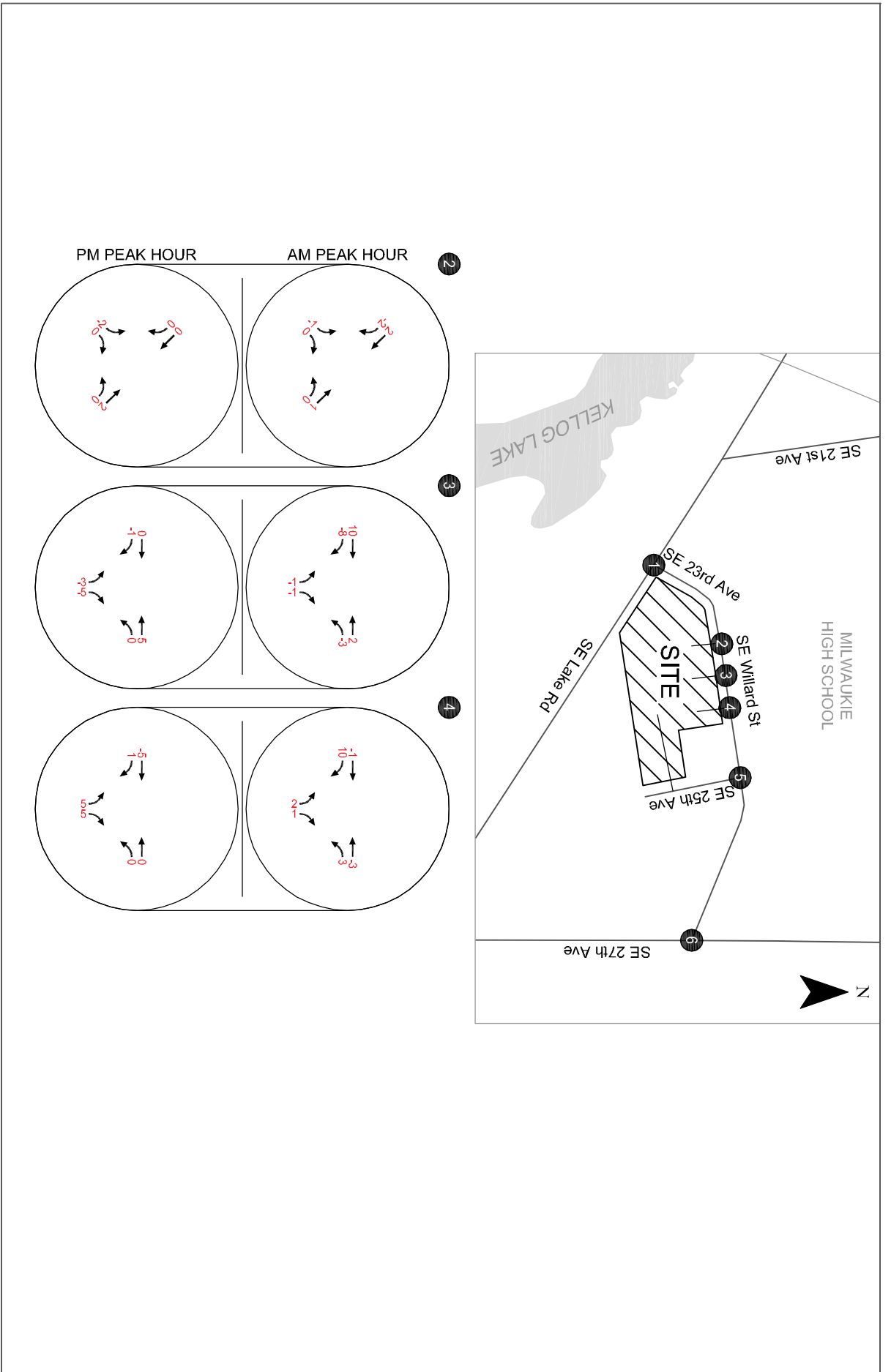




- - STOP SIGN
- - TRAFFIC SIGNAL

**Proposed Site Driveway Configurations  
& Traffic Control Devices  
Milwaukie, Oregon**

Figure  
**6**



**2019 Re-routed Site Driveway trips AM & PM Peak Hour Traffic Conditions Milwaukie, Oregon**

Figure 7

## Trip Generation

In order to develop a trip generation rate for the proposed campus redevelopment, the individual campus components were broken out and analyzed individually given the unique services that NHA provides to the surrounding community.

### ***NHA Office Trip Generation***

Detailed site-generated driveway and on-street parking trips were quantified for the existing NHA campus on a mid-week day while local schools were in session. Based on a review of this data, only the existing NHA office component generates vehicle trips during the weekday AM and PM peak hours. As shown in Table 5, 16 vehicle trips were generated during the weekday AM peak hour and 13 vehicle trips were generated during the weekday PM peak hour. These results were reviewed by NHA staff and were found to be representative of typical peak hour commuting patterns<sup>1</sup>.

As part of their long-term growth projections, NHA is anticipating a need for up to 15 additional employees. To account for the new trips that could be generated by the 15 employee increase, a proportional increase was calculated based on the site’s current trip profile. The resulting weekday AM and PM peak period trip ends are summarized in Table 5. Based on these rates, the 15 additional staff would generate approximately 7 weekday AM and 6 weekday PM peak hour trips.

**Table 5 - NHA Office Trip Generation Estimate**

	Weekday AM Peak Hour <sup>1</sup>			Weekday PM Peak Hour <sup>2</sup>		
	Total	In	Out	Total	In	Out
Existing NHA Office						
Existing (35 employees)	16	13	3	13	3	10
Trip Rate/Employee	0.45	81%	19%	0.37	23%	77%
Anticipated NHA Office Employee Growth						
Net New Trips (additional 15 employees)	7	6	1	6	1	5
Future NHA Office						
Total Office Trips (50 employees)	23	19	4	19	4	15

<sup>1</sup> Weekday AM peak hour of 7:45 – 8:45 AM

<sup>2</sup> Weekday PM peak hour of 4:50 - 5:50 PM

### ***NHA Affordable Housing Trip Generation***

As previously documented, the existing site driveway and on-street parking counts did not reveal any vehicle trips generated specifically by the NHA’s existing 9 affordable housing units and the five shelter rooms in the Annie Ross House. However, recognizing there is a potential for the redevelopment to

<sup>1</sup> Of the 35 staff currently employed by NHA, not all maintain a typical 8:00 AM to 5:00 PM work hours and not all commute via single occupancy vehicles.

generate housing-related trips, a conservative trip generation estimate was calculated using the “Apartment” land use code in the Institute of Transportation Engineers (ITE) *Trip Generation*. The apartment rate was applied to both the affordable housing units and the emergency shelter rooms. The resulting weekday AM and PM peak period trip ends are summarized in Table 6.

**Table 6 - Affordable Apartment Housing and Annie Ross Shelter Trip Generation Estimate**

Land Use	ITE Code	Size	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total	In	Out	Total	In	Out
Apartments	220	36 units <sup>1</sup>	240	18	4	14	22	14	8

<sup>1</sup> Consists of the planned 28 affordable apartment units and the 8 shelter rooms in the Annie Ross House

### Site Trip Distribution/Trip Assignment

The site-generated trips shown in Tables 5 and 6 were distributed onto the study area roadway system based on a combination of existing traffic counts at the site driveways and observed traffic patterns within the site vicinity. Figure 8 illustrates the trip distribution pattern and the assignment of new site-generated trips to the study area intersections during the weekday AM and PM peak hours. It should be noted that the trips generated by the existing office users and reflected in Table 5 are not included in Figure 8.

### 2019 Total Traffic Operations

The year 2019 background traffic volumes for the weekday AM and PM peak hours (shown in Figure 5) were combined with the re-routed driveway volumes (shown in Figure 7) and the site-generated traffic (shown in Figure 8) to arrive at the total traffic volumes that are shown in Figure 9.

Figure 9 and Table 7 summarize the forecast 2019 total traffic conditions for the study intersections during the weekday AM and PM peak hours. As shown, all study intersections and site driveways are forecast to operate acceptably. As such, no capacity-based mitigation measures are needed to support site redevelopment. *Appendix “F” contains the 2019 total traffic conditions operational worksheets.*

**Table 7 – 2019 Total Traffic Conditions**

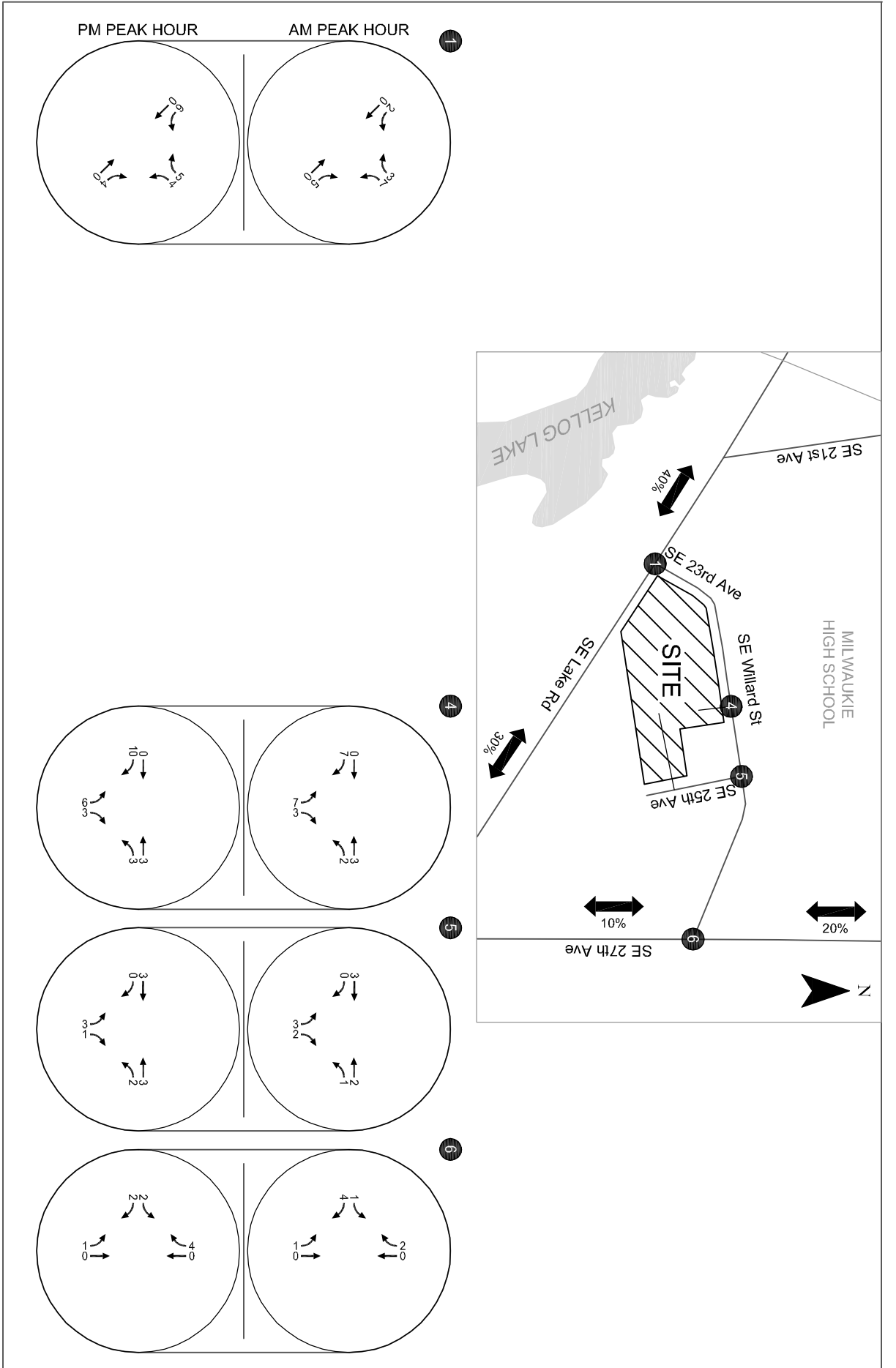
Intersection	Minimum Acceptable Measure of Effectiveness <sup>1</sup>	Weekday AM Peak Hour		Weekday PM Peak Hour	
		LOS	V/C	LOS	V/C
<b>Unsignalized Intersections<sup>2</sup></b>					
SE Lake Road/SE 23 <sup>rd</sup> Avenue	LOS D	C	0.55	A	0.08
SE Willard Street/Proposed Site Driveway	LOS D	A	0.03	A	0.02
SE Willard Street/SE 25 <sup>th</sup> Avenue	LOS D	B	0.01	A	0.01
SE Willard Street/SE 27 <sup>th</sup> Avenue	LOS D	A	0.04	A	0.03

<sup>1</sup> Milwaukie Municipal Code, Section 19.1407.4(A).

<sup>2</sup> LOS and V/C for unsignalized intersections reported for the highest delay or critical movement.

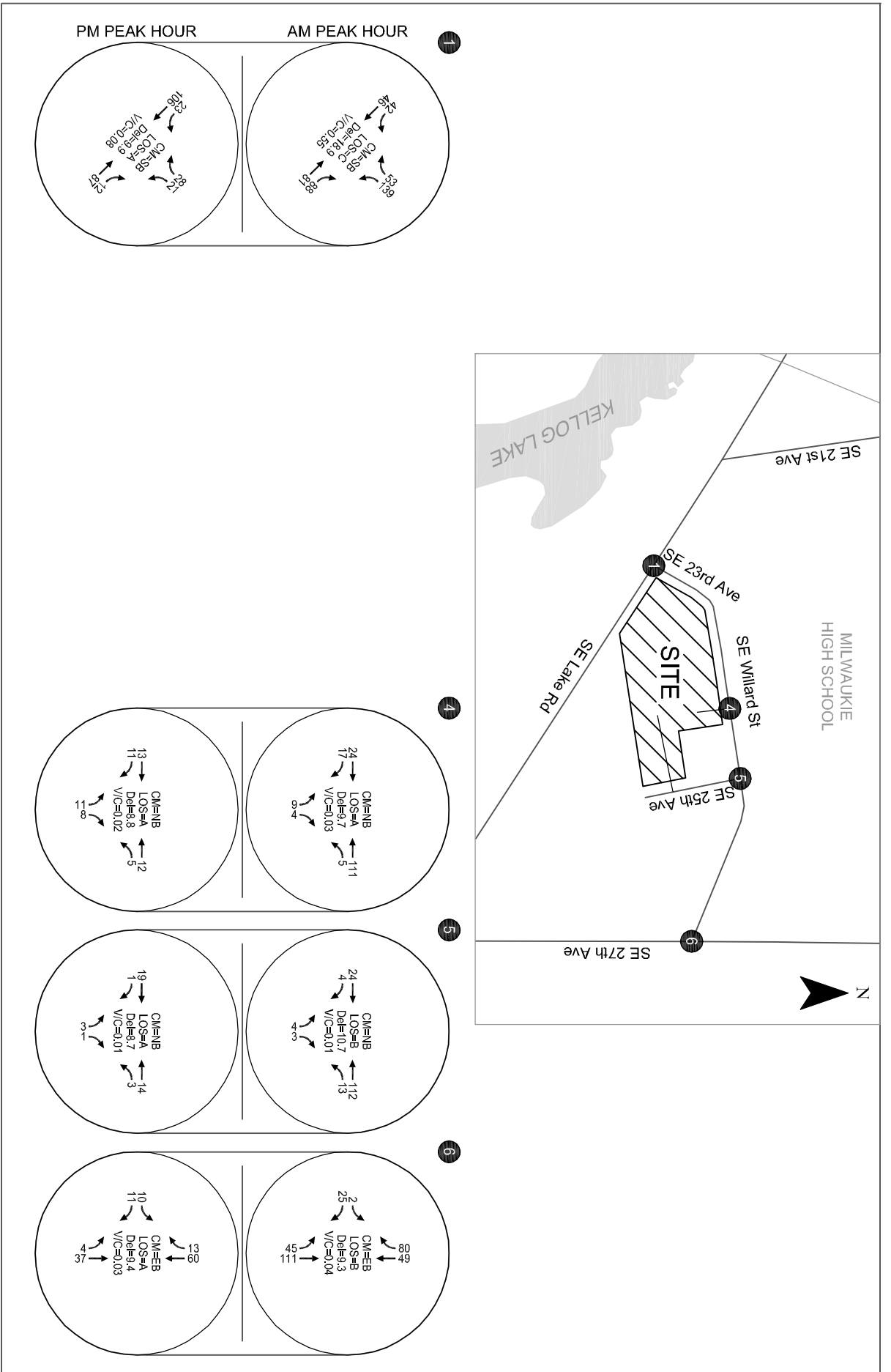


KITTELSSON & ASSOCIATES, INC.  
TRANSPORTATION ENGINEERING/PLANNING



**Trip Distribution & Assignment  
Weekday AM & PM Peak Hour Traffic Conditions  
Milwaukie, Oregon**

Figure  
**8**



**2019 Total Weekday AM & PM  
Peak Hour Traffic Conditions  
Milwaukie, Oregon**

Figure  
**9**

CM = CRITICAL MOVEMENT (TWSC)  
 LOS = INTERSECTION LEVEL OF SERVICE (AWSC) / CRITICAL MOVEMENT LEVEL OF SERVICE (TWSC)  
 Del = INTERSECTION AVERAGE CONTROL DELAY (AWSC) / CRITICAL MOVEMENT CONTROL DELAY (TWSC)  
 V/C = CRITICAL VOLUME-TO-CAPACITY RATIO  
 TWSC = TWO-WAY STOP CONTROL  
 AWSC = ALL-WAY STOP CONTROL

## Site Driveway Location Assessment

The existing NHS campus has three site driveways on SE Willard Street. As previously described, all three of these SE Willard Street driveways are proposed to be closed and replaced with a single site driveway that would be located at the easternmost edge of the SE Willard Street property frontage. This proposed location would be located approximately 100 feet west of the SE Willard Street/SE 25<sup>th</sup> Avenue intersection and 400 feet east of the SE Lake Road/SW 23<sup>rd</sup> Avenue intersection. This driveway location meets the City of Milwaukie's accessway location spacing requirements as outlined in Section 5.0082 in Milwaukie's Public Works Standards.

In addition to the SE Willard Street driveway, a second site driveway is proposed off of SE 25<sup>th</sup> Avenue. This driveway would be located approximately 175 feet south of the SE Willard Street/SE 25<sup>th</sup> Avenue intersection.

### *Preliminary Driveway Sight Distance Assessments*

Intersection sight distance measurements were made at the proposed SE Willard Street driveway. Using field measurements, it was preliminarily determined that there is approximately 250 feet of intersection sight distance when looking east along SE Willard Street and approximately 300 feet of intersection sight distance when looking west along SE Willard Street. These distances are sufficient to meet the 225-foot (left-turn from stop) and 195-foot (right-turn from stop) intersection sight distance requirements for a 20 mph roadway as outlined in the American Association of State Highway Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets*.

## Parking Analysis

### *Weekday Parking Needs Assessment*

The proposed 50-space parking lot will be shared by NHA office staff, residents of the 28 affordable housing apartments, and temporary occupants of the Annie Ross House. In addition to the proposed off-street parking lot, there are 19 on-street parking spaces located along the south side of SE 23<sup>rd</sup> Avenue/SE Willard Street between SE Lake Road and SE 25<sup>th</sup> Avenue that are typically utilized by NHA during a normal weekday. To gauge the adequacy of this total parking supply, a weekday estimate of parking needs was prepared for the site as outlined in the following sections.

Based on conversations with NHS staff, guests at the existing Annie Ross House typically only bring a vehicle 30-40 percent of the time. Assuming a similar rate of vehicle ownership, the expanded Annie Ross House is anticipated to generate a weekday daily parking demand of 3 spaces. For the proposed affordable housing units, studies at other affordable housing facilities in the Metro area<sup>2</sup> have found

---

<sup>2</sup> The Town Center Station affordable housing apartment complex in Happy Valley and the City Center affordable apartment complex in Hillsboro were found to have an average weekday parking demand of 0.47 spaces per unit.

average weekday parking demands to be significantly less than one space per unit. Based on an assessment of historical and anticipated use of the affordable housing apartments, NHA staff is anticipating weekday parking demand of approximately 0.70 spaces per unit. As such, it is assumed that the 28 apartments will generate a weekday daily parking demand of 20 spaces. All combined, the housing units are assumed to need approximately 23 parking spaces during a typical weekday.

Based on conversations with NHA staff, approximately 15 percent of their existing staff regularly commute via transit, cycling and/or walking. With the nearby MAX Orange Line now open, NHA anticipates this number could go up to approximately 25 percent in the foreseeable future. With an anticipated maximum employment figure of approximately 50 staff, the office-related parking demand is estimated to be approximately 38 spaces assuming 75 percent of staff commute via automobile.

Combining the estimated 23-space housing-related demand and the 38-space office-related parking demand results in a total weekday demand of 61 parking spaces. The proposed 50-stall parking lot and the 19 on-street spaces along SE Willard Avenue provide sufficient parking to accommodate typical NHA-related weekday needs based on the analyses conducted as part of this report.

### Transportation Demand Management Measures

NHA is committed to encouraging the use of alternative forms of transportation by their employees and visitors. Programs and incentives that are already in place and are envisioned to continue with the proposed campus redevelopment include:

- Transit Incentive Plan: under this plan, NHA employees are reimbursed for expenses associated with using Mass Transit for commuting to NHA's office.
- Full reimbursement of transit costs for employees when public transportation is used to travel to off-site meetings.
- Monthly prize drawing for those eligible employees who turn in their alternative commute tracking log.
- A secure, sheltered bicycle parking area is provided for all NHA employees who bike to work. Upon campus redevelopment, additional secure bicycle parking areas will be included for use by NHA employees, visitors, and future residents.



---

## TRANSPORTATION IMPACT FINDINGS AND RECOMMENDATIONS

Based on the results of this transportation impact analysis, the proposed NHA campus redevelopment project can be developed while maintaining acceptable levels of service at the study intersections. The findings and recommendations of this analysis are summarized below.

### Existing Conditions

- All study intersections currently operate at acceptable levels of service during the weekday AM and PM peak hours.

### Year 2017 Background Conditions

- With the assumed local and regional traffic growth, all study intersections are forecast to continue to operate acceptably.

### Proposed Development Plan

- The proposed campus redevelopment is estimated to generate up to 25 additional weekday AM peak hour trips and 28 additional weekday PM peak hour trips.

### Year 2019 Total Traffic Conditions

- With the campus redevelopment, all study intersections and site driveways are forecast to continue to operate acceptably.
- The proposed site driveways on SE Willard Street and SE 25<sup>th</sup> Avenue meet City of Milwaukie's accessway location spacing standards.
- There is sufficient intersection sight distance at the proposed SE Willard Street site driveway.
- The proposed 50-space parking lot and the 19 on-street spaces along SE Willard Avenue provide sufficient parking to accommodate typical NHA-related weekday parking needs based on the analysis provided herein.

## RECOMMENDATIONS

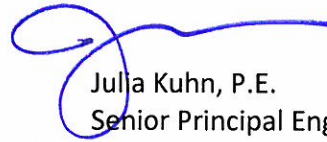
The following list summarizes improvements recommended in conjunction with site development:

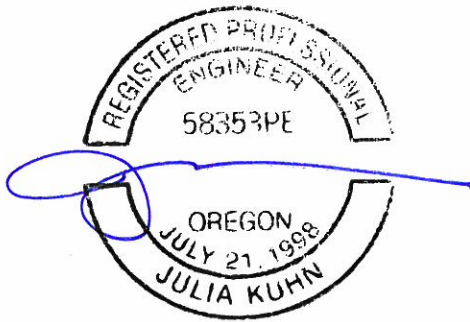
- Any new landscaping, signage or above-ground utilities along the SE Willard Street and SE 25<sup>th</sup> Avenue site frontage should be installed and maintained to ensure they do not interfere with the vision clearance triangles at the two proposed site driveways.

We trust this letter adequately addresses the traffic impacts associated with the proposed NHA campus redevelopment. Please contact us if you have any questions.

Sincerely,  
KITTELSON & ASSOCIATES, INC.

  
Matt Hughart, AICP  
Associate Planner

  
Julia Kuhn, P.E.  
Senior Principal Engineer



# **Exhibit D: Bicycle Parking Product Sheets**

landscapeforms®



bike racks





Reetue min ercillaor sustrud dipsuscip et diam, vel  
illupta tismodi gniamcore dolor sit ver iniam do od  
tincipit ing elis autpat autat ent vel dipit luptatu-  
ero dit utem eros ex esse erosto digna faciliscilit  
nonsequ atinis nim zzrit autat



ride

Who says bike racks have to be boring? Landscape Forms offers seven artful solutions for bicycle storage and security with options in function, form and finish.



flo



pi



bicilínea



ring



key



bola

Landscape Forms takes bike racks seriously. We collaborate with landscape architects and designers to develop beautiful forms that also provide exceptional function. Pi, designed by landscape architect and cyclist Bob Chipman, is a graceful vertical rack with powdercoat finish on which bikes are hung by their frames. Bola, Flo and Ring, designed by Brian Kane, are fluid forms in handsome stainless steel that store bikes in the horizontal position. Bicilínea and Key, from Santa & Cole, provide robust side-by-side stainless steel

storage for multiple cycles and droll, colorful one-on-one accommodation for a single bike. Ride, from the Metro40 Collection designed by BMW Group DesignworksUSA, is an elegant loop that echoes the Metro40 signature ribbon frame. All are made of robust steel, are strong, durable and weather resistant, and meet APBP (Association of Pedestrian and Bicycle Professionals) recommendations.



## Our Purpose Is To Enrich Outdoor Spaces

We believe in the power of design and its ability to influence and elevate the quality of public space. High quality products and outstanding customer experience makes us one of the world's premier designers and manufacturers of outdoor commercial furnishings.

### Bike Rack Specifications

**Bicilinea:** Bike racks available in 10' and 20' lengths, 10' accommodates 8 bicycles, and 20' holds 16 bicycles. Stainless steel horizontal tube connects to support posts and curved tubes. Bicilinea must be embedded, and needs some assembly.

**Bola® and Ring®:** Bike racks made of 1.5" o.d., .120" wall stainless steel tubing, with a #4 satin electropolish finish on bare stainless steel. Ring and Bola are also available in powdercoated steel. Both Ring and Bola must be embedded. Ring and Bola can secure two bicycles parked parallel to the rack. The bicycles can be headed in opposite directions, or in the same direction. The rack provides two-point contact to prevent the bicycle from tipping over. A standard D-shaped bike lock can secure both a wheel and the frame.

**Flo:** Bike rack is made of 1.5" o.d., .120" wall stainless steel tubing, with a #4 satin electropolish finish on bare stainless steel. Flo is also available in powdercoated steel. Nylon glides cushion the two intermediate loops. Flo may be surface mounted or embedded. Flo can secure three bicycles parked parallel to the rack. The bicycles must alternate directions, so access is required from both ends. If access is limited to one direction, the capacity is reduced to two bicycles. The rack provides two-point contact to prevent the bicycles from tipping over. A standard D-shaped bike lock can secure both a wheel and the frame.

**Key:** Bike rack is made of red or grey polyurethane plastic molded over galvanized finish on internal steel tubing. Aluminum base comes standard in silver powdercoat. Key must be embedded, and ships fully assembled. Supports bike upright by its frame in two places, and holds two bicycles. Standard D-shaped bike lock can be placed to secure both a wheel and the frame.

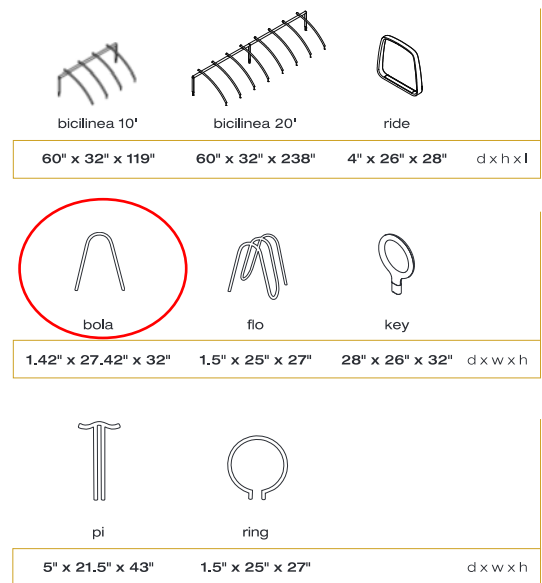
**Pi™ Rack:** Horizontal bar and legs are 2" o.d., .120" wall tubular steel, powdercoated with Pangard II, a polyester powdercoat. Surface mount plate is 5" deep x 10" wide. Pi Rack can secure two bicycles.

**Ride™:** Ride can be surface mount or embedded, and ships fully assembled. Must be spaced 30' apart, and 24' from wall. Provides bicycle support with capability for attachment at two points and holds two bicycles. Cover plate over bike rack base provides seamless appearance. Aluminum casting finished with Pangard II® powdercoat, offered in selection of colors.

**All Landscape Forms bike racks meet guidelines established by the Association of Pedestrian and Bicycle Professionals.**

### Finishes

All metal parts are finished with Landscape Forms' proprietary Pangard II® polyester powdercoat, a hard yet flexible finish that resists rusting, chipping, peeling and fading. Call for standard color chart.



### To Specify

**Bicilinea:** Specify collection and product name.

**Bola and Ring:** Select bike rack style. Specify powdercoat color or stainless steel.

**Flo:** Specify powdercoat color or stainless steel.

**Key:** Specify grey or red.

**Pi and Ride:** Select surface mount or embedded style.

Specify powdercoat color.

### landscapeforms.com

Visit our website for product details, pricing, color charts, technical sheets, sales office locations. Download JPG images, brochure PDF, CAD details, CSI specifications, and assembly instructions.



SANTA & COLE®

Bicilinea and Key are Santa & Cole products.

Specifications are subject to change without notice.

Bola, Flo and Ring are designed by Brian Kane, IDSA.

Pi is designed by Robert Chipman, ASLA.

Ride is designed by BMW Group DesignWorksUSA.

Protected by U.S. Patent Nos - Pi: D374,849, Flo: D529,433

Landscape Forms supports the LAF at the Second Century level.

©2013 Landscape Forms, Inc. Printed in U.S.A.

### landscapeforms®

800.521.2546 269.381.3455 fax

431 Lawndale Avenue, Kalamazoo, MI 49048

landscapeforms.com



Metal is the world's most recycled material and is fully recyclable. Consult our website for recycled content for this product. Powdercoat finish on metal parts contains no heavy metals, is HAPS-free and has extremely low VOCs.