DRAFT

ENVIRONMENTAL IMPACT STATEMENT

for the

SEATTLE PACIFIC UNIVERSITY

Major Institution Master Plan

Seattle Master Use Permit Project No. 3035844-LU

July 20, 2023

Prepared by

Seattle Department of Construction and Inspections
Seattle, Washington

July 20, 2023

Dear Affected Agencies, Organizations, and Interested Parties:

Enclosed is the Draft Environmental Impact Statement (DEIS) for the **Seattle Pacific University *Major Institution Master Plan*** (MIMP). This DEIS analyzes the probable adverse environmental impacts associated with the ***Draft MIMP***, a *No Action Alternative* and four other alternatives.

This DEIS has been prepared in compliance with the State Environmental Policy Act (SEPA) of 1971 (Chapter 43.21C, Revised Code of Washington); the SEPA Rules, effective April 4, 1984, as amended (Chapter 197-11, Washington Administrative Code); and rules adopted by the city of Seattle implementing SEPA – Seattle's Environmental Policies and Procedures Code (Chapter 25.05, Seattle Municipal Code).

Preparation of this DEIS is the responsibility of the Seattle Department of Construction and Inspections (SDCI). SDCI has determined that this document has been prepared in a responsible manner using appropriate methodology and SDCI has directed the areas of research and analysis that were undertaken in preparation of this DEIS.

This document is not an authorization for a specific action or alternative, nor does it constitute a decision or a recommendation for an action; it is one of several key documents that will be considered by the City of Seattle, and other permitting/approval agencies in the decision-making process for this project. In its final form – as a Final EIS (FEIS) – it will accompany the ***Final MIMP*** or such other alternative that may be identified as part of the FEIS and will be considered in making final decisions concerning the project and permits/authorizations for this project.

The purpose of this Draft EIS is to:

- identify and evaluate probable, significant adverse environmental impacts that could result from development that is identified in the proposed Seattle Pacific University Major Institution Master Plan (MIMP) as the ***Draft MIMP***, as well as impacts from alternatives to the ***Draft MIMP***;
- identify measures to mitigate environmental impacts that are identified; and
- identify unavoidable significant adverse impacts that may occur.

The 30-day public comment period associated with this DEIS is: **July 20, 2023** through **August 19, 2023**.

Agencies, affected tribes, organizations, and members of the public are invited to comment on the DEIS. Methods for presenting your comments are described below. All comments are due no later than August 19, 2023, and can be submitted:

Via email to: Public Comments - Seattle Services Portal | seattle.gov (enter SDCI Record Number 3035844-LU)

In writing to: Department of Construction & Inspections
ATTN: Public Resource Center
P.O. Box 34019
Seattle, WA 98124-4019

In writing and/or verbally at the virtual DEIS public hearing:

- **Meeting Date/Time:** August 17, 2023, at 5:00 PM
- **Online Meeting Information**
    - **Webex Meeting Link:** https://bit.ly/mtg3035844
    - **Listen Line:** 206-207-1700 **Access Code:** 2480 108 6592
    - **Public Comment Sign Up:** https://bit.ly/comment3035844

View the online DEIS public hearing and provide comments in person at:

- **Seattle Municipal Tower, 700 5th Ave**

Following the DEIS comment period, the Seattle Department of Construction and Inspections (SDCI) will prepare a Final EIS (FEIS) that addresses comments received during the DEIS public comment period.

This Draft EIS has been distributed to agencies noted on the *Distribution List* of this Draft EIS (**Appendix A**). A Notice of Availability has been sent to those who participated in EIS Scoping and Parties of Record. The DEIS can be reviewed online by entering the SDCI record number 3035844-LU at the Seattle Services Portal: Search All Records - Seattle Services Portal | Seattle.gov

The Draft EIS can be reviewed at the **Seattle Public Library – Central Library** (1000 Fourth Ave.) and the **Queen Anne Branch** (400 W. Garfield St.). In addition, a limited number of complimentary flash drives of this Draft EIS are available – while the supply lasts -- from SDCI's Public Resource Center on Floor 20 of the Seattle Municipal Tower (700 Fifth Ave.).

Thank you for your interest in the **Seattle Pacific University's *Major Institution Master Plan*** DEIS.

Sincerely,

Nathan Torgelson, SEPA Responsible Official
Director, SDCI

DRAFT

ENVIRONMENTAL IMPACT STATEMENT

for the

SEATTLE PACIFIC UNIVERSITY

Major Institution Master Plan

Seattle Master Use Permit Project No. **3035844-LU**

Date of Draft EIS Issuance..... **July 20, 2023**

Date of Draft EIS Public Meeting..... **August 17, 2023**
(Refer to pg. iv of this Draft EIS for time, location and intended meeting format)

Date Comments are Due on this Draft EIS..... **August 19, 2023**

FACT SHEET

Name of Proposal

Seattle Pacific University
Major Institution Master Plan

Proponent

Seattle Pacific University
3307 3rd Ave. W.
Seattle, WA 98119-1957

Location

The Seattle Pacific University (SPU) is located on the north slope of Queen Anne hill in the City of Seattle. The approximately 66-acre campus is situated around the intersection of W Nickerson St. and 3rd Ave. W. The campus is bordered by the Fremont Cut and South Ship Canal Trail to the north.

Proposed Action

The **Proposed Action** involves adoption and implementation of a new ***Major Institution Master Plan*** (MIMP) for Seattle Pacific University. The ***Proposed Action*** is described in detail in Seattle Pacific University's **Draft** ***Major Institution Master Plan*** (dtd. May 2023) which is a document separate from this Draft EIS. Key elements of the ***Draft MIMP*** that are analyzed in this Draft EIS include the following:

- Goals and policies to guide campus development
- Modification of the campus boundaries – three changes are proposed in the northwest, east and southeast areas of campus that would add approximately 18 acres to SPU's existing MIO boundary.
- Proposed planned[1] development consisting of:
  - a new 61,000 sq. ft. Student Union/Student Center;
  - renovation/repurposing of an existing building; and
  - demolition of an existing building for the creation of future open space.
- Proposed potential[2] long-term development of approximately 2,198,600 sq. ft. associated with education and general buildings, campus housing, athletic and recreation development, and mixed-use and commercial development;
- Improved pedestrian connections and vehicular access;
- Increased amount of parking;

[1] Planned development is defined by the Seattle Land Use Code as "development which the Major Institution has definite plans to construct." (SMC 23.69.030D.)

[2] Potential development is defined by the Seattle Land Use Code as "development or uses for which the Major Institution's plans are less definite." (SMC 23.69.030 D.)

- Modification of certain development standards (e.g., zoning designations, height limits, lot coverage, etc.);
- Analysis of potential street and alley vacations; and,
- Adoption of a new Transportation Management Plan (TMP).

Alternatives

For the purposes of environmental review, five alternatives to the ***Draft MIMP*** are analyzed in this EIS, including:

- **Alternative 1 – *No Action Alternative***;
- **Alternative 2 – *No Boundary Expansion and No Change to Height Limits***;
- **Alternative 3 – *Boundary Expansion and No Change to Height Limits in Existing MIO***;
- **Alternative 4 – *No Boundary Expansion and Increased Height Limits***; and
- **Alternative 5 – *Boundary Expansion, Increased Height Limits and No Street/Alley Vacations.***

SEPA Lead Agency

Seattle Department of Construction and Inspections (SDCI)

SEPA Responsible Official
Nathan Torgelson, Director
Seattle Department of Construction and Inspections

EIS Contact Person
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Seattle Department of Construction and Inspections
Seattle Municipal Tower – 700 Fifth Ave., Suite 2000
PO Box 34019
Seattle, WA 98124-4019
Telephone: 206.727.3885
E-mail: michaelt.houston@seattle.gov

Required Approvals

Seattle City Council

- Approval of the Final MIMP
- Approval of a rezone to allow expansion of the MIO boundary
- Approval of a rezone to allow changes to height limits within the MIO

Additional approvals may be identified during project review.

Final Action Date

Approval of the SPU MIMP by Seattle City Council is anticipated in late 2023/early 2024.

Authors and Principal Contributors to this EIS

*The **SPU MIMP** DEIS has been prepared under the direction of SDCI. Research and analysis for this EIS were provided by the following consulting firms:*

- **EA Engineering, Science, and Technology, Inc., PBC** – lead EIS consultant; document preparation; environmental analysis – land use, height/bulk/scale, public view protection, and shadows on open space;
- **Perkins + Will Architects, P.S.** – Draft MIMP and graphics for EIS (height/bulk/scale graphics, viewshed photosimulation graphics, and shadow graphics);
- **Transpo Group** – transportation and circulation;
- **Landau Associates, Inc.** – air quality and greenhouse gas analysis;
- **Tree Solutions** – tree inventory; and
- **Perteet** – cultural resources.

Location of Background Data

Seattle Dept. of Construction and Inspections
Seattle Municipal Tower
700 Fifth Avenue
Seattle, WA 98124

Date of Issuance of this Draft EIS

July 20, 2023

Date Draft EIS Comments Are Due

August 19, 2023

Written comments may be submitted to SDCI at the following address:

Seattle Department of Construction and Inspections
ATTN: PRC
700 Fifth Ave., Suite 2000
PO Box 34019
Seattle, WA 98124-4019

Comments may be also submitted electronically by entering the record number (3035844-LU) at:
http://www.seattle.gov/project/comment

Date of Draft EIS Public Meeting

An online public hearing to gather comments on the DEIS and Draft MIMP will be held on: **Thursday, August 17, 2023 at 5:00 p.m.**

Attendees may attend the public hearing in person or virtually, see below for more details.

To attend virtually, use this link:

Webex Meeting Link: https://bit.ly/mtg3035844
Listen Line: 206-207-1700
Access Code: 2480 108 6592
Public Comment Sign Up:
https://bit.ly/comment3035844

If you want to attend in person, you can view the online meeting and provide comments in person at:

Seattle Municipal Tower
700 5th Ave.
Seattle, WA 98104

All meeting facilities are ADA compliant.

Translators/interpreters provided upon request. Contact the Public Resource Center at www.seattle.gov/project/comment or (206) 684-8467 at least five business days prior to the meeting to request this service.

Availability of this Draft EIS

Copies of this Draft EIS have been distributed to agencies, organizations and individuals noted on the Distribution List (**Appendix A** to this document). This Draft EIS can be reviewed at the following locations:

- **electronically on the Seattle Services Portal** (**http://web6.seattle.gov/dpd/edms/**) under Record Number 3035844-LU.
- **Seattle Public Library – Central Library** (1000 Fourth Ave.); and at the
- **Queen Anne Branch Library** (400 W. Garfield St.).

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Chapter 1

Summary

SECTION I

SUMMARY

1.1 INTRODUCTION

This chapter provides a summary of the Draft Environmental Impact Statement (Draft EIS) for the Seattle Pacific University Major Institution Master Plan. **Chapter 1** briefly describes the Proposed Action (Draft MIMP) and the EIS Alternatives (Alternatives 1- 5) and contains a comprehensive overview of environmental impacts identified for the alternatives. Please see **Chapter 2** of this Draft EIS for a more detailed description of the Proposed Action and alternatives and **Chapter 3** for a detailed description of the affected environment, environmental impacts, mitigation measures, and significant unavoidable adverse impacts.

1.2 PROJECT SUMMARY

The Proposed Action that is evaluated in this Draft EIS involves adoption and implementation of a new Major Institution Master Plan (MIMP) for Seattle Pacific University. The Proposed Action is described in detail in Seattle Pacific University's Draft Major Institution Master Plan (dtd. May 2023) which is a document separate from this Draft EIS. Key elements of the Draft MIMP that are analyzed in this Draft EIS include the following:

- Goals and policies to guide campus development
- Modification of the campus boundaries – three changes are proposed in the northwest, east and southeast areas of campus that would add approximately 18 acres to SPU's existing MIO boundary.
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- ***Alternative 1 – No Action Alternative****;*
- ***Alternative 2 – No Boundary Expansion and No Change to Height Limits****;*
- ***Alternative 3 – Boundary Expansion and No Change to Height Limits in Existing MIO****;*
- ***Alternative 4 – No Boundary Expansion and Increased Height Limits****; and*
- ***Alternative 5 – Boundary Expansion, Increased Height Limits and No Street/Alley Vacations.***

1.3 IMPACTS, MITIGATION MEASURES AND SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

The following highlights the impacts, mitigation measures, and significant unavoidable adverse impacts that would potentially result from the alternatives analyzed in this Draft EIS. **Table 1-1** provides a summary of the potential impacts that would be anticipated under the Draft EIS Alternatives. This summary is not intended to be a substitute for the complete discussion of each element that is contained in **Chapter 3**.

Table 1-1
IMPACT SUMMARY MATRIX

DRAFT MIMP **Proposed Action**	***Alternative 1*** **No Action Alternative**	***Alternative 2*** **No Boundary Expansion and No Increase to Height Limits**	***Alternative 3*** **Boundary Expansion and No Change to Height Limits in Existing MIO**	***Alternative 4*** **No Boundary Expansion and Increased Height Limits**	***Alternative 5*** **Boundary Expansion, Increased Height Limits & No Street Vacations**
3.1 - AIR QUALITY and GHG					
• Construction activity could result in temporary, localized increases in particulate concentrations, emissions, and odors. With implementation of the controls required by PSCAA for the various aspects of construction activities and consistent use of best management practices (BMPs) to minimize on-site emissions, construction would not be expected to significantly affect air quality.	• Under the ***No Action Alt.***, only development/renovation that is consistent with the SPU's current MIMP would be built. With implementation of controls required by PSCAA and BMPs, construction-related air quality impacts would not be expected to significantly affect air quality.	• Construction air quality impacts would be similar to the ***Draft MIMP***.	• Construction air quality impacts would be similar to the ***Draft MIMP***.	• Construction air quality impacts would be similar to the ***Draft MIMP***.	• Construction air quality impacts would be similar to the ***Draft MIMP***.
• The ***Draft MIMP*** would result in an increase in vehicular traffic to and from the campus that would increase emissions near the campus and along roads in the area. While future (2035) traffic volumes and delays would increase over existing (2021) conditions, future CO concentrations would be reduced due to adoption of newer, more efficient vehicles and cleaner fuel regulations. Model results also demonstrate that at the lowest performing LOS of the intersections evaluated (Nickerson St/Westlake Ave. N intersection), ***Draft MIMP*** related traffic would not increase CO concentrations over future No Action conditions. Overall, modeling indicates that no significant traffic-related air quality impacts would be expected.	• Similar to the ***Draft MIMP***, the ***No Action Alt.*** would not be expected to result in significant traffic-related air quality impacts.	• Operational air quality impacts would be similar to the ***Draft MIMP***.	• Operational air quality impacts would be similar to the ***Draft MIMP***.	• Operational air quality impacts would be similar to the ***Draft MIMP***.	• Operational air quality impacts would be similar to the ***Draft MIMP***.

DRAFT MIMP **Proposed Action**	*Alternative 1* **No Action Alternative**	*Alternative 2* **No Boundary Expansion and No Increase to Height Limits**	*Alternative 3* **Boundary Expansion and No Change to Height Limits in Existing MIO**	*Alternative 4* **No Boundary Expansion and Increased Height Limits**	*Alternative 5* **Boundary Expansion, Increased Height Limits & No Street Vacations**
3.1 - AIR QUALITY and GHG con't					
• The ***Draft MIMP*** is expected to produce about 2,167,343 metric tonnes of CO2 equivalent (MTCO2e) over a 62.5-year lifespan. Annually this corresponds to about 34,677 tonnes. The estimates of project GHG emissions do not consider any potential efforts to reduce emissions and/or resource consumption by incorporating sustainable features into the development, although such sustainable features would be incorporated into the project by virtue of the City and State Building and Energy Code requirements and the likely use of green building technologies. Overall, GHG emissions associated with the ***Draft MIMP*** would contribute to the cumulative carbon footprint of King County and no significant climate change impacts would be expected due to project-related GHG emissions.	• The ***No Action Alt.*** is expected to produce about 63,774 metric tonnes of CO2 equivalent (MTCO2e) over a 62.5-year lifespan and corresponds to about 1,020 tonnes annually.	• ***Alternative 2*** is expected to produce about 2,768,547 metric tonnes of CO2 equivalent (MTCO2e) over a 62.5 year lifespan. Annually this corresponds to about 46,127 tonnes. Similar to the ***Draft MIMP***, the estimates of project GHG emission do not consider any potential efforts to reduce emissions, although sustainable features would be incorporated into the project by virtue of the City and State Building and Energy Code requirements and likely use of green building technologies. Overall, GHG emissions associated with the ***Alternative 2*** would contribute to the cumulative carbon footprint of King County and no significant climate change impacts would be expected due to project-related GHG emissions.	• GHG emissions and overall impacts would be the same as ***Alternative 2***.	• GHG emissions and overall impacts would be the same as ***Alternative 2***.	• GHG emissions and overall impacts would be the same as ***Alternative 2***.
3.2 – PLANTS and ANIMALS					
• The ***Draft MIMP*** would result in the following trees removed: - 249 trees removed in total - 47 exceptional trees removed (groves and/or by size) - 153 trees removed in all ECA's - 1 tree removed w/in shoreline buffer	• The ***No Action Alt***. would result in the following trees removed: - 51 trees removed in total - 19 exceptional trees removed (groves and/or by size) - 35 trees removed in all ECA's - 0 trees removed w/in shoreline buffer	• ***Alternative 2*** would result in the following trees removed: - 278 trees removed in total - 65 exceptional trees removed (groves and/or by size) - 166 trees removed in all ECA's - 0 trees removed w/in shoreline buffer	• ***Alternative 3*** would result in the following trees removed: - 274 trees removed in total - 56 exceptional trees removed (groves and/or by size) - 169 trees removed in all ECA's - 1 tree removed w/in shoreline buffer	• ***Alternative 4*** would result in the following trees removed: - 266 trees removed in total - 55 exceptional trees removed (groves and/or by size) - 158 trees removed in all ECA's - 0 trees removed w/in shoreline buffer	• ***Alternative 5*** would result in the following trees removed: - 265 trees removed in total - 52 exceptional trees removed (groves and/or by size) - 164 trees removed in all ECA's - 1 tree removed w/in shoreline buffer
• The ***Draft MIMP*** results in the potential for fewer trees to be removed than under ***Alternatives 2-5***, as it is largely proposing construction in areas that are already dominated by existing hardscapes and buildings.	• The ***No Action Alternative*** involves the least tree and habitat removal, as little construction would occur.	• ***Alternative 2*** involves the most tree and habitat removal of all the alternatives, including more than that proposed under the ***Draft MIMP*** as a greater number of buildings would be built on campus under this alternative.	• ***Alternative 3*** involves a similar amount of tree and habitat removal as that proposed under ***Alternative 2***, and more than that proposed under the ***Draft MIMP***, as a greater number of buildings would be built under this alternative.	• ***Alternative 4*** involves slightly less tree and habitat removal than that proposed under ***Alternatives 2*** and ***3***, but still more than that proposed under the ***Draft MIMP***, as a greater number of buildings would be built on campus under this alternative.	• ***Alternative 5*** involves slightly more tree and habitat removal than that proposed under the ***Draft MIMP***, but less than would occur ***Alternatives 2-4*** as far fewer additional buildings would need to be constructed within the MIO boundary.
3.3 – CULTURAL RESOURCES					
• Impacts to archaeological resources under the ***Draft MIMP*** would depend on specific project locations and depths of excavation. An archaeologist should review project plans and geotechnical data prior to development of the three planned projects. A Monitoring and Inadvertent Discovery Plan (MIDP) or Inadvertent Discovery Plan (IDP) should be prepared prior to ground disturbance.	• Same as under the ***Draft MIMP***.	• Same as under the ***Draft MIMP***.	• Same as under the ***Draft MIMP***.	• Same as under the ***Draft MIMP***.	• Same as under the ***Draft MIMP***.

DRAFT MIMP **Proposed Action**	*Alternative 1* **No Action Alternative**	*Alternative 2* **No Boundary Expansion and No Increase to Height Limits**	*Alternative 3* **Boundary Expansion and No Change to Height Limits in Existing MIO**	*Alternative 4* **No Boundary Expansion and Increased Height Limits**	*Alternative 5* **Boundary Expansion, Increased Height Limits & No Street Vacations**
3.3 – CULTURAL RESOURCES – con't					
• Potential projects developed in the east MIO Boundary expansion area and the northeast portion of campus, areas considered to have High Potential to encounter archaeological resources, may require archaeological monitoring of geotechnical field investigations, archaeological borings, or other mechanical excavation methods to identify deeply buried sites in areas of deep fill.	• Because the boundary expansion on the east side of campus would not occur, High Potential areas would not be affected under the ***No Action Alternative***.	• Without the boundary expansion on the east side of the campus, High Potential areas expected to contain archaeological resources would be largely avoided under ***Alternative 2***.	• Impacts to cultural resources would be similar to but slightly greater than the ***Draft MIMP***.	• Without the boundary expansion on the east side of the campus, most of the High Potential areas expected to contain archaeological resources would be avoided under ***Alternative 4***.	• Impacts to archaeological resources under ***Alternative 5*** would be similar to but slightly greater than the ***Draft MIMP***.
• Potential projects developed in the central campus, an area considered to have Moderate Potential for containing archaeological resources, could generally proceed with spot-check monitoring and an IDP.	• Impacts in Moderate Potential areas would be similar to those described for the ***Draft MIMP***, although the overall potential for impacts would be less because much less new development would occur.	• There would be a higher potential to impact archaeological resources present in Moderate Potential areas of the campus as compared to the ***Draft MIMP***, because a greater number of buildings would need to be developed in these areas.	• Impacts to cultural resources would be similar to but slightly greater than the ***Draft MIMP***. This is because there would be a higher potential to impact archaeological resources present in Moderate Potential areas of campus as compared to the ***Draft MIMP***, due to a greater number of buildings needing to be developed in these areas.	• There would be a higher potential to impact archaeological resources present in Moderate Potential areas of the campus as compared to the ***Draft MIMP***, because a greater number of buildings would need to be developed in these locations.	• Impacts to archaeological resources under ***Alternative 5*** would be similar to but slightly greater than the ***Draft MIMP***, as a greater number of buildings would need to be built in Moderate Potential areas as compared to the ***Draft MIMP***.
• Potential projects developed in the south/southwest portion of campus, an area considered to have Low Potential for intact archaeological resources, could generally proceed under an IDP prior to ground disturbance.	• Impacts in Low Potential areas would be similar to those described for the ***Draft MIMP***, although the overall potential for impacts would be less because much less new development would occur.	• Impacts in Low Potential areas would be similar to those described for the ***Draft MIMP***, although the overall potential for impacts would be higher because much more new development would occur.	• Impacts in Low Potential areas would be similar to those described for the ***Draft MIMP***, although the overall potential for impacts would be higher because much more new development would occur.	• Impacts in Low Potential areas would be similar to those described for the ***Draft MIMP***, although the overall potential for impacts would be slightly higher because more new development would occur.	• Impacts to archaeological resources under ***Alternative 5*** would be similar to but slightly greater than the ***Draft MIMP***.
• One post-contact period archaeological site has been recorded within the existing SPU MIO boundary; this site is within the footprint of a potential project. Adverse effects to the site could be prevented by avoiding ground disturbance within the site boundary. If avoidance is not possible, a DAHP-issued permit may be required, along with monitoring for site documentation as mitigation.	• The one post-contact period site recorded within the existing SPU MIO boundary would not be expected to be affected.	• Impacts to the recorded post-contact period archaeological site would be the same as described under the ***Draft MIMP***.	• Impacts to the recorded post-contact period archaeological site would be the same as described under the ***Draft MIMP***.	• Impacts to the recorded post-contact period archaeological site would be the same as described under the ***Draft MIMP***.	• Impacts to the recorded post-contact period archaeological site would be the same as described under the ***Draft MIMP***.

DRAFT MIMP **Proposed Action**	***Alternative 1*** **No Action Alternative**	***Alternative 2*** **No Boundary Expansion and No Increase to Height Limits**	***Alternative 3*** **Boundary Expansion and No Change to Height Limits in Existing MIO**	***Alternative 4*** **No Boundary Expansion and Increased Height Limits**	***Alternative 5*** **Boundary Expansion, Increased Height Limits & No Street Vacations**
3.4 – LAND USE					
• Implementation of the ***Draft MIMP*** would result in intensification of uses on the campus, expansion of the campus land uses, and displacement and/or relocation of some existing institutional and non-institutional land uses. Proposed boundary expansions would provide the flexibility to concentrate more intense, non-residential uses in the northern and central portions of campus, mostly away from single-family residential neighborhoods to the south and west of campus, thereby creating a residential use buffer; that would help reduce potential impacts to off-campus neighborhoods.	• New campus development would be limited to development consistent with projects approved under the current MIMP, but not yet built. Current MIO boundary and height limits would be retained. Two Education & General buildings could be developed consistent with the existing MIMP. The distribution, character, and intensity of land uses and buildings would remain similar to existing conditions.	• Up to 12 additional buildings and/or building wings would need to be constructed within the current MIO boundary, and overall development on the campus would be much more intense than under the ***Draft MIMP***, there would be less of a buffer with adjacent off-campus neighborhoods and substantially less open space would be provided on campus.	• Up to 7 additional buildings and/or wings would need to be constructed within the existing and expanded campus boundary. Future campus development would be more land use intensive and, in some areas, built much closer to campus boundaries than under the ***Draft MIMP***, but less so than under ***Alternative 2***.	• Up to 5 additional buildings and/or building wings would need to be constructed within the campus. Future campus development would be more land use intensive and built much closer to existing campus boundaries than the ***Draft MIMP***, but less so than ***Alternative 2***.	• Up to 4 additional buildings and/or building wings would need to be constructed within the campus. Overall, site development would be somewhat more land use intensive than under the ***Draft MIMP***.
• Potential housing development adjacent to off-campus low-rise residential neighborhoods to the east, west and south could result in land use impacts including increased noise levels, traffic and pedestrian activity associated with an increase in the number of students living in this area. However, required setbacks, street ROW corridors, large open space areas, and landscape screening would separate these new student residential uses on campus from low-rise residential homes off campus and reduce the potential for incompatibilities.	• The distribution, character, and intensity of land uses and buildings (including all housing) would remain similar to existing conditions.	• Three additional student housing buildings (3- to 4- levels each) would be located along the west edge of campus, near existing single-family neighborhoods, increasing the potential for incompatibilities between on- and off-campus residential uses as compared to the ***Draft MIMP***.	• Two additional student residential/ apartment buildings (3- to 4-levels each) would be located along the west edge of campus near existing single-family neighborhoods, increasing the potential for incompatibilities between on- and off-campus residential uses as compared to the ***Draft MIMP***	• Two additional student residential/ apartment buildings (one at 3-levels and one at 1-level) would be located along the west edge of campus near existing single-family neighborhoods, increasing the potential for incompatibilities between on- and off-campus residential uses as compared to the ***Draft MIMP***.	• No additional student residential/ apartment buildings would need to be located along the west edge of campus, near existing single-family neighborhoods off campus (as would occur as under ***Alternatives 2-3***)
• Proposed boundary expansion areas would expand into some areas that are currently zoned for commercial uses, which are in limited supply within the city, and could potentially replace these uses with institutional uses. However, under the ***Draft MIMP***, approximately 225,600 sq. ft. of net new commercial/mixed-use development is proposed, and these areas would continue to be located mostly along W. Nickerson St. This would contribute to maintaining commercial uses on campus and in the vicinity of campus and would also enhance accessibility to these services for the surrounding neighborhood and campus communities.	• The distribution and intensity of land uses and buildings (including commercial and mixed-use) would remain similar to existing conditions.	• Additional commercial and mixed-use buildings would need to be located more internally to campus to accommodate the same amount of square footage as the ***Draft MIMP***. This would displace Academic uses planned for the central core of campus under the ***Draft MIMP***, would locate commercial uses further away from W. Nickerson. This would contribute to maintaining commercial uses on campus and in the vicinity of campus but would decrease neighborhood accessibility to these services.	• Similar to the ***Draft MIMP*** and consistent with the existing land use patterns, commercial uses and mixed-use areas would continue to be located mostly along and close to W. Nickerson St., which would contribute to maintaining commercial uses on campus and in the vicinity of campus and enhance accessibility to these services for the surrounding neighborhood and campus communities.	• Some commercial uses and mixed-use areas would need to be located more internally to campus to accommodate the same amount of square footage as under the ***Draft MIMP***. This would displace Education/General uses planned for the central core of campus, would locate commercial uses further away from W. Nickerson. While maintaining commercial uses on campus and in the vicinity, neighborhood accessibility to these services would decrease.	• Some commercial uses and mixed-use areas would need to be located more internally to campus to accommodate the same amount of square footage as the ***Draft MIMP***. This would displace Education/ General uses planned for the east campus area, would locate commercial uses further away from W. Nickerson. This would contribute to maintaining commercial uses on and in the vicinity of campus but would decrease neighborhood accessibility to these services.

DRAFT MIMP **Proposed Action**	*Alternative 1* **No Action Alternative**	*Alternative 2* **No Boundary Expansion and No Increase to Height Limits**	*Alternative 3* **Boundary Expansion and No Change to Height Limits in Existing MIO**	*Alternative 4* **No Boundary Expansion and Increased Height Limits**	*Alternative 5* **Boundary Expansion, Increased Height Limits & No Street Vacations**
3.4 – LAND USE – con't					
• Eight street or alley vacations are proposed as part of the ***Draft MIMP***; significant land use impacts would not be anticipated. New opportunities for potential open space areas and pedestrian connections would be provided by the potential street and alley vacations. Each street or alley vacation would be required to go through the City of Seattle vacation process and, ultimately, to obtain discretionary legislative approval from City Council.	• No street enhancements, or street/alley vacations (and the open space the vacations provide) would occur.	• Fewer street enhancements or street/alley vacations (and the open space the vacations provide) could occur within the existing MIO.	• Proposed street enhancements and street/alley vacations (and the open space the vacations provide) could still occur.	• Fewer street enhancements and only those street/alley vacations (and the open space the vacations provide) located within the MIO boundary could occur.	• No street enhancements or street/alley vacations (and the open space the vacations provide) located within the existing MIO boundary or in the MIO Boundary expansion areas would occur.
3.5 – HEIGHT, BULK and SCALE					
• The overall size, bulk, and scale of the SPU campus would increase with development under the ***Draft MIMP***, with the greatest increases in height/bulk/scale occurring in the north and central portions of campus. Lot coverage and FAR would increase, resulting in slightly decreased open space across campus and increased density as compared to existing conditions.	• No boundary expansions and no MIO zoning changes, height limits, or other modifications to existing development standards would occur. Height, bulk, and scale conditions of the SPU campus would remain similar to existing conditions.	• No boundary expansions and no MIO zoning changes, height limits, or other modifications to existing development standards would occur. Overall, future campus development would be much denser than the ***Draft MIMP***. There would be more development within the existing MIO campus boundaries and less functional open space (including within Tiffany Loop). Building bulk and scale could increase as larger buildings would potentially need to be developed to make up for the lack of height increases and boundary expansions. Three additional housing buildings (three to four levels) would be located along the west edge of campus, near existing single-family homes.	• Future campus development would be denser than the ***Draft MIMP***, but less dense than ***Alternative 2***. There would be somewhat more development occurring within the existing MIO campus boundaries overall and somewhat less functional open space (including on Tiffany Loop) due to no changes to height limits. Building bulk and scale could increase as larger buildings would potentially need to be developed to make up for lack of height increases, but the boundary expansions would offset the need for increased bulk and scale to a certain extent. Two additional residential buildings (three to four levels) would be located along the west edge of campus, near existing single-family homes	• Future campus development would be denser than the ***Draft MIMP***, but less dense than ***Alternative 2***. There would be more development within the existing MIO campus boundaries occurring overall and less functional open space due to no boundary expansions occurring. Building bulk and scale could increase as larger buildings would potentially need to be developed to make up for lack of height increases, but the height increases would offset the need for increased bulk and scale to a certain extent. Two additional residential buildings (three to four levels) would be located along the west edge of campus, near existing single-family homes.	• Overall, site development would be somewhat denser than the ***Draft MIMP***. No street enhancements or street/alley vacations (and the open space that the vacations provide in certain areas) within the existing MIO boundary or in the MIO Boundary expansion areas would occur.

DRAFT MIMP **Proposed Action**	***Alternative 1*** **No Action Alternative**	***Alternative 2*** **No Boundary Expansion and No Increase to Height Limits**	***Alternative 3*** **Boundary Expansion and No Change to Height Limits in Existing MIO**	***Alternative 4*** **No Boundary Expansion and Increased Height Limits**	***Alternative 5*** **Boundary Expansion, Increased Height Limits & No Street Vacations**
3.5 – HEIGHT, BULK and SCALE – con't					
• Height limit changes are proposed to the interior of the existing SPU campus and the MIO expansion areas. Along the west and southwest edge of the existing campus, the MIO periphery adjacent to surrounding residential properties and existing neighborhood residential zoning would maintain existing height limits of 37 ft., 50 ft., and 65 ft.; maintaining a buffer between surrounding residential areas and the campus core. The other portion of the proposed MIO periphery adjacent to residential properties would maintain 37 ft. height limits or increase by 10 ft. to a 50-ft. height limit (in the Southeast Expansion area). There would be a limited potential for conflict between the 50-ft. buildings that could be built under the proposed MIO zoning in the Southeast Expansion area and adjacent low-rise residential areas. This potential conflict would be attenuated by existing topography in this area, as well as by vegetation and street ROWs.	• Height conditions on the SPU campus would remain similar to existing conditions.	• No changes to height limits would occur; height conditions would be as allowed by the 2000 MIMP.	• Height conditions would be as allowed by the 2000 MIMP in the existing MIO. Height increases in the expansion areas would be the same as the ***Draft MIMP***. Similar to under the ***Draft MIMP***, there would be a limited potential for conflict between the 50-ft. buildings that could be built under the proposed MIO zoning in the Southeast Expansion area and adjacent low-rise residential areas. This potential conflict may be attenuated by existing topography in this area, as well as by vegetation and street ROWs.	• Height conditions would be similar to the ***Draft MIMP*** in the existing MIO; no boundary expansions would occur.	• Height conditions would be similar to the ***Draft MIMP***. Similar to that under the ***Draft MIMP***, there would be a limited potential for conflict between the 50-ft. buildings that could be built under the proposed MIO zoning in the Southwest Expansion area and adjacent low-rise residential areas. This potential conflict may be attenuated by existing topography in this area, as well as by vegetation and street ROWs.
3.6 – PUBLIC VIEW PROTECTION					
• No significant impacts to views from the protected David Rodgers Park viewpoint would be anticipated. Most of the planned and potential development constructed under buildout of the ***Draft MIMP*** would not be visible; only two potential campus development projects could potentially be visible, were vegetation not obscuring the view. Overall, views from the park would generally remain the same as under existing conditions.	• The two new projects that could be built under the ***No Action Alternative*** would not be expected to be visible from David Rodgers Park, and view conditions would remain generally as described under existing conditions.	• Twelve additional buildings and/or building wings would need to be fit within the existing campus under ***Alternative 2***, and it is possible some of these buildings could be partially visible from David Rodgers Park. However, additional buildings would be expected to be only minimally visible, if at all, and significant adverse impacts to views would not be anticipated. Views of the two potential campus development projects that could potentially be visible would be the same as described for the ***Draft MIMP***.	• Seven additional buildings and/or building wings would need to be fit within the existing campus under ***Alternative 3***, and it is possible some of these buildings could be partially visible from David Rodgers Park. However, additional buildings would be expected to be only minimally visible, if at all, and significant adverse impacts to views would not be anticipated. Views of the two potential campus development projects that could potentially be visible would be the same as described for the ***Draft MIMP***.	• Five additional buildings and/or building wings would need to be fit within the existing campus under ***Alternative 4***., and it is possible some of these buildings could be partially visible from David Rodgers Park. However, additional buildings would be expected to be only minimally visible, if at all, and significant adverse impacts to views would not be anticipated. Views of the two potential campus development projects that could potentially be visible would be the same as described for the ***Draft MIMP***.	• Four additional buildings and/or building wings would need to be fit within the existing campus under ***Alternative 5***, and it is possible some of these buildings could be partially visible from David Rodgers Park. However, additional buildings would be expected to be only minimally visible, if at all, and significant adverse impacts to views would not be anticipated. Views of the two potential campus development projects that could potentially be visible would be the same as described for the ***Draft MIMP***.
3.7 – SHADOWS on OPEN SPACE					
• Off-Site Public Open Spaces - 6th Ave. W Street End and West Ewing Mini Park - would not be expected to be affected by shading from new buildings constructed under the ***Draft MIMP***.	• No boundary expansions would occur, and no new development would be built in the vicinity of the 6th Ave. W Street End or the West Ewing Mini Park. Shadow conditions on these two areas would remain the same as existing conditions and no new shading impacts would occur.	• Shading impacts to off-campus open spaces would generally be the same as described under the ***Draft MIMP*** (i.e., no significant new shading).	• Similar development to the ***Draft MIMP*** would be built in proximity to West Ewing Mini Park and the 6th Ave. W Street End, and overall shadow impacts would be the same as described for the ***Draft MIMP*** (i.e., no significant new shading).	• Shading impacts to off-campus open spaces would generally be the same as described under the ***Draft MIMP*** (i.e., no significant new shading).	• The entirety of the 6th Ave. W Street End would be shaded on Winter Solstice at noon. Shading impacts to off-site public open spaces would otherwise be similar to the ***Draft MIMP*** (i.e., no significant new shading) during all other key solar days of the year and times of day.

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3.7 – SHADOWS on OPEN SPACE – con't					
• On-Site Public Open Spaces – Martin Square and Tiffany Loop – would not be expected to be significantly affected by shading from new buildings constructed under the ***Draft MIMP***.	• No new shading would occur to Martin Square. Some new shading could occur to Tiffany Loop, primarily in the southwest or southeast portion of the Loop due to the construction of a new building southeast of the Loop. However, minimal shadows from the building would be experienced as new shading due to the presence of existing trees in the southeast portion of Tiffany loop.	• Shadow impacts to Martin Square would generally be greater than would occur under the ***Draft MIMP*** in the mornings at 8 AM (9 AM on Winter Solstice). Shading impacts to Tiffany Loop would also generally be greater than would occur under the ***Draft MIMP*** at 8 AM, noon, and 5 PM, depending on the extent of tree coverage. Shading impacts to Tiffany Loop would be especially significant due to the construction of two buildings within the open space area.	• Overall shadow impacts to Martin Square would generally be greater than would occur under the ***Draft MIMP*** in the morning at 8 AM (9AM on Winter Solstice). Shading impacts to Tiffany Loop would also generally be greater than would occur under the ***Draft MIMP***, particularly at 8 AM and noon on the Equinoxes and Summer Solstice. Shading impacts to Tiffany Loop would be especially significant due to the construction of a new building within the open space area.	• Shadow impacts to on-campus open spaces would generally be the same as the ***Draft MIMP***, as planned and potential projects, in the vicinity of these open spaces would be the same as the ***Draft MIMP***.	• Shading impacts to Martin Square would be greater than the ***Draft MIMP*** at 8 AM and 9 AM during all four key solar days of the year, because an additional building would need to be built to the east of Martin Square. Shadow impacts to Tiffany Loop would generally be similar to the ***Draft MIMP***.
3.8 – TRANSPORTATION					
• Trip Generation - Total net new trip generation would be as follows: Total daily vehicle trips: 2,356 AM Peak Hour: 113 PM Peak Hour: 199	• Total net new trip generation would be as follows: Total daily vehicle trips: 872 AM Peak Hour: 81 PM Peak Hour: 86	• Total net new trip generation would be as follows: Total daily vehicle trips: 3,122 AM Peak Hour: 143 PM Peak Hour: 219	• Total net new trip generation would be as follows: Total daily vehicle trips: 2,612 AM Peak Hour: 110 PM Peak Hour: 185	• Total net new trip generation would be as follows: Total daily vehicle trips: 3,102 AM Peak Hour: 142 PM Peak Hour: 215	• Total net new trip generation would be as follows: Total daily vehicle trips: 3,256 AM Peak Hour: 131 PM Peak Hour: 198
• Non-Motorized Transportation - on-campus connections would be improved and frontage improvements would be provided with newly constructed buildings. Additionally, several roadway and intersections improvements would result in benefits to pedestrian access and circulation. The ***Draft MIMP*** would continue to provide bicycle amenities on-campus and make improvements and/or additions as the projects are built.	• No changes to the existing non-motorized system are assumed with the ***No Action Alternative***. However, recommended improvements outlined in the Seattle's 2035 Comprehensive Plan and 2014 Bicycle Master Plan, including bicycle lanes along several streets, would improve bicycle connectivity in the study area if implemented.	• Some pedestrian circulation improvements that would be implemented under the ***Draft MIMP*** would not occur under ***Alternative 2***, and there would be fewer opportunities for ground-floor retail space and overall street activation within the surrounding campus	• Some pedestrian circulation improvements that would be implemented under the ***Draft MIMP*** would not occur under ***Alternative 3***, and there would be fewer opportunities for ground-floor retail space and overall street activation within the surrounding campus	• Some pedestrian circulation improvements that would be implemented under the ***Draft MIMP*** would not occur under ***Alternative 4***, and there would be fewer opportunities for ground-floor retail space and overall street activation within the surrounding campus	• Opportunities to eliminate and reduce pedestrian-vehicle conflict points would be limited without street or alley vacations.
• Transit Service - Transit facilities on-campus would not be anticipated to change. Transit utilization increases of 3 % or less would be expected. No route would be anticipated to operate at above 50 percent capacity and there would be available capacity to accommodate additional riders during the weekday peak periods.	• Transit facilities on-campus would not be anticipated to change. Transit utilization increases of 8 % or less would be expected. There would be available capacity to accommodate additional riders during the weekday peak periods.	• Projected transit trips would be higher than the ***Draft MIMP***. While transit trips would be higher, there would be sufficient capacity to absorb these new trips.	• Projected transit trips would be lower than ***Draft MIMP***.	• Projected transit trips would be higher than the ***Draft MIMP***. While transit trips would be higher, there would be sufficient capacity to absorb these new trips.	• Projected transit trips would be lower than ***Draft MIMP***.

DRAFT MIMP **Proposed Action**	***Alternative 1*** **No Action Alternative**	***Alternative 2*** **No Boundary Expansion and No Increase to Height Limits**	***Alternative 3*** **Boundary Expansion and No Change to Height Limits in Existing MIO**	***Alternative 4*** **No Boundary Expansion and Increased Height Limits**	***Alternative 5*** **Boundary Expansion, Increased Height Limits & No Street Vacations**
3.8 – TRANSPORTATION con't					
• Traffic Volumes - The majority of intersections along W Nickerson Street would grow by less than 10%, with a few intersections projected to grow between 10 and 12%. Within the campus, some intersections would experience traffic growth, while some would experience a decline in traffic. The growth and shift in traffic volumes would primarily be due to the increase in parking along W Cremona St. and the shifting in vehicular traffic as a result of the street vacations and intersection improvements.	• Traffic volumes would generally grow proportionately throughout the study area based on overall campus population growth. Given that there are no changes to roadway network and no changes to locations of off-street parking as part of the ***No Action Alternative***, there would be no major shifts in traffic throughout the study area.	• Traffic volumes within the west side of campus (along 6th Avenue W) would decrease, while traffic volumes within the east side of campus (along 3rd Avenue W and Queen Anne Avenue W) would increase. This is primarily a result of mixed-use development centered around 3rd Avenue W and W Cremona Street versus along W Nickerson Street between 6th Avenue W and 3rd Avenue W as part of the ***Draft MIMP***	• Traffic volumes within the campus (along 6th Avenue W and 3rd Avenue W) would generally decrease, while traffic volumes east of campus (along W Nickerson Street west of Queen Anne Avenue N) would generally increase. This is primarily a result of some mixed-use development shifted to W Cremona Street versus W Nickerson Street between 6th Avenue W and 3rd Avenue W as part of the ***Draft MIMP***.	• Traffic volumes within the west side of campus (along 6th Avenue W) generally would decrease, while traffic volumes within the east side of campus (along 3rd Avenue W and Queen Anne Avenue W) would generally increase. This is primarily a result of some mixed-use development shifted to W Cremona Street versus W Nickerson Street between 6th Avenue W and 3rd Avenue W as part of the ***Draft MIMP***.	• Traffic volumes would increase at intersections that would no longer be impacted by street vacations, but volumes would otherwise generally decrease. With all other Action Alternatives, the street vacations would result in an increase in traffic along 3rd Avenue W as an alternative to 6th Avenue W. Without the street vacations, volumes would not shift from 6th Avenue W and therefore 3rd Avenue is projected to see a decline in trips. Additionally, some mixed-use development would be shifted to W Cremona Street versus W Nickerson Street between 6th Avenue W and 3rd Avenue W as part of the ***Draft MIMP***.
• Traffic Operations - The majority of off-site study intersections would continue to operate acceptably at LOS D or better during the weekday AM and PM peak hours. Consistent with the No Action conditions, three intersections are forecast to operate below LOS E or F at signalized locations and LOS F at stop-controlled intersections during the AM peak hour, and five intersections are forecast to operate below these standards during the PM peak hour. However, proposed mitigation measures and accompanying changes in circulation would result in improvements to overall intersection operations. The ***Draft MIMP*** would result in the most advantageous system-wide LOS results.	• The majority of off-site study intersections would continue to operate acceptably at LOS D or better during the weekday AM and PM peak hours. During the weekday peak hours, five intersections are forecast to operate below LOS E or F for signalized locations and LOS F at stop controlled intersections. The projected operations are generally consistent between the 2031 and 2035 ***No Action Alternative*** conditions in terms of poor operations.	• Operational differences between the ***Draft MIMP*** with mitigation measures implemented would be minimal, but the ***Draft MIMP*** would result in the most advantageous system-wide LOS results.	• Operational differences between the ***Draft MIMP*** with mitigation measures implemented would be minimal, but the ***Draft MIMP*** would result in the most advantageous system-wide LOS results.	• Operational differences between the ***Draft MIMP*** with mitigation measures implemented would be minimal, but the ***Draft MIMP*** would result in the most advantageous system-wide LOS results.	• Operational differences between the ***Draft MIMP*** with mitigation measures implemented would be minimal, but the ***Draft MIMP*** would result in the most advantageous system-wide LOS results.

SUMMARY OF MITIGATION MEASURES AND SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Air Quality

Mitigation Measures

Construction

Although significant air quality impacts are not anticipated due to construction of the planned and potential projects, construction contractors would be required to comply with all relevant federal, state, and local air quality regulations.

Construction contractors could minimize emissions from diesel-powered construction equipment, to the extent practicable, by taking steps such as implementation of best management practices that would reduce emissions related to project construction. Management practices for reducing the potential for air quality impacts during construction include measures for reducing both exhaust emissions and fugitive dust. The Washington Associated General Contractors brochure, *Guide to Handling Fugitive Dust from Construction Projects* and the PSCAA suggest several methods for controlling dust and reducing the potential exposure of people to emissions from diesel equipment. A list of some of the control measures that could be implemented to reduce potential air quality impacts from construction activities follows:

- Use only equipment and trucks that are maintained in optimal operational condition.
- Require all off-road equipment to have emission reduction equipment (e.g., require participation in Puget Sound Region Diesel Solutions, a program designed to reduce air pollution from diesel, by project sponsors and contractors).
- Use car-pooling or other trip-reduction strategies for construction workers.
- Implement restrictions on construction truck and other vehicle idling (e.g., limit idling to a maximum of five minutes).
- Spray exposed soil with water or other suppressant to reduce emissions of PM and deposition of particulate matter.
- Pave or use gravel on staging areas and roads that would be exposed for long periods.
- Cover all trucks transporting materials, wetting materials in trucks, or providing adequate freeboard (space from the top of the material to the top of the truck bed), to reduce PM emissions and deposition during transport.
- Provide wheel washers to remove particulate matter that would otherwise be carried off-site by vehicles in order to decrease deposition of particulate matter on area roadways.
- Cover dirt, gravel, and debris piles as needed to reduce dust and wind-blown debris.
- Stage construction to minimize overall transportation system congestion and delays to reduce regional emissions of pollutants during construction.

Other than direct construction equipment and activity emissions that would be addressed as described above, the largest potential emissions source related to facility construction would be traffic-related emissions associated with disrupted and/or rerouted traffic in the site vicinity.

With appropriate controls, construction-related diesel emissions would not be expected to significantly affect air quality in the project vicinity.

Operation of Proposed Action or Alternatives

The screening analysis described in this section indicates that operation of the ***Draft MIMP*** or ***EIS Alternatives*** would not result in any significant adverse air quality impacts. Consequently, no specific additional mitigation is necessary or proposed.

GHG and Sustainability

The environmental analysis described above does not quantify or take into consideration any potential efforts to reduce climate change-related impacts by incorporating sustainable features into the development. However, it is assumed that sustainable features would be incorporated into individual projects as they are built to reduce the impacts quantified in this section. These sustainable features would be considered in the approach to the design of buildings, and in ongoing site programming and management. Sustainable features would be incorporated into the project through compliance with requirements of Building and Energy Codes and the potential use of the green building technologies, which are described in proposed design guidelines and in ongoing site programming and management.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse air quality or greenhouse gas emission-related impacts have been identified and none are anticipated.

Plants and Animals

Mitigation Measures

- Site planning around exceptional trees would follow the requirements outlined in SMC 25.11.050, 25.11.070, 25.11.080 and 25.11.090, which outlines replacement requirements for exceptional trees and trees over 24 inches that are removed for development.

- Site planning around trees in environmentally critical areas (ECAs) would follow the requirements outlined in SMC 25.09.070, which requires mitigation sequencing at project review. Mitigation for lost tree canopy in developed areas of the site could likely include restoration and planting in the steep slope areas.

- All pruning required for construction clearance must be performed by an ISA certified arborist conforming to current ANSI A300 standards.

- Prior to construction the exact locations of trees would be surveyed, and plans would be reviewed by an arborist to determine impacts to trees, final retention numbers, and locations with respect to specific ECAs. It is possible that utilities, demolition, grading, and revised building footprints could have a considerable impact on overall tree retention. Considering tree retention throughout the design and development phase would lead to an increase in overall tree retention, avoid unnecessary tree removal, and ensure that trees with high retention value can be protected.

- Alternative designs that would better maximize tree retention and urban wildlife habitat by shifting proposed buildable areas around existing trees/groves on campus should be studied further in the ***Draft MIMP***.

- The ***Draft MIMP*** could include "Tree Preservation" Design Guidelines or develop tree standards/guidelines regarding construction activities and trees, to ensure that trees with high retention values and trees that are in good condition/health be considered for retention and protection, as well as maximizing mature tree retention around the perimeter of the site, within groves, and within ECAs (steep slope areas especially).

- When developing the campus, the locations of groves in particular, individual exceptional trees, and other trees of all sizes should be taken into consideration to ensure a diversity of size, age, and species on campus.

- Increasing tree species diversity is important to urban forest resiliency. New plantings should strive to increase diversity throughout the campus and should avoid bigleaf maple (Acer macrophyllum), red maple (Acer rubrum), and Leyland cypress (Cuprocyparis leylandii) species since they already make up the majority of tree species on campus. Red maple can be an especially problematic species in urban areas due to a large concentration of surface and girdling roots, as well as narrow branch unions that are more prone to failure.

- The exceptional grove to the east of Potential Project H-9 in the ***Draft MIMP*** should be taken into consideration when finalizing the design for the proposed building.

- Each proposed/potential development project that is built on campus would be required to replace trees that are removed and to provide new landscaping on campus, which would help to mitigate the short-term impact of this loss of habitat.

Significant Unavoidable Adverse Impacts

As indicated in this section, certain existing trees and/or habitat on campus could be removed or affected by adjacent ground disturbance during construction. With implementation of proposed mitigation measures noted above, no additional significant unavoidable adverse impacts to plant species on-site or proximate to the site are anticipated under the ***Draft MIMP***.

Under ***Alternative 2*** and ***Alternative 3***, buildings are proposed along the southeastern, northeastern, and western edges of Tiffany Loop, which would require the removal of some of the largest and most prominent trees on the campus.

Cultural Resources

Mitigation Measures

Measures Applicable to High Potential Areas and some Moderate Potential Areas

The following recommendations apply to projects in the area mapped as Qw and in locations mapped as Qvr where Holocene deposits were observed in geotechnical borings.

- Archaeological survey with subsurface testing is recommended prior to ground disturbance for projects with the potential to encounter previously undisturbed Holocene deposits. Archaeological monitoring of geotechnical field investigations, archaeological borings, or other mechanical excavation methods may be required to provide adequate opportunity to identify deeply buried sites in areas of deep fill.

- Affected Tribes should be notified in advance of archaeological field investigations and afforded the opportunity to observe or participate.

- If archaeological sites are recorded during survey, the Department of Archaeology and Historic Preservation (DAHP) and affected Tribes should be consulted to determine appropriate site treatment.

- Projects impacting recorded sites should be designed to avoid ground disturbance within the site boundary. If avoidance is not possible, the project would require an Archaeological Site Alteration and Excavation Permit from the DAHP prior to any ground disturbance within the site boundary – along with archaeological monitoring for site documentation.

Measures Applicable to Moderate Potential Areas

The following recommendations apply to projects in the area mapped as Qvr.

- During the design phase, a professional archaeologist should review project plans and recent geotechnical reports produced for the project to determine if an MIDP or an IDP is needed:

    - An MIDP should be prepared by a professional archaeologist prior to ground disturbance and include a provision for notifying affected Tribes in advance of ground disturbance and inviting observation by a Tribal representative if desired. The MIDP should also establish monitoring methods and protocols to be followed in the event of an inadvertent discovery, including notification of affected Tribes and the DAHP: or

    - An IDP should be prepared by a professional archaeologist prior to ground disturbance and should establish procedures and protocols to be followed in the event that construction excavations encounter potentially significant archaeological material.

- Construction crews involved in ground disturbance should be briefed on the MIDP in a tailgate at the beginning of the project, prior to beginning ground-disturbing work.

- An IDP without monitoring may be appropriate for projects in areas where fill and Holocene deposits are absent or where recent construction has already disturbed historic fill.

Measures Applicable to Low Potential Areas

The following recommendations apply to projects in the areas mapped as Qva or Qvlc.

- Projects in these areas are recommended to proceed under an IDP. The IDP should be prepared by a professional archaeologist prior to ground disturbance and should establish procedures and protocols to be followed in the event that construction excavations encounter potentially significant archaeological material.

- Construction crews involved in ground disturbance should be briefed on the IDP in a tailgate at the beginning of the project, prior to beginning ground disturbing work.

Significant Unavoidable Adverse Impacts

With implementation of the identified mitigation measures noted above, no significant unavoidable adverse cultural resources-related impacts are anticipated.

Land Use

Mitigation Measures

As no significant impacts have been identified for development associated with the ***Draft MIMP***, there are no mitigation measures required. Mitigation measures for indirect land use impacts (e.g., transportation, height, bulk, and scale, etc.) are addressed in their respective sections of this Draft EIS and through applicable City codes.

Significant Unavoidable Adverse Impacts

Under the ***Draft MIMP*** and ***Alternatives 2-5***, intensification in land uses on the campus would occur as a result of the increased development that is proposed. Potential development along the periphery of the existing campus MIO boundary and within the planned boundary expansion areas would have the potential for land use impacts to surrounding neighborhoods. The greatest potential for these impacts to occur is under ***Alternative 2***; development under ***Alternative 5*** would have similar impacts as those described under the ***Draft MIMP***. There would be a significant impact to designated open space areas on campus under ***Alternatives 2*** and ***3***, as new buildings are proposed within these areas.

With implementation of the mitigation discussed above, no significant unavoidable adverse land use impacts would be anticipated under the ***Draft MIMP***.

Height, Bulk and Scale

Mitigation Measures

The following measures could be implemented to better integrate new development into the neighborhood and lessen impacts as related to height, bulk, and scale:

- Additional building setbacks, additional building façade modifications, and appropriate building finishes (e.g., color and materials) could be used to reduce perceived height, bulk, and scale impacts. These measures could be included in the design and development regulations in the approved *MIMP* and/or implemented through future approvals.

- Where impacts would be most noticeable in relation to off-site multifamily low-rise-zoned development, upper-level setbacks could be employed adjacent to the campus boundaries to reduce perceived height.

- Proposed landscaping could provide screening in areas where there could be height/bulk/scale impacts on adjacent uses.

Significant Unavoidable Adverse Impacts

Development would result in changes to the height, bulk and scale conditions on the SPU campus, but with implementation of identified mitigation measures no significant unavoidable adverse impacts are anticipated.

Public View Protection

Mitigation Measures

No significant adverse impacts to David Rodgers Park are anticipated to result from development of the ***Draft MIMP*** or ***Alternatives 1-5***, and no mitigation is necessary.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts to protected public views are anticipated under the ***Draft MIMP*** or ***Alternatives 1-5***.

Shadows on Open Space

Mitigation Measures

Although no significant adverse shadow impacts are anticipated under the ***Draft MIMP***, the following mitigation measures could further minimize the potential for impacts from shadows:

- Future new building design could consider the final orientation, siting, and massing to minimize the potential shadow impacts to these open spaces.

Significant Unavoidable Adverse Impacts

Shadow impacts associated with development of the ***Draft MIMP*** and ***Alternatives 1-5*** would not be expected to result in significant impacts to off-campus open spaces (West Ewing Mini Park and the 6th Avenue W Street End). ***Alternatives 2*** and ***3*** could result in significant unavoidable adverse impacts to on-campus open spaces.

Transportation

Mitigation Measures

This section presents mitigation measures that would offset or reduce potential impacts of the Alternatives. The impacts of the Alternatives are similar and would be improved by a consistent set of mitigation measures.

Intersection Improvements

Intersections that are impacted by the Alternatives could be mitigated with the following proposed intersection improvements:

- **6th Avenue W/W Nickerson Street** – A traffic signal is proposed which would help address side street delay as well as provide a supplemental location for pedestrians to cross W Nickerson Street. The signal was shown to meet warrants based on the projected volumes.

- **3rd Avenue W/W Bertona Street** – Given the close proximity to the signalized intersection of 3rd Avenue W/W Nickerson Street, there are limited opportunities to adjust the traffic control. However, the proposed traffic signal at 6th Avenue W/W Nickerson Street provides the opportunity to implement turn restrictions at 3rd Avenue W/W Bertona Street such that vehicles traveling east through W Bertona Street can access W Nickerson Street via 6th Avenue W as an alternative. The proposed turn restrictions would limit eastbound traffic to right-turns only thus reducing delay related to left-turning and through vehicles. The northbound left-turn movement would remain to help process traffic traveling west into campus, but c-curb would be implemented to restrict eastbound movements.

  In conjunction with the proposed turn restrictions at 3rd Avenue W/W Bertona Street, changes to channelization along the northbound approach of 3rd Avenue W at W Nickerson are proposed to incorporate a northbound left-turn lane. Additionally, leading pedestrian intervals are proposed to reduce potential pedestrian-vehicle conflicts for pedestrians crossing W Nickerson Street.

- **W Cremona Street/W Nickerson Street** – A traffic signal is proposed which would help address side street delay as well as provide a supplemental location for pedestrians to cross W Nickerson Street.

Transportation Management Plan

In addition to the proposed intersection improvements, the proposed TMP would include programs and strategies applicable to faculty, resident and commuter students, and staff that are designed to reduce parking and traffic demands associated with projected growth at SPU.

Significant Unavoidable Adverse Impacts

Development of the ***Draft MIMP*** and increase in on-campus population to up to 6,000 student FTE by the year 2035, as well as construction of mixed-use development components would result in increases in all travel modes – vehicles, transit, pedestrians, and bicycles. It is anticipated there would be significant and unavoidable impacts at the intersection of Fremont Avenue N/W Nickerson Street as a result of the cumulative impacts of campus growth and mixed-use development.

This signalized intersection would continue to operate at LOS F during the AM peak hour and degrade to LOS F from LOS E during the PM peak hour. The forecast delay with the ***Draft MIMP*** would increase by just over one second during the AM peak hour and increase by just over six seconds during the PM peak hour as compared to the ***No Action Alternative*** conditions. While the impact of the ***Draft MIMP*** at this intersection is considered significant based on the increase in delay, there are limited opportunities to implement improvements at this intersection due to the split-phased signal operations. The intersection already has a high cycle length and considerable turning volumes which result in limited opportunities to reallocate green time amongst the approaches. As such, no improvements are proposed at this intersection.

Chapter 2

Project Description – Proposed MIMP and Alternatives

SECTION II

PROJECT DESCRIPTION – DRAFT MIMP and OTHER ALTERNATIVES

This Chapter of the Draft EIS provides discussion on the existing campus and surrounding areas, planning activities conducted in support of the proposed Draft Seattle Pacific University Major Institution Master Plan (***Draft MIMP***), and a description of the EIS Alternatives (***Alternatives 1*** through ***5***). A detailed description of the affected environment, impacts, mitigation measures and significant unavoidable adverse impacts is provided in ***Section III*** of the Draft EIS.

2.1 PROPONENT/PROJECT LOCATION

Proponent

The proposed ***Draft Major Institution Master Plan (MIMP)*** is sponsored by Seattle Pacific University (SPU).

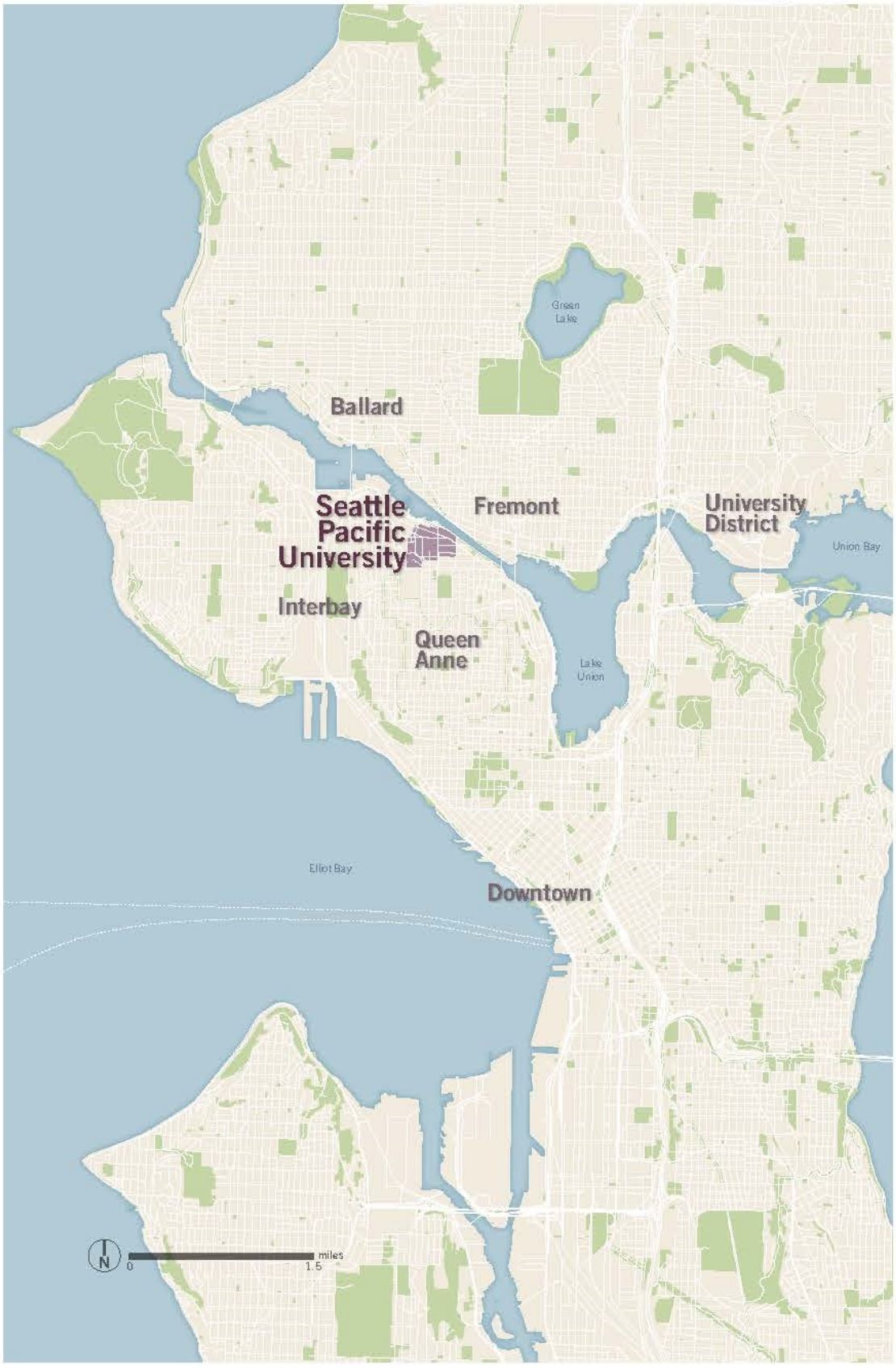
Project Location

Seattle Pacific University is located on the north slope of Seattle's Queen Anne hill. SPU's existing campus boundary (also referred to as the Major Institution Overlay [MIO] boundary) encompasses an area of approximately 66 acres. The campus generally extends from the Fremont Cut on the north to W. Barrett and W. Dravus streets on the south and on the west from 7th Ave. W. to Queen Anne Ave. N. on the east.. **Figure 2-1** is a regional map of the City depicting the location of SPU and **Figure 2-2** is a vicinity map of the campus and immediate surrounding area.

2.2 BACKGROUND INFORMATION

The following includes an overview of Seattle Pacific University, existing campus facilities, the major institution planning process, and phased environmental review.

Seattle Pacific University is a privately-funded, fully accredited institution of higher education and a member of the consortium of Christian colleges. SPU was founded in 1891 by the Free Methodist Church of North America on a donated five-acre site that includes its present location.



Source: Perkins + Will, Draft MIMP, 2023

EA Engineering, Science, and Technology, Inc.

Figure 2-1
Regional Map

Source: Perkins + Will, Draft MIMP, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 2-2

Vicinity Map

In addition to the main campus in Seattle, SPU operates a 965-acre wilderness and field station on Blakely Island in the San Juan Islands and a 155-acre campus retreat on Whidbey Island known as Camp Casey.

SPU currently offers 71 undergraduate majors and 59 undergraduate minors, 31 master's degree programs, five doctoral degree programs, and eight graduate certificates.[1]

Existing Campus Facilities

The Seattle Pacific University campus encompasses an area of approximately 66 acres within SPU's existing MIO boundary (see **Figure 2-3**). Within the MIO, SPU owns an area of approximately 44 acres (**Figure 2-3**), other entities (public or private) own an estimated 4 acres and City of Seattle public rights-of-way comprise an additional 18 acres.

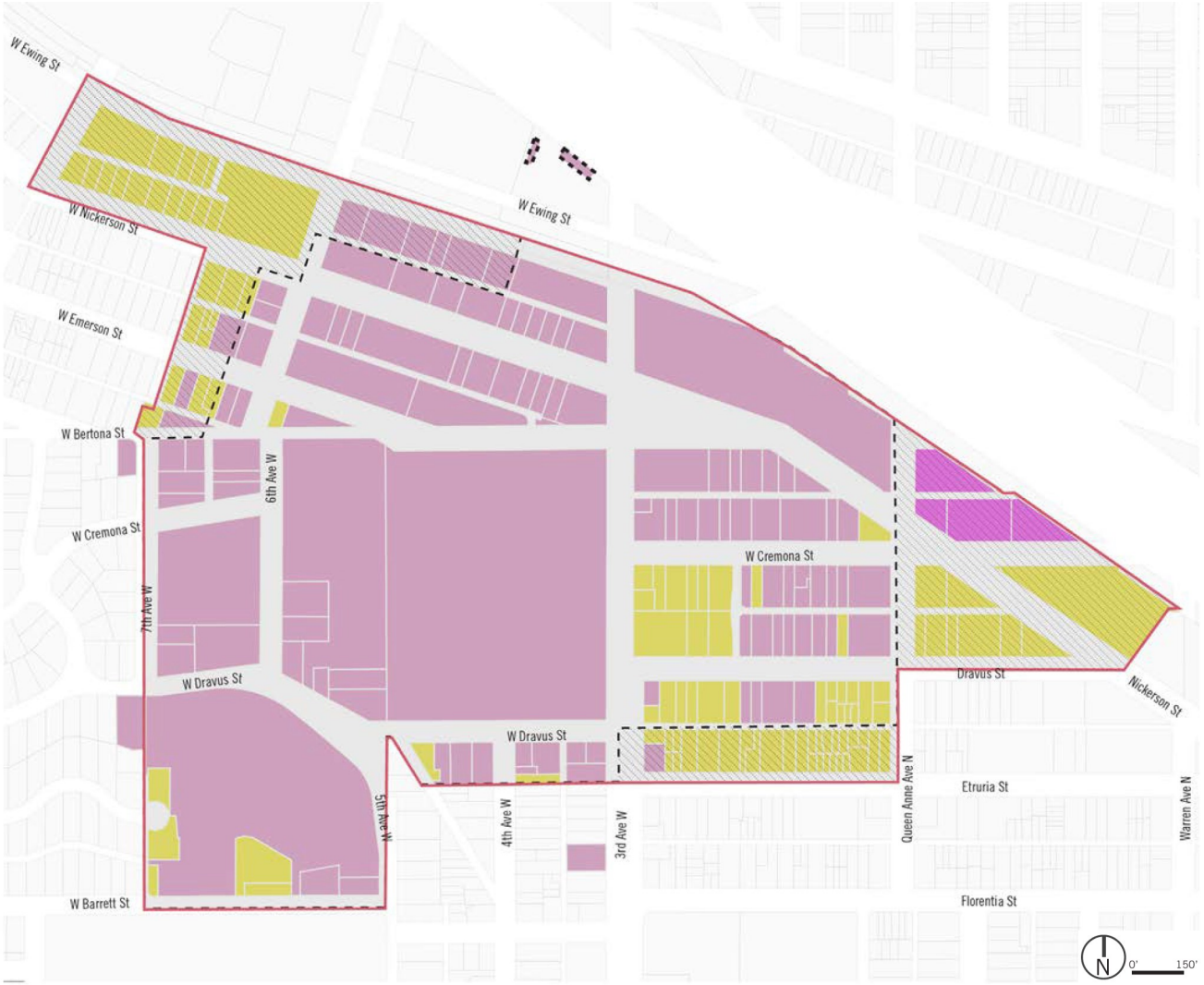
As of 2023, SPU owns 97 buildings within the existing MIO, comprising a total of approximately 1,228,700 sq. ft. of gross floor area (gfa). In addition to buildings owned by SPU within the existing MIO, SPU owns seven buildings, comprising a total of approximately 30,200 sq. ft., outside the MIO and the University leases an additional four buildings (30,800 sq. ft.) outside the MIO. All buildings owned by SPU outside the existing MIO were used for housing and the buildings leased by SPU outside the existing MIO boundary are used for education and general use. Approximately 43 percent of the total building area owned by SPU is in housing, 44.5 percent is in educational and general space, 6.7 percent is used as athletics/recreation space, roughly 1 percent is mixed-use space, and approximately 5 percent is vacant.[2]

Figure 2-4 is a map of the SPU campus depicting the existing MIO boundary, all buildings that are owned by SPU within and outside the MIO, and buildings outside the MIO that are leased by SPU. **Table 2-1** provides information concerning each building; data in the table is keyed to **Figure 2-4**.

1 https://spu.edu/about-spu/spu-facts

2 SPU Draft MIMP, May 2023. Existing areas numbers/percentages include leased space and Capstone rental properties.

	Existing		Proposed	
	MIO	%	MIO	%
	44 ac	67%	46 ac	55%
	4 ac	6%	13 ac	15%
	0 ac	0%	1 ac	1%
	18 ac	27%	24 ac	29%
MIO Total	66 ac	100%	84 ac	100%



LEGEND

- SPU-owned Parcels
- Other Privately-owned Parcels
- SPU Foundation-owned Parcels
- Right-of-Way
- Proposed MIO Extension
- Existing MIO Boundary
- Proposed MIO Boundary

Property Ownership

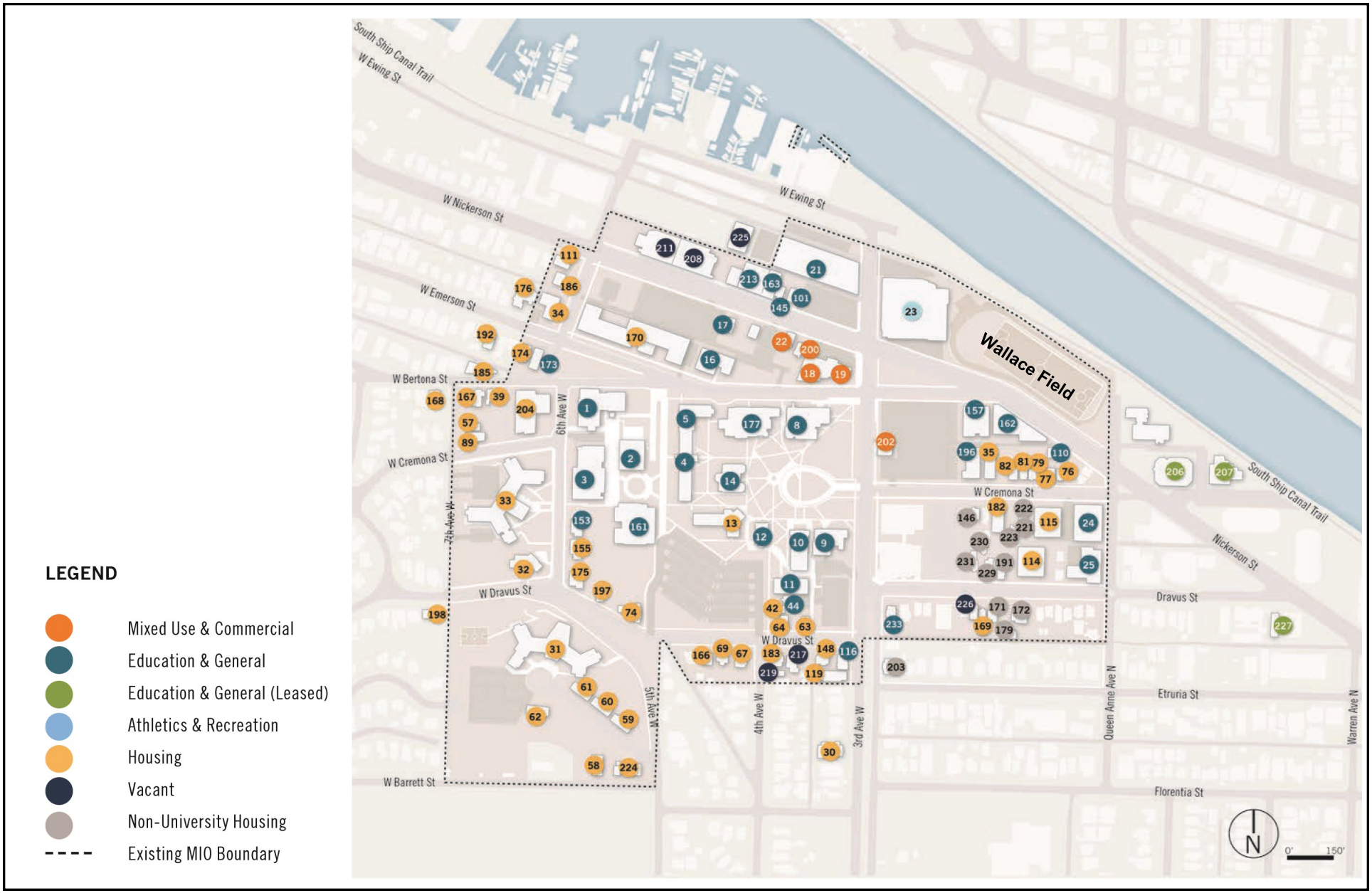
Note: Information as of January 2022

Source: Perkins + Will, Draft MIMP, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 2-3

Existing and Proposed MIO Boundaries and Property Ownership



Source: Perkins + Will, Draft MIMP, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 2-4

Existing MIO Boundary and Building Ownership

Table 2-1
SPU Existing Facilities

Built	Building #	Building Name	Address	GSF	Height
1966	1	Demaray Hall[1]	509 W Bertona St	40,400	49'
1960	2	Weter Hall[1]	3317-5th Ave W	19,200	37'
	3	Gwinn Commons	3310-6th Ave W	34,700	32'
1949	4	Marston Hall[1]	3350-5th Ave W	34,400	41'
1949	5	Watson Hall[1]	353 W Bertona St	15,700	33'
1960	8	Student Union Building[1]	315 W Bertona St	20,300	24'
1960	9	Crawford Misuc Building[1]	3224-3rd Ave W	13,900	23'
1939	10	Mckinley Hall[1,3]	3234-3rd Ave W	14,300	40'
1952	11	Beegle Hall [1,3]	3214-4th Ave W	13,500	37'
1893	12	Alexander & Adelaide Hall [1,2]	3244-3rd Ave W	11,300	48'
1950	13	Moyer Hall[1]	3236-5th Ave W	28,900	39'
1904	14	Peterson Hall[1,3]	3307-3rd Ave W	22,200	36'
	16	McKenna Hall	350 W Bertona St	13,500	32'
	17	SBGE Center House	335 W Nickerson St	2,200	28'
various	18	Bookstore[1]	310 W Bertona St	5,100	13'
various	19	U.S Bank[1]	301 W Nickerson St	2,500	13'
various	21	Otto Miller Hall[1]	3469-3rd Ave W	52,600	31'
various	22	Printing & Mailing[1]	323 W Nickerson St	1,400	14'
various	23	Royal Brougham Pavilion[1,3]	3414-3rd Ave W	82,700	52'
1927	24	Art Center[1]	3 W Cremona St	10,400	22'
1972	25	Facility Operations Center[1,3]	2 W Dravus St	13,200	19'
	30	Davis Apartment	3019-3rd Ave W	7,400	
1964	31	Ashton Hall[1]	611 W Dravus St	95,500	56'
1954	32	Hillford House[1]	600 W Dravus St	3,700	18'

Built	Building #	Building Name	Address	GSF	Height
1961	33	Hill Hall[1]	3231-6th Ave W	70,100	43'
1967	34	Falcon Apartments[1]	600 W Emerson St	9,600	31'
1965	35	Cremona Apartments[1]	34 W Cremona St	6,800	27'
	39	House	651 W Bertona St	1,900	28'
	42	House	3206-4th Ave W	1,400	28'
	44	Office	3210-4th Ave W	2,300	28'
	57	House	3304-7th Ave W	1,600	
	58	House	512 W Barrett St	2,500	28'
	59	Duplex	508-510 W Etruria St	1,200	28'
	60	Duplex	520-522 W Etruria St	1,200	28'
	61	Duplex	528-530 W Etruria St	1,200	28'
	62	Duplex	607-609 W Etruria St	1,200	28'
	63	Duplex	314-314.5 W Dravus St	2,000	28'
	64	House	320 W Dravus St	1,500	28'
	67	House	403 W Dravus St	2,200	28'
	69	House	409 W Dravus St	2,600	28'
	74	Duplex	3201-5th Ave W	2,500	28'
	76	House	14 W Cremona St	1,400	28'
	77	House	18 W Cremona St	1,500	28'
	79	House	22 W Cremona St	1,900	28'
	81	Duplex	26-26.5 W Cremona St	1,500	28'
	82	House	30 W Cremona St	2,400	28'
	89	House	650 W Cremona St	2,700	
	101	Office	324 W Nickerson St	1,600	28'
	110	Storage	18 W Cremona St	1,000	28'

Table 2-1 (con't)
SPU Existing Facilities

Built	Building #	Building Name	Address	GSF	Height
	111	4-plex	3469-3475 6th Ave W	3,400	28'
	114	Wesley Dravus Apartments	20 W Dravus St	20,600	
	115	Wesley Cremona Apartments	13 W Cremona St	20,600	
	116	Kingswood House	303 W Dravus St	2,800	
	119	Bailey Apartments[1]	3041-55-3rd Ave W	7,100	
	145	Office	328-328.5 W Nickerson St	2,200	28'
	146	House	41 W Cremona St	1,500	
	148	House	307 W Dravus St	1,200	
	153	Office	3220-6th Ave W	2,900	28'
	155	House	3212-6th Ave W	2,900	28'
	157	Bertona Classrooms	107 W Bertona St	7,800	28'
	161	Ames Library	3226-6th Ave W	60,000	49'
	162	Walls Advancement Center[1]	25 W Nickerson St	10,700	21'
	163	Human Resource Building[1]	330 W Nickerson St	3,300	22'
	166	Duplex	415 W Dravus	2,000	28'
	167	House	657 W Bertona	2,600	28'
	168	House	703 W Bertona	1,900	28'
	169	Triplex	37 W Dravus	2,900	28'
	170	Emerson Hall	500 W Emerson St	95,300	35'
	171	Duplex	31-33 W Dravus St	2,300	28'
	172	5-plex	25 W Dravus St	4,300	28'
	173	Safety & Security	601 W Emerson St	3,700	28'
	174	Triplex	605 W Emerson St	4,400	28'
	175	4-plex	528 W Dravus St	3,600	28'

Built	Building #	Building Name	Address	GSF	Height
	176	Apartments	608 W Emerson St	7,600	
	177	Eaton Hall	339 W Bertona St	63,200	
	179	Apartment/ADU	25 W Dravus St	-	
1965	182	Apartments[1]	35 W Cremona St	6,900	
	183	House	323 W Dravus St	1,800	
1965	185	Apartments[1]	650 W Bertona St	3,700	
	186	Duplex	3463 6th Ave W	4,000	
	191	House	34 W Dravus St	1,800	
	192	Triplex	615-617-619 W Emerson St	3,000	
	196	Cremona Classrooms	38 W Cremona St	8,400	
	197	House	516 W Dravus St	1,500	
	198	House	701 W Dravus St	2,200	
	200	Bookstore Annex	319 W Nickerson St	900	
various	202	Commercial Duplex[1]	3308-3310-3rd Ave W	1,600	
	203	5-plex	68 W Etruria St	4,400	
	204	Arnett Hall	3309-6th Ave W	46,300	
	206	4 W Nickerson	4 W Nickerson St	9,600	
	207	6 W Nickerson	36 W Cremona St	19,500	
1910	208	Former NW Millworks[1]	360 W Nickerson St	32,200	
1944	211	Former King Building[1]	366 W Nickerson St	15,300	
1956	213	Nickerson Studios[1]	340 W Nickerson St	10,000	
	217	Duplex (inhabitable)	319-319.5 W Dravus St	3,600	
	219	House (inhabitable)	3042-4th Ave W	1,000	
	221	House	23 W Cremona St	2,700	

Table 2-1 (con't)
SPU-Existing Facilities

Built	Building #	Building Name	Address	GSF	Height
	222	House	25 W Cremona St	2,200	
	223	House	29 W Cremona St	400	
	224	House	500 W Barrett St	3,600	
1950	225	Quonset Hut[1]	345-347 W Ewing St	7,200	
	226	House (inhabitable)	41 W Dravus St	1,600	
	227	Senior Art Studio	101 Nickerson St Ste B	1,700	
	229	House	36 W Dravus St	1,100	
	230	House	38 W Dravus St	600	
	231	House	42 W Dravus St	2,200	
1964	233	Financial Affairs Office[1]	3120-3rd Ave W	2,300	

Source: SPU Draft MIMP, 2023

In addition to facilities depicted in **Figure 2-4**, SPU leases the soccer field at the City of Seattle's Interbay Athletic Complex (approx. 2,800 ft. west of the campus) for the University's NCAA Division II men's and women's soccer games and practices.

Major Institution Master Planning Process

Previous Campus Master Planning

The proposed ***Draft MIMP*** represents the third Major Institution Master Plan[3] that has been prepared by Seattle Pacific University in compliance with Seattle Municipal Code (SMC) Chapter 23.69 for Major Institution Overlay Districts, as well as to fulfill SPU's need for a comprehensive campus development plan. The first MIMP was adopted by Seattle City Council on March 11, 1991 (Ord. 115574). The second MIMP, which is in effect at the time of this EIS, was adopted by the Seattle City Council on August 21, 2000 (Ord. 120074).

Current Campus Master Planning

Seattle Pacific University began the process of updating the 2000 MIMP in August 2019 with submittal of a Notice of Intent to the City of Seattle Department of Construction and Inspections (SDCI). The City published a notice relative to formation of the required Development Advisory Committee (DAC)[4] and recommendations concerning prospective DAC members were approved by the Seattle City Council in July 2020. Also, in July 2020 SPU submitted their proposed *Concept Plan*[5] to SDCI. The first meeting of the DAC (orientation) occurred August 4, 2020, and the first working meeting occurred September 1, 2020. Since September 2020, meetings have been held, mostly on a monthly basis, when there is material to review. Due to COVID-19, many meetings were being held remotely, as directed by the Governor's Order on physical distancing measures. Meetings are now occurring in a hybrid format.

The planning process associated with SPU's ***Draft MIMP*** has involved numerous meetings to encourage broad involvement by numerous entities. See **Appendix B** of this Draft EIS for a list of key meetings.

Phased Environmental (SEPA) Review

Projects proposed in conjunction with the ***Final MIMP*** represent planned and potential development. As such, the approval of the Seattle Pacific University MIMP is classified under SEPA as a non-project (also referred to as a programmatic) action. A non-project action is defined as an action that is broader than a single site-specific project, and involves decisions on policies, plans or programs (WAC 197-11-704 and 774. This EIS is a programmatic document in that it addresses a broad range of development that is anticipated to occur over an extended period of time.

Individual planned or potential development proposals that exceed SEPA thresholds will require project-specific environmental review at the time of permitting. The review may focus on the proposed development and environmental impacts and will compare information associated with the site-specific proposal with data noted in SPU's Compiled Adopted *MIMP* and the associated

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4 The DAC was formerly named the Citizen's Advisory Committee (CAC).

5 Seattle Pacific University, 2020

Final EIS[6]. If additional environmental impact analyses are needed, such would be provided in conjunction with the MUP for that site-specific project.

2.3 SEATTLE PACIFIC UNIVERSITY'S PROJECT OBJECTIVES

Seattle Pacific University's ***Draft MIMP*** is a land use plan specific to SPU's existing campus, SPU's proposed MIO expansion areas, and planned and potential development that is proposed by SPU. The University has identified the following key strategies and opportunities specific to this ***Draft MIMP***. Consistent with Seattle's Environmental Policies and Procedures for alternatives in an EIS, these objectives frame the range of reasonable alternatives that are described in ***Section 2.5 – Alternatives***.

- Establish a primary campus entrance along West Cremona Street, with an enhanced streetscape design that extends to and aligns with the historic Tiffany Loop.
- Develop with sensitivity along the Major Institution Overlay boundary and transition respectfully between campus and low-rise residential areas and public edges.
- Concentrate academic functions south of West Nickerson Street—around the historic Tiffany Loop and along an enhanced West Cremona streetscape—to cluster uses and reduce pedestrian-vehicle conflicts.
- Right-size academic and support space to meet physical and programmatic needs.
- Provide more on-campus student housing to strengthen the on-campus community, decrease trips to campus, and reduce impacts on the number of neighborhood rental units.
- Continue to grow away from the south residential area, down the hill toward the north and east.
- Establish a signature, centralized campus that exemplifies SPU's vibrant legacy as a leading national Christian institution of higher learning focused on faith-based education.
- Incorporate new and expanded open spaces for students and neighborhood residents.
- Support an accessible campus that is as navigable as possible for all abilities.
- Gradually replace surface parking with below-ground garages and well-screened structures to concentrate vehicular flow and improve the pedestrian environment.
- Enhance the West Nickerson Street corridor with new mixed-use opportunities and more welcoming athletic facilities.
- Enhance the image and appearance of campus through the architectural design, circulation, and landscaping of new development.
- Incorporate sustainable principles for all aspects of campus site and building design, construction, maintenance, and operations.
- Introduce streetscape improvements to reduce hazards and unify campus appearance and identity.

[6] The Compiled Adopted *MIMP* is the approved *MIMP* and includes all City Council changes and conditions that were imposed during the *MIMP* approval process (SMC 23.69.032 K.).

2.4 DESCRIPTION OF THE PROPOSED MAJOR INSTITUTION MASTER PLAN

The **Proposed Action** involves adoption and implementation of a new *Major Institution Master Plan* (*MIMP*) for Seattle Pacific University. Key elements of the ***Draft MIMP*** (dtd. May 2023) that are considered in this Draft EIS are described in detail in this section.

2.4.1 Proposed Campus Development

2.4.1.1 Proposed Campus Boundary (MIO) Changes

As depicted by **Figure 2-5**, three boundary adjustments are proposed in the northwest, east and southeast areas of campus. These areas, as well as the public rights-of-way within these areas, would add approximately 18 acres to SPU's MIO for a total area of 84 acres. Excluding public rights-of-way, the additional expansion area approximates 12.2 acres. SPU currently owns approximately 53 percent of the land within the proposed MIO boundary expansion areas; land owned by other entities approximates 16 percent; and public rights-of-way comprise an estimated 29 percent. The following is an overview of the three proposed boundary expansions.

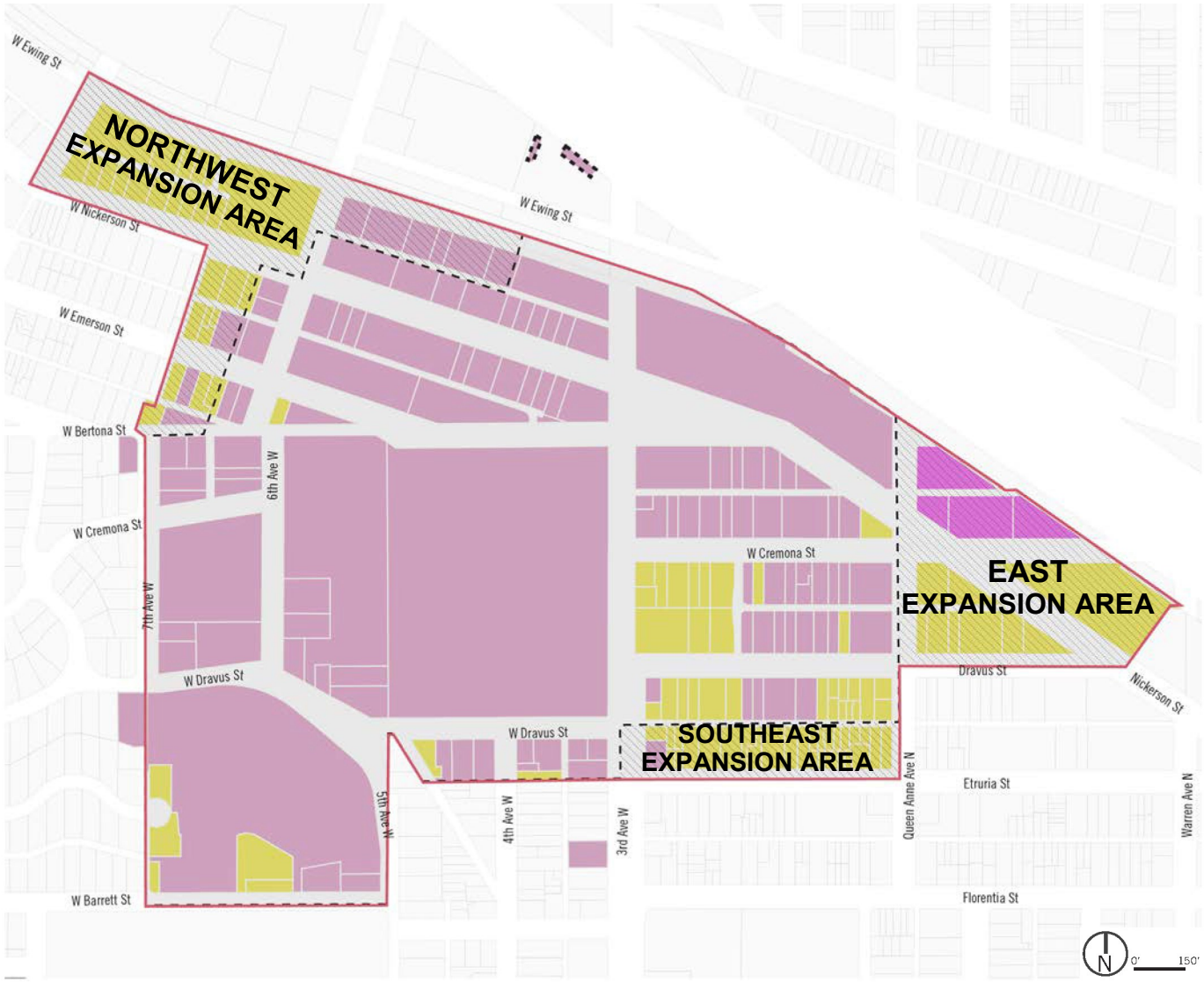
- Northwest – This change would extend the MIO boundary in two areas.
  - The west boundary of the campus would be extended west, between W. Bertona St. and W. Nickerson St., a distance of approximately 160 ft., encompassing 14 parcels and would add roughly 1.4 acres.
  - North of W. Nickerson St. the west boundary and the north boundary would both be modified. The west boundary would be extended west to 8th Ave. W., a distance of approximately 800 ft. In addition, the north boundary would be extended north to the South Ship Canal Trail, a distance of between 150 and 250 ft. This boundary expansion would encompass 26 parcels and would add roughly 4.7 acres.

    Proposed boundary changes in the northwest portion of the campus would add a total of approximately 6.1 acres to the MIO boundary (excluding public rights-of-way).
- East – This change would extend the east boundary of the campus east a distance of approximately 800 ft. encompassing 14 parcels and add roughly 4.2 acres (excluding public rights-of-way).
- Southeast – This boundary change would extend the southeast boundary of the campus south a distance of approximately 120 ft. encompassing 35 parcels and add roughly 1.9 acres (excluding public rights-of-way).

PROPERTY OWNERSHIP *(E.5.)*

SPU owns multiple properties within the existing and proposed MIO District. This is a comprehensive representation of all properties SPU owns and leases within the City of Seattle.

	Existing		Proposed	
	MIO	%	MIO	%
	44 ac	67%	46 ac	55%
	4 ac	6%	13 ac	15%
	0 ac	0%	1 ac	1%
	18 ac	27%	24 ac	29%
MIO Total	66 ac	100%	84 ac	100%



LEGEND

- SPU-owned Parcels
- Other Privately-owned Parcels
- SPU Foundation-owned Parcels
- Right-of-Way
- Proposed MIO Extension
- Existing MIO Boundary
- Proposed MIO Boundary

Property Ownership

Note: Information as of January 2022

Source: Perkins + Will, Draft MIMP, 2023.

EA Engineering, Science, and Technology, Inc., PBC

Figure 2-5

Proposed SPU MIO Expansion Areas

2.4.1.2 Planned Campus Development

Planned campus development is defined by the Seattle Land Use Code as "development which the Major Institution has definite plans to construct" (SMC 23.69.030D).

Seattle Pacific University proposes three planned projects, which include construction of a new campus building – the Student Center, demolition of the existing Marston Hall building to provide open space, and renovation of the Moyer Hall building. The net effect would result in the addition of approximately 7,400 sq. ft. of gross floor area to the existing campus total of approximately **1,228,700** sq. ft., as noted in **Table 2-1**. The result would be a campus-wide total gross floor area of roughly **1,236,100** million sq. ft.

An overview of each of these projects is provided below; each is depicted in **Figure 2-6**. See SPU's ***Draft MIMP***[7] for details regarding each project.

- **Student Center –**

  Location: This building would be located in the central portion of campus in the northeast portion of Martin Square, south of W. Bertona St. and west of the vacated 5th Ave. W.

  Massing/Height: This would be a 4-story, 61,000 sq. ft.[8] building.

  Net change in Campus Gross Floor Area – This project would result in a net increase of approximately 41,800 sq. ft. in the campus gross floor area (with demolition of 19,200 sq. ft. of existing space).

  Proposed Uses:

  Above-grade

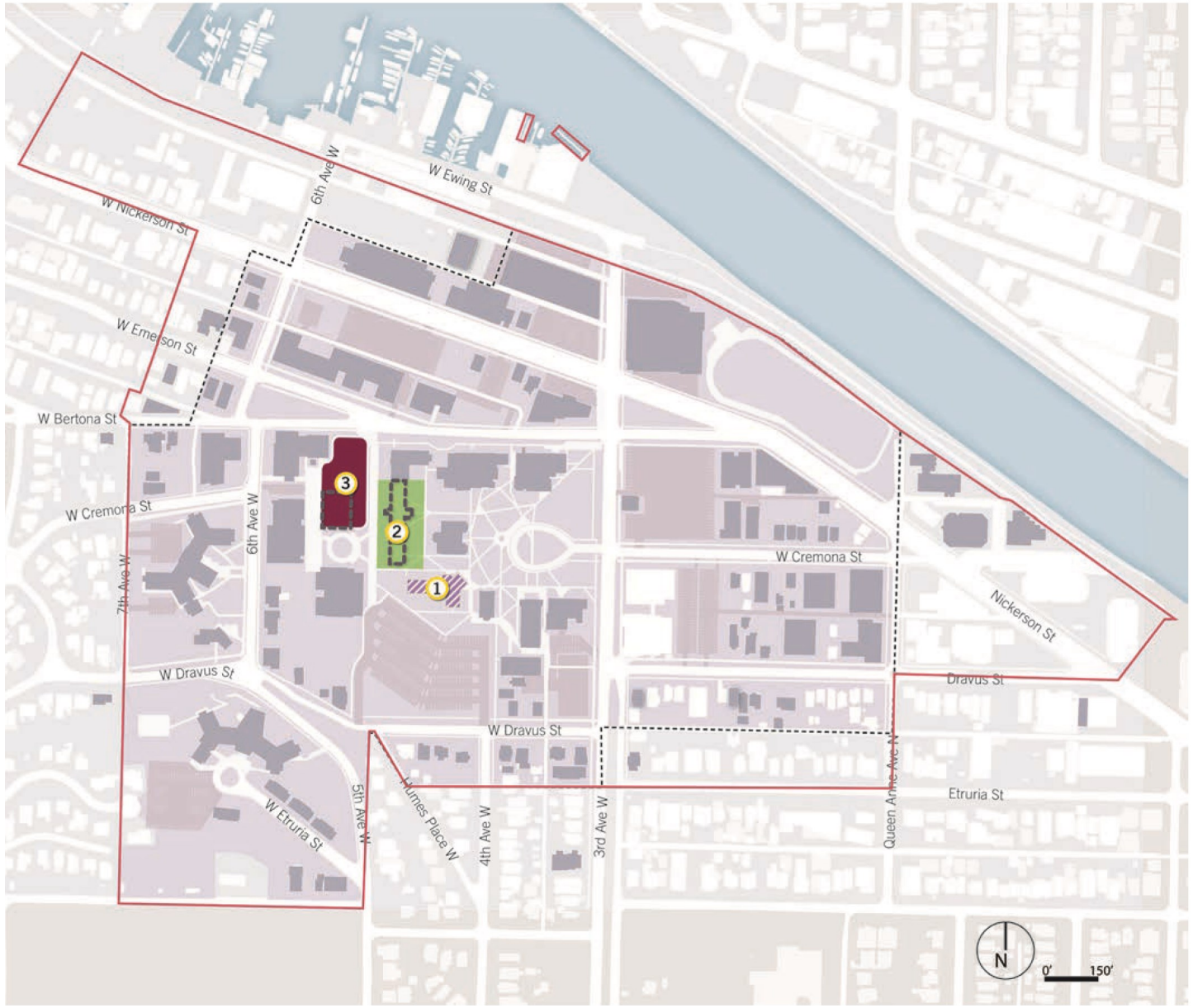
  - 4 floors of student-related functions – 61,000 sq. ft.; and

  Below-grade

  - one level of support space associated with the Student Center.

  Demolition Necessary: Weter Memorial Hall (2-story, approximately 19,200 sq. ft. building that was built in 1960).

[7] The ***Draft Major Institution Master Plan*** (dtd. May 2023) is a document separate from this Draft EIS.
[8] This area represents space above-grade.



LEGEND

- 1 Moyer Hall Repurpose
- 2 Marston Site Future Open Space
- 3 Student Center
- Building Demolition
- Future Open Space
- Building Repurpose
- Existing MIO Boundary

Source: Perkins + Will, Draft MIMP, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 2-6

Planned Campus Development

- **Marston Site Future Open Space[9] – see Figure 2-6**

  Location: This project would be located in the central portion of campus east of the vacated 5th Ave. W. and south of W. Bertona St.

  Massing/Height: This project would involve demolition of an existing 4-story building in order to provide a site for future open space for SPU.

  Net change in Campus Gross Floor Area – This project would result in a decrease of approximately 34,000 sq. ft. in campus gross square footage.

  Proposed Uses: Removal of Marston Hall (education and general building) would provide open space centrally-located within the campus that is proximate to the proposed Student Center. The area created by removal of Marston Hall would be seeded and landscaped.

  Demolition Necessary: Marston Hall (4-story, approximately 34,000 sq. ft. building that was built in 1949).

- **Moyer Hall Repurpose – see Figure 2-6**

  Location: This project would be located in the central portion of campus east of the vacated 5th Ave. W. and between W. Bertona St. and W. Dravus St.

  Massing/Height: This project would involve interior renovation of this existing 3-story building.

  Net change in Campus Gross Floor Area – No change in campus gross square footage.

  Proposed Uses: Renovation of Moyer Hall (student residence hall and offices) would enable repurposing and upgrading of this building to enhance student-related functions within the campus core

  Demolition Necessary: No demolition is proposed for this 3-story, 30,000 sq. ft. building that was built in 1950).

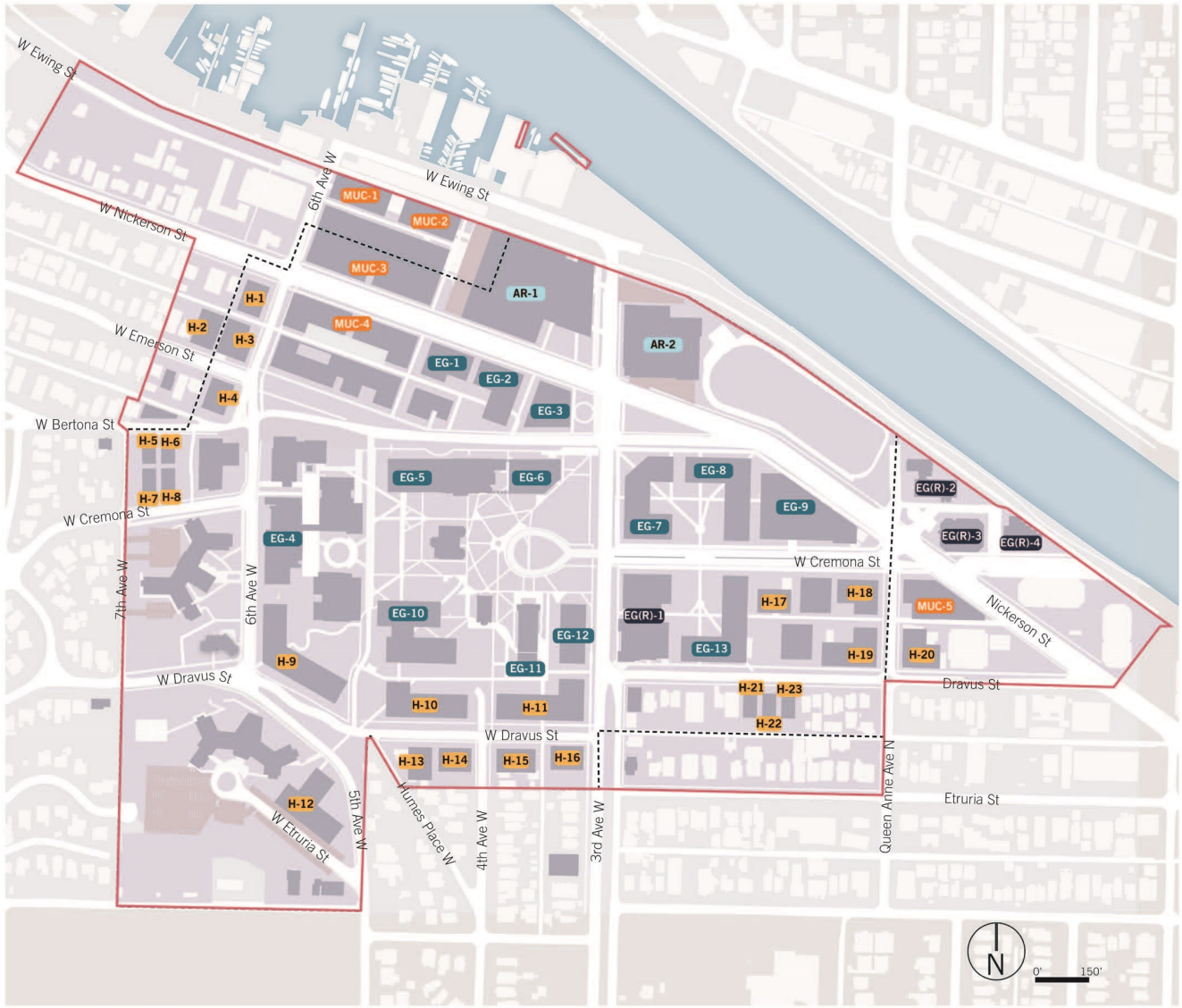
2.4.1.3 Potential Campus Development

Potential development is defined by the Seattle Land Use Code as "development or uses for which the Major Institution's plans are less definite" (SMC 23.69.030 D.).

Seattle Pacific University has identified approximately 49 potential long-term development projects, including 38 located within the existing MIO boundaries, 8 within the proposed MIO boundary expansion areas and one (project MUC-3) that is half in the existing boundary and half in the Northwest Expansion area. Each of these potential development projects is depicted in **Figure 2-7**; reference numbers that are shown correspond to information contained in **Table 2-2,** which provides more information concerning each potential development project. See the ***Draft MIMP*** for additional details.

[9] The ***Draft MIMP*** states: 'SPU views campus green space as a learning lab much like an arboretum, where the classroom extends to the outdoors. Species hardiness and robustness is a priority, as is species diversity. Native species are part of the overall landscape and are sited in areas most appropriate for their needs.'

In this diagram, each building is represented by letters and a number. The letters correspond to the building's anticipated use, and the numbers indicate the general location on the diagram. The number does not relate to anticipated sequence or priority. The planned Moyer Hall renovation will be replaced by a new building in the long term (EG-10).



LEGEND

- Mixed Use & Commercial (MUC)
- Education & General (EG)
- Athletics & Recreation (AR)
- Housing (H)
- Renovation (R)
- Existing MIO Boundary
- Proposed MIO Boundary

Planned and Potential Development

Note: Proposed building footprints are conceptual and may change according to project needs.

Source: Perkins + Will, Draft MIMP, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 2-7

Proposed MIMP—Potential Campus Development

Table 2-2
Potential Long-Term Development Projects

Building #	Project Type	Building Use	New Sq Ft	Levels
EG-1	New Build	Education & General	48,800	4
EG-2	New Build	Education & General	57,200	4
EG-3	New Build	Education & General	38,400	4
EG-4	Addition	Education & General	20,400	5
EG-5	Addition	Education & General	56,000	4
EG-6	New Build	Education & General	65,400	4
EG-7	New Build	Education & General	90,000	4
EG-8	New Build	Education & General	94,000	4
EG-9	New Build	Education & General + Parking	16,800	1
EG-10	New Build	Education & General	88,000	4
EG-11	Addition	Education & General	5,200	4
EG-12	New Build	Education & General	45,200	4
EG-13	New Build	Education & General	72,000	5
H-1	New Build	Housing	16,800	3
H-2	New Build	Housing	19,200	3
H-3	New Build	Housing	23,100	3
H-4	New Build	Housing	17,300	3
H-5	New Build	Housing	5,000	2
H-6	New Build	Housing	5,000	2
H-7	Addition	Housing	5,000	2
H-8	New Build	Housing	5,000	2
H-9	New Build	Housing	144,000	6
H-10	New Build	Housing	91,500	6
H-11(EG)	New Build	Education & General	19,500	1
H-11	New Build	Housing	78,000	4
H-12	New Build	Housing	85,800	6
H-13	New Build	Housing	17,600	3
H-14	New Build	Housing	17,600	3
H-15	New Build	Housing	20,400	3
H-16	New Build	Housing	17,400	3
H-17	New Build	Housing	17,700	5
H-18	New Build	Housing	27,600	5
H-19	New Build	Housing	37,500	5
H-20	New Build	Housing	28,200	4
H-21	New Build	Housing	5,000	3
H-22	New Build	Housing	5,000	3
H-23	New Build	Housing	5,000	3
MUC-1	New Build	Mixed Use & Commercial	27,900	3
MUC-2	New Build	Mixed Use & Commercial	11,300	1
MUC-3	New Build	Mixed Use & Commercial	110,200	4
MUC-4	New Build	Mixed Use & Commercial	53,800	1
MUC-4(H)	New Build	Housing	161,400	3
MUC-5	New Build	Mixed Use & Commercial	33,900	3
AR-1	New Build	Athletic & Recreation	222,600	3
AR-2	New Build	Athletic & Recreation	165,900	3

RENOVATION PROJECTS

Building #	Project Type	Building Use	Gross Floor Area	Levels
EG(R)-1	Renovation	Education & General	70,200	3
EG(R)-2	Renovation	Education & General	27,400	3
EG(R)-3	Renovation	Education & General	42,000	4
EG(R)-4	Renovation	Education & General	27,900	4

Source: SPU Draft MIMP, 2023

Each of the potential campus development projects would depend upon the availability of funding and, in the case of development that is identified within the proposed MIO boundary expansion areas, successful site acquisition. The potential development projects depicted in **Figure 2-7** would add approximately 1,712,900 sq. ft. of net new gross floor area to the existing campus total (accounting for demolition of existing buildings). The result would be a campus-wide total gross floor area of roughly 3.0 million sq. ft. and a campus-wide Floor Area Ratio (FAR) of 1.47.[10] This FAR calculation applies to the entire MIO District and not to individual land parcels, and excludes street rights-of-way and properties within the MIO District boundary not owned by SPU.

As depicted in **Figure 2-7**, an estimated 38 potential development projects (approx. 80% of the total) could be located within the existing MIO boundary. Four potential projects are shown in the proposed Northwest MIO boundary expansion area (including one project that is half in the existing boundary and half in the expansion area) and five potential projects are shown in the East MIO boundary expansion area (this includes three renovations of existing buildings and two new buildings). No development projects are depicted in the Southeast MIO boundary expansion area.

2.4.1.4 Summary of Planned and Potential Campus Development

Overall, buildout of all planned and potential development projects under the ***Draft MIMP*** would result in approximately 2,259,600 sq. ft. of new construction. Minus approximately 613,200 sq. ft. of demolition, this would result in approximately 1,712,900 gross sq. ft. of *net new* development on the SPU campus. Refer to **Table 2-3** for a summary of planned and potential development.

Table 2-3
Summary of Planned & Potential Development (gross sq. ft.) in the Draft MIMP

Aggregated Categories	Existing gfa	Planned gfa	Potential gfa	Demolition gfa	Future Additional Leased Space	Net New gfa	Cumulative Total gfa
Mixed-Use	11,500		237,100	11,500		225,600	
Housing	525,900		856,100	149,500		706,600	
Education & General	547,700	61,000	716,900	308,600	66,500	535,800	
Athletics & Recreation	82,700		388,500	82,700		305,800	
Vacant	60,900			60,900		(60,900)	
Total (gfa)	**1,228,700**	**61,000**	**2,198,600**	**613,200**	**66,500**	**1,712,900**	**2,941,600**

Source: Perkins + Will, 2023

[10] FAR is a ratio of the relationship between the amount of gross floor area or chargeable floor area permitted in one or more structures and the area of the lot on which the structure(s) are located (Seattle Municipal Code 23.84A.012). Building area below-grade is not included in FAR calculations.

Table 2-4, below, summarizes the development categories of net new development that would occur under full buildout of the planned and potential development.

Table 2-4
Planned and Potential Development – Net New (gross floor area)

Housing	Education & General	Athletics & Recreation	Mixed-Use & Commercial	Vacant
706,600	535,800	305,800	225,600	(60,900)
41.2%	31.2%	17.8%	13.1%	(-3.5%)

Source: Draft MIMP, May 2023

Campus Enrollment and Staffing

Existing Enrollment

Based on autumn 2019 information (latest year of non-COVID-19 influenced data), SPU's existing enrollment (full-time and part-time) and the number of faculty and staff included the following:

- **enrollment**: total - 3,657 FTEs,[11] consisting of 2,717 undergraduate students (1,493 undergraduates [on-campus] and 1,124 undergraduates [commuters]), and 940 graduate students (commuters);

- **faculty** and **staff**: total 593.

Projected Enrollment

It is anticipated that the planned and potential development could result in the following enrollment, faculty and staff populations. These data equate to an enrollment increase of 1,883 undergraduate students (72%), an increase of 688 graduate students (85%) over the University's 2019 survey, and an increase in faculty and staff of 267 (45%).

- **enrollment**: total - 6,000 FTEs,[11] consisting of up to 4,500 undergraduate students (3,150 undergraduates [on-campus] and 1,350 undergraduates [commuters]), and 1,500 graduate students (commuters); and
- **faculty** and **staff**: total 860.

2.4.1.5 Potential Parking and Access

Seattle Pacific University currently has 1,520 parking spaces for students, faculty and staff. These spaces are primarily located in surface lots, including several surface lots that are located nearby campus but outside the current MIO boundaries. Structured parking is located beneath two residence halls and two apartment buildings.

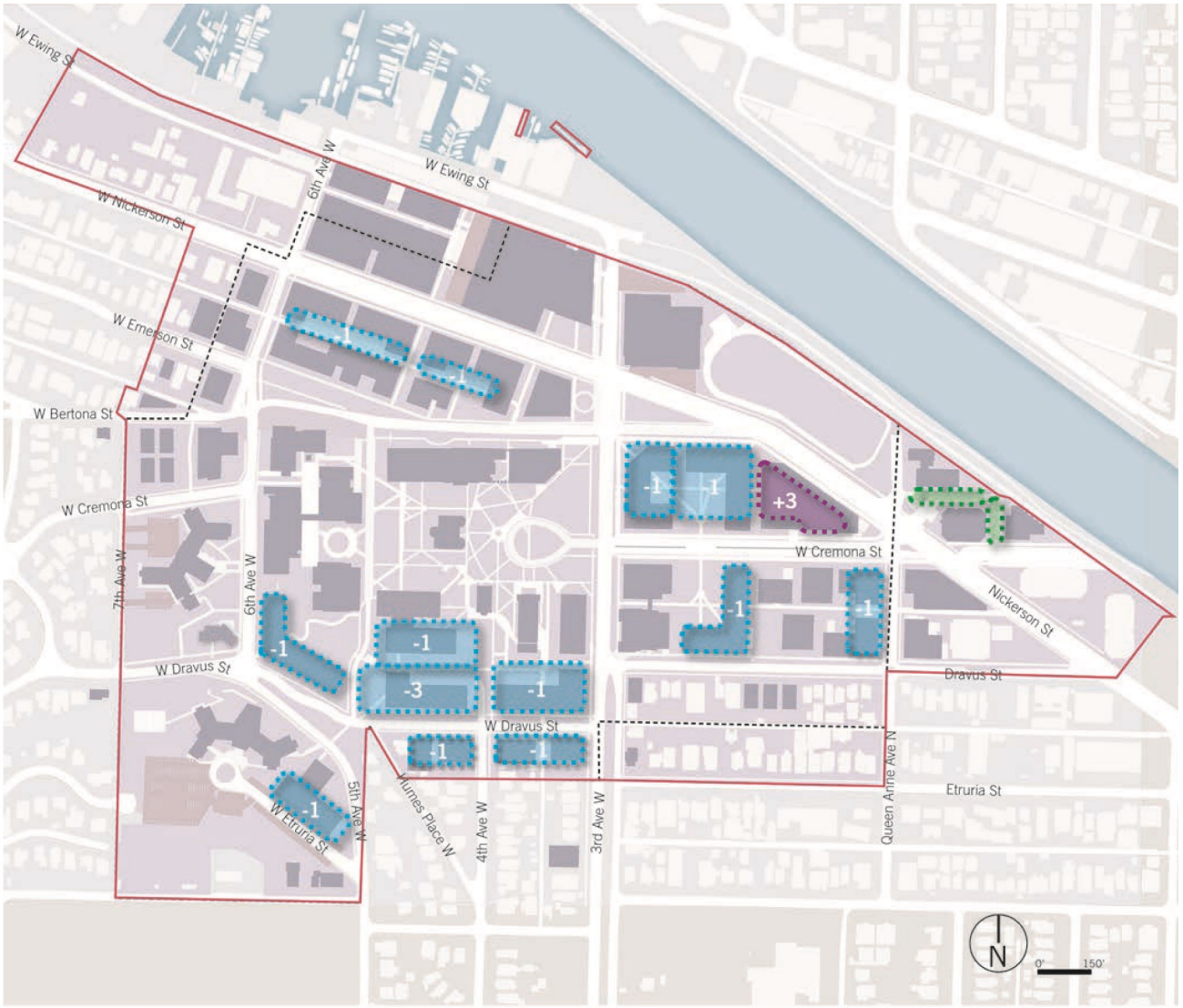
SPU proposes to increase the amount of parking available to students, faculty and staff. **Figure 2-8** depicts potential campus locations (a combined total of 2,560 potential parking spaces) including one parking structure, 13 below-grade parking areas, and two surface parking lots.

[11] The number of full-time equivalent (FTE) Undergraduate students is derived based on the sum of student-generated credits divided by 15; Graduate FTE is based on the sum divided by 9.

The plan consolidates parking and shifts it toward campus edges. This reduces the need for campus-bound vehicles to move through campus. Most new parking is structured and located underground, below new buildings. Above-ground surface or structured parking will be screened, either by active building uses or landscaping. All parking areas together provide approximately 2,560 parking spaces.

Maximum number of Parking spaces allowed *(E.3.)*

The SMC identifies a minimum number of stalls required and maximum number allowed. The **minimum number required is 1,679 and the maximum number allowed is 2,267.** While the plan shows more than the maximum to provide flexibility in location, the University evaluates parking on a campus-wide basis and would not build more than allowed.



Parking Plan

LEGEND

- Underground Parking
- Structured Parking
- Surface Parking
- Existing MIO Boundary
- Proposed MIO Boundary

Source: Perkins + Will, Draft MIMP, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 2-8

Proposed MIMP—Potential Parking Locations

The Seattle Municipal code identifies parking minimums and maximums of 1,670 and 2,267 spaces, respectively. SPU evaluates parking on a campus-wide basis and would not build more parking than allowed by the code.

2.4.1.6 Potential Street Enhancements and Street / Alley Vacations

Seattle Pacific University proposes a number of potential street enhancements to improve the pedestrian experience, improve safety for drivers and pedestrians, and to promote ease of access for both, including the following.

1 – Signalizing the intersection at 6th Ave. W. and W. Nickerson St.;
2 – Crosswalk improvements at 3rd Ave. W.;
3 – Intersection improvements at W Cremona St.;
4 – Crosswalk enhancement at W. Dravus Street and 3rd Ave. W.'
5 – Traffic calming along W Bertona St.;
6 – Improvements to the Demaray parking lot;
7 – Widening of W Dravus St. between Humes Place W. and 6th Ave. W.; and,
8 – Streetscape enhancements to W. Cremona St. between 3rd Ave. W. and W. Nickerson St.

In addition to the street enhancements noted above, SPU proposes eight street or alley vacations; each is depicted in **Figure 2-9** and described generally below.

1. **6th Ave. W.** -- This would involve vacating a portion of 6th Ave. W. between W. Cremona St. and W. Dravus Street. This vacation would be intended to improve pedestrian safety to-and-from student housing facilities.

2. **W. Emerson St.** -- This would involve vacating a portion of W. Emerson St. between W. Bertona St. and 6th Ave. W. Subsequent enhancements to the vacated street would include additional landscaped open space.

3. **Irondale Ave. W.** -- This would involve vacating this north-south street between W. Bertona St. and W. Cremona Street.

4. **Alley** -- This would involve vacating the east-west alley between W. Nickerson St. and W. Ewing St. (southernmost W. Ewing St.)[12] from 6th Ave. W. to 3rd Ave. W.

5. **W. Ewing St.** -- (southernmost W. Ewing St.) -- This would involve vacating this approximately 20-foot wide right-of-way between 6th Ave. W. and 3rd Ave. W.

6. **T-Shaped Alley** -- This would involve vacating the T-Shaped alley that is present on the block bound by W Cremona St. on the north, Queen Anne Ave. N. on the east, W Dravus St. on the south and 3rd Ave. W on the west.

7. **Queen Anne Avenue N** -- This would involve vacating a portion of the north-south street between W Nickerson St. and the South Ship Canal Trail.

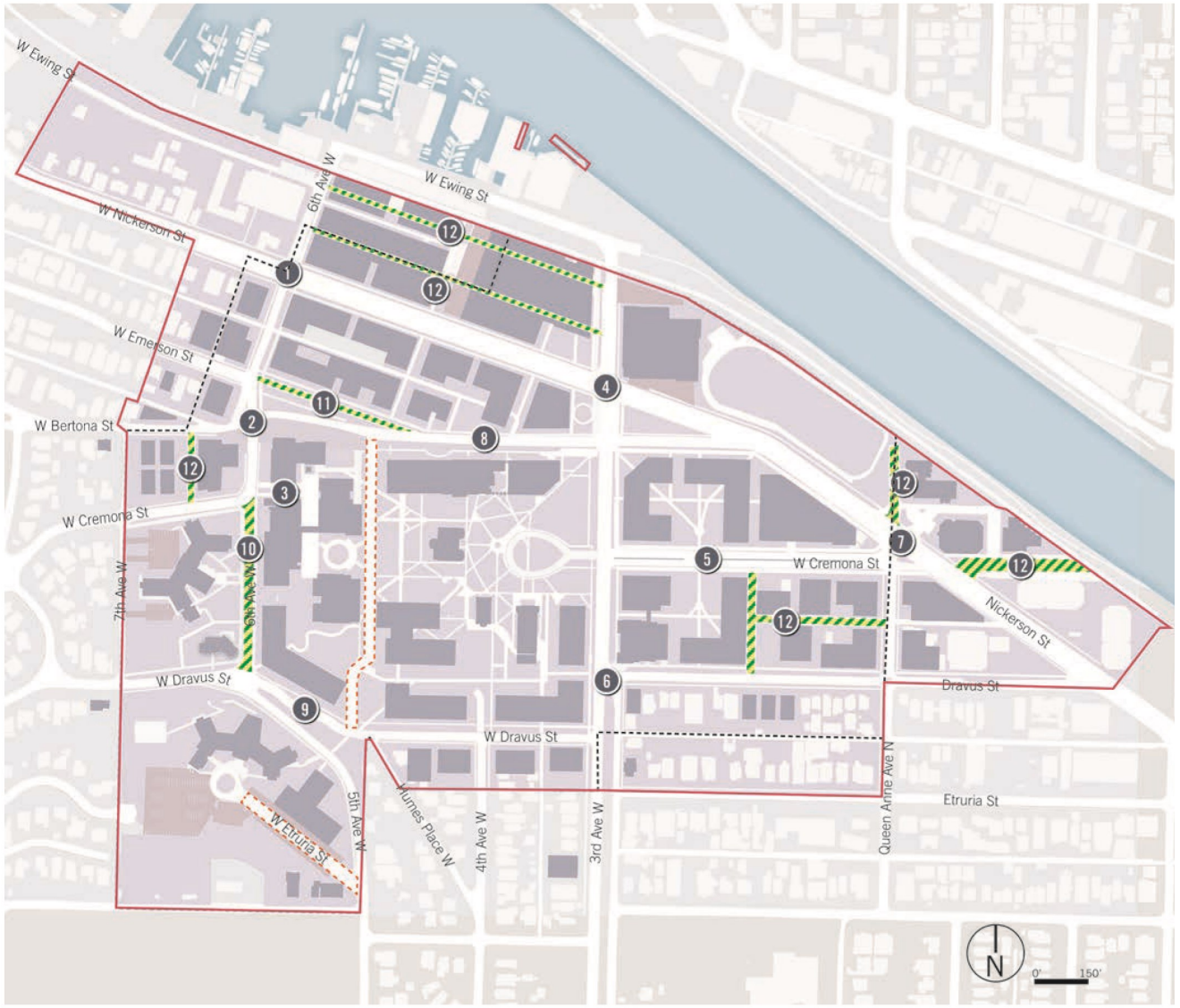
8. **W Cremona Street** -- This would involve vacating a portion of the east-west street between W Nickerson Street and the South Ship Canal Trail.

[12] There are two parallel W. Ewing Streets separated by approximately 100 ft.

LEGEND

1. Signaled intersection at 6th Avenue West & West Nickerson Street
2. Intersection realignment of 6th Avenue West between West Bertona Street & West Emerson Street & West Bertona Street traffic calming
3. Pedestrian enhancement at Demaray parking lot
4. Crosswalk enhancement at West Nickerson Street & 3rd Avenue West
5. Street streetscape enhancement at West Cremona Street
6. Crosswalk enhancement at West Dravus Street & 3rd Avenue West
7. Intersection enhancement at West Cremona Street & West Nickerson Street
8. Traffic calming along West Bertona Street
9. Widening of West Dravus Street
10. Vacation & enhancement at 6th Avenue West
11. Vacation & open space extension at West Emerson Street
12. Street/alley vacation at parking lot

Proposed Street & Alleyway Vacations
Campus Buildings
Vacated Street
Existing MIO Boundary
Proposed MIO Boundary



Potential Street and Alley Vacations and Streetscape Enhancements

Source: Perkins + Will, Draft MIMP, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 2-9

Proposed MIMP—Potential Street and Alley Vacations

2.4.2 Modification of Certain Development Standards

2.4.2.1 Land Use Designations

Figure 2-10 depicts existing zoning designations for property within SPU's current MIO boundary, as well as property proximate to SPU's boundary.

- **MIO Boundary Expansion Areas**

  As described earlier and depicted in **Figure 2-5**, MIO boundary expansion is proposed in three areas - in the northwest, east and southeast areas of campus. Expanding the MIO boundaries to include these areas would require the following zone reclassifications; each is shown in **Figure 2-11**.

  - Northwest – This MIO boundary change would apply to the area that is bisected by Nickerson Street, as described below.

    South of W. Nickerson St., the west MIO boundary of the campus would be extended west, between W. Bertona St. and W. Nickerson St. Properties in this area would be rezoned from LR1(M), LR2(M) and LR3(M) to **MIO-37-LR1(M)**, **MIO-37-LR2(M)**, and **MIO-50-LR3 RC(M)**. North of W. Nickerson St., the west boundary and the north MIO boundary would both be modified. The west boundary would be extended west to 8th Ave. W. and the north boundary would be extended north to the South Ship Canal Trail. Properties in this area would be rezoned from C2-55(M), LR3 RC(M), and IB U/45 to **MIO-65-C2-55(M)**, **MIO-50- LR3 RC(M)**, and **MIO-65-IB U/45** and **MIO-65-IG1 U/45**.

  - East – This change would extend the east MIO boundary to the east. Properties in this area would be rezoned from C1-55(M), and C2-55(M) to **MIO-50-C1-55(M)** and **MIO 50-C2-55(M)**.

  - Southeast – This MIO boundary change would extend the southeast boundary of the campus south. Properties in this area would be rezoned from LR3(M) to **MIO-50-LR3(M)**.

2.4.2.2 Height Changes

As indicated previously, currently the Seattle Pacific University campus has three Major Institution Overlay zoning designations with a range of underlying zoning designations[13] (see **Figure 2-10**). Generally, the central portion of the campus is zoned MIO-50 – with a height limit of 50 ft.; most of the southwest portion of campus is zoned MIO-65 – height limit is 65 ft., and all remaining portions of the campus are zoned MIO-37—height limit is 37 ft.

[13] Underlying zoning designations refers to the suffix in the zoning designation (e.g., MIO-50-LR3). In this example, the LR3 is the underlying zoning designation.

Existing MIO designations and underlying zones are shown here. The Shoreline Overlay applies to nearly all of the MIO District's north edge and supersedes this MIMP and City regulations.

LEGEND

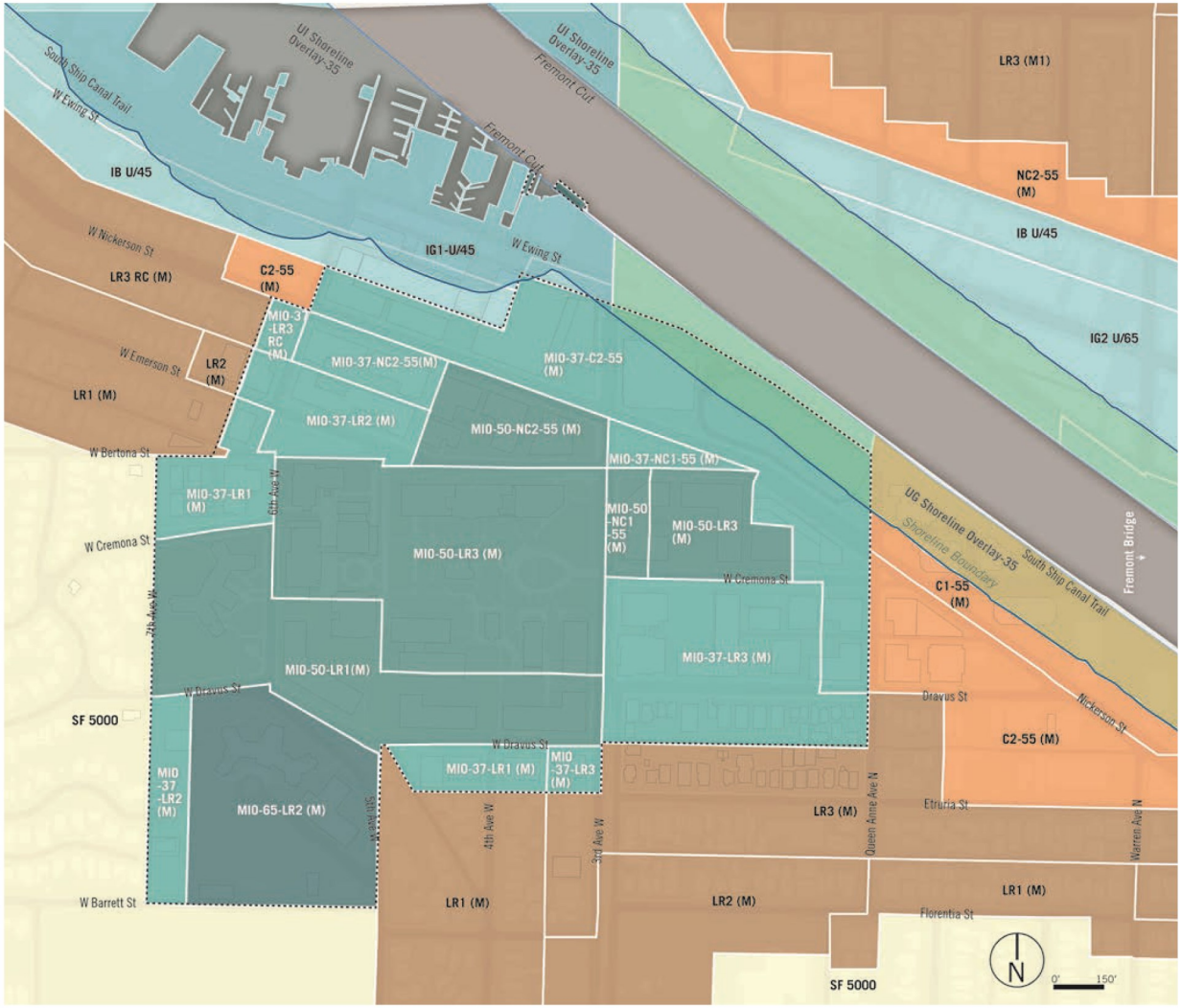
- Commercial / Mixed-Use
- Multi-Family
- Industrial
- Single Family
- Major Institution
- Shoreline Overlay
- Existing MIO Boundary

Major Institution Overlay

- MIO-37 (Major Institution Overlay 37)
- MIO-50 (Major Institution Overlay-50)
- MIO-65 (Major Institution Overlay-65)

Underlying/Adjacent Zoning Designations

C1-55 (Commercial1-55)
C2-55 (Commercial2-55)
IB U/45 (Industrial Buffer-45)
IG1-U/45 (Industrial General 1-U/45)
LR1 (Lowrise1)
LR2 (Lowrise2)
LR3 (Lowrise3)
LR3 RC (Lowrise3/Residential Commercial)
M (Mandatory Housing Affordability Program)
NC1-55 (Neighborhood Commercial1-55)
NC2-55 (Neighborhood Commercial2-55)
SF 5000 (Single Family 5000)



Existing Zoning and MIO Overlay

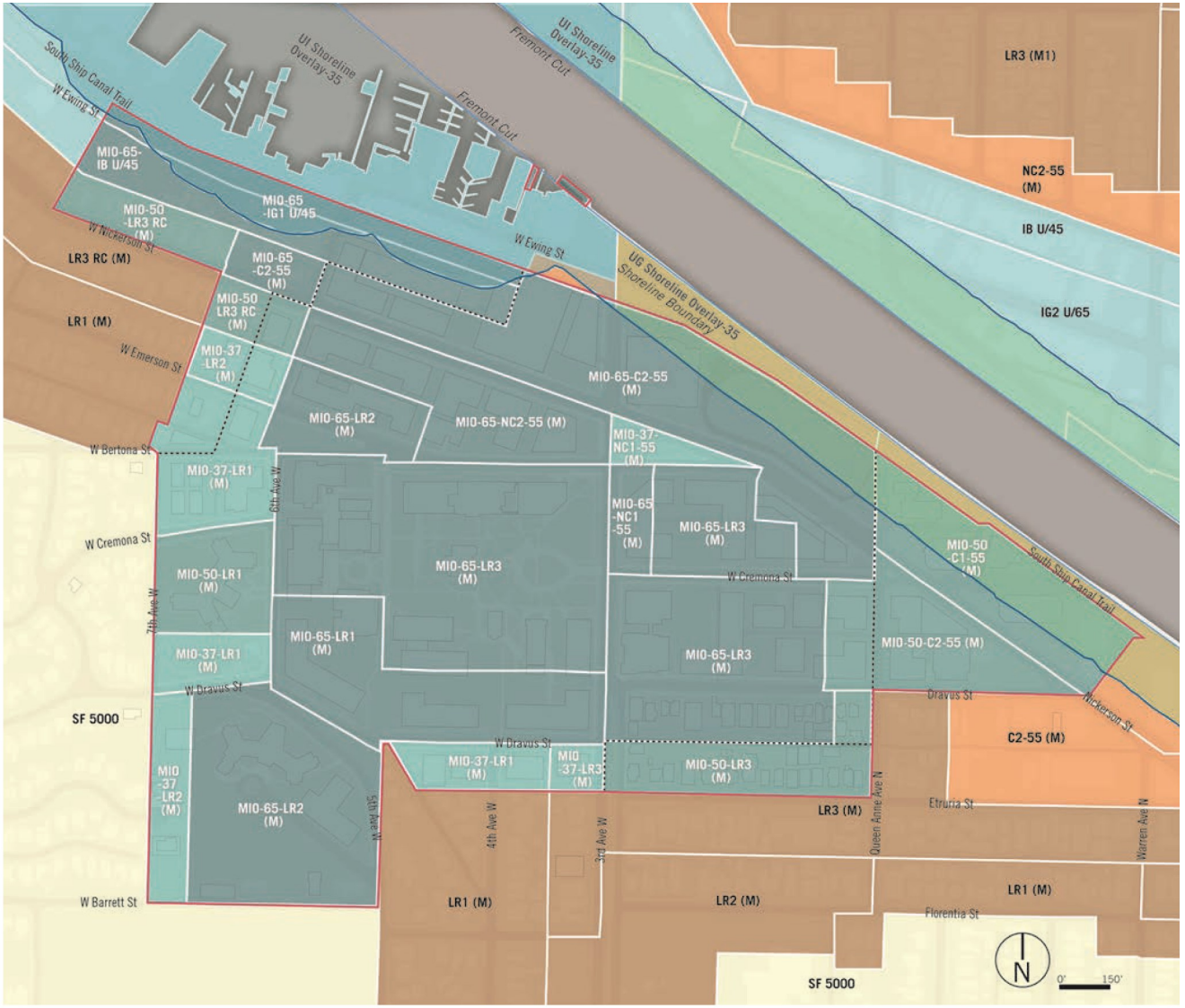
Source: Perkins + Will, Draft MIMP, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 2-10

Existing Zoning and MIO Overlay

SPU is proposing three expansion areas contiguous to campus but away from the single-family residential neighborhood. SPU is also proposing height increases from the existing MIO designations in the campus core, as well as some height decreases adjacent to single-family areas.



Existing Zoning and Proposed MIO Overlay

LEGEND

- Commercial / Mixed-Use
- Multi-Family
- Industrial
- Single Family
- Major Institution
- Shoreline Overlay
- Existing MIO Boundary
- Proposed MIO Boundary

Major Institution Overlay

- MIO-37 (Major Institution Overlay 37)
- MIO - 50 (Major Institution Overlay 50)
- MIO-65 (Major Institution Overlay-65)

Source: Perkins + Will, Draft MIMP, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 2-11

Proposed MIMP—Existing Zoning & Proposed MIO Overlay

Figure 2-11 depicts proposed zoning modifications. Several key changes that are proposed include:

- The height limit of properties in the central portion of the campus with a current height limit of 50 ft. would increase to 65 ft. with the change from MIO-50 to MIO-65;

- The height limit of properties in the southeast portion of campus (west of Queen Anne Ave. N. and south of W Cremona St.) with a current height limit of 37 ft. would increase to 65 feet with the change from MIO-37 to MIO-65;

- The height limit of an area in the northwest portion of campus south of W. Nickerson St. and east of 6th Ave. W. that currently has a 37-foot height limit (zoned MIO-37) would increase to 65 ft. (proposed zone- MIO-65);

- The height limit of properties north of W. Nickerson St. would generally increase from 37 ft. to 65 ft. with the change from MIO 37 to MIO 65, except for an area bordering the R3 RC(M) zoned neighborhood, which would change from MIO 37 to MIO 50;

- The height limit of an area in the east portion of campus east of Queen Anne Ave. N. that currently has a 55-foot height limit (zoned C1-55) would decrease to 37 ft. (proposed zone- MIO-37) south of W Nickerson St. and would increase to 50 ft (MIO-50) north of W Nickerson Street.

Other development regulation modifications that are proposed as part of Seattle Pacific University's ***Draft MIMP*** include:

- Campus-wide floor area ratio;
- building setback modifications;
- lot coverage modifications

See the ***Draft MIMP*** for details.

2.4.3 New Transportation Management Program

In addition to proposed modifications associated with Seattle Pacific University's Development Program and Development Regulations, changes are proposed with regard to SPU's existing Transportation Management Plan (TMP). Details concerning SPU's existing and proposed TMP are described in detail in the ***Draft MIMP*** and in ***Section 3.9 – Traffic and Transportation*** of this Draft EIS. In summary, the proposed changes would include:

- A campus wide single-occupancy vehicle (SOV) goal of 35 percent for the daytime campus population.

- The standard implementation requirements, including:
  - transportation coordinator;
  - periodic promotional events;
  - commuter information centers; and,
  - ridematching service coordination.

- A number of supplemental measures implemented in conjunction with SDCI and SDOT to provide incentives for achieving the TMP goals.

2.5 ALTERNATIVES

SEPA requires analysis of "reasonable alternatives" as part of an EIS and defines reasonable as "actions that could feasibly attain or approximate a proposal's objectives, but at a lower environmental cost or decreased level of environmental degradation."[14] Alternatives analysis must include examination of the "no action" alternative – this would essentially leave the current MIMP in place, which currently has some additional development to be completed. Seattle Pacific University has identified project objectives, which are included in the ***Draft MIMP*** and in this Draft EIS (***Section 2.3***).

Seattle Pacific University has identified the ***Draft MIMP*** as the **Proposed Action** for compliance with SEPA. In order to conduct a comprehensive environmental review, five alternatives to the ***Draft MIMP*** have also been identified and they include:

- **Alternative 1** -- ***No Action Alternative***;
- **Alternative 2** – ***No Boundary Expansion and No Change to Height Limits***;
- **Alternative 3** – ***Boundary Expansion and No Change to Height Limits in Existing MIO***;
- **Alternative 4** – ***No Boundary Expansion and Increased Height Limits***; and
- **Alternative 5** – ***Boundary Expansion, Increased Height Limits and No Street Vacations.***

As with the ***Draft MIMP***, information is provided below concerning key features associated with each alternative. The ***Draft MIMP*** and each alternative are analyzed in ***Section III*** of this Draft EIS in light of the following eight environmental parameters: Air, Plants and Animals, Cultural Resources, Land Use, Height, Bulk and Scale, Public View Protection, Shadows on Open Space, and Transportation impacts. The analysis in ***Section III*** identifies existing conditions, probable adverse environmental impacts associated with each alternative, measures to mitigate identified impacts, and discussion of unavoidable adverse impacts. ***Alternatives 1-5*** would not meet all of the Universities objectives.

2.5.1 Alternative 1 -- *No Action Alternative*

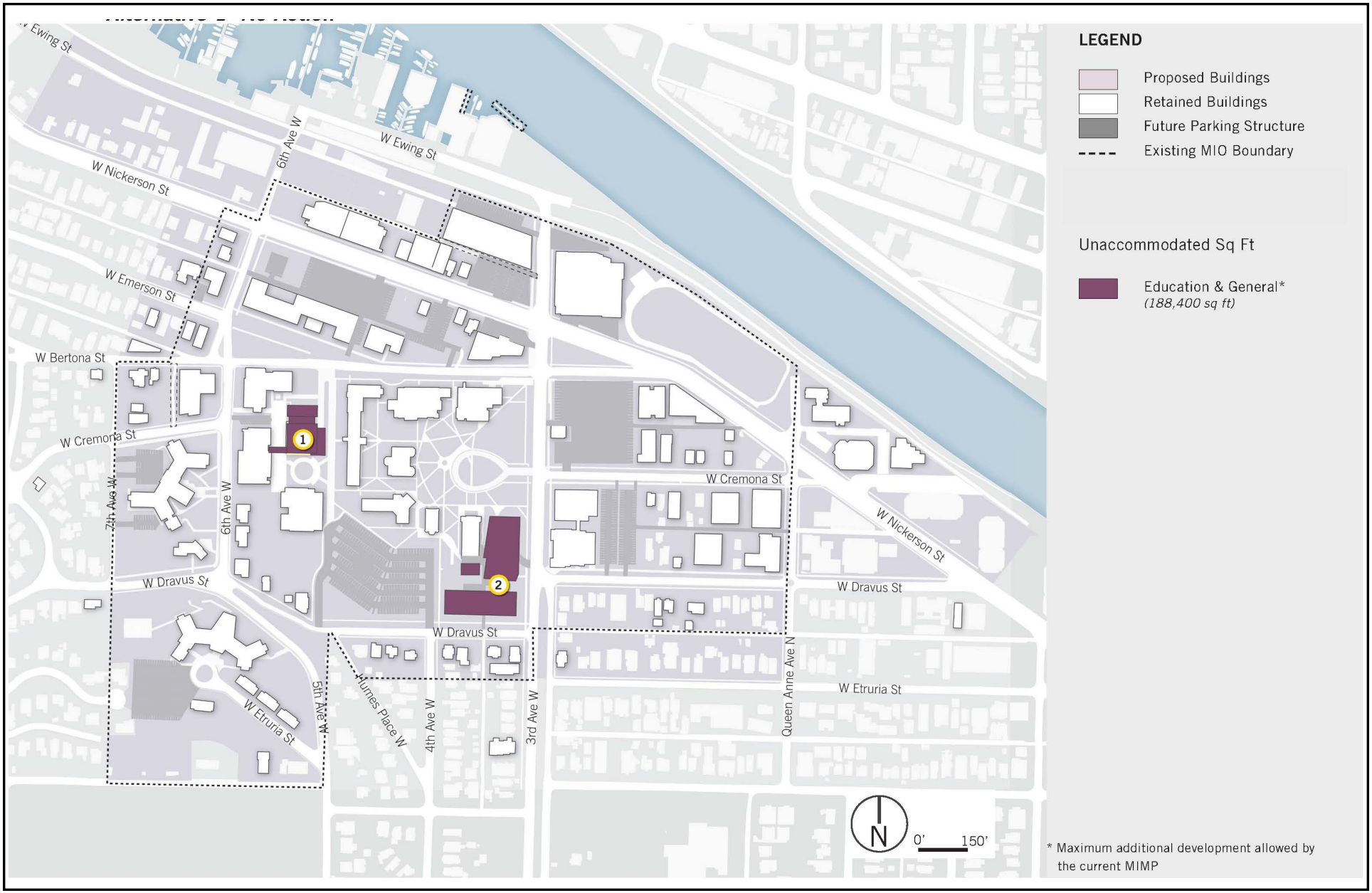
See **Figure 2-12** for a site plan of the campus under the ***No Action Alternative***.

2.5.1.1 Proposed Campus Development

Campus Enrollment and Staffing

Under the ***No Action Alternative***, it is assumed that the demand for higher education in the region would continue and that student enrollment and faculty staffing would represent a condition in which enrollment is approximately equivalent to the highest enrollment observed in recent years, with approximately 4,300 students (3,300 undergraduate students and 1,000 graduate students) and 593 faculty and staff.

[14] WAC 197-11-440(5)



Source: Perkins + Will, SPU, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 2-12

Alternative 1—No Action Alternative

Modification of the Campus Major Institution Overlay (MIO) Boundaries

No boundary expansions would occur.

Planned Development

Under the ***No Action Alternative***, only development / renovation that is consistent with the SPU's current MIMP could be built. The quantity of new development would be limited to the maximum developable gross floor area and overall maximum Floor Area Ratio allowed under the current MIMP (1,222,900 sq. ft. of gross floor area and 0.71 FAR).

Overall, it is anticipated that two Education & General projects could be built without exceeding the maximum developable gross floor area and FAR, adding approximately 188,400 sq. ft. of total development to the existing campus. These two projects would include a building located to the north of Martin Square (up to four-levels in height), and an assemblage of three structures located on and adjacent to the existing surface parking lot located south of Tiffany Loop (four-level buildings).

Potential Development

No potential development would occur under the ***No Action Alternative***.

Potential Parking and Access

Approximately 72 surface parking spaces would be lost due to development of one of the Education & General projects, reducing the existing campus parking supply to 1,307 spaces.

Potential Street Enhancements and Street/Alley Vacations

No street enhancements or street/alley vacations would occur.

2.5.1.3 Modification of Certain Development Standards

No MIO zoning changes, height limits or other modifications to existing development standards would occur.

2.5.1.4 Transportation Management Plan

No change to SPU's existing TMP would occur.

Alternative 1 – *No Action Alternative* *would not be consistent with Seattle Pacific University's project goals relative to the proposed boundary expansion and height increases (see* ***Section 2.3*** *of this Draft EIS). The University indicates that the proposed boundary expansions and height increases are essential for the long-term program and operational effectiveness of Seattle Pacific University. Additional constraints resulting from implementation of the* ***No Action Alternative*** *would include:*

- *Losing the ability to right-size the campus to address existing deficiencies required to meet current needs.*

- *Losing additional capacity to accommodate future growth.*
- *Limiting the University's ability to direct institutional growth north and east.*
- *Reducing the amount of campus square footage per student.*
- *Limiting opportunities for students to live on-campus.*

Benefits and Disadvantages of Delaying Implementation

Another *No-Action*-related consideration involves the possibility of delaying implementation of the ***Draft MIMP*** -- to some future time. If this course of action is taken, the following outlines possible benefits and disadvantages of such delay.

Benefits of Deferral

- The advantage of deferral is that environmental impacts noted in ***Section III*** of this Draft EIS with regard to the development alternatives would not occur at this time, but would be delayed until project implementation.
- Future re-development options for the various portions of the campus would not be foreclosed.

Disadvantages of Deferral

- Deferral would not necessarily eliminate or lessen the severity of environmental impacts that have been identified -- merely postpone them. In some situations, this could result in greater cumulative impacts (e.g., traffic, noise, aesthetics, etc.) as a result of redevelopment,[15] due to changes in background conditions, changes that occur with regard to other nearby major institutions, and changes that occur with regard to nearby Urban Centers.
- It is anticipated that SPU would continue to grow and develop within its existing MIO boundaries. By deferring the adoption of the major institution master plan, the State, City and the surrounding community would lose the opportunities expressed in the purpose and intent of establishing boundaries and master plans.
- Deferral would be inconsistent with SPU's mission, vision and project goals.
- Impacts with regard to SPU operations could occur, including more-intensive utilization of existing facilities. Greater demands on existing capital facilities could result in increased maintenance and operational costs to the institution with the potential for shortening the lifetime of the facilities.
- Deferral may limit SPU's ability to effectively respond to opportunities for program expansion/modification in response to changes in community needs.

[15] Such development would be consistent with the *Adopted* Compiled *MIMP*.

- In all probability, deferral would add to the capital cost associated with specific development projects. Depending upon the amount of delay, deferral could result in a less operationally efficient campus or even abandonment of some development projects.

- Deferral would not meet the University's objectives.

2.5.2 Alternative 2 -- *No Boundary Expansion and No Change to Height Limits*

2.5.2.1 Proposed Campus Development

Refer to **Figure 2-13** for a site plan of the campus under ***Alternative 2.***

Campus Enrollment and Staffing

It is anticipated that enrollment, faculty and staff projections associated with ***Alternative 2*** would be the same as the ***Draft MIMP***, including: 6,000 students (up to 4,500 undergraduate students and 1,500 graduate students); with a faculty and staff of approximately 860.

Modification of the Campus Major Institution Overlay (MIO) Boundaries

No boundary expansions would occur.

Planned Development

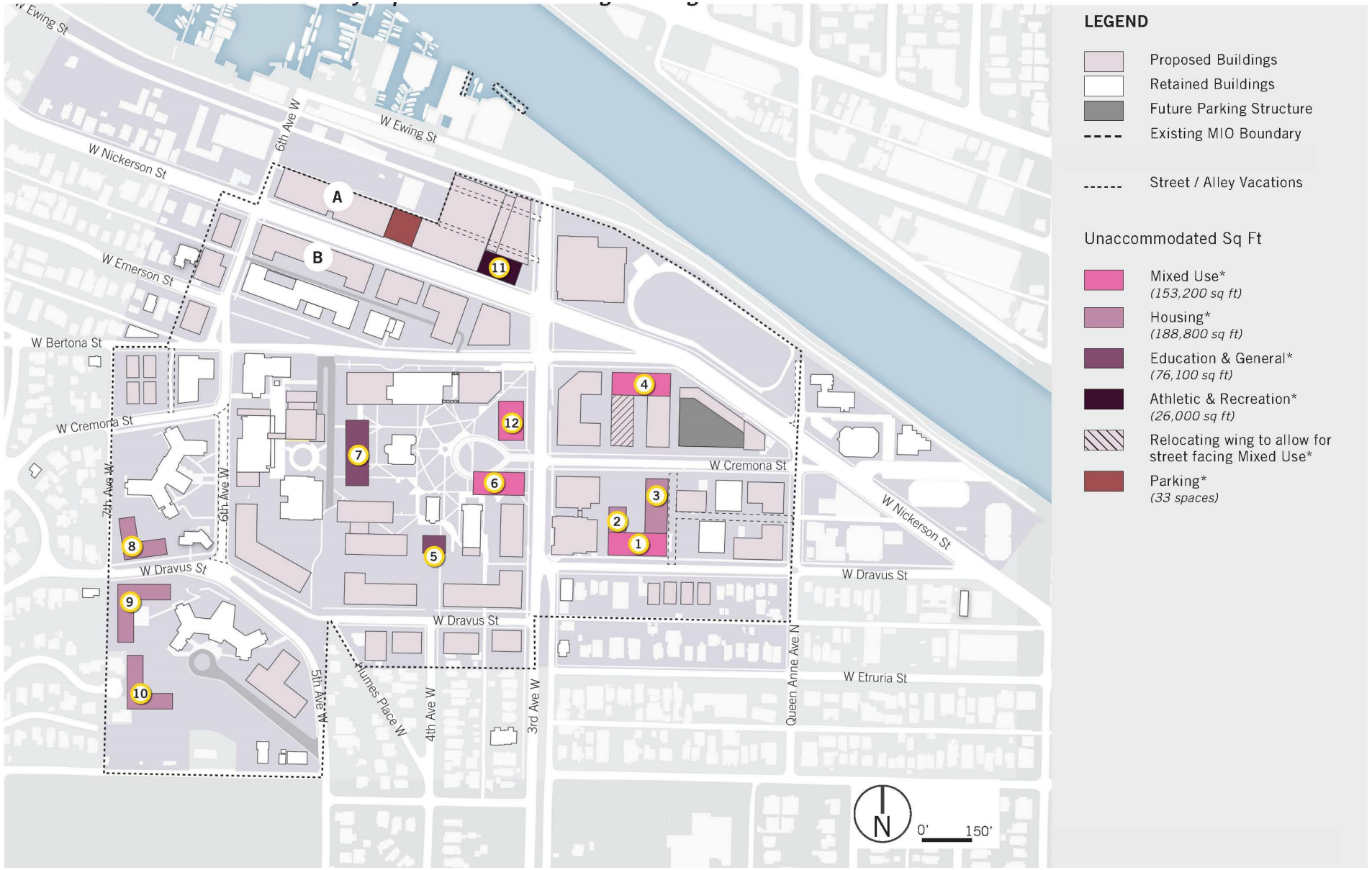
Two of the three *Planned* development projects described for the ***Draft MIMP*** could still occur under ***Alternative 2*** (Student Center and Moyer Hall Repurpose). However, it would not be possible to accommodate the Marston Site Future Open Space project (project #2 on **Figure 2-6**) as this location would be needed to accommodate a new Education and General Studies building (project #7 on **Figure 2-13**).

Potential Development

It is anticipated that a similar amount of potential development would occur under ***Alternative 2*** as compared to the ***Draft MIMP*** (refer to **Table 2-3**), except that 76,100 sq. ft. of Education & General use space, 26,000 sq. ft. of Athletic & Recreation space, 188,800 sq. ft. of housing and 153,200 sq. ft. of mixed use space would not be able to be accommodated within the building footprints shown in **Figure 2-6** that are proposed in the ***Draft MIMP*** (see **Figure 2-13** and **Table 2-5**).

Development Summary

Overall, 2,259,600 sq. ft. of planned and potential development could be built, with net new planned and potential development categories as summarized below in **Table 2-5**. This is the same amount of development as would be accommodated under the ***Draft MIMP***.



Source: Perkins + Will, SPU, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 2-13

Alternative 2—No Boundary Expansion and No Change to Height Limits

Without the proposed boundary expansions or increases to height limits, a greater number of buildings would need to be built within the existing MIO boundary to accommodate anticipated increases in enrollment and staffing, and to provide the same program of uses as that proposed under the ***Draft MIMP*** (see **Figure 2-13**). In total, under ***Alternative 2***, up to 12 additional buildings or building wings would need to be provided within the existing campus boundary (**Table 2-6**). Additionally, these buildings would be located in areas of the campus that are neither possible nor favorable to develop. For example, most of these buildings/wings would be situated on areas that are indicated/designated as open space under the ***Draft MIMP***. Altering the size or location of a designated open space would require a minor amendment to the MIMP per SMC 23.69.035.D. Overall, a more-dense campus than that associated with the ***Draft MIMP*** would occur with less functional open space.

Table 2-5
Alternative 2 - Planned and Potential Development – Net New (gfa)

		Alternative 2					
Aggregated Categories	**Existing gfa**	**Excess gfa[1]**	**DMIMP footprints gfa[2]**	**Demolition gfa**	**Future Additional Leased Space**	**Net New gfa**	**Cumulative Total gfa**
Mixed-Use	11,500	153,200	83,900	11,500		225,600	
Housing	525,900	188,800	667,300	149,500		706,600	
Education & General	547,700	76,100	640,800	308,600	66,500	535,800	
Athletics & Recreation	82,700	26,000	362,500	82,700		305,800	
Vacant	60,900			60,900		(60,900)	
Total (gfa)	**1,228,700**	**444,100**	**1,754,500**	**613,200**	**66,500**	**1,712,900**	**2,941,600**

Source: Perkins + Will, 2023

[1] *This square footage is associated with the excess buildings that would need to be built that are listed in Table 2-6*

[2] *This square footage is associated with the space that could be accommodated within the building footprints shown for the Draft MIMP.*

Table 2-6 - Alternative 2
Additional Buildings – New (gfa)

Building #	Number of Floors	Total Gross Square Footage
1	3	40,200
2	3	10,800
3	3	35,500
4-H	1	13,400
4-MUC	3	40,200
5	4	16,100
6	4	36,800
7	4	60,000
8	4	43,200
9	3	45,400
10	3	40,400
11	3	26,000
12	4	36,000
		444,100

Source: Perkins + Will, 2023

Potential Parking and Access

SPU's parking supply and access to parking would be similar to the ***Draft MIMP***, except that some parking would be displaced from the structured parking garage north of W Cremona to a surface location north of W Nickerson Street. Overall, 33 fewer parking spaces would be accommodated, reducing the total parking supply to 2,527 as compared to 2,560 under the ***Draft MIMP***.

Potential Street Enhancements and Street/Alley Vacations

Fewer street enhancements or street/alley vacations could occur within the existing MIO boundary.

2.5.2.2 Modification of Certain Development Standards

No MIO zoning changes, height limits or other modifications to existing development standards would occur.

2.5.2.3 Transportation Management Program

The Transportation Management Program and associated goals for ***Alternative 2*** would be consistent with those outlined for the ***Draft MIMP***.

Alternative 2 – *No Boundary Expansion and No Change to Height Limits* *– this alternative would not be consistent with Seattle Pacific University's project goals (see* ***Section 2.3*** *of this Draft EIS) relative to the proposed boundary expansion and height increases. The University indicates that the proposed boundary expansions and height increases are essential for the long-term program and operational effectiveness of Seattle Pacific University.*

Alternative 2 *would also result in a number of constraints including:*

- *Locating mixed-use buildings internal to campus with limited exposure in the center of campus, reducing the functionality of commercial uses; the mixed-use site north of W. Cremona St. would only have 40' between bars for courtyard creating an open space that is marginally usable, compromising privacy between wings, and limiting access to daylight within the open space and to the building.*

- *Locating three additional housing buildings (at 3- to 4-levels) along the west edge of the campus, near single-family homes, which is undesirable to the community, could result in the potential for increased shading impacts in this area, and would displace parking in the Ashton Parking Lot.*

- *Reducing the amount of open space throughout the campus, including situating development within Tiffany Loop, a designated open space.*

- *The Education & General site just of 5th Ave. W limits the ability to expand campus open space and disrupts the view corridor along W Cremona St. from Gwinn Commons.*

- *Some parking would be displaced from the W Cremona St. parking structure to a surface lot on the north portion of the campus, with 33 fewer parking spaces accommodated.*

- *Extensive loss of tree canopy, especially in open space areas.*

- *Loss of entry plaza at Athletics & recreation site north of W Nickerson St. could be problematic for large crowds meeting events.*

- *Loss of opportunity to develop a soccer field at 6th Ave. and Nickerson St., should the Interbay lease be terminated.*

- *Loss of opportunity for a stronger buffer with adjacent neighbors by not expanding the MIMP boundary south to W Etruria Street.*

- *Preventing the opportunity for the University to develop a front door to the campus and have street-activating uses east of Queen Anne Avenue N and north of W Nickerson Street.*

- *Mixed Use + Housing site #39 (south of Nickerson at 6th) (**Figure 2-7**) would be reduced by 1-story due to the height limits not being increased. This results in student housing on the ground level along Nickerson, which is not ideal for student residents/street activation.*

- *No margin of error for meeting university needs with adequate development capacity should buildings on the interior of campus be rendered undevelopable for any reason.*

2.5.3 Alternative 3 -- *Boundary Expansion and No Change to Height Limits in Existing MIO*

Refer to **Figure 2-14** for a site plan of the campus under ***Alternative 3.***

2.5.3.1 Proposed Campus Development

Campus Enrollment and Staffing

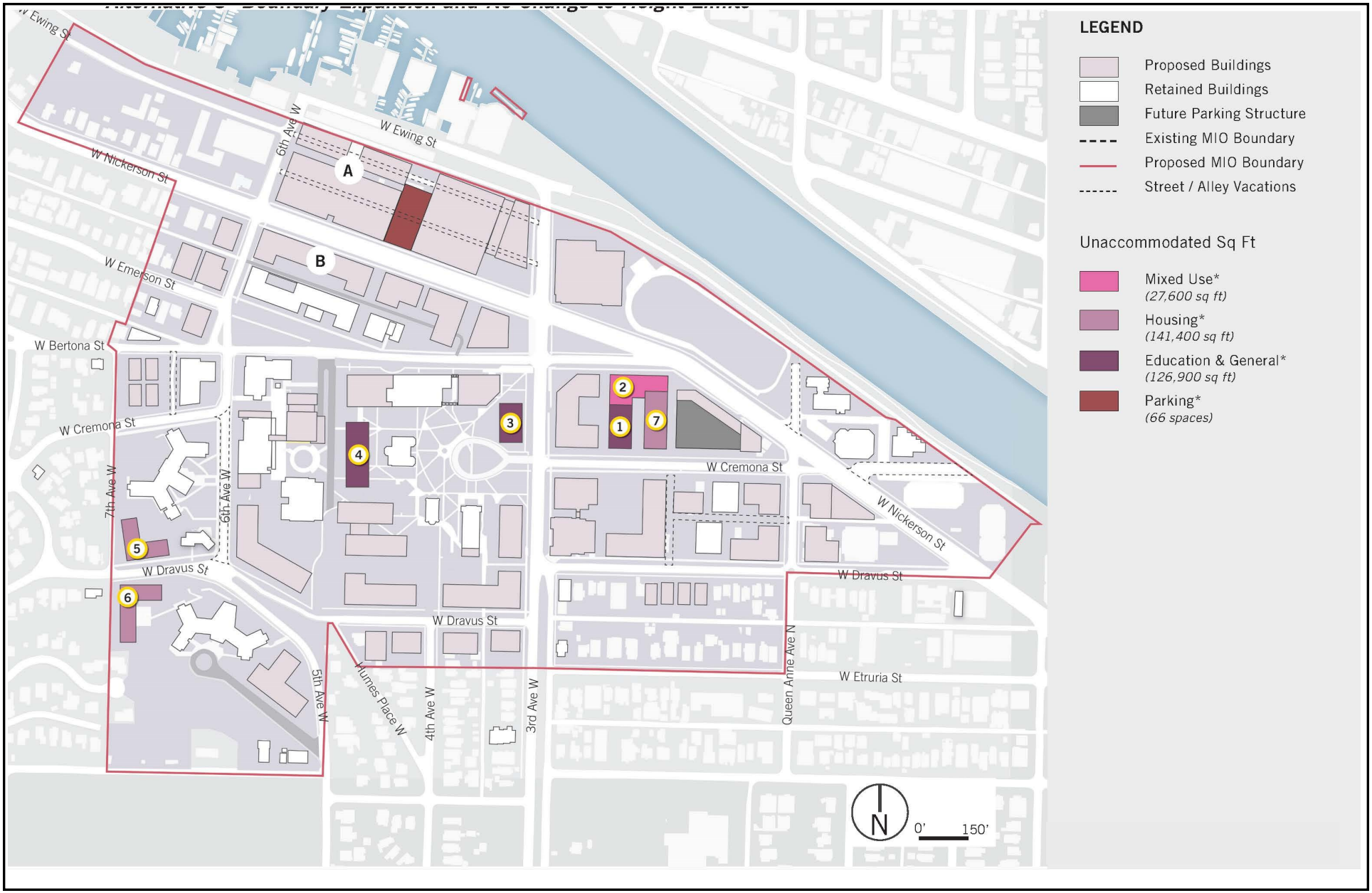
It is anticipated that enrollment, faculty and staff projections associated with ***Alternative 3*** would be the same as the ***Draft MIMP***, including: 6,000 students (up to 4,500 undergraduate students and 1,500 graduate students); with a faculty and staff of approximately 860.

Modification of the Campus Major Institution Overlay (MIO) Boundaries

Proposed boundary expansions would occur as outlined under the ***Draft MIMP***.

Planned Development

Two of the three Planned development projects described for the ***Draft MIMP*** could still occur under ***Alternative 3*** (Student Center and Moyer Hall Repurpose). However, without the increase to height limits, it would not be possible to accommodate the Marston Site Future Open Space project (project #2 on **Figure 2-6**); this location would be needed to accommodate a new Education and General building (project #4 on **Figure 2-14**).



Source: Perkins + Will, SPU, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 2-14

Alternative 3—Boundary Expansion and No Change to Height Limits

Potential Development

It is anticipated that a similar amount of potential development would occur under ***Alternative 3*** as compared to the ***Draft MIMP*** (refer to **Table 2-3**), except that 126,900 sq. ft. of Education & General use space, 141,400 sq. ft. of housing, and 27,600 sq. ft. of mixed-use space would not be able to be accommodated within the building footprints shown in **Figure 2-6** that are proposed in the ***Draft MIMP*** (see **Figure 2-14** and **Table 2-7**).

Development Summary

Overall, 2,259,600 sq. ft. of planned and potential development could be built, with net new planned and potential development categories as summarized below in **Table 2-7**. This is the same amount of overall development as would be accommodated under the ***Draft MIMP***.

Without the proposed increases to height limits, a greater number of buildings would need to be built within the existing and proposed MIO boundaries to accommodate anticipated increases in enrollment and staffing, and to provide the same program of uses as that proposed under the ***Draft MIMP*** (see **Figure 2-14)**. In total, under ***Alternative 3***, up to six additional buildings or building wings would need to be provided within the existing campus boundary (**Table 2-8**). Additionally, these buildings would be located in areas of the campus that are neither possible nor favorable to develop. For example, most of these buildings/wings would be situated on areas that are indicated/designated as open space under the ***Draft MIMP***. Altering the size or location of a designated open space would require a minor amendment to the MIMP per SMC 23.69.035.D. Overall, a more-dense campus than that associated with the ***Draft MIMP*** would occur with less functional open space.

Table 2-7
Alternative 3 - Planned and Potential Development – Net New (gfa)

		Alternative 3					
Aggregated Categories	**Existing gfa**	**Excess gfa[1]**	**DMIMP footprints gfa[2]**	**Demolition gfa**	**Future Additional Leased Space**	**Net New gfa**	**Cumulative Total gfa**
Mixed-Use	11,500	27,600	209,500	11,500		225,600	
Housing	525,900	141,400	714,700	149,500		706,600	
Education & General	547,700	126,900	590,000	308,600	66,500	535,800	
Athletics & Recreation	82,700		388,500	82,700		305,800	
Vacant	60,900			60,900		(60,900)	
Total (gfa)	**1,228,700**	**295,900**	**1,902,700**	**613,200**	**66,500**	**1,712,900**	**2,941,600**

Source: Perkins + Will, 2023

[1] *This square footage is associated with the excess buildings that would need to be built that are listed in Table 2-8*

[2] *This square footage is associated with the space that could be accommodated within the building footprints shown for the Draft MIMP.*

Table 2-8
Alternative 3 - Additional Buildings – New (gfa)

Building #	Number of Floors	Total Gross Square Footage
1	3	30,600
2	2	27,500
3	4	35,400
4	4	60,100
5	4	43,550
6	3	45,950
7	4	52,800
		295,900

Source: Perkins + Will, 2023

Potential Parking and Access

SPU's parking supply would be the same as the ***Draft MIMP***, however, 66 parking spaces would be displaced from the structured parking garage north of W Cremona to a surface lot located north of W Nickerson Street. This would be necessary because the height of the parking garage would be limited under ***Alternative 3***.

Potential Street Enhancements and Street/Alley Vacations

The proposed street enhancements and street/alley vacations could occur.

2.5.3.2 Modification of Certain Development Standards

MIO zoning changes could occur as related to the boundary expansion areas, but no height limit changes would occur within the existing campus boundary.

2.5.3.3 Transportation Management Program

The Transportation Management Program and associated goals for ***Alternative 3*** would be consistent with those outlined for the ***Draft MIMP***.

Alternative 3 – ***Boundary Expansion and No Change to Height Limits*** *– While this alternative may be consistent with many of Seattle Pacific University's project goals (see* ***Section 2.3*** *of this Draft EIS) and the proposed boundary expansions would provide additional sites for redevelopment, it is possible that many existing structures would need to be removed in order to replace the square footage loss as a result of no changes to height limits. A more-dense campus than that associated with the* ***Draft MIMP*** *is likely and with less functional open space.*

Alternative 3 *would also result in a number of constraints including:*

- *Locating mixed-use buildings internal to campus with limited exposure in the center of campus, reducing the functionality of commercial uses; the mixed-use site north of W. Cremona St. would only have 40' between bars for courtyard creating an open space that is marginally usable, compromising privacy between wings, and limiting access to daylight within the open space and to the building.*

- *Locating two additional housing buildings (at 3- to 4-levels) along the west edge of the campus, near single-family homes on 'Open Space with Conditions' sites, which is undesirable to the community, could result in the potential for increased shading impacts in this area, and would displace parking in the Ashton Parking Lot.*

- *The Education & General site just east of 5th Avenue W would limit the ability to expand campus open space and disrupt the view corridor along W Cremona St. from Gwinn Commons.*

- *Parking would be displaced from the structured garage north of W Cremona to the north campus.*

- *Development would occur in Tiffany Loop, a designated open space, and would result in loss of tree canopy.*[16]

- *Mixed Use + Housing site #39 (south of Nickerson at 6th) (**Figure 2-7**) would be reduced by 1-story due to the height limits not being increased. This results in student housing on the ground level along Nickerson, which is not ideal for student residents/street activation.*

- *No margin of error for meeting university needs with adequate development capacity should buildings on the interior of campus be rendered undevelopable for any reason.*

2.5.4 Alternative 4 -- *No Boundary Expansion and Increased Height Limits*

Refer to **Figure 2-15** for a site plan of the campus under ***Alternative 4.***

2.5.4.1 Proposed Campus Development

Campus Enrollment and Staffing

It is anticipated that enrollment, faculty and staff projections associated with ***Alternative 4*** would be the same as the ***Draft MIMP***, including: 6,000 students (up to 4,500 undergraduate students and 1,500 graduate students); and approximately 860 faculty and staff.

Modification of the Campus Major Institution Overlay (MIO) Boundaries

No boundary expansions would occur.

Planned Development

The three planned development projects described for the ***Draft MIMP*** could still occur under ***Alternative 4*** (Student Center, Moyer Hall Repurpose, and the Marston Site Future Open Space project) (see **Figure 2-6**).

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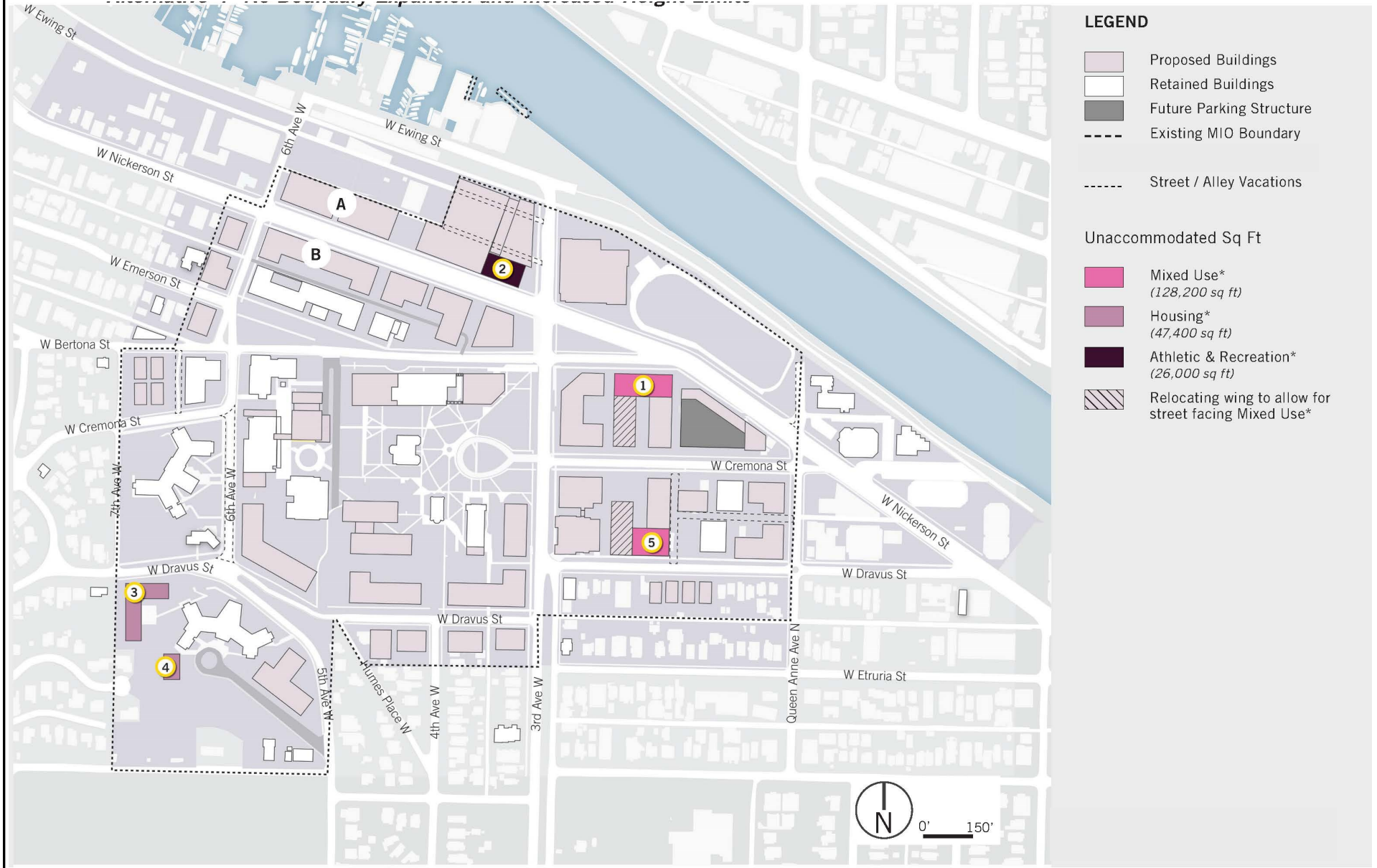
[16] Altering the size or location of a designated open space would require a minor amendment to the MIMP per SMC 23.69.035.D.



Source: Perkins + Will, SPU, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 2-15

Alternative 4—No Boundary Expansion and Increased Height Limits

Potential Development

It is anticipated that a similar amount of planned and potential development would occur under ***Alternative 4*** as compared to the ***Draft MIMP*** (refer to **Table 2-3**), except that 26,000 sq. ft. of Athletic & Recreation space, 47,400 sq. ft. of housing, and 128,200 sq. ft. of mixed-use space would not be able to be accommodated within the building footprints shown in **Figure 2-6** that are proposed in the ***Draft MIMP*** (see **Figure 2-15** and **Table 2-9**).

Development Summary

Overall, 2,259,600 sq. ft. of planned and potential development could be built, with net new planned and potential development categories as summarized below in **Table 2-9**. This is the same amount of overall development as would be accommodated under the ***Draft MIMP***.

Without the proposed expansions to the existing MIO boundary, a greater number of buildings would need to be built within the existing MIO boundary to accommodate anticipated increases in enrollment and staffing, and to provide the same program of uses as that proposed under the ***Draft MIMP*** (see **Figure 2-15**). In total, under ***Alternative 4***, up to 5 additional buildings or building wings would need to be provided within the existing campus boundary (**Table 2-10**). Additionally, some of these buildings would be located in areas of the campus that are neither possible nor favorable to develop. For example, most of these buildings/wings would be situated on areas that are indicated/designated as open space under the ***Draft MIMP***. Altering the size or location of a designated open space would require a minor amendment to the MIMP per SMC 23.69.035.D. Overall, a more-dense campus than that associated with the ***Draft MIMP*** would occur with less functional open space.

Table 2-9
Alternative 4 - Planned and Potential Development – Net New (gfa)

		Alternative 4					
Aggregated Categories	**Existing gfa**	**Excess gfa[1]**	**DMIMP footprints gfa[2]**	**Demolition gfa**	**Future Additional Leased Space**	**Net New gfa**	**Cumulative Total gfa**
Mixed-Use	11,500	128,200	108,900	11,500		225,600	
Housing	525,900	47,400	808,700	149,500		706,600	
Education & General	547,700		716,900	308,600	66,500	535,800	
Athletics & Recreation	82,700	26,000	362,500	82,700		305,800	
Vacant	60,900			60,900		(60,900)	
Total (gfa)	**1,228,700**	**201,600**	**1,997,000**	**613,200**	**66,500**	**1,712,900**	**2,941,600**

Source: Perkins + Will, 2023

[1] *This square footage is associated with the excess buildings that would need to be built that are listed in Table 2-10*

[2] *This square footage is associated with the space that could be accommodated within the building footprints shown for the Draft MIMP.*

Table 2-10
Alternative 4 - Additional Buildings – New (gfa)

Building #	Number of Floors	Total Gross Square Footage
1	5	67,000
2	3	26,000
3	3	43,700
4	1	3,700
5	5	61,200
		201,600

Source: Perkins + Will, 2023

Potential Parking and Access

Parking quantities would be the same as the ***Alternative 2***.

Potential Street Enhancements and Street/Alley Vacations

Fewer street enhancements and only those street/alley vacations located within the proposed MIO boundary could occur.

2.5.4.2 Modification of Certain Development Standards

No MIO zoning changes. Proposed height limit increases could occur.

2.5.4.3 Transportation Management Program

The Transportation Management Program and associated goals for ***Alternative 4*** would be consistent with those outlined for the ***Draft MIMP***.

Alternative 4 – No Boundary Expansion and Increased Height Limits *– While this alternative may be consistent with some of Seattle Pacific University's project goals (see* ***Section 2.3*** *of this Draft EIS), it would not be consistent with Seattle Pacific University's project goal (see* ***Section 2.3*** *of this Draft EIS) relative to the proposed boundary expansions. While increased height limits could accommodate additional development, it is possible that many existing structures would need to be removed in order to replace the square footage loss as a result of no boundary changes. A more-dense campus than that associated with the* ***Draft MIMP*** *is likely and with less functional open space.*

Alternative 4 *would also result in a number of constraints including:*

- *Locating two additional housing buildings (at 3- to 4-levels) along the west edge of the campus, near single-family homes and in locations that would be preserved for Open Space with Conditions under the* ***Draft MIMP,*** *which is undesirable to the community, could result in the potential for increased shading impacts in this area, and would displace parking in the Ashton Parking Lot.*

- *E&G and Mixed-Use sites north and south of Cremona have only 40' between bars for courtyard, creating an open space that is marginally usable, compromising privacy between wings and limiting access to daylight within the open space and to the building.*

- *Loss of entry plaza/spillover at space Athletics & Recreation site north of W Nickerson Street could be problematic for crowds at large events.*

- *Loss of opportunity to develop a soccer field at 6th Avenue W and W Nickerson, should the Interbay lease be terminated by Seattle Parks and Recreation.*

- *Loss of tree canopy.*

- *Losing opportunity for a stronger buffer with adjacent neighbors by not expanding the MIMP boundary south to W Etruria Street.*

- *Preventing the opportunity for the University to develop a front door to the campus and have street-activating uses east of Queen Anne Avenue N and north of W Nickerson Street.*

- *Little margin for error for meeting university needs with adequate development capacity should buildings on interior of campus be rendered undevelopable for any reason.*

2.5.5 Alternative 5 -- *Boundary Expansion, Increased Height Limits and No Street Vacations*

Refer to **Figure 2-16** for a site plan of the campus under ***Alternative 5.***

2.5.5.1 Proposed Campus Development

Campus Enrollment and Staffing

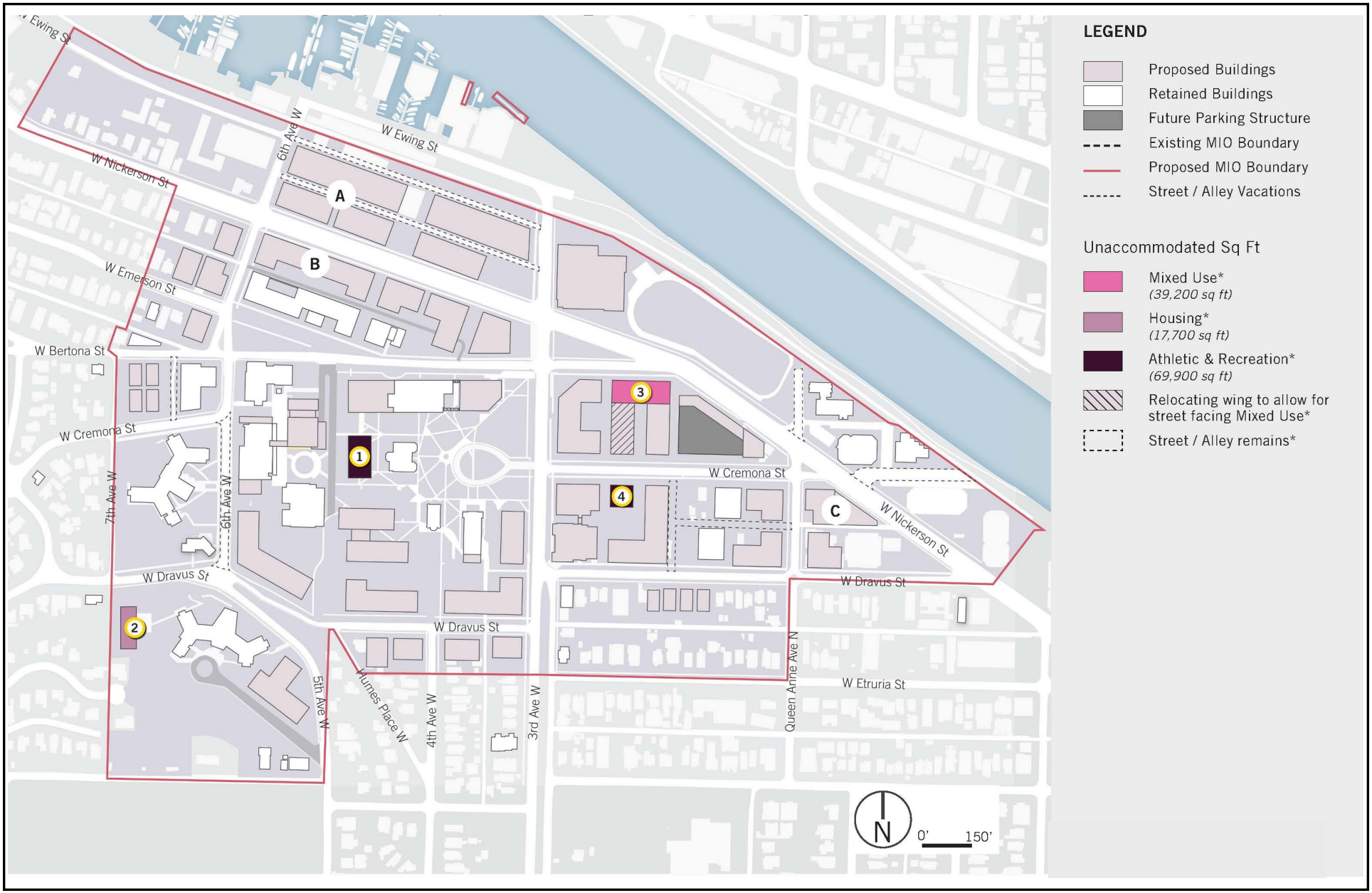
It is anticipated that student enrollment, faculty and staff projections associated with ***Alternative 5*** would be the same as the ***Draft MIMP***, including: 6,000 students (up to 4,500 undergraduate students and 1,500 graduate students); and approximately 860 faculty and staff.

Modification of the Campus Major Institution Overlay (MIO) Boundaries

Proposed boundary expansions identified under the Draft MIMP would occur.

Planned Development

Two of the three Planned development projects described for the ***Draft MIMP*** could still occur (Student Center and Moyer Hall Repurpose). However, without the proposed street and alley vacations, it would not be possible to accommodate the Marston Site Future Open Space project (project #2 on **Figure 2-6**); this location would be needed to accommodate a new Athletics and Recreation building (project #1 on **Figure 2-16**).



Source: Perkins + Will, SPU, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 2-16

Alternative 5—Boundary Expansion, Increased Height Limits and No Street/Alley Vacations

Potential Development

It is anticipated that a similar amount of planned and potential development would occur under ***Alternative 5*** as compared to the ***Draft MIMP*** (refer to **Table 2-3**), except that 39,200 sq. ft. of Athletic & Recreation space, 17,700 sq. ft. of housing, and 69,900 sq. ft. of athletics and recreation space would not be able to be accommodated within the building footprints shown in **Figure 2-6** that are proposed in the ***Draft MIMP*** (see **Figure 2-16** and **Table 2-11**).

Development Summary

Overall, 2,198,600 sq. ft. of planned and potential development could be built, with net new planned and potential development categories as summarized below in **Table 2-11**. This is the same amount of overall development as would be accommodated under the ***Draft MIMP***.

Without the proposed vacations to streets/alleys included in the ***Draft MIMP***, a greater number of buildings would need to be built within the existing and proposed MIO boundaries to accommodate anticipated increases in enrollment and staffing, and to provide the same program of uses as that proposed under the ***Draft MIMP*** (see **Figure 2-16**). In total, under ***Alternative 5***, up to four additional buildings or building wings would need to be provided within the campus boundary (**Table 2-12**). Overall, a more-dense campus than that associated with the ***Draft MIMP*** would occur.

Table 2-11
Alternative 5 - Planned and Potential Development – Net New (gfa)

		Alternative 5					
Aggregated Categories	**Existing gfa**	**Excess gfa[1]**	**DMIMP footprints gfa[2]**	**Demolition gfa**	**Future Additional Leased Space**	**Net New gfa**	**Cumulative Total gfa**
Mixed-Use	11,500	39,200	197,900	11,500		225,600	
Housing	525,900	17,700	838,400	149,500		706,600	
Education & General	547,700		716,900	308,600	66,500	535,800	
Athletics & Recreation	82,700	69,900	318,600	82,700		305,800	
Vacant	60,900			60,900		(60,900)	
Total (gfa)	**1,228,700**	**126,800**	**2,071,800**	**613,200**	**66,500**	**1,712,900**	**2,941,600**

Source: Perkins + Will, 2023

[1] *This square footage is associated with the excess buildings that would need to be built that are listed in Table 2-12*

[2] *This square footage is associated with the space that could be accommodated within the building footprints shown for the Draft MIMP.*

Table 2-12
Alternative 5 - Additional Buildings – New (gfa)

Building #	Number of Floors	Total Gross Square Footage
1	5	39,600
2	3	17,900
3	5	39,700
4	5	30,000
		126,800

Source: Perkins + Will, 2023

Potential Parking and Access

Parking quantities would be the same as under the ***Draft MIMP***.

Potential Street Enhancements and Street/Alley Vacations

No street enhancements or street/alley vacations would occur either within the existing MIO boundary or in the MIO boundary expansion areas. This would result in less flexibility to support future academic, athletic/recreation, mixed-use, and housing opportunities, all supported by expanded open space that could be accommodated with street/alley vacations. As well, the opportunity to improve pedestrian safety to and from student housing facilities would be lost without the proposed vacation of 6th Ave. W. between W Dravus St. and W Cremona Street.

2.5.5.2 Modification of Certain Development Standards

MIO zoning changes and proposed height limit increases could occur.

2.5.5.3 Transportation Management Program

The Transportation Management Program and associated goals for ***Alternative 5*** would be consistent with those outlined for the ***Draft MIMP***.

Alternative 5 – *Boundary Expansion, Increased Height Limits and No Street Vacations* – *While this alternative may be consistent with many of Seattle Pacific University's project goals (see **Section 2.3** of this Draft EIS) and provide for the proposed boundary expansions and increased height limits to accommodate proposed development, several key goals would not be met. These include goals associated with streetscape improvements to reduce safety hazards, transportation/circulation improvements, and the provision of additional open space.*

Alternative 5 *would also result in a number of constraints including:*

- *The mixed-use site north of W Cremona Street would have only 40' between bars for the courtyard, creating an open space that is marginally usable, compromising privacy between wings, and limiting access to daylight within the open space and within the building*

- *An additional Athletics and Recreation site would need to be located in the center of campus (east of 5th Avenue W) and would not allow for large spaces, would limit ability*

to expand campus open space, and would disrupt the view corridor along W Cremona Street from Gwinn Commons.

- *The Athletics and Recreation footprint north of W Nickerson Street would be unable to accommodate athletic and recreation functions with a segmented footprint and loss of square footage*

- *Mixed-use development potential would be limited with a segmented footprint and loss of square footage at a proposed mixed use development site north of W Nickerson Street.*

2.5.6 Alternatives Considered but Not Advanced for EIS Purposes

One additional potential alternative was considered during early planning phases of the Draft MIMP – a Decentralized Option. However, for reasons cited below, this potential alternative was not advanced for purposes of this EIS.

2.5.6.1 Decentralized Option

The decentralization option would involve locating functions in other sites in Seattle or adjacent cities, and/or incorporating online learning. University functions are highly integrated and truly viable scenarios where some functions are split is not workable. SPU is driven by its mission to provide a holistic, faith-based education reinforced by a vibrant atmosphere. Inherent to this mission is a centralized campus environment that encourages community building. This will be further reinforced by an increase in on-campus housing. SPU provides active learning environments and continuously strives to incorporate the latest teaching innovations. This level of interaction is especially critical for undergraduate students and cannot be achieved with online distance-learning alternatives. In addition, a significant number of classes will never be possible to teach online to maintain the high quality of instruction SPU requires. For these reasons, a decentralized option is not considered viable.

Chapter 3

Affected Environment, Impacts, Mitigation Measures, and Significant Unavoidable Adverse Impacts

3.1 Air Quality / Greenhouse Gas Emissions

This section of the DEIS addresses air quality conditions and impacts, including greenhouse gas emissions. Impacts are described in the context of the relationships to adopted laws and regulations and evaluate both construction activities and ongoing operation of development that could be built under the ***Draft MIMP*** and EIS alternatives.

Policy Context

The Seattle Municipal Code (SMC) contains specific provisions that describe the scope of the SEPA analysis relative to air quality. Applicable policies from SMC 25.05.675 are noted below:

A.2 Air Quality Policies

A. It is the City's policy to minimize or prevent adverse air quality impacts.

B. For any project proposal which has a substantial adverse effect on air quality, the decisionmaker shall, in consultation with appropriate agencies with expertise, assess the probable effect of the impact and the need for mitigating measures. "Nonattainment areas" identified by the Puget Sound Clean Air Agency shall be given special consideration.

C. Subject to the overview policy set forth in Section 25.05.665, if the decisionmaker makes a written finding that the applicable federal, state, and/or regional regulations did not anticipate or are inadequate to address the particular impact(s) of the project, the decisionmaker may condition or deny the proposal to mitigate its adverse impacts.

Mitigating measures may include but are not limited to:

1) The use of alternative technologies, including toxic air control technologies;
2) Controlling dust sources with paving, landscaping, or other means
3) Berming, buffering, and screening;
4) Landscaping and/or retention of existing vegetation; and
5) A reduction in size or scope of the project or operation.

3.1-1 Affected Environment

Air quality is generally assessed in terms of whether air pollutant concentrations are in compliance with ambient air quality standards established to protect human health and welfare. Ambient air quality standards are established for "criteria" pollutants (e.g., carbon monoxide - CO, particulate matter, nitrogen dioxide - NO_2, and sulfur dioxide - SO_2). Three agencies have jurisdiction over the ambient air quality in the project area: the US Environmental Protection Agency (EPA), the Washington State Department of Ecology (Ecology), and the Puget Sound Clean Air Agency (PSCAA). These agencies have established regulations that govern the sources and ambient concentrations of pollutants. Although their regulations are similar in stringency, each agency has established its own ambient air quality standards. Unless the state or local jurisdiction has adopted more stringent standards, EPA standards apply. These standards have been set at levels that EPA and Ecology have determined are protective of human health with a margin of safety, including the health of sensitive individuals such as the elderly, the chronically ill, and the very young.

To track air quality conditions over time, Ecology and PSCAA maintain a network of monitoring stations. These stations are generally located where sources of air pollutants are expected to influence ambient concentrations, and so are usually in or near urban areas or close to specific large air pollution sources. Stations are also located in remote areas to provide indications of regional or background air pollution levels.

Based on criteria pollutant monitoring information collected over a period of years, Ecology and EPA designate regions as being in “attainment” or “nonattainment” of particular air pollutant standards. Attainment status is, therefore, a benchmark of whether air quality in an area complies with the National Ambient Air Quality Standard (NAAQS) for one or more “criteria” air pollutants. A region once designated as a nonattainment area (NAA) for a particular pollutant that has since attained the relevant standard, is considered an air quality “maintenance” area. If the area is able to maintain the standard through two 10-year cycles of review, the area returns to “attainment” status. The project study area is in the former Puget Sound Ozone and CO maintenance areas but is now considered attainment for all monitored air pollutants.

In addition to the "criteria" air pollutants discussed above, there are a variety of other potentially hazardous air pollutants for which health-based ambient air quality standards have not been established. Of the identified hazardous air pollutants, some have been designated as mobile source air toxics (MSATs). MSATs are emitted by on-road and off-road vehicles with internal combustion engines burning biofuels, diesel, or gasoline. Of these vehicles, heavy duty diesel trucks are the largest contributor of MSATs. Actual data related to potential effects of MSATs as well as the mechanisms related to analyzing dispersion of MSATs are incomplete or unavailable, so specific analyses of these substances are not typically performed. However, the FHWA has released interim guidance for considering MSATs during the process of NEPA evaluations for transportation projects subject to FHWA review. While the project is not subject to FHWA review, FHWA guidance for screening level review of MSATs was applied in the event there is interest or concern regarding such emissions related to this project.

Existing Air Quality

Existing sources of air pollution in the project study area include marine traffic within the Lake Washington Ship Canal, commercial and industrial activities to the north of the project area, and local traffic sources. With typical vehicular traffic, the air pollutant of concern is CO. Other pollutants include ozone precursors (hydrocarbons and nitrogen oxides – NOx), coarse and fine particulate matter (PM_{10} and $PM_{2.5}$), and SO_2. The amounts of particulate matter generated by well-maintained individual vehicles are minimal compared with other sources (e.g., a wood-burning stove). Concentrations of SO_2 and NOx are usually not high except near large industrial facilities. With marine sources the air pollutants of concern are usually fine particles and NOx. Taken together, existing air quality in the project area is considered good.

Greenhouse Gases Related to Climate Change

Background

The phenomena of natural and human-caused effects on the atmosphere that cause changes in long-term meteorological patterns is known as climate change. The gases that affect such warming are referred to as greenhouse gases or GHGs because they affect the global climate by

trapping heat from the sun that is reflected by the earth, similar to how a greenhouse functions in a garden. The GHGs of primary importance are carbon dioxide (CO_2), methane, and nitrous oxide. Because CO_2 is the most abundant of these gases, GHGs are usually quantified in terms of CO_2e (carbon dioxide equivalent), based on their relative longevity in the atmosphere and the related "global warming potential" of these constituents. CO_2 is not considered an air "pollutant" that causes direct health-related effects, so ambient air quality standards have not been developed to gauge whether ambient CO_2 concentrations are acceptable at a given location.

The global climate changes continuously, as evidenced by repeated episodes of warming and cooling documented in the geologic record. But the rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed an unprecedented increase in the rate of warming over the past 150 years. This recent warming has coincided with the Industrial Revolution that resulted in a sharp increase in fossil fuel consumption through industrial development (factories, internal combustion vehicles, etc.) and large-scale deforestation through growth in agriculture. The result has been the release of substantial amounts of GHGs into the atmosphere, far beyond the level of naturally-occurring GHGs, and a reduction in the earth's ability to absorb GHGs leading to global GHG levels that are unprecedented in the modern geologic record.

The Intergovernmental Panel on Climate Change (IPCC), an international group of scientists from 130 governments, has concluded that it is "extremely likely" - a probability listed at more than 95 per percent - that human activities and fossil fuels explain most of the warming over the past 50 years."

The IPCC predicts that under current human GHG emission trends, the following results could be realized within the next 100 years:[1]

- Global temperature increases between 0.3 – 4.8 degrees Celsius;
- Potential sea level rise between 26 to 82 centimeters or 10 to 32 inches;
- Reduction in snow cover and sea ice;
- Potential for more intense and frequent heat waves, tropical cycles and heavy precipitation, and;
- Impacts to biodiversity, drinking water and food supplies.

The Climate Impacts Group (CIG), a Washington-state based interdisciplinary research group that collaborates with federal, state, local, tribal, and private agencies, organizations, and businesses, studies impacts of natural climate variability and global climate change on the Pacific Northwest. CIG research and modeling indicates the following possible impacts of human-based climate change in the Pacific Northwest:[2]

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1 Intergovernmental Panel on Climate Change (IPCC). *Summary for Policymakers.* (2014).

2 Climate Impacts Group. Accessed July 2023. *Climate Impacts in Brief.* https://cig.uw.edu/learn/climate-impacts-in-brief/.

- Changes in water resources, such as decreased snowpack; earlier snowmelt; decreased water for irrigation, fish and summertime hydropower production; increased conflict over water; increased urban demand for water;
- Changes expected for many federally-listed endangered and threatened species, including salmon, trout, and steelhead;
- Changes in forest growth and species diversity and increases in forest fires; and
- Changes along shorelines, such as increased coastal erosion and beach loss due to rising sea levels, increased landslides due to increased winter rainfall, permanent inundation in some areas, and increased coastal flooding due to sea level rise and increased winter streamflow.

Regulatory/Guidance Framework

There are no specific emission reduction requirements or targets applicable to the project or the project area, nor are there any generally accepted emission level "impact" thresholds with which to assess the potential significance of localized or global impacts related to GHG emissions. Instead, there are State policies and programs intended to consider and reduce GHG emissions over time, as described below.

Executive Order No. 07-02, issued by Gov. Christine Gregoire in 2007, established goals for Washington regarding reductions in climate pollution, increases in jobs, and reductions in expenditures on imported fuel.[3] The Executive Order established Washington's goals for reducing greenhouse gas emissions as follows:

- To reach 1990 levels of GHG emissions by 2020;
- To reach 25% below 1990 emission levels by 2035; and
- To reach 50% below 1990 emission levels by 2050.

The Order was intended to address climate change, grow the clean energy economy, and move Washington toward energy independence. In 2007, the Washington Legislature passed SB 6001, that among other things, adopted the language of Executive Order No. 07-02 into statute.

In 2008, the Washington Legislature built on SB 6001 by passing the Greenhouse Gas Emissions Bill (E2SHB 2815). While SB 6001 set targets to reduce emissions, the E2SHB 2815 made those targets state-wide requirements (RCW 70.235.020) and directed the State to submit a comprehensive greenhouse gas reduction plan to the Legislature by December 1, 2008. As part of the plan, Ecology was mandated to develop a system for reporting and monitoring greenhouse gas emissions within the State and a design for regional multi-sector, market-based system to reduce statewide greenhouse gas emissions, consistent with the requirements in RCW 70.235.020.

[3] Washington, State of; Office of the Governor. 2007. Executive Order No. 07- 02. https://www.governor.wa.gov/sites/default/files/exe_order/eo_07-02.pdf

In 2008, Ecology issued a memorandum stating that climate change and greenhouse gas emissions should be included in all State Environmental Policy Act (SEPA) analyses and committed to providing further clarification and analysis tools.[4]

Based on current State SEPA policy, projects that are subject to a SEPA-level review are required to report an estimate of lifecycle GHG emissions. However, these projects are not subject to specific GHG emission limitations or mitigation requirements.

Executive Order 09-05, issued by Gov. Gregoire in 2009, ordered Washington State agencies to reduce climate-changing GHG emissions, to increase transportation and fuel-conservation options for Washington residents, and to protect the State's water supplies and coastal areas. This Executive Order directed State agencies to develop a regional emissions reduction program; develop emission reduction strategies and industry emissions benchmarks to ensure 2020 reduction targets are met; work on low-carbon fuel standards or alternative requirements to reduce carbon emissions from the transportations sector; address rising sea levels and the risks to water supplies; and increase transit options (e.g., buses, light rail, and rid-share programs) and give Washington residents more choices for reducing the effect of transportation emissions.

On December 1, 2010, Ecology adopted Chapter 173-441 of the Washington Administrative Code (WAC) – Reporting of Emission of Greenhouse Gases. This rule aligned the State's greenhouse gas reporting requirements with EPA regulations and required facilities that directly emit 10,000 metric tons carbon dioxide equivalents ($MTCO_2e$) or more per year, as well as fuel suppliers that supply fuels in the state that would result in 10,000 $MTCO_2e$ when combusted, to report their GHG emissions to Ecology. Requirements for reporting began on January 1, 2012.

In 2011, Ecology issued internal guidance to assist its staff to determine which projects should have GHG emissions evaluated under SEPA and how to perform those evaluations. In April 2016, Ecology removed the internal guidance from its website to allow revisions and updates to incorporate new scientific information, as well as to be consistent with federal greenhouse gas emissions guidance and Ecology policies.

Gov. Jay Inslee issued Executive Order 14-04 in 2014 that established steps to be taken to address the effects of climate change and how to reduce carbon pollution in Washington. This Executive Order superseded Executive Orders 07-02 and 09-05. Some of the key areas addressed by the Order include carbon pollution, clean transportation, and clean technology.

On April 30, 2020, Ecology announced the beginning of the rulemaking process as per the Directive of the Governor #19-18. This initiative would create a new rule, WAC Chapter 173-445, Greenhouse Gas Assessment for Projects (the GAP rule) and would help address analysis and mitigation of greenhouse gas emissions for environmental assessments of industrial and fossil fuel projects. Ecology anticipates the draft GAP rule will be released for public review and comment in 2023.[5]

Locally, King County has developed a GHG Worksheet that is used to estimate all GHG-related emissions created over the life span of project's under SEPA review. Included in the worksheet

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[4] Manning, Jay. 2008. *Climate Change – SEPA Environmental Review of Proposals.* (April 30, 2008).

[5] Ecology website. 2023. *Rulemaking for WAC 173-445.* https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-445. Washington State Department of Ecology. Accessed July 2023.

are considerations for construction materials, fuel used during construction, energy consumed during building operation, and transportation by building occupants, and is based on the type (i.e., intended use) and size of the proposed development. Calculation of GHG emissions using the King County spreadsheet is discussed further in this assessment.

3.1-2 Impacts of the Proposed Action and Alternatives

Construction Impacts

Impacts of Draft MIMP (Proposed Action)

Construction

The Proposed Action (***Draft MIMP***) would involve construction activities (planned and potential projects) that include renovation existing buildings, demolition and construction of new buildings, excavation and site work, and construction of new parking areas.

For the ***Draft MIMP***, construction activity would occur over multiple years (20+ years). Development activity could result in temporary, localized increases in particulate concentrations due to emissions from construction-related sources. For example, dust from construction activities such as excavation and site work could contribute to ambient concentrations of suspended particulate matter. Construction contractors would be required, however, to comply with PSCAA regulations requiring that reasonable precautions be taken to minimize dust emissions.

Demolition and renovation of existing structures would require the removal and disposal of building materials, some of which could contain asbestos. If asbestos were found, demolition contractors would be required to comply with EPA and PSCAA regulations related to the safe removal and disposal of any asbestos-containing materials to ensure such materials do not become air-borne pollutants.

Construction would require the use of heavy trucks and other large diesel construction equipment and a range of smaller equipment such as generators, pumps, and compressors. Emissions from existing transportation sources around the project area (cars, trucks, buses) is likely to outweigh emissions from on-site construction equipment. Pollution control agencies are nonetheless now urging that emissions from diesel equipment be minimized to the extent practicable to reduce potential health risks.

Although some construction phases would cause odors, particularly during paving operations that involve the use of tar and asphalt, odors related to construction typically are short-term and likely to go unnoticed.

In general, construction contractor(s) would be required to comply with PSCAA regulations that prohibit the emission of any air contaminant in sufficient quantities and of such characteristics and duration that may be injurious to human health, plant or animal life, or property, or that unreasonably interfere with enjoyment of life and property. See ***Section 3.1-3*** for additional detail regarding construction air quality mitigation measures.

Construction Effects on Traffic

Construction equipment and material hauling could affect traffic flow within the vicinity of the project site, especially if construction vehicles travel during peak periods or other heavy-traffic hours of the day and pass through congested areas. Although there could be short-term periods with increased congestion and increased vehicle emissions, such events would likely be the exception rather than the rule and significant adverse effects to air quality would be unlikely.

Overall Construction-Related Air Quality

With implementation of the controls required by PSCAA for the various aspects of construction activities and consistent use of best management practices to minimize on-site emissions (see ***Section 3.1-3***), construction associated with planned and potential projects under the ***Draft MIMP*** would not be expected to significantly affect air quality.

Impacts of Alternative 1 - No Action Alternative

With this alternative, only development/renovation that is consistent with the SPU's current MIMP would be built. With implementation of controls as discussed above, construction-related air quality impacts under the ***No Action Alternative*** would not be expected to significantly affect air quality.

Impacts of Alternatives 2 - 5

Alternatives 2 through ***5*** are comparable to the ***Draft MIMP*** with some variations in demolition and construction of new buildings (see **Chapter 2** for details). With implementation of controls for various aspects of construction activities and best management practices as discussed above, construction of these alternatives would not be expected to significantly affect air quality.

Operational Impacts

Impacts of Proposed Action and Alternatives

The Proposed Action (***Draft MIMP***) and EIS Alternatives would result in an increase in vehicular traffic to and from the campus that would increase emissions near the campus and along roads in the area. To assess the potential for localized air quality impacts due to an increase in traffic, projected future traffic conditions with and without the project were examined and a screening level review was conducted. This analysis focused on potential for carbon monoxide (CO) emissions to cause localized "hot spots" based on EPA guidance.[6] EPA guidance recommends screening for intersections with "level of service" (LOS) "D" or worse because longer traffic delays have a greater potential to result in CO air quality impacts. This hot spot review evaluated signalized intersections in the vicinity that would be most affected by project-related traffic during peak-hour periods.

Table 3.1-1 and **Table 3.1-2** provide intersection LOS and per-vehicle delay for the AM and PM peak periods, respectively. Projected intersection conditions indicate the Dexter Ave N/4th Ave N

[6] US Environmental Protection Agency (EPA). 1992. Guideline for Modeling Carbon Monoxide from Roadway Intersections. Office of Air Quality Planning and Standards. Technical Support Division. Research Triangle Park, North Carolina. EPA-454/R-92-005.

and Nickerson St/Westlake Ave N intersection had the lowest-performing LOS of the intersections evaluated for this assessment and would perform worse during the AM peak period (projected LOS “F” for the Proposed Action and all project alternatives). Therefore, the AM peak-period traffic conditions were used to screen for CO air quality impacts where concentrations might exceed the health-protective ambient air quality standards.

Based on the Dexter Ave N/4th Ave N and Nickerson St/Westlake Ave N intersection configuration and traffic conditions including volumes, delays, and projected operational phasing, air quality screening modeling was conducted using the latest version of the WSDOT WASIST tool.[7] This screening modeling tool applies worst-case assumptions to estimate CO concentrations at nearby locations. This model uses vehicle emission factors estimated using the latest available tool from the EPA, the MOVES2014 model.[8] For this modeling, near-road receptors were placed along both sides of each roadway "leg" of the analyzed intersection at 3, 25, 50, and 100 meters from cross streets, 3 meters from the nearest traffic lane, and 1.8 meters above the ground (i.e., typical sidewalk locations at breathing height).

7 Washington State Intersection Screening Tool (WASIST) Version 3.0, Washington State Department of Transportation, June 2015

8 Jim Laughlin, WSDOT Air, Noise, and Energy Program Technical Manager, email of 5/18/2015 announcing the release of WASIST 3.0

Table 3.1-1
AM Peak-Period Signalized Intersection Conditions

Signalized Intersection	Existing 2021		No Action 2035		Draft MIMP 2035		Alt 2 2035		Alt 3 2035		Alt 4 2035		Alt 5 2035	
	LOS	Delay (secs)	LOS	Delay (secs)	LOS	Delay (secs)	LOS	Delay (secs)	LOS	Delay (secs)	LOS	Delay (secs)	LOS	Delay (secs)
6th Ave W & W Nickerson St [1]	-	-	-	-	B	18.2	B	10.8	B	11.1	B	10.7	B	10.9
3rd Ave W & W Nickerson St	B	14.1	B	18.6	B	15.6	C	25.3	C	26	C	24.1	C	24.4
W Cremona St & W Nickerson St/Nickerson St [1]	-	-	-	-	B	14	B	13.1	B	13	A	6.7	A	6.7
3rd Ave N & Nickerson St & Florentia St	D	35.8	D	42.9	D	43.3	D	43.2	D	43.1	D	43.2	D	43.3
Dexter Ave N/4th Ave N & Nickerson St/Westlake Ave N	E	59.5	F	115.1	F	114.7	F	109.8	F	108.4	F	109.8	F	109.5

[1] Intersections are currently unsignalized and would become signalized with the ***Draft MIMP*** and ***Alternatives 2*** through ***5***.
Source: LOS and delay provided by Transpo Group, 2021 & 2023. For additional information, refer to EIS Section 3.8.

Table 3.1-2
PM Peak-Period Signalized Intersection Conditions

Signalized Intersection	Existing 2021		No Action 2035		Draft MIMP 2035		Alt 2 2035		Alt 3 2035		Alt 4 2035		Alt 5 2035	
	LOS	Delay (secs)	LOS	Delay (secs)	LOS	Delay (secs)	LOS	Delay (secs)	LOS	Delay (secs)	LOS	Delay (secs)	LOS	Delay (secs)
6th Ave W & W Nickerson St [1]	-	-	-	-	C	23.3	B	11	B	16.4	B	11.8	B	13.6
3rd Ave W & W Nickerson St	C	24.2	D	41.1	C	25.5	C	34.5	D	36.8	C	33.6	C	32.8
W Cremona St & W Nickerson St/Nickerson St [1]	-	-	-	-	B	17	B	16.8	B	18.4	A	9.2	A	9.2
3rd Ave N & Nickerson St & Florentia St	D	43.8	E	61.2	E	68.6	E	76.8	E	75.3	E	75.6	E	76.6
Dexter Ave N/4th Ave N & Nickerson St/Westlake Ave N	D	53	E	66.3	E	66	F	90.5	F	91.4	F	90.4	F	91

[1] Intersections are currently unsignalized and would become signalized with the ***Draft MIMP*** and ***Alternatives 2*** through ***5***.
Source: LOS and delay provided by Transpo Group, 2021 & 2023. For additional information, refer to EIS Section 3.8.

Traffic Air Quality Analysis Findings

The WASIST modeling results are listed in **Table 3.1-3**. Model results indicate CO concentrations near the most congested intersection in the project study area would be far less than the 35 ppm 1-hour and 9 ppm 8-hour health based ambient air quality standards. While future (2035) traffic volumes and delays would increase over existing (2021) conditions, future CO concentrations would be reduced due to adoption of newer, more efficient vehicles and cleaner fuel regulations.[9] Model results also demonstrate that at this intersection, ***Draft MIMP*** related traffic would not increase CO concentrations over future No Action conditions. These findings indicate that the ***Draft MIMP*** and EIS Alternatives would not likely cause or contribute to any significant traffic-related air quality impacts.

Table 3.1-3
WASIST Calculated AM Peak-Period CO Concentrations (PPM)[1,2.3]

Signalized Intersection	Averaging Period	Existing 2021	No Action 2035	Draft MIMP 2035	Alt 2 2035	Alt 3 2035	Alt 4 2035	Alt 5 2035
Dexter Ave N/4th Ave N & Nickerson St/Westlake Ave N	1-Hour	5.5	5.3	5.3	5.3	5.3	5.3	5.3
	8-Hour	5.3	5.2	5.2	5.2	5.2	5.2	5.2

Source: Landau Associates, based on modeling using the WSDOT WASIST tool
[1] CO concentrations are typically quantified in terms of parts per million, or ppm, and both the WASIST-calculated concentrations.
[2] Concentrations include a 5-ppm background concentration to reflect the potential contribution from other traffic or other sources in the vicinity. This is considered a very conservative assumption.
[3] The WASIST screening tool contains a variety of standard intersection configurations from which to choose as the basis of the air quality modeling. However, none of the available options were precisely representative of the actual configuration of the Dexter Ave N/4th Ave N and Nickerson St/Westlake Ave N intersection. The modeling therefore used the most conservative configuration available as the basis for this analysis based on sensitivity test runs.

Air Quality Impacts Related to Facility Operational Emissions

Emergency Equipment

One or more emergency generators may be required to ensure safe and consistent operation of the project. Emissions associated with emergency generators result from the combustion of fossil fuels and would occur during emergency use or routine testing of the generators.

PSCAA Regulation I, Section 6.03(c) exempts some sources of air pollution from Notice of Construction applications and Order of Approvals. Sources defined in 6.03(c) are not expected to cause or contribute to local air quality impacts. Stationary internal combustion engines, including emergency generators, with less than 50 horsepower output or those that are operated less than 500 hours per year are included in these exemptions. If the project identifies a need for larger

[9] EPA Air Pollution Emissions Trend Data (https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data)

emergency engines or engines that operate more than 500 hours per year, a permit would be required to ensure the emissions would not cause or contribute to air quality impact.

Mobile Source Air Toxics (MSATs)

The traffic impact analysis indicates a total of 2,356 and 2,634 daily passenger and truck trips would result due to the ***Draft MIMP*** and ***Alternative 4*** (considered the highest out of all four alternatives), respectively. The daily project-related traffic volumes are far fewer than the 140,000 to 150,000 annual average daily traffic (AADT) threshold that FHWA states may result in a higher potential for impacts from MSATs. In addition, MSAT emissions in future years are expected to decline compared with existing levels of emissions because of national emission control programs. For example, FHWA estimates vehicle miles traveled will increase 31% from 2020 to 2060, but the combined total annual emissions for the priority MSAT will reduce 76% for the same time period.[10]

Greenhouse Gas Emissions

Impacts of Proposed Action

The GHG emissions associated with the Proposed Action (***Draft MIMP***) were calculated using King County's SEPA GHG Emissions Worksheet. King County's GHG worksheet estimates all GHG emissions that are created over the life span of a project from construction materials, fuel used during construction, energy consumed during building operation, and transportation by building occupants.

Note that this analysis did not quantify or consider any potential efforts to reduce either GHG emissions or resource consumption by incorporating sustainable features into new development. However, it is assumed that sustainable features would be incorporated into projects to reduce GHG emissions. These sustainable features would be considered in the approach to the design of buildings and in ongoing site programming and management. The results for the ***Draft MIMP*** are presented in **Table 3.1-4**.

[10] Federal Highway Administration (FHWA). 2023. *Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents*. Accessed June 2023: https://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/fhwa_nepa_msat_memorandum_2023.pdf.

Table 3.1-4
Estimated Draft MIMP Greenhouse Gas Emissions ($MTCO_2E$)

Components	Area (sq. ft.)	Lifespan Emissions [1]	Annual Emissions [2]
Education[3]	716,900	749,505	11,992
Lodging[4]	856,100	798,851	12,782
Retail (Other Than Mall)[5]	237,100	204,559	3,273
Public Assembly[6]	449,500	414,427	6,631

Source: Landau Associates, based on using the King County's GHG worksheet

[1] Estimated lifecycle emissions are based on an assumed average useful life of about 62.5 years for all types of structures that are not considered residential. These emissions are reported in MTCO2e representing metric tons (tonnes) of carbon dioxide equivalent, or 2,204.62 pounds of CO2. This metric is a standard measure of CO2 equivalent emissions that include CO2 and other GHGs.

[2] Annual emissions estimates are based on dividing total emissions by assumed facility useful lifespan as indicated in note (1) above.

[3] Defined as buildings used for academic or technical classroom instruction, such as elementary, middle, or high schools, and classroom buildings on college or university campuses. Buildings on education campuses for which the main use is not classroom are included in the category relating to their use. For example, administration buildings are part of "Office," dormitories are "Lodging," and libraries are "Public Assembly."

[4] Defined as buildings used to offer multiple accommodations for short-term or long-term residents, including skilled nursing and other residential care buildings.

[5] Defined as buildings used for the sale and display of goods other than food.

[6] Defined as buildings in which people gather for social or recreational activities, whether in private or non-private meeting halls.

The ***Draft MIMP*** is expected to produce about 2,167,343 metric tons (tonnes) of CO_2 equivalent (MTCO2e) over a 62.5-year lifespan. Annually this corresponds to about 34,677 tonnes. To put these values into context, in the Washington State GHG emission inventory for 2010-2018, Ecology estimated state-wide annual GHG emissions in 2018 were about 100 million $MTCO_2e$.[11] Estimated annual worldwide GHG emissions for 2015 were about 46 billion $MTCO_2e$.[12] Thus, the project's annual GHG emissions represent approximately 0.03% of estimated annual 2018 GHG emissions within Washington and much smaller percentages of worldwide emissions.

It is important to note that the scale of global climate change is so large that the impacts from one project, no matter the size, would almost certainly have no discernible effect on increasing or decreasing global climate change. Any such effects can only be considered on a "cumulative" basis. It is, appropriate to conclude that the Proposed Action's GHG emissions would combine

[11] Washington State Department of Ecology (Ecology). 2018. *Washington's greenhouse gas inventory*. Accessed June 2023: https://apps.ecology.wa.gov/publications/documents/2002020.pdf.

[12] United States Environmental Protection Agency (USEPA). 2015. *Climate Change Indicator: Global Greenhouse Gas Emissions*. Accessed June 2023: https://www.epa.gov/climate-indicators/climate-change-indicators-global-greenhouse-gas-emissions.

with emissions across the City, County, State, nation, and planet to cumulatively contribute to increases or decreases in the rate and effects of global climate change.

To reiterate, the estimates of project GHG emissions do not consider any potential efforts to reduce GHG emissions and/or resource consumption by incorporating sustainable features into the development, although such sustainable features would be incorporated into the project by virtue of the City and State Building and Energy Code requirements and the likely use of green building technologies.

The GHG emissions associated with the ***Draft MIMP*** would contribute to the cumulative carbon footprint of King County. No significant climate change impacts would be expected due to project-related GHG emissions.

Impacts of Alternative 1 - No Action Alternative

With this alternative, only development/renovation that is consistent with the SPU's current MIMP would be built. GHG emissions were evaluated using King County's GHG worksheet.

As shown in **Table 3.1-5**, the ***No Action Alternative*** is expected to produce about 63,774 metric tons (tonnes) of CO2 equivalent (MTCO2e) over a 62.5-year lifespan and corresponds to about 1,020 tonnes annually. When compared to the annual state-wide and worldwide GHG emissions as stated above, the ***No Action Alternative*** represents a much smaller percentage overall.

Table 3.1-5
Estimated No Action Alternative Greenhouse Gas Emissions (MTCO2E)

Components	Area (sq. ft.)	Lifespan Emissions [1]	Annual Emissions [2]
Education[3]	61,000	63,774	1,020

Source: Landau Associates, based on using the King County's GHG worksheet

[1] Estimated lifecycle emissions are based on an assumed average useful life of about 62.5 years for all types of structures that are not considered residential. These emissions are reported in MTCO2e representing metric tons (tonnes) of carbon dioxide equivalent, or 2,204.62 pounds of CO2. This metric is a standard measure of CO2 equivalent emissions that include CO2 and other GHGs.

[2] Annual emissions estimates are based on dividing total emissions by assumed facility useful lifespan as indicated in note (1) above.

[3] Defined as buildings used for academic or technical classroom instruction, such as elementary, middle, or high schools, and classroom buildings on college or university campuses. Buildings on education campuses for which the main use is not classroom are included in the category relating to their use. For example, administration buildings are part of "Office," dormitories are "Lodging," and libraries are "Public Assembly."

Impacts of Alternatives 2 through 5

As discussed in ***Section 0***, ***Alternatives 2*** through ***5*** are comparable to the ***Draft MIMP*** with variations in building heights, demolition and construction of additional buildings. Total square footage for each alternative is the same (see **Chapter 2** for details) and was also calculated using the King County's GHG worksheet. The results for the ***Alternatives*** are presented in **Table 3.1-6**.

Table 3.1-6
Estimated Greenhouse Gas Emissions (MTCO2E) per Alternative

Components	Area (sq. ft.)	Lifespan Emissions [1]	Annual Emissions [2]
Education[3]	956,000	999,479	15,992
Lodging[4]	1,232,500	1,150,081	18,401
Retail (Other Than Mall)[5]	237,100	204,559	3,273
Public Assembly[6]	449,500	414,427	6,631

Source: Landau Associates, based on using the King County's GHG worksheet

[1] Estimated lifecycle emissions are based on an assumed average useful life of about 62.5 years for all types of structures that are not considered residential. These emissions are reported in MTCO2e representing metric tons (tonnes) of carbon dioxide equivalent, or 2,204.62 pounds of CO2. This metric is a standard measure of CO2 equivalent emissions that include CO2 and other GHGs.

[2] Annual emissions estimates are based on dividing total emissions by assumed facility useful lifespan as indicated in note (1) above.

[3] Defined as buildings used for academic or technical classroom instruction, such as elementary, middle, or high schools, and classroom buildings on college or university campuses. Buildings on education campuses for which the main use is not classroom are included in the category relating to their use. For example, administration buildings are part of "Office," dormitories are "Lodging," and libraries are "Public Assembly."

[4] Defined as buildings used to offer multiple accommodations for short-term or long-term residents, including skilled nursing and other residential care buildings.

[5] Defined as buildings used for the sale and display of goods other than food.

[6] Defined as buildings in which people gather for social or recreational activities, whether in private or non-private meeting halls.

Each Alternative is expected to produce about 2,768,547 metric tons (tonnes) of CO2 equivalent (MTCO2e) over a 62.5 year lifespan. Annually this corresponds to about 46,127 tonnes. When compared to the state-wide annual GHG emissions in 2018 (about 100 million $MTCO_2e$), the annual GHG emissions from each alternative represents approximately 0.04%, and a much smaller percentage of worldwide emissions.

As with the ***Draft MIMP***, the estimates of GHG emissions from each alternative do not consider any potential efforts to reduce GHG emissions and/or resource consumption by incorporating sustainable features into the development. And the GHG emissions associated with each alternative would contribute to the cumulative carbon footprint of King County. No significant climate change impacts would be expected due to project-related GHG emissions.

3.1-3 Mitigation Measures

Construction

Although significant air quality impacts are not anticipated due to construction of the planned and potential projects, construction contractors would be required to comply with all relevant federal, state, and local air quality regulations.

Construction contractors could minimize emissions from diesel-powered construction equipment, to the extent practicable, by taking steps such as implementation of best management practices that would reduce emissions related to project construction. Management practices for reducing the potential for air quality impacts during construction include measures for reducing both exhaust emissions and fugitive dust. The Washington Associated General Contractors brochure, *Guide to Handling Fugitive Dust from Construction Projects* and the PSCAA suggest several methods for controlling dust and reducing the potential exposure of people to emissions from diesel equipment. A list of some of the control measures that could be implemented to reduce potential air quality impacts from construction activities follows:

- Use only equipment and trucks that are maintained in optimal operational condition.
- Require all off-road equipment to have emission reduction equipment (e.g., require participation in Puget Sound Region Diesel Solutions, a program designed to reduce air pollution from diesel, by project sponsors and contractors).
- Use car-pooling or other trip-reduction strategies for construction workers.
- Implement restrictions on construction truck and other vehicle idling (e.g., limit idling to a maximum of five minutes).
- Spray exposed soil with water or other suppressant to reduce emissions of PM and deposition of particulate matter.
- Pave or use gravel on staging areas and roads that would be exposed for long periods.
- Cover all trucks transporting materials, wetting materials in trucks, or providing adequate freeboard (space from the top of the material to the top of the truck bed), to reduce PM emissions and deposition during transport.
- Provide wheel washers to remove particulate matter that would otherwise be carried off-site by vehicles in order to decrease deposition of particulate matter on area roadways.
- Cover dirt, gravel, and debris piles as needed to reduce dust and wind-blown debris.
- Stage construction to minimize overall transportation system congestion and delays to reduce regional emissions of pollutants during construction.

Other than direct construction equipment and activity emissions that would be addressed as described above, the largest potential emissions source related to facility construction would be traffic-related emissions associated with disrupted and/or rerouted traffic in the site vicinity.

With appropriate controls, construction-related diesel emissions would not be expected to significantly affect air quality in the project vicinity.

Operation of Proposed Action or Alternatives

The screening analysis described in this section indicates that operation of the ***Draft MIMP*** or ***EIS Alternatives*** would not result in any significant adverse air quality impacts. Consequently, no specific additional mitigation is necessary or proposed.

GHG and Sustainability

The environmental analysis described above does not quantify or take into consideration any potential efforts to reduce climate change-related impacts by incorporating sustainable features into the development. However, it is assumed that sustainable features would be incorporated into individual projects as they are built to reduce the impacts quantified in this section. These sustainable features would be considered in the approach to the design of buildings, and in ongoing site programming and management. Sustainable features would be incorporated into the project through compliance with requirements of Building and Energy Codes and the potential use of the green building technologies, which are described in proposed design guidelines and in ongoing site programming and management.

3.1-4 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse air quality or greenhouse gas emission-related impacts have been identified and none are anticipated.

3.2 Plants and Animals

This section of the Draft EIS describes the existing tree conditions on the SPU campus and evaluates the potential impacts from the ***Draft MIMP*** and EIS Alternatives. This section is based on an Arborist's Report (Tree Solutions, 2021, see **Appendix C**) that was prepared by a certified arborist to provide a high-level analysis of potential impacts to trees based on identified building sites/schematics.

Policy Context

The Seattle Municipal Code (SMC) contains specific provisions that describe the scope of the SEPA analysis for plants and animals. Relevant policies from SMC 25.05.675 are provided below:

N.2. Plants and Animals

a. *It is the City's policy to minimize or prevent the loss of wildlife habitat and other vegetation which have substantial aesthetic, educational, ecological, and/or economic value. A high priority shall be given to the preservation and protection of special habitat types. Special habitat types include, but are not limited to, wetlands and associated areas (such as upland nesting areas), and spawning, feeding, or nesting sites. A high priority shall also be given to meeting the needs of state and federal threatened, endangered, and sensitive species of both plants and animals.*
b. *For projects which are proposed within an identified plant or wildlife habitat or travelway, the decisionmaker shall assess the extent of adverse impacts and the need for mitigation.*
c. *When the decisionmaker finds that a proposed project would reduce or damage rare, uncommon, unique or exceptional plant or wildlife habitat, wildlife travelways, or habitat diversity for species (plants or animals) of substantial aesthetic, educational, ecological or economic value, the decisionmaker may condition or deny the project to mitigate its adverse impacts. Such conditioning or denial is permitted whether or not the project meets the criteria of the Overview Policy set forth in SMC Section 25.05.665.*
d. *Mitigating measures may include but are not limited to:*
    i. Relocation of the project on the site;
    ii. Reducing the size or scale of the project;
    iii. Preservation of specific on-site habitats, such as trees or vegetated areas;
    iv. Limitations on the uses allowed on the site;
    v. Limitations on times of operation during periods significant to the affected species (i.e., spawning season, mating season, etc.); and
    vi. Landscaping and/or retention of existing vegetation.

Regulatory Context

Seattle Municipal Code Chapters 25.05, 25.09, and 25.11; and Director's Rule 16-2008 establish the City's tree protection regulations on private property and in and adjacent to designated critical areas. Chapter 25.05 establishes SEPA policies for determining the value of outstanding trees that are subject to an environmental review process. Site planning around trees in or adjacent to critical areas must follow the requirements outlined in SMC 25.09.070. Chapter 25.11 is the City's tree protection code and provides the means for protecting Exceptional Trees by establishing a regulatory framework, identifying restrictions on tree removal, and containing key provisions for Exceptional Trees. DR 16-2008 clarifies the definition of Exceptional Trees, includes size thresholds for various species of Exceptional Trees, and clarifies SEPA policies relative to a determination of value for outstanding trees.

A key to the City's tree regulations is whether a tree is "Exceptional." Based on DR 16-2008, Exceptional Trees should be considered during environmental assessment when development has the potential to reduce or damage "rare, uncommon, unique or exceptional plant or wildlife habitat" or "habitat diversity for species (plants or animals) of substantial aesthetic, educational, ecological or economic value".

3.2-1 Existing Conditions

Background

Urban trees and plants are valued for the ecosystem services that they provide, such as energy conservation by reducing summer energy costs by shading buildings and combating the urban heat island effect, carbon sequestration, air quality enhancement, and stormwater mitigation. Additionally, they are valued for the social services they provide, including their effects on the health and wellness of humans, as well being increasingly valued for their wildlife habitat potential.[1]

Typically, groups of trees provide higher quality habitat and have a higher ecological value than individually spaced trees not only due to the trees, but also to the forested understory. Large individual 'exceptional' trees also provide habitat and ecological value, however, depending on the surrounding trees and landscaping their influence may be dispersed. Additionally, young trees are better able to adapt to construction disturbances than mature exceptional trees and can provide replacement canopy as mature trees decline.

Native mature trees and plants enhance wildlife habitat by providing nesting and hiding cover, food, and safe travel corridors. Urban wildlife residents of mature/exceptional trees include birds, small mammals, amphibians and reptiles, arachnids, and insects. Each of these animals finds shelter from predators and weather in the insulated nooks of these trees. Additionally, plants, lichens, and fungi may use a tree as a growing substrate or food source. Birds may use dead branches on the tree as a perch from which to sing or hunt or use a cavity as a place to roost or nest. Secondary cavity-nesters, such as bluebirds and squirrels use natural cavities, or the vacant cavities previously excavated by woodpeckers (primary cavity-nesters.) Birds, such as bats, may also inhabit the protected spaces behind loose or sloughing bark. Amphibians and reptiles take advantage of cracks as both a safe hiding place and hunting grounds for insects.[1]

Retaining trees and other vegetation on steep slopes helps strengthen and retain the integrity of the hillside. Trees, shrubs, and groundcovers can maintain slopes and reduce erosion from surface water and shallow groundwater. Evergreen trees and other vegetation are most valuable and able to protect soil and remove water during the winter months when deciduous plants are dormant. A diverse mix of both evergreen and deciduous plants provides the greatest protection. Trees/plants can also have value as sight and sound barriers and discourage access to hazardous areas. Once established, native trees/plants require little maintenance or care[2].

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1 https://ufi.ca.uky.edu/wildlife-habitat-tree

2 *Value, Benefits and Limitations of Vegetation in Reducing Erosion*. Prepared for the Coastal Training Program by Greenbelt Consulting. 2004.

Existing Conditions on Campus

Tree species on the existing SPU campus are varied and include natives, ornamentals, and invasive species. The three most common tree species were bigleaf maple (Acer macrophyllum), red maple (Acer rubrum), and Leyland cypress (Cuprocyparis leylandii), at 10.8 percent, 7.2 percent, and 5.1 percent respectively. The understory is a mix of native, ornamental, and invasive plants, such as invasive ivy (Hedera spp.), Himalayan blackberry (Rubus bifrons), and bindweed (Convolvulus spp.) located throughout the campus.

In total, there are 1,069 trees within the existing MIO campus boundary, of which 802 are estimated to be on private property, which is regulated by the Seattle Department of Construction and Inspection (SDCI). The remaining 266 trees are estimated to be growing partially or fully in the right-of-way, and these Street Trees are regulated by the Seattle Department of Transportation (SDOT). The tree survey also identified 252 '*exceptional'* trees on the existing SPU campus, of which 121 are '*exceptional*' by size.

There are several exceptional tree groves within the existing campus boundary. Exceptional groves were determined by drawing the measured driplines of all trees 8-inches diameter at standard height (DSH) on a map and assessing whether at least eight trees had overlapping canopies. There are a total of 252 exceptional trees within the 2000 MIO boundary. One hundred and fifty-eight (158) of the exceptional trees are growing within exceptional groves, 27 of which are also exceptional by size. There are a total of 121 trees within the existing SPU Campus that are exceptional by size.

According to SDCI's GIS map there are two environmentally critical areas (ECAs) distributed across much of the campus. There are numerous Steep Slope (40% average)-ECA 1 areas on campus, as well as large portions of the site that are classified as Potential Slide Areas – ECA2. There are also areas along the ship canal that are within the shoreline buffer area for the Lake Washington Ship Canal. .Within the existing SPU campus there are a total of 580 trees within a steep slope ECA, steep slope buffer, or potential slide area ECA; 182 of which are located within both a steep slope ECA/steep slope buffer and a potential slide area ECA. There is one tree within the shoreline buffer area.

Other than the ECAs described above, the SPU Campus does not contain other special habitat types or areas, such as wetlands or designated wildlife habitat per City of Seattle Critical Areas mapping.[3] The U.S. Fish and Wildlife Service's Information for Planning and Consultation (IPaC) mapping tool identifies the following listed species that could potentially be affected by activities on the SPU campus: North American wolverine, marbled murrelet, yellow-billed cuckoo, bull trout and monarch butterfly. Additionally, critical habitat for bull trout, bald and/or golden eagles and a number of migratory birds could be present on or in the nearby campus vicinity. It is important to note that because species can move and site conditions may change, the species cited above are not guaranteed to be found on or near the project area, but represent species that could be present.[4]

Please refer to the *Arborist's Report* in **Appendix C** to this Draft EIS for more detailed information about existing conditions on campus and each individual tree that has been inventoried on the SPU campus, as well as for tree location maps.

[3] SDCI GIS, ECA's. Accessed May 2023. https://seattlecitygis.maps.arcgis.com/apps/webappviewer/index.html?id=f822b2c6498c4163b0cf908e2241e9c2

[4] U.S. Fish & Wildlife Service. IPaC tool. Accessed June 2023.

Table 3.2-1
Summary of Tree Totals

	Site Trees (private property)	Street Trees (ROW)	Total Trees	Number of Exceptional Trees (Groves and/or by Size)	Number of Trees w/in an ECA	Number of Trees w/in Shoreline Buffer
Within Existing MIO Boundary	801	266	1,067	252	579	1
Within MIO Boundary Expansion Areas	102	56	158	15	79	29
Total Trees	**903**	**322**	**1,225**	**267**	658	30

Source: Tree Solutions, 2023

3.2-2 Impacts of the Proposed Action (Draft MIMP)

Summary of Potential Impacts

The ***Draft MIMP*** results in the potential for fewer trees to be removed than under ***Alternatives 2-5***, as it is largely proposing construction in areas that are already dominated by existing hardscapes and buildings. ***Alternative 2*** has the potential for the highest overall tree removal and the greatest number of exceptional tree removals. Additionally, ***Alternatives 2*** and ***3*** have the potential to remove some of the most iconic trees in the Tiffany Loop area. ***Alternative 1*** results in the lowest tree removal numbers as there is comparably little proposed development. Potential project #H-9 in the ***Draft MIMP*** has the potential to impact the largest number of exceptional grove trees depending upon the final placement and size of the building. Please see **Table 3.2-2** below for a summary comparison of the potential number of trees removed under the ***Draft MIMP*** and each alternative. A more detailed discussion on the ***Draft MIMP*** and each alternative follows the table.

Table 3.2-2
Summary of Potential Tree Removals by Alternative

	Total Number of Trees Removed	Total Number of Exceptional Trees Removed (Groves and/or by Size)	Total Number of Trees Removed in All ECAs	Total Number of Trees Removed w/in the Shoreline Buffer Area
Draft MIMP	249	47	153	1
Alternative 1	51	19	35	0
Alternative 2	278	65	166	0
Alternative 3	274	56	169	1
Alternative 4	266	55	158	0
Alternative 5	265	52	164	1

Source: Tree Solutions, 2023

Proposed Action – Draft MIMP

Under the ***Draft MIMP*** three boundary adjustments are proposed in the northwest, east and southeast areas of campus and height increases are proposed in areas within the expanded MIO boundary (see **Figure 2-5**). These expansion areas, as well as the public ROW within these areas, would add approximately 18 acres to SPU's existing MIO boundary for a total MIO boundary area of 84 acres. The tree survey identified approximately 158 trees within the three proposed MIO boundary expansion areas. Of these trees, 102 are estimated to be on private property, which is regulated by SDCI, and the remaining 56 are estimated to be growing partially or fully in the right-of-way, which is regulated by SDOT. Of the 158 total trees, 15 meet the size threshold to be considered as '*exceptional'* trees. Within the MIO expansion areas there are a total of 79 trees within a steep slope ECA, steep slope buffer, or potential slide area ECA; 12 of these trees are located within both a steep slope ECA/steep slope buffer and a potential slide area ECA; and there are 29 trees located within the shoreline area.

Overall, buildout of all planned and potential development projects under the ***Draft MIMP*** would result in approximately 2,259,600 gross sq. ft. (gsf) of new construction. Minus approximately 613,200 sq. ft. of demolition, this would result in approximately 1,712,900 gsf of *net new* development on the SPU campus. Development and potential demolition projects on the SPU Campus would affect existing trees and vegetation on-site as a result of disturbance associated with demolition and new construction activities. Progressive urbanization of the campus would result in the loss of some existing trees/vegetation/habitat that could support wildlife and replacement of landscaped areas.

There are three (3) planned projects and 47 potential projects that could be developed on SPU's campus under the ***Draft MIMP*** (refer to **Figures 2-6** and **2-7**). For new buildings and building additions constructed under the ***Draft MIMP***, it is assumed that trees/plants that are within the building footprints or that are directly adjacent to proposed buildings would require removal[5].

Planned Projects – there are three (3) planned projects (refer to **Figure 2-6** for project locations): an expanded Student Center, demolition of Marston Hall (Marston Site Future Open Space), and renovation of Moyer Hall.

- Construction of the expanded Student Center would potentially require removal of approximately 24 trees, three of which would be classified as '*exceptional*', and 15 of which would be located within a steep slope ECA/steep slope buffer or a potential landslide area ECA.

- Demolition of Marston Hall to create a Future Open Space Area has the potential to impact approximately 8 trees that have canopies that are touching Marston Hall. Tree protection must be in place and demolition would have to occur very carefully to preserve these trees. It is likely that these trees would have to be pruned in order to minimize disturbance during demolition. Additionally, it is also possible that some of these trees would have to be removed during demolition.

- Renovation of Moyer Hall would involve interior renovation of an existing building and would have no substantial impacts to trees.

Potential Projects – there are 47 potential projects (refer to **Figure 2-7** for project numbers and locations): four projects (Buildings EG-4, EG-5, EG-11 and H-7) would be additions to existing

[5] Tree removals listed are an estimate; specific tree removal and retention numbers for each building must be revised based on design and construction plans for each project prior to construction.

buildings and four projects (Buildings EG(R)-1, EG(R)-2, EG(R)-3, and EG(R)-4) would be renovations. The remaining projects would consist of new buildings.

In total, construction of potential projects under the ***Draft MIMP*** would be estimated to result in the removal of approximately 249 trees, 47 of which are '*exceptional*' by size and/or their location within a grove. A total of 153 of the 249 trees proposed for removal are located within a steep slope ECA/steep slope buffer and/or a potential landslide area ECA. One of the trees proposed for removal is located within the shoreline area. Renovation projects would have the least impact on existing trees, likely leading to little or no impact on tree retention. Structured parking areas, surface parking areas, and a number of underground parking structures associated with new buildings are also proposed under the ***Draft MIMP***; these proposed structures/areas would also necessitate the removal of trees (refer to **Figure 2-8** for project references and locations).

Removal of trees/vegetation on campus would result in a reduction of urban wildlife habitat on campus, and the aesthetic, ecological, and intrinsic human health/wellness value associated with this habitat. Each proposed/potential development project that is built on campus would be required to replace trees that are removed and to provide new landscaping on campus, which would help to mitigate the short-term impact of this loss of habitat. However, increased site density will likely result in more challenges for space for larger maturing trees, which are highly encouraged over smaller ornamental varieties.

Please refer to the *Arborist's Report* in **Appendix C** to this Draft EIS for details concerning specific trees that might need to be removed under each potential project.

3.2-3 Impacts of the Alternatives

Alternative 1 – No Action Alternative

This alternative retains the current MIO boundary and proposes two new Education & General buildings that could be developed consistent with the existing MIMP (refer to **Figure 2-12** for building references and locations). Demolition and construction activities associated with these proposed buildings could potentially require the removal of approximately 51 trees, 19 of which are classified as '*exceptional'* due to size and/or location within a grove. A total of 35 of the 51 trees proposed for removal are located within a steep slope ECA/steep slope buffer and/or a potential landslide area ECA. None of the trees proposed for removal is located within the shoreline area. These activities could also potentially impact the overhanging canopy from three integral trees in Tiffany Loop, therefore careful construction methods would be required in order to retain these trees. This alternative would not involve removal of Marston Hall, which would result in less open space in the future in this area.

The ***No Action Alternative*** involves the least tree and habitat removal as little would occur.

Please refer to the *Arborist's Report* in **Appendix C** to this Draft EIS for details concerning specific trees that might need to be removed under this alternative.

Alternative 2 – No Boundary Expansion and No Change to Height Limits

This alternative retains the existing MIO boundary and existing height limitations across campus. Under ***Alternative 2***, additional buildings would need to be constructed within the current MIO boundary in order to accommodate the same number of students, faculty, and staff and the same

amount of campus development as that proposed as part of the ***Draft MIMP*** (see **Figure 2-13**). As a result, potential impacts to trees and habitat under this alternative would be greater than those described under the ***Draft MIMP*** due to the fact that there would be a larger number of buildings constructed within the existing MIO boundary under ***Alternative 2***. For example, under this alternative, buildings are proposed along the southeastern, northeastern, and western edges of Tiffany Loop, which would require the removal of some of the largest and most prominent trees on the campus. In total, demolition and construction activities associated with planned and potential projects under ***Alternative 2*** could potentially require the removal of an estimated 278 trees, of which 65 are '*exceptional'* by size and/or location within a grove. A total of 166 of the 278 trees proposed for removal are located within a steep slope ECA/steep slope buffer and/or a potential landslide area ECA. None of the trees proposed for removal is located within the shoreline area. Further, with the addition of so many extra buildings within the current MIO boundary under this alternative, there would be less open space in the areas near 6th Avenue W north and south of W Dravus Street, near central campus west of Tiffany Loop, and near W Cremona Street in the eastern portion of campus, which would also result in fewer opportunities to plant new trees on campus as compared to that provided by the ***Draft MIMP***.

Alternative 2 involves the most tree and habitat removal, more than that proposed under the ***Draft MIMP***, as a greater number of buildings are planned for construction on campus under this alternative.

Please refer to the *Arborist's Report* in **Appendix C** to this Draft EIS for details concerning specific trees that might need to be removed under this alternative.

Alternative 3 – Boundary Expansion and No Change to Height Limits in Existing MIO

Under ***Alternative 3,*** three boundary adjustments would occur in the northwest, east and southeast areas of campus, but the existing height limitations across the existing campus are retained. Under this alternative, far fewer additional buildings would need to be constructed within the expanded MIO boundary as compared to that under ***Alternative 2*** (see **Figure 2-14**). As a result, potential impacts to trees under this alternative would be similar to those described under the ***Draft MIMP*** but less than those described under ***Alternative 2***. For example, under this alternative, buildings would be provided only along the eastern and western edges of Tiffany Loop, which would still require the removal of some trees in the Loop, but fewer of these trees would need to be removed. In total, demolition and construction activities associated with planned and potential projects under ***Alternative 3*** could potentially require the removal of an estimated 274 trees, of which 56 are '*exceptional'* by size and/or location within a grove. A total of 169 of the 274 trees proposed for removal are located within a steep slope ECA/steep slope buffer and/or a potential landslide area ECA. One of the trees proposed for removal is located within the shoreline area. Further, with the addition of several extra buildings on campus under this alternative, there would be less open space in the areas near 6th Avenue W north and south of W Dravus Street, near central campus west of Tiffany Loop, and near W Cremona Street in the eastern portion of campus, which would also result in fewer opportunities to plant new trees on campus as compared to that provided by the ***Draft MIMP***.

Alternative 3 involves a similar amount of tree and habitat removal as that proposed under ***Alternative 2***, and more than that proposed under the ***Draft MIMP***, as a greater number of buildings are also planned for construction on campus under this alternative.

Please refer to the *Arborist's Report* in **Appendix C** to this Draft EIS for details concerning specific trees that might need to be removed under this alternative.

Alternative 4 – No Boundary Expansion and Increased Height Limits

This alternative retains the existing MIO boundary, but height increases are proposed in some areas within the existing campus. Under this alternative, far fewer additional buildings would need to be constructed within the current MIO boundary as compared to that under ***Alternative 2*** (see **Figure 2-15**). As a result, potential impacts to trees under this alternative would be similar to those described under the ***Draft MIMP*** but less than those described under ***Alternative 2***. For example, there are no buildings proposed near Tiffany Loop, so removal of these iconic campus trees would not be required under this alternative. In total, demolition and construction activities associated with planned and potential projects under ***Alternative 4*** could potentially require the removal of an estimated 266 trees, of which 55 are '*exceptional'* by size and/or location within a grove. A total of 158 of the 266 trees proposed for removal are located within a steep slope ECA/steep slope buffer and/or a potential landslide area ECA. None of the trees proposed for removal is located within the shoreline area. Further, with the addition of several extra buildings on campus under this alternative, there would be less open space in the areas near 6th Avenue W north and south of W Dravus Street, and near W Cremona Street in the eastern portion of campus, which would also result in fewer opportunities to plant new trees on campus as compared to that provided by the ***Draft MIMP***.

Alternative 4 involves slightly less tree and habitat removal than that proposed under ***Alternatives 2*** and ***3***, but still more than that proposed under the ***Draft MIMP***, as a greater number of buildings are also planned for construction on campus under this alternative.

Please refer to the *Arborist's Report* in **Appendix C** to this Draft EIS for details concerning specific trees that might need to be removed under this alternative.

Alternative 5 – Boundary Expansion, Increased Height and No Street/ Alley Vacations

Similar to that proposed under the ***Draft MIMP***, under ***Alternative 5*****,** three boundary adjustments would be provided in the northwest, east and southeast areas of campus, height increases are proposed in areas within the expanded MIO boundary, but existing streets and alleys proposed for vacation in the ***Draft MIMP*** are retained in their current state. Under this alternative, far fewer additional buildings would need to be constructed within the MIO boundary as compared to that under ***Alternatives 2-4*** (see **Figure 2-16**). As a result, potential impacts to trees under this alternative would be similar to but slightly greater than those described under the ***Draft MIMP***. In total, demolition and construction activities associated with planned and potential projects under ***Alternative 5*** could potentially require the removal of an estimated 265 trees, of which 52 are '*exceptional'* by size and/or location within a grove. A total of 164 of the 265 trees proposed for removal are located within a steep slope ECA/steep slope buffer and/or a potential landslide area ECA. One of the trees proposed for removal is located within the shoreline area. Further, with the absence of ROW vacations under this alternative, there would be less open space in the areas near 6th Avenue W south of W Dravus Street, near central campus west of Tiffany Loop, and near W Cremona Street in the eastern portion of campus, which would also result in fewer opportunities to plant new trees on campus as compared to that provided by the ***Draft MIMP***.

Alternative 5 involves slightly more tree and habitat removal than that proposed under the ***Draft MIMP***, as far fewer additional buildings would need to be constructed within the MIO boundary as compared to that under ***Alternatives 2-4***.

Please refer to the *Arborist's Report* in **Appendix C** to this Draft EIS for details concerning specific trees that might need to be removed under this alternative.

3.2-4 Mitigation Measures

- Site planning around exceptional trees would follow the requirements outlined in SMC 25.11.050, 25.11.070, 25.11.080 and 25.11.090, which outlines replacement requirements for exceptional trees and trees over 24 inches that are removed for development.

- Site planning around trees in environmentally critical areas (ECAs) would follow the requirements outlined in SMC 25.09.070, which requires mitigation sequencing at project review. Mitigation for lost tree canopy in developed areas of the site could likely include restoration and planting in the steep slope areas.

- All pruning required for construction clearance must be performed by an ISA certified arborist conforming to current ANSI A300 standards.

- Prior to construction the exact locations of trees would be surveyed, and plans would be reviewed by an arborist to determine impacts to trees, final retention numbers, and locations with respect to specific ECAs. It is possible that utilities, demolition, grading, and revised building footprints could have a considerable impact on overall tree retention. Considering tree retention throughout the design and development phase would lead to an increase in overall tree retention, avoid unnecessary tree removal, and ensure that trees with high retention value can be protected.

- Alternative designs that would better maximize tree retention and urban wildlife habitat by shifting proposed buildable areas around existing trees/groves on campus should be studied further in the ***Draft MIMP***.

- The ***Draft MIMP*** could include "Tree Preservation" Design Guidelines or develop tree standards/guidelines regarding construction activities and trees, to ensure that trees with high retention values and trees that are in good condition/health be considered for retention and protection, as well as maximizing mature tree retention around the perimeter of the site, within groves, and within ECAs (steep slope areas especially).

- When developing the campus, the locations of groves in particular, individual exceptional trees, and other trees of all sizes should be taken into consideration to ensure a diversity of size, age, and species on campus.

- Increasing tree species diversity is important to urban forest resiliency. New plantings should strive to increase diversity throughout the campus and should avoid bigleaf maple (Acer macrophyllum), red maple (Acer rubrum), and Leyland cypress (Cuprocyparis leylandii) species since they already make up the majority of tree species on campus. Red maple can be an especially problematic species in urban areas due to a large concentration of surface and girdling roots, as well as narrow branch unions that are more prone to failure.

- The exceptional grove to the east of Potential Project H-9 in the ***Draft MIMP*** should be taken into consideration when finalizing the design for the proposed building.

- Each proposed/potential development project that is built on campus would be required to replace trees that are removed and to provide new landscaping on campus, which would help to mitigate the short-term impact of this loss of habitat.

3.2-5 Significant Unavoidable Adverse Impacts

As indicated in this section, certain existing trees and/or habitat on campus could be removed or affected by adjacent ground disturbance during construction. With implementation of proposed mitigation measures noted above, no additional significant unavoidable adverse impacts to plant species on-site or proximate to the site are anticipated under the ***Draft MIMP***.

Under ***Alternative 2*** and ***Alternative 3***, buildings are proposed along the southeastern, northeastern, and western edges of Tiffany Loop, which would require the removal of some of the largest and most prominent trees on the campus.

3.3 Cultural Resources

This section of the Draft EIS describes the existing cultural resources conditions on the SPU campus and evaluates the potential impacts from the ***Draft MIMP*** and EIS alternatives. This section is based on a *Cultural Resources Discipline Report* (Perteet, 2023, on-file with City of Seattle).

Policy Context

The Seattle Municipal Code (SMC) contains specific provisions that describe the scope of the SEPA analysis for sites with potential archaeological significance. Relevant policies from SMC 25.05.675 are provided below:

H.2. e. Historic Preservation

> *On sites with potential archaeological significance, the decisionmaker may require an assessment of the archaeological potential of the site. Subject to the criteria of the overview policy set forth in Section 25.05.665, mitigating measures that may be required to mitigate adverse impacts to an archaeological site include, but are not limited to:*
>
> *1) Relocation of the project on the site;*
>
> *2) Providing markers, plaques, or recognition of discovery;*
>
> *3) Imposing a delay of as much as 90 days (or more than 90 days for extraordinary circumstances) to allow archaeological artifacts and information to be analyzed; and*
>
> *4) Excavation and recovery of artifacts.*

This Historic Preservation policy is clarified by SDCI Director's Rule 2-1998 (DR 2-98), which describes how the policy is applied to sites and when and how an assessment of archaeological resources should be considered.

Regulatory Context

In addition to City of Seattle policies, several Washington state laws address archaeological sites and Native American burials. The Archaeological Sites and Resources Act (RCW 27.53) prohibits knowingly excavating or disturbing prehistoric and historic archaeological sites on public or private land. The Indian Graves and Records Act (RCW 27.44) prohibits knowingly destroying American Indian graves. In the event of inadvertent disturbance through construction or other activities, human remains and artifacts from American Indian graves must be re-interred under supervision of the appropriate Indian Tribe. Additionally, RCW 42.56.300 exempts all records, maps, or other information identifying the location of archaeological sites, historic sites, artifacts, or sites of traditional, ceremonial, or social uses and activities of Indian Tribes from disclosure in order to prevent the looting or depredation of sites.

3.3-1 Existing Conditions

Natural Environment

Geology and Geomorphology

The SPU campus lies in the Puget Lowland, an elongated trough and structural depression oriented on a north-south axis and bordered by the Cascade Mountains in the east and the Olympic Mountains in the west. The overall topography and surficial geology of the Puget Lowland was primarily shaped by multiple southward advances of continental glaciations during the Pleistocene epoch (1.8 million to 10,000 years ago).

The modern Puget Lowland is characterized by undulating uplands that are interrupted by large ice-carved troughs. The largest troughs are now occupied by the marine waters of the Puget Sound and freshwater lakes, including Lake Washington and Lake Sammamish. Hills in the project vicinity contain Vashon glacial sediments, such as till deposited directly by ice, outwash deposited by meltwater, glaciolacustrine sediment deposited in former lakes, and undifferentiated ice contact drift. Older glacial and interglacial deposits are also present below the Vashon sediment. Glacial deposits compose Fremont, Queen Anne, and Capitol Hill, and Lake Union is within a basin that lies between these hills. Holocene-aged lacustrine sediments are also present along the shoreline of Lake Union and may also remain within or near the proposed MIO boundary.

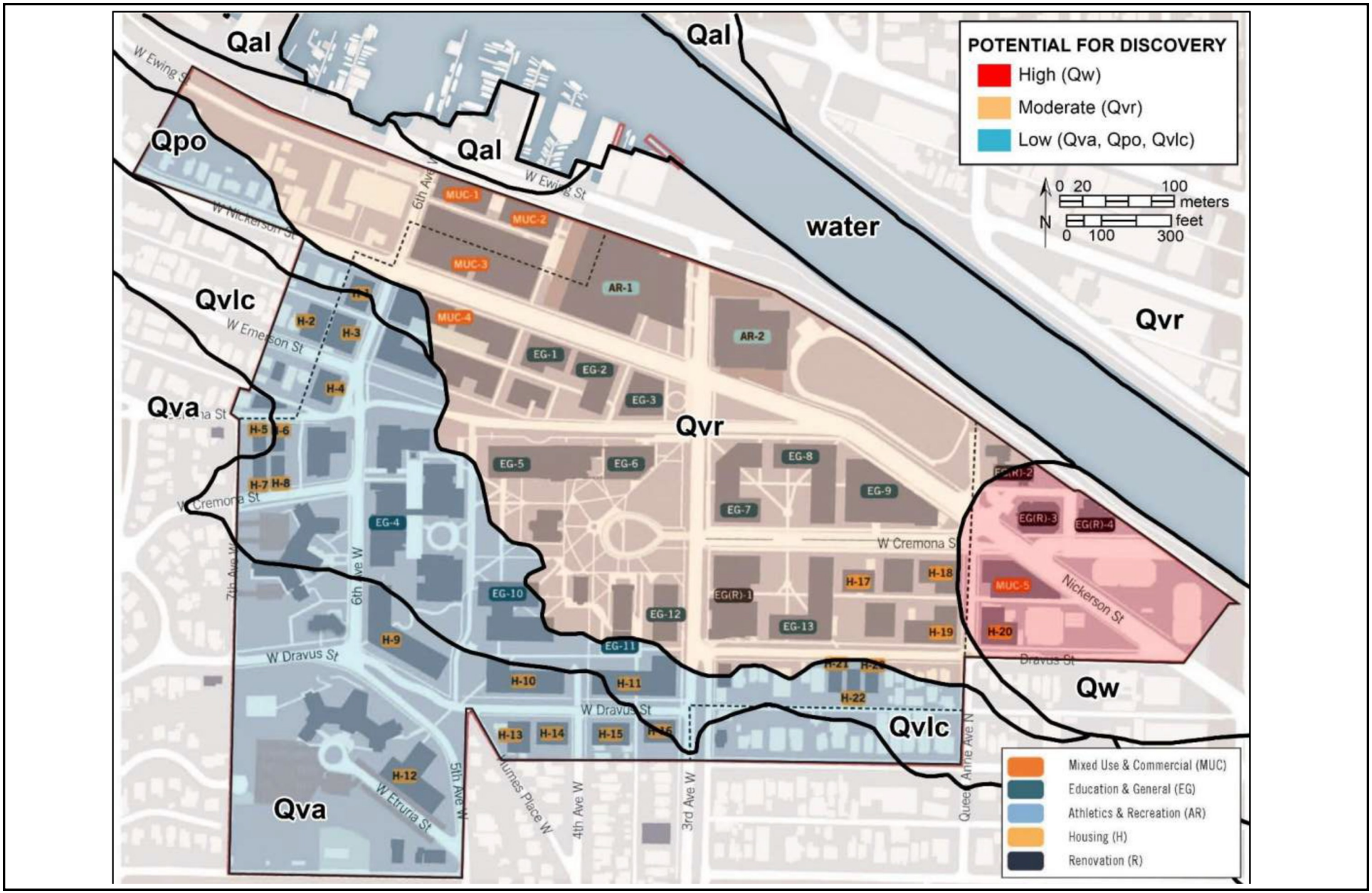
The proposed SPU MIO boundary spans two landforms: the lower portion of the northern slope of Queen Anne Hill and a narrow, relatively flat lowland area between Queen Anne Hill and the Lake Washington Ship Canal, both of which have been modified in the post-contact period. For example, Queen Anne Hill formed as a glacial drumlin with a steep northern slope and a more gradual southern slope - slope modifications to Queen Anne Hill have altered the topography of much of the northern slope with construction of retaining walls, as well as cutting and filling to create buildable development lots.

Sediment and Soils

Soils of the SPU campus are mapped as urban land-Alderwood complex with slopes ranging from 0% to 35%. In an urban land context these soils may be overlain by fill or soil profiles may be truncated from previous cuts. Five surface geology units are mapped in the proposed MIO boundary area including three glacial units, one interglacial unit, and one Holocene unit (see **Figure 3.3-1**).

Flora and Fauna

At present, the SPU campus is in an urban setting, but in the pre-contact and early post-contact periods the native vegetation in the Seattle area was typically western hemlock forest, which is dominated by coniferous Douglas-fir, western hemlock, and western red cedar. Deciduous trees, predominantly alder and big-leaf maples, are also common, especially in disturbed situations. Forest understory communities follow a moisture gradient and forests generally consist of dense shrubs and herbaceous plants, including sword fern, bracken fern, salal, Oregon grape, oceanspray, blackberry, red huckleberry, and red elderberry. At the end of the nineteenth century,



Source: Perteet, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 3.3-1

Potential for Archaeological Discovery

the once densely forested environment was rapidly transformed when the lowlands and the hills above Lake Union were logged.

Wildlife provided a significant source of food, hide, and bone for Seattle's Native people and would also have been important to early settlers in the area. Elk, black-tailed deer, bear, and mountain lion, and smaller animals, such as rabbit, raccoon, red fox, porcupine, squirrel, coyote, weasel, and river otter were all found in western Washington. Prior to urban development, Queen Anne Hill was known as a good bear hunting location. Marshes and wetlands provided habitat for beaver and muskrats and a migration corridor for ducks, geese, and other waterfowl. Fish and shellfish were particularly important to Native Americans in the Pacific Northwest who relied on Chinook, coho, and sockeye salmon, as well as freshwater fish, such as bulltrout, suckers, Dolly Varden, sculpin, and numerous other fishes that were found in Lake Union, Lake Washington, and nearby rivers and streams. The tideflats in Elliott Bay and Shilshole Bay supported a variety of shellfish, and saltwater fish, and harbor seal, sea lions, and porpoises were found in the coastal waters.

Cultural Environment

Prehistory

A small number of isolated fluted projectile points characteristic of the period between 12,000 and 11,000 BP have been found in western Washington. Early to mid-Holocene assemblages (approximately 8000 to 5000 BP), termed "Olcott," are typically found in upland settings on glacial till or inland foothill valleys away from tidal areas, where human occupation likely became established as landforms stabilized during the middle Holocene. Beginning about 5000 BP, sites in the Puget Sound region show an increased population with more complex socioeconomic organization. Ground stone and tools of bone, antler, and shell associated with fishing and plant processing become more common, and toolkits became increasingly diversified. The developing importance of woodworking in this period is evident in the presence of tools, such as adzes, wedges, and mauls. Sites from about 5000 BP to 2500 BP on or near the coast often include extensive midden deposits containing the remains of shellfish, fish, large and small mammals, and birds.

The Late Period, from about 2500 BP until widespread Euro-American contact in the early nineteenth century, is marked by trends, such as full-scale development of marine-oriented cultures on the Pacific coast, the presence of a mixed marine and terrestrial economy along the shores of Puget Sound, and further development of an inland terrestrial mammal and riverine fishing tradition. Favored areas for settlement and resource gathering were littoral, riverine, and estuarine locations.

Ethnography and Ethnohistory

The SPU campus is within the traditional territory of the *Shilshoolabsh* or Shilshole whose main settlement was on Salmon Bay[1]. The Shilshole are considered a band of the *Dxʷdəwʔabš* or "People of the Inside", now known as the Duwamish Tribe, Lushootseed-speakers who made their villages along the shorelines of Lake Union, Lake Sammamish, Lake Washington, Elliott Bay, Shilshole Bay, and the Duwamish, Black, and Cedar Rivers in present-day Seattle and

[1] Salmon Bay is a portion of the Lake Washington Ship Canal, which passes through the city of Seattle, linking Lake Washington to Puget Sound, lying west of the Fremont Cut. It is the westernmost section of the canal and empties into Puget Sound's Shilshole Bay.

Renton. Duwamish groups were linked with neighboring peoples by marital ties and shared use of some resource areas, including the Suquamish to the west, Snohomish to the north, Stillaguamish to the northeast, Snoqualmie to the east, and White and Green River groups to the south whose descendants are known collectively today as the Muckleshoot.

Native residents lived in permanent villages of cedar plank houses during the winter and traveled to seasonal camps in the spring, summer, and fall to fish, hunt, and gather shellfish and plants. In winter villages, extended families lived in cedar plank homes with one large living space subdivided by cedar mats. During spring, summer, and fall people hunted deer, elk, black bear, and small game in interior and upland areas; gathered plant resources, including greens, roots, bulbs, berries, and nuts; and harvested marine and riverine resources, especially salmon and shellfish. A variety of specialized canoe types were developed for travel on rivers, lakes, and in salt water. Groups would periodically congregate at fishing sites, shellfish beds, and root-gathering areas, such as Shilshole Bay and small creeks in the project vicinity, which provided a wealth and variety of resources. Fish were taken using weirs, dip nets, traps, and spears and dried before being transported back to the central village for storage. Botanical resources served dietary, medicinal, and utilitarian needs and played a primary role in the everyday lives of Native Americans. Hunting was conducted primarily in the late summer and fall and often in conjunction with berry picking. Terrestrial mammals, such as elk, deer, bear, raccoon, and beaver were among the most economically important game animals, and birds, including a variety of waterfowl species, were also captured with the aid of nets and spears.

Settlers reported Native people fishing, gathering clams, and harvesting berries at Salmon Bay in the summer in the 1850s, seasonal camps were common around the perimeter of Queen Anne Hill, and people hunted on the hill itself. Twentieth century ethnographers recorded native names for several locations in the project vicinity. What is now the Fremont cut, bordering the SPU campus on the north, was a creek prior to the construction of the Lake Washington ship canal. Settlers named it Ross Creek, but Waterman (1922) recorded its Lushootseed name as *Gwa'xwopl*, which translated as "outlet." This stream had runs of pink, chum, chinook, and coho salmon.

In the late eighteenth century, the arrival of Euro-American settlers ushered in a period of rapid cultural change and demographic shifts in the Native American population of the region. Smallpox and other epidemic diseases often affected native populations even before direct contact. The Duwamish were signatories to the Treaty of Point Elliot in 1855, which established government-to-government relationships between the signatory tribes and the United States and guaranteed hunting and fishing rights and reservations to the Tribes in exchange for their ceded lands. In 1865, Seattle passed an ordinance banning Native Americans from living in the city, displacing Duwamish communities. One year later, prominent leaders of Seattle's settler community successfully petitioned Congressman Arthur Denny.to block the establishment of a Duwamish reservation along the Black River. Despite the deliberate attempts of Seattle settlers to force them out, some Shilshole people remained in their traditional lands and some families remained in the area until the construction of the Hiram M. Chittenden locks. Intermarriage also led to a cluster of mixed-race families living in Ballard. Today, many people of Duwamish descent live among the Muckleshoot, Snoqualmie, Suquamish, and Tulalip Tribes as a result of reservations established by treaties concluded with the US Government in 1855–1856, while other Duwamish peoples continue to seek federal recognition.

Euroamerican History

Permanent Euro-American settlement of Seattle commenced in 1851, when David Denny traveled from Portland to Olympia and then sailed up Puget Sound, landing at the mouth of the Duwamish River. His brother Arthur Denny soon followed with a larger party of settlers and landed at Alki on November 13, 1851. The next year most of the party relocated to the east, filing claims under the Oregon Donation Act in what is now the downtown area of Seattle. Among them, David Denny and Thomas Mercer claimed land on the west shore of Lake Union in 1866, southeast of the SPU campus and established homes there.

Lands including portions of the SPU campus left the public domain through claims under the Oregon Donation Act of 1850. John Ross settled lands including the northwest corner of the SPU campus in 1853 and a claim was granted in 1877. The 1856 General Land Office Survey map depicts Ross's home along the creek just north of the proposed northwest boundary expansion area with cultivated fields located within the expansion area. This claim included the eastern campus area including proposed east and southeast boundary expansion areas. The Strickler home is also depicted adjacent to the SPU campus on the north with cultivated fields extending south into the campus area. The project vicinity was still predominately a forested wilderness when Ross and Strickler settled their claims, with lands southeast of campus described as rolling with second rate timber of predominately hemlock and cedar.

Seattle Pacific University was founded as Seattle Seminary in 1891 by Alexander Beers and his wife Adelaide. That year, Nils B. Peterson offered five acres for the founding of the seminary in the community of Ross, then a suburb of Seattle, and construction of the first building began on October 29, 1891. The school opened in 1893. The original building, Alexander Hall, still stands in the center of campus. By 1930 there were six campus buildings.

By 1950 there were several new buildings south of Alexander Hall. Campus development also expanded onto the steeper slopes with the construction of residence halls in the 1960s.

Potential for Archaeological Discovery

Geological maps divide the SPU campus into five zones with varying potential for preserved archaeological sites to be encountered during excavation for planned and proposed projects under the ***Draft MIMP***. Review of geotechnical borehole logs is generally consistent with mapped geological units and provides a basis for estimating the depths of different deposits. Based on geological maps, the proposed MIO campus boundary can be divided into zones of high, moderate, and low potential for intact buried archaeological sites (**Figure 3.3-1**).

High Potential

Research indicates that the SPU campus has been accessible for human use for several thousand years, and that humans have been present in the region for at least 11,000 years. It has also shown that the campus lies in close proximity to environments, resources, travel corridors, and settlement areas that have long been valued and used by local Native Americans. Archaeological sites are most likely to be encountered in undisturbed areas where Holocene deposits are present and in proximity to water.

Within the existing SPU campus, there are no mapped Holocene-age surface deposits, but recent alluvium was recorded in several. Holocene peat deposits are mapped to the north between W

Bertona and the ship canal in the proposed East MIO boundary. This area, therefore, has relatively high-potential for intact pre-contact period archaeological sites. The Holocene deposits developed along Ross Creek before it was removed during ship canal construction and are in the vicinity of the former Ross home. This portion of the SPU campus is therefore also considered to have the highest potential for containing intact, contact and post-contact age deposits. If present, potentially significant archaeological deposits would most likely be encountered below fill in these Holocene deposits, within the area mapped as Qw, although if present, precontact sites may be deeply buried.

Moderate Potential

The area mapped as Qvr (recessional glacial outwash) is generally considered to have moderate potential for intact, buried archaeological sites. Topography within this zone is relatively level to undulating with a gradual increase in slope from north to south. Fill was only identified in 30% of geotechnical borehole logs from this area. The 19th century campus area, which is still the heart of campus, is entirely within the Qvr area. Most of this zone is classified as high risk in the DAHP predictive model, likely because of the accessible topography and proximity to the historical Ross Creek. However, the lack of Holocene deposition based on previous geotechnical investigations reduces the likelihood that archaeological sites are present. Geotechnical sampling is not even across this zone so Holocene deposits may be present in some areas either at the surface or between fill and recessional outwash. Fill deposits also have potential to contain cultural material from the post-contact period and features could intrude into the upper glacial deposit.

In 1891, when Alexander Hall was built, it was probably not yet on a City Sewer system, but it is not known whether there was a septic system or privies. One or more privy pits intruding into the glacial deposit could be encountered in the central campus area, and if present, would be potentially eligible for listing in the NRHP.

A small portion of the northwest campus is mapped as Qpo, a nonglacial deposit of Pleistocene age consisting of very dense sand. A boring in this area is consistent with this mapping and did not identify Holocene deposits between fill and the sand deposit. Qpo deposits would have very low potential for archaeological sites; however, a lack of Holocene deposition cannot be firmly established from a single borehole, this area is considered to have moderate potential pending verification of the geologic mapping through subsurface investigations whether geotechnical or archaeological.

Low Potential

South of the Qvr, the steep slopes of Queen Anne Hill are mapped as Qvlc and Qva, types of advance outwash deposits. Due to the combination of glacial deposits, steep slopes, and areas of extensive regrading for road and house construction, these zones are considered to have low potential for intact buried archaeological sites. Although the area was certainly used by people in both the pre-and post-contact eras, geotechnical borings did not encounter Holocene-age deposits. Geologic mapping also indicates mass-wastage deposits in this area reflecting the instability of these slopes prior to the construction of terraces and retaining walls in the 20th century. The conditions in this zone would not have been conducive to preservation of archaeological sites. If present, sites would most likely be isolated artifacts in disturbed contexts or concentrations of domestic debris within fill.

3.3-2 Impacts of the Proposed Action and Alternatives

Specific recommendations relative to each planned and potential project are identified in the Archaeology Discipline Report that is on-file with the City of Seattle and with DAHP.

Draft MIMP (Proposed Action)

Under the ***Draft MIMP,*** the likelihood of encountering resources would depend on the project location and depths of excavation. Although no sites have been recorded in the east MIO boundary expansion area or the northeast portion of campus, these areas have a High Potential for buried archaeological sites. Archaeological monitoring of geotechnical field investigations, archaeological borings, or other mechanical excavation methods may be necessary to provide adequate opportunity to identify deeply buried sites in areas of deep fill, associated with mid to late 20th century residential use. Fill was observed in most geotechnical borings to depths ranging from 3 to 12.5 feet bs.

Planned Campus Development

Seattle Pacific University proposes three planned projects, which include construction of a new campus building – the Student Center, demolition of an existing building, and renovation of another building (refer to **Chapter 2** for additional details). Specific recommendations for each planned project are outlined in the Cultural Resources report. In general, an archaeologist should review project plans and data from geotechnical investigations at the time of the development proposal, and prepare a Monitoring and Inadvertent Discovery Plan (MIDP) or an Inadvertent Discovery Plan (IDP) prior to ground disturbance.

Potential Campus Development

Seattle Pacific University has identified approximately 47 potential long-term development projects, including 41 located within the existing MIO boundaries and six within the proposed MIO boundary expansion areas.

The central campus area is generally considered to have Moderate Potential for containing archaeological resources. Based on current information, it is expected that most projects could proceed with spot-check monitoring to confirm the absence of Holocene deposits between fill and glacial, and an IDP. An IDP without monitoring may be appropriate for projects in areas where fill and Holocene deposits are both absent or where recent construction has already disturbed historic fill.

The south/southwest portion of campus is largely identified as a Low Potential area for intact archaeological resources. Projects that occur in these areas are generally recommended to proceed under an IDP prepared by a professional archaeologist prior to ground disturbance.

No pre-contact archaeological sites have been identified on the SPU campus. One post-contact period site has been recorded within the existing SPU MIO boundary; this site is within the footprint of a potential project. Adverse effects to the archaeological site could be prevented by avoiding ground disturbance within the site boundary. If avoidance is not possible, a DAHP-issued permit may be required for the project, along with archaeological monitoring for site documentation as mitigation.

Alternative 1 – No Action Alternative

Under the **No Action Alternative,** new development and demolition would occur in areas of campus identified as having Moderate Potential and Low Potential for containing archaeological resources. Depending on the project location, an IDP or a project specific MIDP could be implemented to manage potential adverse impacts to cultural resources, should they be present. Overall, the extent and potential for impacts would be less than the **Draft MIMP** in these areas because less new development and ground disturbance would occur (two planned projects and no potential projects).

Because no boundary expansion on the east side of the campus would occur, High Potential areas would not be affected under the **No Action Alternative**.

The one post-contact period site recorded within the existing SPU MIO boundary also would not be expected to be affected.

Alternative 2 – No Boundary Expansion and No Increase to Height Limits

Under **Alternative 2,** additional development and demolition would largely occur in areas of campus identified as having Moderate Potential and Low Potential for containing archaeological resources. Overall, there would be a higher potential to impact archaeological resources present in Moderate Potential areas of the campus as compared to the **Draft MIMP**, because a greater number of buildings would need to be developed in these areas. However, without the boundary expansion on the east side of the campus, High Potential areas expected to contain archaeological resources would be largely avoided under **Alternative 2**.

Impacts to the recorded post-contact period site that has been recorded on the campus would be the same as described under the **Draft MIMP**.

Alternative 3 – Boundary Expansion and No Change to Height Limits in Existing MIO

Under **Alternative 3,** impacts to cultural resources would be similar to but slightly greater than the **Draft MIMP**. This is because there would be a higher potential to impact archaeological resources present in Moderate Potential areas of campus as compared to the **Draft MIMP**, due to a greater number of buildings needing to be developed in these areas.

Impacts to the recorded post-contact period site that has been recorded on the campus would be the same as described under the **Draft MIMP**.

Alternative 4 – No Boundary Expansion and Increased Height Limits

Under **Alternative 4**, new development and demolition would largely occur in areas of campus identified as having Moderate Potential and Low Potential for containing archaeological resources. Overall, there would be a higher potential to impact archaeological resources present in Moderate Potential areas of the campus as compared to the **Draft MIMP**, because a greater number of buildings would need to be developed in these locations. However, without the boundary expansion on the east side of the campus, most of the High Potential areas expected to contain archaeological resources would be avoided under **Alternative 4**.

Impacts to the recorded post-contact period site that has been recorded on the campus would be the same as described under the ***Draft MIMP***.

Alternative 5 – Boundary Expansion, Increased Height Limits and No Street Vacations

Under ***Alternative 5***, impacts to archaeological resources would be similar to but slightly greater than the ***Draft MIMP***, as a greater number of buildings would need to be built in Moderate Potential areas as compared to the ***Draft MIMP***.

Impacts to the recorded post-contact period site that has been recorded on the campus would be the same as described under the ***Draft MIMP***.

3.3-3 Mitigation Measures

Measures Applicable to High Potential Areas and some Moderate Potential Areas

The following recommendations apply to projects in the area mapped as Qw and in locations mapped as Qvr where Holocene deposits were observed in geotechnical borings.

- Archaeological survey with subsurface testing is recommended prior to ground disturbance for projects with the potential to encounter previously undisturbed Holocene deposits. Archaeological monitoring of geotechnical field investigations, archaeological borings, or other mechanical excavation methods may be required to provide adequate opportunity to identify deeply buried sites in areas of deep fill.

- Affected Tribes should be notified in advance of archaeological field investigations and afforded the opportunity to observe or participate.

- If archaeological sites are recorded during survey, the Department of Archaeology and Historic Preservation (DAHP) and affected Tribes should be consulted to determine appropriate site treatment.

- Projects impacting recorded sites should be designed to avoid ground disturbance within the site boundary. If avoidance is not possible, the project would require an Archaeological Site Alteration and Excavation Permit from the DAHP prior to any ground disturbance within the site boundary – along with archaeological monitoring for site documentation.

Measures Applicable to Moderate Potential Areas

The following recommendations apply to projects in the area mapped as Qvr.

- During the design phase, a professional archaeologist should review project plans and recent geotechnical reports produced for the project to determine if an MIDP or an IDP is needed:

- An MIDP should be prepared by a professional archaeologist prior to ground disturbance and include a provision for notifying affected Tribes in advance of ground disturbance and inviting observation by a Tribal representative if desired. The MIDP should also establish monitoring methods and protocols to be followed in the event of an inadvertent discovery, including notification of affected Tribes and the DAHP: or

- An IDP should be prepared by a professional archaeologist prior to ground disturbance and should establish procedures and protocols to be followed in the event that construction excavations encounter potentially significant archaeological material.

- Construction crews involved in ground disturbance should be briefed on the MIDP in a tailgate at the beginning of the project, prior to beginning ground disturbing work.

- An IDP without monitoring may be appropriate for projects in areas where fill and Holocene deposits are absent or where recent construction has already disturbed historic fill.

Measures Applicable to Low Potential Areas

The following recommendations apply to projects in the areas mapped as Qva or Qvlc.

- Projects in these areas are recommended to proceed under an IDP. The IDP should be prepared by a professional archaeologist prior to ground disturbance and should establish procedures and protocols to be followed in the event that construction excavations encounter potentially significant archaeological material.

- Construction crews involved in ground disturbance should be briefed on the IDP in a tailgate at the beginning of the project, prior to beginning ground disturbing work.

3.3-4 Significant Unavoidable Adverse Impacts

With implementation of the identified mitigation measures noted above, no significant unavoidable adverse cultural resources-related impacts are anticipated.

3.4 Land Use

This section of the Draft EIS describes the existing land use patterns on the SPU campus and vicinity and evaluates the potential impacts from implementation of the ***Draft MIMP*** or EIS Alternatives. Existing and proposed land use patterns and related impacts are discussed under sections 3.4-1 to 3.4-5; section 3.4-6 provides a discussion of the relationship to the Comprehensive Plan. The emphasis of this analysis is on the MIO expansion areas and resulting impacts on surrounding uses – this may include potential impacts associated with increasing the capacity for institutional uses by expanding the SPU MIO district, including incompatibility with the surrounding residential uses, influence on the surrounding land use pattern and availability of commercial and industrial zoned land, and creation of inconsistencies with the adopted goals and policies of the Seattle Comprehensive Plan.

Policy Context

The Seattle Municipal Code (SMC) contains specific provisions that describe the scope of the SEPA analysis for land use patterns and consistency with applicable plans, policies, and regulations. Relevant policies from SMC 25.05.675 are provided below:

J.2. Land Use

Policies

a. *It is the City's policy to ensure that proposed uses in development projects are reasonably compatible with surrounding uses and are consistent with any applicable, adopted City land use regulations, the goals and policies set forth in the Land Use Element, Growth Strategy Element, and Shoreline Element of the Seattle Comprehensive Plan for the area in which the project is located.*

b. *Subject to the overview policy set forth in Section 25.05.665, the decisionmaker may condition or deny any project to mitigate adverse land use impacts resulting from a proposed project or to achieve consistency with the applicable City land use regulations; the goals and policies set forth in the Land Use Element, Growth Strategy Element, and Shoreline Element of the Seattle Comprehensive Plan; the procedures and locational criteria for shoreline environment redesignations set forth in Sections 23.60A.060 and 23.60A.220, respectively; and the environmentally critical areas policies.*

3.4-1 Existing Conditions

Land Use Patterns

Campus Land Uses

The Seattle Pacific University (SPU) campus is located on the north slope of Queen Anne Hill and is generally situated at the intersection of W. Nickerson St. and 3rd Ave. W. The SPU campus currently contains approximately 66-acres[1] within the Major Institution Overlay (MIO) boundary, of which approximately 44 acres (66%) are owned by SPU, privately-owned properties total roughly 5 acres (7%), and the remaining approximately 17 acres (27%) consists of public right-of-way (see **Figure 2-3**). The SPU campus contains a variety of buildings, landscaped open spaces, and paved parking areas. Existing University land uses with the MIO boundary include

[1] Within SPU's Major Institution Overlay (MIO) boundary, the University currently owns an area of approximately 44 acres.

academic and support facilities ranging from classrooms, libraries, and offices to residence halls and parking facilities (see **Figure 3.4-1**). Non-University owned land uses on the campus include residential properties located along the north and south side of W Dravus Street and the south side of W Cremona Street, the First Free Methodist Church and The Fine Center at the corner of W Dravus Street and 3rd Avenue W, a Shell gas station at the corner of W Cremona Street and W Nickerson Street, and several single-family residential properties in the south and southwest portion of campus (**see Figure 2-3**).

The SPU campus contains a substantial amount of open space that is used by students, faculty, staff and the general public including Wallace Athletic Field and track adjacent to the Royal Brougham Pavilion, Martin Square, 5th Avenue Mall, and Emerson Street Triangle. The campus lawns, plazas, and gardens are utilized as well, and especially prominent among these areas is Tiffany Loop, a large lawn area surrounded by mature trees in the central campus area. Open spaces adjacent to the campus include the West Ewing Mini Park and Ship Canal Trail to the north, and the Mount Pleasant Cemetery and the Queen Anne Bowl Playfield/David Rodgers Park to the south. Both campus users and neighborhood residents utilize pedestrian and bicycle routes within the campus to reach West Ewing Mini Park and the Ship Canal Trail, located along the Ship Canal, which acts as a southern canal alternative to the Burke Gilman Trail, offering connections to the greater Seattle region via foot or bike (see **Figure 3.4-2**).

In addition to the property owned by the University within the MIO boundary, SPU owns eight buildings within 2,500 feet of the MIO boundary (see **Figure 2-4**). The University also leases space within three buildings outside of the eastern boundary of campus north and south of W Nickerson Street.

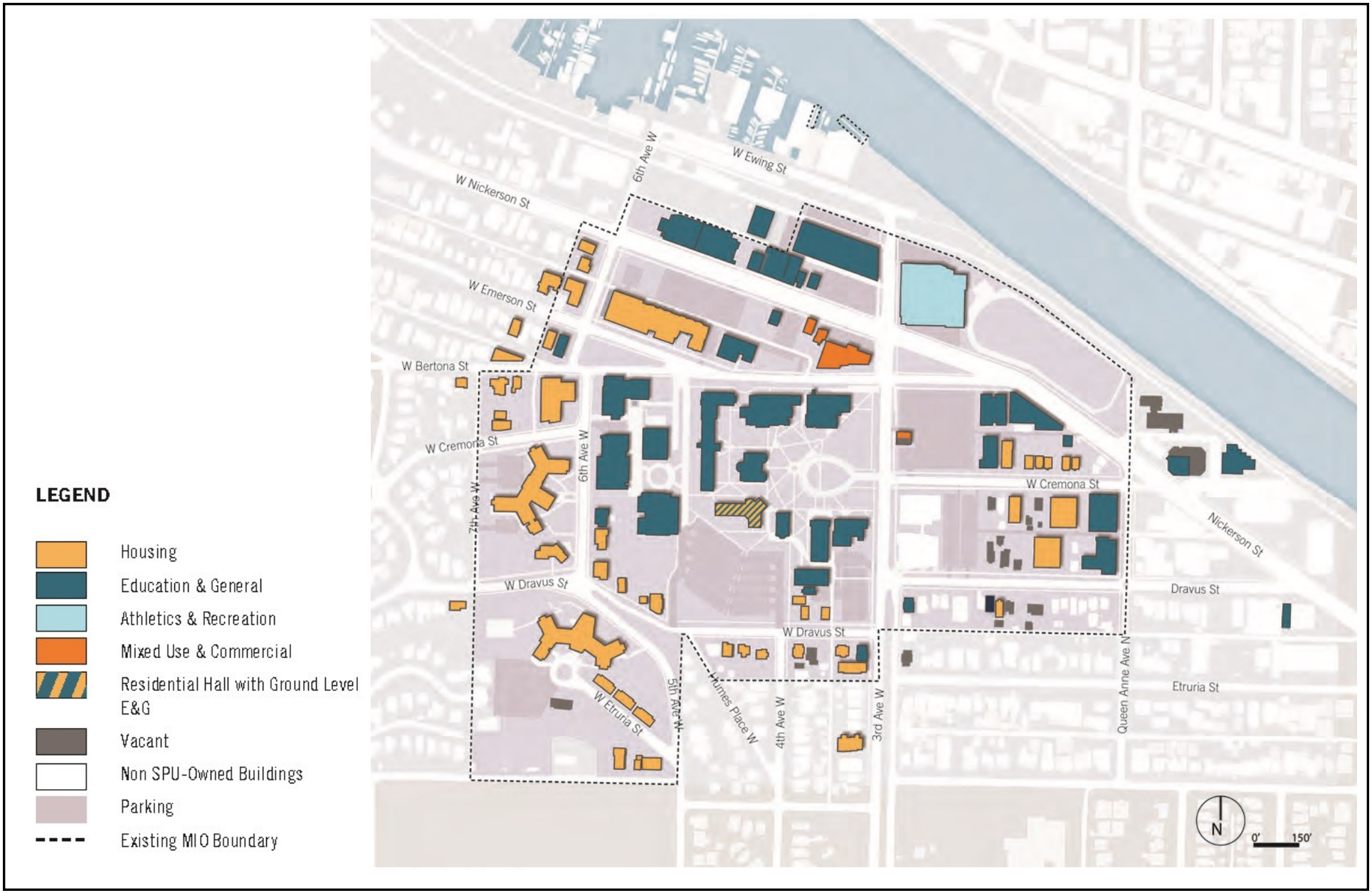
The SPU campus currently contains 96 buildings, which include core activity and facilities (library, dining facilities, student services, administrative services, bookstore, auditorium/chapel), academic (classrooms, laboratories, facility offices), residential (residence halls, staff and faculty housing), recreation (intercollegiate and intramural activities), physical plant (shops, offices, storage), and multi-purpose facilities (bookstore, bank, commercial services, offices) (see **Figure 3.4-1**). The existing campus buildings contain approximately 1,228,700 gsf. The current floor area ratio (FAR) for the campus is approximately 0.64[2].

Compared to many college and university campuses, the SPU campus does not have a strong, cohesive campus identity largely due to incremental development that has occurred over many years, resulting in a campus that is bisected by many City streets. Three streets in particular – W Nickerson Street, 3rd Avenue W, and W Bertona Street – at times substantially affect pedestrian circulation (see **Figure 2-3**).

Vicinity Land Uses

The SPU campus is located within the Queen Anne Neighborhood, adjacent to the Lake Washington Ship Canal. The portion of the Queen Anne neighborhood in which the SPU campus is situated is generally located on a north-facing hillside, leveling off at the base of the hill. Steep slopes along the south end of campus create a buffer between SPU and surrounding low-rise development in the Queen Anne neighborhood. The neighborhood surrounding the SPU campus consists of primarily single-family residential buildings with some multi-family and commercial

[2] FAR is defined as the ratio between gross floor area (gsf) and the area of the lot – Seattle Land Use Code Exhibit 23.84A.012



Source: Perkins + Will, SPU Draft MIMP, 2023

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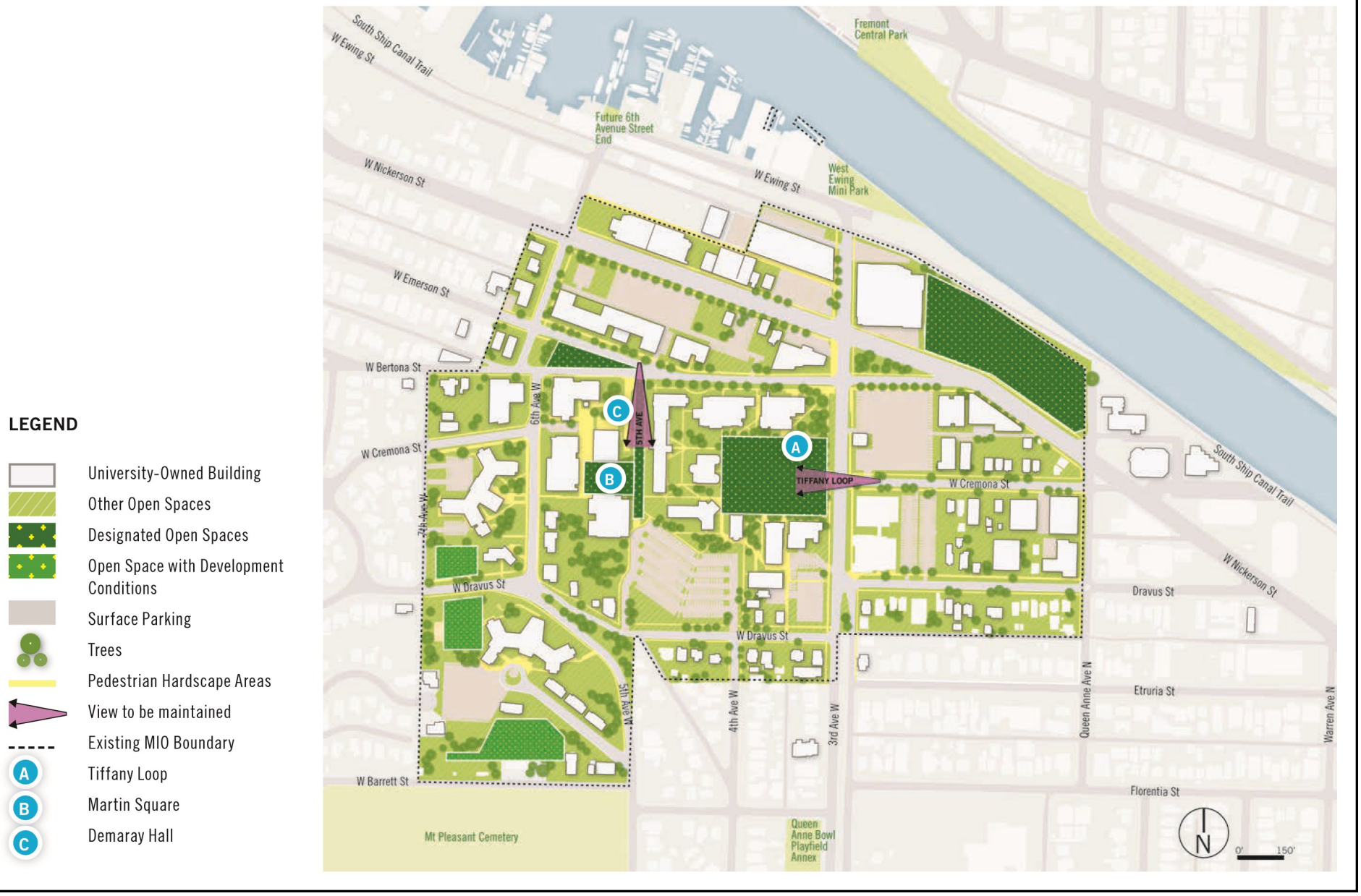
Figure 3.4-1

Existing Building Use on Campus



Source: Perkins + Will, Draft MIMP, 2023

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Figure 3.4-2

Existing Designated Open Space on Campus

buildings located at the base of the hill, and industrial uses along the south side of the Ship Canal. W. Nickerson St., 3rd Ave. W., and W. Bertona St. are arterials passing through the area. The Mount Pleasant Cemetery and Queen Anne Bowl Playfield/David Rogers Mini Park are open space/recreation areas located to the south of campus, and the South Ship Canal Trail and West Ewing Mini Park are open space/recreation areas to the north of campus (see **Figure 3.4-2**). The Fremont neighborhood is situated further north of campus, across the Ship Canal. The Ship Canal and the South Ship Canal Trail serve as major buffer/separators between the Queen Anne and Fremont neighborhoods.

Significant built features that influence the land use pattern in the area consist primarily of transportation routes, including the Lake Washington Ship Canal and W Nickerson Street. The Ship Canal is a man-made waterway constructed in 1916 by the U.S. Army Corps of Engineers to allow ship passage between Lake Washington/Lake Union and Puget Sound. The Ship Canal defines the northern edge of the area. Many water-dependent uses, including marinas, boat yards, and water-dependent industrial activities, are located along portions of the canal.

Vehicular crossings of the Ship Canal in the vicinity of the campus are accommodated by the Fremont, Ballard, and Aurora bridges. W Nickerson Street, the east/west arterial through the area, contains the primary concentration of commercial and office used in the immediate area.

There are no other major institutions in the vicinity of the SPU campus. However, there is a smaller religious institution located within the campus boundary at the corner of W Dravus Street and 3rd Avenue W – the Free Methodist Church – and the Fine Center, a conference and meeting hall associated with the church.

The land use pattern of the area to the south of the campus is predominantly residential, with multi-family residential uses primarily located within approximately two-to-three blocks of the campus and along 3rd Avenue W. The concentration of single-family uses south increases with distance from the campus and becomes the predominant land use two blocks from the campus, with the exception of the 3rd Avenue W corridor. Other land uses south of campus include the approximately 130-acre Mt. Pleasant Cemetery, the roughly 40-acre Rodgers Park/Queen Anne Bowl, and the North Queen Anne Elementary School (currently used by the Cascade Parent Partnership Program for homeschooled children). Rodgers Park/Queen Anne Bowl are used informally by SPU students (see **Figure 2-2**).

To the west of the campus, the land use pattern is predominantly single-family residential, with some multi-family used adjacent to the campus north of W Bertona Street. Land use along W Nickerson Street, west of the campus, is a mixture of single-family, multi-family, and small office buildings.

The area north of the campus consists primarily of commercial and light-industrial uses. The north side of W Nickerson Street contains a mixture of retail, office, and light-industrial uses that contrast with the University-related uses on the south side of W Nickerson Street. Further to the north, along the south border of the Ship Canal, is Ewing Park, the Ship Canal Trail, King County Environmental Laboratory, and several water-related commercial and light-industrial uses (including a lumber yard, two marinas, and a boat manufacturing facility).

The pattern of land uses east of the campus, along W Nickerson Street are predominantly commercial and office buildings. Commercial uses are concentrated on the south side of W Nickerson Street and include a gas station, convenience store, a coffee shop, and several retail

restaurants. Office uses are concentrated on the north side of W Nickerson Street and are primarily located in two- to three-story office buildings. The area east of the campus and south of W Nickerson Street contains a mixture of single-family and multi-family land uses.

Proposed Boundary Expansion Areas Land Uses

The ***Draft MIMP*** includes the expansion of the existing MIO boundary into three areas that are currently outside of the existing MIO boundary. Existing land uses within the proposed boundary expansion areas are described below. Refer to **Figure 2-5** for a map of the proposed expansion areas. Three expansion areas are proposed as described below:

- The Northwest Expansion Area includes an assemblage of existing primarily small-scale, one- to two-story, commercial and residential buildings between W. Nickerson St. and W. Ewing St. (there is one larger scale warehouse-type building located at the southwest corner of W. Ewing St. and 6th Ave. W.). One- to three-story single-family and multi-family residential buildings are located in the panhandle of this expansion area, which extends south, between W. Nickerson St. and W. Bertona St.

- The East Expansion Area is presently comprised of one- to two-story commercial buildings along the south sides of W. Nickerson St. and along the east side of Queen Anne Ave. N. Larger-scale three-story office buildings are situated along the north side of W. Nickerson St.

- The Southeast Expansion Area currently consists of two- to three-story single-family and multifamily homes along the north side of Etruria St., between 3rd Ave. W. and Queen Anne Ave. N.

Zoning Pattern

Campus Zoning

The SPU campus is located within the Major Institution Overlay (MIO) District. The purpose of the MIO District is to permit appropriate institutional growth within campus boundaries while minimizing the adverse impacts associated with development and geographic expansion (SMC 23.69.002.A). All MIO Districts contains a two-part system of use and development standards. The first part is the MIO zone designation, which applies to the major institution uses and development, and the second part is the underlying zone designation, which applies to non-major institution uses.

The SPU campus contains three MIO zone designations, MIO-37, MIO-50, and MIO-65 (please see **Figure 2-10**). **Figure 2-10** also depicts the underlying zoning designations on the SPU campus, including Low-rise 1, 2, and 3 (LR1 (M)[3], LR2 (M), and LR3 (M)), Low-rise 3/Residential Commercial (LR3/RC (M)), Neighborhood Commercial 1 and 2 with a 55-ft. height limit (NC1-55 (M), and NC2-55 (M)), and Commercial 2 with a 55-ft. height limit (C2-55 (M)).

The northern edge of the MIO also extends within the shoreline environment, which is generally defined as the area 200-ft. landward of the ordinary high-water mark. An area along the existing

[3] The (M) suffix in the underlying zoning designation indicates Mandatory Housing Affordability provisions apply.

northeastern boundary of the SPU campus, near the Ship Canal and two discrete areas of campus adjacent to the Ship Canal to the northwest, are currently located within the Shoreline District. The former area is in the Urban General (UG) Shoreline environment, with a 35-ft. height limit; the latter is in the Industrial General (IG)1 Shoreline environment, with a 45-foot height limit. Both of these areas are MIO-37, with a 37-ft. height limit in the current *2000 MIMP*.

Under the ***Draft MIMP***, the two discrete areas along the Ship Canal that are in the Shoreline District would continue as MIO-37. The area to the northeast that is within the Shoreline District would change to MIO-65, increasing the MIO height limit from 37 ft. to 65 ft. However, the underlying height limit of 35 feet that is associated with the UG Shoreline environment would still apply.

Proposed Boundary Expansion Areas Zoning Pattern

The ***Draft MIMP*** proposes three expansions to the MIO boundary (see **Figure 2-5** for a map of the proposed expansion areas). The existing zoning designations within the three proposed expansion areas are:

- Northwest Expansion Area: LR1 (M) [30-ft height limit], LR2 (M) [40-ft height limit], and LR3 (M) [40-ft height limit], C2-55(M), and Industrial Buffer with an Unlimited height suffix and a 45-ft. height limit (IB U/45);

- East Expansion Area**:** LR3 (M) [40-ft height limit], Commercial 1 with a 55-ft. height limit (C1-55 (M)), and C2-55 (M); and the

- Southeast Expansion Area: LR3 (M) [40-ft height limit].

Portions of the proposed MIO expansion areas to the east and northwest are also in the Shoreline District. The northern part of the MIO expansion area to the northwest is presently in the IG1 Shoreline environment, with a 45-foot height limit. The northern part of the MIO expansion area to the east is presently in the UG Shoreline environment, with a 35-ft. height limit.

Under the ***Draft MIMP***, the proposed MIO expansion area to the northwest, that is located in the Shoreline District would continue as MIO-37. The part of the proposed MIO expansion area to the east, that is located within the Shoreline District would change to MIO-65, increasing the MIO height limit from 37 ft. to 65 ft. However, the underlying height limit of 35 feet that is associated with the UG Shoreline environment would still apply.

Comprehensive Plan Designation

Campus

The City of Seattle Comprehensive Plan was originally adopted in 1994, with the most recent update completed by the City in November 2020 producing the *Seattle 2035 Comprehensive Plan*. *Seattle 2035 Comprehensive Plan* and the Future Land Use Map identifies the SPU campus as a Major Institution, and the campus is currently located outside of an urban center or village.

Proposed Boundary Expansion Areas

The Future Land Use Map identifies the Northwest Expansion Area as a mix of Industrial, Commercial / Mixed Use, and Multi-Family Residential areas; the East Expansion Area as Commercial / Mixed-Use; and the Southeast Expansion Area as Multi-Family Residential. The Northwest Expansion Area extends to the southeastern boundary of the Ballard/Interbay/Northend Manufacturing and Industrial Center (BINMIC), delineated by the Ship Canal Trail (west of 6th Avenue W.) and W. Ewing Street (east of 6th Avenue W.) to the north and 8th Avenue W. to the west. The BINMIC terminates at 3rd Avenue W.

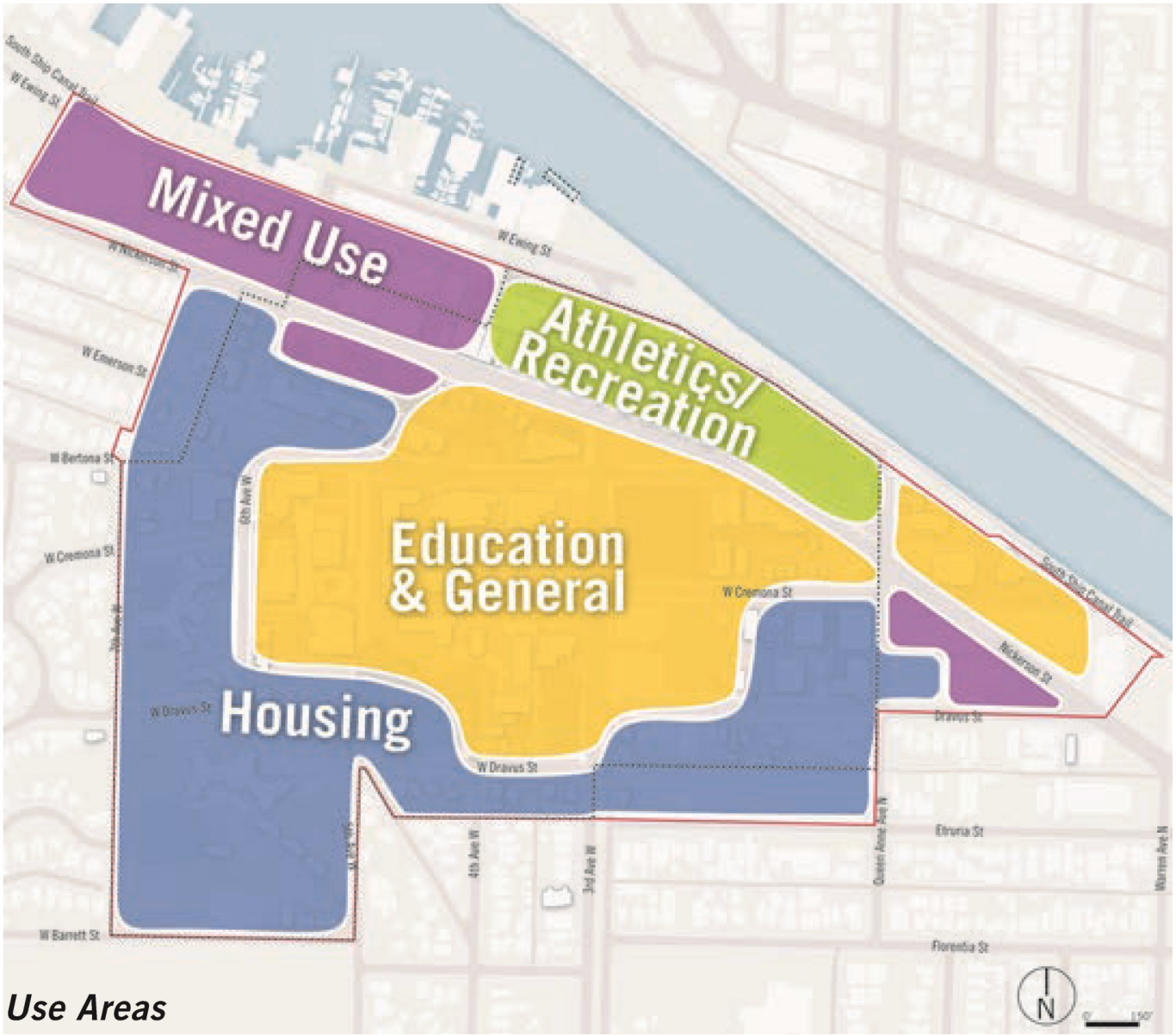
3.4-2 Impacts of the Proposed Action

As is stated in the ***Draft MIMP*** and illustrated in **Figure 3.4-3**, 'The MIMP seeks to bring a renewed focus on concentrating academic uses in an expanded campus core, student housing at the neighborhood residential edges, and mixed-use, recreation, and athletics along the West Nickerson Street corridor. The expanded academic core stretches east along an enhanced West Cremona corridor. This supports the University's need for growth while moving the overall campus away from the less active neighborhood edges, and toward the more active West Nickerson Street corridor. A new, welcoming way into campus along West Cremona Street highlights both the campus of the past and the campus of the future.'

Changes on campus and especially in proposed MIO boundary expansion areas associated with the *Proposed Action* (***Draft MIMP***) could result in land use impacts, such as incompatibility with the surrounding residential uses, influence on the surrounding land use patterns, and availability of commercial and industrial zoned land.

As noted in the ***Draft MIMP***, sites, sizes, and other features of planned and potential development may change as additional information is developed in the years following the adoption of the MIMP. However, for the purposes of analyzing potential land use impacts, assumptions regarding location, general use types, and building scale have been made by the University. Although the specific design features of potential development would be defined later, the height and setbacks of the buildings would be controlled by the MIO zoning and MIMP development standards – and are analyzed in **Section 3.5 Height, Bulk and Scale**.

Overall, implementation of the ***Draft MIMP*** would result in intensification of uses on the campus, expansion of the campus land uses, and displacement and/or relocation of some existing institutional and non-institutional land uses.



Source: Perkins + Will, Draft MIMP, 2023

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Figure 3.4-3

Draft MIMP Campus Concept Plan

Potential Impacts

Land use impacts to surrounding areas associated with potential development on the SPU campus would primarily be a function of proposed use, development intensity, and location on campus. Under the ***Draft MIMP***, the SPU campus would continue to reflect the existing institutional nature of the campus, including educational and general uses, housing, athletics/recreation uses, and mixed-uses. However, the campus area and intensity of development would increase, and the number and locations of buildings and open space areas would change. Development under the ***Draft MIMP*** would strengthen the area near the central campus that is devoted to student activity and open space while concentrating Academic and Administrative space in the central core and northeast portions of campus and congregate student residence halls in the southeastern and southwestern/western portions of campus. Potential development within the interior, central portion of the campus is not expected to significantly impact surrounding land uses due to the distance from adjoining neighborhoods. Existing steep slopes and natural landscaping along the south end of campus would continue to create a buffer between SPU and surrounding low-rise development in the Queen Anne neighborhood.

With regards to proposed uses within the MIO expansion areas, the ***Draft MIMP*** states, "*Little potential development is shown in the expansion areas. The northwest area is set aside as a potential soccer field, sized according to NCAA regulations, if SPU's lease with Seattle Parks at Interbay is not renewed in 2029. The southeast area includes many buildings recently constructed with many years of useful life remaining. This area is intended for potential future use as institutional housing if SPU decides to purchase existing buildings and renovate or reuse them. The northeast area includes some potential new buildings, as well as some existing buildings SPU currently leases and could lease in the future*."

As such, the proposed uses for the MIO boundary expansion areas would generally be compatible with existing uses in those areas, particularly given the separation provided by existing roadways, trails, and open spaces adjoining the expansion areas. The proposed boundary expansions would provide the flexibility to concentrate more intense, non-residential uses in the northern and central portions of campus, mostly away from single-family residential neighborhoods to the south and west of campus. The proposed MIO boundary expansions and potential long-term growth would respect neighborhood character through creation of a residential use buffer; increasing the intensity of non-residential land uses toward the center and northern portions of campus; and promoting mixed-uses along the W. Nickerson St. corridor. These elements of the ***Draft MIMP*** would help to integrate the SPU campus with the surrounding community, as well as contribute to maintaining the livability and vitality of the adjacent neighborhood. As well, implementation of development regulations and consideration of design guidelines contained within the proposed ***Draft MIMP*** would help ensure that the proposed development would be consistent with the type and character of land uses within the surrounding neighborhood.

The planned expansion of campus MIO boundaries would result in an increase of approximately 18 acres of land (including City ROW) potentially subject to institutional use. This represents a 27 percent increase in campus area. The planned expansion of the MIO boundary, by itself, is not anticipated to result in any land use impacts. However, increases in MIO height limits within the proposed Northwest and Southeast Expansion areas have the potential to affect adjacent Neighborhood Residential (NR3) and LR-zoned areas off-campus. However, the East Expansion area would actually result in height limits that are lower than the underlying zoning (from 55 ft. to 50 ft.). The proposed changes to MIO height limits within the existing and proposed MIO

boundaries are discussed in greater detail in **Section 3.5 – Height, Bulk and Scale**. Land within an MIO District is subject to the regulations and requirements of the underlying zone, unless specifically modified by an adopted MIMP. (See **Figure 2-11** for a map of the proposed zoning and overlay designations.)

The ***Draft MIMP*** includes three (3) planned development projects and approximately 47 potential development projects. Each of these planned and potential development projects is depicted in **Figure 2-6** and **Figure 2-7**, respectively; reference numbers that are shown correspond to information described in **Section 2.4.1.2** and contained in **Table 2-2,** which provide more information concerning each planned and potential development project. As depicted in **Figure 2-7**, an estimated 38 potential development projects (approx. 80.1% of the total) would be fully or primarily located within the existing MIO boundary and eight projects would be located within the MIO boundary expansion areas. One project (MUC-3) would be located half within the existing boundary and half within the Northwest Expansion Area. Compatibility of proposed development under the ***Draft MIMP*** with existing land uses and underlying zoning designations within the three proposed expansion areas is discussed below:

- *Northwest Expansion Area*: currently, this area includes primarily small-scale, one- to two-story, commercial and residential buildings between W. Nickerson St. and W. Ewing St. and one- to three-story single-family and multi-family residential buildings located in the panhandle of this expansion area, which extends south, between W. Nickerson St. and W. Bertona St. Zoning in this area consists of LR1 (M), LR2 (M), LR3 (M), C2-55(M), and Industrial Buffer (IB U/45) (see **Figure 2-11**). The ***Draft MIMP*** proposes three potential projects which would be fully located in this expansion area – mixed-use and commercial uses north of W. Nickerson. Two additional potential projects would also extend into the Northwest expansion area including a mixed-use commercial building (approximately half of MUC-3) and an Athletic and Recreation building (the northwest corner of AR-1). A housing use would be located to the south of W. Nickerson St. Additionally, the northwest portion of this area is set aside as a potential soccer field, if SPU's lease with Seattle Parks at Interbay is not renewed in 2029. All of these potential uses would be generally consistent with the existing land use pattern and uses allowed by the underlying zoning.

- *East Expansion Area*: presently, this area includes one- to two-story commercial buildings along the south sides of W. Nickerson St. and along the east side of Queen Anne Ave. N. with three-story office buildings situated along the north side of W. Nickerson St. Zoning in this area consists of LR3 (M), C1-55 (M), and C2-55 (M). The ***Draft MIMP*** proposes five potential projects (three renovations and two new buildings) in this expansion area - education and general uses to the north of W. Nickerson St. and mixed-use commercial and housing uses to the south of W. Nickerson St., which would be generally consistent with the existing land use pattern and uses allowed by the underlying zoning.

- *Southeast Expansion Area*: this area currently consists of two- to three-story single-family and multifamily residences along the north side of Etruria St., between 3rd Ave. W. and Queen Anne Ave. N. Zoning in this area consists of LR3 (M). The ***Draft MIMP*** proposes to retain the residential uses in this area, which would be consistent with the existing land use pattern and uses allowed by the underlying zoning.

Potential development along the periphery of the existing campus MIO boundary and in the proposed MIO boundary expansion areas would have the potential for land use impacts to surrounding neighborhoods. For example, the ***Draft MIMP*** includes potential development of a

six-story student residence hall (Building #H-12 on **Figure 2-7**) in the southwest portion of campus, four (4) three-story student residential buildings (Buildings H-13, H-14, H-15, and H-16 on **Figure 2-7**) in the southern portion of campus, three (3) four-to-five story campus apartment buildings (Buildings H-18, H-19, and H-20 on **Figure 2-7**) in the vicinity of the East MIO boundary expansion area, and eight (8) new three-to-four story campus housing/apartment buildings (Buildings H-1 to H-8 on **Figure 2-7**) in and in the vicinity of the Northwest Expansion area, all of which are adjacent to off-campus low-rise residential neighborhoods to the east, west, and south. Potential land use impacts of these proposed uses could include increased noise levels, traffic, and pedestrian activity associated with an increase in the number of students living in this area. Although both of the on-campus and off-campus uses are residential in nature, they represent different land use intensities, which could create a potential incompatibility. However, required setbacks, street ROW corridors, large open space areas, and landscape screening would separate these new student residential uses on campus from low-rise residential homes off campus and reduce the potential for incompatibilities. Additionally, SPU has indicated that they 1) encourage students to remain respectful to neighbors and educate students prior to hosting large events on-campus about acceptable noise levels; 2) comply with the City noise ordinance; and 3) work directly with neighbors to address issues when there are noise complaints coming from students living in SPU-owned properties. As well, the underlying LR2 and LR3 zoning allows residential apartment type uses, therefore the student residence/apartment uses proposed in the ***Draft MIMP*** in these areas would be consistent with underlying zoning.

Proposed boundary expansion areas would expand into areas that are currently zoned for commercial uses, which is in limited supply within the city, and could potentially replace these uses with institutional uses. Under the ***Draft MIMP***, approximately 225,600 sq. ft. of net new commercial/mixed-use development is proposed, and consistent with existing land use patterns and underlying zoning, commercial/mixed-use areas would continue to be located mostly along W. Nickerson St. This would contribute to maintaining commercial uses on campus and in the vicinity of campus and would also enhance accessibility to these services for the surrounding neighborhood and campus communities.

The proposed northwest boundary expansion area would expand into an area that is currently zoned for industrial uses, which is also in limited supply within the city, and could potentially replace these uses with institutional uses. As stated previously, this area currently mostly consists of commercial and residential uses rather than industrial uses, therefore, the potential for displacement of industrial uses in this area is minimal. Furthermore, in 2018, the City Council approved a Comprehensive Plan amendment that removed the BINMIC designation from this area on the City of Seattle's Future Land Use Map - Ordinance 125732 – and in 2019, Council then approved Ordinance 125845, which directed the following: 1) to permit major institution uses in new and existing buildings in industrial zones, and (2) allowed the creation or expansion of an MIO within industrial zones. The underlying industrial zoning in this area is IB U/45, the intent of which is to 'provide an appropriate transition between industrial areas and adjacent residential zones, or commercial zones having a residential orientation and/or a pedestrian character'. Uses proposed by the ***Draft MIMP*** within this light industrially-zoned area would consist of mixed-use buildings, which would generally be compatible with existing adjacent light industrial development along the Ship Canal and commercial development along W. Nickerson St.

Full build-out under the ***Draft MIMP*** would result in a substantial intensification of land use on campus, which would result in an increase in the number of students, staff, faculty, and visitors on-campus, as well as increasing pedestrian activity on streets adjacent to the campus. The amount of development associated with the ***Draft MIMP*** could contribute to cumulative

employment and population growth in the immediate area of campus, together with an increase in the intensity of land uses in the vicinity of campus. In addition, surrounding businesses could experience an increase in demand for goods and services as a result of this increased population. Businesses that could experience increased demand include nearby retail uses, restaurants, and coffee shops, as well as other businesses. Proposed new development on-campus and in the proposed expansion areas could also indirectly influence the timing associated with redevelopment of properties surrounding campus.

Eight street or alley vacations are proposed as part of this ***Draft MIMP*** and consist of six street segments and two alley segments. The proposed street/alley vacations are depicted in **Figure 2-9** and discussed in detail in **Chapter 2.4.1.6**. Planned street and alley vacations, street enhancements, and pedestrian circulation improvements are not expected to result in any significant land use impacts (refer to the **Street Vacation Policies** discussion provided in the **Transportation** section of this Draft EIS for detail on potential impacts associated with vehicular and pedestrian circulation). New opportunities for potential open space areas and pedestrian connections would be provided by the potential street and alley vacations. Street and alley vacations depicted in the ***Draft MIMP*** have not yet been approved by the City; each individual proposed street or alley vacation would be required to go through the City of Seattle vacation process and, ultimately, to obtain a discretionary legislative approval from the City Council.

3.4-3 Impacts of the Alternatives

Alternative 1 – No Action Alternative

Under the ***No Action Alternative***, new campus development would be limited to development consistent with projects approved under the current MIMP, but not yet built. This alternative retains the current MIO boundary and MIO height limits and proposes two Education & General buildings that could be developed consistent with the existing MIMP (refer to **Figure 2-12** for building references and locations). The distribution, character, and intensity of land uses and buildings would remain similar to the existing condition, and no street enhancements, or street/alley vacations (and the open space the vacations provide) would occur.

Alternative 2 – No Boundary Expansion and No Change to Height Limits

This alternative retains the existing MIO boundary and existing height limitations across campus. Under ***Alternative 2***, additional buildings would need to be constructed within the current MIO boundary in order to accommodate the same number of students, faculty, and staff and the same amount of campus development as that proposed as part of the ***Draft MIMP*** (see **Figure 2-13**).

The amount of development that is proposed in conjunction with the ***Draft MIMP*** would still occur, however, without the proposed boundary expansions or increases in building heights, such development would be much more intense within the existing campus boundaries than under the ***Draft MIMP.*** As well, with no expansion of the MIO boundary, there would be less of a buffer with adjacent off-campus neighborhoods and substantially less open space on campus.

A similar amount of planned and potential development would be built under ***Alternative 2*** as with the ***Draft MIMP***. A number of the potential development projects -- within the existing MIO boundary and existing MIO height limits -- could still occur, and these proposed uses would be compatible with current uses on campus. However, some of the potential development projects could not be accommodated within the buildings proposed in the ***Draft MIMP***. Up to 12 additional

buildings or building wings would be needed within the existing campus boundary. Overall, future campus development would be much more land use intensive and built much closer to existing campus boundaries under ***Alternative 2*** than the ***Draft MIMP***. Three additional student housing/apartment buildings (three to four levels each) would be located along the west edge of campus, near existing single-family neighborhoods off campus, thereby increasing the potential for incompatibilities between on-campus and off-campus residential uses as compared to that under the ***Draft MIMP***. Fewer street enhancements or street/alley vacations (and the open space the vacations provide) could occur within the existing MIO.

Potential development along the periphery of the existing campus MIO boundary under this alternative would have a greater potential for impacts to surrounding neighborhoods as compared to that under the ***Draft MIMP***. Without the proposed boundary expansions, flexibility to concentrate the more intense, taller, non-residential uses in the northern and central portions of campus, away from single-family residential neighborhoods to the south and west of campus would be greatly reduced and the potential for incompatibilities between off-campus and on-campus uses would increase.

Under this alternative, the additional commercial and mixed-use buildings would need to be located more internally to campus in order to accommodate the same amount of square footage as that provided under the ***Draft MIMP***. This would displace Academic uses planned for the central core of campus under the ***Draft MIMP,*** would locate commercial uses further away from W. Nickerson, which would contribute to maintaining commercial uses on campus and in the vicinity of campus but would decrease neighborhood accessibility to these services.

Mixed- uses proposed within and adjacent to the light industrial-zoned areas in the northwest part of the campus under ***Alternative 2*** would be reduced by approximately half of that planned under the ***Draft MIMP*** due to the loss of the Northwest MIO boundary expansion area. The planned use for this area would still be compatible with surrounding light industrial and commercial development in this area.

The potential shoreline view-related impacts associated with proposed development in the vicinity of the areas adjacent to the Ship Canal are presented and discussed in greater detail in **Section 3.5 – Height, Bulk and Scale**.

Indirect impacts, such as an increase in the number of students, staff, faculty, and visitors on-campus, as well as increasing pedestrian activity on streets adjacent to the campus, increased employment and population growth in the immediate area, and businesses experiencing an increase in demand for goods and services as a result, in addition to other impacts mentioned above, would still occur under this alternative.

Alternative 3 – Boundary Expansion and No Change to Height Limits in Existing MIO

Under ***Alternative 3,*** three boundary adjustments are proposed in the northwest, east and southeast areas of campus, but the existing height limitations across campus are retained. Under this alternative, far fewer additional buildings would need to be constructed within the expanded MIO boundary as compared to that under ***Alternative 2*** (see **Figure 2-14**). The amount of planned and potential development that is proposed in conjunction with the ***Draft MIMP*** would still occur, however, without the proposed increases in building heights, such development would be more land use intensive than under the ***Draft MIMP***.

A similar amount of planned and potential development could be built as with the ***Draft MIMP***. A number of the potential development projects -- within the existing MIO height limits -- could still occur, and these proposed uses would be compatible with current uses on campus and in the proposed expansion areas as described under the ***Draft MIMP***. However, some of the potential development projects could not be accommodated within the buildings proposed in the ***Draft MIMP***. Up to seven additional buildings or building wings would be needed within the existing and expanded campus boundary. Overall, future campus development would be more land use intensive and, in some areas, built much closer to campus boundaries than under the ***Draft MIMP***, but less so than under ***Alternative 2***. Two additional student residential/apartment buildings (three to four levels each) would be located along the west edge of campus, near existing single-family neighborhoods off campus, thereby increasing the potential for incompatibilities between on-campus and off-campus residential uses as compared to that under the ***Draft MIMP***. The proposed street enhancements and street/alley vacations (and the open space the vacations provide) could still occur.

Potential development along the periphery of the existing campus MIO boundary under this alternative would have a greater potential for land use impacts to surrounding neighborhoods adjacent to the southwest portion of campus as compared to that under the ***Draft MIMP***. Without the proposed increases to height limits, flexibility to locate a few taller residential buildings in the eastern portions of campus away from single-family residential neighborhoods to the south and west of campus, similar to the ***Draft MIMP***, would be greatly reduced and the potential for incompatibilities between off-campus and on-campus uses would increase.

Under this alternative, similar to the ***Draft MIMP*** and consistent with the existing land use patterns, commercial uses and mixed-use areas would continue to be located mostly along and close to W. Nickerson St., which would contribute to maintaining commercial uses on campus and in the vicinity of campus and enhance accessibility to these services for the surrounding neighborhood and campus communities.

Impacts associated with mixed-uses proposed within and adjacent to the light industrial-zoned areas in the northwest part of the campus would be similar to that discussed under the ***Draft MIMP***.

The potential shoreline view-related impacts associated with proposed development in the vicinity of the areas adjacent to the Ship Canal are presented and discussed in greater detail in **Section 3.5 – Height, Bulk and Scale**.

Indirect impacts, such as an increase in the number of students, staff, faculty, and visitors on-campus, as well as increasing pedestrian activity on streets adjacent to the campus, increased employment and population growth in the immediate area, and businesses experiencing an increase in demand for goods and services as a result, in addition to other impacts mentioned above, would still occur under this alternative.

Alternative 4 – No Boundary Expansion and Increased Height Limits

This alternative retains the existing MIO boundary, but height increases are proposed in some areas within the existing campus. Under this alternative, far fewer additional buildings would need to be constructed within the current MIO boundary as compared to that under ***Alternative 2*** (see **Figure 2-15**).

The three planned development projects described for the ***Draft MIMP*** could still occur (Student Center, Moyer Hall Repurpose, and Marston Site Future Open Space project).

A similar amount of potential development could be built as with the ***Draft MIMP***. A number of the potential development projects -- within the existing MIO boundary -- could still occur. However, some of the potential development projects could not be accommodated within the buildings proposed in the ***Draft MIMP***. Up to five additional buildings or building wings would be needed within the existing and expanded campus boundary. Overall, future campus development would be more land use intensive and built much closer to existing campus boundaries than the ***Draft MIMP***, but less so than ***Alternative 2***. Two additional student residential/apartment buildings (one at three levels and one at one level) would be located along the west edge of campus, near existing single-family neighborhoods off campus, thereby increasing the potential for incompatibilities between on-campus and off-campus residential uses as compared to that under the ***Draft MIMP***. Fewer street enhancements and only those street/alley vacations (and the open space the vacations provide) located within the MIO boundary could occur.

Potential development along the periphery of the existing campus MIO boundary under this alternative would have a greater potential for land use impacts to surrounding neighborhoods adjacent to the southwest portion of campus as compared to that under the ***Draft MIMP***. Without the proposed boundary expansions, flexibility to concentrate the more intense, taller, non-residential uses in the northern and central portions of campus, away from single-family residential neighborhoods to the south and west of campus would be greatly reduced and the potential for incompatibilities between off-campus and on-campus uses would increase.

Under this alternative, some commercial uses and mixed-use areas would need to be located more internally to campus in order to accommodate the same amount of square footage as that provided under the ***Draft MIMP***. This would displace Education/General uses planned for the central core of campus, would locate commercial uses further away from W. Nickerson, which would contribute to maintaining commercial uses on campus and in the vicinity of campus but would decrease neighborhood accessibility to these services.

Similar to ***Alternative 2***, mixed-uses proposed within and adjacent to the light industrial-zoned areas in the northwest part of the campus under ***Alternative 4*** would be reduced by approximately half of that planned under the ***Draft MIMP*** due to the loss of the Northwest MIO boundary expansion area. The planned mixed-uses and commercial uses for this area would still be compatible with surrounding light industrial development in this area.

The potential shoreline view-related impacts associated with proposed development in the vicinity of the areas adjacent to the Ship Canal are presented and discussed in greater detail in **Section 3.5 – Height, Bulk and Scale**.

Indirect impacts, such as an increase in the number of students, staff, faculty, and visitors on-campus, as well as increasing pedestrian activity on streets adjacent to the campus, increased employment and population growth in the immediate area, and businesses experiencing an increase in demand for goods and services as a result, in addition to other impacts mentioned above, would still occur under this alternative.

Alternative 5 – Boundary Expansion, Increased Height and No Street/ Alley Vacations

Similar to that proposed under the ***Draft MIMP***, under ***Alternative 5*****,** three boundary adjustments are proposed in the northwest, east and southeast areas of campus, height increases are proposed in areas within the expanded MIO boundary, but existing streets and alleys proposed for vacation in the ***Draft MIMP*** are retained in their current state. Under this alternative, far fewer additional buildings would need to be constructed within the MIO boundary as compared to that under ***Alternatives 2-4*** (see **Figure 2-16**).

A similar amount of planned and potential development could be built as with the ***Draft MIMP***. A number of the potential development projects -- within the MIO boundary expansion and existing MIO height limits -- could still occur. However, some of the potential development projects could not be accommodated within the buildings proposed in the ***Draft MIMP***. Up to four additional buildings or building wings would be needed within the existing and expanded campus boundary. Overall, site development would be somewhat more land use intensive than under the ***Draft MIMP***. No additional student residential/apartment buildings would need to be located along the west edge of campus, near existing single-family neighborhoods off campus (as would occur as under Alternatives 2-3). No street enhancements or street/alley vacations (and the open space the vacations provide) located within the existing MIO boundary or in the MIO Boundary expansion areas would occur.

Under this alternative, some commercial uses and mixed-use areas would need to be located more internally to campus in order to accommodate the same amount of square footage as that provided under the ***Draft MIMP***. This would displace Education/General uses planned for the east campus area, would locate commercial uses further away from W. Nickerson, which would contribute to maintaining commercial uses on campus and in the vicinity of campus but would decrease neighborhood accessibility to these services.

Similar to ***Alternatives 2*** and ***4***, mixed-use buildings proposed within and adjacent to the light industrial-zoned areas in the northwest part of the campus under ***Alternative 5*** would be reduced in size compared to that planned under the ***Draft MIMP*** due to the loss of the alley vacation in this area. The planned use for this area would still be compatible with surrounding commercial and light industrial development in this area.

The potential shoreline view-related impacts associated with proposed development in the vicinity of the areas adjacent to the Ship Canal are presented and discussed in greater detail in **Section 3.5 – Height, Bulk and Scale**.

Indirect impacts, such as an increase in the number of students, staff, faculty, and visitors on-campus, as well as increasing pedestrian activity on streets adjacent to the campus, increased employment and population growth in the immediate area, and businesses experiencing an increase in demand for goods and services as a result, in addition to other impacts mentioned above, would still occur under this alternative.

3.4-4 Mitigation Measures

As no significant impacts have been identified for development associated with the ***Draft MIMP***, there are no mitigation measures required. Mitigation measures for indirect land use impacts

(e.g., transportation, height, bulk, and scale, etc.) are addressed in their respective sections of this Draft EIS and through applicable City codes.

3.4-5 Significant Unavoidable Adverse Impacts

Under the ***Draft MIMP*** and ***Alternatives 2-5***, intensification in land uses on the campus would occur as a result of the increased development that is proposed. Potential development along the periphery of the existing campus MIO boundary and within the planned boundary expansion areas would have the potential for land use impacts to surrounding neighborhoods. The greatest potential for these impacts to occur is under ***Alternative 2***; development under ***Alternative 5*** would have similar impacts as those described under the ***Draft MIMP***. There would be a significant impact to designated open space areas on campus under ***Alternatives 2*** and ***3***, as new buildings are proposed within these areas.

With implementation of the mitigation discussed above, no significant unavoidable adverse land use impacts would be anticipated under the ***Draft MIMP***.

3.4-6 Relationship to Adopted Land Use Plans, Policies, and Regulations

Information in this section addresses the relationship of the development alternatives to adopted land use plans, applicable policies, and regulations. In particular, this section includes discussion of relevant policies from the City of Seattle Comprehensive Plan and Shoreline Master Program.

City of Seattle Comprehensive Plan

Summary*:* The City of Seattle's *Comprehensive Plan* was originally adopted in 1994 to meet the requirements of the State Growth Management Act (GMA) and has been amended nearly every year. GMA requires a 10-year review of the 20-year plan with action taken to revise the plan, if necessary. The most recent review was completed by the City in November 2020 for the *Seattle 2035 Comprehensive Plan*. The latest update is consistent with the plan for the four-county region, Vision 2040, and King County's Countywide Planning Policies**.** For the updated plan, the City worked with King County, other cities in the County, and the Growth Management Planning Council to establish new growth estimates. In addition, during the update process the City's Planning Commission and City Departments analyzed the effectiveness of policies contained in the current plan, and an extensive community outreach/public participation effort occurred. The following is an overview of applicable policies that are contained in the updated *Seattle 2035 Comprehensive Plan*.

2035 Comprehensive Plan

The City's *2035 Comprehensive Plan* consists of fourteen major elements: Growth Strategy, Land Use, Transportation, Housing, Capital Facilities, Utilities, Economic Development, Environment, Parks and Open Space, Arts and Culture, Community Well-Being, Community Engagement, Container Port, and Shoreline Areas. Each element contains goals and policies that are intended to "guide the development of the City in the context of regional growth management" for the next 20 years. While each element affects development on and adjacent to the SPU campus, the Growth Strategy, Land Use, Community Well-Being, and Shoreline Areas elements are the most relevant; the following goals and policies from these elements are most applicable to proposed development on the SPU campus.

Growth Strategy Element

Urban Village Strategy

The urban village strategy is Seattle's primary approach to growth. This strategy concentrates most of the city's expected future growth in urban centers, urban villages, and manufacturing/industrial centers. The SPU campus is not located within an urban center, urban village, or manufacturing/industrial center. The Fremont Hub Village is located to the north of the campus, across the Fremont Cut, and the Ballard-Interbay-Northend Manufacturing Industrial Center is to the northwest of campus.

Growth strategy goals and policies for areas outside urban centers and villages include:

Policy GS 1.22 – Support healthy neighborhoods throughout the city so that all residents have access to a range of housing choices, as well as access to parks, open space, and services.

Policy GS 1.24 – Plan for uses and densities on hospital and college campuses that are located outside urban centers and villages in ways that recognize the important contributions of these institutions and the generally low-scale development of their surroundings.

Discussion: The SPU campus is located outside of an urban center or village. The ***Proposed Action*** involves adoption and implementation of an updated *MIMP* for the university. The ***Draft MIMP***, ***Alternative 3*****,** and ***Alternative 5*** would include expansions of the SPU campus boundary to the northwest, east, and southeast; no expansion of the campus boundaries would occur under ***Alternatives 1***, ***2***, and ***4***.

Under the ***Draft MIMP*** and all the EIS alternatives, the types of uses on the SPU campus (e.g., education and general, housing, athletics/recreation, and mixed-use commercial) would continue as under existing conditions; however, the density of development would increase. Development under the ***Draft MIMP*** would increase density primarily in the central and northern campus areas, away from nearby low-scale development. However, height limits in the southeast portion of campus (west of Queen Anne Ave. N. and south of W. Cremona St.) and in the northwest portion of campus (south of W. Nickerson St. and east of 6th Ave. W.) with current height limits of 37 ft. would increase to 50 ft. and 65 ft. with the proposed zoning change from MIO-37 to MIO-50 and MIO-65 (see **Figure 3.5-3**). Proposed development along the campus boundaries in these areas is at low-rise scale, and full buildout under the proposed zoning would allow development at slightly greater heights (up to 50 ft. along the campus edges) which has the potential to be incompatible with surrounding low-rise development.

However, implementation of development regulations and design guidelines contained within the proposed ***Draft MIMP*** would help ensure that the proposed development would be consistent with the type and scale of land uses within the surrounding neighborhood. ***Alternative 1*** would increase overall campus density the least but would not provide the future capacity the University indicates that it needs. ***Alternatives 2 – 5*** would increase density relative to the ***Draft MIMP***; ***Alternatives 2*** and ***4*** would increase density the most, with no boundary expansions and no height increase under ***Alternative 2***.

Development under the ***Draft MIMP*** would include public open spaces and pedestrian streetscape enhancements on campus, including adjacent to campus boundaries, consistent with the policy to promote conditions that support healthy neighborhoods throughout the city and provide access to open space. The ***Draft MIMP*** would include developing the Marston Site Future Open Space in central campus and retaining open space along the western campus boundary adjacent to a single-family neighborhood. To provide the additional capacity needed on campus, ***Alternatives 2*****,** ***3*****,** and ***5*** would require development of the planned central open space; and ***Alternatives 2***, ***3***, and ***4*** would necessitate development of the open space along the western campus boundary, reducing the amount of open space on campus and the buffer to the adjacent neighborhood. No or fewer street enhancements would occur under ***Alternatives 1***, ***2***, ***4***, and ***5***, as compared to the ***Draft MIMP***.

Land Use Element

Major Institutions

Hospitals, colleges, and universities are major institutions in the City, and the City has established goals and policies for these institutions to help them to grow, while mitigating the impacts of that growth on the livability of surrounding neighborhoods.

Policy LU G13 – Encourage the benefits that Major Institutions offer the city and the region.

Policy LU13.2 – Support the coordinated growth of major institutions through conceptual master plans and the creation of major institution overlay districts. Use a master plan process to identify development standards for the overlay district that are specifically tailored to the major institution and the surrounding area.

Discussion: SPU is a private institution of higher education located in Seattle. SPU provides benefit to the city and region through its educational services and being one of the major employers in the Queen Anne (Uptown) Neighborhood. The ***Proposed Action*** involves the adoption of an updated *MIMP* that would guide development on the campus for the next 20+ years. SPU currently employs 593 faculty and staff; with implementation of the ***Draft MIMP***, it is projected that SPU would employ 860 faculty and staff.

The ***Draft MIMP*** includes a total of approximately 7,400 sq. ft. of net new gross floor area in planned development and a total of approximately 1.7 million sq. ft. of net new gross floor area in potential development. The ***Draft MIMP***, and ***Alternatives 3*** and ***5*** would include expansion of the campus boundary to the northwest, east, and southeast, adding approximately 18 acres to SPU's MIO boundary. Development under ***Alternatives 1***, ***2***, and ***4*** would concentrate future development within the existing campus boundary, which would result in increased height and density of buildings on campus, beyond that proposed in the ***Draft MIMP***. The ***Draft MIMP*** includes development standards specifically tailored to SPU and the surrounding area.

Policy LU13.3 – Balance the need for major institutions to grow and change with the need to maintain the livability and vitality of neighboring areas.

Discussion: A stated objective of the ***Draft MIMP*** is to, "*Develop with sensitivity along the Major Institution Overlay boundary and transition respectfully between campus and low-rise residential areas and public edges.*" The ***Draft MIMP*** includes proposed development regulations and design guidelines for future development on campus, as well as the provision of open spaces and pedestrian streetscape enhancements on campus and along campus boundaries. SPU maintains an open campus and public use of on-campus open spaces and paths is allowed for passive unscheduled recreation uses. Use of on-campus open spaces for scheduled events or more formal purposes is not allowed without the express permission of the University.

The proposed MIO boundary expansion and potential growth would respect neighborhood character through creation of a residential use buffer; increasing the intensity of non-residential land uses toward the center and northern portions of campus; and promoting mixed-uses along the W. Nickerson St. corridor. These elements of the ***Draft MIMP*** would help to integrate the SPU campus with the surrounding community, as well as contribute to

maintaining the livability and vitality of the adjacent neighborhood. Effects of potential development on adjacent neighborhoods are addressed throughout this Draft EIS.

Policy LU13.4 – Establish major institution overlays (MIO) as a designation on the Official Land Use Map and the Future Land Use Map to show areas where development is regulated by the contents of a master plan, rather than by the underlying zoning. Where appropriate, establish MIO boundaries for better integration between major institution areas and less intensive zones.

Discussion: The SPU campus is currently located within an MIO on the City of Seattle's Official Land Use Map, as well as the Future Land Use Map. The ***Draft MIMP*** and ***Alternatives 2 - 5*** would involve adoption of an updated *MIMP*. The ***Draft MIMP***, as well as ***Alternatives 3*** and ***5***, would expand the existing SPU MIO overlay district and guide future development of the SPU campus. ***Alternatives 1***, ***2***, and ***4*** would not include MIO boundary expansions.

Policy LU13.5 – Encourage community involvement in the development, monitoring, implementation, and amendment of major institution master plans, including the establishment of citizens' advisory committees that include community and major institution representatives.

Discussion: The planning process associated with the ***Draft MIMP*** has involved a considerable amount of public involvement to encourage broad participation. Consistent with the provisions of Section 23.69.032B of the City's Land Use Code, SPU has established a Development Advisory Committee (DAC).[4] A previous Citizen's Advisory committee (CAC) participated in the formulation of the existing *MIMP*, and the newly formed DAC has assisted in the formulation of the ***Draft MIMP*** to help assure that concerns of the community and the institution are considered. The primary role of the DAC is to work with SPU to produce a master plan that meets the needs of the institution, addresses the concerns of the surrounding community, is consistent with the intent of the Seattle *Comprehensive Plan,* and satisfies the provisions of the City's *Land Use Code*. DAC meetings are open to the public. SPU sent letters to all property owners in the current and proposed MIO boundaries. Periodic updates have been made to the land use committee of the Queen Anne Community Council. Articles related to the MIMP process have been included in the *Queen Anne/Magnolia News*. Meetings have been held as the ***Draft MIMP*** evolved. A public meeting was also conducted as part of the EIS Scoping process associated with the Draft EIS. Additional meetings are planned throughout the remainder of the MIMP and EIS processes. See **Appendix B** of this Draft EIS for a list of key meetings that have been held.

Policy LU13.6 – Allow the MIO to modify underlying zoning provisions and development standards, including use restrictions and parking requirements, in order to accommodate the changing needs of major institutions, provide development flexibility, and encourage a high-quality environment.

Discussion: This policy provides the basis for the MIO District. The purpose of the MIO District is to permit appropriate growth within the campus boundaries while minimizing the adverse impacts associated with development and geographic expansion. Several modifications to underlying development code provisions are proposed as part of the ***Draft MIMP*** *(please see the Zoning Modifications Table in the Appendices Section of the* ***Draft MIMP*** *for more information on proposed development standards*).

[4] In 2023, the City of Seattle Department of Neighborhoods renamed the *Citizen's Advisory Committee* to the *Development Advisory Committee*.

Policy LU13.7 – Discourage the expansion of established major institution boundaries.

Discussion: The ***Draft MIMP*** includes expansion of the campus boundary to the northwest, east, and southeast, adding approximately 18 acres (including rights-of-way) to SPU's existing MIO for a total campus area of approximately 84 acres. Boundary expansions are also proposed under ***Alternatives 3*** and ***5***. No boundary expansions under would occur under ***Alternatives 1***, ***2***, and ***4***. The proposed boundary expansions would allow: reduced building heights and more open space on the campus, and flexibility to concentrate non-residential uses in the northern and central portions of campus, away from single-family residential neighborhoods to the south and west of campus. The ***Draft MIMP*** states that "*The northwest area is set aside as a potential soccer field, sized according to NCAA regulations, if SPU's lease with Seattle Parks at Interbay is not renewed in 2029. The southeast area includes many buildings recently constructed with many years of useful life remaining. This area is intended for potential future use as institutional housing if SPU decides to purchase existing buildings and renovate or reuse them. The northeast area includes some potential new buildings, as well as some existing buildings SPU currently leases and could lease in the future*."

SPU considers the proposed MIO boundary expansions to be conservative and limited to the area needed for campus growth that will help the University meet modern academic standards. The ***Draft MIMP*** states that '*the expansion areas are also important given the unpredictable status of the many buildings that could qualify for designation as City landmarks. Such designations could prevent the University from redeveloping these buildings as envisioned in the plan, so the potential impact of this unknown factor is high. Expansion areas provide a contingency plan if the University cannot redevelop to meet modern educational needs and requirements within current boundaries*.' Most of the proposed boundary expansions would occur to the northwest and east of campus, away from adjacent single-family neighborhoods. Existing topography and proposed open space would help control the impacts of the proposed boundary expansion to the southeast and northwest, respectively. Implementation of development regulations and design guidelines contained within the proposed ***Draft MIMP*** would also help ensure that the proposed development within the boundary expansions would be consistent with the type and scale of land uses within the surrounding neighborhood.

Policy LU13.11 – Apply the development standards of the underlying zoning classification to all major institution development, except for specific standards altered by a master plan.

Discussion: See the response to LU13.6 above. Several modifications to underlying development code provisions are proposed as part of the ***Draft MIMP***.

Policy LU13.12 – Determine appropriate measures to address the need for adequate transition between the major institution and surrounding uses.

Discussion: A stated aim of the ***Draft MIMP*** is to, "Develop with sensitivity along the MIO boundary to respect neighborhood and public edges." The ***Draft MIMP*** would continue to shift growth away from the residential area up the hill (to the south), and toward the public edge and Nickerson Street corridor down the hill (to the north). Approximately half of the proposed MIO periphery adjacent to surrounding residential properties would include a 37-foot height limit and maintain a buffer between surrounding residential areas and the campus core. The other half of the proposed MIO periphery adjacent to residential properties would increase to a 50-foot height limit. The area of proposed height limit increase at the southeast campus

boundary may be separated from adjacent low-rise residential areas by existing topography and vegetation. Maintenance of open space areas along campus boundaries and provision of streetscape enhancements would also help to ease the transition between the SPU campus and surrounding uses (e.g., in the northwestern portion of the campus).

Policy LU13.14 – Use a transportation-management program to reduce the number of vehicle trips to the major institution and to limit the adverse impacts of traffic and of institution-related parking on surrounding streets, especially residential streets. Strive to reduce the number of single-occupant vehicles used for trips to and from major institutions at peak times. Allow short-term or long-term parking space requirements to be modified as part of a transportation-management program.

Discussion: The ***Draft MIMP*** includes an updated Transportation Management Program (TMP) to provide for safe, integrated transportation and parking that supports the utilization of alternative modes of transportation to single-occupant vehicles (SOVs) for full time students and staff (see **Appendix F** for details).

Policy LU13.15 – Encourage housing preservation within major institution overlay districts and limit impacts on housing in surrounding areas. Discourage conversion or demolition of housing within a major institution's campus, allowing it only when the institution needs to expand or when the institution replaces the lost housing with new housing. Prohibit the demolition of noninstitutional housing for replacement by principal-use parking that is not necessary to meet the parking requirement. Prohibit development by a major institution outside of the MIO district boundaries when it would result in the demolition or conversion of residential buildings into nonresidential uses, unless authorized by an adopted master plan.

Discussion: A stated objective of the ***Draft MIMP*** is to, "*Provide more on-campus student housing to strengthen the on-campus community, decrease trips to campus, and reduce impacts on the number of neighborhood rental units*.." A total of 706,600 gross sq. ft. of net new housing would be included in the ***Draft MIMP***. Similar amounts of new housing would be provided under ***Alternatives 2***, ***3***, ***4***, and ***5***; no new housing would be built under ***Alternative 1***. A total of approximately 149,500 sq. ft. in residential use within the current MIO boundary would be demolished to accommodate full buildout of the ***Draft MIMP***. Only one residential apartment building would be demolished and replaced with a new residential building, within the proposed MIO expansion areas; no other residential buildings owned or leased by SPU would be demolished or have their uses changed in the proposed MIO expansion areas. Therefore, there would be a net gain in housing with the ***Draft MIMP*****.**

Community Well Being Element

Goal CW G3 – Create a healthy environment where community members of all ages, stages of life, and life circumstances are able to aspire to and achieve a healthy life, are well nourished, and have access to affordable health care.

Policy CW 3.1 – Encourage Seattleites to adopt healthy and active lifestyles to improve their general physical and mental health and well-being and to promote healthy aging. Provide information about and promote access to affordable opportunities for people to participate in fitness and recreational activities and to enjoy the outdoors.

Discussion: Existing athletic and recreational facilities are provided on the SPU campus including: Royal Brougham Pavilion, Wallace Athletic Field, and access points to the Fremont Cut (including a publicly-accessible boat launch). Two new athletic/recreation buildings are proposed in the long-term in the ***Draft MIMP*** (one would replace Royal Brougham Pavilion). These existing and planned athletic/recreational facilities are primarily intended for use by SPU students, faculty, staff, and alumni.

SPU works to maintain a campus that serves both the campus community and neighboring community members through greater walkability and access to a variety of open spaces. As mentioned earlier in this section, SPU allows public use of its open spaces and paths for passive, unscheduled recreation uses. The University must grant permission for use of on-campus open spaces for scheduled events or more formal purposes.

The Ship Canal Trail, a 1.9-mile public trail that extends from Fremont Ave. N. to W. Emerson Pl., passes adjacent to the northern SPU campus boundary. This public trail is currently available for walking, biking, and skating, and is wheelchair accessible. The public would continue to have access to this trail with implementation of the ***Draft MIMP***. SPU could provide additional opportunities for connection to the Ship Canal Trail along the campus boundary through the *MIMP* process.

Additionally, the ***Draft MIMP*** includes design guidelines associated with *Site Planning*, *Pedestrian Environment* and *Athletics and Recreation* that would be expected to prompt consideration of the Ship Canal Trail during the development of individual projects located within the vicinity of the trail. These guidelines include:

A. Site Planning

- *How does the design locate entrances at prominent intersections and pathways?*
- *How does the design encourage human activity on the ground plane?*
- *How does the design encourage and support pedestrian and bicycle activity?*

D. Pedestrian Environment

- *How does the design incorporate convenient, attractive, well-lit, and protected pedestrian entries?*

Athletics and Recreation

- *Athletics and Recreation buildings that front a public right-of-way should be designed with sensitivity to the pedestrian scale along sidewalks and paths with the use of detailing, unit-based expression of materials, and/or wall openings.*

It is important to note that the design guidelines are not regulatory requirements. According to the ***Draft MIMP***, the guidelines are intended to encourage design excellence and uphold features that reinforce institutional identity. However, these guidelines would be considered by the University, design partners and the Standing Advisory Committee to evaluate projects.

Policy 3.7 – Require healthy building methods and materials in City-funded projects and encourage private development to use construction methods and materials that result in healthy indoor environments for all Seattleites.

Discussion: SPU intends to incorporate sustainable principles for all aspects of campus site and building design, construction, maintenance, and operation. The ***Draft MIMP*** includes sustainability design guidelines to encourage the University to meet this goal.

Goal CW G4 – Support an education system and opportunities for lifelong learning that strengthen literacy and employability for all Seattleites.

Discussion: SPU provides benefit to the city as one of the major higher-education institutions in the region. It is SPU's goal to provide quality education for students from Seattle, as well as from around the globe. The University is committed to lifelong learning. This includes a senior citizen program that allows people over 65 to take classes for free. According to SPU's website, graduates from SPU are employed at all the major companies in the region, including the 13 Fortune 500 companies located in Seattle.

Policy 4.3 – Encourage parent, volunteer, business, and community support for education and involvement in schools.

Discussion: Established in 1922, the Seattle Pacific Alumni and Parent Relations Association offers alumni and SPU families a range of opportunities to stay connected to and support SPU. SPU also seeks to maintain and strengthen ties with local businesses and the community, including through improved pedestrian experiences, and opportunities for new open space and mixed-use activity.

Policy 4.5 – Support opportunities for community-based learning through service projects that have value to both the students and the community.

Discussion: SPU provides opportunities for students to engage in community service projects. As an example, Latrecia is a resource at SPU for students interested in serving in greater-Seattle. Latrecia helps connect students' passions, focus of study, or general interests with local agencies looking for volunteers. Service opportunities may be one-time projects or long-term experiences.

Policy 4.9 – Work with colleges, universities, other institutions of higher learning, and community-based organizations to promote lifelong learning opportunities and encourage the broadest possible access to libraries, community centers, schools, and other existing facilities throughout the city.

Discussion: As described in the response to Goal CW G4, SPU provides opportunities for lifelong learning. Ames Library at SPU serves as the heart of SPU's academic program. The library is open to SPU students, faculty, staff, and alumni. One of SPU's stated goals for the ***Draft MIMP*** is to create a strong, accessible campus framework that promotes connected opportunities between SPU and the broader community.

Policy 4.10 – Work with schools, libraries, and other educational institutions, community-based organizations, businesses, labor unions, and other governments to develop strong educational and training programs that provide pathways to successful employment.

Discussion: SPU is a nationally ranked, Christian, private, liberal arts university. According to SPU's website, 93% of graduates surveyed one year after graduations were either employed, attending graduate school, serving in the U.S. Armed Forces, or engaging in volunteer service.

Shoreline Areas Element

An area along the existing northeastern boundary of the SPU campus, near the Ship Canal and two discrete areas of the campus adjacent to the Ship Canal to the northwest, are located within the Shoreline District. The former area is currently in the Urban General (UG) Shoreline environment, with a 35-ft. height limit; the latter is in the Industrial General (IG)1 Shoreline environment, with a 45-foot height limit. Both these areas are MIO-37, with a 37-ft. height limit in the current *MIMP*.

Portions of the proposed MIO expansion areas to the east and northwest are also in the Shoreline District. The northern part of the MIO expansion area to the northwest is presently in the IG1 Shoreline environment, with a 45-foot height limit. The northern part of the MIO expansion area to the east is presently in the UG Shoreline environment, with a 35-ft. height limit.

In the ***Draft MIMP***, the two discrete areas along the Fremont Cut, as well as the part of the proposed MIO expansion area to the northwest, that are in the Shoreline District would continue as MIO-37. The area to the northeast, as well as the part of the proposed MIO expansion area to the east, that are within the Shoreline District would change to MIO-65, increasing the height limit from 35 - 37 ft. to 65 ft. However, development within the Shoreline District would be capped by Shoreline height limits.

Goal SA G6 – Maximize public access—both physical and visual—to Seattle's shorelines.

Policy SA P66 – Require visual public access where feasible.

Discussion: Physical access to the shoreline in the vicinity of SPU is currently provided by the South Ship Canal Trail to the north of campus. Two discrete portions of the existing SPU MIO are also located along the Ship Canal and provide water access (including the publicly-accessible boat launch). These locations with physical access to the shoreline would be maintained with the ***Draft MIMP.***

The main places where visual access to the Ship Canal shoreline is currently possible are from the South Ship Canal Trail, and from W. Nickerson St. (particularly looking across the Wallace Athletic Field and along intersecting street corridors such as Queen Anne Ave. N., 3rd Ave. W, and 6th Ave. W.). Existing buildings on the SPU campus, and in the proposed eastern and northwestern MIO expansion areas, currently block most views of the shoreline from W. Nickerson St.

Under the ***Draft MIMP***, visual access to the shoreline from the South Ship Canal Trail would not change and visual access from W. Nickerson St. would not change substantially. Development of five new one- to four-story buildings and renovation of three existing three- to four-story buildings is proposed in the Shoreline environment in the long-term. The new buildings would replace existing buildings that currently block views of the shoreline from W. Nickerson St. and would also partially obscure background views of industrial development and warehouses, and of the Fremont neighborhood. Views of the water/shoreline down the 6th Ave. W and 3rd Ave. W rights-of-way would remain available however (refer to **Section 3.5 Aesthetics – Height, Bulk, and Scale**, and **Section 3.6 – Public View Protection**, of this Draft EIS for discussion on views).

Goal SA G33 – The purpose of the Urban General Environment is to provide for commercial and industrial uses in the shoreline district where water access is limited.

Goal SA G35 – The purpose of the Urban Industrial Environment is to provide for water-dependent and water-related industrial uses on larger lots.

Policy SA P65 – Allow commercial and industrial uses that are not water dependent or water related.

Policy SA P75 – Allow uses that are not water dependent or water related where there is no direct access to the shoreline.

Discussion: To the north of W. Nickerson St., the ***Draft MIMP*** conceptually proposes the following campus uses in the Shoreline environment: Mixed Use between the western MIO boundary and 4th Ave. W. (if extended) in the Urban Industrial Environment; and Athletic and Recreation uses between 4th Ave. W (if extended) and Queen Anne Ave. N., and Education and General uses between Queen Anne Ave. N and the eastern MIO boundary in the Urban General Environment. Industrial uses are not proposed in either of the Shoreline environments; commercial uses could be included in the Mixed-Use area in the Urban Industrial Environment. None of the proposed uses are water dependent or water related.

3.5 Height, Bulk and Scale

This section of the Draft EIS describes the existing height, bulk, and scale conditions on the SPU campus and in the site vicinity and evaluates the potential impacts to height, bulk, and scale that could occur as a result of the ***Draft MIMP***.

Policy Context

The Seattle Municipal Code (SMC) contains specific provisions that describe the scope of the SEPA analysis relative to height, bulk, and scale. Applicable policies from SMC 25.05.675 are noted below:

G.2 Height, Bulk and Scale. Policies

a. It is the City's policy that the height, bulk, and scale of development projects should be reasonably compatible with the general character of development anticipated by the goals and policies set forth in the Land Use Element, Growth Strategy Element, and Shoreline Element of the Seattle Comprehensive Plan; the procedures and locational criteria for shoreline environment redesignations set forth in Sections 23.60A.060 and 23.60A.220; and the adopted land use regulations for the area in which they are located, and to provide for a reasonable transition between areas of less intensive zoning and more intensive zoning.

b. Subject to the overview policy set forth in SMC Section 25.05.665, the decisionmaker may condition or deny a project to mitigate the adverse impacts of substantially incompatible height, bulk, and scale. Mitigating measures may include but are not limited to:

i. Limiting the height of the development;
ii. Modifying the bulk of the development;
iii. Modifying the development's facade including but not limited to color and finish material;
iv. Reducing the number or size of accessory structures or relocating accessory structures including but not limited to towers, railings, and antennae;
v. Repositioning the development on the site; and
vi. Modifying or requiring setbacks, screening, landscaping, or other techniques to offset the appearance of incompatible height, bulk, and scale.

3.5-1 Affected Environment

Existing Campus

Height, Bulk, & Scale

SPU is an approximately 66-acre[1] urban university campus located on the north slope of Queen Anne hill, abutting the Ship Canal to the north. Steep slopes along the south end of campus create a buffer between SPU and surrounding low-rise development in the Queen Anne neighborhood. To the north, the campus is separated from the Fremont neighborhood by the South Ship Canal Trail and the Ship Canal.

[1] Within SPU's Major Institution Overlay (MIO) boundary, the University currently owns an area of approximately 44 acres.

Height, bulk, and scale relate to the size of buildings and their relationship to the surrounding context (e.g., to surrounding buildings and the pedestrian realm). The City's SEPA policies identify the need to address building height, bulk, and scale to achieve appropriate transitions between areas of less intensive and more intensive zoning.

In general, the existing height, bulk, and scale of buildings on the SPU campus is greatest in the central, northern, and western areas, and least in the southern, and eastern areas (see **Figure 3.5-1**, Isometric Birds Eye View of Existing Campus). Open space areas are located throughout campus, the largest of which are in the central campus (Tiffany Loop) and northern campus (Wallace Athletic Field). Below are further details on the existing height, bulk, and scale at SPU.

Building Heights

Existing campus buildings are primarily low-rise structures ranging in height from one to four stories. Generally, the central portion of the campus is zoned Major Institution Overlay (MIO)-50 – height limit of 50 ft.; most of the southwest portion of campus is zoned MIO-65 – height limit of 65 ft., and all remaining portions of the campus are zoned MIO-37 – height limit of 37 ft. An area along the existing northeastern boundary of the SPU campus, near the Fremont Cut and two discrete areas of the campus adjacent to the Cut to the northwest, are located within the Shoreline District. The former area is currently in the Urban General (UG) Shoreline environment, with a 35-ft. height limit; the latter is in the Industrial General (IG)1 Shoreline environment, with a 45-foot height limit. Both these areas have a 37-ft. height limit in the current *MIMP*. Refer to **Figure 2-10** in **Chapter 2** for an existing MIO zoning map depicting the current campus height limits.

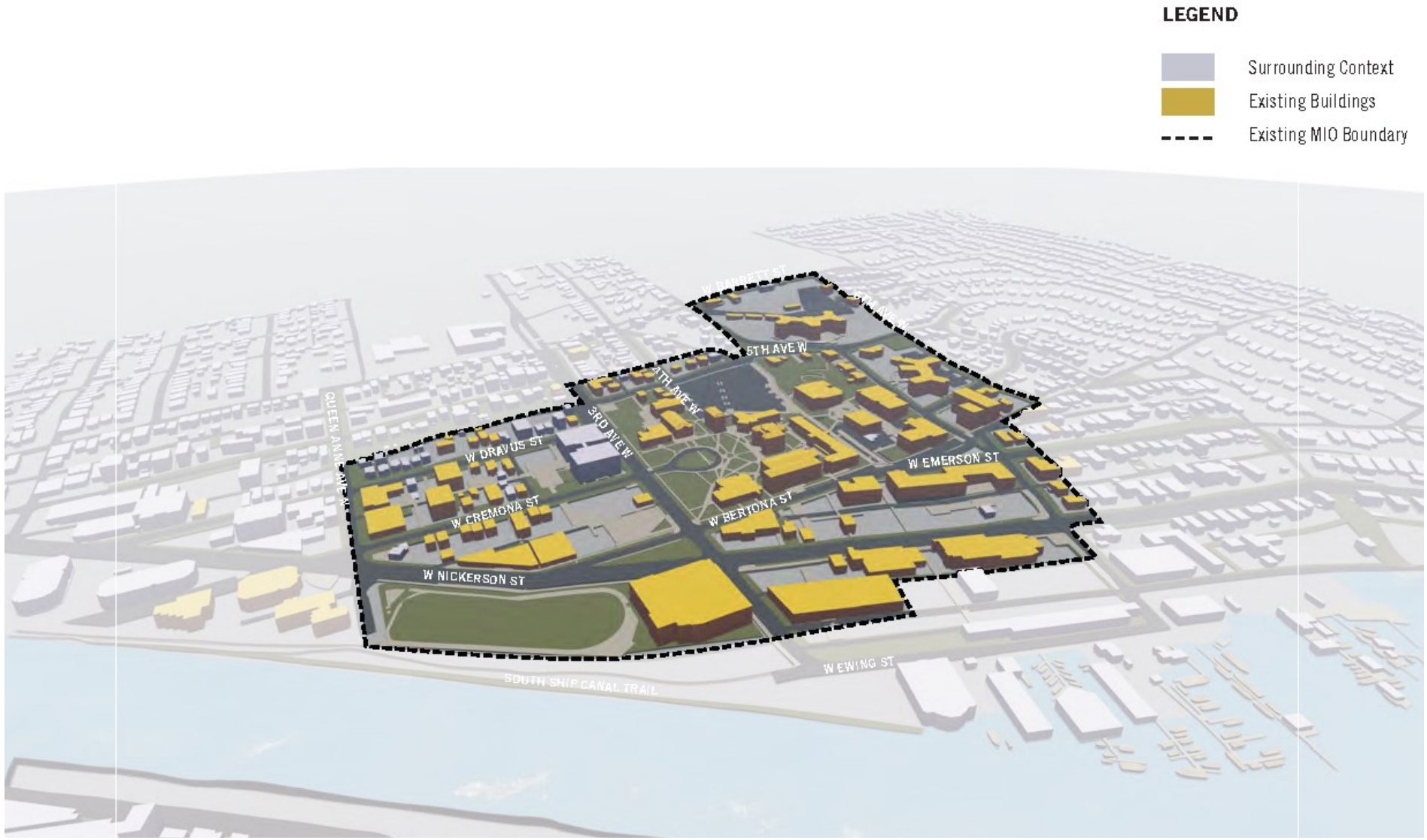
The central academic core, located in the middle of the MIO boundary, is clustered around the Tiffany Loop open space. Buildings in the central core range in height from 23 ft. (Crawford Music Building) to 48 ft. (Alexander and Adelaide Hall). Campus buildings outside the central core vary in height from one-story (several residential buildings) to about five stories (Ashton Dorm and Royal Brougham Pavilion).

The tallest existing buildings on campus include: Ashton Dorm (56 ft. tall) in southwest campus, Royal Brougham Pavilion (52 ft. tall) in the north campus, Demaray Hall (49 ft. tall) in central campus, and Hill Dorm (43 ft. tall) in west campus. Approximately 15, one- to two-story (28 ft. tall) residential buildings, including single-family residences, duplexes, and triplexes, are primarily located in the south and west portions of campus. The existing low-rise student housing facilities create a transitional zone between the academic core and adjacent low-rise development offsite.

Building Sizes, Lot Coverage, & Density

As of 2019, SPU had 90 buildings within the existing MIO, comprising a total of approximately 1,219,800 sq. ft. of gross floor area.[2] The individual buildings vary in size from less than 1,000 sq. ft. of gross floor area to over 135,000 sq. ft. of gross floor area. The largest buildings on campus include: Emerson Hall (135,520 sq. ft. of gross floor area), Ashton Hall (95,531 sq. ft. of gross floor area), Royal Brougham Pavilion (82,746 sq. ft. of gross floor area), and Arnett Hall (74,794 sq. ft. of gross floor area). Smaller residential buildings on south and west campus are generally under 2,000 sq. ft. of gross floor area.

[2] Gross floor area per zoning is measured to the inside surface of exterior walls at floor level and it excludes portions of a building that are entirely below-grade.



Source: Perkins + Will, Draft MIMP, 2023

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Figure 3.5-1

Isometric Birds Eye View of Existing Campus

Lot coverage for SPU is the percentage of the total University-owned land area in major institution use, excluding rights-of-way, that are covered by University buildings. According to the *2000 MIMP*, lot coverage by above-grade structures shall not exceed 50 percent for the entire campus area. Existing buildings comprise a total campus footprint of 449,657 sq. ft. Existing University-owned land equals 1,847,029 sq. ft. Therefore, the lot coverage of the existing campus is approximately 24 percent.

Floor Area Ratio (FAR) is a means of representing density and is the ratio of the amount of gross floor area permitted and the area of the lot on which the structure is located.[3] The FAR requirements of the underlying zones do not apply within the MIO because FAR is calculated at the district level instead of the project level. FAR of development within the existing SPU MIO boundary is 0.64.

Building Setbacks

As shown in **Table 3.5-1**, the existing building setbacks adjacent to streets in the SPU campus area are regulated by the underlying Seattle Municipal Code, as well as by the *2000 MIMP*. Based on the Code, existing building setbacks required by underlying zoning adjacent to and passing through campus are five feet to seven feet, except for adjacent to W. Bertona St. (between Emerson and 3rd) and adjacent to W. Nickerson St. where there are no setbacks. Based on the *2000 MIMP*, the existing building setbacks are pursuant to the Code, except for W. Bertona St. where the setback is 15 ft. and adjacent to 7th Ave. W. where the setback is 20 ft.

Table 3.5-1
Existing & Proposed Building Setbacks

Street	ROW Width	Existing Setback (Underlying Zone)	Existing Setback (2000 MIMP)	Proposed Setback
6th Ave. W.	60 ft., 66 ft.	5 ft. – 7 ft.	Underlying Code	15 ft.
W. Bertona St. (west of Emerson and east of 3rd)	30 ft., 66 ft.	5 ft. – 7 ft.	15 ft.	15 ft.
W. Bertona St. (b/w Emerson and 3rd)	66.63 ft.	No Setback	15 ft.	15 ft.
W. Dravus St.	30 ft., 60 ft.	5 ft. – 7 ft.	Underlying Code	15 ft.
W. Cremona St.	60 ft., 66 ft.	5 ft. – 7 ft.	Underlying Code	15 ft.
3rd Ave. W.	74 ft., 104 ft.	5 ft. – 7 ft.	Underlying Code	15 ft.
W. Nickerson St.	80 ft.	No Setback	Underlying Code	2 ft.
7th Ave. W. (b/w W. Bertona St. and W. Dravus St.	52 ft.	5 ft. – 7 ft.	20 ft.	20 ft.

Source: Perkins + Will Architects, 2021.

MIO Boundary Expansion Areas

Three expansion areas are proposed, and the existing development and height limits in these three areas are described below.

[3] Per SMC Exhibit 23.84.012 A.

Northwest

The Northwest Expansion area includes an assemblage of existing primarily small-scale, one- to two-story, commercial and residential buildings between W. Nickerson St. and W. Ewing St. (there is one larger scale warehouse-type building located at the southwest corner of W. Ewing St. and 6th Ave. W.). One- to three-story single-family and multi-family residential buildings are located in the panhandle of this expansion area, between W. Nickerson St. and W. Bertona St.

Existing height limits in the Northwest expansion are 30 to 40 feet south of W. Nickerson St. between W. Bertona St. and W. Nickerson St; 40 to 55 feet north of W. Nickerson St., west to 8th Ave. W. and north to the South Ship Canal Trail. A portion of the Northwest expansion area is also in the Shoreline District and has a 45-ft height limit. (See **Figure 2-10** in **Chapter 2** for details.)

East

The East Expansion area is presently comprised of one- to two-story commercial buildings along the south sides of W. Nickerson St. and along the east side of Queen Anne Ave. N. Larger-scale three-story office buildings are situated along the north side of W. Nickerson St.

Existing height limits in the East expansion area are 40 feet to 55 feet. A portion of the East expansion area is also in the Shoreline District with a height limit of 35 feet (see **Figure 2-10** in **Chapter 2** for details.)

Southeast

The Southeast Expansion area currently consists of two to three-story single-family and multi-family homes along the north side of Etruria St., between 3rd Ave. W. and Queen Anne Ave. N.

The existing height limit in the Southeast expansion area is 40 feet (see **Figure 2-10** in **Chapter 2** for details).

Existing Campus Vicinity

Height, Bulk, & Scale

The portion of the Queen Anne neighborhood in which the SPU campus is situated is generally located on a north-facing hillside, leveling off at the base of the hill. The topography influences the perception of height, bulk and scale of the area (e.g., because you can look over buildings or the buildings appear less tall).

SPU is bordered by the South Ship Canal Trail, low-rise industrial uses, and the Ship Canal to the north; generally low-rise multifamily/commercial uses to the east; and low-rise single/multi-family residential uses to the south and west. The Mount Pleasant Cemetery and Queen Anne Bowl Playfield/David Rogers Mini Park are open space/recreation areas located to the south of campus, and the South Ship Canal Trail and West Ewing Mini Park are open space/recreation areas to the north of campus. ***Section 3.4, Land Use***, presents a comprehensive overview of the pattern of land uses in the vicinity of the SPU campus.

3.5-2 Impacts of the Proposed Action (Draft MIMP)

Height, Bulk, & Scale

Under the ***Draft MIMP***, SPU would continue to reflect the existing institutional nature of the campus, including educational and general, housing, athletics/recreation, and mixed uses. However, the campus area and density of development would increase, and the number and locations of buildings and open space areas would change. Existing steep slopes and natural landscaping along the south end of campus would continue to create a buffer between SPU and surrounding low-rise development in the Queen Anne neighborhood.

The overall size, and height, bulk, and scale of the SPU campus would increase with development under the ***Draft MIMP*** (Proposed Action), with the greatest increases in height/bulk/scale in the north and central portions of campus (see **Figure 3.5-2**, Isometric Birds Eye View of Proposed Campus). The campus area would increase by 18 acres (including public rights-of-ways) with the proposed MIO boundary expansions to the northwest, east, and southeast. Planned projects identified in the ***Draft MIMP*** would result in approximately 7,400 sq. ft. of net new gross floor area, and a campus-wide total gross floor area of roughly 1,236,100 sq. ft.[4] Potential projects identified in the ***Draft MIMP*** could include 47 projects with a total of approximately 1.71 million sq. ft. of additional net new gross floor area.[5] This potential development would result in a campus-wide total gross floor area of roughly 3.0 million sq. ft., as compared to about 1.2 million sq. ft. of gross floor area in existing development within the 2000 MIO.

Although there are few planned or potential projects identified for the Northwest and Southeast Expansion areas, under the ***Draft MIMP***, maximum building heights in these areas would increase, therefore the potential for impacts associated with height, bulk, and scale on adjoining off-campus neighborhoods exists even though specific buildings have not been identified.[6] In order to reduce these potential impacts, the proposed MIO boundary expansions and potential long-term growth would respect neighborhood character through creation of a residential use buffer; increasing the intensity of non-residential land uses toward the center and northern portions of campus; and promoting mixed-uses along the W. Nickerson St. corridor. These elements of the ***Draft MIMP*** would help to integrate the SPU campus with the surrounding community, as well as contribute to maintaining the livability and vitality of the adjacent neighborhood. As well, implementation of development regulations and consideration of design guidelines contained within the proposed ***Draft MIMP*** would help ensure that any proposed development would be consistent with the type and character of land uses within the surrounding neighborhood. Lastly, if SPU proposes to construct a building in one of the expansion areas that has not previously been identified and considered during this ***MIMP*** approval process, an amendment to the ***MIMP*** would need to be processed and additional SEPA review of the proposed building(s) would be conducted during that process.

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4 Planned campus development is defined by the Seattle Land Use Code as "development which the Major Institution has definite plans to construct".

5 Potential development is defined by the Seattle Land Use Code as "development or uses for which the Major Institution's plans are less definite" (SMC 23.69.030 D.).

6 Building heights in the East Expansion area would actually decrease by 5 ft. as compared to the underlying zoning.

Source: Perkins + Will, Draft MIMP, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 3.5-2

Isometric Birds Eye View of Campus under Proposed Action

Building Sizes, Lot Coverage, & Density

In total, planned and potential development under the ***Draft MIMP*** could include 50 new projects, including: 40 new buildings, four additions to buildings, five building renovations, and a new open space area. All three planned projects would be located within the existing MIO boundary. An estimated 37 potential development projects would be located entirely within the existing MIO boundary, eight potential development projects could be located entirely in the MIO boundary expansion areas, and two potential projects (MUC-3 and AR--1) would be partially located within the existing MIO and partially within the Northwest Expansion area. Proposed new buildings would vary in size from approximately 5,000 sq. ft. of gross floor area (e.g., new housing in the northwest part of campus) to about 222,600 sq. ft. of gross floor area (e.g., a athletics and recreation building in the north part of campus). In general, the largest new buildings would be located in the north and central portions of campus. Five potential new buildings are shown either fully or partially in the Northwest Expansion area (Buildings MUC-1, MUC-2, MUC-3, AR-1 and H-2), two potential new buildings and three building renovations are shown in the East Expansion area (Buildings MUC-5, H-20, EG(R)-2, EG(R)-3 and EG(R)-4), and no new buildings in the Southeast Expansion Area (see **Table 2-2** and **Figures 2-6** and **2-7** in **Chapter 2**).

At full buildout of the ***Draft MIMP***, it is anticipated that lot coverage would be approximately 45.4 percent, as compared to 23.5 percent under existing conditions. The maximum allowable lot coverage proposed under the MIMP is 60 percent. Increasing lot coverage would decrease the open space on campus and the separation/buffering that the open space provides between buildings and between buildings and the pedestrian realm.

The FAR of planned and potential development within the proposed MIO boundary would be 1.47, more than twice the FAR of existing development within the 2000 MIO of 0.64. As mentioned previously, FAR is a means of representing density. Therefore, with an increase in FAR there would be an increase in density on the campus.

Building Heights

Height limit changes are proposed in the following interior areas of the existing SPU campus:

- central campus, an increase from 50 ft. to 65 ft.,
- southeast campus (west of Queen Anne Ave. N. and south of W. Cremona St.), an increase from 37 ft. to 50-65 ft., and
- northwest campus (south of W. Nickerson St. and east of 6th Ave. W.), an increase from 37 ft. to 65 ft., and properties north of W. Nickerson St., an increase from 37 ft. to 65 ft., (see **Table 2-2** and **Figure 2-11** in **Chapter 2** for details).

In the MIO expansion areas, the following height limit changes are proposed:

- **Northwest -** South of W. Nickerson St. between W. Bertona St. and W. Nickerson St., the height limit would largely be similar to at present (37 ft. vs the existing 30 to 40 feet), with heights in the northern most section of this area increasing from 40 ft. to 50 ft. North of W. Nickerson St. west to 8th Ave. W. and north to the South Ship Canal Trail, height limits would increase in certain areas (40 ft. to 50 ft.), and would decrease in others (55 ft. to 50 feet). Several parcels in this area in the Shoreline District have an existing height limit of 45 feet that would increase to 65 feet, although the height limit associated with the Shoreline District would apply.

- **East –** The height limit would decrease from 55 feet to 50 feet. Several parcels in this area in the Shoreline District have an existing height limit of 35 ft. that would increase to 50 feet, although the height limit associated with the Shoreline District would apply.
- **Southeast** – The height limit would increase from 40 feet to 50 feet.

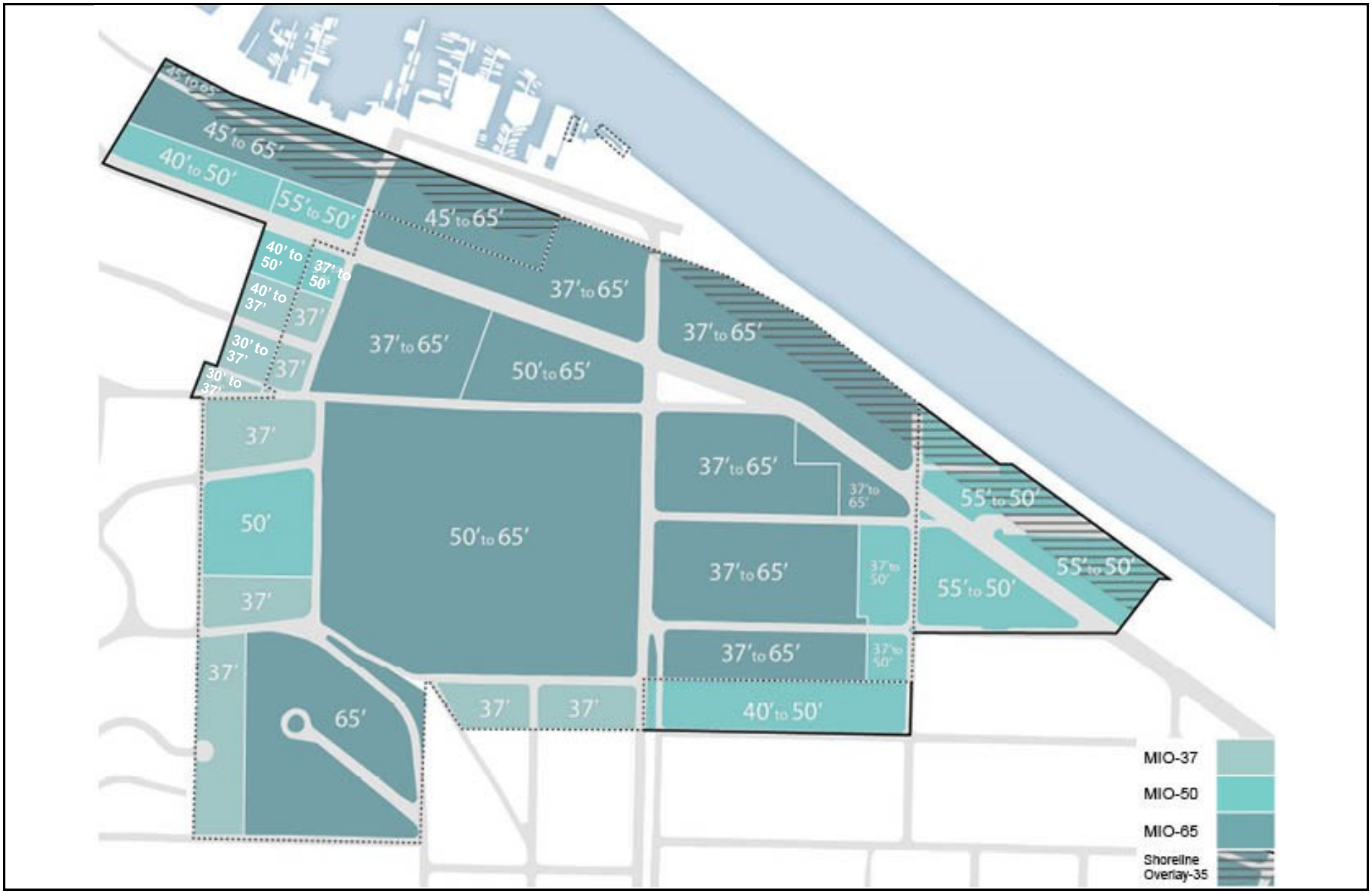
See **Figure 3.5-3** for a map that depicts the changes in height limits that would occur under the ***Draft MIMP*** as compared to the existing MIO within the existing campus boundaries and as compared to the underlying zoning within the MIO expansion areas. See **Figure 3.5-4** for a map that shows the zoning changes as specific height increases or decreases as compared to existing conditions.

Along the west (south of W Bertona St.) and southwest edge of the campus, the MIO periphery adjacent to surrounding residential properties and existing neighborhood residential zoning would maintain the existing height limits of 37 ft., 50 ft., and 65 ft., and maintain a buffer between surrounding residential areas and the campus core. Between W Bertona St. and W Nickerson St., within the Northwest Expansion area, height limits would increase by seven to ten ft. to MIO 37 and MIO 50. These height increases would be adjacent to LR1 (M) and LR3 RC (M) zoning to the west, which permits height limits up to 30 and 40 ft., respectively, and would not be considered a significant .

The other portion of the proposed MIO periphery adjacent to residential properties would maintain 37 ft. height limits or increase by 10 ft. to a 50-foot height limit (in the Southeast Expansion area). As a result, there would be a limited potential for conflicts between the 50-ft. buildings that could be built under the proposed zoning in the southeast and west portions of the campus and adjacent low-rise residential areas. However, the height increase in the southeast part of campus (Southeast Expansion area) would be buffered from adjacent residences to the south by existing topography**.** Refer to **Figure 3.5-5** for a cross-section demonstrating the limited impact of the height increase in the Southeast Expansion area. As demonstrated, the topography slopes down from south to north, from Etruria Street to W Cremona Street. At three levels, the rooftop of potential project H-23 appears to be at the same elevation as the base of the off-campus building to the south, along Etruria Street.

Development in accordance with the 65-foot height limit in the Shoreline District in the northeast part of campus could impact adjacent Shoreline uses, including the South Ship Canal Trail to the north. However, this area is currently occupied by existing buildings (three of which are proposed to be renovated) and the Wallace Athletic Field. They are not planned to be redeveloped in taller buildings. Also, development within the Shoreline District would be capped by Shoreline height limits; therefore, there would be less likelihood for height impacts, as the shoreline overlay supersedes MIO height limits designated in the ***Draft MIMP***.

Proposed new buildings would vary in height from one to six stories (see **Table 2-2** and **Figure 2-11** in **Chapter 2** for details). The tallest proposed buildings (six stories) would generally be located in the central portion of campus, well separated from existing low-rise buildings adjacent to campus. One proposed new 6-story residential hall (Building H-12) would be situated in southwest campus, to the southeast of Ashton Hall. The proposed height of this residential hall would be consistent with the height limit for this area in the *2000 MIMP*. This building would be separated from existing single-family homes to the east by 5th Avenue W and proposed landscaping. Several other new buildings would be located along the campus boundary. Three new residential buildings and one building addition in northwest campus (Buildings H-5, H-6, H-



Source: Perkins + Will, 2023

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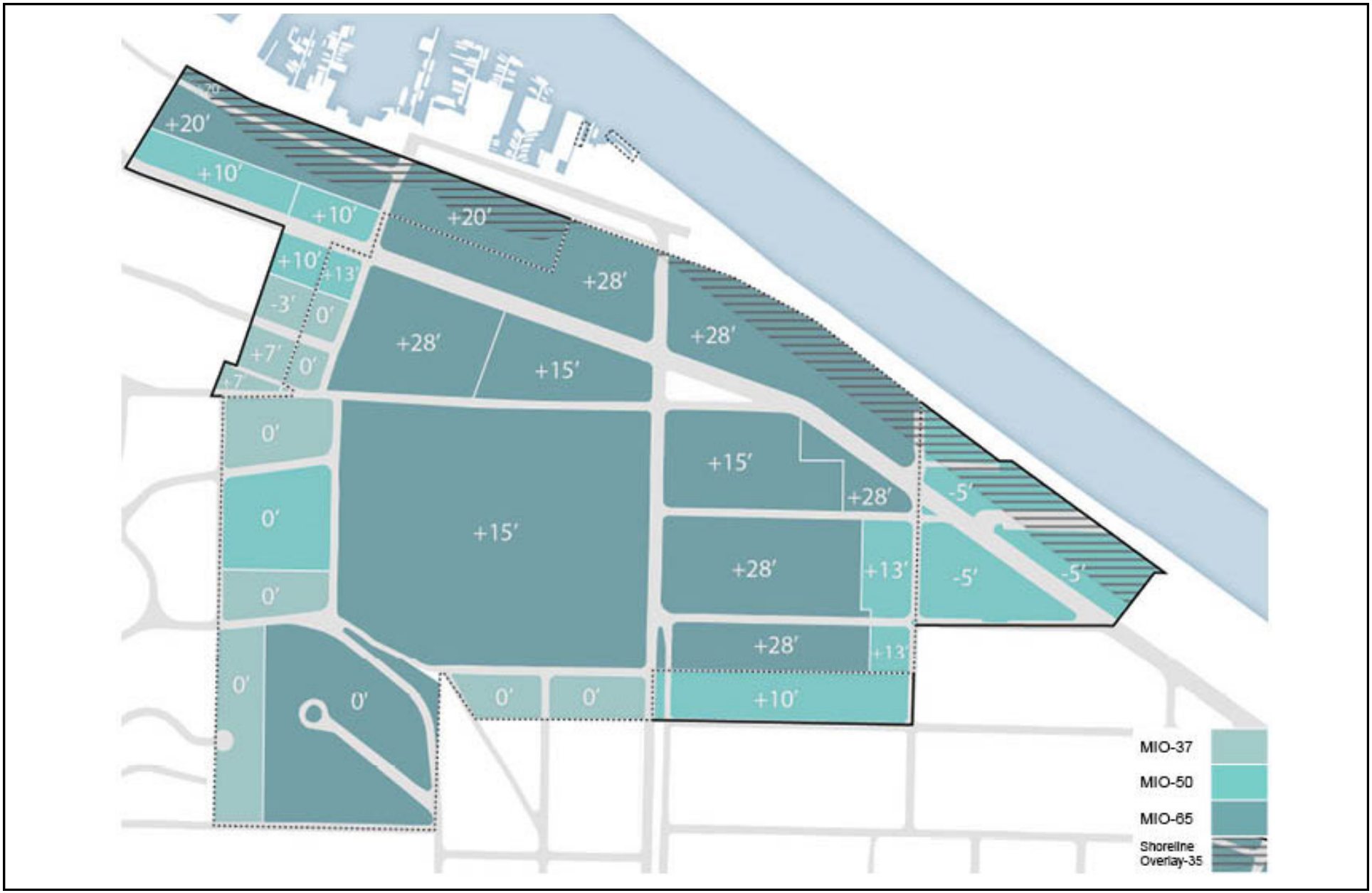
Figure 3.5-3

Existing and Proposed Height Changes - Draft MIMP



Source: Perkins + Will, 2023

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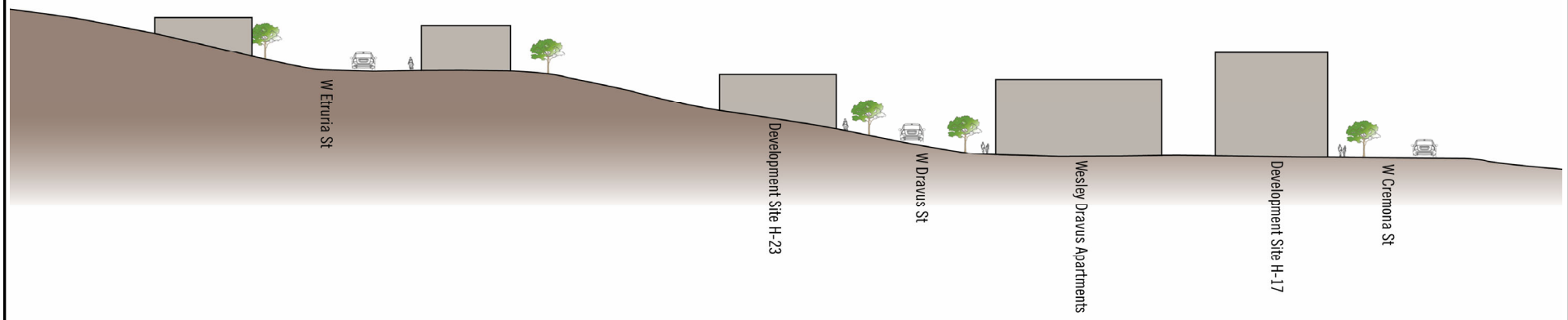
Figure 3.5-4

Proposed Height Increases/Decreases - Draft MIMP

Proposed Campus Massing Cross-Section
Southeast Expansion Area



Source: Perkins + Will, 2023

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Figure 3.5-5

Proposed Campus Massing Cross-Section—Southeast Expansion Area

7, and H-8) would be two stories in height, in keeping with existing off-site single-family homes across 7th Ave. W. to the west. Two new residential buildings in southeast campus (Buildings H-19and H-20) would be five and four stories in height, respectively. These buildings would be similar in height to other campus residential buildings in this area and separated from existing single-family homes to the south by W. Dravus St. Four new residential buildings in south campus (Buildings H-13, H-14, H-15, and H-16) would be three stories in height, compatible with existing single-family homes to the south. (See **Figure 3.5-2**.)

Figures 3.5-6 and **3.5-7** show the SPU campus at full build-out under the ***Draft MIMP*** and depict cross-sections along the east (Cross-section A) and southeast (Cross-section B) edges of campus. The purpose of these cross-sections is to show the heights of buildings under the existing and proposed zoning within the MIO boundary, in comparison to zone transitions at the edges of the campus. Each cross-section is described further below.

Cross-section A (Figure 3.5-6). This figure is a north-south section towards the western edge of the campus depicting existing buildings that would remain and proposed massing, heights and topography over the length of the SPU campus.

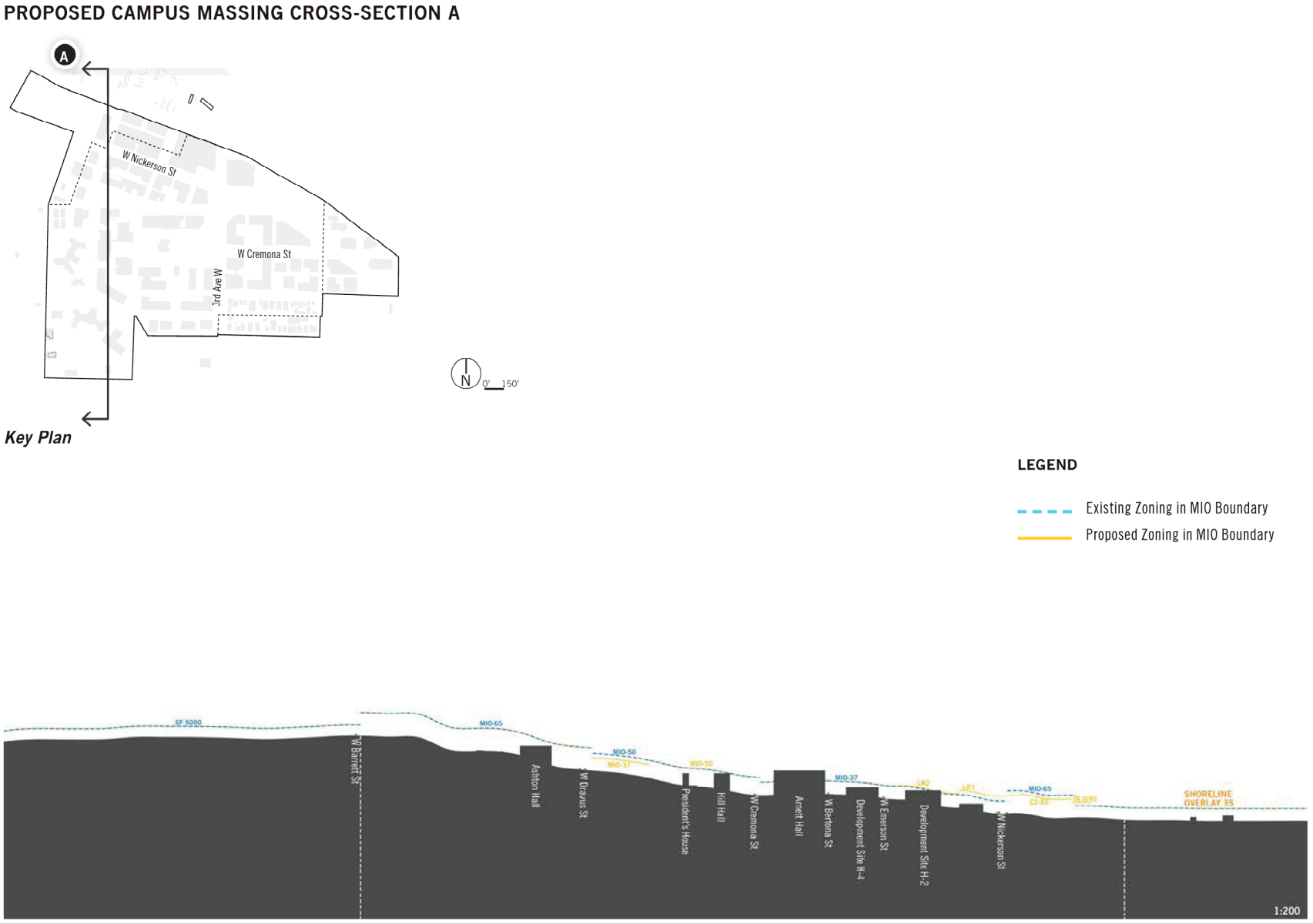
Cross-section B (Figure 3.5-7). This figure is a north-south section towards the eastern section of the campus depicting existing buildings that would remain and proposed massing, heights, and topography over the length of the SPU campus.

Views

Figures 3.5-9 through **3.5-12** show four photo-simulations depicting existing and proposed views from several locations in the immediate vicinity of the SPU campus boundaries, primarily along the campus edges. The purpose of these viewpoint photo-simulations is to depict how views could change from several representative locations in the campus vicinity, particularly relative to the height and massing of planned and potential buildings under the ***Draft MIMP***. Each photo-simulation is described in detail below. See **Figure 3.5-8** for a viewpoint location map.

Viewpoint 1. **Figure 3.5-9** depicts the existing and proposed view from the single-family residential neighborhood west of the SPU campus, at 8th Ave. W. and W. Dravus St., looking east toward the SPU campus. The existing view features small scale single-family homes, 1-2 stories in height, on the north and south sides of W. Dravus St. in the foreground and mid-field view, together with lawns, mature landscaping, and trees. In the mid-field view, approximately 225 feet to the east, is the west boundary of the SPU campus. At the terminus of the street (where W. Dravus St. meets 6th Avenue W.) the low-rise, small scale 528 W. Dravus St. building is visible. Under the proposed view, a portion of a new six-story, 144,000-sq. ft. residential building would be partially visible in the distance at the street end (Building #2). Due to topography, only the top three levels of the building would be visible from this location.[7] Although the new building would be greater in height and scale than the existing building in this location, the building would be similar in height and scale to other existing nearby campus residential buildings that are closer to the single-family neighborhood, including the four-story Hill Hall and six-story Ashton Hall. The

[7] Although the buildings appear white in the photosimulations, this is not expected to be representative of the actual building color or design of the projects. Color and materiality would be determined at the design and permitting stage of development and could be design elements used to achieve greater compatibility with the adjacent single-family neighborhood.



Source: Perkins + Will, Draft MIMP, 2023

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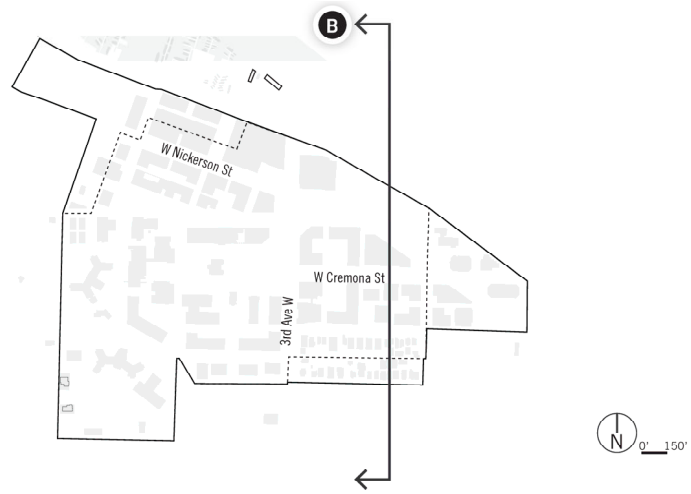
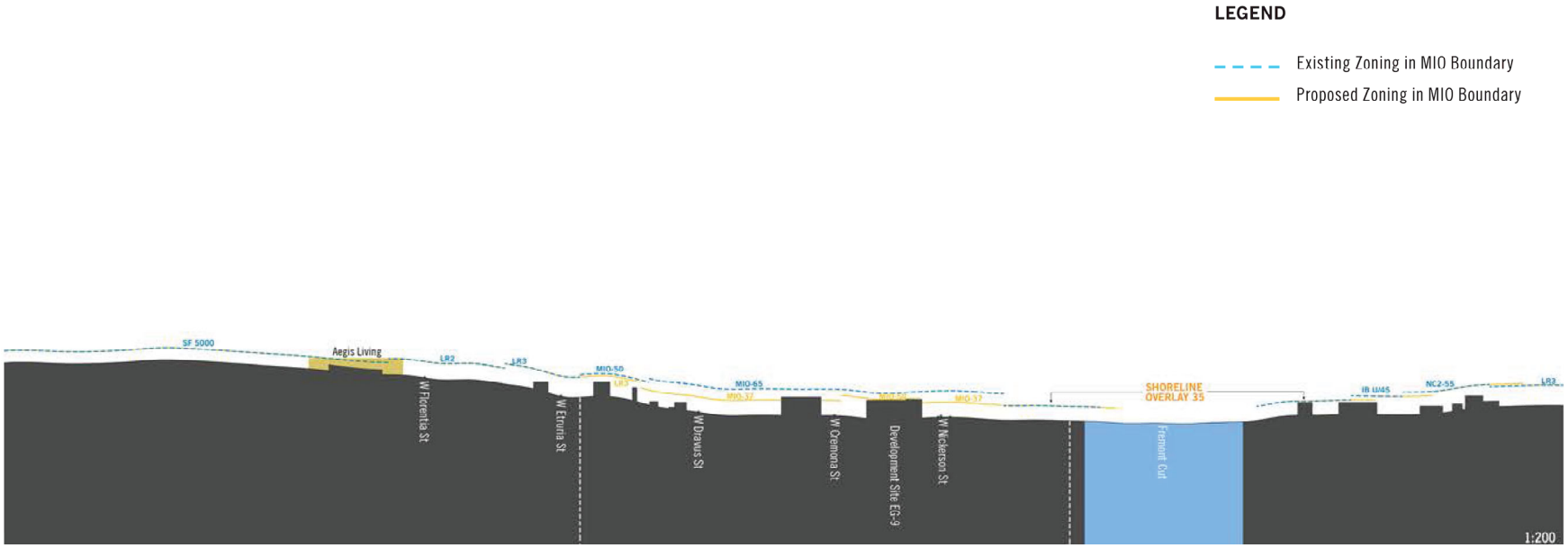
Figure 3.5-6

Proposed Campus Development Cross-Section A (Proposed Action)

PROPOSED CAMPUS MASSING CROSS-SECTION B



Key Plan



Source: Perkins + Will, Draft MIMP, 2023

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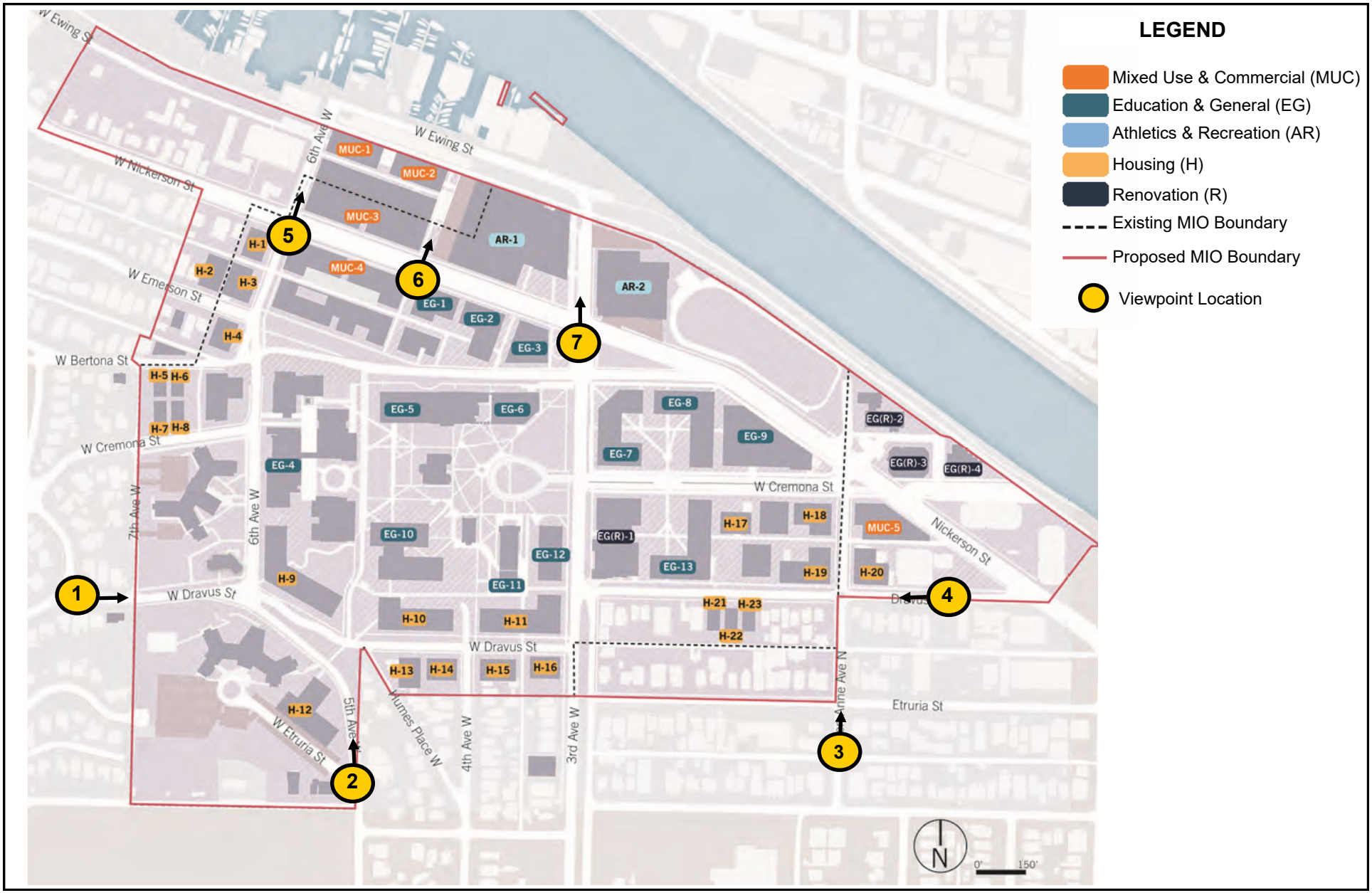
Figure 3.5-7

Proposed Campus Development Cross-Section B (Proposed Action)



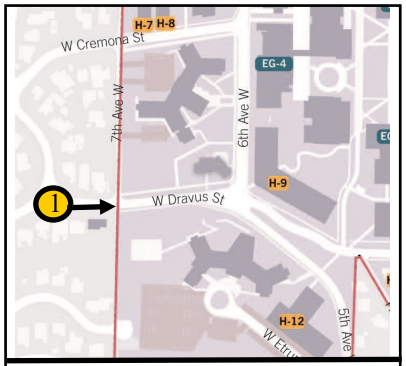
Source: Perkins + Will, Draft MIMP, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 3.5-8

Viewpoint Location Map

Key Map



Existing

Proposed

Source: Perkins + Will, 2021

EA Engineering, Science, and Technology, Inc., PBC

Figure 3.5-9

Viewpoint 1—8th Ave. W and W Dravus St., Looking East (Proposed MIMP)

overall visual character from this viewpoint would remain that of a low-rise residential area, although the bulk and height of development in the distance would increase.

Viewpoint 2. **Figure 3.5-10** depicts the existing and proposed view from 5th Avenue W looking north. The SPU campus is located to the north and to the west of 5th Ave. W. The existing view features a lawn in the foreground between W Etruria St. and 5th Avenue W, and a one-story, small scale residential building (Ashton Duplex) in the west (left) mid-field view. The tree-lined 5th Ave. W. right-of-way is visible extending into the distance; although not visible in the photograph, single-family residences are present on the east (right) side of 5th Ave. W. Topographically, W. Etruria St. slopes up to the west at this location, and 5th Ave. W. slopes down to the north.

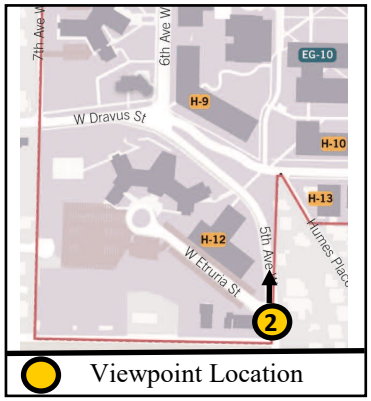
Under the proposed view, a portion of a new six-story, 85,800-sq. ft. residential building would be partially visible in the mid-field view on the north (right) side of W. Etruria St. (Building H-12). A portion of a new six-story, 144,000-sq. ft. residential building would also be partially visible in the distance, beyond the 5th Ave. W. right-of-way (Building H-9). Although the new residential building (H-12) would be greater in height and scale than the existing building at this location, the proposed building height would be consistent with the height limit for this area in the 2000 MIMP. Also, the building would be separated from existing single-family homes to the east by the 5th Ave. W. right-of-way, and proposed landscaping and open space area. The overall visual character from this viewpoint would change to include a larger, taller building visible on the SPU campus. However, a street corridor and open area/landscape screening would separate the new development from low-rise residential homes present to the east and no significant impacts would be anticipated.

Viewpoint 3. **Figure 3.5-11** depicts the existing and proposed view looking north from Queen Anne Avenue N, in between W Etruria Street and W Florentia Street. The existing view in the foreground features the two-story Mary Lynn Apartment building on the west (left) side of the roadway and the four-story One Eturira Apartment building on the east (right) wide of the roadway. Extending north down Queen Anne Avenue N into the distance, several two- and three-story single-family residences are visible or partially visible on the west (left) side of Queen Anne Avenue N. SPU's existing two-story Facility Operations Center is partially visible in the background, also on the west (left) side of the roadway.

Under the proposed view, a portion of a new five-level housing building (Building H-19) would be partially visible in the distance on the west side of Queen Anne Avenue N. A new four level housing building (H-20) on the opposite side of the street would largely be obscured by vegetation and would not be visible. The new residential building (H-19) would be greater in height and scale than the existing Facility Operations Building at this location. The new building would be separated from an existing single-family home across the street to the south by the W Dravus St. right-of-way, as well as a 15 ft. minimum property line setback. The overall visual character from this viewpoint would change to include a larger, taller building visible on the SPU campus. However, the street corridor and property line setbacks would separate the new development from low-rise residential homes (single-family and fourplex) present to the south.

Viewpoint 4. **Figure 3.5-12** depicts the existing and proposed view looking west from W Dravus Street. The existing view features the tree lined street extending into the distance with a surface parking lot in the foreground on the north (right) side of W Dravus Street, and a vacant lot on the opposite side of the street. In the mid-field view the four-story Ashbury Condominium building is visible on the north side of the roadway and a one-story residential building is visible on the south side of the roadway.

Viewpoint Location Map



Existing

Proposed

Source: Perkins + Will, 2021

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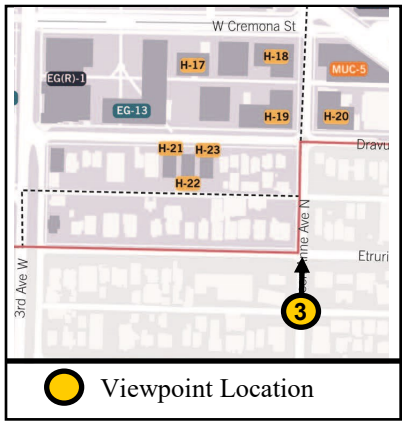
Figure 3.5-10

Viewpoint 2 – W Etruria St. and 5th Ave. W., Looking North (Proposed MIMP)

Key Map



Existing

Proposed

Source: Perkins + Will, 2023

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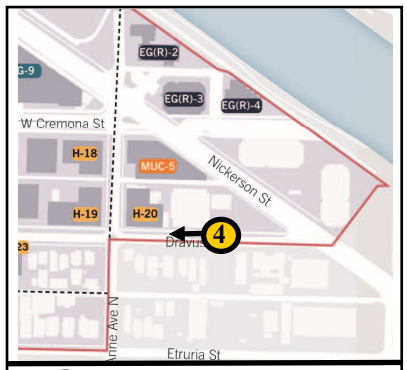
Figure 3.5-11

Viewpoint 3 – Queen Anne Ave. North, Looking North (Proposed MIMP)

Key Map



Existing

Proposed

Source: Perkins + Will, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 3.5-12

Viewpoint 4 – Dravus Street, Looking West (Proposed MIMP)

Under the proposed view, two new housing buildings would be partially visible on the north side of W Dravus St. including the four-level H-20 building and the five level H-19 building. The H-19 building would be similar in height to the Ashbury Condominium building, while the H-20 building would appear taller. The overall visual character from this viewpoint would change to include larger, taller buildings visible on the SPU campus. However, the street corridor and property line setbacks would separate the new development from low-rise residential homes (single-family and fourplex) present to the south.

Shoreline Views

Several potential development projects are proposed in the Shoreline District within and adjacent to the Northwest MIO Expansion area (Buildings MUC-1, MUC-2 and AR-1). Three view photosimulations are provided and demonstrate that views of the water (where available) would not change significantly under the ***Draft MIMP***. Refer to **Figure 3.5-8** for a viewpoint location map.

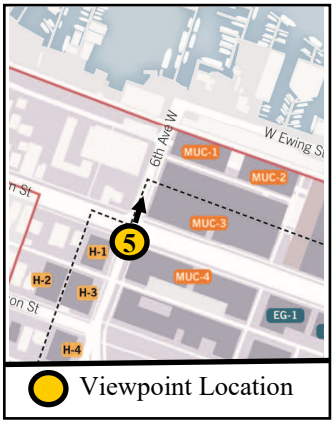
Viewpoint 5. **Figure 3.5-13** depicts the existing and proposed view looking north from W Nickerson St. at the intersection with 6th Ave. W. The existing view largely includes low-rise warehouse buildings and vacant industrial land on the north side of W Nickerson St., extending into the distance. Views of the water are visible at the terminus of the 6th Ave. W Street end in the distance. Cranes, boats and other waterfront industrial development are partially visible in the water, and the Fremont neighborhood can be seen behind the Fremont Cut.

Under the proposed view a new four level mixed-use and commercial building (MUC-3) would be visible in the mid-field view on the east (right) side of 6th Ave. W. The new building would replace views of vacant, undeveloped land visible under existing conditions, and would partially obscure background views of industrial development and warehouses, and of the Fremont neighborhood. Views of the water down the 6th Ave. W right-of-way would remain available.

Viewpoint 6. **Figure 3.5-14** depicts the existing and proposed view looking north from W Nickerson St. at a mid-way point in between 6th Ave. W and 3rd Ave. W. No views of the water are available under existing conditions. The existing view includes a vacant lot on the north side of Nickerson St., which is half obscured by a solid fence. The vacant lot is framed on the west (left) by a two-story warehouse building (former Northwest Millworks – SPU owned) and on the east (right) by the one-story Otto Miller Hall, an SPU education and general building. In the background a one-level Quonset hut is partially visible, as is a portion of the Fremont neighborhood.

Under the proposed view the fence obscuring part of the view to the north under existing conditions would no longer be present. An open corridor extending to the north would be visible, framed by new buildings to the west and east. The new MUC-3 building would be visible on the west (left) side of the corridor; this building would be four levels along Nickerson St. and would step down to two-levels to the north in order to comply with the underlying shoreline overlay height limits. A portion of the new one-level MUC-2 building would be partially visible behind the MUC-3 structure. A new three-level athletic and recreation building (AR-1) would be visible on the east (right) side of the corridor. Views of the water would not be available even with the creation of the open corridor extending to the north due to the presence of over-water structures and intervening development. No views of the water would, therefore, be affected by development under the ***Draft MIMP***.

Key Map



Existing

Proposed

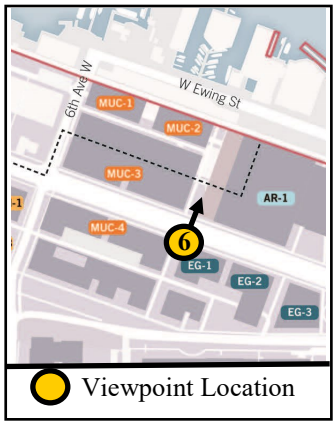
Source: Perkins + Will, 2023

EA Engineering, Science, and Technology, Inc.

Figure 3.5-13

Viewpoint 5—W Nickerson and 6th Ave. W, Looking North

Key Map



Existing

Proposed

Source: Perkins + Will, 2023

EA Engineering, Science, and Technology, Inc.

Figure 3.5-14

Viewpoint 6—W Nickerson St., Looking North, Between 6th Ave. W & 3rd Ave. W

Viewpoint 7. **Figure 3.5-15** depicts the existing and proposed view looking north from W Nickerson St. at the intersection with 3rd Ave. W. Views of the water are not readily available under existing conditions due to the presence of intervening vegetation and trees, which largely block views of the Fremont Cut. The existing view includes portions of the 52 ft. tall Royal Brougham Pavilion on the east (right) side of the street. On the west (left) side of the street, a surface parking lot is visible in the foreground, and the two-story Otto Mill Hall is partially visible in the mid-field view.

Under the proposed view two new three-level Athletic & Recreation buildings would be visible, replacing the views of the Royal Brougham Pavilion and Otto Miller Hall. On the east (right) side of the street a building AR-2 would be visible, while building AR-1 would be visible on the west (left) side of the street. In general, the view of the street terminus in the distance would remain similar to existing conditions, albeit framed by taller buildings along both sides of W Nickerson Street. Views of the water are not readily available under existing conditions, and views of the water would not be affected by development under the ***Draft MIMP***.

Building Setbacks & Modulation

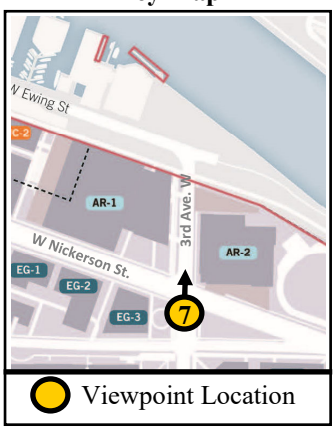
Table 3.5-1 presents the proposed setbacks for new development. Where new University development would abut existing neighborhood structures along the proposed MIO boundary, a 20-ft. setback is proposed. Where the MIO boundary would be located along an existing right-of-way, the existing code-required setback would be followed.

Within the MIO boundary, a 15-ft. setback is generally proposed for structures from the property line. This setback is intended to account for the increased heights of structures and would support the expansion and development of a pedestrian network for students and community members. A two-foot setback is proposed along W. Nickerson St., creating a 15-foot-wide sidewalk area between proposed structures and the roadway curb. In many locations, proposed setbacks would exceed the setbacks under the *2000 MIMP* (see **Table 3.5-1**). Street trees would be installed along sidewalks per code.

Proposed modulation of building facades located five feet or less from public rights-of-way would be consistent with underlying zoning, except that no modulation of building facades would be required where structures are located across the right-of-way from other University-owned buildings.

The ***Draft MIMP*** identifies new development standards which would supersede the development standards of the underlying zone, and which would apply to SPU for the duration of the MIMP. Refer to *Appendix G* of the ***Draft MIMP*** for a table detailing the changes proposed to underlying development standards. The appendix also identifies specific areas of campus where certain development standards would remain the same as the underlying zoning.

Key Map



Existing

Proposed

Source: Perkins + Will, 2023

EA Engineering, Science, and Technology, Inc.

Figure 3.15-15

Viewpoint 7—W Nickerson St. and 3rd Ave. W, Looking North

3.5-3 Impacts of the Alternatives

Alternative 1 – No Action Alternative

Under the ***No Action Alternative***, no boundary expansions and no MIO zoning changes, height limits, or other modifications to existing development standards would occur. No new planned or potential building development would take place other than development/renovation consistent with the current *MIMP*. (See **Figure 2-12** in **Chapter 2.**)

Overall, it is anticipated that two Education & General projects could be built without exceeding the maximum developable gross floor area and FAR. These two projects would include a building located to the north of Martin Square (up to four levels in height), and an assemblage of three structures located on and adjacent to the existing surface parking lot located south of Tiffany Loop (four-level buildings). Height, bulk, and scale conditions of the SPU campus would remain similar to under existing conditions. No street enhancements, or street/alley vacations (and the open space the vacations would provide in certain areas) would occur. There would continue to be a potential for conflict between the buildings that could be built to the heights allowed in the areas currently zoned MIO-50 and MIO-65 in the southwest portion of the campus and adjacent low-rise residential areas.

Alternative 2 – No Boundary Expansion and No Change to Height Limits

Under ***Alternative 2***, no boundary expansions and no MIO zoning changes, height limits, or other modifications to existing development standards would occur. With no expansion of the MIO boundary south to W. Etruria St., there would be less of a buffer with the adjacent neighborhood. (See **Figure 2-13** in **Chapter 2**.)

Two of the three planned development projects described for the ***Draft MIMP*** (Student Center and Moyer Hall Repurpose) could still occur. However, the Marston Site Future Open Space project would be eliminated as that location would be needed to accommodate a new Education and General Studies Building. The Education and General Studies Building would disrupt the view corridor along W. Cremona St. from Gwinn Commons.

A similar amount of potential development would be built as with the ***Draft MIMP***. A number of the potential development projects -- within the existing MIO boundary and existing MIO height limits -- could still occur. However, some of the potential development projects could not be accommodated within the buildings proposed in the ***Draft MIMP***. Up to 12 additional buildings or building wings would be needed within the existing campus boundary. Overall, future campus development would be much denser than the ***Draft MIMP***. Height conditions would be as allowed by the *2000 MIMP*. There would continue to be a potential for conflict between the 50 to 65-ft. buildings that could be built under the existing zoning in the southwest portion of the campus and adjacent low-rise residential areas. There would be more development within the existing MIO campus boundaries and less functional open space (including within Tiffany Loop). Building bulk and scale could increase as larger buildings would potentially need to be developed to make up for the lack of height increases and boundary expansions. Three additional housing buildings (three to four levels) would be located along the west edge of campus, near existing single-family homes. Fewer street enhancements or street/alley vacations (and the open space the vacations would provide in certain areas) could occur within the existing MIO.

Alternative 3 – Boundary Expansion and No Change to Height Limits in Existing MIO

Under ***Alternative 3***, boundary expansions would occur; however, there would be no MIO zoning changes, height limits, or other modifications to existing development standards within the existing MIO. It is assumed the Boundary Expansion areas would have the same height increases as the ***Draft MIMP*** (See **Figure 2-14** in **Chapter 2**.)

Two of the three planned development projects described for the ***Draft MIMP*** (Student Center and Moyer Hall Repurpose) could still occur. However, the Marston Site Future Open Space project would be eliminated as that location would be needed to accommodate a new Education and General Studies Building. The Education and General Studies Building would disrupt the view corridor along W. Cremona Street from Gwinn Commons.

A similar amount of potential development could be built as with the ***Draft MIMP***. A number of the potential development projects -- within the existing MIO height limits -- could still occur. However, some of the potential development projects could not be accommodated within the buildings proposed in the ***Draft MIMP***. Up to seven additional buildings or building wings would be needed within the existing and expanded campus boundary. Overall, future campus development would be denser than the ***Draft MIMP***, but less dense than ***Alternative 2***. Height conditions would be as allowed by the *2000 MIMP* within the existing MIO. Similar to that under the ***Draft MIMP***, there would continue to be a potential for conflict between the 50 to 65-ft. buildings that could be built under the existing zoning in the southwest portion of the campus and adjacent low-rise residential areas. There would be somewhat more development occurring within the existing MIO campus boundaries overall and somewhat less functional open space (including on Tiffany Loop) due to no changes to height limits on the existing campus. Building bulk and scale could increase as larger buildings would potentially need to be developed to make up for lack of height increases, but the boundary expansions would offset the need for increased bulk and scale to a certain extent. Two additional residential buildings (three to four levels) would be located along the west edge of campus, near existing single-family homes. The proposed street enhancements and street/alley vacations (and the open space the vacations would provide in certain areas) could occur.

Alternative 4 – No Boundary Expansion and Increased Height Limits

Under ***Alternative 4***, MIO zoning changes, height limits, and other modifications to existing development standards would be similar to the ***Draft MIMP***; however, no boundary expansions would occur. With no expansion of the MIMP boundary south to W. Etruria St., there would be less of a buffer with the adjacent neighborhood. (See **Figure 2-15** in **Chapter 2**.)

The three planned development projects described for the ***Draft MIMP*** could still occur (Student Center, Moyer Hall Repurpose, and Marston Site Future Open Space project).

A similar amount of potential development could be built as with the ***Draft MIMP***. A number of the potential development projects -- within the existing MIO boundary -- could still occur. However, some of the potential development projects could not be accommodated within the buildings proposed in the ***Draft MIMP***. Up to five additional buildings or building wings would be needed within the existing and expanded campus boundary. Overall, future campus development would be denser than the ***Draft MIMP***, but less dense than ***Alternative 2***. Height conditions would be similar to the ***Draft MIMP***. Like the ***Draft MIMP,*** there would be a potential for conflict between

the 65-ft. buildings that could be built under the proposed zoning in the southwest portion of the campus and adjacent low-rise residential areas. There would be more development within the existing MIO campus boundaries occurring overall and less functional open space due to no boundary expansion. Building bulk and scale could increase as larger buildings would potentially need to be developed to make up for lack of height increases, but the height increases would offset the need for increased bulk and scale to a certain extent. Two additional residential buildings (three to four levels) would be located along the west edge of campus, near existing single-family homes. Fewer street enhancements and only those street/alley vacations (and the open space the vacations would provide in certain areas) located within the MIO boundary could occur.

Alternative 5 – Boundary Expansion, Increased Height Limits, and No Street Vacations

Under ***Alternative 5***, boundary expansions and MIO zoning changes, height limits, and other modifications to existing development standards would occur, similar to the ***Draft MIMP***; however, no street enhancements, or street and alley vacations would be permitted. (See **Figure 2-16** in **Chapter 2**).

Two of the three planned development projects described for the ***Draft MIMP*** (Student Center and Moyer Hall Repurpose) could still occur. However, without the proposed street and alley vacations, the Marston Site Future Open Space Project could not be accommodated.

A similar amount of potential development could be built as with the ***Draft MIMP***. A number of the potential development projects -- within the MIO boundary expansion and existing MIO height limits -- could still occur. However, some of the potential development projects could not be accommodated within the buildings proposed in the ***Draft MIMP***. Up to four additional buildings or building wings would be needed within the existing and expanded campus boundary. Overall, site development would be somewhat denser than the ***Draft MIMP***. Height conditions would be similar to the ***Draft MIMP.*** Like the ***Draft MIMP,*** there would be a potential for conflict between the 65-ft. buildings that could be built under the proposed zoning in the southwest portion of the campus and adjacent low-rise residential areas. No street enhancements or street/alley vacations (and the open space that the vacations provide in certain areas) located within the existing MIO boundary or in the MIO Boundary expansion areas would occur.

3.5-4 Mitigation Measures

The following measures could be implemented to better integrate new development into the neighborhood and lessen impacts as related to height, bulk, and scale:

- Additional building setbacks, additional building façade modifications, and appropriate building finishes (e.g., color and materials) could be used to reduce perceived height, bulk, and scale impacts. These measures could be included in the design and development regulations in the approved *MIMP* and/or implemented through future approvals.

- Where impacts would be most noticeable in relation to off-site multifamily low-rise-zoned development, upper-level setbacks could be employed adjacent to the campus boundaries to reduce perceived height.

- Proposed landscaping could provide screening in areas where there could be height/bulk/scale impacts on adjacent uses.

3.5-5 Significant Unavoidable Adverse Impacts

Development would result in changes to the height, bulk and scale conditions on the SPU campus, but with implementation of identified mitigation measures no significant unavoidable adverse impacts are anticipated.

3.6 Public View Protection

This section of the Draft EIS describes existing protected views in the site vicinity and evaluates the potential impacts to protected public views that could occur as a result of the implementation of the ***Draft MIMP*** or EIS Alternatives.

Policy Context

The Seattle Municipal Code (SMC) contains specific provisions that describe the scope of the SEPA analysis for the viewshed analysis. Relevant policies from SMC 25.05.675 are provided below:

P.2. Public View Protection Policies

a i. It is the City's policy to protect public views of significant natural and human-made features: Mount Rainer, the Olympic and Cascade Mountains, the downtown skyline, and major bodies of water including Puget Sound, Lake Washington, Lake Union and the Ship Canal, from public places consisting of the specified viewpoints, parks, scenic routes, and view corridors, identified in Attachment 1. (Attachment 1 is located at the end of this Section 25.05.675.) This subsection 25.05.675.P.2.a.i does not apply to the Space Needle, which is governed by subsection 25.05.675.P.2.c.

ii. The decisionmaker may condition or deny a proposal to eliminate or reduce its adverse impacts on designated public views, whether or not the project meets the criteria of the overview policy set forth in Section 25.05.665; provided that downtown projects may be conditioned or denied only when public views from outside of downtown would be blocked as a result of a change in the street grid pattern.

Mitigating measures may include, but are not limited to:

1. *Requiring a change in the height of the development;*
2. *Requiring a change in the bulk of the development;*
3. *Requiring a redesign of the profile of the development;*
4. *Requiring on-site view corridors or requiring enhancements to off-site view corridors;*
5. *Relocating the project on the site;*
6. *Requiring a reduction or rearrangement of walls, fences or plant material; and*
7. *Requiring a reduction or rearrangement of accessory structures including, but not limited to towers, railings and antennae.*

3.6-1 Existing Conditions

Of the City's 88 officially-designated public viewpoints, only one, David Rodgers Park, is proximate to the Seattle Pacific University campus. David Rodgers Park is a 9.5-acre park located on a steeply sculptured hillside approximately 1,000 feet south of SPU. The park is largely wooded and contains walking trails, a play area in the southeast corner, and tennis courts in the northeast corner. Existing views from David Rodgers Park are generally limited due to dense vegetation and intervening existing development; limited views available in the distance include partial views of the Fremont Cut and the Fremont neighborhood beyond. According to *Seattle Views: An Inventory of 86 Public View Sites Protected under SEPA*, 'this park provides no SEPA-defined views."[1] Existing and proposed views from this park are evaluated below.

[1] Seattle Views: An Inventory of 86 Public View Sites Protected Under SEPA (SMC 25.05.675). City of Seattle, Department of Design, Construction and Land Use. May 2002.

3.6-2 Impacts of the Proposed Action and Alternatives

Draft MIMP (Proposed Action)

The David Rodgers Viewpoint was analyzed with a photosimulation showing the massing of visible ***Draft MIMP*** development as it would appear from this viewpoint – within the context of the existing view (again, refer to **Figure 3.6-1** for the viewpoint location map). The view photo was taken from the north end of the park, above Queen Anne Bowl, looking north/northwest towards the SPU campus. The location selected for the view photo is one of the few spots in the park where some partial views to the north are available. Views from the south end of the park are extremely limited due to existing mature tree canopy. Under existing conditions (see **Figure 3.6-2**), views to the north are generally limited by both the dense vegetation as well as existing, intervening development, particularly the large four-story Aegis Living building visible in the mid-field view. Some distant views of the Fremont Cut and Fremont neighborhood are partially visible in the background. Buildings on the SPU campus are largely obscured by trees, vegetation and existing off-campus development, and are not easily individually discerned.

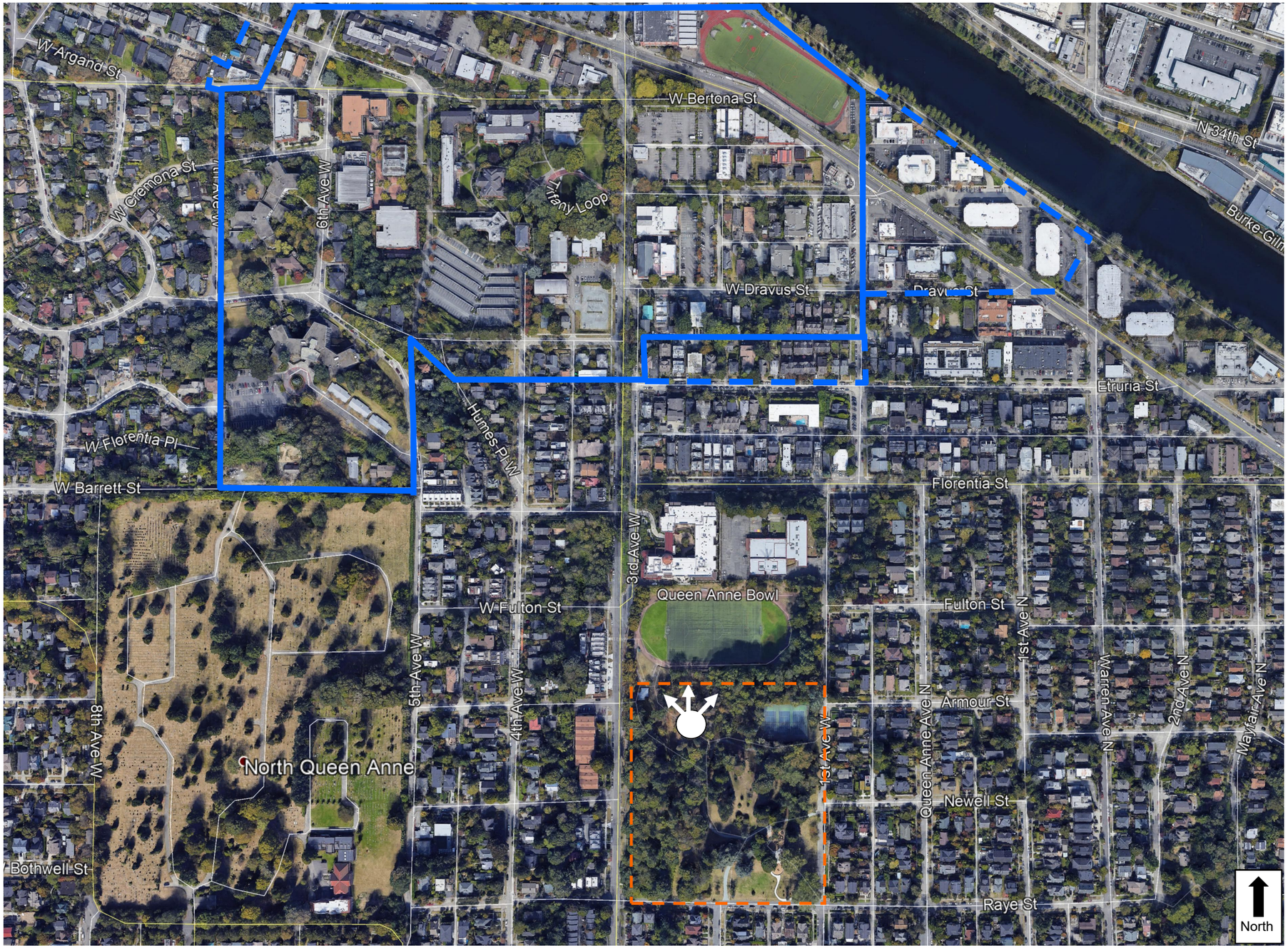
Planned Campus Development

The three planned projects that could be built under the ***Draft MIMP***, which include construction of a new Student Center, demolition of an existing building, and renovation of another building, would not be expected to result in changes to existing views from the David Rodgers Park. It is not anticipated that the new four-story Student Center would be visible, and the open space project and Moyer Hall Repurpose would not result in new visible development (see **Chapter 2**, ***Section 2.4.1.2*** for additional details about planned campus development). The character of the view from David Rodgers Park would remain the same as under existing conditions, and no significant adverse impacts would occur.

Potential Campus Development

From the analyzed viewpoint, because of vegetation, topography, and the presence of intervening existing buildings, most of the potential development constructed under buildout of the ***Draft MIMP*** would not be visible, and the view would generally remain the same as under existing conditions. The structures outlined by a dashed black line in **Figure 3.6-2** represent two potential campus development projects that could potentially be partially visible from this location (Buildings H-15 and H-16), were vegetation not obscuring the view.[2] As demonstrated, even were these three-story buildings partially visible, no significant adverse impacts to this protected viewpoint would be anticipated. There are only limited views available from this park, and the new buildings would not impede public views of significant natural or human-made features. The character of the view from David Rodgers Park would remain similar to existing conditions, and no significant adverse impacts would occur.

[2] Refer to **Figure 2-7** in Chapter 2 for the location of Buildings H-15 and H-16 (Potential Projects).



Source: EA, 2021

EA Engineering, Science, and Technology, Inc.

Figure 3.6-1

David Rodgers Park—Viewpoint Location Map

Existing

Proposed

Source: Perkins + Will, 2021

EA Engineering, Science, and Technology, Inc., PBC

Figure 3.6-2

David Rodgers Park

Potential Development Under Maximum Rezone Heights

Under maximum rezone heights, it is possible that taller buildings (up to 65 ft. in height) could be developed within the MIO expansion areas and within the existing campus boundaries. Due to the fact that limited views are currently available from David Rodgers Park for a variety of reasons, development built to maximum rezone heights would similarly not be expected to adversely affect views from this park. The partially visible buildings depicted in **Figure 3.6-2** represent the maximum building height (MIO-37) that could be developed in that portion of the campus under the proposed MIO Overlay.

Alternative 1 -- No Action Alternative

Under the ***No Action Alternative***, no new planned or potential building development would occur other than development and renovation consistent with the current MIMP. Overall, it is anticipated that two Education & General projects could be built without exceeding the maximum developable gross floor area and FAR. These two projects would include a building located to the north of Martin Square (up to four-levels in height), and an assemblage of three structures located on and adjacent to the existing surface parking lot located south of Tiffany Loop (four-level buildings). These new buildings would not be expected to be visible from David Rodgers Park, and view conditions would remain generally as described under existing conditions.

Alternative 2 – No Boundary Expansion and No Change to Height Limits

Under ***Alternative 2***, no boundary expansions and no change to height limits would occur. An additional 12 buildings and/or building wings would need to be fit within the existing campus boundaries to meet space requirements, over and above the new development that would be constructed under the ***Draft MIMP***. These 12 additional structures or wings would be necessary to accommodate approximately 444,100 sq. ft. of development space that would be lost as a result of not expanding the MIO boundaries or increasing the MIO height limits. While a greater number of buildings would need to be fit within the existing campus, and it is possible some of these buildings could be partially visible from David Rodgers Park, significant adverse impacts to views would not be anticipated. As demonstrated by **Figure 3.6-2**, under both existing conditions and the ***Draft MIMP*** development on the SPU campus is minimally visible from David Rodgers Park; the additional buildings that would need to be built under ***Alternative 2*** would likewise be expected to be only minimally visible, if at all. Similar to the ***Draft MIMP***, Buildings H-15 and H-16 are anticipated to be built under ***Alternative 2***; the potential partial view of these two buildings would be the same as shown in **Figure 3.6-2** and as described for the ***Draft MIMP***.

Alternative 3 – Boundary Expansion and No Change to Height Limits

Under ***Alternative 3***, the three campus boundary expansions would occur, but there would be no change to height limits. In order to accommodate space demands and support student enrollment and programming, seven additional buildings and/or building wings would need to be fit into the campus over and above development that would be accommodated under the ***Draft MIMP***. These seven additional structures or wings would be necessary to accommodate approximately 295,900 sq. ft. of development space that would be lost as a result of not increasing the MIO height limits. While a greater number of buildings would need to be fit within the existing campus, and it is possible some of these buildings could be partially visible from David Rodgers Park, significant adverse impacts to views would not be anticipated. As demonstrated by **Figure 3.6-**

2, under both existing conditions and the ***Draft MIMP*** development on the SPU campus is minimally visible from David Rodgers Park; the additional buildings that would need to be built under ***Alternative 3*** would likewise be expected to be only minimally visible, if at all. Similar to the ***Draft MIMP***, Buildings H-15 and H-16 are anticipated to be built under ***Alternative 3***; the potential partial view of these two buildings would be the same as shown in **Figure 3.6-2** and as described for the ***Draft MIMP***.

Alternative 4 – No Boundary Expansion and Increased Height Limits

Under ***Alternative 4***, no campus boundary expansions would occur, but there would increases to height limits. In order to accommodate space demands and support student enrollment and programming, five additional buildings and/or building wings would need to be fit into the campus over and above development that would be accommodated under the ***Draft MIMP*** program. These five additional structures would be necessary to accommodate approximately 201,600 sq. ft. of development space that would be lost as a result of not expanding the MIO boundaries. While a greater number of buildings would need to be fit within the existing campus, and it is possible some of these buildings could be partially visible from David Rodgers Park, significant adverse impacts to views would not be anticipated. As demonstrated by **Figure 3.6-2**, under both existing conditions and the ***Draft MIMP*** development on the SPU campus is minimally visible from David Rodgers Park; the additional buildings that would need to be built under ***Alternative 4*** would likewise be expected to be only minimally visible, if at all. Similar to the ***Draft MIMP***, Buildings H-15 and H-16 are anticipated to be built under ***Alternative 4***; the potential partial view of these two buildings would be the same as shown in **Figure 3.6-2** and as described for the ***Draft MIMP***.

Alternative 5 – Boundary Expansion, Increased Height Limits and No Street Vacations

Under ***Alternative 5***, both the campus boundary expansions and increases to height limits would occur, however, no street or alley vacations would be accommodated. Without the potential street or alley vacations, four new buildings and or building wings would need to be fit into the SPU campus over and above development that would be accommodated under the ***Draft MIMP*** program. These four additional structures would be necessary to accommodate approximately 126,800 sq. ft. of development space that would be lost as a result of not implementing the potential street and alley vacations assumed under the ***Draft MIMP***. While a greater number of buildings would need to be fit within the existing campus, and it is possible some of these buildings could be partially visible from David Rodgers Park, significant adverse impacts to views would not be anticipated. As demonstrated by **Figure 3.6-2**, under both existing conditions and the ***Draft MIMP*** development on the SPU campus is minimally visible from David Rodgers Park; the additional buildings that would need to be built under ***Alternative 5*** would likewise be expected to be only minimally visible, if at all. Similar to the ***Draft MIMP***, Buildings H-15 and H-16 are anticipated to be built under ***Alternative 5***; the potential partial view of these two buildings would be the same as shown in **Figure 3.6-2** and as described for the ***Draft MIMP***.

3.6-3 Mitigation Measures

No significant adverse impacts to David Rodgers Park are anticipated to result from development of the ***Draft MIMP*** or ***Alternatives 1-5***, and no mitigation is necessary.

3.6-4 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts to protected public views are anticipated under the ***Draft MIMP*** or ***Alternatives 1-5***.

3.7 Shadows on Open Space

This section of the Draft EIS describes existing shadow conditions on public open spaces and shoreline street ends in the site vicinity, as well as key on-campus open spaces and evaluates the potential shading impacts that could occur to these spaces as a result of the implementation of the ***Draft MIMP*** or EIS Alternatives.

Policy Context

The Seattle Municipal Code (SMC) contains specific provisions that describe the scope of the SEPA analysis shadows on open spaces. Relevant policies from SMC 25.05.675 are provided below:

Q. Shadows on Open Spaces Policies

2. It is the City's policy to minimize or prevent light blockage and the creation of shadows on open spaces most used by the public.

a. Areas outside of downtown to be protected are as follows:
1) Publicly owned parks;
2) Public schoolyards;
3) Private schools which allow public use of schoolyards during non-school hours; and
4) Publicly owned street ends in shoreline areas.

d. When the decisionmaker finds that a proposed project would substantially block sunlight from open spaces listed in subsections 25.05.675.Q.2.a and 25.05.675.Q.2.b above at a time when the public most frequently uses that space, the decisionmaker may condition or deny the project to mitigate the adverse impacts of sunlight blockage, whether or not the project meets the criteria of the overview policy set forth in Section 25.05.665.

e. Mitigating measures may include, but are not limited to:
1) Limiting the height of the development;
2) Limiting the bulk of the development;
3) Redesigning the profile of the development;
4) Limiting or rearranging walls, fences, or plant material;
5) Limiting or rearranging accessory structures, i.e., towers, railing, or antennae; and
6) Relocating the project on the site.

3.7-1 Existing Conditions

Existing Campus

Existing buildings, as well as mature vegetation, on the Seattle Pacific University campus are the primary sources of shadows. Buildings generally range from one to six stories in height, with the tallest buildings being Ashton Dorm (56 ft. tall) in the southwest campus, Royal Brougham Pavilion (52 ft. tall) in the north campus, and Demaray Hall (49 ft. tall) in central campus. The majority of the buildings on campus range from one to four-stories in height. Mature trees, as noted in ***Section 3.2*** of this Draft EIS, are located throughout the campus and also contribute to shading.

Open Spaces on the SPU Campus

The largest existing open space on the SPU campus is Tiffany Loop. Located in the center of campus, Tiffany Loop contains mature trees and lawn and is primarily used for passive recreation and gathering. Martin Square is another key open space on the campus that consists of a brick-lined square framed by three buildings including Gwinn Commons, Ames Library and Weter Memorial Hall. Stairs lead down to a circular gathering space in the center of the square. Refer to **Figure 3.7-1** for the locations of these two key SPU campus open space areas[1].

Existing Campus Vicinity

Open Spaces in Site Vicinity

Protected open spaces located in proximity to the SPU campus include West Ewing Mini Park and the 6th Avenue W Street End. West Ewing Mini Park is a 0.3-acre park located on the Fremont Cut that contains lawn and an upper concrete overlook with lights and benches for passive recreation and views of the water. The 6th Avenue W Street End terminates at the Fremont Cut; this street end has been selected by the City for improvement for public use.[2] Refer to **Figure 3.7-1** for the locations of these public open spaces relative to the existing and proposed MIO campus boundaries.

3.7-2 Impacts of the Proposed Action and Alternatives

Draft MIMP (Proposed Action)

Planned and potential future development and associated landscaping on the SPU Campus and in the MIO expansion areas would generate shadows over adjacent portions of the campus and surrounding streets. In general, the time of greatest shading would occur during periods when the sun is at a low-angle, including mid- to late afternoon in the winter and late afternoon to early evening in the summer.

Factors that influence the extent of shading include: weather (e.g., cloud cover); building height, width and facade orientation; and the proximity of other intervening structures, topographic variations and significant landscaping. Generally, greater building heights extend the length of the shadow cast, and increased mass (or cross-sectional width) widens the shadow cast by a building. Shadows from tall buildings extend farther from a building, but their effects on more distant locations are of shorter duration, because the sun's motion translates into faster movement of the shadow over the ground. Buildings with greater mass create wider shadows and an increased amount of shaded area within the immediate area (e.g., adjacent streets, public spaces, etc.), but the reach of the shadow would be limited by the building's height.

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1 SPU maintains an open campus and public use of on-campus open spaces is allowed for passive, unscheduled recreation uses. Use of on-campus open spaces for scheduled events or more formal purposes is not allowed without the express permission of the University.

2 City of Seattle Fact Sheet. Shoreline Street Ends. March 2016. https://www.seattle.gov/Documents/Departments/SDOT/PublicSpaceManagement/Factsheet_Stends_English.pdf

Source: Perkins + Will, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 3.7-1

On– and Off-Campus Open Space Location

This section of the Draft EIS contains shadow diagrams that depict shading under existing conditions and from the ***Draft MIMP*** and ***No Action Alternative*** (***Alternative 1***) for vernal equinox (approx. March 21st), summer solstice (approx. June 21st), autumnal equinox (approx. Sept. 21st), and winter solstice (approx. December 21st). The figures and accompanying text below describe possible shadow impacts to protected off-campus open spaces (West Ewing Mini Park and the 6th Avenue W Street End), that could result from full-buildout of planned and potential development associated with the ***Draft MIMP***, with consideration of shading that already occurs from existing buildings that would remain, as well as existing trees.

The following analysis summarizes shadow impacts for three times of the day on each of the key days of the solar year. These key days of the solar year and times of the day depict worst-case impacts. Shadow-related impacts, however, can also occur at other times of the day throughout the year. Because of the earth's rotation, the duration of shadow-related impacts varies for a stationary observer[3] based on season and depending upon the width of the shadow. The shadow graphics that are included have been adjusted to compensate for topography and, in the case of vernal equinox, summer solstice, and autumnal equinox, daylight savings time.[4]

Vernal (Spring) Equinox

Sunrise on vernal equinox (approx. March 21st) occurs at about 6:11 AM and sunset at 6:21 PM.

The extent of possible shading from the proposed full-buildout of the ***Draft MIMP*** development must also be considered within the context of climatic data for the month (e.g., on average the number of clear, partly cloudy and cloudy days). Data[5] indicate that on average March has 4 clear days, 8 partly cloudy days and 19 cloudy days.[6]

As indicated in **Figures 3.7-2** and **Figure 3.7-3**, for the Vernal Equinox, potential impacts depicting shadows from new development under the ***Draft MIMP***, together with shadows from other nearby existing buildings that would remain and shadows from existing trees that could remain, were evaluated at 8 AM, 12 PM and 5 PM. Pacific Daylight Savings Time is in-effect on this day. The existing conditions and ***No Action Alternative*** shadows are also provided for comparison purposes.

3 The rate of change of the sun's angle relative to the earth varies widely by season – from about 5 degrees horizontally and 2 degrees vertically every 15 minutes in June to 3 degrees horizontally and 1 degree vertically every 15 minutes in December.

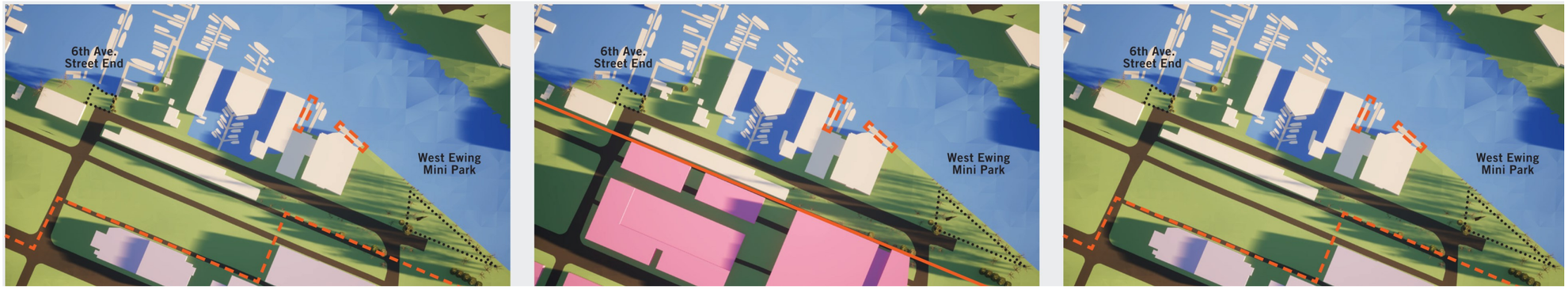
4 Pacific Daylight Savings Time (PDST) applies to shadow impacts associated with spring equinox, summer solstice and autumnal equinox.

5 NOAA, 2005.

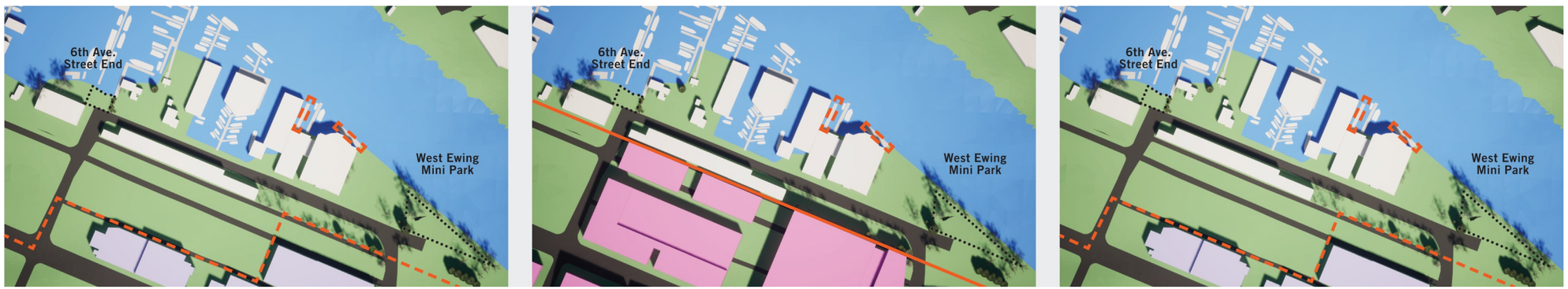
6 NOAA defines a clear day as one with zero to 3/10 average sky cover, a partly cloudy is one with 4/10 to 7/10 tenths average sky cover and a cloudy day is one with 8/10 to 10/10 tenths average sky cover.

Existing Conditions | **Proposed MIMP** | **Alternative 1—No Action Alternative**

8 AM



12 PM



5 PM

KEY

- Proposed Buildings.
- Non SPU Owned Buildings
- Existing SPU Owned Buildings
- Evergreen Tree
- Deciduous Tree
- Existing MIO Boundary
- Proposed MIO Boundary

North

Source: Perkins + Will, 2023

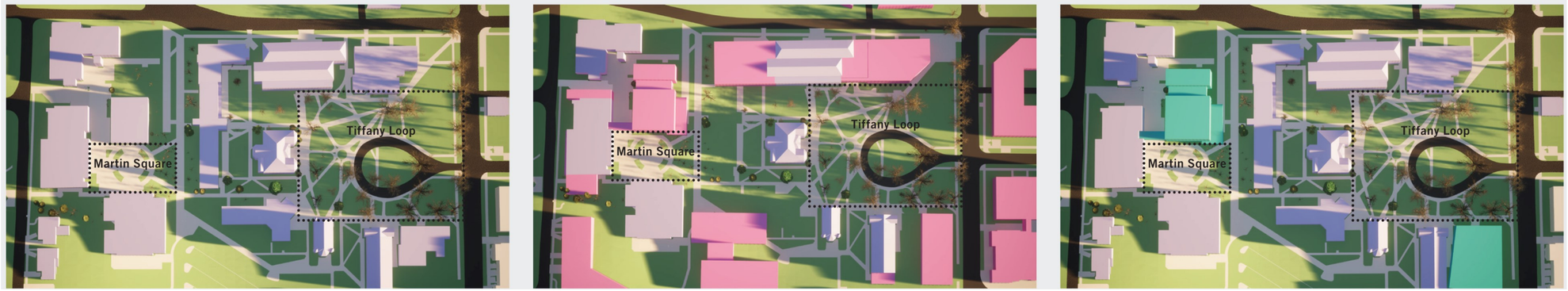
EA Engineering, Science, and Technology, Inc.

Figure 3.7-2

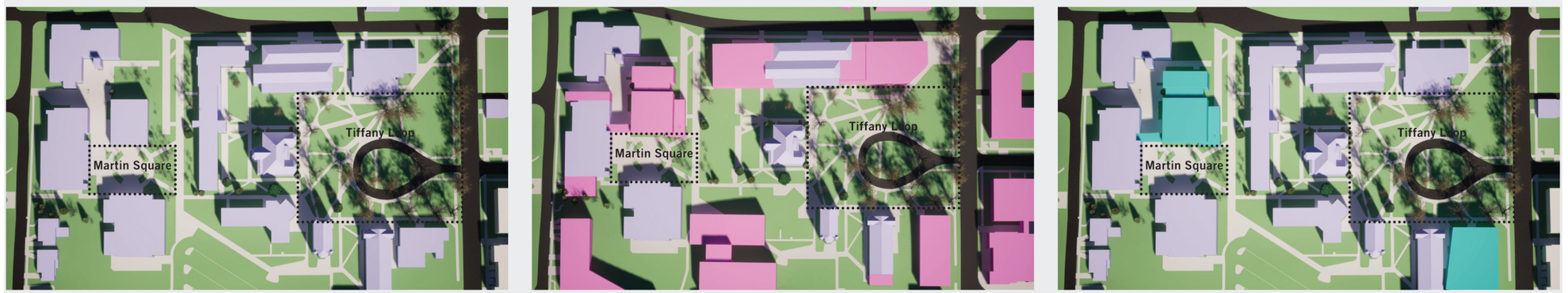
Shadow Graphics — Off-Campus Open Spaces (6th Ave. W Street End & West Ewing Park), Vernal Equinox

Existing Conditions | **Proposed MIMP** | **Alternative 1—No Action Alternative**

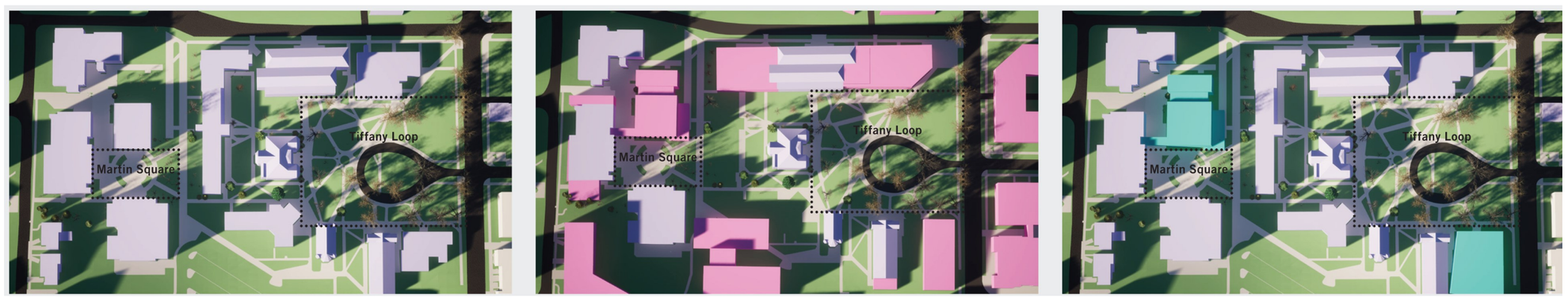
8 AM



12 PM



5 PM



KEY

- Existing SPU Owned Bldgs.
- Proposed Buildings
- Buildings to be completed under current MIMP
- Evergreen Tree
- Deciduous Tree
- Removed Tree

North

Source: Perkins + Will, 2023

EA Engineering, Science, and Technology, Inc.

Figure 3.7-3

Shadow Graphics — On-Campus Open Spaces, Vernal Equinox

Off-Campus Open Spaces (see Figure 3.7-2)

Under the ***Draft MIMP***, the campus boundary would be extended to the north in the vicinity of the 6th Avenue W Street End, and new campus buildings would be in closer proximity to the street end as compared to under existing conditions.

- At **8 AM**, shadows from the ***Draft MIMP*** development would extend in a westerly direction and would not affect West Ewing Mini Park or the 6th Avenue W Street End.

- At **12 PM,** shadows from the ***Draft MIMP*** development would extend in a northerly direction and would not affect West Ewing Mini Park or the 6th Avenue W Street End.

- At **5 PM** shadows from the ***Draft MIMP*** development would extend in a northeasterly direction and would not affect West Ewing Mini Park or the 6th Avenue W Street End.

On-Campus Open Spaces (see Figure 3.7-3)

- At **8 AM**, shadows from development associated with the ***Draft MIMP*** would extend in a westerly direction and would not affect Martin Square; in fact, somewhat less shading to the east portion of the Square would occur due to the demolition of buildings located to the east of this open space area that would occur under the ***Draft MIMP*** (Watson Hall and Marsten Hall). Some new shading could affect the northeast portion of Tiffany Loop; approximately 25 percent or less of the open space would be affected. This area contains open lawn and is used for gathering and passive recreation. The new shading would not be considered significant, however, as over half of Tiffany Loop is already shaded under existing conditions.

- At **12 PM,** shadows from development associated with the ***Draft MIMP*** would extend in a northerly direction and would not affect Martin Square. A small amount of additional shading from development associated with the ***Draft MIMP*** could occur in the southeast portion of Tiffany Loop. Overall, less than approximately 5 percent of this open space area would be affected by new shading. Tiffany Loop is already partially shaded by existing trees at this time of day, and the new additional shading would not be considered significant given that the majority of Tiffany Loop would remain unaffected.

- At **5 PM** shadows from development associated with the ***Draft MIMP*** would extend in a northeasterly direction. A small amount of additional shading from development associated with the ***Draft MIMP*** could occur in the southwest portion of Martin Square (with less than approximately 5 percent of the open space affected). Martin Square is already over 50 percent shaded under existing conditions at this time of day and the new shading would not be considered significant. Somewhat less shading would occur to Tiffany Loop under the ***Draft MIMP*** as compared to existing conditions (in the southwest corner), due to the demolition of Moyer Hall.

Summer Solstice

Sunrise on summer solstice (approx. June 21st) occurs at about 5:11 AM and sunset at 9:10 PM. Pacific Daylight Savings Time remains in-effect on this day.

Climatic data[7] for the month of June indicates that on average June has 7 clear days, 8 partly cloudy days and 15 cloudy days.[8]

As indicated by **Figure 3.7-4** and **Figure 3.7-5** for summer solstice, potential impacts depicting shadows from new development under the ***Draft MIMP***, together with shadows from other nearby existing buildings that would remain and shadows from existing trees that could remain, were evaluated at 8 AM, 12 PM and 5 PM.

Off-Campus Open Spaces (see Figure 3.7-4)

- At **8 AM**, shadows from development associated with the ***Draft MIMP*** would extend in a westerly direction and would not affect West Ewing Mini Park or the 6th Avenue W Street End.

- At **12 PM**, shadows from development associated with the ***Draft MIMP*** would extend in a northerly direction and would not affect West Ewing Mini Park or the 6th Avenue W Street End.

- At **5 PM** shadows from development associated with the ***Draft MIMP*** would extend in an easterly direction and would not affect West Ewing Mini Park or the 6th Avenue W Street End.

On-Campus Open Spaces (see Figure 3.7-5)

- At **8 AM**, shadows from development associated with the ***Draft MIMP*** would extend in a westerly direction. Shading to Tiffany Loop and Martin Square would generally remain similar to that which occurs under existing conditions due to the presence of mature trees; no new significant shading impacts would be anticipated under the ***Draft MIMP***.

- At **12 PM,** shadows from development associated with the ***Draft MIMP*** would extend in a northerly direction and would not affect Tiffany Loop or Martin Square.

- At **5 PM** shadows from development associated with the ***Draft MIMP*** would extend in an easterly direction and would not affect Martin Square or Tiffany Loop.

Autumnal Equinox

Sunrise on autumnal equinox (approx. September 21st) occurs at about 6:13 AM and sunset at 8:11 PM. Pacific Daylight Savings Time remains in-effect on this day.

Climatic data[8] for the month of September indicate that on average September has 3 clear days, 6 partly cloudy days and 22 cloudy days. [9]

As indicated by **Figures 3.7-6** and **3.7-7** for autumnal equinox, potential impacts depicting shadows from new development under the ***Draft MIMP***, together with shadows from other nearby

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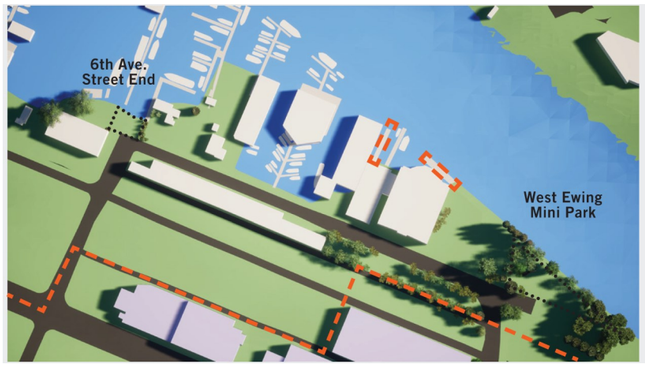
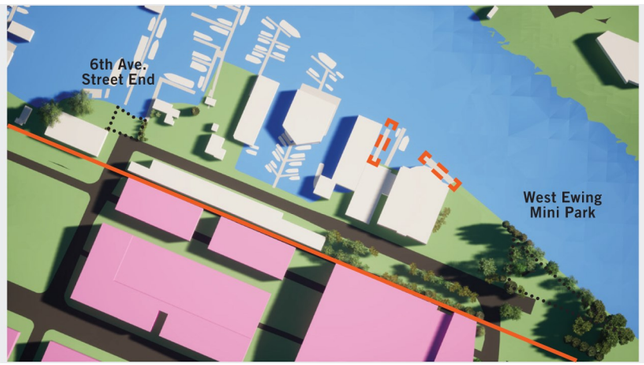
7 NOAA, 2005.

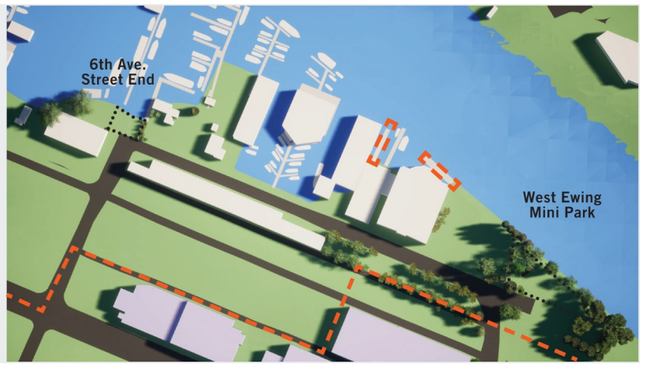
8 NOAA defines a clear day as one with zero to 3/10 average sky cover, a partly cloudy is one with 4/10 to 7/10 tenths average sky cover and a cloudy day is one with 8/10 to 10/10 tenths average sky cover.

Existing Conditions | **Proposed MIMP** | **Alternative 1—No Action Alternative**

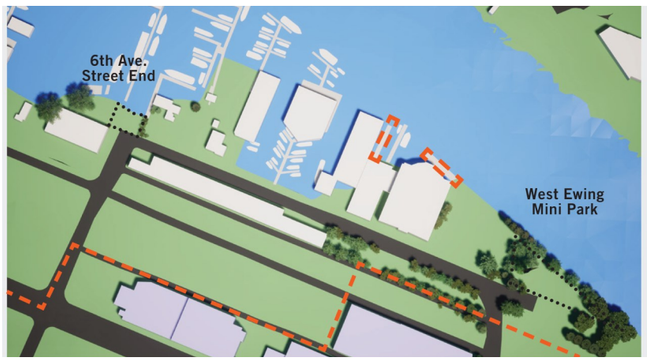
8 AM

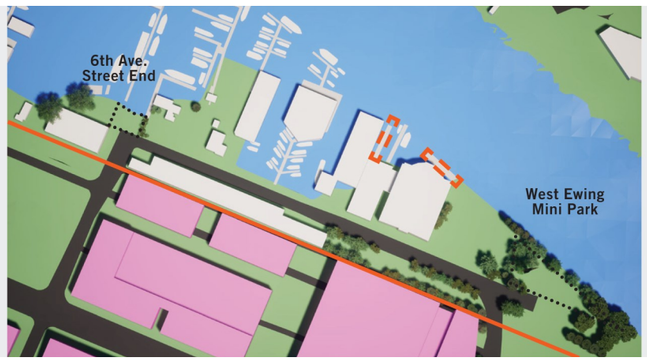


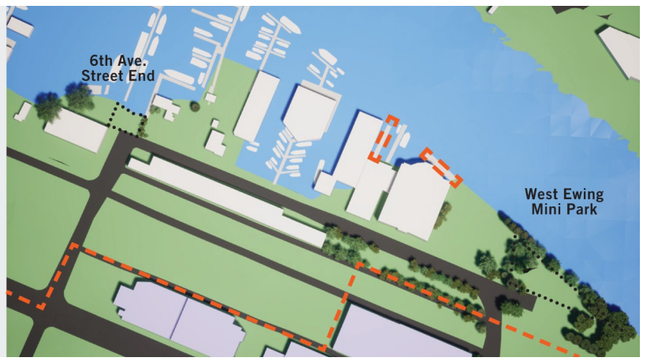




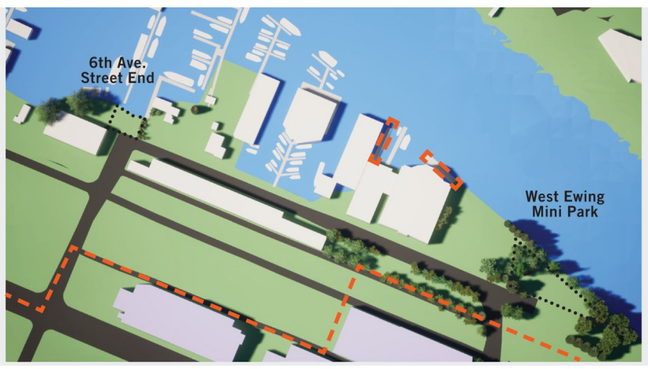
12 PM

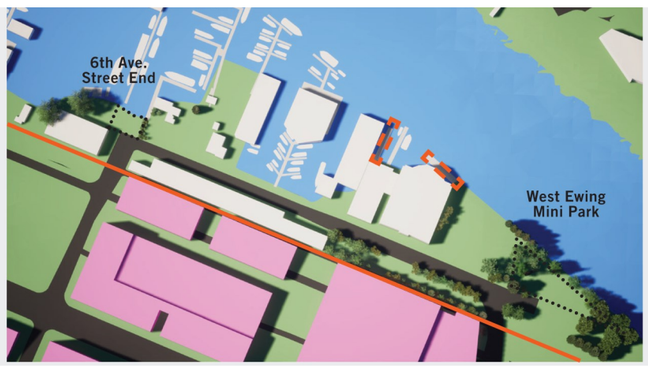


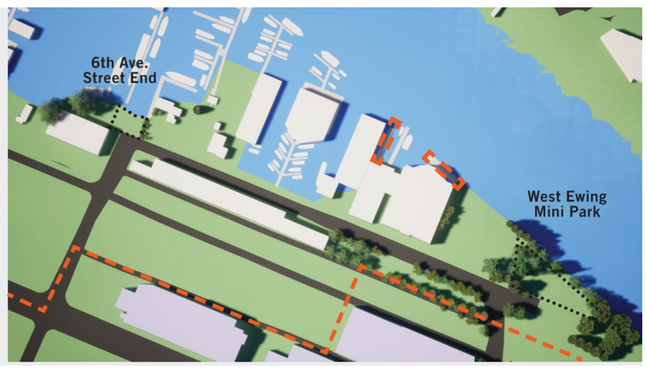




5 PM







KEY

- Proposed Buildings.
- Non SPU Owned Buildings
- Existing SPU Owned Buildings
- Evergreen Tree
- Deciduous Tree
- Existing MIO Boundary
- Proposed MIO Boundary

North

Source: Perkins + Will, 2023

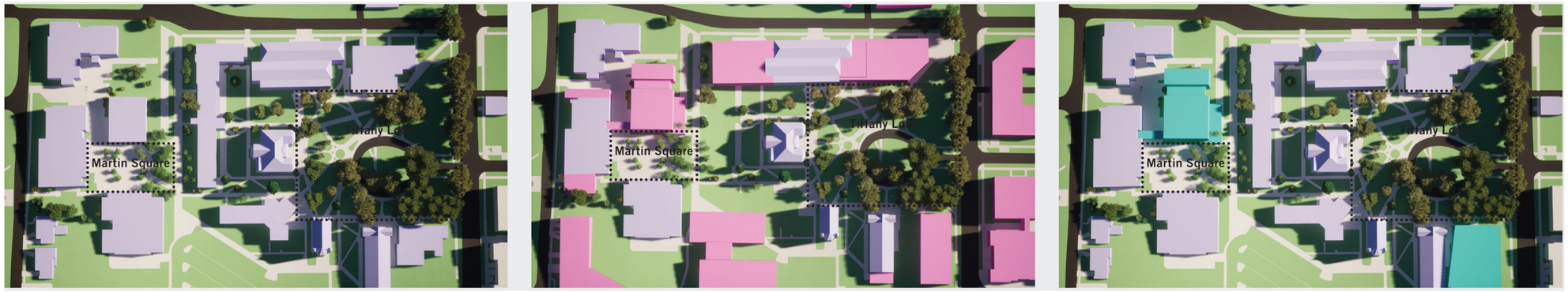
EA Engineering, Science, and Technology, Inc.

Figure 3.7-4

Shadow Graphics — Off-Campus Open Spaces (6th Ave. W Street End & West Ewing Mini Park), Summer Solstice

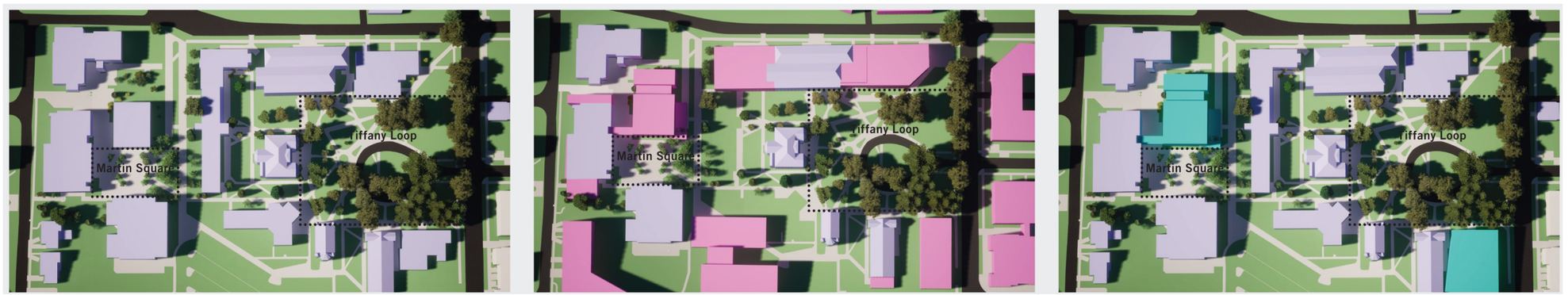
Existing Conditions | **Proposed MIMP** | **Alternative 1—No Action Alternative**

8 AM



12 PM

5 PM



KEY

- Existing SPU Owned Bldgs.
- Proposed Buildings
- Buildings to be completed under current MIMP
- Evergreen Tree
- Deciduous Tree
- Removed Tree

North

Source: Perkins + Will, 2023

EA Engineering, Science, and Technology, Inc.

Figure 3.7-5

Shadow Graphics — On-Campus Open Spaces, Summer Solstice

existing buildings that would remain and shadows from existing trees that could remain, were evaluated at 8 AM, 12 PM and 5 PM.

Off-Campus Open Spaces (see Figure 3.7-6)

- At **8 AM**, shadows from development associated with the ***Draft MIMP*** would extend in a westerly direction and would not affect West Ewing Mini Park or the 6th Avenue W Street End.

- At **12 PM**, shadows from development associated with the ***Draft MIMP*** would extend in a northerly direction and would not affect West Ewing Mini Park or the 6th Avenue W Street End.

- At **5 PM** shadows from development associated with the ***Draft MIMP*** would extend in a northeasterly direction and would not affect West Ewing Mini Park or the 6th Avenue W Street End.

On-Campus Open Spaces (see Figure 3.7-7)

- At **8 AM**, shadows from development associated with the ***Draft MIMP*** would extend in a westerly direction and would not affect Martin Square or Tiffany Loop.

- At **12 PM,** shadows from development associated with the ***Draft MIMP*** would extend in a northerly direction and would not affect Martin Square. A small amount of additional shading could occur in the southeast corner of Tiffany Loop (less than 5 percent of Tiffany Loop affected). However, existing trees that would remain are already shading this area under existing conditions at this time of day and no new shading impacts would be anticipated to be experienced.

- At **5 PM** shadows from development associated with the ***Draft MIMP*** would extend in a northeasterly direction. A small amount of additional new shading would occur to Martin Square, which is nearly 100 percent shaded under existing conditions. The additional new shading would not be considered significant. A small amount of additional shading could also occur to the southeast corner of Tiffany Loop (less than 5 percent of Tiffany Loop affected). However, existing trees that would remain are already shading this area under existing conditions, and no new shading impacts would be anticipated to be experienced.

Winter Solstice

Sunrise on winter solstice (approx. December 21st) occurs at about 7:54 AM and sunset at 4:19 PM.

Climatic data[9] for the month of December indicate that on average December has 3 clear days, 4 partly cloudy days and 23 cloudy days.[10]

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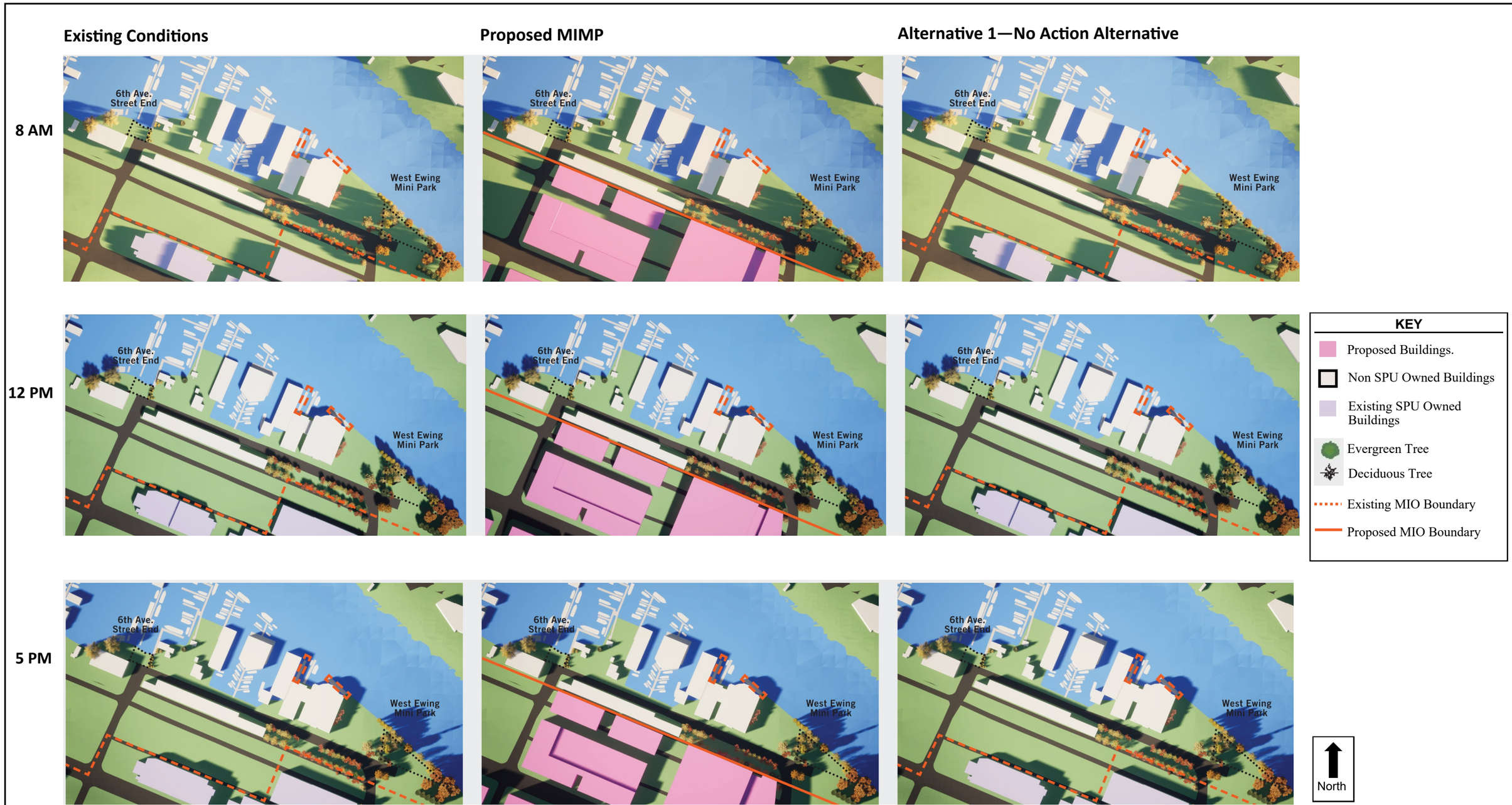
9 NOAA, 2005.

10 NOAA defines a clear day as one with zero to 3/10 average sky cover, a partly cloudy is one with 4/10 to 7/10 tenths average sky cover and a cloudy day is one with 8/10 to 10/10 tenths average sky cover.



Source: Perkins + Will, 2023

EA Engineering, Science, and Technology, Inc.

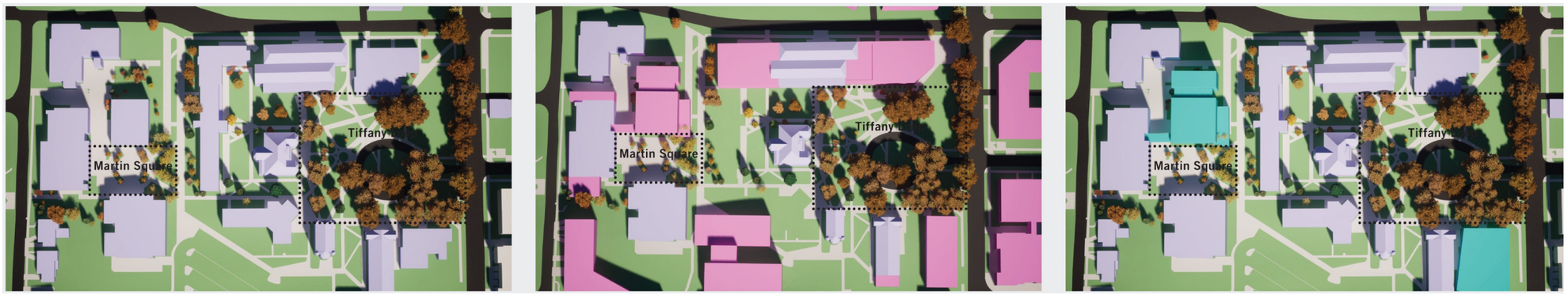
Figure 3.7-6

Shadow Graphics — Off-Campus Open Spaces (6th Ave. W Street End & West Ewing Mini Park), Autumnal Equinox

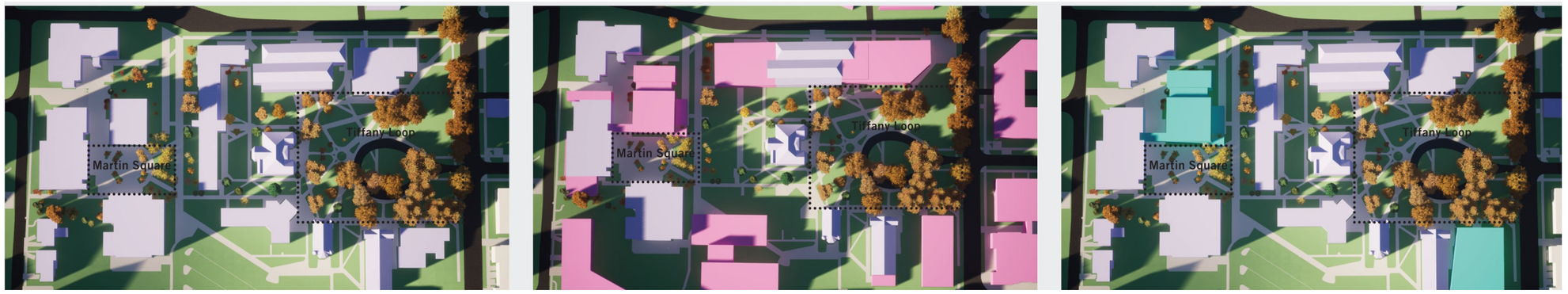
Existing Conditions | **Proposed MIMP** | **Alternative 1—No Action Alternative**

8 AM

12 PM



5 PM



KEY

- Existing SPU Owned Bldgs.
- Proposed Buildings
- Buildings to be completed under current MIMP
- Evergreen Tree
- Deciduous Tree
- Removed Tree

North

Source: Perkins + Will, 2023

EA Engineering, Science, and Technology, Inc.

Figure 3.7-7

Shadow Graphics — On-Campus Open Spaces, Autumnal Equinox

As indicated in **Figures 3.7-8 and 3.7-9**, for winter solstice, potential impacts depicting shadows from new development under the ***Draft MIMP***, together with shadows from other nearby existing buildings that would remain and shadows from existing trees that could remain, were evaluated at 9 AM, 12 PM and 4 PM.

Off-Campus Open Spaces (see Figure 3.7-8)

- At **9 AM**, shadows from development associated with the ***Draft MIMP*** would extend in a northwesterly direction and would not be affect West Ewing Mini Park. . The 6th Avenue W Street End is 100 percent shaded at 9 AM under existing conditions; no new shading to the street end would be caused by development associated with the ***Draft MIMP***.

- At **12 PM**, shadows from development associated with the ***Draft MIMP*** would extend in a northerly direction and would not affect West Ewing Mini Park or the 6th Avenue W Street End.

- At **4 PM** shadows from development associated with the ***Draft MIMP*** would extend in a northeasterly direction. As demonstrated, the area is already largely cast in shadow at this time of day in the winter, and no significant new shading impacts would be anticipated to result from development associated with the ***Draft MIMP***.

On-Campus Open Spaces (see Figure 3.7-9)

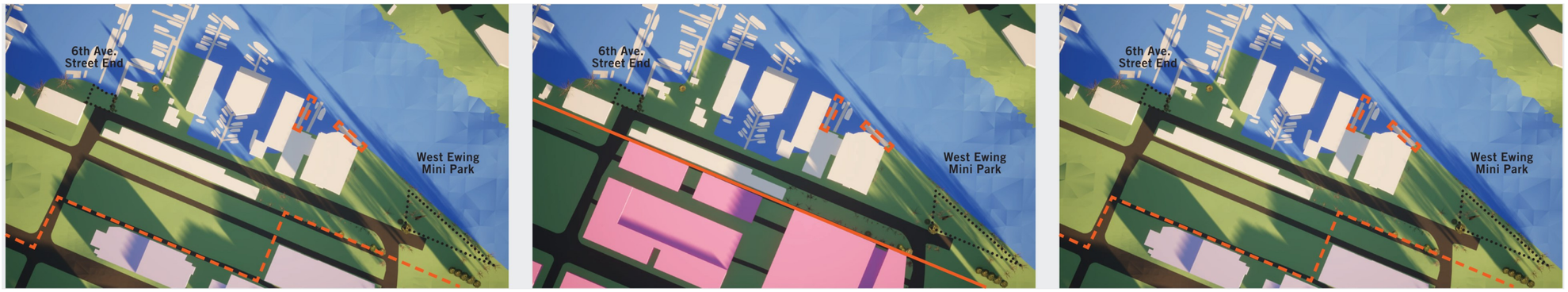
- At **9 AM**, shadows from development associated with the ***Draft MIMP*** would extend in a northwesterly direction and some additional new shading would occur to Martin Square, which is nearly 50 percent shaded under existing conditions. Overall, less than approximately 25 percent of the shading would be new shading caused by development associated with the ***Draft MIMP***. Overall the additional new shading would not be considered significant, given the time of day and year that it is occurring. Tiffany Loop is already nearly 100 percent shaded at this time of day under existing conditions and no new shading impacts to Tiffany Loop would occur.

- At **12 PM**, shadows from development associated with the ***Draft MIMP*** would extend in a northerly direction and no new shading would affect Martin Square or Tiffany Loop. Martin Square is already nearly one hundred percent shaded under existing condition and would remain shaded from an existing building that would remain under implementation of the ***Draft MIMP***. Slightly less shading would occur to the southeast corner of Tiffany Loop under the ***Draft MIMP*** due to the demolition of one existing building and construction of a narrower building directly southeast of Tiffany Loop.

- At **4 PM** shadows from development associated with the ***Draft MIMP*** would extend in an easterly direction. As demonstrated, the area is already largely cast in shadow at this time of day in the winter, and no significant new shading impacts to Tiffany Loop or Martin Square would be anticipated to result from development associated with the ***Draft MIMP***. **Figure 3.7-8**

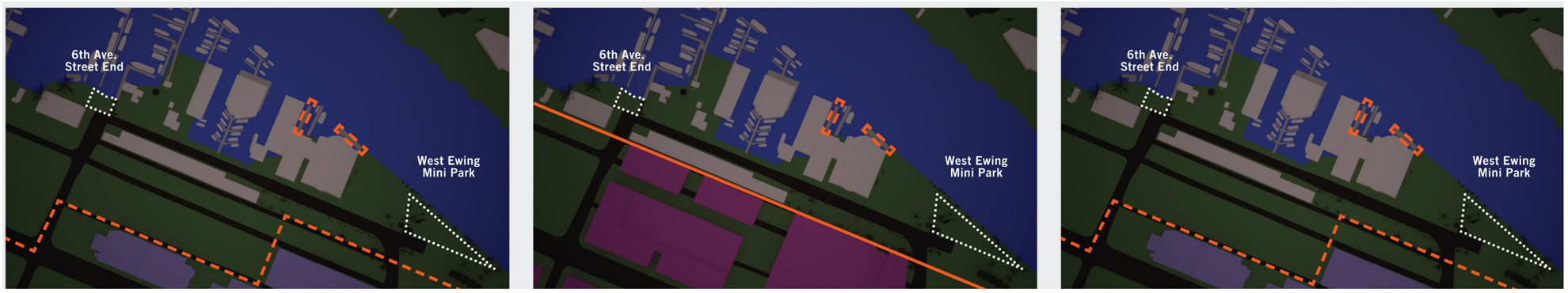
Existing Conditions | **Proposed MIMP** | **Alternative 1—No Action Alternative**

9 AM



12 PM

4 PM



KEY

- Proposed Buildings.
- Non SPU Owned Buildings
- Existing SPU Owned Buildings
- Evergreen Tree
- Deciduous Tree
- Existing MIO Boundary
- Proposed MIO Boundary

North

Source: Perkins + Will, 2023

EA Engineering, Science, and Technology, Inc.

Figure 3.7-8

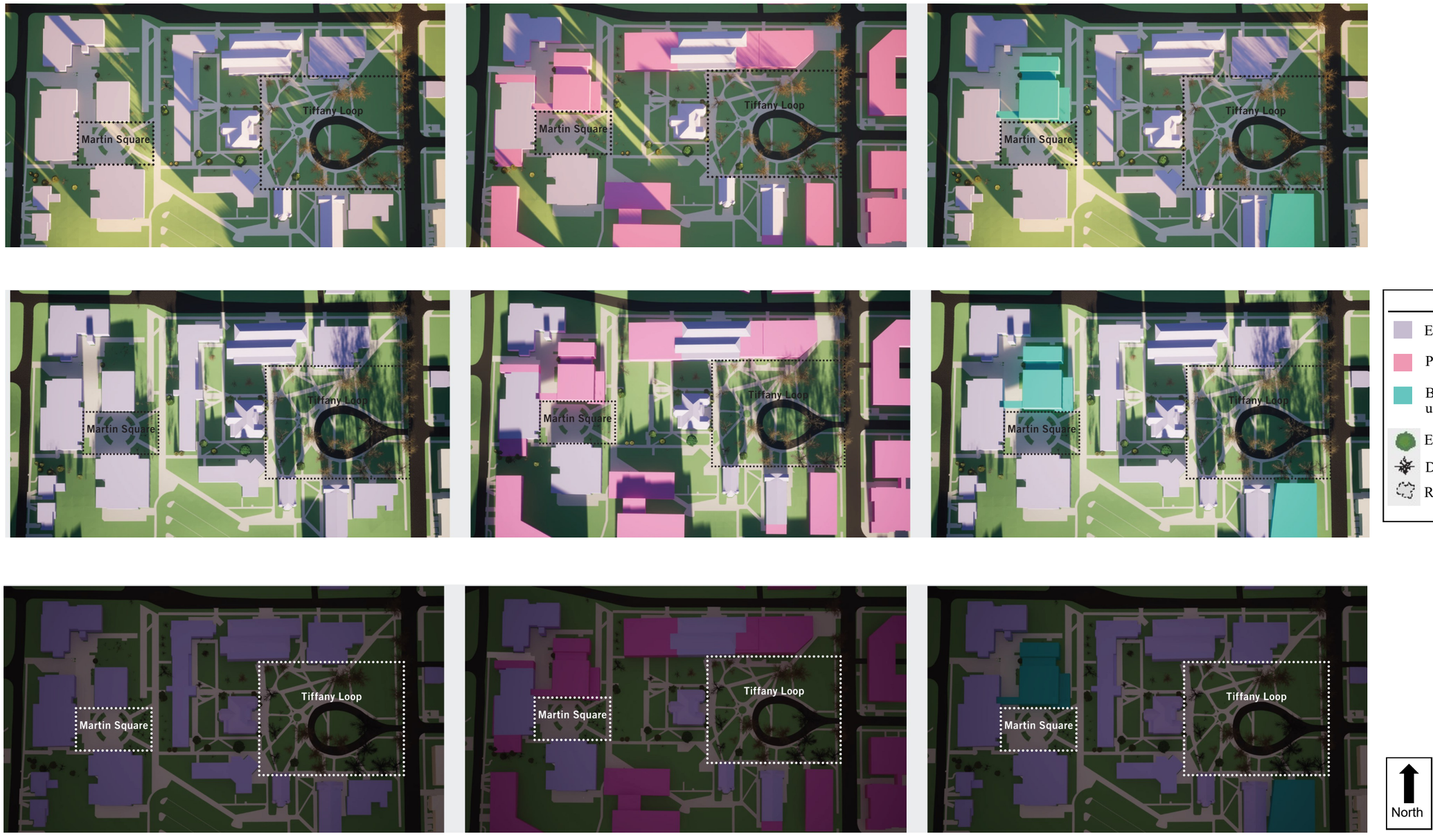
Shadow Graphics — Off-Campus Open Spaces (6th Ave. W Street End & West Ewing Mini Park), Winter Solstice

Existing Conditions | Proposed MIMP | Alternative 1—No Action Alternative

8 AM

12 PM

5 PM



KEY

- Existing SPU Owned Bldgs.
- Proposed Buildings
- Buildings to be completed under current MIMP
- Evergreen Tree
- Deciduous Tree
- Removed Tree

North

Source: Perkins + Will, 2023

EA Engineering, Science, and Technology, Inc.

Figure 3.7-9

Shadow Graphics — On-Campus Open Spaces, Winter Solstice

Summary

As demonstrated by the shadow graphics, new buildings constructed under the ***Draft MIMP*** would not be expected to contribute to significant additional shading of off-campus open space areas where shadow impacts may be mitigated per SMC 25.05.675 (West Ewing Mini Park and the 6th Avenue W Street End). Some additional new shading could occur to the key on-campus open space areas of Martin Square and Tiffany Loop. However, the new shading would not be considered significant given the small amount of additional shading that would occur, and as compared to the shading conditions that already occur under existing conditions, as well as compared to shading conditions that would occur relative to the tree canopy. In some cases, slightly less shading would occur to Tiffany Loop or Martin Square under the ***Draft MIMP*** due to the proposed demolition of buildings that would occur in proximity to these open space areas.

Alternative 1 -- No Action Alternative

Under the ***No Action Alternative*** no new planned or potential building development would occur other than development and renovation consistent with the current MIMP. Overall, it is anticipated that two Education & General projects could be built without exceeding the maximum developable gross floor area and FAR, adding approximately 188,400 sq. ft. of total development to the existing campus. These two projects would include a building located to the north of Martin Square (up to four-levels in height), and an assemblage of three structures located on and adjacent to the existing surface parking lot located south of Tiffany Loop (four-level buildings).

Off-Campus Open Spaces

No boundary expansions would occur under the ***No Action Alternative***, and no new development would be built in the vicinity of the West Ewing Mini Park or the 6th Avenue W Street End. Shadow conditions on these two off-campus open space areas would remain the same as under existing conditions and no new shading impacts would occur (refer to **Figures 3.7-2** to **3.7-9** for shadow graphics depicting the ***No Action Alternative***).

On-Campus Open Spaces

No new shading would occur to Martin Square under the ***No Action Alternative***. Although a new building could be built directly to the north of Martin Square, this building would not contribute to new shading because shadows do not extend to the south. Some new shading could occur to Tiffany Loop, primarily in the southwest or southeast portion of the Loop. This would occur due to the construction of a new building directly southeast of this open space area. However, minimal shadows from the building would be experienced as new shading due to the presence of existing trees in the southeast portion of Tiffany Loop; the trees already contribute to background shading conditions in this area of campus.

Alternative 2 – No Boundary Expansion and No Change to Height Limits

Under ***Alternative 2***, no boundary expansion and no change to height limits would occur. In order to accommodate space demands and support student enrollment and programming, 12 additional buildings and/or building wings would need to be fit into the campus over and above development that would be accommodated under the ***Draft MIMP*** program. These 12 additional structures would be necessary to accommodate approximately 444,100 sq. ft. of development space that

would be lost as a result of not expanding the campus boundaries or increasing the MIO height limits.

Off-Campus Open Spaces

Without a boundary expansion on the north portion of the SPU campus, there would be somewhat less new development built in the immediate vicinity of the West Ewing Mini Park and the 6th Avenue W Street End, as compared to the ***Draft MIMP***. In general, however, shading impacts to off-campus open spaces would be the same as described under the ***Draft MIMP*** (refer to **Appendix E** for shadow graphics depicting development under ***Alternative 2***).

On-Campus Open Spaces

Under ***Alternative 2***, additional buildings would need to be fit within the existing campus boundaries to meet space requirements, over and above the new development that would be constructed under the ***Draft MIMP***. The additional development would include a new building to the east of Martin Square, and two new buildings within the east portion of Tiffany Loop. Overall, shadow impacts to Martin Square would generally be greater than would occur under the ***Draft MIMP*** in the morning at 8 AM (9 AM on Winter Solstice). Shading impacts to Tiffany Loop would also generally be greater than would occur under the ***Draft MIMP*** at 8 AM, noon and 5 PM, depending on the extent of tree coverage. Shading impacts to Tiffany Loop would be especially significant due to the construction of two buildings within the open space area.

Alternative 3 – Boundary Expansion and No Change to Height Limits in Existing MIO

Under ***Alternative 3,*** the three campus boundary expansions would occur, but there would be no change to height limits. In order to accommodate space demands and support student enrollment and programming, seven additional buildings and/or building wings would need to be fit into the campus over and above development that would be accommodated under the ***Draft MIMP*** program. These seven additional structures would be necessary to accommodate approximately 295,900 sq. ft. of development space that would be lost as a result of not increasing the MIO height limits.

Off-Campus Open Spaces

Under ***Alternative 3***, it is assumed that the same campus boundary expansions as proposed under the ***Draft MIMP*** would be implemented. Similar development would be built in proximity to West Ewing Mini Park and the 6th Avenue W Street End, and overall shadow impacts would be the same as described for the ***Draft MIMP*** (refer to **Appendix E** for shadow graphics depicting development under ***Alternative 3***).

On-Campus Open Spaces

Under ***Alternative 3***, additional buildings would need to be fit within the existing campus boundaries to meet space requirements, over and above new development that would be constructed under the ***Draft MIMP***. The additional development would include one new building to the east of Martin Square, and one new building within the northeast quadrant of Tiffany Loop. Overall shadow impacts to Martin Square would generally be greater than would occur under the

Draft MIMP in the morning at 8 AM (9AM on Winter Solstice). Shading impacts to Tiffany Loop would also generally be greater than would occur under the ***Draft MIMP***, particularly at 8 AM and noon on the Equinoxes and Summer Solstice. Shading impacts to Tiffany Loop would be especially significant due to the construction of a new building within the open space area; overall shading impacts to Tiffany Loop would be similar to but somewhat less than under ***Alternative 2***. Shading to Martin Square would be the same as described for ***Alternative 2***.

Alternative 4 – No Boundary Expansion and Increased Height Limits

Under ***Alternative 4***, no campus boundary expansions would occur, but increased height limits would. In order to accommodate space demands and support student enrollment and programming, five additional buildings and/or building wings would need to be fit into the campus over and above development that would be accommodated under the ***Draft MIMP*** program. These five additional structures would be necessary to accommodate approximately 201,600 sq. ft. of development space that would be lost as a result of not expanding the MIO boundaries.

Off-Campus Open Spaces

Without a boundary expansion on the north portion of the SPU campus, there would be somewhat less new development built in the immediate vicinity of the West Ewing Mini Park and the 6th Avenue W Street End, as compared to the ***Draft MIMP***. In general, however, shading impacts to off-campus open spaces would be the same as described under the ***Draft MIMP*** (refer to **Appendix E** for shadow graphics depicting development under ***Alternative 4***).

On-Campus Open Spaces

With increased height limits accommodated under ***Alternative 4***, no additional buildings over and above development assumed under the ***Draft MIMP*** would need to be built within Tiffany Loop or to the east of Martin Square. Shadow impacts to on-campus open spaces would generally be the same as the ***Draft MIMP*** as planned and potential projects in the vicinity of these open spaces would be the same as the Draft MIMP.

Alternative 5 – Boundary Expansion, Increased Height Limits and No Street Vacations

Under ***Alternative 5***, both the campus boundary expansions and increased height limits would occur, however, no street or alley vacations would be accommodated. Without the potential street or alley vacations, four new buildings and or building wings would need to be fit into the SPU campus over and above development that would be accommodated under the ***Draft MIMP*** program. These four additional structures would be necessary to accommodate approximately 126,800 sq. ft. of development space that would be lost as a result of not implementing the potential street and alley vacations assumed under the ***Draft MIMP***. As well, the buildings north of W Nickerson Street (west of 3rd Avenue W) would be segmented into a number of smaller, narrower buildings as compared to ***Draft MIMP*** program (compare to Buildings #MUC-1, MUC-2, MUC-3 and AR-1 in **Figure 2-7** under the ***Draft MIMP***).

Off-Campus Open Spaces

Shading impacts to West Ewing Mini Park and the 6th Avenue W Street End would generally be similar to the ***Draft MIMP***, with the exception of Winter Solstice at noon, when shading impacts to the 6th Avenue W Street End would be greater. The entirety of the street end would be shaded under ***Alternative 5*** at this time of day during the Winter Solstice (refer to **Appendix E** for shadow graphics depicting development under ***Alternative 5***). Due to the time of year that shading would occur, i.e. time of the year when fewer sunnier days and colder temperatures are the norm, this shading would not be considered significant. Less public use of the open space would be anticipated in December.

On-Campus Open Spaces

Under ***Alternative 5***, no additional buildings over and above development assumed under the ***Draft MIMP*** would need to be built within Tiffany Loop, and development surrounding Tiffany Loop would be generally similar to the ***Draft MIMP***. Shadow impacts to Tiffany Loop would be generally similar to those described for the ***Draft MIMP***. However, without the boundary expansions, an additional building would need to be built to the east of Martin Square. Consequently, shading impacts to Martin Square would be greater than the ***Draft MIMP*** at 8 AM and (9 AM Winter Solstice) during all four key solar days of the year.

3.7-3 Mitigation Measures

Although no significant adverse shadow impacts are anticipated under the ***Draft MIMP***, the following mitigation measures could further minimize the potential for impacts from shadows:

- Future new building design could consider the final orientation, siting, and massing to minimize the potential shadow impacts to these open spaces.

3.7-4 Significant Unavoidable Adverse Impacts

Shadow impacts associated with development of the ***Draft MIMP*** and ***Alternatives 1-5*** would not be expected to result in significant impacts to off-campus open spaces (West Ewing Mini Park and the 6th Avenue W Street End). ***Alternatives 2*** and ***3*** could result in significant unavoidable adverse impacts to on-campus open spaces.

3.8 Traffic and Transportation

This section summarizes existing traffic and transportation conditions on the Seattle Pacific University (SPU) site and in the site vicinity and evaluates the potential impacts to traffic and transportation conditions that could occur as a result of the SPU M*ajor Institution Master Plan*. This section summarizes information contained in **Appendix F**, Transportation Discipline Report. Please see **Appendix F** for additional details on the methodology used for collection of data and analysis, and for additional details contained in figures and tables provided to illustrate the information.

Policy Context

The Seattle Municipal Code (SMC) contains specific provisions that describe the scope of the SEPA analysis relative to traffic and transportation. Applicable policies from SMC 25.05.675 are noted below:

R.2 Traffic and Transportation Policies

a. It is the City's policy to minimize or prevent adverse traffic impacts that would undermine the stability, safety, and/or character of a neighborhood or surrounding areas.

b. In determining the necessary traffic and transportation impact mitigation, the decisionmaker shall examine the expected peak traffic and circulation pattern of the proposed project weighed against such factors as the availability of public transit; existing vehicular and pedestrian traffic conditions; accident history; the trend in local area development; parking characteristics of the immediate area; the use of the street as determined by the Seattle Department of Transportation's Seattle Comprehensive Transportation Plan; and the availability of goods, services, and recreation within reasonable walking distance.

c. Mitigation of traffic and transportation impacts shall be permitted whether or not the project meets the criteria of the overview policy set forth in Section 25.05.665.

f. 1.) Mitigating measures that may be applied to projects outside of downtown may include, but are not limited to:

a) Changes in access;
b) Changes in the location, number and size of curb cuts and driveways;
c) Provision of transit incentives including transit pass subsidies;
d) Bicycle parking;
e) Signage;
f) Improvements to pedestrian and vehicular traffic operations including signalization, turn channelization, right-of-way dedication, street widening, or other improvements proportionate to the impacts of the project; and
g) Transportation management plans.

2) For projects outside downtown that result in adverse impacts, the decisionmaker may reduce the size and/or scale of the project only if the decisionmaker determines that the traffic improvements outlined under subsection 25.05.675.R.2.f.1 would not be adequate to effectively mitigate the adverse impacts of the project.

Alternatives Evaluated

Descriptions of the EIS Alternatives from a transportation perspective are provided below, with the applicable MIMP elements for each Alternative summarized in **Table 3.8-1**.

No Action Alternative*:** The campus population would include 4,300 FTE students on campus and 616 employees[1] for both the near-term (2031) and horizon (2035) conditions. The on-campus student housing would include 1,700 beds for undergraduates, consistent with the existing housing supply. Of the 2,600 off-campus students, 1,600 would be undergraduates and 1,000 would be graduate students. The location of parking and the number of spaces would remain the same as current conditions. No new mixed-use development would be constructed as part of the ***No Action Alternative, but some new previously approved academic buildings would be constructed.

Draft MIMP*:** The near-term (2031) conditions assume the implementation of the ***Draft MIMP projects. The ***Draft MIMP*** projects would include a new student center, new open space, and the repurposing of an existing building. The ***Draft MIMP*** projects would not result in an increase in campus population or major changes to transportation-related elements of SPU's campus. As such, the campus population for the near-term conditions would be the same as that for the ***No Action Alternative***.

For the horizon (2035) conditions, the campus population would include 6,000 FTE students on campus and 860 employees. The on-campus student housing would include 3,150 beds for undergraduates. Of the 2,850 off-campus students, 1,350 would be undergraduates and 1,500 would be graduate students. The ***Draft MIMP*** would include planned (near-term) and potential buildings (long-term). In addition to academic buildings, the ***Draft MIMP*** would include approximately 237,100 square feet of mixed-use development located along W Nickerson Street. New parking lots and structures would be constructed, and some existing lots would be abandoned, resulting in an overall increase in parking. The street vacations and new garages would shift the local travel patterns of traffic to and from campus. There would also be a boundary expansion and increased height limits.

Alternative 2 (No Boundary Expansion and No Change to Height Limits): The campus population would be the same as that for the 2035 ***Draft MIMP*** and would include potential academic and mixed-use buildings (long-term). ***Alternative 2*** would include approximately 237,100 square feet of mixed-use development located along W Nickerson Street, 3rd Avenue W, W Bertona Street, and W Dravus Street. New parking lots and structures would be constructed, and some existing lots would be abandoned. Additionally, streets would be vacated to improve connectivity between student housing and academic buildings. The street vacations and new garages would shift the local trip distribution of traffic to and from campus.

Alternative 3 (Boundary Expansion and No Change to Height Limits within the Existing MIO): The campus population would be the same as that for the 2035 ***Draft MIMP*** and would include all planned and potential academic and mixed-use buildings. ***Alternative 3*** would include approximately 237,100 square feet of mixed-use development located along W Nickerson Street, W Bertona Street, and W Cremona Street. New parking lots and structures would be constructed,

[1] The ***No Action Alternative*** campus population is representative of the highest student population that could be realized at the campus with the existing facilities and resources. Within recent history, the highest student enrollment was realized in 2014 at 4,137 students.

and some existing lots would be abandoned. Additionally, streets would be vacated to improve connectivity between student housing and academic buildings. The street vacations and new garages would shift the local trip distribution of traffic to and from campus.

Alternative 4 (No Boundary Expansion and Increased Height Limits): The campus population would be the same as that for the 2035 ***Draft MIMP*** and would include all planned and potential academic and mixed-use buildings. ***Alternative 4*** would include approximately 237,100 square feet of mixed-use development located along W Nickerson Street, W Bertona Street, and W Dravus Street. New parking lots and structures would be constructed, and some existing lots would be abandoned. Additionally, streets would be vacated to improve connectivity between student housing and academic buildings. The street vacations and new garages would shift the local trip distribution of traffic to and from campus.

Alternative 5 (Boundary Expansion, Increased Height and No Street/Alley Vacations): The campus population would be the same as that for the 2035 ***Draft MIMP*** and would include potential academic and mixed-use buildings (long-term). ***Alternative 5*** would include approximately 237,100 square feet of mixed-use development located along W Nickerson Street, W Bertona Street, and W Cremona Street. New parking lots and structures would be constructed, and some existing lots would be abandoned. The new garages would shift the local trip distribution of traffic to and from campus.

Table 3.8-1 - SPU EIS Alternatives

Alternative	***Draft MIMP* Elements**				
	Boundary Expansions	*New Development (Planned + Potential)*	*Repurpose Existing Facilities*	*Increased Height Limits*	*Street Vacations*
No Action Alternative					
Draft MIMP	X	X	X	X	X
Alternative 2		X	X		X
Alternative 3	X	X	X		X
Alternative 4		X	X	X	X
Alternative 5	X	X	X	X	

The campus populations for the existing conditions and Alternatives are summarized in **Table 3.8-2**. While the Alternatives vary as it relates to boundary expansions, increased height limits, and street vacations, it is anticipated that each alternative would result in the same overall campus population. As shown in the table, the ***No Action Alternative*** assumes 771 more students than the existing (2019) conditions, to represent the maximum number of students that could feasibly be enrolled and/or housed at SPU based on the existing facilities available. As part of the Alternatives, the campus population would increase by 1,700 students and 267 employees/staff from the ***No Action Alternative***.

Table 3.8-2 - SPU Campus Population Assumptions

Alternative	FTE Students				Employees/ Staff
	Undergraduate Students		Graduate Students[1]	Total	
	Commuting	Resident			
Existing[2]	1,231	1,497	801	3,529	593
No Action	1,600	1,700	1,000	4,300	616
Draft MIMP (and all other Alternatives)	1,350	3,150	1,500	6,000	860

Notes: FTE = full-time equivalent
1. All graduate students are commuting students
2. Existing population numbers are based on Fall 2019 enrollment numbers, which represent the most recent pre-pandemic conditions

In addition to academic buildings, the ***Draft MIMP*** and all other Alternatives would include buildings that support mixed-use development. **Table 3.8-3** summarizes the assumed amount and type of mixed-use development assumed for the ***Draft MIMP*** and all other Alternatives. In some cases, a proposed mixed-use building replaces an existing building, which offsets the traffic impacts associated with the proposed mixed-use development for each Alternative. More details regarding the mixed-use development assumptions are included in later sections of this report.

Table 3.8-3 - EIS Mixed-Use Development Alternatives

Alternative	Land Use			
	Office	*Retail*	*Grocery*	***Total***
No Alternative	--	--	--	**--**
Draft MIMP Alternative	123,850 sf	101,950 sf	11,300 sf	**237,100 sf**
Alternative 2	123,250 sf	100,450 sf	13,400 sf	**237,100 sf**
Alternative 3	139,800 sf	83,900 sf	13,400 sf	**237,100 sf**
Alternative 4	130,200 sf	93,500 sf	13,400 sf	**237,100 sf**
Alternative 5	131,300 sf	92,700 sf	13,100 sf	**237,100 sf**

Notes: sf = square feet

Study Approach and Methodology

This section provides a summary of the methodology, key assumptions and how the Alternative impacts are identified for the transportation elements evaluated in this study.

Study Scenarios

The transportation analysis evaluated a horizon year of 2035 and a near-term analysis year of 2031 based on potential timelines for development under the ***Draft MIMP*** and discussions with City staff.

Study Area

Based on the location of parking and trip distribution assumptions, 16 study intersections were identified for weekday AM and PM peak hour analysis, as shown in **Figure 3.8-1**.

Source: Transpo Group, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 3.8-1

Site Vicinity and Study Intersections

Trip Generation

The foundation of the transportation analysis is trip generation. Trip generation for the campus is related to students, staff/faculty and visitors. Additionally, the ***Draft MIMP*** would include trips generated by proposed mixed-use developments.

SPU Trip Generation

SPU-related trip generation was estimated based on three components: (1) commuter-related trips (inclusive of staff/faculty and students), (2) campus housing (residential) trips and (3) other trips related to deliveries, pick-up/drop-off activity, or visitors.

Commuter Trip Generation. The commuter weekday daily person trip generation was estimated based on the commuting student and staff populations as well as on the mode splits shown in **Table 3.8-4**. Commuter population includes all commuting trips that use campus parking such as student and staff/faculty.

Table 3.8-4 - SPU Mode Splits for Commuting Employees and Students

Mode of Travel	Employees[1]	Undergraduate Students[2]	Graduate Students[2]
Drive Alone/Motorcycle	50%	59%	79%
Carpool/Vanpool	10%	5%	3%
Total Auto	**60%**	**64%**	**82%**
Transit (Bus and Transit)	19%	20%	15%
Non-Motorized/Other	21%	16%	3%
Total Non-Auto	**40%**	**36%**	**18%**

Notes: Values presented in the table were rounded to the nearest whole number.
1. *2019 Seattle Pacific University Commute Trip Reduction Employer Survey*
2. *2019-2020 Student Commute Survey* conducted by Seattle Pacific University

Residential Trip Generation. The commuter weekday daily person trip generation was estimated based on the on-campus student population and assumed modal splits. Based on the availability of residential parking permits and data collected as part of the *2015 Seattle Pacific University Transportation & Parking Analysis* (2015 Parking Analysis), it was assumed that 10 percent of daily trips are vehicular trips, 10 percent are transit trips, and 80 percent are non-motorized trips.

Other Trip Generation. In addition to the residential and commuter trips, trip generation for visitors and other deliveries to the campus was included. While trips generated by these uses may differ from day to day, these trips were approximated as 5 percent of the commuter trip generation.

Mixed-Use Trip Generation

Trip generation estimates for the mixed-use components of the ***Draft MIMP*** were prepared based on trip rates identified using the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition (2021). For the proposed land uses, General Office Building (LU #710) was utilized for the office component, Shopping Plaza (40-150k) (LU #821) or Strip Retail Plaza (LU #822) was used for the general retail components, and Supermarket (LU #850) was used for the grocery store component.

Existing land uses were based on a review of information from the King County Parcel Viewer for buildings that would be demolished per each Alternative. Based on this review, existing trip generation was projected using Mini-Warehouse (LU #151), Strip Retail Plaza (<40k) (LU #822), Convenience Store Without Gas (LU #851), Walk-In Bank (LU #911), Copy, Print and Express Ship Store (LU #920), Fast Casual Restaurant (LU #930), Fast-Food Restaurant without Drive-Thru Window (LU #933), and Gas Station with Convenience Market (LU #945).

Person trips were developed based on vehicle trip rates and average vehicle occupancy (AVO) information from ITE's Trip Generation, 11th Edition and National Cooperative Highway Research Program Report 365 (NCHRP 365), or by utilizing person trip rates where available. Person trips were then separated by modes and converted back to person trips based on the assumed AVO.

Street System

The study provides a review of the existing and future planned street system and its connectivity to SPU and the surrounding area. Alternative impacts to the street system are evaluated based on potential changes to the nearby street network connectivity.

Non-Motorized Transportation

The pedestrian and bicycle system surrounding SPU is evaluated. A review of the existing and future planned bicycle system and its connectivity to SPU and the surrounding area, including transit stops, is provided. Additionally, existing barriers to connectivity are identified. Alternative impacts are evaluated based on potential changes to the nearby non-motorized network connectivity.

Transit Service

The transit service to and from campus is evaluated for vehicle capacity analysis across screenlines. Screenlines are imaginary lines drawn across corridors to capture transit operations (capacity and demand) to and from the SPU. Each screenline is evaluated by direction and by route for the weekday AM and PM peak periods.

Existing transit demand is based on pre-pandemic Fall 2019 average weekday AM and PM peak period ridership provided by the transit agencies. Transit impacts of the alternatives are based on a comparison of anticipated demand to capacity.

Traffic Volumes

Existing 2021 traffic volumes at the study intersections were based on traffic counts collected in 2015, 2017, 2020 (pre-pandemic), and 2021. Traffic volumes collected in 2015, 2017, and 2020 were grown by 1.35 percent annually to represent 2021 conditions based on a comparison of historic traffic volumes within the study area. Traffic volumes collected in 2021 were adjusted to account for the pandemic-related decline in vehicular activity.

No Action Alternative traffic forecasts include background traffic growth and the assumed population growth between the existing and ***No Action Alternative*** conditions. The background traffic growth is comprised of an annual background growth rate and traffic generated from the planned "pipeline" developments. Lastly, additional trips associated with the ***No Action Alternative*** campus population were distributed through the study area. Traffic volumes associated with annual growth, pipeline developments, and the ***No Action Alternative*** campus population were added to the existing volumes to represent 2031 and 2035 ***No Action Alternative*** conditions.

The near-term (2031) ***Draft MIMP*** would not result in additional campus population beyond that observed in the 2031 ***No Action Alternative***. As such, it assumed that the near-term ***Draft MIMP*** would observe the same traffic volumes as the 2031 ***No Action Alternative***. Additionally, there are no proposed near-term Alternatives.

Horizon (2035) volumes with the ***Draft MIMP***, and all other Alternatives were determined by adding trips related to campus growth with all planned and potential projects implemented. This includes trips associated with student and employee/staff population growth as well as the net new trips associated with the demolition and construction of commercial spaces. Additionally, existing trips to and from the campus were rerouted to account for the proposed distribution of on-campus parking as part of the ***Draft MIMP*** and proposed street vacations, as applicable. Traffic volume impacts at the study intersections were determined based on a review of the change in traffic volumes between the ***No Action Alternative*** and ***Draft MIMP***. The impacts of all other Alternatives were based on a comparison to the ***Draft MIMP***.

Traffic Operations

The operational characteristics of an intersection are determined by calculating the intersection level of service (LOS). At signalized intersections, LOS is measured in average control delay per vehicle and is typically reported using the intersection delay. At side-street stop-controlled intersections, LOS is measured in average delay per vehicle and is reported for the worst operating movement of the intersection. Traffic operations and average vehicle delay for an intersection can be described qualitatively with a range of levels of service (LOS A through LOS F), with LOS A indicating free-flowing traffic and LOS F indicating extreme congestion and long vehicle delays.

Weekday AM and PM peak hour traffic operations are evaluated based on the procedures identified in the *Highway Capacity Manual, 6th Edition* (HCM 6) and are evaluated using Synchro 11. Synchro 11 is a software program that uses HCM methodology to evaluate intersection LOS and average vehicle delay.

The City of Seattle's Comprehensive Plan does not define a LOS standard for individual intersections; however, the City generally recognizes LOS E and F as poor operations for signalized locations and LOS F for unsignalized locations. \

Traffic Safety

Recent collision records are reviewed within the study area to identify existing traffic safety issues at the study intersections. The most recent three-year summary of collision data from the Washington Department of Transportation (WSDOT) is for 2017-2019. SDOT defines High Collision Locations (HCL) as signalized intersections with 10 or more collisions in the previous year, unsignalized intersections with 5 or more collisions in the previous year, mid-block locations with 10 or more collisions in the previous year, and locations with 5 or more pedestrian or bicycle collisions in the last three years. Intersections designated as high accident locations are targeted for future safety improvements in an effort to reduce the occurrence of accidents.

Parking

On January 20, 2023, the state enacted SEPA-related amendments that removed parking as an element of the environment and revised the SEPA environmental checklist. As a result of the new state law, Seattle Department of Construction and Inspections (SDCI) will no longer identify and analyze parking impacts in its SEPA analyses. As such, analysis and disclosure of parking impacts (e.g., related to the proposed supply of and demand for parking) are not included in this document. The information presented herein includes the proposed parking supply and Seattle Municipal Code (SMC) dictated parking requirements are included in the Transportation Management Plan.

3.8.1 Affected Environment

This section provides a summary of the existing conditions within the defined study area.

Trip Generation

Existing trip generation was estimated for commuters and residents based on the Fall 2019 campus population and the observed means of travel, as outlined previously. The existing trip generation is summarized in **Table 3.8-5**. As shown, the campus is projected to generate approximately 3,902 vehicles per day, with 356 trips occurring during the weekday AM peak hour and 383 trips occurring during the weekday PM peak hour.

Table 3.8-5 - Existing Vehicle Trip Generation Summary

	Vehicle Trips		
Time Period	**In**	**Out**	**Total**
Daily	1,951	1,951	**3,902**
AM Peak Hour	288	68	**356**
PM Peak Hour	152	231	**383**

Street System

Table 3.8-6 provides an inventory of the streets serving SPU and included in the study area. W Nickerson St and 3rd Avenue W (both arterials) serve as primary routes to/from campus. Regional access to the campus is provided via Route 99 as well as the Fremont Bridge to the east of campus, and Ballard Bridge/15th Avenue W to the west of campus.

Table 3.8-6 - Roadway Network Existing Conditions Summary

Roadway	Rdwy Classification	Speed Limit[1]	# Lanes	Ped Facilities	Bicycle Facilities	Parking
Nickerson St	Arterial	25	3-5[5]	Yes	Bike Lane	Yes[2]
W Emerson St	Residential	20	2	Yes	None	Yes
W Bertona St	Arterial	25	2	Yes	None	None
W Cremona St	Residential	20	2	Yes	None	Yes[3]
W Dravus St	Residential	20	2	Yes[4]	None	Yes[3]
W Florentia St	Arterial	25	2	Yes	None	Yes[3]
6th Ave W	Residential	20	2	Yes	None	Yes[3]
3rd Ave W	Arterial	25	2	Yes	None	Yes
Queen Anne Ave N	Residential	20	2	Yes	None	Yes
4th Ave N	Arterial	25	2-4[6]	Yes	Partial Sharrows	None
Dexter Ave N	Arterial	25	4	Yes	Bike Lanes	None
Westlake Ave N	Arterial	25	4	Yes	None	None
Fremont Bridge	Arterial	25	4	Yes	Shared-Use Path	None

1. City of Seattle Speed Limit Map https://www.seattle.gov/transportation/projects-and-programs/safety-first/vision-zero/speedlimits (April 2021)
2. Parking is allowed on both sides in intermittent locations.
3. Parking is allowed on one side of the roadway.
4. Pedestrian facilities available along at north side of the street between Humes Place W and 6th Ave W.
5. Three lanes (including a two-way left-turn lane) west of Warren Ave N and four to five lanes east of Warren Ave N.
6. Two lanes south of the intersection with Dexter Ave N and four lanes between Fremont Bridge and Westlake Ave N.

Non-Motorized Transportation

Pedestrian

Pedestrian facilities are provided in the vicinity of the SPU campus, including an extensive sidewalk network and signalized crossings at many major intersections including Nickerson Street/Dexter Avenue N, Florentia Street/3rd Avenue W, and Nickerson Street/3rd Avenue W. There is also a signalized pedestrian crossing at W Nickerson Street/W Cremona Street and a signed crosswalk at W Nickerson Street/W Dravus Street. While there are crossings along W Nickerson Street under existing conditions, there are opportunities to improve pedestrian connectivity along this arterial, including improved pedestrian connectivity at W Nickerson Street/6th Avenue W.

Within and directly surrounding the SPU campus there exist many unsignalized intersections, but there are marked crosswalks and pedestrian signage at intersections along arterials such as W Bertona Street and 3rd Avenue W. Additionally, there are several roadway segments that are included in the City's Pedestrian Priority Investment Network. A summary of these segments is included in **Table 3.8-7**.

Table 3.8-7 Summary of Study Area Roadways in the Pedestrian Priority Investment Network

Roadway	Segment	Designation (per the City's Pedestrian Master Plan)
6th Avenue W	North of W Nickerson Street	Non-Arterial Missing Sidewalk
	South of W Nickerson to W Cremona Street	Non-Arterial
W Emerson Street	From 6th Avenue W to W Bertona Street	Non-Arterial
W Nickerson Street		Arterial
W Bertona Street	From 6th Avenue W to 7th Avenue W	Arterial Missing Sidewalk
3rd Avenue W	From W Nickerson Street to E Ewing Street	Non-Arterial
E Ewing Street	East of 3rd Avenue W	Non-Arterial Missing Sidewalk
Queen Anne Avenue N	North of W Nickerson Street	Non-Arterial Missing Sidewalk
	South of W Nickerson Street	Non-Arterial
W Cremona Street	From Queen Anne Avenue N to 3rd Avenue W	Non-Arterial
W Dravus Street	From 3rd Avenue W to Nickerson Street	Non-Arterial

Bicycle

The bicycle system surrounding the campus provides protected facilities that connect to surrounding neighborhood uses as well as Downtown. The following bicycle facilities are within direct vicinity of the SPU campus:

- **South Ship Canal Trail** – Located north of campus along the canal, the South Ship Canal Trail is a shared-use path and is accessible from 3rd Avenue W, 6th Avenue W, and Queen Anne Avenue. The Trail provides access to Magnolia to the west and to the Cheshiahud Lake Union Loop Trail (to Downtown) to the east.

- **Nickerson Street –** A bike lane is provided in the westbound (uphill) direction and a sharrow is provided in the eastbound direction.

Within the campus there is a significant amount of bicycle parking available. Existing bicycle racks provide parking for up to 220 bicycles and there are an additional 104 secured bicycle parking spaces.

Shared Mobility

As it relates to shared mobility, SPU currently provides space for two Zipcars on campus and provides shared mobility facilities when requested.

Transit Service

Transit Access

SPU is well served by transit with service provided by King County Metro. **Table 3.8-8** summarizes the transit service including 7 bus routes (1, 2, 3, 4, 13, 31, 32,). The nearest stops to campus are provided along 3rd Ave W, W Nickerson St, and 10th Ave W, as illustrated on **Figure 3.8-2**.

Transit Capacity

The transit capacity for service to and from the campus was completed at key screenlines surrounding the campus. The total available capacity, ridership and utilization at the screenlines is summarized in **Table 3.8-9** for the weekday peak periods.

As shown in the table, the onboard utilization of the bus routes serving the campus range between 2 and 39 percent. All of the routes serving the campus have considerable remaining capacity to accommodate additional riders during the weekday peak periods.

Table 3.8-8 - Summary of Existing Transit Service

Transit Service	Approximate Hours of Operation[1]	Weekday Peak Hour Headway (Min)
1[2] (Kinnear to Downtown Seattle)	Mon – Fri: 5:00 a.m. to 12:30 a.m. Sat/Sun: 5:30 a.m. to 12:15 a.m.	15
2[2] (Seattle Pacific to Downtown Seattle Madrona Park)	Mon – Fri: 5:00 a.m. to 1:30 a.m. Sat/Sun: 6:00 a.m. to 1:30 a.m.	15-20
3 (Queen Anne Hill to Downtown Seattle to Madrona/Judkins Park)	Mon – Fri: 4:45 a.m. to 12:45 a.m. Sat/Sun: 4:30 a.m. to 1:15 a.m.	10-15
4 (Queen Anne Hill to Downtown Seattle to Madrona/Judkins Park)	Mon – Fri: 4:45 a.m. to 12:45 a.m. Sat/Sun: 4:30 a.m. to 1:15 a.m.	10-15
13[2] (Seattle Pacific to Downtown Seattle to Madrona Park)	Mon – Fri: 5:00 a.m. to 1:45 a.m. Sat: 6:00 a.m. to 1:45 a.m. Sun: 5:45 a.m. to 1:45 a.m.	5-15
31 (Magnolia to Fremont to University District)	Mon – Fri: 6:00 a.m. to 12:45 a.m.	15
32 (Magnolia to Fremont to University District)	Mon – Fri: 5:45 a.m. to 12:45 a.m. Sat: 6:00 a.m. to 1:30 a.m. Sun: 6:00 a.m. to 1:00 a.m.	15

1. Schedule based on King County Metro accessed June 2021.
2. Under long-term construction reroute until 9/12/2021.
3. Under long-term construction reroute until further notice.

Table 3.8-9 - Existing Transit Capacity Analysis

	Screenline/Location	Direction of Travel	Weekday Routes	AM Peak Period Passenger Capacity[1]	AM Peak Period Passenger Load[1]	AM Peak Period Utilization	PM Peak Period Passenger Capacity[1]	PM Peak Period Passenger Load[1]	PM Peak Period Utilization
1	**W Nickerson St** west of 3rd Ave W	EB	31	289	89	31%	228	25	11%
			32	289	92	32%	375	88	23%
		WB	31	201	19	9%	341	74	22%
			32	219	59	27%	305	92	30%
2	**W Nickerson St** east of 3rd Ave W	EB	31	289	98	34%	228	33	15%
			32	289	107	37%	375	105	28%
		WB	31	201	28	14%	341	95	28%
			32	175	58	33%	305	119	39%
3	**3rd Ave W** at W Raye St	NB	3	340	23	7%	255	19	7%
			4	255	18	7%	170	16	9%
			13	298	29	10%	382	46	12%
		SB	3	340	48	14%	212	29	14%
			4	255	29	11%	298	43	15%
			13	298	36	12%	340	57	17%
4	**9th Ave W / 10th Ave W** north of W Armour St	NB	1	340	6	2%	340	8	2%
		SB	1	340	31	9%	340	10	3%
5	**6th Ave W** at W Raye St	NB	2	170	3	2%	170	8	5%

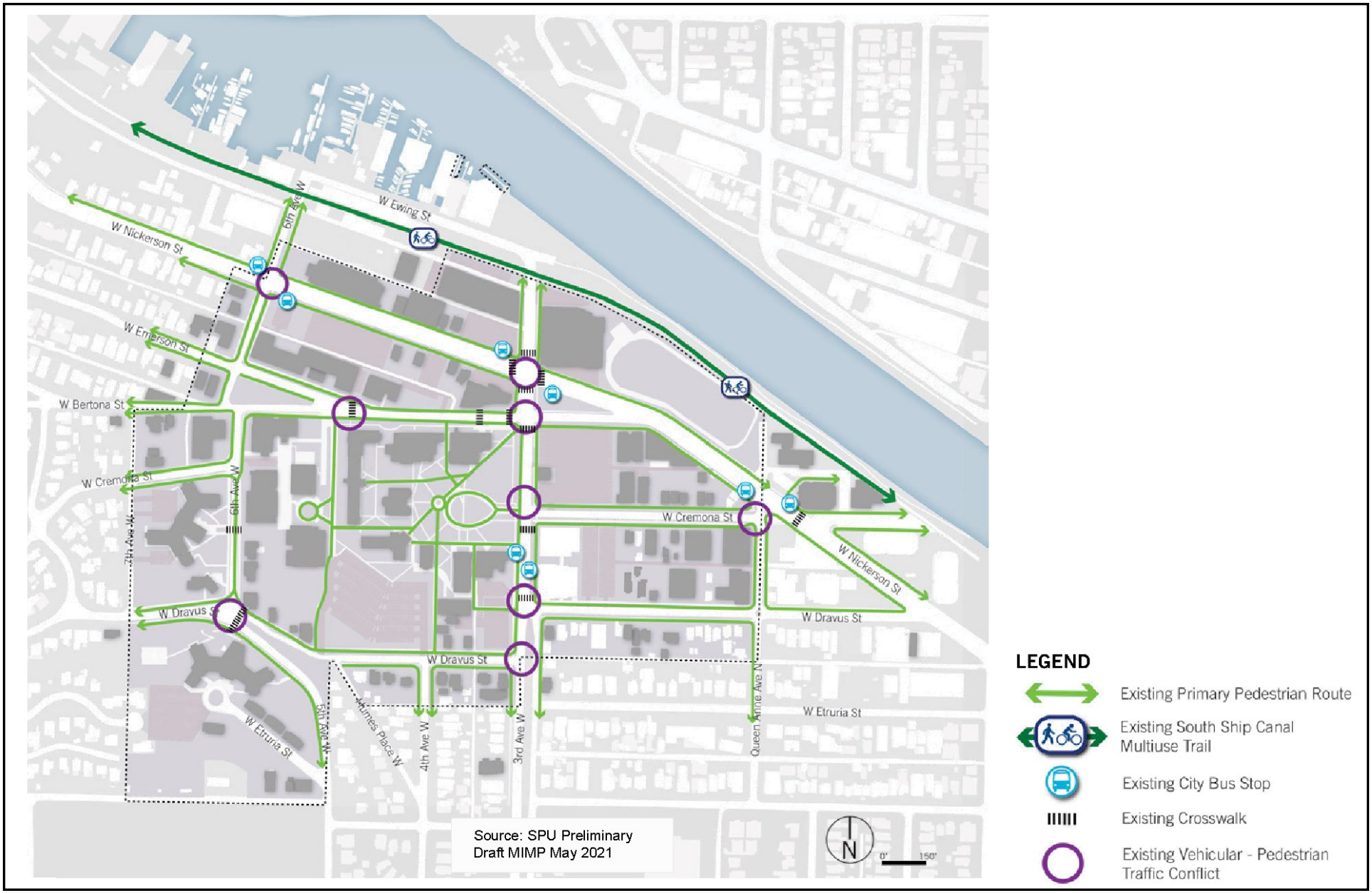
1. Based on bus frequencies and ridership data provided by the respective agencies for Fall 2019 as well as the existing capacity.

Parking

The existing on-campus parking supply is 1,519 spaces. Parking is provided across 68 parking lots and garages throughout the SPU campus. The existing parking spaces are currently reserved for specific uses as follows:

- 752 commuter spaces
- 564 residential spaces
- 77 service vehicle spaces
- 37 ADA spaces
- 41 visitor spaces
- 40 carpool spaces
- 8 EV charging spaces

The location of existing campus parking facilities are shown on **Figure 3.8-3**. The campus parking supply is managed as a collective system. Allocation of stalls between uses may vary and change over time as the campus needs dictate.

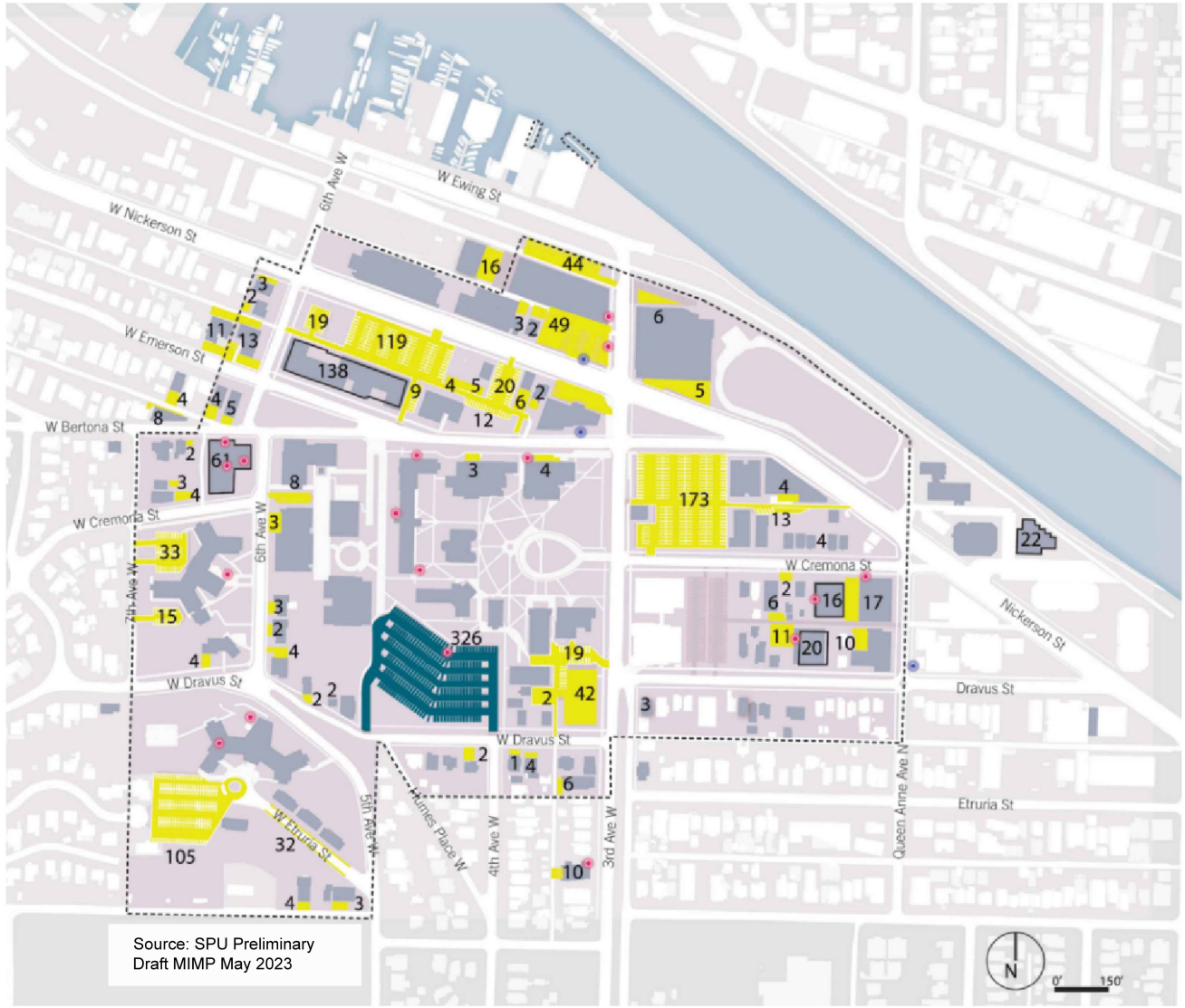


Source: Transpo Group, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 3.8-2

Existing Transit, Pedestrian and Bike Access



Source: Transpo Group, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 3.8-3

Existing Campus Parking Facilities Locations

Traffic Volumes

Existing 2021 traffic volumes at the study intersections were based on traffic counts collected in 2015, 2017, 2020 (pre-pandemic), and 2021, and adjusted to represent 2021 non-pandemic conditions.

Traffic Operations

Weekday peak hour traffic operations for existing conditions are evaluated at the study intersections as well as the existing parking lot access points. Results for the existing operations analyses are summarized in **Table 3.8-10**. The City generally recognizes LOS E and F as poor operations for signalized locations and LOS F for unsignalized locations.

Table 3.8-10 - Existing Peak Hour LOS Summary

Intersection	Traffic Control	AM Peak Hour LOS[1]	PM Peak Hour LOS
1. 6th Ave W/W Nickerson St	TWSC	E	**F**
2. 6th Ave W/W Emerson St	AWSC	A	A
3. 6th Ave W/W Bertona St	TWSC	B	B
4. 6th Ave W/W Dravus St	AWSC	A	A
5. W Emerson St/W Bertona St	TWSC	B	D
6. 3rd Ave W/W Nickerson St	Signal	B	C
7. 3rd Ave W/W Bertona St	TWSC	C	**F**
8. 3rd Ave W/W Cremona St	TWSC	B	C
9. 3rd Ave W/W Dravus St (N)	TWSC	B	C
10. 3rd Ave W/W Dravus St (S)	TWSC	B	B
11. Queen Anne Ave N/W Nickerson St	TWSC	**F**	**F**
12. W Cremona St/W Nickerson St	TWSC	C	D
13. Queen Anne Ave N/W Cremona St	TWSC	A	B
14. 3rd Ave N/W Florentia St/W Nickerson St[2]	Signal	D	D
15. Fremont Ave N/W Florentia St	TWSC	C	C
16. Fremont Ave N/W Nickerson St	Signal	**F**	D

TWSC = Two-Way Stop Controlled. AWSC = All-Way Stop Controlled. **Bold** text indicates operating at LOS E or F if signalized or LOS F for TWSC.
1. Level of Service (A – F) as defined by the *Highway Capacity Manual* (HCM) 6th Edition (TRB, 2016)
2. Evaluated using HCM 2000 because the configuration is not supported with the HCM 6th Edition method due to non-NEMA signal configuration

As shown, study intersections currently operate acceptably, with the following exceptions:

- 6th Avenue W/W Nickerson Street (PM)
- 3rd Avenue W/W Bertona Street (PM)
- Queen Anne Avenue N/W Nickerson Street (AM, PM)
- Fremont Avenue N/W Nickerson Street (AM)

Neighborhood Traffic

Traffic counts were also collected at the following intersections within the neighborhood to the west and south of SPU both when SPU classes were in session (January 12, 2023) and when they were not in session (December 15, 2022) to understand the impacts of SPU-related traffic

along neighborhood streets. The differences in counts could be attributed to changes in background neighborhood traffic as well as University traffic.

1. 8th Avenue W (West) & W Barrett Street
2. 8th Avenue W (East) & W Barrett Street
3. 8th Avenue W & W Dravus Street
4. 6th Avenue W & W Dravus Street
5. 5th Avenue W & W Barrett Street

These counts indicate that volumes along the adjacent roadways are low during the AM and PM peak hours (generally below 60 vehicles per hour, or less than 1 vehicle per minute). Along several roadway segments the peak hour traffic volumes decrease when SPU classes are in session. The differences in neighborhood traffic volume conditions with and without classes in session are summarized below:

- Along W Barrett Street, traffic volumes increase by at most 15 vehicles during the AM peak hour, and 3 vehicles during the PM peak hour.
- Along W Dravus Street, traffic volumes decrease during the AM peak hour, and increase by at most 12 vehicles during the PM peak hour.
- Along 9th Avenue W, traffic volumes increase by at most 9 vehicles during the AM peak hour, and 2 vehicels during the PM peak hour.
- Along 5th Avenue W, traffic volumes increase by at most 13 vehicles during the AM peak hour, and 21 vehicles during the PM peak hour.

Overall, the neighborhood streets surrounding SPU observe low traffic volumes during the peak hours with limited additional traffic as a result of the university.

Traffic Safety

Collision records within the study area are reviewed to identify existing traffic safety issues at the study intersections. The most recent non-pandemic three-year summary of collision data from the Washington Department of Transportation (WSDOT) is for 2017-2019. Collisions are also evaluated along the 6th Avenue W, W Bertona Street, 3rd Avenue W, and Nickerson Street corridors to evaluate the vehicle, pedestrian and bicycle safety conditions. The collisions are summarized in **Table 3.8-11**.

Table 3.8-11 - Collision Summary (2017-2019)

Location	Traffic Control	Collisions per Year			Total	Annual Average	Collisions Involving Ped/Bikes in the Last 3 Years
		2017	2018	2019			
Intersection							
1. 6th Ave W/W Nickerson St	TWSC	3	3	0	3	2.0	0
2. 6th Ave W/W Emerson St	AWSC	0	1	1	0	0.7	0
3. 6th Ave W/W Bertona St	TWSC	1	1	0	1	0.7	0
4. 6th Ave W/W Dravus St	AWSC	0	0	0	0	0.0	0
5. W Emerson St/W Bertona St	TWSC	0	0	0	0	0.0	0
6. 3rd Ave W/W Nickerson St	Signal	5	3	3	5	3.7	1
7. 3rd Ave W/W Bertona St	TWSC	1	4	2	1	2.3	0
8. 3rd Ave W/W Cremona St	TWSC	0	0	1	0	0.3	0
9. 3rd Ave W/W Dravus St (N)	TWSC	0	0	0	0	0.0	0
10. 3rd Ave W/W Dravus St (S)	TWSC	0	0	0	0	0.0	0
11. Queen Anne Ave N/W Nickerson St	TWSC	1	1	1	1	1.0	0
12. W Cremona St/W Nickerson St	TWSC	2	2	2	2	2.0	0
13. Queen Anne Ave N/W Cremona St	TWSC	0	0	0	0	0.0	0
14. 3rd Ave N/W Florentia St/W Nickerson St	Signal	1	3	3	1	2.3	0
15. Fremont Ave N/W Florentia St	TWSC	0	1	2	0	1.0	0
16. Fremont Ave N/W Nickerson St	Signal	5	6	7	5	6.0	1
Roadway Segment							
6th Ave W between W Nickerson St and W Emerson St		0	0	0	0	0.0	0
6th Ave W between W Emerson St and W Bertona St		0	0	0	0	0.0	0
6th Ave W between W Bertona St and W Dravus St		0	0	0	0	0.0	0
W Bertona St between 6th Ave W and 5th Ave W		0	0	0	0	0.0	0
W Bertona St between 5th Ave W and 3rd Ave W		0	0	0	0	0.0	0
3rd Ave W between W Nickerson St and W Bertona St		0	0	0	0	0.0	0
3rd Ave W between W Bertona St and W Cremona St		0	0	0	0	0.0	0
3rd Ave W between W Cremona St and W Dravus St (north)		0	0	0	0	0.0	0
3rd Ave W between W Cremona St and W Dravus St (north)		0	0	0	0	0.0	0
W Nickerson St between 6th Ave W and 3rd Ave W		3	0	0	3	1.0	0
W Nickerson St between 3rd Ave W and Queen Anne Ave N		0	0	0	0	0.0	0
Nickerson St between Queen Anne Ave N and W Cremona St		0	1	0	1	0.3	0
Nickerson St between Florentia St and Fremont Ave N		0	0	0	0	0.0	0

Source: WSDOT 2020
Note: 2020 was not included as it did not represent typical conditions.

As shown in the table, there were no study intersections or roadway segments that meet the signalized or unsignalized HCL criteria, nor were there any intersections that meet the pedestrian/bicycle HCL criteria. There were no reported fatalities, and one serious injury reported. The serious injury occurred at the intersection of 3rd Avenue W and W Nickerson Street when a turning vehicle struck a pedestrian.

3.8.2 Impacts of the No Alternatives

This section summarizes the future transportation conditions for the 2031 and 2035 ***No Action Alternatives***. The ***No Action Alternatives*** reflect the existing campus infrastructure including the location and quantity of parking. In both the 2031 and 2035 ***No Action Alternatives***, the campus population would include 4,300 FTE students and 616 employees. The on-campus student housing supply would include 1,700 beds for undergraduates. Of the 2,600 off-campus students, 1,600 would be undergraduates and 1,000 would be graduate students.

Trip Generation

The methodology used to estimate trip generation for the ***No Action Alternatives*** is consistent with existing conditions. While Sound Transit's Link extension is underway, the Ballard extension, which would serve SPU is not expected to be complete until after 2035. As such, mode splits were not adjusted for the ***No Action Alternatives***. The ***No Action Alternatives*** trip generation is summarized in **Table 3.8-12**. As shown, the ***No Action Alternatives*** would generate approximately 872 net new daily vehicular trips with 81 occurring during the weekday AM peak hour and 86 occurring during the weekday PM peak hour. Additionally, the ***No Action Alternatives*** would generate approximately 474 net new daily non-motorized trips with 26 occurring during the weekday AM peak hour and 40 occurring during the weekday PM peak hour and 267 net new daily transit trips with 24 occurring during the AM peak hour and 25 occurring during the PM peak hour.

Table 3.8-12 - No Action Alternative Trip Generation Summary

	Vehicle Trips		
Time Period	**In**	**Out**	**Total**
Total No Action			
Daily	2,386	2,386	**4,774**
AM Peak Hour	354	84	**437**
PM Peak Hour	186	283	**469**
Net New No Action Trips (relative to Existing Conditions)			
Daily	435	435	**872**
AM Peak Hour	65	15	**81**
PM Peak Hour	33	53	**86**

Street System

The ***No Action Alternative*** assumes no change in campus vehicle access and circulation. A review of local and regional capital improvement programs and long-range transportation plans was conducted to determine planned funded and unfunded transportation projects that would impact the off-site study area. The review included, but was not limited to, the City of Seattle 2021 – 2026 Proposed Capital Improvement Program (CIP) and Comprehensive Plan. No changes in the study area were identified.

Non-Motorized Transportation

No changes to the existing non-motorized system are assumed with the ***No Action Alternative*** condition as no improvements were identified in the review of the CIP. However, recommended improvements are outlined in the Seattle's 2035 Comprehensive Plan and 2014 Bicycle Master Plan, including bicycle lanes along W Bertona Street between 11th Avenue W and Nickerson Street. While specific plans for these improvements are not identified, these facilities would improve bicycle connectivity in the study area if implemented.

Shared Mobility

No changes to the existing shared mobility services are assumed with the ***No Action Alternatives***.

Transit Service

Transit facilities on-campus may be improved with the ***No Action Alternatives***, based on a review of Seattle's Transit Master Plan which highlights 3rd Avenue as a potential candidate for RapidRide service. However, the Transit Master Plan does not outline an implementation plan for this specific corridor. As such, the ***No Action Alternatives*** analysis assumes the current transit access patterns would continue and there would be no changes to transit frequency or capacity.

The transit capacity analysis for the ***No Action Alternatives*** assumes background transit growth associated with SPU specific growth as well as inherent transit growth unrelated to the SPU MIMP, consistent with Seattle's 2035 Comprehensive Plan. Based on the transit forecasts, the resulting 2031 and 2035 ***No Action Alternatives*** vehicle utilization at the screenlines remains below 50 percent, with estimated increases in utilization of 8 percent or less relative to existing conditions such that there is estimated to be available capacity to accommodate additional riders during the weekday peak periods.

Traffic Volumes

The 2031 and 2035 ***No Action Alternatives*** traffic volumes were projected based on growth in background traffic and the campus population. As noted previously, background growth was accounted for assuming an annual growth of 1.0 percent in addition to trips associated with planned "pipeline" projects. The net new ***No Action Alternatives*** campus trips were distributed and assigned to the roadway network based on the following:

- **Student Commuter Trips** – The distribution for commuters was based on existing (2019) travel patterns and home location information for the student campus population, collected as part of the 2019 Student Commute Survey.

- **Residential Trips** – The residential trip distribution is based on OnTheMap, a web-based mapping and reporting application, showing where people work that live within a quarter-mile radius of the proposed site.

- **Other Trips** – The distribution for "other" trips was assumed to be consistent with the distribution of student commuters.

The trips to and from campus are assigned proportionately to the locations of on-site parking based on the location, amount, and type of parking. Residential trips were routed to resident parking areas while commuter trips were routed to SPU commuter parking lots. The 2031 and 2035 ***No Action Alternatives*** study intersection traffic volumes are determined by adding the net new ***No Action Alternatives*** project trips to the 2031 and 2035 background forecasts.

Traffic Operations

The future 2031 and 2035 ***No Action Alternatives*** operations analysis was conducted using the same methodology and intersection parameters as existing conditions. The 2031 and 2035 ***No Action Alternatives*** weekday peak hour intersection operations are shown in **Table 3.8-13**.

As shown, the majority of off-site study intersections would continue to operate acceptably during the weekday AM and PM peak hours under the 2031 and 2035 ***No Action Alternatives***. Under the 2031 and 2035 ***No Action Alternatives*** conditions, five intersections are forecast to operate below LOS E or F at signalized locations and LOS F at stop-controlled intersections.

Table 3.8-13 - Existing (2021) and No Action Weekday Peak Hour LOS Summary

Intersection	Traffic Control	AM Peak Hour LOS[1]			PM Peak Hour LOS		
		Existing	No Action (2031)	No Action (2035)	Existing	No Action (2031)	No Action (2035)
1. 6th Ave W/W Nickerson St	TWSC	E	**F**	**F**	**F**	**F**	**F**
2. 6th Ave W/W Emerson St	AWSC	A	A	A	A	A	A
3. 6th Ave W/W Bertona St	TWSC	B	B	B	B	B	B
4. 6th Ave W/W Dravus St	AWSC	A	A	A	A	A	A
5. W Emerson St/W Bertona St	TWSC	B	B	B	D	D	D
6. 3rd Ave W/W Nickerson St	Signal	B	C	C	C	C	C
7. 3rd Ave W/W Bertona St	TWSC	C	C	C	**F**	**F**	**F**
8. 3rd Ave W/W Cremona St	TWSC	B	B	B	C	C	C
9. 3rd Ave W/W Dravus St (N)	TWSC	B	B	B	C	C	C
10. 3rd Ave W/W Dravus St (S)	TWSC	B	B	B	B	C	C
11. Queen Anne Ave N/W Nickerson St	TWSC	**F**	**F**	**F**	**F**	**F**	**F**
12. W Cremona St/W Nickerson St	TWSC	C	C	C	D	D	D
13. Queen Anne Ave N/W Cremona St	TWSC	A	A	A	B	B	B
14. 3rd Ave N/W Florentia St/W Nickerson St[2]	Signal	D	D	D	D	**E**	**E**
15. Fremont Ave N/W Florentia St	TWSC	C	D	D	C	C	C
16. Fremont Ave N/W Nickerson St	Signal	**F**	**F**	**F**	D	**E**	**E**

TWSC = Two-Way Stop Controlled. AWSC = All-Way Stop Controlled. **Bold** text indicates operating at LOS E or F if signalized or LOS F for TWSC.
1. Level of Service (A – F) as defined by the *Highway Capacity Manual* (HCM) 6th Edition (TRB, 2016)
2. Evaluated using HCM 2000 because the configuration is not supported with the HCM 6th Edition method due to non-NEMA signal configuration

Traffic Safety

As traffic volumes increase, traffic safety issues could increase proportionally. However, there are no significant safety concerns identified within the study area under existing conditions.

Parking

No change to the existing parking supply of 1,519 stalls is proposed with the 2031 and 2035 ***No Action Alternatives***.

3.8.3 Significant Impacts of the Proposed Action

This chapter summarizes of the impacts of the 2031 and 2035 ***Draft MIMP*** alternatives, which are identified through a comparison to the ***No Action Alternatives***.

2031 Draft MIMP Alternative**.** The 2031 ***Draft MIMP*** would include planned projects only, which would not result in an increase in student or employee populations, nor would they result in any notable changes to the transportation network or parking. There may be slight changes to internal pedestrian circulation due to the centralization of the Student Center and establishment of new open space, but from a transportation standpoint, the impacts of the 2031 ***Draft MIMP*** would be functionally equivalent to the impacts of the 2031 ***No Action Alternative***.

2035 Draft MIMP Alternative. The 2035 ***Draft MIMP*** would include planned and potential projects. The ***Draft MIMP*** would include a boundary expansion, increased height limits, and street and alleyway vacations. The campus population would include 6,000 FTE students and 860 employees. The on-campus student housing would include 3,150 beds for undergraduates. Of the 2,850 off-campus students, 1,350 would be undergraduates and 1,500 would be graduate students. The ***Draft MIMP*** would include mixed-use development located along W Nickerson Street.

Trip Generation

Trip generation for the 2035 ***Draft MIMP*** is comprised of trips generated by the following:

- **SPU Population Growth**. The campus population increase of 1,700 students and 244 employees/staff as compared to the ***No Action Alternative***.
- **Mixed-Use Development**. Construction of 237,100 sf of new mixed-use development and the demolition of 95,000 sf of existing commercial space.

SPU Population Trip Generation

The method used to estimate trip generation for the ***Draft MIMP*** is consistent with the ***No Action Alternative***. **Table 3.8-14** summarizes the trip generation for the campus population of the ***Draft MIMP***.

Table 3.8-14 - Draft MIMP Campus Trip Generation Summary (2035)

Time Period	Vehicle Trips		
	In	Out	Total
Total Draft MIMP			
Daily	2,931	2,931	**5,862**
AM Peak Hour	421	104	**525**
PM Peak Hour	229	343	**572**
Net New Draft MIMP Trips (Relative to No Action Conditions)			
Daily	544	544	**1,088**
AM Peak Hour	67	21	**88**
PM Peak Hour	43	60	**103**

As shown, the ***Draft MIMP*** would generate approximately 1,088 net new daily vehicle trips with 88 new trips occurring during the weekday AM peak hour and 103 new trips during the weekday PM peak hour, as compared to the ***No Action Alternative***. A comparison of the existing, ***No Action Alternative***, and Alternatives for SPU-related trip generation is summarized on **Figure 3.8-4** for the weekday daily and peak hours.

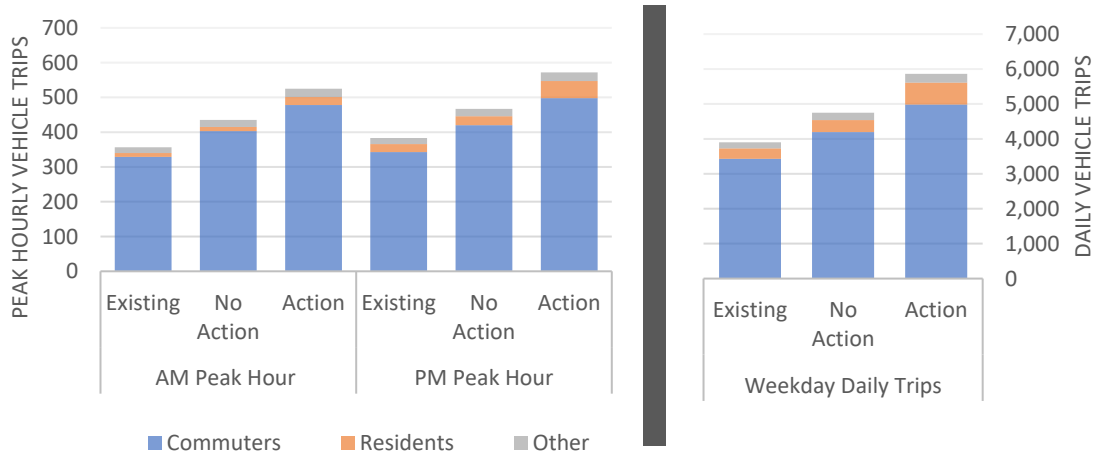


Figure 3.8-4 - SPU Weekday Trip Generation Comparison (2035)

Mixed Use Development Trip Generation

The method used to estimate trip generation for the mixed-use development components of the ***Draft MIMP*** is based on trip rates outlined in ITE Trip Generation, 11th Edition. The ***Draft MIMP*** includes 123,850 sf of office space, 101,950 sf of retail space, and a 11,300 sf grocery store. Additionally, the boundary expansion and construction of potential projects results in the demolition of approximately 95,000 square feet of existing commercial spaces, which were compiled based on information on the King County Parcel Viewer.

Table 3.8-15 summarizes the trip generation for the mixed-use components of the ***Draft MIMP***. As shown in the table, the mixed-use components of the ***Draft MIMP*** are projected to generate

approximately 1,268 net new daily vehicle trips with 25 new trips occurring during the weekday AM park hour and 96 new trips during the weekday PM peak hour.

Table 3.8-15 - Draft MIMP Mixed-Use Trip Generation Summary (2035)

	Net New Vehicle Trips		
Time Period	**In**	**Out**	**Total**
Daily	634	634	**1,268**
AM Peak Hour	45	-20	**25**
PM Peak Hour	27	69	**96**

Cumulative Trip Generation

As summarized in **Table 3.8-16**, the ***Draft MIMP*** Alternative would generate a total of 2,356 net new daily vehicle trips with 113 new trips occurring during the weekday AM peak hour and 199 new trips occurring during the weekday PM peak hour. Approximately 40 percent of these trips would be associated with the mixed-use development. Additionally, the ***Draft MIMP*** would generate approximately 4,208 net new daily non-motorized trips with 46 occurring during the weekday AM peak hour and 546 occurring during the weekday PM peak hour and 823 net new daily transit trips with 24 occurring during the AM peak hour and 94 occurring during the PM peak hour.

Table 3.8-16 - Draft MIMP Cumulative Net New Trip Generation Summary (2035)

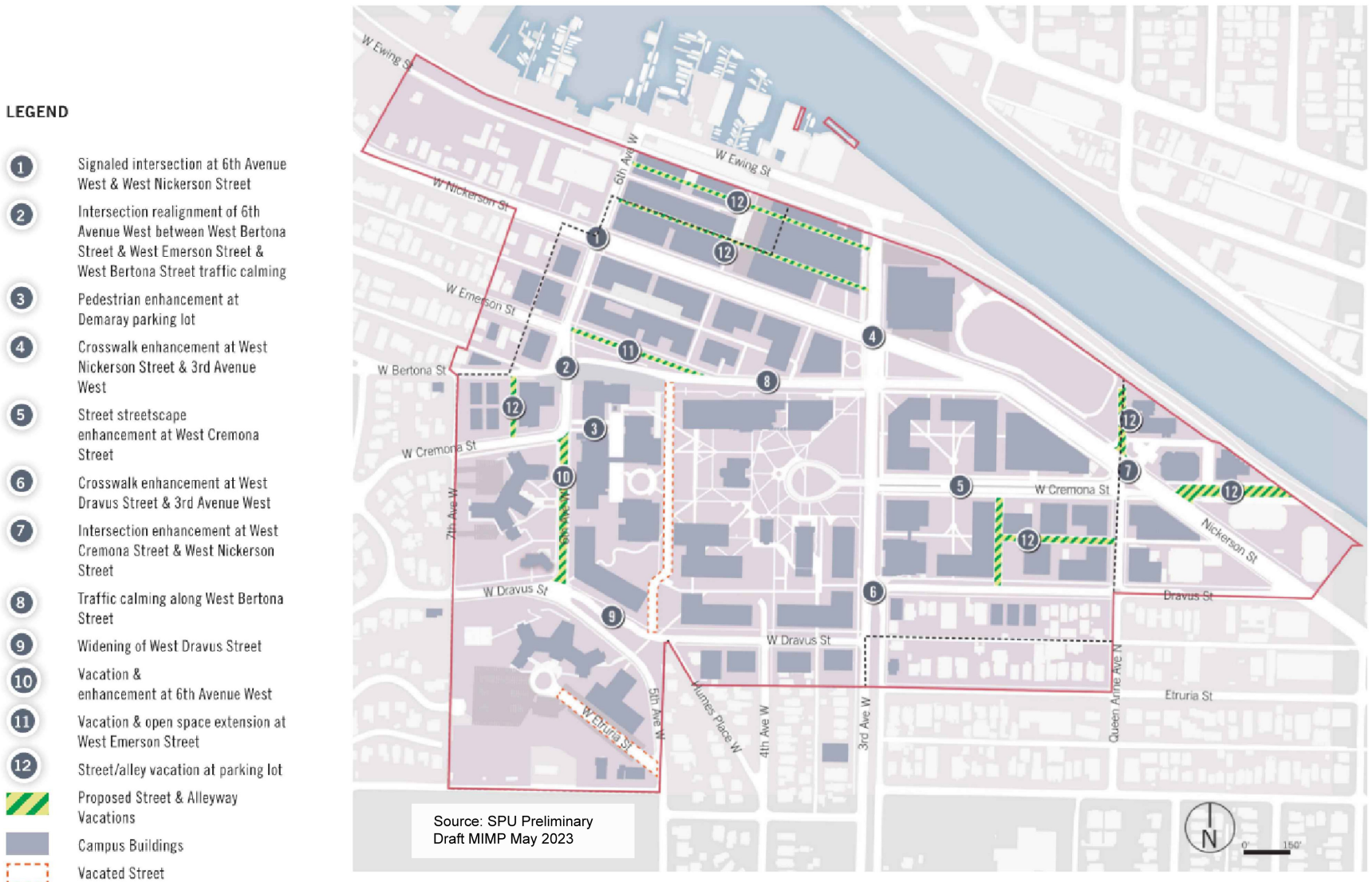
	One-Way Person Trips				Net New Vehicle Trips		
Time Period	**Vehicular**	**Transit**	**Non-Motorized/Other**	**Total**	**In**	**Out**	**Total**
Daily	2,657	823	4,208	**7,687**	1,178	1,178	**2,356**
AM Peak Hour	107	24	46	**178**	112	1	**113**
PM Peak Hour	235	94	546	**874**	70	129	**199**

Street System

Several roadway/intersection modifications are included in the ***Draft MIMP***. Any improvements or roadway modifications proposed as part of the ***Draft MIMP*** would be subject to SDOT review and would be designed consistent with the City's standards. These include the following:

Street/Alley Vacations[2]. Street/alley vacations are proposed as shown on **Figure 3.8-5**. The vacated streets and alleys would no longer be open to vehicular traffic. One exception to this may be the 6th Street W vacation which could ultimately be open to authorized vehicles only, as needed. Overall, the proposed street and alley vacations are incorporated to improve the pedestrian experience, most notably with the vacation of W Emerson Street for additional landscaped space. The 6th Avenue W vacation improves pedestrian connectivity to and from student housing facilities. Additional proposed alley vacations would provide flexibility to support future academic, athletic/recreation, mixed-use, and housing opportunities, all supported by expanded open space.

[2] The proposed street/alley vacations would be subject to the *Seattle City Council Resolution 31809: Street Vacation Policies*. Each proposed street/alley vacation would require Council approval of a vacation petition that analyzes the public benefits of the proposed vacation, which can include impacts to circulation, access, parking, land use and urban form as well as impacts to certain communities, public assembly, and free speech.



Source: SPU Draft MIMP, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 3.8-5

Potential Street Vacations

- **W Cremona Street**. Streetscape enhancements are proposed along W Cremona Street between 3rd Avenue W and W Nickerson Street including sidewalk widening, the addition of a planting island, formal tree planting, and a mid-block crosswalk.

- **6th Avenue W/W Bertona Street**. Currently this intersection is offset. The intersection will be improved such that the northern leg of 6th Avenue W will be realigned to connect squarely with the southern leg of 6th Avenue W.

- **W Cremona Street/W Nickerson Street**. The intersections of W Cremona Street/W Nickerson Street, Queen Anne Avenue N/W Cremona Street and Queen Anne Avenue N/W Nickerson Street will be reconstructed and consolidated such that Queen Anne Avenue N does not continue through W Cremona Street to W Nickerson Street and W Cremona Avenue is realigned to intersection with W Nickerson Street perpendicularly.

- **Queen Anne Avenue N/W Cremona Street.** This intersection operates as TWSC with free-flowing traffic along Queen Anne Avenue N. In conjunction with the realignment of W Cremona Street/W Nickerson Street, this intersection would remain TWSC but stop control would shift to Queen Avenue N and W Cremona Street would be free-flowing.

Non-Motorized Transportation

Improvements to the existing off-campus non-motorized system as part of the ***Draft MIMP*** are summarized below and shown in **Figure 3.8-6**.

Pedestrian

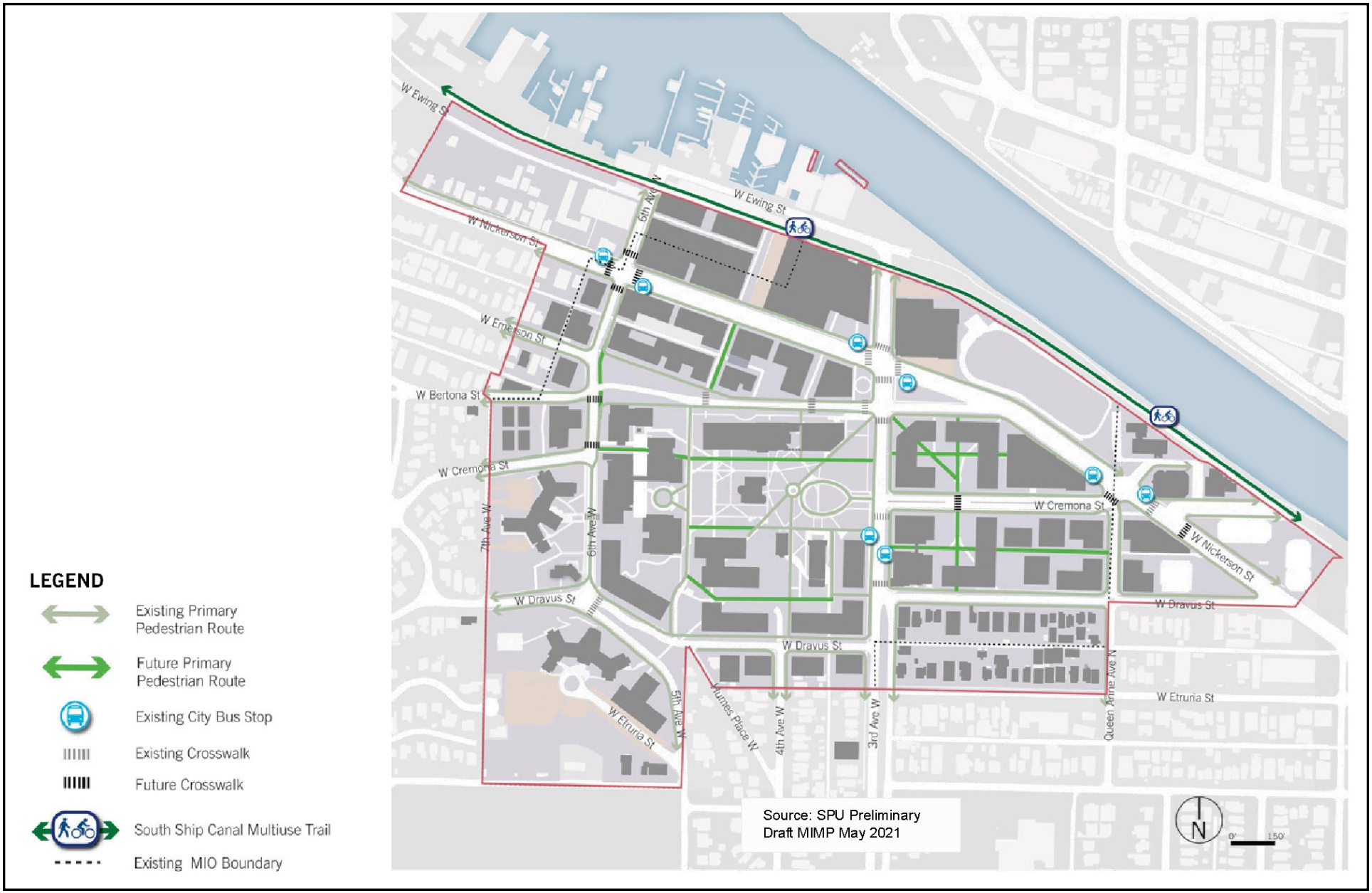
The ***Draft MIMP*** includes many projects that would result in improved on-campus connections[3]. Proposed roadway projects that benefit pedestrian circulation are as follows:

- **W Cremona Street**. The streetscape enhancement proposed along W Cremona Street will introduce a boulevard-style entrance to the campus that will include 8-foot sidewalks and 10-foot landscaped buffers. Additionally, a mid-block crosswalk is proposed.

- **W Bertona Street**. Traffic calming elements are proposed along W Bertona Street between 6th Avenue W and 3rd Avenue W which would aim to reduce vehicular speeds and create a more pedestrian-friendly environment along a key campus roadway. It is not anticipated that traffic calming elements would impact vehicular circulation or operations.

- **Street Vacations**. Street vacations are proposed along 6th Street W and W Emerson Street as part of the ***Draft MIMP***. The 6th Street W vacation would provide improved connectivity between the center of campus and residential halls by eliminating conflicts with vehicular traffic. The W Emerson Street vacation would eliminate a redundant roadway section and eliminate two pedestrian-vehicle conflict points. It would also allow for additional landscaped open space.

[3] While several new crosswalks are proposed as part of the ***Draft MIMP***, any new crosswalk within the ROW would be approved under a separate SDOT process on a project-specific basis.



Source: Transpo Group, 2022

EA Engineering, Science, and Technology, Inc., PBC

Figure 3.8-6

Proposed Transit, Pedestrian and Bicycle Access

Proposed intersection improvements that benefit pedestrian circulation are as follows:

- **3rd Avenue W/W Nickerson Street**. The existing crosswalks would be enhanced to improve the pedestrian environment at the intersection.

- **3rd Avenue W/W Dravus Street**. The existing crosswalk would be enhanced to improve the pedestrian environment at the intersection.

- **6th Avenue W/W Bertona Street**. In coordination with the intersection realignment, a pedestrian crosswalk would be installed along the southern leg of the intersection.

- **6th Avenue W/W Cremona Street**. A pedestrian crosswalk would be implemented along the northern leg of the intersection.

- **W Cremona Street/W Nickerson Street**. In coordination with the intersection improvements at this intersection and adjacent intersections, a pedestrian crosswalk would be installed along the southern leg of W Cremona Street/W Nickerson Street. Additionally, the reconfigured intersections would result in more intuitive pedestrian flow.

In addition to the roadway and intersection improvements that improve the overall pedestrian environment within and surrounding campus, the ***Draft MIMP*** intends to relocate existing academic and administrative buildings from the north side of W Nickerson Street to the south side of W Nickerson Street. Additionally, a significant number of on-campus residences will be constructed. These two elements will help consolidate pedestrian activity within the main area of campus and reduce the number of crossings along W Nickerson Street.

Bicycle

There are existing bicycle amenities such as showers, lockers, bicycle parking on-campus. As stated previously, the existing bicycle racks provide parking for up to 220 bicycles and there are an additional 104 secured bicycle parking spaces. The ***Draft MIMP*** would continue to provide bicycle amenities and make improvements/additions as the MIMP develops. Improvements would include replacing older amenities and adding shower and locker facilities to new buildings. The number and location of bicycle amenities will be evaluated as part of future project Mixed-Use Project (MUP) processes.

Off campus facilities (such as those identified in the Comprehensive Plan and Bicycle Master Plan, as described previously) could be implemented in the future. The existing and planned bicycle facilities could accommodate the expected growth in bicycle commuting. Additionally, some of the proposed pedestrian improvements outlined previously, such as the street vacations, would result in a more bicycle-friendly environment on-campus by improving bike connectivity and creating more comfortable spaces for cyclists.

Shared Mobility

While campus-wide or site-specific shared mobility strategies are not identified as part of the ***Draft MIMP*** due to the timeline of the project and the rapidly evolving shared mobility landscape, there are several Transportation Management Program (TMP) strategies proposed that relate to shared mobility, including the support for third-party micromobility services, coordination with SDOT related to the establishment of shared mobility zones, and car share provisions and subsidies.

Transit Service

Access to surrounding bus stops would improve as part of the ***Draft MIMP***. As shown on **Figure 3.8-6**, the proposed improvements to pedestrian circulation such as new and enhanced crosswalks, coupled with the proposed street network improvements would result in improved access to bus stops along W Nickerson Street and 3rd Avenue W.

Transit service on and surrounding the campus is not anticipated to change with the ***Draft MIMP***. As such, the ***Draft MIMP*** transit analysis assumes the current transit access patterns would continue and there would be no changes to transit frequency or capacity.

The transit capacity analysis for the ***Draft MIMP*** assumes background transit growth associated with SPU-specific and development-related growth as well as inherent transit growth unrelated to the SPU MIMP, consistent with Seattle's 2035 Comprehensive Plan. Based on the transit forecasts, the resulting 2035 ***Draft MIMP*** vehicle utilization at the screenlines remains below 50 percent, with estimated increases in utilization of 3 percent or less relative to ***No Action Alternative*** conditions such that there is estimated to be available capacity to accommodate additional riders during the weekday peak periods.

Additionally, the operational impact on transit would be consistent to the operational impact of general-purpose traffic in terms of vehicle delay. Transit riders would experience the same change in delay as general-purpose riders given that the existing traffic signals do not include transit priority phasing.

Traffic Volumes

The ***Draft MIMP*** traffic volumes were projected by adding trips related to campus growth and mixed-use development to the ***No Action Alternative*** traffic volumes. The distribution and assignment of the net new trips is described below. Additionally, existing volumes and ***No Action Alternative*** campus trips would be rerouted due to the addition and shifting of parking facilities throughout the campus, as well as the proposed adjustments to the street network.

Campus

The ***Draft MIMP*** campus trip distribution was determined for residents, student commuters, and employee commuters as follows:

- **Employee Commuter Trips** – The distribution for employee commuters was based on existing (2019) travel patterns and home location information for employees, collected as part of the 2019 CTR Employer Survey Report.
- **Student Commuter Trips** – As outlined previously, distribution for student commuters was based on existing (2019) travel patterns and home location information for the student campus population collected as part of the 2019 Student Commute Survey.
- **Residential Trips** – As outlined previously, the residential trip distribution is based on *OnTheMap*, a web-based mapping and reporting application, showing where people work that live within a quarter-mile radius of the proposed site.
- **Other Trips** – The distribution for "other" trips was assumed to be consistent with the distribution of student commuters.

Trips to and from campus were assigned proportionately to the locations of on-site parking based on the location, amount, and type of parking. Residential trips were routed to resident parking areas while commuter trips were routed to SPU commuter parking lots. Routing of new campus-related trips accounts for changes in parking allocation throughout the site and street vacations. Due to the relatively low number of net new campus trips generated by the ***Draft MIMP*** (as well as all other Alternatives) and the anticipated distribution of these trips, the impact to nearby residential roadways is expected to be insignificant.

Mixed-Use Development

The ***Draft MIMP*** mixed-use trip distribution was determined for office-related trips and retail, restaurant, and service-related trips as follows:

- **Office-Related Trips** – The office trip distribution (inclusive of warehouse uses) is based on *OnTheMap*, a web-based mapping and reporting application, showing where people live that work within a quarter-mile radius of the proposed site.
- **Retail, Restaurant and Service-Related Trips** – It was assumed that the retail, restaurant and service-related trips will primarily cater to residents who live in the surrounding residential neighborhoods.

New trips to and from the mixed-use development components of the ***Draft MIMP*** are assigned to blocks with proposed mixed-use development assuming access is from lower volumes streets. Existing trips are removed from the network based on the existing access locations.

Rerouted Traffic

In addition to new trips, existing trips were rerouted to account changes in the campus parking allocation and changes to the roadway network, as follows:

- **Campus Parking Allocation** - The proportion of campus parking spaces within each block was compared between the existing and ***Draft MIMP*** conditions. As part of the ***Draft MIMP*** there would be a significant decrease in parking located north and south of W Nickerson Street between 6th Avenue W and 3rd Avenue W, while there would be a significant increase in parking between north and south of W Cremona Street between 3rd Avenue W and Queen Anne Ave N. To account for this change in parking allocation, approximately 10 percent of existing and ***No Action Alternative*** campus-related trips were rerouted from W Nickerson Street to W Cremona Street.
- **Street Vacations** - All existing and ***No Action Alternative*** traffic volumes were removed from streets that are proposed to be vacated and rerouted to parallel streets based on existing travel patterns. The street vacations that have the greatest impact on overall circulation are the 6th Avenue W vacation and the W Emerson Street vacation.
- **Intersection Improvements** – W Cremona Street/W Nickerson Street, Queen Anne Avenue N/W Cremona Street and Queen Anne Avenue N/W Nickerson Street would be reconstructed and consolidated such that Queen Anne Avenue N does not continue through W Cremona Street to W Nickerson Street and W Cremona Avenue is realigned to intersect with W Nickerson Street perpendicularly[4]. Existing and No Build trips were rerouted to correspond with the proposed two-intersection configuration.

[4] A more detailed design would be completed as part of future project applications and would be consistent with the requirements outlined in the Seattle Municipal Code and the City's Right of Way Improvement Manual. While

Overall Traffic Impact

The ***Draft MIMP*** study intersection traffic volumes are determined by adding the net new vehicle trips and accounting for traffic reroutes. **Table 3.8-17** summarizes the percent change in traffic volumes with the ***Draft MIMP*** relative to the ***No Action Alternative***.

Table 3.8-17 - Draft MIMP Peak Hour Traffic Volume Impacts at Study Intersections

	AM Peak Hour				PM Peak Hour			
Intersection	No Action TEV	Net New Trips	Draft MIMP TEV	Percent Change	No Action TEV	Net New Trips	Draft MIMP TEV	Percent Change
1. 6th Ave W/W Nickerson St	1,655	+95	1,750	+5.7%	1,785	+140	1,925	+7.8%
2. 6th Ave W/W Emerson St	115	-9	106	7.8%	190	-30	160	-15.8%
3. 6th Ave W/W Bertona St	425	+12	437	+2.8%	550	+45	595	+8.2%
4. 6th Ave W/W Dravus St	75	-17	58	-22.7%	160	-26	134	-16.3%
5. W Emerson St/W Bertona St[1]	405	--	--	--	520	--	--	--
6. 3rd Ave W/W Nickerson St	1,855	+74	1,929	+4.0%	2,175	+119	2,294	+5.5%
7. 3rd Ave W/W Bertona St	615	+20	635	+3.3%	1,015	+57	1,072	+5.6%
8. 3rd Ave W/W Cremona St	460	+27	487	+5.9%	730	+73	803	+10.0%
9. 3rd Ave W/W Dravus St (N)	475	+36	511	+7.6%	850	+89	939	+10.5%
10. 3rd Ave W/W Dravus St (S)	460	+46	506	+10.0%	780	+93	873	+11.9%
11. Queen Anne Ave N/W Nickerson St[2]	1,845	--	--	--	2,110	--	--	--
12. W Cremona St/W Nickerson St	1,720	+189	1,909	+11.0%	2,020	+202	2,222	+10.0%
13. Queen Anne Ave N/W Cremona St	180	+20	200	+11.1%	205	+23	228	+11.2%
14. 3rd Ave N/W Florentia St/W Nickerson St	2,420	+37	2,457	+1.5%	2,770	+76	2,846	+2.7%
15. Fremont Ave N/W Florentia St	2,655	+27	2,682	+1.0%	3,110	+51	3,161	+1.6%
16. Fremont Ave N/W Nickerson St	3,540	+15	3,555	+0.4%	3,640	+58	3,698	+1.6%

Note: TEV = Total Entering Vehicles.
1. Intersection of W Emerson St/W Bertona St eliminated as a result of the proposed Emerson Street vacation.
2. Intersections reconfigured such that Queen Anne Ave N/W Nickerson Street is eliminated Queen Anne Ave N/W Cremona Street is realigned to intersection with W Nickerson street perpendicularly.

As shown in **Table 3.8-17**, most intersections along W Nickerson Street grow by less than 10 percent between the ***No Action Alternatives*** and ***Draft MIMP Alternatives***. The exception is the intersection of W Cremona Street/W Nickerson Street which grows more significantly due to the realignment and consolidation with the intersection of Queen Anne Avenue N/W Nickerson Street. Within the campus, some intersections observe traffic growth, while some observe a decline in traffic. The growth and shift in traffic volumes is primarily due to the increase in parking along W Cremona Street and the shifting in vehicular traffic due to street vacations.

Traffic Operations

The ***Draft MIMP*** LOS analysis utilized the same methodology as the Existing and No Action conditions. The intersection parameters and channelization are generally consistent with the ***No Action Alternatives*** with the exception of the intersection adjustments outlined previously, that

this proposed realignment is anticipated to result in the most beneficial geometry from a vehicular and pedestrian safety standpoint, other geometric alternatives that utilize the existing curbs and curb ramps in conjunction with turn restrictions will be explored.

are proposed as part of the ***Draft MIMP***. A comparison of the ***No Action Alternative*** and the ***Draft MIMP*** weekday peak hour operations are shown in **Table 3.8-18**.

Table 3.8-18 - No Action (2035) and Draft MIMP (2035) Weekday Peak Hour LOS Summary

Intersection	Traffic Control	AM Peak Hour LOS[1]			PM Peak Hour LOS		
		No Action (2035)	Draft MIMP (2035)	Draft MIMP (2035 Improved)	No Action (2035)	Draft MIMP (2035)	Draft MIMP (2035 Improved)
1. 6th Ave W/W Nickerson St	TWSC[2]	**F**	**F**	B	**F**	**F**	C
2. 6th Ave W/W Emerson St	AWSC	A	A	A	A	A	A
3. 6th Ave W/W Bertona St	TWSC	B	B	B	B	B	C
4. 6th Ave W/W Dravus St	AWSC	A	A	A	A	A	A
5. W Emerson St/W Bertona St[3]	TWSC	B	--	--	D	--	--
6. 3rd Ave W/W Nickerson St	Signal	C	C	B	C	D	C
7. 3rd Ave W/W Bertona St	TWSC	C	C	B	**F**	**F**	D
8. 3rd Ave W/W Cremona St	TWSC	B	B	B	C	C	C
9. 3rd Ave W/W Dravus St (N)	TWSC	B	B	B	C	C	C
10. 3rd Ave W/W Dravus St (S)	TWSC	B	B	B	C	C	C
11. Queen Anne Ave N/W Nickerson St[4]	TWSC	**F**	--	--	**F**	--	--
12. W Cremona St/W Nickerson St[4]	TWSC[5]	C	**F**	A	D	**F**	B
13. Queen Anne Ave N/W Cremona St	TWSC	A	A	A	B	A	A
14. 3rd Ave N/W Florentia St/W Nickerson St[6]	Signal	D	D	D	**E**	**E**	**E**
15. Fremont Ave N/W Florentia St	TWSC	D	D	D	C	C	C
16. Fremont Ave N/W Nickerson St	Signal	**F**	**F**	**F**	**E**	**F**	**F**

TWSC = Two-Way Stop Controlled. AWSC = All-Way Stop Controlled. **Bold** text indicates operating at LOS E or F if signalized or LOS F for TWSC.
1. Level of Service (A – F) as defined by the *Highway Capacity Manual* (HCM) 6th Edition (TRB, 2016)
2. 6th Ave W/W Nickerson Street currently operates as TWSC, but a traffic signal is proposed as part of the mitigation plan
3. Intersection of W Emerson St/W Bertona St eliminated as a result of the proposed Emerson Street vacation.
4. Intersections reconfigured such that Queen Anne Ave N/W Nickerson Street is eliminated Queen Anne Ave N/W Cremona Street is realigned to intersection with W Nickerson Street perpendicularly.
5. W Cremona Street/W Nickerson Street currently operates as TWSC, but a traffic signal is proposed as part of the mitigation plan
6. Evaluated using HCM 2000 because the configuration is not supported with the HCM 6th Edition method due to non-NEMA signal configuration

As shown, the majority of off-site study intersections would continue to operate acceptably during the weekday AM and PM peak hours. Consistent with the No Action conditions, four intersections are forecast to operate below LOS E or F at signalized locations and LOS F at stop-controlled intersections during the AM peak hour, and five intersections are forecast to operate below these standards during the PM peak hour. The intersections that would operate below standards under the ***Draft MIMP***, and mitigation measures to address operational issues are outlined below:

- **6th Avenue W/W Nickerson Street** – The southbound approach of this two-way stop-controlled (TWSC) intersection would operate at LOS F during the AM and PM peak hours with or without the ***Draft MIMP***.

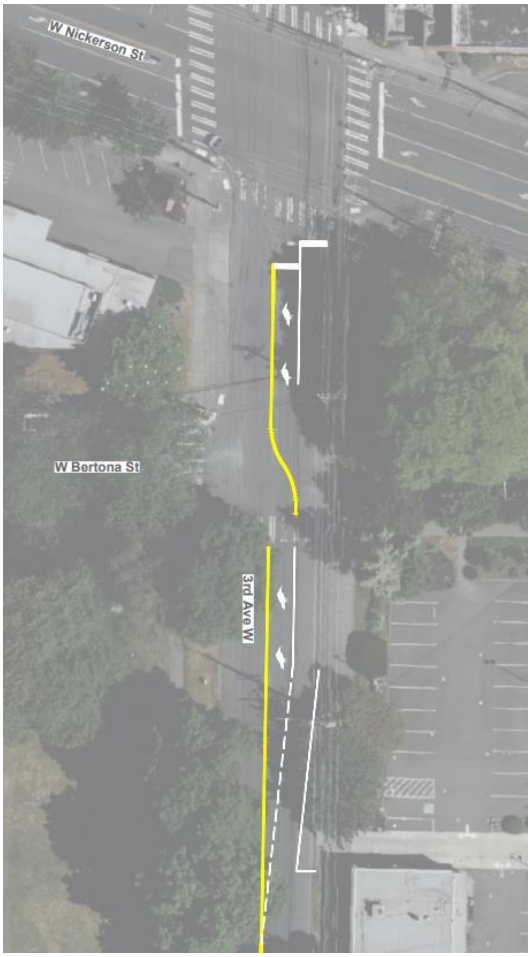
  To improve operations on the 6th Avenue W approached the installation of a traffic signal was considered. Installation of a traffic signal at this location has previously been discussed and considered at this location once warrants are met. The four- and eight-hour vehicular volume signal warrants were evaluated based on the HCS7 Software. The signal warrants show a signal is warranted at this intersection based on the four- and eight-hour warrants.

A traffic signal would help address side street delay as well as provide a supplemental location for pedestrians to cross W Nickerson Street. Implementation of the signal is not expected to require right-of-way widening but existing on-street parking along the northbound approach of 6th Avenue W would likely need to be removed for at least some portion to ensure sufficient two-way flow of traffic. As proposed, this approach is projected to observe a 95th percentile queue length of approximately 80 feet during the PM peak hour therefore it is likely that on-street parking could be removed for at least 80 feet back from the intersection stop bar.

A detailed design of this improvement would be completed as part of future project applications and would be consistent with the requirements outlined in the Seattle Municipal Code and the City's Right of Way Improvement Manual.

- **3rd Avenue W/W Bertona Street –** The eastbound approach of this TWSC intersection would continue to operate at LOS F during the PM peak hour due to the forecast increase in volumes along both 3rd Avenue W and W Bertona Street. This increase in traffic volumes are projected based on the growth in the campus population and the street vacations noted above.

  Given the close proximity to the signalized intersection of 3rd Avenue W/W Nickerson Street, there are limited opportunities to adjust the traffic control. However, the proposed traffic signal at 6th Avenue W/W Nickerson Street provides the opportunity to implement turn restrictions at 3rd Avenue W/W Bertona Street such that vehicles traveling east through W Bertona Street can access W Nickerson Street via 6th Avenue W as an alternative. The proposed turn restrictions would limit eastbound traffic to right-turns only thus reducing delay related to left-turning and through vehicles. The northbound left-turn movement would remain to help process traffic traveling west into campus, but c-curb would be implemented to restrict eastbound movements.



In conjunction with the proposed turn restrictions at 3rd Avenue W/W Bertona Street, changes to channelization along the northbound approach of 3rd Avenue W at W Nickerson are proposed to incorporate a northbound left-turn lane. Additionally, leading pedestrian intervals are proposed to reduce potential pedestrian-vehicle conflicts for pedestrians crossing W Nickerson Street.

A conceptual plan of the proposed improvements is shown in the figure to the left. It is noted that turning maneuvers for buses at 3rd Avenue W/W Nickerson Street may result in the need to increase the curb radius at the southeast corner of the intersection and/or minor widening of 3rd Avenue W between W Bertona Street and W Nickerson Street. The turning radius remains at an acute angle and therefore would not be expected to result in increased speeds, but the leading pedestrian intervals are proposed to address pedestrian safety at this intersection. A more detailed design would be completed as part of future project applications and would be consistent with the requirements outlined in the Seattle Municipal Code and the City's Right of Way Improvement Manual.

- **W Cremona Street/W Nickerson Street** – The northbound approach of this TWSC intersection would operate at LOS F during the AM and PM peak hours due to the forecast increase in volumes along both W Cremona Ave and W Nickerson Street as well as the intersection reconfiguration which consolidates the existing three-intersection cluster into two intersections.

  To address delay along the side streets, signal warrants were reviewed at the W Cremona Street/W Nickerson Street intersection. The four- and eight-hour vehicular volume signal warrants were evaluated based on the HCS7 Software. The signal warrants show a signal is warranted at this intersection based on the four- and eight-hour warrants. A traffic signal would help address side street delay as well as provide a supplemental location for pedestrians to cross W Nickerson Street.

- **3rd Avenue N/W Florentia Street/W Nickerson Street –** This signalized intersection would continue to operate at LOS E during the PM peak hour. The forecast delay with the ***Draft MIMP*** would increase by less than 4 seconds compared to the No Action conditions. The impact of the ***Draft MIMP*** at this intersection is not considered significant.

- **Fremont Avenue N/W Nickerson Street –** This signalized intersection would continue to operate at LOS F during the AM peak hour and degrade to LOS F from LOS E during

the PM peak hour. The forecast delay with the ***Draft MIMP*** would increase by just over one second during the AM peak hour and increase by just over six seconds during the PM peak hour as compared to the ***No Action Alternative*** conditions. While the impact of the ***Draft MIMP*** at this intersection is considered significant based on the increase in delay, there are limited opportunities to implement improvements at this intersection due to the split-phased signal operations. The intersection already has a high cycle length and considerable turning volumes which result in limited opportunities to reallocate green time amongst the approaches. As such, no improvements are proposed at this intersection.

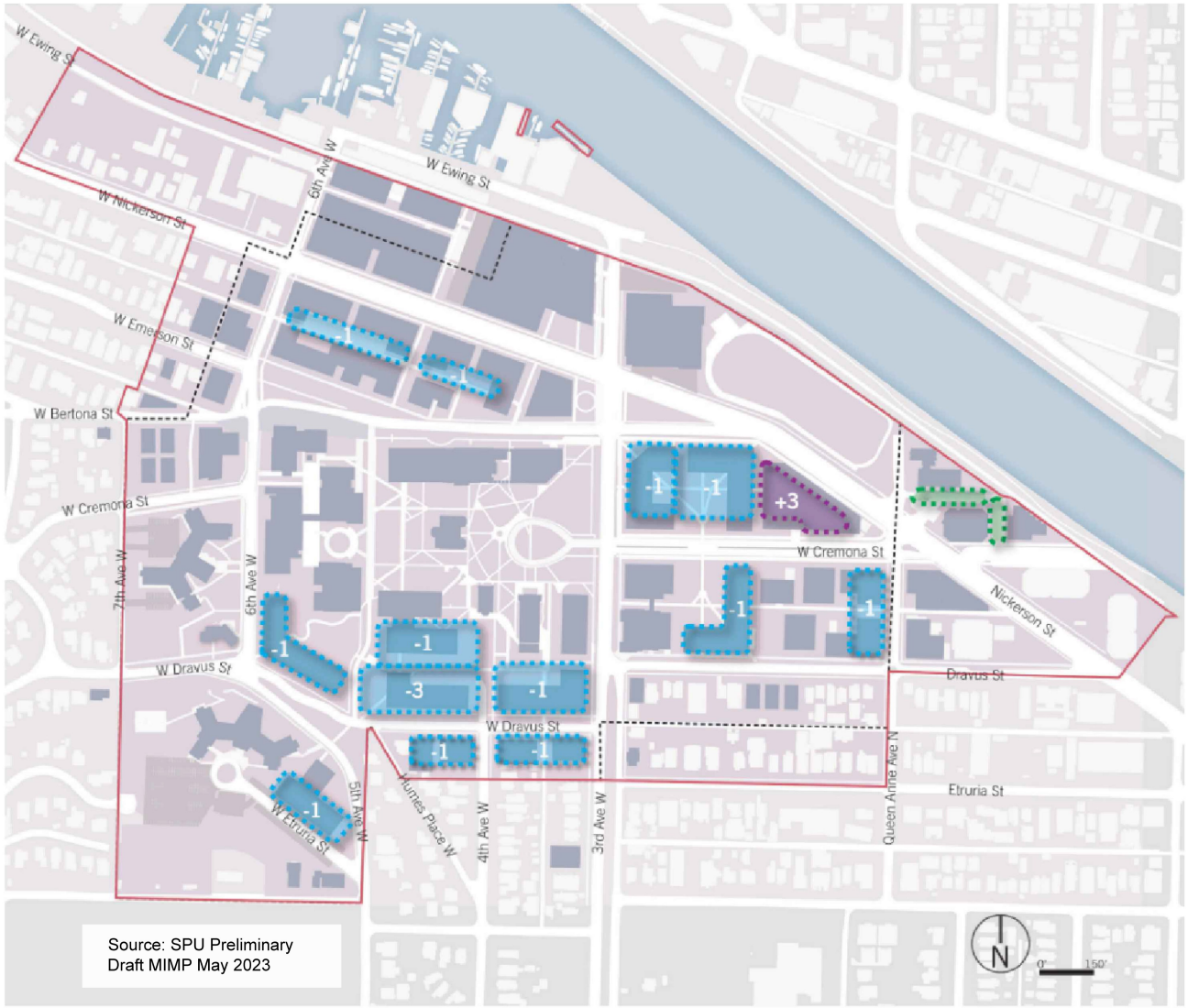
The proposed mitigation measures result in changes to traffic control and vehicular circulation. In conjunction with the proposed turn restrictions at 3rd Avenue W/W Bertona Street, traffic accessing W Nickerson Street from W Bertona Street would be rerouted. Additionally, given the implementation of additional signals along the W Nickerson Street corridor, it is assumed that the signals would operate as actuated-coordinated with consistent cycle lengths of 90 seconds during the peak periods between 6th Avenue W and W Cremona Street. This is a 10-second cycle length increase as compared to existing conditions at 3rd Avenue W/W Nickerson Street. The proposed mitigation measures and accompanying changes in circulation result in improvements to overall operations, as outlined in **Table 3.8-18**.

Traffic Safety

As traffic volumes increase, traffic safety issues could increase proportionally. Trips are forecast to increase with the ***Draft MIMP*** due to the increase in enrollment and the construction of mixed-use development. However, there are no significant safety concerns identified within the study area under existing conditions and the proposed vehicular and multi-modal improvements would be implemented in a way that adequately addresses safety considerations.

Parking

The ***Draft MIMP*** would replace a significant amount of existing surface parking and transition to primarily underground parking below future residential and education buildings. **Figure 3.8-7** depicts the proposed parking plan. The proposed parking plan would offer more consolidated parking options for commuters, staff, and visitors. The proposed parking plan would be more user-friendly than the existing parking plan which primarily consists of small surface lots dispersed throughout the campus. In particular, if commuter students and staff have access to a more consolidated parking area, this could decrease vehicular circulation within and surrounding the campus and reduce use of on-street parking. Between existing parking spaces to remain and proposed parking structures, the plan would allow for 2,703 parking spaces. While it is understood that parking will ultimately conform with SMC 23.54.016.C4, and that parking will be evaluated on a project by project basis, the ***Draft MIMP*** depicts the greatest amount of parking that could feasibly be constructed. As currently depicted, the parking supply significantly exceeds anticipated peak demand.



LEGEND

- Underground Parking
- Structured Parking
- Surface Parking
- Existing MIO Boundary
- Proposed MIO Boundary

Source: SPU Draft MIMP, 2023

EA Engineering, Science, and Technology, Inc., PBC

Figure 3.8-7

Draft MIMP Parking Plan

Loading/Curbside Management

Under existing conditions, there is a loading dock at Gwinn Commons and a loading lay-by lane in front of the Student Union Building. Deliveries are routed to SPU's centralized parcel center and distributed from there. As part of the future project MUP processes, the number and location of loading facilities will be evaluated such that both the SMC requirements and practical loading demand are met. While the number of resident students is projected to increase as part of the ***Draft MIMP***, it is expected that SPU will maintain the use of a centralized parcel center in lieu of deliveries to each building individually.

Curbside management along the building entrance frontages will be evaluated at an individual level to determine if temporary loading zones or entrance zones are appropriate. It is anticipated that curbside loading or pick-up/drop-off areas may be desirable at residential buildings, but some educational buildings or other buildings may also benefit from curbside loading or pick-up/drop-off spaces. It is understood that curbside loading is not always the appropriate treatment given that street parking is not guaranteed in perpetuity. As such, the provision of short-term loading on-site versus within public space will be evaluated as part of future MUP processes.

The specific loading and curbside management needs of each building will be reevaluated as part of future project MUP processes when additional details regarding building design and function are known. The loading facilities will meet SMC requirements and will also consider campus-wide loading provisions and needs.

Special Events

SPU hosts a limited number of special events throughout a typical academic year including graduation, the highest attendance event, as well as sporting events such as basketball games and volleyball matches. These events are currently managed on a case-by-case basis by University staff and will continue to be managed as such as part of the ***Draft MIMP***. Special event management plans triggered by a specific event will be reviewed by the City under a separate process as is currently the case.

Transportation Management Program

The Transportation Management Plan (TMP) defines programs included in the Transportation and Parking Element of the Master Plan per SMC 23.69.030.F. The TMP includes programs and strategies applicable to faculty, resident and commuter students, and staff that are designed to reduce parking and traffic demands associated with projected growth at SPU. The detailed TMP is outlined in the ***Draft MIMP***, but it generally includes programs and strategies that address bicycle and pedestrian amenities, parking management, transit programs and incentives, carpool/vanpool programs and incentives, shared mobility amenities, and telecommuting benefits.

3.8.4 Impacts of the Alternatives

This section summarizes the impacts of the Alternatives. The impacts of each Alternative are identified through a comparison to the ***Draft MIMP*** (2035 conditions). As outlined previously, the following Alternatives are included:

Alternative 2 (No Boundary Expansion and No Change to Height Limits): The campus population would be the same as that for the 2035 ***Draft MIMP*** and would include potential academic and mixed-use buildings (long-term). ***Alternative 2*** would include approximately 237,100 square feet of mixed-use development located along W Nickerson Street, 3rd Avenue W, W Bertona Street, and W Dravus Street.

Alternative 3 (Boundary Expansion and No Change to Height Limits Within the Existing MIO): The campus population would be the same as that for the 2035 ***Draft MIMP*** and would include all planned and potential academic and mixed-use buildings. ***Alternative 3*** would include approximately 237,100 square feet of mixed-use development located along W Nickerson Street, W Bertona Street, and W Cremona Street.

Alternative 4 (No Boundary Expansion and Increased Height Limits): The campus population would be the same as that for the 2035 ***Draft MIMP*** and would include all planned and potential academic and mixed-use buildings. ***Alternative 4*** would include approximately 237,100 square feet of mixed-use development located along W Nickerson Street, W Bertona Street, and W Dravus Street.

Alternative 5 (Boundary Expansion, Increased Height and No Street/Alley Vacations): The campus population would be the same as that for the 2035 ***Draft MIMP*** and would include potential academic and mixed-use buildings (long-term). ***Alternative 5*** would include approximately 237,100 square feet of mixed-use development located along W Nickerson Street, W Bertona Street, and W Cremona Street.

Trip Generation

Trip generation for each Alternative is comprised of a combination of trips generated by campus growth, which is consistent between the ***Draft MIMP*** and each Alternative, as well as mixed-use development. Additionally, each Alternative will include mixed-used development components as summarized above.

SPU Population Trip Generation

Trip generation related to the growth in the SPU campus population would be consistent with the ***Draft MIMP***. As outlined previously, the campus growth would result in approximately 1,088 net new daily vehicle trips with 88 new trips occurring during the weekday AM peak hour and 103 new trips during the weekday PM peak hour, as compared to the ***No Action Alternative***.

Mixed Use Development Trip Generation

A summary of the net new commercial space by Alternative is shown in **Table 3.8-19**. The method used to estimate trip generation for the mixed-use development components of the Alternatives is consistent with that used for the ***Draft MIMP***.

Table 3.8-19 - Summary of Commercial Space by Alternative

Land Use	Alternative				
	Draft MIMP	*Action Alt. 2*	*Action Alt. 3*	*Action Alt. 4*	*Action Alt. 5*
Office	123,850 sf	123,250 sf	139,800 sf	130,200 sf	131,300 sf
Retail	101,950 sf	100,450 sf	83,900 sf	93,500 sf	92,700 sf
Grocery	11,300 sf	13,400 sf	13,400 sf	13,400 sf	13,100 sf
Total Proposed Commercial Space	**237,100 sf**	**237,100 sf**	**237,100 sf**	**237,100 sf**	**237,100 sf**
Existing Commercial Space Removed	*94,626 sf*	*58,869 sf*	*94,626 sf*	*58,869 sf*	*94,626 sf*
Net New Commercial Space	***142,474 sf***	***178,231 sf***	***142,474 sf***	***178,231 sf***	***142,474 sf***

Notes: sf = square feet

Table 3.8-20 summarizes the trip generation for the mixed-use components for each Alternative. As shown, the Alternatives are projected to generate 1,084 to 1,546 net new daily vehicle trips, with 25 to 45 net new trips during the AM peak hour and 74 to 153 net new trips during the PM peak hour trips. Alternatives 3 and 5 have relatively similar mixed-use trip generation projections as the ***Draft MIMP*** due to the consistent level of net commercial space as part of the boundary expansion. Alternatives 2 and 4 have higher mixed-use trip generation projections. While similar net commercial space is proposed, the existing buildings remaining are higher trip generators (such as a gas station). Overall, the mixed-use components account for approximately 35 to 40 percent of the total net new peak hour trips under each Alternative.

Additionally, the Alternatives would generate approximately 776 to 5,137 net new daily non-motorized trips with 110 fewer to 133 more occurring during the weekday AM peak hour and 121 to 566 occurring during the weekday PM peak hour and 439 to 950 net new daily transit trips with 9 to 37 occurring during the AM peak hour and 40 to 97 occurring during the PM peak hour.

Table 3.8-20 - Summary of Mixed-Use Trip Generation by Alternative

Time Period	Vehicle Trips		
	In	Out	Total
Draft MIMP			
Daily	634	634	**1,268**
AM Peak Hour	45	-20	**25**
PM Peak Hour	27	69	**96**
Alternative 2			
Daily	1,017	1,017	**2,034**
AM Peak Hour	56	-1	**55**
PM Peak Hour	35	81	**116**
Alternative 3			
Daily	762	762	**1,523**
AM Peak Hour	46	-24	**22**
PM Peak Hour	18	64	**82**
Alternative 4			
Daily	1,007	1,007	**2,014**
AM Peak Hour	58	-4	**54**
PM Peak Hour	33	79	**112**
Alternative 5			
Daily	1,084	1,084	**2,168**
AM Peak Hour	55	-12	**43**
PM Peak Hour	23	72	**95**

Cumulative Trip Generation

In total, and as summarized in **Table 3.8-21**, the Alternatives would generate 2,356 to 3,256 net new daily vehicle trips, with 110 to 143 occurring during the AM peak hour and 185 to 219 occurring during the PM peak hour. Given that campus-related trip generation is consistent between each Alternative, variations in mixed-use space account for differences in trip generation between each Alternative.

Table 3.8-21 - Summary of Cumulative Net New Trip Generation by Alternative

Time Period	Vehicle Trips		
	In	Out	Total
Draft MIMP			
Daily	1,178	1,178	**2,356**
AM Peak Hour	112	1	**113**
PM Peak Hour	70	129	**199**
Alternative 2			
Daily	1,561	1,561	**3,122**
AM Peak Hour	123	20	**143**
PM Peak Hour	78	141	**219**
Alternative 3			
Daily	1,306	1,306	**2,612**
AM Peak Hour	113	-3	**110**
PM Peak Hour	61	124	**185**
Alternative 4			
Daily	1,551	1,551	**3,102**
AM Peak Hour	125	17	**142**
PM Peak Hour	76	139	**215**
Alternative 5			
Daily	1,628	1,628	**3,256**
AM Peak Hour	122	9	**131**
PM Peak Hour	66	132	**198**

Street System

The street system for the Alternatives would be consistent with the ***Draft MIMP*** with the exception of ***Alternative 5***, which does not include street and alley vacations or any associated circulation adjustments and improvements associated with the vacations. **Table 3.8-22** shows a summary of the street system adjustments that are included in each Alternative.

Table 3.8-22 - Summary of Proposed Street System Changes by Alternative

Street System Change	*Draft MIMP*	*Alternative 2*	*Alternative 3*	*Alternative 4*	*Alternative 5*
Street Vacations	X	X	X	X	
W Cremona St	X	X	X	X	X
6th Ave W/W Bertona St	X	X	X	X	X
W Cremona St/W Nickerson St	X	X	X	X	X

Non-Motorized Transportation

Pedestrian

Consistent with the ***Draft MIMP***, the Alternatives would improve on-campus connections and provide required frontage improvements where new buildings are constructed. Additionally, several roadway and intersections improvements would result in benefits to pedestrian access and circulation. As summarized in **Table 3.8-23**, all Alternatives would include the same

pedestrian improvements proposed as part of the ***Draft MIMP*** with the exception of ***Alternative 5*** which does not include street and alley vacations.

However, given that the Alternatives are not able to provide the most optimal campus plan (due to exclusion of the boundary expansion, increased height limits, and/or street vacations), some of the overarching pedestrian circulation improvements that would occur as part of the ***Draft MIMP*** would not occur as part of the Alternatives. The Alternatives would still aim to relocate existing academic and administrative buildings to the south side of W Nickerson Street and would construct the same amount of on-campus resident space, but there would be impacts to open space due to a more constrained developable area, leading to a less pedestrian-friendly campus layout.

Additionally, for ***Alternatives 2, 3,*** and ***4***, there would be fewer opportunities for ground-floor retail space and overall street activation within the surrounding campus. ***Alternative 5*** would limit opportunities to eliminate and reduce pedestrian-vehicle conflict points.

Table 3.8-23 - Summary of Pedestrian Improvements by Alternative

Pedestrian Improvement	*Draft MIMP*	*Alternative 2*	*Alternative 3*	*Alternative 4*	*Alternative 5*
W Cremona Street	X	X	X	X	X
W Bertona Street	X	X	X	X	X
Street Vacations	X	X	X	X	
3rd Ave W/W Nickerson St	X	X	X	X	X
3rd Ave W/W Bertona St	X	X	X	X	X
6th Ave W/W Bertona St	X	X	X	X	X
6th Ave W/W Cremona St	X	X	X	X	X
W Cremona St/W Nickerson St	X	X	X	X	X

Bicycle

There are existing bicycle amenities such as showers, lockers, bicycle storage/racks on-campus. As stated previously, the existing bicycle racks provide parking for up to 220 bicycles and there are an additional 104 secured bicycle parking spaces. The Alternatives would continue to provide bicycle amenities on-campus and make improvements and/or additions as the ***Draft MIMP*** develops. Improvements would include replacing older amenities and adding shower and locker facilities to new buildings. The number and location of bicycle amenities will be evaluated as part of the future project Mixed-Use Project (MUP) processes.

Off campus facilities (such as those identified in the Comprehensive Plan and Bicycle Master Plan, as described previously) could be implemented in the future. The existing and planned bicycle facilities could accommodate the expected growth in bicycle commuting. Additionally, some of the proposed pedestrian improvements outlined previously, such as the street vacations, would result in a more bicycle-friendly environment on-campus by improving bike connectivity and creating more comfortable spaces for cyclists.

Shared Mobility

While campus-wide or site-specific shared mobility strategies are not identified as part of the Alternatives due to the timeline of the project and the rapidly evolving shared mobility landscape, there are several Transportation Management Program (TMP) strategies proposed that relate to

shared mobility, including the support for third-party micromobility services, coordination with SDOT related to the establishment of shared mobility zones, and car share provisions and subsidies.

Transit Service

Consistent with the ***Draft MIMP*** transit analysis, transit facilities on-campus are not anticipated to change with the Alternatives. The projected transit trips would be higher than the ***Draft MIMP*** for ***Alternatives 2*** and ***3*** and lower than the ***Draft MIMP*** for ***Alternatives 3*** and ***5***. While transit trips would be higher for ***Alternatives 2*** and ***3***, there would be sufficient capacity to absorb these new trips based on the analysis provided for the ***Draft MIMP***. This analysis showed that no route is anticipated to operate at above 50 percent capacity such there would be available capacity to accommodate additional riders during the weekday peak periods.

Traffic Volumes

Traffic volumes for the Alternatives were projected by adding trips related to the growth in the campus population and mixed-use development to the ***No Action Alternative*** traffic volumes. The distribution of the net new trips is consistent with that described for the ***Draft MIMP***; however, the assignment of new trips corresponds with the location of the proposed parking facilities and mixed-use development buildings for each Alternative. **Figure 3.8-8** and **Figure 3.8-9** provide a comparison of the traffic volumes by intersection for each Alternative, for the AM and PM peak hours respectively.

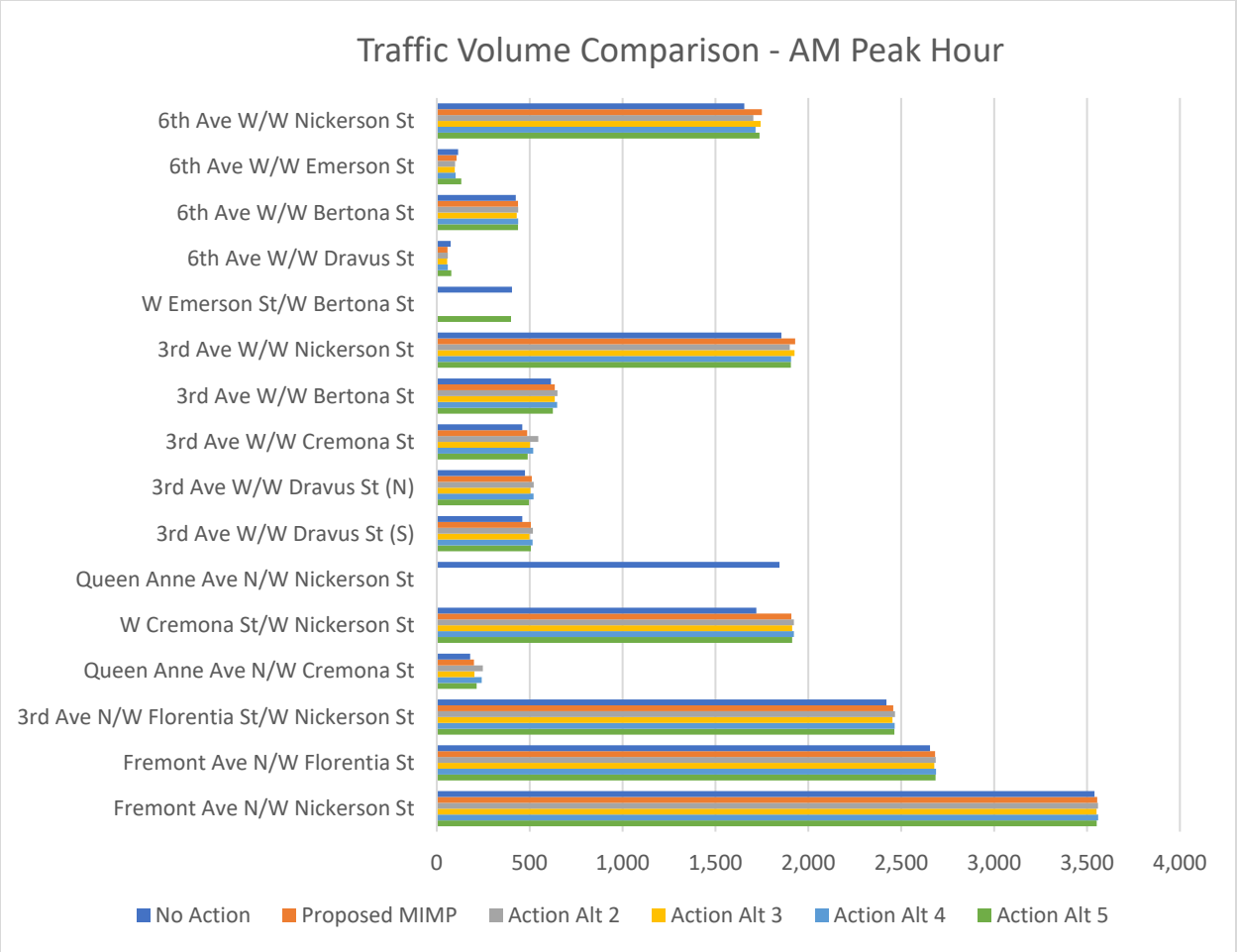


Figure 3.8-8 - AM Peak Hour Traffic Volume Comparison

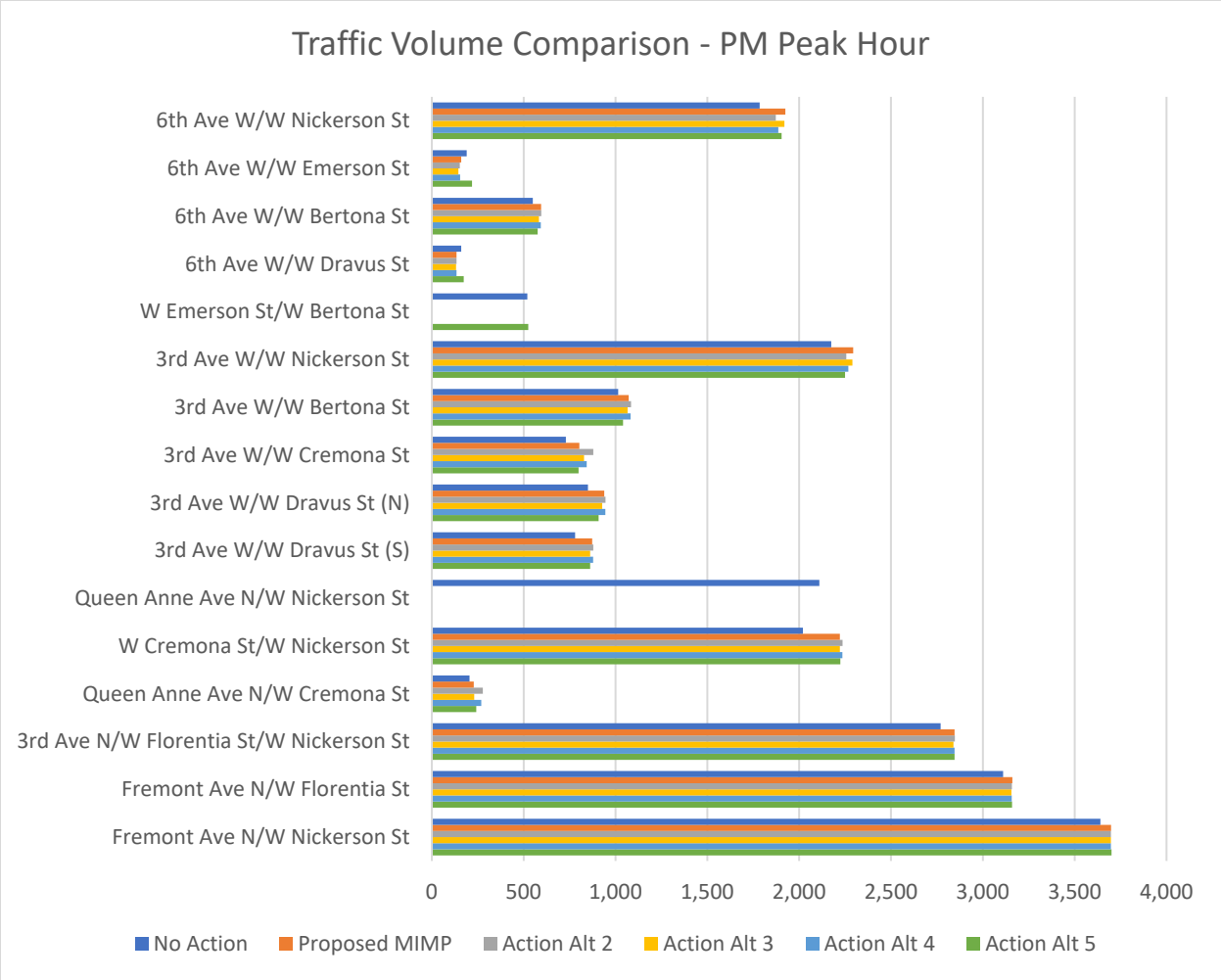


Figure 3.8-9 - PM Peak Hour Traffic Volume Comparison

As shown, traffic volumes remain relatively consistent between the Alternatives, but the following trends are observed:

Alternative 2: Traffic volumes within the west side of campus (along 6th Avenue W) decrease, while traffic volumes within the east side of campus (along 3rd Avenue W and Queen Anne Avenue W) increase. This is primarily a result of mixed-use development centered around 3rd Avenue W and W Cremona Street as part of ***Alternative 2***, rather than along W Nickerson Street between 6th Avenue W and 3rd Avenue W as part of the ***Draft MIMP***.

Alternative 3: Traffic volumes within the campus (along 6th Avenue W and 3rd Avenue W) generally decrease, while traffic volumes east of campus (along W Nickerson Street west of Queen Anne Avenue N) generally increase. This is primarily a result of some mixed-use development shifted to W Cremona Street as part of ***Alternative 3*** from W Nickerson Street between 6th Avenue W and 3rd Avenue W as part of the ***Draft MIMP***.

Alternative 4: Traffic volumes within the west side of campus (along 6th Avenue W) generally decrease, while traffic volumes within the east side of campus (along 3rd Avenue W and Queen

Anne Avenue W) generally increase. This is primarily a result of some mixed-use development shifted to W Cremona Street as part of ***Alternative 4*** from W Nickerson Street between 6th Avenue W and 3rd Avenue W as part of the ***Draft MIMP***.

Alternative 5: Traffic volumes would increase at intersections that would no longer be impacted by street vacations, but volumes would otherwise generally decrease as a result of ***Alternative 5***. With all other Alternatives, the street vacations would result in an increase in traffic along 3rd Avenue W as an alternative to 6th Avenue W. Without the street vacations, volumes would not shift from 6th Avenue W and therefore 3rd Avenue is projected to see a decline in trips. Additionally, some mixed-use development would shifted to W Cremona Street as part of ***Alternative 5*** from W Nickerson Street between 6th Avenue W and 3rd Avenue W as part of the ***Draft MIMP***.

Traffic Operations

The LOS analysis for the Alternatives assumes the same methods as the Existing, No Action, and ***Draft MIMP*** conditions. The intersection parameters and channelization are generally consistent with those assumed as part of the ***Draft MIMP***. The only exception is ***Alternative 5*** which does not include street vacations and therefore does not incorporate roadway adjustments associated with the vacations. A comparison of peak hour operations by Alternative are shown in **Table 3.8-24** and **Table 3.8-25**, for the AM and PM peak hours, respectively.

Table 3.8-24 - Weekday AM Peak Hour LOS Summary by Alternative (2035)

Intersection	Traffic Control	AM Peak Hour LOS[1]					
		No Action	Draft MIMP	Action Alt. 2	Action Alt. 3	Action Alt. 4	Action Alt. 5
1. 6th Ave W/W Nickerson St	TWSC	**F**	**F**	**F**	**F**	**F**	**F**
2. 6th Ave W/W Emerson St	AWSC	A	A	A	A	A	A
3. 6th Ave W/W Bertona St	TWSC	B	B	B	B	B	B
4. 6th Ave W/W Dravus St	AWSC	A	A	A	A	A	A
5. W Emerson St/W Bertona St[2]	TWSC	B	--	--	--	--	B
6. 3rd Ave W/W Nickerson St	Signal	C	C	C	C	C	C
7. 3rd Ave W/W Bertona St	TWSC	C	C	C	C	C	C
8. 3rd Ave W/W Cremona St	TWSC	B	B	B	B	B	B
9. 3rd Ave W/W Dravus St (N)	TWSC	B	B	B	B	B	B
10. 3rd Ave W/W Dravus St (S)	TWSC	B	B	B	B	B	B
11. Queen Anne Ave N/W Nickerson St[3]	TWSC	**F**	--	--	--	--	--
12. W Cremona St/W Nickerson St[3]	TWSC	C	**F**	**F**	**F**	**F**	**F**
13. Queen Anne Ave N/W Cremona St	TWSC	A	A	B	A	A	A
14. 3rd Ave N/W Florentia St/W Nickerson St[4]	Signal	D	D	D	D	D	D
15. Fremont Ave N/W Florentia St	TWSC	D	D	D	D	D	D
16. Fremont Ave N/W Nickerson St	Signal	**F**	**F**	**F**	**F**	**F**	**F**

TWSC = Two-Way Stop Controlled. AWSC = All-Way Stop Controlled. **Bold** text indicates operating at LOS E or F if signalized or LOS F for TWSC.
1. Level of Service (A – F) as defined by the *Highway Capacity Manual* (HCM) 6th Edition (TRB, 2016)
2. Intersection of W Emerson St/W Bertona St eliminated as a result of the proposed Emerson Street vacation.
3. Intersections reconfigured such that Queen Anne Ave N/W Nickerson Street is eliminated Queen Anne Ave N/W Cremona Street is realigned to intersection with W Nickerson Street perpendicularly.
4. Evaluated using HCM 2000 because the configuration is not supported with the HCM 6th Edition method due to non-NEMA signal configuration

Table 3.8-25 - Weekday PM Peak Hour LOS Summary by Alternative (2035)

Intersection	Traffic Control	PM Peak Hour LOS[1]					
		No Action	Draft MIMP	Action Alt. 2	Action Alt. 3	Action Alt. 4	Action Alt. 5
1. 6th Ave W/W Nickerson St	TWSC	**F**	**F**	**F**	**F**	**F**	**F**
2. 6th Ave W/W Emerson St	AWSC	A	A	A	A	A	A
3. 6th Ave W/W Bertona St	TWSC	B	B	B	B	B	B
4. 6th Ave W/W Dravus St	AWSC	A	A	A	A	A	A
5. W Emerson St/W Bertona St[2]	TWSC	D	--	--	--	--	D
6. 3rd Ave W/W Nickerson St	Signal	C	D	D	D	D	D
7. 3rd Ave W/W Bertona St	TWSC	**F**	**F**	**F**	**F**	**F**	**F**
8. 3rd Ave W/W Cremona St	TWSC	C	C	D	D	D	D
9. 3rd Ave W/W Dravus St (N)	TWSC	C	C	C	C	C	C
10. 3rd Ave W/W Dravus St (S)	TWSC	C	C	C	C	C	C
11. Queen Anne Ave N/W Nickerson St[3]	TWSC	**F**	--	--	--	--	--
12. W Cremona St/W Nickerson St[3]	TWSC	D	**F**	**F**	**F**	**F**	**F**
13. Queen Anne Ave N/W Cremona St	TWSC	B	A	B	B	B	A
14. 3rd Ave N/W Florentia St/W Nickerson St[4]	**Signal**	**E**	**E**	**E**	**E**	**E**	**E**
15. Fremont Ave N/W Florentia St	TWSC	C	C	C	C	C	C
16. Fremont Ave N/W Nickerson St	Signal	**E**	**F**	**F**	**F**	**F**	**F**

TWSC = Two-Way Stop Controlled. AWSC = All-Way Stop Controlled. **Bold** text indicates operating at LOS E or F if signalized or LOS F for TWSC.
1. Level of Service (A – F) as defined by the *Highway Capacity Manual* (HCM) 6th Edition (TRB, 2016)
2. Intersection of W Emerson St/W Bertona St eliminated as a result of the proposed Emerson Street vacation.
3. Intersections reconfigured such that Queen Anne Ave N/W Nickerson Street is eliminated Queen Anne Ave N/W Cremona Street is realigned to intersection with W Nickerson Street perpendicularly.
4. Evaluated using HCM 2000 because the configuration is not supported with the HCM 6th Edition method due to non-NEMA signal configuration

As shown in the tables, the operational impacts of the Alternatives are generally consistent with the impacts of the ***Draft MIMP***. There are fluctuations in delay related to the limited development potential along W Nickerson Street as part of the Alternatives, but the intersections that operate below acceptable LOS thresholds remain the same. As such, the same mitigation measures would be proposed as part of the Alternatives, including traffic signals at 6th Avenue W/W Nickerson Street and W Cremona Street/W Nickerson Street, as well as turn restrictions at 3rd Avenue W/W Bertona Street and an accompanying northbound left-turn lane at 3rd Avenue W/W Nickerson Street. Signal warrants were performed for the two proposed signals for each Alternative. The analyses show that signals are warranted at both intersections based on the four- and eight-hour warrants for each Alternative.

A comparison of peak hour operations by Alternative with mitigation measures incorporated are shown in **Table 3.8-26** and **Table 3.8-27**, for the AM and PM peak hours, respectively. As shown, the proposed mitigation measures result in the overarching intersection improvements as compared to the ***No Action Alternative***, consistent with the ***Draft MIMP***. However, fluctuations in LOS are observed at intersections along 3rd Avenue W and at W Nickerson Street/W Cremona Street. This is primarily a result of the higher level of development activity along W Cremona Street and 3rd Avenue W as part of the Alternatives combined with the circulation changes associated with the 3rd Avenue W/W Bertona Street turn restrictions, and for Action Alterative 5, the elimination of street vacations. Overall, the operational differences between the Alternatives with mitigation measures implemented are minimal, but the ***Draft MIMP*** would result in the most advantageous system-wide LOS results.

Table 3.8-26 - Weekday AM Peak Hour LOS Summary by Alternative with Improvements (2035)

Intersection	No Action	Prop. MIMP (w/ Imps)	Action Alt. 2 (w/ Imps)	Action Alt. 3 (w/ Imps)	Action Alt. 4 (w/ Imps)	Action Alt. 5 (w/ Imps)
1. 6th Ave W/W Nickerson St[1]	F	B	B	B	B	B
2. 6th Ave W/W Emerson St	A	A	A	A	A	A
3. 6th Ave W/W Bertona St	B	B	B	B	B	C
4. 6th Ave W/W Dravus St	A	A	A	A	A	A
5. W Emerson St/W Bertona St[2]	B	--	--	--	--	B
6. 3rd Ave W/W Nickerson St	C	B	B	B	B	B
7. 3rd Ave W/W Bertona St	C	B	B	B	B	B
8. 3rd Ave W/W Cremona St	B	B	B	B	B	B
9. 3rd Ave W/W Dravus St (N)	B	B	B	B	B	B
10. 3rd Ave W/W Dravus St (S)	B	B	B	B	B	B
11. Queen Anne Ave N/W Nickerson St[3]	F	--	--	--	--	--
12. W Cremona St/W Nickerson St[4]	C	A	B	B	A	A
13. Queen Anne Ave N/W Cremona St	A	A	B	A	A	A
14. 3rd Ave N/W Florentia St/W Nickerson St[5]	D	D	D	D	D	D
15. Fremont Ave N/W Florentia St	D	D	D	D	D	D
16. Fremont Ave N/W Nickerson St	F	F	F	F	F	F

1. 6th Ave W/W Nickerson Street currently operates as TWSC, but a traffic signal is proposed as part of the mitigation plan.
2. Intersection of W Emerson St/W Bertona St eliminated as a result of the proposed Emerson Street vacation.
3. Intersections reconfigured such that Queen Anne Ave N/W Nickerson Street is eliminated Queen Anne Ave N/W Cremona Street is realigned to intersection with W Nickerson Street perpendicularly.
4. W Cremona Street/W Nickerson Street currently operates as TWSC, but a traffic signal is proposed as part of the mitigation plan
5. Evaluated using HCM 2000 because the configuration is not supported with the HCM 6th Edition method due to non-NEMA signal configuration.

Table 3.8-27 - Weekday PM Peak Hour LOS Summary by Alternative with Improvements (2035)

	No Action	Prop. MIMP (w/ Imps)	Action Alt. 2 (w/ Imps)	Action Alt. 3 (w/ Imps)	Action Alt. 4 (w/ Imps)	Action Alt. 5 (w/ Imps)
1. 6th Ave W/W Nickerson St[1]	F	C	C	C	C	C
2. 6th Ave W/W Emerson St	A	A	A	A	A	A
3. 6th Ave W/W Bertona St	B	C	C	C	C	C
4. 6th Ave W/W Dravus St	A	A	A	A	A	A
5. W Emerson St/W Bertona St[2]	D	--	--	--	--	C
6. 3rd Ave W/W Nickerson St	C	C	C	C	C	C
7. 3rd Ave W/W Bertona St	F	D	D	D	D	C
8. 3rd Ave W/W Cremona St	C	C	D	D	D	D
9. 3rd Ave W/W Dravus St (N)	C	C	C	C	C	C
10. 3rd Ave W/W Dravus St (S)	C	C	C	C	C	C
11. Queen Anne Ave N/W Nickerson St[3]	F	--	--	--	--	--
12. W Cremona St/W Nickerson St[4]	D	B	B	B	A	A
13. Queen Anne Ave N/W Cremona St	B	A	B	B	A	B
14. 3rd Ave N/W Florentia St/W Nickerson St[5]	E	E	E	E	E	E
15. Fremont Ave N/W Florentia St	C	C	C	C	C	C
16. Fremont Ave N/W Nickerson St	E	F	F	F	F	F

1. 6th Ave W/W Nickerson Street currently operates as TWSC, but a traffic signal is proposed as part of the mitigation plan.
2. Intersection of W Emerson St/W Bertona St eliminated as a result of the proposed Emerson Street vacation.
3. Intersections reconfigured such that Queen Anne Ave N/W Nickerson Street is eliminated Queen Anne Ave N/W Cremona Street is realigned to intersection with W Nickerson Street perpendicularly.
4. W Cremona Street/W Nickerson Street currently operates as TWSC, but a traffic signal is proposed as part of the mitigation plan
5. Evaluated using HCM 2000 because the configuration is not supported with the HCM 6th Edition method due to non-NEMA signal configuration.

Traffic Safety

As traffic volumes increase, traffic safety issues could increase proportionally. The total trips are forecast to increase with the Alternatives relative to the ***No Action Alternative*** condition due to the increase in enrollment and the construction of mixed-use development. However, there are no significant safety concerns identified within the study area under existing conditions and the proposed vehicular and multi-modal improvements would be implemented in a way that adequately addresses safety considerations.

Parking

Consistent with the ***Draft MIMP***, the Alternatives would replace a significant amount of existing surface parking and transition to primarily underground parking below future residential and education buildings. Generally, the proposed parking plan would offer more consolidated parking options for commuters, staff, and visitors.

The parking plan for ***Alternatives 2*** and ***4*** depict a total parking supply of 2,670 parking spaces (33 fewer than the ***Draft MIMP***). The parking plan for ***Alternatives 3*** and ***5*** depict a total parking supply of 2,703, consistent with the ***Draft MIMP***. While it is understood that parking will ultimately conform with SMC 23.54.016.C4, and that parking will be evaluated on a project by project basis, the MIMP depicts the greatest amount of parking that could feasibly be constructed. As currently depicted, the parking supply significantly exceeds anticipated peak demand.

Loading/Curbside Management

Consistent with the ***Draft MIMP***, each individual building will provide loading facilities that both meet SMC requirements and accommodate the practical demand for waste collection and deliveries. Additionally, curbside management along the building entrance frontages will be evaluated at an individual level to determine if temporary loading zones or entrance zones are appropriate. It is anticipated that curbside loading or pick-up/drop-off areas may be desirable at residential buildings, but some educational buildings or other buildings may also benefit from curbside loading or pick-up/drop-off spaces. The specific loading and curbside management needs of each building will be reevaluated as part of future project MUP processes when additional details regarding building design and function are known.

Special Events

SPU hosts a limited number of special events throughout a typical academic year including graduation, the highest attendance event, as well as sporting events such as basketball games and volleyball matches. These events are currently managed on a case-by-case basis by University staff and would continue to be managed as such as part of the Alternatives. Special event management plans triggered by a specific event will be reviewed by the City under a separate process as is currently the case.

Transportation Management Program

The Transportation Management Program (TMP) program and associated goals for the Alternatives would be consistent with the ***Draft MIMP***.

3.8.5 Mitigation Measures

This section presents mitigation measures that would offset or reduce potential impacts of the Alternatives. The impacts of the Alternatives are similar and would be improved by a consistent set of mitigation measures.

Intersection Improvements

Intersections that are impacted by the Alternatives could be mitigated with the following proposed intersection improvements:

- **6th Avenue W/W Nickerson Street** – A traffic signal is proposed which would help address side street delay as well as provide a supplemental location for pedestrians to cross W Nickerson Street. The signal was shown to meet warrants based on the projected volumes.

- **3rd Avenue W/W Bertona Street** – Given the close proximity to the signalized intersection of 3rd Avenue W/W Nickerson Street, there are limited opportunities to adjust the traffic control. However, the proposed traffic signal at 6th Avenue W/W Nickerson Street provides the opportunity to implement turn restrictions at 3rd Avenue W/W Bertona Street such that vehicles traveling east through W Bertona Street can access W Nickerson Street via 6th Avenue W as an alternative. The proposed turn restrictions would limit eastbound traffic to right-turns only thus reducing delay related to left-turning and through vehicles. The northbound left-turn movement would remain to help process traffic traveling west into campus, but c-curb would be implemented to restrict eastbound movements.

  In conjunction with the proposed turn restrictions at 3rd Avenue W/W Bertona Street, changes to channelization along the northbound approach of 3rd Avenue W at W Nickerson are proposed to incorporate a northbound left-turn lane. Additionally, leading pedestrian intervals are proposed to reduce potential pedestrian-vehicle conflicts for pedestrians crossing W Nickerson Street.

- **W Cremona Street/W Nickerson Street** – A traffic signal is proposed which would help address side street delay as well as provide a supplemental location for pedestrians to cross W Nickerson Street.

Transportation Management Plan

In addition to the proposed intersection improvements, the proposed TMP would include programs and strategies applicable to faculty, resident and commuter students, and staff that are designed to reduce parking and traffic demands associated with projected growth at SPU.

3.8.6 Significant Unavoidable Adverse Impacts

Development of the ***Draft MIMP*** and increase in on-campus population to up to 6,000 student FTE by the year 2035, as well as construction of mixed-use development components would result in increases in all travel modes – vehicles, transit, pedestrians, and bicycles. It is anticipated there would be significant and unavoidable impacts at the intersection of Fremont Avenue N/W Nickerson Street as a result of the cumulative impacts of campus growth and mixed-use development.

This signalized intersection would continue to operate at LOS F during the AM peak hour and degrade to LOS F from LOS E during the PM peak hour. The forecast delay with the ***Draft MIMP*** would increase by just over one second during the AM peak hour and increase by just over six seconds during the PM peak hour as compared to the ***No Action Alternative*** conditions. While the impact of the ***Draft MIMP*** at this intersection is considered significant based on the increase in delay, there are limited opportunities to implement improvements at this intersection due to the split-phased signal operations. The intersection already has a high cycle length and considerable turning volumes which result in limited opportunities to reallocate green time amongst the approaches. As such, no improvements are proposed at this intersection.

Chapter 4

References

CHAPTER 4

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